### SDG COVER PAGE

Alliance Technical Group, LLC Lab Name: Contract: 68HERH20D0011 SDG No.: ME2948 Lab Code: Case No.: 51900 MA No.: 3114.1 SOW No. : SFAM01.1 Analysis Method EPA Sample No. Lab Sample Id ICP-AES ICP-MS Mercury Cyanide ME2948 Q1186-01 Χ Χ Χ ME2949 Q1186-02 Χ Χ Χ ME2955 Q1186-03 Χ Χ Χ ME2956 Q1186-04 Χ Χ ME2957 Q1186-05 Χ Χ ME2960 Q1186-06 Χ Χ Χ ME2961 Q1186-07 Χ Χ Χ ME2962 Q1186-08 Χ Χ Χ Q1186-09 ME2959 Χ Χ Χ ME2959D Q1186-10 Χ Χ Χ ME2959S Q1186-11 Χ Χ Χ ME2963 Q1186-12 Χ Χ Χ ME2967 Q1186-13 Χ Χ Χ ME2965 Χ Χ Χ Q1186-14 ME2966 Q1186-15 Χ Χ ME2958 Q1186-16 Χ Χ Χ ME2968 Q1186-17 Χ Χ Χ ME2974 Q1186-18 Χ Χ Χ ME2977 Q1186-19 Χ Χ Χ ME2980 Q1186-20 Χ Χ

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:	

USEPA CLP COC (LAB COPY)

CarrierName: UPS DateShipped: 1/23/2025

AirbillNo: 1Z93947Y0126599761

# **CHAIN OF CUSTODY RECORD**

Case #: 51900 Cooler #: 11

No: 5-012325-094805-0332

Lab: Alliance Technical Group LLC Lab Contact: Mohammad Ahmed Lab Phone: 908-789-8900

Sample Identifier	IA-11-MW-06	MW101D	IA-11-MW-06	MW101D					
Sample No.	E2948	E2949	ME2948	ME2949					
Matrix/Sampler	Water/	Water/	Water/	Water/					
Method	Grab	Grab	Grab	Grab					
Analysis/Turnaround (Days)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)					
lag/Preservative/Bottles	5166, 5167, 5168, 5169 (2)	5173, 5174, 5175, 5176 (8)	5170 (NaOH), 5171 (HN03) (2)	5177 (NaOH), 5178 (HN03) (2)					
Location	IA-11-MW-06	MW-101D	IA-11-MW-06	MW-101D					
Collection Date/Time	01/22/2025 10:30	01/22/2025 10:50	01/22/2025 10:30	01/22/2025 10:50					
For Lab Use Only			1 # 10,0 HC	F					

Chanial Instruction	no: Diogno soften good girkii ASA	E FUCUNZ FUCUZ F/ U	200000	Shipment for Case Complete? N	Complete? N
Reduced volume	Reduced volume for 1L amber analyses.	F (1250947 100010	102Z0Z).	Samples Transferre	Samples Transferred From Chain of Custody #
Analysis Key: SV	Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness	by SIM, PEST=Per	sticides, ARO=Aroclors, CN=Cyanide, ICP-MS	3+HG+HARD=ICP-MS	11+ Metals+HG+Hardness
Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
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# USEPA CLP COC (LAB COPY)

DateShipped: 1/23/2025 CarrierName: UPS

AirbillNo: 1Z93947Y0133354396

# CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 14

No: 5-012325-143944-0335

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 908-789-8900

Sample Identifier	GMW10	MW-25-103	GMW10	MW-25-103			ŧ		
CLP Sample No.	E2955	E2956	ME2955	ME2956					,
Matrix/Sampler	Water/	Water/	Water/	Water/					
Coll. Method	Grab	Grab	Grab	Grab					
Analysis/Turnaround (Days)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)					
Tag/Preservative/Bottles	5208, 5209, 5210, 5211 (8)	5215, 5216, 5217, 5218 (8)	5212 (NaOH), 5213 (HNO3) (2)	5219 (NaOH), 5220 (HN03) (2)					
Location	GMW10	MW-25-103	GMW10	MW-25-103					
Collection Date/Time	01/23/2025 10:30	01/23/2025 10:30	01/23/2025 10:30	01/23/2025 10:30					
For Lab Use Only			10 / 0H 12	1					

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS		Special Instructions: Please return cooler with enclosed airbill ASAP (1793947Y0307899318)
ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness	Samples Transferred From Chain of Custody #	Shipment for Case Complete? N

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Tomp Hent presul	11 1 1 1 1 2 M		Sample Condition Upon Receipt

USEPA CLP COC (LAB COPY)

DateShipped: 1/23/2025

CarrierName: UPS AirbillNo: 1Z93947Y0122931005

# CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 15

No: 5-012325-144713-0336

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
IA03-MW-01	E2957	Water/	Grab	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	5222, 5223, 5224, 5225 (8)	IA-03-MW-01	01/23/2025 10:45	
IA03-MW-01S	E2960	Water/	Grab	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	5243, 5244, 5245, 5246 (8)	IA-03-MW-01S	01/23/2025 12:10	
IA03-MW-01	ME2957	Water/	Grab	CN(21), ICP- MS+HG+HARD(21)	5226 (NaOH), 5227 (HN03) (2)	IA-03-MW-01	01/23/2025 10:45	21#10/01/110
IA03-MW-01S	ME2960	Water/	Grab	CN(21), ICP- MS+HG+HARD(21)	5247 (NaOH), 5248 (HNO3) (2)	IA-03-MW-01S	01/23/2025 12:10	A

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

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Sample Condition Upon Receipt	Date/Time	Received by (Signature and Organization)	Date/Time	Items/Reason Relinquished by (Signature and Organization)	Items/Reason

USEPA CLP COC (LAB COPY)

DateShipped: 1/23/2025

CarrierName: UPS
AirbillNo: 1Z93947Y0:

AirbillNo: 1Z93947Y0124276818

CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 16

No: 5-012325-162524-0338

Lab: Alliance Technical Group LLC
Lab Contact: Sample Receiving
Lab Phone: 312-353-9083

er CLP Sample No.	IA-03-MW-02 E2961	MW-25-104 E2962	IA-03-MW-02 ME2961	MW-25-104 ME2962			The second secon			
Matrix/Sampler	Water/	Water/	Water/	Water/						
Coll. Method	Grab	Grab	Grab	Grab						
Analysis/Turnaround (Days)	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)						
Tag/Preservative/Bottles	5250, 5251, 5252, 5253 (8)	5257, 5258, 5259, 5260 (8)	5254 (NaOH), 5255 (HN03) (2)	5261 (NaOH), 5262 (HN03) (2)						
Location	IA-03-MW-02	MW-25-104	IA-03-MW-02	MW-25-104						
Collection Date/Time	01/23/2025 14:50	01/23/2025 14:50	01/23/2025 14:50	01/23/2025 14:50						
For Lab Use Only			2410 241	P						

Special Instructions: Please return cooler with enclosed airbill ASAP (1Z93947Y0316561333).

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

Sample Condition Upon Receipt	Date/Time	Received by (Signature and Organization)	Date/Time	Relinquished by (Signature and Organization)	Items/Reason
ARD=ICP-MS 11+ Metals+HG+Hardness	3+HARD=ICP-MS	ticides, ARO=Aroctors, CN=Cyanide, ICP-MS+H	y SIM, PEST=Pest	Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroctors, CN=Cyanide, I	Analysis Key: SV

son Relinquis	ems/Reason Relinquished by (Signature and Organization) Date/Time	Date/Time	Received by (Signature and Organization)	Date/Time Sample Condition Upon Receipt
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# USEPA CLP COC (LAB COPY)

CarrierName: UPS DateShipped: 1/24/2025

AirbillNo: 1Z93947Y0120415826

# CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 17

Lab: Alliance Technical Group LLC No: 5-012425-085845-0339

Lab Contact: Mohammad Ahmed Lab Phone: 312-353-9083

	Sample Identifier IA-05-MW-02- MS/MSD IA-05-MW-02- MS/MSD	CLP Sample No. E2959 ME2959	Matrix/Sampler Water/ Water/	Coll. Method Grab Grab	Analysis/Turnaround (Days)  SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21) CN(21), ICP- MS+HG+HARD(21)	5236, 5240 (P	Tag/Preservative/Bottles 5236, 5237, 5238, 5239 (16) 5240 (NaOH), 5241 (HN03) (4)	

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness Special Instructions: Please return cooler with enclosed airbill ASAP (1Z93947Y0309872547): Items/Reason Samples Transferred From Chain of Custody # Shipment for Case Complete? N

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		55.8)	inization) Date/IIme
		SAC	Received by (Signature and Organization)
	1-27.25	1/2/18:30	Date/Time
april 18 19 The	TRO-#1 2		Sample Condition Upon Receipt

**USEPA CLP COC (LAB COPY)** 

CarrierName: UPS DateShipped: 1/24/2025

AirbillNo: 1Z93947Y0135652033

# **CHAIN OF CUSTODY RECORD**

Case #: 51900 Cooler#: 18

No: 5-012425-142235-0340

Lab: Alliance Technical Group LLC Lab Contact: Mohammad Ahmed Lab Phone: 312-353-9083

								ర్జు
				DSC-PS1A	OW-11	DSC-PS1A	OW-11	Sample Identifier
				ME2967	ME2963	E2967	E2963	CLP Sample No.
				Water/	Water/	Water/	Water/	Matrix/Sampler
				Grab	Grab	Grab	Grab	Coll. Method
				CN(21), ICP-	CN(21), ICP- MS+HG+HARD(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	Analysis/Turnaround (Days)
				5303 (NaOH), 5304 (HN03) (2)	5275 (NaOH), 5276 (HN03) (2)	5299, 5300, 5301, 5302 (8)	5271, 5272, 5273, 5274 (8)	Tag/Preservative/Bottles
				DSC-PS1A	OW-11	DSC-PS1A	OW-11	Location
				01/24/2025 13:20	01/24/2025 10:35	01/24/2025 13:20	01/24/2025 10:35	Collection Date/Time
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Costady Seal rottale	-2725 Temp 3.35		Sample Condition Upon Receipt

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness

Samples Transferred From Chain of Custody #

Shipment for Case Complete? N

Special Instructions: Please return cooler with enclosed airbil ASAP (1Z93947Y0301443551).

USEPA CLP COC (LAB COPY)

CarrierName: UPS DateShipped: 1/24/2025

AirbilNo: 1Z93947Y0128632050

# **CHAIN OF CUSTODY RECORD**

Case #: 51900 Cooler #: 20

No: 5-012425-145035-0342

Lab: Alliance Technical Group LLC Lab Contact: Mohammad Ahmed Lab Phone: 312-353-9083

OW-8 WL-25-101	OW-8 01/24/2025 11:35	WL-25-101 01/24/2025 11:35						
5285, 5286, 5287, 5288 (8) 5292, 5293, 5294, 5295 (8) 5280 (Nacht), 5290 (HM03) (2)	5289 (NaOH), 5290 (HN03) (2)	5296 (NaOH), 5297 (HN03) (2)						
SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21) SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)						
Grab Grab	Grab	Grab						
Water/	Water/	Water/						
E2965 E2966	ME2965	ME2966					F00	
OW-8 WL-25-101	9-WO	WL-25-101						

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness

Samples Transferred From Chain of Custody #

Shipment for Case Complete? N

Special Instructions: Please return cooler with enclosed airbil ASAP (1Z93947Y0309380971).

Items/Reason

Relinquished by (Signature and Organization)

Date/Time

Received by (Signature and Organization)

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Date/Time

Sample Condition Upon Receipt

10:30

1-27-25

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USEPA CLP COC (LAB COPY)

DateShipped: 1/24/2025 CarrierName: UPS

AirbiliNo: 1Z93947Y0135783866

**CHAIN OF CUSTODY RECORD** 

Case #: 51900 Cooler #: 21

No: 5-012425-162446-0345

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed

Lab Phone: 312-353-9083

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time
IA05-MW-02	E2958	Water/	Grab	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	5229, 5230, 5231, 5232 (8)	IA-05-MW-02	01/23/2025 10:50
IA-11-MW-03S	E2971	Water/	Grab	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	5315, 5316, 5317, 5318 (8)	JA-11-MW-03S	-IA-11-MW-03S01/24/2025-15:15
IA-02-MW-04	E2972	Water/	Grab	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	5322, 5323, 5324, 5325 (8)	IA-02-MW-04	01/24/2025 15:15
IA05-MW-02	ME2958	Water/	Grab	CN(21), ICP- MS+HG+HARD(21)	5233 (NaOH), 5234 (HNO3) (2)	IA-05-MW-02	01/23/2025 10:50
-							
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Special Instructions: Please return cooler with enclosed airbill ASAP (1Z93947Y0314155384). Note reduced volume for samples IA-11-MW-03S and IA-02-MW-04. Please coordinate with USACE on analyses to be run.

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

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness

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Tent blank ofesent	TR 600 #		Date/Time Sample Condition Upon Receipt

USEPA CLP COC (LAB COPY)

DateShipped: 1/27/2025 CarrierName: UPS

AirbillNo: 1Z93947Y0124048878

# CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 23

No: 5-012725-113235-0347

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 312-353-9083

				EPA-MW-001	OW-2	EPA-MW-001	OW-2	Sample Identifier
				ME2974	ME2968	E2974	E2968	CLP Sample No.
				Water/	Water/	Water/	Wateri	Matrix/Sampler
				Grab	Grab	Grab	Grab	Coll. Method
				CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4- DSIM(21), PEST(21), ARO(21)	Analysis/Turnaround (Days)
				5333 (NaOH), 5334 (HNO3) (2)	5310 (NaOH), 5311 (HN03) (2)	5329, 5330, 5331, 5332 (8)	5306, 5307, 5308, 5309 (8)	Tag/Preservative/Bottles
				EPA-MW-001	OW-2	EPA-MW-001	OW-2	Location
				01/27/2025 11:10	01/24/2025 13:25	01/27/2025 11:10	01/24/2025 13:25	Collection Date/Time
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	1-28-25	12716730	Date/Time
Curtary Seal Fortact	IRGun#1 2.3.		Sample Condition Upon Receipt

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness

Samples Transferred From Chain of Custody #

Shipment for Case Complete? N

Special Instructions: Please return cooler with enclosed airbill ASAP (1Z93947Y0332635385).

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SDG # ME2948

USEPA CLP COC (LAB COPY)

DateShipped: 1/27/2025 CarrierName: UPS

AirbillNo: 1Z93947Y0130563102

# CHAIN OF CUSTODY RECORD

Case #: 51900 Cooler #: 26

No: 5-012725-153346-0350

Lab: Alliance Technical Group LLC
Lab Contact: Mohammad Ahmed
Lab Phone: 312-353-9083

OW-3	IA-11-MW-02	OW-3	IA-11-MW-02	MW-101-RI	Sample Identifier
ME2980	ME2977	E2980	E2977	E2976	CLP Sample No.
Water/	Water/	Water/	Water/	Water/	Matrix/Sampler
Grab	Grab	Grab	Grab	Grab	Coll. Method
CN(21), ICP- MS+HG+HARD(21)	CN(21), ICP- MS+HG+HARD(21)	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	SVSIM(21), 1,4-DSIM(21), PEST(21), ARO(21)	Analysis/Turnaround (Days)
5397 (NaOH), 5398 (HN03) (2)	5354 (NaOH), 5355 (HNO3) (2)	5393, 5394, 5395, 5396	5350, 5351, 5352, 5353 (8)	5365, 5366, 5367, 5368	Tag/Preservative/Bottles
OW-3	IA-11-MW-02	OW-3	IA-11-MW-02	MW-101-RI	Location
01/27/2025 14:30	01/27/2025 12:10	01/27/2025 14:30	01/27/2025 12:10	01/27/2025 11:35	Collection Date/Time
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Special Instructions: Please return cooler with enclosed airbill ASAP (1Z93947Y0335573213). Note reduced volume for samples MW-101-RI and OW-3. Please coordinate with USACE on analyses to be run.

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

Analysis Key: SVSIM=Semivolatiles + SIM, 1,4-DSIM=1,4-Dioxane by SIM, PEST=Pesticides, ARO=Aroclors, CN=Cyanide, ICP-MS+HG+HARD=ICP-MS 11+ Metals+HG+Hardness

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				18:30	Date/Time
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			1-28-25	1216.30	Date/Time
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Lab Name : Alliance Technical Grou	p, LLC	Page 1 of 10
Received By (Print Name)	rosa line	Log-in Date 1/24/2025
Received By (Signature)		•
Case Number 51900	SDG No. ME2948	MA No. 3114.1

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.	1Z93947Y0126599761 1
Shipping Container     Temperature     Indicator Bottle	Present
7. Shipping Container Temperature	1.3 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	01/24/2025
12.Time Received	10:20

			Correspo	onding	
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.
1	ME2948	1.0,12	5170,71	Q1186-01	Intact
2	ME2949	1.0,12	5177,78	Q1186-02	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

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Date	1/29/2	Logbook Page No.	N/A

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Received By (Print Name)	are lire	Log-in Date 1/24/2025
Received By (Signature)		
Case Number 51900	SDG No. ME2948	MA No. 3114.1

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.	1Z93947Y013335-439 2
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.9 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	01/24/2025
12.Time Received	10:20

			Correspo	onding	
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ME2955	1.0,12	5212,13	Q1186-03	Intact
2	ME2956	1.0,12	5219,20	Q1186-04	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 I	N/A	N/A	N/A
23	N/A	N/A	N/A	N/A	 N/A

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Date	1/28/25	Logbook Page No. N/A	$\exists$	

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Received By (Signature)		
Case Number 51900	SDG No. ME2948	MA No. 3114.1

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.	1Z93947Y0122931005 3
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.5 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	01/24/2025
12.Time Received	10:20

			Correspond	ling	Dama adaa.
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.
1	ME2957	1.0,12	5226,27	Q1186-05	Intact
2	ME2960	1.0,12	5247,48	Q1186-06	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

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Case Number 51900 S	SDG No. ME2948	MA No. 3114.1

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.	1Z93947Y0124276818 4
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	1.1 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	01/24/2025
12.Time Received	10:20

		Corresponding				
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.	
1	ME2961	1.0,12	5254,55	Q1186-07	Intact	
2	ME2962	1.0,12	5261,62	Q1186-08	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 I	N/A	N/A	N/A	
21	N/A	N/A I	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	

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Case Number 51900	SDG No. ME2948	MA No. N/A 3114-1 all		

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.	1Z93947Y0120415826 5
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	01/27/2025
12.Time Received	10:30

			Corresponding		
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.
1	ME2959	0.7,13	5240,41	Q1186-09	Intact
2	ME2959D	0.7,13	5240,41	Q1186-10	Intact
3	ME2959S	0.7,13	5240,41	Q1186-11	Intact
4	N/A	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
9	N/A	N/A	N/A	N/A	N/A
10	N/A	N/A	N/A	N/A	N/A
11	N/A	N/A	N/A	N/A	N/A
12	N/A	N/A	N/A	N/A	N/A
13	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A
21	N/A	N/A	N/A	N/A	N/A
22	N/A	N/A	N/A	N/A	N/A
23	N/A	N/A	N/A	N/A	N/A

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Received By (Signature)		
Case Number 51900	SDG No. ME2948	MA NO. NA 3114.1 at

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.	1Z93947Y0135652033
Shipping Container     Temperature     Indicator Bottle	Present
7. Shipping Container Temperature	3.3 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	01/27/2025
12.Time Received	10:30

	1				
			Correspond	ling	Remarks:
	EPA	Aqueous Water Sample	Sample	Assigned	Condition of Sample Shipment,
	Sample #	рН	Tag #	Lab #	etc.
1	ME2963	0.7,13	5275,76	Q1186-12	Intact
2	ME2967	0.7,13	5303,04	Q1186-13	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

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Date	1/28/25	Logbook Page No.	N/A	

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Received By (Signature)					
Case Number 51900	SDG No. ME2948	MA No. WA 3/14. \ al			

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	1Z93947Y0128632050
Shipping Container ID No.	7
6. Shipping Container	Present
Temperature Indicator Bottle	5
7. Shipping Container Temperature	2.0 Degree C
8. Sample Condition	Intact
9. Sample Tags	Absent
Sample Tag Numbers	Listed on Traffic Report
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	01/27/2025
12.Time Received	10:30

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	1	1				
			Corresponding		Domonila	
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.	
1	ME2965	0.7,13	5289,90	Q1186-14	Intact	
2	ME2966	0.7,13	5296,97	Q1186-15	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	V/A	N/A	N/A	

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Received By (Print Name)	nova Vero	Log-in Date 1/27/2025
Received By (Signature)		Λ.
Case Number 51900	SDG No. ME2948	MA NO. N/A 3/14. ( )

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	1Z93947Y0135783866
Shipping Container ID No.	8
ID No.	
Shipping Container     Temperature     Indicator Bottle	Present
7. Shipping Container Temperature	3.0 Degree C
8. Sample Condition	Intact
9. Sample Tags	Absent
Sample Tag Numbers	Listed on Traffic
	Report
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	01/27/2025
12.Time Received	10:30

			Correspond	ling	Downsules
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.
1	ME2958	0.7,13	5233,34	Q1186-16	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

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Lab Name : Alliance Technical Group, LLC	Page_10 of_10
Received By (Print Name) GORSE VESUAL	Log-in Date 1/28/2025
Received By (Signature)	
Case Number 51900 SDG No. ME2948	MA No. N/A- 3114.) N

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	1Z93947Y0130563102
Shipping Container ID No.	10
6. Shipping Container Temperature Indicator Bottle	Present
7. Shipping Container Temperature	2.6 Degree C
8. Sample Condition	Intact
9. Sample Tags	Absent
Sample Tag Numbers	Listed on Traffic
10. Does information on Traffic Reports/Chain of Custody Records and Sample Tags agree ?	Yes
11. Date Received at Lab	01/28/2025
12.Time Received	10:10

			Corresponding		
	EPA Sample #	Aqueous Water Sample pH	Sample Tag #	Assigned	Remarks: Condition of Sample Shipment, etc.
1	ME2977	1.0,12	5354,55	Q1186-19	Intact
2	ME2980	1.0,12	5397,98	Q1186-20	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

Reviewed By		Logbook No.	N/A
Date	1/2/25	Logbook Page No.	N/A

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Received By (Print Name)	DEF NESNON	Log-in Date 1/28/2025
Received By (Signature)		
Case Number 51900	SDG No. ME2948	MA No. N/A 2114-1 W

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.	1Z93947Y0124048878 9
Shipping Container     Temperature     Indicator Bottle	Present
7. Shipping Container Temperature	2.3 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	01/28/2025
12.Time Received	10:10

	1	1			1
		Aqueous	Correspond	ding	Remarks: Condition
	EPA Sample #	Water Sample pH	Sample Tag #	Assigned	of Sample Shipment, etc.
1	ME2968	1.0,12	5310,11	Q1186-17	Intact
2	ME2974	1.0,12	5333,34	Q1186-18	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

Reviewed By	M	Logbook No.	N/A	
Date	1/28/25	Logbook Page No.	N/A	

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

LAB NAME	Alliance Technica	l Group, LLC		
LAB CODE	ACE			
CONTRACT NO.	68HERH20D0011			
CASE NO.	51900	SDG NO.	ME2948	
MA NO.	3114.1	SOW NO.	SFAM01.1	

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.4)

(Reference Exhibit D Deceron 2.1)				
	PAGE NOs:		CHECK	
	FROM	TO	LAB	REGION
1. SDG Cover Page	1	1	✓	
2. Traffic Report/Chain of Custody Record(s)	2	11	<b>√</b>	
3. Sample Log-In Sheet (DC-1)	12	21	<b>√</b>	
4. CSF Inventory Sheet (DC-2)	22	24	<b>√</b>	
5. SDG Narrative	25	30	<b>√</b>	
6. Communication Logs	NA	NA	<b>√</b>	
7. Percent Solids Log	NA	NA	<b>√</b>	
Analysis Forms and Data (ICP-AES)				
8. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample	NA	NA	✓	
or sample analysis, laboratory QC as applicable 9. Instrument raw data by instrument in analysis order	NA	NA	<b>✓</b>	
Other Data				
10 . Standard and Reagent Preparation Logs	NA	NA	✓	
11. Original Preparation and Cleanup forms or copies of Preparation and	NA	NA	✓	
Cleanup Logbooks 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_	<b>✓</b>	
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	31	48		
or sample analysis, laboratory QC as applicable 18. Instrument raw data by instrument in analysis order	49	1064		
Other Data				
19. Standard and Reagent Preparation Logs	1065	1235		
20. Original Preparation and Cleanup forms or copies of Preparation and	1236	1237	<b>✓</b>	
Cleanup Logbooks 21. Original Analysis or Instrument Run forms or copies of Analysis or	1238	1247	✓	
<pre>Instrument Logbooks 22 . Performance Evaluation (PE)/Proficiency Testing (PT) Sample Instructions</pre>	NA	NA		

	PAGE	NOs:	СН	ECK
	FROM	TO	LAB	REGION
23. Extraction Logs for TCLP and SPLP	NA	NA	✓	
24 . Raw GPC Data	NA	NA	✓	
25. Raw Florisil Data	NA	NA	✓	
Analysis Forms and Data (Mercury)				
26. Sample Analysis Data Forms (1A-OR, 1B-OR, and 1-IN) for each sample	1248	1265	✓	
or sample analysis, laboratory QC as applicable 27. Instrument raw data by instrument in analysis order	1266	1268	✓	
Other Data				
28. Standard and Reagent Preparation Logs	1269	1295	✓	
29. Original Preparation and Cleanup forms or copies of Preparation and	1296	1297		
Cleanup Logbooks 30. Original Analysis or Instrument Run forms or copies of Analysis or Instrument Logbooks	1298	1301	✓	
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	1302	1319	✓	
or sample analysis, laboratory QC as applicable 36. Instrument raw data by instrument in analysis order	1320	1324		
Other Data				
37. Standard and Reagent Preparation Logs	1325	1352	✓	
38. Original Preparation and Cleanup forms or copies of Preparation and Cleanup Logbooks	1353	1354	✓	
39. Original Analysis or Instrument Run forms or copies of Analysis or	1355	1358	✓	
Instrument Logbooks 40. Performance Evaluation (PE)/Proficiency Testing (PT) Sample	NA	NA	✓	
Instructions 41. Extraction Logs for TCLP and SPLP	NA	NA	✓	
42 . Raw GPC Data	NA	NA	<b>✓</b>	
43 . Raw Florisil Data	NA	NA	<b>✓</b>	

		PAGE NOs:		CHECK	
		FROM	TO	LAB	REGION
Additional					
44. EPA Shipping/Receiving Documents					
Airbill (No. of Shipments 10)		1359	1368		
Sample Tags		NA	NA	✓	
Sample Log-In Sheet (Lab)		1369	1371	_ ✓	
45. Misc. Shipping/Receiving Records(list all in	ndividual records)				
		NA	NA		
46. Internal Lab Sample Transfer Records and Tra	acking Sheets				
(describe or list)					
		1372	1374	<b>✓</b>	
47. Other Records and related Communication Logs	3				
(describe or list)		NA	NA	1	
					_
48. Comments:					
-					
Completed by: (CLP Lab)	Nimisha Pandya, Do	cument Control	L Officer		
(Signature)	(Print Name & Tit			(Da	te)
Audited by: (EPA)					
(Signature)	(Print Name & Tit	le)		(Da	te)



### **SDG NARRATIVE**

USEPA
SDG # ME2948
CASE # 51900
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # Q1186
MODIFIED ANALYSIS # 3114.1

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

18 Water samples were delivered to the laboratory intact on 01/24/2025, 01/27/2025, 01/28/2025.

### B. Parameters

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

### C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 1.3°C, 1.9°C, 1.5°C, 1.1°C, 2.1°C, 3.3°C, 2.0°C, 3.0°C, 2.6°C, 2.3°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.



## 284 Sheffield Street Mountainside, NJ 07092

### **G.** Calculation:

### **Calculation for ICP-MS Water Sample:**

Concentration or Result (
$$\mu$$
g/L) = C x  $\underline{Vf}$  x DF

Where,

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

Vf = Final digestion volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

### **Example Calculation For Sample ME2948 For Arsenic:**

$$\begin{array}{cc} If \ C &= 0.36 \ ppb \\ Vf &= 50 \ ml \end{array}$$

Vi = 50 ml

DF = 1

Concentration or Result (
$$\mu$$
g/L) = 0.36 x  $\underline{50}$  x 1

$$= 0.36 \mu g/L$$

= 0.36 µg/L (Reported Result with Signification)

### **Calculation for Hg Water Sample:**

Concentration or Result ( $\mu$ g/L) = C x DF

Where,

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

DF = Dilution Factor

### **Example Calculation For Mercury:**

$$\begin{array}{cc} If \ C &= 0.033 \ ppb \\ DF &= 1 \end{array}$$

Concentration or Result ( $\mu$ g/L) = 0.033 x 1



 $= 0.033 \mu g/L$ 

=  $0.033 \mu g/L$  (Reported Result with Signification)

### **Calculation for CN Water Sample:**

Concentration or Result (
$$\mu$$
g/L) = C x  $\underline{Vf}$  x DF  $\underline{Vi}$ 

Where,

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

Vf = Final prepared (absorbing solution) volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

### **Example Calculation For Sample ME2955:**

If C = 7.1964 ppb Vf = 50 ml Vi = 50 ml DF = 1

Concentration or Result ( $\mu$ g/L) = 7.1964 x  $\frac{50}{50}$  x 1 = 7.1964  $\mu$ g/L = 7.2  $\mu$ g/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 Selenium. Duplicate sample did meet requirements except for Copper. Serial Dilution did meet requirements except for Manganese.

Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

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.



# 284 Sheffield Street Mountainside, NJ 07092

Internal Standard Association for ICP-MS analysis.

Internal Standard Association for ICP-			
Target Analyte	Associated Internal Standard		
Aluminum	45Sc		
Antimony	159Tb		
Arsenic	89Y		
Barium	159Tb		
Beryllium	6Li		
Cadmium	159Tb		
Calcium	45Sc		
Chromium	45Sc		
Cobalt	45Sc		
Copper	45Sc		
Iron	45Sc		
Lead	209Bi		
Magnesium	45Sc		
Manganese	45Sc		
Nickel	45Sc		
Potassium	45Sc		
Selenium	89Y		
Silver	159Tb		
Sodium	45Sc		
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: 08/08/2023	MA: 3114.1	Title: ICP-MS Analysis with Hardness
Method Source: SFAM01.1	Method: ICP-MS	
Matrix: Aqueous/Water		

### **Summary of Modification**

The purpose of this modified analysis is to analyze aqueous/water samples by ICP-MS with the additional calculated analyte Hardness. 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

Analyte	CAS Number	CRQL (mg/L)
Hardness (total)	Hardness	3.3

II. Calibration and QC Requirements	Not applicable
III. Preparation and Method Modifications	Not applicable
IV. Special Reporting Requirements	Not applicable

### The Laboratory shall:

- Report Hardness (total) in units of mg/L on Form 1, calculated from the calcium and magnesium results using Equation 4F in Exhibit G, Section 3.2.
- The instructions for reporting Hardness by ICP-AES apply to these ICP-MS analyses. All applicable AnalyteGroupID and AnalysisGroupID data elements shall be reported. Report AnalyteGroup for Hardness, and any necessary AnalysisGroup nodes.
- Report the reported results for Hardness (total) in the EDD with AnalyteType = "Derived" and ClientAnalyteID = "Hardness" for the field samples, field blanks, and PT samples only.
- 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.
- Report the "J" and "U" qualifiers in accordance with the requirements in Exhibit B, Section 3.4.3.2.4.2, using the modified CRQL.

ME2948

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-01

Date Received: 01/24/2025

% Solids:

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8.0	J	02/11/2025	1432
7440-36-0	Antimony	2.0	U	02/11/2025	1432
7440-38-2	Arsenic	0.36	J	02/11/2025	1432
7440-39-3	Barium	19		02/11/2025	1432
7440-41-7	Beryllium	1.0	U	02/11/2025	1432
7440-43-9	Cadmium	1.0	U	02/11/2025	1432
7440-70-2	Calcium	370000		02/11/2025	1432
7440-47-3	Chromium	0.44	J	02/11/2025	1432
7440-48-4	Cobalt	1.0	U	02/11/2025	1432
7440-50-8	Copper	2.0	U*	02/11/2025	1432
7439-89-6	Iron	830		02/11/2025	1432
7439-92-1	Lead	1.0	U	02/11/2025	1432
7439-95-4	Magnesium	120000		02/11/2025	1432
7439-96-5	Manganese	30	*	02/11/2025	1432
7440-02-0	Nickel	1.0	U	02/11/2025	1432
7440-09-7	Potassium	3600		02/11/2025	1432
7782-49-2	Selenium	5.0	U*	02/11/2025	1432
7440-22-4	Silver	1.0	U	02/11/2025	1432
7440-23-5	Sodium	32000	1	02/11/2025	1432
7440-28-0	Thallium	1.0	U	02/11/2025	1432
7440-62-2	Vanadium	0.11	J	02/11/2025	1432
7440-66-6	Zinc	1.8	J	02/11/2025	1432
Hardness	Hardness (total)	1400		02/11/2025	1432

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2949		
MEZJAJ		

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

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948 Lab Code: ACE

Lab Sample ID: Q1186-02 Matrix: Water

% Solids: Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	20	IJ	02/06/2025	1352
7440-36-0		2.0	IJ	02/06/2025	1352
	Antimony		_		
7440-38-2	Arsenic	1.0	U	02/06/2025	1352
7440-39-3	Barium	9.3	J	02/06/2025	1352
7440-41-7	Beryllium	1.0	U	02/06/2025	1352
7440-43-9	Cadmium	1.0	U	02/06/2025	1352
7440-70-2	Calcium	350000		02/06/2025	1352
7440-47-3	Chromium	2.0	U	02/06/2025	1352
7440-48-4	Cobalt	1.0	U	02/06/2025	1352
7440-50-8	Copper	2.0	U*	02/06/2025	1352
7439-89-6	Iron	34	J	02/06/2025	1352
7439-92-1	Lead	1.0	U	02/06/2025	1352
7439-95-4	Magnesium	120000		02/06/2025	1352
7439-96-5	Manganese	8.1	*	02/06/2025	1352
7440-02-0	Nickel	1.0	U	02/06/2025	1352
7440-09-7	Potassium	4200		02/06/2025	1352
7782-49-2	Selenium	5.0	U*	02/06/2025	1352
7440-22-4	Silver	1.0	U	02/06/2025	1352
7440-23-5	Sodium	120000		02/06/2025	1352
7440-28-0	Thallium	1.0	U	02/06/2025	1352
7440-62-2	Vanadium	5.0	U	02/06/2025	1352
7440-66-6	Zinc	0.84	J	02/06/2025	1352
Hardness	Hardness (total)	1400		02/06/2025	1352

ME2955

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Date Received: 01/24/2025

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-03

% Solids:

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	1500		02/06/2025	1355
7440-36-0	Antimony	0.30	J	02/06/2025	1355
7440-38-2	Arsenic	0.24	J	02/06/2025	1355
7440-39-3	Barium	15		02/06/2025	1355
7440-41-7	Beryllium	1.0	U	02/06/2025	1355
7440-43-9	Cadmium	1.0	U	02/06/2025	1355
7440-70-2	Calcium	260000		02/06/2025	1355
7440-47-3	Chromium	0.10	J	02/06/2025	1355
7440-48-4	Cobalt	0.060	J	02/06/2025	1355
7440-50-8	Copper	2.2	*	02/06/2025	1355
7439-89-6	Iron	670		02/06/2025	1355
7439-92-1	Lead	0.48	J	02/06/2025	1355
7439-95-4	Magnesium	76000		02/06/2025	1355
7439-96-5	Manganese	58	*	02/06/2025	1355
7440-02-0	Nickel	0.28	J	02/06/2025	1355
7440-09-7	Potassium	3800		02/06/2025	1355
7782-49-2	Selenium	5.0	U*	02/06/2025	1355
7440-22-4	Silver	1.0	U	02/06/2025	1355
7440-23-5	Sodium	30000		02/06/2025	1355
7440-28-0	Thallium	1.0	U	02/06/2025	1355
7440-62-2	Vanadium	0.21	J	02/06/2025	1355
7440-66-6	Zinc	72		02/06/2025	1355
Hardness	Hardness (total)	960		02/06/2025	1355

## FORM 1 - IN

ME2956

### INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-04

% Solids: Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	20	U	02/06/2025	1358
7440-36-0	Antimony	2.0	U	02/06/2025	1358
7440-38-2	Arsenic	0.25	J	02/06/2025	1358
7440-39-3	Barium	16		02/06/2025	1358
7440-41-7	Beryllium	1.0	U	02/06/2025	1358
7440-43-9	Cadmium	1.0	U	02/06/2025	1358
7440-70-2	Calcium	270000		02/06/2025	1358
7440-47-3	Chromium	0.30	J	02/06/2025	1358
7440-48-4	Cobalt	0.10	J	02/06/2025	1358
7440-50-8	Copper	2.0	U*	02/06/2025	1358
7439-89-6	Iron	580		02/06/2025	1358
7439-92-1	Lead	1.0	U	02/06/2025	1358
7439-95-4	Magnesium	76000		02/06/2025	1358
7439-96-5	Manganese	63	*	02/06/2025	1358
7440-02-0	Nickel	0.39	J	02/06/2025	1358
7440-09-7	Potassium	3800		02/06/2025	1358
7782-49-2	Selenium	5.0	U*	02/06/2025	1358
7440-22-4	Silver	1.0	U	02/06/2025	1358
7440-23-5	Sodium	30000		02/06/2025	1358
7440-28-0	Thallium	1.0	U	02/06/2025	1358
7440-62-2	Vanadium	5.0	U	02/06/2025	1358
7440-66-6	Zinc	5.0	U	02/06/2025	1358
Hardness	Hardness (total)	990		02/06/2025	1358

ME2957

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-05

% Solids:

Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	12	J	02/06/2025	1401
7440-36-0	Antimony	2.0	U	02/06/2025	1401
7440-38-2	Arsenic	0.35	J	02/06/2025	1401
7440-39-3	Barium	47		02/06/2025	1401
7440-41-7	Beryllium	1.0	U	02/06/2025	1401
7440-43-9	Cadmium	1.0	U	02/06/2025	1401
7440-70-2	Calcium	460000		02/06/2025	1401
7440-47-3	Chromium	0.26	J	02/06/2025	1401
7440-48-4	Cobalt	0.97	J	02/06/2025	1401
7440-50-8	Copper	0.58	J*	02/06/2025	1401
7439-89-6	Iron	860		02/06/2025	1401
7439-92-1	Lead	1.0	U	02/06/2025	1401
7439-95-4	Magnesium	100000		02/06/2025	1401
7439-96-5	Manganese	26	*	02/06/2025	1401
7440-02-0	Nickel	4.1		02/06/2025	1401
7440-09-7	Potassium	5800		02/06/2025	1401
7782-49-2	Selenium	5.0	U*	02/06/2025	1401
7440-22-4	Silver	1.0	U	02/06/2025	1401
7440-23-5	Sodium	180000		02/06/2025	1401
7440-28-0	Thallium	1.0	U	02/06/2025	1401
7440-62-2	Vanadium	0.23	J	02/06/2025	1401
7440-66-6	Zinc	0.80	J	02/06/2025	1401
Hardness	Hardness (total)	1600		02/06/2025	1401

ME2958

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-16

% Solids:

Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	20	U	02/06/2025	1447
7440-36-0	Antimony	2.0	U	02/06/2025	1447
7440-38-2	Arsenic	1.0	U	02/06/2025	1447
7440-39-3	Barium	4.2	J	02/06/2025	1447
7440-41-7	Beryllium	1.0	U	02/06/2025	1447
7440-43-9	Cadmium	1.0	U	02/06/2025	1447
7440-70-2	Calcium	130000		02/06/2025	1447
7440-47-3	Chromium	2.0	U	02/06/2025	1447
7440-48-4	Cobalt	1.0	U	02/06/2025	1447
7440-50-8	Copper	2.0	U*	02/06/2025	1447
7439-89-6	Iron	440		02/06/2025	1447
7439-92-1	Lead	0.23	J	02/06/2025	1447
7439-95-4	Magnesium	45000		02/06/2025	1447
7439-96-5	Manganese	16	*	02/06/2025	1447
7440-02-0	Nickel	1.0	U	02/06/2025	1447
7440-09-7	Potassium	1500		02/06/2025	1447
7782-49-2	Selenium	5.0	U*	02/06/2025	1447
7440-22-4	Silver	1.0	U	02/06/2025	1447
7440-23-5	Sodium	57000		02/06/2025	1447
7440-28-0	Thallium	1.0	U	02/06/2025	1447
7440-62-2	Vanadium	5.0	U	02/06/2025	1447
7440-66-6	Zinc	5.0	U	02/06/2025	1447
Hardness	Hardness (total)	510		02/06/2025	1447

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-09

% Solids:

Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	20	U	02/06/2025	1414
7440-36-0	Antimony	2.0	U	02/06/2025	1414
7440-38-2	Arsenic	0.13	J	02/06/2025	1414
7440-39-3	Barium	16		02/06/2025	1414
7440-41-7	Beryllium	1.0	U	02/06/2025	1414
7440-43-9	Cadmium	1.0	U	02/06/2025	1414
7440-70-2	Calcium	420000		02/06/2025	1414
7440-47-3	Chromium	2.0	U	02/06/2025	1414
7440-48-4	Cobalt	0.060	J	02/06/2025	1414
7440-50-8	Copper	0.43	J*	02/06/2025	1414
7439-89-6	Iron	1400		02/06/2025	1414
7439-92-1	Lead	1.0	U	02/06/2025	1414
7439-95-4	Magnesium	150000		02/06/2025	1414
7439-96-5	Manganese	51	*	02/06/2025	1414
7440-02-0	Nickel	0.24	J	02/06/2025	1414
7440-09-7	Potassium	4700		02/06/2025	1414
7782-49-2	Selenium	5.0	U*	02/06/2025	1414
7440-22-4	Silver	1.0	U	02/06/2025	1414
7440-23-5	Sodium	190000		02/06/2025	1414
7440-28-0	Thallium	1.0	U	02/06/2025	1414
7440-62-2	Vanadium	5.0	U	02/06/2025	1414
7440-66-6	Zinc	5.0	U	02/06/2025	1414
Hardness	Hardness (total)	1700		02/06/2025	1414

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water

Lab Code: ACE

Lab Sample ID: Q1186-06

% Solids:

Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	20	U	02/06/2025	1405
7440-36-0	Antimony	2.0	U	02/06/2025	1405
7440-38-2	Arsenic	5.0		02/06/2025	1405
7440-39-3	Barium	51		02/06/2025	1405
7440-41-7	Beryllium	1.0	U	02/06/2025	1405
7440-43-9	Cadmium	1.0	U	02/06/2025	1405
7440-70-2	Calcium	380000		02/06/2025	1405
7440-47-3	Chromium	1.2	J	02/06/2025	1405
7440-48-4	Cobalt	0.13	J	02/06/2025	1405
7440-50-8	Copper	2.0	U*	02/06/2025	1405
7439-89-6	Iron	5400		02/06/2025	1405
7439-92-1	Lead	1.0	U	02/06/2025	1405
7439-95-4	Magnesium	120000		02/06/2025	1405
7439-96-5	Manganese	490	*	02/06/2025	1405
7440-02-0	Nickel	0.70	J	02/06/2025	1405
7440-09-7	Potassium	15000		02/06/2025	1405
7782-49-2	Selenium	5.0	U*	02/06/2025	1405
7440-22-4	Silver	1.0	U	02/06/2025	1405
7440-23-5	Sodium	88000		02/06/2025	1405
7440-28-0	Thallium	1.0	U	02/06/2025	1405
7440-62-2	Vanadium	0.20	J	02/06/2025	1405
7440-66-6	Zinc	5.0	U	02/06/2025	1405
Hardness	Hardness (total)	1400		02/06/2025	1405

FORM 1 - IN ME2

ME2961	

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

INORGANIC ANALYSIS DATA SHEET

Matrix: Water Lab Sample ID: Q1186-07

% Solids: Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	25		02/06/2025	1408
7440-36-0	Antimony	2.0	U	02/06/2025	1408
7440-38-2	Arsenic	1.0	U	02/06/2025	1408
7440-39-3	Barium	11		02/06/2025	1408
7440-41-7	Beryllium	1.0	U	02/06/2025	1408
7440-43-9	Cadmium	1.0	U	02/06/2025	1408
7440-70-2	Calcium	370000		02/06/2025	1408
7440-47-3	Chromium	0.31	J	02/06/2025	1408
7440-48-4	Cobalt	0.050	J	02/06/2025	1408
7440-50-8	Copper	2.0	U*	02/06/2025	1408
7439-89-6	Iron	3000		02/06/2025	1408
7439-92-1	Lead	1.0	U	02/06/2025	1408
7439-95-4	Magnesium	110000		02/06/2025	1408
7439-96-5	Manganese	87	*	02/06/2025	1408
7440-02-0	Nickel	0.31	J	02/06/2025	1408
7440-09-7	Potassium	3900		02/06/2025	1408
7782-49-2	Selenium	5.0	U*	02/06/2025	1408
7440-22-4	Silver	1.0	U	02/06/2025	1408
7440-23-5	Sodium	38000		02/06/2025	1408
7440-28-0	Thallium	1.0	U	02/06/2025	1408
7440-62-2	Vanadium	0.14	J	02/06/2025	1408
7440-66-6	Zinc	5.0	U	02/06/2025	1408
Hardness	Hardness (total)	1400		02/06/2025	1408

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-08

% Solids:

Date Received: 01/24/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8.4	J	02/06/2025	1411
7440-36-0	Antimony	2.0	U	02/06/2025	1411
7440-38-2	Arsenic	1.0	U	02/06/2025	1411
7440-39-3	Barium	16		02/06/2025	1411
7440-41-7	Beryllium	1.0	U	02/06/2025	1411
7440-43-9	Cadmium	1.0	U	02/06/2025	1411
7440-70-2	Calcium	350000		02/06/2025	1411
7440-47-3	Chromium	0.68	J	02/06/2025	1411
7440-48-4	Cobalt	0.050	J	02/06/2025	1411
7440-50-8	Copper	14	*	02/06/2025	1411
7439-89-6	Iron	1500		02/06/2025	1411
7439-92-1	Lead	1.0	U	02/06/2025	1411
7439-95-4	Magnesium	91000		02/06/2025	1411
7439-96-5	Manganese	46	*	02/06/2025	1411
7440-02-0	Nickel	2.1		02/06/2025	1411
7440-09-7	Potassium	5900		02/06/2025	1411
7782-49-2	Selenium	5.0	U*	02/06/2025	1411
7440-22-4	Silver	1.0	U	02/06/2025	1411
7440-23-5	Sodium	45000		02/06/2025	1411
7440-28-0	Thallium	1.0	U	02/06/2025	1411
7440-62-2	Vanadium	0.12	J	02/06/2025	1411
7440-66-6	Zinc	1.0	J	02/06/2025	1411
Hardness	Hardness (total)	1200		02/06/2025	1411

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water

Lab Sample ID: Q1186-12

% Solids:

Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	590		02/06/2025	1428
7440-36-0	Antimony	0.10	J	02/06/2025	1428
7440-38-2	Arsenic	2.3		02/06/2025	1428
7440-39-3	Barium	44		02/06/2025	1428
7440-41-7	Beryllium	1.0	U	02/06/2025	1428
7440-43-9	Cadmium	1.0	U	02/06/2025	1428
7440-70-2	Calcium	140000		02/06/2025	1428
7440-47-3	Chromium	2.0	U	02/06/2025	1428
7440-48-4	Cobalt	0.15	J	02/06/2025	1428
7440-50-8	Copper	0.96	J*	02/06/2025	1428
7439-89-6	Iron	22	J	02/06/2025	1428
7439-92-1	Lead	0.22	J	02/06/2025	1428
7439-95-4	Magnesium	500	U	02/06/2025	1428
7439-96-5	Manganese	2.0	*	02/06/2025	1428
7440-02-0	Nickel	160		02/06/2025	1428
7440-09-7	Potassium	60000		02/06/2025	1428
7782-49-2	Selenium	1.7	J*	02/06/2025	1428
7440-22-4	Silver	1.0	U	02/06/2025	1428
7440-23-5	Sodium	30000		02/06/2025	1428
7440-28-0	Thallium	1.0	U	02/06/2025	1428
7440-62-2	Vanadium	2.7	J	02/06/2025	1428
7440-66-6	Zinc	1.3	J	02/06/2025	1428
Hardness	Hardness (total)	350		02/06/2025	1428

NOTE: Hardness (total) is reported in mg/L

Comments:

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-14

% Solids: Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L,\ mg/L,\ mg/kg\ dry\ weight},\ \mu g,\ or\ \mu g/cm^2)$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	700		02/06/2025	1434
7440-36-0	Antimony	0.12	J	02/06/2025	1434
7440-38-2	Arsenic	4.7		02/06/2025	1434
7440-39-3	Barium	54		02/06/2025	1434
7440-41-7	Beryllium	1.0	U	02/06/2025	1434
7440-43-9	Cadmium	1.0	U	02/06/2025	1434
7440-70-2	Calcium	120000		02/06/2025	1434
7440-47-3	Chromium	0.50	J	02/06/2025	1434
7440-48-4	Cobalt	0.15	J	02/06/2025	1434
7440-50-8	Copper	2.5	*	02/06/2025	1434
7439-89-6	Iron	17	J	02/06/2025	1434
7439-92-1	Lead	1.0	U	02/06/2025	1434
7439-95-4	Magnesium	500	U	02/06/2025	1434
7439-96-5	Manganese	0.80	J*	02/06/2025	1434
7440-02-0	Nickel	420		02/06/2025	1434
7440-09-7	Potassium	180000		02/06/2025	1434
7782-49-2	Selenium	2.0	J*	02/06/2025	1434
7440-22-4	Silver	1.0	U	02/06/2025	1434
7440-23-5	Sodium	110000	1	02/06/2025	1434
7440-28-0	Thallium	1.0	U	02/06/2025	1434
7440-62-2	Vanadium	2.7	J	02/06/2025	1434
7440-66-6	Zinc	0.96	J	02/06/2025	1434
Hardness	Hardness (total)	300		02/06/2025	1434
			1		

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-15

% Solids:

Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	740		02/06/2025	1444
7440-36-0	Antimony	0.13	J	02/06/2025	1444
7440-38-2	Arsenic	4.7		02/06/2025	1444
7440-39-3	Barium	52		02/06/2025	1444
7440-41-7	Beryllium	1.0	U	02/06/2025	1444
7440-43-9	Cadmium	1.0	U	02/06/2025	1444
7440-70-2	Calcium	110000		02/06/2025	1444
7440-47-3	Chromium	2.0	U	02/06/2025	1444
7440-48-4	Cobalt	0.16	J	02/06/2025	1444
7440-50-8	Copper	0.53	J*	02/06/2025	1444
7439-89-6	Iron	14	J	02/06/2025	1444
7439-92-1	Lead	1.0	U	02/06/2025	1444
7439-95-4	Magnesium	500	U	02/06/2025	1444
7439-96-5	Manganese	0.62	J*	02/06/2025	1444
7440-02-0	Nickel	440		02/06/2025	1444
7440-09-7	Potassium	190000		02/06/2025	1444
7782-49-2	Selenium	2.0	J*	02/06/2025	1444
7440-22-4	Silver	1.0	U	02/06/2025	1444
7440-23-5	Sodium	120000		02/06/2025	1444
7440-28-0	Thallium	1.0	U	02/06/2025	1444
7440-62-2	Vanadium	2.9	J	02/06/2025	1444
7440-66-6	Zinc	1.4	J	02/06/2025	1444
Hardness	Hardness (total)	270		02/06/2025	1444

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-13

% Solids:

Date Received: 01/27/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	53		02/06/2025	1431
7440-36-0	Antimony	0.20	J	02/06/2025	1431
7440-38-2	Arsenic	1.3		02/06/2025	1431
7440-39-3	Barium	23		02/06/2025	1431
7440-41-7	Beryllium	1.0	U	02/06/2025	1431
7440-43-9	Cadmium	1.0	U	02/06/2025	1431
7440-70-2	Calcium	18000		02/06/2025	1431
7440-47-3	Chromium	2.0	U	02/06/2025	1431
7440-48-4	Cobalt	0.11	J	02/06/2025	1431
7440-50-8	Copper	3.8	*	02/06/2025	1431
7439-89-6	Iron	120	J	02/06/2025	1431
7439-92-1	Lead	1.0	U	02/06/2025	1431
7439-95-4	Magnesium	420	J	02/06/2025	1431
7439-96-5	Manganese	8.0	*	02/06/2025	1431
7440-02-0	Nickel	25		02/06/2025	1431
7440-09-7	Potassium	76000		02/06/2025	1431
7782-49-2	Selenium	1.1	J*	02/06/2025	1431
7440-22-4	Silver	1.0	U	02/06/2025	1431
7440-23-5	Sodium	50000		02/06/2025	1431
7440-28-0	Thallium	1.0	U	02/06/2025	1431
7440-62-2	Vanadium	1.7	J	02/06/2025	1431
7440-66-6	Zinc	4.1	J	02/06/2025	1431
Hardness	Hardness (total)	47		02/06/2025	1431

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-17

% Solids:

Date Received: 01/28/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	19	J	02/06/2025	1450
7440-36-0	Antimony	0.24	J	02/06/2025	1450
7440-38-2	Arsenic	1.9		02/06/2025	1450
7440-39-3	Barium	32		02/06/2025	1450
7440-41-7	Beryllium	1.0	U	02/06/2025	1450
7440-43-9	Cadmium	1.0	U	02/06/2025	1450
7440-70-2	Calcium	33000		02/06/2025	1450
7440-47-3	Chromium	1.7	J	02/06/2025	1450
7440-48-4	Cobalt	0.090	J	02/06/2025	1450
7440-50-8	Copper	3.3	*	02/06/2025	1450
7439-89-6	Iron	190	J	02/06/2025	1450
7439-92-1	Lead	0.64	J	02/06/2025	1450
7439-95-4	Magnesium	39000		02/06/2025	1450
7439-96-5	Manganese	53	*	02/06/2025	1450
7440-02-0	Nickel	4.0		02/06/2025	1450
7440-09-7	Potassium	57000		02/06/2025	1450
7782-49-2	Selenium	1.2	J*	02/06/2025	1450
7440-22-4	Silver	1.0	U	02/06/2025	1450
7440-23-5	Sodium	39000	1	02/06/2025	1450
7440-28-0	Thallium	1.0	U	02/06/2025	1450
7440-62-2	Vanadium	1.2	J	02/06/2025	1450
7440-66-6	Zinc	310	1	02/06/2025	1450
Hardness	Hardness (total)	240		02/06/2025	1450

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-18

% Solids:

Date Received: 01/28/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	13	J	02/06/2025	1453
7440-36-0	Antimony	2.0	U	02/06/2025	1453
7440-38-2	Arsenic	2.0		02/06/2025	1453
7440-39-3	Barium	95		02/06/2025	1453
7440-41-7	Beryllium	1.0	U	02/06/2025	1453
7440-43-9	Cadmium	1.0	U	02/06/2025	1453
7440-70-2	Calcium	150000		02/06/2025	1453
7440-47-3	Chromium	1.0	J	02/06/2025	1453
7440-48-4	Cobalt	0.18	J	02/06/2025	1453
7440-50-8	Copper	0.76	J*	02/06/2025	1453
7439-89-6	Iron	930		02/06/2025	1453
7439-92-1	Lead	0.22	J	02/06/2025	1453
7439-95-4	Magnesium	39000		02/06/2025	1453
7439-96-5	Manganese	69	*	02/06/2025	1453
7440-02-0	Nickel	2.2		02/06/2025	1453
7440-09-7	Potassium	4500		02/06/2025	1453
7782-49-2	Selenium	5.0	U*	02/06/2025	1453
7440-22-4	Silver	1.0	U	02/06/2025	1453
7440-23-5	Sodium	11000		02/06/2025	1453
7440-28-0	Thallium	1.0	U	02/06/2025	1453
7440-62-2	Vanadium	1.1	J	02/06/2025	1453
7440-66-6	Zinc	0.86	J	02/06/2025	1453
Hardness	Hardness (total)	540		02/06/2025	1453

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-19

% Solids:

Date Received: 01/28/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	13	J	02/06/2025	1457
7440-36-0	Antimony	2.0	U	02/06/2025	1457
7440-38-2	Arsenic	0.27	J	02/06/2025	1457
7440-39-3	Barium	37		02/06/2025	1457
7440-41-7	Beryllium	1.0	U	02/06/2025	1457
7440-43-9	Cadmium	1.0	U	02/06/2025	1457
7440-70-2	Calcium	420000		02/06/2025	1457
7440-47-3	Chromium	2.0	U	02/06/2025	1457
7440-48-4	Cobalt	0.12	J	02/06/2025	1457
7440-50-8	Copper	2.0	U*	02/06/2025	1457
7439-89-6	Iron	1200		02/06/2025	1457
7439-92-1	Lead	1.0	U	02/06/2025	1457
7439-95-4	Magnesium	110000		02/06/2025	1457
7439-96-5	Manganese	160	*	02/06/2025	1457
7440-02-0	Nickel	1.0	U	02/06/2025	1457
7440-09-7	Potassium	3000		02/06/2025	1457
7782-49-2	Selenium	5.0	U*	02/06/2025	1457
7440-22-4	Silver	1.0	U	02/06/2025	1457
7440-23-5	Sodium	22000		02/06/2025	1457
7440-28-0	Thallium	1.0	U	02/06/2025	1457
7440-62-2	Vanadium	0.12	J	02/06/2025	1457
7440-66-6	Zinc	2.0	J	02/06/2025	1457
Hardness	Hardness (total)	1500		02/06/2025	1457

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Lab Code: ACE

Case No.: 51900 MA No.: 3114.1 SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-20

% Solids:

Date Received: 01/28/2025

Analytical Method: ICP MS

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ :

ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	56		02/06/2025	1500
7440-36-0	Antimony	0.59	J	02/06/2025	1500
7440-38-2	Arsenic	1.7		02/06/2025	1500
7440-39-3	Barium	33		02/06/2025	1500
7440-41-7	Beryllium	1.0	U	02/06/2025	1500
7440-43-9	Cadmium	1.0	U	02/06/2025	1500
7440-70-2	Calcium	56000		02/06/2025	1500
7440-47-3	Chromium	0.41	J	02/06/2025	1500
7440-48-4	Cobalt	1.7		02/06/2025	1500
7440-50-8	Copper	5.5	*	02/06/2025	1500
7439-89-6	Iron	690		02/06/2025	1500
7439-92-1	Lead	1.8		02/06/2025	1500
7439-95-4	Magnesium	42000		02/06/2025	1500
7439-96-5	Manganese	90	*	02/06/2025	1500
7440-02-0	Nickel	15		02/06/2025	1500
7440-09-7	Potassium	32000		02/06/2025	1500
7782-49-2	Selenium	1.1	J*	02/06/2025	1500
7440-22-4	Silver	1.0	U	02/06/2025	1500
7440-23-5	Sodium	29000		02/06/2025	1500
7440-28-0	Thallium	1.0	U	02/06/2025	1500
7440-62-2	Vanadium	1.4	J	02/06/2025	1500
7440-66-6	Zinc	1.7	J	02/06/2025	1500
Hardness	Hardness (total)	310		02/06/2025	1500

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8020625MS.b\

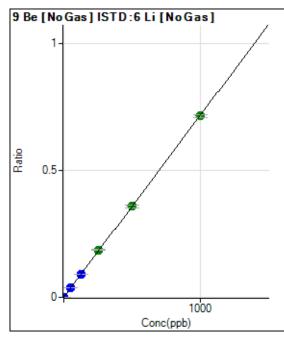
Analysis File: P8020625MS.batch.bin
DA Date-Time: 2025-02-06 19:18:37

Calibration Title:

Calibration Method: External Calibration

VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-02-06 12:08:54
2	005CALS.d	S02	2025-02-06 12:12:13
3	006CALB.d	S03	2025-02-06 12:15:34
4	007CALS.d	S04	2025-02-06 12:18:35
5	008CALS.d	S05	2025-02-06 12:21:31
6	009CALS.d	S06	2025-02-06 12:24:18
7	010CALS.d	S07	2025-02-06 12:27:05
8	011CALS.d	S08	2025-02-06 12:29:51



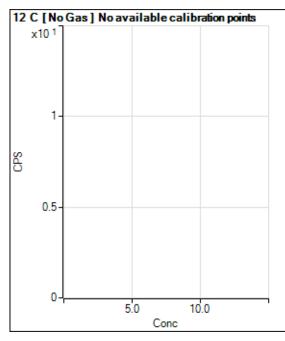
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	299.55	0.0000	Р	5.7
2		1.000	1.105	7601.02	0.0008	Р	0.6
3		50.000	50.575	325755.46	0.0363	Р	1.3
4		125.000	125.563	807230.92	0.0901	Р	1.6
5		250.000	260.917	1646635.43	0.1871	Α	0.5
6		500.000	500.895	3065868.83	0.3592	Α	3.1
7		1000.000	996.724	5979788.32	0.7148	Α	1.6
8				2023.23	0.0003	Р	11.1

y = 7.1714E-004 \* x + 3.3052E-005

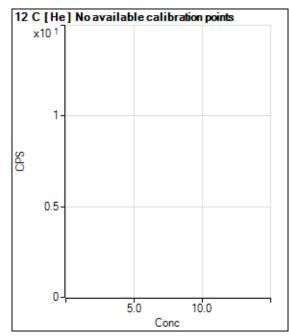
R = 0.9999

DL = 0.007867

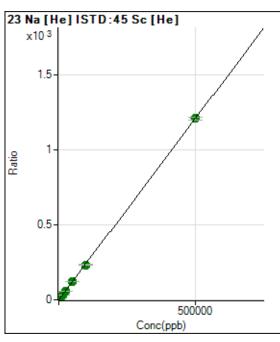
BEC = 0.04609



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				6492331.71		Α	0.7
2				6780051.43		Α	0.7
3				6653098.58		Α	1.2
4				6841966.70		Α	0.5
5				7057636.77		Α	0.6
6				7200802.81		Α	2.1
7				8096407.59		Α	2.2
8				7003234.76		Α	0.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				42841.20		Р	0.9
2				44617.46		Р	0.3
3				43829.54		Р	0.7
4				45526.89		Р	1.0
5				47830.88		Р	0.7
6				49713.77		Р	1.3
7				57866.65		Р	0.4
8				61869.36		Р	1.6



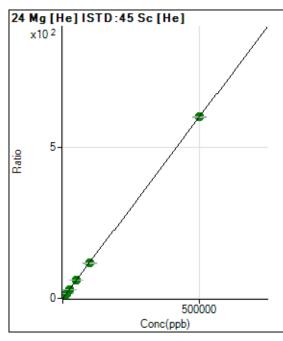
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	55760.32	0.2382	Р	0.6
2		500.000	521.089	349842.29	1.4970	Р	0.3
3		5000.000	4951.978	2822057.88	12.2014	Α	1.9
4		12500.000	12372.251	6956311.28	30.1275	Α	0.7
5		25000.000	24836.823	13768986.32	60.2399	Α	0.5
6		50000.000	50354.134	26222550.72	121.8856	Α	0.4
7		100000.00	96513.484	51640965.34	233.3991	Α	1.1
8		500000.00	500673.70	248800967.4	1,209.784	Α	1.9

y = 0.0024 \* x + 0.2382

R = 1.0000

DL = 1.699

BEC = 98.59



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	4650.78	0.0199	Р	2.6
2		500.000	534.109	154607.72	0.6616	Р	0.1
3		5000.000	5034.854	1403842.83	6.0693	Α	1.4
4		12500.000	12614.920	3504109.32	15.1768	Α	0.6
5		25000.000	25091.272	6895103.51	30.1672	Α	0.5
6		50000.000	50833.316	13143176.75	61.0964	Α	0.5
7		100000.00	97128.939	25824302.67	116.7208	Α	1.4
8		500000.00	500483.06	123685942.6	601.3531	Α	0.3

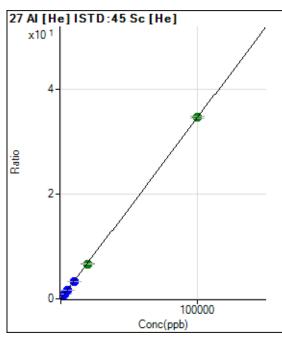
y = 0.0012 \* x + 0.0199

R = 1.0000

DL = 1.277

BEC = 16.53

Weight: <None>
Min Conc: 0



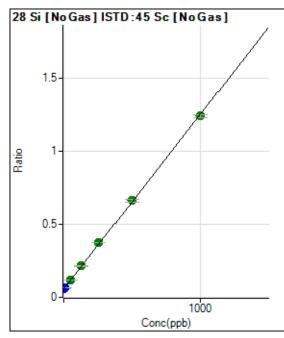
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	77.78	0.0003	Р	23.6
2		20.000	20.337	1722.34	0.0074	Р	2.1
3		1000.000	958.242	76785.46	0.3320	Р	2.2
4		2500.000	2402.443	192068.14	0.8319	Р	0.3
5		5000.000	4822.560	381570.92	1.6695	Р	0.7
6		10000.000	9741.780	725378.44	3.3721	Р	1.1
7		20000.000	19343.237	1481358.52	6.6953	Α	0.9
8		100000.00	100168.90	7130685.38	34.6704	Α	1.1

y = 3.4612E-004 \* x + 3.3179E-004

R = 1.0000

DL = 0.6799

BEC = 0.9586



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	649404.83	0.0569	Р	2.1
2		10.000	7.787	744095.66	0.0662	Р	0.6
3		50.000	52.460	1330772.59	0.1195	Α	0.6
4		125.000	132.061	2365208.98	0.2145	Α	1.6
5		250.000	265.033	4064727.09	0.3732	Α	0.6
6		500.000	507.374	7128445.59	0.6625	Α	3.0
7		1000.000	991.571	13161651.47	1.2405	Α	1.3
8				810986.71	0.0842	Р	1.1

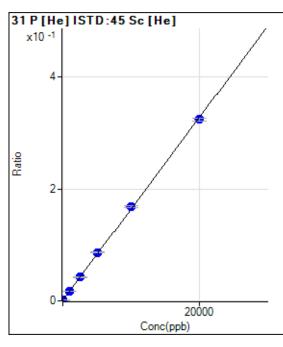
y = 0.0012 \* x + 0.0569

R = 0.9998

DL = 2.998

BEC = 47.64

Weight: <None>
Min Conc: 0



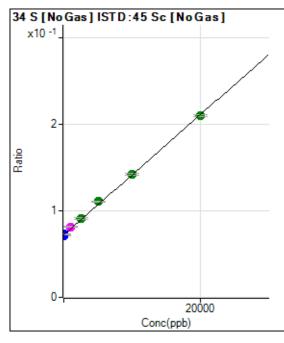
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	-18.210	110.00	0.0005	Р	21.6
2		0.000	18.210	248.89	0.0011	Р	12.5
3		1000.000	1010.216	3995.04	0.0173	Р	6.8
4		2500.000	2533.847	9735.56	0.0422	Р	1.4
5		5000.000	5252.014	19789.14	0.0866	Р	1.4
6		10000.000	10268.387	36251.89	0.1685	Р	1.6
7		20000.000	19798.061	71736.05	0.3242	Р	1.3
8				111.11	0.0005	Р	22.0

y = 1.6338E-005 \* x + 7.6787E-004

R = 0.9998

DL = 21.59

BEC = 47



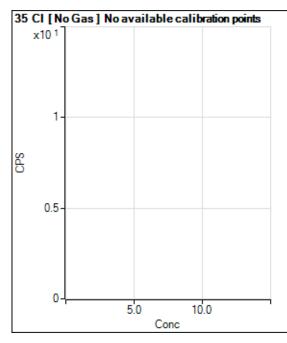
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	-85.005	819535.25	0.0718	Р	2.4
2		0.000	85.005	820440.18	0.0730	Р	0.9
3		1000.000	1299.045	906511.04	0.0814	М	1.2
4		2500.000	2756.900	1009217.73	0.0915	Α	2.0
5		5000.000	5535.280	1207156.98	0.1109	Α	1.6
6		10000.000	10066.160	1532039.70	0.1424	Α	1.8
7		20000.000	19786.035	2227605.89	0.2099	Α	1.1
8				665329.30	0.0691	Р	2.3

y = 6.9536E-006 \* x + 0.0724

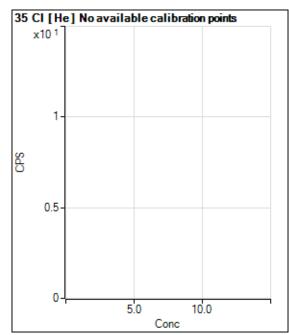
R = 0.9995

DL = 506.2

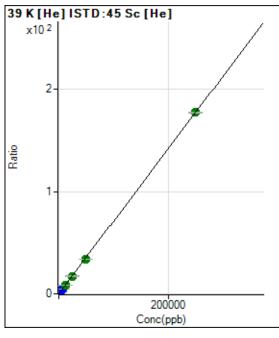
BEC = 1.041E+04



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				167891.88		Р	0.4
2				169064.32		Р	0.9
3				163879.92		Р	0.5
4				164354.36		Р	0.5
5				171655.02		Р	0.4
6				175272.29		Р	0.5
7				197625.40		Р	1.5
8				156089.64		Р	0.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				690.02		Р	7.8
2				717.81		Р	9.8
3				686.69		Р	5.1
4				700.03		Р	6.4
5				713.36		Р	7.3
6				726.69		Р	2.9
7				876.70		Р	4.9
8				691.14		Р	4.8



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	13211.70	0.0564	Р	1.3
2		500.000	508.771	97328.29	0.4165	Р	0.7
3		2500.000	2369.609	400974.09	1.7334	Р	0.7
4		6250.000	5988.420	991539.96	4.2945	Р	8.0
5		12500.000	12363.353	2012754.64	8.8062	Α	1.5
6		25000.000	24429.184	3731054.67	17.3454	Α	1.5
7		50000.000	47709.475	7483021.42	33.8212	Α	1.2
8		250000.00	250529.84	36479288.07	177.3607	Α	0.4

y = 7.0772E-004 \* x + 0.0564

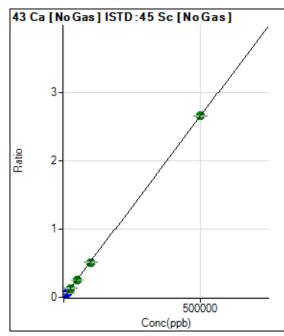
R = 1.0000

DL = 3.228

BEC = 79.73

Weight: <None>

Min Conc: 0



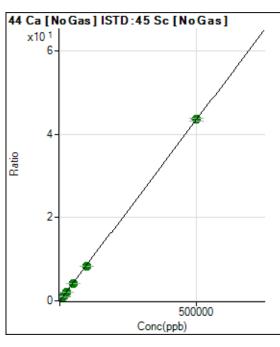
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	690.02	0.0001	Р	4.2
2		500.000	518.193	31534.58	0.0028	Р	1.1
3		5000.000	4786.836	282942.43	0.0254	Р	1.1
4		12500.000	12036.520	703282.84	0.0638	Р	2.5
5		25000.000	25094.048	1447565.15	0.1329	Α	1.3
6		50000.000	48032.999	2736593.88	0.2544	Α	4.1
7		100000.00	96259.368	5408626.03	0.5097	Α	1.4
8		500000.00	500953.82	25543196.01	2.6525	Α	0.7

y = 5.2947E-006 \* x + 6.0374E-005

R = 1.0000DL = 1.451

BEC = 11.4

Weight: <None>
Min Conc: 0



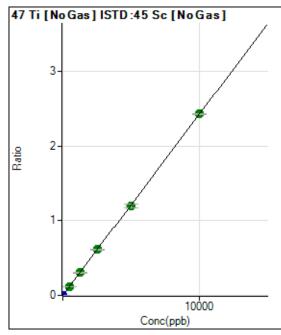
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	34224.02	0.0030	Р	1.5
2		500.000	510.497	532926.39	0.0474	Р	1.0
3		5000.000	4752.829	4636360.49	0.4163	Α	0.5
4		12500.000	11950.698	11491016.08	1.0422	Α	2.0
5		25000.000	24363.907	23105687.71	2.1216	Α	1.5
6		50000.000	47208.658	44206963.79	4.1082	Α	2.5
7		100000.00	95505.588	88153443.13	8.3080	Α	8.0
8		500000.00	501226.01	419745478.1	43.5889	Α	1.3

y = 8.6959E-005 \* x + 0.0030

R = 0.9999

DL = 1.565

BEC = 34.46



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	246.67	0.0000	Р	1.9
2		5.000	5.314	14716.55	0.0013	Р	1.7
3		500.000	498.276	1344304.79	0.1207	Α	1.6
4		1250.000	1251.929	3343781.55	0.3032	Α	1.7
5		2500.000	2534.076	6684766.36	0.6138	Α	1.3
6		5000.000	4942.644	12880212.45	1.1972	Α	3.4
7		10000.000	10020.004	25751142.12	2.4269	Α	0.3
8				3381.55	0.0004	Р	6.8

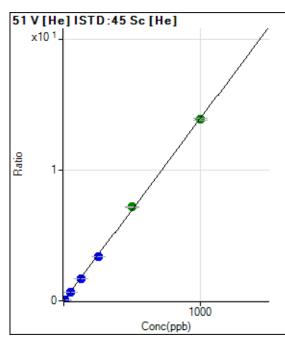
y = 2.4221E-004 \* x + 2.1592E-005

R = 1.0000

DL = 0.005208

BEC = 0.08915

Weight: <None>
Min Conc: 0



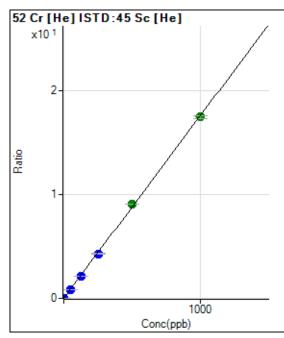
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	6.67	0.0000	Р	49.3
2		5.000	5.249	17095.88	0.0732	Р	2.8
3		50.000	47.997	154668.62	0.6687	Р	1.8
4		125.000	120.733	388370.26	1.6821	Р	0.4
5		250.000	243.612	775720.42	3.3940	Р	8.0
6		500.000	514.457	1541841.30	7.1675	Α	1.1
7		1000.000	995.001	3067117.63	13.8624	Α	0.9
8				821.14	0.0040	Р	7.0

y = 0.0139 \* x + 2.8398E-005

R = 0.9998

DL = 0.003017

BEC = 0.002038



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	1676.78	0.0072	Р	4.8
2		2.000	2.097	10296.00	0.0441	Р	2.4
3		50.000	48.670	199693.88	0.8633	Р	1.1
4		125.000	121.497	495134.91	2.1445	Р	0.3
5		250.000	244.524	984774.30	4.3087	Р	0.6
6		500.000	516.772	1957243.77	9.0979	Α	0.1
7		1000.000	993.487	3868422.75	17.4839	Α	1.8
8				9464.32	0.0460	Р	2.6

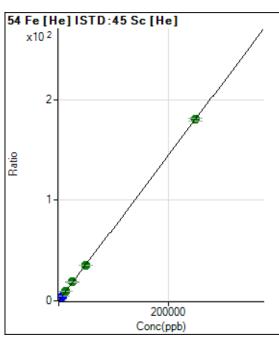
y = 0.0176 \* x + 0.0072

R = 0.9998

DL = 0.05836

BEC = 0.4072

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	548.91	0.0023	Р	10.2
2		50.000	55.250	9862.35	0.0422	Р	2.1
3		2500.000	2477.871	413996.65	1.7900	Р	2.0
4		6250.000	6182.846	1030387.67	4.4628	Р	0.9
5		12500.000	12753.925	2103592.02	9.2034	Α	1.1
6		25000.000	25860.234	4013241.82	18.6587	Α	2.4
7		50000.000	49181.686	7850713.22	35.4834	Α	1.4
8		250000.00	250066.84	37104507.78	180.4078	Α	1.4

y = 7.2143E-004 \* x + 0.0023

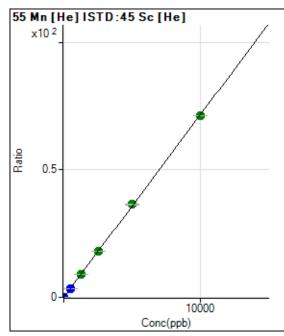
R = 1.0000

DL = 0.9953

BEC = 3.251

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	141.11	0.0006	Р	8.0
2		1.000	1.063	1917.93	0.0082	Р	6.6
3		500.000	491.924	814525.97	3.5217	Р	1.9
4		1250.000	1280.839	2116839.95	9.1685	Α	1.4
5		2500.000	2543.569	4161235.15	18.2067	Α	0.7
6		5000.000	5093.562	7843167.52	36.4588	Α	0.4
7		10000.000	9938.876	15740324.63	71.1401	Α	0.1
8				6856.16	0.0333	Р	3.7

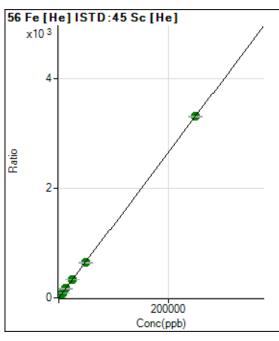
y = 0.0072 \* x + 6.0273E-004

R = 0.9999

DL = 0.00201

BEC = 0.08421

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	6719.42	0.0287	Р	6.5
2		50.000	53.740	172473.19	0.7381	Р	0.6
3		2500.000	2495.735	7626117.11	32.9716	Α	1.8
4		6250.000	6289.400	19174160.27	83.0469	Α	0.7
5		12500.000	12677.636	38252405.54	167.3697	Α	1.7
6		25000.000	25462.262	72307056.14	336.1229	Α	0.7
7		50000.000	48540.308	141766919.0	640.7461	Α	0.9
8		250000.00	250235.88	679358478.7	3,303.066	Α	0.9

y = 0.0132 \* x + 0.0287

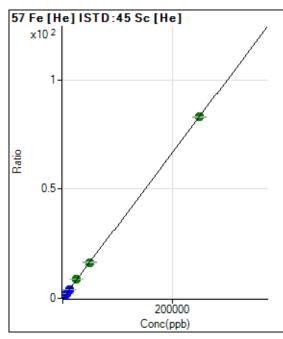
R = 1.0000

DL = 0.4211

 $\mathsf{BEC} = 2.175$ 

Weight: <None>

Min Conc: 0



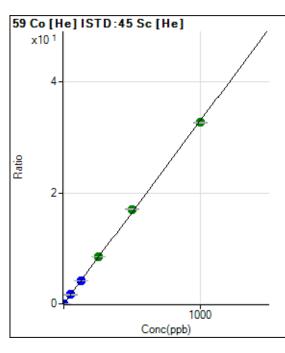
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	194.45	0.0008	Р	11.6
2		50.000	51.927	4222.89	0.0181	Р	4.3
3		2500.000	2453.575	188621.39	0.8155	Р	1.8
4		6250.000	6107.893	468434.01	2.0289	Р	0.6
5		12500.000	12320.743	935197.80	4.0918	Р	1.1
6		25000.000	26145.578	1867412.80	8.6821	Α	2.3
7		50000.000	49627.171	3646140.36	16.4788	Α	1.5
8		250000.00	249972.98	17071398.63	83.0006	Α	0.7

y = 3.3204E-004 \* x + 8.3101E-004

R = 1.0000DL = 0.8674

BEC = 2.503

Weight: <None>
Min Conc: 0

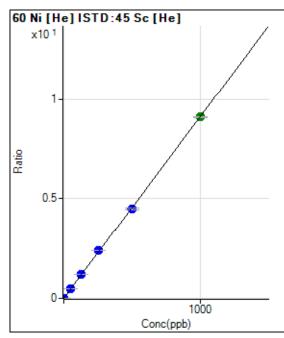


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	94.44	0.0004	Р	15.6
2		1.000	1.177	9179.70	0.0393	Р	1.9
3		50.000	50.076	382669.05	1.6545	Р	1.7
4		125.000	124.309	948132.41	4.1064	Р	0.1
5		250.000	257.214	1941901.15	8.4964	Α	0.6
6		500.000	515.060	3659759.08	17.0132	Α	1.1
7		1000.000	990.749	7240736.56	32.7257	Α	0.5
8				15191.56	0.0739	Р	3.1

y = 0.0330 \* x + 4.0309E-004

R = 0.9998DL = 0.005726

BEC = 0.0122



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	715.58	0.0031	Р	4.3
2		1.000	1.099	3054.80	0.0131	Р	4.8
3		50.000	52.813	112078.86	0.4846	Р	2.1
4		125.000	133.262	281245.83	1.2181	Р	0.1
5		250.000	265.984	554979.55	2.4282	Р	8.0
6		500.000	492.336	966228.30	4.4920	Р	1.8
7		1000.000	998.663	2015333.86	9.1086	Α	0.6
8				6512.65	0.0317	Р	1.4

y = 0.0091 \* x + 0.0031

R = 0.9998

DL = 0.04348

BEC = 0.3351

Weight: <None>
Min Conc: 0

63 C	u [He] ISTD	):45 Sc [He]
Х	10 2	
	3-	
Katio	2-	*
	1-	•
	0	10000 Conc(ppb)

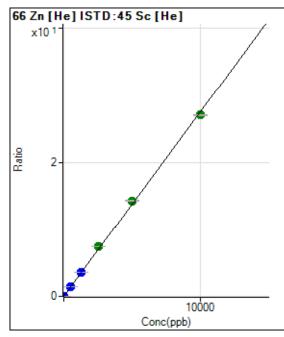
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	3802.77	0.0162	Р	4.4
2		2.000	2.241	17038.11	0.0729	Р	0.6
3		500.000	523.552	3065583.67	13.2546	Α	2.1
4		1250.000	1288.834	7528313.99	32.6051	Α	0.6
5		2500.000	2583.770	14935792.28	65.3483	Α	8.0
6		5000.000	5218.698	28386633.47	131.9739	Α	2.0
7		10000.000	9863.677	55185646.40	249.4248	Α	1.2
8				11343.52	0.0551	Р	8.0

y = 0.0253 \* x + 0.0162

R = 0.9996

DL = 0.08399

BEC = 0.6425



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	336.67	0.0014	Р	3.4
2		5.000	5.367	3781.65	0.0162	Р	5.4
3		500.000	518.470	329779.38	1.4258	Р	1.7
4		1250.000	1302.186	826299.04	3.5788	Р	0.3
5		2500.000	2706.708	1699886.59	7.4373	Α	1.3
6		5000.000	5188.463	3066439.99	14.2551	Α	1.6
7		10000.000	9846.645	5985352.27	27.0520	Α	0.6
8				2943.67	0.0143	Р	4.9

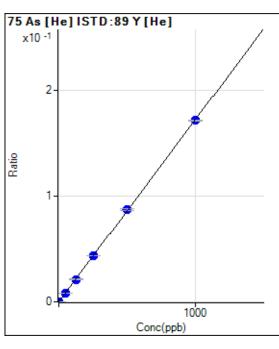
y = 0.0027 \* x + 0.0014

R = 0.9995

DL = 0.05348

BEC = 0.5236

Weight: <None>
Min Conc: 0



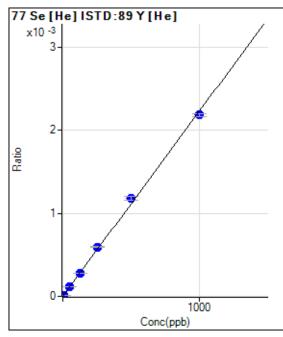
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	6.67	0.0000	Р	51.4
2		1.000	1.101	410.01	0.0002	Р	12.0
3		50.000	49.317	18056.10	0.0085	Р	1.9
4		125.000	123.585	45255.79	0.0213	Р	1.0
5		250.000	254.042	90612.10	0.0437	Р	1.3
6		500.000	505.347	173574.69	0.0870	Р	2.2
7		1000.000	996.527	347359.22	0.1716	Р	0.9
8				225.56	0.0001	Р	7.3

y = 1.7215E-004 \* x + 3.0948E-006

R = 1.0000

DL = 0.02769

BEC = 0.01798



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	0.00	0.0000	Р	
2		5.000	4.451	21.11	0.0000	Р	45.7
3		50.000	52.248	247.78	0.0001	Р	6.2
4		125.000	124.836	592.24	0.0003	Р	3.0
5		250.000	266.663	1232.29	0.0006	Р	3.1
6		500.000	530.681	2361.34	0.0012	Р	4.5
7		1000.000	980.405	4428.52	0.0022	Р	1.8
8				1.11	0.0000	Р	173.

y = 2.2306E-006 \* x + 0.0000E+000

R = 0.9991

DL = 0

BEC = 0

Weight: <None>
Min Conc: 0

	Se [H 10 -2	e] ISTD:89 Y [He]
	1-	
Ratio	0.5-	*
		**
	0-	1000 Conc(ppb)

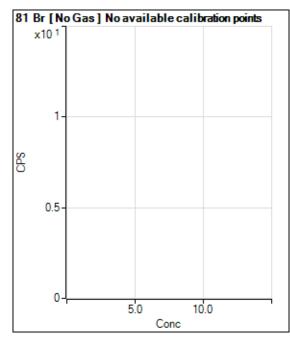
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	16.67	0.0000	Р	69.4
2		5.000	4.161	84.44	0.0000	Р	22.3
3		50.000	47.734	795.59	0.0004	Р	4.4
4		125.000	124.666	2052.40	0.0010	Р	4.6
5		250.000	256.667	4099.52	0.0020	Р	1.3
6		500.000	501.636	7699.95	0.0039	Р	3.3
7		1000.000	997.674	15527.52	0.0077	Р	1.4
8				6.67	0.0000	Р	50.0

y = 7.6790E-006 \* x + 7.7181E-006

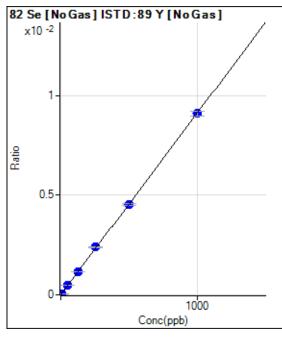
R = 1.0000

DL = 2.093

 $\mathsf{BEC} = 1.005$ 



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				4261.80		Р	3.0
2				4142.87		Р	4.0
3				4071.74		Р	3.5
4				3906.14		Р	0.3
5				4032.84		Р	2.3
6				3793.88		Р	6.9
7				4015.06		Р	1.6
8				4030.63		Р	0.5



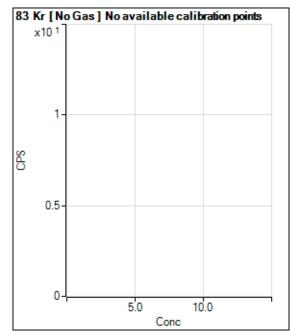
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	20.00	0.0000	Р	31.1
2		5.000	5.266	1333.44	0.0000	Р	0.6
3		50.000	51.025	12593.78	0.0005	Р	2.5
4		125.000	127.157	31817.86	0.0012	Р	1.9
5		250.000	261.843	64314.24	0.0024	Р	8.0
6		500.000	498.169	121133.77	0.0045	Р	1.9
7		1000.000	997.632	240624.74	0.0091	Р	2.7
8				27.78	0.0000	Р	203.

y = 9.1244E-006 \* x + 7.1409E-007

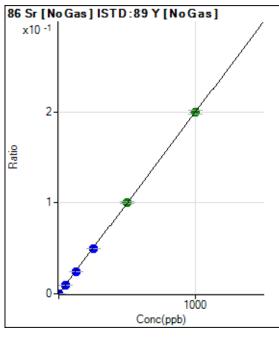
R = 0.9999

DL = 0.07291

BEC = 0.07826



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				290.01		Р	14.1
2				265.56		Р	13.8
3				285.56		Р	3.6
4				295.56		Р	12.8
5				230.00		Р	5.2
6				310.01		Р	19.1
7				294.45		Р	11.8
8				318.90		Р	18.4



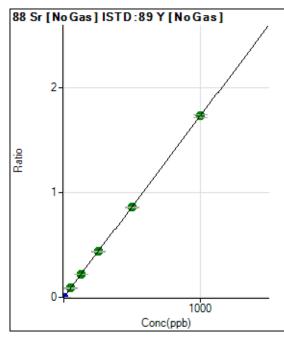
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	503.35	0.0000	Р	17.9
2		1.000	1.067	6320.38	0.0002	Р	3.2
3		50.000	48.748	263444.41	0.0098	Р	1.5
4		125.000	121.053	663107.09	0.0242	Р	1.4
5		250.000	248.670	1337004.91	0.0497	Р	0.7
6		500.000	503.273	2678684.96	0.1005	Α	2.0
7		1000.000	999.252	5276047.42	0.1996	Α	2.3
8				16602.15	0.0007	Р	0.5

y = 1.9972E-004 \* x + 1.8108E-005

R = 1.0000

DL = 0.04869

BEC = 0.09067



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	361.12	0.0000	Р	9.6
2		1.000	1.061	50573.40	0.0018	Р	1.1
3		50.000	50.542	2363414.46	0.0875	Α	2.1
4		125.000	125.638	5961953.32	0.2175	Α	0.9
5		250.000	253.008	11787023.44	0.4380	Α	1.5
6		500.000	497.856	22966438.82	0.8619	Α	1.1
7		1000.000	1000.213	45774527.65	1.7315	Α	1.6
8				140271.68	0.0059	Р	8.0

y = 0.0017 \* x + 1.2973E-005

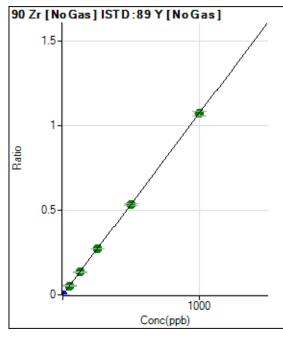
R = 1.0000

DL = 0.002168

BEC = 0.007494

Weight: <None>

Min Conc: 0



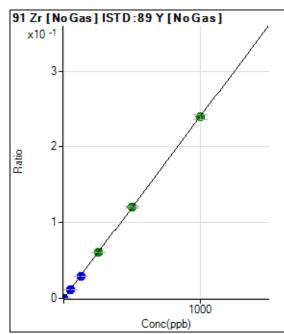
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	933.37	0.0000	Р	10.0
2		1.000	1.036	31344.06	0.0011	Р	1.5
3		50.000	50.234	1458625.85	0.0540	Α	1.4
4		125.000	125.265	3689437.79	0.1346	Α	2.1
5		250.000	254.857	7370100.72	0.2739	Α	0.5
6		500.000	498.474	14271543.12	0.5356	Α	1.7
7		1000.000	999.504	28386090.13	1.0739	Α	2.9
8				47730.31	0.0020	Р	1.0

y = 0.0011 \* x + 3.3502E-005

R = 1.0000

DL = 0.009329

BEC = 0.03118



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	155.56	0.0000	Р	10.2
2		1.000	1.018	6833.96	0.0002	Р	2.0
3		50.000	48.102	311926.87	0.0115	Р	1.2
4		125.000	120.019	789514.89	0.0288	Р	1.3
5		250.000	255.030	1647170.51	0.0612	Α	8.0
6		500.000	503.997	3222730.05	0.1209	Α	2.0
7		1000.000	997.461	6326876.22	0.2394	Α	2.8
8				10741.98	0.0004	Р	2.2

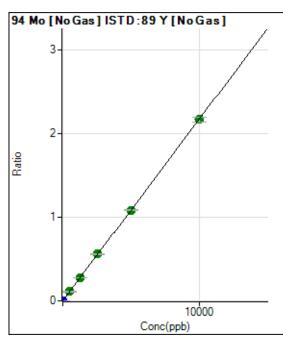
y = 2.3997E-004 \* x + 5.5880E-006

R = 1.0000

DL = 0.007123

BEC = 0.02329

Weight: <None>
Min Conc: 0



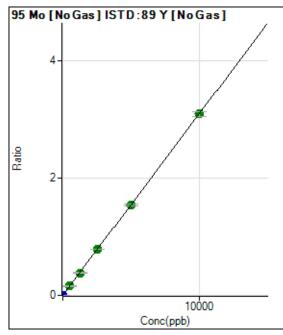
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	374.45	0.0000	Р	7.1
2		5.000	6.204	37155.13	0.0014	Р	1.2
3		500.000	507.536	2972811.31	0.1101	Α	2.4
4		1250.000	1248.840	7423134.54	0.2708	Α	0.6
5		2500.000	2569.945	14998598.39	0.5573	Α	0.7
6		5000.000	4996.107	28869797.35	1.0834	Α	1.3
7		10000.000	9984.228	57231410.81	2.1651	Α	2.5
8				24312.45	0.0010	Р	3.7

y = 2.1685E-004 \* x + 1.3430E-005

R = 1.0000

DL = 0.0131

BEC = 0.06193



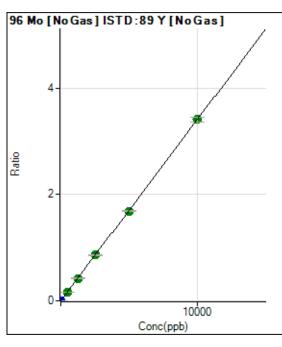
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	156.67	0.0000	Р	18.5
2		5.000	5.230	44336.01	0.0016	Р	1.1
3		500.000	503.724	4203426.02	0.1556	Α	1.9
4		1250.000	1244.379	10538539.22	0.3845	Α	1.2
5		2500.000	2551.599	21215449.27	0.7883	Α	0.7
6		5000.000	4988.449	41067384.67	1.5412	Α	1.6
7		10000.000	9993.392	81611594.34	3.0875	Α	2.5
8				11916.47	0.0005	Р	5.5

y = 3.0896E-004 \* x + 5.6323E-006

R = 1.0000 DL = 0.01011 BEC = 0.01823

Weight: <None>

Min Conc: 0



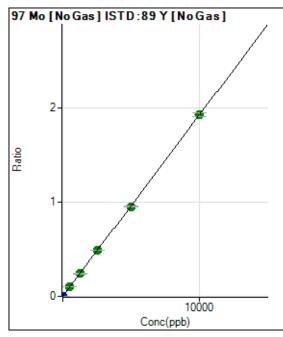
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	213.34	0.0000	Р	7.9
2		5.000	5.254	49136.49	0.0018	Р	8.0
3		500.000	503.167	4628719.93	0.1714	Α	0.3
4		1250.000	1242.574	11598042.33	0.4232	Α	1.4
5		2500.000	2534.354	23226559.93	0.8631	Α	1.2
6		5000.000	4961.079	45021057.66	1.6895	Α	8.0
7		10000.000	10011.641	90125787.54	3.4095	Α	2.4
8				16038.31	0.0007	Р	4.7

y = 3.4056E-004 \* x + 7.6478E-006

R = 1.0000 DL = 0.0053 BEC = 0.02246

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	97.78	0.0000	Р	9.4
2		5.000	5.316	27983.80	0.0010	Р	2.4
3		500.000	508.044	2633141.54	0.0975	Α	0.9
4		1250.000	1250.812	6577813.17	0.2400	Α	2.1
5		2500.000	2548.069	13157592.72	0.4889	Α	1.2
6		5000.000	4951.194	25315910.73	0.9501	Α	0.9
7		10000.000	10011.882	50784152.58	1.9211	Α	2.0
8				6929.60	0.0003	Р	6.5

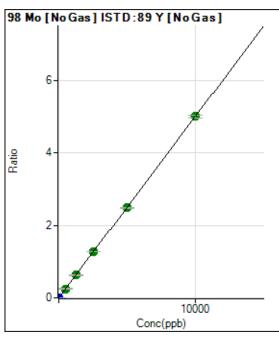
y = 1.9188E-004 \* x + 3.5127E-006

R = 1.0000

DL = 0.005169

BEC = 0.01831

Weight: <None>
Min Conc: 0



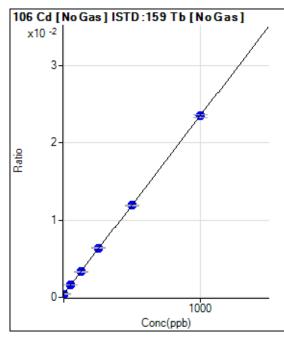
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	231.12	0.0000	Р	14.9
2		5.000	5.190	71276.11	0.0026	Р	2.1
3		500.000	503.835	6813729.83	0.2523	Α	1.8
4		1250.000	1247.432	17119181.13	0.6246	Α	1.0
5		2500.000	2541.961	34251370.60	1.2728	Α	1.3
6		5000.000	4961.580	66196053.46	2.4843	Α	1.6
7		10000.000	10008.849	132482390.2	5.0115	Α	1.6
8				17545.91	0.0007	Р	6.0

y = 5.0071E-004 \* x + 8.2843E-006

R = 1.0000

DL = 0.007404

BEC = 0.01655



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	8102.47	0.0004	Р	1.7
2		1.000	0.990	8395.97	0.0004	Р	1.7
3		50.000	52.438	31430.25	0.0016	Р	1.2
4		125.000	126.388	65580.35	0.0033	Р	2.3
5		250.000	259.284	124870.92	0.0064	Р	1.6
6		500.000	497.559	230555.04	0.0119	Р	1.1
7		1000.000	998.604	450449.33	0.0235	Р	1.4
8				7195.27	0.0004	Р	8.0

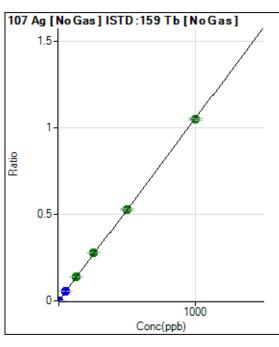
y = 2.3099E-005 \* x + 4.0910E-004

R = 0.9999

DL = 0.9114

 $\mathsf{BEC} = 17.71$ 

Weight: <None>
Min Conc: 0



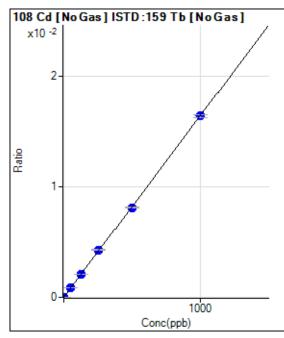
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	196.67	0.0000	Р	17.0
2		1.000	1.060	21911.96	0.0011	Р	2.3
3		50.000	50.694	1037340.99	0.0535	Р	1.0
4		125.000	131.151	2726115.20	0.1383	Α	1.0
5		250.000	263.258	5419214.29	0.2777	Α	1.5
6		500.000	501.584	10247648.39	0.5291	Α	2.0
7		1000.000	995.090	20138358.59	1.0496	Α	1.2
8				2574.73	0.0001	Р	13.2

y = 0.0011 \* x + 9.9565E-006

R = 0.9999

DL = 0.004802

BEC = 0.00944



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	17.78	0.0000	Р	63.6
2		1.000	1.064	356.67	0.0000	Р	7.5
3		50.000	51.974	16565.63	0.0009	Р	0.2
4		125.000	127.638	41296.22	0.0021	Р	2.6
5		250.000	260.627	83503.07	0.0043	Р	2.2
6		500.000	495.139	157458.02	0.0081	Р	0.5
7		1000.000	999.345	314751.20	0.0164	Р	1.8
8				200.00	0.0000	Р	13.5

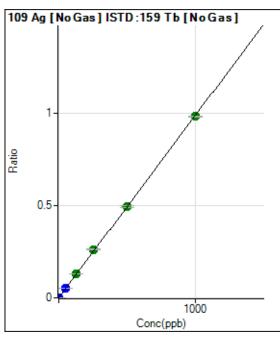
y = 1.6415E-005 \* x + 8.8904E-007

R = 0.9999

DL = 0.1033

BEC = 0.05416

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	95.56	0.0000	Р	7.4
2		1.000	1.065	20585.50	0.0011	Р	2.2
3		50.000	51.439	987783.73	0.0509	Р	1.2
4		125.000	131.325	2561557.32	0.1300	Α	8.0
5		250.000	264.209	5104147.04	0.2615	Α	1.7
6		500.000	501.417	9614332.85	0.4964	Α	1.9
7		1000.000	994.876	18896638.75	0.9848	Α	8.0
8				2398.02	0.0001	Р	9.9

y = 9.8990E-004 \* x + 4.8173E-006

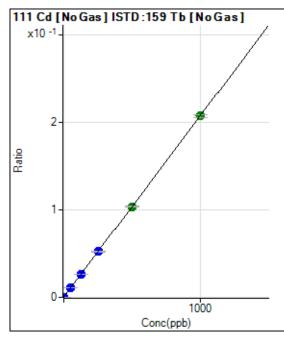
R = 0.9999

DL = 0.001081

BEC = 0.004867

Weight: <None>

Min Conc: 0



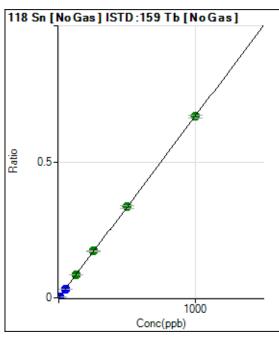
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	5675.95	0.0003	Р	1.9
2		1.000	1.149	10193.87	0.0005	Р	1.4
3		50.000	50.490	208260.39	0.0107	Р	1.0
4		125.000	124.664	514043.12	0.0261	Р	1.5
5		250.000	252.841	1026835.55	0.0526	Р	2.4
6		500.000	499.405	2007874.40	0.1037	Α	0.7
7		1000.000	999.605	3975217.70	0.2072	Α	1.5
8				5598.93	0.0003	Р	0.2

y = 2.0698E-004 \* x + 2.8659E-004

R = 1.0000DL = 0.07957

BEC = 1.385

Weight: <None> Min Conc: 0



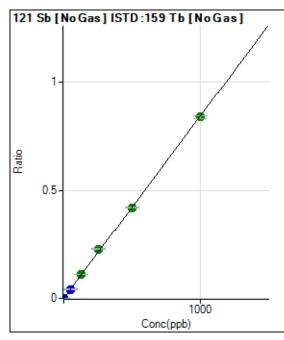
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	2081.36	0.0001	Р	8.4
2		5.000	5.462	73027.63	0.0038	Р	2.7
3		50.000	49.871	648927.15	0.0335	Р	0.6
4		125.000	126.722	1671888.95	0.0848	Α	0.4
5		250.000	256.830	3354170.16	0.1719	Α	1.1
6		500.000	500.001	6478751.85	0.3345	Α	2.3
7		1000.000	998.081	12808427.86	0.6676	Α	1.3
8				4315.17	0.0002	Р	1.8

y = 6.6873E-004 \* x + 1.0514E-004

R = 1.0000

DL = 0.0397

BEC = 0.1572



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	47.78	0.0000	Р	11.6
2		2.000	2.188	35889.24	0.0018	Р	2.6
3		50.000	50.107	819217.98	0.0422	Р	1.0
4		125.000	130.501	2167335.47	0.1100	Α	1.5
5		250.000	270.473	4448843.55	0.2280	Α	1.9
6		500.000	497.794	8127108.42	0.4196	Α	1.5
7		1000.000	995.291	16096043.79	0.8389	Α	1.4
8				6288.17	0.0004	Р	3.8

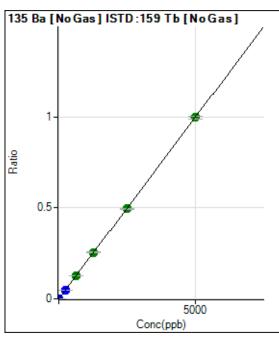
y = 8.4285E-004 \* x + 2.4137E-006

R = 0.9998

DL = 0.001

BEC = 0.002864

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	67.78	0.0000	Р	35.9
2		10.000	10.701	41501.17	0.0021	Р	3.1
3		250.000	244.126	943557.44	0.0486	Р	0.6
4		625.000	639.104	2509160.40	0.1273	Α	1.7
5		1250.000	1282.208	4985735.62	0.2555	Α	1.8
6		2500.000	2485.365	9592317.57	0.4952	Α	1.3
7		5000.000	4997.795	19107089.44	0.9958	Α	1.4
8				6960.76	0.0004	Р	4.5

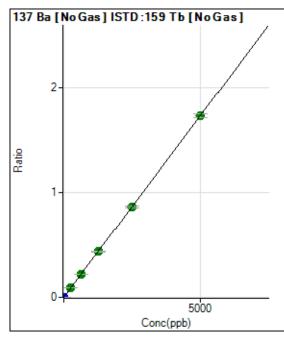
y = 1.9925E-004 \* x + 3.4069E-006

R = 1.0000

DL = 0.01839

BEC = 0.0171

#### Calibration for 004CALB.d



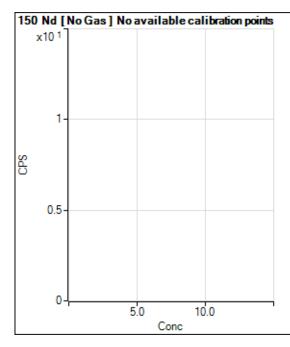
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	110.00	0.0000	Р	10.7
2		10.000	10.673	71882.90	0.0037	Р	2.0
3		250.000	252.966	1697894.49	0.0875	Α	0.4
4		625.000	627.669	4279676.67	0.2172	Α	0.9
5		1250.000	1265.989	8548903.00	0.4381	Α	1.7
6		2500.000	2494.153	16716867.80	0.8630	Α	1.5
7		5000.000	4998.443	33183120.62	1.7296	Α	2.2
8				12433.60	0.0007	Р	3.1

y = 3.4602E-004 \* x + 5.5522E-006

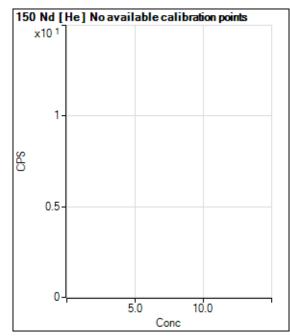
R = 1.0000

DL = 0.005128

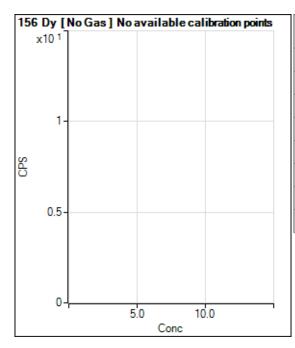
BEC = 0.01605



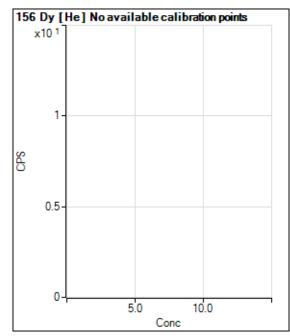
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				11.11		Р	17.3
2				11.11		Р	45.8
3				64.45		Р	26.0
4				177.78		Р	8.5
5				295.56		Р	6.8
6				547.80		Р	0.7
7				1197.84		Р	9.4
8				321.12		Р	8.1



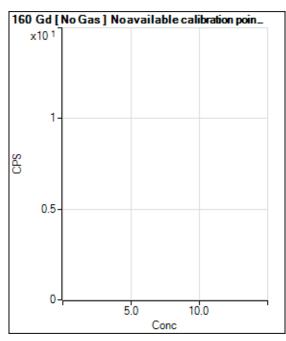
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				0.00		Р	
2				2.22		Р	173.
3				5.56		Р	34.7
4				13.33		Р	25.0
5				5.56		Р	34.7
6				22.22		Р	22.9
7				43.33		Р	NaN
8				74.44		Р	2.6



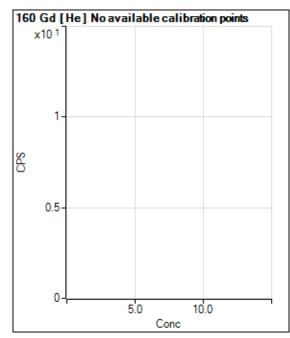
	ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				17.78		Р	10.8
2				13.33		Р	90.2
3				24.44		Р	56.8
4				46.67		Р	18.9
5				102.22		Р	11.5
6				198.89		Р	4.8
7				328.90		Р	12.1
8				590.02		Р	16.4



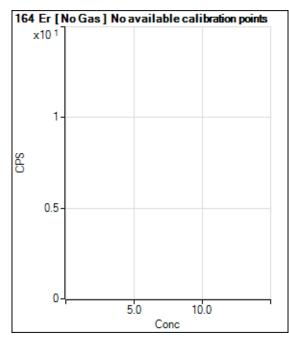
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				3.33		Р	0.0
2				7.78		Р	89.2
3				2.22		Р	173.
4				13.34		Р	43.3
5				15.56		Р	53.9
6				30.00		Р	29.4
7				58.89		Р	23.6
8				214.45		Р	6.5



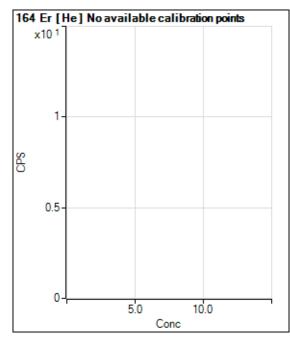
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				133.34		Р	6.6
2				113.33		Р	19.3
3				116.67		Р	8.6
4				124.45		Р	16.1
5				168.89		Р	7.5
6				188.89		Р	13.2
7				241.12		Р	7.1
8				656.69		Р	3.5



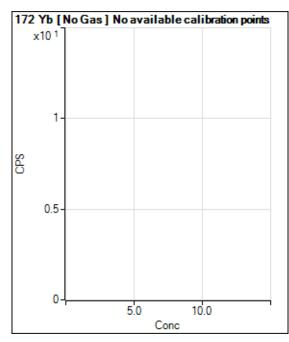
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				23.33		Р	42.9
2				25.56		Р	32.8
3				41.11		Р	12.4
4				42.22		Р	44.9
5				36.67		Р	55.3
6				64.44		Р	25.5
7				77.78		Р	24.4
8				286.67		Р	12.8



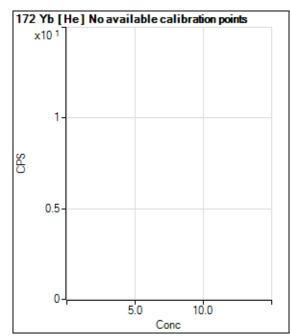
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				104.45		Р	32.0
2				93.34		Р	12.9
3				114.45		Р	11.8
4				123.34		Р	21.1
5				145.56		Р	10.3
6				194.45		Р	9.4
7				253.34		Р	11.7
8				740.03		Р	0.4



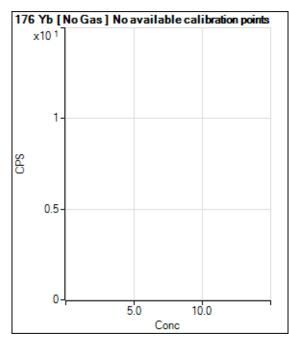
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				30.00		Р	44.4
2				24.44		Р	20.8
3				33.33		Р	17.3
4				44.45		Р	8.7
5				58.89		Р	11.8
6				54.44		Р	31.4
7				82.22		Р	26.4
8				261.12		Р	4.8



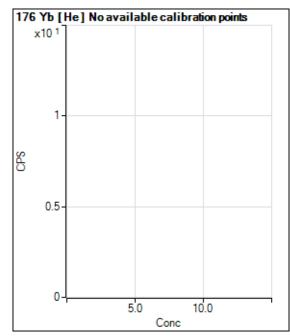
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				98.89		Р	36.0
2				93.34		Р	12.4
3				115.56		Р	26.2
4				120.00		Р	16.9
5				168.89		Р	17.2
6				194.45		Р	29.6
7				260.01		Р	20.6
8				882.26		Р	3.3



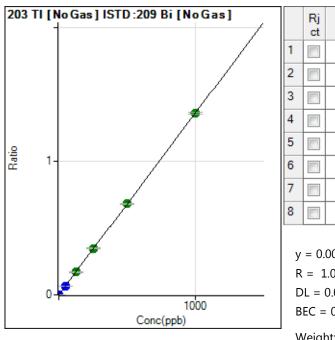
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				46.66		Р	44.6
2				40.00		Р	22.0
3				48.89		Р	10.4
4				64.44		Р	42.1
5				56.67		Р	23.5
6				81.11		Р	12.6
7				100.00		Р	23.1
8				374.45		Р	8.8



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				2030.18		Р	7.9
2				1947.94		Р	1.7
3				5612.35		Р	8.0
4				10736.69		Р	1.7
5				20343.54		Р	1.0
6				38094.81		Р	0.5
7				74668.41		Р	8.0
8				2258.00		Р	2.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				456.68		Р	9.1
2				427.79		Р	6.6
3				1837.92		Р	4.4
4				3927.29		Р	0.9
5				7547.79		Р	2.5
6				14558.12		Р	0.9
7				28305.94		Р	1.6
8				582.24		Р	7.1



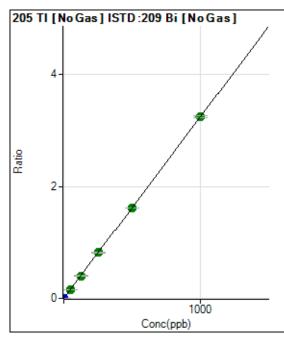
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	231.12	0.0000	Р	11.8
2		1.000	1.012	16636.27	0.0014	Р	1.4
3		50.000	47.310	770408.67	0.0643	Р	8.0
4		125.000	124.819	2011165.61	0.1695	Α	1.2
5		250.000	254.907	4105537.86	0.3462	Α	1.5
6		500.000	500.647	7822424.54	0.6799	Α	0.7
7		1000.000	998.607	15468166.85	1.3560	Α	1.2
8				1546.78	0.0002	Р	13.8

y = 0.0014 \* x + 1.8642E-005

R = 1.0000

DL = 0.00486

BEC = 0.01373



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	496.68	0.0000	Р	5.5
2		1.000	1.042	40767.14	0.0034	Р	1.0
3		50.000	49.929	1938746.50	0.1617	Α	1.0
4		125.000	124.465	4781900.24	0.4030	Α	1.1
5		250.000	253.563	9737737.63	0.8211	Α	1.7
6		500.000	497.490	18533900.84	1.6109	Α	0.5
7		1000.000	1000.435	36951162.51	3.2394	Α	1.0
8				3778.43	0.0004	Р	15.6

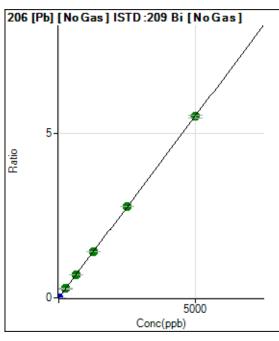
y = 0.0032 \* x + 4.0133E-005

R = 1.0000

DL = 0.00205

BEC = 0.01239

Weight: <None>
Min Conc: 0



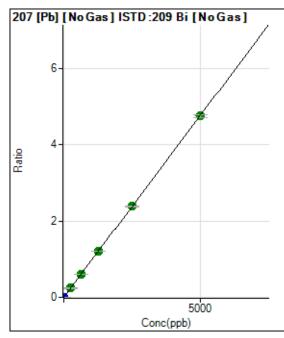
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	1345.64	0.0001	Р	4.3
2		1.000	1.031	14935.39	0.0013	Р	1.6
3		250.000	251.372	3341626.24	0.2787	Α	1.9
4		625.000	625.642	8227418.91	0.6935	Α	1.2
5		1250.000	1273.710	16742879.75	1.4117	Α	1.3
6		2500.000	2508.984	31992105.36	2.7806	Α	0.7
7		5000.000	4989.432	63072056.28	5.5295	Α	1.7
8				15003.29	0.0015	Р	2.4

y = 0.0011 \* x + 1.0879E-004

R = 1.0000

DL = 0.0128

BEC = 0.09817



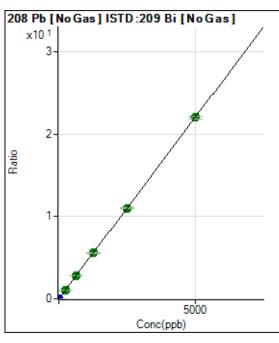
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	1125.62	0.0001	Р	3.0
2		1.000	1.037	12896.51	0.0011	Р	0.5
3		250.000	251.470	2877703.19	0.2400	Α	1.7
4		625.000	629.841	7131591.21	0.6011	Α	0.6
5		1250.000	1267.582	14347356.18	1.2096	Α	1.0
6		2500.000	2511.731	27576696.26	2.3968	Α	1.1
7		5000.000	4989.060	54303627.52	4.7607	Α	1.5
8				12849.85	0.0013	Р	2.4

y = 9.5421E-004 \* x + 9.0983E-005

R = 1.0000DL = 0.008663

BEC = 0.09535

Weight: <None>
Min Conc: 0

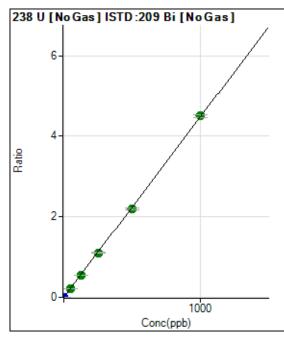


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	5126.00	0.0004	Р	1.7
2		1.000	1.024	58879.12	0.0049	Р	0.3
3		250.000	249.386	13196943.35	1.1008	Α	0.9
4		625.000	625.454	32747204.30	2.7601	Α	0.4
5		1250.000	1266.237	66269760.96	5.5875	Α	1.4
6		2500.000	2497.012	126767311.1	11.0181	Α	0.9
7		5000.000	4997.409	251524314.0	22.0507	Α	1.4
8				59100.96	0.0061	Р	1.6

y = 0.0044 \* x + 4.1445E-004

R = 1.0000 DL = 0.004706 BEC = 0.09393

## Calibration for 004CALB.d



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	106.67	0.0000	Р	21.7
2		1.000	0.966	51769.40	0.0043	Р	0.6
3		50.000	47.879	2571501.92	0.2145	Α	2.3
4		125.000	121.552	6461255.11	0.5446	Α	1.2
5		250.000	247.351	13143452.58	1.1082	Α	1.5
6		500.000	491.403	25328530.73	2.2016	Α	2.7
7		1000.000	1005.498	51387101.46	4.5049	Α	1.4
8				2998.25	0.0003	Р	18.3

y = 0.0045 \* x + 8.6527E-006

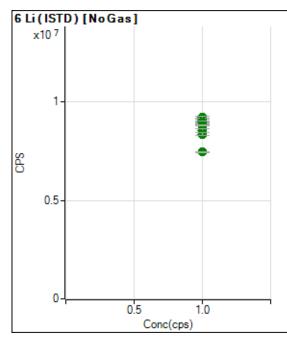
R = 0.9999

DL = 0.001256

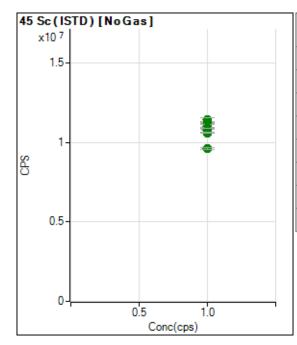
BEC = 0.001931

Weight: <None>

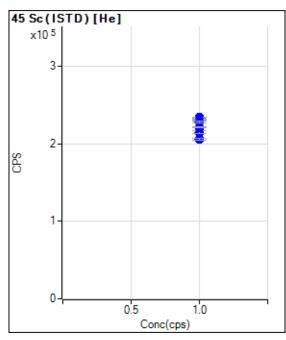
•••		
Mi	n Con	c: 0



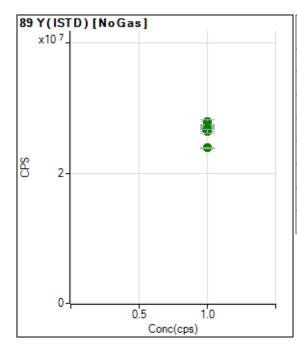
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		9059528.82		Α	1.4
2		1.000		9205242.38		Α	0.9
3		1.000		8973925.67		Α	0.7
4		1.000		8962799.98		Α	1.6
5		1.000		8798351.58		Α	0.9
6		1.000		8537525.63		Α	1.9
7		1.000		8366531.80		Α	1.3
8		1.000		7450189.26		Α	0.4



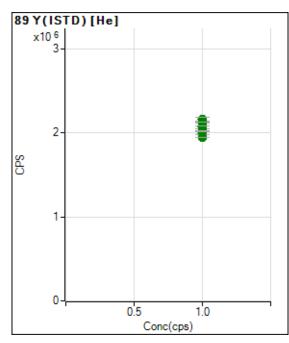
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		11422453.30		Α	2.2
2		1.000		11246345.80		Α	0.7
3		1.000		11137179.14		Α	0.3
4		1.000		11028798.45		Α	2.2
5		1.000		10890753.17		Α	0.9
6		1.000		10764805.81		Α	2.4
7		1.000		10610564.28		Α	0.4
8		1.000		9630328.54		Α	0.9



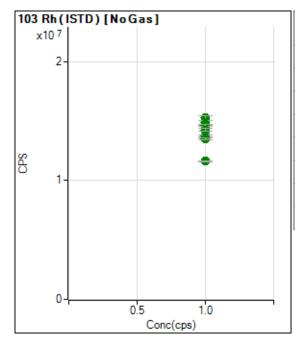
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		234117.65		Р	8.0
2		1.000		233687.50		Р	0.4
3		1.000		231331.89		Р	1.5
4		1.000		230889.13		Р	0.6
5		1.000		228563.17		Р	8.0
6		1.000		215132.96		Р	1.4
7		1.000		221258.57		Р	0.5
8		1.000		205683.33		Р	1.0



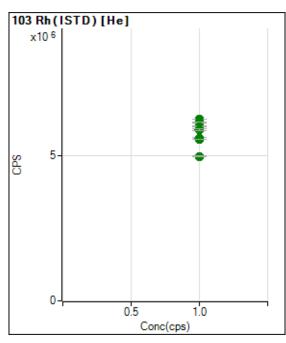
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		27877719.58		Α	2.4
2		1.000		27345740.98		Α	1.1
3		1.000		27011582.10		Α	1.0
4		1.000		27409621.54		Α	0.9
5		1.000		26912505.43		Α	0.9
6		1.000		26648388.22		Α	1.0
7		1.000		26440432.66		Α	1.8
8		1.000		23880634.09		Α	0.7



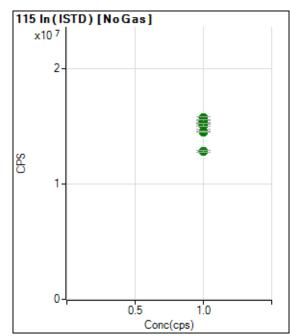
	ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		2161282.02		Α	2.1
2		1.000		2128321.86		Α	0.3
3		1.000		2126151.27		Α	8.0
4		1.000		2126856.65		Α	0.1
5		1.000		2072050.42		Α	1.6
6		1.000		1995577.23		Α	1.6
7		1.000		2024856.64		Α	8.0
8		1.000		1951034.92		Α	0.2



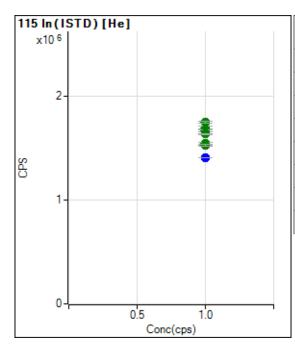
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		15250511.02		Α	2.9
2		1.000		14872047.56		Α	1.7
3		1.000		14690517.42		Α	0.5
4		1.000		14643182.84		Α	1.3
5		1.000		14264099.09		Α	1.4
6		1.000		13769265.07		Α	1.0
7		1.000		13485853.27		Α	1.0
8		1.000		11623148.58		Α	0.6



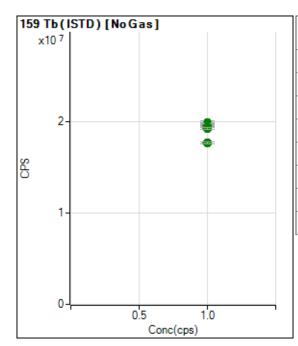
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		6231494.49		Α	0.1
2		1.000		6129774.01		Α	0.3
3		1.000		6120655.12		Α	0.3
4		1.000		5985959.29		Α	0.5
5		1.000		5877366.10		Α	0.7
6		1.000		5583674.78		Α	1.1
7		1.000		5559929.22		Α	0.1
8		1.000		4965394.06		Α	8.0



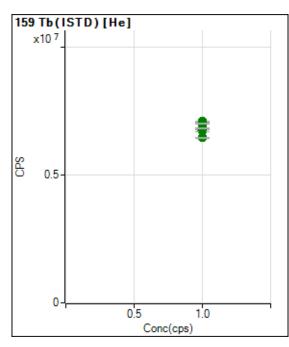
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		15753912.33		Α	1.8
2		1.000		15437188.50		Α	1.4
3		1.000		15272069.31		Α	0.4
4		1.000		15407629.29		Α	2.4
5		1.000		15129807.85		Α	1.8
6		1.000		14648243.61		Α	1.5
7		1.000		14557086.84		Α	0.2
8		1.000		12851021.98		Α	1.2



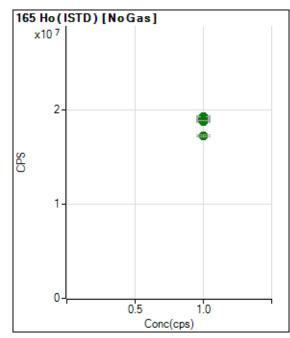
	ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		1743791.67		Α	1.0
2		1.000		1693855.78		Α	1.5
3		1.000		1676281.43		Α	0.9
4		1.000		1662056.01		Α	1.1
5		1.000		1634345.82		Α	0.6
6		1.000		1540383.68		Α	2.1
7		1.000		1523998.87		Α	1.2
8		1.000		1404112.15		Р	0.2



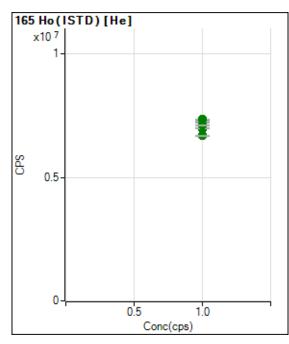
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		19810880.40		Α	2.6
2		1.000		19438155.41		Α	1.2
3		1.000		19396632.21		Α	0.4
4		1.000		19704896.09		Α	0.9
5		1.000		19520114.29		Α	2.1
6		1.000		19371216.38		Α	0.6
7		1.000		19188779.72		Α	1.2
8		1.000		17641355.02		Α	8.0



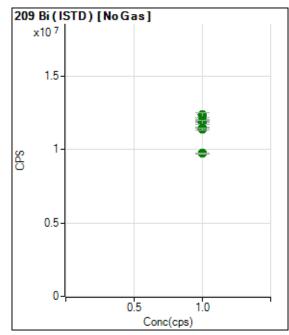
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		7081215.03		Α	0.7
2		1.000		7036621.49		Α	1.3
3		1.000		7094007.11		Α	8.0
4		1.000		7068982.39		Α	0.1
5		1.000		6999528.37		Α	0.5
6		1.000		6728111.29		Α	1.3
7		1.000		6824530.66		Α	8.0
8		1.000		6455927.89		Α	0.6



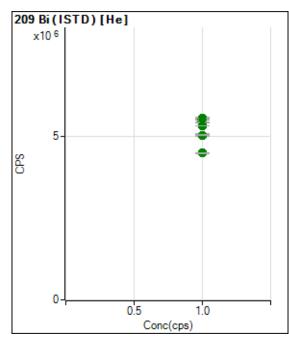
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		19166883.19		Α	1.9
2		1.000		18869168.89		Α	1.4
3		1.000		18973812.77		Α	1.3
4		1.000		19230723.88		Α	0.4
5		1.000		19072554.86		Α	2.1
6		1.000		18774583.61		Α	1.3
7		1.000		18839581.25		Α	0.3
8		1.000		17218425.30		Α	0.9



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		7348301.42		Α	0.6
2		1.000		7256639.13		Α	0.9
3		1.000		7212824.55		Α	0.4
4		1.000		7304751.63		Α	0.9
5		1.000		7227860.52		Α	8.0
6		1.000		6978573.65		Α	0.7
7		1.000		7111347.67		Α	0.7
8		1.000		6690108.79		Α	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		12371269.26		Α	2.7
2		1.000		11939242.04		Α	0.3
3		1.000		11989498.16		Α	1.4
4		1.000		11864360.52		Α	0.1
5		1.000		11862431.91		Α	2.0
6		1.000		11505755.80		Α	0.7
7		1.000		11407413.72		Α	0.7
8		1.000		9749757.35		Α	0.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		5535397.97		Α	1.1
2		1.000		5511954.43		Α	8.0
3		1.000		5453267.00		Α	1.1
4		1.000		5408916.45		Α	8.0
5		1.000		5309387.04		Α	0.4
6		1.000		5029689.06		Α	1.5
7		1.000		5030385.48		Α	0.4
8		1.000		4483946.43		Α	8.0

Reviewed By:Mohan On:2/7/2025 11:31:39 AM Inst Id :P8 ClientSampleId :TUNE001

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8020625MS.b

**Acq. Date-Time** 2025-02-06 11:25:46

Report Comment ---

Instrument Name G8403A SG19224459

## [No Gas]

## Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		34446	344463.40			1.541	5.000
24		329372	3293722.22			1.582	5.000
25		44166	441660.86			1.232	5.000
26		50696	506958.33			1.541	5.000
59		189032	1890321.81			1.621	5.000
113		20040	200397.47			1.392	5.000
115		264609	2646091.49			1.679	5.000
206		59696	596964.50			0.762	5.000
207		51823	518233.47			0.791	5.000
208		129800	1298001.86			1.057	5.000
220		1	5.80			7.711	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

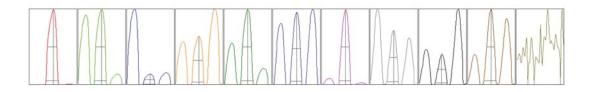
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	35218	34731	34316	33932	34034
24	336234	333683	325165	325178	326601
25	44842	44675	43752	43771	43791
26	51733	51320	50333	50053	50040
59	191821	192378	187892	188083	184987
113	20449	20196	19941	19828	19785
115	270665	268075	261231	261559	261516
206	60320	60016	59432	59223	59491
207	52287	52248	51591	51435	51556
208	131470	130869	128040	129195	129427

Mass Rep#1 Count Rep#2 Count Rep#3 Count Rep#4 Count Rep#5 Count 220

Integration Time [sec]

0.1

#### Resolution/Axis



Mass	Peak Heigh	t	Axis		Axis (Required)		Axis (Flag)
9	63938.77		9.05	.05 8.90 - 9.10			
24	577951.13		24.00		23.90 - 24.10		
25	78495.43		25.00		24.90 - 25.10		
26	88999.95		26.00	)	25.90 - 26.10		
59	358767.91		59.00	)	58.90 - 59.10		
113	41293.54		113.0	)5	112.90 - 113.10		
115	544936.58		115.0	)5	114.90 - 115.10		
206	123634.18		206.0	0	205.90 - 206.10		
207	107028.64		206.9	)5	206.90 - 207.10		
208	266325.64		208.0	0	207.90 - 208.10		
220				-			
					1		
Mass	W-50%	W-5°	%	W-	-5% (Required)	۷	V-5% (Flag)
Mass 9	W-50% 0.58	W-5°			-5% (Required)	۷	V-5% (Flag)
		_	3	0.9		V	V-5% (Flag)
9	0.58	0.77	3	0.9	900	V	V-5% (Flag)
9 24	0.58	0.77	3 0 7	0.9	900 900	V	V-5% (Flag)
9 24 25	0.58 0.61 0.61	0.77 0.74 0.73	3 0 7 0	0.9	900	V	V-5% (Flag)
9 24 25 26	0.58 0.61 0.61 0.61	0.77 0.74 0.73 0.74	3 0 7 0	0.9 0.9 0.9 0.9	900 900 900	V	V-5% (Flag)
9 24 25 26 59	0.58 0.61 0.61 0.61 0.55	0.77 0.74 0.73 0.74 0.76	3 0 7 0 8 2	0.9 0.9 0.9 0.9	900 900 900 900	V	V-5% (Flag)
9 24 25 26 59 113	0.58 0.61 0.61 0.61 0.55 0.50	0.77 0.74 0.73 0.74 0.76 0.72	3 0 7 0 8 2 2	9.0 9.0 9.0 9.0 9.0 9.0	900 900 900 900 900	V	V-5% (Flag)
9 24 25 26 59 113 115	0.58 0.61 0.61 0.61 0.55 0.50	0.77 0.74 0.73 0.74 0.76 0.72	3 0 7 0 8 8 2 2 9	0.9 0.9 0.9 0.9 0.9 0.9 0.9	900 900 900 900 900 900	V	V-5% (Flag)
9 24 25 26 59 113 115 206	0.58 0.61 0.61 0.61 0.55 0.50 0.50 0.48	0.77 0.74 0.73 0.74 0.76 0.72 0.72	3 0 7 0 8 8 2 2 9	9.0 9.0 9.0 9.0 9.0 9.0 9.0	900 900 900 900 900 900	V	V-5% (Flag)

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

#### **Tune Parameters**

#### Plasma Parameters

Plasma Mode Nebulizer Gas 0.72 L/min **Dilution Gas** 0.40 L/min

Reviewed By:Mohan On:2/7/2025 11:31:39 AM Inst Id :P8

ClientSampleId :TUNE001

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				ClientSam
1600 W	Option Gas		Auxiliary Gas	0.9:TUNE001
1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
9.0 mm	S/C Temp	2 °C		
-6.0 V	Omega Lens	8.6 V	Deflect	14.2 V
-215.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
-105 V	Cell Exit	-50 V		
No	3rd Gas Flow		Energy Discrimina	ation 4.0 V
0.0 mL/min	OctP Bias	-8.0 V		
	OctP RF	140 V		
103	Axis Gain	0.9961	QP Bias	-4.0 V
126	Axis Offset	0.03		
-0.2 mm	Torch V	1.5 mm		
	1.80 V 9.0 mm  -6.0 V -215.0 V -105 V  No 0.0 mL/min  103 126	1.80 V Nebulizer Pump 9.0 mm S/C Temp  -6.0 V Omega Lens -215.0 V Cell Entrance -105 V Cell Exit  No 3rd Gas Flow 0.0 mL/min OctP Bias OctP RF  103 Axis Gain 126 Axis Offset	1.80 V       Nebulizer Pump       0.10 rps         9.0 mm       S/C Temp       2 °C         -6.0 V       Omega Lens       8.6 V         -215.0 V       Cell Entrance       -30 V         -105 V       Cell Exit       -50 V         No       3rd Gas Flow          0.0 mL/min       OctP Bias       -8.0 V          OctP RF       140 V         103       Axis Gain       0.9961         126       Axis Offset       0.03	1.80 V       Nebulizer Pump       0.10 rps       Plasma Gas         9.0 mm       S/C Temp       2 °C         -6.0 V       Omega Lens       8.6 V       Deflect         -215.0 V       Cell Entrance       -30 V       Plate Bias         -105 V       Cell Exit       -50 V         No       3rd Gas Flow        Energy Discrimina         0.0 mL/min       OctP Bias       -8.0 V          OctP RF       140 V         103       Axis Gain       0.9961       QP Bias         126       Axis Offset       0.03

## [He]

## Sensitivity

EΜ

Discriminator

4.1 mV

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		36659	366593.10			0.418	
89		36943	369433.04			0.588	
205		37881	378808.54			0.361	

2176 V

Pulse HV

1085 V

Analog HV

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	36846	36779	36652	36526	36495
89	37115	36880	37045	37086	36591
205	37736	37845	37929	38091	37803

Integration Time [sec] 0.1

#### **Tune Parameters**

## Plasma Parameters

Plasma Mode		Nebulizer Gas	0.72 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas		Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1 -6.0 V Omega Lens 8.6 V Deflect 3.0 V

Reviewed By:Mohan On:2/7/2025 11:31:39 AM Inst Id :P8 ClientSampleId

					ClientSamplei
Extract 2	-215.0 V	Cell Entrance	-50 V	Plate Bias	-6(:TUNE001
Omega Bias	-105 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow		Energy Discrimina	ation 5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow		OctP RF	200 V		
QP Parameters					
Mass Gain	103	Axis Gain	0.9961	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	0.03		
Hardware Settings					
Torch					
Torch H	-0.2 mm	Torch V	1.5 mm		
EM					
Discriminator	4.1 mV	Analog HV	2176 V	Pulse HV	1085 V

LB Number: LB134612

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired : 2025-02-06 12:08:54

DataFile Name : 004CALB.d

Jaswal

Operator:

Date & Time Ac	quired: 202	25-02-06 12:08:54	Data	File Name :	004CALB.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.07	0.18	-0.25	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.00	-0.01	0.01	0.00	N/A	ppb
Barium	135-1	0.01	0.00	-0.01	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.00	-0.03	0.00	N/A	ppb
Cadmium	106-1	-0.30	0.30	0.00	0.00	N/A	ppb
Cadmium	111-1	-0.03	0.03	0.00	0.00	N/A	ppb
Calcium	43-1	0.56	-0.23	-0.33	0.00	N/A	ppb
Calcium	44-1	-0.20	-0.40	0.59	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	0.02	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	-0.01	-0.02	0.03	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	54-2	-0.33	0.00	0.33	0.00	N/A	ppb
Iron	56-2	-0.15	0.02	0.13	0.00	N/A	ppb
Iron	57-2	0.15	-0.33	0.18	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB134612 Operator :

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:08:54 DataFile Name: 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	-0.42	-0.01	0.43	0.00	N/A	ppb
Manganese	55-2	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	94-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.01	-0.02	0.00	N/A	ppb
Phosphorus	31-2	-14.77	-25.39	-14.47	-18.21		ppb
Potassium	39-2	-0.87	1.20	-0.34	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.02	0.00	-0.02	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.42	0.81	-0.39	0.00	N/A	ppb
Silicon	28-1	-1.04	0.08	0.96	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	-0.05	-0.54	0.59	0.00	N/A	ppb
Strontium	86-1	-0.02	0.00	0.02	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-346.96	-48.82	140.76	-85.01		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	-0.01	-0.01	0.02	0.00	N/A	ppb
Titanium	47-1	0.00	0.00	0.00	0.00	N/A	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB134612 Operator :

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:08:54 DataFile Name: 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.00	-0.02	0.01	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

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LB Number : LB134612 Operator :

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Date a Time A	quircu . Zoz	0 02 00 12.12.10	Datai	iic radiiic .	0000/ (EO.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.92	20.28	20.82	20.34	2.22	ppb
Antimony	121-1	2.15	2.25	2.16	2.19	2.58	ppb
Arsenic	75-2	1.02	1.26	1.03	1.10	12.23	ppb
Barium	135-1	10.46	11.08	10.57	10.70	3.07	ppb
Barium	137-1	10.64	10.90	10.48	10.67	1.99	ppb
Beryllium	9-1	1.11	1.11	1.10	1.11	0.60	ppb
Bismuth	209-1				97		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.97	1.12	1.10	1.06	7.84	ppb
Cadmium	106-1	1.22	1.12	0.63	0.99	32.20	ppb
Cadmium	111-1	1.19	1.13	1.13	1.15	3.16	ppb
Calcium	43-1	524.37	513.21	517.00	518.19	1.09	ppb
Calcium	44-1	511.61	504.67	515.21	510.50	1.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.08	2.05	2.16	2.10	2.81	ppb
Cobalt	59-2	1.17	1.16	1.20	1.18	1.92	ppb
Copper	63-2	2.24	2.22	2.26	2.24	0.75	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				99		%
Indium	115-1				98		%
Indium	115-2				97		%
Iron	54-2	53.84	56.24	55.67	55.25	2.27	ppb
Iron	56-2	53.50	53.59	54.13	53.74	0.63	ppb
Iron	57-2	50.15	51.08	54.55	51.93	4.46	ppb
Krypton	83-1						cps
Lead	206-1	1.03	1.01	1.05	1.03	1.75	ppb

LB Number : LB134612 Operator :

2

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.04	1.04	1.03	1.04	0.58	ppb
Lead	208-1	1.02	1.02	1.03	1.02	0.34	ppb
Lithium	6-1				102		%
Magnesium	24-2	534.01	533.77	534.54	534.11	0.07	ppb
Manganese	55-2	0.98	1.08	1.13	1.06	7.14	ppb
Molybdenum	94-1	6.18	6.14	6.29	6.20	1.26	ppb
Molybdenum	95-1	5.19	5.30	5.20	5.23	1.09	ppb
Molybdenum	96-1	5.21	5.28	5.28	5.25	0.79	ppb
Molybdenum	97-1	5.17	5.43	5.34	5.32	2.44	ppb
Molybdenum	98-1	5.07	5.25	5.25	5.19	2.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.04	1.17	1.09	1.10	6.27	ppb
Phosphorus	31-2	14.81	12.28	27.54	18.21	44.90	ppb
Potassium	39-2	503.84	510.63	511.85	508.77	0.85	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				98		%
Scandium	45-2				100		%
Selenium	82-1	5.30	5.24	5.25	5.27	0.64	ppb
Selenium	77-2	2.10	5.62	5.63	4.45	45.73	ppb
Selenium	78-2	4.49	5.12	2.88	4.16	27.73	ppb
Silicon	28-1	7.89	7.44	8.04	7.79	4.02	ppb
Silver	107-1	1.05	1.09	1.04	1.06	2.35	ppb
Silver	109-1	1.07	1.09	1.04	1.07	2.17	ppb
Sodium	23-2	520.10	523.33	519.84	521.09	0.37	ppb
Strontium	86-1	1.07	1.10	1.03	1.07	3.45	ppb
Strontium	88-1	1.05	1.07	1.07	1.06	1.14	ppb
Sulfur	34-1	132.96	-20.61	142.66	85.01	107.75	ppb
Terbium	159-1				98		%
Terbium	159-2				99		%
Thallium	203-1	1.00	1.01	1.03	1.01	1.45	ppb
Thallium	205-1	1.04	1.05	1.03	1.04	1.06	ppb
Tin	118-1	5.45	5.62	5.32	5.46	2.82	ppb
Titanium	47-1	5.26	5.25	5.42	5.31	1.77	ppb
Uranium	238-1	0.97	0.96	0.96	0.97	0.63	ppb

LB Number : LB134612 Operator :

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.13	5.20	5.42	5.25	2.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				98		%
Zinc	66-2	5.50	5.00	5.60	5.37	5.94	ppb
Zirconium	90-1	1.03	1.05	1.02	1.04	1.59	ppb
Zirconium	91-1	1.00	1.04	1.02	1.02	2.03	ppb

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LB Number : LB134612 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Date & Time Ac	batta in Nation .				OOOO/ILD.G				
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units		
Aluminium	27-2	973.98	934.28	966.47	958.24	2.20	ppb		
Antimony	121-1	49.56	50.53	50.23	50.11	0.99	ppb		
Arsenic	75-2	48.54	50.39	49.02	49.32	1.94	ppb		
Barium	135-1	242.36	244.79	245.22	244.13	0.63	ppb		
Barium	137-1	254.09	252.56	252.26	252.97	0.39	ppb		
Beryllium	9-1	50.74	49.87	51.11	50.57	1.25	ppb		
Bismuth	209-1				97		%		
Bismuth	209-2				99		%		
Bromine	81-1						cps		
Cadmium	108-1	52.09	51.97	51.87	51.97	0.21	ppb		
Cadmium	106-1	51.54	53.28	52.49	52.44	1.66	ppb		
Cadmium	111-1	50.09	51.10	50.28	50.49	1.07	ppb		
Calcium	43-1	4727.55	4800.98	4831.98	4786.84	1.12	ppb		
Calcium	44-1	4722.99	4765.39	4770.10	4752.83	0.55	ppb		
Carbon	12-1						cps		
Carbon	12-2						cps		
Chlorine	35-1						cps		
Chlorine	35-2						cps		
Chromium	52-2	49.23	48.16	48.62	48.67	1.10	ppb		
Cobalt	59-2	50.96	49.31	49.96	50.08	1.66	ppb		
Copper	63-2	535.67	514.15	520.84	523.55	2.10	ppb		
Dysprosium	156-1						cps		
Dysprosium	156-2						cps		
Erbium	164-1						cps		
Erbium	164-2						cps		
Gadolinium	160-1						cps		
Gadolinium	160-2						cps		
Holmium	165-1				99		%		
Holmium	165-2				98		%		
Indium	115-1				97		%		
Indium	115-2				96		%		
Iron	54-2	2531.98	2438.72	2462.91	2477.87	1.95	ppb		
Iron	56-2	2544.36	2459.29	2483.55	2495.73	1.76	ppb		
Iron	57-2	2503.71	2422.56	2434.46	2453.58	1.79	ppb		
Krypton	83-1						cps		
Lead	206-1	251.23	256.24	246.65	251.37	1.91	ppb		

LB Number : LB134612 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	256.33	249.39	248.69	251.47	1.68	ppb
Lead	208-1	251.70	247.41	249.05	249.39	0.87	ppb
Lithium	6-1				99		%
Magnesium	24-2	5118.39	4992.29	4993.89	5034.85	1.44	ppb
Manganese	55-2	502.54	484.89	488.35	491.92	1.90	ppb
Molybdenum	94-1	501.48	499.54	521.59	507.54	2.41	ppb
Molybdenum	95-1	498.16	498.26	514.75	503.72	1.90	ppb
Molybdenum	96-1	503.98	501.20	504.32	503.17	0.34	ppb
Molybdenum	97-1	507.32	503.71	513.11	508.04	0.93	ppb
Molybdenum	98-1	503.51	495.15	512.85	503.84	1.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	53.93	51.67	52.83	52.81	2.14	ppb
Phosphorus	31-2	991.63	949.43	1089.59	1010.22	7.12	ppb
Potassium	39-2	2385.33	2352.35	2371.14	2369.61	0.70	ppb
Rhodium	103-1				96		%
Rhodium	103-2				98		%
Scandium	45-1				98		%
Scandium	45-2				99		%
Selenium	82-1	49.71	51.10	52.26	51.02	2.50	ppb
Selenium	77-2	51.55	49.43	55.76	52.25	6.17	ppb
Selenium	78-2	45.54	49.86	47.80	47.73	4.53	ppb
Silicon	28-1	52.62	51.79	52.97	52.46	1.16	ppb
Silver	107-1	50.12	50.92	51.04	50.69	0.98	ppb
Silver	109-1	50.75	51.66	51.91	51.44	1.19	ppb
Sodium	23-2	5030.80	4845.05	4980.09	4951.98	1.94	ppb
Strontium	86-1	48.21	48.46	49.57	48.75	1.49	ppb
Strontium	88-1	50.04	49.82	51.76	50.54	2.10	ppb
Sulfur	34-1	1206.08	1232.25	1458.80	1299.05	10.70	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	47.53	46.85	47.55	47.31	0.85	ppb
Thallium	205-1	50.36	50.05	49.38	49.93	1.00	ppb
Tin	118-1	49.51	50.02	50.08	49.87	0.63	ppb
Titanium	47-1	496.40	491.35	507.09	498.28	1.61	ppb
Uranium	238-1	48.62	46.64	48.38	47.88	2.26	ppb

LB Number : LB134612 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	48.86	47.12	48.01	48.00	1.81	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				98		%
Zinc	66-2	528.57	513.74	513.10	518.47	1.69	ppb
Zirconium	90-1	50.21	49.53	50.97	50.23	1.43	ppb
Zirconium	91-1	47.56	48.02	48.73	48.10	1.23	ppb

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Lab Sample ID: S04 Instrumnet Name: P8
Client Sample ID: S04 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2409.43	2398.23	2399.67	2402.44	0.25	ppb
Antimony	121-1	129.23	132.80	129.48	130.50	1.53	ppb
Arsenic	75-2	124.01	124.50	122.25	123.59	0.96	ppb
Barium	135-1	632.82	651.29	633.20	639.10	1.65	ppb
Barium	137-1	626.60	633.98	622.42	627.67	0.93	ppb
Beryllium	9-1	123.31	127.30	126.09	125.56	1.63	ppb
Bismuth	209-1				96		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	123.93	128.70	130.28	127.64	2.59	ppb
Cadmium	106-1	122.66	127.33	129.17	126.39	2.66	ppb
Cadmium	111-1	122.58	126.11	125.30	124.66	1.49	ppb
Calcium	43-1	11699.08	12146.57	12263.92	12036.52	2.48	ppb
Calcium	44-1	11696.71	11981.16	12174.23	11950.70	2.01	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	121.67	121.12	121.71	121.50	0.27	ppb
Cobalt	59-2	124.38	124.43	124.11	124.31	0.14	ppb
Copper	63-2	1296.93	1287.42	1282.16	1288.83	0.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				99		%
Indium	115-1				98		%
Indium	115-2				95		%
Iron	54-2	6131.69	6246.15	6170.69	6182.85	0.94	ppb
Iron	56-2	6246.21	6332.27	6289.71	6289.40	0.68	ppb
Iron	57-2	6069.91	6118.08	6135.69	6107.89	0.56	ppb
Krypton	83-1						cps
Lead	206-1	624.65	618.50	633.78	625.64	1.23	ppb

Lab Sample ID: S04 Instrumnet Name: P8
Client Sample ID: S04 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Date & Time Acquired . 2025-02-00 12.16.55			Dalar	ile ivallie .	007CALS.u	007 CALS.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units		
Lead	207-1	628.42	627.25	633.85	629.84	0.56	ppb		
Lead	208-1	623.74	624.27	628.36	625.45	0.40	ppb		
Lithium	6-1				99		%		
Magnesium	24-2	12580.02	12695.61	12569.13	12614.92	0.56	ppb		
Manganese	55-2	1272.35	1301.35	1268.82	1280.84	1.39	ppb		
Molybdenum	94-1	1247.97	1241.65	1256.90	1248.84	0.61	ppb		
Molybdenum	95-1	1260.74	1233.78	1238.62	1244.38	1.16	ppb		
Molybdenum	96-1	1223.98	1244.72	1259.02	1242.57	1.42	ppb		
Molybdenum	97-1	1227.48	1244.93	1280.03	1250.81	2.14	ppb		
Molybdenum	98-1	1235.19	1246.17	1260.94	1247.43	1.04	ppb		
Neodymium	150-1						cps		
Neodymium	150-2						cps		
Nickel	60-2	133.14	133.49	133.15	133.26	0.15	ppb		
Phosphorus	31-2	2518.33	2507.28	2575.93	2533.85	1.45	ppb		
Potassium	39-2	5942.58	5984.48	6038.20	5988.42	0.80	ppb		
Rhodium	103-1				96		%		
Rhodium	103-2				96		%		
Scandium	45-1				97		%		
Scandium	45-2				99		%		
Selenium	82-1	124.36	128.52	128.59	127.16	1.91	ppb		
Selenium	77-2	120.79	128.05	125.66	124.84	2.96	ppb		
Selenium	78-2	120.59	131.23	122.17	124.67	4.61	ppb		
Silicon	28-1	129.27	131.86	135.06	132.06	2.20	ppb		
Silver	107-1	132.01	131.88	129.57	131.15	1.05	ppb		
Silver	109-1	130.07	132.15	131.76	131.32	0.84	ppb		
Sodium	23-2	12474.67	12298.95	12343.13	12372.25	0.74	ppb		
Strontium	86-1	119.49	120.89	122.78	121.05	1.36	ppb		
Strontium	88-1	126.51	124.40	126.01	125.64	0.88	ppb		
Sulfur	34-1	2499.44	2735.81	3035.45	2756.90	9.74	ppb		
Terbium	159-1				99		%		
Terbium	159-2				100		%		
Thallium	203-1	124.92	123.27	126.26	124.82	1.20	ppb		
Thallium	205-1	124.55	123.01	125.83	124.46	1.13	ppb		
Tin	118-1	126.27	126.71	127.19	126.72	0.36	ppb		
Titanium	47-1	1228.00	1268.84	1258.95	1251.93	1.70	ppb		
Uranium	238-1	120.93	123.24	120.48	121.55	1.22	ppb		

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	120.25	120.86	121.09	120.73	0.36	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				98		%
Zinc	66-2	1301.38	1307.08	1298.10	1302.19	0.35	ppb
Zirconium	90-1	122.82	124.89	128.08	125.27	2.11	ppb
Zirconium	91-1	118.76	119.57	121.73	120.02	1.28	ppb

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Date & Time Acquired . 2025-02-00 12.21.51		Datai	ile inaille .	000CALS.0				
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	4792.20	4861.73	4813.75	4822.56	0.74	ppb	
Antimony	121-1	271.29	275.14	264.99	270.47	1.89	ppb	
Arsenic	75-2	255.72	256.27	250.13	254.04	1.34	ppb	
Barium	135-1	1293.44	1297.31	1255.87	1282.21	1.79	ppb	
Barium	137-1	1277.26	1279.81	1240.89	1265.99	1.72	ppb	
Beryllium	9-1	260.93	259.67	262.15	260.92	0.48	ppb	
Bismuth	209-1				96		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	261.60	265.88	254.40	260.63	2.23	ppb	
Cadmium	106-1	259.68	263.54	254.64	259.28	1.72	ppb	
Cadmium	111-1	252.16	259.18	247.18	252.84	2.38	ppb	
Calcium	43-1	25365.68	25171.62	24744.84	25094.05	1.27	ppb	
Calcium	44-1	24356.06	24733.18	24002.48	24363.91	1.50	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	243.31	246.09	244.18	244.52	0.58	ppb	
Cobalt	59-2	256.98	258.94	255.72	257.21	0.63	ppb	
Copper	63-2	2588.13	2600.60	2562.58	2583.77	0.75	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				100		%	
Holmium	165-2				98		%	
Indium	115-1				96		%	
Indium	115-2				94		%	
Iron	54-2	12913.68	12715.61	12632.49	12753.92	1.13	ppb	
Iron	56-2	12751.20	12843.14	12438.57	12677.64	1.67	ppb	
Iron	57-2	12389.23	12402.08	12170.92	12320.74	1.05	ppb	
Krypton	83-1						cps	
Lead	206-1	1292.23	1267.95	1260.96	1273.71	1.29	ppb	

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Date & Time Acquired : 2025-02-06 12:21:31			DataFile Name :		008CALS.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1281.28	1264.60	1256.86	1267.58	0.98	ppb
Lead	208-1	1286.07	1258.29	1254.34	1266.24	1.37	ppb
Lithium	6-1				97		%
Magnesium	24-2	24962.63	25083.85	25227.33	25091.27	0.53	ppb
Manganese	55-2	2536.81	2563.82	2530.07	2543.57	0.70	ppb
Molybdenum	94-1	2588.66	2552.29	2568.88	2569.95	0.71	ppb
Molybdenum	95-1	2556.15	2565.69	2532.96	2551.60	0.66	ppb
Molybdenum	96-1	2545.83	2556.51	2500.72	2534.35	1.17	ppb
Molybdenum	97-1	2557.58	2571.73	2514.90	2548.07	1.16	ppb
Molybdenum	98-1	2572.64	2545.88	2507.37	2541.96	1.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	264.90	268.35	264.69	265.98	0.77	ppb
Phosphorus	31-2	5242.55	5182.96	5330.53	5252.01	1.41	ppb
Potassium	39-2	12526.49	12395.30	12168.27	12363.35	1.47	ppb
Rhodium	103-1				94		%
Rhodium	103-2				94		%
Scandium	45-1				95		%
Scandium	45-2				98		%
Selenium	82-1	262.90	263.28	259.35	261.84	0.83	ppb
Selenium	77-2	259.63	275.79	264.57	266.66	3.11	ppb
Selenium	78-2	259.94	256.78	253.27	256.67	1.30	ppb
Silicon	28-1	264.75	266.89	263.46	265.03	0.65	ppb
Silver	107-1	265.17	265.88	258.72	263.26	1.50	ppb
Silver	109-1	266.26	267.30	259.06	264.21	1.70	ppb
Sodium	23-2	24950.38	24695.33	24864.76	24836.82	0.52	ppb
Strontium	86-1	250.41	248.73	246.87	248.67	0.71	ppb
Strontium	88-1	254.20	256.06	248.76	253.01	1.50	ppb
Sulfur	34-1	5806.24	5508.16	5291.44	5535.28	4.67	ppb
Terbium	159-1				99		%
Terbium	159-2				99		%
Thallium	203-1	259.34	253.27	252.12	254.91	1.52	ppb
Thallium	205-1	256.97	254.90	248.82	253.56	1.67	ppb
Tin	118-1	259.25	257.48	253.75	256.83	1.09	ppb
Titanium	47-1	2516.85	2571.61	2513.77	2534.08	1.28	ppb
Uranium	238-1	251.56	246.23	244.27	247.35	1.53	ppb

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	242.31	245.81	242.71	243.61	0.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				96		%
Zinc	66-2	2741.85	2708.22	2670.05	2706.71	1.33	ppb
Zirconium	90-1	256.20	253.71	254.66	254.86	0.49	ppb
Zirconium	91-1	253.44	257.34	254.31	255.03	0.80	ppb

Lab Sample ID: S06 Instrumnet Name: P8
Client Sample ID: S06 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

Date & Time Ac	quircu . 202	0 02 00 12.24.10	Datai	iic ivairie .	0000/ (EO.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9622.10	9827.45	9775.79	9741.78	1.10	ppb
Antimony	121-1	489.26	502.66	501.46	497.79	1.49	ppb
Arsenic	75-2	492.94	508.62	514.48	505.35	2.20	ppb
Barium	135-1	2448.59	2506.42	2501.08	2485.36	1.29	ppb
Barium	137-1	2465.44	2537.05	2479.97	2494.15	1.52	ppb
Beryllium	9-1	483.06	508.61	511.01	500.89	3.09	ppb
Bismuth	209-1				93		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	493.31	497.87	494.24	495.14	0.49	ppb
Cadmium	106-1	491.60	502.73	498.34	497.56	1.13	ppb
Cadmium	111-1	496.65	498.26	503.30	499.40	0.69	ppb
Calcium	43-1	45940.87	49844.17	48313.97	48033.00	4.09	ppb
Calcium	44-1	46009.55	48329.84	47286.58	47208.66	2.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	516.45	516.53	517.34	516.77	0.10	ppb
Cobalt	59-2	509.94	521.31	513.93	515.06	1.12	ppb
Copper	63-2	5105.88	5311.72	5238.50	5218.70	2.00	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				95		%
Indium	115-1				93		%
Indium	115-2				88		%
Iron	54-2	25135.81	26152.09	26292.80	25860.23	2.44	ppb
Iron	56-2	25325.79	25670.95	25390.05	25462.26	0.72	ppb
Iron	57-2	25540.34	26727.68	26168.71	26145.58	2.27	ppb
Krypton	83-1						cps
Lead	206-1	2497.11	2527.83	2502.01	2508.98	0.66	ppb

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2487.38	2507.43	2540.38	2511.73	1.07	ppb
Lead	208-1	2471.66	2508.46	2510.92	2497.01	0.88	ppb
Lithium	6-1				94		%
Magnesium	24-2	50513.89	51027.29	50958.77	50833.32	0.55	ppb
Manganese	55-2	5068.29	5110.65	5101.74	5093.56	0.44	ppb
Molybdenum	94-1	4923.12	5022.86	5042.35	4996.11	1.28	ppb
Molybdenum	95-1	4894.92	5025.34	5045.08	4988.45	1.64	ppb
Molybdenum	96-1	4917.60	4970.02	4995.61	4961.08	0.80	ppb
Molybdenum	97-1	4910.83	4946.04	4996.72	4951.19	0.87	ppb
Molybdenum	98-1	4876.63	4968.31	5039.80	4961.58	1.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	483.82	501.79	491.40	492.34	1.83	ppb
Phosphorus	31-2	10108.93	10442.34	10253.89	10268.39	1.63	ppb
Potassium	39-2	24047.69	24761.50	24478.36	24429.18	1.47	ppb
Rhodium	103-1				90		%
Rhodium	103-2				90		%
Scandium	45-1				94		%
Scandium	45-2				92		%
Selenium	82-1	488.93	497.53	508.05	498.17	1.92	ppb
Selenium	77-2	509.59	556.47	525.98	530.68	4.48	ppb
Selenium	78-2	483.33	506.68	514.90	501.64	3.26	ppb
Silicon	28-1	488.61	514.59	518.93	507.37	3.23	ppb
Silver	107-1	491.53	511.34	501.87	501.58	1.98	ppb
Silver	109-1	491.17	509.60	503.48	501.42	1.87	ppb
Sodium	23-2	50549.86	50145.25	50367.30	50354.13	0.40	ppb
Strontium	86-1	491.59	508.39	509.84	503.27	2.02	ppb
Strontium	88-1	491.33	500.96	501.28	497.86	1.14	ppb
Sulfur	34-1	9638.40	10227.23	10332.85	10066.16	3.72	ppb
Terbium	159-1				98		%
Terbium	159-2				95		%
Thallium	203-1	500.91	497.03	504.00	500.65	0.70	ppb
Thallium	205-1	496.08	500.11	496.27	497.49	0.46	ppb
Tin	118-1	486.89	504.39	508.72	500.00	2.31	ppb
Titanium	47-1	4760.30	5097.69	4969.94	4942.64	3.45	ppb
Uranium	238-1	476.01	501.21	496.99	491.40	2.75	ppb

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	511.11	521.14	511.12	514.46	1.13	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				92		%
Zinc	66-2	5147.83	5284.78	5132.78	5188.46	1.61	ppb
Zirconium	90-1	489.24	500.74	505.44	498.47	1.67	ppb
Zirconium	91-1	492.47	507.65	511.87	504.00	2.02	ppb

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Lab Sample ID: S07 Instrumnet Name: P8
Client Sample ID: S07 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

Date & Time Ac	quireu . 202	3-02-00 12.27.03	Dalar	ile ivallie .	010CALS.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	19183.29	19534.98	19311.44	19343.24	0.92	ppb	
Antimony	121-1	980.16	1007.88	997.84	995.29	1.41	ppb	
Arsenic	75-2	992.72	990.29	1006.57	996.53	0.88	ppb	
Barium	135-1	4917.27	5057.19	5018.93	4997.79	1.45	ppb	
Barium	137-1	4909.90	5119.85	4965.58	4998.44	2.18	ppb	
Beryllium	9-1	979.80	998.90	1011.47	996.72	1.60	ppb	
Bismuth	209-1				92		%	
Bismuth	209-2				91		%	
Bromine	81-1						cps	
Cadmium	108-1	990.32	1020.24	987.47	999.35	1.82	ppb	
Cadmium	106-1	984.44	1012.17	999.21	998.60	1.39	ppb	
Cadmium	111-1	985.90	1015.99	996.92	999.60	1.52	ppb	
Calcium	43-1	94870.95	96292.48	97614.67	96259.37	1.43	ppb	
Calcium	44-1	94627.71	95868.86	96020.19	95505.59	0.80	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	991.57	1011.97	976.92	993.49	1.77	ppb	
Cobalt	59-2	986.26	990.07	995.92	990.75	0.49	ppb	
Copper	63-2	9756.59	9846.93	9987.51	9863.68	1.18	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				98		%	
Holmium	165-2				97		%	
Indium	115-1				92		%	
Indium	115-2				87		%	
Iron	54-2	48530.01	49093.57	49921.48	49181.69	1.42	ppb	
Iron	56-2	48163.77	48997.22	48459.94	48540.31	0.87	ppb	
Iron	57-2	49986.02	50127.83	48767.66	49627.17	1.51	ppb	
Krypton	83-1						cps	
Lead	206-1	4902.61	4992.14	5073.54	4989.43	1.71	ppb	

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4907.70	5010.97	5048.51	4989.06	1.46	ppb
Lead	208-1	4917.11	5024.93	5050.18	4997.41	1.41	ppb
Lithium	6-1				92		%
Magnesium	24-2	95755.12	98451.45	97180.24	97128.94	1.39	ppb
Manganese	55-2	9930.84	9935.33	9950.46	9938.88	0.10	ppb
Molybdenum	94-1	9701.32	10058.92	10192.44	9984.23	2.54	ppb
Molybdenum	95-1	9790.58	9911.80	10277.80	9993.39	2.54	ppb
Molybdenum	96-1	9877.68	9868.64	10288.60	10011.64	2.40	ppb
Molybdenum	97-1	9906.81	9890.00	10238.84	10011.88	1.96	ppb
Molybdenum	98-1	9833.82	10034.08	10158.65	10008.85	1.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	995.20	994.70	1006.08	998.66	0.64	ppb
Phosphorus	31-2	19578.83	20074.80	19740.56	19798.06	1.28	ppb
Potassium	39-2	47304.12	48389.52	47434.78	47709.47	1.24	ppb
Rhodium	103-1				88		%
Rhodium	103-2				89		%
Scandium	45-1				93		%
Scandium	45-2				95		%
Selenium	82-1	974.66	991.54	1026.69	997.63	2.66	ppb
Selenium	77-2	998.80	979.16	963.26	980.40	1.82	ppb
Selenium	78-2	983.31	999.27	1010.44	997.67	1.37	ppb
Silicon	28-1	996.45	1002.11	976.15	991.57	1.38	ppb
Silver	107-1	988.98	1008.60	987.69	995.09	1.18	ppb
Silver	109-1	998.17	1001.02	985.44	994.88	0.83	ppb
Sodium	23-2	96270.74	97702.03	95567.68	96513.48	1.13	ppb
Strontium	86-1	973.18	1012.06	1012.52	999.25	2.26	ppb
Strontium	88-1	984.24	1000.81	1015.60	1000.21	1.57	ppb
Sulfur	34-1	19700.15	20152.00	19505.95	19786.04	1.68	ppb
Terbium	159-1				97		%
Terbium	159-2				96		%
Thallium	203-1	986.09	1000.83	1008.90	998.61	1.16	ppb
Thallium	205-1	992.26	996.84	1012.20	1000.43	1.04	ppb
Tin	118-1	987.37	1012.65	994.22	998.08	1.31	ppb
Titanium	47-1	10053.21	10018.00	9988.80	10020.00	0.32	ppb
Uranium	238-1	991.99	1020.91	1003.60	1005.50	1.45	ppb

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	987.46	992.33	1005.21	995.00	0.92	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				95		%
Yttrium	89-2				94		%
Zinc	66-2	9778.43	9898.42	9863.08	9846.64	0.63	ppb
Zirconium	90-1	967.97	1006.98	1023.57	999.50	2.86	ppb
Zirconium	91-1	973.12	991.74	1027.52	997.46	2.77	ppb

<sub>3</sub> 115

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	101096.56	100422.91	98987.24	100168.90	1.08	ppb
Antimony	121-1	0.44	0.41	0.41	0.42	3.80	ppb
Arsenic	75-2	0.71	0.65	0.61	0.65	7.47	ppb
Barium	135-1	2.06	1.89	1.94	1.96	4.58	ppb
Barium	137-1	2.06	2.05	1.95	2.02	3.11	ppb
Beryllium	9-1	0.38	0.30	0.32	0.33	12.59	ppb
Bismuth	209-1				79		%
Bismuth	209-2				81		%
Bromine	81-1						cps
Cadmium	108-1	0.58	0.74	0.58	0.64	14.67	ppb
Cadmium	106-1	-0.16	-0.11	0.10	-0.05		ppb
Cadmium	111-1	0.15	0.15	0.15	0.15	2.43	ppb
Calcium	43-1	497361.39	504066.86	501433.22	500953.82	0.67	ppb
Calcium	44-1	496385.03	508682.43	498610.58	501226.02	1.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.23	2.26	2.13	2.21	3.05	ppb
Cobalt	59-2	2.30	2.17	2.20	2.22	3.14	ppb
Copper	63-2	1.52	1.54	1.55	1.54	1.12	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				90		%
Holmium	165-2				91		%
Indium	115-1				82		%
Indium	115-2				81		%
Iron	54-2	253043.33	246073.09	251084.11	250066.84	1.44	ppb
Iron	56-2	252099.46	247844.21	250763.99	250235.89	0.87	ppb
Iron	57-2	251230.01	248118.08	250570.87	249972.99	0.66	ppb
Krypton	83-1						cps
Lead	206-1	1.33	1.26	1.28	1.29	2.62	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.31	1.30	1.25	1.29	2.63	ppb
Lead	208-1	1.30	1.28	1.26	1.28	1.73	ppb
Lithium	6-1				82		%
Magnesium	24-2	502190.78	498780.20	500478.21	500483.06	0.34	ppb
Manganese	55-2	4.70	4.38	4.64	4.57	3.73	ppb
Molybdenum	94-1	4.80	4.65	4.45	4.63	3.77	ppb
Molybdenum	95-1	1.70	1.53	1.57	1.60	5.55	ppb
Molybdenum	96-1	2.05	1.94	1.86	1.95	4.76	ppb
Molybdenum	97-1	1.59	1.50	1.39	1.49	6.59	ppb
Molybdenum	98-1	1.55	1.42	1.38	1.45	6.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.19	3.10	3.13	3.14	1.60	ppb
Phosphorus	31-2	-9.85	-22.32	-9.57	-13.91		ppb
Potassium	39-2	251478.37	250401.70	249709.46	250529.84	0.36	ppb
Rhodium	103-1				76		%
Rhodium	103-2				80		%
Scandium	45-1				84		%
Scandium	45-2				88		%
Selenium	82-1	0.03	0.32	-0.20	0.05	527.14	ppb
Selenium	77-2	0.00	0.76	0.00	0.25	173.21	ppb
Selenium	78-2	-0.78	-0.34	-0.56	-0.56		ppb
Silicon	28-1	23.24	23.43	22.05	22.91	3.25	ppb
Silver	107-1	0.15	0.12	0.12	0.13	14.16	ppb
Silver	109-1	0.15	0.13	0.12	0.13	10.24	ppb
Sodium	23-2	510918.95	498956.66	492145.50	500673.70	1.90	ppb
Strontium	86-1	3.41	3.39	3.37	3.39	0.56	ppb
Strontium	88-1	3.41	3.36	3.39	3.39	0.84	ppb
Sulfur	34-1	-243.04	-465.20	-707.55	-471.93		ppb
Terbium	159-1				89		%
Terbium	159-2				91		%
Thallium	203-1	0.12	0.10	0.09	0.10	15.65	ppb
Thallium	205-1	0.13	0.11	0.09	0.11	17.39	ppb
Tin	118-1	0.21	0.21	0.20	0.21	3.17	ppb
Titanium	47-1	1.47	1.29	1.32	1.36	7.26	ppb
Uranium	238-1	0.08	0.06	0.06	0.07	18.88	ppb

LB Number : LB134612 Operator :

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.29	0.26	0.30	0.28	7.01	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				86		%
Yttrium	89-2				90		%
Zinc	66-2	4.94	4.69	4.43	4.69	5.41	ppb
Zirconium	90-1	1.83	1.85	1.81	1.83	0.97	ppb
Zirconium	91-1	1.88	1.87	1.80	1.85	2.27	ppb

Jaswal

<sub>3</sub> 118

Lab Sample ID :ICV001Instrumnet Name :P8Client Sample ID :ICV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Date & Time / to	quircu . Zoz	20 02 00 12.40.40	Datai	iic i vairie .	012101.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	467.31	482.84	478.93	476.36	1.70	ppb
Antimony	121-1	209.66	208.37	208.68	208.90	0.32	ppb
Arsenic	75-2	207.68	210.59	207.37	208.55	0.85	ppb
Barium	135-1	102.20	103.27	100.59	102.02	1.32	ppb
Barium	137-1	101.87	103.33	102.40	102.53	0.72	ppb
Beryllium	9-1	104.12	103.24	104.98	104.12	0.83	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	132.30	136.81	134.40	134.51	1.68	ppb
Cadmium	106-1	83.13	83.49	83.44	83.35	0.23	ppb
Cadmium	111-1	105.58	106.80	105.71	106.03	0.63	ppb
Calcium	43-1	2167.07	2181.71	2193.21	2180.66	0.60	ppb
Calcium	44-1	2127.71	2140.92	2134.14	2134.26	0.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	101.54	103.37	102.58	102.50	0.90	ppb
Cobalt	59-2	105.03	105.33	106.91	105.75	0.96	ppb
Copper	63-2	105.02	106.70	108.32	106.68	1.55	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				99		%
Indium	115-1				100		%
Indium	115-2				98		%
Iron	54-2	2073.47	2102.64	2102.87	2092.99	0.81	ppb
Iron	56-2	2062.65	2018.33	2092.49	2057.82	1.81	ppb
Iron	57-2	1998.57	2010.84	2018.55	2009.32	0.50	ppb
Krypton	83-1						cps
Lead	206-1	208.99	209.75	214.81	211.18	1.50	ppb

Lab Sample ID: ICV001 Instrumnet Name: P8

Client Sample ID: ICV001 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Date & Time Act	1011CG . 202	.0 02 00 12.40.40	Datai	iic ivairie .	012101.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	199.56	204.97	209.00	204.51	2.32	ppb
Lead	208-1	203.05	207.66	209.59	206.76	1.62	ppb
Lithium	6-1				99		%
Magnesium	24-2	1133.24	1124.14	1139.99	1132.46	0.70	ppb
Manganese	55-2	100.37	102.09	102.47	101.64	1.10	ppb
Molybdenum	94-1	3934.92	3945.45	4035.17	3971.84	1.39	ppb
Molybdenum	95-1	4783.68	4878.43	4969.52	4877.21	1.91	ppb
Molybdenum	96-1	4718.18	4806.02	4843.09	4789.10	1.34	ppb
Molybdenum	97-1	4835.95	4902.79	4892.02	4876.92	0.74	ppb
Molybdenum	98-1	4762.33	4840.79	4853.20	4818.77	1.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	103.90	105.91	106.27	105.36	1.21	ppb
Phosphorus	31-2	-15.49	-24.94	-14.11	-18.18		ppb
Potassium	39-2	1898.05	1894.13	1929.63	1907.27	1.02	ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				99		%
Selenium	82-1	208.92	211.75	216.01	212.22	1.68	ppb
Selenium	77-2	228.29	222.56	197.98	216.28	7.45	ppb
Selenium	78-2	204.10	204.75	200.50	203.12	1.13	ppb
Silicon	28-1	0.81	1.86	1.88	1.52	40.24	ppb
Silver	107-1	48.85	50.22	49.53	49.53	1.38	ppb
Silver	109-1	49.69	50.66	50.75	50.37	1.17	ppb
Sodium	23-2	2020.67	2068.23	2013.16	2034.02	1.47	ppb
Strontium	86-1	504.00	513.12	515.28	510.80	1.17	ppb
Strontium	88-1	503.96	505.69	510.35	506.67	0.65	ppb
Sulfur	34-1	-655.31	-655.54	-705.71	-672.19		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	207.36	204.76	212.90	208.34	2.00	ppb
Thallium	205-1	204.09	201.72	205.83	203.88	1.01	ppb
Tin	118-1	0.05	0.09	0.05	0.06	37.76	ppb
Titanium	47-1	0.44	0.50	0.49	0.48	6.72	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	9.30	ppb

Lab Sample ID :ICV001Instrumnet Name :P8Client Sample ID :ICV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	99.29	100.06	98.61	99.32	0.73	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				99		%
Zinc	66-2	198.83	203.74	207.16	203.24	2.06	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	12.81	ppb
Zirconium	91-1	0.10	0.12	0.12	0.11	10.13	ppb

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Lab Sample ID :ICB001Instrumnet Name :P8Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

Date & Time / to	quircu . 202	20 02 00 12:00:40	Datai	iic raine .	01000BE.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.26	0.69	0.40	0.45	48.99	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	8.72	ppb
Arsenic	75-2	0.05	-0.02	-0.02	0.01	686.11	ppb
Barium	135-1	0.01	0.00	0.01	0.01	55.58	ppb
Barium	137-1	0.00	0.01	0.01	0.01	29.82	ppb
Beryllium	9-1	0.07	0.06	0.06	0.06	4.51	ppb
Bismuth	209-1				98		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	-0.01	0.03	-0.01		ppb
Cadmium	106-1	-1.91	-0.51	-0.93	-1.12		ppb
Cadmium	111-1	-0.14	-0.03	-0.07	-0.08		ppb
Calcium	43-1	-0.99	0.47	0.13	-0.13		ppb
Calcium	44-1	1.09	0.95	1.31	1.12	16.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.15	-0.15	-0.13	-0.14		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	83.21	ppb
Copper	63-2	0.30	0.32	0.31	0.31	3.12	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				98		%
Indium	115-1				97		%
Indium	115-2				98		%
Iron	54-2	-0.03	0.13	-0.43	-0.11		ppb
Iron	56-2	0.29	0.41	0.37	0.36	17.30	ppb
Iron	57-2	-0.62	-0.04	0.85	0.06	1178.49	ppb
Krypton	83-1						cps
Lead	206-1	0.13	0.12	0.13	0.13	2.59	ppb

Lab Sample ID :ICB001Instrumnet Name :P8Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.13	0.14	0.14	0.14	2.20	ppb
Lead	208-1	0.14	0.14	0.14	0.14	1.48	ppb
Lithium	6-1				99		%
Magnesium	24-2	-10.21	-10.19	-10.38	-10.26		ppb
Manganese	55-2	-0.01	0.02	-0.02	0.00		ppb
Molybdenum	94-1	0.10	0.10	0.07	0.09	19.08	ppb
Molybdenum	95-1	0.12	0.10	0.12	0.11	10.65	ppb
Molybdenum	96-1	0.11	0.10	0.10	0.11	4.69	ppb
Molybdenum	97-1	0.11	0.07	0.09	0.09	18.49	ppb
Molybdenum	98-1	0.14	0.08	0.08	0.10	32.88	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.04	-0.07	-0.01	-0.04		ppb
Phosphorus	31-2	-19.45	-19.28	-22.79	-20.51		ppb
Potassium	39-2	9.72	7.30	9.17	8.73	14.54	ppb
Rhodium	103-1				97		%
Rhodium	103-2				100		%
Scandium	45-1				97		%
Scandium	45-2				98		%
Selenium	82-1	0.12	-0.08	0.06	0.03	299.83	ppb
Selenium	77-2	0.70	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	-0.80	-0.80	-0.39	-0.66		ppb
Silicon	28-1	-0.04	0.70	0.57	0.41	96.49	ppb
Silver	107-1	0.01	0.05	0.01	0.02	83.21	ppb
Silver	109-1	0.01	0.01	0.01	0.01	16.93	ppb
Sodium	23-2	21.79	20.05	21.77	21.20	4.71	ppb
Strontium	86-1	0.01	0.00	0.01	0.01	30.15	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	32.60	ppb
Sulfur	34-1	-457.71	-299.02	-217.94	-324.89		ppb
Terbium	159-1				99		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.02	0.02	0.02	8.90	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	15.57	ppb
Tin	118-1	-0.02	0.00	-0.01	-0.01		ppb
Titanium	47-1	0.00	-0.01	0.01	0.00	509.50	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: ICB001 Instrumnet Name: P8

Client Sample ID: ICB001 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	82.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				98		%
Zinc	66-2	0.05	0.07	0.04	0.05	33.21	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	79.64	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	23.47	ppb

<sub>3</sub> 124

Lab Sample ID: ICSA001 Instrumnet Name: P8

Client Sample ID: ICSA001 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	87946.37	89438.57	88414.68	88599.87	0.86	ppb
Antimony	121-1	1.02	1.11	1.11	1.08	4.99	ppb
Arsenic	75-2	0.25	0.31	0.35	0.30	16.26	ppb
Barium	135-1	1.30	1.43	1.43	1.39	5.51	ppb
Barium	137-1	1.25	1.32	1.40	1.32	5.72	ppb
Beryllium	9-1	0.31	0.34	0.31	0.32	4.33	ppb
Bismuth	209-1				92		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	15.99	17.64	16.11	16.58	5.56	ppb
Cadmium	106-1	-2.85	-2.04	-2.12	-2.34		ppb
Cadmium	111-1	0.42	0.43	0.54	0.46	15.40	ppb
Calcium	43-1	88091.68	93451.76	93941.77	91828.41	3.53	ppb
Calcium	44-1	87758.75	95358.70	94327.91	92481.79	4.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.07	19.46	19.27	19.27	1.01	ppb
Cobalt	59-2	1.15	1.19	1.16	1.17	2.06	ppb
Copper	63-2	7.80	8.00	7.91	7.90	1.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				94		%
Indium	115-2				91		%
Iron	54-2	98052.46	99341.89	96567.18	97987.17	1.42	ppb
Iron	56-2	98563.42	99823.58	98387.66	98924.89	0.79	ppb
Iron	57-2	99252.46	100504.60	98111.92	99289.66	1.21	ppb
Krypton	83-1						cps
Lead	206-1	4.26	4.73	4.69	4.56	5.75	ppb

Lab Sample ID: ICSA001 Instrumnet Name: P8

Client Sample ID: ICSA001 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	3.97	4.27	4.26	4.17	4.10	ppb
Lead	208-1	4.03	4.44	4.40	4.29	5.18	ppb
Lithium	6-1				95		%
Magnesium	24-2	92615.56	92290.17	91234.65	92046.79	0.78	ppb
Manganese	55-2	7.47	7.43	7.51	7.47	0.54	ppb
Molybdenum	94-1	1482.56	1588.05	1570.35	1546.98	3.65	ppb
Molybdenum	95-1	1794.26	1926.73	1940.25	1887.08	4.27	ppb
Molybdenum	96-1	1788.63	1880.67	1916.20	1861.83	3.54	ppb
Molybdenum	97-1	1820.47	1913.99	1969.89	1901.45	3.97	ppb
Molybdenum	98-1	1804.55	1925.46	1924.94	1884.98	3.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.96	5.13	5.06	5.05	1.70	ppb
Phosphorus	31-2	99888.01	100680.31	100310.48	100292.94	0.40	ppb
Potassium	39-2	94975.87	94943.54	93449.35	94456.25	0.92	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				97		%
Scandium	45-2				96		%
Selenium	82-1	-0.26	-0.11	-0.24	-0.20		ppb
Selenium	77-2	0.71	0.73	0.00	0.48	86.61	ppb
Selenium	78-2	-0.38	0.05	-0.80	-0.38		ppb
Silicon	28-1	25.17	29.46	30.02	28.21	9.41	ppb
Silver	107-1	0.06	0.07	0.06	0.07	7.03	ppb
Silver	109-1	0.06	0.07	0.07	0.07	5.42	ppb
Sodium	23-2	96749.68	97531.92	96183.11	96821.57	0.70	ppb
Strontium	86-1	30.12	32.75	32.94	31.93	4.94	ppb
Strontium	88-1	31.30	34.03	34.28	33.20	4.98	ppb
Sulfur	34-1	88018.42	93023.69	92045.39	91029.17	2.91	ppb
Terbium	159-1				100		%
Terbium	159-2				98		%
Thallium	203-1	0.07	0.08	0.11	0.08	24.70	ppb
Thallium	205-1	0.07	0.09	0.10	0.09	16.00	ppb
Tin	118-1	0.19	0.24	0.22	0.21	11.46	ppb
Titanium	47-1	1888.18	2039.69	2066.10	1997.99	4.81	ppb
Uranium	238-1	0.01	0.01	0.02	0.01	8.36	ppb

Lab Sample ID :ICSA001Instrumnet Name :P8Client Sample ID :ICSA001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.16	0.15	0.15	0.16	4.39	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				96		%
Zinc	66-2	11.32	10.86	10.88	11.02	2.37	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	6.09	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	17.37	ppb

Lab Sample ID : ICSAB001 Instrumnet Name : P8

Client Sample ID : ICSAB001 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Date & Time 7to	quircu . 202	-0 02 00 12.07.40	Datai	ic ivallic .	010100B.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	90861.33	90283.38	88398.00	89847.57	1.43	ppb
Antimony	121-1	21.02	21.48	21.63	21.37	1.47	ppb
Arsenic	75-2	21.75	22.13	20.94	21.61	2.79	ppb
Barium	135-1	21.32	21.73	21.91	21.65	1.39	ppb
Barium	137-1	21.25	21.98	21.84	21.69	1.80	ppb
Beryllium	9-1	20.62	21.81	21.52	21.31	2.91	ppb
Bismuth	209-1				90		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	33.83	33.26	33.26	33.45	0.98	ppb
Cadmium	106-1	13.42	13.83	13.38	13.54	1.85	ppb
Cadmium	111-1	19.70	20.02	20.19	19.97	1.25	ppb
Calcium	43-1	97295.48	100218.32	97375.34	98296.38	1.69	ppb
Calcium	44-1	96697.00	98153.01	97114.87	97321.62	0.77	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39.15	39.78	39.61	39.51	0.83	ppb
Cobalt	59-2	21.26	21.48	21.11	21.28	0.89	ppb
Copper	63-2	28.19	28.52	27.77	28.16	1.35	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				99		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	54-2	101126.81	101314.17	99254.75	100565.25	1.13	ppb
Iron	56-2	101949.54	101954.73	98882.26	100928.84	1.76	ppb
Iron	57-2	100776.80	100435.59	100573.25	100595.21	0.17	ppb
Krypton	83-1						cps
Lead	206-1	24.93	25.83	25.15	25.30	1.85	ppb

Lab Sample ID :ICSAB001Instrumnet Name :P8Client Sample ID :ICSAB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	24.33	24.85	24.21	24.46	1.39	ppb
Lead	208-1	24.23	24.96	24.54	24.57	1.50	ppb
Lithium	6-1				93		%
Magnesium	24-2	93817.02	92229.32	90773.97	92273.44	1.65	ppb
Manganese	55-2	27.55	27.45	27.28	27.43	0.49	ppb
Molybdenum	94-1	1639.91	1670.97	1625.09	1645.32	1.42	ppb
Molybdenum	95-1	1998.17	2034.59	1960.54	1997.77	1.85	ppb
Molybdenum	96-1	1952.81	1985.38	1920.36	1952.85	1.66	ppb
Molybdenum	97-1	2016.37	2014.38	1979.61	2003.46	1.03	ppb
Molybdenum	98-1	1988.57	1997.40	1973.47	1986.48	0.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.88	24.90	24.26	24.68	1.48	ppb
Phosphorus	31-2	102725.17	103054.30	101474.46	102417.98	0.81	ppb
Potassium	39-2	98068.32	96128.18	95239.45	96478.65	1.50	ppb
Rhodium	103-1				90		%
Rhodium	103-2				92		%
Scandium	45-1				96		%
Scandium	45-2				98		%
Selenium	82-1	20.32	21.21	20.08	20.54	2.90	ppb
Selenium	77-2	16.11	26.66	19.15	20.64	26.30	ppb
Selenium	78-2	21.99	15.30	19.81	19.03	17.93	ppb
Silicon	28-1	29.67	31.47	30.57	30.57	2.95	ppb
Silver	107-1	18.50	19.04	19.08	18.87	1.72	ppb
Silver	109-1	18.95	19.48	19.21	19.21	1.38	ppb
Sodium	23-2	99052.85	99081.49	97073.01	98402.45	1.17	ppb
Strontium	86-1	33.28	34.14	33.47	33.63	1.35	ppb
Strontium	88-1	34.33	35.69	34.55	34.86	2.11	ppb
Sulfur	34-1	96791.42	97585.44	95879.23	96752.03	0.88	ppb
Terbium	159-1				98		%
Terbium	159-2				98		%
Thallium	203-1	20.54	21.28	20.95	20.92	1.77	ppb
Thallium	205-1	20.65	21.27	21.03	20.98	1.49	ppb
Tin	118-1	0.17	0.15	0.19	0.17	10.22	ppb
Titanium	47-1	2059.76	2151.40	2094.71	2101.96	2.20	ppb
Uranium	238-1	0.02	0.02	0.02	0.02	2.51	ppb

Lab Sample ID : ICSAB001 Instrumnet Name : P8

Client Sample ID : ICSAB001 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	19.95	19.94	19.65	19.84	0.86	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				98		%
Zinc	66-2	30.69	31.48	30.76	30.97	1.41	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	8.52	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	17.94	ppb

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Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Date & Time Ac	quireu . 202	25-02-00 13.00.52	Dalari	ile Name.	010CCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	48684.71	47566.56	48760.86	48337.38	1.38	ppb
Antimony	121-1	487.95	506.55	499.37	497.95	1.88	ppb
Arsenic	75-2	494.26	494.86	494.14	494.42	0.08	ppb
Barium	135-1	2494.21	2579.48	2508.38	2527.36	1.81	ppb
Barium	137-1	2467.54	2517.39	2561.62	2515.52	1.87	ppb
Beryllium	9-1	502.11	526.64	519.81	516.19	2.45	ppb
Bismuth	209-1				87		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Cadmium	108-1	482.69	495.79	492.52	490.33	1.39	ppb
Cadmium	106-1	478.71	490.67	500.17	489.85	2.20	ppb
Cadmium	111-1	483.04	504.07	493.47	493.53	2.13	ppb
Calcium	43-1	234940.28	236153.02	239051.28	236714.86	0.89	ppb
Calcium	44-1	227705.13	235151.37	237615.88	233490.80	2.21	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	509.75	511.27	510.13	510.38	0.16	ppb
Cobalt	59-2	496.60	490.40	493.29	493.43	0.63	ppb
Copper	63-2	4863.77	4724.25	4868.36	4818.79	1.70	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				97		%
Indium	115-1				90		%
Indium	115-2				89		%
Iron	54-2	121141.35	119211.95	121866.25	120739.85	1.14	ppb
Iron	56-2	120540.50	122285.71	121501.39	121442.53	0.72	ppb
Iron	57-2	121437.24	121542.70	121413.88	121464.61	0.06	ppb
Krypton	83-1						cps
Lead	206-1	2563.31	2645.43	2581.51	2596.75	1.66	ppb

Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Date & Time Act	quireu . 202	25-02-06 15.00.52	Dalari	ile Name.	016CCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2554.95	2652.65	2592.83	2600.14	1.89	ppb
Lead	208-1	2531.96	2624.28	2582.37	2579.54	1.79	ppb
Lithium	6-1				89		%
Magnesium	24-2	241105.86	234007.32	235873.87	236995.69	1.55	ppb
Manganese	55-2	5015.49	5044.50	4989.22	5016.40	0.55	ppb
Molybdenum	94-1	5023.53	5211.92	5179.51	5138.32	1.96	ppb
Molybdenum	95-1	5069.41	5160.06	5200.53	5143.34	1.31	ppb
Molybdenum	96-1	5073.57	5060.71	5219.40	5117.90	1.72	ppb
Molybdenum	97-1	5073.85	5076.58	5196.56	5115.66	1.37	ppb
Molybdenum	98-1	5086.56	5122.49	5185.19	5131.41	0.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	463.62	454.63	465.39	461.21	1.25	ppb
Phosphorus	31-2	10104.79	10053.41	10101.84	10086.68	0.29	ppb
Potassium	39-2	119898.19	117690.11	118084.91	118557.74	0.99	ppb
Rhodium	103-1				85		%
Rhodium	103-2				87		%
Scandium	45-1				92		%
Scandium	45-2				96		%
Selenium	82-1	485.73	493.35	499.96	493.01	1.44	ppb
Selenium	77-2	445.49	504.23	500.57	483.43	6.81	ppb
Selenium	78-2	475.04	499.65	500.61	491.77	2.95	ppb
Silicon	28-1	500.22	521.83	528.27	516.78	2.84	ppb
Silver	107-1	479.93	489.67	491.59	487.06	1.28	ppb
Silver	109-1	475.39	500.91	490.47	488.92	2.62	ppb
Sodium	23-2	236252.17	234513.11	232850.32	234538.53	0.73	ppb
Strontium	86-1	512.29	524.44	517.13	517.95	1.18	ppb
Strontium	88-1	504.83	506.20	518.30	509.78	1.45	ppb
Sulfur	34-1	9315.40	9765.95	9773.03	9618.13	2.73	ppb
Terbium	159-1				96		%
Terbium	159-2				97		%
Thallium	203-1	516.99	522.55	513.59	517.71	0.87	ppb
Thallium	205-1	505.66	530.81	529.14	521.87	2.70	ppb
Tin	118-1	500.15	507.17	515.18	507.50	1.48	ppb
Titanium	47-1	5012.58	5049.98	5311.35	5124.64	3.18	ppb
Uranium	238-1	513.56	536.35	524.96	524.96	2.17	ppb

Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	506.69	504.86	512.71	508.09	0.81	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				96		%
Zinc	66-2	4818.09	4799.52	4851.23	4822.95	0.54	ppb
Zirconium	90-1	506.62	526.47	517.01	516.70	1.92	ppb
Zirconium	91-1	508.27	523.59	529.89	520.58	2.14	ppb

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Date & Time / to	quircu . Zoz	20 02 00 10.07.10	Datai	iic i vairie .	01000BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.37	0.72	0.50	0.53	33.44	ppb
Antimony	121-1	0.04	0.03	0.03	0.03	3.35	ppb
Arsenic	75-2	-0.02	-0.02	0.00	-0.01		ppb
Barium	135-1	0.00	0.01	0.00	0.00	162.12	ppb
Barium	137-1	0.01	0.01	0.00	0.00	157.64	ppb
Beryllium	9-1	0.09	0.08	0.08	0.08	7.58	ppb
Bismuth	209-1				101		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	-0.04	0.04	0.00	0.00		ppb
Cadmium	106-1	-0.98	-0.73	-0.94	-0.89		ppb
Cadmium	111-1	-0.06	-0.05	-0.07	-0.06		ppb
Calcium	43-1	-4.05	-3.57	-4.15	-3.92		ppb
Calcium	44-1	-2.80	-2.99	-0.96	-2.25		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.18	-0.15	-0.16	-0.16		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	0.04	0.01	0.02	0.02	58.48	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				101		%
Iron	54-2	1.49	1.08	0.85	1.14	28.39	ppb
Iron	56-2	1.16	1.18	1.14	1.16	2.05	ppb
Iron	57-2	0.86	1.17	-0.18	0.62	114.32	ppb
Krypton	83-1						cps
Lead	206-1	0.16	0.15	0.17	0.16	4.92	ppb

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.17	0.16	0.17	0.16	3.75	ppb
Lead	208-1	0.17	0.16	0.17	0.17	2.10	ppb
Lithium	6-1				102		%
Magnesium	24-2	-11.42	-11.71	-11.37	-11.50		ppb
Manganese	55-2	0.02	0.00	0.00	0.01	165.56	ppb
Molybdenum	94-1	0.05	0.04	0.05	0.04	10.02	ppb
Molybdenum	95-1	0.05	0.03	0.03	0.04	32.20	ppb
Molybdenum	96-1	0.05	0.04	0.03	0.04	29.38	ppb
Molybdenum	97-1	0.05	0.03	0.03	0.04	36.48	ppb
Molybdenum	98-1	0.05	0.03	0.03	0.03	31.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.08	-0.05	-0.07		ppb
Phosphorus	31-2	-26.49	-19.82	-17.80	-21.37		ppb
Potassium	39-2	19.32	16.75	18.48	18.18	7.20	ppb
Rhodium	103-1				102		%
Rhodium	103-2				104		%
Scandium	45-1				101		%
Scandium	45-2				102		%
Selenium	82-1	-0.53	0.18	-0.12	-0.16		ppb
Selenium	77-2	0.00	0.67	0.00	0.22	173.21	ppb
Selenium	78-2	-0.61	-0.42	-0.61	-0.55		ppb
Silicon	28-1	-2.60	-1.03	0.06	-1.19		ppb
Silver	107-1	0.02	0.02	0.02	0.02	11.00	ppb
Silver	109-1	0.02	0.02	0.01	0.02	21.15	ppb
Sodium	23-2	34.98	30.25	31.97	32.40	7.39	ppb
Strontium	86-1	0.00	0.00	0.01	0.00	1760.38	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	8.49	ppb
Sulfur	34-1	-811.46	-489.84	-197.89	-499.73		ppb
Terbium	159-1				102		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.04	0.04	0.03	11.57	ppb
Thallium	205-1	0.03	0.04	0.03	0.03	5.90	ppb
Tin	118-1	-0.01	0.01	0.00	0.00		ppb
Titanium	47-1	0.05	0.04	0.02	0.04	35.56	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	57.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				102		%
Zinc	66-2	-0.15	-0.02	-0.11	-0.09		ppb
Zirconium	90-1	0.00	0.00	0.01	0.01	48.33	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	2.64	ppb

Lab Sample ID : Q1177-01A Instrumnet Name : P8

Client Sample ID : MH2GW9A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

Date & Time / to	quiicu . Zoz	20 02 00 10.10.00	Datai	ic ivallic .	010/11\L1.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	12869.41	15272.54	13277.41	13806.46	9.31	ppb
Antimony	121-1	2.33	2.45	2.47	2.42	3.26	ppb
Arsenic	75-2	40.25	44.88	41.36	42.16	5.73	ppb
Barium	135-1	675.35	710.28	714.63	700.09	3.08	ppb
Barium	137-1	671.25	698.79	708.15	692.73	2.77	ppb
Beryllium	9-1	3.77	3.82	3.78	3.79	0.81	ppb
Bismuth	209-1				99		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	17.06	17.97	17.13	17.39	2.92	ppb
Cadmium	106-1	18.30	17.87	18.55	18.24	1.88	ppb
Cadmium	111-1	19.45	19.88	20.39	19.91	2.37	ppb
Calcium	43-1	147297.62	152053.23	151181.48	150177.44	1.69	ppb
Calcium	44-1	148319.07	146931.25	148087.35	147779.22	0.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	57.61	65.09	59.49	60.73	6.41	ppb
Cobalt	59-2	18.39	20.79	18.97	19.38	6.46	ppb
Copper	63-2	381.34	420.03	378.86	393.41	5.87	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				98		%
Iron	54-2	34560.60	38630.48	35217.26	36136.11	6.05	ppb
Iron	56-2	34445.43	38785.99	35513.31	36248.25	6.24	ppb
Iron	57-2	35289.50	39539.28	35457.60	36762.12	6.55	ppb
Krypton	83-1						cps
Lead	206-1	1493.06	1540.00	1525.08	1519.38	1.58	ppb

Lab Sample ID : Q1177-01A Instrumnet Name : P8

Client Sample ID : MH2GW9A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1446.24	1499.40	1500.74	1482.12	2.10	ppb
Lead	208-1	1464.24	1505.46	1510.66	1493.45	1.70	ppb
Lithium	6-1				101		%
Magnesium	24-2	10872.35	12477.09	11443.04	11597.49	7.01	ppb
Manganese	55-2	5966.92	6653.71	6115.99	6245.54	5.78	ppb
Molybdenum	94-1	8.22	8.81	8.75	8.60	3.78	ppb
Molybdenum	95-1	2.10	2.20	2.17	2.16	2.42	ppb
Molybdenum	96-1	2.68	2.83	2.89	2.80	3.72	ppb
Molybdenum	97-1	2.03	2.18	2.18	2.13	4.01	ppb
Molybdenum	98-1	2.08	2.21	2.16	2.15	3.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	68.27	76.29	69.40	71.32	6.09	ppb
Phosphorus	31-2	2752.10	3217.81	2902.01	2957.31	8.04	ppb
Potassium	39-2	5455.15	6198.58	5617.01	5756.91	6.79	ppb
Rhodium	103-1				97		%
Rhodium	103-2				99		%
Scandium	45-1				102		%
Scandium	45-2				102		%
Selenium	82-1	10.93	11.49	11.39	11.27	2.67	ppb
Selenium	77-2	61.71	78.85	67.08	69.22	12.67	ppb
Selenium	78-2	19.94	19.31	20.30	19.85	2.52	ppb
Silicon	28-1	9541.28	9900.01	10039.52	9826.94	2.62	ppb
Silver	107-1	7.48	7.71	7.83	7.67	2.36	ppb
Silver	109-1	7.54	7.85	7.77	7.72	2.09	ppb
Sodium	23-2	554.82	645.24	577.78	592.61	7.93	ppb
Strontium	86-1	534.98	550.88	548.47	544.78	1.57	ppb
Strontium	88-1	530.92	559.15	548.66	546.24	2.61	ppb
Sulfur	34-1	310.79	540.51	625.74	492.35	33.09	ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.66	0.72	0.73	0.70	5.03	ppb
Thallium	205-1	0.66	0.72	0.74	0.71	5.59	ppb
Tin	118-1	13.52	13.98	14.07	13.85	2.13	ppb
Titanium	47-1	225.95	230.28	234.65	230.29	1.89	ppb
Uranium	238-1	3.60	3.75	3.72	3.69	2.13	ppb

Lab Sample ID :Q1177-01AInstrumnet Name :P8Client Sample ID :MH2GW9ADilution Factor :1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	61.81	70.89	64.80	65.83	7.03	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				108		%
Zinc	66-2	4189.27	4706.41	4283.42	4393.04	6.27	ppb
Zirconium	90-1	3.64	3.87	3.84	3.79	3.32	ppb
Zirconium	91-1	3.59	3.80	3.86	3.75	3.88	ppb

Lab Sample ID: Q1178-01A Instrumnet Name: P8
Client Sample ID: MH2GX0A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Date & Time Ac	quirea: 202	25-02-06 13:14:50	DataFi	ie Name :	020AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20651.43	21726.71	21064.62	21147.59	2.56	ppb
Antimony	121-1	3.93	3.91	3.91	3.92	0.36	ppb
Arsenic	75-2	72.97	76.84	73.68	74.50	2.77	ppb
Barium	135-1	2803.59	2793.00	2723.55	2773.38	1.57	ppb
Barium	137-1	2774.51	2831.01	2740.42	2781.98	1.64	ppb
Beryllium	9-1	3.60	3.50	3.41	3.50	2.63	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	71.49	71.24	69.29	70.68	1.70	ppb
Cadmium	106-1	69.72	69.70	70.08	69.83	0.31	ppb
Cadmium	111-1	85.46	85.22	84.81	85.16	0.39	ppb
Calcium	43-1	129836.20	129963.47	126400.52	128733.40	1.57	ppb
Calcium	44-1	126905.97	129455.38	124617.11	126992.82	1.91	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	42.92	45.27	44.08	44.09	2.66	ppb
Cobalt	59-2	36.74	38.96	37.74	37.81	2.95	ppb
Copper	63-2	632.16	676.34	645.78	651.43	3.47	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				101		%
Indium	115-2				98		%
Iron	54-2	109257.95	114993.12	111229.24	111826.77	2.61	ppb
Iron	56-2	110433.63	115948.43	111872.61	112751.56	2.54	ppb
Iron	57-2	110310.44	116026.20	112502.70	112946.45	2.55	ppb
Krypton	83-1						cps
Lead	206-1	1831.26	1801.17	1791.64	1808.02	1.14	ppb

Lab Sample ID : Q1178-01A Instrumnet Name : P8

Client Sample ID : MH2GX0A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1779.24	1775.80	1750.96	1768.67	0.87	ppb
Lead	208-1	1794.38	1777.80	1765.26	1779.14	0.82	ppb
Lithium	6-1				101		%
Magnesium	24-2	13822.73	14114.23	13550.20	13829.05	2.04	ppb
Manganese	55-2	6861.50	7206.96	6983.61	7017.36	2.50	ppb
Molybdenum	94-1	9.66	9.81	9.32	9.59	2.63	ppb
Molybdenum	95-1	4.81	4.80	4.66	4.76	1.83	ppb
Molybdenum	96-1	5.32	5.29	5.17	5.26	1.55	ppb
Molybdenum	97-1	4.87	4.75	4.68	4.76	2.01	ppb
Molybdenum	98-1	4.69	4.73	4.64	4.69	0.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	493.32	519.59	501.61	504.84	2.66	ppb
Phosphorus	31-2	4038.67	4208.36	3957.88	4068.31	3.14	ppb
Potassium	39-2	7427.09	7810.31	7569.69	7602.37	2.55	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	11.26	11.92	11.74	11.64	2.92	ppb
Selenium	77-2	77.76	74.46	81.61	77.94	4.59	ppb
Selenium	78-2	21.76	19.50	21.44	20.90	5.85	ppb
Silicon	28-1	5516.66	5681.79	5473.82	5557.42	1.98	ppb
Silver	107-1	9.37	9.37	9.37	9.37	0.03	ppb
Silver	109-1	9.41	9.48	9.38	9.43	0.53	ppb
Sodium	23-2	904.52	968.81	926.75	933.36	3.50	ppb
Strontium	86-1	502.67	491.72	494.24	496.21	1.16	ppb
Strontium	88-1	503.15	492.64	478.54	491.44	2.51	ppb
Sulfur	34-1	947.24	1172.74	1108.81	1076.26	10.80	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	1.14	1.17	1.16	1.16	1.37	ppb
Thallium	205-1	1.14	1.16	1.16	1.15	1.02	ppb
Tin	118-1	30.41	30.33	30.09	30.28	0.54	ppb
Titanium	47-1	332.31	332.81	329.58	331.57	0.52	ppb
Uranium	238-1	4.46	4.42	4.32	4.40	1.65	ppb

Lab Sample ID : Q1178-01A Instrumnet Name : P8
Client Sample ID : MH2GX0A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	107.27	114.57	111.08	110.97	3.29	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				111		%
Zinc	66-2	5546.64	6037.57	5651.04	5745.08	4.50	ppb
Zirconium	90-1	3.17	3.19	3.12	3.16	1.10	ppb
Zirconium	91-1	3.20	3.28	3.13	3.20	2.42	ppb

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Lab Sample ID :PB166302BLInstrumnet Name :P8Client Sample ID :PBS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Date a Time / to	quircu . Zoz	20 02 00 10.22.47	Datai	iic i vairie .	02200BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.20	0.12	0.09	0.00	8918.26	ppb
Antimony	121-1	0.00	0.00	0.01	0.00	7.92	ppb
Arsenic	75-2	0.00	0.03	-0.02	0.00	530.04	ppb
Barium	135-1	0.00	0.00	0.01	0.00	182.68	ppb
Barium	137-1	0.01	0.00	0.00	0.00	119.29	ppb
Beryllium	9-1	0.03	0.03	0.03	0.03	4.06	ppb
Bismuth	209-1				95		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.06	0.03	0.04	42.90	ppb
Cadmium	106-1	-1.06	-0.87	-0.59	-0.84		ppb
Cadmium	111-1	-0.08	-0.07	-0.04	-0.06		ppb
Calcium	43-1	-2.52	-3.00	-4.78	-3.43		ppb
Calcium	44-1	0.83	-2.76	-3.28	-1.74		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.20	-0.19	-0.17	-0.18		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.08	-0.06	-0.09	-0.08		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				102		%
Indium	115-1				96		%
Indium	115-2				102		%
Iron	54-2	0.80	0.71	0.57	0.69	16.67	ppb
Iron	56-2	1.07	0.86	0.83	0.92	14.17	ppb
Iron	57-2	0.17	0.49	-0.20	0.15	225.54	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.13	0.13	0.14	7.21	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166302BLInstrumnet Name :P8Client Sample ID :PBS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Date a Time Act	quircu . Zoz	20 02 00 10.22.47	Datai	iic i vairie .	02200BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.16	0.12	0.14	0.14	15.14	ppb
Lead	208-1	0.16	0.13	0.13	0.14	12.63	ppb
Lithium	6-1				98		%
Magnesium	24-2	-11.80	-11.96	-11.69	-11.82		ppb
Manganese	55-2	0.05	0.05	-0.01	0.03	109.47	ppb
Molybdenum	94-1	0.01	0.00	0.00	0.00	417.06	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	823.13	ppb
Molybdenum	96-1	0.00	0.01	0.00	0.00	255.45	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	61.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.08	-0.08	-0.07		ppb
Phosphorus	31-2	-30.05	-26.73	-24.85	-27.21		ppb
Potassium	39-2	5.13	8.54	7.62	7.10	24.89	ppb
Rhodium	103-1				96		%
Rhodium	103-2				103		%
Scandium	45-1				97		%
Scandium	45-2				103		%
Selenium	82-1	-0.09	-0.21	-0.43	-0.24		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.23	-0.05	-0.81	-0.36		ppb
Silicon	28-1	4.98	-0.29	-1.22	1.16	288.83	ppb
Silver	107-1	0.01	0.01	0.01	0.01	10.78	ppb
Silver	109-1	0.01	0.01	0.01	0.01	22.50	ppb
Sodium	23-2	11.53	9.69	11.00	10.74	8.82	ppb
Strontium	86-1	0.02	-0.01	0.01	0.01	150.81	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	24.77	ppb
Sulfur	34-1	737.64	-244.45	-406.58	28.87	2144.58	ppb
Terbium	159-1				97		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.03	0.03	0.03	12.63	ppb
Thallium	205-1	0.03	0.02	0.03	0.03	13.45	ppb
Tin	118-1	0.01	-0.01	-0.01	0.00		ppb
Titanium	47-1	0.03	0.02	0.00	0.02	76.57	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID : PB166302BL Instrumnet Name : P8
Client Sample ID : PBS302 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	25.75	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				104		%
Zinc	66-2	-0.17	-0.08	-0.11	-0.12		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00		ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	58.54	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166302BSInstrumnet Name :P8Client Sample ID :LCS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Date & Time Ac	quirea: 202	25-02-06 13:26:08	Datai	-ile Name :	023LCSE.d			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	38.13	39.72	37.33	38.39	3.17	ppb	
Antimony	121-1	3.89	3.82	3.93	3.88	1.44	ppb	
Arsenic	75-2	2.03	1.89	2.07	2.00	4.82	ppb	
Barium	135-1	18.90	18.93	19.47	19.10	1.69	ppb	
Barium	137-1	19.12	19.10	19.37	19.20	0.79	ppb	
Beryllium	9-1	2.05	2.06	2.07	2.06	0.54	ppb	
Bismuth	209-1				99		%	
Bismuth	209-2				101		%	
Bromine	81-1						cps	
Cadmium	108-1	1.99	1.62	1.84	1.82	10.36	ppb	
Cadmium	106-1	1.81	1.17	2.30	1.76	32.28	ppb	
Cadmium	111-1	1.93	1.97	2.13	2.01	5.32	ppb	
Calcium	43-1	1131.32	1143.03	1132.18	1135.51	0.57	ppb	
Calcium	44-1	1019.05	1037.88	1015.64	1024.19	1.17	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	3.59	3.41	3.45	3.48	2.76	ppb	
Cobalt	59-2	1.91	1.97	1.94	1.94	1.57	ppb	
Copper	63-2	4.30	4.17	4.18	4.22	1.76	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				101		%	
Holmium	165-2				102		%	
Indium	115-1				101		%	
Indium	115-2				101		%	
Iron	54-2	381.64	387.77	374.58	381.33	1.73	ppb	
Iron	56-2	382.74	378.68	381.54	380.99	0.55	ppb	
Iron	57-2	379.53	378.34	375.82	377.90	0.50	ppb	
Krypton	83-1						cps	
Lead	206-1	1.96	1.90	1.88	1.91	1.94	ppb	

LB Number: LB134612

Lab Sample ID :PB166302BSInstrumnet Name :P8Client Sample ID :LCS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Operator :

Jaswal

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.97	1.94	1.95	1.96	0.72	ppb
Lead	208-1	1.96	1.91	1.93	1.93	1.16	ppb
Lithium	6-1				101		%
Magnesium	24-2	878.40	889.73	870.06	879.40	1.12	ppb
Manganese	55-2	2.01	1.91	1.91	1.94	2.91	ppb
Molybdenum	94-1	11.07	10.97	11.12	11.05	0.68	ppb
Molybdenum	95-1	9.34	9.25	9.45	9.35	1.10	ppb
Molybdenum	96-1	9.45	9.41	9.45	9.44	0.26	ppb
Molybdenum	97-1	9.38	9.43	9.36	9.39	0.36	ppb
Molybdenum	98-1	9.13	9.20	9.27	9.20	0.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.94	1.84	1.86	1.88	2.87	ppb
Phosphorus	31-2	31.42	28.18	28.40	29.33	6.17	ppb
Potassium	39-2	914.27	907.67	918.20	913.38	0.58	ppb
Rhodium	103-1				100		%
Rhodium	103-2				103		%
Scandium	45-1				101		%
Scandium	45-2				104		%
Selenium	82-1	9.33	8.88	10.91	9.71	10.96	ppb
Selenium	77-2	11.29	12.05	6.03	9.79	33.49	ppb
Selenium	78-2	8.64	9.11	9.70	9.15	5.78	ppb
Silicon	28-1	19.09	18.77	17.10	18.32	5.83	ppb
Silver	107-1	1.97	1.92	2.02	1.97	2.57	ppb
Silver	109-1	1.92	1.97	1.97	1.95	1.53	ppb
Sodium	23-2	939.22	925.84	923.56	929.54	0.91	ppb
Strontium	86-1	428.95	422.15	434.51	428.54	1.44	ppb
Strontium	88-1	418.47	420.64	414.39	417.84	0.76	ppb
Sulfur	34-1	-164.01	-210.27	-167.84	-180.71		ppb
Terbium	159-1				100		%
Terbium	159-2				103		%
Thallium	203-1	1.89	1.82	1.85	1.85	1.97	ppb
Thallium	205-1	1.86	1.85	1.84	1.85	0.59	ppb
Tin	118-1	9.78	9.60	9.87	9.75	1.43	ppb
Titanium	47-1	2.26	2.31	2.28	2.28	1.18	ppb
Uranium	238-1	1.71	1.71	1.71	1.71	0.17	ppb

LB Number : LB134612 Operator :

Lab Sample ID :PB166302BSInstrumnet Name :P8Client Sample ID :LCS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	9.42	9.69	9.53	9.55	1.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				104		%
Zinc	66-2	9.70	10.09	10.07	9.95	2.22	ppb
Zirconium	90-1	1.80	1.85	1.82	1.82	1.35	ppb
Zirconium	91-1	1.86	1.82	1.88	1.85	1.73	ppb

Jaswal

<sub>3</sub> 148

Lab Sample ID: Q1159-01 Instrumnet Name: P8

Client Sample ID: YE8C9 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20365.67	20646.52	20892.87	20635.02	1.28	ppb
Antimony	121-1	1.09	1.16	1.18	1.15	4.07	ppb
Arsenic	75-2	55.35	54.91	56.50	55.59	1.48	ppb
Barium	135-1	226.97	233.20	238.84	233.00	2.55	ppb
Barium	137-1	240.30	243.40	252.62	245.44	2.61	ppb
Beryllium	9-1	1.00	1.04	1.00	1.01	2.32	ppb
Bismuth	209-1				98		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.44	0.45	0.51	0.47	8.40	ppb
Cadmium	106-1	-0.17	-0.25	-0.27	-0.23		ppb
Cadmium	111-1	0.15	0.13	0.16	0.14	8.66	ppb
Calcium	43-1	5193.16	5398.00	5289.56	5293.58	1.94	ppb
Calcium	44-1	5267.65	5416.88	5305.39	5329.97	1.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	48.13	49.41	49.59	49.04	1.62	ppb
Cobalt	59-2	27.41	27.59	27.89	27.63	0.88	ppb
Copper	63-2	93.55	95.72	95.45	94.91	1.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				102		%
Indium	115-1				102		%
Indium	115-2				98		%
Iron	54-2	57248.47	58228.01	58399.88	57958.79	1.07	ppb
Iron	56-2	58767.60	58996.65	59047.21	58937.15	0.25	ppb
Iron	57-2	58691.58	60234.31	59052.04	59325.98	1.36	ppb
Krypton	83-1						cps
Lead	206-1	23.92	24.60	24.98	24.50	2.19	ppb

Lab Sample ID :Q1159-01Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	23.09	23.54	23.86	23.50	1.65	ppb
Lead	208-1	23.35	23.95	24.39	23.90	2.18	ppb
Lithium	6-1				105		%
Magnesium	24-2	10444.06	10354.59	10380.72	10393.12	0.44	ppb
Manganese	55-2	468.00	477.03	477.12	474.05	1.11	ppb
Molybdenum	94-1	2.51	2.61	2.64	2.59	2.56	ppb
Molybdenum	95-1	1.12	1.21	1.26	1.20	5.93	ppb
Molybdenum	96-1	1.34	1.40	1.41	1.38	2.71	ppb
Molybdenum	97-1	1.09	1.27	1.23	1.20	8.01	ppb
Molybdenum	98-1	1.14	1.20	1.20	1.18	2.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	70.74	72.97	72.30	72.00	1.59	ppb
Phosphorus	31-2	574.20	615.19	648.03	612.47	6.04	ppb
Potassium	39-2	555.37	555.51	558.66	556.51	0.33	ppb
Rhodium	103-1				100		%
Rhodium	103-2				101		%
Scandium	45-1				107		%
Scandium	45-2				104		%
Selenium	82-1	0.68	0.51	1.22	0.81	45.70	ppb
Selenium	77-2	27.35	25.22	21.06	24.54	13.04	ppb
Selenium	78-2	5.28	4.01	5.11	4.80	14.36	ppb
Silicon	28-1	5545.17	5719.41	5648.48	5637.69	1.55	ppb
Silver	107-1	0.42	0.41	0.37	0.40	7.22	ppb
Silver	109-1	0.43	0.37	0.36	0.39	9.35	ppb
Sodium	23-2	99.92	105.27	106.41	103.87	3.34	ppb
Strontium	86-1	49.05	51.17	51.35	50.52	2.52	ppb
Strontium	88-1	51.45	52.91	52.78	52.38	1.55	ppb
Sulfur	34-1	-1923.57	-2033.27	-2290.65	-2082.50		ppb
Terbium	159-1				102		%
Terbium	159-2				103		%
Thallium	203-1	0.19	0.21	0.22	0.21	5.67	ppb
Thallium	205-1	0.20	0.21	0.22	0.21	6.35	ppb
Tin	118-1	0.31	0.30	0.34	0.32	6.65	ppb
Titanium	47-1	21.40	21.94	21.82	21.72	1.30	ppb
Uranium	238-1	0.43	0.44	0.45	0.44	1.83	ppb

Lab Sample ID :Q1159-01Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	61.04	61.74	61.97	61.59	0.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				106		%
Zinc	66-2	128.18	128.73	130.07	128.99	0.75	ppb
Zirconium	90-1	0.84	0.89	0.89	0.87	3.41	ppb
Zirconium	91-1	0.86	0.89	0.91	0.89	2.86	ppb

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Lab Sample ID: Q1159-02 Instrumnet Name: P8
Client Sample ID: YE8C9D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20503.46	20756.85	20279.42	20513.24	1.16	ppb
Antimony	121-1	1.05	1.06	1.02	1.04	1.95	ppb
Arsenic	75-2	53.35	54.95	54.23	54.18	1.48	ppb
Barium	135-1	232.61	233.58	231.10	232.43	0.54	ppb
Barium	137-1	239.47	239.73	239.64	239.61	0.05	ppb
Beryllium	9-1	1.03	1.00	1.05	1.03	2.47	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.42	0.44	0.38	0.41	6.44	ppb
Cadmium	106-1	-1.50	-0.77	-1.15	-1.14		ppb
Cadmium	111-1	0.05	0.12	0.07	0.08	41.58	ppb
Calcium	43-1	5369.78	5368.52	5405.48	5381.26	0.39	ppb
Calcium	44-1	5310.48	5394.08	5379.48	5361.35	0.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	49.11	49.36	49.10	49.19	0.30	ppb
Cobalt	59-2	27.85	27.80	27.67	27.78	0.34	ppb
Copper	63-2	95.65	95.34	95.14	95.37	0.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				98		%
Iron	54-2	57723.70	59120.02	57822.37	58222.03	1.34	ppb
Iron	56-2	58240.06	59052.32	59491.79	58928.06	1.08	ppb
Iron	57-2	59391.88	58729.94	58174.67	58765.49	1.04	ppb
Krypton	83-1						cps
Lead	206-1	24.30	24.54	24.67	24.50	0.78	ppb

Lab Sample ID :Q1159-02Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	23.03	23.37	23.25	23.21	0.75	ppb
Lead	208-1	23.53	23.90	23.87	23.77	0.85	ppb
Lithium	6-1				104		%
Magnesium	24-2	10378.03	10320.92	10549.27	10416.07	1.14	ppb
Manganese	55-2	468.89	475.41	468.77	471.02	0.81	ppb
Molybdenum	94-1	2.47	2.52	2.60	2.53	2.52	ppb
Molybdenum	95-1	1.15	1.19	1.23	1.19	3.32	ppb
Molybdenum	96-1	1.38	1.32	1.35	1.35	2.10	ppb
Molybdenum	97-1	1.16	1.15	1.23	1.18	4.00	ppb
Molybdenum	98-1	1.15	1.15	1.17	1.16	0.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	72.56	72.29	72.03	72.29	0.37	ppb
Phosphorus	31-2	563.83	605.29	620.64	596.59	4.93	ppb
Potassium	39-2	549.42	547.10	554.89	550.47	0.73	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				104		%
Scandium	45-2				104		%
Selenium	82-1	1.25	0.73	0.32	0.77	60.46	ppb
Selenium	77-2	19.29	28.01	25.07	24.13	18.40	ppb
Selenium	78-2	6.28	5.20	3.85	5.11	23.81	ppb
Silicon	28-1	5979.77	5852.21	5917.82	5916.60	1.08	ppb
Silver	107-1	0.33	0.35	0.35	0.34	3.22	ppb
Silver	109-1	0.34	0.35	0.35	0.34	0.61	ppb
Sodium	23-2	103.98	106.31	107.36	105.88	1.63	ppb
Strontium	86-1	50.12	50.18	51.43	50.58	1.46	ppb
Strontium	88-1	52.28	52.43	52.29	52.34	0.16	ppb
Sulfur	34-1	-2658.48	-2919.63	-3007.40	-2861.84		ppb
Terbium	159-1				102		%
Terbium	159-2				104		%
Thallium	203-1	0.19	0.19	0.20	0.20	1.09	ppb
Thallium	205-1	0.19	0.20	0.22	0.20	7.82	ppb
Tin	118-1	0.29	0.27	0.27	0.27	3.96	ppb
Titanium	47-1	21.12	21.16	21.12	21.13	0.11	ppb
Uranium	238-1	0.44	0.45	0.44	0.44	1.38	ppb

Lab Sample ID :Q1159-02Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	61.47	61.23	61.22	61.30	0.23	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				106		%
Zinc	66-2	127.84	128.28	128.61	128.24	0.30	ppb
Zirconium	90-1	0.84	0.87	0.88	0.86	1.95	ppb
Zirconium	91-1	0.92	0.92	0.90	0.91	0.94	ppb

<sub>3</sub> 154

Lab Sample ID: Q1159-01LX5 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 5

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Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	4088.29	4056.27	4047.43	4064.00	0.53	ppb	
Antimony	121-1	0.23	0.25	0.23	0.24	4.63	ppb	
Arsenic	75-2	10.75	11.13	10.77	10.88	1.98	ppb	
Barium	135-1	43.99	46.26	46.07	45.44	2.78	ppb	
Barium	137-1	44.57	46.84	45.93	45.78	2.50	ppb	
Beryllium	9-1	0.21	0.21	0.20	0.21	0.58	ppb	
Bismuth	209-1				98		%	
Bismuth	209-2				101		%	
Bromine	81-1						cps	
Cadmium	108-1	0.14	0.12	0.12	0.13	11.17	ppb	
Cadmium	106-1	-2.73	-1.89	-1.50	-2.04		ppb	
Cadmium	111-1	-0.18	-0.11	-0.08	-0.12		ppb	
Calcium	43-1	1059.20	1092.68	1077.76	1076.55	1.56	ppb	
Calcium	44-1	1048.35	1071.59	1065.31	1061.75	1.13	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	10.39	10.31	10.38	10.36	0.42	ppb	
Cobalt	59-2	5.68	5.63	5.59	5.64	0.79	ppb	
Copper	63-2	19.24	19.25	19.32	19.27	0.21	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				101		%	
Holmium	165-2				102		%	
Indium	115-1				100		%	
Indium	115-2				99		%	
Iron	54-2	11981.51	11926.03	12125.16	12010.90	0.86	ppb	
Iron	56-2	11839.08	11803.53	11976.29	11872.97	0.77	ppb	
Iron	57-2	11519.84	11505.01	11570.92	11531.92	0.30	ppb	
Krypton	83-1						cps	
Lead	206-1	4.86	5.07	4.93	4.95	2.18	ppb	

Lab Sample ID: Q1159-01LX5 Instrumnet Name: P8

Client Sample ID: YE8C9L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.59	4.88	4.71	4.73	3.05	ppb
Lead	208-1	4.66	4.90	4.75	4.77	2.55	ppb
Lithium	6-1				102		%
Magnesium	24-2	2038.04	2053.97	2044.99	2045.67	0.39	ppb
Manganese	55-2	96.08	95.62	96.14	95.95	0.30	ppb
Molybdenum	94-1	0.54	0.57	0.52	0.54	4.73	ppb
Molybdenum	95-1	0.24	0.27	0.26	0.25	5.72	ppb
Molybdenum	96-1	0.26	0.31	0.32	0.30	10.04	ppb
Molybdenum	97-1	0.23	0.27	0.27	0.25	9.88	ppb
Molybdenum	98-1	0.25	0.25	0.26	0.25	3.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	14.36	14.41	14.84	14.54	1.83	ppb
Phosphorus	31-2	118.76	121.12	78.59	106.15	22.52	ppb
Potassium	39-2	112.53	114.39	113.05	113.33	0.85	ppb
Rhodium	103-1				100		%
Rhodium	103-2				102		%
Scandium	45-1				102		%
Scandium	45-2				102		%
Selenium	82-1	-0.08	0.03	-0.17	-0.07		ppb
Selenium	77-2	6.01	4.01	8.72	6.24	37.83	ppb
Selenium	78-2	0.74	-0.03	1.33	0.68	100.87	ppb
Silicon	28-1	1125.10	1165.30	1132.87	1141.09	1.87	ppb
Silver	107-1	0.07	0.08	0.07	0.08	3.72	ppb
Silver	109-1	0.07	0.07	0.07	0.07	1.91	ppb
Sodium	23-2	34.86	33.66	33.41	33.98	2.29	ppb
Strontium	86-1	10.03	10.46	10.13	10.21	2.22	ppb
Strontium	88-1	10.02	10.44	10.13	10.20	2.10	ppb
Sulfur	34-1	-3094.55	-3014.84	-3060.19	-3056.53		ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	0.06	0.06	0.06	0.06	2.83	ppb
Thallium	205-1	0.06	0.06	0.06	0.06	3.68	ppb
Tin	118-1	0.05	0.04	0.03	0.04	22.72	ppb
Titanium	47-1	4.30	4.37	4.36	4.34	0.86	ppb
Uranium	238-1	0.09	0.09	0.08	0.09	3.06	ppb

Lab Sample ID :Q1159-01LX5Instrumnet Name :P8Client Sample ID :YE8C9LDilution Factor :5

Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	12.45	12.30	12.40	12.38	0.60	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				103		%
Zinc	66-2	26.25	26.15	25.94	26.11	0.59	ppb
Zirconium	90-1	0.17	0.18	0.18	0.18	2.42	ppb
Zirconium	91-1	0.17	0.19	0.18	0.18	6.15	ppb

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Lab Sample ID :Q1159-03Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Date & Time / to	quircu . 202	0 02 00 10.00.12	Datai	iic ivairie .	02//(IXEI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20696.93	21067.87	21336.20	21033.67	1.53	ppb
Antimony	121-1	21.03	21.61	21.57	21.40	1.53	ppb
Arsenic	75-2	62.63	60.88	61.32	61.61	1.47	ppb
Barium	135-1	633.21	652.10	652.40	645.90	1.70	ppb
Barium	137-1	627.10	648.20	644.05	639.78	1.75	ppb
Beryllium	9-1	10.59	10.90	10.75	10.75	1.42	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	8.88	9.76	9.73	9.46	5.25	ppb
Cadmium	106-1	6.63	5.83	6.73	6.40	7.71	ppb
Cadmium	111-1	9.81	9.77	10.00	9.86	1.29	ppb
Calcium	43-1	6077.06	6271.07	6324.04	6224.06	2.09	ppb
Calcium	44-1	5839.38	6067.70	6076.28	5994.45	2.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	88.31	88.83	88.88	88.67	0.35	ppb
Cobalt	59-2	127.50	126.49	128.48	127.49	0.78	ppb
Copper	63-2	144.65	145.02	145.12	144.93	0.17	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				100		%
Iron	54-2	57808.76	57369.20	58191.12	57789.69	0.71	ppb
Iron	56-2	58352.58	58011.92	58533.84	58299.45	0.45	ppb
Iron	57-2	60308.26	58585.36	59269.14	59387.59	1.46	ppb
Krypton	83-1						cps
Lead	206-1	27.85	28.54	28.63	28.34	1.50	ppb

Lab Sample ID: Q1159-03 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	26.65	27.08	27.27	27.00	1.17	ppb
Lead	208-1	26.97	27.63	27.76	27.45	1.54	ppb
Lithium	6-1				105		%
Magnesium	24-2	10292.09	10271.42	10247.60	10270.37	0.22	ppb
Manganese	55-2	563.76	568.32	572.21	568.10	0.74	ppb
Molybdenum	94-1	87.11	91.72	91.99	90.27	3.04	ppb
Molybdenum	95-1	103.48	107.72	109.61	106.94	2.93	ppb
Molybdenum	96-1	100.57	105.73	105.08	103.79	2.70	ppb
Molybdenum	97-1	103.99	109.84	108.72	107.51	2.89	ppb
Molybdenum	98-1	108.53	111.81	113.01	111.12	2.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	170.47	170.81	172.37	171.22	0.59	ppb
Phosphorus	31-2	628.93	608.67	611.49	616.36	1.78	ppb
Potassium	39-2	557.31	562.12	573.02	564.15	1.43	ppb
Rhodium	103-1				101		%
Rhodium	103-2				103		%
Scandium	45-1				106		%
Scandium	45-2				105		%
Selenium	82-1	3.85	3.92	4.29	4.02	5.85	ppb
Selenium	77-2	29.37	29.05	20.25	26.22	19.73	ppb
Selenium	78-2	8.85	8.18	7.72	8.25	6.88	ppb
Silicon	28-1	5768.00	6168.46	6067.63	6001.36	3.47	ppb
Silver	107-1	9.80	10.24	10.21	10.08	2.42	ppb
Silver	109-1	9.92	10.29	10.30	10.17	2.17	ppb
Sodium	23-2	100.90	105.48	106.94	104.44	3.02	ppb
Strontium	86-1	1950.63	1992.35	1968.83	1970.60	1.06	ppb
Strontium	88-1	1945.37	1991.38	1988.71	1975.15	1.31	ppb
Sulfur	34-1	-3394.52	-3371.81	-3390.67	-3385.67		ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	9.35	9.63	9.74	9.57	2.06	ppb
Thallium	205-1	9.55	9.66	9.69	9.63	0.76	ppb
Tin	118-1	0.43	0.25	0.25	0.31	33.92	ppb
Titanium	47-1	19.95	20.62	20.89	20.48	2.35	ppb
Uranium	238-1	0.44	0.45	0.45	0.44	1.25	ppb

Lab Sample ID :Q1159-03Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	157.54	156.39	158.93	157.62	0.81	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				106		%
Zinc	66-2	227.00	230.02	226.95	227.99	0.77	ppb
Zirconium	90-1	0.81	0.85	0.87	0.84	3.80	ppb
Zirconium	91-1	0.84	0.87	0.88	0.86	2.47	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Date & Time / to	quircu . 202	10 02 00 10.42.22	Datai	iic ivailie .	02000BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26.59	26.12	27.38	26.70	2.39	ppb
Antimony	121-1	0.01	0.00	0.00	0.00	37.02	ppb
Arsenic	75-2	-0.02	0.00	-0.02	-0.01		ppb
Barium	135-1	0.09	0.07	0.07	0.08	13.21	ppb
Barium	137-1	0.06	0.04	0.05	0.05	19.91	ppb
Beryllium	9-1	0.01	0.02	0.01	0.01	14.37	ppb
Bismuth	209-1				98		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.02	-0.01	0.02	0.01	250.42	ppb
Cadmium	106-1	-1.86	-2.07	-1.73	-1.89		ppb
Cadmium	111-1	-0.14	-0.16	-0.13	-0.14		ppb
Calcium	43-1	-3.05	-3.57	-3.33	-3.32		ppb
Calcium	44-1	-1.04	-0.55	-2.13	-1.24		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.15	-0.11	-0.10	-0.12		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	13.72	ppb
Copper	63-2	0.29	0.31	0.33	0.31	7.14	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				103		%
Indium	115-1				101		%
Indium	115-2				102		%
Iron	54-2	3.69	3.64	2.85	3.39	13.79	ppb
Iron	56-2	4.02	3.80	2.97	3.60	15.44	ppb
Iron	57-2	3.90	2.91	3.62	3.48	14.60	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.08	0.07	0.08	11.77	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.06	0.07	17.37	ppb
Lead	208-1	0.08	0.08	0.07	0.08	12.15	ppb
Lithium	6-1				101		%
Magnesium	24-2	-9.87	-10.18	-10.10	-10.05		ppb
Manganese	55-2	0.05	0.03	0.03	0.04	30.59	ppb
Molybdenum	94-1	0.01	0.02	0.02	0.02	21.25	ppb
Molybdenum	95-1	0.02	0.02	0.00	0.02	62.88	ppb
Molybdenum	96-1	0.02	0.02	0.02	0.02	4.52	ppb
Molybdenum	97-1	0.02	0.02	0.02	0.02	8.23	ppb
Molybdenum	98-1	0.02	0.01	0.02	0.02	23.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.09	0.07	0.06	85.08	ppb
Phosphorus	31-2	-23.04	-19.27	-19.36	-20.55		ppb
Potassium	39-2	-0.40	1.72	3.90	1.74	123.63	ppb
Rhodium	103-1				101		%
Rhodium	103-2				103		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	-0.29	-0.47	0.10	-0.22		ppb
Selenium	77-2	0.00	0.00	0.66	0.22	173.21	ppb
Selenium	78-2	-0.62	-0.42	1.11	0.03	3765.59	ppb
Silicon	28-1	0.48	1.88	1.06	1.14	61.75	ppb
Silver	107-1	0.02	0.02	0.01	0.02	12.15	ppb
Silver	109-1	0.02	0.02	0.01	0.02	12.00	ppb
Sodium	23-2	22.19	21.84	22.03	22.02	0.81	ppb
Strontium	86-1	0.17	0.17	0.14	0.16	12.30	ppb
Strontium	88-1	0.17	0.17	0.12	0.15	17.07	ppb
Sulfur	34-1	-2979.77	-2791.66	-2897.63	-2889.69		ppb
Terbium	159-1				101		%
Terbium	159-2				104		%
Thallium	203-1	0.03	0.03	0.02	0.03	18.37	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	7.33	ppb
Tin	118-1	0.00	-0.01	-0.01	-0.01		ppb
Titanium	47-1	0.03	0.00	0.02	0.02	74.46	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID : PB166317BL Instrumnet Name : P8
Client Sample ID : PBW317 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.02	0.01	16.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				104		%
Zinc	66-2	0.02	-0.02	0.01	0.00	2177.62	ppb
Zirconium	90-1	0.00	0.01	0.00	0.00	64.16	ppb
Zirconium	91-1	0.00	0.00	0.01	0.00	148.46	ppb

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	43.47	40.11	41.72	41.77	4.03	ppb
Antimony	121-1	4.22	4.33	4.23	4.26	1.38	ppb
Arsenic	75-2	2.26	2.17	1.86	2.10	9.85	ppb
Barium	135-1	20.58	20.92	20.72	20.74	0.82	ppb
Barium	137-1	20.91	21.01	20.64	20.85	0.94	ppb
Beryllium	9-1	2.21	2.27	2.23	2.23	1.46	ppb
Bismuth	209-1				100		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	1.97	2.21	2.36	2.18	9.08	ppb
Cadmium	106-1	-0.01	-0.11	0.24	0.04	452.32	ppb
Cadmium	111-1	2.02	2.05	1.99	2.02	1.51	ppb
Calcium	43-1	986.49	1015.42	1019.26	1007.06	1.78	ppb
Calcium	44-1	975.74	1008.37	1007.26	997.12	1.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.05	3.98	4.11	4.05	1.53	ppb
Cobalt	59-2	2.24	2.25	2.19	2.22	1.44	ppb
Copper	63-2	5.15	5.09	5.06	5.10	0.89	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				101		%
Iron	54-2	431.06	429.70	422.70	427.82	1.05	ppb
Iron	56-2	430.76	427.50	423.71	427.32	0.83	ppb
Iron	57-2	425.38	432.03	426.86	428.09	0.82	ppb
Krypton	83-1						cps
Lead	206-1	1.98	2.15	2.05	2.06	4.06	ppb

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Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Date & Time Acc	quirea: 202	25-02-06 13:45:42	Datai	-ile Name :	029LCSE.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.07	2.13	2.05	2.08	2.00	ppb
Lead	208-1	2.01	2.11	2.05	2.06	2.65	ppb
Lithium	6-1				99		%
Magnesium	24-2	975.93	995.80	977.62	983.12	1.12	ppb
Manganese	55-2	2.13	2.22	2.13	2.16	2.39	ppb
Molybdenum	94-1	11.86	12.51	12.52	12.30	3.08	ppb
Molybdenum	95-1	9.98	10.23	10.36	10.19	1.89	ppb
Molybdenum	96-1	10.12	10.43	10.44	10.33	1.73	ppb
Molybdenum	97-1	10.15	10.38	10.56	10.36	1.96	ppb
Molybdenum	98-1	9.81	10.26	10.28	10.11	2.63	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.45	2.16	2.34	2.32	6.26	ppb
Phosphorus	31-2	42.63	35.31	14.81	30.92	46.64	ppb
Potassium	39-2	1012.62	1007.92	1011.62	1010.72	0.24	ppb
Rhodium	103-1				101		%
Rhodium	103-2				102		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	10.34	10.09	10.43	10.29	1.71	ppb
Selenium	77-2	12.77	9.49	11.64	11.30	14.78	ppb
Selenium	78-2	10.52	8.24	12.32	10.36	19.71	ppb
Silicon	28-1	20.82	21.61	20.92	21.12	2.03	ppb
Silver	107-1	2.10	2.12	2.11	2.11	0.40	ppb
Silver	109-1	2.12	2.13	2.15	2.13	0.72	ppb
Sodium	23-2	1038.67	1040.72	1027.23	1035.54	0.70	ppb
Strontium	86-1	1.99	2.08	2.17	2.08	4.36	ppb
Strontium	88-1	2.02	2.11	2.08	2.07	2.17	ppb
Sulfur	34-1	-2439.18	-2097.95	-2159.84	-2232.32		ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	1.95	2.11	2.04	2.04	3.84	ppb
Thallium	205-1	2.01	2.12	2.04	2.06	2.77	ppb
Tin	118-1	10.65	10.78	10.67	10.70	0.63	ppb
Titanium	47-1	2.47	2.58	2.53	2.53	2.09	ppb
Uranium	238-1	1.85	1.94	1.88	1.89	2.56	ppb

LB Number : LB134612 Operator :

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.65	10.84	10.69	10.73	0.93	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				102		%
Zinc	66-2	10.89	10.82	10.97	10.90	0.69	ppb
Zirconium	90-1	1.98	2.03	2.07	2.03	2.08	ppb
Zirconium	91-1	2.00	1.96	2.05	2.01	2.07	ppb

Jaswal

<sub>3</sub> 166

Lab Sample ID: Q1186-01 Instrumnet Name: P8

Client Sample ID: ME2948 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Date & Time At	quireu . 202	25-02-00 15.46.59	Dalari	ile Name.	USUAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	8.28	8.63	8.89	8.60	3.54	ppb	
Antimony	121-1	0.05	0.05	0.05	0.05	5.13	ppb	
Arsenic	75-2	0.52	0.51	0.34	0.46	21.44	ppb	
Barium	135-1	18.75	19.15	19.39	19.10	1.70	ppb	
Barium	137-1	18.83	19.17	19.43	19.14	1.58	ppb	
Beryllium	9-1	0.01	0.02	0.01	0.01	45.77	ppb	
Bismuth	209-1				90		%	
Bismuth	209-2				92		%	
Bromine	81-1						cps	
Cadmium	108-1	0.06	0.02	0.07	0.05	55.72	ppb	
Cadmium	106-1	-1.34	-0.67	-0.42	-0.81		ppb	
Cadmium	111-1	-0.10	-0.05	-0.04	-0.06		ppb	
Calcium	43-1	354348.43	361669.50	362481.30	359499.74	1.25	ppb	
Calcium	44-1	353147.97	355959.52	354341.87	354483.12	0.40	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.03	0.06	0.03	0.04	46.47	ppb	
Cobalt	59-2	0.02	0.03	0.02	0.03	10.75	ppb	
Copper	63-2	0.03	0.09	0.02	0.05	84.45	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				99		%	
Holmium	165-2				97		%	
Indium	115-1				95		%	
Indium	115-2				92		%	
Iron	54-2	812.71	819.89	809.40	814.00	0.66	ppb	
Iron	56-2	848.19	853.95	859.68	853.94	0.67	ppb	
Iron	57-2	816.92	837.39	821.21	825.17	1.31	ppb	
Krypton	83-1						cps	
Lead	206-1	0.09	0.09	0.08	0.09	6.82	ppb	

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Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Date a Time Acc	1411C4 . 202	20 02 00 10.40.00	Datai	iic riame .	000/ ((KE) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.10	0.09	0.08	0.09	11.77	ppb
Lead	208-1	0.09	0.09	0.08	0.09	9.00	ppb
Lithium	6-1				95		%
Magnesium	24-2	115043.09	114531.06	115602.28	115058.81	0.47	ppb
Manganese	55-2	25.97	26.05	26.38	26.14	0.83	ppb
Molybdenum	94-1	0.46	0.42	0.42	0.43	5.94	ppb
Molybdenum	95-1	0.36	0.33	0.38	0.36	6.11	ppb
Molybdenum	96-1	0.36	0.36	0.36	0.36	0.50	ppb
Molybdenum	97-1	0.35	0.34	0.36	0.35	2.41	ppb
Molybdenum	98-1	0.34	0.33	0.34	0.34	1.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.04	-0.01	0.02	0.02	154.66	ppb
Phosphorus	31-2	-6.76	-23.00	-17.60	-15.79		ppb
Potassium	39-2	3521.81	3508.79	3474.41	3501.67	0.70	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				97		%
Scandium	45-2				95		%
Selenium	82-1	0.04	0.24	0.38	0.22	76.22	ppb
Selenium	77-2	0.73	0.00	0.74	0.49	86.61	ppb
Selenium	78-2	-0.58	-0.38	-0.36	-0.44		ppb
Silicon	28-1	6119.83	6154.77	6192.01	6155.54	0.59	ppb
Silver	107-1	0.03	0.03	0.02	0.03	16.24	ppb
Silver	109-1	0.03	0.02	0.02	0.02	19.36	ppb
Sodium	23-2	31292.79	30865.94	31448.92	31202.55	0.97	ppb
Strontium	86-1	14544.33	14150.17	14563.91	14419.47	1.62	ppb
Strontium	88-1	14276.86	14191.15	14523.86	14330.62	1.21	ppb
Sulfur	34-1	409893.45	414056.37	416436.81	413462.21	0.80	ppb
Terbium	159-1				97		%
Terbium	159-2				98		%
Thallium	203-1	0.02	0.02	0.02	0.02	8.74	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	11.19	ppb
Tin	118-1	0.81	0.80	0.87	0.83	4.21	ppb
Titanium	47-1	0.52	0.58	0.60	0.56	7.20	ppb
Uranium	238-1	0.22	0.22	0.22	0.22	1.92	ppb

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.11	0.11	0.12	0.11	3.66	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	0.68	0.56	0.66	0.63	10.34	ppb
Zirconium	90-1	0.09	0.08	0.08	0.09	7.98	ppb
Zirconium	91-1	0.11	0.09	0.08	0.09	14.88	ppb

<sub>3</sub> 169

Lab Sample ID: Q1186-02 Instrumnet Name: P8

Client Sample ID: ME2949 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Date & Time Ac	quireu . 202	25-02-06 13.52.13	Dalar	ile ivaille .	USTAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	6.09	5.31	5.64	5.68	6.86	ppb	
Antimony	121-1	0.00	0.01	0.00	0.00	31.50	ppb	
Arsenic	75-2	0.06	0.04	0.02	0.04	48.27	ppb	
Barium	135-1	8.90	9.51	8.96	9.12	3.68	ppb	
Barium	137-1	9.08	9.71	9.11	9.30	3.84	ppb	
Beryllium	9-1	0.03	0.03	0.03	0.03	7.17	ppb	
Bismuth	209-1				88		%	
Bismuth	209-2				88		%	
Bromine	81-1						cps	
Cadmium	108-1	0.00	0.04	0.05	0.03	91.45	ppb	
Cadmium	106-1	-0.67	-0.72	-0.74	-0.71		ppb	
Cadmium	111-1	-0.05	-0.05	-0.06	-0.05		ppb	
Calcium	43-1	361896.98	377576.71	344317.25	361263.65	4.61	ppb	
Calcium	44-1	350311.61	372677.51	338664.11	353884.41	4.88	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.00	0.04	0.06	0.03	93.73	ppb	
Cobalt	59-2	0.04	0.04	0.04	0.04	1.68	ppb	
Copper	63-2	0.35	0.37	0.38	0.37	4.79	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				95		%	
Holmium	165-2				96		%	
Indium	115-1				91		%	
Indium	115-2				87		%	
Iron	54-2	28.89	24.15	25.18	26.08	9.56	ppb	
Iron	56-2	25.66	25.91	25.68	25.75	0.53	ppb	
Iron	57-2	33.02	35.35	34.01	34.13	3.42	ppb	
Krypton	83-1						cps	
Lead	206-1	0.09	0.10	0.10	0.10	4.04	ppb	

Lab Sample ID :Q1186-02Instrumnet Name :P8Client Sample ID :ME2949Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Date & Time Acc	quired: 202	uired: 2025-02-06 13:52:13		ile Name :	031AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.09	0.09	0.08	0.09	10.04	ppb
Lead	208-1	0.10	0.09	0.09	0.09	6.00	ppb
Lithium	6-1				93		%
Magnesium	24-2	119712.85	115019.88	116297.92	117010.22	2.07	ppb
Manganese	55-2	8.18	8.00	8.25	8.14	1.59	ppb
Molybdenum	94-1	0.09	0.09	0.09	0.09	1.40	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	4.31	ppb
Molybdenum	96-1	0.04	0.03	0.03	0.03	15.78	ppb
Molybdenum	97-1	0.02	0.03	0.02	0.02	20.38	ppb
Molybdenum	98-1	0.02	0.02	0.03	0.02	15.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.10	0.04	0.12	0.09	44.63	ppb
Phosphorus	31-2	-13.71	-12.37	-16.98	-14.35		ppb
Potassium	39-2	4256.97	4195.07	4204.30	4218.78	0.79	ppb
Rhodium	103-1				86		%
Rhodium	103-2				88		%
Scandium	45-1				93		%
Scandium	45-2				93		%
Selenium	82-1	0.13	0.39	0.62	0.38	63.81	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.30	-0.79	-0.13	-0.21		ppb
Silicon	28-1	7218.73	7731.61	6977.14	7309.16	5.27	ppb
Silver	107-1	0.03	0.03	0.02	0.03	4.82	ppb
Silver	109-1	0.02	0.02	0.02	0.02	13.40	ppb
Sodium	23-2	125117.26	121055.88	122603.57	122925.57	1.67	ppb
Strontium	86-1	15475.16	16171.01	15096.05	15580.74	3.50	ppb
Strontium	88-1	15075.34	15842.73	14754.92	15224.33	3.67	ppb
Sulfur	34-1	364364.01	389199.43	348676.51	367413.32	5.56	ppb
Terbium	159-1				94		%
Terbium	159-2				94		%
Thallium	203-1	0.02	0.01	0.01	0.01	43.68	ppb
Thallium	205-1	0.01	0.02	0.01	0.02	18.74	ppb
Tin	118-1	0.42	0.49	0.43	0.45	9.18	ppb
Titanium	47-1	0.91	1.03	0.87	0.94	8.84	ppb
Uranium	238-1	0.02	0.02	0.02	0.02	8.18	ppb

Lab Sample ID: Q1186-02 Instrumnet Name: P8

Client Sample ID: ME2949 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.04	0.04	0.05	0.04	15.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				93		%
Yttrium	89-2				93		%
Zinc	66-2	0.79	0.93	0.79	0.84	9.52	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	4.73	ppb
Zirconium	91-1	0.04	0.05	0.04	0.04	6.44	ppb

<sub>3</sub> 172

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Date a Time / te	quii cu . 202	0 02 00 10.00.20	Datari	ile i tairie .	002/ (I/Cl .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1502.86	1485.73	1545.38	1511.33	2.03	ppb
Antimony	121-1	0.30	0.29	0.29	0.30	2.30	ppb
Arsenic	75-2	0.25	0.19	0.28	0.24	18.90	ppb
Barium	135-1	15.06	15.44	15.26	15.25	1.26	ppb
Barium	137-1	15.12	15.40	15.70	15.41	1.89	ppb
Beryllium	9-1	0.03	0.02	0.03	0.03	15.07	ppb
Bismuth	209-1				93		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.07	0.01	0.03	103.28	ppb
Cadmium	106-1	-0.80	-1.53	-0.33	-0.89		ppb
Cadmium	111-1	-0.05	-0.11	-0.01	-0.06		ppb
Calcium	43-1	266270.10	262634.92	273288.49	267397.84	2.03	ppb
Calcium	44-1	258438.43	256145.23	262185.74	258923.13	1.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.10	0.11	0.09	0.10	10.82	ppb
Cobalt	59-2	0.06	0.06	0.06	0.06	7.07	ppb
Copper	63-2	2.11	2.10	2.29	2.17	4.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	54-2	647.65	654.10	680.62	660.79	2.64	ppb
Iron	56-2	690.47	691.61	701.49	694.52	0.87	ppb
Iron	57-2	661.85	657.67	693.84	671.12	2.95	ppb
Krypton	83-1						cps
Lead	206-1	0.49	0.50	0.47	0.49	3.50	ppb

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Date & Time Act	quircu . 202	0 02 00 10.00.20	Datai	iic ivairie .	002/ ((\LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.47	0.48	0.52	0.49	5.61	ppb
Lead	208-1	0.48	0.48	0.49	0.48	1.83	ppb
Lithium	6-1				96		%
Magnesium	24-2	75126.59	73720.29	77514.81	75453.90	2.54	ppb
Manganese	55-2	58.65	57.03	59.36	58.35	2.04	ppb
Molybdenum	94-1	0.96	0.92	0.97	0.95	2.62	ppb
Molybdenum	95-1	0.97	1.02	1.02	1.00	2.53	ppb
Molybdenum	96-1	0.98	1.02	1.01	1.00	2.14	ppb
Molybdenum	97-1	0.97	1.01	1.06	1.02	4.16	ppb
Molybdenum	98-1	1.01	1.01	1.01	1.01	0.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.25	0.24	0.34	0.28	18.65	ppb
Phosphorus	31-2	2.61	-16.11	-8.86	-7.45		ppb
Potassium	39-2	3771.22	3723.84	3891.49	3795.52	2.28	ppb
Rhodium	103-1				92		%
Rhodium	103-2				95		%
Scandium	45-1				97		%
Scandium	45-2				98		%
Selenium	82-1	0.23	0.20	0.59	0.34	63.02	ppb
Selenium	77-2	0.00	2.10	0.72	0.94	113.63	ppb
Selenium	78-2	-0.21	-0.60	-0.38	-0.40		ppb
Silicon	28-1	6825.66	6873.63	6908.89	6869.39	0.61	ppb
Silver	107-1	0.08	0.07	0.08	0.07	2.77	ppb
Silver	109-1	0.06	0.07	0.06	0.06	3.09	ppb
Sodium	23-2	29264.45	29692.39	30424.00	29793.61	1.97	ppb
Strontium	86-1	14645.50	14917.89	15262.72	14942.04	2.07	ppb
Strontium	88-1	14879.97	14926.24	15284.68	15030.29	1.47	ppb
Sulfur	34-1	263997.89	264463.05	266054.09	264838.34	0.41	ppb
Terbium	159-1				99		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.02	0.01	0.01	30.51	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	18.27	ppb
Tin	118-1	0.60	0.64	0.66	0.64	4.53	ppb
Titanium	47-1	0.86	0.93	0.99	0.93	6.67	ppb
Uranium	238-1	0.81	0.83	0.82	0.82	1.51	ppb

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.22	0.21	0.21	0.21	1.98	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				99		%
Zinc	66-2	70.56	72.12	73.66	72.11	2.15	ppb
Zirconium	90-1	0.06	0.07	0.07	0.07	9.03	ppb
Zirconium	91-1	0.06	0.06	0.09	0.07	23.81	ppb

Lab Sample ID: Q1186-04 Instrumnet Name: P8
Client Sample ID: ME2956 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:58:43 DataFile Name: 033AREF.d

Date & Time Ac	quireu . 202	25-02-00 13.56.45	Dalari	ile Name.	USSAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	4.44	5.06	3.81	4.44	14.17	ppb	
Antimony	121-1	0.01	0.01	0.01	0.01	9.43	ppb	
Arsenic	75-2	0.20	0.26	0.28	0.25	16.97	ppb	
Barium	135-1	16.21	15.97	16.09	16.09	0.77	ppb	
Barium	137-1	16.00	15.93	16.05	16.00	0.38	ppb	
Beryllium	9-1	0.02	0.02	0.03	0.02	31.03	ppb	
Bismuth	209-1				95		%	
Bismuth	209-2				94		%	
Bromine	81-1						cps	
Cadmium	108-1	0.02	0.05	0.04	0.03	40.15	ppb	
Cadmium	106-1	-1.14	-0.56	-1.09	-0.93		ppb	
Cadmium	111-1	-0.09	-0.05	-0.08	-0.07		ppb	
Calcium	43-1	277067.11	263940.95	271213.49	270740.52	2.43	ppb	
Calcium	44-1	275597.81	255614.61	265286.28	265499.56	3.76	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.32	0.28	0.30	0.30	7.22	ppb	
Cobalt	59-2	0.10	0.09	0.09	0.10	6.92	ppb	
Copper	63-2	0.23	0.30	0.28	0.27	12.59	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				103		%	
Holmium	165-2				100		%	
Indium	115-1				99		%	
Indium	115-2				95		%	
Iron	54-2	586.17	583.64	572.85	580.89	1.22	ppb	
Iron	56-2	613.49	607.90	584.05	601.81	2.60	ppb	
Iron	57-2	587.66	577.25	575.87	580.26	1.11	ppb	
Krypton	83-1						cps	
Lead	206-1	0.12	0.11	0.10	0.11	7.37	ppb	

Lab Sample ID :Q1186-04Instrumnet Name :P8Client Sample ID :ME2956Dilution Factor :1

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Lead         207-1         0.12         0.11         0.12         0.11         0.12         0.11         0.11         0.11         0.11         0.11         0.11         0.15 <t< th=""><th>Parameter</th><th>Mass</th><th>ConRep1</th><th>ConRep2</th><th>ConRep3</th><th>Avg. Conc.</th><th>ConcRSD</th><th>Units</th></t<>	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lithium         6-1         For 1-15         For 1-15         75916-61         74138-58         75592-26         1.75         pb           Mangnesium         24-2         76721-58         75916-61         74138-58         75592-26         1.75         pp           Molybdenum         95-2         64-29         62-83         62-10         63-07         1.77         ppb           Molybdenum         95-1         1.00         1.03         1.06         1.03         2.61         ppb           Molybdenum         96-1         1.01         0.97         1.03         1.02         2.30         ppb           Molybdenum         98-1         1.03         1.02         1.02         1.40         ppb           Molybdenum         98-1         1.03         1.00         1.03         1.02         1.40         ppb           Neodymium         150-1         1.03         1.02         1.40         ppb         ppb           Neodymium         150-1         1.03         1.93         1.513         18.36         1.47         ppb           Nockel         60-2         0.45         0.33         0.37         0.39         1.46         ppb           Phosphorus <td>Lead</td> <td>207-1</td> <td>0.12</td> <td>0.11</td> <td>0.12</td> <td>0.11</td> <td>3.25</td> <td>ppb</td>	Lead	207-1	0.12	0.11	0.12	0.11	3.25	ppb
Magnesium         24-2         76721.58         75916.61         74138.58         7692.26         1.75         pp           Manganese         55-2         64.29         62.83         62.10         63.07         1.77         pp           Molybdenum         94-1         0.90         8.85         0.88         0.88         2.72         pp           Molybdenum         96-1         1.01         1.03         1.03         1.00         3.18         pp           Molybdenum         97-1         1.00         1.04         1.03         1.02         3.30         pp           Molybdenum         98-1         1.03         1.03         1.02         3.40         pp           Molybdenum         150-1         1.03         1.03         1.02         1.40         pp           Neodymium         150-1         1.03         1.03         1.02         1.40         pp           Neodymium         150-2         1.02         4.52         2.20         9.33         0.37         0.39         1.547         pp           Nickel         60-2         0.45         3.73         3768.89         3799.00         1.46         9.           Rhodium         103-1 <td>Lead</td> <td>208-1</td> <td>0.11</td> <td>0.11</td> <td>0.11</td> <td>0.11</td> <td>2.15</td> <td>ppb</td>	Lead	208-1	0.11	0.11	0.11	0.11	2.15	ppb
Manganese         55-2         84-29         62-83         62-10         63-07         1.77         pb           Molybdenum         94-1         0.90         0.85         0.88         0.88         2.72         pb           Molybdenum         95-1         1.00         1.03         1.05         1.03         2.61         pb           Molybdenum         96-1         1.01         0.97         1.03         1.02         2.30         pb           Molybdenum         96-1         1.00         1.00         1.03         1.02         2.30         pb           Molybdenum         96-1         1.00         1.00         1.03         1.02         2.30         pb           Molybdenum         96-1         1.00         1.03         1.02         1.40         pb           Molybdenum         150-1         1.00         1.03         1.02         1.40         pb           Molybdenum         150-1         1.00         1.03         1.03         1.02         2.30         pb           Molybdenum         150-1         1.00         1.03         1.03         1.02         1.40         2.00         1.00         1.00         1.00         1.00	Lithium	6-1				100		%
Molybdenum         94-1         0.90         0.85         0.88         0.88         2.72         pb           Molybdenum         95-1         1.00         1.03         1.05         1.03         2.61         pb           Molybdenum         96-1         1.01         0.97         1.03         1.00         3.18         pb           Molybdenum         98-1         1.00         1.04         1.03         1.02         3.18         pb           Molybdenum         98-1         1.00         1.04         1.03         1.02         1.20         2.00         pb           Neodymium         150-1	Magnesium	24-2	76721.58	75916.61	74138.58	75592.26	1.75	ppb
Molybdenum         95-1         1.00         1.03         1.05         1.03         2.61         ppb           Molybdenum         96-1         1.01         0.97         1.03         1.00         3.18         ppb           Molybdenum         97-1         1.00         1.04         1.03         1.02         2.30         ppb           Molybdenum         98-1         1.03         1.00         1.03         1.02         2.30         ppb           Neodymium         150-1         1.03         1.03         0.37         0.39         15.47         ppb           Nickel         60-2         0.45         0.33         0.37         0.39         15.47         ppb           Phosphorus         31-2         20.20         -19.73         -15.13         -18.36	Manganese	55-2	64.29	62.83	62.10	63.07	1.77	ppb
Molybdenum         96-1         1.01         0.97         1.03         1.00         3.18         pph           Molybdenum         97-1         1.00         1.04         1.03         1.02         2.30         ppb           Molybdenum         98-1         1.03         1.00         1.03         1.02         1.40         ppb           Neodymium         150-1	Molybdenum	94-1	0.90	0.85	0.88	0.88	2.72	ppb
Molybdenum         97-1         1.00         1.04         1.03         1.02         2.30         ppb           Molybdenum         98-1         1.03         1.00         1.03         1.02         1.40         ppb           Neodymium         150-1	Molybdenum	95-1	1.00	1.03	1.05	1.03	2.61	ppb
Molybdenum         98-1         1.03         1.00         1.03         1.02         1.40         pp           Neodymium         150-1	Molybdenum	96-1	1.01	0.97	1.03	1.00	3.18	ppb
Neodymium         150-1         Framework         Cps           Neodymium         150-2         Cps           Nickel         60-2         0.45         0.33         0.37         0.39         15.47         ppb           Phosphorus         31-2         -20.20         -19.73         -15.13         -18.36         ————————————————————————————————————	Molybdenum	97-1	1.00	1.04	1.03	1.02	2.30	ppb
Neodymium         150-2         cps           Nickel         60-2         0.45         0.33         0.37         0.39         15.47         ppb           Phosphorus         31-2         -20.20         -19.73         -15.13         -18.36         -16.00         ppb           Potassium         39-2         3863.17         3764.88         3768.95         3799.00         1.46         ppb           Rhodium         103-1	Molybdenum	98-1	1.03	1.00	1.03	1.02	1.40	ppb
Nickel         60-2         0.45         0.33         0.37         0.39         15.47         ppb           Phosphorus         31-2         -20.20         -19.73         -15.13         -18.36	Neodymium	150-1						cps
Phosphorus         31-2         -20.20         -19.73         -15.13         -18.36	Neodymium	150-2						cps
Potassium         39-2         3863.17         3764.88         3768.95         3799.00         1.46         ppb           Rhodium         103-1	Nickel	60-2	0.45	0.33	0.37	0.39	15.47	ppb
Rhodium       103-1       Image: Control of the	Phosphorus	31-2	-20.20	-19.73	-15.13	-18.36		ppb
Rhodium       103-2       Image: Control of the	Potassium	39-2	3863.17	3764.88	3768.95	3799.00	1.46	ppb
Scandium         45-1	Rhodium	103-1				95		%
Scandium         45-2	Rhodium	103-2				96		%
Selenium         82-1         0.16         -0.03         0.05         0.06         154.71         ppb           Selenium         77-2         0.69         0.00         0.00         0.23         173.21         ppb           Selenium         78-2         -0.60         -0.39         -0.59         -0.53	Scandium	45-1				100		%
Selenium         77-2         0.69         0.00         0.00         0.23         173.21         ppb           Selenium         78-2         -0.60         -0.39         -0.59         -0.53         ————————————————————————————————————	Scandium	45-2				98		%
Selenium         78-2         -0.60         -0.39         -0.59         -0.53         -0.59         ppb           Silicon         28-1         7192.10         6806.35         6904.78         6967.74         2.88         ppb           Silver         107-1         0.02         0.02         0.02         0.02         10.34         ppb           Silver         109-1         0.01         0.01         0.01         9.64         ppb           Sodium         23-2         30955.18         30058.24         29735.89         30249.77         2.09         ppb           Strontium         86-1         15066.90         14756.97         15011.45         14945.11         1.11         ppb           Sulfur         34-1         272351.63         263176.13         268027.09         267851.62         1.71         ppb           Terbium         159-1	Selenium	82-1	0.16	-0.03	0.05	0.06	154.71	ppb
Silicon         28-1         7192.10         6806.35         6904.78         6967.74         2.88         ppb           Silver         107-1         0.02         0.02         0.02         0.02         10.34         ppb           Silver         109-1         0.01         0.01         0.01         9.64         ppb           Sodium         23-2         30955.18         30058.24         29735.89         30249.77         2.09         ppb           Strontium         86-1         15066.90         14756.97         15011.45         14945.11         1.11         ppb           Sulfur         88-1         14897.39         14604.18         14815.48         14772.35         1.02         ppb           Sulfur         34-1         272351.63         263176.13         268027.09         267851.62         1.71         ppb           Terbium         159-1	Selenium	77-2	0.69	0.00	0.00	0.23	173.21	ppb
Silver         107-1         0.02         0.02         0.02         0.02         10.34         ppb           Silver         109-1         0.01         0.01         0.01         0.01         9.64         ppb           Sodium         23-2         30955.18         30058.24         29735.89         30249.77         2.09         ppb           Strontium         86-1         15066.90         14756.97         15011.45         14945.11         1.11         ppb           Strontium         88-1         14897.39         14604.18         14815.48         14772.35         1.02         ppb           Sulfur         34-1         272351.63         263176.13         268027.09         267851.62         1.71         ppb           Terbium         159-1	Selenium	78-2	-0.60	-0.39	-0.59	-0.53		ppb
Silver         109-1         0.01         0.01         0.01         0.01         9.64         ppb           Sodium         23-2         30955.18         30058.24         29735.89         30249.77         2.09         ppb           Strontium         86-1         15066.90         14756.97         15011.45         14945.11         1.11         ppb           Strontium         88-1         14897.39         14604.18         14815.48         14772.35         1.02         ppb           Sulfur         34-1         272351.63         263176.13         268027.09         267851.62         1.71         ppb           Terbium         159-1	Silicon	28-1	7192.10	6806.35	6904.78	6967.74	2.88	ppb
Sodium         23-2         30955.18         30058.24         29735.89         30249.77         2.09         ppb           Strontium         86-1         15066.90         14756.97         15011.45         14945.11         1.11         ppb           Strontium         88-1         14897.39         14604.18         14815.48         14772.35         1.02         ppb           Sulfur         34-1         272351.63         263176.13         268027.09         267851.62         1.71         ppb           Terbium         159-1	Silver	107-1	0.02	0.02	0.02	0.02	10.34	ppb
Strontium       86-1       15066.90       14756.97       15011.45       14945.11       1.11       ppb         Strontium       88-1       14897.39       14604.18       14815.48       14772.35       1.02       ppb         Sulfur       34-1       272351.63       263176.13       268027.09       267851.62       1.71       ppb         Terbium       159-1       101       %       %         Terbium       159-2       100       %       %         Thallium       203-1       0.01       0.01       0.01       13.88       ppb         Thallium       205-1       0.01       0.01       0.01       4.44       ppb         Tin       118-1       0.53       0.51       0.51       0.52       2.13       ppb         Titanium       47-1       0.57       0.55       0.61       0.58       4.71       ppb	Silver	109-1	0.01	0.01	0.01	0.01	9.64	ppb
Strontium       88-1       14897.39       14604.18       14815.48       14772.35       1.02       ppb         Sulfur       34-1       272351.63       263176.13       268027.09       267851.62       1.71       ppb         Terbium       159-1       159-2       100       %         Thallium       203-1       0.01       0.01       0.01       0.01       13.88       ppb         Thallium       205-1       0.01       0.01       0.01       0.01       4.44       ppb         Tin       118-1       0.53       0.51       0.51       0.52       2.13       ppb         Titanium       47-1       0.57       0.55       0.61       0.58       4.71       ppb	Sodium	23-2	30955.18	30058.24	29735.89	30249.77	2.09	ppb
Sulfur     34-1     272351.63     263176.13     268027.09     267851.62     1.71     ppb       Terbium     159-1     101     %       Terbium     159-2     100     %       Thallium     203-1     0.01     0.01     0.01     13.88     ppb       Thallium     205-1     0.01     0.01     0.01     4.44     ppb       Tin     118-1     0.53     0.51     0.51     0.52     2.13     ppb       Titanium     47-1     0.57     0.55     0.61     0.58     4.71     ppb	Strontium	86-1	15066.90	14756.97	15011.45	14945.11	1.11	ppb
Terbium     159-1     101     %       Terbium     159-2     100     %       Thallium     203-1     0.01     0.01     0.01     0.01     13.88     ppb       Thallium     205-1     0.01     0.01     0.01     4.44     ppb       Tin     118-1     0.53     0.51     0.51     0.52     2.13     ppb       Titanium     47-1     0.57     0.55     0.61     0.58     4.71     ppb	Strontium	88-1	14897.39	14604.18	14815.48	14772.35	1.02	ppb
Terbium         159-2         100         %           Thallium         203-1         0.01         0.01         0.01         13.88         ppb           Thallium         205-1         0.01         0.01         0.01         4.44         ppb           Tin         118-1         0.53         0.51         0.51         0.52         2.13         ppb           Titanium         47-1         0.57         0.55         0.61         0.58         4.71         ppb	Sulfur	34-1	272351.63	263176.13	268027.09	267851.62	1.71	ppb
Thallium       203-1       0.01       0.01       0.01       0.01       13.88       ppb         Thallium       205-1       0.01       0.01       0.01       0.01       4.44       ppb         Tin       118-1       0.53       0.51       0.51       0.52       2.13       ppb         Titanium       47-1       0.57       0.55       0.61       0.58       4.71       ppb	Terbium	159-1				101		%
Thallium     205-1     0.01     0.01     0.01     0.01     4.44     ppb       Tin     118-1     0.53     0.51     0.51     0.52     2.13     ppb       Titanium     47-1     0.57     0.55     0.61     0.58     4.71     ppb	Terbium	159-2				100		%
Tin 118-1 0.53 0.51 0.51 0.52 2.13 ppb Titanium 47-1 0.57 0.55 0.61 0.58 4.71 ppb	Thallium	203-1	0.01	0.01	0.01	0.01	13.88	ppb
Titanium 47-1 0.57 0.55 0.61 0.58 4.71 ppb	Thallium	205-1	0.01	0.01	0.01	0.01	4.44	ppb
	Tin	118-1	0.53	0.51	0.51	0.52	2.13	ppb
Uranium 238-1 0.84 0.83 0.86 0.84 1.64 ppb	Titanium	47-1	0.57	0.55	0.61	0.58	4.71	ppb
	Uranium	238-1	0.84	0.83	0.86	0.84	1.64	ppb

Lab Sample ID :Q1186-04Instrumnet Name :P8Client Sample ID :ME2956Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:58:43 DataFile Name: 033AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.04	0.03	20.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				99		%
Zinc	66-2	0.68	0.69	0.60	0.66	7.79	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	1.53	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	9.02	ppb

Lab Sample ID: Q1186-05 Instrumnet Name: P8

Client Sample ID: ME2957 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Date & Time 7to	quircu . Zoz	0 02 00 14.01.00	Datai	iic riamic .	00+/ ((\L) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	11.80	11.16	12.76	11.91	6.75	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	9.16	ppb
Arsenic	75-2	0.39	0.28	0.37	0.35	17.36	ppb
Barium	135-1	44.78	46.11	48.30	46.40	3.83	ppb
Barium	137-1	44.87	46.65	48.29	46.60	3.68	ppb
Beryllium	9-1	0.02	0.03	0.03	0.03	13.31	ppb
Bismuth	209-1				89		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	0.20	0.15	0.16	0.17	14.76	ppb
Cadmium	106-1	-0.44	-0.29	-1.04	-0.59		ppb
Cadmium	111-1	-0.03	-0.01	-0.07	-0.04		ppb
Calcium	43-1	450766.88	465166.41	492798.20	469577.16	4.55	ppb
Calcium	44-1	443562.27	452956.50	479849.94	458789.57	4.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.28	0.22	0.28	0.26	13.08	ppb
Cobalt	59-2	0.95	0.96	0.98	0.97	1.47	ppb
Copper	63-2	0.54	0.53	0.67	0.58	13.07	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				99		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	54-2	835.12	839.68	862.67	845.82	1.75	ppb
Iron	56-2	884.29	886.19	881.43	883.97	0.27	ppb
Iron	57-2	851.86	846.12	884.04	860.68	2.37	ppb
Krypton	83-1						cps
Lead	206-1	0.14	0.15	0.15	0.14	5.55	ppb

Lab Sample ID: Q1186-05 Instrumnet Name: P8

Client Sample ID: ME2957 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Date a Time Act	quircu . Zoz	0 02 00 14.01.00	Datari	ic ivallic .	00+7 (TCL) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.15	0.16	0.14	15.55	ppb
Lead	208-1	0.13	0.14	0.16	0.15	8.64	ppb
Lithium	6-1				97		%
Magnesium	24-2	98721.32	101006.75	100482.44	100070.17	1.20	ppb
Manganese	55-2	26.04	26.39	26.78	26.40	1.39	ppb
Molybdenum	94-1	9.91	10.27	11.05	10.41	5.59	ppb
Molybdenum	95-1	11.73	12.01	12.71	12.15	4.15	ppb
Molybdenum	96-1	11.57	11.64	12.54	11.91	4.54	ppb
Molybdenum	97-1	12.06	12.18	12.77	12.34	3.11	ppb
Molybdenum	98-1	11.66	11.75	12.84	12.08	5.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.00	4.14	4.21	4.12	2.64	ppb
Phosphorus	31-2	-14.32	-18.66	-18.03	-17.00		ppb
Potassium	39-2	5679.13	5761.26	5874.36	5771.58	1.70	ppb
Rhodium	103-1				89		%
Rhodium	103-2				92		%
Scandium	45-1				97		%
Scandium	45-2				98		%
Selenium	82-1	0.57	0.68	0.34	0.53	32.43	ppb
Selenium	77-2	0.00	0.69	1.42	0.71	100.87	ppb
Selenium	78-2	-0.80	-0.40	-0.18	-0.46		ppb
Silicon	28-1	7041.21	7292.70	7564.74	7299.55	3.59	ppb
Silver	107-1	0.03	0.03	0.04	0.03	16.95	ppb
Silver	109-1	0.02	0.02	0.03	0.02	30.73	ppb
Sodium	23-2	177926.40	180299.00	182348.77	180191.39	1.23	ppb
Strontium	86-1	14327.91	14570.42	15496.92	14798.42	4.17	ppb
Strontium	88-1	14164.35	14460.74	15440.42	14688.50	4.55	ppb
Sulfur	34-1	369214.12	382100.41	400029.21	383781.25	4.03	ppb
Terbium	159-1				99		%
Terbium	159-2				98		%
Thallium	203-1	0.02	0.02	0.03	0.03	11.89	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	2.22	ppb
Tin	118-1	0.72	0.72	0.76	0.73	3.03	ppb
Titanium	47-1	0.69	0.70	0.75	0.71	4.21	ppb
Uranium	238-1	0.07	0.08	0.08	0.08	5.35	ppb

Lab Sample ID :Q1186-05Instrumnet Name :P8Client Sample ID :ME2957Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.25	0.22	0.23	0.23	6.82	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				98		%
Zinc	66-2	0.87	0.72	0.81	0.80	9.38	ppb
Zirconium	90-1	0.15	0.15	0.18	0.16	8.69	ppb
Zirconium	91-1	0.15	0.15	0.18	0.16	9.96	ppb

<sub>3</sub> 181

Lab Sample ID: Q1186-06 Instrumnet Name: P8

Client Sample ID: ME2960 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	6.00	6.49	7.86	6.78	14.18	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	8.27	ppb
Arsenic	75-2	5.12	4.83	5.01	4.99	2.88	ppb
Barium	135-1	51.18	49.96	51.56	50.90	1.65	ppb
Barium	137-1	51.35	50.48	51.00	50.94	0.86	ppb
Beryllium	9-1	0.02	0.02	0.02	0.02	13.32	ppb
Bismuth	209-1				93		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	0.11	0.02	0.06	0.06	77.61	ppb
Cadmium	106-1	0.56	-0.09	-0.50	-0.01		ppb
Cadmium	111-1	0.04	0.00	-0.03	0.01	668.06	ppb
Calcium	43-1	397763.00	386915.03	386606.05	390428.03	1.63	ppb
Calcium	44-1	386637.58	377042.88	376548.36	380076.28	1.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.19	1.21	1.25	1.22	2.77	ppb
Cobalt	59-2	0.12	0.13	0.13	0.13	2.64	ppb
Copper	63-2	0.27	0.26	0.33	0.29	14.22	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				95		%
Indium	115-1				98		%
Indium	115-2				89		%
Iron	54-2	5212.19	5341.09	5435.67	5329.65	2.10	ppb
Iron	56-2	5411.67	5472.50	5705.18	5529.78	2.80	ppb
Iron	57-2	5266.19	5326.93	5466.32	5353.15	1.92	ppb
Krypton	83-1						cps
Lead	206-1	0.17	0.16	0.17	0.16	4.63	ppb

Lab Sample ID: Q1186-06 Instrumnet Name: P8

Client Sample ID: ME2960 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.17	0.20	0.15	0.18	12.75	ppb
Lead	208-1	0.18	0.18	0.17	0.17	3.31	ppb
Lithium	6-1				100		%
Magnesium	24-2	117567.13	118859.53	120761.93	119062.86	1.35	ppb
Manganese	55-2	481.31	486.02	502.32	489.88	2.25	ppb
Molybdenum	94-1	2.43	2.20	2.28	2.30	5.12	ppb
Molybdenum	95-1	2.60	2.52	2.55	2.56	1.64	ppb
Molybdenum	96-1	2.48	2.42	2.52	2.47	2.06	ppb
Molybdenum	97-1	2.62	2.50	2.64	2.59	2.90	ppb
Molybdenum	98-1	2.52	2.44	2.51	2.49	1.81	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.69	0.68	0.74	0.70	4.17	ppb
Phosphorus	31-2	1.55	5.58	-3.16	1.32	330.53	ppb
Potassium	39-2	15152.52	15189.65	15503.57	15281.92	1.26	ppb
Rhodium	103-1				94		%
Rhodium	103-2				90		%
Scandium	45-1				101		%
Scandium	45-2				94		%
Selenium	82-1	0.28	0.74	0.29	0.44	59.91	ppb
Selenium	77-2	0.00	0.00	0.76	0.25	173.21	ppb
Selenium	78-2	-0.80	-1.01	-0.56	-0.79		ppb
Silicon	28-1	7511.85	7372.77	7303.30	7395.97	1.44	ppb
Silver	107-1	0.02	0.02	0.02	0.02	8.48	ppb
Silver	109-1	0.01	0.01	0.01	0.01	12.85	ppb
Sodium	23-2	87338.45	87318.25	89129.09	87928.59	1.18	ppb
Strontium	86-1	11813.96	11416.55	11707.96	11646.16	1.77	ppb
Strontium	88-1	11717.32	11337.38	11561.03	11538.58	1.65	ppb
Sulfur	34-1	489838.21	472084.12	478056.36	479992.90	1.88	ppb
Terbium	159-1				102		%
Terbium	159-2				96		%
Thallium	203-1	0.02	0.01	0.01	0.01	22.32	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	14.25	ppb
Tin	118-1	0.47	0.49	0.48	0.48	1.97	ppb
Titanium	47-1	0.73	0.64	0.64	0.67	7.28	ppb
Uranium	238-1	0.52	0.51	0.51	0.51	0.71	ppb

Lab Sample ID : Q1186-06 Instrumnet Name : P8
Client Sample ID : ME2960 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.20	0.19	0.21	0.20	5.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				94		%
Zinc	66-2	0.64	0.68	0.72	0.68	5.54	ppb
Zirconium	90-1	0.10	0.10	0.11	0.10	1.49	ppb
Zirconium	91-1	0.12	0.11	0.11	0.11	4.61	ppb

<sub>3</sub> 184

Lab Sample ID: Q1186-07 Instrumnet Name: P8

Client Sample ID: ME2961 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	25.74	25.87	22.01	24.54	8.94	ppb
Antimony	121-1	0.02	0.02	0.03	0.02	13.80	ppb
Arsenic	75-2	0.10	0.07	0.05	0.07	39.60	ppb
Barium	135-1	11.00	11.17	11.39	11.19	1.74	ppb
Barium	137-1	11.13	11.09	11.55	11.26	2.28	ppb
Beryllium	9-1	0.02	0.02	0.01	0.02	27.43	ppb
Bismuth	209-1				91		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.04	0.13	0.06	94.77	ppb
Cadmium	106-1	-0.05	0.22	0.11	0.09	140.57	ppb
Cadmium	111-1	0.00	0.02	0.01	0.01	66.55	ppb
Calcium	43-1	368965.00	366617.35	394815.79	376799.38	4.15	ppb
Calcium	44-1	369541.63	356710.96	383130.36	369794.31	3.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.32	0.31	0.31	0.31	1.94	ppb
Cobalt	59-2	0.05	0.05	0.05	0.05	3.52	ppb
Copper	63-2	0.33	0.25	0.26	0.28	14.57	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				94		%
Indium	115-1				96		%
Indium	115-2				87		%
Iron	54-2	3154.14	2926.03	2850.21	2976.80	5.31	ppb
Iron	56-2	3302.21	2993.65	2977.45	3091.10	5.92	ppb
Iron	57-2	3170.38	2909.18	2854.36	2977.98	5.67	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.11	0.11	0.11	6.61	ppb

Lab Sample ID: Q1186-07 Instrumnet Name: P8
Client Sample ID: ME2961 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Date & Time Act	quireu . 202	25-02-00 14.06.20	Dalari	ile Name.	USUAREF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.11	0.12	0.12	2.19	ppb
Lead	208-1	0.12	0.11	0.12	0.12	4.60	ppb
Lithium	6-1				97		%
Magnesium	24-2	115282.40	105841.20	104549.65	108557.75	5.40	ppb
Manganese	55-2	93.61	83.90	84.47	87.33	6.24	ppb
Molybdenum	94-1	0.94	0.95	1.00	0.96	3.30	ppb
Molybdenum	95-1	0.97	0.94	1.01	0.97	3.92	ppb
Molybdenum	96-1	0.97	0.93	0.97	0.96	2.31	ppb
Molybdenum	97-1	1.01	0.95	0.99	0.98	3.08	ppb
Molybdenum	98-1	0.95	0.94	1.02	0.97	4.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.36	0.28	0.29	0.31	14.15	ppb
Phosphorus	31-2	1.05	-10.10	-15.97	-8.34		ppb
Potassium	39-2	4093.11	3762.57	3700.71	3852.13	5.48	ppb
Rhodium	103-1				92		%
Rhodium	103-2				89		%
Scandium	45-1				97		%
Scandium	45-2				92		%
Selenium	82-1	0.37	0.26	0.67	0.43	48.76	ppb
Selenium	77-2	0.00	0.00	0.72	0.24	173.21	ppb
Selenium	78-2	-0.32	-0.17	0.05	-0.15		ppb
Silicon	28-1	6594.93	6679.23	6871.63	6715.26	2.11	ppb
Silver	107-1	0.01	0.02	0.02	0.02	6.04	ppb
Silver	109-1	0.01	0.01	0.01	0.01	24.76	ppb
Sodium	23-2	40935.55	37393.08	36462.56	38263.73	6.17	ppb
Strontium	86-1	12615.00	12417.74	13228.07	12753.60	3.31	ppb
Strontium	88-1	12491.14	12283.12	13096.15	12623.47	3.35	ppb
Sulfur	34-1	410944.05	408284.71	431965.58	417064.78	3.11	ppb
Terbium	159-1				99		%
Terbium	159-2				94		%
Thallium	203-1	0.01	0.01	0.01	0.01	8.83	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	11.11	ppb
Tin	118-1	0.55	0.51	0.57	0.54	5.57	ppb
Titanium	47-1	1.00	1.01	1.13	1.05	7.19	ppb
Uranium	238-1	0.35	0.34	0.35	0.35	1.84	ppb

Lab Sample ID :Q1186-07Instrumnet Name :P8Client Sample ID :ME2961Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.15	0.16	0.12	0.14	13.42	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				93		%
Zinc	66-2	0.66	0.71	0.53	0.63	14.79	ppb
Zirconium	90-1	0.07	0.07	0.08	0.07	6.31	ppb
Zirconium	91-1	0.07	0.07	0.07	0.07	5.06	ppb

<sub>3</sub> 187

Lab Sample ID: Q1186-08 Instrumnet Name: P8

Client Sample ID: ME2962 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	<del>-</del>		
Aluminium	27-2	8.00	8.31	8.97	8.42	5.89	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	5.38	ppb
Arsenic	75-2	0.11	0.14	0.09	0.11	20.76	ppb
Barium	135-1	17.43	15.26	16.42	16.37	6.63	ppb
Barium	137-1	17.57	15.33	16.34	16.41	6.84	ppb
Beryllium	9-1	0.03	0.02	0.02	0.02	19.83	ppb
Bismuth	209-1				91		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.02	0.08	0.06	51.03	ppb
Cadmium	106-1	0.25	0.46	-0.12	0.20	149.25	ppb
Cadmium	111-1	0.02	0.04	-0.01	0.01	159.66	ppb
Calcium	43-1	379305.79	333520.32	352646.36	355157.49	6.47	ppb
Calcium	44-1	373086.54	330786.37	343594.49	349155.80	6.21	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.67	0.70	0.68	0.68	2.74	ppb
Cobalt	59-2	0.05	0.06	0.05	0.05	15.27	ppb
Copper	63-2	13.96	14.20	13.87	14.01	1.20	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	54-2	1522.86	1523.89	1518.24	1521.66	0.20	ppb
Iron	56-2	1567.11	1590.35	1569.53	1575.66	0.81	ppb
Iron	57-2	1514.12	1510.92	1527.59	1517.54	0.58	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.09	0.11	0.11	26.25	ppb
						-	

Lab Sample ID: Q1186-08 Instrumnet Name: P8

Client Sample ID: ME2962 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Date & Time Act	quircu . Zoz	0 02 00 14.11.40	Datai	iic i vairie .	0077 (I CLI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.10	0.12	0.11	11.90	ppb
Lead	208-1	0.13	0.10	0.11	0.11	16.58	ppb
Lithium	6-1				97		%
Magnesium	24-2	91040.28	91624.61	91030.74	91231.88	0.37	ppb
Manganese	55-2	45.67	45.81	45.91	45.79	0.27	ppb
Molybdenum	94-1	0.63	0.53	0.60	0.58	8.68	ppb
Molybdenum	95-1	0.64	0.55	0.55	0.58	8.30	ppb
Molybdenum	96-1	0.60	0.51	0.58	0.57	8.32	ppb
Molybdenum	97-1	0.64	0.54	0.59	0.59	8.95	ppb
Molybdenum	98-1	0.61	0.54	0.57	0.57	6.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.15	2.10	2.11	2.12	1.14	ppb
Phosphorus	31-2	-4.25	-7.57	-18.73	-10.18		ppb
Potassium	39-2	5914.86	5938.56	5961.26	5938.23	0.39	ppb
Rhodium	103-1				90		%
Rhodium	103-2				94		%
Scandium	45-1				96		%
Scandium	45-2				98		%
Selenium	82-1	0.26	0.17	0.63	0.35	68.06	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.03	-0.18	-0.19	-0.11		ppb
Silicon	28-1	6385.06	5585.52	5875.24	5948.61	6.80	ppb
Silver	107-1	0.02	0.01	0.02	0.02	17.96	ppb
Silver	109-1	0.01	0.01	0.01	0.01	5.46	ppb
Sodium	23-2	44968.39	44705.99	44826.30	44833.56	0.29	ppb
Strontium	86-1	15243.10	12863.24	13863.71	13990.02	8.54	ppb
Strontium	88-1	15249.44	12639.81	13718.94	13869.40	9.45	ppb
Sulfur	34-1	410430.65	360468.57	377164.83	382688.01	6.65	ppb
Terbium	159-1				97		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.01	0.01	0.01	36.51	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	10.65	ppb
Tin	118-1	0.76	0.63	0.70	0.70	9.56	ppb
Titanium	47-1	0.71	0.55	0.70	0.65	13.65	ppb
Uranium	238-1	0.11	0.09	0.10	0.10	7.31	ppb

Lab Sample ID : Q1186-08 Instrumnet Name : P8
Client Sample ID : ME2962 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.12	0.13	0.11	0.12	5.48	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				98		%
Zinc	66-2	0.92	1.13	0.96	1.00	11.36	ppb
Zirconium	90-1	0.07	0.06	0.07	0.06	9.14	ppb
Zirconium	91-1	0.07	0.06	0.06	0.07	11.38	ppb

Lab Sample ID: Q1186-09 Instrumnet Name: P8

Client Sample ID: ME2959 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.43	3.93	4.47	4.28	7.06	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	10.29	ppb
Arsenic	75-2	0.11	0.13	0.16	0.13	16.46	ppb
Barium	135-1	15.27	15.97	16.43	15.89	3.68	ppb
Barium	137-1	15.40	16.12	16.57	16.03	3.69	ppb
Beryllium	9-1	0.01	0.02	0.02	0.02	22.13	ppb
Bismuth	209-1				93		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.04	0.00	0.03	87.76	ppb
Cadmium	106-1	-0.11	-0.51	-0.64	-0.42		ppb
Cadmium	111-1	-0.01	-0.03	-0.05	-0.03		ppb
Calcium	43-1	412869.76	421075.05	452949.38	428964.73	4.94	ppb
Calcium	44-1	406078.11	417501.39	441307.37	421628.96	4.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.06	0.01	0.03	0.03	74.38	ppb
Cobalt	59-2	0.06	0.06	0.06	0.06	0.91	ppb
Copper	63-2	0.41	0.43	0.45	0.43	4.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				92		%
Indium	115-1				99		%
Indium	115-2				83		%
Iron	54-2	1365.95	1348.33	1354.19	1356.16	0.66	ppb
Iron	56-2	1411.19	1380.91	1405.59	1399.23	1.15	ppb
Iron	57-2	1364.50	1353.65	1385.03	1367.73	1.17	ppb
Krypton	83-1						cps
Lead	206-1	0.11	0.11	0.13	0.12	9.18	ppb

Lab Sample ID: Q1186-09 Instrumnet Name: P8

Client Sample ID: ME2959 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Date a Time Act	1011CG . 202	0 02 00 14.14.00	Datari	ic ivallic .	000/ (( CL ) . C		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.10	0.11	0.12	0.11	11.00	ppb
Lead	208-1	0.10	0.11	0.13	0.12	14.38	ppb
Lithium	6-1				100		%
Magnesium	24-2	144517.23	143617.59	147785.23	145306.68	1.51	ppb
Manganese	55-2	50.60	51.26	51.77	51.21	1.14	ppb
Molybdenum	94-1	0.57	0.65	0.67	0.63	8.50	ppb
Molybdenum	95-1	0.67	0.73	0.72	0.71	4.39	ppb
Molybdenum	96-1	0.65	0.69	0.74	0.70	6.31	ppb
Molybdenum	97-1	0.68	0.71	0.79	0.73	8.10	ppb
Molybdenum	98-1	0.66	0.69	0.71	0.69	4.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.24	0.25	0.21	0.24	8.73	ppb
Phosphorus	31-2	-7.95	-8.06	-10.60	-8.87		ppb
Potassium	39-2	4729.37	4705.87	4784.60	4739.95	0.85	ppb
Rhodium	103-1				93		%
Rhodium	103-2				86		%
Scandium	45-1				101		%
Scandium	45-2				91		%
Selenium	82-1	0.36	0.33	0.22	0.30	25.34	ppb
Selenium	77-2	0.00	0.74	0.75	0.50	86.61	ppb
Selenium	78-2	-0.09	-0.14	-0.57	-0.27		ppb
Silicon	28-1	8069.40	8141.29	8650.41	8287.03	3.82	ppb
Silver	107-1	0.02	0.03	0.03	0.03	15.92	ppb
Silver	109-1	0.01	0.01	0.03	0.02	42.18	ppb
Sodium	23-2	186739.20	184918.82	189692.39	187116.80	1.29	ppb
Strontium	86-1	13425.27	14044.99	14835.24	14101.84	5.01	ppb
Strontium	88-1	13152.71	14039.41	14707.56	13966.56	5.58	ppb
Sulfur	34-1	437671.93	446083.44	472599.15	452118.18	4.03	ppb
Terbium	159-1				102		%
Terbium	159-2				92		%
Thallium	203-1	0.01	0.00	0.01	0.01	48.82	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	39.11	ppb
Tin	118-1	0.52	0.55	0.55	0.54	2.88	ppb
Titanium	47-1	0.71	0.67	0.69	0.69	3.15	ppb
Uranium	238-1	0.23	0.24	0.25	0.24	2.37	ppb

Lab Sample ID :Q1186-09Instrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.03	0.03	3.16	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				91		%
Zinc	66-2	0.63	0.47	0.70	0.60	19.64	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	10.33	ppb
Zirconium	91-1	0.03	0.03	0.04	0.03	31.06	ppb

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Lab Sample ID: Q1186-10 Instrumnet Name: P8

Client Sample ID: ME2959D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Date & Time / to	quircu . 202	20 02 00 14.10.14	Datai	iic ivairie .	0007 (TKET .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.13	4.78	3.61	4.17	14.01	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	12.16	ppb
Arsenic	75-2	0.14	0.16	0.10	0.13	25.65	ppb
Barium	135-1	16.27	16.43	16.41	16.37	0.52	ppb
Barium	137-1	16.02	16.54	16.65	16.40	2.05	ppb
Beryllium	9-1	0.02	0.02	0.01	0.02	14.82	ppb
Bismuth	209-1				91		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.07	0.02	0.04	84.11	ppb
Cadmium	106-1	-0.09	-0.86	-1.60	-0.85		ppb
Cadmium	111-1	0.00	-0.07	-0.12	-0.06		ppb
Calcium	43-1	424251.00	443114.31	458530.84	441965.38	3.88	ppb
Calcium	44-1	416533.92	435832.54	449659.96	434008.81	3.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.12	0.15	0.12	0.13	15.72	ppb
Cobalt	59-2	0.05	0.05	0.04	0.05	8.37	ppb
Copper	63-2	3.40	3.69	3.44	3.51	4.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				95		%
Indium	115-1				97		%
Indium	115-2				89		%
Iron	54-2	1454.36	1528.48	1485.45	1489.43	2.50	ppb
Iron	56-2	1546.56	1581.53	1537.17	1555.09	1.50	ppb
Iron	57-2	1477.74	1530.59	1492.19	1500.18	1.82	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.08	0.09	0.09	6.86	ppb

Lab Sample ID :Q1186-10Instrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Date & Time Act	1011CG . 202	20 02 00 14.10.14	Datai	iic i vairie .	0007 (TKLT .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.10	0.09	0.09	11.05	ppb
Lead	208-1	0.09	0.09	0.09	0.09	4.22	ppb
Lithium	6-1				96		%
Magnesium	24-2	144366.16	148119.91	142692.00	145059.36	1.92	ppb
Manganese	55-2	50.18	52.44	50.11	50.91	2.60	ppb
Molybdenum	94-1	0.60	0.64	0.63	0.63	3.18	ppb
Molybdenum	95-1	0.70	0.73	0.72	0.72	1.95	ppb
Molybdenum	96-1	0.71	0.73	0.72	0.72	0.91	ppb
Molybdenum	97-1	0.72	0.71	0.75	0.73	3.02	ppb
Molybdenum	98-1	0.69	0.70	0.72	0.70	1.92	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.23	0.27	0.30	0.27	12.76	ppb
Phosphorus	31-2	-15.01	-3.31	-15.94	-11.42		ppb
Potassium	39-2	4620.81	4887.59	4683.08	4730.50	2.95	ppb
Rhodium	103-1				90		%
Rhodium	103-2				88		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	0.60	0.09	0.09	0.26	112.91	ppb
Selenium	77-2	0.74	0.00	1.46	0.73	99.28	ppb
Selenium	78-2	-0.14	-0.58	-0.37	-0.36		ppb
Silicon	28-1	7993.59	8370.39	8681.10	8348.36	4.12	ppb
Silver	107-1	0.02	0.03	0.03	0.03	15.57	ppb
Silver	109-1	0.02	0.03	0.03	0.02	24.87	ppb
Sodium	23-2	185716.71	189832.75	181963.27	185837.58	2.12	ppb
Strontium	86-1	14074.42	14037.34	14625.73	14245.83	2.31	ppb
Strontium	88-1	13965.18	14014.67	14643.25	14207.70	2.66	ppb
Sulfur	34-1	443792.98	454162.94	474883.76	457613.23	3.46	ppb
Terbium	159-1				98		%
Terbium	159-2				96		%
Thallium	203-1	0.01	0.00	0.01	0.00	63.43	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	11.15	ppb
Tin	118-1	0.51	0.52	0.56	0.53	4.66	ppb
Titanium	47-1	0.81	0.70	0.71	0.74	8.41	ppb
Uranium	238-1	0.23	0.25	0.25	0.24	4.68	ppb

Lab Sample ID : Q1186-10 Instrumnet Name : P8
Client Sample ID : ME2959D Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.02	0.03	15.14	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				94		%
Zinc	66-2	0.93	0.94	0.94	0.93	0.66	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	13.41	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	20.67	ppb

Lab Sample ID: Q1186-09LX5 Instrumnet Name: P8
Client Sample ID: ME2959L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.51	3.96	3.73	3.73	5.97	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	5.99	ppb
Arsenic	75-2	0.03	0.01	0.04	0.03	67.66	ppb
Barium	135-1	3.17	3.20	3.22	3.19	0.87	ppb
Barium	137-1	3.34	3.25	3.32	3.31	1.46	ppb
Beryllium	9-1	0.02	0.01	0.01	0.01	22.43	ppb
Bismuth	209-1				99		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.01	0.03	0.02	0.02	52.02	ppb
Cadmium	106-1	-0.20	-0.64	-0.14	-0.33		ppb
Cadmium	111-1	-0.01	-0.05	-0.01	-0.02		ppb
Calcium	43-1	86702.58	87031.67	87206.77	86980.34	0.29	ppb
Calcium	44-1	84696.12	86291.01	85024.67	85337.27	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.07	-0.10	-0.07	-0.08		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	53.18	ppb
Copper	63-2	0.52	0.57	0.54	0.54	5.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				101		%
Iron	54-2	275.11	276.08	275.62	275.60	0.18	ppb
Iron	56-2	275.33	277.09	278.61	277.01	0.59	ppb
Iron	57-2	275.08	269.76	274.32	273.05	1.05	ppb
Krypton	83-1						cps
Lead	206-1	0.06	0.06	0.05	0.06	13.15	ppb

Lab Sample ID : Q1186-09LX5 Instrumnet Name : P8

Client Sample ID : ME2959L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Date a Time Acc	1011CG . 202	20 02 00 14.21.20	Datai	iic ivairie .	040/ (( \L   . u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.05	0.05	0.05	0.05	3.16	ppb
Lead	208-1	0.05	0.05	0.05	0.05	1.22	ppb
Lithium	6-1				104		%
Magnesium	24-2	29163.29	29164.30	29857.36	29394.98	1.36	ppb
Manganese	55-2	12.59	12.76	12.76	12.70	0.74	ppb
Molybdenum	94-1	0.16	0.16	0.14	0.15	9.89	ppb
Molybdenum	95-1	0.15	0.16	0.17	0.16	6.87	ppb
Molybdenum	96-1	0.15	0.15	0.15	0.15	1.89	ppb
Molybdenum	97-1	0.17	0.16	0.14	0.16	8.62	ppb
Molybdenum	98-1	0.15	0.15	0.15	0.15	2.04	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.12	0.12	0.15	0.13	11.49	ppb
Phosphorus	31-2	-20.71	-28.23	-27.65	-25.53		ppb
Potassium	39-2	958.22	953.81	960.45	957.49	0.35	ppb
Rhodium	103-1				99		%
Rhodium	103-2				101		%
Scandium	45-1				105		%
Scandium	45-2				102		%
Selenium	82-1	0.20	0.07	0.14	0.14	49.40	ppb
Selenium	77-2	0.69	0.00	0.67	0.45	86.63	ppb
Selenium	78-2	-0.81	-0.62	-0.23	-0.55		ppb
Silicon	28-1	1635.27	1683.35	1670.04	1662.89	1.49	ppb
Silver	107-1	0.02	0.02	0.02	0.02	9.83	ppb
Silver	109-1	0.02	0.01	0.01	0.01	23.33	ppb
Sodium	23-2	37208.68	36945.63	37005.40	37053.24	0.37	ppb
Strontium	86-1	2823.07	2845.67	2867.26	2845.33	0.78	ppb
Strontium	88-1	2796.68	2822.07	2841.84	2820.20	0.80	ppb
Sulfur	34-1	89799.19	91822.32	90954.99	90858.83	1.12	ppb
Terbium	159-1				105		%
Terbium	159-2				103		%
Thallium	203-1	0.00	0.01	0.00	0.01	22.75	ppb
Thallium	205-1	0.01	0.00	0.01	0.01	28.04	ppb
Tin	118-1	0.19	0.17	0.17	0.18	6.33	ppb
Titanium	47-1	0.17	0.14	0.17	0.16	9.24	ppb
Uranium	238-1	0.04	0.05	0.05	0.05	4.42	ppb

Lab Sample ID : Q1186-09LX5 Instrumnet Name : P8
Client Sample ID : ME2959L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.01	0.01	61.85	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				103		%
Zinc	66-2	0.49	0.58	0.57	0.54	9.05	ppb
Zirconium	90-1	0.00	0.00	0.01	0.01	37.45	ppb
Zirconium	91-1	0.01	0.00	0.01	0.01	23.29	ppb

Lab Sample ID: Q1186-11 Instrumnet Name: P8

Client Sample ID: ME2959S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

Date & Time Ac	quircu . Zoz	0 02 00 14.24.41	Datai	ic ivailic .	0+17(1\L1 .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1765.93	1882.71	1853.20	1833.95	3.31	ppb
Antimony	121-1	106.84	101.22	109.15	105.74	3.86	ppb
Arsenic	75-2	40.08	40.32	41.47	40.62	1.83	ppb
Barium	135-1	2088.84	2033.63	2158.69	2093.72	2.99	ppb
Barium	137-1	2076.80	2013.44	2131.73	2073.99	2.85	ppb
Beryllium	9-1	49.54	49.27	51.62	50.14	2.57	ppb
Bismuth	209-1				92		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	38.69	39.60	40.32	39.54	2.06	ppb
Cadmium	106-1	38.99	37.29	39.40	38.56	2.90	ppb
Cadmium	111-1	48.32	46.19	49.38	47.96	3.39	ppb
Calcium	43-1	443408.94	426142.76	454127.60	441226.43	3.20	ppb
Calcium	44-1	435147.37	422221.51	439651.57	432340.15	2.09	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	196.50	209.44	205.11	203.68	3.23	ppb
Cobalt	59-2	504.68	533.32	517.64	518.55	2.77	ppb
Copper	63-2	251.10	249.49	245.97	248.86	1.06	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				102		%
Indium	115-1				100		%
Indium	115-2				96		%
Iron	54-2	2399.61	2525.26	2500.93	2475.26	2.69	ppb
Iron	56-2	2347.19	2440.89	2403.98	2397.35	1.97	ppb
Iron	57-2	2257.71	2389.16	2337.98	2328.28	2.85	ppb
Krypton	83-1						cps
Lead	206-1	20.12	19.90	20.66	20.22	1.93	ppb

Lab Sample ID : Q1186-11 Instrumnet Name : P8

Client Sample ID : ME2959S Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	20.19	19.64	20.69	20.18	2.59	ppb
Lead	208-1	20.08	19.73	20.62	20.15	2.22	ppb
Lithium	6-1				100		%
Magnesium	24-2	134905.77	143549.67	141063.07	139839.51	3.18	ppb
Manganese	55-2	521.93	551.72	538.87	537.51	2.78	ppb
Molybdenum	94-1	0.65	0.68	0.68	0.67	2.86	ppb
Molybdenum	95-1	0.71	0.71	0.80	0.74	7.05	ppb
Molybdenum	96-1	0.73	0.73	0.75	0.74	1.26	ppb
Molybdenum	97-1	0.70	0.70	0.77	0.72	5.76	ppb
Molybdenum	98-1	0.71	0.68	0.77	0.72	6.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	470.06	496.30	484.57	483.64	2.72	ppb
Phosphorus	31-2	-3.76	-5.92	-5.03	-4.91		ppb
Potassium	39-2	4525.15	4795.15	4671.74	4664.01	2.90	ppb
Rhodium	103-1				93		%
Rhodium	103-2				95		%
Scandium	45-1				102		%
Scandium	45-2				102		%
Selenium	82-1	19.28	19.22	20.11	19.54	2.54	ppb
Selenium	77-2	12.53	21.10	15.99	16.54	26.06	ppb
Selenium	78-2	18.35	17.58	17.77	17.90	2.23	ppb
Silicon	28-1	8648.84	8376.15	8768.45	8597.81	2.34	ppb
Silver	107-1	45.83	44.96	47.73	46.17	3.07	ppb
Silver	109-1	46.84	45.17	48.38	46.80	3.44	ppb
Sodium	23-2	174580.37	186257.11	180303.28	180380.26	3.24	ppb
Strontium	86-1	13829.58	13853.14	14627.45	14103.39	3.22	ppb
Strontium	88-1	13921.07	13765.90	14607.34	14098.10	3.18	ppb
Sulfur	34-1	463428.72	448165.97	479530.89	463708.53	3.38	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	50.73	50.10	51.96	50.93	1.86	ppb
Thallium	205-1	54.91	53.15	55.22	54.43	2.06	ppb
Tin	118-1	0.59	0.57	0.60	0.59	2.58	ppb
Titanium	47-1	0.74	0.79	0.76	0.76	3.36	ppb
Uranium	238-1	0.25	0.24	0.25	0.25	1.82	ppb

Lab Sample ID :Q1186-11Instrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	513.59	527.79	537.72	526.37	2.30	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	453.34	482.04	468.81	468.06	3.07	ppb
Zirconium	90-1	0.05	0.05	0.05	0.05	4.48	ppb
Zirconium	91-1	0.06	0.08	0.08	0.07	11.99	ppb

Lab Sample ID: Q1186-12 Instrumnet Name: P8

Client Sample ID: ME2963 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Date & Time / to	quii cu . 202	10 02 00 14.20.11	Datari	ile i varie .	0 12/ (I/Cl .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	588.14	589.99	590.28	589.47	0.20	ppb
Antimony	121-1	0.09	0.11	0.10	0.10	7.14	ppb
Arsenic	75-2	2.36	2.33	2.31	2.33	1.09	ppb
Barium	135-1	45.50	43.14	42.05	43.56	4.05	ppb
Barium	137-1	45.65	43.25	42.15	43.68	4.10	ppb
Beryllium	9-1	0.04	0.03	0.03	0.03	17.13	ppb
Bismuth	209-1				97		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.62	0.51	0.55	0.56	9.70	ppb
Cadmium	106-1	0.60	1.15	-0.31	0.48	152.58	ppb
Cadmium	111-1	0.08	0.12	0.00	0.07	94.01	ppb
Calcium	43-1	147120.94	136843.39	135540.27	139834.87	4.54	ppb
Calcium	44-1	143323.31	135166.86	134663.18	137717.78	3.53	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.05	0.06	0.03	0.05	27.55	ppb
Cobalt	59-2	0.14	0.16	0.15	0.15	5.75	ppb
Copper	63-2	1.00	0.92	0.95	0.96	3.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				106		%
Indium	115-1				101		%
Indium	115-2				102		%
Iron	54-2	17.25	18.84	17.08	17.72	5.45	ppb
Iron	56-2	18.50	18.24	18.02	18.25	1.29	ppb
Iron	57-2	22.19	21.88	22.90	22.32	2.35	ppb
Krypton	83-1						cps
Lead	206-1	0.25	0.22	0.22	0.23	8.07	ppb

Lab Sample ID: Q1186-12 Instrumnet Name: P8

Client Sample ID: ME2963 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Date & Time Act	1011CG . 202	20 02 00 14.20.11	Datai	iic ivairie .	0+2/ ((\L1 .0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.23	0.21	0.23	0.22	5.44	ppb
Lead	208-1	0.24	0.21	0.22	0.22	7.38	ppb
Lithium	6-1				106		%
Magnesium	24-2	22.47	24.34	22.75	23.19	4.35	ppb
Manganese	55-2	1.96	2.05	2.03	2.01	2.33	ppb
Molybdenum	94-1	38.17	35.81	35.41	36.47	4.09	ppb
Molybdenum	95-1	46.31	43.51	42.65	44.16	4.33	ppb
Molybdenum	96-1	44.96	42.29	41.53	42.93	4.20	ppb
Molybdenum	97-1	46.41	43.90	42.94	44.42	4.04	ppb
Molybdenum	98-1	45.82	42.55	42.18	43.52	4.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	161.41	159.77	160.30	160.49	0.52	ppb
Phosphorus	31-2	340.77	367.38	377.00	361.71	5.19	ppb
Potassium	39-2	60624.07	59943.66	58929.27	59832.33	1.43	ppb
Rhodium	103-1				99		%
Rhodium	103-2				102		%
Scandium	45-1				104		%
Scandium	45-2				105		%
Selenium	82-1	1.87	1.63	1.62	1.71	8.09	ppb
Selenium	77-2	0.00	3.25	2.00	1.75	93.69	ppb
Selenium	78-2	0.13	0.88	0.93	0.64	69.84	ppb
Silicon	28-1	2495.92	2399.26	2355.50	2416.89	2.97	ppb
Silver	107-1	0.05	0.03	0.03	0.04	24.18	ppb
Silver	109-1	0.04	0.04	0.03	0.04	14.71	ppb
Sodium	23-2	30046.30	29725.59	30075.56	29949.15	0.65	ppb
Strontium	86-1	1432.76	1348.89	1319.81	1367.15	4.29	ppb
Strontium	88-1	1444.12	1338.31	1323.61	1368.68	4.80	ppb
Sulfur	34-1	14468.61	12775.97	12649.78	13298.12	7.64	ppb
Terbium	159-1				104		%
Terbium	159-2				106		%
Thallium	203-1	0.03	0.02	0.02	0.02	25.40	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	8.34	ppb
Tin	118-1	0.48	0.48	0.45	0.47	4.01	ppb
Titanium	47-1	0.76	0.64	0.58	0.66	13.44	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1186-12 Instrumnet Name: P8

Client Sample ID: ME2963 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.72	2.74	2.69	2.72	0.95	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				106		%
Zinc	66-2	1.33	1.29	1.29	1.30	2.04	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	22.26	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	6.89	ppb

Lab Sample ID: Q1186-13 Instrumnet Name: P8

Client Sample ID: ME2967 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Date & Time / to	quii cu . 202	20 02 00 14.01.20	Datai	iic i vairie .	0 10/ (I CLI . G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	57.33	53.78	46.63	52.58	10.37	ppb
Antimony	121-1	0.22	0.19	0.20	0.20	6.17	ppb
Arsenic	75-2	1.21	1.59	1.13	1.31	18.48	ppb
Barium	135-1	23.56	22.56	22.71	22.94	2.34	ppb
Barium	137-1	23.76	22.36	22.53	22.89	3.33	ppb
Beryllium	9-1	0.01	0.02	0.02	0.02	28.87	ppb
Bismuth	209-1				98		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.37	0.60	0.45	0.47	25.12	ppb
Cadmium	106-1	0.35	0.97	0.59	0.63	48.88	ppb
Cadmium	111-1	0.09	0.10	0.09	0.10	8.06	ppb
Calcium	43-1	18864.24	17680.02	17852.46	18132.24	3.53	ppb
Calcium	44-1	19151.47	17593.56	17776.47	18173.83	4.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.03	-0.03	-0.05	-0.02		ppb
Cobalt	59-2	0.12	0.11	0.10	0.11	9.43	ppb
Copper	63-2	4.03	4.04	3.26	3.78	11.86	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				109		%
Indium	115-1				102		%
Indium	115-2				103		%
Iron	54-2	127.80	125.40	106.76	119.99	9.60	ppb
Iron	56-2	126.40	124.66	107.17	119.41	8.90	ppb
Iron	57-2	123.17	125.87	113.12	120.72	5.56	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.09	0.08	0.10	25.47	ppb

Lab Sample ID: Q1186-13 Instrumnet Name: P8

Client Sample ID: ME2967 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:31:25	Datar	·ile Name :	043AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.10	0.09	0.10	9.23	ppb
Lead	208-1	0.11	0.09	0.08	0.09	14.13	ppb
Lithium	6-1				106		%
Magnesium	24-2	441.71	448.00	377.47	422.39	9.24	ppb
Manganese	55-2	8.37	8.43	7.30	8.04	7.90	ppb
Molybdenum	94-1	29.70	27.75	28.31	28.59	3.51	ppb
Molybdenum	95-1	36.00	34.03	34.46	34.83	2.97	ppb
Molybdenum	96-1	35.03	33.12	33.22	33.79	3.19	ppb
Molybdenum	97-1	36.05	34.02	34.63	34.90	2.99	ppb
Molybdenum	98-1	35.70	33.52	33.80	34.34	3.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	26.95	26.68	22.56	25.40	9.69	ppb
Phosphorus	31-2	107.43	87.03	96.12	96.86	10.55	ppb
Potassium	39-2	80508.24	79640.33	68454.29	76200.95	8.82	ppb
Rhodium	103-1				98		%
Rhodium	103-2				105		%
Scandium	45-1				103		%
Scandium	45-2				105		%
Selenium	82-1	1.07	1.03	1.06	1.05	1.58	ppb
Selenium	77-2	1.34	1.36	0.00	0.90	86.61	ppb
Selenium	78-2	0.74	0.38	0.57	0.56	32.25	ppb
Silicon	28-1	2113.70	1977.76	2017.92	2036.46	3.43	ppb
Silver	107-1	0.02	0.02	0.01	0.02	33.47	ppb
Silver	109-1	0.02	0.02	0.02	0.02	9.08	ppb
Sodium	23-2	52562.08	52636.09	45279.71	50159.29	8.43	ppb
Strontium	86-1	543.90	528.68	517.53	530.04	2.50	ppb
Strontium	88-1	548.47	501.45	519.92	523.28	4.53	ppb
Sulfur	34-1	14567.05	12578.92	12528.35	13224.77	8.79	ppb
Terbium	159-1				103		%
Terbium	159-2				108		%
Thallium	203-1	0.01	0.01	0.01	0.01	17.31	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	1.43	ppb
Tin	118-1	0.48	0.42	0.43	0.44	7.12	ppb
Titanium	47-1	0.39	0.36	0.39	0.38	4.53	ppb
Uranium	238-1	0.12	0.12	0.12	0.12	2.54	ppb

Lab Sample ID :Q1186-13Instrumnet Name :P8Client Sample ID :ME2967Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.82	1.85	1.50	1.72	11.48	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				107		%
Zinc	66-2	4.38	4.19	3.79	4.12	7.40	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	28.30	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	24.34	ppb

Lab Sample ID: Q1186-14 Instrumnet Name: P8

Client Sample ID: ME2965 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Date & Time 7 to	quircu . 202	.0 02 00 14.04.01	Datai	iic i vairie .	0447 (I (LI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	753.54	693.20	640.55	695.76	8.13	ppb
Antimony	121-1	0.13	0.12	0.11	0.12	7.94	ppb
Arsenic	75-2	5.20	4.26	4.72	4.73	9.96	ppb
Barium	135-1	58.30	52.19	52.17	54.22	6.52	ppb
Barium	137-1	57.71	52.69	51.94	54.12	5.80	ppb
Beryllium	9-1	0.02	0.01	0.02	0.01	39.53	ppb
Bismuth	209-1				92		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	1.32	1.21	1.10	1.21	9.05	ppb
Cadmium	106-1	-0.31	0.23	-0.14	-0.07		ppb
Cadmium	111-1	0.01	0.06	0.03	0.03	76.88	ppb
Calcium	43-1	125257.59	114884.75	112089.64	117410.66	5.91	ppb
Calcium	44-1	124398.07	111691.49	110421.70	115503.75	6.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.57	0.48	0.44	0.50	12.96	ppb
Cobalt	59-2	0.18	0.13	0.13	0.15	17.59	ppb
Copper	63-2	2.73	2.41	2.35	2.50	8.12	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				112		%
Indium	115-1				97		%
Indium	115-2				106		%
Iron	54-2	16.28	14.05	13.25	14.53	10.81	ppb
Iron	56-2	15.97	14.39	13.26	14.54	9.38	ppb
Iron	57-2	19.01	17.20	15.17	17.13	11.22	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.07	0.06	0.07	17.24	ppb

Lab Sample ID: Q1186-14 Instrumnet Name: P8

Client Sample ID: ME2965 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Date & Time Act	1011CG . 202	20 02 00 14.04.07	Datari	ic ivailie .	0-1-7 (TCL .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.07	0.05	0.05	0.06	16.69	ppb
Lead	208-1	0.08	0.06	0.06	0.07	14.41	ppb
Lithium	6-1				104		%
Magnesium	24-2	-4.97	-6.84	-6.59	-6.13		ppb
Manganese	55-2	0.84	0.80	0.75	0.80	5.49	ppb
Molybdenum	94-1	78.98	71.81	70.71	73.83	6.08	ppb
Molybdenum	95-1	95.78	86.70	86.30	89.59	5.99	ppb
Molybdenum	96-1	93.66	84.40	84.39	87.48	6.11	ppb
Molybdenum	97-1	95.79	88.06	87.81	90.55	5.01	ppb
Molybdenum	98-1	95.92	86.45	85.62	89.33	6.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	451.81	412.22	387.91	417.31	7.73	ppb
Phosphorus	31-2	555.61	554.31	507.72	539.22	5.06	ppb
Potassium	39-2	192994.40	173166.33	163903.79	176688.17	8.41	ppb
Rhodium	103-1				94		%
Rhodium	103-2				107		%
Scandium	45-1				99		%
Scandium	45-2				110		%
Selenium	82-1	2.07	1.67	2.10	1.95	12.39	ppb
Selenium	77-2	1.34	1.82	2.38	1.85	28.02	ppb
Selenium	78-2	0.36	0.41	0.03	0.27	76.95	ppb
Silicon	28-1	3291.45	2994.54	2954.21	3080.07	5.98	ppb
Silver	107-1	0.01	0.01	0.01	0.01	13.64	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.61	ppb
Sodium	23-2	117249.70	107373.52	101618.50	108747.24	7.27	ppb
Strontium	86-1	2514.02	2267.48	2205.36	2328.95	7.01	ppb
Strontium	88-1	2506.58	2267.74	2222.59	2332.30	6.54	ppb
Sulfur	34-1	15958.95	13322.03	12303.38	13861.46	13.61	ppb
Terbium	159-1				101		%
Terbium	159-2				112		%
Thallium	203-1	0.01	0.01	0.01	0.01	32.40	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	34.05	ppb
Tin	118-1	0.59	0.51	0.54	0.55	7.34	ppb
Titanium	47-1	0.87	0.78	0.70	0.78	10.82	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1186-14 Instrumnet Name: P8

Client Sample ID: ME2965 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.96	2.70	2.56	2.74	7.51	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				111		%
Zinc	66-2	1.16	0.93	0.79	0.96	19.22	ppb
Zirconium	90-1	0.01	0.00	0.01	0.01	45.89	ppb
Zirconium	91-1	0.01	0.00	0.01	0.01	46.98	ppb

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Date & Time Ac	quirea: 202	25-02-06 14:37:49	DataFi	ie Name :	045CCV.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47976.81	47843.64	47911.96	47910.80	0.14	ppb
Antimony	121-1	498.50	494.81	501.39	498.23	0.66	ppb
Arsenic	75-2	500.17	493.54	491.44	495.05	0.92	ppb
Barium	135-1	2527.35	2530.19	2521.48	2526.34	0.18	ppb
Barium	137-1	2470.09	2523.62	2520.69	2504.80	1.20	ppb
Beryllium	9-1	500.78	506.26	506.53	504.52	0.64	ppb
Bismuth	209-1				92		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	489.89	495.21	498.28	494.46	0.86	ppb
Cadmium	106-1	488.83	500.44	500.61	496.63	1.36	ppb
Cadmium	111-1	478.19	492.59	496.88	489.22	2.00	ppb
Calcium	43-1	236169.68	235527.59	235923.61	235873.63	0.14	ppb
Calcium	44-1	233912.85	229823.79	233700.62	232479.09	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	516.50	523.71	503.93	514.71	1.94	ppb
Cobalt	59-2	496.54	504.25	511.18	503.99	1.45	ppb
Copper	63-2	4883.75	4815.74	4768.40	4822.63	1.20	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				100		%
Indium	115-1				96		%
Indium	115-2				92		%
Iron	54-2	121167.78	120020.97	119464.81	120217.85	0.72	ppb
Iron	56-2	123247.76	121387.06	119927.70	121520.84	1.37	ppb
Iron	57-2	124858.82	122429.51	120147.24	122478.52	1.92	ppb
Krypton	83-1						cps
Lead	206-1	2571.64	2609.70	2552.56	2577.97	1.13	ppb

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Date & Time Act	quireu . 202	25-02-06 14.57.49	Dalari	ile ivaille .	045CCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2590.44	2602.24	2573.75	2588.81	0.55	ppb
Lead	208-1	2548.22	2588.29	2569.16	2568.56	0.78	ppb
Lithium	6-1				97		%
Magnesium	24-2	239830.92	239359.26	240632.27	239940.82	0.27	ppb
Manganese	55-2	5110.18	5011.91	4939.62	5020.57	1.71	ppb
Molybdenum	94-1	5034.75	5100.34	5100.03	5078.37	0.74	ppb
Molybdenum	95-1	5058.07	5126.51	5116.26	5100.28	0.72	ppb
Molybdenum	96-1	5013.09	5126.57	5140.98	5093.55	1.38	ppb
Molybdenum	97-1	4940.15	5109.79	5105.51	5051.82	1.91	ppb
Molybdenum	98-1	4955.71	5110.30	5099.74	5055.25	1.71	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	463.82	464.34	464.02	464.06	0.06	ppb
Phosphorus	31-2	9918.41	9880.61	9711.04	9836.69	1.12	ppb
Potassium	39-2	118573.42	119155.85	119483.50	119070.92	0.39	ppb
Rhodium	103-1				92		%
Rhodium	103-2				91		%
Scandium	45-1				100		%
Scandium	45-2				98		%
Selenium	82-1	482.20	493.16	484.89	486.75	1.17	ppb
Selenium	77-2	536.91	489.20	490.60	505.57	5.37	ppb
Selenium	78-2	486.84	460.47	483.76	477.02	3.02	ppb
Silicon	28-1	535.46	536.48	548.70	540.22	1.36	ppb
Silver	107-1	482.27	478.33	485.00	481.87	0.70	ppb
Silver	109-1	479.80	480.22	492.08	484.03	1.44	ppb
Sodium	23-2	240799.53	240334.93	237726.67	239620.37	0.69	ppb
Strontium	86-1	508.75	514.26	511.07	511.36	0.54	ppb
Strontium	88-1	500.60	509.30	509.25	506.38	0.99	ppb
Sulfur	34-1	10551.13	10441.32	10081.83	10358.09	2.37	ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	521.68	517.66	513.65	517.66	0.78	ppb
Thallium	205-1	513.71	516.84	516.72	515.76	0.34	ppb
Tin	118-1	502.85	501.50	512.68	505.68	1.21	ppb
Titanium	47-1	4971.39	5080.00	5107.93	5053.11	1.43	ppb
Uranium	238-1	514.93	516.71	522.11	517.92	0.72	ppb

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	516.69	516.68	510.76	514.71	0.66	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				98		%
Zinc	66-2	4935.00	4840.49	4753.00	4842.83	1.88	ppb
Zirconium	90-1	508.53	516.23	515.36	513.37	0.82	ppb
Zirconium	91-1	519.69	521.22	517.44	519.45	0.37	ppb

Lab Sample ID :CCB002Instrumnet Name :P8Client Sample ID :CCB002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Date & Time Ac	quireu . 202	25-02-00 14.40.51	Dalai	rile ivallie .	040CCBE.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	1.56	1.33	1.40	1.43	8.11	ppb	
Antimony	121-1	0.15	0.13	0.12	0.14	11.90	ppb	
Arsenic	75-2	-0.01	0.01	0.01	0.00	444.67	ppb	
Barium	135-1	0.12	0.08	0.08	0.09	20.95	ppb	
Barium	137-1	0.10	0.08	0.08	0.09	12.21	ppb	
Beryllium	9-1	0.16	0.14	0.13	0.15	9.74	ppb	
Bismuth	209-1				106		%	
Bismuth	209-2				102		%	
Bromine	81-1						cps	
Cadmium	108-1	0.06	0.06	0.04	0.05	17.87	ppb	
Cadmium	106-1	-0.83	0.18	-0.47	-0.38		ppb	
Cadmium	111-1	-0.03	0.05	-0.01	0.00	9189.77	ppb	
Calcium	43-1	10.19	6.82	5.50	7.50	32.23	ppb	
Calcium	44-1	12.34	8.57	7.71	9.54	25.83	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	-0.16	-0.16	-0.13	-0.15		ppb	
Cobalt	59-2	0.02	0.01	0.01	0.01	28.25	ppb	
Copper	63-2	0.29	0.26	0.26	0.27	7.15	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				109		%	
Holmium	165-2				103		%	
Indium	115-1				109		%	
Indium	115-2				100		%	
Iron	54-2	3.90	2.71	3.48	3.36	17.90	ppb	
Iron	56-2	3.51	3.32	3.37	3.40	2.82	ppb	
Iron	57-2	3.64	3.83	2.12	3.19	29.39	ppb	
Krypton	83-1						cps	
Lead	206-1	0.34	0.29	0.26	0.30	14.67	ppb	

Lab Sample ID :CCB002Instrumnet Name :P8Client Sample ID :CCB002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Date & Time Act	quircu . Zoz	20 02 00 14.40.01	Datai	iic i vairie .	0+000BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.32	0.28	0.26	0.29	11.88	ppb
Lead	208-1	0.33	0.29	0.25	0.29	12.80	ppb
Lithium	6-1				107		%
Magnesium	24-2	-5.09	-5.31	-5.63	-5.34		ppb
Manganese	55-2	0.12	0.11	0.09	0.11	12.63	ppb
Molybdenum	94-1	0.36	0.27	0.25	0.29	20.34	ppb
Molybdenum	95-1	0.33	0.26	0.23	0.27	19.63	ppb
Molybdenum	96-1	0.32	0.26	0.23	0.27	17.98	ppb
Molybdenum	97-1	0.30	0.25	0.23	0.26	15.63	ppb
Molybdenum	98-1	0.32	0.26	0.21	0.26	21.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.11	-0.10	-0.06	-0.09		ppb
Phosphorus	31-2	-26.34	-25.69	-24.61	-25.55		ppb
Potassium	39-2	41.15	36.08	39.28	38.84	6.60	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				105		%
Scandium	45-2				102		%
Selenium	82-1	0.06	0.07	-0.11	0.00	3164.53	ppb
Selenium	77-2	0.00	0.66	0.68	0.45	86.63	ppb
Selenium	78-2	-1.01	-0.81	0.58	-0.41		ppb
Silicon	28-1	13.08	10.20	8.33	10.54	22.73	ppb
Silver	107-1	0.07	0.07	0.05	0.06	13.94	ppb
Silver	109-1	0.07	0.06	0.05	0.06	15.67	ppb
Sodium	23-2	59.24	54.81	56.04	56.70	4.04	ppb
Strontium	86-1	0.05	0.02	0.03	0.03	45.87	ppb
Strontium	88-1	0.06	0.05	0.04	0.05	22.72	ppb
Sulfur	34-1	-583.90	-606.80	-572.01	-587.57		ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.05	0.05	0.05	0.05	6.06	ppb
Thallium	205-1	0.06	0.05	0.04	0.05	15.17	ppb
Tin	118-1	0.03	0.03	0.01	0.02	37.76	ppb
Titanium	47-1	0.31	0.18	0.16	0.21	38.82	ppb
Uranium	238-1	0.02	0.02	0.02	0.02	22.44	ppb

Lab Sample ID :CCB002Instrumnet Name :P8Client Sample ID :CCB002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.02	0.02	0.02	34.38	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				104		%
Zinc	66-2	0.02	-0.07	-0.09	-0.05		ppb
Zirconium	90-1	0.04	0.03	0.03	0.03	20.26	ppb
Zirconium	91-1	0.04	0.03	0.03	0.03	19.72	ppb

Lab Sample ID: Q1186-15 Instrumnet Name: P8

Client Sample ID: ME2966 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

Date & Time Ac	quired: 202	25-02-06 14:44:21	DataFi	ile Name :	047AREF.d				
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_	
Aluminium	27-2	732.02	740.25	755.59	742.62	1.61	ppb		
Antimony	121-1	0.13	0.13	0.13	0.13	0.63	ppb		
Arsenic	75-2	4.53	4.57	5.08	4.73	6.54	ppb		
Barium	135-1	52.05	50.51	52.29	51.62	1.88	ppb		
Barium	137-1	52.76	50.93	52.45	52.05	1.88	ppb		
Beryllium	9-1	0.06	0.06	0.06	0.06	6.74	ppb		
Bismuth	209-1				95		%		
Bismuth	209-2				95		%		
Bromine	81-1						cps		
Cadmium	108-1	1.10	1.05	1.02	1.06	3.91	ppb		
Cadmium	106-1	-0.18	0.27	0.44	0.18	182.35	ppb		
Cadmium	111-1	0.03	0.06	0.10	0.06	55.58	ppb		
Calcium	43-1	114045.57	106195.33	107946.75	109395.88	3.77	ppb		
Calcium	44-1	111385.91	106043.89	107065.57	108165.12	2.62	ppb		
Carbon	12-1						cps		
Carbon	12-2						cps		
Chlorine	35-1						cps		
Chlorine	35-2						cps		
Chromium	52-2	0.07	0.06	0.08	0.07	13.42	ppb		
Cobalt	59-2	0.16	0.17	0.16	0.16	4.21	ppb		
Copper	63-2	0.51	0.51	0.56	0.53	5.20	ppb		
Dysprosium	156-1						cps		
Dysprosium	156-2						cps		
Erbium	164-1						cps		
Erbium	164-2						cps		
Gadolinium	160-1						cps		
Gadolinium	160-2						cps		
Holmium	165-1				103		%		
Holmium	165-2				102		%		
Indium	115-1				99		%		
Indium	115-2				98		%		
Iron	54-2	11.04	11.73	11.56	11.45	3.15	ppb		
Iron	56-2	11.39	11.68	11.79	11.62	1.76	ppb		
Iron	57-2	13.44	14.15	15.00	14.20	5.52	ppb		
Krypton	83-1						cps		
Lead	206-1	0.15	0.13	0.13	0.14	8.08	ppb		

Lab Sample ID: Q1186-15 Instrumnet Name: P8

Client Sample ID: ME2966 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:44:21	DataF	ile Name :	04/AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.15	0.14	0.14	4.40	ppb
Lead	208-1	0.14	0.14	0.14	0.14	2.49	ppb
Lithium	6-1				104		%
Magnesium	24-2	-6.30	-6.03	-5.23	-5.85		ppb
Manganese	55-2	0.66	0.60	0.59	0.62	6.64	ppb
Molybdenum	94-1	70.78	67.58	69.64	69.33	2.34	ppb
Molybdenum	95-1	84.83	81.30	84.65	83.59	2.38	ppb
Molybdenum	96-1	83.17	79.17	82.36	81.57	2.59	ppb
Molybdenum	97-1	85.71	82.99	84.06	84.25	1.63	ppb
Molybdenum	98-1	84.52	81.38	83.38	83.09	1.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	436.04	443.99	448.75	442.93	1.45	ppb
Phosphorus	31-2	568.81	589.60	592.43	583.61	2.21	ppb
Potassium	39-2	182557.57	187071.56	189678.01	186435.71	1.93	ppb
Rhodium	103-1				94		%
Rhodium	103-2				98		%
Scandium	45-1				102		%
Scandium	45-2				101		%
Selenium	82-1	2.03	2.02	1.97	2.00	1.59	ppb
Selenium	77-2	1.33	0.00	0.00	0.44	173.21	ppb
Selenium	78-2	-0.43	-0.61	-0.01	-0.35		ppb
Silicon	28-1	2937.34	2813.79	2863.52	2871.55	2.16	ppb
Silver	107-1	0.03	0.02	0.02	0.02	10.40	ppb
Silver	109-1	0.02	0.02	0.02	0.02	2.00	ppb
Sodium	23-2	115053.18	116500.94	117560.84	116371.65	1.08	ppb
Strontium	86-1	2248.79	2181.53	2171.99	2200.77	1.90	ppb
Strontium	88-1	2239.27	2133.29	2194.58	2189.05	2.43	ppb
Sulfur	34-1	12950.43	11473.31	11202.71	11875.48	7.92	ppb
Terbium	159-1				101		%
Terbium	159-2				103		%
Thallium	203-1	0.02	0.02	0.02	0.02	13.25	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	14.04	ppb
Tin	118-1	0.50	0.47	0.52	0.50	4.88	ppb
Titanium	47-1	0.71	0.71	0.67	0.70	3.08	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	8.11	ppb

Lab Sample ID :Q1186-15Instrumnet Name :P8Client Sample ID :ME2966Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
	Vanadium	51-2	2.88	2.85	2.88	2.87	0.52	ppb
,	Ytterbium	172-1						cps
•	Ytterbium	172-2						cps
,	Ytterbium	176-1						cps
,	Ytterbium	176-2						cps
,	Yttrium	89-1				103		%
•	Yttrium	89-2				102		%
	Zinc	66-2	1.19	1.38	1.51	1.36	11.93	ppb
	Zirconium	90-1	0.05	0.05	0.04	0.05	13.51	ppb
	Zirconium	91-1	0.07	0.05	0.04	0.05	34.86	ppb

Lab Sample ID: Q1186-16 Instrumnet Name: P8

Client Sample ID: ME2958 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2.53	1.72	1.54	1.93	27.40	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	5.59	ppb
Arsenic	75-2	0.02	0.03	0.04	0.03	35.62	ppb
Barium	135-1	4.12	4.19	4.29	4.20	2.07	ppb
Barium	137-1	4.06	4.23	4.36	4.22	3.49	ppb
Beryllium	9-1	0.04	0.04	0.04	0.04	5.08	ppb
Bismuth	209-1				111		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.05	-0.01	0.01	264.01	ppb
Cadmium	106-1	-1.14	-0.54	0.18	-0.50		ppb
Cadmium	111-1	-0.08	-0.04	0.02	-0.03		ppb
Calcium	43-1	134939.92	138480.23	135555.03	136325.06	1.39	ppb
Calcium	44-1	132055.16	135174.18	133043.61	133424.32	1.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.17	-0.15	-0.14	-0.15		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	6.33	ppb
Copper	63-2	0.19	0.18	0.19	0.19	3.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				120		%
Holmium	165-2				112		%
Indium	115-1				117		%
Indium	115-2				109		%
Iron	54-2	428.26	426.19	427.72	427.39	0.25	ppb
Iron	56-2	453.78	445.74	442.11	447.21	1.34	ppb
Iron	57-2	441.56	437.77	431.48	436.94	1.17	ppb
Krypton	83-1						cps
Lead	206-1	0.28	0.23	0.18	0.23	20.73	ppb

Lab Sample ID :Q1186-16Instrumnet Name :P8Client Sample ID :ME2958Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

Date a Time Act	quircu . Zoz	0 02 00 14.47.02	Datai	iic ivairie .	0+0/ ((\L) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.30	0.22	0.17	0.23	28.82	ppb
Lead	208-1	0.29	0.23	0.19	0.23	21.95	ppb
Lithium	6-1				117		%
Magnesium	24-2	44639.43	45447.42	45070.45	45052.43	0.90	ppb
Manganese	55-2	16.69	16.19	16.13	16.33	1.89	ppb
Molybdenum	94-1	0.23	0.20	0.22	0.21	7.46	ppb
Molybdenum	95-1	0.22	0.26	0.24	0.24	8.06	ppb
Molybdenum	96-1	0.23	0.21	0.22	0.22	5.14	ppb
Molybdenum	97-1	0.26	0.24	0.23	0.24	5.20	ppb
Molybdenum	98-1	0.21	0.22	0.23	0.22	3.39	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.06	0.06	0.06	0.06	7.30	ppb
Phosphorus	31-2	-24.41	-25.98	-20.54	-23.64		ppb
Potassium	39-2	1535.32	1549.85	1523.84	1536.34	0.85	ppb
Rhodium	103-1				112		%
Rhodium	103-2				108		%
Scandium	45-1				120		%
Scandium	45-2				112		%
Selenium	82-1	0.11	0.43	0.20	0.25	64.64	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.29	0.25	-0.65	-0.23		ppb
Silicon	28-1	2570.79	2682.15	2646.83	2633.25	2.16	ppb
Silver	107-1	0.01	0.01	0.01	0.01	31.57	ppb
Silver	109-1	0.01	0.01	0.01	0.01	9.26	ppb
Sodium	23-2	57380.30	56848.28	57844.15	57357.58	0.87	ppb
Strontium	86-1	4443.12	4481.81	4525.16	4483.36	0.92	ppb
Strontium	88-1	4392.80	4439.23	4500.19	4444.07	1.21	ppb
Sulfur	34-1	141032.50	143457.48	142064.95	142184.97	0.86	ppb
Terbium	159-1				118		%
Terbium	159-2				113		%
Thallium	203-1	0.03	0.02	0.02	0.03	13.63	ppb
Thallium	205-1	0.03	0.03	0.02	0.03	15.35	ppb
Tin	118-1	0.05	0.06	0.07	0.06	20.07	ppb
Titanium	47-1	0.21	0.22	0.23	0.22	3.64	ppb
Uranium	238-1	0.07	0.07	0.07	0.07	1.28	ppb

Lab Sample ID :Q1186-16Instrumnet Name :P8Client Sample ID :ME2958Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	16.96	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				119		%
Yttrium	89-2				113		%
Zinc	66-2	0.71	0.50	0.59	0.60	17.82	ppb
Zirconium	90-1	0.01	0.01	0.00	0.01	15.39	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	41.23	ppb

Lab Sample ID :Q1186-17Instrumnet Name :P8Client Sample ID :ME2968Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Date & Time 7to	quircu . Zoz	20 02 00 14.00.47	Datai	iic i vairie .	0+37 (I KET .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.61	17.66	18.41	18.90	8.12	ppb
Antimony	121-1	0.22	0.25	0.24	0.24	6.42	ppb
Arsenic	75-2	1.85	1.89	2.06	1.93	5.82	ppb
Barium	135-1	30.31	31.14	31.59	31.01	2.10	ppb
Barium	137-1	30.71	31.94	31.86	31.50	2.19	ppb
Beryllium	9-1	0.04	0.05	0.05	0.05	6.10	ppb
Bismuth	209-1				99		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.48	0.29	0.50	0.42	27.22	ppb
Cadmium	106-1	0.10	-0.33	0.41	0.06	611.50	ppb
Cadmium	111-1	0.07	0.03	0.09	0.06	43.78	ppb
Calcium	43-1	33070.17	34446.71	34912.73	34143.20	2.81	ppb
Calcium	44-1	32862.06	33516.39	33898.53	33425.66	1.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.64	1.61	1.70	1.65	2.87	ppb
Cobalt	59-2	0.09	0.10	0.09	0.09	5.26	ppb
Copper	63-2	3.27	3.24	3.28	3.26	0.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				101		%
Indium	115-1				104		%
Indium	115-2				96		%
Iron	54-2	190.67	191.16	186.16	189.33	1.46	ppb
Iron	56-2	188.74	188.20	187.55	188.16	0.32	ppb
Iron	57-2	195.40	184.94	187.80	189.38	2.86	ppb
Krypton	83-1						cps
Lead	206-1	0.63	0.66	0.68	0.65	4.03	ppb

Lab Sample ID : Q1186-17 Instrumnet Name : P8
Client Sample ID : ME2968 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:50:47	Datar	·lie Name :	049AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.62	0.64	0.64	0.63	2.02	ppb
Lead	208-1	0.63	0.65	0.66	0.64	2.40	ppb
Lithium	6-1				104		%
Magnesium	24-2	39120.37	39259.84	37872.99	38751.06	1.97	ppb
Manganese	55-2	53.08	52.14	53.01	52.74	1.00	ppb
Molybdenum	94-1	22.46	22.91	23.31	22.89	1.85	ppb
Molybdenum	95-1	26.53	27.53	27.91	27.32	2.60	ppb
Molybdenum	96-1	26.34	26.49	26.90	26.58	1.10	ppb
Molybdenum	97-1	27.32	27.53	27.91	27.59	1.08	ppb
Molybdenum	98-1	26.50	27.26	27.52	27.09	1.95	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.92	3.91	4.00	3.95	1.32	ppb
Phosphorus	31-2	43.34	33.99	43.97	40.43	13.82	ppb
Potassium	39-2	58246.02	56141.68	56569.55	56985.75	1.95	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				105		%
Scandium	45-2				99		%
Selenium	82-1	1.02	1.24	1.21	1.16	10.37	ppb
Selenium	77-2	0.00	1.38	0.68	0.69	100.17	ppb
Selenium	78-2	0.42	0.19	-0.01	0.20	106.70	ppb
Silicon	28-1	8216.49	8284.02	8453.12	8317.88	1.47	ppb
Silver	107-1	0.03	0.03	0.03	0.03	5.78	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.10	ppb
Sodium	23-2	40164.81	39184.21	38647.36	39332.13	1.96	ppb
Strontium	86-1	330.89	339.08	341.06	337.01	1.60	ppb
Strontium	88-1	327.71	333.39	340.64	333.91	1.94	ppb
Sulfur	34-1	64931.84	65202.10	65860.20	65331.38	0.73	ppb
Terbium	159-1				104		%
Terbium	159-2				101		%
Thallium	203-1	0.02	0.01	0.02	0.01	6.46	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	7.68	ppb
Tin	118-1	17.03	17.41	17.93	17.46	2.58	ppb
Titanium	47-1	1.07	1.08	1.06	1.07	0.73	ppb
Uranium	238-1	1.49	1.58	1.58	1.55	3.33	ppb

Lab Sample ID : Q1186-17 Instrumnet Name : P8
Client Sample ID : ME2968 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.16	1.13	1.15	1.15	1.38	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	314.40	311.64	309.21	311.75	0.83	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	7.53	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	6.66	ppb

Lab Sample ID: Q1186-18 Instrumnet Name: P8

Client Sample ID: ME2974 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	11.73	14.21	12.63	12.86	9.74	ppb
Antimony	121-1	0.09	0.09	0.08	0.09	9.74	ppb
Arsenic	75-2	2.07	1.91	2.03	2.00	4.12	ppb
Barium	135-1	94.10	96.75	93.44	94.76	1.85	ppb
Barium	137-1	94.27	97.34	94.06	95.23	1.93	ppb
Beryllium	9-1	0.04	0.04	0.03	0.04	19.40	ppb
Bismuth	209-1				97		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.09	0.14	0.13	0.12	19.29	ppb
Cadmium	106-1	-0.59	0.61	-0.39	-0.13		ppb
Cadmium	111-1	-0.03	0.06	-0.03	0.00		ppb
Calcium	43-1	157787.58	156942.80	153988.06	156239.48	1.28	ppb
Calcium	44-1	152191.71	151295.39	148813.44	150766.85	1.16	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.95	1.01	1.04	1.00	4.32	ppb
Cobalt	59-2	0.18	0.19	0.17	0.18	5.53	ppb
Copper	63-2	0.71	0.77	0.81	0.76	6.11	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				97		%
Iron	54-2	921.56	939.20	929.40	930.05	0.95	ppb
Iron	56-2	968.80	979.92	961.88	970.20	0.94	ppb
Iron	57-2	928.02	933.11	940.49	933.87	0.67	ppb
Krypton	83-1						cps
Lead	206-1	0.24	0.23	0.21	0.22	5.57	ppb

Lab Sample ID: Q1186-18 Instrumnet Name: P8
Client Sample ID: ME2974 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.22	0.22	0.20	0.21	5.49	ppb
Lead	208-1	0.23	0.22	0.21	0.22	4.12	ppb
Lithium	6-1				100		%
Magnesium	24-2	39399.69	39045.28	38387.64	38944.20	1.32	ppb
Manganese	55-2	69.52	70.11	68.25	69.29	1.36	ppb
Molybdenum	94-1	6.34	6.59	6.38	6.44	2.14	ppb
Molybdenum	95-1	7.52	7.65	7.43	7.53	1.49	ppb
Molybdenum	96-1	7.30	7.46	7.26	7.34	1.49	ppb
Molybdenum	97-1	7.58	7.69	7.40	7.56	1.97	ppb
Molybdenum	98-1	7.48	7.59	7.37	7.48	1.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.21	2.20	2.19	2.20	0.64	ppb
Phosphorus	31-2	83.53	60.38	50.99	64.96	25.78	ppb
Potassium	39-2	4485.35	4517.25	4496.99	4499.86	0.36	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				102		%
Scandium	45-2				99		%
Selenium	82-1	0.17	0.21	0.40	0.26	48.51	ppb
Selenium	77-2	0.00	0.69	0.00	0.23	173.21	ppb
Selenium	78-2	-0.20	0.00	0.00	-0.07		ppb
Silicon	28-1	8730.08	8939.97	8560.27	8743.44	2.18	ppb
Silver	107-1	0.02	0.02	0.01	0.02	15.85	ppb
Silver	109-1	0.01	0.01	0.01	0.01	20.99	ppb
Sodium	23-2	10797.77	10901.15	10743.43	10814.12	0.74	ppb
Strontium	86-1	16003.96	16604.63	15631.70	16080.10	3.05	ppb
Strontium	88-1	16024.02	16559.43	15597.39	16060.28	3.00	ppb
Sulfur	34-1	115655.29	114537.43	112011.10	114067.94	1.64	ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.01	0.01	0.01	30.51	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	9.81	ppb
Tin	118-1	0.41	0.40	0.38	0.40	3.20	ppb
Titanium	47-1	1.15	1.19	1.10	1.15	3.97	ppb
Uranium	238-1	2.03	2.05	1.99	2.02	1.45	ppb

Lab Sample ID :Q1186-18Instrumnet Name :P8Client Sample ID :ME2974Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.09	1.15	1.08	1.11	3.15	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	0.81	0.82	0.95	0.86	9.23	ppb
Zirconium	90-1	0.11	0.12	0.14	0.12	10.64	ppb
Zirconium	91-1	0.12	0.12	0.12	0.12	2.60	ppb

Lab Sample ID: Q1186-19 Instrumnet Name: P8

Client Sample ID: ME2977 Dilution Factor: 1

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Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Date & Time 7to	quircu . 202	20 02 00 14.07.10	Datai	iic i vairie .	00 17 (I VET .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13.43	10.92	13.08	12.48	10.90	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	4.47	ppb
Arsenic	75-2	0.23	0.30	0.28	0.27	13.61	ppb
Barium	135-1	35.79	36.58	36.45	36.27	1.17	ppb
Barium	137-1	36.13	37.14	36.29	36.52	1.48	ppb
Beryllium	9-1	0.03	0.04	0.03	0.03	3.45	ppb
Bismuth	209-1				93		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.05	-0.01	0.04	104.27	ppb
Cadmium	106-1	-1.38	-0.44	-0.75	-0.86		ppb
Cadmium	111-1	-0.11	-0.03	-0.06	-0.07		ppb
Calcium	43-1	416150.96	419676.15	427626.54	421151.22	1.40	ppb
Calcium	44-1	409940.93	411988.41	425582.91	415837.42	2.04	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.09	0.07	0.12	0.09	27.02	ppb
Cobalt	59-2	0.13	0.11	0.13	0.12	7.73	ppb
Copper	63-2	0.06	0.07	0.14	0.09	50.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	54-2	1191.31	1138.30	1177.90	1169.17	2.36	ppb
Iron	56-2	1262.68	1184.89	1252.92	1233.49	3.44	ppb
Iron	57-2	1229.78	1127.65	1204.60	1187.34	4.48	ppb
Krypton	83-1						cps
Lead	206-1	0.11	0.13	0.13	0.12	7.45	ppb

Lab Sample ID: Q1186-19 Instrumnet Name: P8

Client Sample ID: ME2977 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Lead         207-1         0.12         0.14         0.15         0.13         11-91         ppb           Lead         208-1         0.12         0.13         0.14         0.13         5.30         ppb           Lithium         6-1         100         """         %           Magneslum         24-2         119111.04         109588.73         114282.85         114314.20         4.17         ppb           Manganesse         55-2         167.54         157.76         166.53         163.95         3.28         ppb           Molybdenum         94-1         0.57         0.57         0.54         0.56         3.19         ppb           Molybdenum         96-1         0.37         0.36         0.35         0.36         2.29         ppb           Molybdenum         97-1         0.34         0.33         0.33         0.34         2.86         ppb           Neodymium         150-1         0.35         0.34         0.39         0.34         2.86         ppb           Neodymium         150-2         0.15         0.17         0.17         12.91         0.16         16.23         ppb           Neodymium         150-2         0.19<	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lithium         6-1         Indicated to the problem of	Lead	207-1	0.12	0.14	0.15	0.13	11.91	ppb
Magnesium         24-2         119111.04         109568.73         114262.85         114314.20         4.17         ppb           Manganese         55-2         167.54         157.76         166.53         163.95         3.28         ppb           Molybdenum         96-1         0.57         0.57         0.54         0.56         3.19         ppb           Molybdenum         96-1         0.36         0.36         0.35         0.36         1.64         ppb           Molybdenum         97-1         0.34         0.33         0.33         0.33         1.47         ppb           Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Meedymium         150-1         0.55         0.17         0.17         12.91         ppb           Needymium         150-2         0.15         0.17         0.17         12.91         ppb           Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         115.1         -2.54         15.30         8.09         116.23         ppb           Rhodium         103-1	Lead	208-1	0.12	0.13	0.14	0.13	5.30	ppb
Manganese         55-2         167.54         157.76         166.53         163.95         3.28         ppb           Molybdenum         94-1         0.57         0.57         0.54         0.56         3.19         ppb           Molybdenum         95-1         0.37         0.36         0.35         0.36         2.29         ppb           Molybdenum         96-1         0.36         0.36         0.35         0.33         1.47         ppb           Molybdenum         98-1         0.34         0.34         0.33         0.34         2.86         ppb           Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Molybdenum         150-1	Lithium	6-1				100		%
Molybdenum         94-1         0.57         0.57         0.54         0.56         3.19         pb           Molybdenum         95-1         0.37         0.36         0.35         0.36         2.29         pb           Molybdenum         96-1         0.36         0.36         0.35         0.36         0.35         0.36         1.64         pb           Molybdenum         98-1         0.34         0.33         0.33         0.34         1.47         pb           Molybdenum         150-1         0.34         0.33         0.33         0.34         1.47         pb           Neodymium         150-1         0.25         0.94         0.15         0.17         0.17         12.91         pb           Phosphorus         31-2         11.51         2.54         15.30         8.09         116.23         pb           Plotasium         30-2         3022.70         2.56         15.30         8.09         116.23         pb           Plotasium         103-2         1.51         2.54         15.30         8.09         116.23         pb           Rhodium         103-2         1.51         2.54         15.30         8.09         116.23	Magnesium	24-2	119111.04	109568.73	114262.85	114314.20	4.17	ppb
Molybdenum         95-1         0.37         0.36         0.35         0.36         2.29         ppb           Molybdenum         96-1         0.36         0.36         0.35         0.36         1.64         ppb           Molybdenum         97-1         0.34         0.33         0.33         0.33         1.47         ppb           Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Neodymium         150-1         0.35         0.34         0.33         0.34         2.86         ppb           Neodymium         150-1         0.15         0.17         0.17         12.91         ppb           Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         ppb           Phosphorus         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1         5-1         1.50         97         97         5-2         73         ppb           Scandium	Manganese	55-2	167.54	157.76	166.53	163.95	3.28	ppb
Molybdenum         96-1         0.36         0.36         0.35         0.36         1.64         ppb           Molybdenum         97-1         0.34         0.33         0.33         0.33         1.47         ppb           Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Neodymium         150-1	Molybdenum	94-1	0.57	0.57	0.54	0.56	3.19	ppb
Molybdenum         97-1         0.34         0.33         0.33         0.34         1.47         ppb           Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Neodymium         150-1         0.15         0.17         0.17         12.91         ppb           Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         ppb           Phostassium         39-2         10.31         2.54         15.30         8.09         116.23         ppb           Rhodium         103-1         2.54         15.30         8.09         116.23         ppb           Rhodium         103-1         2.54         15.30         8.09         116.23         ppb           Rhodium         103-1         2.54         15.30         8.09         10.50         2.73         ppb           Rhodium         103-2         2.71         8.0         975.54         2954.52         2.73         ppb           Scandium         45-1         0.50         0.59 <td>Molybdenum</td> <td>95-1</td> <td>0.37</td> <td>0.36</td> <td>0.35</td> <td>0.36</td> <td>2.29</td> <td>ppb</td>	Molybdenum	95-1	0.37	0.36	0.35	0.36	2.29	ppb
Molybdenum         98-1         0.35         0.34         0.33         0.34         2.86         ppb           Neodymium         150-1	Molybdenum	96-1	0.36	0.36	0.35	0.36	1.64	ppb
Neodymium         150-1         cps           Neodymium         150-2         cps           Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         ppb           Potassium         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1	Molybdenum	97-1	0.34	0.33	0.33	0.33	1.47	ppb
Neodymium         150-2         cps           Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         ppb           Potassium         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1	Molybdenum	98-1	0.35	0.34	0.33	0.34	2.86	ppb
Nickel         60-2         0.19         0.15         0.17         0.17         12.91         ppb           Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         ppb           Potassium         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1	Neodymium	150-1						cps
Phosphorus         31-2         11.51         -2.54         15.30         8.09         116.23         pb           Potassium         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1	Neodymium	150-2						cps
Potassium         39-2         3022.70         2865.32         2975.54         2954.52         2.73         ppb           Rhodium         103-1         48-1	Nickel	60-2	0.19	0.15	0.17	0.17	12.91	ppb
Rhodium         103-1         4         95         %           Rhodium         103-2         97         %           Scandium         45-1         102         %           Scandium         45-2         101         %           Selenium         82-1         0.50         0.59         -0.02         0.36         91.34         ppb           Selenium         77-2         0.00         1.34         0.69         0.68         99.13         ppb           Selenium         77-2         0.00         1.34         0.69         0.68         99.13         ppb           Selenium         78-2         0.01         -0.62         0.00         -0.20         ppb           Selicon         28-1         5990.40         5978.23         6116.81         6028.48         1.27         ppb           Siliver         107-1         0.01         0.01         0.01         0.01         24.49         ppb           Siliver         109-1         0.00         0.01         0.01         0.01         50.26         ppb           Stodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb	Phosphorus	31-2	11.51	-2.54	15.30	8.09	116.23	ppb
Rhodium         103-2         Image: Control of the con	Potassium	39-2	3022.70	2865.32	2975.54	2954.52	2.73	ppb
Scandium         45-1              %           Scandium         45-2 <td< td=""><td>Rhodium</td><td>103-1</td><td></td><td></td><td></td><td>95</td><td></td><td>%</td></td<>	Rhodium	103-1				95		%
Scandium         45-2         Interpretation         Material	Rhodium	103-2				97		%
Selenium         82-1         0.50         0.59         -0.02         0.36         91.34         ppb           Selenium         77-2         0.00         1.34         0.69         0.68         99.13         ppb           Selenium         78-2         0.01         -0.62         0.00         -0.20	Scandium	45-1				102		%
Selenium         77-2         0.00         1.34         0.69         0.68         99.13         ppb           Selenium         78-2         0.01         -0.62         0.00         -0.20         -0.20         ppb           Silicon         28-1         5990.40         5978.23         6116.81         6028.48         1.27         ppb           Silver         107-1         0.01         0.01         0.01         0.01         24.49         ppb           Silver         109-1         0.00         0.01         0.01         0.01         50.26         ppb           Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Strontium         88-1         11439.90         11658.09         11727.37         11608.45         1.29         ppb           Terbium         159-1         449264.90         458499.63         452026.52         1.24         pb           Terbium         159-2         10.01         0.01         0.01         10.01         10.01         14.64         pb	Scandium	45-2				101		%
Selenium         78-2         0.01         -0.62         0.00         -0.20         -0.20         ppb           Silicon         28-1         5990.40         5978.23         6116.81         6028.48         1.27         ppb           Silver         107-1         0.01         0.01         0.01         24.49         ppb           Silver         109-1         0.00         0.01         0.01         50.26         ppb           Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Sulfur         34-1         148315.03         449264.90         458499.63         452026.52         1.24         ppb           Terbium         159-1	Selenium	82-1	0.50	0.59	-0.02	0.36	91.34	ppb
Silicon         28-1         5990.40         5978.23         6116.81         6028.48         1.27         ppb           Silver         107-1         0.01         0.01         0.01         24.49         ppb           Silver         109-1         0.00         0.01         0.01         0.01         50.26         ppb           Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Sulfur         88-1         11439.90         11658.09         11727.37         11608.45         1.29         ppb           Sulfur         34-1         448315.03         449264.90         458499.63         452026.52         1.24         ppb           Terbium         159-1	Selenium	77-2	0.00	1.34	0.69	0.68	99.13	ppb
Silver         107-1         0.01         0.01         0.01         0.01         24.49         ppb           Silver         109-1         0.00         0.01         0.01         0.01         50.26         ppb           Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Strontium         88-1         11439.90         11658.09         11727.37         11608.45         1.29         ppb           Sulfur         34-1         448315.03         449264.90         458499.63         452026.52         1.24         ppb           Terbium         159-1	Selenium	78-2	0.01	-0.62	0.00	-0.20		ppb
Silver         109-1         0.00         0.01         0.01         0.01         50.26         ppb           Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Strontium         88-1         11439.90         11658.09         11727.37         11608.45         1.29         ppb           Sulfur         34-1         448315.03         449264.90         458499.63         452026.52         1.24         ppb           Terbium         159-1	Silicon	28-1	5990.40	5978.23	6116.81	6028.48	1.27	ppb
Sodium         23-2         22717.88         21802.34         22189.32         22236.51         2.07         ppb           Strontium         86-1         11432.14         11813.75         11737.33         11661.08         1.73         ppb           Strontium         88-1         11439.90         11658.09         11727.37         11608.45         1.29         ppb           Sulfur         34-1         448315.03         449264.90         458499.63         452026.52         1.24         ppb           Terbium         159-1	Silver	107-1	0.01	0.01	0.01	0.01	24.49	ppb
Strontium       86-1       11432.14       11813.75       11737.33       11661.08       1.73       ppb         Strontium       88-1       11439.90       11658.09       11727.37       11608.45       1.29       ppb         Sulfur       34-1       448315.03       449264.90       458499.63       452026.52       1.24       ppb         Terbium       159-1       104       %       %         Terbium       159-2       101       %       %         Thallium       203-1       0.01       0.01       0.01       0.01       14.64       ppb         Thallium       205-1       0.01       0.01       0.01       0.01       16.83       ppb         Tin       118-1       0.47       0.48       0.47       0.48       1.12       ppb         Titanium       47-1       0.74       0.74       0.90       0.79       11.54       ppb	Silver	109-1	0.00	0.01	0.01	0.01	50.26	ppb
Strontium       88-1       11439.90       11658.09       11727.37       11608.45       1.29       ppb         Sulfur       34-1       448315.03       449264.90       458499.63       452026.52       1.24       ppb         Terbium       159-1       104       %         Terbium       159-2       101       %         Thallium       203-1       0.01       0.01       0.01       14.64       ppb         Thallium       205-1       0.01       0.01       0.01       16.83       ppb         Tin       118-1       0.47       0.48       0.47       0.48       1.12       ppb         Titanium       47-1       0.74       0.74       0.90       0.79       11.54       ppb	Sodium	23-2	22717.88	21802.34	22189.32	22236.51	2.07	ppb
Sulfur     34-1     448315.03     449264.90     458499.63     452026.52     1.24     ppb       Terbium     159-1     104     %       Terbium     159-2     101     %       Thallium     203-1     0.01     0.01     0.01     14.64     ppb       Thallium     205-1     0.01     0.01     0.01     16.83     ppb       Tin     118-1     0.47     0.48     0.47     0.48     1.12     ppb       Titanium     47-1     0.74     0.74     0.90     0.79     11.54     ppb	Strontium	86-1	11432.14	11813.75	11737.33	11661.08	1.73	ppb
Terbium     159-1     104     %       Terbium     159-2     101     %       Thallium     203-1     0.01     0.01     0.01     0.01     14.64     ppb       Thallium     205-1     0.01     0.01     0.01     0.01     16.83     ppb       Tin     118-1     0.47     0.48     0.47     0.48     1.12     ppb       Titanium     47-1     0.74     0.74     0.90     0.79     11.54     ppb	Strontium	88-1	11439.90	11658.09	11727.37	11608.45	1.29	ppb
Terbium         159-2         101         %           Thallium         203-1         0.01         0.01         0.01         14.64         ppb           Thallium         205-1         0.01         0.01         0.01         16.83         ppb           Tin         118-1         0.47         0.48         0.47         0.48         1.12         ppb           Titanium         47-1         0.74         0.74         0.90         0.79         11.54         ppb	Sulfur	34-1	448315.03	449264.90	458499.63	452026.52	1.24	ppb
Thallium       203-1       0.01       0.01       0.01       0.01       14.64       ppb         Thallium       205-1       0.01       0.01       0.01       0.01       16.83       ppb         Tin       118-1       0.47       0.48       0.47       0.48       1.12       ppb         Titanium       47-1       0.74       0.74       0.90       0.79       11.54       ppb	Terbium	159-1				104		%
Thallium     205-1     0.01     0.01     0.01     0.01     16.83     ppb       Tin     118-1     0.47     0.48     0.47     0.48     1.12     ppb       Titanium     47-1     0.74     0.74     0.90     0.79     11.54     ppb	Terbium	159-2				101		%
Tin 118-1 0.47 0.48 0.47 0.48 1.12 ppb Titanium 47-1 0.74 0.74 0.90 0.79 11.54 ppb	Thallium	203-1	0.01	0.01	0.01	0.01	14.64	ppb
Titanium 47-1 0.74 0.74 0.90 0.79 11.54 ppb	Thallium	205-1	0.01	0.01	0.01	0.01	16.83	ppb
	Tin	118-1	0.47	0.48	0.47	0.48	1.12	ppb
Uranium 238-1 0.15 0.16 0.16 0.16 2.67 ppb	Titanium	47-1	0.74	0.74	0.90	0.79	11.54	ppb
	Uranium	238-1	0.15	0.16	0.16	0.16	2.67	ppb

Lab Sample ID :Q1186-19Instrumnet Name :P8Client Sample ID :ME2977Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.13	0.13	0.11	0.12	6.57	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	2.00	1.91	1.98	1.96	2.36	ppb
Zirconium	90-1	0.14	0.14	0.14	0.14	0.88	ppb
Zirconium	91-1	0.14	0.16	0.15	0.15	7.42	ppb

Lab Sample ID: Q1186-20 Instrumnet Name: P8

Client Sample ID: ME2980 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:00:28	Datar	·ile Name :	052AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51.42	56.17	59.49	55.70	7.28	ppb
Antimony	121-1	0.59	0.64	0.55	0.59	7.08	ppb
Arsenic	75-2	1.43	1.81	1.72	1.65	12.04	ppb
Barium	135-1	31.85	35.47	32.00	33.10	6.19	ppb
Barium	137-1	32.17	35.78	31.63	33.19	6.80	ppb
Beryllium	9-1	0.03	0.04	0.04	0.04	14.21	ppb
Bismuth	209-1				98		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.47	0.61	0.54	0.54	13.14	ppb
Cadmium	106-1	0.72	0.26	0.37	0.45	52.87	ppb
Cadmium	111-1	0.14	0.13	0.11	0.13	10.91	ppb
Calcium	43-1	55614.23	59475.80	55359.76	56816.60	4.06	ppb
Calcium	44-1	54410.52	59816.42	54341.13	56189.36	5.59	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.36	0.41	0.47	0.41	12.71	ppb
Cobalt	59-2	1.62	1.76	1.77	1.71	4.91	ppb
Copper	63-2	5.16	5.64	5.68	5.49	5.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				109		%
Indium	115-1				104		%
Indium	115-2				106		%
Iron	54-2	650.27	696.38	711.20	685.95	4.63	ppb
Iron	56-2	697.41	733.11	743.31	724.61	3.33	ppb
Iron	57-2	653.03	698.46	715.76	689.08	4.70	ppb
Krypton	83-1						cps
Lead	206-1	1.81	2.05	1.79	1.88	7.49	ppb

Lab Sample ID: Q1186-20 Instrumnet Name: P8
Client Sample ID: ME2980 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.72	1.95	1.74	1.80	6.85	ppb
Lead	208-1	1.75	1.96	1.74	1.82	6.73	ppb
Lithium	6-1				105		%
Magnesium	24-2	39732.32	42198.50	43928.88	41953.23	5.03	ppb
Manganese	55-2	85.29	90.94	93.65	89.96	4.74	ppb
Molybdenum	94-1	33.77	36.60	33.56	34.64	4.90	ppb
Molybdenum	95-1	40.74	43.93	40.36	41.68	4.71	ppb
Molybdenum	96-1	39.76	43.39	39.14	40.76	5.64	ppb
Molybdenum	97-1	40.43	44.85	40.41	41.90	6.11	ppb
Molybdenum	98-1	40.02	43.72	40.00	41.25	5.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	14.19	14.70	15.02	14.64	2.88	ppb
Phosphorus	31-2	20.08	20.23	18.62	19.64	4.52	ppb
Potassium	39-2	29828.18	32694.00	33526.01	32016.06	6.06	ppb
Rhodium	103-1				99		%
Rhodium	103-2				106		%
Scandium	45-1				106		%
Scandium	45-2				110		%
Selenium	82-1	0.95	0.86	1.44	1.08	28.87	ppb
Selenium	77-2	0.60	0.65	0.00	0.42	86.79	ppb
Selenium	78-2	0.39	-0.25	0.34	0.16	223.29	ppb
Silicon	28-1	3013.81	3287.86	2990.52	3097.40	5.34	ppb
Silver	107-1	0.10	0.10	0.09	0.10	5.56	ppb
Silver	109-1	0.10	0.11	0.09	0.10	9.85	ppb
Sodium	23-2	27058.43	28913.79	29421.61	28464.61	4.37	ppb
Strontium	86-1	486.40	537.05	481.45	501.63	6.13	ppb
Strontium	88-1	484.90	529.66	480.91	498.49	5.43	ppb
Sulfur	34-1	61867.98	66304.61	61137.21	63103.27	4.43	ppb
Terbium	159-1				104		%
Terbium	159-2				109		%
Thallium	203-1	0.05	0.07	0.05	0.06	16.63	ppb
Thallium	205-1	0.05	0.06	0.06	0.06	7.69	ppb
Tin	118-1	0.49	0.59	0.49	0.52	10.92	ppb
Titanium	47-1	0.67	0.70	0.61	0.66	6.44	ppb
Uranium	238-1	4.62	5.08	4.54	4.74	6.10	ppb

Lab Sample ID :Q1186-20Instrumnet Name :P8Client Sample ID :ME2980Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.28	1.38	1.43	1.36	5.56	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				109		%
Zinc	66-2	1.59	1.78	1.74	1.70	5.74	ppb
Zirconium	90-1	0.07	0.08	0.08	0.08	7.83	ppb
Zirconium	91-1	0.07	0.08	0.08	0.08	5.78	ppb

Lab Sample ID :Q1186-09REInstrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:03:40	DataFi	ile Name :	053AREF.0			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	4.56	5.03	4.64	4.74	5.30	ppb	
Antimony	121-1	0.01	0.01	0.01	0.01	12.26	ppb	
Arsenic	75-2	0.19	0.06	0.14	0.13	48.87	ppb	
Barium	135-1	16.34	16.41	16.68	16.48	1.06	ppb	
Barium	137-1	16.50	16.59	16.85	16.65	1.10	ppb	
Beryllium	9-1	0.03	0.03	0.03	0.03	10.16	ppb	
Bismuth	209-1				93		%	
Bismuth	209-2				86		%	
Bromine	81-1						cps	
Cadmium	108-1	0.05	0.06	0.01	0.04	76.94	ppb	
Cadmium	106-1	-0.08	0.20	-0.35	-0.08		ppb	
Cadmium	111-1	0.00	0.02	-0.02	0.00	1104.96	ppb	
Calcium	43-1	436497.70	443039.29	441644.62	440393.87	0.78	ppb	
Calcium	44-1	425412.35	434852.74	438702.89	432989.33	1.58	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.06	0.06	0.02	0.05	56.84	ppb	
Cobalt	59-2	0.05	0.06	0.05	0.05	4.79	ppb	
Copper	63-2	0.28	0.35	0.36	0.33	12.69	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				104		%	
Holmium	165-2				95		%	
Indium	115-1				100		%	
Indium	115-2				88		%	
Iron	54-2	1435.09	1403.61	1453.19	1430.63	1.75	ppb	
Iron	56-2	1515.70	1438.97	1492.10	1482.26	2.65	ppb	
Iron	57-2	1460.81	1423.66	1460.39	1448.29	1.47	ppb	
Krypton	83-1						cps	
Lead	206-1	0.12	0.14	0.15	0.14	11.26	ppb	

Lab Sample ID :Q1186-09REInstrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

Date & Time Acc	quired: 202	25-02-06 15:03:40	DataFi	le Name :	053AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.13	0.15	0.16	0.15	10.84	ppb
Lead	208-1	0.13	0.14	0.15	0.14	8.15	ppb
Lithium	6-1				101		%
Magnesium	24-2	155777.39	149777.42	156162.34	153905.72	2.33	ppb
Manganese	55-2	54.97	53.69	54.92	54.52	1.33	ppb
Molybdenum	94-1	0.68	0.68	0.68	0.68	0.37	ppb
Molybdenum	95-1	0.78	0.72	0.78	0.76	4.81	ppb
Molybdenum	96-1	0.68	0.69	0.74	0.70	4.93	ppb
Molybdenum	97-1	0.71	0.71	0.75	0.73	3.51	ppb
Molybdenum	98-1	0.69	0.69	0.71	0.70	1.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.29	0.27	0.26	0.27	5.16	ppb
Phosphorus	31-2	-8.01	-14.60	-5.31	-9.31		ppb
Potassium	39-2	5110.36	4984.01	5105.27	5066.55	1.41	ppb
Rhodium	103-1				94		%
Rhodium	103-2				88		%
Scandium	45-1				104		%
Scandium	45-2				95		%
Selenium	82-1	0.06	0.37	0.45	0.29	69.55	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.79	0.64	-0.14	-0.10		ppb
Silicon	28-1	8307.10	8544.95	8801.82	8551.29	2.89	ppb
Silver	107-1	0.02	0.02	0.03	0.03	13.36	ppb
Silver	109-1	0.02	0.02	0.02	0.02	16.33	ppb
Sodium	23-2	201002.31	192966.27	201016.45	198328.34	2.34	ppb
Strontium	86-1	14414.90	14074.75	14854.87	14448.17	2.71	ppb
Strontium	88-1	14148.93	14284.97	14670.11	14368.00	1.88	ppb
Sulfur	34-1	461228.62	464483.60	467066.47	464259.56	0.63	ppb
Terbium	159-1				102		%
Terbium	159-2				96		%
Thallium	203-1	0.01	0.01	0.01	0.01	18.20	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	21.57	ppb
Tin	118-1	0.55	0.59	0.55	0.56	3.92	ppb
Titanium	47-1	0.76	0.75	0.78	0.76	1.95	ppb
Uranium	238-1	0.25	0.25	0.25	0.25	1.40	ppb

Lab Sample ID :Q1186-09REInstrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.03	0.03	9.08	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				95		%
Zinc	66-2	0.72	0.65	0.78	0.72	9.00	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	9.92	ppb
Zirconium	91-1	0.04	0.04	0.02	0.03	25.03	ppb

Lab Sample ID :Q1186-10REInstrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Date & Time Acquired : 2025-02-06 15:06:55		02-06 15:06:55	DataFile i	vame :	U54AREF.d			
	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
	Aluminium	27-2	4.48	4.03	4.03	4.18	6.21	ppb
	Antimony	121-1	0.01	0.02	0.01	0.02	29.06	ppb
	Arsenic	75-2	0.13	0.10	0.17	0.14	26.46	ppb
	Barium	135-1	16.54	17.28	16.08	16.63	3.65	ppb
	Barium	137-1	16.65	17.37	16.22	16.75	3.46	ppb
	Beryllium	9-1	0.03	0.03	0.03	0.03	3.19	ppb
	Bismuth	209-1				91		%
	Bismuth	209-2				87		%
	Bromine	81-1						cps
	Cadmium	108-1	0.01	0.07	0.04	0.04	85.21	ppb
	Cadmium	106-1	0.85	0.26	0.35	0.49	65.20	ppb
	Cadmium	111-1	0.07	0.02	0.03	0.04	65.07	ppb
	Calcium	43-1	432584.64	445336.09	423912.91	433944.55	2.48	ppb
	Calcium	44-1	429138.07	432464.45	411880.42	424494.31	2.60	ppb
	Carbon	12-1						cps
	Carbon	12-2						cps
	Chlorine	35-1						cps
	Chlorine	35-2						cps
	Chromium	52-2	0.21	0.21	0.19	0.20	5.57	ppb
	Cobalt	59-2	0.05	0.06	0.05	0.05	7.05	ppb
	Copper	63-2	3.43	3.56	3.54	3.51	1.99	ppb
	Dysprosium	156-1						cps
	Dysprosium	156-2						cps
	Erbium	164-1						cps
	Erbium	164-2						cps
	Gadolinium	160-1						cps
	Gadolinium	160-2						cps
	Holmium	165-1				102		%
	Holmium	165-2				96		%
	Indium	115-1				100		%
	Indium	115-2				92		%
	Iron	54-2	1523.97	1530.21	1532.44	1528.87	0.29	ppb
	Iron	56-2	1599.20	1586.53	1589.96	1591.90	0.41	ppb
	Iron	57-2	1517.81	1540.90	1543.24	1533.98	0.92	ppb
	Krypton	83-1						cps
	Lead	206-1	0.11	0.12	0.12	0.12	3.61	ppb

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Lab Sample ID :Q1186-10REInstrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.10	0.11	0.11	0.11	2.14	ppb
Lead	208-1	0.11	0.12	0.12	0.12	6.01	ppb
Lithium	6-1				101		%
Magnesium	24-2	145168.24	148382.56	150800.54	148117.11	1.91	ppb
Manganese	55-2	52.30	51.67	52.78	52.25	1.07	ppb
Molybdenum	94-1	0.64	0.70	0.64	0.66	5.36	ppb
Molybdenum	95-1	0.73	0.78	0.71	0.74	5.13	ppb
Molybdenum	96-1	0.69	0.75	0.71	0.72	4.00	ppb
Molybdenum	97-1	0.72	0.71	0.70	0.71	1.12	ppb
Molybdenum	98-1	0.72	0.76	0.68	0.72	5.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.32	0.32	0.40	0.35	13.46	ppb
Phosphorus	31-2	-14.86	-2.24	-10.87	-9.32		ppb
Potassium	39-2	4866.90	4888.35	4934.16	4896.47	0.70	ppb
Rhodium	103-1				92		%
Rhodium	103-2				90		%
Scandium	45-1				103		%
Scandium	45-2				97		%
Selenium	82-1	0.62	0.21	0.26	0.36	60.65	ppb
Selenium	77-2	0.00	0.00	0.74	0.25	173.21	ppb
Selenium	78-2	-0.39	-0.17	-0.58	-0.38		ppb
Silicon	28-1	8483.03	8699.26	8287.15	8489.81	2.43	ppb
Silver	107-1	0.03	0.03	0.04	0.03	9.17	ppb
Silver	109-1	0.02	0.03	0.02	0.02	17.94	ppb
Sodium	23-2	192166.17	189503.68	191420.60	191030.15	0.72	ppb
Strontium	86-1	14007.25	14818.96	13930.62	14252.28	3.45	ppb
Strontium	88-1	13894.95	14430.14	13960.62	14095.24	2.07	ppb
Sulfur	34-1	453925.33	475633.52	450001.69	459853.51	3.00	ppb
Terbium	159-1				100		%
Terbium	159-2				96		%
Thallium	203-1	0.01	0.01	0.01	0.01	13.55	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	2.29	ppb
Tin	118-1	0.52	0.59	0.52	0.54	6.95	ppb
Titanium	47-1	0.74	0.77	0.77	0.76	1.94	ppb
Uranium	238-1	0.24	0.26	0.24	0.25	5.21	ppb

Lab Sample ID :Q1186-10REInstrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.04	0.03	0.03	17.57	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				96		%
Zinc	66-2	1.03	1.03	1.05	1.04	0.76	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	12.98	ppb
Zirconium	91-1	0.03	0.03	0.03	0.03	4.28	ppb

Lab Sample ID: Q1186-09LREX5 Instrumnet Name: P8
Client Sample ID: ME2959L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

Date & Time 7to	quircu . Zoz	0 02 00 10.10.12	Datai	iic i tairic .	000/ (I \L I .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.08	4.58	3.46	3.71	20.99	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	19.08	ppb
Arsenic	75-2	0.02	0.03	0.03	0.03	21.77	ppb
Barium	135-1	3.34	3.31	3.42	3.36	1.71	ppb
Barium	137-1	3.40	3.34	3.43	3.39	1.33	ppb
Beryllium	9-1	0.02	0.03	0.03	0.03	8.26	ppb
Bismuth	209-1				96		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	0.04	0.00	0.00	835.60	ppb
Cadmium	106-1	0.46	0.80	1.21	0.82	45.91	ppb
Cadmium	111-1	0.04	0.06	0.09	0.07	41.58	ppb
Calcium	43-1	88363.29	87441.71	88476.27	88093.76	0.64	ppb
Calcium	44-1	85970.24	87214.38	86828.56	86671.06	0.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.03	-0.03	-0.03		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	38.14	ppb
Copper	63-2	0.45	0.49	0.43	0.46	6.64	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				97		%
Indium	115-1				101		%
Indium	115-2				94		%
Iron	54-2	275.84	295.22	276.00	282.35	3.95	ppb
Iron	56-2	278.68	293.70	278.66	283.68	3.06	ppb
Iron	57-2	278.22	292.77	280.46	283.82	2.76	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.06	0.06	0.07	13.16	ppb

Lab Sample ID : Q1186-09LREX5 Instrumnet Name : P8
Client Sample ID : ME2959L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

Date & Time Act	1011CG . 202	20 02 00 10.10.12	Datai	iic i vairie .	000/ (( \L   . u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.07	0.07	0.06	0.07	3.57	ppb
Lead	208-1	0.07	0.07	0.07	0.07	3.63	ppb
Lithium	6-1				104		%
Magnesium	24-2	29334.62	31463.15	29815.33	30204.37	3.70	ppb
Manganese	55-2	12.83	13.49	12.79	13.04	2.99	ppb
Molybdenum	94-1	0.15	0.15	0.17	0.16	4.50	ppb
Molybdenum	95-1	0.17	0.16	0.17	0.17	1.58	ppb
Molybdenum	96-1	0.16	0.14	0.17	0.15	10.41	ppb
Molybdenum	97-1	0.17	0.15	0.15	0.16	8.62	ppb
Molybdenum	98-1	0.14	0.15	0.16	0.15	5.17	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.17	0.21	0.23	0.20	14.58	ppb
Phosphorus	31-2	-21.40	-20.20	-24.23	-21.94		ppb
Potassium	39-2	993.40	1065.95	1001.26	1020.20	3.90	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				103		%
Scandium	45-2				98		%
Selenium	82-1	0.22	0.20	-0.16	0.09	245.69	ppb
Selenium	77-2	1.42	0.00	0.00	0.47	173.21	ppb
Selenium	78-2	-1.01	0.26	0.01	-0.25		ppb
Silicon	28-1	1720.15	1706.47	1716.01	1714.21	0.41	ppb
Silver	107-1	0.02	0.01	0.01	0.02	21.55	ppb
Silver	109-1	0.01	0.01	0.01	0.01	5.52	ppb
Sodium	23-2	37103.24	39616.02	37963.13	38227.46	3.34	ppb
Strontium	86-1	2841.95	2833.15	2909.77	2861.62	1.47	ppb
Strontium	88-1	2807.77	2827.40	2910.96	2848.71	1.92	ppb
Sulfur	34-1	95686.62	93158.99	94246.10	94363.90	1.34	ppb
Terbium	159-1				100		%
Terbium	159-2				97		%
Thallium	203-1	0.01	0.01	0.00	0.01	32.46	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	21.94	ppb
Tin	118-1	0.21	0.19	0.20	0.20	3.59	ppb
Titanium	47-1	0.17	0.15	0.19	0.17	13.39	ppb
Uranium	238-1	0.04	0.05	0.05	0.05	5.19	ppb

Lab Sample ID : Q1186-09LREX5 Instrumnet Name : P8

Client Sample ID : ME2959L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.00	0.01	0.01	34.95	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				97		%
Zinc	66-2	0.51	0.73	0.43	0.55	28.11	ppb
Zirconium	90-1	0.01	0.01	0.00	0.01	34.57	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	10.74	ppb

Lab Sample ID: Q1186-11RE Instrumnet Name: P8
Client Sample ID: ME2959S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1804.26	1826.03	1816.50	1815.60	0.60	ppb
Antimony	121-1	98.58	104.12	102.91	101.87	2.86	ppb
Arsenic	75-2	39.83	40.77	40.24	40.28	1.16	ppb
Barium	135-1	1934.90	2069.49	2042.56	2015.65	3.53	ppb
Barium	137-1	1894.24	2077.04	2086.04	2019.10	5.36	ppb
Beryllium	9-1	45.86	48.82	47.96	47.55	3.20	ppb
Bismuth	209-1				91		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	36.49	39.17	38.62	38.09	3.71	ppb
Cadmium	106-1	36.32	38.45	37.68	37.48	2.88	ppb
Cadmium	111-1	43.91	47.45	47.06	46.14	4.20	ppb
Calcium	43-1	396342.73	430811.49	439131.79	422095.34	5.37	ppb
Calcium	44-1	386039.55	426243.89	434258.21	415513.89	6.22	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	196.42	198.79	200.20	198.47	0.96	ppb
Cobalt	59-2	508.54	509.68	502.74	506.98	0.73	ppb
Copper	63-2	237.94	240.00	238.89	238.94	0.43	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	54-2	2454.73	2444.56	2447.50	2448.93	0.21	ppb
Iron	56-2	2351.63	2355.66	2405.39	2370.89	1.26	ppb
Iron	57-2	2256.44	2296.26	2300.78	2284.49	1.07	ppb
Krypton	83-1						cps
Lead	206-1	18.31	19.74	19.65	19.23	4.16	ppb

Lab Sample ID: Q1186-11RE Instrumnet Name: P8

Client Sample ID: ME2959S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Date & Time Act	quircu . Zoz	0 02 00 10.10.20	Datari	ic ivallic .	000/11121.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	18.32	19.63	19.64	19.20	3.97	ppb
Lead	208-1	18.29	19.65	19.70	19.21	4.15	ppb
Lithium	6-1				102		%
Magnesium	24-2	139403.33	143041.05	141316.87	141253.75	1.29	ppb
Manganese	55-2	528.09	527.80	528.00	527.96	0.03	ppb
Molybdenum	94-1	0.65	0.69	0.69	0.67	3.47	ppb
Molybdenum	95-1	0.67	0.72	0.75	0.71	5.84	ppb
Molybdenum	96-1	0.64	0.66	0.71	0.67	5.12	ppb
Molybdenum	97-1	0.65	0.74	0.72	0.70	7.05	ppb
Molybdenum	98-1	0.66	0.73	0.72	0.71	5.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	471.41	474.00	470.16	471.85	0.41	ppb
Phosphorus	31-2	-14.68	-5.27	-5.45	-8.47		ppb
Potassium	39-2	4638.79	4666.00	4612.55	4639.11	0.58	ppb
Rhodium	103-1				94		%
Rhodium	103-2				94		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	17.60	19.74	19.36	18.90	6.04	ppb
Selenium	77-2	23.24	18.89	18.68	20.27	12.69	ppb
Selenium	78-2	18.45	19.12	19.50	19.02	2.78	ppb
Silicon	28-1	7582.02	8407.34	8511.57	8166.98	6.24	ppb
Silver	107-1	41.83	45.61	45.50	44.31	4.85	ppb
Silver	109-1	42.38	46.52	46.17	45.02	5.09	ppb
Sodium	23-2	181853.45	181678.08	179692.31	181074.61	0.66	ppb
Strontium	86-1	13187.71	13913.69	13923.83	13675.08	3.09	ppb
Strontium	88-1	13003.72	13622.36	13940.64	13522.24	3.52	ppb
Sulfur	34-1	419596.29	453863.46	460379.35	444613.03	4.93	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	46.11	49.36	50.07	48.51	4.35	ppb
Thallium	205-1	48.82	52.55	51.90	51.09	3.90	ppb
Tin	118-1	0.53	0.55	0.55	0.54	2.49	ppb
Titanium	47-1	0.73	0.78	0.79	0.77	4.39	ppb
Uranium	238-1	0.23	0.24	0.24	0.24	3.68	ppb

Lab Sample ID : Q1186-11RE Instrumnet Name : P8
Client Sample ID : ME2959S Dilution Factor : 1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	519.83	512.82	524.96	519.20	1.17	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	454.32	455.91	458.14	456.12	0.42	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	4.33	ppb
Zirconium	91-1	0.06	0.06	0.06	0.06	3.54	ppb

<sub>3</sub> 247

Lab Sample ID :PB166435BLInstrumnet Name :P8Client Sample ID :PBW435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

Date & Time AC	quireu . 202	25-02-06 15.16.55	Dala	rile ivallie .	057CCBE.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.53	0.24	0.55	0.44	39.45	ppb
Antimony	121-1	0.01	0.01	0.00	0.01	31.53	ppb
Arsenic	75-2	-0.01	0.00	-0.01	-0.01		ppb
Barium	135-1	0.06	0.03	0.03	0.04	40.35	ppb
Barium	137-1	0.05	0.04	0.03	0.04	27.98	ppb
Beryllium	9-1	0.04	0.03	0.03	0.03	17.29	ppb
Bismuth	209-1				105		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	-0.04	0.03	0.03	0.01	404.56	ppb
Cadmium	106-1	0.85	0.89	0.81	0.85	4.82	ppb
Cadmium	111-1	0.07	0.07	0.07	0.07	4.09	ppb
Calcium	43-1	13.98	5.71	8.88	9.53	43.82	ppb
Calcium	44-1	16.45	10.69	11.02	12.72	25.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.12	-0.08	-0.13	-0.11		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	19.27	ppb
Copper	63-2	0.43	0.43	0.43	0.43	0.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				105		%
Indium	115-1				110		%
Indium	115-2				106		%
Iron	54-2	-0.13	-0.16	0.29	0.00	16368.65	ppb
Iron	56-2	0.15	0.12	0.08	0.12	29.61	ppb
Iron	57-2	-0.56	-0.01	0.36	-0.07		ppb
Krypton	83-1						cps
Lead	206-1	0.03	0.04	0.04	0.04	14.02	ppb

Lab Sample ID :PB166435BLInstrumnet Name :P8Client Sample ID :PBW435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
			·	· · · · · · · · · · · · · · · · · · ·			
Lead	207-1	0.06	0.05	0.05	0.05	14.35	ppb
Lead	208-1	0.05	0.04	0.04	0.04	2.04	ppb
Lithium	6-1				112		%
Magnesium	24-2	-8.11	-8.42	-7.83	-8.12		ppb
Manganese	55-2	-0.02	0.04	0.00	0.01	391.86	ppb
Molybdenum	94-1	0.03	0.01	0.01	0.02	48.95	ppb
Molybdenum	95-1	0.01	0.01	0.02	0.01	9.91	ppb
Molybdenum	96-1	0.02	0.02	0.01	0.02	25.73	ppb
Molybdenum	97-1	0.03	0.01	0.01	0.02	57.68	ppb
Molybdenum	98-1	0.01	0.02	0.01	0.02	17.42	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.12	0.15	0.11	0.13	15.44	ppb
Phosphorus	31-2	-25.22	-24.09	-22.45	-23.92		ppb
Potassium	39-2	41.36	42.39	40.80	41.52	1.94	ppb
Rhodium	103-1				108		%
Rhodium	103-2				109		%
Scandium	45-1				111		%
Scandium	45-2				107		%
Selenium	82-1	0.00	0.14	-0.17	-0.01		ppb
Selenium	77-2	0.64	0.00	0.65	0.43	86.61	ppb
Selenium	78-2	-0.07	-0.63	-0.82	-0.51		ppb
Silicon	28-1	2.77	2.82	2.87	2.82	1.78	ppb
Silver	107-1	0.04	0.03	0.03	0.03	17.22	ppb
Silver	109-1	0.03	0.03	0.02	0.03	14.99	ppb
Sodium	23-2	52.85	53.54	52.26	52.88	1.21	ppb
Strontium	86-1	0.51	0.30	0.31	0.37	31.53	ppb
Strontium	88-1	0.52	0.34	0.35	0.40	25.18	ppb
Sulfur	34-1	1327.37	1551.13	1632.83	1503.78	10.52	ppb
Terbium	159-1				108		%
Terbium	159-2				106		%
Thallium	203-1	0.01	0.01	0.01	0.01	31.29	ppb
Thallium	205-1	0.01	0.02	0.01	0.01	16.38	ppb
Tin	118-1	-0.01	-0.01	-0.02	-0.01		ppb
Titanium	47-1	0.01	0.01	0.01	0.01	6.47	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	-	ppb
amam	200 1	0.50	5.55	5.00	0.00		440

Lab Sample ID :PB166435BLInstrumnet Name :P8Client Sample ID :PBW435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	37.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				107		%
Zinc	66-2	-0.17	-0.23	-0.12	-0.17		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	220.82	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	29.85	ppb

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

Date & Time / to	quircu . 202	0 02 00 10.24.01	Datai	iic ivaiiic .	000L00L.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	40.71	40.13	39.98	40.27	0.96	ppb
Antimony	121-1	4.26	4.25	4.19	4.24	0.85	ppb
Arsenic	75-2	2.18	2.42	1.92	2.18	11.56	ppb
Barium	135-1	20.25	20.99	20.76	20.67	1.82	ppb
Barium	137-1	20.75	21.04	20.85	20.88	0.69	ppb
Beryllium	9-1	2.09	2.15	2.15	2.13	1.58	ppb
Bismuth	209-1				106		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	1.91	2.11	2.10	2.04	5.61	ppb
Cadmium	106-1	2.47	3.11	2.84	2.81	11.44	ppb
Cadmium	111-1	2.19	2.32	2.24	2.25	2.85	ppb
Calcium	43-1	988.55	1021.64	1015.97	1008.72	1.75	ppb
Calcium	44-1	976.38	998.52	996.12	990.34	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.18	4.15	4.16	4.16	0.47	ppb
Cobalt	59-2	2.11	2.17	2.19	2.16	1.73	ppb
Copper	63-2	4.66	4.83	4.77	4.75	1.86	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				106		%
Indium	115-1				110		%
Indium	115-2				105		%
Iron	54-2	418.42	422.15	419.33	419.97	0.46	ppb
Iron	56-2	435.89	437.42	430.52	434.61	0.83	ppb
Iron	57-2	420.55	418.80	412.08	417.14	1.07	ppb
Krypton	83-1						cps
Lead	206-1	2.04	2.00	1.94	1.99	2.53	ppb

<sub>1</sub> 251

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.01	2.02	2.02	2.02	0.14	ppb
Lead	208-1	2.00	2.01	2.00	2.01	0.35	ppb
Lithium	6-1				110		%
Magnesium	24-2	965.37	985.31	979.49	976.72	1.05	ppb
Manganese	55-2	2.08	2.21	2.26	2.18	4.14	ppb
Molybdenum	94-1	11.75	12.00	12.12	11.95	1.55	ppb
Molybdenum	95-1	9.88	10.09	10.02	10.00	1.06	ppb
Molybdenum	96-1	9.98	10.25	10.15	10.13	1.35	ppb
Molybdenum	97-1	10.01	9.99	10.27	10.09	1.56	ppb
Molybdenum	98-1	9.78	9.88	10.08	9.91	1.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.26	2.47	2.26	2.33	5.12	ppb
Phosphorus	31-2	16.28	16.04	48.99	27.10	69.95	ppb
Potassium	39-2	1013.65	1035.40	1040.06	1029.70	1.37	ppb
Rhodium	103-1				108		%
Rhodium	103-2				108		%
Scandium	45-1				110		%
Scandium	45-2				107		%
Selenium	82-1	10.85	11.46	10.78	11.03	3.40	ppb
Selenium	77-2	6.58	8.47	9.59	8.22	18.49	ppb
Selenium	78-2	12.00	10.93	10.32	11.08	7.68	ppb
Silicon	28-1	17.07	16.29	16.88	16.74	2.43	ppb
Silver	107-1	2.07	2.15	2.12	2.11	2.01	ppb
Silver	109-1	2.12	2.16	2.17	2.15	1.05	ppb
Sodium	23-2	1057.91	1074.28	1074.98	1069.06	0.90	ppb
Strontium	86-1	1.97	2.09	2.08	2.05	3.21	ppb
Strontium	88-1	2.01	2.06	2.09	2.05	2.04	ppb
Sulfur	34-1	1321.38	1371.66	1357.91	1350.32	1.92	ppb
Terbium	159-1				108		%
Terbium	159-2				106		%
Thallium	203-1	2.00	1.98	1.98	1.99	0.71	ppb
Thallium	205-1	2.02	2.01	2.00	2.01	0.67	ppb
Tin	118-1	10.56	10.85	10.57	10.66	1.54	ppb
Titanium	47-1	2.63	2.58	2.68	2.63	1.84	ppb
Uranium	238-1	1.84	1.85	1.84	1.84	0.18	ppb

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.08	10.43	10.57	10.36	2.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				106		%
Zinc	66-2	10.20	10.25	9.97	10.14	1.47	ppb
Zirconium	90-1	1.98	1.99	2.03	2.00	1.18	ppb
Zirconium	91-1	1.95	2.05	1.96	1.98	2.66	ppb

Lab Sample ID: Q1200-01 Instrumnet Name: P8
Client Sample ID: ME2964 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Date & Time Ac	quireu . 202	25-02-00 15.26.46	Dalari	ile ivallie .	UUUAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	591.32	574.16	591.82	585.77	1.72	ppb	
Antimony	121-1	0.09	0.09	0.09	0.09	1.60	ppb	
Arsenic	75-2	2.07	2.31	2.07	2.15	6.63	ppb	
Barium	135-1	41.81	42.40	42.78	42.33	1.15	ppb	
Barium	137-1	42.24	42.43	42.32	42.33	0.24	ppb	
Beryllium	9-1	0.02	0.02	0.01	0.02	19.12	ppb	
Bismuth	209-1				99		%	
Bismuth	209-2				100		%	
Bromine	81-1						cps	
Cadmium	108-1	0.62	0.57	0.61	0.60	4.55	ppb	
Cadmium	106-1	1.36	0.85	0.49	0.90	48.66	ppb	
Cadmium	111-1	0.13	0.09	0.06	0.09	37.74	ppb	
Calcium	43-1	134004.93	135781.71	134009.37	134598.67	0.76	ppb	
Calcium	44-1	130899.86	134498.25	132751.90	132716.67	1.36	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.15	0.10	0.13	0.13	16.99	ppb	
Cobalt	59-2	0.12	0.13	0.11	0.12	7.80	ppb	
Copper	63-2	0.73	0.72	0.73	0.72	0.91	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				107		%	
Holmium	165-2				106		%	
Indium	115-1				106		%	
Indium	115-2				101		%	
Iron	54-2	27.72	28.63	27.96	28.10	1.67	ppb	
Iron	56-2	28.25	28.22	28.29	28.26	0.12	ppb	
Iron	57-2	32.16	31.83	30.50	31.50	2.79	ppb	
Krypton	83-1						cps	
Lead	206-1	0.22	0.21	0.24	0.22	7.03	ppb	

Lab Sample ID :Q1200-01Instrumnet Name :P8Client Sample ID :ME2964Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Date & Time Act	quireu . 202	25-02-00 15.26.46	Dalar	ile Name.	UUUAKEF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.23	0.20	0.22	0.22	6.23	ppb
Lead	208-1	0.22	0.22	0.23	0.22	2.14	ppb
Lithium	6-1				108		%
Magnesium	24-2	16.11	16.16	16.44	16.24	1.12	ppb
Manganese	55-2	2.76	2.88	2.79	2.81	2.27	ppb
Molybdenum	94-1	36.03	35.93	36.44	36.13	0.74	ppb
Molybdenum	95-1	43.07	43.18	44.12	43.46	1.33	ppb
Molybdenum	96-1	41.68	42.52	43.09	42.43	1.68	ppb
Molybdenum	97-1	42.97	43.55	44.23	43.58	1.46	ppb
Molybdenum	98-1	42.26	42.81	43.31	42.79	1.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	166.17	164.67	165.66	165.50	0.46	ppb
Phosphorus	31-2	433.80	400.94	403.13	412.63	4.45	ppb
Potassium	39-2	62481.57	62407.71	63380.96	62756.74	0.86	ppb
Rhodium	103-1				101		%
Rhodium	103-2				103		%
Scandium	45-1				107		%
Scandium	45-2				107		%
Selenium	82-1	1.67	1.89	1.57	1.71	9.42	ppb
Selenium	77-2	0.00	0.65	0.66	0.44	86.60	ppb
Selenium	78-2	0.89	0.52	-0.43	0.32	210.44	ppb
Silicon	28-1	2313.04	2394.47	2362.87	2356.79	1.74	ppb
Silver	107-1	0.02	0.02	0.02	0.02	14.38	ppb
Silver	109-1	0.02	0.01	0.02	0.02	15.58	ppb
Sodium	23-2	32800.90	32305.12	31997.50	32367.84	1.25	ppb
Strontium	86-1	1326.46	1331.29	1339.70	1332.48	0.50	ppb
Strontium	88-1	1311.50	1335.38	1346.54	1331.14	1.34	ppb
Sulfur	34-1	13057.03	13072.71	12693.20	12940.98	1.66	ppb
Terbium	159-1				107		%
Terbium	159-2				106		%
Thallium	203-1	0.01	0.01	0.01	0.01	36.17	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	31.21	ppb
Tin	118-1	0.73	0.77	0.75	0.75	3.02	ppb
Titanium	47-1	0.67	0.65	0.68	0.66	2.07	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1200-01 Instrumnet Name: P8
Client Sample ID: ME2964 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.65	2.67	2.63	2.65	0.82	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				106		%
Zinc	66-2	1.68	1.96	2.00	1.88	9.42	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	6.20	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	18.90	ppb

<sub>3</sub> 256

Lab Sample ID: Q1200-02 Instrumnet Name: P8
Client Sample ID: ME2964D Dilution Factor: 1

1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	595.39	600.39	587.24	594.34	1.12	ppb
Antimony	121-1	0.08	0.09	0.10	0.09	6.87	ppb
Arsenic	75-2	2.48	2.52	2.36	2.45	3.42	ppb
Barium	135-1	42.22	42.31	43.16	42.56	1.22	ppb
Barium	137-1	42.37	42.29	43.91	42.86	2.13	ppb
Beryllium	9-1	0.01	0.02	0.01	0.02	23.68	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.63	0.60	0.51	0.58	10.99	ppb
Cadmium	106-1	1.17	-0.15	0.85	0.62	110.89	ppb
Cadmium	111-1	0.12	0.01	0.10	0.08	74.30	ppb
Calcium	43-1	134809.97	135033.90	133900.44	134581.44	0.45	ppb
Calcium	44-1	132788.66	131877.55	133868.06	132844.76	0.75	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.07	0.03	0.00	0.03	107.95	ppb
Cobalt	59-2	0.13	0.12	0.11	0.12	10.46	ppb
Copper	63-2	0.69	0.70	0.69	0.69	1.11	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	54-2	24.59	26.52	27.66	26.26	5.91	ppb
Iron	56-2	27.43	27.50	27.03	27.32	0.94	ppb
Iron	57-2	28.70	29.61	28.62	28.98	1.91	ppb
Krypton	83-1						cps
Lead	206-1	0.23	0.22	0.22	0.22	4.70	ppb

Lab Sample ID: Q1200-02 Instrumnet Name: P8

Client Sample ID: ME2964D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.20	0.20	0.21	0.20	4.27	ppb
Lead	208-1	0.21	0.21	0.21	0.21	0.87	ppb
Lithium	6-1				108		%
Magnesium	24-2	14.94	15.43	15.00	15.13	1.76	ppb
Manganese	55-2	2.65	2.70	2.77	2.71	2.16	ppb
Molybdenum	94-1	35.79	35.51	36.56	35.95	1.52	ppb
Molybdenum	95-1	43.47	42.51	44.98	43.65	2.86	ppb
Molybdenum	96-1	42.34	41.44	43.52	42.44	2.46	ppb
Molybdenum	97-1	43.71	43.20	44.58	43.83	1.59	ppb
Molybdenum	98-1	43.12	42.35	44.06	43.17	1.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	164.94	165.33	166.84	165.70	0.61	ppb
Phosphorus	31-2	406.27	387.81	389.47	394.52	2.59	ppb
Potassium	39-2	63300.05	63163.01	63445.25	63302.77	0.22	ppb
Rhodium	103-1				101		%
Rhodium	103-2				102		%
Scandium	45-1				107		%
Scandium	45-2				105		%
Selenium	82-1	1.42	1.40	1.43	1.41	1.05	ppb
Selenium	77-2	0.67	1.33	1.96	1.32	48.63	ppb
Selenium	78-2	0.95	-0.04	1.46	0.79	96.26	ppb
Silicon	28-1	2336.01	2333.47	2372.25	2347.25	0.92	ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.07	ppb
Silver	109-1	0.01	0.01	0.01	0.01	23.95	ppb
Sodium	23-2	31437.21	32429.24	32485.46	32117.30	1.84	ppb
Strontium	86-1	1343.02	1318.85	1348.90	1336.92	1.19	ppb
Strontium	88-1	1346.75	1322.75	1367.94	1345.81	1.68	ppb
Sulfur	34-1	12946.57	12285.87	12591.67	12608.04	2.62	ppb
Terbium	159-1				106		%
Terbium	159-2				103		%
Thallium	203-1	0.00	0.00	0.00	0.00	35.01	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	16.95	ppb
Tin	118-1	0.77	0.76	0.75	0.76	1.45	ppb
	47.4	0.70	0.64	0.65	0.66	4.14	ppb
Titanium	47-1	0.70	0.0-	0.00	0.00	7.17	PPD

Lab Sample ID :Q1200-02Instrumnet Name :P8Client Sample ID :ME2964DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Vanadium	51-2	2.60	2.64	2.68	2.64	1.48	ppb	
Ytterbium	172-1						cps	
Ytterbium	172-2						cps	
Ytterbium	176-1						cps	
Ytterbium	176-2						cps	
Yttrium	89-1				107		%	
Yttrium	89-2				104		%	
Zinc	66-2	1.68	1.83	1.67	1.73	5.23	ppb	
Zirconium	90-1	0.02	0.02	0.01	0.02	22.41	ppb	
Zirconium	91-1	0.01	0.02	0.02	0.02	27.37	ppb	

<sub>3</sub> 259

Lab Sample ID : Q1200-01LX5 Instrumnet Name : P8

Client Sample ID : ME2964L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Date & Time 7to	quiicu . Zoz	20 02 00 10.00.10	Datai	iic i vairie .	002/ (I \L I . u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	123.26	119.81	122.26	121.77	1.46	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	4.45	ppb
Arsenic	75-2	0.46	0.44	0.41	0.44	5.92	ppb
Barium	135-1	8.82	8.85	7.94	8.54	6.06	ppb
Barium	137-1	9.13	8.68	8.04	8.62	6.37	ppb
Beryllium	9-1	0.02	0.01	0.01	0.02	29.03	ppb
Bismuth	209-1				104		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.08	0.10	0.06	0.08	23.72	ppb
Cadmium	106-1	0.64	0.61	1.10	0.78	35.42	ppb
Cadmium	111-1	0.05	0.05	0.10	0.07	34.91	ppb
Calcium	43-1	29276.26	27807.13	25938.06	27673.82	6.05	ppb
Calcium	44-1	28688.72	27275.20	25053.33	27005.75	6.79	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.05	-0.02	-0.04		ppb
Cobalt	59-2	0.03	0.02	0.02	0.02	16.93	ppb
Copper	63-2	0.42	0.37	0.43	0.41	8.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				105		%
Indium	115-1				108		%
Indium	115-2				102		%
Iron	54-2	6.22	6.89	6.18	6.43	6.15	ppb
Iron	56-2	7.00	6.71	6.73	6.81	2.34	ppb
Iron	57-2	7.17	7.25	7.01	7.14	1.67	ppb
Krypton	83-1						cps
Lead	206-1	0.06	0.06	0.04	0.05	14.23	ppb

Lab Sample ID :Q1200-01LX5Instrumnet Name :P8Client Sample ID :ME2964LDilution Factor :5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Date & Time Act	quircu . Zoz	0 02 00 10.00.10	Datai	iic ivairie .	002/ (I \LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.06	0.06	0.04	0.05	19.13	ppb
Lead	208-1	0.06	0.05	0.05	0.05	15.93	ppb
Lithium	6-1				110		%
Magnesium	24-2	-5.16	-5.31	-5.89	-5.45		ppb
Manganese	55-2	0.58	0.52	0.56	0.55	5.13	ppb
Molybdenum	94-1	7.64	7.20	6.64	7.16	7.02	ppb
Molybdenum	95-1	9.05	8.77	7.89	8.57	7.06	ppb
Molybdenum	96-1	8.97	8.55	7.82	8.45	6.92	ppb
Molybdenum	97-1	9.19	8.93	8.03	8.72	6.94	ppb
Molybdenum	98-1	9.09	8.69	7.85	8.54	7.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	35.26	33.87	34.33	34.49	2.05	ppb
Phosphorus	31-2	74.82	33.74	62.11	56.89	36.97	ppb
Potassium	39-2	13316.88	12710.69	12937.05	12988.21	2.36	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				108		%
Scandium	45-2				105		%
Selenium	82-1	0.29	0.25	0.28	0.27	7.97	ppb
Selenium	77-2	0.67	0.00	0.00	0.22	173.21	ppb
Selenium	78-2	-0.42	0.52	-1.01	-0.30		ppb
Silicon	28-1	496.91	474.47	441.67	471.01	5.90	ppb
Silver	107-1	0.01	0.01	0.00	0.01	25.11	ppb
Silver	109-1	0.00	0.00	0.00	0.00	11.37	ppb
Sodium	23-2	6641.77	6607.27	6606.67	6618.57	0.30	ppb
Strontium	86-1	288.79	271.69	246.39	268.96	7.93	ppb
Strontium	88-1	285.49	272.94	246.19	268.21	7.48	ppb
Sulfur	34-1	4935.02	4053.09	3343.67	4110.60	19.39	ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.00	0.00	0.00	0.00		ppb
Thallium	205-1	0.00	0.00	0.00	0.00	228.19	ppb
Tin	118-1	0.17	0.15	0.14	0.15	10.76	ppb
Titanium	47-1	0.13	0.17	0.13	0.14	16.05	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1200-01LX5 Instrumnet Name: P8
Client Sample ID: ME2964L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.58	0.52	0.52	0.54	6.63	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	0.49	0.42	0.41	0.44	9.83	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	600.24	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	4.69	ppb

Lab Sample ID :Q1200-03Instrumnet Name :P8Client Sample ID :ME2964SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Date & Time Ac	quireu . 202	25-02-00 15.36.29	Dalari	ie name.	UUSAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	2484.76	2441.52	2452.19	2459.49	0.92	ppb	
Antimony	121-1	140.80	124.96	121.96	129.24	7.83	ppb	
Arsenic	75-2	42.23	43.23	42.89	42.78	1.19	ppb	
Barium	135-1	2438.49	2184.11	2164.85	2262.48	6.75	ppb	
Barium	137-1	2423.90	2149.69	2110.51	2228.03	7.66	ppb	
Beryllium	9-1	56.40	50.68	52.04	53.04	5.64	ppb	
Bismuth	209-1				94		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	47.93	42.94	41.96	44.28	7.23	ppb	
Cadmium	106-1	47.65	41.61	41.08	43.45	8.40	ppb	
Cadmium	111-1	57.54	50.70	49.63	52.63	8.16	ppb	
Calcium	43-1	150211.21	133198.02	128756.97	137388.73	8.24	ppb	
Calcium	44-1	148425.81	131105.32	126463.27	135331.47	8.55	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	209.18	206.42	208.07	207.89	0.67	ppb	
Cobalt	59-2	539.80	535.38	542.00	539.06	0.63	ppb	
Copper	63-2	280.62	266.15	279.13	275.30	2.89	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				100		%	
Holmium	165-2				102		%	
Indium	115-1				100		%	
Indium	115-2				99		%	
Iron	54-2	1215.88	1205.51	1199.34	1206.91	0.69	ppb	
Iron	56-2	1105.41	1067.12	1096.10	1089.54	1.83	ppb	
Iron	57-2	1056.50	1033.68	1054.12	1048.10	1.20	ppb	
Krypton	83-1						cps	
Lead	206-1	22.89	20.54	20.42	21.29	6.54	ppb	

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Lab Sample ID: Q1200-03 Instrumnet Name: P8

Client Sample ID: ME2964S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:38:29	Datar	·lie Name :	063AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	22.73	20.45	20.56	21.25	6.07	ppb
Lead	208-1	22.87	20.44	20.41	21.24	6.65	ppb
Lithium	6-1				100		%
Magnesium	24-2	15.06	14.89	14.55	14.83	1.73	ppb
Manganese	55-2	508.71	500.45	502.74	503.97	0.85	ppb
Molybdenum	94-1	38.44	35.24	35.16	36.28	5.16	ppb
Molybdenum	95-1	46.94	42.16	42.09	43.73	6.35	ppb
Molybdenum	96-1	45.40	41.09	41.07	42.52	5.87	ppb
Molybdenum	97-1	47.54	43.02	42.46	44.34	6.27	ppb
Molybdenum	98-1	46.56	42.22	41.73	43.50	6.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	715.69	666.62	715.98	699.43	4.06	ppb
Phosphorus	31-2	448.64	429.59	466.05	448.09	4.07	ppb
Potassium	39-2	61092.36	60307.82	62028.26	61142.81	1.41	ppb
Rhodium	103-1				94		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				103		%
Selenium	82-1	22.72	20.40	20.90	21.34	5.73	ppb
Selenium	77-2	30.81	18.07	18.85	22.58	31.64	ppb
Selenium	78-2	17.69	20.18	19.14	19.01	6.58	ppb
Silicon	28-1	2632.39	2331.14	2284.78	2416.10	7.81	ppb
Silver	107-1	55.20	49.33	48.68	51.07	7.03	ppb
Silver	109-1	55.70	50.23	49.45	51.79	6.58	ppb
Sodium	23-2	31648.51	31101.42	31322.12	31357.35	0.88	ppb
Strontium	86-1	1475.55	1309.37	1296.74	1360.56	7.33	ppb
Strontium	88-1	1456.31	1302.51	1290.03	1349.62	6.86	ppb
Sulfur	34-1	15047.24	11727.11	11419.32	12731.23	15.80	ppb
Terbium	159-1				101		%
Terbium	159-2				103		%
Thallium	203-1	56.88	50.60	51.01	52.83	6.65	ppb
Thallium	205-1	59.74	54.17	52.68	55.53	6.70	ppb
Tin	118-1	0.87	0.74	0.74	0.78	9.88	ppb
Titanium	47-1	0.93	0.75	0.71	0.80	14.29	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :Q1200-03Instrumnet Name :P8Client Sample ID :ME2964SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	544.59	520.49	536.81	533.96	2.30	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				102		%
Zinc	66-2	504.63	499.03	503.12	502.26	0.58	ppb
Zirconium	90-1	0.04	0.03	0.03	0.03	7.22	ppb
Zirconium	91-1	0.07	0.05	0.05	0.06	18.43	ppb

Lab Sample ID: Q1200-04 Instrumnet Name: P8

Client Sample ID: ME2981 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9.52	10.44	10.77	10.24	6.36	ppb
Antimony	121-1	0.21	0.18	0.17	0.18	11.46	ppb
Arsenic	75-2	0.54	0.57	0.50	0.53	6.05	ppb
Barium	135-1	31.36	27.73	27.14	28.74	7.94	ppb
Barium	137-1	31.39	27.75	27.35	28.83	7.73	ppb
Beryllium	9-1	0.04	0.02	0.03	0.03	29.61	ppb
Bismuth	209-1				90		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	0.11	0.06	0.06	0.08	34.91	ppb
Cadmium	106-1	0.20	-0.08	-0.73	-0.20		ppb
Cadmium	111-1	0.02	0.00	-0.06	-0.01		ppb
Calcium	43-1	369597.70	321557.04	317640.07	336264.94	8.60	ppb
Calcium	44-1	365716.34	317233.06	308297.63	330415.68	9.35	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.50	1.44	1.55	1.50	3.55	ppb
Cobalt	59-2	0.07	0.08	0.07	0.07	7.79	ppb
Copper	63-2	0.15	0.15	0.16	0.15	5.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				102		%
Indium	115-1				97		%
Indium	115-2				97		%
Iron	54-2	346.39	357.73	356.38	353.50	1.75	ppb
Iron	56-2	353.74	359.12	354.91	355.92	0.80	ppb
Iron	57-2	358.47	361.19	359.54	359.73	0.38	ppb
Krypton	83-1						cps
Lead	206-1	1.52	1.32	1.32	1.39	8.63	ppb

Lab Sample ID: Q1200-04 Instrumnet Name: P8
Client Sample ID: ME2981 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Date & Time Acc	quirea: 202	25-02-06 15:41:35	DataF	ile Name :	064AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.49	1.29	1.25	1.34	9.62	ppb
Lead	208-1	1.49	1.29	1.26	1.35	9.11	ppb
Lithium	6-1				98		%
Magnesium	24-2	92507.23	92215.72	93146.09	92623.01	0.51	ppb
Manganese	55-2	20.12	20.67	19.73	20.17	2.33	ppb
Molybdenum	94-1	4.58	3.91	4.05	4.18	8.41	ppb
Molybdenum	95-1	5.40	4.66	4.66	4.90	8.70	ppb
Molybdenum	96-1	5.26	4.63	4.64	4.84	7.47	ppb
Molybdenum	97-1	5.42	4.68	4.74	4.95	8.32	ppb
Molybdenum	98-1	5.30	4.74	4.67	4.90	7.00	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.56	0.43	0.53	0.51	13.76	ppb
Phosphorus	31-2	-6.04	-7.34	-13.69	-9.02		ppb
Potassium	39-2	3309.82	3390.89	3352.57	3351.09	1.21	ppb
Rhodium	103-1				91		%
Rhodium	103-2				97		%
Scandium	45-1				98		%
Scandium	45-2				102		%
Selenium	82-1	0.54	0.01	0.41	0.32	86.23	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.22	0.19	-0.40	-0.14		ppb
Silicon	28-1	5935.10	5064.62	4940.99	5313.57	10.20	ppb
Silver	107-1	0.05	0.03	0.02	0.03	41.87	ppb
Silver	109-1	0.04	0.03	0.02	0.03	28.79	ppb
Sodium	23-2	21131.63	21284.66	21018.69	21144.99	0.63	ppb
Strontium	86-1	11924.54	10350.54	10414.59	10896.55	8.18	ppb
Strontium	88-1	11704.22	10321.35	10342.82	10789.46	7.34	ppb
Sulfur	34-1	408449.98	353033.82	347954.60	369812.80	9.07	ppb
Terbium	159-1				99		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	23.05	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	31.94	ppb
Tin	118-1	0.57	0.51	0.46	0.51	10.55	ppb
Titanium	47-1	0.80	0.69	0.69	0.73	8.92	ppb
Uranium	238-1	38.46	33.53	33.87	35.29	7.79	ppb

Lab Sample ID :Q1200-04Instrumnet Name :P8Client Sample ID :ME2981Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.09	0.10	0.07	0.09	13.93	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				101		%
Zinc	66-2	0.63	0.75	0.77	0.72	10.20	ppb
Zirconium	90-1	0.07	0.06	0.06	0.06	3.37	ppb
Zirconium	91-1	0.07	0.07	0.07	0.07	2.69	ppb

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Lab Sample ID: Q1200-05 Instrumnet Name: P8

Client Sample ID: ME2982 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Date & Time Ac	quireu . 202	25-02-06 15.44.47	Dalari	ile Name.	UUSAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	11.78	11.16	10.98	11.31	3.70	ppb	
Antimony	121-1	0.05	0.04	0.05	0.05	13.26	ppb	
Arsenic	75-2	0.46	0.39	0.43	0.43	7.65	ppb	
Barium	135-1	47.90	48.81	49.64	48.79	1.78	ppb	
Barium	137-1	48.16	48.95	49.73	48.95	1.60	ppb	
Beryllium	9-1	0.02	0.02	0.02	0.02	4.17	ppb	
Bismuth	209-1				96		%	
Bismuth	209-2				95		%	
Bromine	81-1						cps	
Cadmium	108-1	0.03	0.03	0.08	0.05	56.75	ppb	
Cadmium	106-1	1.20	-0.19	-0.48	0.18	502.93	ppb	
Cadmium	111-1	0.09	-0.01	-0.04	0.01	508.30	ppb	
Calcium	43-1	367276.44	368580.87	377131.35	370996.22	1.44	ppb	
Calcium	44-1	357242.00	363001.03	368086.08	362776.37	1.50	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.42	0.45	0.47	0.45	5.66	ppb	
Cobalt	59-2	0.16	0.16	0.15	0.16	2.44	ppb	
Copper	63-2	0.91	0.93	0.92	0.92	1.09	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				106		%	
Holmium	165-2				104		%	
Indium	115-1				103		%	
Indium	115-2				99		%	
Iron	54-2	275.76	274.86	271.69	274.10	0.78	ppb	
Iron	56-2	275.34	277.77	271.88	275.00	1.08	ppb	
Iron	57-2	280.87	281.81	275.98	279.55	1.12	ppb	
Krypton	83-1						cps	
Lead	206-1	0.06	0.08	0.10	0.08	23.37	ppb	

Lab Sample ID :Q1200-05Instrumnet Name :P8Client Sample ID :ME2982Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Date a Time Act	quircu . Zoz	20 02 00 10.44.47	Datai	iic ivairie .	000/ ((KE) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.08	0.08	3.39	ppb
Lead	208-1	0.08	0.08	0.09	0.08	9.05	ppb
Lithium	6-1				105		%
Magnesium	24-2	92973.09	92702.86	92635.68	92770.54	0.19	ppb
Manganese	55-2	321.04	323.56	314.10	319.57	1.53	ppb
Molybdenum	94-1	0.42	0.49	0.47	0.46	7.50	ppb
Molybdenum	95-1	0.29	0.31	0.33	0.31	5.84	ppb
Molybdenum	96-1	0.30	0.31	0.31	0.31	2.22	ppb
Molybdenum	97-1	0.30	0.30	0.32	0.31	3.11	ppb
Molybdenum	98-1	0.27	0.30	0.32	0.30	8.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.37	0.42	0.46	0.42	10.67	ppb
Phosphorus	31-2	51.65	46.51	42.60	46.92	9.67	ppb
Potassium	39-2	3499.77	3517.25	3452.15	3489.72	0.97	ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				103		%
Selenium	82-1	0.18	0.27	0.11	0.19	42.68	ppb
Selenium	77-2	0.67	0.67	0.00	0.45	86.61	ppb
Selenium	78-2	-0.03	0.37	-0.62	-0.10		ppb
Silicon	28-1	5622.54	5841.42	5822.07	5762.01	2.10	ppb
Silver	107-1	0.02	0.02	0.01	0.02	19.31	ppb
Silver	109-1	0.01	0.03	0.01	0.01	72.26	ppb
Sodium	23-2	21368.98	21352.13	20861.26	21194.12	1.36	ppb
Strontium	86-1	12828.70	13524.54	14092.76	13482.00	4.70	ppb
Strontium	88-1	12846.17	13583.82	13863.26	13431.08	3.91	ppb
Sulfur	34-1	383500.55	390183.80	399206.98	390963.78	2.02	ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.00	0.00	0.01	28.34	ppb
Thallium	205-1	0.00	0.00	0.01	0.00	18.70	ppb
Tin	118-1	0.33	0.34	0.35	0.34	2.23	ppb
Titanium	47-1	0.80	0.93	0.87	0.86	7.86	ppb
Uranium	238-1	0.16	0.16	0.16	0.16	1.67	ppb

Lab Sample ID : Q1200-05 Instrumnet Name : P8
Client Sample ID : ME2982 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Vanadium	51-2	0.13	0.14	0.13	0.13	4.06	ppb	
Ytterbium	172-1						cps	
Ytterbium	172-2						cps	
Ytterbium	176-1						cps	
Ytterbium	176-2						cps	
Yttrium	89-1				105		%	
Yttrium	89-2				104		%	
Zinc	66-2	0.61	0.77	0.73	0.70	11.42	ppb	
Zirconium	90-1	0.10	0.12	0.11	0.11	5.60	ppb	
Zirconium	91-1	0.12	0.11	0.14	0.12	9.54	ppb	

Lab Sample ID :Q1200-06Instrumnet Name :P8Client Sample ID :ME2983Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Date & Time Ac	quireu . 202	25-02-06 15.46.02	Dalari	ile ivaille .	UUUAKEF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7.58	5.87	6.85	6.77	12.67	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	5.35	ppb
Arsenic	75-2	0.08	0.06	0.04	0.06	34.69	ppb
Barium	135-1	11.51	11.34	10.92	11.26	2.69	ppb
Barium	137-1	11.88	11.24	10.92	11.35	4.30	ppb
Beryllium	9-1	0.03	0.03	0.03	0.03	6.69	ppb
Bismuth	209-1				94		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	0.08	0.07	0.09	0.08	15.45	ppb
Cadmium	106-1	1.43	-0.03	0.08	0.49	165.19	ppb
Cadmium	111-1	0.11	0.00	0.01	0.04	164.98	ppb
Calcium	43-1	452893.62	442340.01	420613.05	438615.56	3.75	ppb
Calcium	44-1	440913.61	436188.98	411094.34	429398.98	3.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.38	0.46	0.43	0.42	9.17	ppb
Cobalt	59-2	0.10	0.10	0.09	0.10	5.90	ppb
Copper	63-2	0.36	0.33	0.36	0.35	4.91	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				96		%
Indium	115-1				102		%
Indium	115-2				90		%
Iron	54-2	224.72	219.93	215.50	220.05	2.09	ppb
Iron	56-2	223.78	222.32	217.50	221.20	1.48	ppb
Iron	57-2	233.09	231.92	236.71	233.91	1.07	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.18	0.17	0.17	10.22	ppb

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Lab Sample ID: Q1200-06 Instrumnet Name: P8

Client Sample ID: ME2983 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Date a Time Act	quircu . Zoz	20 02 00 10.40.02	Datari	ic ivallic .	000/ (( \L   . \d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.16	0.15	0.15	0.15	2.21	ppb
Lead	208-1	0.17	0.17	0.16	0.17	1.58	ppb
Lithium	6-1				103		%
Magnesium	24-2	124219.24	124881.88	117966.12	122355.75	3.12	ppb
Manganese	55-2	37.47	37.40	36.73	37.20	1.10	ppb
Molybdenum	94-1	0.39	0.44	0.36	0.40	9.95	ppb
Molybdenum	95-1	0.27	0.28	0.25	0.27	4.70	ppb
Molybdenum	96-1	0.24	0.26	0.24	0.25	6.27	ppb
Molybdenum	97-1	0.25	0.24	0.23	0.24	3.11	ppb
Molybdenum	98-1	0.27	0.24	0.22	0.24	8.95	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.52	0.52	0.45	0.49	7.93	ppb
Phosphorus	31-2	-8.84	-13.56	-8.27	-10.22		ppb
Potassium	39-2	7261.40	7224.18	7014.82	7166.80	1.85	ppb
Rhodium	103-1				95		%
Rhodium	103-2				91		%
Scandium	45-1				104		%
Scandium	45-2				97		%
Selenium	82-1	0.74	0.21	0.60	0.52	53.22	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.46	-0.58	1.03	0.30	270.23	ppb
Silicon	28-1	7538.53	7502.52	7093.76	7378.27	3.35	ppb
Silver	107-1	0.02	0.02	0.02	0.02	6.04	ppb
Silver	109-1	0.01	0.01	0.01	0.01	19.51	ppb
Sodium	23-2	76332.43	76189.99	73653.95	75392.12	2.00	ppb
Strontium	86-1	13423.03	12778.36	12416.12	12872.50	3.96	ppb
Strontium	88-1	13140.31	12773.60	12446.72	12786.87	2.71	ppb
Sulfur	34-1	466273.83	461395.42	436102.81	454590.69	3.56	ppb
Terbium	159-1				103		%
Terbium	159-2				95		%
Thallium	203-1	0.00	0.01	0.00	0.00	64.26	ppb
Thallium	205-1	0.00	0.01	0.01	0.01	22.79	ppb
Tin	118-1	0.55	0.52	0.49	0.52	5.27	ppb
Titanium	47-1	0.73	0.72	0.67	0.71	4.66	ppb
Uranium	238-1	0.08	0.08	0.08	0.08	3.55	ppb

Lab Sample ID : Q1200-06 Instrumnet Name : P8
Client Sample ID : ME2983 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.13	0.14	0.14	6.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				97		%
Zinc	66-2	2.02	1.89	1.72	1.88	7.86	ppb
Zirconium	90-1	0.10	0.09	0.09	0.09	4.95	ppb
Zirconium	91-1	0.10	0.09	0.09	0.09	6.39	ppb

<sub>3</sub> 274

Lab Sample ID :Q1200-07Instrumnet Name :P8Client Sample ID :ME2984Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Date & Time Ac	quireu . 202	25-02-06 15.51.17	Dalari	ile ivaille .	00/AREF.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	2019.48	1994.90	1987.14	2000.51	0.84	ppb	
Antimony	121-1	0.97	0.97	0.97	0.97	0.18	ppb	
Arsenic	75-2	2.33	2.08	2.09	2.17	6.49	ppb	
Barium	135-1	101.04	102.06	99.61	100.91	1.22	ppb	
Barium	137-1	101.45	101.57	101.51	101.51	0.06	ppb	
Beryllium	9-1	0.13	0.13	0.14	0.13	2.67	ppb	
Bismuth	209-1				94		%	
Bismuth	209-2				93		%	
Bromine	81-1						cps	
Cadmium	108-1	0.37	0.34	0.36	0.36	4.43	ppb	
Cadmium	106-1	0.42	0.55	0.49	0.49	13.85	ppb	
Cadmium	111-1	0.08	0.09	0.09	0.09	2.42	ppb	
Calcium	43-1	297885.20	303283.70	297054.38	299407.76	1.13	ppb	
Calcium	44-1	286345.45	297981.00	284938.15	289754.87	2.47	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	4.27	4.21	4.28	4.25	0.98	ppb	
Cobalt	59-2	5.75	5.56	5.56	5.62	1.94	ppb	
Copper	63-2	6.00	6.07	5.99	6.02	0.67	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				105		%	
Holmium	165-2				100		%	
Indium	115-1				101		%	
Indium	115-2				96		%	
Iron	54-2	3077.14	3088.42	3047.39	3070.98	0.69	ppb	
Iron	56-2	3201.66	3160.31	3138.58	3166.85	1.01	ppb	
Iron	57-2	3105.84	3091.33	3035.78	3077.65	1.20	ppb	
Krypton	83-1						cps	
Lead	206-1	4.17	4.25	4.11	4.17	1.72	ppb	

Lab Sample ID: Q1200-07 Instrumnet Name: P8
Client Sample ID: ME2984 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	3.87	3.92	3.89	3.90	0.66	ppb
Lead	208-1	3.95	4.03	3.97	3.98	1.12	ppb
Lithium	6-1				103		%
Magnesium	24-2	94732.38	92729.29	91072.58	92844.75	1.97	ppb
Manganese	55-2	908.65	891.42	861.39	887.15	2.70	ppb
Molybdenum	94-1	8.42	8.41	8.47	8.44	0.35	ppb
Molybdenum	95-1	7.77	7.79	7.78	7.78	0.13	ppb
Molybdenum	96-1	7.59	7.59	7.69	7.62	0.75	ppb
Molybdenum	97-1	7.55	7.75	7.65	7.65	1.30	ppb
Molybdenum	98-1	7.51	7.65	7.55	7.57	0.94	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.88	9.00	8.81	8.90	1.12	ppb
Phosphorus	31-2	531.11	521.38	543.38	531.96	2.07	ppb
Potassium	39-2	6705.36	6613.15	6526.68	6615.06	1.35	ppb
Rhodium	103-1				96		%
Rhodium	103-2				96		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.62	0.66	0.51	0.60	13.05	ppb
Selenium	77-2	5.51	2.07	1.36	2.98	74.47	ppb
Selenium	78-2	0.00	0.20	-0.02	0.06	206.33	ppb
Silicon	28-1	9485.57	9991.11	9536.80	9671.16	2.88	ppb
Silver	107-1	0.03	0.03	0.03	0.03	3.02	ppb
Silver	109-1	0.02	0.02	0.03	0.02	6.10	ppb
Sodium	23-2	25761.17	25337.57	25162.82	25420.52	1.21	ppb
Strontium	86-1	17644.80	17758.91	17907.72	17770.48	0.74	ppb
Strontium	88-1	17552.62	17674.46	18210.36	17812.48	1.96	ppb
Sulfur	34-1	287635.77	296270.53	285000.04	289635.44	2.04	ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	0.08	0.09	0.08	0.08	7.09	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	4.27	ppb
Tin	118-1	3.44	3.35	3.45	3.41	1.65	ppb
Titanium	47-1	44.33	46.55	44.39	45.09	2.80	ppb
Uranium	238-1	3.15	3.20	3.12	3.16	1.40	ppb

Lab Sample ID: Q1200-07 Instrumnet Name: P8
Client Sample ID: ME2984 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.86	5.93	5.82	5.87	0.98	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				101		%
Zinc	66-2	19.65	20.46	19.65	19.92	2.36	ppb
Zirconium	90-1	1.13	1.11	1.11	1.12	1.13	ppb
Zirconium	91-1	1.07	1.11	1.16	1.11	3.89	ppb

Lab Sample ID :Q1200-08Instrumnet Name :P8Client Sample ID :ME2985Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Date & Time 7to	quirou . 202	0 02 00 10.04.02	Batari	ic ivallic .	000/ (I (E) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8.36	8.50	7.76	8.20	4.81	ppb
Antimony	121-1	0.08	0.07	0.07	0.07	6.81	ppb
Arsenic	75-2	0.32	0.31	0.30	0.31	2.80	ppb
Barium	135-1	100.59	100.50	100.56	100.55	0.05	ppb
Barium	137-1	101.80	103.52	99.45	101.59	2.01	ppb
Beryllium	9-1	0.01	0.02	0.02	0.02	34.25	ppb
Bismuth	209-1				91		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.04	0.08	0.05	37.55	ppb
Cadmium	106-1	0.31	0.25	-0.38	0.06	639.41	ppb
Cadmium	111-1	0.03	0.02	-0.03	0.01	339.66	ppb
Calcium	43-1	405430.49	397858.53	400331.14	401206.72	0.96	ppb
Calcium	44-1	393604.24	390635.27	394343.33	392860.95	0.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.12	1.17	1.19	1.16	3.02	ppb
Cobalt	59-2	0.10	0.10	0.09	0.10	8.46	ppb
Copper	63-2	0.90	0.86	0.81	0.85	5.63	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				96		%
Iron	54-2	25.64	28.30	26.04	26.66	5.39	ppb
Iron	56-2	26.90	26.63	25.01	26.18	3.91	ppb
Iron	57-2	34.66	36.89	31.85	34.47	7.33	ppb
Krypton	83-1						cps
Lead	206-1	0.10	0.10	0.10	0.10	4.19	ppb

Lab Sample ID :Q1200-08Instrumnet Name :P8Client Sample ID :ME2985Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Date & Time Act	quii cu	-0 02 00 10.01.02	Batari	iio riairio .	000/11121.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.11	0.09	0.10	10.93	ppb
Lead	208-1	0.10	0.10	0.10	0.10	2.44	ppb
Lithium	6-1				102		%
Magnesium	24-2	44711.06	45150.32	42719.01	44193.46	2.93	ppb
Manganese	55-2	6.67	6.90	6.37	6.65	3.96	ppb
Molybdenum	94-1	1.75	1.64	1.61	1.66	4.53	ppb
Molybdenum	95-1	1.97	1.99	1.92	1.96	1.68	ppb
Molybdenum	96-1	1.90	1.93	1.90	1.91	1.01	ppb
Molybdenum	97-1	1.97	1.91	1.94	1.94	1.56	ppb
Molybdenum	98-1	1.96	1.92	1.92	1.93	1.04	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.64	3.53	3.48	3.55	2.34	ppb
Phosphorus	31-2	-11.04	-1.70	-17.63	-10.12		ppb
Potassium	39-2	34625.56	35030.95	32153.79	33936.77	4.59	ppb
Rhodium	103-1				93		%
Rhodium	103-2				96		%
Scandium	45-1				102		%
Scandium	45-2				101		%
Selenium	82-1	0.41	0.57	0.13	0.37	60.21	ppb
Selenium	77-2	0.70	0.00	0.66	0.45	86.69	ppb
Selenium	78-2	0.01	-0.80	-0.04	-0.28		ppb
Silicon	28-1	4567.57	4501.30	4573.70	4547.52	0.88	ppb
Silver	107-1	0.02	0.02	0.02	0.02	2.21	ppb
Silver	109-1	0.01	0.01	0.01	0.01	12.51	ppb
Sodium	23-2	38476.85	38570.27	36411.17	37819.43	3.23	ppb
Strontium	86-1	15292.12	15034.59	14865.89	15064.20	1.42	ppb
Strontium	88-1	15007.32	14943.63	14683.05	14878.00	1.15	ppb
Sulfur	34-1	386507.24	369375.93	378941.23	378274.80	2.27	ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.01	0.01	0.01	2.83	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	19.91	ppb
Tin	118-1	0.22	0.21	0.20	0.21	4.58	ppb
Titanium	47-1	0.62	0.61	0.60	0.61	1.77	ppb
Uranium	238-1	0.12	0.13	0.13	0.13	3.28	ppb

Lab Sample ID :Q1200-08Instrumnet Name :P8Client Sample ID :ME2985Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.42	3.53	3.32	3.42	3.05	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				101		%
Zinc	66-2	0.28	0.19	0.29	0.26	22.22	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	6.94	ppb
Zirconium	91-1	0.03	0.03	0.02	0.03	16.72	ppb

Lab Sample ID: Q1200-09 Instrumnet Name: P8
Client Sample ID: ME2986 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Date & Time At	quireu . 202	25-02-00 15.57.45	Dalari	ie name.	009AREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	9.80	8.85	9.10	9.25	5.27	ppb	
Antimony	121-1	0.10	0.09	0.10	0.10	1.51	ppb	
Arsenic	75-2	0.96	0.92	1.04	0.97	6.33	ppb	
Barium	135-1	75.94	73.73	78.53	76.07	3.16	ppb	
Barium	137-1	76.62	74.66	78.10	76.46	2.26	ppb	
Beryllium	9-1	0.03	0.02	0.03	0.02	10.26	ppb	
Bismuth	209-1				90		%	
Bismuth	209-2				92		%	
Bromine	81-1						cps	
Cadmium	108-1	0.08	0.05	0.08	0.07	28.34	ppb	
Cadmium	106-1	-0.06	0.41	-0.24	0.04	952.89	ppb	
Cadmium	111-1	0.01	0.05	0.00	0.02	158.53	ppb	
Calcium	43-1	394424.72	379977.98	400533.99	391645.56	2.70	ppb	
Calcium	44-1	385890.37	375809.18	391363.98	384354.51	2.05	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.25	0.26	0.26	0.25	3.45	ppb	
Cobalt	59-2	2.38	2.33	2.26	2.32	2.65	ppb	
Copper	63-2	1.07	1.15	1.07	1.10	4.34	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				100		%	
Holmium	165-2				101		%	
Indium	115-1				98		%	
Indium	115-2				97		%	
Iron	54-2	866.52	857.24	799.01	840.92	4.35	ppb	
Iron	56-2	909.36	878.30	832.52	873.39	4.43	ppb	
Iron	57-2	865.14	859.99	802.56	842.56	4.12	ppb	
Krypton	83-1						cps	
Lead	206-1	0.14	0.14	0.15	0.14	5.37	ppb	

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Lab Sample ID: Q1200-09 Instrumnet Name: P8

Client Sample ID: ME2986 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Parameter  Lead  Lead  Lithium  Magnesium  Manganese  Molybdenum  Molybdenum  Molybdenum	Mass 207-1 208-1 6-1 24-2 55-2 94-1 95-1	ConRep1  0.14  0.14  112441.08  268.82	0.14 0.14 109922.64	0.16 0.15	Avg. Conc.  0.15  0.14	6.41 5.39	Units ppb ppb
Lead Lithium Magnesium Manganese Molybdenum Molybdenum	208-1 6-1 24-2 55-2 94-1	0.14 112441.08 268.82	0.14		0.14		
Lithium  Magnesium  Manganese  Molybdenum  Molybdenum	6-1 24-2 55-2 94-1	112441.08 268.82		0.15		5.39	ppb
Magnesium Manganese Molybdenum Molybdenum	24-2 55-2 94-1	268.82	109922.64		100		
Manganese Molybdenum Molybdenum	55-2 94-1	268.82	109922.64		100		%
Molybdenum Molybdenum	94-1			104219.81	108861.18	3.87	ppb
Molybdenum			258.52	246.82	258.05	4.27	ppb
•	95-1	3.70	3.75	3.81	3.76	1.49	ppb
Molybdenum		4.12	4.10	4.21	4.14	1.40	ppb
,	96-1	4.09	4.09	4.19	4.12	1.51	ppb
Molybdenum	97-1	4.17	4.03	4.32	4.17	3.48	ppb
Molybdenum	98-1	4.02	4.02	4.19	4.08	2.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.52	4.68	4.28	4.50	4.51	ppb
Phosphorus	31-2	-7.11	-15.43	-3.87	-8.80		ppb
Potassium	39-2	3543.64	3495.12	3280.71	3439.83	4.07	ppb
Rhodium	103-1				92		%
Rhodium	103-2				95		%
Scandium	45-1				102		%
Scandium	45-2				101		%
Selenium	82-1	0.43	0.51	0.36	0.43	18.02	ppb
Selenium	77-2	0.00	0.00	0.66	0.22	173.21	ppb
Selenium	78-2	-0.41	-0.20	0.14	-0.15		ppb
Silicon	28-1	7174.95	6885.95	7198.10	7086.33	2.45	ppb
Silver	107-1	0.02	0.02	0.02	0.02	10.35	ppb
Silver	109-1	0.01	0.02	0.02	0.02	30.44	ppb
Sodium	23-2	98628.06	98316.06	91233.40	96059.17	4.35	ppb
Strontium	86-1	12013.21	11916.89	12388.10	12106.07	2.06	ppb
Strontium	88-1	11876.54	11907.60	12197.21	11993.78	1.47	ppb
Sulfur	34-1	356667.00	339089.76	357520.61	351092.46	2.96	ppb
Terbium	159-1				100		%
Terbium	159-2				101		%
Thallium	203-1	0.02	0.02	0.01	0.02	17.18	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	12.39	ppb
Tin	118-1	0.23	0.22	0.23	0.23	1.17	ppb
Titanium	47-1	0.64	0.69	0.66	0.66	3.97	ppb
Uranium	238-1	5.06	5.04	5.12	5.07	0.82	ppb

Lab Sample ID :Q1200-09Instrumnet Name :P8Client Sample ID :ME2986Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.13	0.13	0.13	0.13	1.28	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				102		%
Zinc	66-2	2.47	2.52	2.29	2.43	5.04	ppb
Zirconium	90-1	0.20	0.20	0.19	0.20	2.91	ppb
Zirconium	91-1	0.19	0.20	0.20	0.20	4.22	ppb

Lab Sample ID: Q1200-10 Instrumnet Name: P8

Client Sample ID: ME2987 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Date & Time 7to	quircu . 202	20 02 00 10.01.01	Datai	iic riame .	07 07 (TKLT .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9.74	10.38	10.91	10.35	5.65	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	3.85	ppb
Arsenic	75-2	0.23	0.28	0.27	0.26	11.10	ppb
Barium	135-1	49.26	48.88	47.99	48.71	1.34	ppb
Barium	137-1	49.21	49.65	48.33	49.06	1.37	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	9.38	ppb
Bismuth	209-1				92		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.03	0.05	0.04	33.25	ppb
Cadmium	106-1	-0.07	-0.25	-0.18	-0.17		ppb
Cadmium	111-1	0.00	-0.01	-0.01	-0.01		ppb
Calcium	43-1	347298.71	350694.39	349663.59	349218.89	0.50	ppb
Calcium	44-1	342909.43	340165.00	346992.05	343355.49	1.00	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.09	1.08	1.11	1.09	1.63	ppb
Cobalt	59-2	0.12	0.12	0.12	0.12	1.60	ppb
Copper	63-2	0.73	0.70	0.70	0.71	2.39	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				101		%
Indium	115-2				97		%
Iron	54-2	217.74	216.65	214.26	216.22	0.82	ppb
Iron	56-2	216.39	215.76	214.65	215.60	0.41	ppb
Iron	57-2	224.28	225.27	222.27	223.94	0.68	ppb
Krypton	83-1						cps
Lead	206-1	0.18	0.20	0.21	0.20	7.97	ppb

Lab Sample ID :Q1200-10Instrumnet Name :P8Client Sample ID :ME2987Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Date & Time Act	1011CG . 202	20 02 00 10.01.01	Dataii	ic ivallic .	0707(IXEI .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.18	0.19	0.20	0.19	5.07	ppb
Lead	208-1	0.18	0.19	0.21	0.19	6.17	ppb
Lithium	6-1				102		%
Magnesium	24-2	150071.89	149769.92	150521.41	150121.07	0.25	ppb
Manganese	55-2	64.79	64.72	63.87	64.46	0.80	ppb
Molybdenum	94-1	0.85	0.85	0.86	0.85	0.55	ppb
Molybdenum	95-1	0.87	0.81	0.84	0.84	3.31	ppb
Molybdenum	96-1	0.82	0.83	0.82	0.82	0.96	ppb
Molybdenum	97-1	0.84	0.83	0.85	0.84	1.56	ppb
Molybdenum	98-1	0.83	0.83	0.81	0.82	1.04	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.62	1.55	1.67	1.62	3.87	ppb
Phosphorus	31-2	36.40	24.21	29.65	30.09	20.30	ppb
Potassium	39-2	15056.85	15385.28	14914.33	15118.82	1.60	ppb
Rhodium	103-1				93		%
Rhodium	103-2				95		%
Scandium	45-1				103		%
Scandium	45-2				101		%
Selenium	82-1	0.61	0.62	0.36	0.53	27.36	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.41	-0.80	-0.41	-0.27		ppb
Silicon	28-1	6762.31	6693.85	6696.96	6717.71	0.58	ppb
Silver	107-1	0.12	0.08	0.04	0.08	46.51	ppb
Silver	109-1	0.10	0.07	0.03	0.07	48.32	ppb
Sodium	23-2	74583.93	74953.03	74719.43	74752.13	0.25	ppb
Strontium	86-1	12670.04	12738.74	12422.40	12610.39	1.32	ppb
Strontium	88-1	12653.99	12767.12	12315.43	12578.85	1.87	ppb
Sulfur	34-1	370967.90	368485.84	363379.84	367611.19	1.05	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	116.52	ppb
Thallium	205-1	0.00	0.01	0.00	0.00	45.58	ppb
Tin	118-1	0.46	0.45	0.45	0.45	1.69	ppb
Titanium	47-1	0.81	0.88	0.83	0.84	4.33	ppb
Uranium	238-1	0.45	0.44	0.46	0.45	1.78	ppb

Lab Sample ID : Q1200-10 Instrumnet Name : P8
Client Sample ID : ME2987 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.15	0.12	0.12	0.13	13.95	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	1.24	1.23	1.20	1.22	1.91	ppb
Zirconium	90-1	0.09	0.08	0.09	0.09	7.37	ppb
Zirconium	91-1	0.09	0.09	0.08	0.09	6.71	ppb

Lab Sample ID : Q1200-11 Instrumnet Name : P8

Client Sample ID : ME2988 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Date & Time At	quireu . 202	25-02-00 10.04.15	Dalari	ile Name.	UTTAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	66.17	68.37	66.34	66.96	1.83	ppb	
Antimony	121-1	0.21	0.20	0.20	0.20	1.68	ppb	
Arsenic	75-2	3.50	3.13	2.89	3.17	9.71	ppb	
Barium	135-1	67.09	66.39	64.63	66.03	1.92	ppb	
Barium	137-1	67.30	66.27	65.18	66.25	1.60	ppb	
Beryllium	9-1	0.02	0.01	0.02	0.02	19.13	ppb	
Bismuth	209-1				97		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	0.47	0.42	0.40	0.43	7.28	ppb	
Cadmium	106-1	0.13	-0.37	-0.02	-0.08		ppb	
Cadmium	111-1	0.02	-0.01	0.02	0.01	145.39	ppb	
Calcium	43-1	192470.13	185950.24	183717.14	187379.17	2.43	ppb	
Calcium	44-1	186406.33	177307.45	176767.96	180160.58	3.01	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.29	0.30	0.24	0.28	11.09	ppb	
Cobalt	59-2	2.05	2.00	1.92	1.99	3.14	ppb	
Copper	63-2	0.68	0.73	0.69	0.70	3.86	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				107		%	
Holmium	165-2				102		%	
Indium	115-1				104		%	
Indium	115-2				98		%	
Iron	54-2	166.68	170.88	165.54	167.70	1.68	ppb	
Iron	56-2	169.96	170.59	166.79	169.11	1.21	ppb	
Iron	57-2	174.51	171.07	168.97	171.51	1.63	ppb	
Krypton	83-1						cps	
Lead	206-1	0.27	0.23	0.23	0.24	9.66	ppb	

Lab Sample ID :Q1200-11Instrumnet Name :P8Client Sample ID :ME2988Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Date & Time Ac	quired: 202	25-02-06 16:04:15	DataFi	ile Name :	071AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.24	0.23	0.24	0.24	1.82	ppb
Lead	208-1	0.25	0.23	0.23	0.24	5.17	ppb
Lithium	6-1				106		%
Magnesium	24-2	57836.57	56292.09	55560.33	56563.00	2.05	ppb
Manganese	55-2	713.55	708.42	701.48	707.82	0.86	ppb
Molybdenum	94-1	28.12	27.61	27.25	27.66	1.57	ppb
Molybdenum	95-1	33.84	32.88	33.34	33.35	1.43	ppb
Molybdenum	96-1	32.39	32.06	31.73	32.06	1.02	ppb
Molybdenum	97-1	33.50	32.90	33.31	33.24	0.91	ppb
Molybdenum	98-1	33.46	32.49	32.82	32.92	1.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.88	1.82	1.87	1.85	1.62	ppb
Phosphorus	31-2	141.45	149.63	147.06	146.05	2.87	ppb
Potassium	39-2	11601.99	11218.08	11142.69	11320.92	2.18	ppb
Rhodium	103-1				99		%
Rhodium	103-2				98		%
Scandium	45-1				109		%
Scandium	45-2				103		%
Selenium	82-1	0.81	0.45	0.37	0.54	43.03	ppb
Selenium	77-2	1.35	0.00	0.67	0.67	100.35	ppb
Selenium	78-2	-0.42	0.36	-0.23	-0.09		ppb
Silicon	28-1	7947.49	7675.87	7482.87	7702.08	3.03	ppb
Silver	107-1	0.02	0.02	0.02	0.02	3.42	ppb
Silver	109-1	0.01	0.01	0.01	0.01	2.64	ppb
Sodium	23-2	118427.39	114876.42	112401.19	115235.00	2.63	ppb
Strontium	86-1	17103.64	16752.93	16555.67	16804.08	1.65	ppb
Strontium	88-1	16955.84	16405.94	16299.44	16553.74	2.13	ppb
Sulfur	34-1	238128.95	229106.25	226754.70	231329.97	2.60	ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.00	0.00	0.00	0.00	21.06	ppb
Thallium	205-1	0.00	0.01	0.00	0.00	13.14	ppb
Tin	118-1	1.13	1.11	1.10	1.11	1.25	ppb
Titanium	47-1	3.82	3.77	3.62	3.74	2.70	ppb
Uranium	238-1	2.65	2.58	2.57	2.60	1.69	ppb

Lab Sample ID : Q1200-11 Instrumnet Name : P8
Client Sample ID : ME2988 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.41	0.44	0.43	0.43	3.09	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				103		%
Zinc	66-2	1.56	1.44	1.48	1.49	4.17	ppb
Zirconium	90-1	0.12	0.11	0.12	0.12	3.09	ppb
Zirconium	91-1	0.12	0.12	0.11	0.11	4.61	ppb

Lab Sample ID :Q1200-12Instrumnet Name :P8Client Sample ID :ME2992Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Date & Time Ac	quireu . 202	25-02-00 10.07.51	DalaFi	ile Name.	U/ZAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	45.61	48.19	49.51	47.77	4.15	ppb	
Antimony	121-1	0.02	0.02	0.02	0.02	5.62	ppb	
Arsenic	75-2	0.55	0.68	0.66	0.63	11.07	ppb	
Barium	135-1	8.07	8.36	8.40	8.28	2.21	ppb	
Barium	137-1	8.03	8.44	8.39	8.29	2.70	ppb	
Beryllium	9-1	0.02	0.02	0.02	0.02	14.76	ppb	
Bismuth	209-1				93		%	
Bismuth	209-2				90		%	
Bromine	81-1						cps	
Cadmium	108-1	0.04	0.03	0.09	0.06	63.37	ppb	
Cadmium	106-1	-0.14	-0.58	-0.45	-0.39		ppb	
Cadmium	111-1	-0.01	-0.04	-0.03	-0.03		ppb	
Calcium	43-1	414321.20	423796.93	430593.66	422903.93	1.93	ppb	
Calcium	44-1	407215.25	415651.25	427562.05	416809.52	2.45	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.02	0.04	0.06	0.04	48.98	ppb	
Cobalt	59-2	0.06	0.07	0.06	0.06	9.77	ppb	
Copper	63-2	0.47	0.45	0.46	0.46	2.29	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				103		%	
Holmium	165-2				99		%	
Indium	115-1				101		%	
Indium	115-2				95		%	
Iron	54-2	5017.34	5076.29	5036.67	5043.43	0.60	ppb	
Iron	56-2	5159.94	5202.51	5262.78	5208.41	0.99	ppb	
Iron	57-2	5057.58	4997.44	5025.86	5026.96	0.60	ppb	
Krypton	83-1						cps	
Lead	206-1	0.08	0.07	0.09	0.08	12.14	ppb	

Lab Sample ID :Q1200-12Instrumnet Name :P8Client Sample ID :ME2992Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Date & Time Act	1011CG . 202	20 02 00 10.07.01	Datari	ic ivallic .	072/((CI .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.09	0.08	7.52	ppb
Lead	208-1	0.08	0.08	0.09	0.08	5.52	ppb
Lithium	6-1				102		%
Magnesium	24-2	163929.71	165027.62	165348.36	164768.56	0.45	ppb
Manganese	55-2	62.88	63.81	63.93	63.54	0.90	ppb
Molybdenum	94-1	1.36	1.43	1.40	1.40	2.72	ppb
Molybdenum	95-1	1.50	1.62	1.52	1.55	4.16	ppb
Molybdenum	96-1	1.45	1.52	1.48	1.48	2.47	ppb
Molybdenum	97-1	1.51	1.60	1.48	1.53	4.13	ppb
Molybdenum	98-1	1.48	1.50	1.49	1.49	0.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.23	0.25	0.25	0.25	4.29	ppb
Phosphorus	31-2	-12.83	-16.07	-7.57	-12.16		ppb
Potassium	39-2	4135.25	4109.67	4133.08	4126.00	0.34	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				104		%
Scandium	45-2				99		%
Selenium	82-1	0.27	0.23	0.36	0.29	23.16	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.40	-0.60	0.43	-0.19		ppb
Silicon	28-1	9588.83	9898.48	9935.74	9807.69	1.94	ppb
Silver	107-1	0.02	0.02	0.02	0.02	5.19	ppb
Silver	109-1	0.01	0.01	0.01	0.01	41.65	ppb
Sodium	23-2	46307.21	46307.01	46635.57	46416.60	0.41	ppb
Strontium	86-1	12174.79	12515.58	12275.53	12321.97	1.42	ppb
Strontium	88-1	11995.30	12474.82	12387.77	12285.96	2.08	ppb
Sulfur	34-1	523185.59	535510.77	541726.54	533474.30	1.77	ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	0.00	0.00	0.00	0.00	71.13	ppb
Thallium	205-1	0.00	0.01	0.01	0.00	20.46	ppb
Tin	118-1	0.17	0.16	0.17	0.17	5.64	ppb
Titanium	47-1	0.97	0.89	0.98	0.95	5.58	ppb
Uranium	238-1	0.83	0.85	0.88	0.86	2.89	ppb

Lab Sample ID: Q1200-12 Instrumnet Name: P8

Client Sample ID: ME2992 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.05	0.05	0.05	0.05	4.80	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				99		%
Zinc	66-2	1.28	1.37	1.26	1.31	4.25	ppb
Zirconium	90-1	0.04	0.05	0.05	0.05	9.28	ppb
Zirconium	91-1	0.05	0.04	0.06	0.05	17.93	ppb

Lab Sample ID: Q1200-13 Instrumnet Name: P8

Client Sample ID: ME2994 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Date & Time 7to	quircu . Zoz	-0 02 00 10.10.44	Datai	ic ivallic .	O7 O7 (I VET .C		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.82	3.93	3.88	3.88	1.44	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	17.08	ppb
Arsenic	75-2	0.09	0.12	0.14	0.11	22.12	ppb
Barium	135-1	15.21	15.78	15.75	15.58	2.05	ppb
Barium	137-1	15.23	16.02	16.02	15.76	2.90	ppb
Beryllium	9-1	0.02	0.02	0.02	0.02	8.92	ppb
Bismuth	209-1				97		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.02	0.00	0.02	69.56	ppb
Cadmium	106-1	0.65	0.81	-0.43	0.34	195.15	ppb
Cadmium	111-1	0.05	0.06	-0.03	0.03	189.89	ppb
Calcium	43-1	261576.27	268348.97	262602.31	264175.85	1.38	ppb
Calcium	44-1	257364.70	261162.83	256279.86	258269.13	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	0.02	0.02	0.03	30.81	ppb
Cobalt	59-2	0.01	0.03	0.03	0.02	36.07	ppb
Copper	63-2	0.30	0.39	0.34	0.34	13.39	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				100		%
Indium	115-1				104		%
Indium	115-2				95		%
Iron	54-2	597.08	624.17	618.72	613.32	2.34	ppb
Iron	56-2	626.84	664.04	656.60	649.16	3.03	ppb
Iron	57-2	602.59	639.71	613.31	618.54	3.09	ppb
Krypton	83-1						cps
Lead	206-1	0.09	0.09	0.09	0.09	0.69	ppb

Lab Sample ID : Q1200-13 Instrumnet Name : P8
Client Sample ID : ME2994 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Date & Time Acc	juired: 2025-02-06 16:10:44		DataF	ile Name :	U/3AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.09	0.09	0.10	0.09	2.40	ppb
Lead	208-1	0.09	0.09	0.09	0.09	1.23	ppb
Lithium	6-1				105		%
Magnesium	24-2	73095.12	76229.47	74501.88	74608.83	2.10	ppb
Manganese	55-2	78.88	83.31	81.60	81.27	2.75	ppb
Molybdenum	94-1	0.29	0.32	0.30	0.31	6.07	ppb
Molybdenum	95-1	0.29	0.29	0.30	0.29	1.52	ppb
Molybdenum	96-1	0.28	0.29	0.32	0.30	7.69	ppb
Molybdenum	97-1	0.29	0.28	0.30	0.29	3.44	ppb
Molybdenum	98-1	0.28	0.28	0.31	0.29	6.35	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.18	0.26	0.25	0.23	20.32	ppb
Phosphorus	31-2	45.67	52.06	46.82	48.18	7.06	ppb
Potassium	39-2	2922.64	3048.58	3015.27	2995.49	2.18	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				106		%
Scandium	45-2				100		%
Selenium	82-1	0.43	0.86	0.44	0.58	42.25	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-1.01	-0.58	-0.40	-0.66		ppb
Silicon	28-1	5630.74	5720.98	5666.99	5672.90	0.80	ppb
Silver	107-1	0.02	0.02	0.02	0.02	5.00	ppb
Silver	109-1	0.01	0.01	0.01	0.01	15.64	ppb
Sodium	23-2	26267.32	26970.41	26228.28	26488.67	1.58	ppb
Strontium	86-1	13709.95	14363.05	14570.90	14214.63	3.16	ppb
Strontium	88-1	13486.10	13991.05	14519.19	13998.78	3.69	ppb
Sulfur	34-1	274887.57	276201.25	275113.55	275400.79	0.26	ppb
Terbium	159-1				105		%
Terbium	159-2				99		%
Thallium	203-1	0.00	0.00	0.00	0.00	27.60	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	27.39	ppb
Tin	118-1	0.35	0.39	0.37	0.37	5.88	ppb
Titanium	47-1	0.55	0.62	0.51	0.56	9.71	ppb
Uranium	238-1	0.13	0.13	0.13	0.13	0.63	ppb

Lab Sample ID: Q1200-13 Instrumnet Name: P8
Client Sample ID: ME2994 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.05	0.05	0.06	0.05	17.71	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				99		%
Zinc	66-2	1.02	1.00	0.89	0.97	7.14	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	3.18	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	17.91	ppb

Lab Sample ID: Q1200-14 Instrumnet Name: P8
Client Sample ID: ME2995 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Date & Time Ac	quired . 2025-02-00 10.15.56		Dalari	Datarile Name .		U/4AREF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	6.62	6.65	6.57	6.61	0.60	ppb	
Antimony	121-1	0.01	0.01	0.01	0.01	18.14	ppb	
Arsenic	75-2	1.36	1.54	1.67	1.52	10.02	ppb	
Barium	135-1	14.82	14.70	15.06	14.86	1.22	ppb	
Barium	137-1	15.03	14.98	15.22	15.08	0.82	ppb	
Beryllium	9-1	0.02	0.02	0.01	0.01	21.13	ppb	
Bismuth	209-1				94		%	
Bismuth	209-2				92		%	
Bromine	81-1						cps	
Cadmium	108-1	0.05	0.05	0.02	0.04	37.10	ppb	
Cadmium	106-1	-0.05	0.36	0.15	0.15	135.56	ppb	
Cadmium	111-1	-0.01	0.02	0.01	0.01	160.38	ppb	
Calcium	43-1	383767.13	381327.99	383873.87	382989.66	0.38	ppb	
Calcium	44-1	376023.50	373129.58	374270.19	374474.42	0.39	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	-0.02	-0.04	0.00	-0.02		ppb	
Cobalt	59-2	0.07	0.07	0.08	0.08	5.99	ppb	
Copper	63-2	0.30	0.28	0.32	0.30	7.89	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				106		%	
Holmium	165-2				101		%	
Indium	115-1				103		%	
Indium	115-2				97		%	
Iron	54-2	2483.70	2495.46	2511.31	2496.82	0.55	ppb	
Iron	56-2	2577.34	2619.04	2584.67	2593.68	0.86	ppb	
Iron	57-2	2495.28	2511.28	2483.79	2496.78	0.55	ppb	
Krypton	83-1						cps	
Lead	206-1	0.07	0.07	0.07	0.07	5.44	ppb	

Lab Sample ID: Q1200-14 Instrumnet Name: P8
Client Sample ID: ME2995 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.06	0.06	0.05	0.06	7.42	ppb
Lead	208-1	0.07	0.07	0.07	0.07	0.72	ppb
Lithium	6-1				105		%
Magnesium	24-2	101062.16	101155.85	98927.86	100381.95	1.26	ppb
Manganese	55-2	170.37	172.30	169.36	170.68	0.88	ppb
Molybdenum	94-1	0.94	0.97	0.91	0.94	3.21	ppb
Molybdenum	95-1	1.02	1.03	1.05	1.03	1.78	ppb
Molybdenum	96-1	0.99	0.95	1.04	0.99	4.72	ppb
Molybdenum	97-1	1.02	1.03	1.05	1.04	1.28	ppb
Molybdenum	98-1	0.97	1.00	1.00	0.99	1.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.61	0.51	0.60	0.58	9.41	ppb
Phosphorus	31-2	14.30	14.53	10.47	13.10	17.42	ppb
Potassium	39-2	4671.69	4708.25	4648.15	4676.03	0.65	ppb
Rhodium	103-1				96		%
Rhodium	103-2				97		%
Scandium	45-1				105		%
Scandium	45-2				101		%
Selenium	82-1	0.25	0.20	0.58	0.34	61.23	ppb
Selenium	77-2	0.68	0.00	0.69	0.46	86.61	ppb
Selenium	78-2	-0.81	0.18	-1.01	-0.54		ppb
Silicon	28-1	6837.13	6790.12	6795.99	6807.75	0.38	ppb
Silver	107-1	0.02	0.01	0.02	0.02	23.01	ppb
Silver	109-1	0.01	0.01	0.01	0.01	18.35	ppb
Sodium	23-2	85708.79	84184.47	83981.49	84624.91	1.12	ppb
Strontium	86-1	12792.01	12909.16	13054.53	12918.57	1.02	ppb
Strontium	88-1	12991.37	12831.93	12955.48	12926.26	0.65	ppb
Sulfur	34-1	400941.66	405278.66	403383.98	403201.43	0.54	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	33.41	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	31.86	ppb
Tin	118-1	0.19	0.22	0.20	0.20	7.82	ppb
Titanium	47-1	0.66	0.65	0.67	0.66	2.10	ppb
Uranium	238-1	0.18	0.19	0.19	0.19	2.04	ppb

Lab Sample ID :Q1200-14Instrumnet Name :P8Client Sample ID :ME2995Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.07	0.07	0.09	0.08	12.89	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				101		%
Zinc	66-2	0.01	0.00	0.02	0.01	96.69	ppb
Zirconium	90-1	0.06	0.06	0.06	0.06	3.19	ppb
Zirconium	91-1	0.06	0.06	0.06	0.06	6.01	ppb

Lab Sample ID :CCV003Instrumnet Name :P8Client Sample ID :CCV003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

Date & Time Ac	equired: 2025-02-06 16:17:15		DataFi	DataFile Name :				
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	48369.21	47786.49	47431.30	47862.33	0.99	ppb	
Antimony	121-1	507.38	498.89	498.35	501.54	1.01	ppb	
Arsenic	75-2	496.39	499.79	485.40	493.86	1.52	ppb	
Barium	135-1	2557.41	2554.87	2562.01	2558.09	0.14	ppb	
Barium	137-1	2561.76	2558.85	2543.24	2554.62	0.39	ppb	
Beryllium	9-1	486.50	502.47	491.42	493.47	1.66	ppb	
Bismuth	209-1				91		%	
Bismuth	209-2				88		%	
Bromine	81-1						cps	
Cadmium	108-1	496.18	495.05	498.41	496.55	0.34	ppb	
Cadmium	106-1	503.44	503.68	502.75	503.29	0.10	ppb	
Cadmium	111-1	484.64	489.94	501.22	491.93	1.72	ppb	
Calcium	43-1	234600.68	239057.24	235431.10	236363.01	1.00	ppb	
Calcium	44-1	231354.63	234351.61	233732.01	233146.08	0.68	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	506.27	513.58	513.39	511.08	0.81	ppb	
Cobalt	59-2	495.28	497.58	500.50	497.79	0.53	ppb	
Copper	63-2	4754.52	4685.21	4822.29	4754.00	1.44	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				104		%	
Holmium	165-2				99		%	
Indium	115-1				97		%	
Indium	115-2				91		%	
Iron	54-2	119105.80	121234.60	120759.49	120366.63	0.93	ppb	
Iron	56-2	118782.58	118218.51	122178.68	119726.59	1.79	ppb	
Iron	57-2	119965.69	117927.84	121514.21	119802.58	1.50	ppb	
Krypton	83-1						cps	
Lead	206-1	2585.85	2659.67	2588.48	2611.33	1.60	ppb	

Lab Sample ID : CCV003 Instrumnet Name : P8

Client Sample ID : CCV003 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2539.16	2634.80	2535.40	2569.79	2.19	ppb
Lead	208-1	2568.20	2617.25	2565.06	2583.50	1.13	ppb
Lithium	6-1				99		%
Magnesium	24-2	240283.73	242444.92	242746.91	241825.19	0.56	ppb
Manganese	55-2	4910.21	4974.48	5024.51	4969.73	1.15	ppb
Molybdenum	94-1	5081.07	5058.79	5131.34	5090.40	0.73	ppb
Molybdenum	95-1	5083.15	4983.71	5112.08	5059.65	1.33	ppb
Molybdenum	96-1	5065.13	4974.09	5009.43	5016.21	0.91	ppb
Molybdenum	97-1	5064.83	4987.21	5058.38	5036.81	0.86	ppb
Molybdenum	98-1	5026.92	4988.73	5044.79	5020.14	0.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	457.57	454.43	465.18	459.06	1.20	ppb
Phosphorus	31-2	9832.44	9617.03	9851.91	9767.13	1.33	ppb
Potassium	39-2	118170.40	119381.60	119874.67	119142.22	0.74	ppb
Rhodium	103-1				92		%
Rhodium	103-2				92		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	483.46	487.21	480.71	483.79	0.67	ppb
Selenium	77-2	471.21	508.51	444.82	474.84	6.74	ppb
Selenium	78-2	475.91	464.42	472.60	470.98	1.26	ppb
Silicon	28-1	510.15	518.58	521.51	516.75	1.14	ppb
Silver	107-1	491.60	483.68	481.79	485.69	1.07	ppb
Silver	109-1	488.32	483.39	485.28	485.66	0.51	ppb
Sodium	23-2	236308.25	245862.18	244598.60	242256.34	2.14	ppb
Strontium	86-1	511.81	512.34	511.06	511.73	0.13	ppb
Strontium	88-1	504.24	511.26	506.10	507.20	0.72	ppb
Sulfur	34-1	10277.88	10774.03	10318.11	10456.67	2.64	ppb
Terbium	159-1				102		%
Terbium	159-2				98		%
Thallium	203-1	519.84	534.66	524.14	526.21	1.45	ppb
Thallium	205-1	520.84	523.96	520.89	521.90	0.34	ppb
Tin	118-1	509.06	507.97	503.67	506.90	0.56	ppb
Titanium	47-1	5093.55	5097.56	5069.21	5086.77	0.30	ppb
Uranium	238-1	522.30	518.26	516.55	519.04	0.57	ppb

Lab Sample ID :CCV003Instrumnet Name :P8Client Sample ID :CCV003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.62	506.77	507.40	506.26	0.29	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				98		%
Zinc	66-2	4770.55	4729.74	4816.06	4772.12	0.90	ppb
Zirconium	90-1	512.39	513.53	513.57	513.16	0.13	ppb
Zirconium	91-1	506.81	510.91	513.56	510.43	0.67	ppb

Lab Sample ID :CCB003Instrumnet Name :P8Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Date & Time / to	quircu . Zoz	20 02 00 10.10.00	Datai	iic ivairie .	07000BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.34	1.67	1.01	1.34	24.72	ppb
Antimony	121-1	0.16	0.13	0.12	0.14	16.32	ppb
Arsenic	75-2	0.04	0.00	0.02	0.02	110.44	ppb
Barium	135-1	0.12	0.09	0.09	0.10	17.53	ppb
Barium	137-1	0.14	0.09	0.09	0.11	25.59	ppb
Beryllium	9-1	0.17	0.15	0.14	0.15	8.08	ppb
Bismuth	209-1				105		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.11	0.04	0.03	0.06	69.29	ppb
Cadmium	106-1	0.46	-0.26	-0.13	0.02	1665.09	ppb
Cadmium	111-1	0.07	0.01	0.02	0.03	110.06	ppb
Calcium	43-1	14.20	7.88	6.61	9.56	42.49	ppb
Calcium	44-1	14.16	10.99	8.00	11.05	27.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	0.01	0.00	-0.01		ppb
Cobalt	59-2	0.02	0.02	0.02	0.02	6.29	ppb
Copper	63-2	0.34	0.28	0.25	0.29	15.64	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				102		%
Indium	115-1				110		%
Indium	115-2				102		%
Iron	54-2	4.23	4.48	3.99	4.23	5.88	ppb
Iron	56-2	4.23	4.22	4.23	4.23	0.11	ppb
Iron	57-2	4.00	2.85	3.02	3.29	18.96	ppb
Krypton	83-1						cps
Lead	206-1	0.30	0.25	0.23	0.26	14.34	ppb

Lab Sample ID: CCB003 Instrumnet Name: P8
Client Sample ID: CCB003 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.29	0.26	0.22	0.26	14.11	ppb
Lead	208-1	0.30	0.25	0.23	0.26	13.99	ppb
Lithium	6-1				110		%
Magnesium	24-2	-2.81	-3.35	-2.29	-2.82		ppb
Manganese	55-2	0.19	0.20	0.20	0.19	3.68	ppb
Molybdenum	94-1	0.37	0.29	0.26	0.31	19.43	ppb
Molybdenum	95-1	0.35	0.24	0.21	0.27	26.84	ppb
Molybdenum	96-1	0.34	0.26	0.23	0.28	21.45	ppb
Molybdenum	97-1	0.35	0.28	0.24	0.29	18.53	ppb
Molybdenum	98-1	0.32	0.26	0.20	0.26	22.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.11	0.13	0.16	0.13	17.31	ppb
Phosphorus	31-2	-30.79	-30.98	-26.60	-29.46		ppb
Potassium	39-2	27.87	28.98	26.56	27.81	4.36	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				103		%
Selenium	82-1	0.16	-0.13	-0.11	-0.03		ppb
Selenium	77-2	0.00	1.34	0.00	0.45	173.21	ppb
Selenium	78-2	-1.01	-0.23	-0.81	-0.68		ppb
Silicon	28-1	1.99	2.61	1.08	1.90	40.65	ppb
Silver	107-1	0.08	0.07	0.05	0.07	19.46	ppb
Silver	109-1	0.08	0.06	0.06	0.07	14.81	ppb
Sodium	23-2	51.02	46.06	46.96	48.02	5.51	ppb
Strontium	86-1	0.09	0.07	0.08	0.08	15.20	ppb
Strontium	88-1	0.12	0.09	0.08	0.10	20.43	ppb
Sulfur	34-1	-800.53	-431.41	-623.80	-618.58		ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	0.06	0.04	0.04	0.05	20.95	ppb
Thallium	205-1	0.06	0.05	0.04	0.05	14.41	ppb
Tin	118-1	0.08	0.08	0.07	0.08	8.33	ppb
Titanium	47-1	0.25	0.19	0.15	0.19	26.08	ppb
Uranium	238-1	0.02	0.02	0.01	0.02	26.80	ppb

Lab Sample ID :CCB003Instrumnet Name :P8Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.02	0.02	0.02	8.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				103		%
Zinc	66-2	0.04	-0.07	-0.16	-0.06		ppb
Zirconium	90-1	0.05	0.04	0.03	0.04	26.01	ppb
Zirconium	91-1	0.05	0.03	0.03	0.04	27.93	ppb

Lab Sample ID: Q1200-15 Instrumnet Name: P8

Client Sample ID: ME2999 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Date & Time Ac	quirea: 202	25-02-06 16:23:19	DataFi	ile Name :	0//AREF.d			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	3.13	3.26	2.94	3.11	5.11	ppb	
Antimony	121-1	0.07	0.06	0.07	0.07	6.78	ppb	
Arsenic	75-2	0.25	0.23	0.23	0.24	3.60	ppb	
Barium	135-1	32.91	34.13	32.54	33.19	2.51	ppb	
Barium	137-1	33.63	33.72	32.53	33.29	1.99	ppb	
Beryllium	9-1	0.09	0.08	0.07	0.08	12.26	ppb	
Bismuth	209-1				94		%	
Bismuth	209-2				92		%	
Bromine	81-1						cps	
Cadmium	108-1	0.14	0.12	0.13	0.13	8.43	ppb	
Cadmium	106-1	0.14	-0.25	-0.51	-0.21		ppb	
Cadmium	111-1	0.01	-0.01	-0.03	-0.01		ppb	
Calcium	43-1	287266.78	288606.17	280490.48	285454.48	1.52	ppb	
Calcium	44-1	284154.46	288557.78	278001.17	283571.14	1.87	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.01	0.00	0.02	0.01	153.04	ppb	
Cobalt	59-2	1.72	1.68	1.76	1.72	2.33	ppb	
Copper	63-2	0.22	0.22	0.27	0.24	11.29	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				103		%	
Holmium	165-2				99		%	
Indium	115-1				101		%	
Indium	115-2				96		%	
Iron	54-2	788.72	774.57	835.21	799.50	3.97	ppb	
Iron	56-2	810.53	819.08	863.51	831.04	3.42	ppb	
Iron	57-2	789.50	779.10	846.93	805.18	4.54	ppb	
Krypton	83-1						cps	
Lead	206-1	0.17	0.16	0.14	0.16	7.29	ppb	

Lab Sample ID :Q1200-15Instrumnet Name :P8Client Sample ID :ME2999Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Date & Time Ac	quirea: 202	25-02-06 16:23:19	Datar	ile Name :	0//AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.19	0.15	0.15	0.16	13.87	ppb
Lead	208-1	0.17	0.15	0.15	0.16	9.83	ppb
Lithium	6-1				104		%
Magnesium	24-2	71949.33	74160.92	75565.06	73891.77	2.47	ppb
Manganese	55-2	287.98	286.49	303.77	292.74	3.27	ppb
Molybdenum	94-1	4.45	4.23	4.16	4.28	3.51	ppb
Molybdenum	95-1	4.97	4.90	4.96	4.94	0.75	ppb
Molybdenum	96-1	4.90	4.80	4.83	4.84	0.98	ppb
Molybdenum	97-1	5.08	5.00	4.90	4.99	1.84	ppb
Molybdenum	98-1	4.92	4.81	4.88	4.87	1.17	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.96	1.91	1.89	1.92	1.92	ppb
Phosphorus	31-2	-15.29	-8.71	-19.15	-14.39		ppb
Potassium	39-2	3071.57	3042.90	3253.91	3122.79	3.67	ppb
Rhodium	103-1				97		%
Rhodium	103-2				96		%
Scandium	45-1				104		%
Scandium	45-2				100		%
Selenium	82-1	0.85	0.67	1.42	0.98	40.37	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.01	-0.42	0.04	-0.13		ppb
Silicon	28-1	7345.78	7549.73	7107.64	7334.38	3.02	ppb
Silver	107-1	0.03	0.02	0.03	0.03	11.05	ppb
Silver	109-1	0.03	0.02	0.02	0.02	11.51	ppb
Sodium	23-2	54729.87	54416.12	57488.65	55544.88	3.04	ppb
Strontium	86-1	11281.11	11069.57	10882.82	11077.83	1.80	ppb
Strontium	88-1	11158.11	11075.93	11003.08	11079.04	0.70	ppb
Sulfur	34-1	228753.71	229758.06	224976.13	227829.30	1.11	ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.05	0.05	0.05	4.34	ppb
Thallium	205-1	0.04	0.05	0.04	0.04	4.94	ppb
Tin	118-1	0.13	0.13	0.11	0.13	10.49	ppb
Titanium	47-1	0.63	0.60	0.61	0.61	2.96	ppb
Uranium	238-1	2.96	3.02	2.92	2.97	1.72	ppb

Lab Sample ID :Q1200-15Instrumnet Name :P8Client Sample ID :ME2999Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.03	0.03	3.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	0.54	0.63	0.71	0.63	13.48	ppb
Zirconium	90-1	0.11	0.09	0.09	0.10	12.40	ppb
Zirconium	91-1	0.11	0.09	0.10	0.10	11.20	ppb

Lab Sample ID: Q1200-16 Instrumnet Name: P8

Client Sample ID: ME2997 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Date & Time Ac	quireu . 202	25-02-00 10.20.33	Dalari	ie ivallie .	U/OAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	7.70	8.11	8.02	7.94	2.66	ppb	
Antimony	121-1	0.05	0.05	0.06	0.05	4.70	ppb	
Arsenic	75-2	1.47	1.40	1.45	1.44	2.24	ppb	
Barium	135-1	68.30	68.90	69.02	68.74	0.56	ppb	
Barium	137-1	68.80	70.03	68.47	69.10	1.19	ppb	
Beryllium	9-1	0.06	0.07	0.05	0.06	17.03	ppb	
Bismuth	209-1				98		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	0.19	0.23	0.17	0.20	16.28	ppb	
Cadmium	106-1	0.65	0.37	-0.33	0.23	220.64	ppb	
Cadmium	111-1	0.06	0.03	-0.02	0.02	201.48	ppb	
Calcium	43-1	180861.03	179766.28	178933.39	179853.57	0.54	ppb	
Calcium	44-1	177215.60	175796.60	176433.79	176482.00	0.40	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	0.13	0.13	0.15	0.14	10.93	ppb	
Cobalt	59-2	1.28	1.28	1.29	1.28	0.67	ppb	
Copper	63-2	0.19	0.22	0.25	0.22	14.78	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				107		%	
Holmium	165-2				104		%	
Indium	115-1				106		%	
Indium	115-2				100		%	
Iron	54-2	557.36	564.39	577.13	566.29	1.77	ppb	
Iron	56-2	572.76	594.12	615.56	594.15	3.60	ppb	
Iron	57-2	555.11	565.88	575.78	565.59	1.83	ppb	
Krypton	83-1						cps	
Lead	206-1	0.12	0.12	0.12	0.12	1.65	ppb	

Lab Sample ID: Q1200-16 Instrumnet Name: P8

Client Sample ID: ME2997 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Date a Time Act	quircu . Zoz	20 02 00 10.20.00	Datai	iic riame .	0707111LT .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.13	0.14	0.13	5.91	ppb
Lead	208-1	0.12	0.12	0.12	0.12	0.54	ppb
Lithium	6-1				108		%
Magnesium	24-2	76939.14	79210.62	80114.73	78754.83	2.08	ppb
Manganese	55-2	146.05	147.55	153.44	149.01	2.62	ppb
Molybdenum	94-1	8.90	8.88	9.12	8.96	1.51	ppb
Molybdenum	95-1	10.44	10.70	10.70	10.61	1.43	ppb
Molybdenum	96-1	10.28	10.40	10.40	10.36	0.64	ppb
Molybdenum	97-1	10.54	10.77	10.47	10.59	1.47	ppb
Molybdenum	98-1	10.37	10.47	10.62	10.49	1.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.13	3.17	3.32	3.21	3.06	ppb
Phosphorus	31-2	-14.22	-17.90	-6.05	-12.73		ppb
Potassium	39-2	2811.44	2847.88	2990.18	2883.17	3.28	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				107		%
Scandium	45-2				104		%
Selenium	82-1	0.53	0.31	0.38	0.41	27.32	ppb
Selenium	77-2	0.65	0.00	0.00	0.22	173.21	ppb
Selenium	78-2	0.13	0.34	0.20	0.22	48.13	ppb
Silicon	28-1	6683.22	6698.36	6650.01	6677.20	0.37	ppb
Silver	107-1	0.02	0.01	0.02	0.02	10.68	ppb
Silver	109-1	0.01	0.01	0.01	0.01	3.01	ppb
Sodium	23-2	29692.92	30187.45	30924.82	30268.40	2.05	ppb
Strontium	86-1	6212.77	6296.41	6230.55	6246.58	0.71	ppb
Strontium	88-1	6194.42	6251.36	6221.18	6222.32	0.46	ppb
Sulfur	34-1	130928.09	129938.37	129218.57	130028.34	0.66	ppb
Terbium	159-1				106		%
Terbium	159-2				104		%
Thallium	203-1	0.05	0.05	0.04	0.05	6.22	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	4.28	ppb
Tin	118-1	0.13	0.11	0.11	0.12	9.32	ppb
					0.70	0.40	
Titanium	47-1	0.70	0.67	0.72	0.70	3.48	ppb

Lab Sample ID: Q1200-16 Instrumnet Name: P8

Client Sample ID: ME2997 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.05	0.04	0.04	0.05	3.86	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				104		%
Zinc	66-2	1.81	1.88	1.85	1.84	1.99	ppb
Zirconium	90-1	0.14	0.15	0.15	0.15	3.61	ppb
Zirconium	91-1	0.15	0.16	0.16	0.16	4.47	ppb

Lab Sample ID: Q1200-17 Instrumnet Name: P8
Client Sample ID: ME2998 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Date & Time 7to	quircu . 202	.0 02 00 10.20.40	Datai	ic ivallic .	07 57 (I KET .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.90	5.15	5.31	5.12	4.05	ppb
Antimony	121-1	0.05	0.04	0.04	0.04	20.58	ppb
Arsenic	75-2	1.63	1.67	1.14	1.48	19.87	ppb
Barium	135-1	88.73	72.72	68.32	76.59	14.02	ppb
Barium	137-1	89.06	72.02	69.54	76.87	13.82	ppb
Beryllium	9-1	0.06	0.05	0.04	0.05	23.54	ppb
Bismuth	209-1				90		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	0.17	0.13	0.16	0.16	11.51	ppb
Cadmium	106-1	0.22	0.80	0.40	0.47	63.07	ppb
Cadmium	111-1	0.04	0.06	0.04	0.05	28.64	ppb
Calcium	43-1	238356.22	185557.10	182787.48	202233.60	15.48	ppb
Calcium	44-1	232551.15	184073.42	177023.65	197882.74	15.28	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	-0.01	-0.03	0.00		ppb
Cobalt	59-2	1.25	1.27	1.25	1.26	1.21	ppb
Copper	63-2	0.21	0.20	0.19	0.20	5.47	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				102		%
Indium	115-1				98		%
Indium	115-2				98		%
Iron	54-2	596.94	577.31	574.64	582.96	2.09	ppb
Iron	56-2	609.02	618.26	604.11	610.46	1.18	ppb
Iron	57-2	602.73	580.80	572.72	585.42	2.65	ppb
Krypton	83-1						cps
Lead	206-1	0.17	0.12	0.11	0.13	20.97	ppb

Lab Sample ID : Q1200-17 Instrumnet Name : P8

Client Sample ID : ME2998 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Date a Time Act	quircu . Zoz	0 02 00 10.20.40	Datai	iic ivairie .	07 37 (TKLT .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.16	0.12	0.12	0.13	17.43	ppb
Lead	208-1	0.17	0.12	0.11	0.13	22.40	ppb
Lithium	6-1				102		%
Magnesium	24-2	81103.93	82651.59	81353.61	81703.04	1.02	ppb
Manganese	55-2	154.60	152.55	148.67	151.94	1.98	ppb
Molybdenum	94-1	11.69	9.23	8.94	9.95	15.18	ppb
Molybdenum	95-1	13.87	11.09	10.52	11.83	15.15	ppb
Molybdenum	96-1	13.31	10.51	10.31	11.38	14.76	ppb
Molybdenum	97-1	13.95	10.95	10.72	11.87	15.16	ppb
Molybdenum	98-1	13.60	10.88	10.37	11.62	14.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.92	3.09	2.97	3.00	2.92	ppb
Phosphorus	31-2	-15.76	-20.43	-19.08	-18.42		ppb
Potassium	39-2	3045.84	3002.29	2954.85	3000.99	1.52	ppb
Rhodium	103-1				91		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				102		%
Selenium	82-1	0.13	0.56	0.09	0.26	100.78	ppb
Selenium	77-2	0.69	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	0.60	-0.81	-0.42	-0.21		ppb
Silicon	28-1	8719.97	6986.40	6752.43	7486.27	14.36	ppb
Silver	107-1	0.02	0.02	0.01	0.02	10.87	ppb
Silver	109-1	0.02	0.01	0.01	0.01	33.73	ppb
Sodium	23-2	32308.11	31997.43	32098.64	32134.73	0.49	ppb
Strontium	86-1	8583.85	6696.01	6470.25	7250.03	16.01	ppb
Strontium	88-1	8504.11	6734.24	6427.47	7221.94	15.52	ppb
Sulfur	34-1	177637.20	135491.84	132166.60	148431.88	17.08	ppb
Terbium	159-1				98		%
Terbium	159-2				101		%
Thallium	203-1	0.05	0.03	0.04	0.04	20.88	ppb
Thallium	205-1	0.06	0.04	0.04	0.05	24.82	ppb
Tin	118-1	0.30	0.22	0.21	0.25	20.90	ppb
Titanium	47-1	0.82	0.62	0.59	0.68	18.92	ppb
Uranium	238-1	19.19	15.12	14.91	16.41	14.73	ppb

Lab Sample ID: Q1200-17 Instrumnet Name: P8

Client Sample ID: ME2998 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.05	0.05	0.03	0.04	28.75	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				102		%
Zinc	66-2	1.16	1.04	1.16	1.12	6.02	ppb
Zirconium	90-1	0.15	0.12	0.12	0.13	12.90	ppb
Zirconium	91-1	0.17	0.13	0.11	0.13	23.04	ppb

Lab Sample ID: Q1200-18 Instrumnet Name: P8
Client Sample ID: ME29A0 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Date & Time / to	quircu . Zoz	-0 02 00 10.00.00	Datai	ic ivallic .	0007 (I (LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9.44	8.55	8.26	8.75	7.08	ppb
Antimony	121-1	0.01	0.02	0.01	0.01	2.66	ppb
Arsenic	75-2	0.12	0.06	0.03	0.07	69.42	ppb
Barium	135-1	24.01	20.87	21.00	21.96	8.10	ppb
Barium	137-1	23.91	20.57	21.27	21.92	8.02	ppb
Beryllium	9-1	0.06	0.05	0.05	0.05	11.89	ppb
Bismuth	209-1				91		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	0.12	0.07	0.12	0.10	24.62	ppb
Cadmium	106-1	1.00	0.68	0.77	0.81	20.18	ppb
Cadmium	111-1	0.09	0.06	0.06	0.07	19.16	ppb
Calcium	43-1	299306.88	260158.30	263340.98	274268.72	7.93	ppb
Calcium	44-1	292491.28	250026.37	255364.00	265960.55	8.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	-0.04	-0.01		ppb
Cobalt	59-2	0.05	0.04	0.05	0.05	7.81	ppb
Copper	63-2	0.21	0.22	0.26	0.23	12.17	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				95		%
Iron	54-2	1960.09	2008.31	1977.53	1981.97	1.23	ppb
Iron	56-2	2079.03	2095.23	2042.56	2072.28	1.30	ppb
Iron	57-2	2029.37	2013.68	1958.88	2000.64	1.85	ppb
Krypton	83-1						cps
Lead	206-1	0.13	0.09	0.09	0.10	19.66	ppb

Lab Sample ID: Q1200-18 Instrumnet Name: P8
Client Sample ID: ME29A0 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Tarameter	IVIGOS	Ооптерт	Обитера	Облисро	Avg. Conc.	CONCINED	Office
Lead	207-1	0.12	0.09	0.09	0.10	15.59	ppb
Lead	208-1	0.12	0.10	0.09	0.10	13.80	ppb
Lithium	6-1				101		%
Magnesium	24-2	91021.49	91160.03	90680.92	90954.15	0.27	ppb
Manganese	55-2	46.34	46.56	46.67	46.52	0.37	ppb
Molybdenum	94-1	7.98	6.88	7.13	7.33	7.89	ppb
Molybdenum	95-1	9.41	8.11	8.55	8.69	7.62	ppb
Molybdenum	96-1	9.17	7.85	8.21	8.41	8.08	ppb
Molybdenum	97-1	9.16	8.07	8.62	8.62	6.30	ppb
Molybdenum	98-1	9.18	8.10	8.32	8.53	6.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.20	0.19	0.16	0.18	11.98	ppb
Phosphorus	31-2	-3.62	-14.60	-15.32	-11.18		ppb
Potassium	39-2	4573.69	4549.97	4526.80	4550.15	0.52	ppb
Rhodium	103-1				92		%
Rhodium	103-2				95		%
Scandium	45-1				101		%
Scandium	45-2				101		%
Selenium	82-1	0.14	0.63	0.47	0.41	60.61	ppb
Selenium	77-2	0.69	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	-0.60	0.02	-0.01	-0.20		ppb
Silicon	28-1	11355.07	9777.59	9997.06	10376.57	8.23	ppb
Silver	107-1	0.02	0.02	0.04	0.03	31.32	ppb
Silver	109-1	0.02	0.01	0.02	0.02	13.10	ppb
Sodium	23-2	112626.38	113541.14	111807.76	112658.43	0.77	ppb
Strontium	86-1	23366.41	20108.11	21055.28	21509.93	7.79	ppb
Strontium	88-1	23062.35	20296.15	20686.94	21348.48	7.01	ppb
Sulfur	34-1	266789.45	231994.63	237003.19	245262.43	7.67	ppb
Terbium	159-1				98		%
Terbium	159-2				101		%
Thallium	203-1	0.02	0.01	0.01	0.01	48.81	ppb
Thallium	205-1	0.02	0.01	0.01	0.01	17.29	ppb
Tin	118-1	0.20	0.12	0.16	0.16	22.64	ppb
Titanium	47-1	1.08	0.96	0.92	0.99	8.22	ppb
Uranium	238-1	0.69	0.61	0.60	0.63	8.15	ppb

Lab Sample ID : Q1200-18 Instrumnet Name : P8
Client Sample ID : ME29A0 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.15	0.16	0.14	0.15	6.18	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.90	0.93	0.95	0.93	2.95	ppb
Zirconium	90-1	0.12	0.10	0.11	0.11	7.61	ppb
Zirconium	91-1	0.13	0.11	0.11	0.11	12.67	ppb

Lab Sample ID: Q1200-19 Instrumnet Name: P8

Client Sample ID: ME29A1 Dilution Factor: 1

1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Date & Time 7to	quirou . 202	-0 02 00 10.00.10	Batari	io riamo .	00 17 (T CET .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	302.51	300.07	296.11	299.56	1.08	ppb
Antimony	121-1	0.02	0.03	0.03	0.03	12.55	ppb
Arsenic	75-2	0.44	0.43	0.46	0.44	2.88	ppb
Barium	135-1	15.87	16.10	16.18	16.05	1.00	ppb
Barium	137-1	15.93	16.13	16.22	16.09	0.91	ppb
Beryllium	9-1	0.04	0.05	0.04	0.04	13.99	ppb
Bismuth	209-1				95		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.09	0.12	0.09	46.74	ppb
Cadmium	106-1	0.82	0.21	-0.45	0.19	325.00	ppb
Cadmium	111-1	0.08	0.03	-0.03	0.03	194.79	ppb
Calcium	43-1	429922.43	426349.74	444521.03	433597.74	2.22	ppb
Calcium	44-1	419274.93	417331.01	431252.24	422619.40	1.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.73	0.71	0.71	0.72	1.31	ppb
Cobalt	59-2	0.44	0.44	0.44	0.44	0.64	ppb
Copper	63-2	0.71	0.73	0.71	0.72	1.30	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				99		%
Indium	115-1				103		%
Indium	115-2				94		%
Iron	54-2	4367.96	4334.38	4306.90	4336.41	0.71	ppb
Iron	56-2	4491.08	4557.18	4503.59	4517.28	0.78	ppb
Iron	57-2	4314.58	4339.09	4357.19	4336.95	0.49	ppb
Krypton	83-1						cps
Lead	206-1	0.33	0.34	0.34	0.34	1.01	ppb

Lab Sample ID :Q1200-19Instrumnet Name :P8Client Sample ID :ME29A1Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Date & Time Ac	quirea: 202	25-02-06 16:36:18	DataF	ile Name :	081AREF.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.30	0.32	0.34	0.32	5.36	ppb
Lead	208-1	0.32	0.33	0.34	0.33	2.98	ppb
Lithium	6-1				105		%
Magnesium	24-2	133753.77	136241.51	131664.04	133886.44	1.71	ppb
Manganese	55-2	114.55	117.64	115.99	116.06	1.33	ppb
Molybdenum	94-1	3.79	3.89	3.92	3.87	1.69	ppb
Molybdenum	95-1	3.87	3.79	3.83	3.83	0.99	ppb
Molybdenum	96-1	3.65	3.75	3.83	3.74	2.40	ppb
Molybdenum	97-1	3.81	3.80	3.82	3.81	0.24	ppb
Molybdenum	98-1	3.75	3.83	3.86	3.81	1.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.38	1.22	1.23	1.28	7.02	ppb
Phosphorus	31-2	25.29	25.61	16.36	22.42	23.41	ppb
Potassium	39-2	5972.78	6054.56	5940.84	5989.40	0.98	ppb
Rhodium	103-1				97		%
Rhodium	103-2				95		%
Scandium	45-1				107		%
Scandium	45-2				101		%
Selenium	82-1	0.35	0.34	0.65	0.45	39.40	ppb
Selenium	77-2	0.69	0.69	0.69	0.69	0.34	ppb
Selenium	78-2	-0.40	-0.40	-0.40	-0.40		ppb
Silicon	28-1	7930.49	7886.38	8002.43	7939.77	0.74	ppb
Silver	107-1	0.02	0.02	0.02	0.02	13.82	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.65	ppb
Sodium	23-2	49599.00	49435.70	49521.56	49518.75	0.16	ppb
Strontium	86-1	12744.10	12749.94	12860.48	12784.84	0.51	ppb
Strontium	88-1	12550.53	12602.39	12665.29	12606.07	0.46	ppb
Sulfur	34-1	505691.71	500285.30	515344.42	507107.14	1.50	ppb
Terbium	159-1				105		%
Terbium	159-2				100		%
Thallium	203-1	0.02	0.02	0.02	0.02	9.45	ppb
Thallium	205-1	0.03	0.03	0.02	0.02	12.42	ppb
Tin	118-1	0.33	0.36	0.35	0.35	3.82	ppb
Titanium	47-1	8.04	8.00	8.33	8.12	2.22	ppb
Uranium	238-1	0.38	0.40	0.39	0.39	2.88	ppb

Lab Sample ID : Q1200-19 Instrumnet Name : P8
Client Sample ID : ME29A1 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.84	0.86	0.90	0.87	3.48	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				100		%
Zinc	66-2	1.55	1.40	1.57	1.51	6.04	ppb
Zirconium	90-1	0.37	0.38	0.38	0.37	2.23	ppb
Zirconium	91-1	0.38	0.35	0.39	0.38	6.01	ppb

Lab Sample ID: Q1200-20 Instrumnet Name: P8

Client Sample ID: ME29A2 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Date & Time / to	quircu . 202	20 02 00 10.00.04	Datai	iic riamic .	002/ (I (LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5.29	4.67	5.07	5.01	6.32	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	12.66	ppb
Arsenic	75-2	0.24	0.22	0.16	0.20	19.96	ppb
Barium	135-1	47.11	47.24	47.22	47.19	0.15	ppb
Barium	137-1	48.02	48.57	47.52	48.04	1.10	ppb
Beryllium	9-1	0.03	0.03	0.03	0.03	14.28	ppb
Bismuth	209-1				93		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.01	0.03	0.02	57.57	ppb
Cadmium	106-1	0.68	0.95	0.18	0.60	64.80	ppb
Cadmium	111-1	0.05	0.07	0.01	0.05	67.15	ppb
Calcium	43-1	324397.24	319993.69	316670.06	320353.66	1.21	ppb
Calcium	44-1	318564.32	309908.03	306442.69	311638.35	2.00	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.12	0.13	0.13	0.13	4.85	ppb
Cobalt	59-2	0.06	0.05	0.05	0.05	5.91	ppb
Copper	63-2	0.25	0.26	0.24	0.25	4.26	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				96		%
Iron	54-2	171.90	168.73	164.19	168.27	2.30	ppb
Iron	56-2	167.48	170.17	166.19	167.94	1.21	ppb
Iron	57-2	175.96	175.61	180.85	177.47	1.65	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.08	0.08	0.08	3.22	ppb

Lab Sample ID :Q1200-20Instrumnet Name :P8Client Sample ID :ME29A2Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Date a Time Act	quircu . 202	20 02 00 10.00.04	Datai	iic ivairie .	002/ ((\LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.08	0.08	5.67	ppb
Lead	208-1	0.08	0.08	0.08	0.08	1.18	ppb
Lithium	6-1				104		%
Magnesium	24-2	87018.40	84644.80	82831.03	84831.41	2.48	ppb
Manganese	55-2	132.82	133.89	131.60	132.77	0.86	ppb
Molybdenum	94-1	0.43	0.41	0.43	0.43	2.49	ppb
Molybdenum	95-1	0.24	0.24	0.24	0.24	1.70	ppb
Molybdenum	96-1	0.24	0.26	0.24	0.25	6.25	ppb
Molybdenum	97-1	0.22	0.22	0.24	0.23	4.31	ppb
Molybdenum	98-1	0.23	0.21	0.22	0.22	5.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.26	0.21	0.29	0.25	15.48	ppb
Phosphorus	31-2	13.63	14.75	13.89	14.09	4.15	ppb
Potassium	39-2	5837.73	5884.23	5770.71	5830.89	0.98	ppb
Rhodium	103-1				94		%
Rhodium	103-2				95		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	0.28	0.53	0.66	0.49	39.52	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.41	0.21	-0.41	-0.21		ppb
Silicon	28-1	6233.12	5867.30	5914.20	6004.87	3.31	ppb
Silver	107-1	0.01	0.02	0.02	0.02	16.66	ppb
Silver	109-1	0.01	0.01	0.01	0.01	18.27	ppb
Sodium	23-2	74540.09	73023.42	72653.41	73405.64	1.36	ppb
Strontium	86-1	14531.06	14855.88	14755.98	14714.31	1.13	ppb
Strontium	88-1	14854.45	14937.27	14808.85	14866.86	0.44	ppb
Sulfur	34-1	313110.67	304019.80	302496.19	306542.22	1.87	ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.00	0.01	0.01	33.02	ppb
Thallium	205-1	0.00	0.01	0.01	0.01	22.55	ppb
Tin	118-1	0.30	0.29	0.28	0.29	2.79	ppb
Titanium	47-1	0.64	0.66	0.61	0.64	4.35	ppb
Uranium	238-1	0.03	0.03	0.03	0.03	1.49	ppb

Lab Sample ID :Q1200-20Instrumnet Name :P8Client Sample ID :ME29A2Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.13	0.14	0.12	0.13	6.12	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	0.10	0.13	0.00	0.08	88.95	ppb
Zirconium	90-1	0.12	0.13	0.13	0.13	6.22	ppb
Zirconium	91-1	0.13	0.13	0.13	0.13	2.37	ppb

Lab Sample ID: Q1200-21 Instrumnet Name: P8

Client Sample ID: ME29A3 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Date & Time 7to	quircu . Zoz	20 02 00 10.42.47	Datai	iic i vairie .	000/ (( \L   .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	88.08	90.84	90.13	89.68	1.60	ppb
Antimony	121-1	0.23	0.25	0.26	0.25	6.79	ppb
Arsenic	75-2	0.27	0.33	0.25	0.28	13.49	ppb
Barium	135-1	9.51	9.90	10.70	10.04	6.07	ppb
Barium	137-1	9.40	10.00	10.55	9.98	5.77	ppb
Beryllium	9-1	0.04	0.04	0.04	0.04	1.84	ppb
Bismuth	209-1				95		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	0.13	0.10	0.04	0.09	52.64	ppb
Cadmium	106-1	0.58	0.32	0.02	0.31	91.96	ppb
Cadmium	111-1	0.09	0.08	0.06	0.08	17.63	ppb
Calcium	43-1	451202.88	470942.52	497065.69	473070.36	4.86	ppb
Calcium	44-1	439881.90	463886.21	489257.47	464341.86	5.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.23	0.21	0.23	0.23	4.99	ppb
Cobalt	59-2	0.29	0.30	0.29	0.29	1.97	ppb
Copper	63-2	1.56	1.65	1.58	1.60	2.78	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				100		%
Indium	115-1				102		%
Indium	115-2				96		%
Iron	54-2	2527.34	2583.39	2591.28	2567.33	1.36	ppb
Iron	56-2	2619.20	2726.22	2712.55	2685.99	2.17	ppb
Iron	57-2	2527.33	2587.45	2595.43	2570.07	1.45	ppb
Krypton	83-1						cps
Lead	206-1	0.41	0.39	0.43	0.41	4.82	ppb

Lab Sample ID: Q1200-21 Instrumnet Name: P8

Client Sample ID: ME29A3 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.37	0.37	0.42	0.38	7.06	ppb
Lead	208-1	0.38	0.38	0.42	0.39	6.09	ppb
Lithium	6-1				104		%
Magnesium	24-2	91426.80	93173.56	95401.04	93333.80	2.13	ppb
Manganese	55-2	106.54	109.86	109.75	108.72	1.73	ppb
Molybdenum	94-1	2.41	2.51	2.65	2.52	4.65	ppb
Molybdenum	95-1	2.62	2.79	2.82	2.74	3.92	ppb
Molybdenum	96-1	2.58	2.71	2.79	2.69	3.86	ppb
Molybdenum	97-1	2.66	2.85	2.87	2.79	4.18	ppb
Molybdenum	98-1	2.60	2.70	2.81	2.70	4.00	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.31	1.38	1.31	1.34	3.00	ppb
Phosphorus	31-2	54.52	55.51	69.69	59.91	14.16	ppb
Potassium	39-2	3876.54	3988.76	4062.01	3975.77	2.35	ppb
Rhodium	103-1				96		%
Rhodium	103-2				96		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.08	0.39	0.48	0.32	65.94	ppb
Selenium	77-2	0.67	0.70	0.00	0.46	86.65	ppb
Selenium	78-2	-0.81	-0.60	0.22	-0.40		ppb
Silicon	28-1	8782.07	9213.14	9820.50	9271.90	5.63	ppb
Silver	107-1	0.01	0.02	0.01	0.02	18.41	ppb
Silver	109-1	0.01	0.01	0.01	0.01	23.46	ppb
Sodium	23-2	21062.64	21559.43	22012.56	21544.88	2.21	ppb
Strontium	86-1	15379.99	15996.65	16592.38	15989.67	3.79	ppb
Strontium	88-1	15382.76	15918.96	16609.88	15970.53	3.85	ppb
Sulfur	34-1	444163.54	460698.49	490287.81	465049.95	5.02	ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.01	0.01	0.01	42.49	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	18.30	ppb
Tin	118-1	0.17	0.16	0.18	0.17	7.36	ppb
Titanium	47-1	2.69	2.75	2.98	2.81	5.32	ppb
Uranium	238-1	0.19	0.20	0.21	0.20	6.20	ppb

Lab Sample ID :Q1200-21Instrumnet Name :P8Client Sample ID :ME29A3Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.30	0.30	0.28	0.29	3.96	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				100		%
Zinc	66-2	4.81	4.80	4.84	4.82	0.45	ppb
Zirconium	90-1	0.11	0.13	0.13	0.12	6.37	ppb
Zirconium	91-1	0.13	0.13	0.14	0.13	3.69	ppb

Lab Sample ID: WATER-01 Instrumnet Name: P8

Client Sample ID: WATER-01 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Date & Time Ac	quireu . 202	25-02-06 16.46.05	Dalar	ile ivallie .	UO4AREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	_
Aluminium	27-2	12.80	11.64	12.56	12.33	4.94	ppb	
Antimony	121-1	1.49	1.40	1.48	1.46	3.29	ppb	
Arsenic	75-2	0.08	0.07	0.14	0.10	39.40	ppb	
Barium	135-1	35.93	33.87	35.95	35.25	3.38	ppb	
Barium	137-1	36.44	34.47	36.27	35.73	3.05	ppb	
Beryllium	9-1	0.04	0.02	0.02	0.03	30.06	ppb	
Bismuth	209-1				95		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	0.02	0.02	0.02	0.02	16.40	ppb	
Cadmium	106-1	1.08	0.50	1.07	0.88	37.52	ppb	
Cadmium	111-1	0.09	0.04	0.09	0.07	39.06	ppb	
Calcium	43-1	31801.44	30141.61	31727.29	31223.45	3.00	ppb	
Calcium	44-1	31374.68	29435.98	31222.45	30677.70	3.51	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	-0.02	0.02	-0.01	0.00		ppb	
Cobalt	59-2	0.08	0.08	0.08	0.08	5.22	ppb	
Copper	63-2	2.46	2.46	2.43	2.45	0.73	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				102		%	
Holmium	165-2				101		%	
Indium	115-1				101		%	
Indium	115-2				97		%	
Iron	54-2	4.67	3.75	3.51	3.98	15.44	ppb	
Iron	56-2	3.55	3.62	3.58	3.58	0.98	ppb	
Iron	57-2	3.46	4.51	4.20	4.06	13.24	ppb	
Krypton	83-1						cps	
Lead	206-1	0.09	0.07	0.08	0.08	8.42	ppb	

Lab Sample ID: WATER-01 Instrumnet Name: P8
Client Sample ID: WATER-01 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Lead         207-1         0.09         0.08         0.08         0.08         6.69         pp           Lead         208-1         0.09         0.07         0.08         0.08         8.55         pp           Lithium         6-1         """         105         """         %""           Magnesium         24-2         10649.41         10522.33         10715.51         10569.08         0.92         pp           Molydenum         94-1         0.45         0.37         0.43         0.42         10.58         pp           Molydedenum         95-1         0.43         0.44         0.46         0.44         1.00         pp           Molydedenum         97-1         0.43         0.44         0.44         0.44         1.00         pp           Molydedenum         97-1         0.43         0.44         0.44         0.44         1.00         pp           Neodymium         150-1         0.45         0.42         0.44         0.44         2.74         pp           Neodymium         150-2         1.03         1.02         1.03         1.03         1.03         1.03         1.03         1.03         1.03         1.03         1.04	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lithium         6-1         Image siture         <	Lead	207-1	0.09	0.08	0.08	0.08	6.69	ppb
Magnesium         24-2         10649.41         10522.33         10715.51         10629.08         0.92         ppb           Manganese         55-2         6.08         6.15         6.13         6.12         0.52         ppb           Molydednum         94-1         0.45         0.37         0.43         0.42         10.58         ppb           Molyddenum         95-1         0.44         0.45         0.44         0.44         1.00         ppb           Molyddenum         97-1         0.43         0.44         0.46         0.44         2.58         ppb           Molyddenum         98-1         0.43         0.42         0.44         0.44         2.74         ppb           Molyddenum         98-1         0.43         0.42         0.44         0.44         2.74         ppb           Molyddenum         150-1         0.43         0.42         0.44         0.44         2.74         ppb           Molyddenum         150-1         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42         0.42	Lead	208-1	0.09	0.07	0.08	0.08	8.55	ppb
Manganese         55-2         0.08         6.15         6.13         6.12         0.52         ppb           Molybdenum         94-1         0.45         0.37         0.43         0.42         10.58         ppb           Molybdenum         95-1         0.43         0.44         0.45         0.44         1.83         ppb           Molybdenum         96-1         0.43         0.44         0.45         0.44         0.44         1.00         ppb           Molybdenum         98-1         0.43         0.42         0.44         0.44         2.74         ppb           Molybdenum         98-1         0.43         0.42         0.44         0.44         2.74         ppb           Molybdenum         150-1	Lithium	6-1				105		%
Molybdenum         94-1         0.45         0.37         0.43         0.42         10.58         ppb           Molybdenum         95-1         0.43         0.44         0.45         0.44         1.83         ppb           Molybdenum         96-1         0.44         0.45         0.44         0.44         1.00         ppb           Molybdenum         98-1         0.43         0.44         0.46         0.44         2.58         ppb           Molybdenum         98-1         0.43         0.44         0.46         0.44         2.58         ppb           Molybdenum         150-1         0.43         0.42         0.44         0.44         2.58         ppb           Neodymium         150-1         0.43         0.42         0.44         0.44         2.58         ppb           Neodymium         150-2         0.03         1.02         1.03         1.03         1.03         0.85         ppb           Phosphorus         31-2         224.32         201.09         181.63         202.35         10.56         ppb           Plotasium         103-1         1.50         1.56         ppb         1.00         1.00         1.00         1.00	Magnesium	24-2	10649.41	10522.33	10715.51	10629.08	0.92	ppb
Molybdenum         95-1         0.43         0.44         0.45         0.44         1.00         pb           Molybdenum         96-1         0.44         0.45         0.44         0.44         1.00         pb           Molybdenum         97-1         0.43         0.44         0.46         0.44         2.58         pb           Molybdenum         98-1         0.45         0.42         0.44         0.44         2.58         pb           Molybdenum         150-1         0.45         0.42         0.44         0.44         2.74         pb           Neodymium         150-1         0.45         0.42         0.44         0.44         2.74         pb           Neodymium         150-1         0.45         0.42         1.03         1.03         1.03         0.85         pb           Nickel         60-2         1.03         1.02         1.03         1.03         0.85         pb           Phosphorus         31-2         284.32         201.09         181.63         202.35         10.56         pb           Phosphorus         39-2         1896.91         1850.86         1856.97         1868.25         1.34         pb	Manganese	55-2	6.08	6.15	6.13	6.12	0.52	ppb
Molybdenum         96-1         0.44         0.45         0.44         0.44         1.00         ppb           Molybdenum         97-1         0.43         0.44         0.46         0.44         2.58         ppb           Molybdenum         98-1         0.45         0.42         0.44         0.44         2.74         ppb           Neodymium         150-1         150-1         1.02         1.03         1.03         0.85         ppb           Nickel         60-2         1.03         1.02         1.03         1.03         0.85         ppb           Phosphorus         31-2         224.32         201.09         181.63         202.35         10.56         ppb           Phosphorus         31-2         289.91         1850.86         1856.97         1868.25         1.34         ppb           Potassium         39-2         1896.91         1850.86         1856.97         1868.25         1.34         ppb           Rhodium         103-1         150.00         100         100         100         100         90         90         90         90         90         90         90         90         90         90         90         90 <td< td=""><td>Molybdenum</td><td>94-1</td><td>0.45</td><td>0.37</td><td>0.43</td><td>0.42</td><td>10.58</td><td>ppb</td></td<>	Molybdenum	94-1	0.45	0.37	0.43	0.42	10.58	ppb
Molybdenum         97-1         0.43         0.44         0.46         0.44         2.58         pb           Molybdenum         98-1         0.45         0.42         0.44         0.44         2.74         pb           Neodymium         150-1	Molybdenum	95-1	0.43	0.44	0.45	0.44	1.83	ppb
Molybdenum         98-1         0.45         0.42         0.44         0.44         2.74         pp           Neodymium         150-1	Molybdenum	96-1	0.44	0.45	0.44	0.44	1.00	ppb
Neodymium         150-1         Image: Composition of the compositi	Molybdenum	97-1	0.43	0.44	0.46	0.44	2.58	ppb
Neodymium         150-2 <th< td=""><td>Molybdenum</td><td>98-1</td><td>0.45</td><td>0.42</td><td>0.44</td><td>0.44</td><td>2.74</td><td>ppb</td></th<>	Molybdenum	98-1	0.45	0.42	0.44	0.44	2.74	ppb
Nickel         60-2         1.03         1.02         1.03         1.03         0.85         ppb           Phosphorus         31-2         224.32         201.09         181.63         202.35         10.56         ppb           Potassium         39-2         1896.91         1850.86         1856.97         1868.25         1.34         ppb           Rhodium         103-1         103-1         100         100         %           Scandium         45-1         100         100         %           Scandium         45-2         101         %         9           Scalenium         82-1         0.23         0.23         -0.07         0.13         129.26         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         0.80         -0.41         -0.20         -0.47         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.1         10.	Neodymium	150-1						cps
Phosphorus         31-2         224.32         201.09         181.63         202.35         10.56         ppb           Potassium         39-2         1896.91         1850.86         1856.97         1868.25         1.34         ppb           Rhodium         103-1         45-1         45-1         100         %           Scandium         45-1         45-1         45-1         101         %           Scandium         45-2         -23         0.23         -0.07         0.13         129.26         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47         ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47         ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47         ppb           Silicon         28-1         2645.75         2512.18         2612.46         2590.13         2.68         ppb           Silver         109-1         0.02         0.02         0.02         0.02         2.445         <	Neodymium	150-2						cps
Potassium         39-2         1896.91         1850.86         1856.97         1868.25         1.34         ppb           Rhodium         103-1         48-1	Nickel	60-2	1.03	1.02	1.03	1.03	0.85	ppb
Rhodium         103-1         Fraction         97         %           Rhodium         103-2         100         %           Scandium         45-1         101         %           Scandium         45-2         101         %           Selenium         82-1         0.23         0.23         0.07         0.13         129.26         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         0.80         -0.41         -0.20         -0.47         Ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47         Ppb           Silicon         28-1         2645.75         2512.18         2612.46         2590.13         2.68         ppb           Siliver         107-1         0.02         0.02         0.02         0.02         4.13         ppb           Silver         109-1         0.02         0.02         0.02         4.45         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium	Phosphorus	31-2	224.32	201.09	181.63	202.35	10.56	ppb
Rhodium       103-2       Image: Control of the	Potassium	39-2	1896.91	1850.86	1856.97	1868.25	1.34	ppb
Scandium         45-1         Interpretation	Rhodium	103-1				97		%
Scandium         45-2         Interpretation         Material	Rhodium	103-2				100		%
Selenium         82-1         0.23         0.23         -0.07         0.13         129.26         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47	Scandium	45-1				101		%
Selenium         77-2         0.00         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.80         -0.41         -0.20         -0.47         -0.68         ppb           Silicon         28-1         2645.75         2512.18         2612.46         2590.13         2.68         ppb           Silver         107-1         0.02         0.02         0.02         0.02         4.13         ppb           Silver         109-1         0.02         0.01         0.02         0.02         4.13         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Stuffur         34-1         18560.43         170.33         177.31         175.69         2.71         ppb           Terbium         159-1	Scandium	45-2				101		%
Selenium         78-2         -0.80         -0.41         -0.20         -0.47         ppb           Silicon         28-1         2645.75         2512.18         2612.46         2590.13         2.68         ppb           Silver         107-1         0.02         0.02         0.02         0.02         4.13         ppb           Silver         109-1         0.02         0.01         0.02         0.02         24.45         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1	Selenium	82-1	0.23	0.23	-0.07	0.13	129.26	ppb
Silicon         28-1         2645.75         2512.18         2612.46         2590.13         2.68         ppb           Silver         107-1         0.02         0.02         0.02         0.02         4.13         ppb           Silver         109-1         0.02         0.01         0.02         0.02         24.45         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1         159-1         102         %         6         7         6         7         7         7         7         7         7         7         7         7         9         7         7         9         7         9         7         9         7         8         7         9         7         9         9         7         9         9         7         9         9         7         9         9	Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Silver         107-1         0.02         0.02         0.02         0.02         0.02         4.13         ppb           Silver         109-1         0.02         0.01         0.02         0.02         24.45         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Strontium         88-1         179.42         170.33         177.31         175.69         2.71         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1	Selenium	78-2	-0.80	-0.41	-0.20	-0.47		ppb
Silver         109-1         0.02         0.01         0.02         0.02         24.45         ppb           Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Strontium         88-1         179.42         170.33         177.31         175.69         2.71         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1	Silicon	28-1	2645.75	2512.18	2612.46	2590.13	2.68	ppb
Sodium         23-2         45516.56         45751.67         45244.16         45504.13         0.56         ppb           Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Strontium         88-1         179.42         170.33         177.31         175.69         2.71         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1	Silver	107-1	0.02	0.02	0.02	0.02	4.13	ppb
Strontium         86-1         173.17         164.61         172.61         170.13         2.81         ppb           Strontium         88-1         179.42         170.33         177.31         175.69         2.71         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1	Silver	109-1	0.02	0.01	0.02	0.02	24.45	ppb
Strontium         88-1         179.42         170.33         177.31         175.69         2.71         ppb           Sulfur         34-1         18560.43         17033.25         17628.44         17740.71         4.34         ppb           Terbium         159-1         102         %         %           Terbium         159-2         101         %         101         %           Thallium         203-1         0.02         0.01         0.02         0.02         17.90         ppb           Thallium         205-1         0.01         0.02         0.02         0.02         16.05         ppb           Tin         118-1         0.10         0.08         0.10         0.09         7.66         ppb           Titanium         47-1         0.40         0.41 <td>Sodium</td> <td>23-2</td> <td>45516.56</td> <td>45751.67</td> <td>45244.16</td> <td>45504.13</td> <td>0.56</td> <td>ppb</td>	Sodium	23-2	45516.56	45751.67	45244.16	45504.13	0.56	ppb
Sulfur     34-1     18560.43     17033.25     17628.44     17740.71     4.34     ppb       Terbium     159-1	Strontium	86-1	173.17	164.61	172.61	170.13	2.81	ppb
Terbium     159-1     102     %       Terbium     159-2     101     %       Thallium     203-1     0.02     0.01     0.02     0.02     17.90     ppb       Thallium     205-1     0.01     0.02     0.02     0.02     16.05     ppb       Tin     118-1     0.10     0.08     0.10     0.09     7.66     ppb       Titanium     47-1     0.40     0.41     0.41     0.41     0.41     0.72     ppb	Strontium	88-1	179.42	170.33	177.31	175.69	2.71	ppb
Terbium         159-2         101         %           Thallium         203-1         0.02         0.01         0.02         0.02         17.90         ppb           Thallium         205-1         0.01         0.02         0.02         0.02         16.05         ppb           Tin         118-1         0.10         0.08         0.10         0.09         7.66         ppb           Titanium         47-1         0.40         0.41         0.41         0.41         0.41         0.72         ppb	Sulfur	34-1	18560.43	17033.25	17628.44	17740.71	4.34	ppb
Thallium       203-1       0.02       0.01       0.02       0.02       17.90       ppb         Thallium       205-1       0.01       0.02       0.02       0.02       16.05       ppb         Tin       118-1       0.10       0.08       0.10       0.09       7.66       ppb         Titanium       47-1       0.40       0.41       0.41       0.41       0.41       0.72       ppb	Terbium	159-1				102		%
Thallium     205-1     0.01     0.02     0.02     0.02     16.05     ppb       Tin     118-1     0.10     0.08     0.10     0.09     7.66     ppb       Titanium     47-1     0.40     0.41     0.41     0.41     0.41     0.72     ppb	Terbium	159-2				101		%
Tin 118-1 0.10 0.08 0.10 0.09 7.66 ppb Titanium 47-1 0.40 0.41 0.41 0.41 0.72 ppb	Thallium	203-1	0.02	0.01	0.02	0.02	17.90	ppb
Titanium 47-1 0.40 0.41 0.41 0.41 0.72 ppb	Thallium	205-1	0.01	0.02	0.02	0.02	16.05	ppb
	Tin	118-1	0.10	0.08	0.10	0.09	7.66	ppb
Uranium 238-1 0.01 0.01 0.01 0.01 11.40 ppb	Titanium	47-1	0.40	0.41	0.41	0.41	0.72	ppb
	Uranium	238-1	0.01	0.01	0.01	0.01	11.40	ppb

Lab Sample ID: WATER-01 Instrumnet Name: P8
Client Sample ID: WATER-01 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.09	0.09	0.09	0.09	1.98	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				99		%
Zinc	66-2	4.09	3.73	3.97	3.93	4.59	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	16.10	ppb
Zirconium	91-1	0.03	0.02	0.03	0.02	23.97	ppb

Lab Sample ID :WATER-02REInstrumnet Name :P8Client Sample ID :WATER-02REDilution Factor :1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Date & Time 7to	quircu . Zoz	20 02 00 10.43.10	Datai	iic i vaiiic .	000/ (I (L1 .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22.79	22.10	21.90	22.26	2.08	ppb
Antimony	121-1	0.16	0.28	40.60	13.68	170.47	ppb
Arsenic	75-2	0.16	0.13	0.15	0.15	9.04	ppb
Barium	135-1	37.50	64.34	9290.07	3130.64	170.39	ppb
Barium	137-1	37.97	64.04	9315.25	3139.09	170.39	ppb
Beryllium	9-1	0.03	0.08	2.97	1.03	164.28	ppb
Bismuth	209-1				52		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.09	13.81	4.64	171.42	ppb
Cadmium	106-1	1.00	1.57	11.85	4.80	127.14	ppb
Cadmium	111-1	0.09	0.14	2.17	0.80	148.19	ppb
Calcium	43-1	29456.11	47067.80	4898101.38	1658208.43	169.21	ppb
Calcium	44-1	29026.88	46401.18	4712789.44	1596072.50	169.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.07	-0.05	-0.03	-0.05		ppb
Cobalt	59-2	0.14	0.16	0.16	0.15	8.71	ppb
Copper	63-2	77.62	76.04	77.15	76.94	1.05	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				57		%
Holmium	165-2				101		%
Indium	115-1				57		%
Indium	115-2				96		%
Iron	54-2	9.34	8.69	8.27	8.77	6.17	ppb
Iron	56-2	8.55	8.48	8.58	8.54	0.63	ppb
Iron	57-2	8.31	8.67	9.80	8.92	8.69	ppb
Krypton	83-1						cps
Lead	206-1	0.20	0.39	59.39	19.99	170.66	ppb

Lab Sample ID: WATER-02RE Instrumnet Name: P8

Client Sample ID: WATER-02RE Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.21	0.40	58.06	19.56	170.49	ppb
Lead	208-1	0.20	0.39	58.01	19.54	170.55	ppb
Lithium	6-1				59		%
Magnesium	24-2	10856.88	10930.86	10930.36	10906.04	0.39	ppb
Manganese	55-2	9.69	9.52	9.50	9.57	1.06	ppb
Molybdenum	94-1	0.41	0.68	100.49	33.86	170.44	ppb
Molybdenum	95-1	0.43	0.70	104.76	35.30	170.43	ppb
Molybdenum	96-1	0.43	0.67	100.41	33.84	170.39	ppb
Molybdenum	97-1	0.42	0.80	101.20	34.14	170.11	ppb
Molybdenum	98-1	0.43	0.69	97.42	32.84	170.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.51	0.44	0.55	0.50	11.06	ppb
Phosphorus	31-2	211.88	187.74	205.56	201.73	6.20	ppb
Potassium	39-2	1926.52	1901.79	1932.11	1920.14	0.84	ppb
Rhodium	103-1				55		%
Rhodium	103-2				100		%
Scandium	45-1				57		%
Scandium	45-2				101		%
Selenium	82-1	-0.08	0.33	76.91	25.72	172.35	ppb
Selenium	77-2	0.69	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	-0.40	-0.60	-0.38	-0.46		ppb
Silicon	28-1	2474.75	3976.44	408938.70	138463.30	169.17	ppb
Silver	107-1	0.02	0.03	4.63	1.56	170.58	ppb
Silver	109-1	0.01	0.03	4.94	1.66	170.74	ppb
Sodium	23-2	47223.92	46459.63	46449.28	46710.94	0.95	ppb
Strontium	86-1	163.75	265.73	37724.10	12717.86	170.28	ppb
Strontium	88-1	171.62	279.44	39731.05	13394.03	170.29	ppb
Sulfur	34-1	16615.84	32004.18	4214261.55	1420960.52	170.24	ppb
Terbium	159-1				56		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.03	5.76	1.93	171.25	ppb
Thallium	205-1	0.01	0.03	5.29	1.78	170.91	ppb
Tin	118-1	0.10	0.28	60.89	20.42	171.62	ppb
Titanium	47-1	0.45	0.59	72.60	24.55	169.55	ppb
Uranium	238-1	0.03	0.06	7.68	2.59	170.17	ppb

Lab Sample ID: WATER-02RE Instrumnet Name: P8
Client Sample ID: WATER-02RE Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.09	0.08	0.08	0.08	4.87	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				58		%
Yttrium	89-2				99		%
Zinc	66-2	12.95	13.35	13.54	13.28	2.24	ppb
Zirconium	90-1	0.02	0.06	7.86	2.65	170.48	ppb
Zirconium	91-1	0.02	0.05	9.07	3.05	171.11	ppb

Lab Sample ID: WATER-02 Instrumnet Name: P8

Client Sample ID: WATER-02 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Date a Time 7to	quircu . 202	0 02 00 10.02.07	Datai	iic i vairie .	000/ (I \L I .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22.00	20.77	21.35	21.37	2.88	ppb
Antimony	121-1	0.15	0.16	0.16	0.16	2.75	ppb
Arsenic	75-2	0.13	0.15	0.09	0.12	22.24	ppb
Barium	135-1	37.81	38.98	39.20	38.67	1.94	ppb
Barium	137-1	37.56	39.07	39.21	38.61	2.36	ppb
Beryllium	9-1	0.02	0.02	0.02	0.02	3.04	ppb
Bismuth	209-1				98		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.09	0.05	0.06	60.86	ppb
Cadmium	106-1	0.94	0.67	0.52	0.71	30.24	ppb
Cadmium	111-1	0.08	0.06	0.05	0.06	29.91	ppb
Calcium	43-1	28915.97	30268.23	30200.33	29794.85	2.56	ppb
Calcium	44-1	28103.13	29256.23	29651.04	29003.47	2.77	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.04	-0.03	-0.04	-0.04		ppb
Cobalt	59-2	0.16	0.13	0.13	0.14	11.75	ppb
Copper	63-2	78.75	77.00	77.64	77.80	1.14	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				100		%
Indium	115-1				104		%
Indium	115-2				95		%
Iron	54-2	8.75	8.38	8.75	8.63	2.47	ppb
Iron	56-2	8.82	8.59	8.60	8.67	1.52	ppb
Iron	57-2	9.90	8.97	8.84	9.24	6.24	ppb
Krypton	83-1						cps
Lead	206-1	0.21	0.23	0.20	0.21	6.64	ppb

Lab Sample ID: WATER-02 Instrumnet Name: P8

Client Sample ID: WATER-02 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.19	0.20	0.22	0.20	6.30	ppb
Lead	208-1	0.19	0.22	0.20	0.20	7.12	ppb
Lithium	6-1				107		%
Magnesium	24-2	11213.94	10908.90	11023.81	11048.88	1.39	ppb
Manganese	55-2	9.88	9.32	10.07	9.76	4.00	ppb
Molybdenum	94-1	0.38	0.40	0.42	0.40	5.20	ppb
Molybdenum	95-1	0.41	0.43	0.44	0.43	4.27	ppb
Molybdenum	96-1	0.41	0.41	0.45	0.42	4.60	ppb
Molybdenum	97-1	0.43	0.48	0.47	0.46	5.46	ppb
Molybdenum	98-1	0.44	0.44	0.44	0.44	0.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.53	0.56	0.53	0.54	3.27	ppb
Phosphorus	31-2	189.97	200.16	199.44	196.52	2.90	ppb
Potassium	39-2	1958.46	1919.81	1912.81	1930.36	1.27	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				99		%
Selenium	82-1	0.19	0.51	0.62	0.44	51.31	ppb
Selenium	77-2	1.39	0.00	0.71	0.70	99.53	ppb
Selenium	78-2	0.01	0.01	0.23	0.08	152.65	ppb
Silicon	28-1	2395.55	2511.99	2529.38	2478.97	2.94	ppb
Silver	107-1	0.01	0.02	0.02	0.02	7.49	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.01	ppb
Sodium	23-2	47233.53	46609.79	46985.18	46942.83	0.67	ppb
Strontium	86-1	164.77	169.69	170.65	168.37	1.87	ppb
Strontium	88-1	170.15	174.53	175.47	173.38	1.64	ppb
Sulfur	34-1	16008.25	16717.13	16140.47	16288.62	2.31	ppb
Terbium	159-1				104		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.01	0.01	0.01	8.33	ppb
Thallium	205-1	0.01	0.02	0.02	0.02	8.57	ppb
Tin	118-1	0.10	0.13	0.12	0.12	13.98	ppb
Titanium	47-1	0.40	0.37	0.41	0.40	6.15	ppb
Uranium	238-1	0.03	0.04	0.04	0.04	7.67	ppb

Lab Sample ID: WATER-02 Instrumnet Name: P8
Client Sample ID: WATER-02 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.09	0.10	0.08	0.09	10.31	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				99		%
Zinc	66-2	13.47	13.07	12.80	13.12	2.57	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	12.34	ppb
Zirconium	91-1	0.02	0.02	0.03	0.02	21.98	ppb

Lab Sample ID : CCV004 Instrumnet Name : P8
Client Sample ID : CCV004 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

Date & Time Ac	quired: 202	quired: 2025-02-06 16:55:55		DataFile Name :		087CCV.d	
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47797.48	47901.50	47841.13	47846.71	0.11	ppb
Antimony	121-1	495.03	508.13	495.93	499.70	1.46	ppb
Arsenic	75-2	505.28	496.28	494.97	498.84	1.13	ppb
Barium	135-1	2510.93	2611.33	2552.65	2558.30	1.97	ppb
Barium	137-1	2507.16	2580.90	2506.14	2531.40	1.69	ppb
Beryllium	9-1	497.41	493.55	504.79	498.58	1.15	ppb
Bismuth	209-1				92		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	502.54	514.34	491.19	502.69	2.30	ppb
Cadmium	106-1	503.78	515.50	501.31	506.87	1.49	ppb
Cadmium	111-1	492.47	503.51	498.10	498.03	1.11	ppb
Calcium	43-1	236232.42	235559.22	237960.46	236584.03	0.52	ppb
Calcium	44-1	238221.45	233752.98	239415.53	237129.99	1.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	513.24	515.90	516.98	515.37	0.37	ppb
Cobalt	59-2	506.06	503.46	497.06	502.19	0.92	ppb
Copper	63-2	4828.40	4748.60	4809.15	4795.39	0.87	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				98		%
Indium	115-1				99		%
Indium	115-2				91		%
Iron	54-2	120407.43	119828.39	119814.49	120016.77	0.28	ppb
Iron	56-2	119599.51	119701.41	119364.86	119555.26	0.14	ppb
Iron	57-2	121121.69	120418.14	120308.37	120616.07	0.37	ppb
Krypton	83-1						cps
Lead	206-1	2581.93	2589.57	2646.23	2605.91	1.35	ppb

Lab Sample ID : CCV004 Instrumnet Name : P8
Client Sample ID : CCV004 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2580.27	2602.24	2686.19	2622.90	2.13	ppb
Lead	208-1	2577.61	2591.31	2646.93	2605.28	1.41	ppb
Lithium	6-1				99		%
Magnesium	24-2	241970.47	239477.85	242571.72	241340.01	0.68	ppb
Manganese	55-2	4960.81	4923.80	4962.71	4949.11	0.44	ppb
Molybdenum	94-1	5158.46	5132.50	5173.16	5154.71	0.40	ppb
Molybdenum	95-1	5124.81	5051.25	5089.42	5088.49	0.72	ppb
Molybdenum	96-1	5127.92	5043.13	5031.10	5067.38	1.04	ppb
Molybdenum	97-1	5138.43	5067.68	5099.82	5101.97	0.69	ppb
Molybdenum	98-1	5150.47	5126.61	5147.21	5141.43	0.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	463.11	456.32	458.59	459.34	0.75	ppb
Phosphorus	31-2	9873.68	9610.48	10013.18	9832.45	2.08	ppb
Potassium	39-2	118595.87	119373.59	121372.99	119780.82	1.20	ppb
Rhodium	103-1				93		%
Rhodium	103-2				90		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	491.91	490.97	492.77	491.88	0.18	ppb
Selenium	77-2	473.86	507.59	490.05	490.50	3.44	ppb
Selenium	78-2	463.54	478.60	468.32	470.15	1.64	ppb
Silicon	28-1	515.73	516.02	517.34	516.37	0.17	ppb
Silver	107-1	477.43	492.30	479.66	483.13	1.66	ppb
Silver	109-1	484.19	491.74	482.12	486.02	1.04	ppb
Sodium	23-2	246593.07	242397.87	246299.06	245096.66	0.96	ppb
Strontium	86-1	524.58	529.18	514.24	522.67	1.46	ppb
Strontium	88-1	503.83	514.33	505.79	507.98	1.10	ppb
Sulfur	34-1	10912.18	10298.02	10486.89	10565.70	2.98	ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	523.74	515.47	537.76	525.66	2.14	ppb
Thallium	205-1	518.36	510.77	528.01	519.05	1.66	ppb
Tin	118-1	498.99	518.12	501.28	506.13	2.06	ppb
Titanium	47-1	5080.08	4982.82	5067.63	5043.51	1.05	ppb
Uranium	238-1	523.87	524.07	532.18	526.71	0.90	ppb

Lab Sample ID :CCV004Instrumnet Name :P8Client Sample ID :CCV004Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	517.09	514.61	516.91	516.20	0.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				98		%
Zinc	66-2	4854.52	4773.62	4823.68	4817.27	0.85	ppb
Zirconium	90-1	519.47	509.58	516.08	515.04	0.98	ppb
Zirconium	91-1	511.45	516.82	512.65	513.64	0.55	ppb

Lab Sample ID: CCB004 Instrumnet Name: P8
Client Sample ID: CCB004 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.50	0.14	0.41	0.35	53.11	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	6.91	ppb
Arsenic	75-2	-0.01	-0.01	-0.02	-0.01		ppb
Barium	135-1	0.01	0.01	0.00	0.00	91.30	ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.08	0.07	0.07	0.07	9.62	ppb
Bismuth	209-1				104		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.05	-0.02	0.02	145.23	ppb
Cadmium	106-1	-0.40	-0.54	0.87	-0.02		ppb
Cadmium	111-1	-0.03	-0.04	0.07	0.00	6980.41	ppb
Calcium	43-1	-0.66	0.20	0.39	-0.03		ppb
Calcium	44-1	-2.21	-1.00	-0.83	-1.34		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.03	-0.05	-0.03		ppb
Cobalt	59-2	0.01	0.00	0.01	0.01	61.38	ppb
Copper	63-2	0.10	0.10	0.08	0.09	11.68	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				104		%
Indium	115-1				110		%
Indium	115-2				102		%
Iron	54-2	1.79	1.24	1.55	1.53	18.05	ppb
Iron	56-2	1.37	1.42	1.55	1.45	6.35	ppb
Iron	57-2	1.24	0.53	1.51	1.09	46.08	ppb
Krypton	83-1						cps
Lead	206-1	0.10	0.11	0.09	0.10	7.72	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :CCB004Instrumnet Name :P8Client Sample ID :CCB004Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.09	0.10	0.08	0.09	9.61	ppb
Lead	208-1	0.10	0.10	0.09	0.10	3.33	ppb
Lithium	6-1				111		%
Magnesium	24-2	-7.38	-8.01	-7.33	-7.58		ppb
Manganese	55-2	0.06	0.04	0.05	0.05	16.74	ppb
Molybdenum	94-1	0.05	0.04	0.04	0.04	16.26	ppb
Molybdenum	95-1	0.03	0.03	0.02	0.03	20.21	ppb
Molybdenum	96-1	0.03	0.03	0.02	0.03	18.90	ppb
Molybdenum	97-1	0.03	0.02	0.02	0.02	33.23	ppb
Molybdenum	98-1	0.03	0.03	0.02	0.03	16.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.25	0.25	0.23	0.25	4.06	ppb
Phosphorus	31-2	-24.40	-26.16	-17.90	-22.82		ppb
Potassium	39-2	27.28	24.36	20.96	24.20	13.07	ppb
Rhodium	103-1				108		%
Rhodium	103-2				106		%
Scandium	45-1				109		%
Scandium	45-2				105		%
Selenium	82-1	-0.37	-0.02	-0.03	-0.14		ppb
Selenium	77-2	0.00	0.00	0.66	0.22	173.21	ppb
Selenium	78-2	-0.22	-0.62	-0.24	-0.36		ppb
Silicon	28-1	-4.12	-3.57	-3.41	-3.70		ppb
Silver	107-1	0.02	0.02	0.02	0.02	15.40	ppb
Silver	109-1	0.02	0.02	0.02	0.02	7.28	ppb
Sodium	23-2	31.43	30.68	30.62	30.91	1.45	ppb
Strontium	86-1	0.02	0.03	0.02	0.02	25.78	ppb
Strontium	88-1	0.02	0.02	0.02	0.02	4.77	ppb
Sulfur	34-1	74.53	323.02	-269.31	42.75	695.80	ppb
Terbium	159-1				109		%
Terbium	159-2				103		%
Thallium	203-1	0.02	0.01	0.01	0.01	20.13	ppb
Thallium	205-1	0.02	0.02	0.01	0.01	12.65	ppb
Tin	118-1	0.06	0.05	0.06	0.06	9.66	ppb
Titanium	47-1	0.01	-0.01	0.01	0.00	2754.98	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: CCB004 Instrumnet Name: P8
Client Sample ID: CCB004 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	138.01	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	-0.18	-0.20	-0.17	-0.18		ppb
Zirconium	90-1	0.00	0.00	0.01	0.01	57.33	ppb
Zirconium	91-1	0.01	0.00	0.01	0.01	57.17	ppb

Lab Sample ID :PB166532BLInstrumnet Name :P8Client Sample ID :PBS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:12:19 DataFile Name: 092CCBE.d

Date & Time / to	quircu . Zoz	0 02 00 17.12.10	Datai	iic raine .	00200BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.12	0.14	-0.16	0.03	499.83	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	9.64	ppb
Arsenic	75-2	0.00	0.00	-0.02	-0.01		ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.04	0.03	0.04	0.04	12.06	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.02	-0.03	0.07	0.02	211.48	ppb
Cadmium	106-1	0.04	-0.59	1.05	0.17	493.25	ppb
Cadmium	111-1	0.01	-0.04	0.08	0.02	403.54	ppb
Calcium	43-1	-0.70	-0.05	-0.06	-0.27		ppb
Calcium	44-1	-1.49	-1.28	-0.89	-1.22		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.24	0.25	0.28	0.26	8.02	ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	31.26	ppb
Copper	63-2	0.12	0.08	0.14	0.11	27.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				101		%
Indium	115-1				109		%
Indium	115-2				100		%
Iron	54-2	1.66	1.55	1.59	1.60	3.60	ppb
Iron	56-2	1.55	1.66	1.93	1.71	11.30	ppb
Iron	57-2	0.74	1.64	3.59	1.99	73.38	ppb
Krypton	83-1						cps
Lead	206-1	0.05	0.04	0.04	0.05	14.59	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166532BLInstrumnet Name :P8Client Sample ID :PBS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:12:19 DataFile Name: 092CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.04	0.05	0.04	0.04	19.81	ppb
Lead	208-1	0.05	0.05	0.05	0.05	3.27	ppb
Lithium	6-1				109		%
Magnesium	24-2	-6.54	-6.76	-5.93	-6.41		ppb
Manganese	55-2	0.09	0.07	0.08	0.08	11.18	ppb
Molybdenum	94-1	0.02	0.01	0.04	0.02	64.23	ppb
Molybdenum	95-1	0.02	0.01	0.01	0.01	65.72	ppb
Molybdenum	96-1	0.01	0.01	0.01	0.01	5.48	ppb
Molybdenum	97-1	0.01	0.01	0.01	0.01	18.11	ppb
Molybdenum	98-1	0.01	0.01	0.00	0.00	43.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.45	0.40	0.44	0.43	5.79	ppb
Phosphorus	31-2	-30.12	-29.49	-29.18	-29.60		ppb
Potassium	39-2	23.41	21.88	29.60	24.96	16.37	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				110		%
Scandium	45-2				102		%
Selenium	82-1	-0.01	-0.24	0.05	-0.06		ppb
Selenium	77-2	0.00	0.00	1.41	0.47	173.21	ppb
Selenium	78-2	-0.43	-0.43	-0.80	-0.55		ppb
Silicon	28-1	-4.06	-4.26	-4.40	-4.24		ppb
Silver	107-1	0.01	0.01	0.01	0.01	25.24	ppb
Silver	109-1	0.00	0.01	0.01	0.00	14.96	ppb
Sodium	23-2	34.43	33.56	40.65	36.21	10.67	ppb
Strontium	86-1	0.02	0.01	0.00	0.01	69.71	ppb
Strontium	88-1	0.02	0.02	0.02	0.02	4.10	ppb
Sulfur	34-1	1023.99	834.29	765.18	874.49	15.32	ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.01	0.01	0.00	94.33	ppb
Thallium	205-1	0.01	0.00	0.00	0.00	31.05	ppb
Tin	118-1	-0.02	-0.02	-0.01	-0.02		ppb
Titanium	47-1	0.00	0.02	0.00	0.01	146.83	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB134612 Operator :

Lab Sample ID :PB166532BLInstrumnet Name :P8Client Sample ID :PBS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:12:19 DataFile Name: 092CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.01	0.00	48.56	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				103		%
Zinc	66-2	-0.25	-0.25	-0.20	-0.23		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	238.46	ppb
Zirconium	91-1	0.01	0.01	0.00	0.01	72.21	ppb

Jaswal

Lab Sample ID :PB166532BSInstrumnet Name :P8Client Sample ID :LCS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10424.31	9760.43	9551.57	9912.10	4.60	ppb
Antimony	121-1	520.54	523.17	591.65	545.12	7.40	ppb
Arsenic	75-2	549.78	516.13	516.91	527.61	3.64	ppb
Barium	135-1	2556.99	2571.79	2886.67	2671.82	6.97	ppb
Barium	137-1	2594.71	2569.13	2898.70	2687.52	6.82	ppb
Beryllium	9-1	490.00	485.02	533.30	502.77	5.28	ppb
Bismuth	209-1				95		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	521.95	516.09	601.33	546.46	8.71	ppb
Cadmium	106-1	524.25	521.19	596.67	547.37	7.81	ppb
Cadmium	111-1	515.31	526.36	595.28	545.65	7.94	ppb
Calcium	43-1	47555.50	47961.68	55947.01	50488.07	9.37	ppb
Calcium	44-1	46975.21	47630.78	54801.02	49802.33	8.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	568.13	537.59	526.76	544.16	3.94	ppb
Cobalt	59-2	565.66	535.61	511.86	537.71	5.01	ppb
Copper	63-2	5576.94	5261.59	5120.96	5319.83	4.39	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				95		%
Indium	115-1				101		%
Indium	115-2				89		%
Iron	54-2	27754.11	26386.31	25655.64	26598.68	4.00	ppb
Iron	56-2	27323.18	25847.27	25067.36	26079.27	4.39	ppb
Iron	57-2	27776.12	26177.13	25439.87	26464.37	4.51	ppb
Krypton	83-1						cps
Lead	206-1	2523.58	2532.62	2875.71	2643.97	7.59	ppb

Lab Sample ID :PB166532BSInstrumnet Name :P8Client Sample ID :LCS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2548.80	2524.06	2864.91	2645.92	7.18	ppb
Lead	208-1	2553.85	2534.04	2854.16	2647.35	6.78	ppb
Lithium	6-1				102		%
Magnesium	24-2	55812.97	52060.20	52105.17	53326.11	4.04	ppb
Manganese	55-2	5486.21	5246.80	5054.96	5262.66	4.11	ppb
Molybdenum	94-1	4996.61	5096.62	5696.72	5263.31	7.19	ppb
Molybdenum	95-1	4998.48	4988.85	5756.22	5247.85	8.39	ppb
Molybdenum	96-1	4982.78	4915.99	5800.03	5232.93	9.41	ppb
Molybdenum	97-1	4968.19	4959.28	5787.21	5238.23	9.08	ppb
Molybdenum	98-1	4930.72	5007.33	5735.59	5224.54	8.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	566.88	533.34	513.36	537.86	5.03	ppb
Phosphorus	31-2	10889.60	10230.23	9820.03	10313.29	5.23	ppb
Potassium	39-2	26921.09	25425.44	24784.43	25710.32	4.26	ppb
Rhodium	103-1				97		%
Rhodium	103-2				93		%
Scandium	45-1				103		%
Scandium	45-2				97		%
Selenium	82-1	498.25	498.34	590.18	528.92	10.03	ppb
Selenium	77-2	556.40	519.90	479.59	518.63	7.41	ppb
Selenium	78-2	529.88	476.24	523.08	509.73	5.73	ppb
Silicon	28-1	500.26	509.72	562.65	524.21	6.41	ppb
Silver	107-1	512.98	511.31	585.78	536.69	7.92	ppb
Silver	109-1	523.60	513.24	590.01	542.29	7.68	ppb
Sodium	23-2	56145.59	52745.33	51878.94	53589.95	4.21	ppb
Strontium	86-1	503.69	518.88	572.24	531.60	6.77	ppb
Strontium	88-1	504.84	493.24	573.77	523.95	8.31	ppb
Sulfur	34-1	10157.71	10228.93	12756.50	11047.71	13.40	ppb
Terbium	159-1				101		%
Terbium	159-2				97		%
Thallium	203-1	507.21	504.57	578.60	530.12	7.92	ppb
Thallium	205-1	507.54	507.74	561.31	525.53	5.90	ppb
Tin	118-1	522.80	519.02	582.94	541.59	6.62	ppb
Titanium	47-1	4897.38	4944.21	5649.44	5163.68	8.16	ppb
Uranium	238-1	485.74	485.02	552.05	507.61	7.58	ppb

LB Number : LB134612 Operator :

Lab Sample ID :PB166532BSInstrumnet Name :P8Client Sample ID :LCS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	564.82	536.56	506.95	536.11	5.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				96		%
Zinc	66-2	5695.16	5398.29	5260.23	5451.23	4.08	ppb
Zirconium	90-1	503.58	504.96	578.28	528.94	8.08	ppb
Zirconium	91-1	497.57	499.83	588.09	528.50	9.77	ppb

Jaswal

Lab Sample ID: Q1271-03 Instrumnet Name: P8

Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Date & Time Ac	quircu . 202	0 02 00 17.10.21	Data	incitatine.	05+7 (I (LI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2.28	3.88	2.69	2.95	28.03	ppb
Antimony	121-1	0.18	0.15	0.12	0.15	19.84	ppb
Arsenic	75-2	0.02	0.01	0.02	0.01	38.23	ppb
Barium	135-1	0.20	0.13	0.11	0.14	33.12	ppb
Barium	137-1	0.19	0.13	0.10	0.14	35.19	ppb
Beryllium	9-1	0.24	0.16	0.15	0.18	25.63	ppb
Bismuth	209-1				96		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.63	0.58	0.61	0.61	4.53	ppb
Cadmium	106-1	0.02	0.33	-0.56	-0.07		ppb
Cadmium	111-1	0.07	0.06	-0.02	0.04	124.06	ppb
Calcium	43-1	156.36	133.31	130.66	140.11	10.09	ppb
Calcium	44-1	166.86	136.43	128.65	143.98	14.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.37	1.47	1.43	1.42	3.63	ppb
Cobalt	59-2	0.02	0.04	0.03	0.03	25.20	ppb
Copper	63-2	0.24	0.23	0.28	0.25	10.44	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				104		%
Indium	115-1				101		%
Indium	115-2				102		%
Iron	54-2	18.63	19.74	19.56	19.31	3.08	ppb
Iron	56-2	17.74	17.54	18.00	17.76	1.30	ppb
Iron	57-2	17.85	17.29	17.78	17.64	1.73	ppb
Krypton	83-1						cps
Lead	206-1	0.48	0.33	0.29	0.37	27.25	ppb

Lab Sample ID :Q1271-03Instrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.49	0.34	0.30	0.37	26.50	ppb
Lead	208-1	0.47	0.34	0.29	0.36	25.94	ppb
Lithium	6-1				103		%
Magnesium	24-2	60.51	62.20	62.92	61.88	2.01	ppb
Manganese	55-2	0.66	0.74	0.68	0.70	6.03	ppb
Molybdenum	94-1	45.18	37.69	36.46	39.77	11.87	ppb
Molybdenum	95-1	54.88	46.00	43.76	48.21	12.19	ppb
Molybdenum	96-1	53.47	44.94	43.32	47.24	11.54	ppb
Molybdenum	97-1	55.23	46.15	44.61	48.66	11.79	ppb
Molybdenum	98-1	54.15	45.75	43.57	47.82	11.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.10	1.16	1.13	1.13	2.52	ppb
Phosphorus	31-2	122.20	109.55	133.02	121.59	9.66	ppb
Potassium	39-2	32.80	34.05	37.37	34.74	6.79	ppb
Rhodium	103-1				99		%
Rhodium	103-2				106		%
Scandium	45-1				100		%
Scandium	45-2				105		%
Selenium	82-1	-0.20	0.01	-0.15	-0.11		ppb
Selenium	77-2	0.66	0.00	0.68	0.45	86.65	ppb
Selenium	78-2	-0.62	-0.04	-0.21	-0.29		ppb
Silicon	28-1	17.39	7.96	5.22	10.19	62.63	ppb
Silver	107-1	0.09	0.06	0.05	0.07	24.23	ppb
Silver	109-1	0.08	0.06	0.04	0.06	28.53	ppb
Sodium	23-2	50.73	54.25	57.08	54.02	5.90	ppb
Strontium	86-1	0.17	0.10	0.10	0.12	35.02	ppb
Strontium	88-1	0.15	0.11	0.10	0.12	19.24	ppb
Sulfur	34-1	2769.97	951.22	285.35	1335.51	96.30	ppb
Terbium	159-1				100		%
Terbium	159-2				104		%
Thallium	203-1	0.07	0.05	0.04	0.05	26.12	ppb
Thallium	205-1	0.07	0.04	0.04	0.05	29.79	ppb
Tin	118-1	1.00	0.83	0.80	0.87	12.28	ppb
Titanium	47-1	0.51	0.30	0.34	0.39	28.89	ppb
Uranium	238-1	0.03	0.01	0.01	0.02	49.53	ppb

Lab Sample ID :Q1271-03Instrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.02	0.03	32.67	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				104		%
Zinc	66-2	315.99	323.98	324.26	321.41	1.46	ppb
Zirconium	90-1	0.03	0.02	0.02	0.02	42.19	ppb
Zirconium	91-1	0.04	0.02	0.01	0.03	58.11	ppb

Lab Sample ID: Q1271-03DUP Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Date a Time / to	quircu . Zoz	20 02 00 17.21.40	Data	iic radiiic .	000/ (I (E) .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.50	3.12	3.84	3.49	10.39	ppb
Antimony	121-1	0.06	0.06	0.06	0.06	3.36	ppb
Arsenic	75-2	0.01	-0.01	0.00	0.00		ppb
Barium	135-1	0.11	0.13	0.10	0.11	9.68	ppb
Barium	137-1	0.12	0.11	0.10	0.11	7.97	ppb
Beryllium	9-1	0.10	0.08	0.08	0.09	10.69	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.54	0.38	0.49	0.47	17.27	ppb
Cadmium	106-1	0.11	-1.31	-0.35	-0.51		ppb
Cadmium	111-1	0.02	-0.07	0.00	-0.02		ppb
Calcium	43-1	125.96	121.50	122.65	123.37	1.88	ppb
Calcium	44-1	129.53	126.15	124.45	126.71	2.04	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.38	1.41	1.44	1.41	2.17	ppb
Cobalt	59-2	0.02	0.03	0.02	0.03	16.33	ppb
Copper	63-2	0.22	0.22	0.20	0.21	6.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				104		%
Indium	115-1				108		%
Indium	115-2				103		%
Iron	54-2	10.89	10.63	12.25	11.26	7.75	ppb
Iron	56-2	10.64	10.85	10.83	10.77	1.10	ppb
Iron	57-2	11.28	10.53	10.39	10.74	4.47	ppb
Krypton	83-1						cps
Lead	206-1	0.23	0.23	0.21	0.23	5.58	ppb

Lab Sample ID :Q1271-03DUPInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Date & Time Act	quireu . 202	25-02-06 17.21.40	Dalai	rile ivallie .	U95AREF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.24	0.23	0.22	0.23	5.91	ppb
Lead	208-1	0.24	0.23	0.21	0.23	5.03	ppb
Lithium	6-1				110		%
Magnesium	24-2	61.91	60.38	61.61	61.30	1.32	ppb
Manganese	55-2	0.64	0.62	0.59	0.62	3.62	ppb
Molybdenum	94-1	37.37	36.89	36.71	36.99	0.93	ppb
Molybdenum	95-1	45.10	44.64	44.58	44.78	0.64	ppb
Molybdenum	96-1	43.79	43.61	42.92	43.44	1.05	ppb
Molybdenum	97-1	45.37	44.98	44.58	44.98	0.87	ppb
Molybdenum	98-1	45.01	44.00	44.01	44.34	1.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.03	1.14	1.10	1.09	5.00	ppb
Phosphorus	31-2	113.23	90.35	109.26	104.28	11.73	ppb
Potassium	39-2	33.07	34.62	32.87	33.52	2.85	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				106		%
Selenium	82-1	0.09	-0.02	-0.09	0.00		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.62	0.34	-0.62	-0.30		ppb
Silicon	28-1	4.66	3.09	3.65	3.80	20.94	ppb
Silver	107-1	0.02	0.02	0.02	0.02	15.72	ppb
Silver	109-1	0.02	0.02	0.02	0.02	10.10	ppb
Sodium	23-2	52.83	51.51	53.55	52.63	1.97	ppb
Strontium	86-1	0.10	0.08	0.08	0.09	10.53	ppb
Strontium	88-1	0.11	0.10	0.10	0.10	6.61	ppb
Sulfur	34-1	907.00	416.60	595.43	639.68	38.80	ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	0.02	0.02	0.02	0.02	6.76	ppb
Thallium	205-1	0.03	0.02	0.02	0.02	14.70	ppb
Tin	118-1	0.88	0.86	0.81	0.85	3.80	ppb
Titanium	47-1	0.33	0.32	0.25	0.30	14.37	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	11.08	ppb

Lab Sample ID: Q1271-03DUP Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.02	0.02	28.91	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				104		%
Zinc	66-2	314.11	315.56	312.18	313.95	0.54	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	15.20	ppb
Zirconium	91-1	0.02	0.01	0.01	0.01	78.01	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID: Q1271-03LX5 Instrumnet Name: P8

Client Sample ID: 3189-3196L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.29	1.20	1.48	1.32	10.91	ppb
Antimony	121-1	0.05	0.04	0.05	0.04	2.77	ppb
Arsenic	75-2	0.01	0.00	0.01	0.01	111.15	ppb
Barium	135-1	0.02	0.03	0.02	0.03	21.00	ppb
Barium	137-1	0.01	0.03	0.02	0.02	35.11	ppb
Beryllium	9-1	0.06	0.06	0.06	0.06	2.35	ppb
Bismuth	209-1				104		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.14	0.09	0.21	0.15	41.68	ppb
Cadmium	106-1	0.25	-0.53	0.28	0.00		ppb
Cadmium	111-1	0.03	-0.03	0.02	0.01	567.99	ppb
Calcium	43-1	26.15	25.05	25.92	25.71	2.26	ppb
Calcium	44-1	23.38	23.26	24.79	23.81	3.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.03	0.12	0.21	0.12	73.29	ppb
Cobalt	59-2	0.01	0.01	0.00	0.01	47.89	ppb
Copper	63-2	-0.02	0.06	0.12	0.06	127.28	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				102		%
Indium	115-1				109		%
Indium	115-2				99		%
Iron	54-2	3.24	4.55	4.57	4.12	18.48	ppb
Iron	56-2	2.99	4.07	4.65	3.90	21.59	ppb
Iron	57-2	3.34	3.20	4.32	3.62	16.92	ppb
Krypton	83-1						cps
Lead	206-1	0.09	0.09	0.09	0.09	1.85	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :Q1271-03LX5Instrumnet Name :P8Client Sample ID :3189-3196LDilution Factor :5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Date & Time Act	1011CG . 202	20 02 00 17.20.00	Datai	iic i vairie .	050/ (( \L   . \d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.09	0.09	0.08	0.09	4.94	ppb
Lead	208-1	0.09	0.09	0.09	0.09	1.03	ppb
Lithium	6-1				109		%
Magnesium	24-2	5.07	9.30	11.84	8.74	39.12	ppb
Manganese	55-2	0.08	0.16	0.11	0.11	34.68	ppb
Molybdenum	94-1	7.02	7.16	7.19	7.12	1.22	ppb
Molybdenum	95-1	8.68	8.68	8.86	8.74	1.18	ppb
Molybdenum	96-1	8.36	8.35	8.53	8.41	1.19	ppb
Molybdenum	97-1	8.61	8.59	8.79	8.66	1.26	ppb
Molybdenum	98-1	8.58	8.49	8.63	8.57	0.82	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.32	0.44	0.54	0.43	25.30	ppb
Phosphorus	31-2	-0.08	3.75	6.59	3.42	97.86	ppb
Potassium	39-2	12.98	26.34	40.05	26.46	51.15	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				109		%
Scandium	45-2				104		%
Selenium	82-1	-0.13	-0.30	-0.31	-0.25		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.66	-0.61	0.11	-0.39		ppb
Silicon	28-1	-2.67	-3.01	-1.94	-2.54		ppb
Silver	107-1	0.01	0.01	0.01	0.01	9.66	ppb
Silver	109-1	0.01	0.01	0.01	0.01	28.08	ppb
Sodium	23-2	9.36	27.18	42.60	26.38	63.06	ppb
Strontium	86-1	0.02	0.01	0.03	0.02	53.80	ppb
Strontium	88-1	0.04	0.04	0.04	0.04	2.11	ppb
Sulfur	34-1	261.27	149.72	526.44	312.48	61.93	ppb
Terbium	159-1				107		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	1.41	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	8.25	ppb
Tin	118-1	0.15	0.14	0.15	0.15	3.85	ppb
Titanium	47-1	0.07	0.08	0.09	0.08	11.55	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1271-03LX5 Instrumnet Name: P8
Client Sample ID: 3189-3196L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	26.48	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				103		%
Zinc	66-2	54.32	64.31	69.51	62.71	12.31	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	50.94	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	18.17	ppb

Lab Sample ID :Q1271-03MSInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Date & Time / to	quiicu . Zoz	.0 02 00 17.20.10	Datai	iic i vairie .	OSTAILLI .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1637.60	1648.62	1639.10	1641.78	0.36	ppb
Antimony	121-1	109.97	106.74	102.31	106.34	3.62	ppb
Arsenic	75-2	0.06	0.05	0.05	0.05	12.48	ppb
Barium	135-1	466.30	456.08	444.17	455.52	2.43	ppb
Barium	137-1	463.85	440.59	437.64	447.36	3.21	ppb
Beryllium	9-1	94.65	90.53	89.63	91.61	2.92	ppb
Bismuth	209-1				96		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	98.21	96.72	93.36	96.10	2.58	ppb
Cadmium	106-1	105.36	103.59	97.10	102.01	4.26	ppb
Cadmium	111-1	100.01	98.43	93.98	97.47	3.21	ppb
Calcium	43-1	9500.69	9104.43	8812.38	9139.17	3.78	ppb
Calcium	44-1	9331.96	9069.44	8721.15	9040.85	3.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	90.20	90.49	91.86	90.85	0.98	ppb
Cobalt	59-2	93.44	93.55	93.84	93.61	0.23	ppb
Copper	63-2	961.38	973.73	985.02	973.38	1.21	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				93		%
Indium	115-1				100		%
Indium	115-2				88		%
Iron	54-2	4133.08	4156.13	4195.92	4161.71	0.76	ppb
Iron	56-2	4191.46	4207.57	4240.46	4213.17	0.59	ppb
Iron	57-2	4076.54	4072.09	4164.85	4104.49	1.27	ppb
Krypton	83-1						cps
Lead	206-1	498.63	470.83	467.20	478.89	3.59	ppb

Lab Sample ID :Q1271-03MSInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Date a Time Acc	quircu . Zoz	20 02 00 17.20.10	Datai	iic ivairie .	OSTAIRET .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	505.97	474.30	466.65	482.31	4.32	ppb
Lead	208-1	498.13	473.61	468.49	480.08	3.30	ppb
Lithium	6-1				104		%
Magnesium	24-2	9153.42	9178.70	9227.57	9186.57	0.41	ppb
Manganese	55-2	941.50	927.78	957.69	942.32	1.59	ppb
Molybdenum	94-1	513.81	501.78	482.05	499.21	3.21	ppb
Molybdenum	95-1	405.81	398.17	373.08	392.35	4.36	ppb
Molybdenum	96-1	415.12	402.43	393.99	403.84	2.63	ppb
Molybdenum	97-1	407.73	390.05	388.12	395.30	2.73	ppb
Molybdenum	98-1	403.52	388.41	378.66	390.20	3.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	94.31	94.56	94.26	94.38	0.17	ppb
Phosphorus	31-2	148.04	128.57	115.75	130.79	12.43	ppb
Potassium	39-2	4009.52	4045.84	4042.63	4032.66	0.50	ppb
Rhodium	103-1				98		%
Rhodium	103-2				95		%
Scandium	45-1				102		%
Scandium	45-2				96		%
Selenium	82-1	100.75	99.26	97.68	99.23	1.55	ppb
Selenium	77-2	81.90	95.90	91.34	89.71	7.96	ppb
Selenium	78-2	93.50	88.36	98.34	93.40	5.34	ppb
Silicon	28-1	7.53	4.94	6.78	6.42	20.72	ppb
Silver	107-1	17.36	17.13	16.31	16.93	3.24	ppb
Silver	109-1	17.18	17.16	16.49	16.95	2.31	ppb
Sodium	23-2	9071.67	9021.14	9217.98	9103.60	1.12	ppb
Strontium	86-1	114.80	111.95	110.16	112.30	2.08	ppb
Strontium	88-1	118.78	117.52	114.13	116.81	2.06	ppb
Sulfur	34-1	1866.67	1173.97	1303.70	1448.11	25.43	ppb
Terbium	159-1				100		%
Terbium	159-2				93		%
Thallium	203-1	93.45	90.55	91.13	91.71	1.67	ppb
Thallium	205-1	98.70	95.40	93.82	95.97	2.60	ppb
Tin	118-1	91.48	90.21	86.50	89.40	2.89	ppb
Titanium	47-1	0.65	0.64	0.58	0.62	5.94	ppb
Uranium	238-1	94.48	90.81	88.19	91.16	3.47	ppb

Lab Sample ID: Q1271-03MS Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	92.44	91.82	92.92	92.39	0.59	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				93		%
Zinc	66-2	1196.76	1200.26	1211.47	1202.83	0.64	ppb
Zirconium	90-1	97.78	95.25	94.18	95.74	1.93	ppb
Zirconium	91-1	93.44	91.15	90.05	91.55	1.89	ppb

 $_{3}$ 

Lab Sample ID :Q1271-03MSDInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:31:23 DataFile Name: 098AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1761.64	1629.08	1621.31	1670.68	4.72	ppb
Antimony	121-1	105.85	103.85	98.73	102.81	3.57	ppb
Arsenic	75-2	0.00	0.04	0.04	0.03	86.06	ppb
Barium	135-1	449.76	444.19	417.42	437.12	3.96	ppb
Barium	137-1	456.68	440.71	421.31	439.57	4.03	ppb
Beryllium	9-1	91.28	91.24	86.06	89.53	3.35	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	94.50	94.41	90.35	93.09	2.55	ppb
Cadmium	106-1	102.71	99.49	96.78	99.66	2.98	ppb
Cadmium	111-1	97.78	95.38	91.37	94.84	3.42	ppb
Calcium	43-1	9069.53	8890.53	8549.54	8836.53	2.99	ppb
Calcium	44-1	8871.11	8911.85	8485.80	8756.25	2.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	96.92	90.21	90.50	92.54	4.10	ppb
Cobalt	59-2	100.17	93.32	94.12	95.87	3.90	ppb
Copper	63-2	1033.43	952.56	971.12	985.71	4.30	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				103		%
Indium	115-1				108		%
Indium	115-2				101		%
Iron	54-2	4485.63	4135.52	4168.75	4263.30	4.53	ppb
Iron	56-2	4557.16	4105.97	4210.37	4291.17	5.50	ppb
Iron	57-2	4391.82	4065.62	4105.98	4187.80	4.25	ppb
Krypton	83-1						cps
Lead	206-1	468.41	474.94	453.46	465.60	2.37	ppb

Lab Sample ID: Q1271-03MSD Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:31:23 DataFile Name: 098AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	465.35	477.66	454.33	465.78	2.51	ppb
Lead	208-1	464.70	467.93	447.96	460.19	2.33	ppb
Lithium	6-1				111		%
Magnesium	24-2	9720.23	9025.43	9310.84	9352.17	3.73	ppb
Manganese	55-2	1020.43	916.98	934.56	957.32	5.78	ppb
Molybdenum	94-1	487.38	486.47	464.99	479.61	2.64	ppb
Molybdenum	95-1	390.20	390.01	367.75	382.65	3.37	ppb
Molybdenum	96-1	394.38	399.51	381.01	391.63	2.44	ppb
Molybdenum	97-1	389.54	390.48	374.45	384.82	2.34	ppb
Molybdenum	98-1	387.15	378.83	366.48	377.49	2.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	99.56	93.07	92.87	95.17	4.00	ppb
Phosphorus	31-2	157.80	123.98	138.83	140.20	12.09	ppb
Potassium	39-2	4307.78	3986.70	4013.24	4102.57	4.34	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				109		%
Scandium	45-2				105		%
Selenium	82-1	97.95	96.47	93.92	96.11	2.12	ppb
Selenium	77-2	100.85	85.41	107.80	98.02	11.69	ppb
Selenium	78-2	92.78	94.56	94.29	93.88	1.02	ppb
Silicon	28-1	5.45	3.56	1.49	3.50	56.60	ppb
Silver	107-1	16.63	16.61	15.83	16.36	2.81	ppb
Silver	109-1	16.78	16.56	15.95	16.43	2.64	ppb
Sodium	23-2	9746.80	9010.27	9248.16	9335.08	4.03	ppb
Strontium	86-1	110.02	110.82	105.49	108.78	2.64	ppb
Strontium	88-1	115.05	113.12	108.20	112.12	3.15	ppb
Sulfur	34-1	1071.95	613.81	111.61	599.13	80.17	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	89.43	91.46	86.59	89.16	2.74	ppb
Thallium	205-1	95.02	94.26	90.22	93.17	2.77	ppb
Tin	118-1	88.84	87.22	84.41	86.82	2.58	ppb
Titanium	47-1	0.61	0.55	0.60	0.58	5.71	ppb
Uranium	238-1	88.82	88.55	83.93	87.10	3.15	ppb

Lab Sample ID :Q1271-03MSDInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:31:23 DataFile Name: 098AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	98.19	90.41	91.46	93.35	4.52	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				102		%
Zinc	66-2	1289.36	1197.10	1206.02	1230.82	4.13	ppb
Zirconium	90-1	92.65	92.38	89.28	91.44	2.05	ppb
Zirconium	91-1	88.09	88.97	85.34	87.47	2.16	ppb

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Lab Sample ID: Q1271-03A Instrumnet Name: P8
Client Sample ID: 3189-3196A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1648.94	1657.70	1638.05	1648.23	0.60	ppb
Antimony	121-1	101.24	103.91	103.06	102.74	1.32	ppb
Arsenic	75-2	0.05	0.07	0.05	0.06	15.87	ppb
Barium	135-1	428.01	432.73	434.99	431.91	0.82	ppb
Barium	137-1	416.08	440.79	434.11	430.33	2.97	ppb
Beryllium	9-1	85.54	91.84	90.50	89.29	3.72	ppb
Bismuth	209-1				104		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	90.69	93.99	92.66	92.45	1.80	ppb
Cadmium	106-1	95.63	99.80	98.55	97.99	2.18	ppb
Cadmium	111-1	90.98	95.63	94.93	93.85	2.68	ppb
Calcium	43-1	8448.05	8751.35	8774.40	8657.94	2.10	ppb
Calcium	44-1	8515.87	8808.43	8813.99	8712.76	1.96	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	92.64	93.24	90.76	92.22	1.40	ppb
Cobalt	59-2	95.41	96.13	94.93	95.49	0.64	ppb
Copper	63-2	977.88	978.81	990.68	982.46	0.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				102		%
Indium	115-1				108		%
Indium	115-2				99		%
Iron	54-2	4260.24	4264.86	4193.47	4239.52	0.94	ppb
Iron	56-2	4216.14	4302.74	4212.67	4243.85	1.20	ppb
Iron	57-2	4164.29	4187.40	4150.38	4167.35	0.45	ppb
Krypton	83-1						cps
Lead	206-1	451.19	471.67	468.78	463.88	2.39	ppb

Lab Sample ID :Q1271-03AInstrumnet Name :P8Client Sample ID :3189-3196ADilution Factor :1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Date & Time Ac	quirea: 202	25-02-06 17:34:22	Datai	riie Name :	099AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	454.65	471.57	468.87	465.03	1.95	ppb
Lead	208-1	449.61	466.83	465.34	460.59	2.07	ppb
Lithium	6-1				110		%
Magnesium	24-2	9182.79	9288.07	9223.53	9231.46	0.58	ppb
Manganese	55-2	946.24	967.51	937.59	950.45	1.62	ppb
Molybdenum	94-1	461.93	476.60	480.20	472.91	2.05	ppb
Molybdenum	95-1	366.23	377.39	385.40	376.34	2.56	ppb
Molybdenum	96-1	376.84	392.32	388.11	385.75	2.07	ppb
Molybdenum	97-1	362.43	388.72	385.25	378.80	3.77	ppb
Molybdenum	98-1	365.63	385.24	384.46	378.44	2.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	95.11	95.29	94.51	94.97	0.43	ppb
Phosphorus	31-2	118.26	131.36	161.61	137.08	16.22	ppb
Potassium	39-2	4077.31	4049.09	4021.09	4049.17	0.69	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				110		%
Scandium	45-2				104		%
Selenium	82-1	89.38	96.34	96.30	94.01	4.26	ppb
Selenium	77-2	73.64	93.52	110.86	92.67	20.10	ppb
Selenium	78-2	93.08	93.79	88.97	91.95	2.83	ppb
Silicon	28-1	1.94	3.27	3.31	2.84	27.49	ppb
Silver	107-1	15.77	16.60	16.56	16.31	2.86	ppb
Silver	109-1	15.89	16.51	16.59	16.33	2.37	ppb
Sodium	23-2	9189.62	9119.67	8947.14	9085.48	1.37	ppb
Strontium	86-1	104.50	110.28	110.91	108.56	3.25	ppb
Strontium	88-1	108.90	111.57	111.68	110.72	1.42	ppb
Sulfur	34-1	461.93	403.62	536.71	467.42	14.27	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	85.58	89.03	89.72	88.11	2.52	ppb
Thallium	205-1	92.04	93.46	93.77	93.09	0.99	ppb
Tin	118-1	83.03	87.16	86.56	85.58	2.61	ppb
Titanium	47-1	0.60	0.63	0.59	0.61	3.84	ppb
Uranium	238-1	83.96	87.66	88.76	86.79	2.90	ppb

Lab Sample ID: Q1271-03A Instrumnet Name: P8

Client Sample ID: 3189-3196A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Vanadium	51-2	92.86	93.17	93.18	93.07	0.20	ppb	_
Ytterbium	172-1						cps	
Ytterbium	172-2						cps	
Ytterbium	176-1						cps	
Ytterbium	176-2						cps	
Yttrium	89-1				109		%	
Yttrium	89-2				103		%	
Zinc	66-2	1218.39	1219.65	1213.54	1217.19	0.27	ppb	
Zirconium	90-1	87.86	94.01	92.92	91.60	3.58	ppb	
Zirconium	91-1	83.55	89.07	89.77	87.46	3.89	ppb	

Lab Sample ID: CCV005 Instrumnet Name: P8
Client Sample ID: CCV005 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

Date & Time Ac	quirea: 202	25-02-06 17:39:33	DataFi	ile Name :	100CCV.a			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	51475.81	47199.52	48751.98	49142.44	4.40	ppb	
Antimony	121-1	489.91	497.58	498.87	495.45	0.98	ppb	
Arsenic	75-2	531.75	485.95	490.34	502.68	5.03	ppb	
Barium	135-1	2450.76	2477.67	2523.52	2483.98	1.48	ppb	
Barium	137-1	2470.64	2478.81	2514.18	2487.88	0.93	ppb	
Beryllium	9-1	474.80	490.67	483.46	482.98	1.65	ppb	
Bismuth	209-1				90		%	
Bismuth	209-2				86		%	
Bromine	81-1						cps	
Cadmium	108-1	487.84	496.79	502.13	495.59	1.46	ppb	
Cadmium	106-1	493.02	498.87	505.78	499.22	1.28	ppb	
Cadmium	111-1	478.10	490.47	498.46	489.01	2.10	ppb	
Calcium	43-1	230866.14	235167.31	232024.97	232686.14	0.96	ppb	
Calcium	44-1	227864.41	235250.01	233936.63	232350.35	1.70	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	542.09	499.04	501.84	514.32	4.68	ppb	
Cobalt	59-2	522.30	482.81	489.36	498.16	4.25	ppb	
Copper	63-2	5102.99	4603.10	4753.20	4819.76	5.32	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				103		%	
Holmium	165-2				96		%	
Indium	115-1				97		%	
Indium	115-2				88		%	
Iron	54-2	128532.72	118822.60	118638.78	121998.03	4.64	ppb	
Iron	56-2	130665.72	117965.08	119939.05	122856.62	5.56	ppb	
Iron	57-2	128826.45	117706.76	118974.36	121835.86	5.00	ppb	
Krypton	83-1						cps	
Lead	206-1	2425.11	2499.37	2589.27	2504.58	3.28	ppb	

Lab Sample ID: CCV005 Instrumnet Name: P8
Client Sample ID: CCV005 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2459.82	2539.45	2578.64	2525.97	2.40	ppb
Lead	208-1	2443.02	2518.40	2554.69	2505.37	2.27	ppb
Lithium	6-1				98		%
Magnesium	24-2	259256.42	232594.26	240850.07	244233.58	5.59	ppb
Manganese	55-2	5281.27	4838.35	4864.12	4994.58	4.98	ppb
Molybdenum	94-1	4791.36	5032.83	4897.23	4907.14	2.47	ppb
Molybdenum	95-1	4764.71	5015.34	4841.41	4873.82	2.63	ppb
Molybdenum	96-1	4787.00	5005.24	4882.20	4891.48	2.24	ppb
Molybdenum	97-1	4757.36	4891.54	4957.69	4868.86	2.10	ppb
Molybdenum	98-1	4742.68	4958.26	4940.55	4880.50	2.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	491.40	446.18	454.02	463.87	5.21	ppb
Phosphorus	31-2	10611.67	9697.40	9740.24	10016.43	5.15	ppb
Potassium	39-2	127620.87	117111.33	119999.29	121577.16	4.47	ppb
Rhodium	103-1				92		%
Rhodium	103-2				89		%
Scandium	45-1				103		%
Scandium	45-2				98		%
Selenium	82-1	460.35	482.12	468.82	470.43	2.33	ppb
Selenium	77-2	541.58	475.70	473.95	497.08	7.75	ppb
Selenium	78-2	532.87	474.68	475.93	494.49	6.72	ppb
Silicon	28-1	477.60	507.47	500.85	495.31	3.17	ppb
Silver	107-1	473.33	481.52	477.20	477.35	0.86	ppb
Silver	109-1	475.85	482.11	481.68	479.88	0.73	ppb
Sodium	23-2	261939.28	242293.41	237994.85	247409.18	5.16	ppb
Strontium	86-1	486.55	505.74	505.08	499.12	2.18	ppb
Strontium	88-1	487.45	496.59	496.57	493.54	1.07	ppb
Sulfur	34-1	9626.86	10176.79	10154.59	9986.08	3.12	ppb
Terbium	159-1				101		%
Terbium	159-2				95		%
Thallium	203-1	495.03	505.35	528.80	509.73	3.40	ppb
Thallium	205-1	500.12	498.17	512.33	503.54	1.52	ppb
Tin	118-1	498.03	501.32	504.55	501.30	0.65	ppb
Titanium	47-1	4786.19	4966.89	4907.85	4886.97	1.89	ppb
Uranium	238-1	492.64	513.40	501.23	502.42	2.08	ppb

Lab Sample ID :CCV005Instrumnet Name :P8Client Sample ID :CCV005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	543.84	492.98	502.69	513.17	5.26	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				96		%
Zinc	66-2	5035.40	4646.95	4663.86	4782.07	4.59	ppb
Zirconium	90-1	486.48	509.31	500.06	498.62	2.30	ppb
Zirconium	91-1	488.41	517.57	494.07	500.02	3.09	ppb

Lab Sample ID :CCB005Instrumnet Name :P8Client Sample ID :CCB005Dilution Factor :1

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Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Date & Time / to	quircu . 202	0 02 00 17.42.10	Datai	iic i vairie .	10100BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.26	0.89	1.16	1.10	17.69	ppb
Antimony	121-1	0.15	0.14	0.13	0.14	9.99	ppb
Arsenic	75-2	0.00	-0.02	-0.01	-0.01		ppb
Barium	135-1	0.12	0.10	0.07	0.10	30.79	ppb
Barium	137-1	0.17	0.08	0.05	0.10	59.31	ppb
Beryllium	9-1	0.22	0.20	0.18	0.20	11.47	ppb
Bismuth	209-1				103		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.04	-0.02	0.01	257.14	ppb
Cadmium	106-1	-0.02	0.57	0.29	0.28	104.63	ppb
Cadmium	111-1	0.05	0.06	0.05	0.05	17.48	ppb
Calcium	43-1	9.62	6.73	5.80	7.38	27.05	ppb
Calcium	44-1	12.90	6.88	5.29	8.36	48.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.09	0.09	0.13	0.10	23.27	ppb
Cobalt	59-2	0.03	0.02	0.02	0.02	29.34	ppb
Copper	63-2	0.23	0.10	0.18	0.17	40.28	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				105		%
Indium	115-1				109		%
Indium	115-2				104		%
Iron	54-2	3.85	3.23	3.29	3.46	9.79	ppb
Iron	56-2	4.52	3.19	3.77	3.82	17.44	ppb
Iron	57-2	4.18	3.52	3.32	3.67	12.23	ppb
Krypton	83-1						cps
Lead	206-1	0.34	0.26	0.23	0.28	19.86	ppb

Lab Sample ID :CCB005Instrumnet Name :P8Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Date & Time Act	quireu . 202	25-02-00 17.42.10	Dalai	riie ivairie .	101CCBE.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.28	0.22	0.28	20.87	ppb
Lead	208-1	0.34	0.27	0.24	0.28	19.09	ppb
Lithium	6-1				108		%
Magnesium	24-2	-0.26	-2.51	-1.55	-1.44		ppb
Manganese	55-2	0.25	0.16	0.18	0.20	24.03	ppb
Molybdenum	94-1	0.45	0.26	0.22	0.31	39.62	ppb
Molybdenum	95-1	0.37	0.27	0.21	0.28	28.57	ppb
Molybdenum	96-1	0.38	0.26	0.20	0.28	33.87	ppb
Molybdenum	97-1	0.38	0.25	0.20	0.28	34.85	ppb
Molybdenum	98-1	0.37	0.24	0.18	0.26	36.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.39	0.26	0.36	0.34	21.29	ppb
Phosphorus	31-2	-36.35	-30.47	-26.59	-31.14		ppb
Potassium	39-2	35.35	15.48	26.04	25.62	38.81	ppb
Rhodium	103-1				105		%
Rhodium	103-2				108		%
Scandium	45-1				109		%
Scandium	45-2				107		%
Selenium	82-1	-0.25	0.14	-0.02	-0.04		ppb
Selenium	77-2	0.00	0.60	0.00	0.20	173.21	ppb
Selenium	78-2	-0.80	-0.66	-0.23	-0.56		ppb
Silicon	28-1	-4.12	-4.57	-3.51	-4.07		ppb
Silver	107-1	0.08	0.06	0.06	0.07	17.39	ppb
Silver	109-1	0.09	0.06	0.05	0.07	25.91	ppb
Sodium	23-2	54.45	30.56	39.48	41.50	29.09	ppb
Strontium	86-1	0.05	0.03	0.02	0.03	45.55	ppb
Strontium	88-1	0.05	0.04	0.03	0.04	17.54	ppb
Sulfur	34-1	-880.11	-867.00	-633.24	-793.45		ppb
Terbium	159-1				106		%
Terbium	159-2				106		%
Thallium	203-1	0.06	0.05	0.04	0.05	20.93	ppb
Thallium	205-1	0.06	0.05	0.05	0.05	12.22	ppb
Tin	118-1	0.03	0.01	0.01	0.02	81.27	ppb
Titanium	47-1	0.28	0.18	0.16	0.21	33.10	ppb
Uranium	238-1	0.03	0.02	0.01	0.02	47.36	ppb

Lab Sample ID :CCB005Instrumnet Name :P8Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.02	0.01	0.02	0.02	10.28	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				106		%
Zinc	66-2	0.02	-0.03	-0.03	-0.02		ppb
Zirconium	90-1	0.05	0.04	0.03	0.04	20.13	ppb
Zirconium	91-1	0.05	0.03	0.03	0.04	25.14	ppb

Lab Sample ID :PB166282BLInstrumnet Name :P8Client Sample ID :PBW282Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:45:57 DataFile Name: 102CCBD.d

Date & Time / to	quircu . 202	20 02 00 17.40.07	Datai	iic i vairie .	10200BB.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.25	0.21	0.51	0.32	49.65	ppb
Antimony	121-1	0.03	0.04	0.04	0.03	13.02	ppb
Arsenic	75-2	-0.01	0.03	-0.02	0.00	1397.55	ppb
Barium	135-1	0.01	0.00	0.00	0.00	200.67	ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.11	0.09	0.11	0.10	6.87	ppb
Bismuth	209-1				104		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.01	0.02	0.03	57.49	ppb
Cadmium	106-1	0.29	0.55	-0.08	0.25	124.34	ppb
Cadmium	111-1	0.03	0.06	0.00	0.03	105.80	ppb
Calcium	43-1	-2.70	-2.36	-3.02	-2.69		ppb
Calcium	44-1	-2.45	-3.32	-3.43	-3.07		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.15	-0.14	-0.12	-0.13		ppb
Cobalt	59-2	0.00	0.01	0.00	0.01	72.21	ppb
Copper	63-2	0.02	-0.02	0.03	0.01	276.43	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				104		%
Indium	115-1				111		%
Indium	115-2				103		%
Iron	54-2	0.88	0.55	0.80	0.75	22.92	ppb
Iron	56-2	0.86	0.82	0.83	0.84	2.22	ppb
Iron	57-2	0.50	0.27	0.64	0.47	39.90	ppb
Krypton	83-1						cps
Lead	206-1	0.11	0.10	0.10	0.10	5.27	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID: PB166282BL Instrumnet Name: P8
Client Sample ID: PBW282 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:45:57 DataFile Name: 102CCBD.d

Date & Time Act	1011CG . 202	.0 02 00 17.40.07	Datai	iic i vairie .	1020000.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.11	0.11	0.11	3.80	ppb
Lead	208-1	0.11	0.11	0.10	0.11	5.34	ppb
Lithium	6-1				110		%
Magnesium	24-2	-3.96	-3.55	-3.51	-3.67		ppb
Manganese	55-2	0.03	0.05	0.04	0.04	14.37	ppb
Molybdenum	94-1	0.05	0.05	0.04	0.05	4.37	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	6.68	ppb
Molybdenum	96-1	0.03	0.02	0.02	0.03	16.39	ppb
Molybdenum	97-1	0.03	0.03	0.03	0.03	6.29	ppb
Molybdenum	98-1	0.03	0.03	0.02	0.03	18.35	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.23	0.24	0.18	0.22	16.18	ppb
Phosphorus	31-2	-20.58	-22.17	-28.19	-23.65		ppb
Potassium	39-2	23.29	25.10	24.79	24.40	3.96	ppb
Rhodium	103-1				109		%
Rhodium	103-2				107		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	-0.02	-0.07	-0.21	-0.10		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.82	-0.43	-1.01	-0.75		ppb
Silicon	28-1	-4.67	-5.24	-5.52	-5.14		ppb
Silver	107-1	0.02	0.02	0.01	0.02	14.52	ppb
Silver	109-1	0.01	0.01	0.01	0.01	20.30	ppb
Sodium	23-2	17.94	18.89	18.60	18.47	2.64	ppb
Strontium	86-1	0.01	0.01	0.01	0.01	7.52	ppb
Strontium	88-1	0.02	0.01	0.02	0.02	8.85	ppb
Sulfur	34-1	281.72	-54.87	-179.21	15.88	1501.83	ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.02	0.01	0.02	0.02	27.86	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	7.80	ppb
Tin	118-1	0.01	0.00	0.01	0.01	58.56	ppb
Titanium	47-1	0.03	0.00	0.00	0.01	148.19	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
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LB Number : LB134612 Operator :

Lab Sample ID :PB166282BLInstrumnet Name :P8Client Sample ID :PBW282Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:45:57 DataFile Name: 102CCBD.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	54.05	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				105		%
Zinc	66-2	-0.26	-0.21	-0.27	-0.25		ppb
Zirconium	90-1	0.00	0.01	0.00	0.00	22.11	ppb
Zirconium	91-1	0.00	0.00	0.01	0.01	71.68	ppb

Jaswal

Lab Sample ID :PB166282BSInstrumnet Name :P8Client Sample ID :LCS282Dilution Factor :1

Date & Time Acquired : 2025-02-06 17:49:27 DataFile Name : 103LCS6.d

Date & Time Ac	quireu . 202	23-02-00 17.49.27	Dalar	ile ivallie .	1032036.0			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	9617.86	9459.01	9305.35	9460.74	1.65	ppb	
Antimony	121-1	527.69	520.32	528.17	525.39	0.84	ppb	
Arsenic	75-2	514.84	503.23	512.91	510.33	1.22	ppb	
Barium	135-1	2616.37	2543.75	2604.34	2588.15	1.50	ppb	
Barium	137-1	2604.88	2578.25	2557.28	2580.14	0.92	ppb	
Beryllium	9-1	496.55	489.02	488.41	491.32	0.92	ppb	
Bismuth	209-1				98		%	
Bismuth	209-2				96		%	
Bromine	81-1						cps	
Cadmium	108-1	534.21	532.57	524.82	530.53	0.95	ppb	
Cadmium	106-1	535.81	522.43	526.15	528.13	1.31	ppb	
Cadmium	111-1	531.96	527.17	522.83	527.32	0.87	ppb	
Calcium	43-1	51497.59	48371.82	48767.22	49545.54	3.44	ppb	
Calcium	44-1	50224.25	47831.25	48521.95	48859.15	2.52	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	525.89	516.78	511.79	518.16	1.38	ppb	
Cobalt	59-2	519.75	507.38	503.85	510.33	1.64	ppb	
Copper	63-2	5174.52	5020.59	5010.62	5068.58	1.81	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				106		%	
Holmium	165-2				102		%	
Indium	115-1				104		%	
Indium	115-2				95		%	
Iron	54-2	25681.97	25156.02	24770.51	25202.84	1.82	ppb	
Iron	56-2	25183.18	24543.45	24288.82	24671.82	1.87	ppb	
Iron	57-2	25831.70	24782.26	24767.32	25127.10	2.43	ppb	
Krypton	83-1						cps	
Lead	206-1	2593.75	2543.02	2595.65	2577.47	1.16	ppb	

Lab Sample ID :PB166282BSInstrumnet Name :P8Client Sample ID :LCS282Dilution Factor :1

Date & Time Acquired : 2025-02-06 17:49:27 DataFile Name : 103LCS6.d

Date & Time Act	1011CG . 202	.0 02 00 17.40.27	Datai	iic ivairie .	1002000.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2563.51	2556.92	2584.76	2568.40	0.57	ppb
Lead	208-1	2568.56	2541.59	2568.47	2559.54	0.61	ppb
Lithium	6-1				106		%
Magnesium	24-2	52629.99	50776.68	50146.70	51184.46	2.52	ppb
Manganese	55-2	5101.25	5045.01	4913.79	5020.02	1.92	ppb
Molybdenum	94-1	5054.41	5010.87	5042.87	5036.05	0.45	ppb
Molybdenum	95-1	5069.03	4984.07	5090.00	5047.70	1.11	ppb
Molybdenum	96-1	5023.34	4990.67	4961.51	4991.84	0.62	ppb
Molybdenum	97-1	5022.25	5080.47	4913.06	5005.26	1.70	ppb
Molybdenum	98-1	5045.86	5020.14	4960.54	5008.85	0.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	522.00	501.39	503.22	508.87	2.24	ppb
Phosphorus	31-2	10356.48	10039.85	9829.80	10075.38	2.63	ppb
Potassium	39-2	25091.51	24382.57	24007.36	24493.81	2.25	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				106		%
Scandium	45-2				103		%
Selenium	82-1	505.11	496.75	504.55	502.14	0.93	ppb
Selenium	77-2	527.78	509.09	492.29	509.72	3.48	ppb
Selenium	78-2	464.63	493.35	504.41	487.46	4.21	ppb
Silicon	28-1	519.84	492.70	502.71	505.08	2.72	ppb
Silver	107-1	532.09	514.64	529.07	525.26	1.78	ppb
Silver	109-1	531.34	522.75	517.41	523.83	1.34	ppb
Sodium	23-2	53217.27	51227.82	50330.06	51591.72	2.86	ppb
Strontium	86-1	519.56	508.32	511.91	513.26	1.12	ppb
Strontium	88-1	507.36	502.54	507.63	505.84	0.57	ppb
Sulfur	34-1	10689.85	9636.12	10278.55	10201.51	5.21	ppb
Terbium	159-1				105		%
Terbium	159-2				100		%
Thallium	203-1	512.28	517.80	516.92	515.67	0.57	ppb
Thallium	205-1	517.79	497.64	513.20	509.54	2.07	ppb
Tin	118-1	529.60	522.82	511.96	521.46	1.71	ppb
Titanium	47-1	5144.01	4933.33	5002.71	5026.68	2.14	ppb
Uranium	238-1	496.27	492.88	486.42	491.86	1.02	ppb

LB Number : LB134612 Operator :

Lab Sample ID :PB166282BSInstrumnet Name :P8Client Sample ID :LCS282Dilution Factor :1

Date & Time Acquired : 2025-02-06 17:49:27 DataFile Name : 103LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	513.58	500.60	495.80	503.32	1.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	5304.36	5076.62	5064.91	5148.63	2.62	ppb
Zirconium	90-1	512.27	498.00	506.40	505.56	1.42	ppb
Zirconium	91-1	515.78	502.27	511.22	509.76	1.35	ppb

Jaswal

Lab Sample ID: Q1193-01 Instrumnet Name: P8

Client Sample ID: TAPIAL3-MW04S-01242! Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:53:19 DataFile Name: 104AREF.d

Date a Time 7to	quircu . Zoz	0 02 00 17.00.10	Datai	iic i vairie .	1047 (I CET .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	74.35	76.45	78.14	76.31	2.49	ppb
Antimony	121-1	0.26	0.24	0.24	0.25	3.49	ppb
Arsenic	75-2	4.41	4.92	5.17	4.83	8.03	ppb
Barium	135-1	160.65	159.38	156.21	158.75	1.44	ppb
Barium	137-1	162.25	161.43	158.76	160.82	1.14	ppb
Beryllium	9-1	0.23	0.21	0.22	0.22	4.77	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.25	0.17	0.22	0.21	19.30	ppb
Cadmium	106-1	0.48	0.10	0.80	0.46	75.41	ppb
Cadmium	111-1	0.13	0.09	0.14	0.12	24.58	ppb
Calcium	43-1	67784.53	65365.48	64640.46	65930.15	2.50	ppb
Calcium	44-1	66105.96	65239.25	63497.12	64947.45	2.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.35	0.39	0.36	0.37	5.56	ppb
Cobalt	59-2	73.36	77.97	77.59	76.31	3.35	ppb
Copper	63-2	0.64	0.71	0.68	0.68	5.03	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				100		%
Iron	54-2	21843.54	23391.17	22738.14	22657.62	3.43	ppb
Iron	56-2	21552.41	23003.40	22552.05	22369.29	3.32	ppb
Iron	57-2	22125.93	23496.55	22932.66	22851.71	3.01	ppb
Krypton	83-1						cps
Lead	206-1	0.73	0.73	0.70	0.72	2.60	ppb

Lab Sample ID: Q1193-01 Instrumnet Name: P8

Client Sample ID: TAPIAL3-MW04S-01242t Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:53:19 DataFile Name: 104AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.71	0.69	0.65	0.68	3.92	ppb
Lead	208-1	0.72	0.70	0.67	0.69	3.30	ppb
Lithium	6-1				108		%
Magnesium	24-2	7570.31	7881.35	7896.55	7782.73	2.37	ppb
Manganese	55-2	1982.79	2108.58	2071.24	2054.21	3.14	ppb
Molybdenum	94-1	0.62	0.59	0.56	0.59	4.97	ppb
Molybdenum	95-1	0.43	0.37	0.35	0.38	10.53	ppb
Molybdenum	96-1	0.46	0.37	0.37	0.40	11.74	ppb
Molybdenum	97-1	0.45	0.36	0.36	0.39	13.17	ppb
Molybdenum	98-1	0.41	0.34	0.33	0.36	12.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	71.60	75.43	75.74	74.26	3.10	ppb
Phosphorus	31-2	-16.20	-16.37	-14.91	-15.83		ppb
Potassium	39-2	2769.59	2914.64	2908.31	2864.18	2.86	ppb
Rhodium	103-1				102		%
Rhodium	103-2				102		%
Scandium	45-1				107		%
Scandium	45-2				104		%
Selenium	82-1	0.25	0.29	0.29	0.28	7.46	ppb
Selenium	77-2	1.30	1.39	2.04	1.58	25.58	ppb
Selenium	78-2	-0.25	0.00	0.38	0.04	724.26	ppb
Silicon	28-1	6891.05	6633.32	6551.71	6692.03	2.65	ppb
Silver	107-1	0.05	0.04	0.04	0.04	17.63	ppb
Silver	109-1	0.04	0.04	0.04	0.04	3.08	ppb
Sodium	23-2	2245.32	2407.21	2366.29	2339.61	3.60	ppb
Strontium	86-1	341.01	336.71	342.94	340.22	0.94	ppb
Strontium	88-1	341.04	336.51	334.93	337.49	0.94	ppb
Sulfur	34-1	20562.33	20121.84	19569.46	20084.54	2.48	ppb
Terbium	159-1				106		%
Terbium	159-2				102		%
Thallium	203-1	0.28	0.29	0.27	0.28	3.60	ppb
Thallium	205-1	0.28	0.28	0.28	0.28	1.35	ppb
Tin	118-1	0.37	0.34	0.33	0.35	5.26	ppb
Titanium	47-1	2.58	2.32	2.38	2.43	5.66	ppb
Uranium	238-1	0.21	0.20	0.20	0.20	2.59	ppb

Lab Sample ID: Q1193-01 Instrumnet Name: P8

Client Sample ID: TAPIAL3-MW04S-01242! Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:53:19 DataFile Name: 104AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.43	0.42	0.44	0.43	2.63	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				103		%
Zinc	66-2	1302.75	1390.17	1360.26	1351.06	3.29	ppb
Zirconium	90-1	0.16	0.16	0.15	0.16	5.12	ppb
Zirconium	91-1	0.16	0.14	0.15	0.15	5.62	ppb

Lab Sample ID: Q1193-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:56:30 DataFile Name: 105AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	167.55	170.08	177.04	171.56	2.86	ppb
Antimony	121-1	0.13	0.12	0.13	0.13	2.46	ppb
Arsenic	75-2	3.81	3.55	3.64	3.67	3.63	ppb
Barium	135-1	42.65	39.58	41.37	41.20	3.74	ppb
Barium	137-1	41.92	40.04	40.95	40.97	2.29	ppb
Beryllium	9-1	0.11	0.12	0.11	0.12	2.61	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.14	0.15	0.11	0.13	16.58	ppb
Cadmium	106-1	1.11	0.80	0.41	0.77	45.10	ppb
Cadmium	111-1	0.10	0.06	0.04	0.07	47.29	ppb
Calcium	43-1	35350.99	33713.59	33451.13	34171.90	3.01	ppb
Calcium	44-1	34839.18	33363.61	33245.77	33816.19	2.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.08	1.10	1.07	1.08	1.73	ppb
Cobalt	59-2	0.48	0.50	0.49	0.49	2.49	ppb
Copper	63-2	0.46	0.44	0.50	0.47	6.79	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				103		%
Indium	115-1				107		%
Indium	115-2				101		%
Iron	54-2	18659.73	18728.59	18903.19	18763.83	0.67	ppb
Iron	56-2	18502.76	18756.58	18402.03	18553.79	0.98	ppb
Iron	57-2	18964.16	18898.56	18889.49	18917.41	0.22	ppb
Krypton	83-1						cps
Lead	206-1	0.29	0.28	0.31	0.30	5.03	ppb

Lab Sample ID : Q1193-02 Client Sample ID: TAPIAL2-MW01-012425-Dilution Factor: 1

Date & Time Acquired : 2025-02-06 17:56:30 DataFile Name : 105AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.40	0.32	0.31	0.34	14.05	ppb
Lead	208-1	0.33	0.29	0.30	0.31	7.49	ppb
Lithium	6-1				109		%
Magnesium	24-2	2329.37	2328.28	2334.11	2330.59	0.13	ppb
Manganese	55-2	158.17	158.49	160.22	158.96	0.69	ppb
Molybdenum	94-1	3.73	3.61	4.43	3.92	11.27	ppb
Molybdenum	95-1	3.44	3.40	3.40	3.42	0.68	ppb
Molybdenum	96-1	3.46	3.36	3.37	3.40	1.56	ppb
Molybdenum	97-1	3.45	3.37	3.40	3.40	1.15	ppb
Molybdenum	98-1	3.49	3.32	3.32	3.38	3.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.97	0.92	0.95	0.95	2.95	ppb
Phosphorus	31-2	-8.95	-8.57	-12.23	-9.92		ppb
Potassium	39-2	1784.84	1795.42	1797.75	1792.67	0.38	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	0.11	0.00	0.16	0.09	87.49	ppb
Selenium	77-2	0.66	0.66	0.66	0.66	0.20	ppb
Selenium	78-2	0.53	-0.24	-0.05	0.08	503.75	ppb
Silicon	28-1	3580.32	3243.17	3388.37	3403.95	4.97	ppb
Silver	107-1	0.01	0.02	0.02	0.02	13.13	ppb
Silver	109-1	0.01	0.02	0.01	0.01	15.12	ppb
Sodium	23-2	56046.61	56019.88	56490.59	56185.69	0.47	ppb
Strontium	86-1	82.24	80.26	80.64	81.05	1.30	ppb
Strontium	88-1	86.50	82.79	83.19	84.16	2.42	ppb
Sulfur	34-1	1684.25	979.50	1085.39	1249.71	30.41	ppb
Terbium	159-1				107		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.03	0.03	0.03	2.93	ppb
Thallium	205-1	0.04	0.03	0.03	0.03	9.72	ppb
Tin	118-1	0.21	0.18	0.20	0.20	8.70	ppb
Titanium	47-1	5.16	6.14	4.95	5.42	11.71	ppb
Uranium	238-1	0.40	0.36	0.37	0.37	6.13	ppb

Instrumnet Name:

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Lab Sample ID: Q1193-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:56:30 DataFile Name: 105AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.11	1.13	1.04	1.09	4.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				105		%
Zinc	66-2	1.04	0.96	1.04	1.02	4.36	ppb
Zirconium	90-1	0.44	0.43	0.52	0.47	10.44	ppb
Zirconium	91-1	0.44	0.43	0.41	0.43	4.05	ppb

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	85.84	83.17	93.72	87.58	6.26	ppb
Antimony	121-1	0.11	0.10	0.11	0.10	7.02	ppb
Arsenic	75-2	3.57	3.54	3.50	3.54	0.93	ppb
Barium	135-1	39.67	41.02	40.09	40.26	1.72	ppb
Barium	137-1	40.10	41.26	40.46	40.61	1.47	ppb
Beryllium	9-1	0.10	0.09	0.08	0.09	7.20	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.08	0.04	0.10	0.07	37.29	ppb
Cadmium	106-1	0.61	1.28	-0.21	0.56	133.25	ppb
Cadmium	111-1	0.05	0.11	-0.02	0.05	132.79	ppb
Calcium	43-1	33623.77	35708.70	33731.30	34354.59	3.42	ppb
Calcium	44-1	32766.84	35358.68	33545.59	33890.37	3.92	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.94	1.01	1.01	0.99	4.22	ppb
Cobalt	59-2	0.50	0.50	0.46	0.49	4.09	ppb
Copper	63-2	0.38	0.39	0.38	0.39	1.89	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				105		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	54-2	18157.46	18060.73	18282.28	18166.82	0.61	ppb
Iron	56-2	18135.30	18099.18	17915.38	18049.95	0.65	ppb
Iron	57-2	18278.92	18577.28	18248.18	18368.13	0.99	ppb
Krypton	83-1						cps
Lead	206-1	0.24	0.26	0.24	0.25	4.46	ppb

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.26	0.24	0.24	0.25	4.75	ppb
Lead	208-1	0.25	0.25	0.24	0.25	3.93	ppb
Lithium	6-1				112		%
Magnesium	24-2	2309.07	2273.21	2283.92	2288.74	0.80	ppb
Manganese	55-2	155.18	155.34	153.47	154.66	0.67	ppb
Molybdenum	94-1	3.25	3.47	3.37	3.37	3.19	ppb
Molybdenum	95-1	3.24	3.42	3.29	3.32	2.71	ppb
Molybdenum	96-1	3.28	3.34	3.33	3.31	1.00	ppb
Molybdenum	97-1	3.18	3.42	3.25	3.28	3.65	ppb
Molybdenum	98-1	3.18	3.38	3.28	3.28	3.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.92	0.88	0.99	0.93	6.21	ppb
Phosphorus	31-2	-16.90	-15.33	-5.77	-12.67		ppb
Potassium	39-2	1734.77	1741.55	1747.57	1741.30	0.37	ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				110		%
Scandium	45-2				107		%
Selenium	82-1	0.35	-0.04	0.25	0.19	109.11	ppb
Selenium	77-2	0.66	0.66	1.97	1.10	69.37	ppb
Selenium	78-2	-0.05	-0.62	-0.43	-0.37		ppb
Silicon	28-1	3227.70	3542.28	3296.17	3355.38	4.93	ppb
Silver	107-1	0.01	0.01	0.01	0.01	9.29	ppb
Silver	109-1	0.01	0.01	0.01	0.01	3.73	ppb
Sodium	23-2	55547.58	55343.57	55387.25	55426.13	0.19	ppb
Strontium	86-1	77.82	79.92	78.84	78.86	1.33	ppb
Strontium	88-1	81.19	84.15	82.06	82.47	1.84	ppb
Sulfur	34-1	1208.21	1933.04	1109.24	1416.83	31.75	ppb
Terbium	159-1				106		%
Terbium	159-2				103		%
Thallium	203-1	0.02	0.02	0.02	0.02	2.18	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	6.26	ppb
Tin	118-1	0.17	0.23	0.20	0.20	15.11	ppb
Titanium	47-1	1.51	4.63	2.86	3.00	52.17	ppb
Uranium	238-1	0.36	0.37	0.36	0.36	2.10	ppb

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.96	0.92	0.95	0.94	1.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				105		%
Zinc	66-2	1.53	1.40	1.14	1.36	14.51	ppb
Zirconium	90-1	0.33	0.36	0.34	0.34	4.16	ppb
Zirconium	91-1	0.33	0.38	0.35	0.35	7.57	ppb

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22.09	16.01	15.96	18.02	19.54	ppb
Antimony	121-1	0.04	0.05	0.05	0.05	11.24	ppb
Arsenic	75-2	0.66	0.58	0.70	0.65	9.57	ppb
Barium	135-1	7.71	8.03	8.23	7.99	3.28	ppb
Barium	137-1	7.90	8.02	8.11	8.01	1.36	ppb
Beryllium	9-1	0.07	0.06	0.07	0.07	11.40	ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.04	0.03	0.03	79.14	ppb
Cadmium	106-1	1.13	0.40	0.33	0.62	71.35	ppb
Cadmium	111-1	0.09	0.03	0.03	0.05	76.28	ppb
Calcium	43-1	6437.73	6480.23	6616.56	6511.51	1.43	ppb
Calcium	44-1	6395.00	6626.77	6684.19	6568.65	2.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.25	0.23	0.26	0.24	6.42	ppb
Cobalt	59-2	0.09	0.10	0.10	0.10	2.59	ppb
Copper	63-2	0.04	0.05	0.08	0.06	43.01	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	54-2	3482.16	3455.25	3534.63	3490.68	1.16	ppb
Iron	56-2	3494.78	3586.76	3625.69	3569.08	1.88	ppb
Iron	57-2	3467.17	3461.90	3522.39	3483.82	0.96	ppb
Krypton	83-1						cps
Lead	206-1	0.09	0.10	0.08	0.09	11.42	ppb

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.10	0.09	0.08	0.09	8.30	ppb
Lead	208-1	0.09	0.10	0.08	0.09	6.88	ppb
Lithium	6-1				111		%
Magnesium	24-2	443.93	445.05	454.50	447.83	1.30	ppb
Manganese	55-2	30.58	29.98	31.22	30.59	2.03	ppb
Molybdenum	94-1	0.67	0.73	0.67	0.69	5.56	ppb
Molybdenum	95-1	0.67	0.65	0.66	0.66	1.38	ppb
Molybdenum	96-1	0.66	0.65	0.65	0.65	0.80	ppb
Molybdenum	97-1	0.64	0.69	0.69	0.67	3.85	ppb
Molybdenum	98-1	0.64	0.66	0.66	0.66	1.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.44	0.47	0.45	0.45	4.16	ppb
Phosphorus	31-2	-18.20	-28.70	-21.80	-22.90		ppb
Potassium	39-2	362.58	358.15	371.39	364.04	1.85	ppb
Rhodium	103-1				106		%
Rhodium	103-2				107		%
Scandium	45-1				111		%
Scandium	45-2				109		%
Selenium	82-1	-0.31	0.18	0.35	0.07	486.58	ppb
Selenium	77-2	0.64	1.95	0.00	0.86	115.16	ppb
Selenium	78-2	-0.07	-0.44	-0.26	-0.26		ppb
Silicon	28-1	625.80	639.17	651.44	638.80	2.01	ppb
Silver	107-1	0.01	0.00	0.01	0.01	17.09	ppb
Silver	109-1	0.00	0.01	0.00	0.00	36.13	ppb
Sodium	23-2	10673.00	10821.22	10823.83	10772.68	0.80	ppb
Strontium	86-1	15.24	15.75	15.57	15.52	1.66	ppb
Strontium	88-1	15.38	15.94	15.69	15.67	1.77	ppb
Sulfur	34-1	208.55	387.84	334.43	310.27	29.67	ppb
Terbium	159-1				106		%
Terbium	159-2				104		%
Thallium	203-1	0.01	0.01	0.01	0.01	21.42	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	5.13	ppb
Tin	118-1	0.02	0.02	0.04	0.03	34.06	ppb
Titanium	47-1	0.29	1.50	0.32	0.71	97.66	ppb
Uranium	238-1	0.07	0.07	0.07	0.07	1.36	ppb

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.19	0.17	0.19	0.18	5.12	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				107		%
Zinc	66-2	0.11	0.12	0.02	0.08	63.24	ppb
Zirconium	90-1	0.07	0.07	0.07	0.07	2.32	ppb
Zirconium	91-1	0.06	0.07	0.06	0.06	12.99	ppb

Lab Sample ID: Q1193-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

Date & Time Acquired :		25-02-06 18:06:12	DataF	ile Name :	108AREF.d	AREF.d			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units		
Aluminium	27-2	8724.24	8592.21	8513.17	8609.87	1.24	ppb		
Antimony	121-1	528.23	512.79	498.04	513.02	2.94	ppb		
Arsenic	75-2	3.76	3.42	3.96	3.71	7.31	ppb		
Barium	135-1	2399.35	2301.13	2304.26	2334.91	2.39	ppb		
Barium	137-1	2382.83	2313.56	2270.57	2322.32	2.44	ppb		
Beryllium	9-1	502.82	486.37	472.81	487.33	3.08	ppb		
Bismuth	209-1				95		%		
Bismuth	209-2				95		%		
Bromine	81-1						cps		
Cadmium	108-1	486.86	470.74	472.73	476.78	1.84	ppb		
Cadmium	106-1	528.51	501.71	507.89	512.70	2.74	ppb		
Cadmium	111-1	526.07	501.79	512.10	513.32	2.37	ppb		
Calcium	43-1	82749.56	76994.31	79924.51	79889.46	3.60	ppb		
Calcium	44-1	82575.19	76407.48	78061.65	79014.77	4.04	ppb		
Carbon	12-1						cps		
Carbon	12-2						cps		
Chlorine	35-1						cps		
Chlorine	35-2						cps		
Chromium	52-2	487.57	483.85	470.22	480.55	1.90	ppb		
Cobalt	59-2	488.32	487.17	486.78	487.42	0.16	ppb		
Copper	63-2	4827.33	4742.18	4679.62	4749.71	1.56	ppb		
Dysprosium	156-1						cps		
Dysprosium	156-2						cps		
Erbium	164-1						cps		
Erbium	164-2						cps		
Gadolinium	160-1						cps		
Gadolinium	160-2						cps		
Holmium	165-1				105		%		
Holmium	165-2				102		%		
Indium	115-1				104		%		
Indium	115-2				97		%		
Iron	54-2	38621.77	38265.80	37769.44	38219.00	1.12	ppb		
Iron	56-2	38466.42	38278.85	37840.70	38195.33	0.84	ppb		
Iron	57-2	39047.42	38791.69	38121.73	38653.61	1.24	ppb		
Krypton	83-1						cps		
Lead	206-1	2609.31	2441.75	2450.48	2500.51	3.77	ppb		

Lab Sample ID: Q1193-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2616.94	2450.42	2427.73	2498.37	4.14	ppb
Lead	208-1	2590.36	2433.96	2431.05	2485.12	3.67	ppb
Lithium	6-1				107		%
Magnesium	24-2	49212.92	47390.83	47493.85	48032.53	2.13	ppb
Manganese	55-2	4901.62	4832.86	4797.13	4843.87	1.10	ppb
Molybdenum	94-1	2493.21	2291.52	2321.63	2368.79	4.59	ppb
Molybdenum	95-1	1891.74	1733.67	1757.23	1794.21	4.75	ppb
Molybdenum	96-1	1926.35	1765.87	1816.35	1836.19	4.47	ppb
Molybdenum	97-1	1846.85	1728.53	1738.29	1771.22	3.71	ppb
Molybdenum	98-1	1875.57	1737.26	1765.64	1792.82	4.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	462.38	460.12	454.92	459.14	0.83	ppb
Phosphorus	31-2	-0.84	-13.45	-12.71	-9.00		ppb
Potassium	39-2	23319.01	22798.52	22399.66	22839.06	2.02	ppb
Rhodium	103-1				99		%
Rhodium	103-2				100		%
Scandium	45-1				108		%
Scandium	45-2				106		%
Selenium	82-1	521.06	471.27	485.63	492.65	5.20	ppb
Selenium	77-2	478.31	507.61	483.19	489.70	3.21	ppb
Selenium	78-2	496.79	466.56	482.73	482.03	3.14	ppb
Silicon	28-1	3387.50	3298.73	3441.63	3375.95	2.14	ppb
Silver	107-1	90.98	87.47	87.65	88.70	2.23	ppb
Silver	109-1	91.77	87.48	86.88	88.71	3.01	ppb
Sodium	23-2	99034.80	96608.93	97019.60	97554.44	1.33	ppb
Strontium	86-1	710.64	656.27	669.30	678.73	4.18	ppb
Strontium	88-1	693.27	655.34	654.86	667.82	3.30	ppb
Sulfur	34-1	1723.50	1035.63	1249.90	1336.34	26.34	ppb
Terbium	159-1				105		%
Terbium	159-2				102		%
Thallium	203-1	523.28	484.31	492.78	500.12	4.10	ppb
Thallium	205-1	517.02	482.59	488.91	496.18	3.69	ppb
Tin	118-1	468.37	455.04	455.11	459.50	1.67	ppb
Titanium	47-1	6.10	10.03	6.02	7.38	31.05	ppb
Uranium	238-1	496.42	469.77	468.98	478.39	3.26	ppb

Lab Sample ID: Q1193-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	497.37	486.26	484.30	489.31	1.44	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				103		%
Zinc	66-2	4752.54	4748.60	4679.95	4727.03	0.86	ppb
Zirconium	90-1	522.66	471.97	484.73	493.12	5.35	ppb
Zirconium	91-1	517.75	472.74	484.52	491.67	4.75	ppb

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Lab Sample ID: Q1193-02MSD Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Date & Time Ac	quirea: 202	25-02-06 18:08:54	Datar	ile Name :	109AREF.d			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	8405.36	8475.29	8526.68	8469.11	0.72	ppb	
Antimony	121-1	490.91	491.51	491.45	491.29	0.07	ppb	
Arsenic	75-2	3.59	3.70	3.55	3.61	2.07	ppb	
Barium	135-1	2215.73	2254.57	2236.11	2235.47	0.87	ppb	
Barium	137-1	2201.96	2215.77	2232.79	2216.84	0.70	ppb	
Beryllium	9-1	470.49	474.91	471.43	472.28	0.49	ppb	
Bismuth	209-1				97		%	
Bismuth	209-2				95		%	
Bromine	81-1						cps	
Cadmium	108-1	456.40	463.41	458.05	459.29	0.80	ppb	
Cadmium	106-1	488.22	495.94	488.90	491.02	0.87	ppb	
Cadmium	111-1	479.63	479.54	490.52	483.23	1.31	ppb	
Calcium	43-1	75281.76	77466.53	77662.00	76803.43	1.72	ppb	
Calcium	44-1	74560.14	75875.62	76448.94	75628.23	1.28	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	465.22	464.43	469.83	466.49	0.63	ppb	
Cobalt	59-2	483.15	472.50	479.53	478.39	1.13	ppb	
Copper	63-2	4689.32	4647.43	4630.12	4655.62	0.65	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				106		%	
Holmium	165-2				102		%	
Indium	115-1				105		%	
Indium	115-2				97		%	
Iron	54-2	38282.38	37987.58	37972.45	38080.80	0.46	ppb	
Iron	56-2	38065.53	37287.29	38233.13	37861.99	1.33	ppb	
Iron	57-2	39362.01	38089.08	38721.77	38724.28	1.64	ppb	
Krypton	83-1						cps	
Lead	206-1	2390.02	2355.24	2360.21	2368.49	0.79	ppb	

Lab Sample ID: Q1193-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Date a Time Act	quircu . Zoz	0 02 00 10.00.04	Datai	iic ivairie .	1007 (I CLI . G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2398.15	2389.19	2363.22	2383.52	0.76	ppb
Lead	208-1	2385.48	2378.29	2363.06	2375.61	0.48	ppb
Lithium	6-1				107		%
Magnesium	24-2	47092.20	47546.20	48409.53	47682.64	1.40	ppb
Manganese	55-2	4767.53	4772.42	4859.37	4799.77	1.08	ppb
Molybdenum	94-1	2223.27	2241.68	2246.82	2237.26	0.55	ppb
Molybdenum	95-1	1673.44	1676.85	1696.10	1682.13	0.73	ppb
Molybdenum	96-1	1722.93	1741.40	1767.69	1744.01	1.29	ppb
Molybdenum	97-1	1680.82	1681.07	1713.32	1691.74	1.10	ppb
Molybdenum	98-1	1691.45	1710.85	1714.53	1705.61	0.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	451.60	449.31	452.69	451.20	0.38	ppb
Phosphorus	31-2	11.39	34.27	14.10	19.92	62.74	ppb
Potassium	39-2	22150.48	22472.08	21967.07	22196.54	1.15	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				108		%
Scandium	45-2				105		%
Selenium	82-1	469.70	475.36	476.83	473.96	0.79	ppb
Selenium	77-2	484.89	495.13	464.78	481.60	3.21	ppb
Selenium	78-2	460.80	477.41	461.85	466.68	1.99	ppb
Silicon	28-1	3120.10	3435.45	3207.18	3254.24	5.00	ppb
Silver	107-1	85.25	85.12	84.02	84.80	0.79	ppb
Silver	109-1	83.28	83.39	82.35	83.01	0.69	ppb
Sodium	23-2	97363.77	98536.71	98325.58	98075.36	0.64	ppb
Strontium	86-1	644.65	652.33	652.96	649.98	0.71	ppb
Strontium	88-1	636.13	643.97	639.20	639.77	0.62	ppb
Sulfur	34-1	907.77	1239.08	885.06	1010.64	19.61	ppb
Terbium	159-1				105		%
Terbium	159-2				102		%
Thallium	203-1	467.65	478.37	472.04	472.69	1.14	ppb
Thallium	205-1	469.31	476.01	472.93	472.75	0.71	ppb
Tin	118-1	444.76	441.04	442.04	442.61	0.43	ppb
Titanium	47-1	4.51	10.06	9.45	8.01	38.03	ppb
Uranium	238-1	457.64	458.83	458.99	458.49	0.16	ppb

Lab Sample ID: Q1193-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	492.19	480.41	480.43	484.34	1.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				102		%
Zinc	66-2	4748.80	4605.15	4603.12	4652.35	1.80	ppb
Zirconium	90-1	462.19	469.63	473.21	468.34	1.20	ppb
Zirconium	91-1	455.00	469.20	469.80	464.67	1.80	ppb

Lab Sample ID: Q1193-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Allminium 27-2 8300.11 8576.90 8535.80 8470.94 1.76 ppb Antmony 121-1 502.29 504.71 510.51 505.84 0.83 ppb Arsenic 76-2 3.79 3.73 3.58 3.70 2.87 ppb Barium 136-1 5208.56 2211.12 2228.19 2215.66 0.48 ppb Barium 137-1 2210.62 2176.16 2233.83 2206.87 1.31 ppb Beryllium 9-1 462.44 463.94 472.83 466.40 1.20 ppb Bismuth 209-1 462.44 463.94 472.83 466.40 1.20 ppb Bismuth 209-2 95 505.00 505.	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Arsenic         75-2         3.79         3.73         3.58         3.70         2.87         ppb           Barlum         135-1         2208.56         2211.12         2228.19         2215.96         0.48         ppb           Barlum         137-1         2210.62         2176.16         2233.83         2206.87         1.31         ppb           Bismuth         209-1         462.44         463.94         472.83         466.40         1.20         ppb           Bismuth         209-2         5         95         %         %           Bromine         81-1         5         66.40         1.23         ppb           Cadmium         108-1         453.94         454.95         464.19         457.69         1.23         ppb           Cadmium         108-1         485.90         485.16         496.52         489.19         1.30         ppb           Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Carbon         12-1         7660.945         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-1         75627.30	Aluminium	27-2	8300.11	8576.90	8535.80	8470.94	1.76	ppb
Barium         135-1         2208.56         2211.12         2228.19         2215.96         0.48         ppb           Barium         137-1         2210.62         2176.16         2233.83         2206.87         1.31         ppb           Beryllium         9-1         462.44         463.94         472.83         466.40         1.20         ppb           Blsmuth         209-2         ————————————————————————————————————	Antimony	121-1	502.29	504.71	510.51	505.84	0.83	ppb
Barium 137-1 2210.62 2176.16 2233.83 2206.87 1.31 ppb Beryllium 9-1 462.44 463.94 472.83 466.40 1.20 ppb Blismuth 209-1 97 % 97 % % 150.00 ppb Blismuth 209-2 90-2 95 97 % 97 % 97 % 97 % 97 % 98 97 % 97 % 9	Arsenic	75-2	3.79	3.73	3.58	3.70	2.87	ppb
Beryllium	Barium	135-1	2208.56	2211.12	2228.19	2215.96	0.48	ppb
Bismuth   209-1	Barium	137-1	2210.62	2176.16	2233.83	2206.87	1.31	ppb
Bismuth   209-2	Beryllium	9-1	462.44	463.94	472.83	466.40	1.20	ppb
Bromine         81-1         cps           Cadmium         108-1         453.94         454.95         464.19         457.69         1.23         ppb           Cadmium         106-1         485.90         485.16         496.52         489.19         1.30         ppb           Cadmium         111-1         477.59         485.42         489.03         484.01         1.21         ppb           Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Carbon         12-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-2         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-1         2-1         52.2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Dysprosium         156-1         56-2         471.48         4653.57         4655.62         1.16         pps           Erbium         164-1 <t< td=""><td>Bismuth</td><td>209-1</td><td></td><td></td><td></td><td>97</td><td></td><td>%</td></t<>	Bismuth	209-1				97		%
Cadmium         108-1         453.94         454.95         464.19         457.69         1.23         ppb           Cadmium         106-1         485.90         485.16         496.52         489.19         1.30         ppb           Cadmium         111-1         477.59         485.42         489.03         484.01         1.21         ppb           Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Calcium         44-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-2         77.27         475.92         474.99         475.42         0.10         ppb           Chlorine         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copser	Bismuth	209-2				95		%
Cadmium         106-1         485.90         485.16         496.52         489.19         1.30         ppb           Cadmium         111-1         477.59         485.42         489.03         484.01         1.21         ppb           Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Carbon         12-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-2         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-1         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-1         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-1         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-2         76761.96         75627.30         76332.90         0.81         ppb           Chlorine         35-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2	Bromine	81-1						cps
Cadmium         111-1         477.59         485.42         489.03         484.01         1.21         ppb           Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Calcium         44-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-1	Cadmium	108-1	453.94	454.95	464.19	457.69	1.23	ppb
Calcium         43-1         78331.46         78051.44         77999.24         78127.38         0.23         ppb           Carbon         12-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-1         Cps         Cps         Cps         Cps         Chlorine         35-1         Cps         Cps           Chlorine         35-2         Cps         Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         Cps         Cps         Cps         Cps         Cps           Erbium         164-1         Cps         Cps         Cps         Cps         Cps           Gadolinium         160-1         Cps         To         To         M           Holmium         165-2         To         To         To         M           Indium         115-1<	Cadmium	106-1	485.90	485.16	496.52	489.19	1.30	ppb
Calcium         44-1         76609.45         76761.96         75627.30         76332.90         0.81         ppb           Carbon         12-1         cps         cps           Carbon         12-2         cps         cps           Chlorine         35-1         cps         cps           Chlorine         35-2         cps         cps           Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         cps         cps         cps           Erbium         164-1         cps         cps         cps           Erbium         164-2         cps         cps           Gadolinium         160-1         cps         cps           Holmium         165-2         tps         tps         tps           Indium         115-1         tps         tps         tps           Iron         <	Cadmium	111-1	477.59	485.42	489.03	484.01	1.21	ppb
Carbon         12-1         cps           Carbon         12-2         cps           Chlorine         35-1         cps           Chlorine         35-2         cps           Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         cps         cps         cps           Erbium         164-1         cps         cps         cps           Gadolinium         160-2         cps         cps           Gadolinium         160-1         cps         cps           Holmium         165-2         cps         cps           Holmium         165-2         cps         cps           Indium         115-1         cps         cps           Iron         54-2         37598.45         38566.58         38366.14         3817.06         1.34         ppb           Iron         57-2	Calcium	43-1	78331.46	78051.44	77999.24	78127.38	0.23	ppb
Carbon         12-2         cps           Chlorine         35-1         cps           Chlorine         35-2         cps           Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         cps         cps         cps         cps           Erbium         164-1         cps         cps         cps           Gadolinium         160-1         cps         cps           Gadolinium         160-2         cps         cps           Holmium         165-2         cps         cps           Holmium         115-1         cps         cps           Indium         115-2         cps         cps           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         57-2         38281.10         38541.37         3880	Calcium	44-1	76609.45	76761.96	75627.30	76332.90	0.81	ppb
Chlorine         35-1         cps           Chlorine         35-2         cps           Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         cps         cps         cps         cps           Erbium         164-1         cps         cps         cps           Gadolinium         160-1         cps         cps           Gadolinium         160-2         cps         cps           Holmium         165-1         cps         cps           Holmium         165-2         cps         cps           Indium         115-1         cps         cps           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb <td>Carbon</td> <td>12-1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>cps</td>	Carbon	12-1						cps
Chlorine         35-2         cps           Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         Cps         Cps         Cps         Cps         Cps           Erbium         164-1         Cps         Cps         Cps         Cps         Cps           Gadolinium         160-1         Cps         Cps         Cps         Cps         Cps           Holmium         165-1         Tron         105         Kryton         Kryton         Kryton         83-1         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         3800.16         38540.88         0.67         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb	Carbon	12-2						cps
Chromium         52-2         475.37         475.92         474.99         475.42         0.10         ppb           Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         Free Procession         156-2         Free Procession         164-1         Free Procession	Chlorine	35-1						cps
Cobalt         59-2         477.42         482.32         484.95         481.56         0.79         ppb           Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         Cps         Cps         Cps         Cps         Cps           Erbium         164-1         Cps         Cps         Cps         Cps         Cps           Gadolinium         160-1         Cps         Cps         Cps         Cps         Cps           Gadolinium         160-2         Cps         Cps         Cps         Cps         Cps           Holmium         165-1         Cps         Tps         Tps         Tps         Tps         Cps           Indium         115-1         Cps         Tps	Chlorine	35-2						cps
Copper         63-2         4602.82         4710.48         4653.57         4655.62         1.16         ppb           Dysprosium         156-1         cps           Dysprosium         156-2         cps         cps           Erbium         164-1         cps         cps           Erbium         164-2         cps         cps           Gadolinium         160-1         cps         cps           Gadolinium         160-2         transparent         transparent         transparent           Holmium         165-1         transparent         transp	Chromium	52-2	475.37	475.92	474.99	475.42	0.10	ppb
Dysprosium         156-1         cps           Dysprosium         156-2         cps           Erbium         164-1         cps           Erbium         164-2         cps           Gadolinium         160-1         cps           Gadolinium         160-2         cps           Holmium         165-1         105         %           Holmium         165-2         101         %           Indium         115-1         102         %           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         cps         cps         cps	Cobalt	59-2	477.42	482.32	484.95	481.56	0.79	ppb
Dysprosium         156-2         cps           Erbium         164-1         cps           Erbium         164-2         cps           Gadolinium         160-1         cps           Gadolinium         160-2         cps           Holmium         165-1         105         %           Holmium         165-2         101         %           Indium         115-1         102         %           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         cps         cps         cps         cps         cps	Copper	63-2	4602.82	4710.48	4653.57	4655.62	1.16	ppb
Erbium         164-1         cps           Erbium         164-2         cps           Gadolinium         160-1         cps           Gadolinium         160-2         cps           Holmium         165-1         105         %           Holmium         165-2         101         %           Indium         115-1         102         %           Indium         115-2         96         %           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         cps         cps         cps         cps	Dysprosium	156-1						cps
Erbium         164-2         cps           Gadolinium         160-1         cps           Gadolinium         160-2         the second of th	Dysprosium	156-2						cps
Gadolinium         160-1         cps           Holmium         165-1         105         %           Holmium         165-2         101         %           Indium         115-1         102         %           Indium         115-2         96         %           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         58	Erbium	164-1						cps
Gadolinium         160-2         cps           Holmium         165-1         105         %           Holmium         165-2         101         %           Indium         115-1         102         %           Indium         115-2         96         %           Iron         54-2         37598.45         38566.58         38366.14         38177.06         1.34         ppb           Iron         56-2         37984.80         38164.50         38069.38         38072.89         0.24         ppb           Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         57-2	Erbium	164-2						cps
Holmium       165-1       105       %         Holmium       165-2       101       %         Indium       115-1       102       %         Indium       115-2       96       %         Iron       54-2       37598.45       38566.58       38366.14       38177.06       1.34       ppb         Iron       56-2       37984.80       38164.50       38069.38       38072.89       0.24       ppb         Iron       57-2       38281.10       38541.37       38800.16       38540.88       0.67       ppb         Krypton       83-1       57-2       <	Gadolinium	160-1						cps
Holmium       165-2       101       %         Indium       115-1       102       %         Indium       115-2       96       %         Iron       54-2       37598.45       38566.58       38366.14       38177.06       1.34       ppb         Iron       56-2       37984.80       38164.50       38069.38       38072.89       0.24       ppb         Iron       57-2       38281.10       38541.37       38800.16       38540.88       0.67       ppb         Krypton       83-1       57-2	Gadolinium	160-2						cps
Indium       115-1       102       %         Indium       115-2       96       %         Iron       54-2       37598.45       38566.58       38366.14       38177.06       1.34       ppb         Iron       56-2       37984.80       38164.50       38069.38       38072.89       0.24       ppb         Iron       57-2       38281.10       38541.37       38800.16       38540.88       0.67       ppb         Krypton       83-1       cps	Holmium	165-1				105		%
Indium       115-2       96       %         Iron       54-2       37598.45       38566.58       38366.14       38177.06       1.34       ppb         Iron       56-2       37984.80       38164.50       38069.38       38072.89       0.24       ppb         Iron       57-2       38281.10       38541.37       38800.16       38540.88       0.67       ppb         Krypton       83-1       cps	Holmium	165-2				101		%
Iron     54-2     37598.45     38566.58     38366.14     38177.06     1.34     ppb       Iron     56-2     37984.80     38164.50     38069.38     38072.89     0.24     ppb       Iron     57-2     38281.10     38541.37     38800.16     38540.88     0.67     ppb       Krypton     83-1     cps	Indium	115-1				102		%
Iron     56-2     37984.80     38164.50     38069.38     38072.89     0.24     ppb       Iron     57-2     38281.10     38541.37     38800.16     38540.88     0.67     ppb       Krypton     83-1     cps	Indium	115-2				96		%
Iron         57-2         38281.10         38541.37         38800.16         38540.88         0.67         ppb           Krypton         83-1         cps	Iron	54-2	37598.45	38566.58	38366.14	38177.06	1.34	ppb
Krypton 83-1 cps	Iron	56-2	37984.80	38164.50	38069.38	38072.89	0.24	ppb
	Iron	57-2	38281.10	38541.37	38800.16	38540.88	0.67	ppb
Lead 206-1 2352.77 2457.99 2400.07 2403.61 2.19 ppb	Krypton	83-1						cps
	Lead	206-1	2352.77	2457.99	2400.07	2403.61	2.19	ppb

Lab Sample ID: Q1193-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2351.41	2452.05	2399.14	2400.87	2.10	ppb
Lead	208-1	2347.95	2427.58	2387.00	2387.51	1.67	ppb
Lithium	6-1				107		%
Magnesium	24-2	46785.45	48684.77	47372.48	47614.24	2.04	ppb
Manganese	55-2	4699.87	4793.08	4821.33	4771.43	1.33	ppb
Molybdenum	94-1	2229.90	2272.28	2243.87	2248.69	0.96	ppb
Molybdenum	95-1	1704.81	1734.45	1688.54	1709.27	1.36	ppb
Molybdenum	96-1	1735.36	1763.91	1749.65	1749.64	0.82	ppb
Molybdenum	97-1	1673.48	1645.22	1719.39	1679.36	2.23	ppb
Molybdenum	98-1	1688.57	1689.56	1722.81	1700.31	1.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	446.60	454.60	453.68	451.63	0.97	ppb
Phosphorus	31-2	158.43	154.47	182.22	165.04	9.09	ppb
Potassium	39-2	21523.28	22286.68	22515.56	22108.51	2.35	ppb
Rhodium	103-1				98		%
Rhodium	103-2				99		%
Scandium	45-1				105		%
Scandium	45-2				104		%
Selenium	82-1	465.87	478.36	473.29	472.51	1.33	ppb
Selenium	77-2	423.12	505.67	482.32	470.37	9.05	ppb
Selenium	78-2	445.09	475.12	483.89	468.04	4.35	ppb
Silicon	28-1	3454.41	3626.65	3379.98	3487.01	3.63	ppb
Silver	107-1	84.11	85.21	84.39	84.57	0.67	ppb
Silver	109-1	82.53	82.87	84.51	83.30	1.28	ppb
Sodium	23-2	95388.33	99141.22	97837.28	97455.61	1.96	ppb
Strontium	86-1	643.15	652.24	650.43	648.61	0.74	ppb
Strontium	88-1	639.19	651.02	645.13	645.11	0.92	ppb
Sulfur	34-1	1283.02	1059.85	1024.29	1122.39	12.50	ppb
Terbium	159-1				106		%
Terbium	159-2				101		%
Thallium	203-1	467.77	495.22	469.42	477.47	3.22	ppb
Thallium	205-1	468.91	492.82	476.39	479.37	2.55	ppb
Tin	118-1	434.66	435.60	443.29	437.85	1.08	ppb
Titanium	47-1	6.18	9.61	17.87	11.22	53.55	ppb
Uranium	238-1	460.74	472.72	461.70	465.05	1.43	ppb

Lab Sample ID: Q1193-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	478.13	483.76	489.74	483.88	1.20	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	4613.08	4713.91	4641.72	4656.24	1.12	ppb
Zirconium	90-1	467.52	482.65	466.07	472.08	1.95	ppb
Zirconium	91-1	463.70	480.09	468.77	470.85	1.78	ppb

Lab Sample ID : CCV006 Instrumnet Name : P8

Client Sample ID : CCV006 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Date & Time Ac	quirea: 202	25-02-06 18:14:21	DataFi	ile Name :	111CCV.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47425.44	47440.47	47362.97	47409.63	0.09	ppb
Antimony	121-1	504.51	507.10	498.68	503.43	0.86	ppb
Arsenic	75-2	490.81	492.55	489.45	490.94	0.32	ppb
Barium	135-1	2552.40	2523.32	2509.65	2528.46	0.86	ppb
Barium	137-1	2540.83	2557.43	2514.70	2537.66	0.85	ppb
Beryllium	9-1	486.55	495.57	495.99	492.70	1.08	ppb
Bismuth	209-1				89		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	501.03	510.36	501.38	504.25	1.05	ppb
Cadmium	106-1	508.81	513.58	495.97	506.12	1.80	ppb
Cadmium	111-1	502.04	500.54	483.51	495.36	2.08	ppb
Calcium	43-1	243790.43	240502.98	232950.45	239081.29	2.32	ppb
Calcium	44-1	239602.04	238081.01	227153.83	234945.62	2.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	491.89	484.90	498.29	491.69	1.36	ppb
Cobalt	59-2	485.76	476.50	491.79	484.68	1.59	ppb
Copper	63-2	4656.82	4628.25	4737.21	4674.09	1.21	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				99		%
Indium	115-1				95		%
Indium	115-2				92		%
Iron	54-2	118828.27	117733.40	121242.02	119267.90	1.51	ppb
Iron	56-2	117976.89	117550.80	119792.55	118440.08	1.01	ppb
Iron	57-2	118363.95	117405.29	120683.44	118817.56	1.42	ppb
Krypton	83-1						cps
Lead	206-1	2600.90	2591.62	2560.29	2584.27	0.82	ppb

Lab Sample ID :CCV006Instrumnet Name :P8Client Sample ID :CCV006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Date & Time Act	quireu . 202	25-02-00 16.14.21	DalaFi	ile Name.	TTTCCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2560.30	2596.43	2553.24	2569.99	0.90	ppb
Lead	208-1	2558.63	2590.71	2521.19	2556.84	1.36	ppb
Lithium	6-1				98		%
Magnesium	24-2	239168.08	239045.26	237721.30	238644.88	0.34	ppb
Manganese	55-2	4764.98	4765.50	4934.21	4821.56	2.02	ppb
Molybdenum	94-1	5117.04	4992.53	4999.26	5036.28	1.39	ppb
Molybdenum	95-1	5103.95	5043.50	4983.96	5043.80	1.19	ppb
Molybdenum	96-1	4979.31	5022.16	4966.41	4989.29	0.58	ppb
Molybdenum	97-1	4912.00	5002.69	4986.30	4967.00	0.97	ppb
Molybdenum	98-1	5049.43	4941.97	4944.52	4978.64	1.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	450.14	445.85	456.13	450.71	1.15	ppb
Phosphorus	31-2	9674.87	9657.86	9642.00	9658.24	0.17	ppb
Potassium	39-2	119323.58	116829.43	118573.23	118242.08	1.08	ppb
Rhodium	103-1				90		%
Rhodium	103-2				91		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	483.28	477.73	472.48	477.83	1.13	ppb
Selenium	77-2	478.65	492.11	533.64	501.46	5.72	ppb
Selenium	78-2	475.89	482.78	481.75	480.14	0.77	ppb
Silicon	28-1	516.87	510.08	498.69	508.55	1.81	ppb
Silver	107-1	493.67	491.61	469.38	484.89	2.78	ppb
Silver	109-1	491.65	494.47	477.42	487.84	1.87	ppb
Sodium	23-2	241448.88	237853.82	239769.30	239690.67	0.75	ppb
Strontium	86-1	509.85	508.56	501.31	506.57	0.91	ppb
Strontium	88-1	495.25	511.27	495.31	500.61	1.84	ppb
Sulfur	34-1	10793.46	10677.61	10063.23	10511.43	3.73	ppb
Terbium	159-1				100		%
Terbium	159-2				98		%
Thallium	203-1	527.58	524.10	522.40	524.69	0.50	ppb
Thallium	205-1	520.47	509.42	509.93	513.27	1.22	ppb
Tin	118-1	498.26	509.17	497.30	501.58	1.31	ppb
Titanium	47-1	5079.60	4950.82	4967.93	4999.45	1.40	ppb
Uranium	238-1	509.60	519.91	506.66	512.06	1.36	ppb

Lab Sample ID :CCV006Instrumnet Name :P8Client Sample ID :CCV006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	510.19	485.95	498.26	498.14	2.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				98		%
Zinc	66-2	4728.00	4655.22	4766.34	4716.52	1.20	ppb
Zirconium	90-1	525.00	505.21	501.70	510.64	2.46	ppb
Zirconium	91-1	516.13	517.87	506.03	513.34	1.24	ppb

Lab Sample ID :CCB006Instrumnet Name :P8Client Sample ID :CCB006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.61	1.03	0.48	0.71	40.75	ppb
Antimony	121-1	0.08	0.07	0.07	0.07	6.79	ppb
Arsenic	75-2	-0.01	-0.01	0.01	0.00		ppb
Barium	135-1	0.06	0.03	0.04	0.04	37.58	ppb
Barium	137-1	0.06	0.04	0.03	0.04	38.36	ppb
Beryllium	9-1	0.30	0.26	0.24	0.27	11.72	ppb
Bismuth	209-1				97		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.00	0.02	0.01	105.13	ppb
Cadmium	106-1	0.33	-0.04	0.44	0.24	104.03	ppb
Cadmium	111-1	0.05	0.02	0.06	0.04	47.27	ppb
Calcium	43-1	3.23	0.91	0.91	1.69	79.19	ppb
Calcium	44-1	7.21	2.00	2.35	3.85	75.71	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.15	0.15	0.13	0.15	6.39	ppb
Cobalt	59-2	0.02	0.02	0.02	0.02	15.57	ppb
Copper	63-2	0.11	0.11	0.16	0.13	23.75	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	3.70	3.48	3.46	3.55	3.68	ppb
Iron	56-2	3.61	3.77	3.89	3.76	3.75	ppb
Iron	57-2	3.05	3.63	3.06	3.25	10.23	ppb
Krypton	83-1						cps
Lead	206-1	0.27	0.21	0.20	0.23	15.58	ppb

Lab Sample ID :CCB006Instrumnet Name :P8Client Sample ID :CCB006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

Date a Time Act	quircu . 202	0 02 00 10.10.01	Datai	iic i vairie .	11200BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.28	0.20	0.19	0.22	22.20	ppb
Lead	208-1	0.27	0.21	0.20	0.23	16.24	ppb
Lithium	6-1				105		%
Magnesium	24-2	-1.56	0.12	-1.02	-0.82		ppb
Manganese	55-2	0.19	0.20	0.18	0.19	4.87	ppb
Molybdenum	94-1	0.19	0.12	0.14	0.15	25.01	ppb
Molybdenum	95-1	0.14	0.10	0.09	0.11	22.76	ppb
Molybdenum	96-1	0.16	0.10	0.11	0.12	25.62	ppb
Molybdenum	97-1	0.16	0.09	0.09	0.11	34.74	ppb
Molybdenum	98-1	0.14	0.09	0.09	0.11	24.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.38	0.38	0.43	0.40	6.87	ppb
Phosphorus	31-2	-22.22	-28.47	-30.96	-27.22		ppb
Potassium	39-2	39.03	36.64	36.22	37.30	4.06	ppb
Rhodium	103-1				100		%
Rhodium	103-2				104		%
Scandium	45-1				101		%
Scandium	45-2				103		%
Selenium	82-1	-0.08	-0.14	-0.09	-0.10		ppb
Selenium	77-2	0.68	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	-0.61	-0.02	-0.03	-0.22		ppb
Silicon	28-1	3.86	-0.63	-1.51	0.58	501.09	ppb
Silver	107-1	0.03	0.04	0.03	0.03	10.89	ppb
Silver	109-1	0.04	0.03	0.03	0.03	16.13	ppb
Sodium	23-2	53.06	50.06	47.74	50.29	5.30	ppb
Strontium	86-1	0.03	0.01	0.00	0.01	104.66	ppb
Strontium	88-1	0.02	0.01	0.01	0.02	29.87	ppb
Sulfur	34-1	855.32	-103.74	-307.81	147.92	419.86	ppb
Terbium	159-1				99		%
Terbium	159-2				102		%
Thallium	203-1	0.09	0.07	0.07	0.08	13.29	ppb
Thallium	205-1	0.09	0.07	0.07	0.08	13.29	ppb
Tin	118-1	0.02	0.00	0.00	0.01	320.20	ppb
Titanium	47-1	0.10	0.04	0.07	0.07	40.52	ppb
Uranium	238-1	0.01	0.00	0.00	0.01	40.25	ppb

Lab Sample ID :CCB006Instrumnet Name :P8Client Sample ID :CCB006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	8.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	0.03	-0.03	-0.06	-0.02		ppb
Zirconium	90-1	0.03	0.02	0.02	0.02	15.61	ppb
Zirconium	91-1	0.03	0.02	0.03	0.03	3.32	ppb

Lab Sample ID: PB166378BL Instrumnet Name: P8
Client Sample ID: PBW378 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:21:50 DataFile Name: 113CCBE.d

Date & Time At	quireu . 202	25-02-06 16.21.50	Dalai	The Marrie .	113CCBE.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.45	0.10	0.57	0.37	65.70	ppb
Antimony	121-1	0.02	0.03	0.02	0.02	4.11	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00		ppb
Barium	135-1	0.01	0.00	0.01	0.01	51.65	ppb
Barium	137-1	0.01	0.01	0.01	0.01	22.67	ppb
Beryllium	9-1	0.16	0.17	0.16	0.16	4.40	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.00	0.01	0.02	84.04	ppb
Cadmium	106-1	-0.73	-0.71	0.42	-0.34		ppb
Cadmium	111-1	-0.04	-0.05	0.04	-0.02		ppb
Calcium	43-1	-1.19	-0.78	-1.35	-1.10		ppb
Calcium	44-1	-1.75	-2.05	-2.10	-1.96		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.19	-0.17	-0.16	-0.17		ppb
Cobalt	59-2	0.01	0.01	0.01	0.01	34.90	ppb
Copper	63-2	0.00	0.02	0.00	0.00	213.41	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				103		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	54-2	0.66	0.77	1.07	0.83	25.12	ppb
Iron	56-2	1.06	1.26	1.05	1.12	10.40	ppb
Iron	57-2	0.75	-0.05	0.23	0.31	132.19	ppb
Krypton	83-1						cps
Lead	206-1	0.16	0.13	0.13	0.14	11.19	ppb

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LB Number : LB134612 Operator :

Lab Sample ID :PB166378BLInstrumnet Name :P8Client Sample ID :PBW378Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:21:50 DataFile Name: 113CCBE.d

Lead         207-1         0.15         0.14         0.05         0.05         0.05         0.07         0.06         24.98         ppb         0.04         0.03 <t< th=""><th>Parameter</th><th>Mass</th><th>ConRep1</th><th>ConRep2</th><th>ConRep3</th><th>Avg. Conc.</th><th>ConcRSD</th><th>Units</th></t<>	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lithium         6-1         "Tithium"         110         "Section of the part	Lead	207-1	0.15	0.14	0.14	0.14	3.44	ppb
Magnesium         24-2         -3.48         -2.72         -3.67         -3.29	Lead	208-1	0.15	0.14	0.14	0.14	4.34	ppb
Manganese         55-21         0.06         0.08         0.07         0.07         18.60         ppb           Molybdenum         94-1         0.05         0.05         0.07         0.06         24.98         ppb           Molybdenum         95-1         0.03         0.03         0.03         0.03         7.02         ppb           Molybdenum         96-1         0.03         0.03         0.03         10.18         ppb           Molybdenum         96-1         0.03         0.02         0.03         0.03         10.18         ppb           Molybdenum         96-1         0.03         0.02         0.03         0.33         10.18         ppb           Molybdenum         196-1         0.03         0.02         0.03         0.33         13.2         ppb           Molybdenum         196-1         0.03         0.02         0.03         0.03         1.32         ppb           Molybdenum         196-1         0.02         0.02         0.03         0.03         1.32         ppb           Molybdenum         150-1         0.28         0.23         0.31         0.27         1.68         1.68         1.68         1.68         1.68	Lithium	6-1				110		%
Molybdenum         94-1         0.05         0.05         0.07         0.06         24.98         ppb           Molybdenum         95-1         0.03         0.03         0.03         0.03         7.02         ppb           Molybdenum         96-1         0.03         0.03         0.03         0.03         10.18         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         10.18         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         10.18         ppb           Molybdenum         150-2         0.03         0.02         0.03         10.33         ppb           Neodymium         150-2         0.26         0.23         0.31         0.27         16.88         ppb           Phosphorus         31-2         34.59         30.41         -26.27         -30.42         9.06         90           Phosphorus         31-2         34.59         30.41         -26.27         -30.42         5.33         ppb           Phosphorus         31-2         34.59         30.08         32.06         30.42         5.33         ppb           Phosphorus	Magnesium	24-2	-3.48	-2.72	-3.67	-3.29		ppb
Molybdenum         96-1         0.03         0.03         0.03         0.03         7.02         ppb           Molybdenum         96-1         0.03         0.03         0.03         0.03         8.64         ppb           Molybdenum         97-1         0.03         0.02         0.03         0.03         1.32         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         1.32         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         1.32         ppb           Meodymium         150-1         150-2 </td <td>Manganese</td> <td>55-2</td> <td>0.06</td> <td>0.08</td> <td>0.07</td> <td>0.07</td> <td>18.60</td> <td>ppb</td>	Manganese	55-2	0.06	0.08	0.07	0.07	18.60	ppb
Molybdenum         96-1         0.03         0.03         0.03         0.03         0.04         ppb           Molybdenum         97-1         0.03         0.02         0.03         0.03         10.18         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         1.32         ppb           Neodymium         150-1	Molybdenum	94-1	0.05	0.05	0.07	0.06	24.98	ppb
Molybdenum         97-1         0.03         0.02         0.03         0.03         10.18         ppb           Molybdenum         98-1         0.03         0.02         0.03         0.03         1.32         ppb           Neodymium         150-1	Molybdenum	95-1	0.03	0.03	0.03	0.03	7.02	ppb
Molybdenum         98-1         0.03         0.02         0.03         0.03         1,32         ppb           Neodymium         150-1	Molybdenum	96-1	0.03	0.03	0.03	0.03	8.64	ppb
Neodymium         150-1         Image: Composition of the compositi	Molybdenum	97-1	0.03	0.02	0.03	0.03	10.18	ppb
Neodymium         150-2         Creation         Copa           Nickel         60-2         0.26         0.23         0.31         0.27         16.88         ppb           Phosphorus         31-2         -34.59         -30.41         -26.27         -30.42	Molybdenum	98-1	0.03	0.02	0.03	0.03	1.32	ppb
Nickel         60-2         0.26         0.23         0.31         0.27         16.88         ppb           Phosphorus         31-2         -34.59         -30.41         -26.27         -30.42         -90         ppb           Potassium         39-2         28.86         30.08         32.06         30.33         5.33         ppb           Rhodium         103-1	Neodymium	150-1						cps
Phosphorus         31-2         -34.59         -30.41         -26.27         -30.42         -90.00         ppb           Potassium         39-2         28.86         30.08         32.06         30.33         5.33         ppb           Rhodium         103-1	Neodymium	150-2						cps
Potassium         39-2         28.86         30.08         32.06         30.33         5.33         ppb           Rhodium         103-1	Nickel	60-2	0.26	0.23	0.31	0.27	16.88	ppb
Rhodium         103-1         4         8           Rhodium         103-2         106         %           Scandium         45-1         108         %           Scandium         45-2         105         %           Selenium         82-1         -0.33         -0.63         -0.13         -0.36         ppb           Selenium         77-2         0.00         1.33         0.00         0.44         173.21         ppb           Selenium         78-2         -0.81         -0.43         -0.23         -0.49         ppb           Selenium         78-2         -0.81         -0.43         -0.23         -0.49         ppb           Silicon         28-1         -2.29         -3.03         -3.26         -2.86         ppb           Siliver         107-1         0.01         0.01         0.02         0.01         14.79         ppb           Silver         109-1         0.01         0.01         0.01         7.41         ppb           Solium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.01         0.01         0.01	Phosphorus	31-2	-34.59	-30.41	-26.27	-30.42		ppb
Rhodium         103-2         Incompany         Inco	Potassium	39-2	28.86	30.08	32.06	30.33	5.33	ppb
Scandium         45-1         Interpretation	Rhodium	103-1				106		%
Scandium         45-2	Rhodium	103-2				106		%
Selenium         82-1         -0.33         -0.63         -0.13         -0.36         ppb           Selenium         77-2         0.00         1.33         0.00         0.44         173.21         ppb           Selenium         78-2         -0.81         -0.43         -0.23         -0.49         ————————————————————————————————————	Scandium	45-1				108		%
Selenium         77-2         0.00         1.33         0.00         0.44         173.21         ppb           Selenium         78-2         -0.81         -0.43         -0.23         -0.49         ppb           Silicon         28-1         -2.29         -3.03         -3.26         -2.86         ppb           Silver         107-1         0.01         0.01         0.02         0.01         14.79         ppb           Silver         109-1         0.01         0.01         0.01         0.01         7.41         ppb           Sodium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Strontium         88-1         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63         -549.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63         -649.63	Scandium	45-2				105		%
Selenium         78-2         -0.81         -0.43         -0.23         -0.49         -0.49         ppb           Silicon         28-1         -2.29         -3.03         -3.26         -2.86         -2.86         ppb           Silver         107-1         0.01         0.01         0.02         0.01         14.79         ppb           Silver         109-1         0.01         0.01         0.01         0.01         7.41         ppb           Sodium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Strontium         88-1         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63	Selenium	82-1	-0.33	-0.63	-0.13	-0.36		ppb
Silicon         28-1         -2.29         -3.03         -3.26         -2.86         ppb           Silver         107-1         0.01         0.01         0.02         0.01         14.79         ppb           Silver         109-1         0.01         0.01         0.01         14.79         ppb           Sodium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Sulfur         38-1         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63	Selenium	77-2	0.00	1.33	0.00	0.44	173.21	ppb
Silver         107-1         0.01         0.01         0.02         0.01         14.79         ppb           Silver         109-1         0.01         0.01         0.01         0.01         7.41         ppb           Sodium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Strontium         88-1         0.01         0.01         0.01         3.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63	Selenium	78-2	-0.81	-0.43	-0.23	-0.49		ppb
Silver       109-1       0.01       0.01       0.01       0.01       7.41       ppb         Sodium       23-2       25.00       22.94       23.15       23.70       4.79       ppb         Strontium       86-1       0.00       0.00       -0.01       0.00       887.85       ppb         Strontium       88-1       0.01       0.01       0.01       13.46       ppb         Sulfur       34-1       -533.80       -550.11       -564.96       -549.63	Silicon	28-1	-2.29	-3.03	-3.26	-2.86		ppb
Sodium         23-2         25.00         22.94         23.15         23.70         4.79         ppb           Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Strontium         88-1         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63	Silver	107-1	0.01	0.01	0.02	0.01	14.79	ppb
Strontium         86-1         0.00         0.00         -0.01         0.00         887.85         ppb           Strontium         88-1         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63	Silver	109-1	0.01	0.01	0.01	0.01	7.41	ppb
Strontium         88-1         0.01         0.01         0.01         0.01         13.46         ppb           Sulfur         34-1         -533.80         -550.11         -564.96         -549.63         -649.63         ppb           Terbium         159-1         106         %           Terbium         159-2         103         %           Thallium         203-1         0.05         0.04         0.04         0.04         3.67         ppb           Thallium         205-1         0.05         0.05         0.04         0.05         13.77         ppb           Tin         118-1         0.00         0.01         0.02         0.01         74.01         ppb           Titanium         47-1         0.01         0.04         0.02         0.02         53.83         ppb	Sodium	23-2	25.00	22.94	23.15	23.70	4.79	ppb
Sulfur       34-1       -533.80       -550.11       -564.96       -549.63       ppb         Terbium       159-1       106       %         Terbium       159-2       103       %         Thallium       203-1       0.05       0.04       0.04       0.04       3.67       ppb         Thallium       205-1       0.05       0.05       0.04       0.05       13.77       ppb         Tin       118-1       0.00       0.01       0.02       0.01       74.01       ppb         Titanium       47-1       0.01       0.04       0.02       0.02       53.83       ppb	Strontium	86-1	0.00	0.00	-0.01	0.00	887.85	ppb
Terbium     159-1     106     %       Terbium     159-2     103     %       Thallium     203-1     0.05     0.04     0.04     0.04     3.67     ppb       Thallium     205-1     0.05     0.05     0.04     0.05     13.77     ppb       Tin     118-1     0.00     0.01     0.02     0.01     74.01     ppb       Titanium     47-1     0.01     0.04     0.02     0.02     53.83     ppb	Strontium	88-1	0.01	0.01	0.01	0.01	13.46	ppb
Terbium         159-2         103         %           Thallium         203-1         0.05         0.04         0.04         0.04         3.67         ppb           Thallium         205-1         0.05         0.05         0.04         0.05         13.77         ppb           Tin         118-1         0.00         0.01         0.02         0.01         74.01         ppb           Titanium         47-1         0.01         0.04         0.02         0.02         53.83         ppb	Sulfur	34-1	-533.80	-550.11	-564.96	-549.63		ppb
Thallium       203-1       0.05       0.04       0.04       0.04       0.04       3.67       ppb         Thallium       205-1       0.05       0.05       0.04       0.05       13.77       ppb         Tin       118-1       0.00       0.01       0.02       0.01       74.01       ppb         Titanium       47-1       0.01       0.04       0.02       0.02       53.83       ppb	Terbium	159-1				106		%
Thallium     205-1     0.05     0.05     0.04     0.05     13.77     ppb       Tin     118-1     0.00     0.01     0.02     0.01     74.01     ppb       Titanium     47-1     0.01     0.04     0.02     0.02     53.83     ppb	Terbium	159-2				103		%
Tin     118-1     0.00     0.01     0.02     0.01     74.01     ppb       Titanium     47-1     0.01     0.04     0.02     0.02     53.83     ppb	Thallium	203-1	0.05	0.04	0.04	0.04	3.67	ppb
Titanium 47-1 0.01 0.04 0.02 0.02 53.83 ppb	Thallium	205-1	0.05	0.05	0.04	0.05	13.77	ppb
	Tin	118-1	0.00	0.01	0.02	0.01	74.01	ppb
Uranium 238-1 0.00 0.00 0.00 0.00 ppb	Titanium	47-1	0.01	0.04	0.02	0.02	53.83	ppb
	Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :PB166378BLInstrumnet Name :P8Client Sample ID :PBW378Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:21:50 DataFile Name: 113CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	119.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				104		%
Zinc	66-2	0.90	0.99	0.83	0.90	8.75	ppb
Zirconium	90-1	0.00	0.00	0.01	0.01	36.00	ppb
Zirconium	91-1	0.00	0.01	0.01	0.01	32.36	ppb

Lab Sample ID :PB166378BSInstrumnet Name :P8Client Sample ID :LCS378Dilution Factor :1

Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Date & Time Ac	quircu . 202	0 02 00 10.20.12	Datai	iic ivairie .	1142000.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9343.39	9349.93	9390.59	9361.30	0.27	ppb
Antimony	121-1	505.90	514.59	512.96	511.15	0.90	ppb
Arsenic	75-2	500.70	508.56	511.68	506.98	1.12	ppb
Barium	135-1	2522.05	2571.54	2591.43	2561.67	1.39	ppb
Barium	137-1	2513.96	2594.91	2594.98	2567.95	1.82	ppb
Beryllium	9-1	485.83	474.50	496.09	485.47	2.22	ppb
Bismuth	209-1				97		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	509.51	520.14	533.77	521.14	2.33	ppb
Cadmium	106-1	519.15	528.64	535.49	527.76	1.55	ppb
Cadmium	111-1	517.70	516.62	526.43	520.25	1.03	ppb
Calcium	43-1	49080.28	49878.02	48776.79	49245.03	1.16	ppb
Calcium	44-1	48191.71	49497.66	48900.88	48863.42	1.34	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	512.32	511.78	512.04	512.05	0.05	ppb
Cobalt	59-2	513.84	512.91	515.33	514.03	0.24	ppb
Copper	63-2	5062.32	4918.26	5008.29	4996.29	1.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				102		%
Indium	115-1				103		%
Indium	115-2				97		%
Iron	54-2	24958.01	24934.38	25307.91	25066.77	0.83	ppb
Iron	56-2	24711.48	24865.49	24523.99	24700.32	0.69	ppb
Iron	57-2	25048.02	25454.77	24993.61	25165.47	1.00	ppb
Krypton	83-1						cps
Lead	206-1	2522.96	2535.01	2555.67	2537.88	0.65	ppb

Lab Sample ID :PB166378BSInstrumnet Name :P8Client Sample ID :LCS378Dilution Factor :1

Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Date a Time Act	quircu . Zoz	0 02 00 10.20.12	Datai	iic ivairie .	1142000.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2486.50	2507.33	2579.57	2524.47	1.93	ppb
Lead	208-1	2499.09	2510.58	2558.58	2522.75	1.25	ppb
Lithium	6-1				105		%
Magnesium	24-2	50049.17	50080.81	50785.73	50305.23	0.83	ppb
Manganese	55-2	5006.02	5013.24	4996.92	5005.39	0.16	ppb
Molybdenum	94-1	5031.39	5056.85	5082.61	5056.95	0.51	ppb
Molybdenum	95-1	5017.93	5098.84	5065.34	5060.70	0.80	ppb
Molybdenum	96-1	5037.83	5069.59	5128.16	5078.53	0.90	ppb
Molybdenum	97-1	5061.27	5029.58	5089.55	5060.13	0.59	ppb
Molybdenum	98-1	5050.77	5027.20	5076.36	5051.44	0.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	479.48	477.63	482.04	479.72	0.46	ppb
Phosphorus	31-2	9678.38	9788.88	9840.47	9769.24	0.85	ppb
Potassium	39-2	24256.14	24168.33	24271.95	24232.14	0.23	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				106		%
Scandium	45-2				104		%
Selenium	82-1	498.62	514.12	495.09	502.61	2.01	ppb
Selenium	77-2	490.37	491.85	501.71	494.64	1.25	ppb
Selenium	78-2	493.34	496.37	495.76	495.16	0.32	ppb
Silicon	28-1	490.85	501.10	487.96	493.30	1.40	ppb
Silver	107-1	513.88	521.92	524.76	520.19	1.08	ppb
Silver	109-1	517.55	516.71	531.38	521.88	1.58	ppb
Sodium	23-2	50904.81	50531.36	50763.39	50733.19	0.37	ppb
Strontium	86-1	508.16	522.96	513.89	515.00	1.45	ppb
Strontium	88-1	501.69	515.82	511.72	509.74	1.43	ppb
Sulfur	34-1	9666.15	9980.83	9312.29	9653.09	3.46	ppb
Terbium	159-1				105		%
Terbium	159-2				101		%
Thallium	203-1	508.06	503.13	510.76	507.32	0.76	ppb
Thallium	205-1	505.02	507.96	506.98	506.65	0.30	ppb
Tin	118-1	508.29	517.45	527.58	517.77	1.86	ppb
Titanium	47-1	5025.17	5139.04	5078.56	5080.92	1.12	ppb
Uranium	238-1	481.22	486.51	492.88	486.87	1.20	ppb

Lab Sample ID :PB166378BSInstrumnet Name :P8Client Sample ID :LCS378Dilution Factor :1

Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	500.54	497.14	512.96	503.55	1.65	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				101		%
Zinc	66-2	4914.98	4850.30	4951.77	4905.68	1.05	ppb
Zirconium	90-1	500.98	509.73	504.97	505.23	0.87	ppb
Zirconium	91-1	507.85	512.56	512.81	511.07	0.55	ppb

Lab Sample ID: Q1201-01 Instrumnet Name: P8

Client Sample ID: TAPHHA-MW12-012725- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:28:00 DataFile Name: 115AREF.d

Date & Time Ac	quircu . Zoz	0 02 00 10.20.00	Datai	iic ivaiiic .	TTO/ (TKET .C		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.07	17.84	18.28	18.73	6.32	ppb
Antimony	121-1	0.15	0.13	0.12	0.13	9.95	ppb
Arsenic	75-2	1.27	1.51	1.22	1.33	11.63	ppb
Barium	135-1	44.58	45.09	45.41	45.02	0.93	ppb
Barium	137-1	45.07	45.13	44.95	45.05	0.20	ppb
Beryllium	9-1	0.32	0.31	0.30	0.31	2.77	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.07	0.14	0.09	42.14	ppb
Cadmium	106-1	-0.89	-0.95	0.97	-0.29		ppb
Cadmium	111-1	0.04	0.03	0.16	0.07	97.68	ppb
Calcium	43-1	9891.83	9784.21	10036.76	9904.27	1.28	ppb
Calcium	44-1	10060.75	9967.18	9875.25	9967.73	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.11	0.14	0.13	0.13	13.31	ppb
Cobalt	59-2	5.97	5.98	5.93	5.96	0.48	ppb
Copper	63-2	0.66	0.69	0.67	0.67	2.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				104		%
Indium	115-1				109		%
Indium	115-2				104		%
Iron	54-2	7168.97	7136.30	7240.98	7182.08	0.75	ppb
Iron	56-2	7373.52	7368.50	7330.21	7357.41	0.32	ppb
Iron	57-2	7189.11	7142.62	7189.59	7173.77	0.38	ppb
Krypton	83-1						cps
Lead	206-1	0.34	0.33	0.31	0.33	5.13	ppb

Lab Sample ID: Q1201-01 Instrumnet Name: P8
Client Sample ID: TAPHHA-MW12-012725- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:28:00 DataFile Name: 115AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.36	0.34	0.32	0.34	6.57	ppb
Lead	208-1	0.35	0.33	0.31	0.33	6.74	ppb
Lithium	6-1				110		%
Magnesium	24-2	8456.33	8336.92	8276.78	8356.68	1.09	ppb
Manganese	55-2	4123.19	4086.51	4105.19	4104.96	0.45	ppb
Molybdenum	94-1	0.33	0.27	0.23	0.28	17.47	ppb
Molybdenum	95-1	0.29	0.25	0.20	0.25	17.73	ppb
Molybdenum	96-1	0.30	0.26	0.22	0.26	14.27	ppb
Molybdenum	97-1	0.27	0.21	0.20	0.23	16.79	ppb
Molybdenum	98-1	0.27	0.25	0.20	0.24	15.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	18.99	18.70	19.03	18.91	0.94	ppb
Phosphorus	31-2	-11.85	-18.38	-17.72	-15.98		ppb
Potassium	39-2	2217.09	2215.74	2237.66	2223.50	0.55	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				110		%
Scandium	45-2				107		%
Selenium	82-1	0.21	0.26	-0.14	0.11	198.90	ppb
Selenium	77-2	0.63	0.00	1.99	0.87	116.27	ppb
Selenium	78-2	-0.82	0.31	0.54	0.01	7255.74	ppb
Silicon	28-1	2096.03	2068.55	2032.64	2065.74	1.54	ppb
Silver	107-1	0.06	0.05	0.05	0.05	14.76	ppb
Silver	109-1	0.06	0.05	0.05	0.05	9.20	ppb
Sodium	23-2	3357.82	3370.67	3399.00	3375.83	0.62	ppb
Strontium	86-1	51.26	51.42	51.36	51.34	0.16	ppb
Strontium	88-1	52.94	53.16	53.41	53.17	0.44	ppb
Sulfur	34-1	3650.64	3340.62	3401.86	3464.37	4.74	ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.07	0.07	0.07	0.07	5.84	ppb
Thallium	205-1	0.08	0.07	0.06	0.07	9.47	ppb
Tin	118-1	0.16	0.17	0.17	0.17	2.64	ppb
Titanium	47-1	0.49	0.49	0.39	0.46	13.43	ppb
Uranium	238-1	0.03	0.03	0.03	0.03	7.36	ppb

Lab Sample ID: Q1201-01 Instrumnet Name: P8

Client Sample ID: TAPHHA-MW12-012725- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:28:00 DataFile Name: 115AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.27	0.27	0.29	0.28	3.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				107		%
Zinc	66-2	11.77	11.90	11.23	11.63	3.06	ppb
Zirconium	90-1	0.04	0.03	0.04	0.04	9.44	ppb
Zirconium	91-1	0.03	0.04	0.04	0.04	8.49	ppb

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Lab Sample ID: Q1211-01 Instrumnet Name: P8

Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Date & Time 7 to	quircu . 202	20 02 00 10.01.10	Datai	iic i tairic .	TTO/ (I CET .C		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16.58	18.33	15.53	16.81	8.43	ppb
Antimony	121-1	0.05	0.05	0.06	0.05	9.25	ppb
Arsenic	75-2	0.08	0.04	0.15	0.09	60.14	ppb
Barium	135-1	22.10	22.48	23.01	22.53	2.01	ppb
Barium	137-1	21.98	22.49	23.07	22.51	2.43	ppb
Beryllium	9-1	0.16	0.16	0.16	0.16	0.84	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.10	0.06	0.00	0.06	89.09	ppb
Cadmium	106-1	-0.15	-0.15	-0.12	-0.14		ppb
Cadmium	111-1	0.00	0.01	0.01	0.01	69.66	ppb
Calcium	43-1	26808.26	27100.81	27416.30	27108.46	1.12	ppb
Calcium	44-1	25824.98	26754.52	27465.54	26681.68	3.08	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.22	0.21	0.25	0.23	9.76	ppb
Cobalt	59-2	1.98	2.06	1.99	2.01	2.06	ppb
Copper	63-2	0.39	0.40	0.43	0.41	5.09	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				104		%
Indium	115-1				109		%
Indium	115-2				102		%
Iron	54-2	56.42	56.29	58.91	57.21	2.58	ppb
Iron	56-2	57.17	57.79	56.38	57.11	1.24	ppb
Iron	57-2	58.40	57.78	57.63	57.94	0.70	ppb
Krypton	83-1						cps
Lead	206-1	0.34	0.37	0.37	0.36	4.10	ppb

Lab Sample ID: Q1211-01 Instrumnet Name: P8

Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.37	0.36	0.36	3.55	ppb
Lead	208-1	0.35	0.37	0.37	0.36	2.13	ppb
Lithium	6-1				109		%
Magnesium	24-2	5669.56	5481.37	5597.42	5582.78	1.70	ppb
Manganese	55-2	295.62	295.84	294.28	295.24	0.29	ppb
Molybdenum	94-1	0.14	0.14	0.14	0.14	2.33	ppb
Molybdenum	95-1	0.09	0.08	0.09	0.09	1.84	ppb
Molybdenum	96-1	0.08	0.09	0.11	0.09	13.40	ppb
Molybdenum	97-1	0.10	0.09	0.09	0.09	4.98	ppb
Molybdenum	98-1	0.09	0.08	0.07	0.08	10.99	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.04	1.19	1.11	1.11	6.42	ppb
Phosphorus	31-2	-23.93	-15.69	-20.71	-20.11		ppb
Potassium	39-2	2744.49	2702.50	2682.93	2709.97	1.16	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	2.18	2.21	2.93	2.44	17.43	ppb
Selenium	77-2	2.65	6.59	3.33	4.19	50.26	ppb
Selenium	78-2	2.27	3.02	1.90	2.39	23.84	ppb
Silicon	28-1	3487.95	3627.83	3698.87	3604.89	2.98	ppb
Silver	107-1	0.02	0.01	0.02	0.01	15.94	ppb
Silver	109-1	0.01	0.01	0.02	0.01	10.43	ppb
Sodium	23-2	10224.65	10158.04	10161.44	10181.38	0.37	ppb
Strontium	86-1	84.08	87.08	87.50	86.22	2.16	ppb
Strontium	88-1	86.86	89.53	89.04	88.48	1.61	ppb
Sulfur	34-1	7776.46	8145.12	8317.87	8079.82	3.42	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	0.05	0.06	0.05	0.06	8.37	ppb
Thallium	205-1	0.06	0.06	0.06	0.06	2.52	ppb
Tin	118-1	0.63	0.64	0.69	0.65	4.87	ppb
Titanium	47-1	0.63	0.68	0.70	0.67	5.24	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	4.14	ppb

Lab Sample ID: Q1211-01 Instrumnet Name: P8

Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.07	0.07	0.08	0.07	7.36	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	4.61	4.42	4.91	4.64	5.32	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	6.23	ppb
Zirconium	91-1	0.04	0.11	0.03	0.06	64.23	ppb

<sub>3</sub> 415

Lab Sample ID: Q1211-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:34:29 DataFile Name: 117AREF.d

Date a Time A	quii 0	-0 02 00 10.04.20	Datai	iic ivailic .	TITTUTE I.G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	183.53	183.90	190.52	185.98	2.12	ppb
Antimony	121-1	0.06	0.06	0.05	0.06	3.42	ppb
Arsenic	75-2	4.57	4.36	4.61	4.51	2.95	ppb
Barium	135-1	39.56	40.77	39.37	39.90	1.91	ppb
Barium	137-1	41.31	41.30	39.57	40.73	2.46	ppb
Beryllium	9-1	0.16	0.16	0.15	0.16	4.27	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.08	0.10	0.10	0.09	11.40	ppb
Cadmium	106-1	1.11	1.09	0.15	0.78	70.12	ppb
Cadmium	111-1	0.09	0.09	0.02	0.07	65.50	ppb
Calcium	43-1	13477.31	13321.00	13332.12	13376.81	0.65	ppb
Calcium	44-1	13561.06	13301.02	13088.69	13316.92	1.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.23	1.15	1.20	1.19	3.55	ppb
Cobalt	59-2	7.26	7.09	7.30	7.22	1.59	ppb
Copper	63-2	0.78	0.87	0.83	0.83	5.71	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				104		%
Indium	115-1				109		%
Indium	115-2				102		%
Iron	54-2	36070.37	35931.96	36988.82	36330.38	1.58	ppb
Iron	56-2	36450.07	36230.20	36381.16	36353.81	0.31	ppb
Iron	57-2	37681.73	37145.85	36430.73	37086.10	1.69	ppb
Krypton	83-1						cps
Lead	206-1	0.33	0.32	0.33	0.33	1.96	ppb

Lab Sample ID: Q1211-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:34:29 DataFile Name: 117AREF.d

Date & Time Act	1011CG . 202	20 02 00 10.04.20	Datai	iic rianic .	TTT/TITEL .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.37	0.36	0.33	0.35	5.94	ppb
Lead	208-1	0.35	0.34	0.33	0.34	2.39	ppb
Lithium	6-1				110		%
Magnesium	24-2	2892.19	2835.59	2884.41	2870.73	1.07	ppb
Manganese	55-2	1061.42	1074.75	1109.18	1081.79	2.28	ppb
Molybdenum	94-1	0.85	0.85	0.89	0.86	2.47	ppb
Molybdenum	95-1	0.29	0.32	0.29	0.30	4.92	ppb
Molybdenum	96-1	0.38	0.38	0.39	0.38	2.19	ppb
Molybdenum	97-1	0.30	0.29	0.29	0.29	1.62	ppb
Molybdenum	98-1	0.30	0.30	0.29	0.29	2.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.09	1.97	1.92	1.99	4.32	ppb
Phosphorus	31-2	-4.44	-9.14	4.18	-3.13		ppb
Potassium	39-2	2492.18	2500.84	2525.45	2506.16	0.69	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				109		%
Scandium	45-2				107		%
Selenium	82-1	0.28	0.15	0.08	0.17	60.36	ppb
Selenium	77-2	1.31	2.58	0.66	1.52	64.26	ppb
Selenium	78-2	-0.05	-0.25	0.54	0.08	530.21	ppb
Silicon	28-1	2260.08	2250.08	2319.97	2276.71	1.66	ppb
Silver	107-1	0.01	0.01	0.01	0.01	12.29	ppb
Silver	109-1	0.01	0.01	0.01	0.01	14.04	ppb
Sodium	23-2	1753.14	1728.57	1700.90	1727.54	1.51	ppb
Strontium	86-1	51.96	53.07	52.53	52.52	1.05	ppb
Strontium	88-1	55.46	54.40	55.40	55.09	1.08	ppb
Sulfur	34-1	11177.27	11109.80	11460.76	11249.27	1.66	ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	0.03	0.03	0.03	0.03	8.07	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	1.09	ppb
Tin	118-1	0.24	0.23	0.25	0.24	4.01	ppb
Titanium	47-1	4.36	4.92	4.76	4.68	6.25	ppb
Uranium	238-1	0.10	0.10	0.10	0.10	1.88	ppb

Lab Sample ID: Q1211-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:34:29 DataFile Name: 117AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.01	2.97	2.99	2.99	0.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				105		%
Zinc	66-2	3.96	4.03	4.11	4.04	1.83	ppb
Zirconium	90-1	0.32	0.31	0.32	0.32	2.17	ppb
Zirconium	91-1	0.34	0.37	0.33	0.35	6.78	ppb

<sub>3</sub> 418

Lab Sample ID: Q1211-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Date & Time Ac	quirea: 202	25-02-06 18:37:44	Datar	ile Name :	118AREF.0			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	534.19	548.27	535.58	539.35	1.44	ppb	
Antimony	121-1	0.06	0.07	0.06	0.06	6.68	ppb	
Arsenic	75-2	4.87	4.57	4.93	4.79	4.02	ppb	
Barium	135-1	38.91	42.23	41.53	40.89	4.28	ppb	
Barium	137-1	39.42	42.10	42.36	41.29	3.95	ppb	
Beryllium	9-1	0.15	0.14	0.15	0.15	1.15	ppb	
Bismuth	209-1				102		%	
Bismuth	209-2				101		%	
Bromine	81-1						cps	
Cadmium	108-1	0.09	0.26	0.56	0.31	77.89	ppb	
Cadmium	106-1	0.59	0.79	1.19	0.86	35.49	ppb	
Cadmium	111-1	0.05	0.05	0.07	0.06	21.44	ppb	
Calcium	43-1	12800.74	13006.49	13431.32	13079.51	2.46	ppb	
Calcium	44-1	12912.39	13152.18	13468.53	13177.70	2.12	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	1.63	1.57	1.54	1.58	2.92	ppb	
Cobalt	59-2	7.47	7.42	7.30	7.40	1.18	ppb	
Copper	63-2	0.96	1.08	0.95	1.00	7.47	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				108		%	
Holmium	165-2				104		%	
Indium	115-1				109		%	
Indium	115-2				102		%	
Iron	54-2	37817.01	37588.45	37145.86	37517.11	0.91	ppb	
Iron	56-2	38195.77	36940.54	36566.95	37234.42	2.29	ppb	
Iron	57-2	38172.39	37525.96	37758.27	37818.87	0.87	ppb	
Krypton	83-1						cps	
Lead	206-1	0.37	0.36	0.38	0.37	3.61	ppb	

Lab Sample ID : Q1211-02DUP Instrumnet Name : P8
Client Sample ID : TAPIAL2-MW03-012825- Dilution Factor : 1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.34	0.35	0.35	1.89	ppb
Lead	208-1	0.38	0.37	0.38	0.38	0.84	ppb
Lithium	6-1				108		%
Magnesium	24-2	2981.88	2930.52	2905.49	2939.30	1.32	ppb
Manganese	55-2	1124.41	1090.19	1057.34	1090.64	3.08	ppb
Molybdenum	94-1	1.16	2.82	1.21	1.73	54.60	ppb
Molybdenum	95-1	0.28	0.29	0.29	0.29	1.89	ppb
Molybdenum	96-1	0.48	0.42	0.61	0.50	19.08	ppb
Molybdenum	97-1	0.27	0.28	0.33	0.29	10.34	ppb
Molybdenum	98-1	0.27	0.27	0.27	0.27	0.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.24	2.26	2.40	2.30	3.71	ppb
Phosphorus	31-2	4.59	-2.71	-1.16	0.24	1606.82	ppb
Potassium	39-2	2596.23	2552.43	2589.09	2579.25	0.91	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	0.00	0.22	0.22	0.15	85.64	ppb
Selenium	77-2	2.61	1.98	5.29	3.29	53.45	ppb
Selenium	78-2	-0.44	0.33	0.15	0.01	2806.73	ppb
Silicon	28-1	2601.46	2608.97	2756.57	2655.67	3.29	ppb
Silver	107-1	0.01	0.01	0.01	0.01	9.61	ppb
Silver	109-1	0.01	0.01	0.00	0.01	19.47	ppb
Sodium	23-2	1797.63	1765.79	1773.71	1779.05	0.93	ppb
Strontium	86-1	49.75	52.28	53.15	51.72	3.42	ppb
Strontium	88-1	52.57	54.67	54.51	53.92	2.16	ppb
Sulfur	34-1	10671.32	10511.86	11136.44	10773.21	3.01	ppb
Terbium	159-1				106		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.02	0.03	0.02	12.18	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	7.46	ppb
Tin	118-1	0.24	0.25	0.27	0.25	6.93	ppb
Titanium	47-1	23.39	24.79	26.34	24.84	5.95	ppb
Uranium	238-1	0.10	0.11	0.12	0.11	8.78	ppb

Lab Sample ID : Q1211-02DUP Instrumnet Name : P8

Client Sample ID : TAPIAL2-MW03-012825- Dilution Factor : 1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.58	3.54	3.34	3.49	3.57	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				105		%
Zinc	66-2	4.21	4.31	4.32	4.28	1.43	ppb
Zirconium	90-1	0.74	0.63	0.70	0.69	8.64	ppb
Zirconium	91-1	0.61	0.85	1.08	0.85	28.07	ppb

Lab Sample ID: Q1211-02LX5 Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 5

1

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Date a Time 7to	quircu . 202	0 02 00 10.40.00	Datai	iic ivaiiic .	1107 (IXE1 .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	55.06	46.44	45.23	48.91	10.96	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	7.17	ppb
Arsenic	75-2	0.92	1.05	0.87	0.94	9.90	ppb
Barium	135-1	7.78	8.00	8.11	7.96	2.11	ppb
Barium	137-1	7.76	8.25	7.94	7.98	3.06	ppb
Beryllium	9-1	0.10	0.11	0.10	0.10	3.81	ppb
Bismuth	209-1				104		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.00	0.03	0.04	91.01	ppb
Cadmium	106-1	-0.37	0.65	0.43	0.24	228.41	ppb
Cadmium	111-1	-0.03	0.06	0.04	0.02	203.16	ppb
Calcium	43-1	2536.84	2660.00	2608.86	2601.90	2.38	ppb
Calcium	44-1	2593.81	2723.09	2641.14	2652.68	2.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.30	0.29	0.38	0.32	15.74	ppb
Cobalt	59-2	1.44	1.50	1.46	1.47	1.98	ppb
Copper	63-2	0.18	0.17	0.13	0.16	15.88	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				101		%
Indium	115-1				110		%
Indium	115-2				100		%
Iron	54-2	7237.50	7245.97	7247.37	7243.61	0.07	ppb
Iron	56-2	7580.64	7508.49	7473.68	7520.94	0.73	ppb
Iron	57-2	7186.70	7251.27	7242.44	7226.80	0.48	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.12	0.11	0.12	4.98	ppb

Lab Sample ID: Q1211-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.12	0.12	0.12	7.17	ppb
Lead	208-1	0.12	0.12	0.12	0.12	3.68	ppb
Lithium	6-1				110		%
Magnesium	24-2	587.87	581.17	584.22	584.42	0.57	ppb
Manganese	55-2	208.90	212.10	208.42	209.81	0.95	ppb
Molybdenum	94-1	0.18	0.24	0.20	0.20	15.07	ppb
Molybdenum	95-1	0.07	0.07	0.07	0.07	1.42	ppb
Molybdenum	96-1	0.09	0.09	0.08	0.09	8.42	ppb
Molybdenum	97-1	0.07	0.07	0.06	0.07	7.24	ppb
Molybdenum	98-1	0.07	0.07	0.07	0.07	4.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.86	0.80	0.82	0.82	3.86	ppb
Phosphorus	31-2	-27.90	-17.35	-23.20	-22.82		ppb
Potassium	39-2	537.14	539.85	540.24	539.07	0.31	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				111		%
Scandium	45-2				106		%
Selenium	82-1	-0.21	-0.38	-0.10	-0.23		ppb
Selenium	77-2	0.68	0.66	1.34	0.89	43.43	ppb
Selenium	78-2	-0.41	-0.24	0.35	-0.10		ppb
Silicon	28-1	447.43	464.09	455.19	455.57	1.83	ppb
Silver	107-1	0.00	0.01	0.01	0.01	20.77	ppb
Silver	109-1	0.00	0.01	0.00	0.00	74.73	ppb
Sodium	23-2	374.27	369.98	371.21	371.82	0.60	ppb
Strontium	86-1	10.03	10.50	10.19	10.24	2.34	ppb
Strontium	88-1	10.07	10.55	10.26	10.29	2.37	ppb
Sulfur	34-1	2239.93	2729.49	2161.46	2376.96	12.95	ppb
Terbium	159-1				106		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.02	0.02	0.02	24.66	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	8.28	ppb
Tin	118-1	0.02	0.05	0.03	0.03	52.36	ppb
Titanium	47-1	0.96	1.26	1.03	1.09	14.37	ppb
Uranium	238-1	0.02	0.02	0.02	0.02	3.55	ppb

Lab Sample ID: Q1211-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.65	0.59	0.56	0.60	7.65	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	0.86	0.94	0.83	0.88	6.30	ppb
Zirconium	90-1	0.06	0.07	0.07	0.07	5.49	ppb
Zirconium	91-1	0.07	0.08	0.36	0.17	98.50	ppb

Lab Sample ID: Q1211-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Date & Time / to	quircu . 202	0 02 00 10.44.10	Datai	iic ivairie .	120/11121 .0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8538.73	8479.39	7703.41	8240.51	5.66	ppb
Antimony	121-1	487.15	494.78	493.68	491.87	0.84	ppb
Arsenic	75-2	4.45	4.21	4.20	4.29	3.34	ppb
Barium	135-1	2213.14	2231.46	2222.58	2222.39	0.41	ppb
Barium	137-1	2167.79	2251.73	2219.71	2213.08	1.91	ppb
Beryllium	9-1	448.44	470.21	471.38	463.35	2.79	ppb
Bismuth	209-1				97		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	447.37	459.50	455.43	454.10	1.36	ppb
Cadmium	106-1	479.17	493.99	494.05	489.07	1.75	ppb
Cadmium	111-1	480.06	488.29	482.37	483.57	0.88	ppb
Calcium	43-1	57049.76	56990.65	57705.52	57248.64	0.69	ppb
Calcium	44-1	55496.74	55440.86	56683.83	55873.81	1.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	472.88	480.84	430.37	461.36	5.88	ppb
Cobalt	59-2	496.03	498.71	448.69	481.14	5.85	ppb
Copper	63-2	4763.28	4725.27	4385.94	4624.83	4.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				102		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	54-2	55823.92	56182.04	51095.57	54367.17	5.22	ppb
Iron	56-2	56093.96	55848.80	50384.04	54108.93	5.97	ppb
Iron	57-2	55368.33	55599.70	50833.21	53933.75	4.98	ppb
Krypton	83-1						cps
Lead	206-1	2340.25	2348.79	2392.90	2360.65	1.20	ppb

Lab Sample ID: Q1211-02MS Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Date a Time Act	quircu . Zoz	20 02 00 10.44.10	Datai	iic ivairie .	120/ (( CL :		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2330.60	2380.26	2407.75	2372.87	1.65	ppb
Lead	208-1	2308.65	2362.41	2402.57	2357.88	2.00	ppb
Lithium	6-1				107		%
Magnesium	24-2	48932.09	48310.35	44576.23	47272.89	4.98	ppb
Manganese	55-2	5721.05	5732.40	5223.46	5558.97	5.23	ppb
Molybdenum	94-1	2169.83	2245.73	2248.01	2221.19	2.00	ppb
Molybdenum	95-1	1686.84	1681.22	1728.66	1698.91	1.53	ppb
Molybdenum	96-1	1714.21	1744.50	1772.35	1743.68	1.67	ppb
Molybdenum	97-1	1666.30	1702.33	1721.35	1696.66	1.65	ppb
Molybdenum	98-1	1652.17	1712.48	1720.93	1695.19	2.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	456.74	462.20	420.45	446.46	5.08	ppb
Phosphorus	31-2	6.36	1.44	-7.01	0.27	2546.23	ppb
Potassium	39-2	23273.01	23074.11	21531.21	22626.11	4.21	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	456.26	470.79	478.73	468.60	2.43	ppb
Selenium	77-2	511.49	474.07	449.09	478.22	6.57	ppb
Selenium	78-2	485.57	452.10	428.36	455.34	6.31	ppb
Silicon	28-1	2048.81	2046.49	2105.05	2066.79	1.60	ppb
Silver	107-1	83.97	86.41	87.57	85.98	2.14	ppb
Silver	109-1	84.58	86.38	85.20	85.39	1.07	ppb
Sodium	23-2	47942.54	47911.95	43671.78	46508.76	5.28	ppb
Strontium	86-1	600.01	621.00	618.52	613.18	1.87	ppb
Strontium	88-1	587.20	606.91	617.76	603.96	2.57	ppb
Sulfur	34-1	10117.38	10048.37	10236.62	10134.12	0.94	ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	462.29	463.18	469.09	464.85	0.80	ppb
Thallium	205-1	457.00	464.86	470.32	464.06	1.44	ppb
Tin	118-1	444.30	453.51	453.43	450.41	1.18	ppb
Titanium	47-1	5.76	5.72	5.44	5.64	3.05	ppb
Uranium	238-1	434.47	451.59	464.09	450.05	3.30	ppb

Lab Sample ID: Q1211-02MS Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	495.15	493.44	453.35	480.64	4.92	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				104		%
Zinc	66-2	4775.58	4755.36	4299.31	4610.08	5.84	ppb
Zirconium	90-1	453.92	468.77	469.90	464.19	1.92	ppb
Zirconium	91-1	464.29	470.81	466.71	467.27	0.71	ppb

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Lab Sample ID: Q1211-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Date & Time Ac	quireu . 202	13-02-00 16.46.59	Dalar	THE INATHE.	12 IAREF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8432.56	8510.12	8349.56	8430.75	0.95	ppb
Antimony	121-1	500.33	502.67	495.95	499.65	0.68	ppb
Arsenic	75-2	4.29	4.30	4.86	4.48	7.21	ppb
Barium	135-1	2236.34	2266.31	2215.25	2239.30	1.15	ppb
Barium	137-1	2226.10	2272.64	2203.70	2234.14	1.57	ppb
Beryllium	9-1	465.96	475.38	459.86	467.07	1.67	ppb
Bismuth	209-1				97		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	466.42	464.93	462.57	464.64	0.42	ppb
Cadmium	106-1	495.79	497.48	498.99	497.42	0.32	ppb
Cadmium	111-1	498.48	498.95	492.65	496.70	0.71	ppb
Calcium	43-1	56228.54	57532.96	56533.25	56764.92	1.20	ppb
Calcium	44-1	55898.79	56391.12	55646.69	55978.87	0.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	471.06	486.07	480.61	479.25	1.58	ppb
Cobalt	59-2	488.90	498.00	486.45	491.12	1.24	ppb
Copper	63-2	4752.25	4739.14	4733.76	4741.72	0.20	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				100		%
Indium	115-1				104		%
Indium	115-2				96		%
Iron	54-2	54471.49	55363.53	54663.28	54832.76	0.86	ppb
Iron	56-2	54522.54	55428.97	54212.41	54721.31	1.16	ppb
Iron	57-2	54419.06	54320.59	54060.74	54266.80	0.34	ppb
Krypton	83-1						cps
Lead	206-1	2402.80	2408.55	2390.64	2400.66	0.38	ppb

Lab Sample ID: Q1211-02MSD Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Date & Time Act	quirca. 202	.0 02 00 10.40.00	Datai	iic i vairie .	12 17 (IXE) .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2397.03	2428.66	2399.44	2408.37	0.73	ppb
Lead	208-1	2381.02	2417.56	2382.37	2393.65	0.87	ppb
Lithium	6-1				107		%
Magnesium	24-2	47710.97	49551.98	47134.68	48132.54	2.62	ppb
Manganese	55-2	5654.66	5776.40	5648.44	5693.17	1.27	ppb
Molybdenum	94-1	2266.07	2252.27	2230.28	2249.54	0.80	ppb
Molybdenum	95-1	1751.03	1709.20	1690.26	1716.83	1.81	ppb
Molybdenum	96-1	1790.45	1762.74	1738.85	1764.01	1.46	ppb
Molybdenum	97-1	1697.96	1694.31	1692.91	1695.06	0.15	ppb
Molybdenum	98-1	1712.43	1694.49	1697.15	1701.36	0.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	456.11	460.29	454.71	457.04	0.64	ppb
Phosphorus	31-2	-5.22	-9.63	-11.83	-8.89		ppb
Potassium	39-2	22755.76	23417.20	22815.81	22996.26	1.59	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				108		%
Scandium	45-2				104		%
Selenium	82-1	482.01	483.93	477.87	481.27	0.64	ppb
Selenium	77-2	451.64	475.75	450.19	459.19	3.13	ppb
Selenium	78-2	465.19	456.72	463.58	461.83	0.97	ppb
Silicon	28-1	2046.51	2118.52	2069.61	2078.21	1.77	ppb
Silver	107-1	88.58	86.13	86.87	87.19	1.44	ppb
Silver	109-1	88.15	87.34	86.34	87.28	1.03	ppb
Sodium	23-2	46276.70	48689.49	47586.54	47517.58	2.54	ppb
Strontium	86-1	626.99	632.00	625.77	628.25	0.53	ppb
Strontium	88-1	614.28	625.76	618.06	619.37	0.94	ppb
Sulfur	34-1	9494.01	10010.05	9603.93	9702.66	2.80	ppb
Terbium	159-1				104		%
Terbium	159-2				101		%
Thallium	203-1	478.22	479.19	473.96	477.12	0.58	ppb
Thallium	205-1	476.22	478.60	480.14	478.32	0.41	ppb
Tin	118-1	450.12	453.43	446.98	450.18	0.72	ppb
Titanium	47-1	5.66	7.24	7.53	6.81	14.73	ppb
Uranium	238-1	452.26	462.44	451.62	455.44	1.33	ppb

Lab Sample ID: Q1211-02MSD Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	480.08	499.66	490.38	490.04	2.00	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	4689.45	4766.40	4615.27	4690.37	1.61	ppb
Zirconium	90-1	472.08	467.68	464.38	468.05	0.83	ppb
Zirconium	91-1	491.50	477.50	468.93	479.31	2.38	ppb

Lab Sample ID: Q1211-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8662.31	8909.97	8717.86	8763.38	1.48	ppb
Antimony	121-1	482.75	493.91	510.97	495.88	2.87	ppb
Arsenic	75-2	4.13	4.20	4.35	4.23	2.65	ppb
Barium	135-1	2154.65	2213.85	2277.29	2215.27	2.77	ppb
Barium	137-1	2177.93	2228.50	2271.42	2225.95	2.10	ppb
Beryllium	9-1	452.77	468.07	475.10	465.31	2.45	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	448.65	458.07	477.34	461.36	3.17	ppb
Cadmium	106-1	481.29	491.05	510.98	494.44	3.06	ppb
Cadmium	111-1	485.04	489.55	500.66	491.75	1.63	ppb
Calcium	43-1	55335.29	57986.90	58925.03	57415.74	3.24	ppb
Calcium	44-1	55158.13	57273.41	57181.22	56537.58	2.11	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	485.89	482.12	471.32	479.78	1.58	ppb
Cobalt	59-2	486.83	496.27	479.98	487.69	1.68	ppb
Copper	63-2	4713.09	4774.72	4662.33	4716.71	1.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				101		%
Indium	115-1				105		%
Indium	115-2				96		%
Iron	54-2	53187.55	55347.98	54125.62	54220.38	2.00	ppb
Iron	56-2	54176.59	54590.45	53860.61	54209.22	0.68	ppb
Iron	57-2	54528.21	54857.06	54283.80	54556.36	0.53	ppb
Krypton	83-1						cps
Lead	206-1	2356.58	2444.48	2454.43	2418.50	2.23	ppb

Lab Sample ID: Q1211-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Date a Time Act	quircu . Zoz	0 02 00 10.40.40	Datai	iic i vairie .	122/ (IXEI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2346.90	2465.89	2450.31	2421.03	2.67	ppb
Lead	208-1	2331.74	2436.16	2416.88	2394.93	2.32	ppb
Lithium	6-1				107		%
Magnesium	24-2	48085.67	50017.79	48073.78	48725.75	2.30	ppb
Manganese	55-2	5613.65	5774.72	5683.60	5690.66	1.42	ppb
Molybdenum	94-1	2160.36	2272.72	2302.50	2245.20	3.34	ppb
Molybdenum	95-1	1645.48	1739.45	1756.90	1713.94	3.50	ppb
Molybdenum	96-1	1695.42	1809.01	1816.99	1773.81	3.83	ppb
Molybdenum	97-1	1680.56	1747.39	1760.11	1729.35	2.47	ppb
Molybdenum	98-1	1659.39	1725.65	1769.59	1718.21	3.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	454.98	463.20	453.93	457.37	1.11	ppb
Phosphorus	31-2	-15.64	-7.30	-7.27	-10.07		ppb
Potassium	39-2	22854.55	23440.68	22880.71	23058.65	1.44	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				108		%
Scandium	45-2				105		%
Selenium	82-1	457.65	487.12	495.42	480.06	4.13	ppb
Selenium	77-2	464.92	496.22	499.54	486.89	3.92	ppb
Selenium	78-2	463.41	479.71	465.66	469.59	1.88	ppb
Silicon	28-1	2297.41	2382.09	2495.84	2391.78	4.16	ppb
Silver	107-1	85.04	85.79	90.24	87.02	3.23	ppb
Silver	109-1	84.56	87.67	89.38	87.20	2.80	ppb
Sodium	23-2	47096.58	48725.79	47303.73	47708.70	1.86	ppb
Strontium	86-1	595.78	625.15	634.65	618.52	3.28	ppb
Strontium	88-1	600.74	625.22	622.61	616.19	2.18	ppb
Sulfur	34-1	9218.85	9754.87	9852.94	9608.89	3.55	ppb
Terbium	159-1				105		%
Terbium	159-2				100		%
Thallium	203-1	468.08	486.37	488.40	480.95	2.33	ppb
Thallium	205-1	467.34	484.33	485.26	478.98	2.11	ppb
Tin	118-1	435.56	448.33	464.10	449.33	3.18	ppb
Titanium	47-1	16.20	17.23	13.64	15.69	11.78	ppb
Uranium	238-1	442.05	468.90	462.77	457.91	3.07	ppb

Lab Sample ID: Q1211-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	483.57	487.67	495.09	488.77	1.19	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				102		%
Zinc	66-2	4699.91	4747.25	4660.89	4702.68	0.92	ppb
Zirconium	90-1	451.81	473.51	484.10	469.81	3.50	ppb
Zirconium	91-1	449.53	478.36	482.45	470.11	3.82	ppb

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Date & Time Acquire	eu. 2025-0	02-00 10.02.20	Dalariie i	Name .	123CCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47679.13	51161.00	48680.25	49173.46	3.65	ppb
Antimony	121-1	472.72	487.10	498.90	486.24	2.70	ppb
Arsenic	75-2	479.18	527.99	526.72	511.30	5.44	ppb
Barium	135-1	2376.50	2486.66	2519.61	2460.92	3.05	ppb
Barium	137-1	2395.98	2473.15	2475.49	2448.21	1.85	ppb
Beryllium	9-1	461.88	484.72	466.64	471.08	2.56	ppb
Bismuth	209-1				90		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Cadmium	108-1	471.59	493.39	503.03	489.33	3.29	ppb
Cadmium	106-1	475.28	491.81	505.13	490.74	3.05	ppb
Cadmium	111-1	466.97	484.10	494.06	481.71	2.84	ppb
Calcium	43-1	224347.74	233395.27	232822.40	230188.47	2.20	ppb
Calcium	44-1	221451.68	231021.39	229754.44	227409.17	2.29	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	500.36	528.53	508.53	512.47	2.83	ppb
Cobalt	59-2	480.79	525.04	500.67	502.17	4.41	ppb
Copper	63-2	4613.60	4917.47	4756.52	4762.53	3.19	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				93		%
Indium	115-1				97		%
Indium	115-2				85		%
Iron	54-2	118138.90	127775.61	124640.82	123518.44	3.98	ppb
Iron	56-2	117758.48	126462.41	122995.33	122405.40	3.58	ppb
Iron	57-2	118272.32	127914.11	122436.86	122874.43	3.94	ppb
Krypton	83-1						cps
Lead	206-1	2371.48	2550.58	2534.99	2485.68	3.99	ppb

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Date & Time Act	quireu . 202	25-02-00 16.52.26	Dalari	ile ivaille .	123CCV.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2393.26	2532.91	2491.68	2472.62	2.90	ppb
Lead	208-1	2379.83	2520.37	2487.20	2462.47	2.98	ppb
Lithium	6-1				100		%
Magnesium	24-2	234508.26	255830.15	248361.67	246233.36	4.39	ppb
Manganese	55-2	4759.39	5116.69	5051.42	4975.83	3.82	ppb
Molybdenum	94-1	4668.86	5011.86	4953.38	4878.04	3.76	ppb
Molybdenum	95-1	4634.26	4931.80	4963.41	4843.15	3.75	ppb
Molybdenum	96-1	4693.65	4839.81	4936.21	4823.22	2.53	ppb
Molybdenum	97-1	4637.51	4896.16	4947.24	4826.97	3.44	ppb
Molybdenum	98-1	4632.62	4932.24	4880.64	4815.17	3.33	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	447.35	479.54	462.92	463.27	3.47	ppb
Phosphorus	31-2	9546.45	10449.08	9995.12	9996.89	4.51	ppb
Potassium	39-2	116942.15	126240.84	123803.90	122328.97	3.94	ppb
Rhodium	103-1				91		%
Rhodium	103-2				87		%
Scandium	45-1				101		%
Scandium	45-2				96		%
Selenium	82-1	451.33	474.45	476.09	467.29	2.96	ppb
Selenium	77-2	458.57	486.03	516.55	487.05	5.96	ppb
Selenium	78-2	457.75	523.57	487.02	489.44	6.74	ppb
Silicon	28-1	480.54	496.96	496.78	491.43	1.92	ppb
Silver	107-1	452.43	479.82	486.51	472.92	3.82	ppb
Silver	109-1	461.08	475.27	492.95	476.43	3.35	ppb
Sodium	23-2	236500.81	259078.17	252310.15	249296.38	4.65	ppb
Strontium	86-1	475.03	502.10	501.81	492.98	3.15	ppb
Strontium	88-1	467.23	487.71	487.54	480.83	2.45	ppb
Sulfur	34-1	9687.79	10359.12	9987.05	10011.32	3.36	ppb
Terbium	159-1				101		%
Terbium	159-2				93		%
Thallium	203-1	478.62	511.03	505.53	498.39	3.48	ppb
Thallium	205-1	470.32	519.41	506.59	498.77	5.10	ppb
Tin	118-1	479.05	488.05	495.31	487.47	1.67	ppb
Titanium	47-1	4673.81	4897.05	4865.86	4812.24	2.51	ppb
Uranium	238-1	477.81	497.98	492.38	489.39	2.13	ppb

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	496.68	538.33	510.36	515.12	4.12	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				94		%
Zinc	66-2	4603.28	4994.03	4818.12	4805.14	4.07	ppb
Zirconium	90-1	465.79	512.33	500.78	492.97	4.92	ppb
Zirconium	91-1	477.05	502.90	503.27	494.41	3.04	ppb

Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Date a Time 7to	quircu . Zoz	10 02 00 10.00.24	Datai	iic radiiic .	12400BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.79	0.74	0.84	0.79	6.33	ppb
Antimony	121-1	0.06	0.06	0.06	0.06	4.69	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00		ppb
Barium	135-1	0.03	0.03	0.04	0.03	19.08	ppb
Barium	137-1	0.03	0.02	0.03	0.03	9.35	ppb
Beryllium	9-1	0.20	0.22	0.20	0.21	4.45	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	-0.01	0.02	-0.01		ppb
Cadmium	106-1	-0.35	-0.61	0.38	-0.20		ppb
Cadmium	111-1	0.00	-0.04	0.05	0.00	919.44	ppb
Calcium	43-1	0.31	1.01	-0.11	0.40	139.11	ppb
Calcium	44-1	-0.63	1.02	0.16	0.18	452.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.02	0.00	-0.01		ppb
Cobalt	59-2	0.02	0.02	0.02	0.02	6.04	ppb
Copper	63-2	0.04	0.02	-0.01	0.02	149.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				101		%
Indium	115-1				106		%
Indium	115-2				100		%
Iron	54-2	3.35	3.05	4.30	3.57	18.25	ppb
Iron	56-2	3.50	3.48	3.43	3.47	1.12	ppb
Iron	57-2	3.22	2.73	2.35	2.77	15.78	ppb
Krypton	83-1						cps
Lead	206-1	0.18	0.18	0.19	0.18	3.84	ppb

Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Date & Time Act	quireu . 202	25-02-00 16.56.24	Dalai	rile ivallie .	124CCBE.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.19	0.22	0.21	0.21	7.34	ppb
Lead	208-1	0.19	0.20	0.19	0.19	3.57	ppb
Lithium	6-1				108		%
Magnesium	24-2	3.92	2.84	3.92	3.56	17.61	ppb
Manganese	55-2	0.25	0.21	0.22	0.23	9.48	ppb
Molybdenum	94-1	0.10	0.10	0.10	0.10	1.55	ppb
Molybdenum	95-1	0.07	0.07	0.07	0.07	5.82	ppb
Molybdenum	96-1	0.07	0.07	0.07	0.07	6.57	ppb
Molybdenum	97-1	0.07	0.07	0.07	0.07	3.29	ppb
Molybdenum	98-1	0.07	0.07	0.07	0.07	1.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.40	0.44	0.43	0.42	5.47	ppb
Phosphorus	31-2	-33.21	-26.54	-24.61	-28.12		ppb
Potassium	39-2	49.70	40.37	40.50	43.52	12.29	ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				108		%
Scandium	45-2				104		%
Selenium	82-1	-0.09	0.01	0.07	0.00		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.80	-0.43	-0.05	-0.43		ppb
Silicon	28-1	-5.65	-1.84	-4.26	-3.92		ppb
Silver	107-1	0.02	0.02	0.02	0.02	1.19	ppb
Silver	109-1	0.02	0.02	0.02	0.02	13.82	ppb
Sodium	23-2	45.49	38.38	38.50	40.79	9.98	ppb
Strontium	86-1	0.03	0.03	0.03	0.03	12.50	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	5.23	ppb
Sulfur	34-1	-840.17	-81.45	-514.76	-478.80		ppb
Terbium	159-1				104		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.07	0.07	0.07	2.06	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	3.12	ppb
Tin	118-1	-0.01	0.00	-0.01	-0.01		ppb
Titanium	47-1	0.05	0.02	0.03	0.03	44.75	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	15.62	ppb

Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	22.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				104		%
Zinc	66-2	0.26	0.20	0.36	0.27	29.36	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	27.93	ppb
Zirconium	91-1	0.01	0.02	0.02	0.02	34.67	ppb

Lab Sample ID: Q1159-01A Instrumnet Name: P8
Client Sample ID: YE8C9A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21281.43	22422.03	19119.73	20941.06	8.01	ppb
Antimony	121-1	1.04	1.04	1.03	1.04	0.65	ppb
Arsenic	75-2	54.27	63.05	53.27	56.86	9.46	ppb
Barium	135-1	237.48	245.04	240.44	240.99	1.58	ppb
Barium	137-1	246.40	257.63	245.54	249.86	2.70	ppb
Beryllium	9-1	1.01	1.01	1.01	1.01	0.08	ppb
Bismuth	209-1				97		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.37	0.41	0.57	0.45	23.53	ppb
Cadmium	106-1	0.38	1.00	0.99	0.79	44.57	ppb
Cadmium	111-1	0.21	0.26	0.27	0.25	13.04	ppb
Calcium	43-1	5358.67	5478.66	5395.82	5411.05	1.14	ppb
Calcium	44-1	5424.14	5552.93	5389.28	5455.45	1.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	49.74	53.56	47.28	50.19	6.30	ppb
Cobalt	59-2	27.72	29.81	26.42	27.98	6.12	ppb
Copper	63-2	101.00	109.23	94.43	101.55	7.30	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				101		%
Indium	115-1				105		%
Indium	115-2				98		%
Iron	54-2	58166.50	61905.71	54289.44	58120.55	6.55	ppb
Iron	56-2	58063.90	62626.06	54667.23	58452.40	6.83	ppb
Iron	57-2	58982.34	63641.58	55369.89	59331.27	6.99	ppb
Krypton	83-1						cps
Lead	206-1	24.91	25.46	25.58	25.32	1.41	ppb

Lab Sample ID: Q1159-01A Instrumnet Name: P8

Client Sample ID: YE8C9A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	23.48	24.28	23.59	23.79	1.82	ppb
Lead	208-1	23.99	24.65	24.39	24.34	1.36	ppb
Lithium	6-1				116		%
Magnesium	24-2	10548.83	11371.37	9613.55	10511.25	8.37	ppb
Manganese	55-2	469.67	504.82	444.48	472.99	6.41	ppb
Molybdenum	94-1	2.55	2.46	2.51	2.50	1.72	ppb
Molybdenum	95-1	1.16	1.15	1.12	1.14	1.92	ppb
Molybdenum	96-1	1.30	1.30	1.34	1.31	1.93	ppb
Molybdenum	97-1	1.11	1.09	1.12	1.11	1.38	ppb
Molybdenum	98-1	1.15	1.15	1.14	1.15	0.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	76.97	83.18	72.46	77.53	6.95	ppb
Phosphorus	31-2	621.81	628.06	533.99	594.62	8.85	ppb
Potassium	39-2	588.37	635.63	556.47	593.49	6.71	ppb
Rhodium	103-1				105		%
Rhodium	103-2				102		%
Scandium	45-1				114		%
Scandium	45-2				109		%
Selenium	82-1	10.76	10.95	11.89	11.20	5.42	ppb
Selenium	77-2	42.53	34.61	33.39	36.84	13.47	ppb
Selenium	78-2	15.04	19.31	16.06	16.80	13.28	ppb
Silicon	28-1	6420.01	6471.41	6400.82	6430.75	0.57	ppb
Silver	107-1	0.35	0.36	0.35	0.35	1.52	ppb
Silver	109-1	0.34	0.36	0.35	0.35	3.32	ppb
Sodium	23-2	104.29	125.13	100.91	110.11	11.91	ppb
Strontium	86-1	51.00	51.22	51.31	51.18	0.31	ppb
Strontium	88-1	53.70	53.55	53.40	53.55	0.29	ppb
Sulfur	34-1	-1771.09	-2032.07	-2235.89	-2013.02		ppb
Terbium	159-1				104		%
Terbium	159-2				101		%
Thallium	203-1	0.40	0.45	0.47	0.44	8.86	ppb
Thallium	205-1	0.42	0.47	0.49	0.46	8.31	ppb
Tin	118-1	0.34	0.36	0.37	0.36	4.55	ppb
Titanium	47-1	20.50	20.61	20.65	20.59	0.38	ppb
Uranium	238-1	0.43	0.44	0.46	0.44	2.51	ppb

Lab Sample ID : Q1159-01A Instrumnet Name : P8
Client Sample ID : YE8C9A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	62.21	66.69	58.27	62.39	6.76	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				106		%
Zinc	66-2	131.40	138.70	122.80	130.97	6.08	ppb
Zirconium	90-1	0.87	0.85	0.85	0.86	1.02	ppb
Zirconium	91-1	0.84	0.87	0.88	0.86	2.35	ppb

Lab Sample ID: Q1186-09A Instrumnet Name: P8

Client Sample ID: ME2959A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	6.85	6.64	5.75	6.42	9.10	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	2.17	ppb
Arsenic	75-2	0.18	0.25	0.16	0.20	25.01	ppb
Barium	135-1	17.05	17.00	16.71	16.92	1.07	ppb
Barium	137-1	16.79	16.87	17.01	16.89	0.65	ppb
Beryllium	9-1	0.05	0.06	0.05	0.05	6.74	ppb
Bismuth	209-1				88		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.08	0.05	53.03	ppb
Cadmium	106-1	-1.28	0.17	0.25	-0.29		ppb
Cadmium	111-1	-0.08	0.02	0.03	-0.01		ppb
Calcium	43-1	434024.78	428240.18	430796.71	431020.55	0.67	ppb
Calcium	44-1	414506.75	425121.05	416919.32	418849.04	1.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.07	0.04	0.12	0.08	53.89	ppb
Cobalt	59-2	0.06	0.06	0.06	0.06	3.63	ppb
Copper	63-2	0.19	0.19	0.21	0.20	6.99	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				95		%
Indium	115-1				94		%
Indium	115-2				88		%
Iron	54-2	1310.05	1309.67	1325.39	1315.04	0.68	ppb
Iron	56-2	1329.49	1340.74	1360.69	1343.64	1.18	ppb
Iron	57-2	1307.95	1326.96	1328.78	1321.23	0.87	ppb
Krypton	83-1						cps
Lead	206-1	0.20	0.16	0.15	0.17	15.84	ppb

Lab Sample ID: Q1186-09A Instrumnet Name: P8
Client Sample ID: ME2959A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.19	0.18	0.16	0.18	8.25	ppb
Lead	208-1	0.20	0.17	0.16	0.17	11.36	ppb
Lithium	6-1				100		%
Magnesium	24-2	143401.25	141307.28	144264.50	142991.01	1.06	ppb
Manganese	55-2	50.10	49.39	49.92	49.80	0.74	ppb
Molybdenum	94-1	0.71	0.71	0.71	0.71	0.35	ppb
Molybdenum	95-1	0.72	0.75	0.79	0.75	4.46	ppb
Molybdenum	96-1	0.70	0.72	0.71	0.71	1.77	ppb
Molybdenum	97-1	0.73	0.75	0.73	0.74	1.12	ppb
Molybdenum	98-1	0.71	0.72	0.72	0.72	1.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.42	0.54	0.54	0.50	14.65	ppb
Phosphorus	31-2	-13.20	0.43	-18.02	-10.27		ppb
Potassium	39-2	4614.68	4627.55	4707.48	4649.90	1.08	ppb
Rhodium	103-1				88		%
Rhodium	103-2				90		%
Scandium	45-1				98		%
Scandium	45-2				97		%
Selenium	82-1	11.34	11.22	11.56	11.37	1.50	ppb
Selenium	77-2	7.98	12.33	12.35	10.89	23.08	ppb
Selenium	78-2	10.38	12.48	11.65	11.50	9.18	ppb
Silicon	28-1	8358.12	8533.71	8410.78	8434.20	1.07	ppb
Silver	107-1	0.02	0.03	0.03	0.03	14.59	ppb
Silver	109-1	0.02	0.02	0.02	0.02	6.81	ppb
Sodium	23-2	180455.22	182544.80	183111.00	182037.01	0.77	ppb
Strontium	86-1	14171.21	13702.65	14098.87	13990.91	1.80	ppb
Strontium	88-1	14135.91	13796.54	14123.75	14018.73	1.37	ppb
Sulfur	34-1	461949.98	459920.69	459549.36	460473.34	0.28	ppb
Terbium	159-1				98		%
Terbium	159-2				95		%
Thallium	203-1	0.08	0.07	0.08	0.08	5.55	ppb
Thallium	205-1	0.08	0.07	0.07	0.07	4.94	ppb
Tin	118-1	0.54	0.55	0.79	0.63	22.09	ppb
Titanium	47-1	0.78	0.74	0.76	0.76	2.30	ppb
Uranium	238-1	0.25	0.26	0.25	0.25	1.69	ppb

Lab Sample ID :Q1186-09AInstrumnet Name :P8Client Sample ID :ME2959ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.02	0.04	0.03	30.93	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				95		%
Zinc	66-2	0.84	0.83	0.98	0.89	9.59	ppb
Zirconium	90-1	0.07	0.06	0.05	0.06	10.65	ppb
Zirconium	91-1	0.06	0.06	0.06	0.06	5.59	ppb

Lab Sample ID : Q1200-01A Instrumnet Name : P8

Client Sample ID : ME2964A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Date & Time / to	quircu . Zoz	.0 02 00 20.0 1. <del>4</del> 7	Datai	iic riamic .	12//(IXEI .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	576.69	567.65	579.22	574.52	1.06	ppb
Antimony	121-1	4.21	4.30	4.42	4.31	2.54	ppb
Arsenic	75-2	2.47	2.53	2.06	2.35	10.93	ppb
Barium	135-1	39.64	41.14	41.52	40.77	2.44	ppb
Barium	137-1	39.97	41.60	41.49	41.02	2.21	ppb
Beryllium	9-1	0.04	0.06	0.05	0.05	13.67	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.60	0.52	0.59	0.57	7.93	ppb
Cadmium	106-1	0.85	1.17	0.15	0.72	71.94	ppb
Cadmium	111-1	0.10	0.13	0.05	0.09	44.28	ppb
Calcium	43-1	126048.65	129053.23	129831.40	128311.09	1.56	ppb
Calcium	44-1	124720.93	127437.09	127249.61	126469.21	1.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.21	0.24	0.28	0.25	13.77	ppb
Cobalt	59-2	0.13	0.14	0.15	0.14	6.78	ppb
Copper	63-2	1.16	1.12	1.12	1.14	2.18	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				101		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	54-2	37.80	38.20	37.84	37.95	0.57	ppb
Iron	56-2	39.04	38.54	38.66	38.74	0.67	ppb
Iron	57-2	42.25	40.66	43.89	42.27	3.82	ppb
Krypton	83-1						cps
Lead	206-1	0.50	0.48	0.51	0.50	3.12	ppb

Lab Sample ID: Q1200-01A Instrumnet Name: P8
Client Sample ID: ME2964A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Date a Time Acc	1411C4 . 202	.0 02 00 20.01.47	Datai	iic ivairie .	12//(IXE) .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.47	0.49	0.50	0.49	2.47	ppb
Lead	208-1	0.49	0.49	0.51	0.49	2.16	ppb
Lithium	6-1				110		%
Magnesium	24-2	30.21	28.93	27.32	28.82	5.03	ppb
Manganese	55-2	3.14	3.12	3.00	3.08	2.38	ppb
Molybdenum	94-1	34.23	34.37	34.73	34.44	0.74	ppb
Molybdenum	95-1	40.62	41.65	41.80	41.36	1.56	ppb
Molybdenum	96-1	39.23	40.46	40.59	40.09	1.86	ppb
Molybdenum	97-1	41.60	42.14	41.94	41.89	0.65	ppb
Molybdenum	98-1	40.28	41.45	41.32	41.02	1.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	158.13	157.60	161.10	158.94	1.18	ppb
Phosphorus	31-2	389.77	379.77	347.07	372.20	6.00	ppb
Potassium	39-2	58632.25	59264.23	60088.96	59328.48	1.23	ppb
Rhodium	103-1				99		%
Rhodium	103-2				98		%
Scandium	45-1				106		%
Scandium	45-2				104		%
Selenium	82-1	11.63	11.29	11.47	11.46	1.50	ppb
Selenium	77-2	4.82	8.97	10.23	8.00	35.33	ppb
Selenium	78-2	11.00	13.02	13.25	12.42	9.98	ppb
Silicon	28-1	2211.06	2251.04	2259.19	2240.43	1.15	ppb
Silver	107-1	0.02	0.02	0.02	0.02	7.13	ppb
Silver	109-1	0.01	0.01	0.01	0.01	6.45	ppb
Sodium	23-2	31101.13	31227.35	30673.57	31000.68	0.94	ppb
Strontium	86-1	1252.08	1280.59	1290.57	1274.41	1.57	ppb
Strontium	88-1	1249.41	1294.49	1269.22	1271.04	1.78	ppb
Sulfur	34-1	11687.89	12002.61	11772.38	11820.96	1.38	ppb
Terbium	159-1				105		%
Terbium	159-2				101		%
Thallium	203-1	0.05	0.05	0.04	0.05	1.65	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	2.61	ppb
Tin	118-1	0.60	0.63	0.61	0.61	2.89	ppb
Titanium	47-1	0.64	0.69	0.71	0.68	5.24	ppb

Lab Sample ID : Q1200-01A Instrumnet Name : P8

Client Sample ID : ME2964A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.59	2.70	2.61	2.63	2.26	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				101		%
Zinc	66-2	3.37	3.33	3.66	3.46	5.27	ppb
Zirconium	90-1	0.03	0.03	0.02	0.03	5.36	ppb
Zirconium	91-1	0.03	0.03	0.03	0.03	10.80	ppb

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:04:59 DataFile Name: 128CCBE.d

Date a Time 7to	quircu . 202	0 02 00 20.04.00	Datai	iic radiiic .	12000BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.18	0.14	0.78	0.70	75.08	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	10.44	ppb
Arsenic	75-2	-0.01	-0.02	-0.01	-0.01		ppb
Barium	135-1	0.01	0.00	0.01	0.01	48.91	ppb
Barium	137-1	0.01	0.00	0.01	0.00	58.52	ppb
Beryllium	9-1	0.05	0.05	0.04	0.05	7.95	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.03	0.01	0.02	44.97	ppb
Cadmium	106-1	0.96	1.10	1.54	1.20	24.97	ppb
Cadmium	111-1	0.07	0.09	0.12	0.09	28.16	ppb
Calcium	43-1	4.54	5.27	4.22	4.68	11.52	ppb
Calcium	44-1	6.39	4.39	3.77	4.85	28.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.21	-0.21	-0.22	-0.21		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	73.89	ppb
Copper	63-2	-0.05	-0.07	-0.01	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				102		%
Indium	115-1				109		%
Indium	115-2				100		%
Iron	54-2	0.62	0.24	0.20	0.36	65.26	ppb
Iron	56-2	0.47	0.62	0.72	0.61	20.62	ppb
Iron	57-2	0.13	-0.14	0.28	0.09	232.73	ppb
Krypton	83-1						cps
Lead	206-1	0.05	0.04	0.04	0.05	15.28	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:04:59 DataFile Name: 128CCBE.d

Date & Time Act	1011CG . 202	20 02 00 20.04.00	Datai	iic railic .	12000BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.06	0.05	0.04	0.05	12.02	ppb
Lead	208-1	0.05	0.05	0.05	0.05	5.29	ppb
Lithium	6-1				110		%
Magnesium	24-2	-2.51	-1.00	-0.62	-1.38		ppb
Manganese	55-2	0.11	0.11	0.09	0.10	12.19	ppb
Molybdenum	94-1	0.00	0.02	0.01	0.01	98.11	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	32.57	ppb
Molybdenum	96-1	0.01	0.01	0.01	0.01	26.10	ppb
Molybdenum	97-1	0.01	0.01	0.01	0.01	15.80	ppb
Molybdenum	98-1	0.01	0.01	0.01	0.01	46.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.22	0.24	0.25	0.24	7.85	ppb
Phosphorus	31-2	-33.85	-30.41	-25.60	-29.95		ppb
Potassium	39-2	57.37	60.41	60.74	59.51	3.12	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				108		%
Scandium	45-2				104		%
Selenium	82-1	0.08	-0.08	0.02	0.01	1310.35	ppb
Selenium	77-2	0.00	0.67	0.00	0.22	173.21	ppb
Selenium	78-2	-0.43	-0.81	-0.20	-0.48		ppb
Silicon	28-1	-3.59	-3.48	-4.34	-3.80		ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.35	ppb
Silver	109-1	0.00	0.00	0.00	0.00	15.28	ppb
Sodium	23-2	22.34	24.20	29.40	25.31	14.44	ppb
Strontium	86-1	0.12	0.08	0.07	0.09	32.29	ppb
Strontium	88-1	0.11	0.09	0.07	0.09	23.81	ppb
Sulfur	34-1	1283.68	1536.72	1419.28	1413.22	8.96	ppb
Terbium	159-1				106		%
Terbium	159-2				102		%
Thallium	203-1	0.03	0.02	0.03	0.03	8.59	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	2.21	ppb
Tin	118-1	-0.03	-0.01	-0.03	-0.02		ppb
Titanium	47-1	0.01	0.00	-0.01	0.00	735.57	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

<sub>2</sub> 450

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:04:59 DataFile Name: 128CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.00	0.00	0.00	74.98	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				102		%
Zinc	66-2	0.44	0.37	0.40	0.41	8.05	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	612.19	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	93.16	ppb

<sub>3</sub> 451

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

Date & Time Act	quircu . Zoz	0 02 00 20.00.20	Datai	iic ivaiiic .	123E00E.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	41.62	40.61	38.96	40.40	3.33	ppb
Antimony	121-1	4.17	4.15	4.32	4.21	2.21	ppb
Arsenic	75-2	1.87	2.05	2.48	2.13	14.70	ppb
Barium	135-1	20.51	20.40	21.11	20.67	1.87	ppb
Barium	137-1	20.82	20.66	21.21	20.90	1.36	ppb
Beryllium	9-1	2.06	2.05	2.07	2.06	0.48	ppb
Bismuth	209-1				102		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	2.12	2.08	2.40	2.20	8.13	ppb
Cadmium	106-1	2.76	2.87	3.45	3.03	12.16	ppb
Cadmium	111-1	2.20	2.18	2.23	2.20	1.15	ppb
Calcium	43-1	1010.39	1006.66	1019.89	1012.31	0.67	ppb
Calcium	44-1	991.96	987.96	1003.77	994.56	0.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.88	3.80	3.85	3.85	1.07	ppb
Cobalt	59-2	2.10	2.17	2.17	2.15	1.94	ppb
Copper	63-2	4.58	4.54	4.65	4.59	1.16	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				101		%
Indium	115-1				107		%
Indium	115-2				98		%
Iron	54-2	417.04	408.94	410.79	412.26	1.03	ppb
Iron	56-2	414.75	415.38	416.16	415.43	0.17	ppb
Iron	57-2	416.36	418.66	413.66	416.23	0.60	ppb
Krypton	83-1						cps
Lead	206-1	2.00	1.96	2.04	2.00	2.04	ppb

Jaswal

LB Number : LB134612 Operator :

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.03	2.03	2.06	2.04	0.91	ppb
Lead	208-1	2.01	2.02	2.04	2.03	0.87	ppb
Lithium	6-1				111		%
Magnesium	24-2	994.77	1007.31	998.29	1000.13	0.65	ppb
Manganese	55-2	2.27	2.34	2.11	2.24	5.07	ppb
Molybdenum	94-1	11.81	11.92	11.84	11.86	0.49	ppb
Molybdenum	95-1	9.95	10.11	9.90	9.98	1.14	ppb
Molybdenum	96-1	10.11	10.17	10.19	10.16	0.42	ppb
Molybdenum	97-1	9.89	10.21	9.93	10.01	1.73	ppb
Molybdenum	98-1	9.87	9.94	9.73	9.85	1.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.40	2.49	2.34	2.41	3.12	ppb
Phosphorus	31-2	20.62	18.45	22.89	20.65	10.74	ppb
Potassium	39-2	1023.00	1015.67	1027.87	1022.18	0.60	ppb
Rhodium	103-1				105		%
Rhodium	103-2				102		%
Scandium	45-1				106		%
Scandium	45-2				103		%
Selenium	82-1	10.75	11.07	10.89	10.90	1.45	ppb
Selenium	77-2	8.33	4.82	6.91	6.69	26.43	ppb
Selenium	78-2	10.49	9.19	8.03	9.24	13.30	ppb
Silicon	28-1	13.43	18.76	19.55	17.25	19.30	ppb
Silver	107-1	2.03	2.04	2.11	2.06	2.23	ppb
Silver	109-1	2.05	2.07	2.16	2.09	2.58	ppb
Sodium	23-2	1071.61	1061.11	1060.16	1064.29	0.60	ppb
Strontium	86-1	2.03	2.03	2.04	2.03	0.07	ppb
Strontium	88-1	2.05	2.05	2.08	2.06	0.81	ppb
Sulfur	34-1	1637.96	1288.16	1352.95	1426.36	13.05	ppb
Terbium	159-1				106		%
Terbium	159-2				101		%
Thallium	203-1	2.00	2.03	2.06	2.03	1.59	ppb
Thallium	205-1	2.03	2.03	2.08	2.05	1.51	ppb
Tin	118-1	10.42	10.57	10.69	10.56	1.26	ppb
Titanium	47-1	2.52	2.51	2.57	2.53	1.23	ppb
Uranium	238-1	1.85	1.87	1.90	1.87	1.32	ppb

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.56	10.44	10.44	10.48	0.67	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				100		%
Zinc	66-2	10.89	10.65	11.13	10.89	2.19	ppb
Zirconium	90-1	1.95	2.01	2.01	1.99	1.68	ppb
Zirconium	91-1	1.97	2.05	2.00	2.00	2.00	ppb

<sub>3</sub> 454

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:11:38 DataFile Name: 130AREF.d

Date a Time 7to	quircu . 202	0 02 00 20.11.00	Datai	iic ivaiiic .	100/ (I (E) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.82	2.09	1.65	1.85	11.94	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	2.74	ppb
Arsenic	75-2	0.02	-0.02	-0.02	-0.01		ppb
Barium	135-1	0.03	0.03	0.04	0.03	31.19	ppb
Barium	137-1	0.03	0.03	0.03	0.03	14.39	ppb
Beryllium	9-1	0.04	0.04	0.03	0.04	15.95	ppb
Bismuth	209-1				105		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	0.00	0.01	0.00		ppb
Cadmium	106-1	0.96	0.72	1.12	0.93	21.77	ppb
Cadmium	111-1	0.08	0.06	0.09	0.08	20.83	ppb
Calcium	43-1	3.10	2.46	2.76	2.78	11.48	ppb
Calcium	44-1	1.74	2.54	2.98	2.42	25.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.08	0.06	0.09	0.08	21.03	ppb
Cobalt	59-2	0.00	0.00	0.01	0.00	104.83	ppb
Copper	63-2	-0.04	-0.02	-0.07	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				98		%
Indium	115-1				109		%
Indium	115-2				95		%
Iron	54-2	1.79	1.90	2.16	1.95	9.48	ppb
Iron	56-2	2.00	2.01	2.12	2.04	3.18	ppb
Iron	57-2	1.15	1.14	1.79	1.36	27.31	ppb
Krypton	83-1						cps
Lead	206-1	0.11	0.09	0.10	0.10	10.23	ppb

Lab Sample ID: Q1135-09 Instrumnet Name: P8

Client Sample ID: YE8H7 Dilution Factor: 1

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Lead         207-1         0.11         0.10         0.09         0.10         7.77         ppb           Lead         208-1         0.11         0.10         0.10         0.10         7.21         ppb           Lithium         6-1         """<"">"""         112         """<"">"""         """ <t< th=""><th>Parameter</th><th>Mass</th><th>ConRep1</th><th>ConRep2</th><th>ConRep3</th><th>Avg. Conc.</th><th>ConcRSD</th><th>Units</th></t<>	Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lithium         6-1         Image of the content of the	Lead	207-1	0.11	0.10	0.09	0.10	7.77	ppb
Magnesium         24-2         0.52         0.23         1.49         0.75         88.18         ppb           Manganese         55-2         0.40         0.37         0.47         0.42         13.17         ppb           Molybdenum         94-1         0.01         0.02         0.02         0.02         55.56         ppb           Molybdenum         95-1         0.00         0.00         0.00         0.00         69.19         ppb           Molybdenum         97-1         0.01         0.00         0.00         0.00         80.25         ppb           Molybdenum         150-1         0.00         0.00         0.00         0.00         80.25         ppb           Molybdenum         150-2         0.00         0.00         0.00         80.25         ppb           Neodymium         150-2         0.00         0.00         0.00         0.00         9.6         ppb           Nickel         60.2         0.18         0.26         0.22         0.22         17.70         ppb           Phosphorus         31-2         34.20         20.84         32.75         29.26         17.70         ppb           Rhodium         103-1	Lead	208-1	0.11	0.10	0.10	0.10	7.21	ppb
Manganese         55-2         0.40         0.37         0.47         0.42         13.17         ppb           Molybdenum         94-1         0.01         0.02         0.02         0.02         55.56         ppb           Molybdenum         95-1         0.00         0.00         0.00         0.00         69.19         ppb           Molybdenum         96-1         0.00         0.00         0.00         0.00         89.25         ppb           Molybdenum         97-1         0.01         0.00         0.00         0.00         89.25         ppb           Molybdenum         98-1         0.00         0.00         0.00         0.00         89.25         ppb           Molybdenum         150-1	Lithium	6-1				112		%
Molybdenum         94-1         0.01         0.02         0.02         0.02         55-56         pb           Molybdenum         95-1         0.00         0.00         0.00         0.00         106.55         pb           Molybdenum         96-1         0.00         0.00         0.00         0.00         89.19         pb           Molybdenum         98-1         0.01         0.00         0.00         0.00         89.25         pb           Molybdenum         98-1         0.01         0.00         0.00         0.00         89.25         pb           Molybdenum         150-1         0.00         0.00         0.00         80.25         pb           Neodymium         150-1         50.2         0.22         1.22         17.70         pb           Phosphorus         31-2         34.20         20.84         32.75         29.26         7.70         pb           Potassium         39-2         31.06         31.78         37.07         33.00         9.86         pb           Rhodium         103-2         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	Magnesium	24-2	0.52	0.23	1.49	0.75	88.18	ppb
Molybdenum         95-1         0.00         0.00         0.00         0.00         69-19         ppb           Molybdenum         96-1         0.00         0.00         0.00         0.00         69-19         ppb           Molybdenum         97-1         0.01         0.00         0.00         0.00         80-25         ppb           Molybdenum         98-1         0.00         0.00         0.00         0.00         9.00         ppb           Neodymium         150-1         150-1         150-1         150-1         17.00         ppb           Nickel         60-2         0.18         0.26         0.22         0.22         17.70         ppb           Phosphorus         31-2         -34.20         -20.84         -32.75         -29.26         70         ppb           Phosphorus         31-2         31.06         31.78         37.07         33.30         9.86         ppb           Rhodium         103-1         -1         1.01         100         -1         %           Scandlum         45-1         -0.05         -0.31         -0.42         -0.26         -1         ppb           Selenium         77-2         0.00	Manganese	55-2	0.40	0.37	0.47	0.42	13.17	ppb
Molybdenum         96-1         0.00         0.00         0.00         69-19         ppb           Molybdenum         97-1         0.01         0.00         0.00         0.00         80.25         ppb           Molybdenum         98-1         0.00         0.00         0.00         0.00         ppb           Molybdenum         150-1         0.00         0.00         0.00         0.00         ppb           Neodymium         150-2         0.18         0.26         0.22         0.22         17.70         ppb           Nickel         60-2         0.18         0.26         0.22         0.22         17.70         ppb           Phosphorus         31-2         -34.20         20.84         -32.75         -29.26         ppb         ppb           Phosphorus         103-1         -1.02         1.01         106         -4.02         ppb           Rhodium         103-1         -1.02         1.02         1.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00         9.00	Molybdenum	94-1	0.01	0.02	0.02	0.02	55.56	ppb
Molybdenum         97-1         0.01         0.00         0.00         0.00         0.00         ppb           Molybdenum         98-1         0.00         0.00         0.00         0.00         ppb           Neodymium         150-1	Molybdenum	95-1	0.00	0.00	0.00	0.00	106.55	ppb
Molybdenum         98-1         0.00         0.00         0.00         0.00         ppb           Neodymium         150-1	Molybdenum	96-1	0.00	0.00	0.00	0.00	69.19	ppb
Neodymium         150-1         Image: Composition of the compositi	Molybdenum	97-1	0.01	0.00	0.00	0.00	80.25	ppb
Neodymium         150-2         Image: Control of the c	Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Nickel         60-2         0.18         0.26         0.22         0.22         17.70         ppb           Phosphorus         31-2         -34.20         -20.84         -32.75         -29.26         -70         ppb           Potassium         39-2         31.06         31.78         37.07         33.30         9.86         ppb           Rhodium         103-1         -70         106         -70         %           Scandium         45-1         -70         107         70         %           Scandium         45-2         -70         100         70         %           Selenium         82-1         -0.05         -0.31         -0.42         -0.26         70         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.90         N/A         ppb           Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Siliver         109-1         0.01         0.01         0.01         0.01         0.01         0.01	Neodymium	150-1						cps
Phosphorus         31-2         -34.20         -20.84         -32.75         -29.26         ppb           Potassium         39-2         31.06         31.78         37.07         33.30         9.86         ppb           Rhodium         103-1	Neodymium	150-2						cps
Potassium         39-2         31.06         31.78         37.07         33.30         9.86         ppb           Rhodium         103-1	Nickel	60-2	0.18	0.26	0.22	0.22	17.70	ppb
Rhodium         103-1         Kendium         106         %           Rhodium         103-2         100         %           Scandium         45-1         107         %           Scandium         45-2         100         %           Selenium         82-1         -0.05         -0.31         -0.42         -0.26         ppb           Selenium         77-2         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.80         N/A         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.80         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.80         ppb           Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Siliver         100-1         0.01         0.01         0.01         8.14         9.06           Silver         109-1         0.01         0.01         0.01         8.14         9.06         9.00         9.05         9.02         9.02         9.02         9.02	Phosphorus	31-2	-34.20	-20.84	-32.75	-29.26		ppb
Rhodium         103-2         Image: Composition of the problem of the	Potassium	39-2	31.06	31.78	37.07	33.30	9.86	ppb
Scandium         45-1         Interpretation	Rhodium	103-1				106		%
Scandium         45-2	Rhodium	103-2				100		%
Selenium         82-1         -0.05         -0.31         -0.42         -0.26         ppb           Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.80         -0.80         ppb           Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Silver         107-1         0.01         0.01         0.01         0.01         5.01         ppb           Silver         109-1         0.01         0.01         0.01         0.01         8.14         ppb           Silver         109-1         0.01         0.01         0.01         8.14         ppb           Silver         109-1         0.01         0.01         0.01         8.14         ppb           Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03	Scandium	45-1				107		%
Selenium         77-2         0.00         0.00         0.00         0.00         N/A         ppb           Selenium         78-2         -0.61         -1.01         -0.80         -0.80         ppb           Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Silver         107-1         0.01         0.01         0.01         0.01         5.01         ppb           Silver         109-1         0.01         0.01         0.01         0.01         8.14         ppb           Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         86-1         0.04         0.06         0.04         0.05         22.49         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         pb           Terbium         159-1	Scandium	45-2				100		%
Selenium         78-2         -0.61         -1.01         -0.80         -0.80         -0.80         ppb           Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Silver         107-1         0.01         0.01         0.01         0.01         5.01         ppb           Silver         109-1         0.01         0.01         0.01         0.01         8.14         ppb           Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         19.15         ppb           Sulfur         159-1         1106.17         814.25         1194.03         1007         1007         98         98         98         98	Selenium	82-1	-0.05	-0.31	-0.42	-0.26		ppb
Silicon         28-1         7.07         8.36         9.51         8.31         14.68         ppb           Silver         107-1         0.01         0.01         0.01         0.01         5.01         ppb           Silver         109-1         0.01         0.01         0.01         0.01         8.14         ppb           Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         86-1         0.04         0.06         0.04         0.05         22.49         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         ppb           Terbium         159-1         4.25         1194.03         1007         98         %           Tradlium         203-1         0.02         0.02         0.02         0.02         16.94         ppb           Thallium         205-1         0.02         0.02         0.02         0.02         12.66         ppb           Titanium         47-1         0	Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Silver         107-1         0.01         0.01         0.01         0.01         5.01         ppb           Silver         109-1         0.01         0.01         0.01         0.01         8.14         ppb           Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         86-1         0.04         0.06         0.04         0.05         22.49         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         ppb           Terbium         159-1	Selenium	78-2	-0.61	-1.01	-0.80	-0.80		ppb
Silver       109-1       0.01       0.01       0.01       0.01       8.14       ppb         Sodium       23-2       40.78       43.25       46.13       43.39       6.18       ppb         Strontium       86-1       0.04       0.06       0.04       0.05       22.49       ppb         Strontium       88-1       0.07       0.08       0.07       0.07       5.32       ppb         Sulfur       34-1       1106.17       814.25       1194.03       1038.15       19.15       ppb         Terbium       159-1	Silicon	28-1	7.07	8.36	9.51	8.31	14.68	ppb
Sodium         23-2         40.78         43.25         46.13         43.39         6.18         ppb           Strontium         86-1         0.04         0.06         0.04         0.05         22.49         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         ppb           Terbium         159-1	Silver	107-1	0.01	0.01	0.01	0.01	5.01	ppb
Strontium         86-1         0.04         0.06         0.04         0.05         22.49         ppb           Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         ppb           Terbium         159-1	Silver	109-1	0.01	0.01	0.01	0.01	8.14	ppb
Strontium         88-1         0.07         0.08         0.07         0.07         5.32         ppb           Sulfur         34-1         1106.17         814.25         1194.03         1038.15         19.15         ppb           Terbium         159-1	Sodium	23-2	40.78	43.25	46.13	43.39	6.18	ppb
Sulfur       34-1       1106.17       814.25       1194.03       1038.15       19.15       ppb         Terbium       159-1	Strontium	86-1	0.04	0.06	0.04	0.05	22.49	ppb
Terbium     159-1     107     %       Terbium     159-2     98     %       Thallium     203-1     0.02     0.02     0.02     16.94     ppb       Thallium     205-1     0.02     0.02     0.02     12.66     ppb       Tin     118-1     0.08     0.05     0.07     0.07     19.34     ppb       Titanium     47-1     0.03     0.03     -0.01     0.02     117.30     ppb	Strontium	88-1	0.07	0.08	0.07	0.07	5.32	ppb
Terbium         159-2         98         %           Thallium         203-1         0.02         0.02         0.02         16.94         ppb           Thallium         205-1         0.02         0.02         0.02         12.66         ppb           Tin         118-1         0.08         0.05         0.07         0.07         19.34         ppb           Titanium         47-1         0.03         0.03         -0.01         0.02         117.30         ppb	Sulfur	34-1	1106.17	814.25	1194.03	1038.15	19.15	ppb
Thallium       203-1       0.02       0.02       0.02       0.02       16.94       ppb         Thallium       205-1       0.02       0.02       0.02       0.02       12.66       ppb         Tin       118-1       0.08       0.05       0.07       0.07       19.34       ppb         Titanium       47-1       0.03       0.03       -0.01       0.02       117.30       ppb	Terbium	159-1				107		%
Thallium     205-1     0.02     0.02     0.02     0.02     12.66     ppb       Tin     118-1     0.08     0.05     0.07     0.07     19.34     ppb       Titanium     47-1     0.03     0.03     -0.01     0.02     117.30     ppb	Terbium	159-2				98		%
Tin     118-1     0.08     0.05     0.07     0.07     19.34     ppb       Titanium     47-1     0.03     0.03     -0.01     0.02     117.30     ppb	Thallium	203-1	0.02	0.02	0.02	0.02	16.94	ppb
Titanium 47-1 0.03 0.03 -0.01 0.02 117.30 ppb	Thallium	205-1	0.02	0.02	0.02	0.02	12.66	ppb
	Tin	118-1	0.08	0.05	0.07	0.07	19.34	ppb
Uranium 238-1 0.00 0.00 0.00 0.00 ppb	Titanium	47-1	0.03	0.03	-0.01	0.02	117.30	ppb
	Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:11:38 DataFile Name: 130AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	151.49	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				99		%
Zinc	66-2	-0.09	-0.11	-0.09	-0.10		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	82.01	ppb
Zirconium	91-1	0.01	0.00	0.01	0.01	36.23	ppb

<sub>3</sub> 457

Lab Sample ID: Q1223-17 Instrumnet Name: P8

Client Sample ID: A6310 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Date & Time Ac	quireu . 202	25-02-00 20.14.59	Dalai	rile ivallie .	ISTAREF.U		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.53	1.37	0.93	0.95	44.40	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	46.90	ppb
Arsenic	75-2	0.00	-0.01	0.00	0.00		ppb
Barium	135-1	0.02	0.02	0.03	0.02	15.44	ppb
Barium	137-1	0.01	0.02	0.02	0.02	31.14	ppb
Beryllium	9-1	0.04	0.04	0.04	0.04	6.79	ppb
Bismuth	209-1				107		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	0.03	0.06	0.02	159.89	ppb
Cadmium	106-1	0.52	0.91	1.02	0.81	32.54	ppb
Cadmium	111-1	0.04	0.07	0.08	0.06	31.00	ppb
Calcium	43-1	3.69	1.33	2.52	2.51	46.99	ppb
Calcium	44-1	0.99	2.33	1.38	1.57	43.95	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	0.02	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.07	-0.04	-0.10	-0.07		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				101		%
Indium	115-1				110		%
Indium	115-2				98		%
Iron	54-2	3.89	4.02	3.03	3.65	14.79	ppb
Iron	56-2	3.85	3.99	4.21	4.02	4.56	ppb
Iron	57-2	4.69	3.57	3.69	3.98	15.38	ppb
Krypton	83-1						cps
Lead	206-1	0.04	0.04	0.04	0.04	7.27	ppb

Lab Sample ID: Q1223-17 Instrumnet Name: P8

Client Sample ID: A6310 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Date & Time Ac	te & Time Acquired: 2025-02-06 20:14:59 Data-lie Name: 131AREF.d						
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.05	0.03	0.04	0.04	20.45	ppb
Lead	208-1	0.05	0.04	0.04	0.04	10.05	ppb
Lithium	6-1				112		%
Magnesium	24-2	1.57	1.02	1.71	1.43	25.15	ppb
Manganese	55-2	1.72	1.76	1.77	1.75	1.60	ppb
Molybdenum	94-1	0.02	0.01	0.02	0.02	12.96	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	53.99	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	13.87	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.27	0.26	0.33	0.28	13.96	ppb
Phosphorus	31-2	-30.76	-29.11	-29.99	-29.95		ppb
Potassium	39-2	33.72	33.63	35.00	34.12	2.24	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				109		%
Scandium	45-2				102		%
Selenium	82-1	-0.10	-0.01	-0.28	-0.13		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.41	-0.42	0.17	-0.22		ppb
Silicon	28-1	-7.71	-5.83	-5.06	-6.20		ppb
Silver	107-1	0.00	0.00	0.01	0.00	26.77	ppb
Silver	109-1	0.00	0.00	0.00	0.00	45.36	ppb
Sodium	23-2	126.07	122.95	122.92	123.98	1.46	ppb
Strontium	86-1	-0.02	0.00	0.01	0.00		ppb
Strontium	88-1	0.02	0.02	0.02	0.02	3.21	ppb
Sulfur	34-1	734.94	1160.04	1086.55	993.84	22.86	ppb
Terbium	159-1				109		%
Terbium	159-2				102		%
Thallium	203-1	0.02	0.02	0.01	0.02	32.86	ppb
Thallium	205-1	0.02	0.02	0.01	0.02	11.78	ppb
Tin	118-1	0.02	0.02	0.03	0.02	40.59	ppb
Titanium	47-1	0.02	0.05	-0.01	0.02	126.91	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1223-17 Instrumnet Name: P8
Client Sample ID: A6310 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.00	0.01	93.08	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				102		%
Zinc	66-2	-0.11	-0.08	-0.10	-0.10		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	206.85	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	141.88	ppb

<sub>3</sub> 460

Lab Sample ID : CCV008 Instrumnet Name : P8
Client Sample ID : CCV008 Dilution Factor : 1

1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Date & Time / to	quircu . 202	0 02 00 20.22.00	Datai	iic ivairie .	10000 V.a		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	47692.29	46896.15	46547.14	47045.19	1.25	ppb
Antimony	121-1	486.31	496.98	497.53	493.61	1.28	ppb
Arsenic	75-2	483.65	492.50	498.22	491.46	1.49	ppb
Barium	135-1	2449.77	2543.45	2534.10	2509.10	2.06	ppb
Barium	137-1	2433.76	2528.53	2545.61	2502.63	2.41	ppb
Beryllium	9-1	468.23	472.61	488.91	476.59	2.29	ppb
Bismuth	209-1				89		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	489.60	498.12	499.44	495.72	1.08	ppb
Cadmium	106-1	492.84	501.05	504.66	499.51	1.21	ppb
Cadmium	111-1	478.65	495.52	493.46	489.21	1.88	ppb
Calcium	43-1	235057.50	238034.54	238624.41	237238.82	0.81	ppb
Calcium	44-1	230760.18	237804.37	231870.01	233478.19	1.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	483.63	483.84	478.47	481.98	0.63	ppb
Cobalt	59-2	481.82	482.02	485.46	483.10	0.42	ppb
Copper	63-2	4584.23	4608.62	4577.38	4590.08	0.36	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				96		%
Indium	115-1				95		%
Indium	115-2				87		%
Iron	54-2	118169.52	118412.86	115918.60	117500.33	1.17	ppb
Iron	56-2	116362.43	118689.48	115849.12	116967.01	1.29	ppb
Iron	57-2	118010.58	118481.86	118283.66	118258.70	0.20	ppb
Krypton	83-1						cps
Lead	206-1	2469.70	2526.04	2486.17	2493.97	1.16	ppb

Lab Sample ID :CCV008Instrumnet Name :P8Client Sample ID :CCV008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Date & Time Acc	quirea: 202	25-02-06 20:22:56	DataFi	ile Name :	133CCV.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2455.65	2525.75	2462.51	2481.30	1.56	ppb
Lead	208-1	2462.08	2512.58	2470.47	2481.71	1.09	ppb
Lithium	6-1				99		%
Magnesium	24-2	237784.84	241314.66	234030.09	237709.87	1.53	ppb
Manganese	55-2	4691.02	4821.91	4692.21	4735.05	1.59	ppb
Molybdenum	94-1	4885.34	5041.37	4904.86	4943.86	1.72	ppb
Molybdenum	95-1	4963.25	4946.64	4870.62	4926.84	1.00	ppb
Molybdenum	96-1	4923.29	4981.00	4979.26	4961.18	0.66	ppb
Molybdenum	97-1	4887.65	4902.12	5017.18	4935.65	1.44	ppb
Molybdenum	98-1	4891.31	4956.56	4978.60	4942.15	0.92	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	505.99	508.41	507.78	507.39	0.25	ppb
Phosphorus	31-2	9582.27	9588.02	9597.35	9589.21	0.08	ppb
Potassium	39-2	118121.08	118002.49	116147.15	117423.57	0.94	ppb
Rhodium	103-1				89		%
Rhodium	103-2				89		%
Scandium	45-1				99		%
Scandium	45-2				98		%
Selenium	82-1	486.00	489.11	482.73	485.94	0.66	ppb
Selenium	77-2	477.78	497.95	458.62	478.12	4.11	ppb
Selenium	78-2	456.50	480.75	481.46	472.90	3.01	ppb
Silicon	28-1	503.89	500.16	491.60	498.55	1.26	ppb
Silver	107-1	472.32	484.51	476.00	477.61	1.31	ppb
Silver	109-1	474.69	480.73	475.67	477.03	0.68	ppb
Sodium	23-2	241828.52	240768.61	238466.11	240354.41	0.72	ppb
Strontium	86-1	492.77	504.17	506.89	501.28	1.50	ppb
Strontium	88-1	488.54	500.28	505.68	498.17	1.76	ppb
Sulfur	34-1	10220.70	10129.13	9828.19	10059.34	2.04	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	500.40	506.76	493.70	500.29	1.31	ppb
Thallium	205-1	500.37	512.86	507.61	506.94	1.24	ppb
Tin	118-1	486.98	495.72	499.94	494.21	1.34	ppb
Titanium	47-1	4905.58	4924.69	4964.22	4931.49	0.61	ppb
Uranium	238-1	498.36	503.88	495.06	499.10	0.89	ppb

Lab Sample ID :CCV008Instrumnet Name :P8Client Sample ID :CCV008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	485.28	494.76	488.35	489.46	0.99	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				95		%
Zinc	66-2	4587.64	4636.03	4610.67	4611.45	0.52	ppb
Zirconium	90-1	495.60	511.08	492.19	499.62	2.01	ppb
Zirconium	91-1	496.28	511.27	495.85	501.14	1.75	ppb

<sup>3</sup> 463

Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

Date & Time / to	quircu . Zoz	0 02 00 20.20.40	Datai	iic i vairie .	10-100BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.03	0.99	1.17	1.06	8.97	ppb
Antimony	121-1	0.16	0.15	0.13	0.15	12.36	ppb
Arsenic	75-2	0.00	0.00	0.03	0.01	172.26	ppb
Barium	135-1	0.13	0.10	0.08	0.10	26.33	ppb
Barium	137-1	0.13	0.10	0.08	0.10	23.06	ppb
Beryllium	9-1	0.23	0.21	0.19	0.21	8.89	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.10	0.09	0.02	0.07	67.31	ppb
Cadmium	106-1	-0.32	-0.25	0.00	-0.19		ppb
Cadmium	111-1	0.00	0.01	0.03	0.01	117.13	ppb
Calcium	43-1	9.30	6.28	5.23	6.94	30.42	ppb
Calcium	44-1	7.32	5.08	2.93	5.11	42.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.21	-0.20	-0.20	-0.20		ppb
Cobalt	59-2	0.01	0.02	0.01	0.01	31.98	ppb
Copper	63-2	-0.01	0.02	-0.02	0.00		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				99		%
Indium	115-1				108		%
Indium	115-2				97		%
Iron	54-2	2.60	3.14	3.52	3.09	15.07	ppb
Iron	56-2	2.96	3.30	3.26	3.17	5.91	ppb
Iron	57-2	3.26	2.37	2.39	2.67	18.90	ppb
Krypton	83-1						cps
Lead	206-1	0.33	0.29	0.24	0.29	15.55	ppb

Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

Date & Time Act	quircu . Zoz	20 02 00 20.20.40	Datai	ne ivanie .	10-100DL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.33	0.30	0.24	0.29	16.30	ppb
Lead	208-1	0.33	0.29	0.24	0.29	15.05	ppb
Lithium	6-1				110		%
Magnesium	24-2	-0.23	0.50	-0.12	0.05	837.11	ppb
Manganese	55-2	0.24	0.19	0.28	0.24	17.68	ppb
Molybdenum	94-1	0.33	0.28	0.22	0.28	20.04	ppb
Molybdenum	95-1	0.31	0.24	0.19	0.25	23.93	ppb
Molybdenum	96-1	0.30	0.25	0.18	0.24	25.12	ppb
Molybdenum	97-1	0.32	0.24	0.21	0.25	22.08	ppb
Molybdenum	98-1	0.29	0.26	0.19	0.25	21.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.24	0.30	0.27	0.27	12.89	ppb
Phosphorus	31-2	-34.95	-32.97	-26.12	-31.35		ppb
Potassium	39-2	45.76	44.02	36.91	42.23	11.11	ppb
Rhodium	103-1				107		%
Rhodium	103-2				102		%
Scandium	45-1				109		%
Scandium	45-2				102		%
Selenium	82-1	-0.17	0.47	0.04	0.11	290.03	ppb
Selenium	77-2	0.69	0.00	0.00	0.23	173.21	ppb
Selenium	78-2	-0.40	-0.80	-0.43	-0.54		ppb
Silicon	28-1	-5.91	-5.48	-5.32	-5.57		ppb
Silver	107-1	0.08	0.07	0.06	0.07	17.14	ppb
Silver	109-1	0.07	0.06	0.05	0.06	16.03	ppb
Sodium	23-2	48.93	48.23	39.34	45.50	11.74	ppb
Strontium	86-1	0.02	0.02	0.00	0.01	76.90	ppb
Strontium	88-1	0.03	0.03	0.02	0.03	16.57	ppb
Sulfur	34-1	-969.37	-786.61	-758.18	-838.05		ppb
Terbium	159-1				106		%
Terbium	159-2				99		%
Thallium	203-1	0.07	0.06	0.05	0.06	20.36	ppb
Thallium	205-1	0.07	0.06	0.05	0.06	18.07	ppb
Tin	118-1	0.02	0.02	0.01	0.01	26.08	ppb
Titanium	47-1	0.22	0.21	0.12	0.18	32.01	ppb
Uranium	238-1	0.02	0.02	0.01	0.02	32.71	ppb

Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	24.52	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				101		%
Zinc	66-2	0.53	0.56	0.54	0.54	2.84	ppb
Zirconium	90-1	0.04	0.04	0.02	0.03	28.60	ppb
Zirconium	91-1	0.04	0.05	0.03	0.04	23.75	ppb

Lab Sample ID: S00 Instrumnet Name: P8
Client Sample ID: S0 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:08:54 DataFile Name: 004CALB.d

Date & Time At	quireu . 202	13-02-00 12.06.54	Dalar	ile ivallie .	004CALB.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	83	93	57	78	24.37	cps
Antimony	121-1	47	53	43	48	10.66	cps
Arsenic	75-2	7	3	10	7	50.03	cps
Barium	135-1	90	73	40	68	37.56	cps
Barium	137-1	113	97	120	110	10.92	cps
Beryllium	9-1	322	284	292	300	6.78	cps
Bismuth	209-1	12687442	12408795	12017571	12371269	2.72	cps
Bismuth	209-2	5590091	5543926	5472177	5535398	1.07	cps
Bromine	81-1	4117	4351	4317	4262	2.96	cps
Cadmium	108-1	30	17	7	18	65.83	cps
Cadmium	106-1	8203	8112	7992	8102	1.30	cps
Cadmium	111-1	5731	5690	5607	5676	1.12	cps
Calcium	43-1	740	673	657	690	6.39	cps
Calcium	44-1	34825	33716	34131	34224	1.64	cps
Carbon	12-1	6523192	6438822	6514982	6492332	0.72	cps
Carbon	12-2	42755	42511	43257	42841	0.89	cps
Chlorine	35-1	167429	168582	167665	167892	0.36	cps
Chlorine	35-2	740	697	633	690	7.78	cps
Chromium	52-2	1620	1657	1753	1677	4.11	cps
Cobalt	59-2	103	103	77	94	16.30	cps
Copper	63-2	3757	3697	3954	3803	3.53	cps
Dysprosium	156-1	20	17	17	18	10.81	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	137	70	107	104	31.97	cps
Erbium	164-2	30	43	17	30	44.43	cps
Gadolinium	160-1	140	137	123	133	6.61	cps
Gadolinium	160-2	33	23	13	23	42.86	cps
Holmium	165-1	19576447	18928803	18995399	19166883	1.86	cps
Holmium	165-2	7320354	7402202	7322349	7348301	0.64	cps
Indium	115-1	16078425	15651327	15531985	15753912	1.82	cps
Indium	115-2	1726312	1761309	1743754	1743792	1.00	cps
Iron	54-2	493	553	600	549	9.74	cps
Iron	56-2	6261	6838	7058	6719	6.13	cps
Iron	57-2	207	170	207	194	10.89	cps
Krypton	83-1	320	243	307	290	14.12	cps
Lead	206-1	1403	1283	1350	1346	4.47	cps

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:08:54 DataFile Name: 004CALB.d

Date & Time Acc	quirea: 202	25-02-06 12:08:54	Datar	ile Name :	004CALB.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1180	1090	1107	1126	4.25	cps
Lead	208-1	5230	5074	5074	5126	1.76	cps
Lithium	6-1	9190100	9041663	8946823	9059529	1.35	cps
Magnesium	24-2	4534	4687	4731	4651	2.22	cps
Manganese	55-2	140	143	140	141	1.37	cps
Molybdenum	94-1	380	400	343	374	7.68	cps
Molybdenum	95-1	143	140	187	157	16.62	cps
Molybdenum	96-1	233	193	213	213	9.37	cps
Molybdenum	97-1	90	100	103	98	7.10	cps
Molybdenum	98-1	260	190	243	231	15.82	cps
Neodymium	150-1	13	10	10	11	17.30	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	720	750	677	716	5.15	cps
Phosphorus	31-2	123	83	123	110	21.00	cps
Potassium	39-2	13073	13520	13043	13212	2.02	cps
Rhodium	103-1	15724710	15158605	14868218	15250511	2.86	cps
Rhodium	103-2	6235829	6236249	6222405	6231494	0.13	cps
Scandium	45-1	11687784	11382066	11197510	11422453	2.17	cps
Scandium	45-2	234216	236027	232111	234118	0.84	cps
Selenium	82-1	27	20	13	20	33.32	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	10	30	10	17	69.28	cps
Silicon	28-1	650213	648416	649585	649405	0.14	cps
Silver	107-1	163	213	213	197	14.68	cps
Silver	109-1	107	90	90	96	10.07	cps
Sodium	23-2	55756	55910	55615	55760	0.26	cps
Strontium	86-1	420	513	577	503	15.66	cps
Strontium	88-1	330	380	373	361	7.52	cps
Sulfur	34-1	817571	819783	821251	819535	0.23	cps
Terbium	159-1	20399134	19494686	19538821	19810880	2.57	cps
Terbium	159-2	7125790	7085516	7032339	7081215	0.66	cps
Thallium	203-1	263	233	197	231	14.45	cps
Thallium	205-1	537	470	483	497	7.10	cps
Tin	118-1	2034	1957	2254	2081	7.41	cps
Titanium	47-1	253	250	237	247	3.58	cps
Uranium	238-1	97	93	130	107	19.01	cps

LB Number : LB134612 Operator :

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:08:54 DataFile Name: 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	7	10	3	7	50.03	cps
Ytterbium	172-1	80	140	77	99	36.04	cps
Ytterbium	172-2	23	53	63	47	44.61	cps
Ytterbium	176-1	2210	1900	1980	2030	7.93	cps
Ytterbium	176-2	413	460	497	457	9.15	cps
Yttrium	89-1	28625784	27692795	27314580	27877720	2.42	cps
Yttrium	89-2	2207354	2157535	2118957	2161282	2.05	cps
Zinc	66-2	340	327	343	337	2.62	cps
Zirconium	90-1	890	1033	877	933	9.31	cps
Zirconium	91-1	147	150	170	156	8.11	cps

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Lab Sample ID: S02 Instrumnet Name: P8
Client Sample ID: S02 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Date a Time 7to	quired. 202	.0 02 00 12.12.10	Datai	iic i vairie .	0000/ (EO.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1693	1720	1753	1722	1.75	cps
Antimony	121-1	35296	36468	35904	35889	1.63	cps
Arsenic	75-2	380	467	383	410	11.98	cps
Barium	135-1	40641	42396	41467	41501	2.12	cps
Barium	137-1	71769	72463	71417	71883	0.74	cps
Beryllium	9-1	7689	7584	7531	7601	1.06	cps
Bismuth	209-1	11927763	11910622	11979341	11939242	0.30	cps
Bismuth	209-2	5466224	5547573	5522066	5511954	0.75	cps
Bromine	81-1	4107	4324	3997	4143	4.01	cps
Cadmium	108-1	327	370	373	357	7.30	cps
Cadmium	106-1	8513	8346	8329	8396	1.21	cps
Cadmium	111-1	10378	9974	10230	10194	2.00	cps
Calcium	43-1	31825	31484	31294	31535	0.85	cps
Calcium	44-1	532733	531398	534648	532926	0.31	cps
Carbon	12-1	6816822	6724532	6798800	6780051	0.72	cps
Carbon	12-2	44460	44758	44634	44617	0.33	cps
Chlorine	35-1	170133	169645	167415	169064	0.86	cps
Chlorine	35-2	647	787	720	718	9.76	cps
Chromium	52-2	10240	10124	10524	10296	2.00	cps
Cobalt	59-2	9143	9060	9336	9180	1.55	cps
Copper	63-2	17087	16964	17064	17038	0.38	cps
Dysprosium	156-1	3	10	27	13	90.16	cps
Dysprosium	156-2	13	10	0	8	89.21	cps
Erbium	164-1	80	103	97	93	12.88	cps
Erbium	164-2	30	23	20	24	20.83	cps
Gadolinium	160-1	110	137	93	113	19.29	cps
Gadolinium	160-2	27	33	17	26	32.81	cps
Holmium	165-1	19109048	18600197	18898261	18869169	1.35	cps
Holmium	165-2	7200011	7243161	7326745	7256639	0.89	cps
Indium	115-1	15660500	15423472	15227593	15437189	1.40	cps
Indium	115-2	1687469	1721838	1672260	1693856	1.50	cps
Iron	54-2	9653	10044	9890	9862	1.99	cps
Iron	56-2	172243	172263	172914	172473	0.22	cps
Iron	57-2	4097	4164	4407	4223	3.86	cps
Krypton	83-1	237	253	307	266	13.77	cps
Lead	206-1	14872	14688	15246	14935	1.90	cps

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12870	12940	12880	12897	0.29	cps
Lead	208-1	58816	58559	59263	58879	0.61	cps
Lithium	6-1	9299891	9137682	9178154	9205242	0.92	cps
Magnesium	24-2	155032	154737	154055	154608	0.32	cps
Manganese	55-2	1787	1943	2024	1918	6.28	cps
Molybdenum	94-1	37480	36588	37397	37155	1.33	cps
Molybdenum	95-1	44581	44652	43775	44336	1.10	cps
Molybdenum	96-1	49317	49103	48990	49136	0.34	cps
Molybdenum	97-1	27594	28426	27931	27984	1.50	cps
Molybdenum	98-1	70468	71737	71624	71276	0.99	cps
Neodymium	150-1	7	17	10	11	45.82	cps
Neodymium	150-2	7	0	0	2	173.21	cps
Nickel	60-2	2930	3217	3017	3055	4.81	cps
Phosphorus	31-2	237	227	283	249	12.15	cps
Potassium	39-2	96795	97778	97412	97328	0.51	cps
Rhodium	103-1	15160082	14782991	14673069	14872048	1.72	cps
Rhodium	103-2	6142732	6108689	6137901	6129774	0.30	cps
Scandium	45-1	11218829	11334741	11185468	11246346	0.70	cps
Scandium	45-2	234368	234026	232668	233688	0.38	cps
Selenium	82-1	1360	1320	1320	1333	1.73	cps
Selenium	77-2	10	27	27	21	45.58	cps
Selenium	78-2	90	100	63	84	22.45	cps
Silicon	28-1	743633	745218	743436	744096	0.13	cps
Silver	107-1	21834	22178	21724	21912	1.08	cps
Silver	109-1	20656	20739	20362	20586	0.96	cps
Sodium	23-2	350301	351614	347612	349842	0.58	cps
Strontium	86-1	6438	6465	6058	6320	3.60	cps
Strontium	88-1	50555	50635	50531	50573	0.11	cps
Sulfur	34-1	822207	818598	820516	820440	0.22	cps
Terbium	159-1	19467270	19182427	19664769	19438155	1.25	cps
Terbium	159-2	7094421	6929271	7086172	7036621	1.32	cps
Thallium	203-1	16410	16547	16951	16636	1.69	cps
Thallium	205-1	40817	41045	40439	40767	0.75	cps
Tin	118-1	72933	74162	71988	73028	1.49	cps
Titanium	47-1	14547	14671	14931	14717	1.33	cps
Uranium	238-1	52066	51347	51895	51769	0.73	cps
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LB Number : LB134612 Operator :

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:12:13 DataFile Name: 005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	16763	16960	17564	17096	2.44	cps
Ytterbium	172-1	87	107	87	93	12.37	cps
Ytterbium	172-2	30	43	47	40	22.05	cps
Ytterbium	176-1	1910	1960	1974	1948	1.71	cps
Ytterbium	176-2	460	417	407	428	6.63	cps
Yttrium	89-1	27694785	27198152	27144286	27345741	1.11	cps
Yttrium	89-2	2134364	2127309	2123293	2128322	0.26	cps
Zinc	66-2	3877	3554	3914	3782	5.24	cps
Zirconium	90-1	31506	31729	30797	31344	1.55	cps
Zirconium	91-1	6792	6938	6772	6834	1.33	cps

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Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	76902	75967	77488	76785	1.00	cps
Antimony	121-1	807781	824975	824898	819218	1.21	cps
Arsenic	75-2	17931	18365	17871	18056	1.49	cps
Barium	135-1	933796	944802	952074	943557	0.98	cps
Barium	137-1	1700084	1692808	1700792	1697894	0.26	cps
Beryllium	9-1	325587	323914	327765	325755	0.59	cps
Bismuth	209-1	11835766	12161966	11970761	11989498	1.37	cps
Bismuth	209-2	5398042	5514635	5447123	5453267	1.07	cps
Bromine	81-1	3914	4184	4117	4072	3.46	cps
Cadmium	108-1	16550	16540	16607	16566	0.22	cps
Cadmium	106-1	30931	31763	31596	31430	1.40	cps
Cadmium	111-1	206016	210430	208335	208260	1.06	cps
Calcium	43-1	279484	284574	284769	282942	1.06	cps
Calcium	44-1	4608063	4661574	4639445	4636360	0.58	cps
Carbon	12-1	6692741	6705147	6561408	6653099	1.20	cps
Carbon	12-2	43835	43504	44149	43830	0.74	cps
Chlorine	35-1	162871	164516	164253	163880	0.54	cps
Chlorine	35-2	647	703	710	687	5.07	cps
Chromium	52-2	199004	200509	199569	199694	0.38	cps
Cobalt	59-2	383697	382332	381978	382669	0.24	cps
Copper	63-2	3090471	3054817	3051463	3065584	0.71	cps
Dysprosium	156-1	40	13	20	24	56.78	cps
Dysprosium	156-2	7	0	0	2	173.21	cps
Erbium	164-1	117	127	100	114	11.77	cps
Erbium	164-2	30	30	40	33	17.32	cps
Gadolinium	160-1	107	127	117	117	8.57	cps
Gadolinium	160-2	40	47	37	41	12.39	cps
Holmium	165-1	19012369	19190135	18718934	18973813	1.25	cps
Holmium	165-2	7191441	7246191	7200843	7212825	0.41	cps
Indium	115-1	15301153	15311431	15203623	15272069	0.39	cps
Indium	115-2	1665123	1692534	1671187	1676281	0.86	cps
Iron	54-2	416819	413441	411730	413997	0.63	cps
Iron	56-2	7660377	7624959	7593015	7626117	0.44	cps
Iron	57-2	189643	188968	187253	188621	0.65	cps
Krypton	83-1	297	277	283	286	3.57	cps
Lead	206-1	3296562	3454928	3273388	3341626	2.96	cps

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2896020	2895300	2841789	2877703	1.08	cps
Lead	208-1	13149489	13281827	13159514	13196943	0.56	cps
Lithium	6-1	8939248	9047798	8934731	8973926	0.71	cps
Magnesium	24-2	1406035	1412346	1393147	1403843	0.70	cps
Manganese	55-2	819890	814643	809044	814526	0.67	cps
Molybdenum	94-1	2943652	2953261	3021521	2972811	1.43	cps
Molybdenum	95-1	4165845	4196403	4248030	4203426	0.99	cps
Molybdenum	96-1	4645531	4652966	4587662	4628720	0.77	cps
Molybdenum	97-1	2634805	2634740	2629880	2633142	0.11	cps
Molybdenum	98-1	6823703	6758403	6859083	6813730	0.75	cps
Neodymium	150-1	67	47	80	64	26.03	cps
Neodymium	150-2	7	3	7	6	34.70	cps
Nickel	60-2	112762	111287	112187	112079	0.66	cps
Phosphorus	31-2	3867	3821	4297	3995	6.58	cps
Potassium	39-2	397581	403941	401401	400974	0.80	cps
Rhodium	103-1	14638919	14767211	14665422	14690517	0.46	cps
Rhodium	103-2	6122866	6103946	6135153	6120655	0.26	cps
Scandium	45-1	11138606	11168416	11104516	11137179	0.29	cps
Scandium	45-2	227896	234682	231418	231332	1.47	cps
Selenium	82-1	12296	12729	12756	12594	2.05	cps
Selenium	77-2	247	233	263	248	6.07	cps
Selenium	78-2	767	827	793	796	3.78	cps
Silicon	28-1	1333068	1325585	1333664	1330773	0.34	cps
Silver	107-1	1022429	1040561	1049033	1037341	1.31	cps
Silver	109-1	971385	990638	1001329	987784	1.54	cps
Sodium	23-2	2824033	2802814	2839326	2822058	0.65	cps
Strontium	86-1	261062	264339	264933	263444	0.79	cps
Strontium	88-1	2344980	2351538	2393725	2363414	1.12	cps
Sulfur	34-1	899444	903884	916205	906511	0.96	cps
Terbium	159-1	19335883	19369718	19484296	19396632	0.40	cps
Terbium	159-2	7073252	7160590	7048179	7094007	0.83	cps
Thallium	203-1	764074	773910	773243	770409	0.71	cps
Thallium	205-1	1930439	1971279	1914521	1938746	1.51	cps
Tin	118-1	642239	650003	654539	648927	0.96	cps
Titanium	47-1	1339447	1329370	1364097	1344305	1.33	cps
Uranium	238-1	2578460	2541458	2594587	2571502	1.06	cps

LB Number : LB134612 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:15:34 DataFile Name: 006CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	155130	154079	154797	154669	0.35	cps
Ytterbium	172-1	93	103	150	116	26.17	cps
Ytterbium	172-2	53	50	43	49	10.42	cps
Ytterbium	176-1	5641	5561	5635	5612	0.79	cps
Ytterbium	176-2	1820	1767	1927	1838	4.43	cps
Yttrium	89-1	27065522	27259007	26710217	27011582	1.03	cps
Yttrium	89-2	2144967	2116402	2117085	2126151	0.77	cps
Zinc	66-2	331249	331555	326534	329779	0.85	cps
Zirconium	90-1	1460893	1451483	1463502	1458626	0.43	cps
Zirconium	91-1	309048	314236	312497	311927	0.85	cps

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Lab Sample ID: S04 Instrumnet Name: P8
Client Sample ID: S04 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Date a Time 7to	quircu . Zoz	0 02 00 12.10.00	Datai	iic i vairie .	007 O7 (EO.u			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	193877	190956	191372	192068	0.82	cps	
Antimony	121-1	2169553	2194597	2137857	2167335	1.31	cps	
Arsenic	75-2	45433	45530	44804	45256	0.87	cps	
Barium	135-1	2511539	2544399	2471544	2509160	1.45	cps	
Barium	137-1	4318725	4301247	4219059	4279677	1.24	cps	
Beryllium	9-1	806154	806252	809287	807231	0.22	cps	
Bismuth	209-1	11877260	11853650	11862171	11864361	0.10	cps	
Bismuth	209-2	5447065	5415724	5363961	5408916	0.78	cps	
Bromine	81-1	3894	3907	3917	3906	0.30	cps	
Cadmium	108-1	40540	41439	41910	41296	1.69	cps	
Cadmium	106-1	64584	65692	66466	65580	1.44	cps	
Cadmium	111-1	511059	517407	513664	514043	0.62	cps	
Calcium	43-1	699980	706962	702906	703283	0.50	cps	
Calcium	44-1	11516512	11474933	11481604	11491016	0.19	cps	
Carbon	12-1	6874349	6811520	6840031	6841967	0.46	cps	
Carbon	12-2	46015	45126	45440	45527	0.99	cps	
Chlorine	35-1	163724	165187	164152	164354	0.46	cps	
Chlorine	35-2	653	743	703	700	6.44	cps	
Chromium	52-2	499047	491595	494763	495135	0.76	cps	
Cobalt	59-2	954855	945248	944294	948132	0.62	cps	
Copper	63-2	7624644	7489549	7470749	7528314	1.12	cps	
Dysprosium	156-1	57	43	40	47	18.90	cps	
Dysprosium	156-2	17	17	7	13	43.29	cps	
Erbium	164-1	107	110	153	123	21.11	cps	
Erbium	164-2	47	47	40	44	8.66	cps	
Gadolinium	160-1	127	103	143	124	16.15	cps	
Gadolinium	160-2	37	27	63	42	44.88	cps	
Holmium	165-1	19262056	19286355	19143761	19230724	0.40	cps	
Holmium	165-2	7225447	7350370	7338438	7304752	0.94	cps	
Indium	115-1	15820383	15281839	15120666	15407629	2.38	cps	
Indium	115-2	1666782	1677667	1641719	1662056	1.11	cps	
Iron	54-2	1028540	1036762	1025861	1030388	0.55	cps	
Iron	56-2	19166762	19227368	19128350	19174160	0.26	cps	
Iron	57-2	468557	467330	469415	468434	0.22	cps	
Krypton	83-1	307	327	253	296	12.83	cps	
Lead	206-1	8223248	8126124	8332885	8227419	1.26	cps	

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7123233	7095846	7175695	7131591	0.57	cps
Lead	208-1	32692933	32655559	32893121	32747204	0.39	cps
Lithium	6-1	9113070	8828403	8946927	8962800	1.60	cps
Magnesium	24-2	3517181	3512300	3482847	3504109	0.53	cps
Manganese	55-2	2116544	2142110	2091866	2116840	1.19	cps
Molybdenum	94-1	7479824	7388772	7400807	7423135	0.67	cps
Molybdenum	95-1	10765388	10459877	10390353	10538539	1.89	cps
Molybdenum	96-1	11520461	11631956	11641710	11598042	0.58	cps
Molybdenum	97-1	6509587	6554995	6668857	6577813	1.25	cps
Molybdenum	98-1	17093170	17121919	17142454	17119181	0.14	cps
Neodymium	150-1	193	177	163	178	8.45	cps
Neodymium	150-2	10	17	13	13	25.01	cps
Nickel	60-2	282822	280594	280322	281246	0.49	cps
Phosphorus	31-2	9740	9597	9870	9736	1.41	cps
Potassium	39-2	990467	986919	997234	991540	0.53	cps
Rhodium	103-1	14448862	14641091	14839595	14643183	1.33	cps
Rhodium	103-2	5992628	6011513	5953737	5985959	0.49	cps
Scandium	45-1	11289297	10982245	10814854	11028798	2.18	cps
Scandium	45-2	232390	229957	230320	230889	0.57	cps
Selenium	82-1	31379	32198	31877	31818	1.30	cps
Selenium	77-2	573	607	597	592	2.89	cps
Selenium	78-2	1987	2157	2014	2052	4.46	cps
Silicon	28-1	2383960	2353096	2358571	2365209	0.70	cps
Silver	107-1	2773607	2727474	2677264	2726115	1.77	cps
Silver	109-1	2564647	2564938	2555087	2561557	0.22	cps
Sodium	23-2	7058828	6887322	6922784	6956311	1.30	cps
Strontium	86-1	660068	662981	666273	663107	0.47	cps
Strontium	88-1	6053057	5909576	5923227	5961953	1.33	cps
Sulfur	34-1	1013142	1003637	1010874	1009218	0.49	cps
Terbium	159-1	19918388	19606890	19589411	19704896	0.94	cps
Terbium	159-2	7074712	7057285	7074950	7068982	0.14	cps
Thallium	203-1	2014968	1984472	2034057	2011166	1.24	cps
Thallium	205-1	4790188	4721904	4833609	4781900	1.18	cps
Tin	118-1	1683997	1663466	1668204	1671889	0.64	cps
Titanium	47-1	3358030	3375340	3297974	3343782	1.21	cps
Uranium	238-1	6435390	6545257	6403118	6461255	1.15	cps

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LB Number : LB134612 Operator :

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:18:35 DataFile Name: 007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	389348	387200	388562	388370	0.28	cps
Ytterbium	172-1	143	110	107	120	16.90	cps
Ytterbium	172-2	33	77	83	64	42.13	cps
Ytterbium	176-1	10878	10524	10808	10737	1.74	cps
Ytterbium	176-2	3917	3897	3967	3927	0.92	cps
Yttrium	89-1	27637518	27440120	27151227	27409622	0.89	cps
Yttrium	89-2	2127871	2124015	2128684	2126857	0.12	cps
Zinc	66-2	831155	826060	821682	826299	0.57	cps
Zirconium	90-1	3648040	3683064	3737210	3689438	1.22	cps
Zirconium	91-1	787803	787470	793271	789515	0.41	cps

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Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	381059	381194	382460	381571	0.20	cps
Antimony	121-1	4419238	4461247	4466045	4448844	0.58	cps
Arsenic	75-2	90974	90133	90729	90612	0.48	cps
Barium	135-1	4980895	4972792	5003519	4985736	0.32	cps
Barium	137-1	8541745	8519364	8585601	8548903	0.39	cps
Beryllium	9-1	1655284	1622470	1662153	1646635	1.29	cps
Bismuth	209-1	11613407	11899130	12074759	11862432	1.96	cps
Bismuth	209-2	5284012	5325879	5318270	5309387	0.42	cps
Bromine	81-1	4054	3931	4114	4033	2.32	cps
Cadmium	108-1	83011	83980	83517	83503	0.58	cps
Cadmium	106-1	123836	124983	125793	124871	0.79	cps
Cadmium	111-1	1014249	1037527	1028731	1026836	1.14	cps
Calcium	43-1	1448233	1455161	1439301	1447565	0.55	cps
Calcium	44-1	22860559	23504805	22951699	23105688	1.51	cps
Carbon	12-1	7008747	7090515	7073649	7057637	0.61	cps
Carbon	12-2	48192	47553	47747	47831	0.68	cps
Chlorine	35-1	171994	172147	170824	171655	0.42	cps
Chlorine	35-2	710	663	767	713	7.25	cps
Chromium	52-2	984754	982090	987478	984774	0.27	cps
Cobalt	59-2	1949773	1937294	1938637	1941901	0.35	cps
Copper	63-2	15035412	14897120	14874844	14935792	0.58	cps
Dysprosium	156-1	113	103	90	102	11.45	cps
Dysprosium	156-2	23	17	7	16	53.90	cps
Erbium	164-1	147	130	160	146	10.33	cps
Erbium	164-2	53	57	67	59	11.79	cps
Gadolinium	160-1	160	163	183	169	7.47	cps
Gadolinium	160-2	60	27	23	37	55.30	cps
Holmium	165-1	18675645	19078671	19463348	19072555	2.07	cps
Holmium	165-2	7188799	7196428	7298354	7227861	0.85	cps
Indium	115-1	14890826	15070943	15427654	15129808	1.81	cps
Indium	115-2	1643980	1635226	1623831	1634346	0.62	cps
Iron	54-2	2140432	2078215	2092129	2103592	1.55	cps
Iron	56-2	38666761	38402314	37688142	38252406	1.32	cps
Iron	57-2	945072	932857	927664	935198	0.96	cps
Krypton	83-1	233	240	217	230	5.22	cps
Lead	206-1	16632424	16721463	16874753	16742880	0.73	cps

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Date & Time Ac	quired: 2025-02-06 12:21:31		Datar	ile Name :	008CALS.d			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	14199802	14359754	14482513	14347356	0.99	cps	
Lead	208-1	65906237	66069131	66833915	66269761	0.75	cps	
Lithium	6-1	8844325	8711131	8839599	8798352	0.86	cps	
Magnesium	24-2	6893702	6830540	6961069	6895104	0.95	cps	
Manganese	55-2	4170857	4156464	4156385	4161235	0.20	cps	
Molybdenum	94-1	15007301	14845417	15143077	14998598	0.99	cps	
Molybdenum	95-1	21112342	21261318	21272688	21215449	0.42	cps	
Molybdenum	96-1	23177749	23352015	23149916	23226560	0.47	cps	
Molybdenum	97-1	13119514	13235765	13117499	13157593	0.51	cps	
Molybdenum	98-1	34436208	34190959	34126944	34251371	0.48	cps	
Neodymium	150-1	293	317	277	296	6.80	cps	
Neodymium	150-2	7	3	7	6	34.70	cps	
Nickel	60-2	555487	554863	554589	554980	0.08	cps	
Phosphorus	31-2	19850	19353	20164	19789	2.07	cps	
Potassium	39-2	2049243	1999633	1989388	2012755	1.59	cps	
Rhodium	103-1	14035049	14335741	14421507	14264099	1.42	cps	
Rhodium	103-2	5915791	5877862	5838446	5877366	0.66	cps	
Scandium	45-1	10778364	10913377	10980519	10890753	0.95	cps	
Scandium	45-2	229693	226490	229506	228563	0.79	cps	
Selenium	82-1	64147	64452	64344	64314	0.24	cps	
Selenium	77-2	1197	1257	1243	1232	2.56	cps	
Selenium	78-2	4141	4044	4114	4100	1.22	cps	
Silicon	28-1	4019170	4097336	4077675	4064727	1.00	cps	
Silver	107-1	5405798	5395142	5456702	5419214	0.61	cps	
Silver	109-1	5094150	5090509	5127782	5104147	0.40	cps	
Sodium	23-2	13899727	13566310	13840921	13768986	1.29	cps	
Strontium	86-1	1337419	1332866	1340730	1337005	0.30	cps	
Strontium	88-1	11764634	11889991	11706445	11787023	0.80	cps	
Sulfur	34-1	1215129	1207730	1198612	1207157	0.69	cps	
Terbium	159-1	19326943	19237876	19995523	19520114	2.12	cps	
Terbium	159-2	6959400	7011956	7027230	6999528	0.51	cps	
Thallium	203-1	4090005	4092546	4134062	4105538	0.60	cps	
Thallium	205-1	9663443	9821273	9728497	9737738	0.81	cps	
Tin	118-1	3352786	3314541	3395184	3354170	1.20	cps	
Titanium	47-1	6570723	6797782	6685795	6684766	1.70	cps	
Uranium	238-1	13089032	13126832	13214494	13143453	0.49	cps	

LB Number : LB134612 Operator :

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:21:31 DataFile Name: 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	775431	775648	776082	775720	0.04	cps
Ytterbium	172-1	177	137	193	169	17.24	cps
Ytterbium	172-2	43	70	57	57	23.53	cps
Ytterbium	176-1	20483	20115	20433	20344	0.98	cps
Ytterbium	176-2	7349	7732	7562	7548	2.55	cps
Yttrium	89-1	26733145	26821661	27182710	26912505	0.88	cps
Yttrium	89-2	2066380	2042858	2106914	2072050	1.56	cps
Zinc	66-2	1730467	1685408	1683784	1699887	1.56	cps
Zirconium	90-1	7359632	7312209	7438462	7370101	0.87	cps
Zirconium	91-1	1625969	1656503	1659039	1647171	1.12	cps

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Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	727753	723308	725074	725378	0.31	cps
Antimony	121-1	8031599	8154392	8195334	8127108	1.05	cps
Arsenic	75-2	172471	172846	175407	173575	0.92	cps
Barium	135-1	9502127	9612055	9662770	9592318	0.86	cps
Barium	137-1	16615159	16896466	16638979	16716868	0.93	cps
Beryllium	9-1	3023153	3083444	3091009	3065869	1.21	cps
Bismuth	209-1	11582195	11429356	11505717	11505756	0.66	cps
Bismuth	209-2	5049446	4948859	5090762	5029689	1.45	cps
Bromine	81-1	4087	3587	3707	3794	6.88	cps
Cadmium	108-1	157731	157316	157327	157458	0.15	cps
Cadmium	106-1	229136	231388	231141	230555	0.54	cps
Cadmium	111-1	2007686	1990481	2025456	2007874	0.87	cps
Calcium	43-1	2691881	2789869	2728031	2736594	1.81	cps
Calcium	44-1	44298696	44449201	43872994	44206964	0.68	cps
Carbon	12-1	7033492	7243901	7325016	7200803	2.09	cps
Carbon	12-2	50159	48988	49995	49714	1.28	cps
Chlorine	35-1	174383	175438	175995	175272	0.47	cps
Chlorine	35-2	733	703	743	727	2.86	cps
Chromium	52-2	1986624	1933539	1951569	1957244	1.38	cps
Cobalt	59-2	3680440	3661378	3637459	3659759	0.59	cps
Copper	63-2	28212889	28561340	28385672	28386633	0.61	cps
Dysprosium	156-1	193	193	210	199	4.84	cps
Dysprosium	156-2	20	37	33	30	29.40	cps
Erbium	164-1	207	203	173	194	9.44	cps
Erbium	164-2	73	50	40	54	31.42	cps
Gadolinium	160-1	190	213	163	189	13.24	cps
Gadolinium	160-2	53	83	57	64	25.51	cps
Holmium	165-1	18901695	18493068	18928987	18774584	1.30	cps
Holmium	165-2	7031421	6963298	6941002	6978574	0.67	cps
Indium	115-1	14877403	14449438	14617891	14648244	1.47	cps
Indium	115-2	1575008	1512139	1534004	1540384	2.07	cps
Iron	54-2	3962709	4012106	4064910	4013242	1.27	cps
Iron	56-2	73048947	72054507	71817714	72307056	0.90	cps
Iron	57-2	1853118	1887142	1861979	1867413	0.95	cps
Krypton	83-1	290	377	263	310	19.11	cps
Lead	206-1	32053124	32019266	31903926	31992105	0.24	cps

Lab Sample ID: S06 Instrumnet Name: P8
Client Sample ID: S06 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27491291	27347154	27891644	27576696	1.02	cps
Lead	208-1	126317807	126507011	127477116	126767311	0.49	cps
Lithium	6-1	8725884	8452820	8433873	8537526	1.91	cps
Magnesium	24-2	13265646	13040299	13123584	13143177	0.87	cps
Manganese	55-2	7926696	7778140	7824667	7843168	0.97	cps
Molybdenum	94-1	28696967	29070750	28841675	28869797	0.65	cps
Molybdenum	95-1	40650788	41437959	41113407	41067385	0.96	cps
Molybdenum	96-1	45015996	45173254	44873923	45021058	0.33	cps
Molybdenum	97-1	25328836	25329551	25289345	25315911	0.09	cps
Molybdenum	98-1	65634089	66393877	66560194	66196053	0.75	cps
Neodymium	150-1	543	550	550	548	0.70	cps
Neodymium	150-2	27	17	23	22	22.91	cps
Nickel	60-2	964537	973448	960700	966228	0.68	cps
Phosphorus	31-2	36255	36439	36061	36252	0.52	cps
Potassium	39-2	3730959	3738105	3724100	3731055	0.19	cps
Rhodium	103-1	13921268	13730898	13655629	13769265	0.99	cps
Rhodium	103-2	5654421	5534422	5562181	5583675	1.13	cps
Scandium	45-1	11063815	10568811	10661791	10764806	2.44	cps
Scandium	45-2	218499	212627	214273	215133	1.41	cps
Selenium	82-1	119933	121178	122290	121134	0.97	cps
Selenium	77-2	2310	2450	2324	2361	3.27	cps
Selenium	78-2	7559	7695	7846	7700	1.86	cps
Silicon	28-1	7081938	7092899	7210499	7128446	1.00	cps
Silver	107-1	10097623	10380950	10264373	10247648	1.39	cps
Silver	109-1	9469597	9709371	9664031	9614333	1.32	cps
Sodium	23-2	26735208	25808874	26123570	26222551	1.80	cps
Strontium	86-1	2639480	2710345	2686230	2678685	1.35	cps
Strontium	88-1	22863448	23146054	22889815	22966439	0.68	cps
Sulfur	34-1	1542131	1516409	1537580	1532040	0.90	cps
Terbium	159-1	19476427	19247160	19390062	19371216	0.60	cps
Terbium	159-2	6821970	6712442	6649922	6728111	1.29	cps
Thallium	203-1	7878319	7714251	7874703	7822425	1.20	cps
Thallium	205-1	18604544	18508286	18488872	18533901	0.33	cps
Tin	118-1	6343602	6494097	6598557	6478752	1.98	cps
Titanium	47-1	12756625	13049561	12834451	12880212	1.18	cps
Uranium	238-1	24700718	25665374	25619500	25328531	2.15	cps

LB Number : LB134612 Operator :

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:24:18 DataFile Name: 009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1555910	1543795	1525819	1541841	0.98	cps
Ytterbium	172-1	183	143	257	194	29.56	cps
Ytterbium	172-2	90	83	70	81	12.55	cps
Ytterbium	176-1	37901	38262	38122	38095	0.48	cps
Ytterbium	176-2	14672	14592	14411	14558	0.92	cps
Yttrium	89-1	26879671	26689068	26376425	26648388	0.95	cps
Yttrium	89-2	2032356	1973964	1980411	1995577	1.60	cps
Zinc	66-2	3090335	3087282	3021703	3066440	1.26	cps
Zirconium	90-1	14130179	14359657	14324793	14271543	0.87	cps
Zirconium	91-1	3176736	3251431	3240024	3222730	1.25	cps

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Lab Sample ID: S07 Instrumnet Name: P8
Client Sample ID: S07 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1478227	1490745	1475104	1481359	0.56	cps
Antimony	121-1	15907673	16086655	16293804	16096044	1.20	cps
Arsenic	75-2	347031	347402	347645	347359	0.09	cps
Barium	135-1	18865895	19081466	19373907	19107089	1.33	cps
Barium	137-1	32713920	33547877	33287565	33183121	1.29	cps
Beryllium	9-1	5966290	5970200	6002875	5979788	0.34	cps
Bismuth	209-1	11500362	11378110	11343770	11407414	0.72	cps
Bismuth	209-2	5047653	5031844	5011660	5030385	0.36	cps
Bromine	81-1	4027	4074	3944	4015	1.64	cps
Cadmium	108-1	313042	317158	314054	314751	0.68	cps
Cadmium	106-1	445752	450501	455094	450449	1.04	cps
Cadmium	111-1	3934869	3987633	4003151	3975218	0.90	cps
Calcium	43-1	5326185	5392213	5507480	5408626	1.70	cps
Calcium	44-1	87272235	88191302	88996792	88153443	0.98	cps
Carbon	12-1	7888259	8179511	8221453	8096408	2.24	cps
Carbon	12-2	57833	58128	57639	57867	0.43	cps
Chlorine	35-1	194829	197164	200883	197625	1.54	cps
Chlorine	35-2	923	840	867	877	4.86	cps
Chromium	52-2	3884849	3926358	3794061	3868423	1.75	cps
Cobalt	59-2	7252536	7210068	7259606	7240737	0.37	cps
Copper	63-2	54925471	54897134	55734334	55185646	0.86	cps
Dysprosium	156-1	283	357	347	329	12.09	cps
Dysprosium	156-2	63	43	70	59	23.57	cps
Erbium	164-1	220	263	277	253	11.70	cps
Erbium	164-2	83	103	60	82	26.38	cps
Gadolinium	160-1	237	227	260	241	7.10	cps
Gadolinium	160-2	57	93	83	78	24.37	cps
Holmium	165-1	18892438	18834016	18792289	18839581	0.27	cps
Holmium	165-2	7080777	7083308	7169958	7111348	0.71	cps
Indium	115-1	14536549	14542521	14592191	14557087	0.21	cps
Indium	115-2	1530754	1538144	1503099	1523999	1.21	cps
Iron	54-2	7794851	7808987	7948302	7850713	1.08	cps
Iron	56-2	141539905	142594408	141166445	141766919	0.52	cps
Iron	57-2	3695126	3669716	3573579	3646140	1.76	cps
Krypton	83-1	283	333	267	294	11.78	cps
Lead	206-1	62484467	62949192	63782509	63072056	1.04	cps

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

Date & Time Acc	quirea: 202	25-02-06 12:27:05	DataFi	ie Name :	010CALS.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	53857091	54405836	54647956	54303628	0.75	cps
Lead	208-1	249516203	252277136	252779603	251524314	0.70	cps
Lithium	6-1	8490599	8333754	8275242	8366532	1.33	cps
Magnesium	24-2	25617554	26083670	25771685	25824303	0.92	cps
Manganese	55-2	15824795	15678609	15717569	15740325	0.48	cps
Molybdenum	94-1	56493969	57868816	57331447	57231411	1.21	cps
Molybdenum	95-1	81228515	81241000	82365267	81611594	0.80	cps
Molybdenum	96-1	90332749	89159999	90884615	90125788	0.98	cps
Molybdenum	97-1	51047141	50345018	50960299	50784153	0.75	cps
Molybdenum	98-1	132223608	133286628	131936935	132482390	0.54	cps
Neodymium	150-1	1300	1077	1217	1198	9.42	cps
Neodymium	150-2	43	43	43	43	0.00	cps
Nickel	60-2	2020771	2000205	2025026	2015334	0.66	cps
Phosphorus	31-2	71384	72480	71344	71736	0.90	cps
Potassium	39-2	7465606	7562649	7420809	7483021	0.97	cps
Rhodium	103-1	13621097	13356727	13479736	13485853	0.98	cps
Rhodium	103-2	5553290	5558051	5568447	5559929	0.14	cps
Scandium	45-1	10601975	10574972	10654746	10610564	0.38	cps
Scandium	45-2	222625	220469	220681	221259	0.54	cps
Selenium	82-1	238832	240033	243009	240625	0.89	cps
Selenium	77-2	4524	4451	4311	4429	2.45	cps
Selenium	78-2	15348	15652	15582	15528	1.02	cps
Silicon	28-1	13213174	13251026	13020754	13161651	0.94	cps
Silver	107-1	20086364	20145731	20182981	20138359	0.24	cps
Silver	109-1	19026341	18764733	18898842	18896639	0.69	cps
Sodium	23-2	51830029	52090336	51002531	51640965	1.10	cps
Strontium	86-1	5219753	5362695	5245694	5276047	1.44	cps
Strontium	88-1	45755314	45963693	45604576	45774528	0.39	cps
Sulfur	34-1	2219528	2247102	2216188	2227606	0.76	cps
Terbium	159-1	19255737	18936896	19373706	19188780	1.18	cps
Terbium	159-2	6799196	6883486	6790911	6824531	0.75	cps
Thallium	203-1	15399515	15463684	15541301	15468167	0.46	cps
Thallium	205-1	36949323	36725365	37178799	36951163	0.61	cps
Tin	118-1	12716397	12825915	12882971	12808428	0.66	cps
Titanium	47-1	25815693	25659760	25777973	25751142	0.32	cps
Uranium	238-1	51111966	52042983	51006356	51387101	1.11	cps

LB Number : LB134612 Operator :

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:27:05 DataFile Name: 010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
								_
Vanadium	51-2	3062741	3048036	3090576	3067118	0.70	cps	
Ytterbium	172-1	203	310	267	260	20.63	cps	
Ytterbium	172-2	127	87	87	100	23.09	cps	
Ytterbium	176-1	74244	75390	74371	74668	0.84	cps	
Ytterbium	176-2	27936	28802	28180	28306	1.58	cps	
Yttrium	89-1	26853554	26529204	25938540	26440433	1.75	cps	
Yttrium	89-2	2030607	2037754	2006209	2024857	0.82	cps	
Zinc	66-2	5980741	5995489	5979827	5985352	0.15	cps	
Zirconium	90-1	27928636	28703199	28526435	28386090	1.43	cps	
Zirconium	91-1	6270988	6313724	6395916	6326876	1.00	cps	

Jaswal

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Date & Time At	quireu . 202	3-02-00 12.29.51	DalaFi	ie name.	UTICALS.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7111375	7184102	7096579	7130685	0.66	cps
Antimony	121-1	6535	6168	6161	6288	3.40	cps
Arsenic	75-2	243	223	210	226	7.44	cps
Barium	135-1	7282	6648	6952	6961	4.55	cps
Barium	137-1	12633	12566	12102	12434	2.32	cps
Beryllium	9-1	2267	1861	1941	2023	10.64	cps
Bismuth	209-1	9670068	9786847	9792358	9749757	0.71	cps
Bismuth	209-2	4450812	4524946	4476082	4483946	0.84	cps
Bromine	81-1	4034	4011	4047	4031	0.46	cps
Cadmium	108-1	183	230	187	200	13.02	cps
Cadmium	106-1	7129	7132	7325	7195	1.57	cps
Cadmium	111-1	5595	5558	5644	5599	0.77	cps
Calcium	43-1	25593620	25477560	25558408	25543196	0.23	cps
Calcium	44-1	419534207	422284234	417417994	419745478	0.58	cps
Carbon	12-1	6960702	6987123	7061879	7003235	0.75	cps
Carbon	12-2	62987	61150	61471	61869	1.59	cps
Chlorine	35-1	157330	155906	155033	156090	0.74	cps
Chlorine	35-2	723	657	693	691	4.83	cps
Chromium	52-2	9430	9707	9256	9464	2.40	cps
Cobalt	59-2	15545	14908	15121	15192	2.14	cps
Copper	63-2	11111	11418	11501	11344	1.81	cps
Dysprosium	156-1	683	597	490	590	16.41	cps
Dysprosium	156-2	210	230	203	214	6.47	cps
Erbium	164-1	737	740	743	740	0.45	cps
Erbium	164-2	267	270	247	261	4.83	cps
Gadolinium	160-1	643	683	643	657	3.52	cps
Gadolinium	160-2	323	250	287	287	12.79	cps
Holmium	165-1	17356685	17234881	17063709	17218425	0.85	cps
Holmium	165-2	6709295	6650980	6710052	6690109	0.51	cps
Indium	115-1	12978444	12888503	12686119	12851022	1.17	cps
Indium	115-2	1400862	1404760	1406715	1404112	0.21	cps
Iron	54-2	37101010	36692526	37519987	37104508	1.12	cps
Iron	56-2	676287577	676177683	685610176	679358479	0.80	cps
Iron	57-2	16953199	17027901	17233096	17071399	0.85	cps
Krypton	83-1	313	263	380	319	18.35	cps
Lead	206-1	15286	14758	14966	15003	1.77	cps

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Lead         207-1         12940         13067         12643         12850         2.13         cps           Lead         208-1         59474         59497         58332         59101         1.13         cps           Lithium         6-1         7415734         7469342         7465492         7450189         0.40         cps           Magnesium         24-2         122631098         123869295         124557435         123685943         0.79         cps           Manganese         65-2         6965         6605         6998         6856         3.18         cps           Molybdenum         94-1         24989         24465         23483         24312         3.14         cps           Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lithium         6-1         7415734         7469342         7465492         7450189         0.40         cps           Magnesium         24-2         122631098         123869295         12457435         123685943         0.79         cps           Manganese         55-2         6965         6605         6998         6856         3.18         cps           Molybdenum         94-1         24989         24465         23483         24312         3.14         cps           Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps	Lead	207-1	12940	13067	12543	12850	2.13	cps
Magnesium         24-2         122631098         123869295         12457435         123685943         0.79         cps           Manganese         55-2         6965         6605         6998         6856         3.18         cps           Molybdenum         94-1         24989         24465         23483         24312         3.14         cps           Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Rh	Lead	208-1	59474	59497	58332	59101	1.13	cps
Manganese         55-2         6965         6605         6998         6856         3.18         cps           Molybdenum         94-1         24989         24465         23483         24312         3.14         cps           Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Rhodium         103	Lithium	6-1	7415734	7469342	7465492	7450189	0.40	cps
Molybdenum         94-1         24989         24465         23483         24312         3.14         cps           Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Photassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps	Magnesium	24-2	122631098	123869295	124557435	123685943	0.79	cps
Molybdenum         95-1         12559         11435         11755         11916         4.86         cps           Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Sc	Manganese	55-2	6965	6605	6998	6856	3.18	cps
Molybdenum         96-1         16697         16033         15385         16038         4.09         cps           Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps	Molybdenum	94-1	24989	24465	23483	24312	3.14	cps
Molybdenum         97-1         7319         6969         6502         6930         5.92         cps           Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Scandium         45-1         9718644         994688         5011806         4965394         0.82         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps	Molybdenum	95-1	12559	11435	11755	11916	4.86	cps
Molybdenum         98-1         18599         17231         16807         17546         5.34         cps           Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Selenium         45-2         203232         206688         207131         205683         1.04         cps      <	Molybdenum	96-1	16697	16033	15385	16038	4.09	cps
Neodymium         150-1         300         350         313         321         8.06         cps           Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scalenium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         77-2         0         3         0         1         173.21         cps <td< td=""><td>Molybdenum</td><td>97-1</td><td>7319</td><td>6969</td><td>6502</td><td>6930</td><td>5.92</td><td>cps</td></td<>	Molybdenum	97-1	7319	6969	6502	6930	5.92	cps
Neodymium         150-2         77         73         73         74         2.59         cps           Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Siliver<	Molybdenum	98-1	18599	17231	16807	17546	5.34	cps
Nickel         60-2         6538         6465         6535         6513         0.64         cps           Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps	Neodymium	150-1	300	350	313	321	8.06	cps
Phosphorus         31-2         123         83         127         111         21.71         cps           Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps <t< td=""><td>Neodymium</td><td>150-2</td><td>77</td><td>73</td><td>73</td><td>74</td><td>2.59</td><td>cps</td></t<>	Neodymium	150-2	77	73	73	74	2.59	cps
Potassium         39-2         36181777         36639506         36616581         36479288         0.71         cps           Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         109-1         2637         2364         2194         2398         9.33         cps           <	Nickel	60-2	6538	6465	6535	6513	0.64	cps
Rhodium         103-1         11579544         11707732         11582169         11623149         0.63         cps           Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         82249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Solium         23-2         250896916         249190010         246315976         248800967         0.93         cps	Phosphorus	31-2	123	83	127	111	21.71	cps
Rhodium         103-2         4949688         4934688         5011806         4965394         0.82         cps           Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Solium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Stront	Potassium	39-2	36181777	36639506	36616581	36479288	0.71	cps
Scandium         45-1         9718644         9545877         9626464         9630329         0.90         cps           Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Silver         109-1         2637         2364         2194         2398         9.33         cps           Sodium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium	Rhodium	103-1	11579544	11707732	11582169	11623149	0.63	cps
Scandium         45-2         203232         206688         207131         205683         1.04         cps           Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Silver         109-1         2637         2364         2194         2398         9.33         cps           Sodium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium         88-1         140324         139455         141037         140272         0.56         cps	Rhodium	103-2	4949688	4934688	5011806	4965394	0.82	cps
Selenium         82-1         23         87         -27         28         204.49         cps           Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Silver         109-1         2637         2364         2194         2398         9.33         cps           Sodium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium         88-1         140324         139455         141037         140272         0.56         cps	Scandium	45-1	9718644	9545877	9626464	9630329	0.90	cps
Selenium         77-2         0         3         0         1         173.21         cps           Selenium         78-2         3         10         7         7         50.03         cps           Silicon         28-1         822249         809841         800870         810987         1.32         cps           Silver         107-1         2950         2437         2337         2575         12.78         cps           Silver         109-1         2637         2364         2194         2398         9.33         cps           Sodium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium         88-1         140324         139455         141037         140272         0.56         cps	Scandium	45-2	203232	206688	207131	205683	1.04	cps
Selenium       78-2       3       10       7       7       50.03       cps         Silicon       28-1       822249       809841       800870       810987       1.32       cps         Silver       107-1       2950       2437       2337       2575       12.78       cps         Silver       109-1       2637       2364       2194       2398       9.33       cps         Sodium       23-2       250896916       249190010       246315976       248800967       0.93       cps         Strontium       86-1       16573       16637       16597       16602       0.19       cps         Strontium       88-1       140324       139455       141037       140272       0.56       cps	Selenium	82-1	23	87	-27	28	204.49	cps
Silicon       28-1       822249       809841       800870       810987       1.32       cps         Silver       107-1       2950       2437       2337       2575       12.78       cps         Silver       109-1       2637       2364       2194       2398       9.33       cps         Sodium       23-2       250896916       249190010       246315976       248800967       0.93       cps         Strontium       86-1       16573       16637       16597       16602       0.19       cps         Strontium       88-1       140324       139455       141037       140272       0.56       cps	Selenium	77-2	0	3	0	1	173.21	cps
Silver       107-1       2950       2437       2337       2575       12.78       cps         Silver       109-1       2637       2364       2194       2398       9.33       cps         Sodium       23-2       250896916       249190010       246315976       248800967       0.93       cps         Strontium       86-1       16573       16637       16597       16602       0.19       cps         Strontium       88-1       140324       139455       141037       140272       0.56       cps	Selenium	78-2	3	10	7	7	50.03	cps
Silver       109-1       2637       2364       2194       2398       9.33       cps         Sodium       23-2       250896916       249190010       246315976       248800967       0.93       cps         Strontium       86-1       16573       16637       16597       16602       0.19       cps         Strontium       88-1       140324       139455       141037       140272       0.56       cps	Silicon	28-1	822249	809841	800870	810987	1.32	cps
Sodium         23-2         250896916         249190010         246315976         248800967         0.93         cps           Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium         88-1         140324         139455         141037         140272         0.56         cps	Silver	107-1	2950	2437	2337	2575	12.78	cps
Strontium         86-1         16573         16637         16597         16602         0.19         cps           Strontium         88-1         140324         139455         141037         140272         0.56         cps	Silver	109-1	2637	2364	2194	2398	9.33	cps
Strontium 88-1 140324 139455 141037 140272 0.56 cps	Sodium	23-2	250896916	249190010	246315976	248800967	0.93	cps
	Strontium	86-1	16573	16637	16597	16602	0.19	cps
Sulfur 34-1 686851 659894 649243 665329 2.91 cps	Strontium	88-1	140324	139455	141037	140272	0.56	cps
•	Sulfur	34-1	686851	659894	649243	665329	2.91	cps
Terbium 159-1 17581348 17539916 17802801 17641355 0.80 cps	Terbium	159-1	17581348	17539916	17802801	17641355	0.80	cps
Terbium 159-2 6430702 6499098 6437983 6455928 0.58 cps	Terbium	159-2	6430702	6499098	6437983	6455928	0.58	cps
Thallium 203-1 1753 1540 1347 1547 13.15 cps	Thallium	203-1	1753	1540	1347	1547	13.15	cps
Thallium 205-1 4354 3754 3227 3778 14.93 cps	Thallium	205-1	4354	3754	3227	3778	14.93	cps
Tin 118-1 4324 4354 4267 4315 1.02 cps	Tin	118-1	4324	4354	4267	4315	1.02	cps
Titanium 47-1 3677 3190 3277 3382 7.68 cps	Titanium	47-1	3677	3190	3277	3382	7.68	cps
Uranium 238-1 3597 2794 2604 2998 17.59 cps	Uranium	238-1	3597	2794	2604	2998	17.59	cps

LB Number: LB134612

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:29:51 DataFile Name: 011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	833	760	870	821	6.82	cps
Ytterbium	172-1	877	913	857	882	3.26	cps
Ytterbium	172-2	390	337	397	374	8.78	cps
Ytterbium	176-1	2250	2324	2200	2258	2.75	cps
Ytterbium	176-2	593	537	617	582	7.07	cps
Yttrium	89-1	23700940	23951312	23989650	23880634	0.66	cps
Yttrium	89-2	1953666	1953088	1946351	1951035	0.21	cps
Zinc	66-2	3050	2960	2820	2944	3.94	cps
Zirconium	90-1	47280	48367	47544	47730	1.19	cps
Zirconium	91-1	10841	10868	10517	10742	1.82	cps

Operator :

Jaswal

Lab Sample ID :ICV001Instrumnet Name :P8Client Sample ID :ICV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Aluminlum         27-2         37776         38715         38123         38205         1.24         cps           Antimony         121-1         3518285         3467284         3521626         3502398         0.87         cps           Arsenic         75-2         75836         77418         77076         76777         1.08         cps           Barium         135-1         405474         406290         401357         404374         0.54         cps           Beryllium         9-1         672299         672747         673484         672844         0.09         cps           Bismuth         209-1         12260999         12187462         12112890         12187113         0.61         cps           Bismuth         209-2         5504484         5500817         545788         5487890         0.47         cps           Bismuth         108-1         42318         4235         44191         43934         1.35         cps           Bismuth         108-1         48378         48150         46782         46437         0.69         cps           Cadmium         110-1         44378         42234         0.34         cps           Cadmium	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Arsenic         75-2         75836         77418         77076         76777         1.08         cps           Barlum         135-1         405474         406290         401357         404374         0.65         cps           Barlum         137-1         701931         706011         709513         705818         0.54         cps           Bleyllium         9-1         6722999         672747         673484         672844         0.09         cps           Blismuth         209-1         12260999         12187452         12112890         12187113         0.61         cps           Blismuth         209-2         5504484         5500817         5457768         5487690         0.47         cps           Bromine         81-1         4211         4231         4137         4193         1.17         cps           Cadmium         106-1         46378         46150         46782         44437         0.69         cps           Cadmium         111-1         440808         442064         443830         44234         0.34         cps           Calcium         41-1         2129671         2100672         2095750         2108664         0.87         cps <td>Aluminium</td> <td>27-2</td> <td>37776</td> <td>38715</td> <td>38123</td> <td>38205</td> <td>1.24</td> <td>cps</td>	Aluminium	27-2	37776	38715	38123	38205	1.24	cps
Barlum         135-1         405474         406290         401357         404374         0.65         cps           Barlum         137-1         701931         706011         709513         705818         0.54         cps           Beryllum         9-1         672299         672747         673484         672844         0.09         cps           Bismuth         209-1         12280999         12187452         1211890         12187113         0.61         cps           Bismuth         209-2         55048484         5500817         5457768         5487690         0.47         cps           Bismuth         209-2         55048484         5500817         5457768         5487690         0.47         cps           Bismuth         109-2         5504484         4231         4137         4193         1.17         cps           Bismuth         109-2         5504484         4231         4137         4193         1.17         cps           Cadmium         108-1         43278         44150         4632         44234         0.34         cps           Calcium         44-1         210633         129848         129725         129772         0.65         cps </td <td>Antimony</td> <td>121-1</td> <td>3518285</td> <td>3467284</td> <td>3521626</td> <td>3502398</td> <td>0.87</td> <td>cps</td>	Antimony	121-1	3518285	3467284	3521626	3502398	0.87	cps
Barium         137-1         701931         706011         709513         705818         0.54         cps           Beryllium         9-1         672299         672747         673484         672844         0.09         cps           Bismuth         209-1         12260999         12187452         12112890         12187113         0.61         cps           Bismuth         209-2         5504484         5500817         5457768         5487690         0.47         cps           Bromine         81-1         4211         4231         4193         1.17         cps           Cadmium         108-1         43258         44355         44191         43934         1.35         cps           Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         210864         0.87         cps           Calcium         44-1         2159571         2100672         2095750         210864         0.87         cps	Arsenic	75-2	75836	77418	77076	76777	1.08	cps
Beryllium         9-1         672299         672747         673484         672844         0.09         cps           Bismuth         209-1         12260999         12187452         12112890         12187113         0.61         cps           Bismuth         209-2         5504484         5500817         545768         5487690         0.47         cps           Bromine         81-1         4211         4231         4137         4193         1.17         cps           Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Cadmium         111-1         440808         442064         443830         442234         0.34         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         728253         7324836         7267599         1.01         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cp	Barium	135-1	405474	406290	401357	404374	0.65	cps
Bismuth         209-1         12260999         12187452         12112890         12187113         0.61         cps           Bismuth         209-2         5504484         5500817         5457768         5487690         0.47         cps           Bromine         81-1         4211         4231         4197         4193         1.17         cps           Cadmium         108-1         43258         44350         44191         43934         1.35         cps           Cadmium         108-1         440808         442064         44830         442234         0.34         cps           Cadmium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chlorine         35-2         653         757         560         597         8.34         cps	Barium	137-1	701931	706011	709513	705818	0.54	cps
Bismuth         209-2         5504484         5500817         5457768         5487690         0.47         cps           Bromine         81-1         4211         4231         4137         4193         1.17         cps           Cadmium         108-1         43258         44355         44191         43934         1.35         cps           Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chiorine         35-1         150769         149789         150556         150371         0.34         cps           Chiorine         35-2         653         577         50         507         8.34         0.76         cps	Beryllium	9-1	672299	672747	673484	672844	0.09	cps
Bromine         81-1         4211         4231         4197         4193         1.17         cps           Cadmium         108-1         43258         44355         44191         43934         1.35         cps           Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Cadmium         111-1         440808         442064         443830         442234         0.34         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Carbon         12-2         48730         48095         48871         48564         0.87         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         0.76         cps	Bismuth	209-1	12260999	12187452	12112890	12187113	0.61	cps
Cadmium         108-1         43258         44355         44191         43934         1.35         cps           Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Cadmium         111-1         440808         442064         443830         442234         0.34         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chiorine         35-1         150769         149789         150556         150371         0.34         cps           Chiorine         35-2         808641         804438         810610         807896         0.39         cps           Chopar         63-2         808641         804438         810610         807896         0.39         cps </td <td>Bismuth</td> <td>209-2</td> <td>5504484</td> <td>5500817</td> <td>5457768</td> <td>5487690</td> <td>0.47</td> <td>cps</td>	Bismuth	209-2	5504484	5500817	5457768	5487690	0.47	cps
Cadmium         106-1         46378         46150         46782         46437         0.69         cps           Cadmium         111-1         440808         442064         443830         442234         0.34         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48666         0.85         cps           Chlorine         35-1         150769         149789         150566         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418643         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps	Bromine	81-1	4211	4231	4137	4193	1.17	cps
Cadmium         111-1         440808         442064         443830         442234         0.34         cps           Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chlorine         35-2         417991         422083         415826         419634         0.76         cps           C	Cadmium	108-1	43258	44355	44191	43934	1.35	cps
Calcium         43-1         130643         128948         129725         129772         0.65         cps           Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         24.71         cps	Cadmium	106-1	46378	46150	46782	46437	0.69	cps
Calcium         44-1         2129571         2100672         2095750         2108664         0.87         cps           Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium<	Cadmium	111-1	440808	442064	443830	442234	0.34	cps
Carbon         12-1         7186018         7288253         7328436         7267569         1.01         cps           Carbon         12-2         48730         48095         48871         48565         0.85         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         <	Calcium	43-1	130643	128948	129725	129772	0.65	cps
Carbon         12-2         48730         48095         48871         48665         0.85         cps           Chlorine         35-1         150769         149789         150556         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         160-2         40         30         47         39         21.57         cps           Gadolinium         160-1	Calcium	44-1	2129571	2100672	2095750	2108664	0.87	cps
Chlorine         35-1         150769         149789         150566         150371         0.34         cps           Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         166-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Holmium         165-2	Carbon	12-1	7186018	7288253	7328436	7267569	1.01	cps
Chlorine         35-2         653         577         560         597         8.34         cps           Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Holmium         165-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936 <td>Carbon</td> <td>12-2</td> <td>48730</td> <td>48095</td> <td>48871</td> <td>48565</td> <td>0.85</td> <td>cps</td>	Carbon	12-2	48730	48095	48871	48565	0.85	cps
Chromium         52-2         417991         422083         415826         418634         0.76         cps           Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2	Chlorine	35-1	150769	149789	150556	150371	0.34	cps
Cobalt         59-2         808641         804438         810610         807896         0.39         cps           Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1 <td>Chlorine</td> <td>35-2</td> <td>653</td> <td>577</td> <td>560</td> <td>597</td> <td>8.34</td> <td>cps</td>	Chlorine	35-2	653	577	560	597	8.34	cps
Copper         63-2         622710         627512         632385         627536         0.77         cps           Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         5	Chromium	52-2	417991	422083	415826	418634	0.76	cps
Dysprosium         156-1         20         27         37         28         30.20         cps           Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-	Cobalt	59-2	808641	804438	810610	807896	0.39	cps
Dysprosium         156-2         10         7         7         8         24.71         cps           Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron	Copper	63-2	622710	627512	632385	627536	0.77	cps
Erbium         164-1         97         103         107         102         4.98         cps           Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Kr	Dysprosium	156-1	20	27	37	28	30.20	cps
Erbium         164-2         40         30         47         39         21.57         cps           Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Dysprosium	156-2	10	7	7	8	24.71	cps
Gadolinium         160-1         107         103         160         123         25.78         cps           Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Erbium	164-1	97	103	107	102	4.98	cps
Gadolinium         160-2         40         23         40         34         27.94         cps           Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Erbium	164-2	40	30	47	39	21.57	cps
Holmium         165-1         19530936         19363658         19143007         19345867         1.01         cps           Holmium         165-2         7188134         7339491         7366385         7298003         1.32         cps           Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Indium         115-2         1702786         1716664         1700336         1706595         0.52         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Gadolinium	160-1	107	103	160	123	25.78	cps
Holmium       165-2       7188134       7339491       7366385       7298003       1.32       cps         Indium       115-1       15624360       15686694       15715668       15675574       0.30       cps         Indium       115-2       1702786       1716664       1700336       1706595       0.52       cps         Iron       54-2       349193       351250       348744       349729       0.38       cps         Iron       56-2       6352436       6166124       6346127       6288229       1.68       cps         Iron       57-2       154861       154558       154025       154481       0.27       cps         Krypton       83-1       213       307       270       263       17.86       cps	Gadolinium	160-2	40	23	40	34	27.94	cps
Indium         115-1         15624360         15686694         15715668         15675574         0.30         cps           Indium         115-2         1702786         1716664         1700336         1706595         0.52         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Holmium	165-1	19530936	19363658	19143007	19345867	1.01	cps
Indium         115-2         1702786         1716664         1700336         1706595         0.52         cps           Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Holmium	165-2	7188134	7339491	7366385	7298003	1.32	cps
Iron         54-2         349193         351250         348744         349729         0.38         cps           Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Indium	115-1	15624360	15686694	15715668	15675574	0.30	cps
Iron         56-2         6352436         6166124         6346127         6288229         1.68         cps           Iron         57-2         154861         154558         154025         154481         0.27         cps           Krypton         83-1         213         307         270         263         17.86         cps	Indium	115-2	1702786	1716664	1700336	1706595	0.52	cps
Iron     57-2     154861     154558     154025     154481     0.27     cps       Krypton     83-1     213     307     270     263     17.86     cps	Iron	54-2	349193	351250	348744	349729	0.38	cps
Krypton 83-1 213 307 270 263 17.86 cps	Iron	56-2	6352436	6166124	6346127	6288229	1.68	cps
	Iron	57-2	154861	154558	154025	154481	0.27	cps
Lead 206-1 2841099 2834233 2884812 2853381 0.96 cps	Krypton	83-1	213	307	270	263	17.86	cps
	Lead	206-1	2841099	2834233	2884812	2853381	0.96	cps

Lab Sample ID :ICV001Instrumnet Name :P8Client Sample ID :ICV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Date & Time Acc	quirea: 202	25-02-06 12:45:45	Datar	ile Name :	012ICV.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2335929	2384811	2416769	2379170	1.71	cps
Lead	208-1	10989917	11171804	11206645	11122789	1.05	cps
Lithium	6-1	8999658	9082072	8941669	9007800	0.78	cps
Magnesium	24-2	321983	316866	318943	319264	0.81	cps
Manganese	55-2	167591	169085	168484	168387	0.45	cps
Molybdenum	94-1	24116314	23936361	24021429	24024701	0.37	cps
Molybdenum	95-1	41769889	42166579	42148059	42028176	0.53	cps
Molybdenum	96-1	45411478	45789256	45276844	45492526	0.58	cps
Molybdenum	97-1	26225311	26318973	25768501	26104262	1.13	cps
Molybdenum	98-1	67391746	67809506	66708071	67303107	0.83	cps
Neodymium	150-1	57	47	47	50	11.55	cps
Neodymium	150-2	7	3	0	3	100.05	cps
Nickel	60-2	221512	223962	223088	222854	0.56	cps
Phosphorus	31-2	120	83	123	109	20.39	cps
Potassium	39-2	326235	322972	326399	325202	0.59	cps
Rhodium	103-1	15220405	15005582	14927342	15051110	1.01	cps
Rhodium	103-2	6230946	6161092	6206494	6199511	0.57	cps
Scandium	45-1	11326349	11104782	11113400	11181510	1.12	cps
Scandium	45-2	233074	231200	229525	231266	0.77	cps
Selenium	82-1	53894	54071	54125	54030	0.22	cps
Selenium	77-2	1080	1060	953	1031	6.60	cps
Selenium	78-2	3340	3374	3340	3352	0.57	cps
Silicon	28-1	655127	656254	656934	656105	0.14	cps
Silver	107-1	1025986	1045902	1046230	1039373	1.12	cps
Silver	109-1	979417	990222	1006004	991881	1.35	cps
Sodium	23-2	1193289	1210260	1170958	1191502	1.65	cps
Strontium	86-1	2845266	2867487	2825536	2846096	0.74	cps
Strontium	88-1	24657236	24491727	24253579	24467514	0.83	cps
Sulfur	34-1	768003	752962	749669	756878	1.29	cps
Terbium	159-1	19909884	19742394	20022287	19891522	0.71	cps
Terbium	159-2	7103819	7122615	6974327	7066920	1.14	cps
Thallium	203-1	3452613	3388893	3502142	3447882	1.65	cps
Thallium	205-1	8102989	7960762	8073069	8045607	0.93	cps
Tin	118-1	2700	3214	2754	2889	9.78	cps
Titanium	47-1	1450	1587	1547	1528	4.60	cps
Uranium	238-1	797	677	753	742	8.19	cps

Lab Sample ID :ICV001Instrumnet Name :P8Client Sample ID :ICV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:45:45 DataFile Name: 012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Farameter	IVIASS	CF31	UP32	CF33	CFSIVIEATI	CFSRSD	Units
Vanadium	51-2	322419	322308	315334	320020	1.27	cps
Ytterbium	172-1	130	167	90	129	29.75	cps
Ytterbium	172-2	43	47	67	52	24.17	cps
Ytterbium	176-1	1840	1890	1877	1869	1.39	cps
Ytterbium	176-2	450	447	327	408	17.23	cps
Yttrium	89-1	28261925	27976193	27451385	27896501	1.47	cps
Yttrium	89-2	2120940	2135279	2158834	2138351	0.89	cps
Zinc	66-2	127644	129737	130955	129445	1.29	cps
Zirconium	90-1	1533	1513	1370	1472	6.05	cps
Zirconium	91-1	840	953	957	917	7.25	cps

Lab Sample ID :ICB001Instrumnet Name :P8Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

	Juirea: 202	25-02-06 12:50:48	Datar	DataFile Name :		013CCBE.d			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Aluminium	27-2	97	130	107	111	15.39	cps		
Antimony	121-1	503	570	583	552	7.76	cps		
Arsenic	75-2	27	0	0	9	173.21	cps		
Barium	135-1	117	80	103	100	18.56	cps		
Barium	137-1	137	160	153	150	8.01	cps		
Beryllium	9-1	729	672	691	697	4.11	cps		
Bismuth	209-1	12225291	12255663	12075051	12185335	0.79	cps		
Bismuth	209-2	5476060	5427511	5413200	5438924	0.61	cps		
Bromine	81-1	4004	4131	3941	4025	2.40	cps		
Cadmium	108-1	7	13	27	16	65.47	cps		
Cadmium	106-1	7172	7789	7582	7514	4.18	cps		
Cadmium	111-1	5069	5493	5329	5297	4.04	cps		
Calcium	43-1	617	690	670	659	5.75	cps		
Calcium	44-1	34565	33810	34147	34174	1.11	cps		
Carbon	12-1	6207591	6351346	6336719	6298552	1.26	cps		
Carbon	12-2	41328	41485	41047	41287	0.54	cps		
Chlorine	35-1	154912	154110	152079	153700	0.95	cps		
Chlorine	35-2	663	557	637	619	8.97	cps		
Chromium	52-2	1037	1023	1110	1057	4.42	cps		
Cobalt	59-2	120	110	93	108	12.50	cps		
Copper	63-2	5474	5551	5458	5494	0.91	cps		
Dysprosium	156-1	17	20	23	20	16.65	cps		
Dysprosium	156-2	7	3	0	3	100.05	cps		
Erbium	164-1	113	93	113	107	10.82	cps		
Erbium	164-2	37	43	33	38	13.48	cps		
Gadolinium	160-1	127	120	147	131	10.59	cps		
Gadolinium	160-2	37	27	27	30	19.24	cps		
Holmium	165-1	18733260	19044602	19011323	18929728	0.90	cps		
Holmium	165-2	7170051	7161997	7190591	7174213	0.21	cps		
Indium	115-1	15217671	15425472	15360911	15334685	0.69	cps		
Indium	115-2	1743046	1711268	1689515	1714610	1.57	cps		
Iron	54-2	533	557	463	518	9.38	cps		
Iron	56-2	7465	7789	7632	7629	2.12	cps		
Iron	57-2	143	187	253	194	28.50	cps		
Krypton	83-1	250	257	300	269	10.10	cps		
Lead	206-1	3080	3030	3074	3062	0.89	cps		

Lab Sample ID :ICB001Instrumnet Name :P8Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

Date & Time Act	quireu . 202	ulled . 2025-02-00 12.50.46		ile ivallie .	013CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2677	2754	2687	2706	1.54	cps
Lead	208-1	12409	12459	12453	12440	0.22	cps
Lithium	6-1	9079892	8821882	8887853	8929876	1.50	cps
Magnesium	24-2	1743	1740	1683	1722	1.96	cps
Manganese	55-2	123	163	110	132	20.99	cps
Molybdenum	94-1	937	967	770	891	11.89	cps
Molybdenum	95-1	1203	990	1113	1102	9.72	cps
Molybdenum	96-1	1250	1147	1160	1186	4.74	cps
Molybdenum	97-1	663	480	567	570	16.09	cps
Molybdenum	98-1	2194	1363	1357	1638	29.40	cps
Neodymium	150-1	13	7	13	11	34.61	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	623	543	677	614	10.92	cps
Phosphorus	31-2	103	103	90	99	7.79	cps
Potassium	39-2	14531	14057	14317	14302	1.66	cps
Rhodium	103-1	14889942	14769158	14860694	14839931	0.42	cps
Rhodium	103-2	6260718	6179225	6164575	6201506	0.84	cps
Scandium	45-1	11180402	10980463	10977024	11045963	1.05	cps
Scandium	45-2	229534	228224	227557	228438	0.44	cps
Selenium	82-1	50	0	33	28	91.66	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	3	3	10	6	69.34	cps
Silicon	28-1	635300	633690	631714	633568	0.28	cps
Silver	107-1	480	1205	447	711	60.33	cps
Silver	109-1	333	263	307	301	11.73	cps
Sodium	23-2	66752	65412	66169	66111	1.02	cps
Strontium	86-1	527	513	530	523	1.69	cps
Strontium	88-1	927	717	653	766	18.69	cps
Sulfur	34-1	773469	771754	777701	774308	0.40	cps
Terbium	159-1	19656591	19603336	19566019	19608649	0.23	cps
Terbium	159-2	6981353	6992083	7039201	7004212	0.44	cps
Thallium	203-1	467	507	503	492	4.51	cps
Thallium	205-1	1217	1130	1340	1229	8.59	cps
Tin	118-1	1790	2097	1920	1936	7.95	cps
Titanium	47-1	237	223	270	243	9.88	cps
Uranium	238-1	73	53	47	58	24.02	cps

Lab Sample ID :ICB001Instrumnet Name :P8Client Sample ID :ICB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:50:48 DataFile Name: 013CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	13	7	11	34.61	cps
Ytterbium	172-1	123	97	97	106	14.59	cps
Ytterbium	172-2	53	47	50	50	6.66	cps
Ytterbium	176-1	1767	1777	1857	1800	2.74	cps
Ytterbium	176-2	363	363	400	376	5.64	cps
Yttrium	89-1	27280254	26947136	26756037	26994476	0.98	cps
Yttrium	89-2	2147389	2107596	2105443	2120143	1.11	cps
Zinc	66-2	363	373	350	362	3.23	cps
Zirconium	90-1	1030	923	943	966	5.87	cps
Zirconium	91-1	190	183	200	191	4.39	cps

Lab Sample ID: ICSA001 Instrumnet Name: P8

Client Sample ID: ICSA001 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Date & Time Ac	quired. 202	illed . 2025-02-06 12.54.42		ie ivallie .	0141CSA.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6843237	6948448	6905729	6899138	0.77	cps
Antimony	121-1	17842	18312	18276	18143	1.44	cps
Arsenic	75-2	97	117	130	114	14.66	cps
Barium	135-1	5421	5605	5605	5543	1.91	cps
Barium	137-1	9060	8980	9503	9181	3.07	cps
Beryllium	9-1	2276	2307	2174	2252	3.11	cps
Bismuth	209-1	11879058	11021733	11090550	11330447	4.20	cps
Bismuth	209-2	4978348	5102253	5022008	5034203	1.25	cps
Bromine	81-1	6048	6658	6592	6433	5.20	cps
Cadmium	108-1	5451	5661	5148	5420	4.76	cps
Cadmium	106-1	7105	7055	6985	7049	0.86	cps
Cadmium	111-1	7713	7301	7741	7585	3.25	cps
Calcium	43-1	5378412	5361706	5406531	5382216	0.42	cps
Calcium	44-1	88022309	89877015	89181525	89026950	1.05	cps
Carbon	12-1	50090541	50636151	51367714	50698135	1.26	cps
Carbon	12-2	339754	340986	338907	339882	0.31	cps
Chlorine	35-1	80749075	88225452	90578672	86517733	5.93	cps
Chlorine	35-2	408794	416201	417839	414278	1.16	cps
Chromium	52-2	77036	78447	78112	77865	0.95	cps
Cobalt	59-2	8599	8930	8726	8752	1.90	cps
Copper	63-2	48014	49058	48793	48622	1.12	cps
Dysprosium	156-1	83	60	77	73	16.39	cps
Dysprosium	156-2	17	17	27	20	28.86	cps
Erbium	164-1	157	153	113	141	17.09	cps
Erbium	164-2	63	37	57	52	26.57	cps
Gadolinium	160-1	160	177	180	172	6.22	cps
Gadolinium	160-2	33	50	43	42	19.87	cps
Holmium	165-1	20189084	18717061	18417785	19107977	4.96	cps
Holmium	165-2	7198257	7173966	7243697	7205307	0.49	cps
Indium	115-1	15633823	14501014	14264016	14799618	4.95	cps
Indium	115-2	1607442	1541875	1594997	1581438	2.20	cps
Iron	54-2	15903181	16087076	15721601	15903953	1.15	cps
Iron	56-2	292487262	295762822	293071322	293773802	0.59	cps
Iron	57-2	7408903	7490621	7351501	7417008	0.94	cps
Krypton	83-1	357	300	353	337	9.44	cps
Lead	206-1	57323	58933	58866	58374	1.56	cps

Lab Sample ID :ICSA001Instrumnet Name :P8Client Sample ID :ICSA001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Date & Time Act	quireu . 202	25-02-06 12.54.42	Dalar	ile ivallie .	0141CSA.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	46072	45874	46128	46025	0.29	cps
Lead	208-1	216379	220445	219714	218846	0.99	cps
Lithium	6-1	8872078	8404043	8419527	8565216	3.10	cps
Magnesium	24-2	25021015	24894079	24741353	24885482	0.56	cps
Manganese	55-2	12149	12079	12272	12166	0.80	cps
Molybdenum	94-1	9174313	9286619	9191637	9217523	0.66	cps
Molybdenum	95-1	15818515	16052164	16179743	16016807	1.14	cps
Molybdenum	96-1	17381691	17270921	17613465	17422026	1.00	cps
Molybdenum	97-1	9967864	9903506	10202217	10024529	1.57	cps
Molybdenum	98-1	25783171	25997577	26014614	25931787	0.50	cps
Neodymium	150-1	70	63	83	72	14.10	cps
Neodymium	150-2	23	27	30	27	12.51	cps
Nickel	60-2	10858	11191	11104	11051	1.57	cps
Phosphorus	31-2	367059	369390	370007	368819	0.42	cps
Potassium	39-2	15123599	15094781	14937076	15051819	0.67	cps
Rhodium	103-1	14514433	13480883	13595620	13863645	4.09	cps
Rhodium	103-2	5656382	5676510	5696778	5676556	0.36	cps
Scandium	45-1	11529725	10834741	10868340	11077602	3.54	cps
Scandium	45-2	224811	224459	225662	224977	0.28	cps
Selenium	82-1	-47	-7	-40	-31	-68.87	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	10	17	3	10	66.70	cps
Silicon	28-1	1002048	997189	1007493	1002244	0.51	cps
Silver	107-1	1613	1680	1500	1598	5.70	cps
Silver	109-1	1397	1407	1447	1417	1.87	cps
Sodium	23-2	52598971	52940779	52489279	52676343	0.45	cps
Strontium	86-1	172152	176849	178047	175683	1.77	cps
Strontium	88-1	1546483	1589159	1601999	1579214	1.84	cps
Sulfur	34-1	7891038	7792484	7742715	7808746	0.97	cps
Terbium	159-1	20698465	19488666	19399600	19862244	3.65	cps
Terbium	159-2	6937593	6994948	6797645	6910062	1.47	cps
Thallium	203-1	1277	1427	1817	1507	18.50	cps
Thallium	205-1	3167	3631	3901	3566	10.40	cps
Tin	118-1	4771	5118	4901	4930	3.55	cps
Titanium	47-1	5273171	5352924	5439030	5355042	1.55	cps
Uranium	238-1	787	823	843	818	3.51	cps

Lab Sample ID :ICSA001Instrumnet Name :P8Client Sample ID :ICSA001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:54:42 DataFile Name: 014ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	517	473	493	494	4.39	cps	_
Ytterbium	172-1	157	123	113	131	17.30	cps	
Ytterbium	172-2	63	67	67	66	2.94	cps	
Ytterbium	176-1	1860	1687	1737	1761	5.07	cps	
Ytterbium	176-2	300	320	337	319	5.76	cps	
Yttrium	89-1	28535014	26965623	26990590	27497075	3.27	cps	
Yttrium	89-2	2097345	2058664	2068411	2074807	0.97	cps	
Zinc	66-2	7315	7018	7068	7134	2.23	cps	
Zirconium	90-1	1733	1733	1690	1719	1.46	cps	
Zirconium	91-1	327	323	370	340	7.66	cps	

Lab Sample ID : ICSAB001 Instrumnet Name : P8

Client Sample ID : ICSAB001 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Date & Time Acquire	quired . 2020 02 00 12.07.40		Batar lie Hame :		010100D.u		
Parameter	Mass	CPS1 (	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7193168	7099874	7075542	7122862	0.87	cps
Antimony	121-1	345364	349681	353169	349405	1.12	cps
Arsenic	75-2	7992	8119	7602	7905	3.41	cps
Barium	135-1	82851	83693	84622	83722	1.06	cps
Barium	137-1	143399	147046	146527	145658	1.35	cps
Beryllium	9-1	128012	129996	128444	128817	0.81	cps
Bismuth	209-1	11176586	10940487	11183837	11100303	1.25	cps
Bismuth	209-2	5066891	5112523	5029558	5069657	0.82	cps
Bromine	81-1	5715	6255	6328	6099	5.49	cps
Cadmium	108-1	10841	10564	10594	10666	1.42	cps
Cadmium	106-1	14014	14074	13914	14001	0.58	cps
Cadmium	111-1	85069	85593	86526	85729	0.86	cps
Calcium	43-1	5702841	5789850	5673675	5722122	1.06	cps
Calcium	44-1	93107429	93152752	92955119	93071766	0.11	cps
Carbon	12-1	52774528	54527928	54655228	53985894	1.95	cps
Carbon	12-2	362334	361954	361636	361975	0.10	cps
Chlorine	35-1	93502669	98580719	100008949	97364112	3.51	cps
Chlorine	35-2	451855	451203	455910	452989	0.56	cps
Chromium	52-2	159147	160613	162811	160857	1.15	cps
Cobalt	59-2	160709	161315	161329	161118	0.22	cps
Copper	63-2	166779	167562	166118	166820	0.43	cps
Dysprosium	156-1	70	100	50	73	34.32	cps
Dysprosium	156-2	57	27	33	39	40.51	cps
Erbium	164-1	160	173	183	172	6.80	cps
Erbium	164-2	57	53	57	56	3.47	cps
Gadolinium	160-1	137	167	170	158	11.63	cps
Gadolinium	160-2	47	50	57	51	9.96	cps
Holmium	165-1	18796972	19030827	19155313	18994371	0.96	cps
Holmium	165-2	7260506	7221328	7297098	7259644	0.52	cps
Indium	115-1	14812455	14655522	14723732	14730570	0.53	cps
Indium	115-2	1653435	1633711	1629502	1638883	0.78	cps
Iron	54-2	16687413	16607129	16559618	16618054	0.39	cps
Iron	56-2	307803629	305771895	301844456	305139993	0.99	cps
Iron	57-2	7653686	7577037	7722691	7651138	0.95	cps
Krypton	83-1	277	283	277	279	1.38	cps
Lead	206-1	309943	314306	312931	312393	0.71	cps

Lab Sample ID :ICSAB001Instrumnet Name :P8Client Sample ID :ICSAB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
							<u> </u>
Lead	207-1	260468	260371	259344	260061	0.24	cps
Lead	208-1	1199348	1209465	1215397	1208070	0.67	cps
Lithium	6-1	8638275	8293689	8306303	8412755	2.32	cps
Magnesium	24-2	25786905	25181964	25226530	25398466	1.33	cps
Manganese	55-2	45238	44783	45298	45106	0.62	cps
Molybdenum	94-1	9690633	9826086	9727658	9748125	0.72	cps
Molybdenum	95-1	16822254	17045416	16719572	16862414	0.99	cps
Molybdenum	96-1	18121868	18334331	18051926	18169375	0.81	cps
Molybdenum	97-1	10542876	10481167	10484970	10503004	0.33	cps
Molybdenum	98-1	27131755	27119481	27275070	27175436	0.32	cps
Neodymium	150-1	130	57	100	96	38.58	cps
Neodymium	150-2	10	23	23	19	40.75	cps
Nickel	60-2	52583	52282	51854	52240	0.70	cps
Phosphorus	31-2	384053	382721	383575	383450	0.18	cps
Potassium	39-2	15887542	15469901	15600244	15652563	1.37	cps
Rhodium	103-1	13908495	13464495	13756532	13709841	1.65	cps
Rhodium	103-2	5765074	5739275	5733814	5746054	0.29	cps
Scandium	45-1	11068882	10910051	11003241	10994058	0.73	cps
Scandium	45-2	228726	227205	231255	229062	0.89	cps
Selenium	82-1	5071	5268	5078	5139	2.17	cps
Selenium	77-2	77	127	90	98	26.48	cps
Selenium	78-2	377	267	337	327	17.05	cps
Silicon	28-1	1021497	1030312	1027209	1026339	0.44	cps
Silver	107-1	380417	388037	389975	386143	1.31	cps
Silver	109-1	365615	372483	368581	368893	0.93	cps
Sodium	23-2	54787568	54438874	54287316	54504586	0.47	cps
Strontium	86-1	181597	185405	185036	184013	1.14	cps
Strontium	88-1	1619604	1675915	1651182	1648900	1.71	cps
Sulfur	34-1	8250877	8192721	8132155	8191918	0.72	cps
Terbium	159-1	19489428	19315901	19373018	19392782	0.46	cps
Terbium	159-2	6969874	6934673	7008196	6970914	0.53	cps
Thallium	203-1	311922	316283	318426	315544	1.05	cps
Thallium	205-1	747800	754012	761881	754564	0.94	cps
Tin	118-1	4211	4007	4461	4226	5.38	cps
Titanium	47-1	5522398	5685325	5582789	5596837	1.47	cps
Uranium	238-1	890	890	870	883	1.31	cps
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Lab Sample ID :ICSAB001Instrumnet Name :P8Client Sample ID :ICSAB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 12:57:49 DataFile Name: 015ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	63567	63115	63306	63329	0.36	cps
Ytterbium	172-1	103	140	120	121	15.16	cps
Ytterbium	172-2	40	57	30	42	31.91	cps
Ytterbium	176-1	1703	1707	1720	1710	0.52	cps
Ytterbium	176-2	353	367	383	368	4.09	cps
Yttrium	89-1	27248974	27116162	27602468	27322535	0.92	cps
Yttrium	89-2	2132882	2129712	2106566	2123053	0.68	cps
Zinc	66-2	19610	19974	19874	19820	0.95	cps
Zirconium	90-1	1287	1263	1350	1300	3.45	cps
Zirconium	91-1	307	320	373	333	10.58	cps

Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Date & Time Ac	quireu . 202	julied. 2025-02-00 15.00.52		ie ivallie .	016CCV.u			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	3763862	3711136	3773573	3749524	0.90	cps	
Antimony	121-1	7930877	8027619	7966222	7974906	0.61	cps	
Arsenic	75-2	178120	177257	174229	176536	1.16	cps	
Barium	135-1	9583480	9663649	9459569	9568899	1.07	cps	
Barium	137-1	16464958	16378187	16776408	16539851	1.27	cps	
Beryllium	9-1	2910114	2999355	3050456	2986641	2.38	cps	
Bismuth	209-1	10886758	10542559	10799237	10742851	1.67	cps	
Bismuth	209-2	4897807	4826511	4768993	4831103	1.34	cps	
Bromine	81-1	5274	5248	5334	5285	0.84	cps	
Cadmium	108-1	152810	153039	153036	152962	0.09	cps	
Cadmium	106-1	221131	220802	226420	222784	1.42	cps	
Cadmium	111-1	1933508	1967062	1938610	1946393	0.93	cps	
Calcium	43-1	13250886	13307612	13116804	13225101	0.74	cps	
Calcium	44-1	210947197	217653510	214152690	214251132	1.57	cps	
Carbon	12-1	7078415	7113476	7270463	7154118	1.43	cps	
Carbon	12-2	54611	53942	53841	54131	0.77	cps	
Chlorine	35-1	5905612	5580695	5305726	5597344	5.36	cps	
Chlorine	35-2	20451	19503	18776	19577	4.29	cps	
Chromium	52-2	2004546	2028955	2008053	2013851	0.66	cps	
Cobalt	59-2	3663922	3651368	3643175	3652821	0.29	cps	
Copper	63-2	27473506	26930190	27527336	27310344	1.21	cps	
Dysprosium	156-1	373	450	440	421	9.90	cps	
Dysprosium	156-2	77	120	110	102	22.19	cps	
Erbium	164-1	467	407	453	442	7.12	cps	
Erbium	164-2	143	137	170	150	11.76	cps	
Gadolinium	160-1	433	387	403	408	5.80	cps	
Gadolinium	160-2	167	187	153	169	9.93	cps	
Holmium	165-1	18299857	18358628	18249461	18302649	0.30	cps	
Holmium	165-2	7083253	7185012	7069934	7112733	0.89	cps	
Indium	115-1	14316458	14153921	14162698	14211026	0.64	cps	
Indium	115-2	1555728	1570702	1505658	1544029	2.21	cps	
Iron	54-2	19521302	19386534	19658035	19521957	0.70	cps	
Iron	56-2	355398848	363850061	358595301	359281404	1.19	cps	
Iron	57-2	9006501	9096973	9013904	9039126	0.56	cps	
Krypton	83-1	333	343	370	349	5.43	cps	
Lead	206-1	30927175	30908899	30896405	30910826	0.05	cps	

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Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Date & Time Act	quireu . 202	25-02-06 13.00.52	Dalari	ie Name.	010000.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	26542556	26686206	26719469	26649410	0.35	cps
Lead	208-1	121630011	122079112	123054077	122254400	0.60	cps
Lithium	6-1	8080961	7940882	8182281	8068041	1.50	cps
Magnesium	24-2	64710474	63381276	63370579	63820776	1.21	cps
Manganese	55-2	8018723	8139063	7984819	8047535	1.01	cps
Molybdenum	94-1	28794053	29553650	29145011	29164238	1.30	cps
Molybdenum	95-1	41397957	41686527	41691787	41592090	0.40	cps
Molybdenum	96-1	45669406	45065314	46122608	45619109	1.16	cps
Molybdenum	97-1	25733332	25471170	25873570	25692691	0.79	cps
Molybdenum	98-1	67318019	67066862	67368079	67250987	0.24	cps
Neodymium	150-1	747	717	847	770	8.84	cps
Neodymium	150-2	53	63	73	63	15.79	cps
Nickel	60-2	944880	935053	949446	943126	0.78	cps
Phosphorus	31-2	37047	37198	37074	37106	0.22	cps
Potassium	39-2	18965852	18787498	18698163	18817171	0.72	cps
Rhodium	103-1	13186325	12768150	12972928	12975801	1.61	cps
Rhodium	103-2	5457585	5470222	5396710	5441505	0.72	cps
Scandium	45-1	10651784	10642451	10362683	10552306	1.56	cps
Scandium	45-2	223363	225411	223590	224121	0.50	cps
Selenium	82-1	117164	117725	118388	117759	0.52	cps
Selenium	77-2	2080	2340	2287	2236	6.14	cps
Selenium	78-2	7652	7999	7889	7847	2.26	cps
Silicon	28-1	6965901	7234358	7123795	7108018	1.90	cps
Silver	107-1	9761820	9711282	9813949	9762350	0.53	cps
Silver	109-1	9074883	9323197	9189399	9195826	1.35	cps
Sodium	23-2	127536931	127759275	125828788	127041665	0.83	cps
Strontium	86-1	2704748	2739242	2680384	2708125	1.09	cps
Strontium	88-1	23099945	22914363	23282475	23098928	0.80	cps
Sulfur	34-1	1460776	1492838	1454105	1469240	1.41	cps
Terbium	159-1	19283933	18802443	18927049	19004475	1.31	cps
Terbium	159-2	6896460	6872883	6751658	6840334	1.14	cps
Thallium	203-1	7643084	7481068	7531692	7551948	1.10	cps
Thallium	205-1	17825105	18120162	18502878	18149382	1.87	cps
Tin	118-1	6451894	6379096	6522706	6451232	1.11	cps
Titanium	47-1	12932408	13017495	13331315	13093739	1.60	cps
Uranium	238-1	25049370	25333704	25399673	25260915	0.74	cps

Lab Sample ID :CCV001Instrumnet Name :P8Client Sample ID :CCV001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:00:52 DataFile Name: 016CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1576781	1585499	1597145	1586475	0.64	cps
Ytterbium	172-1	460	487	447	464	4.39	cps
Ytterbium	172-2	177	257	210	214	18.74	cps
Ytterbium	176-1	37914	38279	38636	38276	0.94	cps
Ytterbium	176-2	14912	13937	15039	14629	4.12	cps
Yttrium	89-1	26431508	26148174	25947996	26175893	0.93	cps
Yttrium	89-2	2093314	2080646	2048069	2074009	1.13	cps
Zinc	66-2	2956796	2972406	2980151	2969784	0.40	cps
Zirconium	90-1	14387992	14791581	14414542	14531372	1.55	cps
Zirconium	91-1	3223980	3285539	3299612	3269710	1.23	cps

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

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Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Date & Time Acquired . 2025-02-00 13.07.19			Dalar	ile ivallie .	U10CCBE.u			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	110	140	120	123	12.39	cps	
Antimony	121-1	663	620	633	639	3.47	cps	
Arsenic	75-2	0	0	7	2	173.21	cps	
Barium	135-1	73	100	67	80	22.05	cps	
Barium	137-1	180	147	93	140	31.23	cps	
Beryllium	9-1	910	811	791	837	7.59	cps	
Bismuth	209-1	12687735	12449702	12250210	12462549	1.76	cps	
Bismuth	209-2	5639684	5667635	5678338	5661886	0.35	cps	
Bromine	81-1	4557	4497	4571	4542	0.86	cps	
Cadmium	108-1	3	30	17	17	80.01	cps	
Cadmium	106-1	7846	7896	7849	7863	0.36	cps	
Cadmium	111-1	5576	5553	5526	5552	0.45	cps	
Calcium	43-1	463	477	430	457	5.26	cps	
Calcium	44-1	32774	31454	32607	32278	2.23	cps	
Carbon	12-1	6046317	6033953	5968175	6016149	0.70	cps	
Carbon	12-2	39466	39192	39373	39344	0.35	cps	
Chlorine	35-1	1711772	1624496	1530929	1622399	5.57	cps	
Chlorine	35-2	5631	5765	5878	5758	2.15	cps	
Chromium	52-2	973	1070	1053	1032	5.01	cps	
Cobalt	59-2	80	83	117	93	21.73	cps	
Copper	63-2	4104	3974	3974	4017	1.87	cps	
Dysprosium	156-1	17	10	7	11	45.82	cps	
Dysprosium	156-2	3	3	3	3	0.00	cps	
Erbium	164-1	80	73	77	77	4.35	cps	
Erbium	164-2	37	17	30	28	36.66	cps	
Gadolinium	160-1	110	123	133	122	9.58	cps	
Gadolinium	160-2	27	30	20	26	19.92	cps	
Holmium	165-1	20253311	19486379	19470456	19736715	2.27	cps	
Holmium	165-2	7559469	7560559	7510926	7543651	0.38	cps	
Indium	115-1	16666898	16285347	15879046	16277097	2.42	cps	
Indium	115-2	1768221	1766806	1766136	1767054	0.06	cps	
Iron	54-2	817	750	703	757	7.53	cps	
Iron	56-2	10504	10647	10377	10510	1.29	cps	
Iron	57-2	267	293	183	248	23.16	cps	
Krypton	83-1	347	317	263	309	13.66	cps	
Lead	206-1	3651	3484	3644	3593	2.63	cps	

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Date & Time Acquired : 2025-02-06 13:07:19		DataFile Name :		018CCBE.0			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3167	2990	3074	3077	2.87	cps
Lead	208-1	14703	14047	14006	14252	2.75	cps
Lithium	6-1	9517773	9066234	9080038	9221348	2.78	cps
Magnesium	24-2	1467	1393	1473	1445	3.07	cps
Manganese	55-2	173	140	150	154	11.08	cps
Molybdenum	94-1	680	617	663	653	5.02	cps
Molybdenum	95-1	610	427	403	480	23.58	cps
Molybdenum	96-1	703	563	470	579	20.29	cps
Molybdenum	97-1	393	243	270	302	26.48	cps
Molybdenum	98-1	913	587	677	726	23.26	cps
Neodymium	150-1	30	10	10	17	69.28	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	567	567	613	582	4.63	cps
Phosphorus	31-2	80	107	113	100	17.64	cps
Potassium	39-2	16733	16406	16510	16550	1.01	cps
Rhodium	103-1	15721478	15366128	15459801	15515802	1.19	cps
Rhodium	103-2	6493436	6475338	6408284	6459019	0.69	cps
Scandium	45-1	11903849	11495228	11193861	11530979	3.09	cps
Scandium	45-2	238698	240262	237524	238828	0.58	cps
Selenium	82-1	-120	67	-10	-21	-444.43	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	7	10	7	8	24.71	cps
Silicon	28-1	640066	639586	637348	639000	0.23	cps
Silver	107-1	613	530	597	580	7.60	cps
Silver	109-1	510	427	367	434	16.57	cps
Sodium	23-2	77025	74784	74921	75577	1.66	cps
Strontium	86-1	510	497	543	517	4.65	cps
Strontium	88-1	467	463	447	459	2.34	cps
Sulfur	34-1	794236	792681	794624	793847	0.13	cps
Terbium	159-1	20305190	20134037	20267002	20235410	0.44	cps
Terbium	159-2	7314061	7324170	7256596	7298275	0.50	cps
Thallium	203-1	730	827	817	791	6.72	cps
Thallium	205-1	1860	1980	1827	1889	4.27	cps
Tin	118-1	2050	2234	2090	2125	4.54	cps
Titanium	47-1	397	353	303	351	13.30	cps
Uranium	238-1	120	107	97	108	10.86	cps

Lab Sample ID :CCB001Instrumnet Name :P8Client Sample ID :CCB001Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:07:19 DataFile Name: 018CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	20	17	10	16	32.73	cps
Ytterbium	172-1	107	103	107	106	1.83	cps
Ytterbium	172-2	53	43	43	47	12.37	cps
Ytterbium	176-1	1954	1977	1913	1948	1.64	cps
Ytterbium	176-2	303	400	367	357	13.77	cps
Yttrium	89-1	29107087	28201123	28057046	28455085	2.00	cps
Yttrium	89-2	2217029	2236739	2185684	2213151	1.16	cps
Zinc	66-2	247	333	270	283	15.83	cps
Zirconium	90-1	1117	1090	1243	1150	7.12	cps
Zirconium	91-1	243	240	237	240	1.39	cps

Lab Sample ID : Q1177-01A Instrumnet Name : P8

Client Sample ID : MH2GW9A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

Date & Time?	required. 2020	0 02 00 10.10.00	Datain	ic ivallic .	0137 (INE) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1119341	1180186	1118715	1139414	3.10	cps
Antimony	121-1	40921	41613	41743	41426	1.07	cps
Arsenic	75-2	16954	16843	16980	16926	0.43	cps
Barium	135-1	2804625	2844943	2850787	2833452	0.89	cps
Barium	137-1	4841018	4860664	4905870	4869184	0.68	cps
Beryllium	9-1	25311	25089	25083	25161	0.52	cps
Bismuth	209-1	12539607	12205765	12164311	12303228	1.67	cps
Bismuth	209-2	5746520	5198740	5597640	5514300	5.14	cps
Bromine	81-1	15822	16844	17421	16696	4.85	cps
Cadmium	108-1	5855	5948	5648	5817	2.64	cps
Cadmium	106-1	17338	16523	16770	16877	2.47	cps
Cadmium	111-1	89867	88483	90235	89528	1.03	cps
Calcium	43-1	9265118	9401100	9248202	9304806	0.90	cps
Calcium	44-1	153245711	149222841	148803728	150424093	1.63	cps
Carbon	12-1	9508055	9770160	9673285	9650500	1.37	cps
Carbon	12-2	62114	62810	62716	62547	0.60	cps
Chlorine	35-1	157461128	168455764	174975137	166964010	5.30	cps
Chlorine	35-2	773257	792771	793048	786359	1.44	cps
Chromium	52-2	256441	257207	256471	256706	0.17	cps
Cobalt	59-2	152716	153376	152638	152910	0.27	cps
Copper	63-2	2426968	2374719	2335850	2379179	1.92	cps
Dysprosium	156-1	152889	153591	153904	153461	0.34	cps
Dysprosium	156-2	53262	53577	52864	53234	0.67	cps
Erbium	164-1	126498	126639	126858	126665	0.14	cps
Erbium	164-2	46732	46508	47371	46870	0.96	cps
Gadolinium	160-1	141157	140006	139628	140264	0.57	cps
Gadolinium	160-2	63222	62978	63004	63068	0.21	cps
Holmium	165-1	20367438	19409315	19927956	19901569	2.41	cps
Holmium	165-2	7815578	7067311	7542309	7475066	5.07	cps
Indium	115-1	16237477	15647403	15728784	15871221	2.01	cps
Indium	115-2	1795348	1607559	1727095	1710001	5.56	cps
Iron	54-2	6265642	6222299	6185042	6224328	0.65	cps
Iron	56-2	114254432	114302042	114113022	114223165	0.09	cps
Iron	57-2	2944492	2931103	2866009	2913868	1.44	cps
Krypton	83-1	537	603	513	551	8.47	cps
Lead	206-1	20749792	20832399	20560482	20714224	0.67	cps

Lab Sample ID: Q1177-01A Instrumnet Name: P8
Client Sample ID: MH2GW9A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

lired: 2025-02-06 13:10:39		DataFi	DataFile Name :		U19AREF.0		
Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
207-1	17305998	17464471	17420646	17397038	0.47	cps	
208-1	81020147	81083323	81086785	81063418	0.05	cps	
6-1	9256185	9038471	9146113	9146923	1.19	cps	
24-2	3287450	3351236	3351567	3330084	1.11	cps	
55-2	10731987	10632454	10656136	10673526	0.49	cps	
94-1	56832	58097	57190	57373	1.14	cps	
95-1	20672	20652	20262	20529	1.13	cps	
96-1	29157	29324	29632	29371	0.82	cps	
97-1	12462	12753	12636	12617	1.16	cps	
98-1	33206	33721	32642	33190	1.63	cps	
150-1	223225	223311	224203	223579	0.24	cps	
150-2	59900	60468	59354	59907	0.93	cps	
60-2	157178	155968	154772	155973	0.77	cps	
31-2	11491	11908	11728	11709	1.79	cps	
39-2	984279	991959	981386	985875	0.55	cps	
103-1	15174507	14749571	14600963	14841680	2.01	cps	
103-2	6381820	5856351	6207580	6148584	4.35	cps	
45-1	11878937	11676332	11552659	11702643	1.41	cps	
45-2	251275	223250	243418	239314	6.04	cps	
82-1	3177	3187	3130	3165	0.96	cps	
77-2	337	383	357	359	6.52	cps	
78-2	393	340	390	374	7.98	cps	
28-1	135965361	138646201	139101525	137904362	1.23	cps	
107-1	164566	163587	165611	164588	0.61	cps	
109-1	155621	156275	154087	155328	0.72	cps	
23-2	396650	401176	397744	398523	0.59	cps	
86-1	3380532	3321658	3277681	3326624	1.55	cps	
88-1	29075906	29220288	28416727	28904307	1.48	cps	
34-1	885273	888826	886259	886786	0.21	cps	
159-1	20842165	20102052	20020745	20321654	2.23	cps	
159-2	7529777	6762680	7259151	7183869	5.42	cps	
203-1	11529	12102	12289	11973	3.31	cps	
205-1	27409	28996	29554	28653	3.88	cps	
118-1	190595	189979	190484	190353	0.17	cps	
47-1	650346	651516	656835	652899	0.53	cps	
238-1	202500	205314	202750	203521	0.77	cps	
	Mass  207-1 208-1 6-1 24-2 55-2 94-1 95-1 96-1 97-1 98-1 150-1 150-2 60-2 31-2 39-2 103-1 103-2 45-1 45-2 82-1 77-2 78-2 28-1 107-1 109-1 23-2 86-1 88-1 34-1 159-1 159-2 203-1 205-1 118-1 47-1	Mass         CPS1           207-1         17305998           208-1         81020147           6-1         9256185           24-2         3287450           55-2         10731987           94-1         56832           95-1         20672           96-1         29157           97-1         12462           98-1         33206           150-1         223225           150-2         59900           60-2         157178           31-2         11491           39-2         984279           103-1         15174507           103-2         6381820           45-1         11878937           45-2         251275           82-1         3177           77-2         337           78-2         393           28-1         135965361           107-1         164566           109-1         155621           23-2         396650           36-1         3380532           88-1         29075906           34-1         885273           159-2         7529777           <	Mass         CPS1         CPS2           207-1         17305998         17464471           208-1         81020147         81083323           6-1         9256185         9038471           24-2         3287450         3351236           55-2         10731987         10632454           94-1         56832         58097           95-1         20672         20652           96-1         29157         29324           97-1         12462         12753           98-1         33206         33721           150-1         223225         223311           150-2         59900         60468           60-2         157178         155968           31-2         11491         11908           39-2         984279         991959           103-1         15174507         14749571           103-2         6381820         5856351           45-1         11878937         11676332           45-2         251275         223250           82-1         3177         3187           77-2         337         383           78-2         393         340	Mass         CPS1         CPS2         CPS3           207-1         17305998         17464471         17420646           208-1         81020147         81083323         81086785           6-1         9256185         9038471         9146113           24-2         3287450         3351236         3351567           55-2         10731987         10632454         10656136           94-1         56832         58097         57190           95-1         20672         20652         20262           96-1         29157         29324         29632           97-1         12462         12753         12636           98-1         33206         33721         32642           150-1         223225         223311         224203           150-2         59900         60468         59354           60-2         157178         155968         154772           31-2         11491         11908         11728           39-2         984279         991959         981386           103-1         15174507         14749571         14600963           45-1         11878937         11676332         11552659 <td>Mass         CPS1         CPS2         CPS3         CPSMean           207-1         17305998         17464471         17420646         17397038           208-1         81020147         81083323         81086785         81063418           6-1         9256185         9038471         9146113         9146923           24-2         3287450         3351236         3351567         3330084           55-2         10731987         10632454         10656136         10673526           94-1         56832         58097         57190         57373           95-1         20672         20652         20262         20529           96-1         29157         29324         29632         29371           97-1         12462         12753         12636         12617           98-1         33206         33721         32642         33190           150-1         223225         223311         224203         223579           150-2         59900         60468         59354         59907           60-2         157178         155968         154772         155973           31-2         11491         11908         11728         11709<td>Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         17305998         17464471         17420646         17397038         0.47           208-1         81020147         81083233         81086785         81083418         0.05           6-1         9256185         9038471         9146113         9146923         1.19           24-2         3287450         3351236         3351567         3330084         1.11           55-2         10731987         10632454         10656136         10673526         0.49           94-1         56832         58097         57190         57373         1.14           95-1         20672         20652         20262         20529         1.13           96-1         29157         29324         29632         29371         0.82           97-1         12462         12753         12636         12617         1.16           98-1         33206         33721         32642         33190         1.63           150-2         59900         60468         59354         59907         0.93           60-2         157178         155988         154772         155973</td></td>	Mass         CPS1         CPS2         CPS3         CPSMean           207-1         17305998         17464471         17420646         17397038           208-1         81020147         81083323         81086785         81063418           6-1         9256185         9038471         9146113         9146923           24-2         3287450         3351236         3351567         3330084           55-2         10731987         10632454         10656136         10673526           94-1         56832         58097         57190         57373           95-1         20672         20652         20262         20529           96-1         29157         29324         29632         29371           97-1         12462         12753         12636         12617           98-1         33206         33721         32642         33190           150-1         223225         223311         224203         223579           150-2         59900         60468         59354         59907           60-2         157178         155968         154772         155973           31-2         11491         11908         11728         11709 <td>Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         17305998         17464471         17420646         17397038         0.47           208-1         81020147         81083233         81086785         81083418         0.05           6-1         9256185         9038471         9146113         9146923         1.19           24-2         3287450         3351236         3351567         3330084         1.11           55-2         10731987         10632454         10656136         10673526         0.49           94-1         56832         58097         57190         57373         1.14           95-1         20672         20652         20262         20529         1.13           96-1         29157         29324         29632         29371         0.82           97-1         12462         12753         12636         12617         1.16           98-1         33206         33721         32642         33190         1.63           150-2         59900         60468         59354         59907         0.93           60-2         157178         155988         154772         155973</td>	Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         17305998         17464471         17420646         17397038         0.47           208-1         81020147         81083233         81086785         81083418         0.05           6-1         9256185         9038471         9146113         9146923         1.19           24-2         3287450         3351236         3351567         3330084         1.11           55-2         10731987         10632454         10656136         10673526         0.49           94-1         56832         58097         57190         57373         1.14           95-1         20672         20652         20262         20529         1.13           96-1         29157         29324         29632         29371         0.82           97-1         12462         12753         12636         12617         1.16           98-1         33206         33721         32642         33190         1.63           150-2         59900         60468         59354         59907         0.93           60-2         157178         155988         154772         155973	

Lab Sample ID :Q1177-01AInstrumnet Name :P8Client Sample ID :MH2GW9ADilution Factor :1

Date & Time Acquired: 2025-02-06 13:10:39 DataFile Name: 019AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
- aramotor	11100	0. 0.	0.02	0. 00	or omoun	01 01 02	
Vanadium	51-2	216377	220507	219749	218877	1.00	cps
Ytterbium	172-1	38970	39151	38656	38926	0.64	cps
Ytterbium	172-2	17592	17512	17488	17531	0.31	cps
Ytterbium	176-1	26163	26206	26293	26220	0.25	cps
Ytterbium	176-2	11755	11819	11028	11534	3.81	cps
Yttrium	89-1	31634635	30186344	29917500	30579493	3.02	cps
Yttrium	89-2	2445634	2179409	2383709	2336251	5.96	cps
Zinc	66-2	2892217	2886801	2864740	2881253	0.51	cps
Zirconium	90-1	124849	126584	124587	125340	0.87	cps
Zirconium	91-1	27394	27687	27901	27661	0.92	cps

Lab Sample ID : Q1178-01A Instrumnet Name : P8

Client Sample ID : MH2GX0A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1746109	1737788	1746329	1743409	0.28	cps
Antimony	121-1	66802	66434	66923	66719	0.38	cps
Arsenic	75-2	30426	30807	30667	30633	0.63	cps
Barium	135-1	11243330	11206024	11011643	11153666	1.12	cps
Barium	137-1	19322899	19725472	19241546	19429972	1.33	cps
Beryllium	9-1	23204	23417	23096	23239	0.70	cps
Bismuth	209-1	12101827	12144962	12318499	12188429	0.94	cps
Bismuth	209-2	5576351	5286161	5537993	5466835	2.88	cps
Bromine	81-1	18786	20599	20802	20062	5.53	cps
Cadmium	108-1	23637	23567	23099	23434	1.25	cps
Cadmium	106-1	40650	40656	41151	40819	0.70	cps
Cadmium	111-1	361773	360963	361996	361578	0.15	cps
Calcium	43-1	8110788	8043335	7974666	8042930	0.85	cps
Calcium	44-1	130226071	131607698	129149011	130327594	0.95	cps
Carbon	12-1	9759555	9885148	9987226	9877309	1.15	cps
Carbon	12-2	64671	64547	63195	64138	1.28	cps
Chlorine	35-1	179991724	189770677	193266284	187676228	3.67	cps
Chlorine	35-2	857186	860895	869472	862518	0.73	cps
Chromium	52-2	186202	185668	187440	186437	0.49	cps
Cobalt	59-2	296529	297497	298647	297558	0.36	cps
Copper	63-2	3908618	3955584	3914907	3926370	0.65	cps
Dysprosium	156-1	198952	202290	200209	200484	0.84	cps
Dysprosium	156-2	70789	70789	68612	70063	1.79	cps
Erbium	164-1	162060	163195	159854	161703	1.05	cps
Erbium	164-2	60744	59891	60527	60387	0.73	cps
Gadolinium	160-1	182974	179479	180295	180916	1.01	cps
Gadolinium	160-2	81674	82664	80615	81651	1.26	cps
Holmium	165-1	19327954	19778474	19800293	19635573	1.36	cps
Holmium	165-2	7528474	7201175	7488501	7406050	2.41	cps
Indium	115-1	15891871	16014169	16043328	15983123	0.50	cps
Indium	115-2	1743075	1658616	1750188	1717293	2.97	cps
Iron	54-2	19254810	19170786	19220135	19215244	0.22	cps
Iron	56-2	356084968	353670875	353693821	354483221	0.39	cps
Iron	57-2	8947265	8902495	8947217	8932326	0.29	cps
Krypton	83-1	513	687	607	602	14.41	cps
Lead	206-1	24561190	24243673	24460033	24421632	0.66	cps

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Lab Sample ID :Q1178-01AInstrumnet Name :P8Client Sample ID :MH2GX0ADilution Factor :1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Date & Time Acquired : 2025-0		25-02-06 13:14:50	DataFile Name :		U2UAREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	20547285	20580606	20582706	20570199	0.10	cps
Lead	208-1	95820293	95273226	95952839	95682119	0.38	cps
Lithium	6-1	8884337	9217571	9313809	9138572	2.47	cps
Magnesium	24-2	4061801	3923320	3904203	3963108	2.17	cps
Manganese	55-2	11997135	11920464	11972647	11963415	0.33	cps
Molybdenum	94-1	65071	66063	64696	65277	1.08	cps
Molybdenum	95-1	46063	45942	45939	45981	0.15	cps
Molybdenum	96-1	56196	55882	56260	56113	0.36	cps
Molybdenum	97-1	28923	28232	28660	28605	1.22	cps
Molybdenum	98-1	72749	73403	74184	73445	0.98	cps
Neodymium	150-1	302693	303183	299294	301724	0.70	cps
Neodymium	150-2	80935	80965	80855	80919	0.07	cps
Nickel	60-2	1099489	1095432	1096155	1097025	0.20	cps
Phosphorus	31-2	16306	16066	15672	16014	2.00	cps
Potassium	39-2	1297764	1290333	1296642	1294913	0.31	cps
Rhodium	103-1	14715717	14772164	14869383	14785755	0.53	cps
Rhodium	103-2	6142312	5968999	6114640	6075317	1.53	cps
Scandium	45-1	11797367	11687799	11914627	11799931	0.96	cps
Scandium	45-2	244275	231080	239514	238290	2.80	cps
Selenium	82-1	3194	3381	3431	3335	3.74	cps
Selenium	77-2	420	387	440	416	6.48	cps
Selenium	78-2	423	367	417	402	7.70	cps
Silicon	28-1	78356856	79932860	78526329	78938682	1.10	cps
Silver	107-1	199130	199292	200702	199708	0.43	cps
Silver	109-1	187647	189090	188603	188447	0.39	cps
Sodium	23-2	591965	595879	593290	593711	0.34	cps
Strontium	86-1	3098583	3032219	3140833	3090545	1.77	cps
Strontium	88-1	26879896	26328118	26355454	26521156	1.17	cps
Sulfur	34-1	931405	941082	954049	942179	1.21	cps
Terbium	159-1	20127310	20136594	20291880	20185261	0.46	cps
Terbium	159-2	7307601	6999090	7299389	7202026	2.44	cps
Thallium	203-1	18951	19501	19708	19387	2.02	cps
Thallium	205-1	45155	45954	46874	45995	1.87	cps
Tin	118-1	411420	410544	410488	410817	0.13	cps
Titanium	47-1	949801	942387	951372	947853	0.51	cps
Uranium	238-1	242150	240582	238633	240455	0.73	cps

Lab Sample ID :Q1178-01AInstrumnet Name :P8Client Sample ID :MH2GX0ADilution Factor :1

Date & Time Acquired: 2025-02-06 13:14:50 DataFile Name: 020AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	365057	368840	370662	368186	0.78	cps
Ytterbium	172-1	49385	49087	48776	49083	0.62	cps
Ytterbium	172-2	22242	22876	21678	22266	2.69	cps
Ytterbium	176-1	32326	32607	32520	32484	0.44	cps
Ytterbium	176-2	14451	14365	14438	14418	0.32	cps
Yttrium	89-1	30859453	30870769	31813432	31181218	1.76	cps
Yttrium	89-2	2421463	2328244	2417102	2388936	2.20	cps
Zinc	66-2	3722532	3833096	3718668	3758099	1.73	cps
Zirconium	90-1	105985	106681	107624	106763	0.77	cps
Zirconium	91-1	23834	24475	24041	24116	1.36	cps

Lab Sample ID: PB166302BL Instrumnet Name: P8
Client Sample ID: PBS302 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	63	90	87	80	18.17	cps
Antimony	121-1	117	123	140	127	9.49	cps
Arsenic	75-2	7	20	0	9	114.55	cps
Barium	135-1	50	83	103	79	34.16	cps
Barium	137-1	140	130	107	126	13.62	cps
Beryllium	9-1	460	510	501	490	5.45	cps
Bismuth	209-1	10863462	12310310	12111873	11761881	6.67	cps
Bismuth	209-2	5583388	5624053	5604913	5604118	0.36	cps
Bromine	81-1	4874	4607	4654	4712	3.02	cps
Cadmium	108-1	27	37	27	30	19.24	cps
Cadmium	106-1	6945	7565	7952	7488	6.79	cps
Cadmium	111-1	4890	5310	5585	5261	6.65	cps
Calcium	43-1	487	507	407	467	11.34	cps
Calcium	44-1	31758	31391	31458	31536	0.62	cps
Carbon	12-1	5861273	5916810	5938433	5905505	0.67	cps
Carbon	12-2	38801	38116	37354	38090	1.90	cps
Chlorine	35-1	3898801	3639708	3465990	3668166	5.94	cps
Chlorine	35-2	13777	13206	12953	13312	3.17	cps
Chromium	52-2	870	943	1017	943	7.77	cps
Cobalt	59-2	107	83	77	89	17.72	cps
Copper	63-2	3424	3537	3367	3443	2.52	cps
Dysprosium	156-1	20	20	3	14	66.64	cps
Dysprosium	156-2	10	0	3	4	114.60	cps
Erbium	164-1	87	137	97	107	24.80	cps
Erbium	164-2	43	43	40	42	4.55	cps
Gadolinium	160-1	130	103	130	121	12.71	cps
Gadolinium	160-2	20	27	13	20	33.35	cps
Holmium	165-1	17353067	19378846	19321544	18684486	6.17	cps
Holmium	165-2	7458484	7576075	7509909	7514823	0.78	cps
Indium	115-1	14230652	15437642	15718794	15129029	5.23	cps
Indium	115-2	1779595	1771642	1795272	1782170	0.67	cps
Iron	54-2	703	690	660	684	3.24	cps
Iron	56-2	10307	9667	9500	9825	4.34	cps
Iron	57-2	213	240	183	212	13.36	cps
Krypton	83-1	307	297	377	327	13.35	cps
Lead	206-1	3007	3164	3124	3098	2.63	cps

Lab Sample ID :PB166302BLInstrumnet Name :P8Client Sample ID :PBS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Parameter         Mass         CPS1         CPS2         CPS3         CPSMean           Lead         207-1         2677         2537         2694         2636           Lead         208-1         12229         12302         11892         12141           Lithium         6-1         8343571         9021798         9143483         8836284           Magnesium         24-2         1370         1327         1393         1363           Manganese         55-2         237         233         130         200           Molybdenum         94-1         377         373         360         370           Molybdenum         95-1         147         137         183         156           Molybdenum         96-1         187         277         210         224           Molybdenum         97-1         80         87         103         90           Molybdenum         98-1         247         250         243         247           Neodymium         150-1         3         10         7         7	E.u
Lead208-112229123021189212141Lithium6-18343571902179891434838836284Magnesium24-21370132713931363Manganese55-2237233130200Molybdenum94-1377373360370Molybdenum95-1147137183156Molybdenum96-1187277210224Molybdenum97-1808710390Molybdenum98-1247250243247	n CPSRSD Units
Lithium       6-1       8343571       9021798       9143483       8836284         Magnesium       24-2       1370       1327       1393       1363         Manganese       55-2       237       233       130       200         Molybdenum       94-1       377       373       360       370         Molybdenum       95-1       147       137       183       156         Molybdenum       96-1       187       277       210       224         Molybdenum       97-1       80       87       103       90         Molybdenum       98-1       247       250       243       247	3.27 cps
Magnesium24-21370132713931363Manganese55-2237233130200Molybdenum94-1377373360370Molybdenum95-1147137183156Molybdenum96-1187277210224Molybdenum97-1808710390Molybdenum98-1247250243247	1.80 cps
Manganese       55-2       237       233       130       200         Molybdenum       94-1       377       373       360       370         Molybdenum       95-1       147       137       183       156         Molybdenum       96-1       187       277       210       224         Molybdenum       97-1       80       87       103       90         Molybdenum       98-1       247       250       243       247	4.88 cps
Molybdenum       94-1       377       373       360       370         Molybdenum       95-1       147       137       183       156         Molybdenum       96-1       187       277       210       224         Molybdenum       97-1       80       87       103       90         Molybdenum       98-1       247       250       243       247	2.48 cps
Molybdenum       95-1       147       137       183       156         Molybdenum       96-1       187       277       210       224         Molybdenum       97-1       80       87       103       90         Molybdenum       98-1       247       250       243       247	30.32 cps
Molybdenum       96-1       187       277       210       224         Molybdenum       97-1       80       87       103       90         Molybdenum       98-1       247       250       243       247	2.38 cps
Molybdenum     97-1     80     87     103     90       Molybdenum     98-1     247     250     243     247	15.80 cps
Molybdenum 98-1 247 250 243 247	20.81 cps
•	13.35 cps
Neodymium 150-1 3 10 7 7	1.35 cps
	50.03 cps
Neodymium 150-2 3 0 0 1	173.21 cps
Nickel 60-2 617 570 553 580	5.66 cps
Phosphorus 31-2 67 80 87 78	13.09 cps
Potassium 39-2 14464 15091 14808 14788	2.12 cps
Rhodium 103-1 13453285 15050751 15406396 14636810	0 7.11 cps
Rhodium 103-2 6438582 6393302 6433576 6421820	0.39 cps
Scandium 45-1 10348564 11388537 11601654 11112918	6.03 cps
Scandium 45-2 240833 241559 239522 240638	0.43 cps
Selenium 82-1 -3 -33 -90 -42	-104.25 cps
Selenium 77-2 0 0 0 0	0.00 cps
Selenium 78-2 13 17 3 11	62.48 cps
Silicon 28-1 650024 643746 642919 645563	0.60 cps
Silver 107-1 393 393 393 393	0.00 cps
Silver 109-1 287 230 277 264	11.44 cps
Sodium 23-2 64070 63189 63417 63559	0.72 cps
Strontium 86-1 570 467 580 539	11.64 cps
Strontium 88-1 413 493 463 457	8.85 cps
Sulfur 34-1 801939 804757 806736 804477	0.30 cps
Terbium 159-1 18058650 19451948 20104590 19205063	3 5.44 cps
Terbium 159-2 7214004 7219515 7408205 7280574	1.52 cps
Thallium 203-1 683 660 673 672	1.74 cps
Thallium 205-1 1553 1467 1547 1522	3.17 cps
Tin 118-1 1970 1920 1997 1962	1.98 cps
Titanium 47-1 300 300 260 287	8.06 cps
Uranium 238-1 40 33 27 33	20.00 cps

LB Number: LB134612

Lab Sample ID : PB166302BL

Client Sample ID: PBS302 Dilution Factor:

Date & Time Acquired: 2025-02-06 13:22:47 DataFile Name: 022CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	17	20	23	20	16.65	cps	
Ytterbium	172-1	77	100	160	112	38.31	cps	
Ytterbium	172-2	30	43	33	36	19.51	cps	
Ytterbium	176-1	1830	1944	2007	1927	4.65	cps	
Ytterbium	176-2	277	390	370	346	17.51	cps	
Yttrium	89-1	25615652	27558259	28245612	27139841	5.03	cps	
Yttrium	89-2	2229964	2263090	2228083	2240379	0.88	cps	
Zinc	66-2	233	297	273	268	11.96	cps	
Zirconium	90-1	810	883	1033	909	12.53	cps	
Zirconium	91-1	160	160	183	168	8.03	cps	

Operator :

Instrumnet Name:

Jaswal

P8

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<sub>3</sub> 517

Lab Sample ID :PB166302BSInstrumnet Name :P8Client Sample ID :LCS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Date & Time /	equired. Zoz	.0 02 00 10.20.00	Datai	iic i tairic .	020L00L.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3274	3400	3227	3300	2.72	cps
Antimony	121-1	64659	64458	64759	64625	0.24	cps
Arsenic	75-2	793	733	803	777	4.88	cps
Barium	135-1	74369	75593	75931	75298	1.09	cps
Barium	137-1	130644	132471	131185	131433	0.71	cps
Beryllium	9-1	13783	13721	13761	13755	0.23	cps
Bismuth	209-1	12116603	12359152	12290629	12255461	1.02	cps
Bismuth	209-2	5550786	5554413	5628784	5577994	0.79	cps
Bromine	81-1	4647	4611	4698	4652	0.94	cps
Cadmium	108-1	663	550	607	607	9.34	cps
Cadmium	106-1	8896	8733	9040	8890	1.73	cps
Cadmium	111-1	13545	13914	14242	13901	2.51	cps
Calcium	43-1	69791	70535	70264	70197	0.54	cps
Calcium	44-1	1056740	1076058	1059652	1064150	0.98	cps
Carbon	12-1	6318796	6366188	6324486	6336490	0.41	cps
Carbon	12-2	40994	40412	41308	40905	1.11	cps
Chlorine	35-1	3779954	3854570	3868246	3834257	1.24	cps
Chlorine	35-2	16162	16123	16666	16317	1.86	cps
Chromium	52-2	17007	16199	16506	16571	2.46	cps
Cobalt	59-2	15368	15826	15669	15621	1.49	cps
Copper	63-2	30252	29364	29721	29779	1.50	cps
Dysprosium	156-1	27	27	37	30	19.24	cps
Dysprosium	156-2	3	3	10	6	69.34	cps
Erbium	164-1	103	127	93	108	15.87	cps
Erbium	164-2	40	53	43	46	15.23	cps
Gadolinium	160-1	143	100	100	114	21.86	cps
Gadolinium	160-2	23	23	33	27	21.65	cps
Holmium	165-1	19253498	19517638	19340149	19370428	0.70	cps
Holmium	165-2	7416905	7593457	7494892	7501751	1.18	cps
Indium	115-1	15657101	16045059	15963969	15888710	1.29	cps
Indium	115-2	1717998	1793015	1767522	1759512	2.17	cps
Iron	54-2	67187	68135	66383	67235	1.30	cps
Iron	56-2	1229361	1214243	1233494	1225699	0.83	cps
Iron	57-2	30693	30543	30593	30610	0.25	cps
Krypton	83-1	317	293	297	302	4.18	cps
Lead	206-1	27579	27382	27008	27323	1.06	cps

Lab Sample ID :PB166302BSInstrumnet Name :P8Client Sample ID :LCS302Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Date & Time Ac	quirea: 202	uired: 2025-02-06 13:26:08		DataFile Name :		U23LGSE.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	23902	24059	24012	23991	0.34	cps	
Lead	208-1	109645	109491	109502	109546	0.08	cps	
Lithium	6-1	9183663	9085588	9072901	9114051	0.67	cps	
Magnesium	24-2	260177	263001	259430	260869	0.72	cps	
Manganese	55-2	3627	3447	3484	3519	2.70	cps	
Molybdenum	94-1	67727	68169	68430	68109	0.52	cps	
Molybdenum	95-1	81155	81598	82630	81794	0.93	cps	
Molybdenum	96-1	90549	91526	91076	91050	0.54	cps	
Molybdenum	97-1	50632	51656	50813	51033	1.07	cps	
Molybdenum	98-1	128593	131509	131237	130446	1.24	cps	
Neodymium	150-1	20	33	20	24	31.49	cps	
Neodymium	150-2	0	0	0	0	0.00	cps	
Nickel	60-2	5018	4781	4878	4892	2.43	cps	
Phosphorus	31-2	310	297	300	302	2.30	cps	
Potassium	39-2	170215	168784	172002	170334	0.95	cps	
Rhodium	103-1	15230346	15372071	15046093	15216170	1.07	cps	
Rhodium	103-2	6435186	6416861	6433471	6428506	0.16	cps	
Scandium	45-1	11534989	11539592	11604306	11559629	0.34	cps	
Scandium	45-2	241964	241534	243539	242346	0.44	cps	
Selenium	82-1	2410	2330	2830	2524	10.64	cps	
Selenium	77-2	57	60	30	49	33.63	cps	
Selenium	78-2	167	173	183	174	4.81	cps	
Silicon	28-1	918820	914795	896801	910138	1.29	cps	
Silver	107-1	41155	40647	41773	41191	1.37	cps	
Silver	109-1	37581	39172	38246	38333	2.08	cps	
Sodium	23-2	606646	597761	601383	601930	0.74	cps	
Strontium	86-1	2405112	2403385	2450534	2419677	1.10	cps	
Strontium	88-1	20334471	20753947	20254269	20447562	1.31	cps	
Sulfur	34-1	821558	818173	826185	821972	0.49	cps	
Terbium	159-1	19728958	20023628	19552347	19768311	1.20	cps	
Terbium	159-2	7173674	7371543	7271304	7272174	1.36	cps	
Thallium	203-1	31321	30730	31064	31038	0.96	cps	
Thallium	205-1	73614	74472	73832	73973	0.60	cps	
Tin	118-1	131046	130595	131096	130913	0.21	cps	
Titanium	47-1	6568	6718	6655	6647	1.13	cps	
Uranium	238-1	92726	94834	94364	93975	1.18	cps	

LB Number : LB134612

Lab Sample ID : PB166302BS

Client Sample ID: LCS302 Dilution Factor:

Date & Time Acquired: 2025-02-06 13:26:08 DataFile Name: 023LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	_
Vanadium	51-2	31769	32614	32333	32239	1.34	cps	
Ytterbium	172-1	73	83	103	87	17.63	cps	
Ytterbium	172-2	57	57	53	56	3.47	cps	
Ytterbium	176-1	2140	2090	2100	2110	1.25	cps	
Ytterbium	176-2	400	377	410	396	4.32	cps	
Yttrium	89-1	28068479	28499932	28233161	28267191	0.77	cps	
Yttrium	89-2	2249290	2232527	2230263	2237360	0.46	cps	
Zinc	66-2	6795	7045	7085	6975	2.25	cps	
Zirconium	90-1	55239	57582	56112	56311	2.10	cps	
Zirconium	91-1	12679	12589	12899	12723	1.25	cps	

Operator :

Instrumnet Name:

Jaswal

P8

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<sub>3</sub> 520

Lab Sample ID :Q1159-01Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1745831	1739619	1753633	1746361	0.40	cps
Antimony	121-1	19000	19941	19751	19564	2.54	cps
Arsenic	75-2	22395	21289	22097	21927	2.61	cps
Barium	135-1	929620	942139	941045	937601	0.74	cps
Barium	137-1	1709249	1707702	1728554	1715168	0.68	cps
Beryllium	9-1	7276	7362	7147	7262	1.49	cps
Bismuth	209-1	12367087	12208424	11922114	12165875	1.85	cps
Bismuth	209-2	5562356	5461533	5438884	5487591	1.20	cps
Bromine	81-1	8222	8593	8996	8604	4.50	cps
Cadmium	108-1	167	167	183	172	5.59	cps
Cadmium	106-1	8329	8176	7966	8157	2.24	cps
Cadmium	111-1	6514	6363	6308	6395	1.67	cps
Calcium	43-1	341380	345488	342408	343092	0.62	cps
Calcium	44-1	5711776	5718151	5664838	5698255	0.51	cps
Carbon	12-1	6764127	6946198	7000041	6903455	1.79	cps
Carbon	12-2	44337	44664	44885	44629	0.62	cps
Chlorine	35-1	190148251	208984690	218897470	206010137	7.09	cps
Chlorine	35-2	958065	960269	963823	960719	0.30	cps
Chromium	52-2	211472	213309	213262	212681	0.49	cps
Cobalt	59-2	224299	221944	223460	223234	0.53	cps
Copper	63-2	589878	593144	589227	590750	0.36	cps
Dysprosium	156-1	68313	70484	69415	69404	1.56	cps
Dysprosium	156-2	29068	28744	27769	28527	2.37	cps
Erbium	164-1	66160	67383	67222	66922	0.99	cps
Erbium	164-2	24930	24810	25381	25040	1.20	cps
Gadolinium	160-1	73270	74272	73813	73785	0.68	cps
Gadolinium	160-2	33612	33632	33155	33466	0.81	cps
Holmium	165-1	19778823	19497161	19257355	19511113	1.34	cps
Holmium	165-2	7515765	7491881	7457653	7488433	0.39	cps
Indium	115-1	16328076	15822934	15825733	15992248	1.82	cps
Indium	115-2	1741415	1678549	1724898	1714954	1.90	cps
Iron	54-2	10229255	10226228	10217131	10224205	0.06	cps
Iron	56-2	192123244	189571537	189007371	190234051	0.87	cps
Iron	57-2	4826589	4868687	4754849	4816708	1.19	cps
Krypton	83-1	400	467	317	394	19.05	cps
Lead	206-1	329196	334159	331329	331561	0.75	cps

Lab Sample ID :Q1159-01Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Date & Time Ac	uired: 2025-02-06 13:29:24		Datar	DataFile Name :		U24AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	273623	275366	272563	273851	0.52	cps	
Lead	208-1	1279234	1295407	1287870	1287504	0.63	cps	
Lithium	6-1	9728153	9447441	9491867	9555820	1.58	cps	
Magnesium	24-2	3112749	3033313	3029312	3058458	1.54	cps	
Manganese	55-2	829779	831306	828288	829791	0.18	cps	
Molybdenum	94-1	17137	17154	17171	17154	0.10	cps	
Molybdenum	95-1	10791	11245	11568	11201	3.49	cps	
Molybdenum	96-1	14224	14307	14281	14271	0.30	cps	
Molybdenum	97-1	6518	7342	6992	6951	5.95	cps	
Molybdenum	98-1	17761	17985	17781	17843	0.69	cps	
Neodymium	150-1	74167	74612	74090	74290	0.38	cps	
Neodymium	150-2	19865	20299	19938	20034	1.16	cps	
Nickel	60-2	160497	162698	160601	161266	0.77	cps	
Phosphorus	31-2	2514	2634	2754	2634	4.56	cps	
Potassium	39-2	111318	109437	109558	110105	0.96	cps	
Rhodium	103-1	15567395	15197186	15169258	15311280	1.45	cps	
Rhodium	103-2	6423459	6160690	6354411	6312853	2.16	cps	
Scandium	45-1	12388229	12062567	12199588	12216795	1.34	cps	
Scandium	45-2	247663	243425	242493	244527	1.13	cps	
Selenium	82-1	213	160	347	240	40.06	cps	
Selenium	77-2	143	127	107	126	14.62	cps	
Selenium	78-2	113	87	107	102	13.57	cps	
Silicon	28-1	82702867	83037547	82947939	82896118	0.21	cps	
Silver	107-1	9410	8964	7886	8753	8.95	cps	
Silver	109-1	8760	7605	7069	7811	11.06	cps	
Sodium	23-2	118771	119884	120095	119583	0.59	cps	
Strontium	86-1	301260	303384	300985	301876	0.43	cps	
Strontium	88-1	2734052	2714745	2677598	2708798	1.06	cps	
Sulfur	34-1	730754	702343	688487	707195	3.05	cps	
Terbium	159-1	20555127	20275380	19773473	20201327	1.96	cps	
Terbium	159-2	7347072	7388351	7167744	7301055	1.61	cps	
Thallium	203-1	3494	3731	3734	3653	3.77	cps	
Thallium	205-1	8379	8656	9090	8709	4.11	cps	
Tin	118-1	6365	6218	6572	6385	2.78	cps	
Titanium	47-1	64477	64357	64725	64520	0.29	cps	
Uranium	238-1	23959	24317	23913	24063	0.92	cps	

Lab Sample ID : Q1159-01 Instrumnet Name : P8
Client Sample ID : YE8C9 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:29:24 DataFile Name: 024AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	210630	209405	209367	209801	0.34	cps
Ytterbium	172-1	19194	19201	18987	19127	0.64	cps
Ytterbium	172-2	8690	8446	8590	8575	1.43	cps
Ytterbium	176-1	13467	13841	13477	13595	1.57	cps
Ytterbium	176-2	5698	5851	5948	5832	2.16	cps
Yttrium	89-1	30693239	29634201	29299505	29875648	2.44	cps
Yttrium	89-2	2349651	2251254	2271014	2290639	2.27	cps
Zinc	66-2	87565	86438	86998	87000	0.65	cps
Zirconium	90-1	28703	29411	28963	29026	1.23	cps
Zirconium	91-1	6502	6508	6558	6523	0.48	cps

<sup>3</sup> 523

Lab Sample ID :Q1159-02Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1730578	1748498	1703314	1727464	1.32	cps
Antimony	121-1	17852	18145	17568	17855	1.62	cps
Arsenic	75-2	21353	21203	21707	21421	1.21	cps
Barium	135-1	930081	943585	937372	937013	0.72	cps
Barium	137-1	1662805	1681762	1688044	1677537	0.78	cps
Beryllium	9-1	7236	7112	7300	7216	1.32	cps
Bismuth	209-1	12330949	12163881	12211511	12235447	0.70	cps
Bismuth	209-2	5415605	5514438	5531173	5487072	1.14	cps
Bromine	81-1	7856	8096	8649	8200	4.96	cps
Cadmium	108-1	157	163	147	156	5.39	cps
Cadmium	106-1	7515	7932	7786	7744	2.73	cps
Cadmium	111-1	5971	6308	6137	6139	2.75	cps
Calcium	43-1	337552	340213	341638	339801	0.61	cps
Calcium	44-1	5506491	5638026	5607871	5584130	1.23	cps
Carbon	12-1	7009135	6922890	6968374	6966800	0.62	cps
Carbon	12-2	44989	44935	44049	44658	1.18	cps
Chlorine	35-1	208527370	225113817	227999010	220546732	4.76	cps
Chlorine	35-2	991874	993503	1007139	997506	0.84	cps
Chromium	52-2	212406	213043	211314	212254	0.41	cps
Cobalt	59-2	224448	223605	221900	223317	0.58	cps
Copper	63-2	593734	590620	587671	590675	0.51	cps
Dysprosium	156-1	68940	69908	69325	69391	0.70	cps
Dysprosium	156-2	28317	28390	27979	28229	0.78	cps
Erbium	164-1	67523	68117	67208	67616	0.68	cps
Erbium	164-2	25845	24620	25381	25282	2.45	cps
Gadolinium	160-1	72881	73317	73591	73263	0.49	cps
Gadolinium	160-2	34404	33241	32937	33528	2.31	cps
Holmium	165-1	19835758	19641555	19851167	19776160	0.59	cps
Holmium	165-2	7683949	7431959	7473391	7529766	1.79	cps
Indium	115-1	16047856	15969816	15763247	15926973	0.92	cps
Indium	115-2	1743624	1711153	1697138	1717305	1.39	cps
Iron	54-2	10155342	10380408	10123045	10219598	1.37	cps
Iron	56-2	187466857	189705264	190561104	189244408	0.84	cps
Iron	57-2	4808968	4745966	4687421	4747452	1.28	cps
Krypton	83-1	427	433	417	426	1.97	cps
Lead	206-1	333348	332114	335246	333569	0.47	cps

Lab Sample ID :Q1159-02Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

Date & Time Act	quireu . 202	25-02-00 15.52.40	Dalar	ile ivallie .	UZSAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	272065	272360	272003	272143	0.07	cps
Lead	208-1	1285593	1287742	1291155	1288164	0.22	cps
Lithium	6-1	9360916	9493849	9301394	9385387	1.05	cps
Magnesium	24-2	3045472	3022748	3080531	3049584	0.95	cps
Manganese	55-2	818554	828289	814348	820397	0.87	cps
Molybdenum	94-1	16306	16583	16827	16572	1.57	cps
Molybdenum	95-1	10714	11028	11241	10994	2.41	cps
Molybdenum	96-1	14151	13557	13623	13777	2.36	cps
Molybdenum	97-1	6715	6632	7019	6788	3.00	cps
Molybdenum	98-1	17371	17391	17378	17380	0.06	cps
Neodymium	150-1	73362	73560	73835	73586	0.32	cps
Neodymium	150-2	20075	19391	20182	19883	2.16	cps
Nickel	60-2	162081	161161	160099	161114	0.62	cps
Phosphorus	31-2	2434	2594	2647	2558	4.34	cps
Potassium	39-2	108578	107963	108987	108509	0.47	cps
Rhodium	103-1	15183770	15285020	15205302	15224697	0.35	cps
Rhodium	103-2	6230789	6238997	6266669	6245485	0.30	cps
Scandium	45-1	11847289	11943483	11911652	11900808	0.41	cps
Scandium	45-2	243850	243367	242660	243292	0.25	cps
Selenium	82-1	360	220	107	229	55.44	cps
Selenium	77-2	100	140	130	123	16.88	cps
Selenium	78-2	130	107	87	108	20.12	cps
Silicon	28-1	85237515	84111012	84819730	84722753	0.67	cps
Silver	107-1	7135	7592	7666	7464	3.85	cps
Silver	109-1	6898	7032	7079	7003	1.33	cps
Sodium	23-2	119336	120469	120734	120179	0.62	cps
Strontium	86-1	297829	297756	300403	298663	0.50	cps
Strontium	88-1	2688495	2692233	2643071	2674600	1.02	cps
Sulfur	34-1	638302	621797	612870	624323	2.07	cps
Terbium	159-1	20065968	20273168	20355997	20231711	0.74	cps
Terbium	159-2	7378496	7299334	7360302	7346044	0.56	cps
Thallium	203-1	3464	3447	3501	3470	0.79	cps
Thallium	205-1	7909	8343	9070	8441	6.95	cps
Tin	118-1	5938	5738	5778	5818	1.82	cps
Titanium	47-1	60852	61461	61180	61164	0.50	cps
Uranium	238-1	24317	24651	24343	24437	0.76	cps

Lab Sample ID :Q1159-02Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :1

Date & Time Acquired: 2025-02-06 13:32:40 DataFile Name: 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	208830	207606	206968	207801	0.46	cps
Ytterbium	172-1	19241	19050	19605	19299	1.46	cps
Ytterbium	172-2	9073	8590	8890	8851	2.76	cps
Ytterbium	176-1	13280	13751	13904	13645	2.38	cps
Ytterbium	176-2	5575	5805	5941	5774	3.21	cps
Yttrium	89-1	29699067	29654790	29193750	29515869	0.95	cps
Yttrium	89-2	2323999	2240467	2324232	2296233	2.10	cps
Zinc	66-2	85989	86113	86086	86062	0.08	cps
Zirconium	90-1	27958	28579	28529	28356	1.22	cps
Zirconium	91-1	6715	6715	6502	6644	1.85	cps

Lab Sample ID: Q1159-01LX5 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	337980	334034	334637	335550	0.63	cps
Antimony	121-1	4107	4307	4021	4145	3.55	cps
Arsenic	75-2	4151	4291	4137	4193	2.03	cps
Barium	135-1	181522	184641	185100	183755	1.06	cps
Barium	137-1	319382	324672	320450	321501	0.87	cps
Beryllium	9-1	1667	1664	1662	1664	0.16	cps
Bismuth	209-1	12309079	11903371	12236157	12149536	1.78	cps
Bismuth	209-2	5615341	5564071	5517966	5565793	0.88	cps
Bromine	81-1	5338	5494	5391	5408	1.47	cps
Cadmium	108-1	67	57	57	60	9.62	cps
Cadmium	106-1	7162	7315	7545	7341	2.63	cps
Cadmium	111-1	5160	5301	5422	5294	2.48	cps
Calcium	43-1	66278	67517	66975	66923	0.93	cps
Calcium	44-1	1100936	1110849	1110683	1107489	0.51	cps
Carbon	12-1	6274038	6427696	6360316	6354017	1.21	cps
Carbon	12-2	40790	40425	40459	40558	0.50	cps
Chlorine	35-1	50806958	53197633	53051444	52352011	2.56	cps
Chlorine	35-2	229066	226728	227067	227620	0.56	cps
Chromium	52-2	45372	44857	45328	45186	0.63	cps
Cobalt	59-2	44924	44355	44225	44502	0.83	cps
Copper	63-2	120045	119655	120522	120074	0.36	cps
Dysprosium	156-1	13594	13373	13627	13531	1.02	cps
Dysprosium	156-2	5568	5478	5655	5567	1.59	cps
Erbium	164-1	13097	13353	13253	13234	0.98	cps
Erbium	164-2	5018	5361	4941	5107	4.38	cps
Gadolinium	160-1	14248	14638	14641	14509	1.56	cps
Gadolinium	160-2	6862	6605	6892	6786	2.32	cps
Holmium	165-1	19489226	19348707	19395963	19411299	0.37	cps
Holmium	165-2	7471267	7562461	7413469	7482399	1.00	cps
Indium	115-1	15837411	15301313	15951274	15696666	2.21	cps
Indium	115-2	1709885	1722488	1748508	1726961	1.14	cps
Iron	54-2	2064665	2047138	2089622	2067142	1.03	cps
Iron	56-2	37324027	37067674	37760298	37384000	0.94	cps
Iron	57-2	913591	908876	917733	913400	0.49	cps
Krypton	83-1	323	330	343	332	3.07	cps
Lead	206-1	67638	68201	68158	67999	0.46	cps

Lab Sample ID: Q1159-01LX5 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

Date & Time Ac	quirea: 202	uired: 2025-02-06 13:35:53		DataFile Name :		U26AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	55073	56513	56124	55903	1.33	cps	
Lead	208-1	258354	262477	261679	260837	0.84	cps	
Lithium	6-1	9249331	9195619	9275852	9240267	0.44	cps	
Magnesium	24-2	589488	591754	591539	590927	0.21	cps	
Manganese	55-2	164371	162948	164493	163937	0.52	cps	
Molybdenum	94-1	3734	3857	3617	3736	3.21	cps	
Molybdenum	95-1	2260	2464	2427	2384	4.55	cps	
Molybdenum	96-1	2794	3160	3350	3101	9.13	cps	
Molybdenum	97-1	1343	1570	1560	1491	8.59	cps	
Molybdenum	98-1	3877	3701	4001	3859	3.91	cps	
Neodymium	150-1	14408	14495	14972	14625	2.08	cps	
Neodymium	150-2	3884	4047	3804	3912	3.17	cps	
Nickel	60-2	31999	31976	33052	32342	1.90	cps	
Phosphorus	31-2	647	653	490	597	15.49	cps	
Potassium	39-2	32493	32680	32583	32586	0.29	cps	
Rhodium	103-1	15409576	15182919	15177809	15256768	0.87	cps	
Rhodium	103-2	6347515	6290771	6482216	6373501	1.54	cps	
Scandium	45-1	11692247	11549627	11613779	11618551	0.61	cps	
Scandium	45-2	238796	237870	238820	238495	0.23	cps	
Selenium	82-1	0	27	-23	1	2247.18	cps	
Selenium	77-2	30	20	43	31	37.62	cps	
Selenium	78-2	30	17	40	29	40.51	cps	
Silicon	28-1	16367544	16722109	16365314	16484989	1.25	cps	
Silver	107-1	1810	1857	1770	1812	2.39	cps	
Silver	109-1	1567	1473	1533	1525	3.10	cps	
Sodium	23-2	76988	75996	76157	76380	0.70	cps	
Strontium	86-1	57879	59208	58485	58524	1.14	cps	
Strontium	88-1	497520	508064	502928	502837	1.05	cps	
Sulfur	34-1	594496	593645	593281	593807	0.10	cps	
Terbium	159-1	20703488	20023937	20155433	20294286	1.78	cps	
Terbium	159-2	7335941	7172999	7215774	7241571	1.17	cps	
Thallium	203-1	1207	1117	1187	1170	4.04	cps	
Thallium	205-1	2900	2757	2717	2791	3.45	cps	
Tin	118-1	2834	2580	2534	2649	6.09	cps	
Titanium	47-1	12435	12479	12516	12477	0.32	cps	
Uranium	238-1	4858	4798	4648	4768	2.27	cps	

LB Number : LB134612 Operator :

Lab Sample ID : Q1159-01LX5 Instrumnet Name :

Client Sample ID: YE8C9L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 13:35:53 DataFile Name: 026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	41430	40781	41259	41157	0.82	cps	
Ytterbium	172-1	3774	3911	3574	3753	4.51	cps	
Ytterbium	172-2	1700	1663	1787	1717	3.69	cps	
Ytterbium	176-1	4277	4117	4337	4244	2.68	cps	
Ytterbium	176-2	1377	1397	1483	1419	4.00	cps	
Yttrium	89-1	28647396	28097670	28649041	28464702	1.12	cps	
Yttrium	89-2	2239219	2235474	2228305	2234333	0.25	cps	
Zinc	66-2	17561	17431	17364	17452	0.57	cps	
Zirconium	90-1	6271	6291	6535	6366	2.30	cps	
Zirconium	91-1	1317	1440	1403	1387	4.57	cps	

Jaswal

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<sub>3</sub> 529

Lab Sample ID :Q1159-03Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1762488	1788228	1803263	1784659	1.16	cps
Antimony	121-1	364549	371925	369127	368534	1.01	cps
Arsenic	75-2	24695	24271	24157	24375	1.16	cps
Barium	135-1	2594845	2652408	2638873	2628709	1.14	cps
Barium	137-1	4462798	4578681	4524044	4521841	1.28	cps
Beryllium	9-1	72897	74184	73589	73557	0.88	cps
Bismuth	209-1	12286055	12223434	12202502	12237330	0.36	cps
Bismuth	209-2	5484142	5548184	5481323	5504550	0.69	cps
Bromine	81-1	7862	8486	8116	8155	3.85	cps
Cadmium	108-1	3017	3287	3260	3188	4.67	cps
Cadmium	106-1	11565	11101	11462	11376	2.14	cps
Cadmium	111-1	47633	47116	47852	47534	0.79	cps
Calcium	43-1	394188	400362	403521	399357	1.19	cps
Calcium	44-1	6245770	6386683	6392226	6341560	1.31	cps
Carbon	12-1	6847622	7055577	6986207	6963135	1.52	cps
Carbon	12-2	44427	45517	45493	45146	1.38	cps
Chlorine	35-1	213483563	227933837	232241843	224553081	4.38	cps
Chlorine	35-2	1010907	1023508	1031147	1021854	1.00	cps
Chromium	52-2	383963	384948	383500	384137	0.19	cps
Cobalt	59-2	1036248	1024623	1036290	1032387	0.65	cps
Copper	63-2	903870	903207	899971	902349	0.23	cps
Dysprosium	156-1	68371	70240	69298	69303	1.35	cps
Dysprosium	156-2	28307	28480	28607	28465	0.53	cps
Erbium	164-1	66345	66947	67098	66797	0.60	cps
Erbium	164-2	24890	24940	24930	24920	0.11	cps
Gadolinium	160-1	72938	74335	74671	73981	1.24	cps
Gadolinium	160-2	33863	34124	33780	33922	0.53	cps
Holmium	165-1	19883601	19847788	19622215	19784535	0.72	cps
Holmium	165-2	7485804	7369839	7492251	7449298	0.92	cps
Indium	115-1	16140984	16058698	15991810	16063831	0.47	cps
Indium	115-2	1726234	1731777	1750538	1736183	0.73	cps
Iron	54-2	10261014	10149811	10251219	10220681	0.60	cps
Iron	56-2	189504231	187783984	188663631	188650615	0.46	cps
Iron	57-2	4926716	4770378	4805427	4834174	1.70	cps
Krypton	83-1	523	490	447	487	7.90	cps
Lead	206-1	380528	387880	388492	385633	1.15	cps

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Lab Sample ID :Q1159-03Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Date & Time Acquire	. 2020 C	DZ 00 10.00.12	Datai iic i	vario .	02//(IXE) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	313538	316918	318589	316348	0.81	cps
Lead	208-1	1467180	1495210	1499787	1487392	1.19	cps
Lithium	6-1	9554666	9452501	9502196	9503121	0.54	cps
Magnesium	24-2	3047230	3031210	3011265	3029902	0.59	cps
Manganese	55-2	992916	997680	1000223	996940	0.37	cps
Molybdenum	94-1	570082	583598	581532	578404	1.26	cps
Molybdenum	95-1	964386	976000	986721	975703	1.14	cps
Molybdenum	96-1	1033204	1055957	1042723	1043961	1.09	cps
Molybdenum	97-1	601866	618077	607847	609263	1.35	cps
Molybdenum	98-1	1639148	1641827	1648769	1643248	0.30	cps
Neodymium	150-1	72032	75668	74401	74034	2.49	cps
Neodymium	150-2	20392	20202	19881	20159	1.28	cps
Nickel	60-2	383151	382666	384503	383440	0.25	cps
Phosphorus	31-2	2717	2627	2627	2657	1.96	cps
Potassium	39-2	110919	111392	112799	111703	0.88	cps
Rhodium	103-1	15530934	15331961	15383473	15415456	0.67	cps
Rhodium	103-2	6486487	6339533	6362515	6396178	1.24	cps
Scandium	45-1	12227882	12035901	12029445	12097743	0.93	cps
Scandium	45-2	246025	245223	244175	245141	0.38	cps
Selenium	82-1	1080	1070	1160	1103	4.47	cps
Selenium	77-2	150	150	103	134	20.04	cps
Selenium	78-2	173	163	153	163	6.12	cps
Silicon	28-1	84884799	89305352	87809672	87333274	2.57	cps
Silver	107-1	212861	220654	218849	217455	1.88	cps
Silver	109-1	201956	208063	207121	205713	1.60	cps
Sodium	23-2	118567	120898	121241	120235	1.21	cps
Strontium	86-1	11749688	11667563	11455947	11624399	1.30	cps
Strontium	88-1	101568328	101082138	100299619	100983362	0.63	cps
Sulfur	34-1	596225	588764	586871	590620	0.84	cps
Terbium	159-1	20566569	20413694	20300203	20426822	0.65	cps
Terbium	159-2	7279333	7368131	7299808	7315758	0.64	cps
Thallium	203-1	156283	159999	161585	159289	1.71	cps
Thallium	205-1	380318	382762	383225	382102	0.41	cps
Tin	118-1	8090	5585	5478	6384	23.16	cps
Titanium	47-1	59349	60366	61113	60276	1.47	cps
Uranium	238-1	24267	24751	24450	24489	1.00	cps

Lab Sample ID: Q1159-03 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:39:12 DataFile Name: 027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	540010	534311	540650	538323	0.65	cps
Ytterbium	172-1	18970	19144	19765	19293	2.17	cps
Ytterbium	172-2	9016	8820	9033	8956	1.33	cps
Ytterbium	176-1	13200	13437	13767	13468	2.12	cps
Ytterbium	176-2	5831	5855	5658	5781	1.86	cps
Yttrium	89-1	30158977	29321116	29133224	29537772	1.85	cps
Yttrium	89-2	2289907	2315143	2287693	2297581	0.66	cps
Zinc	66-2	153777	155310	152585	153891	0.89	cps
Zirconium	90-1	27257	27808	28309	27791	1.89	cps
Zirconium	91-1	6245	6281	6322	6283	0.61	cps

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Date & Time Ac	quirea: 202	25-02-06 13:42:22	Datar	ile Name :	028CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2274	2207	2317	2266	2.45	cps
Antimony	121-1	153	103	107	121	23.08	cps
Arsenic	75-2	0	7	0	2	173.21	cps
Barium	135-1	433	353	360	382	11.61	cps
Barium	137-1	537	403	423	454	15.82	cps
Beryllium	9-1	379	409	382	390	4.19	cps
Bismuth	209-1	12032972	12078667	12278667	12130102	1.08	cps
Bismuth	209-2	5622515	5634914	5736073	5664501	1.10	cps
Bromine	81-1	4758	4631	4691	4693	1.35	cps
Cadmium	108-1	23	13	23	20	28.87	cps
Cadmium	106-1	7352	7152	7335	7280	1.53	cps
Cadmium	111-1	5177	5034	5152	5121	1.49	cps
Calcium	43-1	510	467	490	489	4.44	cps
Calcium	44-1	33519	33192	32216	32976	2.06	cps
Carbon	12-1	6348860	6370376	6439226	6386154	0.74	cps
Carbon	12-2	42568	41692	42548	42269	1.18	cps
Chlorine	35-1	13994164	12702634	11513723	12736840	9.74	cps
Chlorine	35-2	41984	40590	37726	40100	5.41	cps
Chromium	52-2	1073	1250	1273	1199	9.12	cps
Cobalt	59-2	163	160	147	157	5.63	cps
Copper	63-2	5621	5698	5835	5718	1.89	cps
Dysprosium	156-1	27	23	20	23	14.29	cps
Dysprosium	156-2	7	7	3	6	34.70	cps
Erbium	164-1	100	93	90	94	5.39	cps
Erbium	164-2	33	37	37	36	5.42	cps
Gadolinium	160-1	113	130	123	122	6.86	cps
Gadolinium	160-2	13	10	20	14	35.26	cps
Holmium	165-1	19528713	19446176	19343748	19439546	0.48	cps
Holmium	165-2	7650811	7542383	7522175	7571789	0.91	cps
Indium	115-1	16088011	15851424	15622206	15853880	1.47	cps
Indium	115-2	1779436	1789784	1791852	1787024	0.37	cps
Iron	54-2	1193	1170	1040	1135	7.28	cps
Iron	56-2	19507	18563	16036	18035	9.95	cps
Iron	57-2	507	423	480	470	9.06	cps
Krypton	83-1	310	347	257	304	14.87	cps
Lead	206-1	2414	2367	2230	2337	4.08	cps

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Date & Time Ac	quirea: 202	25-02-06 13:42:22	DataF	ile Name :	028CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2057	1987	1810	1951	6.52	cps
Lead	208-1	9465	9238	8681	9128	4.42	cps
Lithium	6-1	9128261	9261173	9068561	9152665	1.08	cps
Magnesium	24-2	1910	1797	1827	1845	3.18	cps
Manganese	55-2	230	200	190	207	10.07	cps
Molybdenum	94-1	453	480	493	476	4.28	cps
Molybdenum	95-1	357	343	197	299	29.70	cps
Molybdenum	96-1	387	380	393	387	1.72	cps
Molybdenum	97-1	207	200	217	208	4.04	cps
Molybdenum	98-1	480	430	543	484	11.72	cps
Neodymium	150-1	20	20	30	23	24.74	cps
Neodymium	150-2	7	0	3	3	100.05	cps
Nickel	60-2	733	917	877	842	11.45	cps
Phosphorus	31-2	93	107	107	102	7.53	cps
Potassium	39-2	13386	13573	13980	13647	2.23	cps
Rhodium	103-1	15444821	15414268	15178296	15345795	0.95	cps
Rhodium	103-2	6399306	6400496	6493278	6431027	0.84	cps
Scandium	45-1	11533108	11255375	11458275	11415586	1.26	cps
Scandium	45-2	238427	235446	236182	236685	0.66	cps
Selenium	82-1	-53	-100	47	-36	-210.75	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	7	10	37	18	92.48	cps
Silicon	28-1	662494	665371	666144	664670	0.29	cps
Silver	107-1	563	513	480	519	8.08	cps
Silver	109-1	420	433	363	406	9.17	cps
Sodium	23-2	69571	68500	68825	68965	0.80	cps
Strontium	86-1	1483	1480	1283	1416	8.09	cps
Strontium	88-1	8420	8794	6382	7865	16.51	cps
Sulfur	34-1	595609	595989	598289	596629	0.24	cps
Terbium	159-1	20076648	19797390	19872422	19915487	0.73	cps
Terbium	159-2	7380266	7316542	7325484	7340764	0.47	cps
Thallium	203-1	760	673	607	680	11.31	cps
Thallium	205-1	1760	1823	1670	1751	4.40	cps
Tin	118-1	2064	1980	1963	2002	2.68	cps
Titanium	47-1	323	250	317	297	13.67	cps
Uranium	238-1	47	27	33	36	28.64	cps

LB Number: LB134612

Lab Sample ID : PB166317BL

Client Sample ID: PBW317 Dilution Factor:

Date & Time Acquired: 2025-02-06 13:42:22 DataFile Name: 028CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	43	47	57	49	14.20	cps	
Ytterbium	172-1	107	127	93	109	15.41	cps	
Ytterbium	172-2	23	47	53	41	38.32	cps	
Ytterbium	176-1	1873	1787	1830	1830	2.37	cps	
Ytterbium	176-2	337	280	353	323	11.89	cps	
Yttrium	89-1	28121682	28208851	28051239	28127257	0.28	cps	
Yttrium	89-2	2227866	2234095	2254717	2238893	0.63	cps	
Zinc	66-2	353	323	347	341	4.62	cps	
Zirconium	90-1	1033	1120	983	1046	6.61	cps	
Zirconium	91-1	163	157	203	174	14.47	cps	

Operator:

Instrumnet Name:

Jaswal

P8

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Lab Sample ID: PB166317BS Instrumnet Name: P8
Client Sample ID: LCS317 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Date & Time / to	quircu . 202	0 02 00 10.40.42	Datai	iic i vairie .	023L00L.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3640	3347	3510	3499	4.20	cps
Antimony	121-1	71314	72883	72605	72267	1.16	cps
Arsenic	75-2	870	830	707	802	10.61	cps
Barium	135-1	82312	83331	84008	83217	1.03	cps
Barium	137-1	145251	145361	145257	145290	0.04	cps
Beryllium	9-1	14688	14813	14670	14724	0.53	cps
Bismuth	209-1	12568279	12031134	12368924	12322779	2.20	cps
Bismuth	209-2	5580530	5631957	5612088	5608192	0.46	cps
Bromine	81-1	4838	4818	4921	4859	1.13	cps
Cadmium	108-1	667	743	807	739	9.49	cps
Cadmium	106-1	8199	8122	8429	8250	1.94	cps
Cadmium	111-1	14149	14205	14199	14184	0.22	cps
Calcium	43-1	61705	61641	62200	61849	0.49	cps
Calcium	44-1	1025915	1028159	1032511	1028862	0.33	cps
Carbon	12-1	6552620	6758098	6770214	6693644	1.83	cps
Carbon	12-2	44634	44795	44741	44723	0.18	cps
Chlorine	35-1	7399696	7425849	7294941	7373495	0.94	cps
Chlorine	35-2	29012	28041	28141	28398	1.88	cps
Chromium	52-2	18559	18188	18876	18541	1.86	cps
Cobalt	59-2	17578	17568	17261	17469	1.03	cps
Copper	63-2	34652	34104	34255	34337	0.82	cps
Dysprosium	156-1	27	40	27	31	24.74	cps
Dysprosium	156-2	7	13	3	8	65.47	cps
Erbium	164-1	110	90	100	100	10.00	cps
Erbium	164-2	43	37	33	38	13.48	cps
Gadolinium	160-1	100	117	157	124	23.40	cps
Gadolinium	160-2	7	20	13	13	49.99	cps
Holmium	165-1	19565556	19119774	19347311	19344214	1.15	cps
Holmium	165-2	7542050	7575041	7408020	7508370	1.18	cps
Indium	115-1	15938629	15898064	15933164	15923285	0.14	cps
Indium	115-2	1766506	1752352	1751740	1756866	0.48	cps
Iron	54-2	74175	73548	73029	73584	0.78	cps
Iron	56-2	1352827	1335482	1335979	1341429	0.74	cps
Iron	57-2	33633	33974	33880	33829	0.52	cps
Krypton	83-1	273	300	263	279	6.80	cps
Lead	206-1	28996	29978	29477	29484	1.67	cps

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	25979	25535	25298	25604	1.35	cps
Lead	208-1	116400	117189	116997	116862	0.35	cps
Lithium	6-1	9087727	8915022	9006826	9003192	0.96	cps
Magnesium	24-2	282291	286409	283872	284191	0.73	cps
Manganese	55-2	3744	3877	3764	3795	1.90	cps
Molybdenum	94-1	74706	76603	76405	75904	1.37	cps
Molybdenum	95-1	89264	89009	89758	89344	0.43	cps
Molybdenum	96-1	99842	100020	99735	99866	0.14	cps
Molybdenum	97-1	56384	56063	56809	56418	0.66	cps
Molybdenum	98-1	142146	144591	144295	143677	0.93	cps
Neodymium	150-1	33	17	33	28	34.63	cps
Neodymium	150-2	0	3	10	4	114.60	cps
Nickel	60-2	6015	5364	5791	5723	5.77	cps
Phosphorus	31-2	347	317	240	301	18.27	cps
Potassium	39-2	183011	181253	183554	182606	0.66	cps
Rhodium	103-1	15579752	15348210	15443813	15457258	0.75	cps
Rhodium	103-2	6370986	6404574	6325934	6367165	0.62	cps
Scandium	45-1	11678578	11337941	11398066	11471528	1.58	cps
Scandium	45-2	236732	235470	237652	236618	0.46	cps
Selenium	82-1	2747	2607	2684	2679	2.62	cps
Selenium	77-2	63	47	57	56	15.09	cps
Selenium	78-2	197	157	223	192	17.46	cps
Silicon	28-1	954422	937278	932889	941529	1.21	cps
Silver	107-1	44712	44869	45388	44990	0.79	cps
Silver	109-1	42134	42238	43318	42563	1.54	cps
Sodium	23-2	650408	648104	646365	648292	0.31	cps
Strontium	86-1	12012	12182	12652	12282	2.70	cps
Strontium	88-1	101529	103050	101163	101914	0.98	cps
Sulfur	34-1	647022	655053	653621	651898	0.66	cps
Terbium	159-1	20057137	19976593	20327728	20120486	0.91	cps
Terbium	159-2	7251669	7239077	7255008	7248585	0.12	cps
Thallium	203-1	33577	34690	34536	34267	1.76	cps
Thallium	205-1	82356	83121	82218	82565	0.59	cps
Tin	118-1	144954	146056	147222	146077	0.78	cps
Titanium	47-1	7245	7322	7242	7270	0.62	cps
Uranium	238-1	104230	104916	104435	104527	0.34	cps

LB Number : LB134612 Operator :

Lab Sample ID : PB166317BS

Client Sample ID: LCS317 Dilution Factor:

Date & Time Acquired: 2025-02-06 13:45:42 DataFile Name: 029LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	35123	35564	35414	35367	0.63	cps	
Ytterbium	172-1	77	103	77	86	18.00	cps	
Ytterbium	172-2	70	40	60	57	26.96	cps	
Ytterbium	176-1	1840	1977	2027	1948	4.96	cps	
Ytterbium	176-2	383	447	447	426	8.59	cps	
Yttrium	89-1	28897440	28102754	27997130	28332441	1.74	cps	
Yttrium	89-2	2222919	2205757	2182960	2203879	0.91	cps	
Zinc	66-2	7425	7339	7505	7423	1.12	cps	
Zirconium	90-1	62513	62265	63092	62623	0.68	cps	
Zirconium	91-1	14064	13407	13914	13795	2.50	cps	

Instrumnet Name:

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P8

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Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Date & Time Ac	quired. 202	13-02-00 13.46.59	Dalari	ie name.	USUAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	713	733	757	734	2.95	cps
Antimony	121-1	913	917	823	884	5.99	cps
Arsenic	75-2	190	190	127	169	21.65	cps
Barium	135-1	72818	74041	73609	73489	0.84	cps
Barium	137-1	126976	128682	128087	127915	0.68	cps
Beryllium	9-1	354	389	319	354	9.90	cps
Bismuth	209-1	11060901	11161145	11207896	11143314	0.67	cps
Bismuth	209-2	5074105	5082522	5039946	5065524	0.45	cps
Bromine	81-1	96966	110182	118334	108494	9.94	cps
Cadmium	108-1	37	23	40	33	26.47	cps
Cadmium	106-1	7365	7629	7602	7532	1.93	cps
Cadmium	111-1	5173	5351	5317	5280	1.78	cps
Calcium	43-1	20993106	21348236	21150193	21163845	0.84	cps
Calcium	44-1	343637182	345102355	339585088	342774875	0.83	cps
Carbon	12-1	9440204	10063204	10378838	9960749	4.80	cps
Carbon	12-2	72266	70418	71968	71551	1.39	cps
Chlorine	35-1	5456261	5691753	5665600	5604538	2.30	cps
Chlorine	35-2	23763	23720	22768	23417	2.40	cps
Chromium	52-2	1700	1827	1727	1751	3.81	cps
Cobalt	59-2	273	303	267	281	6.95	cps
Copper	63-2	3781	4094	3717	3864	5.22	cps
Dysprosium	156-1	207	263	210	227	14.03	cps
Dysprosium	156-2	93	73	90	86	12.53	cps
Erbium	164-1	313	293	380	329	13.80	cps
Erbium	164-2	97	80	137	104	27.88	cps
Gadolinium	160-1	337	303	300	313	6.47	cps
Gadolinium	160-2	90	140	117	116	21.65	cps
Holmium	165-1	18700440	18967538	19081408	18916462	1.03	cps
Holmium	165-2	7140163	7167668	7077194	7128342	0.65	cps
Indium	115-1	14809087	14944932	15117456	14957158	1.03	cps
Indium	115-2	1609065	1621669	1578635	1603123	1.38	cps
Iron	54-2	131341	131277	130197	130938	0.49	cps
Iron	56-2	2504404	2498158	2526374	2509645	0.59	cps
Iron	57-2	60705	61649	60738	61031	0.88	cps
Krypton	83-1	350	313	280	314	11.13	cps
Lead	206-1	2307	2374	2237	2306	2.96	cps

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Date & Time Act	quireu . 202	25-02-00 13.46.59	Dalari	ie ivailie .	USUAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2040	1947	1847	1945	4.97	cps
Lead	208-1	9015	9068	8458	8847	3.82	cps
Lithium	6-1	8584584	8687979	8528139	8600234	0.94	cps
Magnesium	24-2	30844900	30425172	30850059	30706710	0.79	cps
Manganese	55-2	41610	41360	42068	41679	0.86	cps
Molybdenum	94-1	3060	2870	2810	2914	4.48	cps
Molybdenum	95-1	3134	2994	3314	3147	5.10	cps
Molybdenum	96-1	3484	3530	3507	3507	0.67	cps
Molybdenum	97-1	1923	1913	1974	1937	1.66	cps
Molybdenum	98-1	4848	4794	4774	4805	0.79	cps
Neodymium	150-1	323	290	303	306	5.49	cps
Neodymium	150-2	77	67	73	72	7.05	cps
Nickel	60-2	767	657	713	712	7.72	cps
Phosphorus	31-2	147	87	107	113	26.96	cps
Potassium	39-2	568699	561432	558594	562908	0.93	cps
Rhodium	103-1	13848901	13999196	13903264	13917120	0.55	cps
Rhodium	103-2	5693400	5750669	5607111	5683727	1.27	cps
Scandium	45-1	11188921	11147883	11019732	11118845	0.79	cps
Scandium	45-2	223118	221066	222076	222087	0.46	cps
Selenium	82-1	30	80	113	74	56.34	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	7	10	10	9	21.63	cps
Silicon	28-1	82371377	82534159	82075294	82326943	0.28	cps
Silver	107-1	793	747	613	718	13.01	cps
Silver	109-1	577	440	437	484	16.49	cps
Sodium	23-2	16920482	16536877	16925226	16794195	1.33	cps
Strontium	86-1	78065329	77585579	78677424	78109444	0.70	cps
Strontium	88-1	664228417	674460937	680102630	672930661	1.20	cps
Sulfur	34-1	32700710	32903475	32707637	32770607	0.35	cps
Terbium	159-1	19474668	19383788	19034938	19297798	1.20	cps
Terbium	159-2	6984218	6943341	6964783	6964114	0.29	cps
Thallium	203-1	490	490	453	478	4.43	cps
Thallium	205-1	1290	1200	1137	1209	6.37	cps
Tin	118-1	12643	12412	13026	12694	2.44	cps
Titanium	47-1	1647	1807	1827	1760	5.61	cps
Uranium	238-1	11132	10858	10928	10973	1.30	cps

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:48:59 DataFile Name: 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	343	340	363	349	3.62	cps
Ytterbium	172-1	237	203	203	214	8.97	cps
Ytterbium	172-2	63	100	117	93	29.24	cps
Ytterbium	176-1	1747	2064	1873	1895	8.41	cps
Ytterbium	176-2	307	327	300	311	4.46	cps
Yttrium	89-1	26874901	27453738	27049205	27125948	1.09	cps
Yttrium	89-2	2055193	2092624	2029857	2059225	1.53	cps
Zinc	66-2	737	657	723	706	6.07	cps
Zirconium	90-1	3584	3357	3234	3392	5.24	cps
Zirconium	91-1	833	743	663	747	11.39	cps

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Lab Sample ID: Q1186-02 Instrumnet Name: P8

Client Sample ID: ME2949 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	523	473	497	498	5.03	cps
Antimony	121-1	90	123	110	108	15.57	cps
Arsenic	75-2	27	20	13	20	33.35	cps
Barium	135-1	33575	33979	34350	33968	1.14	cps
Barium	137-1	59460	60274	60675	60136	1.03	cps
Beryllium	9-1	451	417	461	443	5.17	cps
Bismuth	209-1	10984404	10257383	11344865	10862217	5.10	cps
Bismuth	209-2	4815334	4960863	4858719	4878306	1.53	cps
Bromine	81-1	125910	156551	172912	151791	15.72	cps
Cadmium	108-1	17	27	33	26	32.81	cps
Cadmium	106-1	7435	7025	7532	7331	3.67	cps
Cadmium	111-1	5233	4929	5286	5149	3.74	cps
Calcium	43-1	20483136	20303502	20206702	20331113	0.69	cps
Calcium	44-1	325659608	329150735	326440842	327083728	0.56	cps
Carbon	12-1	9726294	10453586	10830430	10336770	5.43	cps
Carbon	12-2	73727	73422	73931	73693	0.35	cps
Chlorine	35-1	19653239	21770171	22599989	21341133	7.12	cps
Chlorine	35-2	97740	99069	100767	99192	1.53	cps
Chromium	52-2	1530	1727	1777	1678	7.77	cps
Cobalt	59-2	393	410	407	403	2.19	cps
Copper	63-2	5368	5561	5635	5521	2.50	cps
Dysprosium	156-1	20	23	27	23	14.29	cps
Dysprosium	156-2	23	7	7	12	78.69	cps
Erbium	164-1	123	137	80	113	26.14	cps
Erbium	164-2	43	47	40	43	7.70	cps
Gadolinium	160-1	163	137	110	137	19.51	cps
Gadolinium	160-2	33	7	20	20	66.65	cps
Holmium	165-1	18031290	17412389	18916480	18120053	4.17	cps
Holmium	165-2	6963575	7129561	7006983	7033373	1.22	cps
Indium	115-1	14471368	13736966	14909671	14372668	4.12	cps
Indium	115-2	1480660	1583820	1483929	1516136	3.87	cps
Iron	54-2	4974	4311	4461	4582	7.59	cps
Iron	56-2	78809	80814	79956	79860	1.26	cps
Iron	57-2	2530	2740	2637	2636	3.98	cps
Krypton	83-1	323	287	297	302	6.27	cps
Lead	206-1	2344	2270	2504	2372	5.03	cps

Lab Sample ID : Q1186-02 Instrumnet Name : P8

Client Sample ID : ME2949 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1974	1837	1870	1893	3.76	cps
Lead	208-1	9245	8544	9025	8938	4.01	cps
Lithium	6-1	8533961	8137563	8522171	8397898	2.69	cps
Magnesium	24-2	30858075	30135922	30394406	30462801	1.20	cps
Manganese	55-2	12682	12609	12969	12754	1.49	cps
Molybdenum	94-1	837	813	867	839	3.19	cps
Molybdenum	95-1	377	377	387	380	1.52	cps
Molybdenum	96-1	510	407	480	466	11.42	cps
Molybdenum	97-1	193	227	203	208	8.23	cps
Molybdenum	98-1	460	510	557	509	9.50	cps
Neodymium	150-1	37	40	30	36	14.32	cps
Neodymium	150-2	3	0	7	3	100.05	cps
Nickel	60-2	857	753	900	837	9.01	cps
Phosphorus	31-2	117	123	107	116	7.26	cps
Potassium	39-2	658358	659628	659397	659128	0.10	cps
Rhodium	103-1	13064168	12735043	13712441	13170551	3.78	cps
Rhodium	103-2	5441097	5630827	5456815	5509580	1.91	cps
Scandium	45-1	10689411	10155671	11083534	10642872	4.38	cps
Scandium	45-2	214507	218034	217487	216676	0.88	cps
Selenium	82-1	50	107	170	109	55.13	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	20	3	13	12	68.66	cps
Silicon	28-1	92715532	94303445	92937772	93318916	0.92	cps
Silver	107-1	697	683	683	688	1.12	cps
Silver	109-1	427	410	523	453	13.50	cps
Sodium	23-2	64888739	63816136	64469472	64391449	0.84	cps
Strontium	86-1	80297955	80248672	80583327	80376652	0.22	cps
Strontium	88-1	678042390	681476897	682714083	680744457	0.36	cps
Sulfur	34-1	27856648	28219558	27674691	27916966	0.99	cps
Terbium	159-1	18892779	17903127	19210079	18668662	3.65	cps
Terbium	159-2	6710216	6739669	6600633	6683506	1.10	cps
Thallium	203-1	453	363	310	376	19.29	cps
Thallium	205-1	913	1033	980	976	6.16	cps
Tin	118-1	7302	7802	7495	7533	3.35	cps
Titanium	47-1	2594	2747	2567	2636	3.69	cps
Uranium	238-1	850	907	997	918	8.06	cps

Lab Sample ID :Q1186-02Instrumnet Name :P8Client Sample ID :ME2949Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:52:13 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	130	117	157	134	15.15	cps
Ytterbium	172-1	80	93	90	88	7.90	cps
Ytterbium	172-2	27	37	30	31	16.37	cps
Ytterbium	176-1	1790	1613	1890	1765	7.94	cps
Ytterbium	176-2	283	297	260	280	6.63	cps
Yttrium	89-1	25980760	24847527	26727865	25852051	3.66	cps
Yttrium	89-2	1995050	2042909	1977404	2005121	1.69	cps
Zinc	66-2	773	870	787	810	6.47	cps
Zirconium	90-1	1877	1840	2034	1917	5.36	cps
Zirconium	91-1	400	410	410	407	1.42	cps

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	119883	118968	120241	119697	0.55	cps
Antimony	121-1	5044	4888	4934	4955	1.62	cps
Arsenic	75-2	100	77	107	94	16.68	cps
Barium	135-1	58643	60849	60079	59857	1.87	cps
Barium	137-1	102220	105403	107315	104979	2.45	cps
Beryllium	9-1	450	431	456	446	2.92	cps
Bismuth	209-1	11497410	11509020	11526747	11511059	0.13	cps
Bismuth	209-2	5240706	5266331	5109231	5205423	1.62	cps
Bromine	81-1	134357	150613	164468	149813	10.06	cps
Cadmium	108-1	23	40	20	28	38.58	cps
Cadmium	106-1	7626	7382	7922	7643	3.54	cps
Cadmium	111-1	5382	5206	5595	5394	3.61	cps
Calcium	43-1	15522474	15594621	16103739	15740278	2.01	cps
Calcium	44-1	247459310	249814156	253759463	250344310	1.27	cps
Carbon	12-1	9638216	10335418	10666827	10213487	5.14	cps
Carbon	12-2	71292	71693	72601	71862	0.93	cps
Chlorine	35-1	6419174	6672249	6776469	6622631	2.77	cps
Chlorine	35-2	28258	28117	27980	28119	0.49	cps
Chromium	52-2	2067	2114	1967	2049	3.66	cps
Cobalt	59-2	520	587	533	547	6.45	cps
Copper	63-2	16046	16012	16660	16239	2.24	cps
Dysprosium	156-1	40	103	107	83	45.08	cps
Dysprosium	156-2	27	30	43	33	26.45	cps
Erbium	164-1	157	153	137	149	7.20	cps
Erbium	164-2	63	43	67	58	21.85	cps
Gadolinium	160-1	177	163	217	186	14.96	cps
Gadolinium	160-2	57	43	63	54	18.71	cps
Holmium	165-1	18900685	19579221	19277649	19252518	1.77	cps
Holmium	165-2	7478323	7447402	7284851	7403525	1.40	cps
Indium	115-1	15064203	15149165	15322352	15178573	0.87	cps
Indium	115-2	1657927	1675331	1618105	1650454	1.78	cps
Iron	54-2	108156	109643	110839	109546	1.23	cps
Iron	56-2	2105779	2117282	2086692	2103251	0.73	cps
Iron	57-2	50807	50680	51944	51143	1.36	cps
Krypton	83-1	273	303	263	280	7.43	cps
Lead	206-1	7549	7659	7252	7487	2.81	cps

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Date & Time Act	quireu . 202	25-02-00 13.55.26	DalaFi	ie ivallie .	USZAKEF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6235	6305	6805	6448	4.82	cps
Lead	208-1	29046	29076	29900	29341	1.65	cps
Lithium	6-1	8469482	8964466	8687646	8707198	2.85	cps
Magnesium	24-2	20794708	20483311	20928117	20735379	1.10	cps
Manganese	55-2	96829	94523	95584	95645	1.21	cps
Molybdenum	94-1	5975	5831	6098	5968	2.24	cps
Molybdenum	95-1	8243	8733	8726	8567	3.28	cps
Molybdenum	96-1	9166	9663	9617	9482	2.89	cps
Molybdenum	97-1	5128	5398	5638	5388	4.74	cps
Molybdenum	98-1	13877	14047	14054	13993	0.72	cps
Neodymium	150-1	100	77	73	83	17.44	cps
Neodymium	150-2	20	17	27	21	24.12	cps
Nickel	60-2	1227	1220	1373	1273	6.81	cps
Phosphorus	31-2	187	117	140	148	24.12	cps
Potassium	39-2	627720	622361	631410	627164	0.73	cps
Rhodium	103-1	13853351	14237046	13963742	14018046	1.41	cps
Rhodium	103-2	6041111	5907249	5866660	5938340	1.54	cps
Scandium	45-1	11009712	11213972	11128669	11117451	0.92	cps
Scandium	45-2	230323	231201	224661	228728	1.55	cps
Selenium	82-1	77	70	167	104	51.69	cps
Selenium	77-2	0	10	3	4	114.60	cps
Selenium	78-2	13	7	10	10	33.30	cps
Silicon	28-1	90327949	92645875	92409562	91794462	1.39	cps
Silver	107-1	1757	1703	1777	1746	2.17	cps
Silver	109-1	1293	1383	1363	1347	3.51	cps
Sodium	23-2	16338285	16639583	16565942	16514603	0.95	cps
Strontium	86-1	78712070	81358182	83140359	81070204	2.75	cps
Strontium	88-1	693201203	705609616	721699456	706836758	2.02	cps
Sulfur	34-1	21007613	21433635	21393714	21278321	1.11	cps
Terbium	159-1	19521631	19754525	19734325	19670160	0.66	cps
Terbium	159-2	7225026	7190883	6958798	7124902	2.03	cps
Thallium	203-1	430	457	343	410	14.45	cps
Thallium	205-1	953	940	810	901	8.79	cps
Tin	118-1	9940	10588	10788	10439	4.24	cps
Titanium	47-1	2540	2757	2900	2733	6.63	cps
Uranium	238-1	41715	43006	42698	42473	1.59	cps

Lab Sample ID :Q1186-03Instrumnet Name :P8Client Sample ID :ME2955Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:55:28 DataFile Name: 032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	700	677	677	684	1.97	cps
Ytterbium	172-1	103	127	127	119	11.33	cps
Ytterbium	172-2	77	60	77	71	13.53	cps
Ytterbium	176-1	1980	1840	1803	1875	4.97	cps
Ytterbium	176-2	317	347	313	326	5.64	cps
Yttrium	89-1	26910361	27307144	27274842	27164116	0.81	cps
Yttrium	89-2	2188947	2139098	2083492	2137179	2.47	cps
Zinc	66-2	44975	46138	45784	45632	1.31	cps
Zirconium	90-1	2664	2954	3047	2888	6.92	cps
Zirconium	91-1	563	523	730	606	18.10	cps

Lab Sample ID: Q1186-04 Instrumnet Name: P8

Client Sample ID: ME2956 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:58:43 DataFile Name: 033AREF.d

Date & Time /	equired. 202	0 02 00 10.00.40	Datain	ic ivallic .	000/ (I LET .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	427	483	380	430	12.03	cps
Antimony	121-1	230	217	247	231	6.50	cps
Arsenic	75-2	80	103	107	97	15.03	cps
Barium	135-1	63012	65108	64503	64208	1.68	cps
Barium	137-1	107990	112798	111777	110855	2.29	cps
Beryllium	9-1	400	437	482	440	9.39	cps
Bismuth	209-1	11508043	12041298	11780436	11776592	2.26	cps
Bismuth	209-2	5147984	5192788	5201106	5180626	0.55	cps
Bromine	81-1	133618	158893	171302	154604	12.42	cps
Cadmium	108-1	23	33	30	29	17.63	cps
Cadmium	106-1	7455	8099	7719	7758	4.17	cps
Cadmium	111-1	5229	5666	5416	5437	4.03	cps
Calcium	43-1	16073916	16581526	16356552	16337331	1.56	cps
Calcium	44-1	262613936	263761863	262786023	263053941	0.24	cps
Carbon	12-1	9587627	10073710	10442651	10034663	4.27	cps
Carbon	12-2	70575	71858	70535	70989	1.06	cps
Chlorine	35-1	5667892	6234124	6222819	6041612	5.36	cps
Chlorine	35-2	26481	25743	26488	26237	1.63	cps
Chromium	52-2	2937	2807	2857	2867	2.29	cps
Cobalt	59-2	867	803	780	817	5.49	cps
Copper	63-2	5041	5504	5351	5299	4.46	cps
Dysprosium	156-1	53	87	47	62	34.44	cps
Dysprosium	156-2	10	10	30	17	69.28	cps
Erbium	164-1	163	180	163	169	5.70	cps
Erbium	164-2	30	67	60	52	37.40	cps
Gadolinium	160-1	203	143	137	161	22.79	cps
Gadolinium	160-2	47	30	53	43	27.73	cps
Holmium	165-1	19383548	20284386	19641353	19769762	2.35	cps
Holmium	165-2	7374790	7403033	7194581	7324134	1.54	cps
Indium	115-1	15025781	16104330	15471443	15533851	3.49	cps
Indium	115-2	1656477	1683027	1656169	1665225	0.93	cps
Iron	54-2	97131	98214	95792	97046	1.25	cps
Iron	56-2	1856296	1867964	1783438	1835900	2.50	cps
Iron	57-2	44760	44653	44262	44558	0.59	cps
Krypton	83-1	327	330	330	329	0.59	cps
Lead	206-1	2760	2787	2614	2720	3.43	cps

Lab Sample ID: Q1186-04 Instrumnet Name: P8

Client Sample ID: ME2956 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 13:58:43 DataFile Name: 033AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2317	2350	2370	2346	1.15	cps
Lead	208-1	10458	10698	10635	10597	1.17	cps
Lithium	6-1	8985521	9314300	8983361	9094394	2.09	cps
Magnesium	24-2	21060697	21163149	20535256	20919701	1.61	cps
Manganese	55-2	105248	104465	102582	104098	1.32	cps
Molybdenum	94-1	5718	5778	5781	5759	0.62	cps
Molybdenum	95-1	8609	9403	9350	9121	4.87	cps
Molybdenum	96-1	9603	9800	10114	9839	2.62	cps
Molybdenum	97-1	5321	5905	5681	5636	5.22	cps
Molybdenum	98-1	14337	14855	14735	14642	1.85	cps
Neodymium	150-1	57	80	63	67	18.03	cps
Neodymium	150-2	7	7	13	9	43.25	cps
Nickel	60-2	1637	1413	1490	1513	7.50	cps
Phosphorus	31-2	100	103	120	108	9.94	cps
Potassium	39-2	637399	631154	627776	632110	0.77	cps
Rhodium	103-1	14284734	14838344	14500477	14541185	1.92	cps
Rhodium	103-2	5946298	5958602	5977436	5960779	0.26	cps
Scandium	45-1	10956576	11864650	11389855	11403694	3.98	cps
Scandium	45-2	228421	231965	230480	230289	0.77	cps
Selenium	82-1	60	13	33	36	65.87	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	7	10	7	8	24.71	cps
Silicon	28-1	94684519	97068812	94522492	95425274	1.49	cps
Silver	107-1	563	553	623	580	6.53	cps
Silver	109-1	330	307	307	314	4.29	cps
Sodium	23-2	17136335	16899601	16611906	16882614	1.56	cps
Strontium	86-1	82337987	85721495	84634077	84231187	2.05	cps
Strontium	88-1	705678229	735343269	724033163	721684887	2.07	cps
Sulfur	34-1	21542676	22571123	22052080	22055293	2.33	cps
Terbium	159-1	19483662	20441727	20104427	20009938	2.43	cps
Terbium	159-2	7124202	7011645	7144622	7093490	1.01	cps
Thallium	203-1	380	367	403	383	4.84	cps
Thallium	205-1	850	913	907	890	3.91	cps
Tin	118-1	8950	9173	8950	9024	1.43	cps
Titanium	47-1	1743	1850	1920	1838	4.84	cps
Uranium	238-1	43176	44969	45347	44498	2.61	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1186-04Instrumnet Name :P8Client Sample ID :ME2956Dilution Factor :1

Date & Time Acquired: 2025-02-06 13:58:43 DataFile Name: 033AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	87	100	127	104	19.50	cps
Ytterbium	172-1	157	160	127	148	12.42	cps
Ytterbium	172-2	30	70	70	57	40.75	cps
Ytterbium	176-1	1790	1977	1957	1908	5.37	cps
Ytterbium	176-2	287	373	353	338	13.43	cps
Yttrium	89-1	27362686	29085396	28229610	28225897	3.05	cps
Yttrium	89-2	2153141	2131134	2114837	2133037	0.90	cps
Zinc	66-2	757	773	710	747	4.40	cps
Zirconium	90-1	1820	1960	1903	1895	3.72	cps
Zirconium	91-1	360	413	363	379	7.88	cps

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Lab Sample ID: Q1186-05 Instrumnet Name: P8

Client Sample ID: ME2957 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Date & Time 7to	quircu . Zoz	0 02 00 14.01.00	Datari	ic ivallic .	00+/ ((\L) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1020	967	1070	1019	5.07	cps
Antimony	121-1	530	587	597	571	6.30	cps
Arsenic	75-2	150	110	140	133	15.61	cps
Barium	135-1	178412	179190	183921	180508	1.65	cps
Barium	137-1	310422	314799	319335	314852	1.42	cps
Beryllium	9-1	441	495	460	465	5.86	cps
Bismuth	209-1	11292016	10993296	10589719	10958344	3.22	cps
Bismuth	209-2	4978505	5012901	4984951	4992119	0.37	cps
Bromine	81-1	168063	196416	213583	192688	11.93	cps
Cadmium	108-1	83	67	67	72	13.32	cps
Cadmium	106-1	7976	7846	7355	7726	4.23	cps
Cadmium	111-1	5598	5549	5182	5443	4.17	cps
Calcium	43-1	26933713	27298275	27957231	27396407	1.89	cps
Calcium	44-1	435301767	436590820	447116273	439669620	1.47	cps
Carbon	12-1	9798828	10408902	10829579	10345770	5.01	cps
Carbon	12-2	73057	73429	74189	73558	0.78	cps
Chlorine	35-1	33783871	37277539	39333788	36798399	7.62	cps
Chlorine	35-2	170005	171985	171800	171263	0.64	cps
Chromium	52-2	2807	2557	2737	2700	4.78	cps
Cobalt	59-2	7369	7435	7399	7401	0.45	cps
Copper	63-2	6908	6842	7462	7071	4.82	cps
Dysprosium	156-1	67	53	57	59	11.79	cps
Dysprosium	156-2	10	20	27	19	44.42	cps
Erbium	164-1	150	133	167	150	11.11	cps
Erbium	164-2	57	47	50	51	9.96	cps
Gadolinium	160-1	140	207	173	173	19.23	cps
Gadolinium	160-2	33	53	37	41	26.06	cps
Holmium	165-1	19039955	19241046	18282372	18854458	2.68	cps
Holmium	165-2	7335150	7373349	7206199	7304899	1.20	cps
Indium	115-1	15227355	15265529	14605958	15032947	2.46	cps
Indium	115-2	1620607	1622794	1624700	1622700	0.13	cps
Iron	54-2	139729	140109	140779	140206	0.38	cps
Iron	56-2	2703222	2701677	2628404	2677767	1.60	cps
Iron	57-2	65536	64920	66337	65598	1.08	cps
Krypton	83-1	277	307	383	322	17.07	cps
Lead	206-1	2924	3014	2907	2948	1.95	cps

Lab Sample ID :Q1186-05Instrumnet Name :P8Client Sample ID :ME2957Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:01:56	DataFi	ie Name :	034AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2297	2564	2587	2482	6.49	cps
Lead	208-1	11302	11562	11769	11544	2.03	cps
Lithium	6-1	8834809	8982057	8615206	8810691	2.10	cps
Magnesium	24-2	27407382	27965641	27211668	27528230	1.42	cps
Manganese	55-2	43205	43653	43329	43396	0.53	cps
Molybdenum	94-1	59527	61455	62704	61229	2.61	cps
Molybdenum	95-1	99909	101994	102354	101419	1.30	cps
Molybdenum	96-1	108684	108956	111348	109663	1.34	cps
Molybdenum	97-1	63789	64231	63896	63972	0.36	cps
Molybdenum	98-1	160952	161629	167586	163389	2.23	cps
Neodymium	150-1	60	77	97	78	23.61	cps
Neodymium	150-2	10	30	20	20	50.00	cps
Nickel	60-2	9126	9403	9340	9290	1.56	cps
Phosphorus	31-2	123	107	107	112	8.58	cps
Potassium	39-2	941574	952410	949605	947863	0.59	cps
Rhodium	103-1	13526850	13748416	13384916	13553394	1.35	cps
Rhodium	103-2	5724503	5797681	5707717	5743300	0.83	cps
Scandium	45-1	11284679	11083379	10714477	11027512	2.62	cps
Scandium	45-2	231025	230397	225355	228926	1.36	cps
Selenium	82-1	163	190	100	151	30.59	cps
Selenium	77-2	0	3	7	3	100.05	cps
Selenium	78-2	3	10	13	9	57.30	cps
Silicon	28-1	95487445	97111295	97358255	96652332	1.05	cps
Silver	107-1	753	897	933	861	11.05	cps
Silver	109-1	417	533	667	539	23.21	cps
Sodium	23-2	99358899	100409765	99328312	99698992	0.62	cps
Strontium	86-1	78778374	79855604	80566402	79733460	1.13	cps
Strontium	88-1	675057350	686979776	695805750	685947625	1.52	cps
Sulfur	34-1	29788503	30250264	30579175	30205981	1.31	cps
Terbium	159-1	19988796	19497008	19103424	19529743	2.27	cps
Terbium	159-2	6954418	7022923	6936954	6971431	0.65	cps
Thallium	203-1	553	570	603	576	4.42	cps
Thallium	205-1	1327	1330	1267	1308	2.73	cps
Tin	118-1	11668	11468	11678	11605	1.02	cps
Titanium	47-1	2137	2114	2170	2140	1.33	cps
Uranium	238-1	3854	3817	3981	3884	2.21	cps

Lab Sample ID :Q1186-05Instrumnet Name :P8Client Sample ID :ME2957Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:01:56 DataFile Name: 034AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	800	700	713	738	7.36	cps
Ytterbium	172-1	120	143	107	123	15.05	cps
Ytterbium	172-2	57	27	57	47	37.11	cps
Ytterbium	176-1	1984	1933	1800	1906	4.97	cps
Ytterbium	176-2	277	270	290	279	3.65	cps
Yttrium	89-1	27530004	27441994	26031005	27001001	3.12	cps
Yttrium	89-2	2120330	2153211	2101610	2125051	1.23	cps
Zinc	66-2	883	787	823	831	5.87	cps
Zirconium	90-1	5494	5344	5798	5546	4.17	cps
Zirconium	91-1	1177	1123	1257	1186	5.66	cps

Lab Sample ID :Q1186-06Instrumnet Name :P8Client Sample ID :ME2960Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	537	570	653	587	10.24	cps
Antimony	121-1	210	237	240	229	7.19	cps
Arsenic	75-2	1863	1707	1700	1757	5.26	cps
Barium	135-1	203669	204065	206434	204722	0.73	cps
Barium	137-1	354859	358079	354554	355831	0.55	cps
Beryllium	9-1	424	431	394	416	4.77	cps
Bismuth	209-1	11453884	11600410	11481657	11511984	0.68	cps
Bismuth	209-2	4936954	4944720	4754465	4878713	2.21	cps
Bromine	81-1	171739	190681	201296	187906	7.97	cps
Cadmium	108-1	53	23	37	38	39.79	cps
Cadmium	106-1	8426	8343	7986	8251	2.83	cps
Cadmium	111-1	5891	5883	5641	5805	2.45	cps
Calcium	43-1	24024487	23693829	23715646	23811321	0.78	cps
Calcium	44-1	383556114	379233008	379387368	380725497	0.64	cps
Carbon	12-1	14005492	14584386	14717826	14435902	2.62	cps
Carbon	12-2	100024	101363	100464	100617	0.68	cps
Chlorine	35-1	7902030	8044034	7942119	7962728	0.92	cps
Chlorine	35-2	32727	32777	31995	32500	1.35	cps
Chromium	52-2	6251	6278	6255	6261	0.23	cps
Cobalt	59-2	1003	1033	1010	1016	1.55	cps
Copper	63-2	5111	5054	5284	5150	2.33	cps
Dysprosium	156-1	347	303	317	322	6.89	cps
Dysprosium	156-2	93	97	113	101	10.60	cps
Erbium	164-1	327	367	313	336	8.27	cps
Erbium	164-2	120	130	73	108	28.07	cps
Gadolinium	160-1	340	370	353	354	4.24	cps
Gadolinium	160-2	157	127	107	130	19.36	cps
Holmium	165-1	19151474	19942226	19456810	19516837	2.04	cps
Holmium	165-2	7089274	7075827	6833184	6999428	2.06	cps
Indium	115-1	15288214	15719264	15133989	15380489	1.97	cps
Indium	115-2	1594670	1578756	1468518	1547315	4.44	cps
Iron	54-2	837963	852817	840076	843619	0.95	cps
Iron	56-2	15915137	15984187	16129155	16009493	0.68	cps
Iron	57-2	389608	391412	388768	389929	0.35	cps
Krypton	83-1	330	330	310	323	3.57	cps
Lead	206-1	3417	3270	3370	3353	2.24	cps

Lab Sample ID :Q1186-06Instrumnet Name :P8Client Sample ID :ME2960Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

quirea: 202	25-02-06 14:05:12	DataFi	ie Name :	035AREF.0		
Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
207-1	2927	3260	2740	2976	8.85	cps
208-1	13770	13826	13250	13615	2.34	cps
6-1	8936505	9293694	8935806	9055335	2.28	cps
24-2	31463958	31592842	31069033	31375278	0.87	cps
55-2	767388	769605	769905	768966	0.18	cps
94-1	14875	14074	14114	14354	3.14	cps
95-1	22251	22471	22078	22267	0.89	cps
96-1	23417	23867	24108	23797	1.47	cps
97-1	13910	13870	14197	13993	1.27	cps
98-1	34941	35251	35181	35124	0.46	cps
150-1	463	390	387	413	10.48	cps
150-2	103	113	90	102	11.45	cps
60-2	2080	2050	2090	2074	1.00	cps
31-2	177	190	153	173	10.71	cps
39-2	2400848	2390286	2361195	2384109	0.86	cps
103-1	14124256	14477624	14222274	14274718	1.28	cps
103-2	5720162	5662140	5481738	5621347	2.21	cps
45-1	11407048	11565458	11585359	11519288	0.85	cps
45-2	222710	221192	214098	219333	2.10	cps
82-1	90	213	93	132	53.14	cps
77-2	0	0	3	1	173.21	cps
78-2	3	0	7	3	100.05	cps
28-1	102931185	102440535	101656108	102342610	0.63	cps
107-1	590	647	667	634	6.27	cps
109-1	377	400	327	368	10.19	cps
23-2	47043948	46712304	46150856	46635703	0.97	cps
86-1	64915496	65433892	65066991	65138793	0.41	cps
88-1	558085418	563248592	556923538	559419183	0.60	cps
34-1	39679428	38802644	39350538	39277537	1.13	cps
159-1	19964390	20494511	20086385	20181762	1.38	cps
159-2	6877537	6816988	6625342	6773289	1.94	cps
203-1	457	390	380	409	10.19	cps
205-1	933	837	843	871	6.20	cps
118-1	8356	8833	8566	8585	2.78	cps
47-1	2254	2044	2057	2118	5.55	cps
238-1	26591	26554	26478	26541	0.22	cps
	Mass  207-1 208-1 6-1 24-2 55-2 94-1 95-1 96-1 97-1 98-1 150-2 60-2 31-2 39-2 103-1 103-2 45-1 45-2 82-1 77-2 78-2 28-1 107-1 109-1 23-2 86-1 88-1 34-1 159-1 159-2 203-1 205-1 118-1 47-1	Mass         CPS1           207-1         2927           208-1         13770           6-1         8936505           24-2         31463958           55-2         767388           94-1         14875           95-1         22251           96-1         23417           97-1         13910           98-1         34941           150-1         463           150-2         103           60-2         2080           31-2         177           39-2         2400848           103-1         14124256           103-2         5720162           45-1         11407048           45-2         222710           82-1         90           77-2         0           78-2         3           28-1         102931185           107-1         590           109-1         377           23-2         47043948           86-1         64915496           88-1         558085418           34-1         39679428           159-2         6877537           205-1	Mass         CPS1         CPS2           207-1         2927         3260           208-1         13770         13826           6-1         8936505         9293694           24-2         31463958         31592842           55-2         767388         769605           94-1         14875         14074           95-1         22251         22471           96-1         23417         23867           97-1         13910         13870           98-1         34941         35251           150-1         463         390           150-2         103         113           60-2         2080         2050           31-2         177         190           39-2         2400848         2390286           103-1         14124256         14477624           103-2         5720162         5662140           45-1         11407048         11565458           45-2         222710         221192           82-1         90         213           77-2         0         0           78-2         3         0           28-1	Mass         CPS1         CPS2         CPS3           207-1         2927         3260         2740           208-1         13770         13826         13250           6-1         8936505         9293694         8935806           24-2         31463958         31592842         31069033           55-2         767388         769605         769905           94-1         14875         14074         14114           95-1         22251         22471         22078           96-1         23417         23867         24108           97-1         13910         13870         14197           98-1         34941         35251         35181           150-1         463         390         387           150-2         103         113         90           60-2         2080         2050         2090           31-2         177         190         153           39-2         2400848         2390286         2361195           103-1         14124256         14477624         14222274           103-2         5720162         5662140         5481738           45-1         11407	Mass         CPS1         CPS2         CPS3         CPSMean           207-1         2927         3260         2740         2976           208-1         13770         13826         13250         13615           6-1         8936505         9293694         8935806         9055335           24-2         31463958         31592842         31069033         31375278           55-2         767388         769605         769905         768966           94-1         14875         14074         14114         14354           95-1         22251         22471         22078         22267           96-1         23417         23667         24108         23797           97-1         13910         13870         14197         13993           98-1         34941         35251         35181         35124           150-1         463         390         387         413           150-2         103         113         90         102           60-2         2080         2050         2090         2074           31-2         177         190         153         173           39-2         2400848	Mass         CPS1         CPS2         CPS3         CPSMean         CPSRSD           207-1         2927         3260         2740         2976         8.85           208-1         13770         13826         13250         13615         2.34           6-1         8936505         9293694         8935806         9055335         2.28           24-2         31463958         31592842         31069033         31375278         0.87           55-2         767388         769605         769905         768966         0.18           94-1         14875         14074         14114         14354         3.14           95-1         22251         22471         22078         22267         0.89           96-1         23417         23867         24108         23797         1.47           97-1         13910         13870         14197         13993         1.27           98-1         34941         35251         35181         35124         0.46           150-1         463         390         387         413         10.48           150-2         103         113         90         102         11.45 <td< td=""></td<>

Lab Sample ID :Q1186-06Instrumnet Name :P8Client Sample ID :ME2960Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:05:12 DataFile Name: 035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	633	580	620	611	4.54	cps
Ytterbium	172-1	210	213	270	231	14.59	cps
Ytterbium	172-2	113	83	67	88	26.94	cps
Ytterbium	176-1	1904	1924	1890	1906	0.88	cps
Ytterbium	176-2	350	307	343	333	7.00	cps
Yttrium	89-1	27512784	28697857	27826656	28012432	2.19	cps
Yttrium	89-2	2108562	2044107	1963205	2038625	3.57	cps
Zinc	66-2	713	730	730	724	1.33	cps
Zirconium	90-1	3957	4147	4091	4065	2.40	cps
Zirconium	91-1	930	900	897	909	2.02	cps

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Lab Sample ID :Q1186-07Instrumnet Name :P8Client Sample ID :ME2961Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Date & Time At	quired. 202	3-02-00 14.06.20	Dalari	ie ivallie .	USUAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1883	2054	1777	1905	7.33	cps
Antimony	121-1	390	400	470	420	10.38	cps
Arsenic	75-2	40	30	23	31	26.97	cps
Barium	135-1	43443	44051	43590	43695	0.73	cps
Barium	137-1	76334	75972	76780	76362	0.53	cps
Beryllium	9-1	424	424	360	402	9.14	cps
Bismuth	209-1	11420111	11540604	10912225	11290980	2.95	cps
Bismuth	209-2	4605428	5010280	4989070	4868259	4.68	cps
Bromine	81-1	119838	137573	146189	134534	9.99	cps
Cadmium	108-1	23	30	57	37	48.11	cps
Cadmium	106-1	8072	8186	7896	8051	1.82	cps
Cadmium	111-1	5684	5746	5551	5660	1.76	cps
Calcium	43-1	21980765	22033064	22572381	22195403	1.48	cps
Calcium	44-1	361590421	352107781	359769861	357822688	1.41	cps
Carbon	12-1	9685022	10354977	10804694	10281564	5.48	cps
Carbon	12-2	72156	72460	73891	72836	1.27	cps
Chlorine	35-1	5370430	5507420	5751743	5543198	3.48	cps
Chlorine	35-2	23643	24144	23850	23879	1.05	cps
Chromium	52-2	2604	2790	2810	2735	4.17	cps
Cobalt	59-2	420	433	440	431	2.36	cps
Copper	63-2	4994	5001	5108	5034	1.26	cps
Dysprosium	156-1	250	183	227	220	15.38	cps
Dysprosium	156-2	67	83	80	77	11.50	cps
Erbium	164-1	313	307	257	292	10.60	cps
Erbium	164-2	87	113	100	100	13.33	cps
Gadolinium	160-1	290	337	327	318	7.73	cps
Gadolinium	160-2	87	103	103	98	9.84	cps
Holmium	165-1	19295868	19403658	18691055	19130194	2.01	cps
Holmium	165-2	6644312	7045441	7101835	6930529	3.60	cps
Indium	115-1	15394770	15326438	14711260	15144156	2.49	cps
Indium	115-2	1417127	1576420	1572419	1521989	5.97	cps
Iron	54-2	464239	467362	460171	463924	0.78	cps
Iron	56-2	8889437	8745378	8791820	8808878	0.83	cps
Iron	57-2	214713	213810	212044	213522	0.64	cps
Krypton	83-1	310	380	303	331	12.83	cps
Lead	206-1	2784	2634	2520	2646	4.99	cps

Lab Sample ID :Q1186-07Instrumnet Name :P8Client Sample ID :ME2961Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:08:26	DataFi	ie Name :	036AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2317	2287	2197	2267	2.76	cps
Lead	208-1	10912	10522	10382	10605	2.59	cps
Lithium	6-1	8949891	8882250	8654019	8828720	1.76	cps
Magnesium	24-2	28233897	28128524	28084736	28149052	0.27	cps
Manganese	55-2	136676	132949	135284	134970	1.40	cps
Molybdenum	94-1	6008	6108	6158	6091	1.25	cps
Molybdenum	95-1	8493	8213	8529	8412	2.06	cps
Molybdenum	96-1	9400	9073	9053	9175	2.12	cps
Molybdenum	97-1	5464	5181	5191	5279	3.05	cps
Molybdenum	98-1	13367	13347	13914	13542	2.38	cps
Neodymium	150-1	273	327	283	294	9.63	cps
Neodymium	150-2	77	77	43	66	29.36	cps
Nickel	60-2	1297	1240	1283	1273	2.33	cps
Phosphorus	31-2	160	133	113	136	17.27	cps
Potassium	39-2	601883	601381	598076	600447	0.34	cps
Rhodium	103-1	14345074	14092556	13682428	14040019	2.38	cps
Rhodium	103-2	5277148	5660600	5689497	5542415	4.15	cps
Scandium	45-1	11251235	11350222	10797577	11133011	2.65	cps
Scandium	45-2	203807	221156	223539	216167	4.98	cps
Selenium	82-1	113	87	183	128	39.07	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	10	13	17	13	25.01	cps
Silicon	28-1	89210825	91137832	89180009	89842889	1.25	cps
Silver	107-1	503	510	523	512	1.99	cps
Silver	109-1	273	313	373	320	15.73	cps
Sodium	23-2	20203790	20030931	19744261	19992994	1.16	cps
Strontium	86-1	69778334	69102497	70785074	69888635	1.21	cps
Strontium	88-1	598901191	592488285	607447218	599612231	1.25	cps
Sulfur	34-1	32965025	33045159	33214188	33074790	0.38	cps
Terbium	159-1	19784679	19768324	19177242	19576748	1.77	cps
Terbium	159-2	6308692	6869562	6884654	6687636	4.91	cps
Thallium	203-1	393	427	407	409	4.10	cps
Thallium	205-1	917	883	933	911	2.79	cps
Tin	118-1	9380	8810	9297	9162	3.36	cps
Titanium	47-1	2964	3024	3200	3063	4.02	cps
Uranium	238-1	18116	17773	17379	17756	2.08	cps

Lab Sample ID :Q1186-07Instrumnet Name :P8Client Sample ID :ME2961Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:08:26 DataFile Name: 036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	433	490	383	436	12.25	cps
Ytterbium	172-1	123	223	160	169	29.95	cps
Ytterbium	172-2	57	80	60	66	19.25	cps
Ytterbium	176-1	1997	2030	1897	1975	3.51	cps
Ytterbium	176-2	307	353	303	321	8.71	cps
Yttrium	89-1	27695887	27863332	26793358	27450859	2.10	cps
Yttrium	89-2	1900596	2069892	2061003	2010497	4.74	cps
Zinc	66-2	663	750	647	687	8.08	cps
Zirconium	90-1	3014	3167	3187	3123	3.04	cps
Zirconium	91-1	650	607	600	619	4.39	cps

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Lab Sample ID: Q1186-08 Instrumnet Name: P8
Client Sample ID: ME2962 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Bate a Time / t	equired. Zoz	.0 02 00 14.11.40	Datain	ic ivallic .	OOTTAINET .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	710	730	793	744	5.84	cps
Antimony	121-1	393	417	423	411	3.83	cps
Arsenic	75-2	47	57	40	48	17.56	cps
Barium	135-1	61586	62678	63907	62723	1.85	cps
Barium	137-1	107795	109317	110463	109192	1.23	cps
Beryllium	9-1	435	441	449	442	1.56	cps
Bismuth	209-1	10321626	11958038	11325007	11201557	7.37	cps
Bismuth	209-2	5052147	5059972	5210429	5107516	1.75	cps
Bromine	81-1	109532	126602	137227	124453	11.23	cps
Cadmium	108-1	37	27	43	36	23.58	cps
Cadmium	106-1	7352	8643	7929	7975	8.11	cps
Cadmium	111-1	5147	6055	5550	5584	8.14	cps
Calcium	43-1	20250046	20677128	20871595	20599590	1.54	cps
Calcium	44-1	327146308	336833102	334011015	332663475	1.50	cps
Carbon	12-1	10303033	10924315	11420177	10882509	5.14	cps
Carbon	12-2	74919	76775	76018	75904	1.23	cps
Chlorine	35-1	5267512	5836310	5986102	5696641	6.65	cps
Chlorine	35-2	25342	25633	26120	25698	1.53	cps
Chromium	52-2	4321	4444	4424	4396	1.51	cps
Cobalt	59-2	480	553	440	491	11.70	cps
Copper	63-2	84569	85415	84747	84910	0.52	cps
Dysprosium	156-1	147	117	157	140	14.87	cps
Dysprosium	156-2	50	43	63	52	19.50	cps
Erbium	164-1	207	157	190	184	13.80	cps
Erbium	164-2	60	100	93	84	25.38	cps
Gadolinium	160-1	227	267	227	240	9.62	cps
Gadolinium	160-2	53	70	83	69	21.82	cps
Holmium	165-1	17353453	20530051	19444616	19109373	8.45	cps
Holmium	165-2	7207603	7185326	7319560	7237496	0.99	cps
Indium	115-1	13740483	15989628	15367136	15032416	7.73	cps
Indium	115-2	1612299	1630093	1644130	1628841	0.98	cps
Iron	54-2	252198	250825	253476	252166	0.53	cps
Iron	56-2	4744922	4785724	4790790	4773812	0.53	cps
Iron	57-2	115352	114404	117321	115692	1.29	cps
Krypton	83-1	313	323	303	313	3.19	cps
Lead	206-1	2790	2457	2577	2608	6.48	cps

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Lab Sample ID: Q1186-08 Instrumnet Name: P8

Client Sample ID: ME2962 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Date & Time Acc	quireu . 202	25-02-06 14.11.45	Dalari	ie ivallie .	USTAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2157	2204	2294	2218	3.13	cps
Lead	208-1	10382	10048	10258	10229	1.65	cps
Lithium	6-1	8083298	9402494	8883690	8789827	7.56	cps
Magnesium	24-2	25061122	25067699	25261883	25130235	0.45	cps
Manganese	55-2	75012	74781	76024	75272	0.88	cps
Molybdenum	94-1	3667	3741	3927	3778	3.55	cps
Molybdenum	95-1	4984	5168	4864	5005	3.05	cps
Molybdenum	96-1	5238	5338	5655	5410	4.02	cps
Molybdenum	97-1	3114	3114	3210	3146	1.77	cps
Molybdenum	98-1	7739	8122	8132	7998	2.81	cps
Neodymium	150-1	113	150	173	146	20.78	cps
Neodymium	150-2	47	40	30	39	21.57	cps
Nickel	60-2	5181	5058	5141	5127	1.23	cps
Phosphorus	31-2	160	147	107	138	20.14	cps
Potassium	39-2	971811	969687	987282	976260	0.98	cps
Rhodium	103-1	12523957	14754107	13890421	13722828	8.19	cps
Rhodium	103-2	5831812	5856421	5915406	5867880	0.73	cps
Scandium	45-1	10082761	11708710	11177847	10989773	7.54	cps
Scandium	45-2	229067	227666	230926	229220	0.71	cps
Selenium	82-1	77	67	177	107	57.02	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	17	13	13	14	13.35	cps
Silicon	28-1	77420187	78730399	79026445	78392344	1.09	cps
Silver	107-1	533	493	530	519	4.28	cps
Silver	109-1	300	323	323	316	4.27	cps
Sodium	23-2	24939539	24642702	25062691	24881644	0.87	cps
Strontium	86-1	74913721	75247119	76088974	75416604	0.80	cps
Strontium	88-1	649624190	640913964	652654124	647730759	0.94	cps
Sulfur	34-1	29505514	30195788	30124474	29941925	1.27	cps
Terbium	159-1	17716671	20591248	19515883	19274601	7.54	cps
Terbium	159-2	6935366	6894307	7110352	6980008	1.64	cps
Thallium	203-1	350	377	290	339	13.10	cps
Thallium	205-1	833	900	947	893	6.38	cps
Tin	118-1	10894	10828	11231	10984	1.97	cps
Titanium	47-1	1943	1813	2144	1967	8.46	cps
Uranium	238-1	5088	5104	5244	5146	1.67	cps

Lab Sample ID :Q1186-08Instrumnet Name :P8Client Sample ID :ME2962Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:11:43 DataFile Name: 037AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	393	410	373	392	4.68	cps
Ytterbium	172-1	150	160	157	156	3.27	cps
Ytterbium	172-2	67	60	83	70	17.17	cps
Ytterbium	176-1	1713	2087	1837	1879	10.12	cps
Ytterbium	176-2	283	333	293	303	8.72	cps
Yttrium	89-1	24607664	29290129	27480495	27126096	8.70	cps
Yttrium	89-2	2091965	2108290	2130093	2110116	0.91	cps
Zinc	66-2	907	1037	943	962	6.97	cps
Zirconium	90-1	2644	2797	2887	2776	4.43	cps
Zirconium	91-1	573	583	567	574	1.46	cps

Lab Sample ID: Q1186-09 Instrumnet Name: P8

Client Sample ID: ME2959 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Date & Time A	quircu . Zoz	.0 02 00 14.14.00	Datain	ic ivallic .	000/ (I (LI .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	390	363	400	384	4.93	cps
Antimony	121-1	270	223	220	238	11.76	cps
Arsenic	75-2	43	50	60	51	16.42	cps
Barium	135-1	64338	65507	61650	63832	3.10	cps
Barium	137-1	112668	114846	107970	111828	3.14	cps
Beryllium	9-1	397	441	396	412	6.22	cps
Bismuth	209-1	12091547	11698779	10609459	11466595	6.70	cps
Bismuth	209-2	4598529	4628865	4686028	4637807	0.96	cps
Bromine	81-1	121331	140391	147458	136393	9.91	cps
Cadmium	108-1	37	33	17	29	37.08	cps
Cadmium	106-1	8586	8172	7415	8058	7.37	cps
Cadmium	111-1	6028	5747	5206	5660	7.38	cps
Calcium	43-1	26239741	26668025	25892293	26266687	1.48	cps
Calcium	44-1	423886674	434292380	414337127	424172060	2.35	cps
Carbon	12-1	9347773	10056481	10262050	9888768	4.85	cps
Carbon	12-2	67752	69902	69966	69206	1.82	cps
Chlorine	35-1	32429565	36506462	35303846	34746624	6.03	cps
Chlorine	35-2	146627	151379	154838	150948	2.73	cps
Chromium	52-2	1723	1580	1640	1648	4.37	cps
Cobalt	59-2	473	493	483	483	2.07	cps
Copper	63-2	5548	5801	5861	5737	2.90	cps
Dysprosium	156-1	67	97	47	70	35.95	cps
Dysprosium	156-2	7	13	27	16	65.47	cps
Erbium	164-1	177	130	123	143	20.27	cps
Erbium	164-2	43	50	40	44	11.46	cps
Gadolinium	160-1	173	160	137	157	11.85	cps
Gadolinium	160-2	27	57	30	38	43.52	cps
Holmium	165-1	20812026	20294726	18380374	19829042	6.46	cps
Holmium	165-2	6688551	6768090	6782091	6746244	0.75	cps
Indium	115-1	16178632	15956761	14639949	15591781	5.33	cps
Indium	115-2	1421869	1456944	1466711	1448508	1.63	cps
Iron	54-2	206458	209473	208569	208167	0.74	cps
Iron	56-2	3899318	3921990	3957567	3926292	0.75	cps
Iron	57-2	94869	96735	98121	96575	1.69	cps
Krypton	83-1	307	353	403	354	13.64	cps
Lead	206-1	2810	2697	2674	2727	2.68	cps

Lab Sample ID: Q1186-09 Instrumnet Name: P8

Client Sample ID: ME2959 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Lead         207-1         2210         2297         2180         2229         2.72         cps           Lead         208-1         10405         10735         10685         10608         1.68         cps           Lithium         6-1         9414920         9338026         8520189         9091045         5.45         cps           Mangenium         24-2         3626656         37074844         37821639         37084279         2.06         cps           Molybdenum         94-1         4084         4421         4161         4218         4.23         cps           Molybdenum         95-1         6345         6618         5958         6367         5.26         cps           Molybdenum         96-1         6855         6698         6873         1.67         cps           Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium <t< th=""><th>Parameter</th><th>Mass</th><th>CPS1</th><th>CPS2</th><th>CPS3</th><th>CPSMean</th><th>CPSRSD</th><th>Units</th></t<>	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lithium         6-1         9414920         9338026         8520188         9091045         5.45         cps           Magnesum         24-2         36296656         37074544         37821639         37064279         2.06         cps           Manganese         55-2         75833         78950         79047         77943         2.35         cps           Molybdenum         94-1         4084         4421         4151         4218         4.23         cps           Molybdenum         96-1         6845         6618         5968         6307         5.26         cps           Molybdenum         96-1         6855         6995         6768         6873         1.67         cps           Molybdenum         98-1         10047         10164         9613         9908         3.50         cps           Molybdenum         98-1         10047         10164         9613         9908         3.50         cps           Molybdenum         98-1         10047         10164         363         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel <t< td=""><td>Lead</td><td>207-1</td><td>2210</td><td>2297</td><td>2180</td><td>2229</td><td>2.72</td><td>cps</td></t<>	Lead	207-1	2210	2297	2180	2229	2.72	cps
Magnesium         24-2         36296656         37074544         37821639         37064279         2.06         cps           Manganese         55-2         75833         78950         79047         77943         2.35         cps           Molybdenum         94-1         4084         4421         4151         4218         4.23         cps           Molybdenum         96-1         6855         6995         6768         6873         1.67         cps           Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Neodymium         150-2         133         137         127         132         3.85         cps           Phosphorus	Lead	208-1	10405	10735	10685	10608	1.68	cps
Manganese         55-2         75833         78950         79047         77943         2.35         cps           Molybdenum         94-1         4084         4421         4151         4218         4.23         cps           Molybdenum         95-1         6345         6618         5958         6307         5.26         cps           Molybdenum         96-1         6855         6995         6768         6873         1.67         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Molybdenum         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Photasum         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1 </td <td>Lithium</td> <td>6-1</td> <td>9414920</td> <td>9338026</td> <td>8520189</td> <td>9091045</td> <td>5.45</td> <td>cps</td>	Lithium	6-1	9414920	9338026	8520189	9091045	5.45	cps
Molybdenum         94-1         4084         4421         4151         4218         4.23         cps           Molybdenum         95-1         6345         6618         5958         6307         5.26         cps           Molybdenum         96-1         6855         6995         6788         6873         1.67         cps           Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         713170         727594         733193         724052         1.57         cps           Rhodium         103-1	Magnesium	24-2	36296656	37074544	37821639	37064279	2.06	cps
Molybdenum         95-1         6345         6618         5958         6307         5.26         cps           Molybdenum         96-1         6855         6995         6768         6873         1.67         cps           Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Sca	Manganese	55-2	75833	78950	79047	77943	2.35	cps
Molybdenum         96-1         6855         6995         6768         6873         1.67         cps           Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         2003018         11961223         10796075         11586772         5.91         cps	Molybdenum	94-1	4084	4421	4151	4218	4.23	cps
Molybdenum         97-1         3967         4021         4041         4010         0.95         cps           Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Photassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352099         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps	Molybdenum	95-1	6345	6618	5958	6307	5.26	cps
Molybdenum         98-1         10047         10164         9513         9908         3.50         cps           Neodymium         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         591         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selen	Molybdenum	96-1	6855	6995	6768	6873	1.67	cps
Neodymium         150-1         53         110         100         88         34.46         cps           Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         120009012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium <t< td=""><td>Molybdenum</td><td>97-1</td><td>3967</td><td>4021</td><td>4041</td><td>4010</td><td>0.95</td><td>cps</td></t<>	Molybdenum	97-1	3967	4021	4041	4010	0.95	cps
Neodymium         150-2         17         7         10         11         45.82         cps           Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         77-2         0         3         3         2         86.60         cps           Silicon	Molybdenum	98-1	10047	10164	9513	9908	3.50	cps
Nickel         60-2         1100         1150         1063         1104         3.94         cps           Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon	Neodymium	150-1	53	110	100	88	34.46	cps
Phosphorus         31-2         133         137         127         132         3.85         cps           Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silloon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Sillver         107-1         740         883         827         817         8.84         cps	Neodymium	150-2	17	7	10	11	45.82	cps
Potassium         39-2         711370         727594         733193         724052         1.57         cps           Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps	Nickel	60-2	1100	1150	1063	1104	3.94	cps
Rhodium         103-1         14954696         14495768         13258309         14236258         6.16         cps           Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodi	Phosphorus	31-2	133	137	127	132	3.85	cps
Rhodium         103-2         5294756         5334697         5426815         5352089         1.27         cps           Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Stront	Potassium	39-2	711370	727594	733193	724052	1.57	cps
Scandium         45-1         12003018         11961223         10796075         11586772         5.91         cps           Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps           Siliver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps	Rhodium	103-1	14954696	14495768	13258309	14236258	6.16	cps
Scandium         45-2         209012         214829         212978         212273         1.40         cps           Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps           Siliver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps	Rhodium	103-2	5294756	5334697	5426815	5352089	1.27	cps
Selenium         82-1         120         107         70         99         26.18         cps           Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Siliver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps	Scandium	45-1	12003018	11961223	10796075	11586772	5.91	cps
Selenium         77-2         0         3         3         2         86.60         cps           Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Silver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps	Scandium	45-2	209012	214829	212978	212273	1.40	cps
Selenium         78-2         13         13         7         11         34.61         cps           Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Silver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Thallium         203-1         323         280         347         317         10.68         c	Selenium	82-1	120	107	70	99	26.18	cps
Silicon         28-1         116297262         116918638         112090528         115102143         2.28         cps           Silver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Thallium         203-1         323         280         347         317         10.68         cps           Thallium         205-1         757         777         907         813         10.01	Selenium	77-2	0	3	3	2	86.60	cps
Silver         107-1         740         883         827         817         8.84         cps           Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps<	Selenium	78-2	13	13	7	11	34.61	cps
Silver         109-1         340         393         557         430         26.25         cps           Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps           Titanium         47-1         2324         2190         2027         2180         6.82 <td< td=""><td>Silicon</td><td>28-1</td><td>116297262</td><td>116918638</td><td>112090528</td><td>115102143</td><td>2.28</td><td>cps</td></td<>	Silicon	28-1	116297262	116918638	112090528	115102143	2.28	cps
Sodium         23-2         94341755         96022435         97651345         96005179         1.72         cps           Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps           Titanium         47-1         2324         2190         2027         2180         6.82         cps	Silver	107-1	740	883	827	817	8.84	cps
Strontium         86-1         79763912         80502514         77039196         79101874         2.31         cps           Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Thallium         205-1         757         777         907         813         10.01         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps           Titanium         47-1         2324         2190         2027         2180         6.82         cps	Silver	109-1	340	393	557	430	26.25	cps
Strontium         88-1         677358430         697520070         662030257         678969585         2.62         cps           Sulfur         34-1         37398496         37967887         36259994         37208793         2.34         cps           Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Thallium         205-1         757         777         907         813         10.01         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps           Titanium         47-1         2324         2190         2027         2180         6.82         cps	Sodium	23-2	94341755	96022435	97651345	96005179	1.72	cps
Sulfur       34-1       37398496       37967887       36259994       37208793       2.34       cps         Terbium       159-1       21123181       20564303       18810893       20166126       5.98       cps         Terbium       159-2       6452619       6588133       6535431       6525394       1.05       cps         Thallium       203-1       323       280       347       317       10.68       cps         Thallium       205-1       757       777       907       813       10.01       cps         Tin       118-1       9593       9680       8903       9392       4.53       cps         Titanium       47-1       2324       2190       2027       2180       6.82       cps	Strontium	86-1	79763912	80502514	77039196	79101874	2.31	cps
Terbium         159-1         21123181         20564303         18810893         20166126         5.98         cps           Terbium         159-2         6452619         6588133         6535431         6525394         1.05         cps           Thallium         203-1         323         280         347         317         10.68         cps           Thallium         205-1         757         777         907         813         10.01         cps           Tin         118-1         9593         9680         8903         9392         4.53         cps           Titanium         47-1         2324         2190         2027         2180         6.82         cps	Strontium	88-1	677358430	697520070	662030257	678969585	2.62	cps
Terbium       159-2       6452619       6588133       6535431       6525394       1.05       cps         Thallium       203-1       323       280       347       317       10.68       cps         Thallium       205-1       757       777       907       813       10.01       cps         Tin       118-1       9593       9680       8903       9392       4.53       cps         Titanium       47-1       2324       2190       2027       2180       6.82       cps	Sulfur	34-1	37398496	37967887	36259994	37208793	2.34	cps
Thallium       203-1       323       280       347       317       10.68       cps         Thallium       205-1       757       777       907       813       10.01       cps         Tin       118-1       9593       9680       8903       9392       4.53       cps         Titanium       47-1       2324       2190       2027       2180       6.82       cps	Terbium	159-1	21123181	20564303	18810893	20166126	5.98	cps
Thallium       205-1       757       777       907       813       10.01       cps         Tin       118-1       9593       9680       8903       9392       4.53       cps         Titanium       47-1       2324       2190       2027       2180       6.82       cps	Terbium	159-2	6452619	6588133	6535431	6525394	1.05	cps
Tin     118-1     9593     9680     8903     9392     4.53     cps       Titanium     47-1     2324     2190     2027     2180     6.82     cps	Thallium	203-1	323	280	347	317	10.68	cps
Titanium 47-1 2324 2190 2027 2180 6.82 cps	Thallium	205-1	757	777	907	813	10.01	cps
	Tin	118-1	9593	9680	8903	9392	4.53	cps
Uranium 238-1 12800 12640 11769 12403 4.47 cps	Titanium	47-1	2324	2190	2027	2180	6.82	cps
	Uranium	238-1	12800	12640	11769	12403	4.47	cps

Lab Sample ID :Q1186-09Instrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:14:56 DataFile Name: 038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	87	93	93	91	4.22	cps
Ytterbium	172-1	143	117	117	126	12.26	cps
Ytterbium	172-2	47	43	57	49	14.20	cps
Ytterbium	176-1	2027	1807	1687	1840	9.37	cps
Ytterbium	176-2	263	350	310	308	14.09	cps
Yttrium	89-1	29748524	28699222	26001565	28149770	6.87	cps
Yttrium	89-2	1901231	2016515	1996416	1971387	3.12	cps
Zinc	66-2	660	587	717	654	9.96	cps
Zirconium	90-1	1707	1713	1633	1685	2.64	cps
Zirconium	91-1	347	360	423	377	10.87	cps

<sub>3</sub> 565

Lab Sample ID: Q1186-10 Instrumnet Name: P8
Client Sample ID: ME2959D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Date & Time Ac	quireu . 202	3-02-00 14.16.14	Dalari	ie ivallie .	USSAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	393	427	353	391	9.39	cps
Antimony	121-1	243	287	247	259	9.31	cps
Arsenic	75-2	53	63	40	52	22.41	cps
Barium	135-1	64288	63411	62835	63511	1.15	cps
Barium	137-1	109865	110839	110661	110455	0.47	cps
Beryllium	9-1	417	404	374	398	5.62	cps
Bismuth	209-1	11488244	11067605	11040594	11198814	2.24	cps
Bismuth	209-2	4846419	4773802	4803074	4807765	0.76	cps
Bromine	81-1	118884	140519	148932	136112	11.39	cps
Cadmium	108-1	23	40	23	29	33.32	cps
Cadmium	106-1	8059	7532	7142	7578	6.07	cps
Cadmium	111-1	5658	5271	5026	5319	5.99	cps
Calcium	43-1	25880572	26261880	26056100	26066184	0.73	cps
Calcium	44-1	417344287	424249860	419678207	420424118	0.84	cps
Carbon	12-1	8947935	9646905	9974490	9523110	5.51	cps
Carbon	12-2	69279	69349	69550	69393	0.20	cps
Chlorine	35-1	34489229	37136003	37816341	36480524	4.82	cps
Chlorine	35-2	158976	161129	163664	161256	1.46	cps
Chromium	52-2	2074	2120	2057	2084	1.58	cps
Cobalt	59-2	480	433	420	444	7.09	cps
Copper	63-2	22805	23556	23056	23139	1.65	cps
Dysprosium	156-1	80	43	67	63	29.31	cps
Dysprosium	156-2	33	33	17	28	34.63	cps
Erbium	164-1	127	133	190	150	23.20	cps
Erbium	164-2	47	43	53	48	10.66	cps
Gadolinium	160-1	143	157	157	152	5.06	cps
Gadolinium	160-2	33	73	40	49	43.84	cps
Holmium	165-1	19636981	18999531	18822446	19152986	2.24	cps
Holmium	165-2	6992095	6948650	7039087	6993277	0.65	cps
Indium	115-1	15568992	15245598	14877988	15230860	2.27	cps
Indium	115-2	1559694	1492327	1584778	1545600	3.09	cps
Iron	54-2	234724	237397	239890	237337	1.09	cps
Iron	56-2	4563119	4490946	4538488	4530851	0.81	cps
Iron	57-2	109708	109358	110853	109973	0.71	cps
Krypton	83-1	270	377	373	340	17.84	cps
Lead	206-1	2307	2237	2350	2298	2.49	cps

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Lab Sample ID :Q1186-10Instrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Date & Time Acc	quirea: 202	25-02-06 14:18:14	DataFi	ie Name :	039AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1903	2037	1970	1970	3.38	cps
Lead	208-1	9251	8808	9145	9068	2.55	cps
Lithium	6-1	8805565	8708648	8545386	8686533	1.51	cps
Magnesium	24-2	38722446	38237239	38299022	38419569	0.69	cps
Manganese	55-2	80307	80760	80247	80438	0.35	cps
Molybdenum	94-1	3991	4227	3991	4070	3.36	cps
Molybdenum	95-1	6145	6368	6098	6204	2.33	cps
Molybdenum	96-1	6928	7045	6682	6885	2.70	cps
Molybdenum	97-1	3901	3881	3937	3906	0.74	cps
Molybdenum	98-1	9807	9924	9790	9840	0.74	cps
Neodymium	150-1	57	73	50	60	20.03	cps
Neodymium	150-2	27	17	23	22	22.91	cps
Nickel	60-2	1157	1193	1297	1216	5.97	cps
Phosphorus	31-2	117	153	113	128	17.37	cps
Potassium	39-2	742557	755233	752897	750229	0.90	cps
Rhodium	103-1	13961657	13762284	13493726	13739223	1.71	cps
Rhodium	103-2	5476418	5426815	5503827	5469020	0.71	cps
Scandium	45-1	11521136	11193215	10732133	11148828	3.56	cps
Scandium	45-2	223214	214832	223363	220470	2.21	cps
Selenium	82-1	170	43	40	84	87.77	cps
Selenium	77-2	3	0	7	3	100.05	cps
Selenium	78-2	13	7	10	10	33.30	cps
Silicon	28-1	110585728	112472508	111819805	111626014	0.86	cps
Silver	107-1	690	823	833	782	10.23	cps
Silver	109-1	443	620	647	570	19.39	cps
Sodium	23-2	100200772	98574182	98242329	99005761	1.06	cps
Strontium	86-1	77618397	77463226	77641569	77574397	0.13	cps
Strontium	88-1	667575830	670368870	673805337	670583346	0.47	cps
Sulfur	34-1	36387446	36158893	36215731	36254023	0.33	cps
Terbium	159-1	19804878	19352546	19194467	19450631	1.63	cps
Terbium	159-2	6802845	6778246	6822882	6801324	0.33	cps
Thallium	203-1	297	227	310	278	16.12	cps
Thallium	205-1	723	647	680	683	5.63	cps
Tin	118-1	8823	8813	9170	8935	2.27	cps
Titanium	47-1	2514	2134	2080	2242	10.54	cps
Uranium	238-1	12009	12463	12590	12354	2.47	cps

Lab Sample ID :Q1186-10Instrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 14:18:14 DataFile Name: 039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	90	93	73	86	12.53	cps
Ytterbium	172-1	133	123	103	120	12.73	cps
Ytterbium	172-2	23	50	37	37	36.37	cps
Ytterbium	176-1	1637	1647	1843	1709	6.82	cps
Ytterbium	176-2	307	257	260	274	10.19	cps
Yttrium	89-1	27613175	27630773	26580254	27274734	2.21	cps
Yttrium	89-2	2006804	2046762	2054186	2035917	1.25	cps
Zinc	66-2	890	863	897	883	2.00	cps
Zirconium	90-1	1563	1650	1693	1636	4.05	cps
Zirconium	91-1	320	407	367	364	11.90	cps

<sub>3</sub> 568

Lab Sample ID : Q1186-09LX5 Instrumnet Name : P8
Client Sample ID : ME2959L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Date & Time Ac	quired. 202	led . 2025-02-00 14.21.29		Datarile Name.		U4UAREF.U			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Aluminium	27-2	360	407	393	387	6.22	cps		
Antimony	121-1	100	97	100	99	1.94	cps		
Arsenic	75-2	17	10	23	17	39.99	cps		
Barium	135-1	13297	13373	13136	13269	0.91	cps		
Barium	137-1	24379	23614	23517	23837	1.98	cps		
Beryllium	9-1	421	391	375	396	5.93	cps		
Bismuth	209-1	12406977	12149008	12098329	12218105	1.35	cps		
Bismuth	209-2	5247704	5495003	5518656	5420454	2.77	cps		
Bromine	81-1	55560	57742	56727	56676	1.93	cps		
Cadmium	108-1	23	30	23	26	15.07	cps		
Cadmium	106-1	8483	8236	8263	8327	1.63	cps		
Cadmium	111-1	5952	5781	5787	5840	1.66	cps		
Calcium	43-1	5559931	5559777	5431143	5516950	1.35	cps		
Calcium	44-1	89225569	90558869	86990942	88925126	2.03	cps		
Carbon	12-1	7729166	8016437	7680444	7808682	2.33	cps		
Carbon	12-2	49630	49643	50881	50051	1.44	cps		
Chlorine	35-1	9599397	10038212	9777244	9804951	2.25	cps		
Chlorine	35-2	40914	42018	41526	41486	1.33	cps		
Chromium	52-2	1380	1287	1447	1371	5.86	cps		
Cobalt	59-2	157	137	217	170	24.49	cps		
Copper	63-2	6815	7349	7279	7147	4.06	cps		
Dysprosium	156-1	17	37	23	26	39.85	cps		
Dysprosium	156-2	3	0	7	3	100.05	cps		
Erbium	164-1	103	103	110	106	3.65	cps		
Erbium	164-2	30	30	37	32	11.95	cps		
Gadolinium	160-1	110	147	123	127	14.65	cps		
Gadolinium	160-2	17	33	33	28	34.63	cps		
Holmium	165-1	20525459	19972971	19850413	20116281	1.79	cps		
Holmium	165-2	7277241	7611300	7881762	7590101	3.99	cps		
Indium	115-1	16578952	16047541	15996097	16207530	1.99	cps		
Indium	115-2	1703936	1764002	1807340	1758426	2.95	cps		
Iron	54-2	46750	48188	48783	47907	2.18	cps		
Iron	56-2	852717	881447	898704	877622	2.65	cps		
Iron	57-2	21456	21617	22287	21787	2.02	cps		
Krypton	83-1	277	297	300	291	4.34	cps		
Lead	206-1	2177	2107	1944	2076	5.77	cps		

Lab Sample ID :Q1186-09LX5Instrumnet Name :P8Client Sample ID :ME2959LDilution Factor :5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Date & Time Act	quireu . 202	25-02-00 14.21.29	DalaFi	ie name.	040AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1703	1693	1697	1698	0.30	cps
Lead	208-1	8028	7844	7878	7917	1.23	cps
Lithium	6-1	9492785	9442757	9262487	9399343	1.29	cps
Magnesium	24-2	8161746	8383805	8703461	8416337	3.24	cps
Manganese	55-2	21126	21977	22291	21798	2.77	cps
Molybdenum	94-1	1423	1460	1233	1372	8.87	cps
Molybdenum	95-1	1510	1613	1653	1592	4.65	cps
Molybdenum	96-1	1747	1703	1697	1716	1.58	cps
Molybdenum	97-1	1070	1030	890	997	9.48	cps
Molybdenum	98-1	2447	2490	2457	2465	0.92	cps
Neodymium	150-1	17	27	23	22	22.91	cps
Neodymium	150-2	7	10	7	8	24.71	cps
Nickel	60-2	973	997	1070	1013	4.98	cps
Phosphorus	31-2	100	73	77	83	17.44	cps
Potassium	39-2	171007	174906	178503	174805	2.14	cps
Rhodium	103-1	15176679	15213158	14880731	15090189	1.21	cps
Rhodium	103-2	6112382	6383641	6441505	6312509	2.78	cps
Scandium	45-1	12109780	12063662	11760891	11978111	1.58	cps
Scandium	45-2	232796	239121	242479	238132	2.06	cps
Selenium	82-1	77	40	57	58	31.78	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	3	7	13	8	65.47	cps
Silicon	28-1	24326429	24926240	24113761	24455477	1.72	cps
Silver	107-1	563	637	600	600	6.11	cps
Silver	109-1	420	320	307	349	17.75	cps
Sodium	23-2	20981466	21399614	21735156	21372079	1.77	cps
Strontium	86-1	16740636	16901665	16457973	16700091	1.34	cps
Strontium	88-1	143748191	145285855	141390125	143474723	1.37	cps
Sulfur	34-1	8437985	8575562	8289403	8434317	1.70	cps
Terbium	159-1	20969092	20884540	20363195	20738942	1.58	cps
Terbium	159-2	7170444	7322984	7456563	7316664	1.96	cps
Thallium	203-1	307	337	303	316	5.82	cps
Thallium	205-1	770	657	787	738	9.59	cps
Tin	118-1	4888	4598	4477	4654	4.53	cps
Titanium	47-1	747	680	743	723	5.19	cps
Uranium	238-1	2604	2760	2580	2648	3.70	cps

LB Number : LB134612 Operator :

Lab Sample ID: Q1186-09LX5 Instrumnet Name: P8
Client Sample ID: ME2959L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 14:21:29 DataFile Name: 040AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	20	20	43	28	48.49	cps	
Ytterbium	172-1	127	133	120	127	5.27	cps	
Ytterbium	172-2	63	33	87	61	43.76	cps	
Ytterbium	176-1	1957	1940	1934	1944	0.62	cps	
Ytterbium	176-2	320	310	333	321	3.64	cps	
Yttrium	89-1	29690748	29738308	28739565	29389540	1.92	cps	
Yttrium	89-2	2173982	2246527	2237155	2219221	1.78	cps	
Zinc	66-2	647	723	727	699	6.48	cps	
Zirconium	90-1	1143	1150	1230	1175	4.11	cps	
Zirconium	91-1	213	200	213	209	3.69	cps	

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Lab Sample ID: Q1186-11 Instrumnet Name: P8

Client Sample ID: ME2959S Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

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Pa	rameter	Mass	CPS1 (	CPS2	CPS3	CPSMean	CPSRSD	Units
Αlι	uminium	27-2	150068	152193	152887	151716	0.97	cps
An	itimony	121-1	1822016	1805463	1842762	1823413	1.02	cps
Ars	senic	75-2	15636	15245	15355	15412	1.31	cps
Ва	ırium	135-1	8421172	8574788	8615105	8537022	1.20	cps
Ва	ırium	137-1	14540089	14743365	14774343	14685932	0.87	cps
Ве	eryllium	9-1	321209	327191	327738	325380	1.11	cps
Bis	smuth	209-1	11318538	11626502	11245226	11396755	1.78	cps
Bis	smuth	209-2	5299446	5016962	5111537	5142648	2.80	cps
Bro	omine	81-1	108884	131937	144007	128276	13.91	cps
Ca	admium	108-1	12869	13774	13273	13305	3.40	cps
Ca	admium	106-1	26499	26886	26425	26604	0.93	cps
Ca	admium	111-1	208151	208388	210457	208999	0.61	cps
Ca	alcium	43-1	27056514	26993879	27494630	27181674	1.00	cps
Ca	alcium	44-1	436109780	439281793	437190367	437527313	0.37	cps
Ca	arbon	12-1	8775668	9613355	9870165	9419729	6.08	cps
Ca	arbon	12-2	69714	70588	70029	70111	0.63	cps
Ch	nlorine	35-1	65207399	71280364	73720412	70069392	6.26	cps
Ch	nlorine	35-2	317233	319280	321839	319450	0.72	cps
Ch	nromium	52-2	850001	861734	861291	857675	0.78	cps
Со	balt	59-2	4090756	4112263	4073445	4092155	0.48	cps
Со	ppper	63-2	1562054	1476451	1485540	1508015	3.12	cps
Dy	sprosium	156-1	120	113	140	124	11.15	cps
Dy	sprosium	156-2	33	20	13	22	45.83	cps
Erl	bium	164-1	143	147	150	147	2.27	cps
Erl	bium	164-2	57	80	67	68	17.27	cps
Ga	adolinium	160-1	147	230	153	177	26.21	cps
Ga	adolinium	160-2	50	50	57	52	7.37	cps
Но	olmium	165-1	19749070	20244311	19106422	19699934	2.90	cps
Но	olmium	165-2	7675600	7318969	7464433	7486334	2.40	cps
Inc	dium	115-1	15664274	16091858	15290967	15682366	2.56	cps
Inc	dium	115-2	1726429	1651437	1651015	1676293	2.59	cps
Iro	n	54-2	425383	425820	430387	427197	0.65	cps
Iro	n	56-2	7609792	7527773	7566393	7567986	0.54	cps
Iro	n	57-2	184159	185375	185136	184890	0.35	cps
Kr	ypton	83-1	350	353	327	343	4.23	cps
Le	ad	206-1	253583	257606	258639	256609	1.04	cps

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Lab Sample ID :Q1186-11Instrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	219111	218999	223016	220376	1.04	cps
Lead	208-1	1007486	1017182	1027910	1017526	1.00	cps
Lithium	6-1	9033348	9252075	8844763	9043395	2.25	cps
Magnesium	24-2	39780363	40266687	40382265	40143105	0.80	cps
Manganese	55-2	916877	921996	919020	919298	0.28	cps
Molybdenum	94-1	4467	4731	4501	4566	3.14	cps
Molybdenum	95-1	6522	6638	7075	6745	4.33	cps
Molybdenum	96-1	7422	7555	7312	7430	1.64	cps
Molybdenum	97-1	3981	4031	4217	4076	3.06	cps
Molybdenum	98-1	10564	10180	10934	10560	3.57	cps
Neodymium	150-1	687	657	613	652	5.65	cps
Neodymium	150-2	27	23	27	26	7.55	cps
Nickel	60-2	1052459	1057031	1053283	1054258	0.23	cps
Phosphorus	31-2	173	157	163	164	5.10	cps
Potassium	39-2	799719	805364	801104	802062	0.37	cps
Rhodium	103-1	14228182	14503136	13804968	14178762	2.48	cps
Rhodium	103-2	6109144	5772233	5910977	5930785	2.86	cps
Scandium	45-1	11524238	11963398	11434444	11640693	2.43	cps
Scandium	45-2	245391	233436	238232	239020	2.52	cps
Selenium	82-1	5118	5161	5134	5138	0.43	cps
Selenium	77-2	63	103	77	81	25.11	cps
Selenium	78-2	337	313	310	320	4.54	cps
Silicon	28-1	119629105	120293788	120329445	120084113	0.33	cps
Silver	107-1	978258	1003689	1008620	996855	1.63	cps
Silver	109-1	938201	946282	959422	947968	1.13	cps
Sodium	23-2	103554152	105094088	103826792	104158344	0.79	cps
Strontium	86-1	80014095	81091734	81432619	80846149	0.92	cps
Strontium	88-1	698152363	698478576	704889643	700506861	0.54	cps
Sulfur	34-1	37970750	38148034	38955184	38357989	1.37	cps
Terbium	159-1	20233530	21161967	20029703	20475067	2.95	cps
Terbium	159-2	7387912	7146429	7111027	7215123	2.09	cps
Thallium	203-1	779990	791130	793649	788256	0.92	cps
Thallium	205-1	2012993	2001264	2011215	2008491	0.31	cps
Tin	118-1	10174	10274	10077	10175	0.97	cps
Titanium	47-1	2314	2547	2340	2400	5.32	cps
Uranium	238-1	12850	12760	12696	12769	0.60	cps

Lab Sample ID :Q1186-11Instrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 14:24:41 DataFile Name: 041AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1755876	1716500	1784744	1752374	1.95	cps
Ytterbium	172-1	123	130	173	142	19.09	cps
Ytterbium	172-2	37	43	53	44	18.87	cps
Ytterbium	176-1	1863	1873	1833	1857	1.12	cps
Ytterbium	176-2	343	283	280	302	11.79	cps
Yttrium	89-1	28969414	29309653	27874815	28717961	2.61	cps
Yttrium	89-2	2265221	2195389	2150044	2203551	2.63	cps
Zinc	66-2	305966	309465	307162	307531	0.58	cps
Zirconium	90-1	2460	2600	2494	2518	2.90	cps
Zirconium	91-1	607	733	670	670	9.45	cps

<sub>3</sub> 574

Lab Sample ID: Q1186-12 Instrumnet Name: P8

Client Sample ID: ME2963 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Date & Time / to	quircu . Zoz	.0 02 00 14.20.11	Datain	ic ivallic .	0+2/ ((\L1 .u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	49996	50457	50223	50225	0.46	cps
Antimony	121-1	1557	1900	1820	1759	10.21	cps
Arsenic	75-2	943	930	900	924	2.40	cps
Barium	135-1	177028	178338	178861	178076	0.53	cps
Barium	137-1	308432	310502	311324	310086	0.48	cps
Beryllium	9-1	551	510	522	528	4.01	cps
Bismuth	209-1	11324929	12497489	12351881	12058100	5.30	cps
Bismuth	209-2	5530582	5502276	5588671	5540510	0.79	cps
Bromine	81-1	237487	257911	269961	255119	6.43	cps
Cadmium	108-1	217	193	213	208	6.07	cps
Cadmium	106-1	8256	9036	8579	8624	4.55	cps
Cadmium	111-1	5907	6453	6110	6157	4.48	cps
Calcium	43-1	8781310	8733553	8821218	8778694	0.50	cps
Calcium	44-1	140521018	141703541	143963531	142062697	1.23	cps
Carbon	12-1	17960326	19192138	19746037	18966167	4.82	cps
Carbon	12-2	128502	129804	131058	129788	0.98	cps
Chlorine	35-1	6583423	6361854	6166254	6370510	3.28	cps
Chlorine	35-2	23676	23149	22421	23082	2.73	cps
Chromium	52-2	1963	2020	1900	1961	3.06	cps
Cobalt	59-2	1237	1380	1337	1318	5.58	cps
Copper	63-2	10180	9773	9897	9950	2.10	cps
Dysprosium	156-1	33	67	37	46	40.30	cps
Dysprosium	156-2	23	20	10	18	39.03	cps
Erbium	164-1	100	160	153	138	23.87	cps
Erbium	164-2	37	53	47	46	18.41	cps
Gadolinium	160-1	160	140	150	150	6.67	cps
Gadolinium	160-2	23	33	30	29	17.63	cps
Holmium	165-1	19050571	20245340	20426649	19907520	3.76	cps
Holmium	165-2	7727450	7839739	7762897	7776695	0.74	cps
Indium	115-1	15036435	16372502	16511717	15973551	5.10	cps
Indium	115-2	1789892	1761518	1765304	1772238	0.87	cps
Iron	54-2	3627	3931	3601	3719	4.93	cps
Iron	56-2	66902	66481	65436	66273	1.14	cps
Iron	57-2	2010	1997	2070	2026	1.93	cps
Krypton	83-1	250	293	300	281	9.66	cps
Lead	206-1	4367	4361	4344	4357	0.28	cps

Lab Sample ID :Q1186-12Instrumnet Name :P8Client Sample ID :ME2963Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Date & Time Act	quireu . 202	25-02-00 14.26.11	Dalar	ile ivallie .	U4ZAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3524	3624	3811	3653	3.98	cps
Lead	208-1	16598	16568	16898	16688	1.09	cps
Lithium	6-1	9323565	9696331	9907557	9642484	3.07	cps
Magnesium	24-2	11491	12115	11585	11730	2.87	cps
Manganese	55-2	3590	3771	3714	3692	2.49	cps
Molybdenum	94-1	230556	232890	234473	232640	0.85	cps
Molybdenum	95-1	398031	402589	401857	400826	0.61	cps
Molybdenum	96-1	425983	431372	431279	429544	0.72	cps
Molybdenum	97-1	247748	252237	251268	250418	0.94	cps
Molybdenum	98-1	638214	638053	643951	640073	0.52	cps
Neodymium	150-1	43	30	47	40	22.05	cps
Neodymium	150-2	13	0	20	11	91.66	cps
Nickel	60-2	361620	360109	359447	360392	0.31	cps
Phosphorus	31-2	1553	1670	1700	1641	4.72	cps
Potassium	39-2	10534088	10479176	10249369	10420878	1.45	cps
Rhodium	103-1	14292120	15574468	15499634	15122074	4.76	cps
Rhodium	103-2	6392339	6319563	6323536	6345146	0.64	cps
Scandium	45-1	11272161	12052771	12290786	11871906	4.49	cps
Scandium	45-2	245200	246687	245425	245771	0.33	cps
Selenium	82-1	493	467	473	478	2.90	cps
Selenium	77-2	0	17	10	9	94.38	cps
Selenium	78-2	20	33	33	29	26.64	cps
Silicon	28-1	34224025	35203359	35256569	34894651	1.67	cps
Silver	107-1	1147	887	913	982	14.56	cps
Silver	109-1	870	963	770	868	11.14	cps
Sodium	23-2	17856761	17773911	17890473	17840382	0.34	cps
Strontium	86-1	7957234	8064803	8034892	8018977	0.69	cps
Strontium	88-1	69516806	69353392	69843062	69571087	0.36	cps
Sulfur	34-1	1949773	1942937	1970520	1954410	0.73	cps
Terbium	159-1	19518132	20738338	21340173	20532214	4.52	cps
Terbium	159-2	7598246	7550106	7371014	7506455	1.60	cps
Thallium	203-1	630	533	537	567	9.68	cps
Thallium	205-1	1203	1320	1197	1240	5.59	cps
Tin	118-1	8323	8846	8636	8602	3.06	cps
Titanium	47-1	2307	2120	2000	2142	7.21	cps
Uranium	238-1	120	70	57	82	40.61	cps

Lab Sample ID :Q1186-12Instrumnet Name :P8Client Sample ID :ME2963Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:28:11 DataFile Name: 042AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	9310	9433	9210	9318	1.20	cps	
Ytterbium	172-1	123	117	123	121	3.18	cps	
Ytterbium	172-2	83	60	70	71	16.46	cps	
Ytterbium	176-1	2267	2130	2204	2200	3.11	cps	
Ytterbium	176-2	333	410	347	363	11.27	cps	
Yttrium	89-1	27806540	29934507	30480595	29407214	4.80	cps	
Yttrium	89-2	2303674	2302109	2245262	2283681	1.46	cps	
Zinc	66-2	1250	1227	1220	1232	1.28	cps	
Zirconium	90-1	1337	1327	1313	1326	0.88	cps	
Zirconium	91-1	267	293	310	290	7.54	cps	

<sub>3</sub> 577

Lab Sample ID: Q1186-13 Instrumnet Name: P8

Client Sample ID: ME2967 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Date & Time Ac	quirea: 202	25-02-06 14:31:25	Datar	ile Name :	043AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4744	4471	4437	4551	3.70	cps
Antimony	121-1	3644	3487	3490	3540	2.53	cps
Arsenic	75-2	473	607	493	524	13.71	cps
Barium	135-1	91999	94241	93359	93200	1.21	cps
Barium	137-1	161138	162244	160865	161416	0.45	cps
Beryllium	9-1	381	464	435	427	9.81	cps
Bismuth	209-1	11643701	12167888	12420971	12077520	3.28	cps
Bismuth	209-2	5413220	5388088	6336363	5712557	9.46	cps
Bromine	81-1	228515	267491	294124	263377	12.53	cps
Cadmium	108-1	137	227	170	178	25.59	cps
Cadmium	106-1	8173	9040	8713	8642	5.07	cps
Cadmium	111-1	5978	6459	6307	6248	3.93	cps
Calcium	43-1	1124550	1134180	1127985	1128905	0.43	cps
Calcium	44-1	18772795	18560585	18470700	18601360	0.83	cps
Carbon	12-1	11988525	12603654	12952846	12515008	3.90	cps
Carbon	12-2	84089	83475	84893	84152	0.85	cps
Chlorine	35-1	5853502	6415722	6545471	6271565	5.86	cps
Chlorine	35-2	27242	27493	26865	27200	1.16	cps
Chromium	52-2	1813	1580	1687	1693	6.90	cps
Cobalt	59-2	1033	917	1010	987	6.26	cps
Copper	63-2	27781	27951	26588	27440	2.71	cps
Dysprosium	156-1	43	23	33	33	30.00	cps
Dysprosium	156-2	7	3	10	7	50.03	cps
Erbium	164-1	77	140	117	111	28.83	cps
Erbium	164-2	33	40	53	42	24.12	cps
Gadolinium	160-1	147	167	183	166	11.09	cps
Gadolinium	160-2	17	47	60	41	53.98	cps
Holmium	165-1	18768578	20188387	20235899	19730955	4.23	cps
Holmium	165-2	7473225	7661340	8810440	7981668	9.07	cps
Indium	115-1	15117094	16550659	16569817	16079190	5.18	cps
Indium	115-2	1700662	1704121	1973107	1792630	8.72	cps
Iron	54-2	22234	21900	21383	21839	1.96	cps
Iron	56-2	399118	395031	388887	394345	1.31	cps
Iron	57-2	9813	10057	10344	10071	2.64	cps
Krypton	83-1	297	283	293	291	2.38	cps
Lead	206-1	2877	2510	2424	2604	9.24	cps

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Lab Sample ID :Q1186-13Instrumnet Name :P8Client Sample ID :ME2967Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Date & Time Ac	quired: 2025-02-06 14:31:25		Datar	DataFile Name :		U43AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	2284	2214	2237	2245	1.59	cps	
Lead	208-1	10475	9895	9768	10046	3.75	cps	
Lithium	6-1	9271784	9757659	9906701	9645381	3.44	cps	
Magnesium	24-2	129482	131695	127545	129574	1.60	cps	
Manganese	55-2	14237	14381	14247	14288	0.56	cps	
Molybdenum	94-1	177011	176213	178418	177214	0.63	cps	
Molybdenum	95-1	305247	307406	308922	307192	0.60	cps	
Molybdenum	96-1	327459	329813	328244	328505	0.36	cps	
Molybdenum	97-1	189840	190851	192769	191153	0.78	cps	
Molybdenum	98-1	490577	490729	491064	490790	0.05	cps	
Neodymium	150-1	33	67	47	49	34.32	cps	
Neodymium	150-2	3	0	3	2	86.60	cps	
Nickel	60-2	58500	58128	56244	57624	2.10	cps	
Phosphorus	31-2	593	517	630	580	9.97	cps	
Potassium	39-2	13412647	13312261	13067958	13264289	1.34	cps	
Rhodium	103-1	14697973	15026924	15248159	14991019	1.85	cps	
Rhodium	103-2	6271518	6153881	7154166	6526522	8.38	cps	
Scandium	45-1	11252091	12108082	11925701	11761958	3.83	cps	
Scandium	45-2	235171	235952	269427	246850	7.92	cps	
Selenium	82-1	287	297	300	294	2.36	cps	
Selenium	77-2	7	7	0	4	86.60	cps	
Selenium	78-2	30	23	30	28	13.86	cps	
Silicon	28-1	29029458	29273052	29403806	29235439	0.65	cps	
Silver	107-1	593	700	443	579	22.27	cps	
Silver	109-1	403	450	487	447	9.35	cps	
Sodium	23-2	29918416	30059963	29536404	29838261	0.91	cps	
Strontium	86-1	2980021	3085862	2997691	3021191	1.88	cps	
Strontium	88-1	26044379	25366828	26100017	25837075	1.58	cps	
Sulfur	34-1	1954003	1935262	1901918	1930395	1.37	cps	
Terbium	159-1	19587379	20952645	20616179	20385401	3.49	cps	
Terbium	159-2	7249789	7195956	8430562	7625436	9.15	cps	
Thallium	203-1	453	417	417	429	4.94	cps	
Thallium	205-1	967	1000	1017	994	2.56	cps	
Tin	118-1	8329	8122	8039	8164	1.83	cps	
Titanium	47-1	1303	1323	1397	1341	3.66	cps	
Uranium	238-1	6405	6682	6535	6541	2.12	cps	

Lab Sample ID :Q1186-13Instrumnet Name :P8Client Sample ID :ME2967Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:31:25 DataFile Name: 043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	5985	6095	5625	5901	4.17	cps
Ytterbium	172-1	117	113	143	124	13.22	cps
Ytterbium	172-2	43	37	73	51	38.21	cps
Ytterbium	176-1	1833	2117	2040	1997	7.34	cps
Ytterbium	176-2	317	240	367	308	20.73	cps
Yttrium	89-1	27429296	29220805	28997486	28549196	3.42	cps
Yttrium	89-2	2236872	2195223	2486068	2306054	6.82	cps
Zinc	66-2	3170	3057	3190	3139	2.29	cps
Zirconium	90-1	1173	1430	1270	1291	10.04	cps
Zirconium	91-1	243	250	220	238	6.63	cps

Lab Sample ID: Q1186-14 Instrumnet Name: P8

Client Sample ID: ME2965 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Date & Time Acquired: 2025-02-06 14:34:37 DataFile				ie Name :	U44AREF.0				
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Aluminium	27-2	62514	62694	61171	62126	1.34	cps		
Antimony	121-1	1980	2050	1937	1989	2.88	cps		
Arsenic	75-2	2000	1813	2050	1955	6.38	cps		
Barium	135-1	212455	214621	216939	214672	1.04	cps		
Barium	137-1	365263	376343	375072	372226	1.63	cps		
Beryllium	9-1	412	380	427	407	5.97	cps		
Bismuth	209-1	10591205	11669891	12014463	11425186	6.50	cps		
Bismuth	209-2	5407267	5884795	6051968	5781343	5.79	cps		
Bromine	81-1	668386	783182	852360	767976	12.10	cps		
Cadmium	108-1	413	427	397	412	3.65	cps		
Cadmium	106-1	7349	8553	8469	8124	8.28	cps		
Cadmium	111-1	5291	6188	6091	5857	8.40	cps		
Calcium	43-1	6940115	7029121	7057323	7008853	0.87	cps		
Calcium	44-1	113220705	112258308	114206062	113228358	0.86	cps		
Carbon	12-1	38159030	41967954	44863266	41663417	8.07	cps		
Carbon	12-2	303980	302616	305233	303943	0.43	cps		
Chlorine	35-1	13854778	15202272	15695998	14917683	6.39	cps		
Chlorine	35-2	67684	66703	68240	67542	1.15	cps		
Chromium	52-2	4097	4091	4101	4096	0.12	cps		
Cobalt	59-2	1493	1227	1330	1350	9.96	cps		
Copper	63-2	20398	20171	20832	20467	1.64	cps		
Dysprosium	156-1	23	27	30	27	12.51	cps		
Dysprosium	156-2	7	3	7	6	34.70	cps		
Erbium	164-1	90	100	87	92	7.52	cps		
Erbium	164-2	33	33	43	37	15.75	cps		
Gadolinium	160-1	147	127	107	127	15.79	cps		
Gadolinium	160-2	33	27	27	29	13.31	cps		
Holmium	165-1	17987597	19738326	20420075	19381999	6.47	cps		
Holmium	165-2	7590483	8344642	8675376	8203500	6.78	cps		
Indium	115-1	13989369	15617905	16177382	15261552	7.45	cps		
Indium	115-2	1693749	1891616	1965399	1850255	7.59	cps		
Iron	54-2	3374	3257	3280	3304	1.87	cps		
Iron	56-2	57345	57050	56123	56839	1.12	cps		
Iron	57-2	1710	1707	1617	1678	3.16	cps		
Krypton	83-1	290	310	307	302	3.54	cps		
Lead	206-1	2080	2120	2054	2085	1.61	cps		

Lab Sample ID : Q1186-14 Instrumnet Name : P8

Client Sample ID : ME2965 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1687	1670	1710	1689	1.19	cps
Lead	208-1	7984	8148	8061	8064	1.01	cps
Lithium	6-1	8699331	9695893	9744388	9379871	6.29	cps
Magnesium	24-2	3327	3040	3290	3219	4.85	cps
Manganese	55-2	1583	1657	1650	1630	2.49	cps
Molybdenum	94-1	443870	450113	447547	447177	0.70	cps
Molybdenum	95-1	766521	773749	777706	772659	0.73	cps
Molybdenum	96-1	826205	830296	838383	831628	0.75	cps
Molybdenum	97-1	476091	488086	491463	485213	1.66	cps
Molybdenum	98-1	1243957	1250341	1250475	1248258	0.30	cps
Neodymium	150-1	53	20	50	41	44.65	cps
Neodymium	150-2	3	7	3	4	43.40	cps
Nickel	60-2	986881	981558	975251	981230	0.59	cps
Phosphorus	31-2	2357	2564	2497	2472	4.27	cps
Potassium	39-2	32710202	31994172	31973149	32225841	1.30	cps
Rhodium	103-1	13236829	14590518	14953567	14260305	6.34	cps
Rhodium	103-2	6186944	6765814	7020375	6657711	6.42	cps
Scandium	45-1	10463550	11554511	11890123	11302728	6.60	cps
Scandium	45-2	239386	260944	275502	258611	7.03	cps
Selenium	82-1	507	460	580	516	11.73	cps
Selenium	77-2	7	10	13	10	33.30	cps
Selenium	78-2	23	27	20	23	14.29	cps
Silicon	28-1	41705029	41958328	42604594	42089317	1.10	cps
Silver	107-1	460	450	467	459	1.83	cps
Silver	109-1	300	363	303	322	11.06	cps
Sodium	23-2	67864687	67750297	67699744	67771576	0.12	cps
Strontium	86-1	13003204	13078919	12845514	12975879	0.92	cps
Strontium	88-1	112375592	113377805	112211982	112655126	0.56	cps
Sulfur	34-1	1918342	1906489	1877644	1900825	1.10	cps
Terbium	159-1	18285196	20634076	20864885	19928052	7.16	cps
Terbium	159-2	7433297	8022962	8297950	7918070	5.58	cps
Thallium	203-1	303	383	313	333	13.08	cps
Thallium	205-1	877	750	783	803	8.17	cps
Tin	118-1	9106	9173	9764	9348	3.87	cps
Titanium	47-1	2420	2430	2264	2371	3.94	cps
Uranium	238-1	33	53	33	40	28.87	cps

Lab Sample ID :Q1186-14Instrumnet Name :P8Client Sample ID :ME2965Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:34:37 DataFile Name: 044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
	54.0	0000	0000		00.40	0.07		_
Vanadium	51-2	9890	9833	9823	9849	0.37	cps	
Ytterbium	172-1	110	120	107	112	6.18	cps	
Ytterbium	172-2	47	63	73	61	22.04	cps	
Ytterbium	176-1	1733	1967	2144	1948	10.56	cps	
Ytterbium	176-2	290	437	347	358	20.67	cps	
Yttrium	89-1	25897125	28879908	29163520	27980184	6.47	cps	
Yttrium	89-2	2226202	2462613	2513651	2400822	6.39	cps	
Zinc	66-2	1107	1043	997	1049	5.26	cps	
Zirconium	90-1	1083	1053	1167	1101	5.33	cps	
Zirconium	91-1	203	190	247	213	13.89	cps	

<sup>3</sup> 583

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Date & Time Acquired : 2025-02-06 14:37:49				DataFile Name :		045CCV.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	3827241	3795000	3839696	3820646	0.60	cps	
Antimony	121-1	8525720	8530642	8539083	8531815	0.08	cps	
Arsenic	75-2	180716	180916	181955	181196	0.37	cps	
Barium	135-1	10218199	10311993	10151618	10227270	0.79	cps	
Barium	137-1	17343108	17861529	17623989	17609542	1.47	cps	
Beryllium	9-1	3151277	3200127	3197006	3182803	0.86	cps	
Bismuth	209-1	11259982	11475697	11430372	11388684	1.00	cps	
Bismuth	209-2	4999912	4998433	4886906	4961750	1.31	cps	
Bromine	81-1	133037	122570	113518	123042	7.94	cps	
Cadmium	108-1	163193	166293	165291	164926	0.96	cps	
Cadmium	106-1	237425	244822	241928	241392	1.54	cps	
Cadmium	111-1	2014161	2091356	2083876	2063131	2.06	cps	
Calcium	43-1	14255671	14299266	14306740	14287226	0.19	cps	
Calcium	44-1	231915337	229181677	232777517	231291510	0.81	cps	
Carbon	12-1	10537287	10222388	9999194	10252956	2.64	cps	
Carbon	12-2	66342	65689	64551	65527	1.38	cps	
Chlorine	35-1	1876699	1790921	1729447	1799022	4.11	cps	
Chlorine	35-2	6582	6178	5818	6192	6.17	cps	
Chromium	52-2	2095717	2112936	2054208	2087621	1.45	cps	
Cobalt	59-2	3780112	3817097	3909533	3835581	1.74	cps	
Copper	63-2	28464765	27909425	27920701	28098297	1.13	cps	
Dysprosium	156-1	440	467	487	464	5.04	cps	
Dysprosium	156-2	113	77	127	106	24.53	cps	
Erbium	164-1	437	433	413	428	2.95	cps	
Erbium	164-2	147	167	177	163	9.35	cps	
Gadolinium	160-1	377	400	443	407	8.32	cps	
Gadolinium	160-2	173	177	150	167	8.72	cps	
Holmium	165-1	19907348	19882995	20055802	19948715	0.47	cps	
Holmium	165-2	7423167	7274415	7294512	7330698	1.10	cps	
Indium	115-1	15075422	15025633	15462418	15187824	1.57	cps	
Indium	115-2	1581563	1600029	1623284	1601625	1.31	cps	
Iron	54-2	20147296	19843578	19955762	19982212	0.77	cps	
Iron	56-2	374951541	367199208	366534088	369561612	1.27	cps	
Iron	57-2	9555127	9316153	9236978	9369419	1.77	cps	
Krypton	83-1	293	300	327	307	5.75	cps	
Lead	206-1	32091449	33190189	32335410	32539016	1.77	cps	

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Date & Time Acc	quirea: 202	25-02-06 14:37:49	DataFi	ie Name :	045CCV.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27833795	28496280	28072915	28134330	1.19	cps
Lead	208-1	126607836	131062139	129579769	129083248	1.76	cps
Lithium	6-1	8773920	8813411	8800202	8795844	0.23	cps
Magnesium	24-2	66417937	65911867	66947216	66425673	0.78	cps
Manganese	55-2	8430265	8221327	8186490	8279361	1.59	cps
Molybdenum	94-1	30728650	31012688	31221695	30987677	0.80	cps
Molybdenum	95-1	43982319	44410924	44623508	44338917	0.74	cps
Molybdenum	96-1	48049444	48953611	49425084	48809380	1.43	cps
Molybdenum	97-1	26679065	27492105	27655895	27275688	1.92	cps
Molybdenum	98-1	69836914	71746469	72085171	71222851	1.70	cps
Neodymium	150-1	810	787	803	800	1.50	cps
Neodymium	150-2	57	130	57	81	52.19	cps
Nickel	60-2	975389	970941	980311	975547	0.48	cps
Phosphorus	31-2	37525	37171	36914	37203	0.83	cps
Potassium	39-2	19353680	19338522	19592075	19428092	0.73	cps
Rhodium	103-1	13875961	13924240	14095701	13965301	0.83	cps
Rhodium	103-2	5578127	5727040	5725763	5676977	1.51	cps
Scandium	45-1	11399834	11465868	11452604	11439436	0.31	cps
Scandium	45-2	230475	229170	231538	230395	0.51	cps
Selenium	82-1	123850	126191	124920	124987	0.94	cps
Selenium	77-2	2514	2324	2354	2397	4.26	cps
Selenium	78-2	7862	7545	8006	7804	3.02	cps
Silicon	28-1	7934581	7994577	8152390	8027182	1.40	cps
Silver	107-1	10322022	10320102	10336717	10326280	0.09	cps
Silver	109-1	9637519	9723701	9842715	9734645	1.06	cps
Sodium	23-2	134129905	133112958	133029731	133424198	0.46	cps
Strontium	86-1	2860180	2880358	2881952	2874163	0.42	cps
Strontium	88-1	24391000	24722185	24887892	24667026	1.03	cps
Sulfur	34-1	1661319	1662187	1631635	1651714	1.05	cps
Terbium	159-1	20291500	20454764	20206186	20317483	0.62	cps
Terbium	159-2	7083453	7036573	6996043	7038690	0.62	cps
Thallium	203-1	7976792	8066918	7972922	8005544	0.66	cps
Thallium	205-1	18729730	19204949	19124372	19019684	1.34	cps
Tin	118-1	6825596	6862119	6929753	6872489	0.77	cps
Titanium	47-1	13726913	14108048	14169193	14001385	1.71	cps
Uranium	238-1	25977270	26566225	26737976	26427157	1.51	cps

Lab Sample ID :CCV002Instrumnet Name :P8Client Sample ID :CCV002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:37:49 DataFile Name: 045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1659087	1649655	1647611	1652118	0.37	cps
Ytterbium	172-1	487	457	467	470	3.25	cps
Ytterbium	172-2	263	203	263	243	14.24	cps
Ytterbium	176-1	40522	40596	41502	40873	1.33	cps
Ytterbium	176-2	14668	14972	14835	14825	1.03	cps
Yttrium	89-1	28144511	28039385	28230071	28137989	0.34	cps
Yttrium	89-2	2098740	2129270	2150638	2126216	1.23	cps
Zinc	66-2	3124970	3047765	3023617	3065451	1.73	cps
Zirconium	90-1	15378462	15552926	15632206	15521198	0.84	cps
Zirconium	91-1	3510028	3507249	3505504	3507594	0.07	cps

<sup>3</sup> 586

Lab Sample ID: CCB002 Instrumnet Name: P8
Client Sample ID: CCB002 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	207	190	193	197	4.48	cps
Antimony	121-1	2857	2377	2254	2496	12.77	cps
Arsenic	75-2	3	10	10	8	49.52	cps
Barium	135-1	570	427	410	469	18.76	cps
Barium	137-1	867	723	710	767	11.33	cps
Beryllium	9-1	1457	1285	1236	1326	8.77	cps
Bismuth	209-1	13281951	12973106	13212939	13155998	1.23	cps
Bismuth	209-2	5633515	5598113	5742499	5658042	1.33	cps
Bromine	81-1	51745	49042	45473	48753	6.45	cps
Cadmium	108-1	40	40	33	38	10.19	cps
Cadmium	106-1	8413	8870	8366	8549	3.26	cps
Cadmium	111-1	6044	6354	5966	6121	3.35	cps
Calcium	43-1	1373	1160	1083	1206	12.47	cps
Calcium	44-1	48893	44993	44388	46092	5.30	cps
Carbon	12-1	6931603	6750086	6731453	6804381	1.62	cps
Carbon	12-2	42020	41064	40419	41168	1.96	cps
Chlorine	35-1	1269731	1214427	1176810	1220323	3.83	cps
Chlorine	35-2	4327	4144	4224	4232	2.17	cps
Chromium	52-2	1050	1023	1157	1077	6.55	cps
Cobalt	59-2	250	203	187	213	15.39	cps
Copper	63-2	5601	5474	5381	5486	2.01	cps
Dysprosium	156-1	13	0	10	8	89.21	cps
Dysprosium	156-2	10	7	7	8	24.71	cps
Erbium	164-1	83	113	97	98	15.38	cps
Erbium	164-2	47	47	47	47	0.00	cps
Gadolinium	160-1	137	127	150	138	8.50	cps
Gadolinium	160-2	30	20	20	23	24.74	cps
Holmium	165-1	21053191	20952545	20903635	20969790	0.36	cps
Holmium	165-2	7504774	7639654	7518924	7554451	0.98	cps
Indium	115-1	17142670	17172315	17225699	17180228	0.24	cps
Indium	115-2	1781169	1745818	1708219	1745068	2.09	cps
Iron	54-2	1223	1030	1150	1135	8.60	cps
Iron	56-2	17775	17364	17334	17491	1.41	cps
Iron	57-2	483	503	363	450	16.83	cps
Krypton	83-1	300	257	307	288	9.43	cps
Lead	206-1	6468	5561	5178	5736	11.55	cps

Lab Sample ID :CCB002Instrumnet Name :P8Client Sample ID :CCB002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Date & Time Ac	quirea: 202	25-02-06 14:40:31	Datar	ile Name :	046CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5318	4658	4441	4805	9.51	cps
Lead	208-1	24726	21991	20260	22326	10.09	cps
Lithium	6-1	9810327	9604632	9571485	9662148	1.34	cps
Magnesium	24-2	3260	3227	3104	3197	2.58	cps
Manganese	55-2	343	340	300	328	7.36	cps
Molybdenum	94-1	2730	2127	2027	2295	16.59	cps
Molybdenum	95-1	3220	2537	2277	2678	18.20	cps
Molybdenum	96-1	3487	2877	2527	2964	16.40	cps
Molybdenum	97-1	1843	1523	1400	1589	14.40	cps
Molybdenum	98-1	5038	4157	3350	4182	20.18	cps
Neodymium	150-1	17	13	23	18	28.64	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	487	520	590	532	9.91	cps
Phosphorus	31-2	80	83	87	83	4.00	cps
Potassium	39-2	20281	19620	19954	19952	1.66	cps
Rhodium	103-1	16400165	15949787	16140800	16163584	1.40	cps
Rhodium	103-2	6531504	6589666	6515472	6545547	0.60	cps
Scandium	45-1	12013755	12023312	12105893	12047653	0.42	cps
Scandium	45-2	237067	239375	236902	237782	0.58	cps
Selenium	82-1	37	40	-10	22	125.80	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	0	3	27	10	145.32	cps
Silicon	28-1	870862	830159	808845	836622	3.77	cps
Silver	107-1	1850	1717	1413	1660	13.48	cps
Silver	109-1	1700	1423	1243	1456	15.80	cps
Sodium	23-2	90394	88710	88496	89200	1.17	cps
Strontium	86-1	857	687	703	749	12.51	cps
Strontium	88-1	3350	2797	2264	2804	19.38	cps
Sulfur	34-1	820580	819317	827874	822590	0.56	cps
Terbium	159-1	21581134	21467081	21008493	21352236	1.42	cps
Terbium	159-2	7488079	7307892	7521036	7439002	1.54	cps
Thallium	203-1	1190	1193	1107	1163	4.22	cps
Thallium	205-1	2917	2470	2290	2559	12.61	cps
Tin	118-1	2644	2640	2380	2555	5.91	cps
Titanium	47-1	1157	770	720	882	27.09	cps
Uranium	238-1	1513	1087	1050	1217	21.17	cps

Lab Sample ID :CCB002Instrumnet Name :P8Client Sample ID :CCB002Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:40:31 DataFile Name: 046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	40	77	63	60	30.93	cps
Ytterbium	172-1	123	127	113	121	5.73	cps
Ytterbium	172-2	43	60	37	47	25.75	cps
Ytterbium	176-1	1950	1917	1934	1934	0.86	cps
Ytterbium	176-2	263	290	333	296	11.95	cps
Yttrium	89-1	29865627	29927303	29980621	29924517	0.19	cps
Yttrium	89-2	2270431	2253518	2191760	2238570	1.85	cps
Zinc	66-2	353	300	283	312	11.71	cps
Zirconium	90-1	2190	1910	1820	1973	9.78	cps
Zirconium	91-1	457	393	367	406	11.40	cps

<sub>3</sub> 589

Lab Sample ID : Q1186-15 Instrumnet Name : P8
Client Sample ID : ME2966 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	61027	60766	61415	61070	0.53	cps
Antimony	121-1	2124	2234	2184	2180	2.53	cps
Arsenic	75-2	1767	1730	1917	1805	5.48	cps
Barium	135-1	203769	207885	208260	206638	1.21	cps
Barium	137-1	358699	364058	362751	361836	0.77	cps
Beryllium	9-1	734	732	691	719	3.36	cps
Bismuth	209-1	11407524	11816926	11896199	11706883	2.24	cps
Bismuth	209-2	5395165	5232151	5224227	5283848	1.83	cps
Bromine	81-1	638034	760570	836333	744979	13.43	cps
Cadmium	108-1	373	373	353	367	3.15	cps
Cadmium	106-1	7952	8579	8379	8304	3.86	cps
Cadmium	111-1	5749	6174	6135	6019	3.91	cps
Calcium	43-1	6774953	6683098	6727098	6728383	0.68	cps
Calcium	44-1	108697085	109627968	109605102	109310052	0.49	cps
Carbon	12-1	36319601	39823144	43005168	39715971	8.42	cps
Carbon	12-2	287814	293552	294791	292052	1.27	cps
Chlorine	35-1	11971814	13340500	13861264	13057859	7.47	cps
Chlorine	35-2	60583	60576	61674	60944	1.04	cps
Chromium	52-2	2003	1960	2013	1992	1.42	cps
Cobalt	59-2	1373	1437	1323	1378	4.12	cps
Copper	63-2	7025	6912	7129	7022	1.54	cps
Dysprosium	156-1	57	23	20	33	60.84	cps
Dysprosium	156-2	3	3	10	6	69.34	cps
Erbium	164-1	140	147	103	130	17.95	cps
Erbium	164-2	53	40	60	51	19.92	cps
Gadolinium	160-1	163	127	127	139	15.24	cps
Gadolinium	160-2	53	37	20	37	45.45	cps
Holmium	165-1	19235021	20244788	19884887	19788232	2.59	cps
Holmium	165-2	7571439	7513863	7492583	7525961	0.54	cps
Indium	115-1	15229495	15934343	15783806	15649214	2.37	cps
Indium	115-2	1728523	1684853	1697033	1703470	1.32	cps
Iron	54-2	2480	2560	2507	2516	1.62	cps
Iron	56-2	43081	43306	43239	43209	0.27	cps
Iron	57-2	1273	1310	1363	1316	3.44	cps
Krypton	83-1	287	307	327	307	6.52	cps
Lead	206-1	3117	2974	3007	3033	2.47	cps

Lab Sample ID :Q1186-15Instrumnet Name :P8Client Sample ID :ME2966Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2557	2774	2670	2667	4.06	cps
Lead	208-1	11919	12022	12129	12023	0.87	cps
Lithium	6-1	9273181	9511054	9424988	9403075	1.28	cps
Magnesium	24-2	2957	2990	3187	3045	4.08	cps
Manganese	55-2	1287	1153	1130	1190	7.10	cps
Molybdenum	94-1	429579	431679	437265	432841	0.92	cps
Molybdenum	95-1	733009	739370	756810	743063	1.66	cps
Molybdenum	96-1	792248	793647	811676	799191	1.36	cps
Molybdenum	97-1	460016	468690	466733	465146	0.98	cps
Molybdenum	98-1	1183586	1199358	1208061	1197002	1.04	cps
Neodymium	150-1	57	37	47	47	21.43	cps
Neodymium	150-2	7	0	7	4	86.60	cps
Nickel	60-2	957095	959596	960359	959016	0.18	cps
Phosphorus	31-2	2420	2464	2450	2445	0.91	cps
Potassium	39-2	31092781	31372660	31497500	31320981	0.66	cps
Rhodium	103-1	13895113	14729899	14592517	14405843	3.11	cps
Rhodium	103-2	6118578	6056898	6060924	6078800	0.57	cps
Scandium	45-1	11218646	11884523	11768695	11623955	3.06	cps
Scandium	45-2	240553	236864	234540	237319	1.28	cps
Selenium	82-1	537	563	540	547	2.66	cps
Selenium	77-2	7	0	0	2	173.21	cps
Selenium	78-2	10	7	17	11	45.82	cps
Silicon	28-1	39972646	40592579	40895569	40486932	1.16	cps
Silver	107-1	773	703	710	729	5.30	cps
Silver	109-1	527	537	523	529	1.31	cps
Sodium	23-2	66918876	66721107	66667052	66769012	0.20	cps
Strontium	86-1	12559414	12821699	12549864	12643659	1.22	cps
Strontium	88-1	108401195	108677822	109910645	108996554	0.74	cps
Sulfur	34-1	1822084	1808163	1768395	1799547	1.55	cps
Terbium	159-1	19642974	20651356	19981053	20091795	2.55	cps
Terbium	159-2	7397311	7371762	7211832	7326968	1.37	cps
Thallium	203-1	493	597	543	544	9.49	cps
Thallium	205-1	1320	1230	1160	1237	6.49	cps
Tin	118-1	8626	8679	9043	8783	2.58	cps
Titanium	47-1	2167	2314	2177	2219	3.69	cps
Uranium	238-1	417	390	440	416	6.02	cps

Lab Sample ID :Q1186-15Instrumnet Name :P8Client Sample ID :ME2966Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:44:21 DataFile Name: 047AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9647	9417	9410	9491	1.42	cps
Ytterbium	172-1	113	133	120	122	8.33	cps
Ytterbium	172-2	43	53	33	43	23.08	cps
Ytterbium	176-1	1810	2077	1913	1933	6.95	cps
Ytterbium	176-2	243	343	310	299	17.04	cps
Yttrium	89-1	27963299	29427411	28930001	28773570	2.59	cps
Yttrium	89-2	2255466	2191864	2182355	2209895	1.80	cps
Zinc	66-2	1133	1240	1313	1229	7.37	cps
Zirconium	90-1	2447	2517	2174	2379	7.63	cps
Zirconium	91-1	647	497	423	522	21.80	cps

Lab Sample ID :Q1186-16Instrumnet Name :P8Client Sample ID :ME2958Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

Date & Time Ac	quireu . 202	illed . 2025-02-00 14.47.32		Datarile Name.		U40AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	317	243	227	262	18.26	cps	
Antimony	121-1	360	313	320	331	7.62	cps	
Arsenic	75-2	17	20	27	21	24.12	cps	
Barium	135-1	19978	19387	19437	19601	1.67	cps	
Barium	137-1	34200	33963	34240	34134	0.44	cps	
Beryllium	9-1	644	620	627	630	1.93	cps	
Bismuth	209-1	14247924	13519359	13364702	13710661	3.44	cps	
Bismuth	209-2	5907661	5891675	5942885	5914073	0.44	cps	
Bromine	81-1	156441	147799	137974	147405	6.27	cps	
Cadmium	108-1	20	40	17	26	49.38	cps	
Cadmium	106-1	9277	9176	9350	9268	0.94	cps	
Cadmium	111-1	6540	6456	6573	6523	0.93	cps	
Calcium	43-1	10174750	9845097	9686110	9901986	2.52	cps	
Calcium	44-1	163562664	157859154	156160994	159194271	2.44	cps	
Carbon	12-1	9817247	9641164	9460803	9639738	1.85	cps	
Carbon	12-2	59165	59239	58158	58854	1.03	cps	
Chlorine	35-1	10872328	12101810	12693973	11889370	7.82	cps	
Chlorine	35-2	55499	55566	55824	55630	0.31	cps	
Chromium	52-2	1110	1190	1210	1170	4.52	cps	
Cobalt	59-2	233	233	220	229	3.36	cps	
Copper	63-2	5481	5478	5551	5503	0.75	cps	
Dysprosium	156-1	47	47	33	42	18.24	cps	
Dysprosium	156-2	20	10	23	18	39.03	cps	
Erbium	164-1	133	133	147	138	5.59	cps	
Erbium	164-2	37	47	37	40	14.43	cps	
Gadolinium	160-1	150	167	160	159	5.28	cps	
Gadolinium	160-2	63	53	33	50	30.55	cps	
Holmium	165-1	23643965	23264118	22085090	22997724	3.53	cps	
Holmium	165-2	8147512	8251932	8232039	8210495	0.68	cps	
Indium	115-1	19039670	18151880	17902868	18364806	3.25	cps	
Indium	115-2	1856266	1917585	1914102	1895985	1.82	cps	
Iron	54-2	81537	81192	81524	81418	0.24	cps	
Iron	56-2	1576356	1549462	1537699	1554506	1.27	cps	
Iron	57-2	38619	38311	37783	38238	1.11	cps	
Krypton	83-1	303	280	323	302	7.18	cps	
Lead	206-1	5975	4934	4181	5030	17.91	cps	

Lab Sample ID : Q1186-16 Instrumnet Name : P8
Client Sample ID : ME2958 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

uired: 2025-02-06 14:47:32		DataFile Name :		U48AREF.0		
Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
207-1	5321	4061	3330	4237	23.77	cps
208-1	24049	19283	16508	19946	19.12	cps
6-1	10831679	10632963	10288409	10584351	2.60	cps
24-2	14053124	14315774	14204337	14191078	0.93	cps
55-2	31448	30519	30429	30799	1.83	cps
94-1	2124	1853	1957	1978	6.89	cps
95-1	2534	2877	2590	2667	6.90	cps
96-1	2934	2614	2650	2733	6.41	cps
97-1	1787	1660	1543	1663	7.32	cps
98-1	3907	3971	3957	3945	0.85	cps
150-1	37	50	33	40	22.05	cps
150-2	3	0	3	2	86.60	cps
60-2	933	937	953	941	1.14	cps
31-2	97	90	113	100	12.02	cps
39-2	299374	302245	297573	299731	0.79	cps
103-1	17565604	16912256	16630472	17036111	2.82	cps
103-2	6716001	6771450	6640109	6709187	0.98	cps
45-1	14239758	13426180	13494389	13720109	3.29	cps
45-2	261919	262073	262207	262066	0.05	cps
82-1	60	153	83	99	49.12	cps
77-2	0	0	0	0	0.00	cps
78-2	13	23	7	14	58.06	cps
28-1	44506639	43748421	43401798	43885619	1.29	cps
107-1	437	430	540	469	13.15	cps
109-1	283	257	280	273	5.32	cps
23-2	36370034	36054495	36703782	36376104	0.89	cps
86-1	30194310	29775178	29254149	29741212	1.58	cps
88-1	258757363	255636523	252173250	255522378	1.29	cps
34-1	14995130	14364791	14307100	14555674	2.62	cps
159-1	24229146	23133673	22630442	23331087	3.50	cps
159-2	7940881	7974512	8117107	8010833	1.17	cps
203-1	837	677	683	732	12.36	cps
205-1	1900	1677	1450	1676	13.43	cps
118-1	3374	3300	3500	3392	2.98	cps
47-1	1037	1013	1033	1028	1.23	cps
238-1	4497	4371	4297	4389	2.31	cps
	Mass  207-1 208-1 6-1 24-2 55-2 94-1 95-1 96-1 97-1 98-1 150-2 60-2 31-2 39-2 103-1 103-2 45-1 45-2 82-1 77-2 78-2 28-1 107-1 109-1 23-2 86-1 88-1 34-1 159-1 159-2 203-1 205-1 118-1 47-1	Mass         CPS1           207-1         5321           208-1         24049           6-1         10831679           24-2         14053124           55-2         31448           94-1         2124           95-1         2534           96-1         2934           97-1         1787           98-1         3907           150-2         3           60-2         933           31-2         97           39-2         299374           103-1         17565604           103-2         6716001           45-1         14239758           45-2         261919           82-1         60           77-2         0           78-2         13           28-1         44506639           107-1         437           109-1         283           23-2         36370034           86-1         30194310           88-1         258757363           34-1         14995130           159-1         24229146           159-2         7940881           203-1         8	Mass         CPS1         CPS2           207-1         5321         4061           208-1         24049         19283           6-1         10831679         10632963           24-2         14053124         14315774           55-2         31448         30519           94-1         2124         1853           95-1         2534         2877           96-1         2934         2614           97-1         1787         1660           98-1         3907         3971           150-2         3         0           60-2         933         937           31-2         97         90           39-2         299374         302245           103-1         17565604         16912256           103-2         6716001         6771450           45-1         14239758         13426180           45-2         261919         262073           82-1         60         153           77-2         0         0           78-2         13         23           28-1         44506639         43748421           107-1         437	Mass         CPS1         CPS2         CPS3           207-1         5321         4061         3330           208-1         24049         19283         16508           6-1         10831679         10632963         10288409           24-2         14053124         14315774         14204337           55-2         31448         30519         30429           94-1         2124         1853         1957           95-1         2534         2877         2590           96-1         2934         2614         2650           97-1         1787         1660         1543           98-1         3907         3971         3957           150-1         37         50         33           150-2         3         0         3           60-2         933         937         953           31-2         97         90         113           39-2         299374         302245         297573           103-1         17565604         16912256         16630472           103-2         6716001         6771450         6640109           45-1         14239758         13426180 </td <td>Mass         CPS1         CPS2         CPS3         CPSMean           207-1         5321         4061         3330         4237           208-1         24049         19283         16508         19946           6-1         10831679         10632963         10288409         10584351           24-2         14053124         14315774         14204337         14191078           55-2         31448         30519         30429         30799           94-1         2124         1853         1957         1978           95-1         2534         2877         2590         2667           96-1         2934         2614         2650         2733           97-1         1787         1660         1543         1663           98-1         3907         3971         3957         3945           150-1         37         50         33         40           150-2         3         0         3         2           60-2         933         937         953         941           31-2         97         90         113         100           39-2         299374         302245         29</td> <td>Mass         CPS1         CPS2         CPS3         CPSMean         CPSRSD           207-1         5321         4061         3330         4237         23.77           208-1         24049         19283         16508         19946         19.12           6-1         10831679         10632963         10288409         10584351         2.60           24-2         14053124         14315774         14204337         14191078         0.93           55-2         31448         30519         30429         30799         1.83           94-1         2124         1853         1957         1978         6.89           95-1         2534         2877         2590         2667         6.90           96-1         2934         2614         2650         2733         6.41           97-1         1787         1660         1543         1663         7.32           98-1         3907         3971         3957         3945         0.85           150-1         37         50         33         40         22.05           150-2         3         0         3         2         86.60           60-2         933</td>	Mass         CPS1         CPS2         CPS3         CPSMean           207-1         5321         4061         3330         4237           208-1         24049         19283         16508         19946           6-1         10831679         10632963         10288409         10584351           24-2         14053124         14315774         14204337         14191078           55-2         31448         30519         30429         30799           94-1         2124         1853         1957         1978           95-1         2534         2877         2590         2667           96-1         2934         2614         2650         2733           97-1         1787         1660         1543         1663           98-1         3907         3971         3957         3945           150-1         37         50         33         40           150-2         3         0         3         2           60-2         933         937         953         941           31-2         97         90         113         100           39-2         299374         302245         29	Mass         CPS1         CPS2         CPS3         CPSMean         CPSRSD           207-1         5321         4061         3330         4237         23.77           208-1         24049         19283         16508         19946         19.12           6-1         10831679         10632963         10288409         10584351         2.60           24-2         14053124         14315774         14204337         14191078         0.93           55-2         31448         30519         30429         30799         1.83           94-1         2124         1853         1957         1978         6.89           95-1         2534         2877         2590         2667         6.90           96-1         2934         2614         2650         2733         6.41           97-1         1787         1660         1543         1663         7.32           98-1         3907         3971         3957         3945         0.85           150-1         37         50         33         40         22.05           150-2         3         0         3         2         86.60           60-2         933

Lab Sample ID :Q1186-16Instrumnet Name :P8Client Sample ID :ME2958Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:47:32 DataFile Name: 048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	47	40	53	47	14.28	cps	
Ytterbium	172-1	153	137	150	147	6.01	cps	
Ytterbium	172-2	53	63	23	47	44.61	cps	
Ytterbium	176-1	2227	2124	2144	2165	2.53	cps	
Ytterbium	176-2	333	407	337	359	11.54	cps	
Yttrium	89-1	34026183	33264175	32369061	33219806	2.50	cps	
Yttrium	89-2	2426840	2411442	2474965	2437749	1.36	cps	
Zinc	66-2	890	737	803	810	9.49	cps	
Zirconium	90-1	1343	1327	1237	1302	4.41	cps	
Zirconium	91-1	303	247	233	261	14.23	cps	

Lab Sample ID: Q1186-17 Instrumnet Name: P8

Client Sample ID: ME2968 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Date & Time / to	quired. Zoz	.0 02 00 14.00.47	Datai	Datai lie Name .		OHO/ (INE) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	1720	1510	1563	1598	6.83	cps	
Antimony	121-1	3924	4337	4251	4171	5.23	cps	
Arsenic	75-2	687	713	780	727	6.62	cps	
Barium	135-1	126548	127664	128812	127675	0.89	cps	
Barium	137-1	222634	227339	225633	225202	1.06	cps	
Beryllium	9-1	622	641	624	629	1.67	cps	
Bismuth	209-1	12464888	12158839	12178892	12267540	1.40	cps	
Bismuth	209-2	5308474	5329723	5306030	5314742	0.25	cps	
Bromine	81-1	106436	107330	108049	107271	0.75	cps	
Cadmium	108-1	183	117	187	162	24.34	cps	
Cadmium	106-1	8616	8256	8563	8478	2.29	cps	
Cadmium	111-1	6300	6037	6240	6192	2.22	cps	
Calcium	43-1	2127407	2191954	2203241	2174200	1.88	cps	
Calcium	44-1	34744269	35051964	35158254	34984829	0.61	cps	
Carbon	12-1	12663353	13269008	13622958	13185106	3.68	cps	
Carbon	12-2	87250	88320	88307	87959	0.70	cps	
Chlorine	35-1	2940902	2807259	2708092	2818751	4.14	cps	
Chlorine	35-2	10204	10167	9843	10071	1.97	cps	
Chromium	52-2	8302	8302	8649	8418	2.38	cps	
Cobalt	59-2	780	840	763	794	5.08	cps	
Copper	63-2	22768	22982	23156	22969	0.84	cps	
Dysprosium	156-1	63	67	100	77	26.45	cps	
Dysprosium	156-2	10	30	7	16	81.11	cps	
Erbium	164-1	147	180	117	148	21.44	cps	
Erbium	164-2	43	43	60	49	19.69	cps	
Gadolinium	160-1	170	170	187	176	5.48	cps	
Gadolinium	160-2	50	60	43	51	16.42	cps	
Holmium	165-1	20499710	20346904	20050071	20298895	1.13	cps	
Holmium	165-2	7302917	7609398	7337643	7416652	2.26	cps	
Indium	115-1	16819381	16259997	16171250	16416876	2.14	cps	
Indium	115-2	1679816	1680966	1686104	1682295	0.20	cps	
Iron	54-2	32230	32858	31872	32320	1.54	cps	
Iron	56-2	580536	588712	584114	584454	0.70	cps	
Iron	57-2	15138	14581	14738	14819	1.94	cps	
Krypton	83-1	247	267	297	270	9.32	cps	
Lead	206-1	9991	10234	10454	10226	2.27	cps	

Lab Sample ID : Q1186-17 Instrumnet Name : P8
Client Sample ID : ME2968 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Date & Time Acc	uired: 2025-02-06 14:50:47		DataFile Name :		U49AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	8480	8523	8546	8516	0.40	cps
Lead	208-1	39567	39717	40278	39854	0.94	cps
Lithium	6-1	9539068	9305045	9522739	9455617	1.38	cps
Magnesium	24-2	10832799	11055674	10618285	10835586	2.02	cps
Manganese	55-2	87667	87570	88646	87961	0.68	cps
Molybdenum	94-1	144606	147317	146896	146273	1.00	cps
Molybdenum	95-1	242838	251717	250062	248206	1.90	cps
Molybdenum	96-1	265804	267021	265773	266199	0.27	cps
Molybdenum	97-1	155315	156326	155331	155657	0.37	cps
Molybdenum	98-1	393140	403895	399638	398891	1.36	cps
Neodymium	150-1	93	93	90	92	2.08	cps
Neodymium	150-2	10	23	10	14	53.28	cps
Nickel	60-2	8940	9066	9230	9079	1.60	cps
Phosphorus	31-2	340	310	347	332	5.88	cps
Potassium	39-2	9509301	9321582	9351121	9394001	1.07	cps
Rhodium	103-1	15356135	15113715	15219449	15229766	0.80	cps
Rhodium	103-2	6081665	6100568	6202871	6128368	1.06	cps
Scandium	45-1	12145639	12014232	11914950	12024940	0.96	cps
Scandium	45-2	230371	234276	233243	232630	0.87	cps
Selenium	82-1	297	357	340	331	9.35	cps
Selenium	77-2	0	7	3	3	100.05	cps
Selenium	78-2	23	20	17	20	16.65	cps
Silicon	28-1	119811502	119483672	120901358	120065510	0.62	cps
Silver	107-1	893	943	867	901	4.32	cps
Silver	109-1	770	717	737	741	3.64	cps
Sodium	23-2	22408182	22233009	21832504	22157898	1.33	cps
Strontium	86-1	1957150	2003556	1974901	1978536	1.18	cps
Strontium	88-1	16797092	17071570	17093114	16987259	0.97	cps
Sulfur	34-1	6362777	6316514	6318842	6332711	0.41	cps
Terbium	159-1	20943670	20563069	20454329	20653689	1.24	cps
Terbium	159-2	7011809	7209003	7201485	7140766	1.56	cps
Thallium	203-1	490	450	477	472	4.31	cps
Thallium	205-1	1070	977	1053	1033	4.82	cps
Tin	118-1	240715	241636	247382	243244	1.49	cps
Titanium	47-1	3414	3397	3324	3378	1.42	cps
Uranium	238-1	83496	86445	86321	85421	1.95	cps

Lab Sample ID :Q1186-17Instrumnet Name :P8Client Sample ID :ME2968Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:50:47 DataFile Name: 049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3744	3704	3744	3731	0.62	cps
Ytterbium	172-1	117	100	163	127	25.92	cps
Ytterbium	172-2	57	53	67	59	11.79	cps
Ytterbium	176-1	1850	2027	2017	1965	5.05	cps
Ytterbium	176-2	270	307	367	314	15.52	cps
Yttrium	89-1	29607475	29577919	28985698	29390364	1.19	cps
Yttrium	89-2	2139141	2173882	2181772	2164932	1.05	cps
Zinc	66-2	199307	200906	198468	199561	0.62	cps
Zirconium	90-1	2230	2334	2104	2222	5.18	cps
Zirconium	91-1	463	443	473	460	3.32	cps

<sub>3</sub> 598

Lab Sample ID : Q1186-18 Instrumnet Name : P8

Client Sample ID : ME2974 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

Date & Time Ac	quireu . 202	eu . 2025-02-00 14.55.56		Datarile Name.		USUAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	1030	1207	1087	1108	8.14	cps	
Antimony	121-1	1680	1617	1427	1575	8.37	cps	
Arsenic	75-2	773	720	760	751	3.70	cps	
Barium	135-1	384291	387741	386832	386288	0.46	cps	
Barium	137-1	668601	677468	676265	674111	0.71	cps	
Beryllium	9-1	560	565	497	541	6.95	cps	
Bismuth	209-1	11837994	11932493	12358214	12042900	2.30	cps	
Bismuth	209-2	5322587	5298303	5303861	5308250	0.24	cps	
Bromine	81-1	63667	65412	66272	65117	2.04	cps	
Cadmium	108-1	50	63	63	59	13.07	cps	
Cadmium	106-1	8102	8509	8309	8307	2.45	cps	
Cadmium	111-1	5740	5996	5835	5857	2.20	cps	
Calcium	43-1	9619886	9676667	9722218	9672924	0.53	cps	
Calcium	44-1	152413664	153230888	154332611	153325721	0.63	cps	
Carbon	12-1	10225048	10828423	11121013	10724828	4.26	cps	
Carbon	12-2	72581	73432	73901	73305	0.91	cps	
Chlorine	35-1	2167675	2233643	2242890	2214736	1.85	cps	
Chlorine	35-2	9330	9523	8926	9260	3.29	cps	
Chromium	52-2	5608	5745	5868	5740	2.27	cps	
Cobalt	59-2	1513	1570	1423	1502	4.92	cps	
Copper	63-2	8039	8199	8466	8235	2.62	cps	
Dysprosium	156-1	93	110	123	109	13.81	cps	
Dysprosium	156-2	37	20	40	32	33.25	cps	
Erbium	164-1	147	213	170	177	19.15	cps	
Erbium	164-2	37	57	67	53	28.64	cps	
Gadolinium	160-1	173	187	220	193	12.43	cps	
Gadolinium	160-2	70	73	37	60	33.79	cps	
Holmium	165-1	19628790	19874070	20445273	19982711	2.10	cps	
Holmium	165-2	7570072	7393816	7401518	7455135	1.34	cps	
Indium	115-1	15777507	15958403	16460524	16065478	2.20	cps	
Indium	115-2	1683195	1684763	1723431	1697130	1.34	cps	
Iron	54-2	156433	156321	155509	156088	0.32	cps	
Iron	56-2	3005074	2980475	2941090	2975546	1.08	cps	
Iron	57-2	72443	71424	72366	72078	0.79	cps	
Krypton	83-1	260	300	237	266	12.06	cps	
Lead	206-1	4381	4291	4234	4302	1.72	cps	

Lab Sample ID: Q1186-18 Instrumnet Name: P8
Client Sample ID: ME2974 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

Lead       207-1       3524       3591       3464       3526       1.80       cp         Lead       208-1       16784       16484       16541       16603       0.96       cp         Lithium       6-1       8996945       9013222       9284387       9098185       1.77       cp	s s s
Lithium 6-1 8996945 9013222 9284387 9098185 1.77 cp	s s s
	s s
M : 04.0 4404004 40700777 40004001 10700777	s
Magnesium 24-2 11104064 10790577 10664624 10853088 2.09 cp	
Manganese 55-2 116806 115509 113053 115123 1.66 cp	S
Molybdenum 94-1 39493 40860 40673 40342 1.84 cp	
Molybdenum 95-1 66297 67074 66997 66789 0.64 cp	s
Molybdenum 96-1 70920 72183 72233 71779 1.04 cp	S
Molybdenum 97-1 41502 41876 41438 41605 0.57 cp	s
Molybdenum 98-1 106874 107836 107748 107486 0.49 cp	S
Neodymium 150-1 103 147 137 129 17.61 cp	S
Neodymium 150-2 3 27 7 12 103.26 cp	s
Nickel 60-2 5448 5308 5311 5355 1.49 cp	s
Phosphorus 31-2 500 403 370 424 15.91 cp	s
Potassium 39-2 757512 747996 748610 751373 0.71 cp	s
Rhodium 103-1 14707166 14783826 14878750 14789914 0.58 cp	s
Rhodium 103-2 6081997 6043316 6062604 6062639 0.32 cp	s
Scandium 45-1 11513880 11644178 11923455 11693838 1.79 cp	S
Scandium 45-2 234467 229915 231122 231834 1.02 cp	s
Selenium 82-1 63 73 127 88 38.79 cp	S
Selenium 77-2 0 3 0 1 173.21 cp	S
Selenium 78-2 13 17 17 16 12.40 cp	s
Silicon 28-1 120638128 124920551 122512578 122690419 1.75 cp	S
Silver 107-1 547 573 487 536 8.29 cp	s
Silver 109-1 230 283 240 251 11.29 cp	S
Sodium 23-2 6172061 6109658 6053676 6111798 0.97 cp	S
Strontium 86-1 90952865 93884002 90928349 91921739 1.85 cp	s
Strontium 88-1 789370202 811574095 786439535 795794610 1.73 cp	S
Sulfur 34-1 10092881 10116586 10149765 10119744 0.28 cp	S
Terbium 159-1 20493313 20109776 20774403 20459164 1.63 cp	S
Terbium 159-2 7236796 7057595 7206321 7166904 1.34 cp	S
Thallium 203-1 310 393 380 361 12.40 cp	s
Thallium 205-1 793 810 780 794 1.89 cp	s
Tin 118-1 7719 7539 7502 7587 1.53 cp	S
Titanium 47-1 3457 3621 3444 3507 2.81 cp	s
Uranium 238-1 107661 109807 110496 109321 1.35 cp	s

Lab Sample ID :Q1186-18Instrumnet Name :P8Client Sample ID :ME2974Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:53:58 DataFile Name: 050AREF.d

<b>5</b> ,		0004	0000	0000	00014	00000	
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3574	3684	3497	3585	2.62	cps
Ytterbium	172-1	147	153	137	146	5.76	cps
Ytterbium	172-2	87	70	67	74	14.39	cps
Ytterbium	176-1	1857	1787	1863	1836	2.31	cps
Ytterbium	176-2	290	387	313	330	15.29	cps
Yttrium	89-1	28455839	28310330	29125641	28630603	1.52	cps
Yttrium	89-2	2149312	2167390	2160515	2159072	0.42	cps
Zinc	66-2	860	847	937	881	5.51	cps
Zirconium	90-1	4411	4601	5313	4775	9.96	cps
Zirconium	91-1	980	977	967	974	0.71	cps

Lab Sample ID: Q1186-19 Instrumnet Name: P8
Client Sample ID: ME2977 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1163	1000	1130	1098	7.86	cps
Antimony	121-1	637	620	603	620	2.69	cps
Arsenic	75-2	90	120	110	107	14.32	cps
Barium	135-1	145048	148399	151861	148436	2.30	cps
Barium	137-1	254307	261639	262606	259517	1.75	cps
Beryllium	9-1	522	525	529	525	0.60	cps
Bismuth	209-1	11396755	11670204	11526961	11531307	1.19	cps
Bismuth	209-2	5189082	5304788	5065018	5186296	2.31	cps
Bromine	81-1	134804	159557	175514	156625	13.10	cps
Cadmium	108-1	40	33	17	30	40.05	cps
Cadmium	106-1	7669	8119	8189	7992	3.53	cps
Cadmium	111-1	5377	5690	5747	5605	3.56	cps
Calcium	43-1	25403345	26200322	26223288	25942318	1.80	cps
Calcium	44-1	411012221	422445527	428646327	420701358	2.13	cps
Carbon	12-1	8827108	9329099	9879564	9345257	5.63	cps
Carbon	12-2	67387	67527	66489	67135	0.84	cps
Chlorine	35-1	4658847	5218398	5342493	5073246	7.18	cps
Chlorine	35-2	23619	23569	23462	23550	0.34	cps
Chromium	52-2	2024	2040	2147	2070	3.23	cps
Cobalt	59-2	1073	983	1060	1039	4.68	cps
Copper	63-2	4131	4391	4611	4377	5.49	cps
Dysprosium	156-1	167	203	157	176	14.00	cps
Dysprosium	156-2	97	43	30	57	62.26	cps
Erbium	164-1	290	310	317	306	4.54	cps
Erbium	164-2	97	120	103	107	11.27	cps
Gadolinium	160-1	277	287	277	280	2.06	cps
Gadolinium	160-2	117	103	87	102	14.70	cps
Holmium	165-1	19651399	19575547	19698600	19641848	0.32	cps
Holmium	165-2	7374863	7637844	7331363	7448024	2.23	cps
Indium	115-1	15635010	15660180	15791779	15695656	0.54	cps
Indium	115-2	1684676	1729614	1664660	1692983	1.96	cps
Iron	54-2	201344	200328	198145	199939	0.82	cps
Iron	56-2	3900688	3811436	3852318	3854814	1.16	cps
Iron	57-2	95594	91279	93199	93357	2.32	cps
Krypton	83-1	257	277	367	300	19.53	cps
Lead	206-1	2664	2894	2920	2826	4.99	cps

Lab Sample ID: Q1186-19 Instrumnet Name: P8
Client Sample ID: ME2977 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Date & Time Act	julied. 2025-02-00 14.57.15		Dalari	Datarile Name.		USTAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	2297	2594	2664	2518	7.73	cps	
Lead	208-1	10849	11509	11665	11341	3.82	cps	
Lithium	6-1	9132831	8942076	9232981	9102629	1.62	cps	
Magnesium	24-2	33440698	32028000	31928341	32465680	2.61	cps	
Manganese	55-2	280320	274827	277318	277488	0.99	cps	
Molybdenum	94-1	3921	3904	3797	3874	1.73	cps	
Molybdenum	95-1	3407	3307	3320	3345	1.62	cps	
Molybdenum	96-1	3691	3751	3724	3722	0.81	cps	
Molybdenum	97-1	1960	1923	1940	1941	0.95	cps	
Molybdenum	98-1	5294	5078	5111	5161	2.26	cps	
Neodymium	150-1	250	200	283	244	17.16	cps	
Neodymium	150-2	97	83	70	83	16.00	cps	
Nickel	60-2	1127	1077	1063	1089	3.07	cps	
Phosphorus	31-2	223	177	237	212	14.85	cps	
Potassium	39-2	512980	506997	502798	507591	1.01	cps	
Rhodium	103-1	14294883	14564137	14499244	14452755	0.97	cps	
Rhodium	103-2	5960388	6202416	6029436	6064080	2.06	cps	
Scandium	45-1	11528799	11790617	11581556	11633657	1.19	cps	
Scandium	45-2	233635	243249	232532	236472	2.49	cps	
Selenium	82-1	150	173	17	113	74.59	cps	
Selenium	77-2	0	7	3	3	100.05	cps	
Selenium	78-2	17	7	17	13	43.29	cps	
Silicon	28-1	83092324	84808097	85220169	84373530	1.34	cps	
Silver	107-1	377	480	493	450	14.19	cps	
Silver	109-1	153	227	280	220	28.91	cps	
Sodium	23-2	12878148	12870109	12520446	12756234	1.60	cps	
Strontium	86-1	65402017	67237189	68345851	66995019	2.22	cps	
Strontium	88-1	567289978	575133751	591919898	578114542	2.18	cps	
Sulfur	34-1	36774167	37687180	37762648	37407998	1.47	cps	
Terbium	159-1	20331699	20350702	20901657	20528019	1.58	cps	
Terbium	159-2	7012904	7384847	6961224	7119659	3.25	cps	
Thallium	203-1	347	333	317	332	4.53	cps	
Thallium	205-1	853	800	923	859	7.20	cps	
Tin	118-1	8546	8690	8810	8682	1.52	cps	
Titanium	47-1	2307	2377	2770	2485	10.05	cps	
Uranium	238-1	7779	8326	8253	8119	3.66	cps	

Lab Sample ID :Q1186-19Instrumnet Name :P8Client Sample ID :ME2977Dilution Factor :1

Date & Time Acquired: 2025-02-06 14:57:15 DataFile Name: 051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	417	447	377	413	8.50	cps
Ytterbium	172-1	210	203	167	193	12.07	cps
Ytterbium	172-2	113	87	83	94	17.41	cps
Ytterbium	176-1	1823	2014	2090	1976	6.95	cps
Ytterbium	176-2	343	410	297	350	16.27	cps
Yttrium	89-1	28644748	28497282	29155756	28765929	1.20	cps
Yttrium	89-2	2148237	2226884	2165476	2180199	1.90	cps
Zinc	66-2	1620	1627	1597	1615	0.98	cps
Zirconium	90-1	5278	5321	5434	5344	1.51	cps
Zirconium	91-1	1117	1260	1247	1208	6.56	cps

Lab Sample ID: Q1186-20 Instrumnet Name: P8

Client Sample ID: ME2980 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Date & Time Ac	quireu . 202	Julieu . 2025-02-00 15.00.26		Datarile Name.		USZAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	4908	4981	5204	5031	3.07	cps	
Antimony	121-1	10384	10331	10097	10271	1.49	cps	
Arsenic	75-2	620	727	673	673	7.92	cps	
Barium	135-1	132686	135662	137564	135304	1.82	cps	
Barium	137-1	232750	237661	236150	235521	1.07	cps	
Beryllium	9-1	545	590	606	580	5.47	cps	
Bismuth	209-1	12371973	11314747	12672686	12119802	5.88	cps	
Bismuth	209-2	5920966	5641261	5522697	5694975	3.59	cps	
Bromine	81-1	149353	158811	165707	157957	5.20	cps	
Cadmium	108-1	180	210	210	200	8.66	cps	
Cadmium	106-1	8896	7966	9006	8623	6.63	cps	
Cadmium	111-1	6601	6006	6687	6432	5.77	cps	
Calcium	43-1	3646198	3616138	3669023	3643786	0.73	cps	
Calcium	44-1	58612741	59753161	59175182	59180361	0.96	cps	
Carbon	12-1	12954994	14054050	14205610	13738218	4.97	cps	
Carbon	12-2	95202	96427	97390	96340	1.14	cps	
Chlorine	35-1	2525505	2636980	2649522	2604002	2.62	cps	
Chlorine	35-2	10751	10898	10968	10872	1.02	cps	
Chromium	52-2	3664	3610	3824	3699	3.00	cps	
Cobalt	59-2	14571	14708	14641	14640	0.47	cps	
Copper	63-2	39702	39986	39769	39819	0.37	cps	
Dysprosium	156-1	683	817	783	761	9.12	cps	
Dysprosium	156-2	233	247	233	238	3.24	cps	
Erbium	164-1	550	610	600	587	5.48	cps	
Erbium	164-2	237	200	180	206	13.98	cps	
Gadolinium	160-1	800	777	713	763	5.88	cps	
Gadolinium	160-2	253	293	320	289	11.62	cps	
Holmium	165-1	20391699	19208611	20934362	20178224	4.37	cps	
Holmium	165-2	8364739	7884089	7798565	8015798	3.81	cps	
Indium	115-1	16316454	15355876	17299796	16324042	5.95	cps	
Indium	115-2	1946448	1818610	1791229	1852096	4.47	cps	
Iron	54-2	127620	127139	128202	127654	0.42	cps	
Iron	56-2	2499608	2444769	2447541	2463973	1.25	cps	
Iron	57-2	58918	58627	59319	58955	0.59	cps	
Krypton	83-1	280	293	283	286	2.43	cps	
Lead	206-1	26220	26895	26544	26553	1.27	cps	

Lab Sample ID :Q1186-20Instrumnet Name :P8Client Sample ID :ME2980Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Date & Time Act	Julieu . 2025-02-00 15.00.26		Dalar	Datarile Name.		USZAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	21461	22045	22243	21916	1.85	cps	
Lead	208-1	100699	102490	102745	101978	1.09	cps	
Lithium	6-1	9643298	9183631	9809033	9545321	3.39	cps	
Magnesium	24-2	12927626	12776464	13133092	12945727	1.38	cps	
Manganese	55-2	165407	164108	166883	165466	0.84	cps	
Molybdenum	94-1	219933	222837	224781	222517	1.10	cps	
Molybdenum	95-1	377521	380606	384651	380926	0.94	cps	
Molybdenum	96-1	406149	414415	411170	410578	1.01	cps	
Molybdenum	97-1	232699	241342	239178	237740	1.89	cps	
Molybdenum	98-1	601017	613827	617803	610883	1.44	cps	
Neodymium	150-1	1000	1153	1000	1051	8.42	cps	
Neodymium	150-2	283	233	230	249	12.00	cps	
Nickel	60-2	35842	34539	34833	35071	1.95	cps	
Phosphorus	31-2	297	277	267	280	5.46	cps	
Potassium	39-2	5729468	5842563	5915630	5829220	1.61	cps	
Rhodium	103-1	15290026	14359481	15717829	15122445	4.59	cps	
Rhodium	103-2	6981239	6508611	6315922	6601924	5.19	cps	
Scandium	45-1	12380019	11480941	12514766	12125242	4.64	cps	
Scandium	45-2	270688	251894	248730	257104	4.62	cps	
Selenium	82-1	280	240	427	316	31.15	cps	
Selenium	77-2	3	3	0	2	86.60	cps	
Selenium	78-2	27	13	23	21	32.88	cps	
Silicon	28-1	45240783	45710873	45385298	45445651	0.53	cps	
Silver	107-1	2394	2280	2317	2330	2.48	cps	
Silver	109-1	2067	2147	2014	2076	3.23	cps	
Sodium	23-2	17758992	17655043	17738412	17717482	0.31	cps	
Strontium	86-1	2912909	3006925	2965207	2961680	1.59	cps	
Strontium	88-1	25167428	25701432	25669708	25512856	1.17	cps	
Sulfur	34-1	6221807	6124153	6225934	6190631	0.93	cps	
Terbium	159-1	20899572	19187051	21565305	20550642	5.97	cps	
Terbium	159-2	8078164	7569267	7475578	7707670	4.21	cps	
Thallium	203-1	1070	1243	1133	1149	7.63	cps	
Thallium	205-1	2674	2764	2844	2760	3.08	cps	
Tin	118-1	8996	9557	9357	9303	3.05	cps	
Titanium	47-1	2290	2187	2134	2204	3.62	cps	
Uranium	238-1	256376	257377	257624	257126	0.26	cps	

Lab Sample ID :Q1186-20Instrumnet Name :P8Client Sample ID :ME2980Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:00:28 DataFile Name: 052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	4834	4848	4958	4880	1.39	cps	
Ytterbium	172-1	307	250	327	294	13.50	cps	
Ytterbium	172-2	120	150	123	131	12.54	cps	
Ytterbium	176-1	2180	2010	2234	2141	5.45	cps	
Ytterbium	176-2	437	400	397	411	5.40	cps	
Yttrium	89-1	29980608	28029828	30832547	29614328	4.85	cps	
Yttrium	89-2	2486650	2304839	2256731	2349407	5.16	cps	
Zinc	66-2	1573	1593	1543	1570	1.60	cps	
Zirconium	90-1	3347	3497	3607	3484	3.75	cps	
Zirconium	91-1	693	693	777	721	6.67	cps	

Lab Sample ID: Q1186-09RE Instrumnet Name: P8
Client Sample ID: ME2959 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

Date a Time?	required. 202	0 02 00 10.00.40	Datain	ic ivallic .	000/ (I (LI .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	420	470	427	439	6.19	cps
Antimony	121-1	237	283	290	270	10.76	cps
Arsenic	75-2	73	30	53	52	41.53	cps
Barium	135-1	65414	67011	67427	66617	1.60	cps
Barium	137-1	114647	117653	118318	116873	1.67	cps
Beryllium	9-1	472	519	482	491	4.95	cps
Bismuth	209-1	11426522	11535385	11437702	11466536	0.52	cps
Bismuth	209-2	4733729	4864830	4756259	4784939	1.46	cps
Bromine	81-1	119888	144028	155081	139665	12.89	cps
Cadmium	108-1	33	40	20	31	32.73	cps
Cadmium	106-1	8172	8469	8129	8257	2.24	cps
Cadmium	111-1	5757	5957	5736	5817	2.10	cps
Calcium	43-1	27222274	27861020	27648406	27577233	1.18	cps
Calcium	44-1	435757847	449147580	451086060	445330496	1.87	cps
Carbon	12-1	8971053	9660830	10126215	9586033	6.06	cps
Carbon	12-2	68937	69048	71355	69780	1.96	cps
Chlorine	35-1	31761167	35999073	37444731	35068324	8.42	cps
Chlorine	35-2	161234	162407	164554	162731	1.03	cps
Chromium	52-2	1823	1860	1640	1775	6.64	cps
Cobalt	59-2	460	510	467	479	5.67	cps
Copper	63-2	5134	5675	5574	5461	5.26	cps
Dysprosium	156-1	60	57	63	60	5.55	cps
Dysprosium	156-2	17	7	20	14	48.02	cps
Erbium	164-1	120	117	137	124	8.61	cps
Erbium	164-2	77	50	30	52	44.83	cps
Gadolinium	160-1	110	150	193	151	27.58	cps
Gadolinium	160-2	57	40	33	43	27.74	cps
Holmium	165-1	19957672	19874583	19709729	19847328	0.64	cps
Holmium	165-2	6842512	7172322	6878975	6964603	2.60	cps
Indium	115-1	15705580	15856117	15717869	15759856	0.53	cps
Indium	115-2	1482868	1599670	1538667	1540402	3.79	cps
Iron	54-2	228066	230094	231381	229847	0.73	cps
Iron	56-2	4403573	4312553	4343461	4353196	1.06	cps
Iron	57-2	106789	107353	106964	107035	0.27	cps
Krypton	83-1	363	343	290	332	11.41	cps
Lead	206-1	2737	3077	3094	2969	6.78	cps

Lab Sample ID :Q1186-09REInstrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

Lead207-124802687283426676.66cpsLead208-1110621207212129117545.11cpsLithium6-190373339242810914934791431631.13cpsMagnesium24-2411417184080206441322690410888240.64cpsManganese55-2866048725486694868510.41cpsMolybdenum94-145814728458446311.81cpsMolybdenum95-170756695704569383.05cpsMolybdenum96-168427129742971334.11cpsMolybdenum97-139874131422141132.86cpsMolybdenum98-1101871043710351103251.23cpsNeodymium150-1839797928.35cpsNeodymium150-21717101426.66cps	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lithium       6-1       9037333       9242810       9149347       9143163       1.13       cps         Magnesium       24-2       41141718       40802064       41322690       41088824       0.64       cps         Manganese       55-2       86604       87254       86694       86851       0.41       cps         Molybdenum       94-1       4581       4728       4584       4631       1.81       cps         Molybdenum       95-1       7075       6695       7045       6938       3.05       cps         Molybdenum       96-1       6842       7129       7429       7133       4.11       cps         Molybdenum       97-1       3987       4131       4221       4113       2.86       cps         Molybdenum       98-1       10187       10437       10351       10325       1.23       cps         Neodymium       150-1       83       97       97       92       8.35       cps         Neodymium       150-2       17       17       10       14       26.66       cps	Lead	207-1	2480	2687	2834	2667	6.66	cps
Magnesium       24-2       41141718       40802064       41322690       41088824       0.64       cps         Manganese       55-2       86604       87254       86694       86851       0.41       cps         Molybdenum       94-1       4581       4728       4584       4631       1.81       cps         Molybdenum       95-1       7075       6695       7045       6938       3.05       cps         Molybdenum       96-1       6842       7129       7429       7133       4.11       cps         Molybdenum       97-1       3987       4131       4221       4113       2.86       cps         Molybdenum       98-1       10187       10437       10351       10325       1.23       cps         Neodymium       150-1       83       97       97       92       8.35       cps         Neodymium       150-2       17       17       10       14       26.66       cps	Lead	208-1	11062	12072	12129	11754	5.11	cps
Manganese         55-2         86604         87254         86694         86851         0.41         cps           Molybdenum         94-1         4581         4728         4584         4631         1.81         cps           Molybdenum         95-1         7075         6695         7045         6938         3.05         cps           Molybdenum         96-1         6842         7129         7429         7133         4.11         cps           Molybdenum         97-1         3987         4131         4221         4113         2.86         cps           Molybdenum         98-1         10187         10437         10351         10325         1.23         cps           Neodymium         150-1         83         97         97         92         8.35         cps           Neodymium         150-2         17         17         10         14         26.66         cps	Lithium	6-1	9037333	9242810	9149347	9143163	1.13	cps
Molybdenum       94-1       4581       4728       4584       4631       1.81       cps         Molybdenum       95-1       7075       6695       7045       6938       3.05       cps         Molybdenum       96-1       6842       7129       7429       7133       4.11       cps         Molybdenum       97-1       3987       4131       4221       4113       2.86       cps         Molybdenum       98-1       10187       10437       10351       10325       1.23       cps         Neodymium       150-1       83       97       97       92       8.35       cps         Neodymium       150-2       17       17       10       14       26.66       cps	Magnesium	24-2	41141718	40802064	41322690	41088824	0.64	cps
Molybdenum         95-1         7075         6695         7045         6938         3.05         cps           Molybdenum         96-1         6842         7129         7429         7133         4.11         cps           Molybdenum         97-1         3987         4131         4221         4113         2.86         cps           Molybdenum         98-1         10187         10437         10351         10325         1.23         cps           Neodymium         150-1         83         97         97         92         8.35         cps           Neodymium         150-2         17         17         10         14         26.66         cps	Manganese	55-2	86604	87254	86694	86851	0.41	cps
Molybdenum       96-1       6842       7129       7429       7133       4.11       cps         Molybdenum       97-1       3987       4131       4221       4113       2.86       cps         Molybdenum       98-1       10187       10437       10351       10325       1.23       cps         Neodymium       150-1       83       97       97       92       8.35       cps         Neodymium       150-2       17       17       10       14       26.66       cps	Molybdenum	94-1	4581	4728	4584	4631	1.81	cps
Molybdenum       97-1       3987       4131       4221       4113       2.86       cps         Molybdenum       98-1       10187       10437       10351       10325       1.23       cps         Neodymium       150-1       83       97       97       92       8.35       cps         Neodymium       150-2       17       17       10       14       26.66       cps	Molybdenum	95-1	7075	6695	7045	6938	3.05	cps
Molybdenum         98-1         10187         10437         10351         10325         1.23         cps           Neodymium         150-1         83         97         97         92         8.35         cps           Neodymium         150-2         17         17         10         14         26.66         cps	Molybdenum	96-1	6842	7129	7429	7133	4.11	cps
Neodymium         150-1         83         97         97         92         8.35         cps           Neodymium         150-2         17         17         10         14         26.66         cps	Molybdenum	97-1	3987	4131	4221	4113	2.86	cps
Neodymium 150-2 17 17 10 14 26.66 cps	Molybdenum	98-1	10187	10437	10351	10325	1.23	cps
	Neodymium	150-1	83	97	97	92	8.35	cps
	Neodymium	150-2	17	17	10	14	26.66	cps
Nickel 60-2 1247 1250 1193 1230 2.59 cps	Nickel	60-2	1247	1250	1193	1230	2.59	cps
Phosphorus 31-2 140 120 150 137 11.18 cps	Phosphorus	31-2	140	120	150	137	11.18	cps
Potassium 39-2 807312 812444 808071 809276 0.34 cps	Potassium	39-2	807312	812444	808071	809276	0.34	cps
Rhodium 103-1 14169962 14389877 14261411 14273750 0.77 cps	Rhodium	103-1	14169962	14389877	14261411	14273750	0.77	cps
Rhodium 103-2 5407071 5689532 5418291 5504965 2.91 cps	Rhodium	103-2	5407071	5689532	5418291	5504965	2.91	cps
Scandium 45-1 11778421 11876804 11823388 11826204 0.42 cps	Scandium	45-1	11778421	11876804	11823388	11826204	0.42	cps
Scandium 45-2 219789 226705 220212 222235 1.74 cps	Scandium	45-2	219789	226705	220212	222235	1.74	cps
Selenium 82-1 37 120 137 98 54.79 cps	Selenium	82-1	37	120	137	98	54.79	cps
Selenium 77-2 0 0 0 0 0 0.00 cps	Selenium	77-2	0	0	0	0	0.00	cps
Selenium 78-2 3 27 13 14 81.07 cps	Selenium	78-2	3	27	13	14	81.07	cps
Silicon 28-1 117462955 121816065 124893525 121390848 3.08 cps	Silicon	28-1	117462955	121816065	124893525	121390848	3.08	cps
Silver 107-1 677 720 820 739 9.95 cps	Silver	107-1	677	720	820	739	9.95	cps
Silver 109-1 443 513 583 513 13.64 cps	Silver	109-1	443	513	583	513	13.64	cps
Sodium 23-2 106779492 105738468 106992365 106503442 0.63 cps	Sodium	23-2	106779492	105738468	106992365	106503442	0.63	cps
Strontium 86-1 82376817 82590484 84404314 83123872 1.34 cps	Strontium	86-1	82376817	82590484	84404314	83123872	1.34	cps
Strontium 88-1 700869510 726588843 722519189 716659180 1.93 cps	Strontium	88-1	700869510	726588843	722519189	716659180	1.93	cps
Sulfur 34-1 38628055 39219524 39255485 39034355 0.90 cps	Sulfur	34-1	38628055	39219524	39255485	39034355	0.90	cps
Terbium 159-1 20067128 20470630 20273403 20270387 1.00 cps	Terbium	159-1	20067128	20470630	20273403	20270387	1.00	cps
Terbium 159-2 6665452 6899161 6742114 6768909 1.76 cps	Terbium	159-2	6665452	6899161	6742114	6768909	1.76	cps
Thallium 203-1 347 360 400 369 7.52 cps	Thallium	203-1	347	360	400	369	7.52	cps
Thallium 205-1 787 977 880 881 10.78 cps	Thallium	205-1	787	977	880	881	10.78	cps
Tin 118-1 9547 10214 9560 9774 3.90 cps	Tin	118-1	9547	10214	9560	9774	3.90	cps
Titanium 47-1 2427 2417 2490 2445 1.63 cps	Titanium	47-1	2427	2417	2490	2445	1.63	cps
Uranium 238-1 12980 12797 13003 12927 0.88 cps	Uranium	238-1	12980	12797	13003	12927	0.88	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1186-09REInstrumnet Name :P8Client Sample ID :ME2959Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:03:40 DataFile Name: 053AREF.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
							_
Vanadium	51-2	93	90	103	96	7.27	cps
Ytterbium	172-1	143	113	117	124	13.21	cps
Ytterbium	172-2	70	57	37	54	30.81	cps
Ytterbium	176-1	2164	1810	1870	1948	9.71	cps
Ytterbium	176-2	277	290	330	299	9.29	cps
Yttrium	89-1	28613810	29381344	28449735	28814963	1.73	cps
Yttrium	89-2	2028509	2112449	2015475	2052144	2.56	cps
Zinc	66-2	753	730	787	757	3.76	cps
Zirconium	90-1	1990	1953	1793	1912	5.47	cps
Zirconium	91-1	427	437	323	396	15.86	cps

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Lab Sample ID :Q1186-10REInstrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Date & Time Ac	quired . 2025-02-06 15.06.55		DalaFi	Datarile Name.		UJ4AREF.U			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Aluminium	27-2	430	393	390	404	5.49	cps		
Antimony	121-1	280	390	267	312	21.68	cps		
Arsenic	75-2	53	43	67	54	21.51	cps		
Barium	135-1	65417	66227	65367	65670	0.74	cps		
Barium	137-1	114375	115555	114479	114803	0.57	cps		
Beryllium	9-1	492	464	495	484	3.59	cps		
Bismuth	209-1	11349028	10891625	11571738	11270797	3.08	cps		
Bismuth	209-2	4855250	4898674	4750030	4834651	1.58	cps		
Bromine	81-1	127488	147048	156950	143829	10.42	cps		
Cadmium	108-1	20	40	30	30	33.33	cps		
Cadmium	106-1	8503	7976	8503	8327	3.65	cps		
Cadmium	111-1	5991	5598	5971	5853	3.78	cps		
Calcium	43-1	26987466	27388189	26890625	27088760	0.97	cps		
Calcium	44-1	439724167	436835740	429130034	435229980	1.26	cps		
Carbon	12-1	9142717	9761909	10202120	9702248	5.49	cps		
Carbon	12-2	69399	69986	69694	69693	0.42	cps		
Chlorine	35-1	33989446	36963875	37596048	36183123	5.32	cps		
Chlorine	35-2	162923	165551	166889	165121	1.22	cps		
Chromium	52-2	2480	2487	2380	2449	2.44	cps		
Cobalt	59-2	507	513	457	492	6.29	cps		
Copper	63-2	23536	24207	23914	23886	1.41	cps		
Dysprosium	156-1	80	80	73	78	4.95	cps		
Dysprosium	156-2	23	17	20	20	16.65	cps		
Erbium	164-1	147	133	143	141	4.92	cps		
Erbium	164-2	50	37	63	50	26.66	cps		
Gadolinium	160-1	187	210	197	198	5.92	cps		
Gadolinium	160-2	50	53	57	53	6.25	cps		
Holmium	165-1	19796583	18835743	20044984	19559103	3.27	cps		
Holmium	165-2	7110664	7031421	6958772	7033619	1.08	cps		
Indium	115-1	15511827	15459529	16098524	15689960	2.26	cps		
Indium	115-2	1609749	1601943	1578798	1596830	1.01	cps		
Iron	54-2	251762	252156	250235	251384	0.40	cps		
Iron	56-2	4830063	4779813	4746722	4785533	0.88	cps		
Iron	57-2	115349	116807	115923	116026	0.63	cps		
Krypton	83-1	247	350	323	307	17.49	cps		
Lead	206-1	2667	2597	2827	2697	4.37	cps		

Lab Sample ID : Q1186-10RE Instrumnet Name : P8
Client Sample ID : ME2959D Dilution Factor : 1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Lead     207-1     2167     2127     2230     2175     2.40       Lead     208-1     10148     10385     10869     10467     3.51	cps cps cps
Lead 208-1 10148 10385 10869 10467 3.51	
	cps
Lithium 6-1 9216131 8861091 9451437 9176220 3.24	
Magnesium 24-2 39860483 40640578 40928479 40476513 1.37	cps
Manganese 55-2 85681 84428 85457 85189 0.78	cps
Molybdenum 94-1 4424 4564 4407 4465 1.93	cps
Molybdenum 95-1 6668 6792 6498 6653 2.22	cps
Molybdenum 96-1 7012 7219 7252 7161 1.82	cps
Molybdenum 97-1 4091 3867 4027 3995 2.88	cps
Molybdenum 98-1 10637 10728 10087 10484 3.31	cps
Neodymium 150-1 63 43 67 58 21.85	cps
Neodymium 150-2 7 23 13 14 58.06	cps
Nickel 60-2 1367 1367 1520 1418 6.24	cps
Phosphorus 31-2 120 167 133 140 17.17	cps
Potassium 39-2 799955 801404 801465 800941 0.11	cps
Rhodium 103-1 14182962 13826639 14276096 14095232 1.68	cps
Rhodium 103-2 5643850 5642449 5473512 5586604 1.75	cps
Scandium 45-1 11782449 11615029 11980324 11792600 1.55	cps
Scandium 45-2 228505 227931 225865 227434 0.61	cps
Selenium 82-1 183 73 90 116 51.31	cps
Selenium 77-2 0 0 3 1 173.21	cps
Selenium 78-2 10 13 7 10 33.30	cps
Silicon 28-1 119977472 121270575 119191282 120146443 0.87	cps
Silver 107-1 820 893 963 892 8.03	cps
Silver 109-1 453 590 580 541 14.08	cps
Sodium 23-2 106136095 104403268 104503138 105014167 0.93	cps
Strontium 86-1 80786064 81531559 80841989 81053204 0.51	cps
Strontium 88-1 694641296 688175190 702249216 695021901 1.01	cps
Sulfur 34-1 38042902 39255629 38354934 38551155 1.63	cps
Terbium 159-1 19830953 19213180 20379642 19807925 2.95	cps
Terbium 159-2 6890201 6883924 6682368 6818831 1.73	cps
Thallium 203-1 327 320 367 338 7.47	cps
Thallium 205-1 880 830 900 870 4.14	cps
Tin 118-1 8960 9560 9297 9272 3.25	cps
Titanium 47-1 2377 2420 2484 2427 2.21	cps
Uranium 238-1 12503 12807 12296 12535 2.05	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1186-10REInstrumnet Name :P8Client Sample ID :ME2959DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:06:55 DataFile Name: 054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	117	120	87	108	17.03	cps
Ytterbium	172-1	77	130	140	116	29.46	cps
Ytterbium	172-2	50	60	40	50	20.00	cps
Ytterbium	176-1	1877	1847	2130	1951	7.98	cps
Ytterbium	176-2	310	277	340	309	10.26	cps
Yttrium	89-1	28877901	27548026	29056860	28494262	2.89	cps
Yttrium	89-2	2109461	2080020	2019934	2069805	2.20	cps
Zinc	66-2	977	973	973	974	0.20	cps
Zirconium	90-1	1763	1870	1780	1805	3.18	cps
Zirconium	91-1	370	343	380	364	5.20	cps

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Lab Sample ID: Q1186-09LREX5 Instrumnet Name: P8
Client Sample ID: ME2959L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	323	423	357	368	13.84	cps
Antimony	121-1	127	103	100	110	13.21	cps
Arsenic	75-2	13	17	17	16	12.40	cps
Barium	135-1	13667	13427	13063	13386	2.27	cps
Barium	137-1	24165	23524	22749	23479	3.02	cps
Beryllium	9-1	497	520	476	498	4.39	cps
Bismuth	209-1	12214248	12048979	11287677	11850301	4.17	cps
Bismuth	209-2	5139764	4903523	5242500	5095262	3.41	cps
Bromine	81-1	57229	58635	57855	57907	1.22	cps
Cadmium	108-1	10	30	17	19	53.91	cps
Cadmium	106-1	8579	8650	8329	8519	1.98	cps
Cadmium	111-1	6032	6054	5836	5974	2.01	cps
Calcium	43-1	5631337	5564094	5339022	5511484	2.78	cps
Calcium	44-1	90006662	91169105	86076119	89083962	3.00	cps
Carbon	12-1	7656128	7748031	7629971	7678043	0.81	cps
Carbon	12-2	48841	49279	49610	49243	0.78	cps
Chlorine	35-1	9304240	9555349	9440969	9433520	1.33	cps
Chlorine	35-2	39350	39788	40373	39837	1.29	cps
Chromium	52-2	1540	1460	1547	1516	3.18	cps
Cobalt	59-2	163	180	137	160	13.66	cps
Copper	63-2	6398	6335	6331	6355	0.59	cps
Dysprosium	156-1	30	20	40	30	33.33	cps
Dysprosium	156-2	10	10	7	9	21.63	cps
Erbium	164-1	133	113	80	109	24.75	cps
Erbium	164-2	17	43	33	31	43.29	cps
Gadolinium	160-1	130	130	100	120	14.43	cps
Gadolinium	160-2	23	27	40	30	29.40	cps
Holmium	165-1	20396493	19521146	18654433	19524024	4.46	cps
Holmium	165-2	7166208	7001645	7171417	7113090	1.36	cps
Indium	115-1	16441292	16033264	15365759	15946772	3.40	cps
Indium	115-2	1670776	1592515	1642875	1635389	2.43	cps
Iron	54-2	46542	47542	46930	47005	1.07	cps
Iron	56-2	856956	862298	863546	860934	0.41	cps
Iron	57-2	21546	21646	21887	21693	0.81	cps
Krypton	83-1	283	223	313	273	16.77	cps
Lead	206-1	2374	2120	2024	2172	8.32	cps

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Lab Sample ID :Q1186-09LREX5Instrumnet Name :P8Client Sample ID :ME2959LDilution Factor :5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

Date a Time	cricquired. 202	0 02 00 10.10.12	Datai ii	c ivallic .	000/ (I (L) .d			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	1900	1870	1710	1827	5.59	cps	
Lead	208-1	8785	8471	8171	8476	3.62	cps	
Lithium	6-1	9761144	9603442	8959228	9441271	4.50	cps	
Magnesium	24-2	8151997	8350963	8349829	8284263	1.38	cps	
Manganese	55-2	21369	21446	21473	21430	0.25	cps	
Molybdenum	94-1	1373	1363	1357	1365	0.62	cps	
Molybdenum	95-1	1697	1640	1563	1633	4.10	cps	
Molybdenum	96-1	1783	1583	1787	1718	6.78	cps	
Molybdenum	97-1	1070	950	867	962	10.62	cps	
Molybdenum	98-1	2370	2424	2427	2407	1.32	cps	
Neodymium	150-1	40	17	17	24	55.10	cps	
Neodymium	150-2	3	7	0	3	100.05	cps	
Nickel	60-2	1063	1097	1193	1118	6.04	cps	
Phosphorus	31-2	97	97	87	93	6.19	cps	
Potassium	39-2	175560	179022	178219	177600	1.02	cps	
Rhodium	103-1	15296438	15186638	14162733	14881936	4.20	cps	
Rhodium	103-2	6108952	5869128	6022295	6000125	2.02	cps	
Scandium	45-1	12034821	12016421	11395540	11815594	3.08	cps	
Scandium	45-2	231160	220791	232955	228302	2.88	cps	
Selenium	82-1	80	73	-20	44	125.80	cps	
Selenium	77-2	7	0	0	2	173.21	cps	
Selenium	78-2	0	20	17	12	87.67	cps	
Silicon	28-1	25395236	25160130	23989985	24848451	3.03	cps	
Silver	107-1	630	503	463	532	16.35	cps	
Silver	109-1	330	353	320	334	5.11	cps	
Sodium	23-2	20775194	21183534	21420400	21126376	1.54	cps	
Strontium	86-1	16689568	16545479	15984770	16406605	2.27	cps	
Strontium	88-1	142922365	143122288	138609741	141551465	1.80	cps	
Sulfur	34-1	8878444	8653669	8292682	8608265	3.43	cps	
Terbium	159-1	20442888	20229269	19054738	19908965	3.75	cps	
Terbium	159-2	6845912	6732588	6994236	6857579	1.91	cps	
Thallium	203-1	363	317	277	319	13.60	cps	
Thallium	205-1	790	813	870	824	4.99	cps	
Tin	118-1	4971	4728	4571	4756	4.24	cps	
Titanium	47-1	757	687	777	740	6.39	cps	
Uranium	238-1	2447	2567	2497	2504	2.41	cps	

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cps

LB Number: LB134612 Operator:

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Zinc

Zirconium

Zirconium

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90-1

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Lab Sample ID: Q1186-09LREX5 Instrumnet Name: P8
Client Sample ID: ME2959L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 15:10:12 DataFile Name: 055AREF.d

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CPS2 CPS3 CPSMean **CPSRSD** Units Parameter Mass CPS1 Vanadium 51-2 37 20 30 29 29.04 cps Ytterbium 172-1 133 110 113 119 10.62 cps Ytterbium 172-2 53 43 53 50 11.55 cps Ytterbium 176-1 2000 1954 1763 1906 6.58 cps Ytterbium 176-2 263 257 323 281 13.06 cps Yttrium 89-1 29240260 27505495 3.66 29403529 28716428 cps Yttrium 89-2 2103967 2061968 2136278 2100738 1.77 cps

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Lab Sample ID :Q1186-11REInstrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	149887	148388	148280	148852	0.60	cps
Antimony	121-1	1732634	1731125	1743595	1735785	0.39	cps
Arsenic	75-2	14998	14995	14965	14986	0.12	cps
Barium	135-1	8039330	8133679	8180719	8117909	0.89	cps
Barium	137-1	13667924	14176647	14509253	14117941	3.00	cps
Beryllium	9-1	308016	316095	320070	314727	1.95	cps
Bismuth	209-1	11615499	11072412	11198593	11295501	2.52	cps
Bismuth	209-2	5079132	4892701	5092831	5021555	2.23	cps
Bromine	81-1	118694	145442	160821	141652	15.05	cps
Cadmium	108-1	12509	12699	12759	12656	1.03	cps
Cadmium	106-1	26025	25587	25721	25777	0.87	cps
Cadmium	111-1	195511	199398	201546	198818	1.54	cps
Calcium	43-1	25765681	26419681	27084659	26423340	2.50	cps
Calcium	44-1	412190194	429329700	439914793	427144896	3.28	cps
Carbon	12-1	9695511	10841655	11461359	10666175	8.40	cps
Carbon	12-2	80693	81665	82919	81759	1.36	cps
Chlorine	35-1	62943966	69009009	72736177	68229717	7.24	cps
Chlorine	35-2	316887	321519	322526	320310	0.94	cps
Chromium	52-2	830610	822294	831840	828248	0.63	cps
Cobalt	59-2	4029622	3950631	3914439	3964897	1.49	cps
Copper	63-2	1447192	1427866	1427673	1434244	0.78	cps
Dysprosium	156-1	143	167	123	144	15.01	cps
Dysprosium	156-2	17	10	20	16	32.73	cps
Erbium	164-1	140	160	93	131	26.09	cps
Erbium	164-2	73	47	47	56	27.71	cps
Gadolinium	160-1	123	217	167	169	27.65	cps
Gadolinium	160-2	43	33	73	50	41.64	cps
Holmium	165-1	20257792	19486343	19994643	19912926	1.97	cps
Holmium	165-2	7400909	7451336	7449046	7433763	0.38	cps
Indium	115-1	16395238	15453158	15589349	15812582	3.22	cps
Indium	115-2	1687924	1668339	1704172	1686812	1.06	cps
Iron	54-2	425389	414394	416763	418848	1.38	cps
Iron	56-2	7453274	7303319	7490953	7415849	1.34	cps
Iron	57-2	179930	179110	180271	179770	0.33	cps
Krypton	83-1	273	330	347	317	12.14	cps
Lead	206-1	236939	243386	245091	241805	1.78	cps

Lab Sample ID :Q1186-11REInstrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	204080	208391	210923	207798	1.66	cps
Lead	208-1	942430	964531	978104	961688	1.87	cps
Lithium	6-1	9355157	9019993	9296709	9223953	1.94	cps
Magnesium	24-2	40184993	40334729	40028236	40182652	0.38	cps
Manganese	55-2	906906	886662	890987	894851	1.19	cps
Molybdenum	94-1	4534	4564	4664	4587	1.48	cps
Molybdenum	95-1	6231	6368	6788	6463	4.49	cps
Molybdenum	96-1	6668	6555	7139	6787	4.56	cps
Molybdenum	97-1	3754	4087	4047	3963	4.59	cps
Molybdenum	98-1	10034	10547	10631	10404	3.11	cps
Neodymium	150-1	637	567	683	629	9.34	cps
Neodymium	150-2	27	13	13	18	43.33	cps
Nickel	60-2	1031824	1014870	1011199	1019298	1.08	cps
Phosphorus	31-2	127	160	160	149	12.92	cps
Potassium	39-2	801086	788144	782781	790670	1.19	cps
Rhodium	103-1	14690222	14031295	14318449	14346655	2.30	cps
Rhodium	103-2	5881012	5788300	5820470	5829928	0.81	cps
Scandium	45-1	12277621	11582033	11648586	11836080	3.24	cps
Scandium	45-2	239891	234662	235720	236757	1.17	cps
Selenium	82-1	4751	5078	5078	4969	3.80	cps
Selenium	77-2	113	90	90	98	13.78	cps
Selenium	78-2	327	330	340	332	2.09	cps
Silicon	28-1	111815155	116890292	119011288	115905578	3.19	cps
Silver	107-1	920272	949104	964933	944770	2.40	cps
Silver	109-1	875004	908414	918803	900741	2.54	cps
Sodium	23-2	105447938	103050082	102383808	103627276	1.56	cps
Strontium	86-1	77574259	78013659	79629424	78405780	1.38	cps
Strontium	88-1	663033803	662065043	691063110	672053986	2.45	cps
Sulfur	34-1	36710909	37390821	38133461	37411731	1.90	cps
Terbium	159-1	20852881	19725513	20101181	20226525	2.84	cps
Terbium	159-2	7153126	7003123	7132031	7096094	1.14	cps
Thallium	203-1	727488	742289	761597	743791	2.30	cps
Thallium	205-1	1836550	1884372	1882239	1867720	1.45	cps
Tin	118-1	9553	9340	9530	9474	1.24	cps
Titanium	47-1	2430	2444	2480	2451	1.06	cps
Uranium	238-1	11959	12166	12276	12134	1.33	cps

Lab Sample ID :Q1186-11REInstrumnet Name :P8Client Sample ID :ME2959SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:13:23 DataFile Name: 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
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Vanadium	51-2	1737359	1676591	1723992	1712647	1.86	cps
Ytterbium	172-1	103	153	153	137	21.13	cps
Ytterbium	172-2	37	40	83	53	48.81	cps
Ytterbium	176-1	1867	1757	1843	1822	3.18	cps
Ytterbium	176-2	297	297	327	307	5.65	cps
Yttrium	89-1	29453052	28074400	28634995	28720816	2.41	cps
Yttrium	89-2	2186100	2135545	2159370	2160339	1.17	cps
Zinc	66-2	299754	294247	297014	297005	0.93	cps
Zirconium	90-1	2267	2267	2287	2274	0.51	cps
Zirconium	91-1	603	550	587	580	4.70	cps

Lab Sample ID :PB166435BLInstrumnet Name :P8Client Sample ID :PBW435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

Date a Time A	quircu . 202	0 02 00 10.10.00	Datai	iic i vairie .	007 OODL.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	130	103	130	121	12.71	cps
Antimony	121-1	207	153	133	164	23.05	cps
Arsenic	75-2	3	7	3	4	43.40	cps
Barium	135-1	353	217	213	261	30.59	cps
Barium	137-1	530	403	350	428	21.61	cps
Beryllium	9-1	615	567	517	567	8.60	cps
Bismuth	209-1	13198886	12991830	12801133	12997283	1.53	cps
Bismuth	209-2	5865025	5735639	5849847	5816837	1.22	cps
Bromine	81-1	37911	34041	30670	34208	10.59	cps
Cadmium	108-1	7	30	30	22	60.61	cps
Cadmium	106-1	9293	9100	9050	9148	1.41	cps
Cadmium	111-1	6541	6382	6360	6428	1.53	cps
Calcium	43-1	1720	1143	1350	1405	20.80	cps
Calcium	44-1	56651	49545	49712	51969	7.80	cps
Carbon	12-1	7670417	7619473	7721766	7670552	0.67	cps
Carbon	12-2	47303	46891	47105	47100	0.44	cps
Chlorine	35-1	4537122	4060302	3715692	4104372	10.05	cps
Chlorine	35-2	13153	12812	11912	12626	5.08	cps
Chromium	52-2	1273	1443	1233	1317	8.47	cps
Cobalt	59-2	170	173	150	164	7.68	cps
Copper	63-2	6848	6755	6765	6789	0.76	cps
Dysprosium	156-1	17	17	13	16	12.40	cps
Dysprosium	156-2	7	10	3	7	50.03	cps
Erbium	164-1	87	117	90	98	16.82	cps
Erbium	164-2	40	43	30	38	18.36	cps
Gadolinium	160-1	157	150	120	142	13.73	cps
Gadolinium	160-2	20	27	20	22	17.33	cps
Holmium	165-1	21019030	20432839	20504889	20652253	1.55	cps
Holmium	165-2	7800856	7654487	7745884	7733742	0.96	cps
Indium	115-1	17634736	17120669	17268800	17341402	1.53	cps
Indium	115-2	1848917	1855142	1845188	1849749	0.27	cps
Iron	54-2	570	557	637	588	7.29	cps
Iron	56-2	7769	7562	7429	7587	2.26	cps
Iron	57-2	163	207	237	202	18.23	cps
Krypton	83-1	323	253	313	297	12.76	cps
Lead	206-1	1924	2050	1960	1978	3.30	cps

Lab Sample ID: PB166435BL Instrumnet Name: P8
Client Sample ID: PBW435 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1987	1823	1743	1851	6.70	cps
Lead	208-1	8104	7898	7764	7922	2.16	cps
Lithium	6-1	10352188	10194414	10024182	10190261	1.61	cps
Magnesium	24-2	2560	2430	2607	2532	3.62	cps
Manganese	55-2	123	217	150	163	29.43	cps
Molybdenum	94-1	600	517	480	532	11.55	cps
Molybdenum	95-1	303	303	320	309	3.12	cps
Molybdenum	96-1	490	423	383	432	12.47	cps
Molybdenum	97-1	263	163	177	201	27.00	cps
Molybdenum	98-1	470	547	467	494	9.15	cps
Neodymium	150-1	10	3	20	11	75.52	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	1043	1103	1023	1057	3.94	cps
Phosphorus	31-2	90	93	100	94	5.39	cps
Potassium	39-2	21676	21553	21272	21501	0.96	cps
Rhodium	103-1	16612050	16415111	16391041	16472734	0.74	cps
Rhodium	103-2	6814157	6730949	6827669	6790925	0.77	cps
Scandium	45-1	12796737	12619339	12568533	12661536	0.95	cps
Scandium	45-2	252926	249373	249374	250558	0.82	cps
Selenium	82-1	23	63	-27	20	225.50	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	17	7	3	9	78.08	cps
Silicon	28-1	770001	760213	757763	762659	0.85	cps
Silver	107-1	1047	943	783	924	14.35	cps
Silver	109-1	773	767	603	714	13.48	cps
Sodium	23-2	92534	91652	90880	91689	0.90	cps
Strontium	86-1	3721	2424	2450	2865	25.87	cps
Strontium	88-1	28454	18693	18976	22041	25.21	cps
Sulfur	34-1	1044131	1049291	1052208	1048543	0.39	cps
Terbium	159-1	21670601	21181151	21157488	21336413	1.36	cps
Terbium	159-2	7608939	7471345	7530616	7536967	0.92	cps
Thallium	203-1	450	447	347	414	14.17	cps
Thallium	205-1	1020	1187	1053	1087	8.12	cps
Tin	118-1	2094	2090	1953	2046	3.91	cps
Titanium	47-1	313	307	303	308	1.65	cps
Uranium	238-1	37	13	33	28	45.44	cps

Lab Sample ID: PB166435BL Instrumnet Name: P8
Client Sample ID: PBW435 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:16:33 DataFile Name: 057CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	57	57	30	48	32.23	cps
Ytterbium	172-1	117	100	113	110	8.02	cps
Ytterbium	172-2	37	53	43	44	18.87	cps
Ytterbium	176-1	2094	2237	1907	2079	7.96	cps
Ytterbium	176-2	250	293	280	274	8.09	cps
Yttrium	89-1	31018036	31106865	30427275	30850725	1.20	cps
Yttrium	89-2	2332339	2304423	2289391	2308718	0.94	cps
Zinc	66-2	247	203	273	241	14.65	cps
Zirconium	90-1	1033	1037	1090	1053	3.02	cps
Zirconium	91-1	223	267	240	243	8.98	cps

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

Date & Time Ac	quireu . 202	3-02-00 13.24.31	Dalar	ile Name.	059LCSE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3674	3544	3554	3590	2.02	cps
Antimony	121-1	77656	76308	75973	76645	1.16	cps
Arsenic	75-2	860	963	780	868	10.59	cps
Barium	135-1	87306	89020	88916	88414	1.09	cps
Barium	137-1	155357	154970	155082	155136	0.13	cps
Beryllium	9-1	15265	15750	15560	15525	1.58	cps
Bismuth	209-1	12971778	13068093	13198182	13079351	0.87	cps
Bismuth	209-2	5797848	5781133	5759667	5779550	0.33	cps
Bromine	81-1	11251	11028	10637	10972	2.83	cps
Cadmium	108-1	697	757	760	738	4.83	cps
Cadmium	106-1	10077	10231	10194	10167	0.79	cps
Cadmium	111-1	15996	16302	16120	16139	0.95	cps
Calcium	43-1	66707	68438	68368	67838	1.44	cps
Calcium	44-1	1107493	1123941	1126348	1119261	0.92	cps
Carbon	12-1	5762111	5721788	5514295	5666065	2.35	cps
Carbon	12-2	34931	35496	36058	35495	1.59	cps
Chlorine	35-1	3234626	3477842	3550492	3420987	4.84	cps
Chlorine	35-2	15118	14674	15345	15046	2.27	cps
Chromium	52-2	20575	19957	20171	20234	1.55	cps
Cobalt	59-2	17888	17945	18205	18013	0.94	cps
Copper	63-2	34141	34502	34318	34320	0.53	cps
Dysprosium	156-1	40	30	17	29	40.51	cps
Dysprosium	156-2	3	17	0	7	132.33	cps
Erbium	164-1	130	133	107	123	11.78	cps
Erbium	164-2	50	20	33	34	43.64	cps
Gadolinium	160-1	103	147	150	133	19.53	cps
Gadolinium	160-2	23	20	40	28	38.58	cps
Holmium	165-1	20749875	21081529	20802512	20877972	0.85	cps
Holmium	165-2	7849473	7818626	7764356	7810818	0.55	cps
Indium	115-1	17143188	17486583	17165976	17265249	1.11	cps
Indium	115-2	1829816	1834481	1826171	1830156	0.23	cps
Iron	54-2	77492	76483	76460	76812	0.77	cps
Iron	56-2	1472952	1446093	1432454	1450500	1.42	cps
Iron	57-2	35782	34863	34525	35056	1.85	cps
Krypton	83-1	247	313	243	268	14.75	cps
Lead	206-1	30720	30449	29801	30323	1.56	cps

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	26096	26357	26607	26354	0.97	cps
Lead	208-1	120097	121597	122044	121246	0.84	cps
Lithium	6-1	9961884	9993852	9900660	9952132	0.48	cps
Magnesium	24-2	300523	299987	300146	300219	0.09	cps
Manganese	55-2	3947	4087	4201	4078	3.11	cps
Molybdenum	94-1	79931	80628	80578	80379	0.48	cps
Molybdenum	95-1	95421	96298	94626	95448	0.88	cps
Molybdenum	96-1	106289	107895	105708	106631	1.06	cps
Molybdenum	97-1	60052	59212	60257	59841	0.92	cps
Molybdenum	98-1	152970	152834	154283	153362	0.52	cps
Neodymium	150-1	23	0	7	10	120.16	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	6035	6365	5925	6108	3.75	cps
Phosphorus	31-2	263	257	393	304	25.31	cps
Potassium	39-2	197114	196681	198762	197519	0.56	cps
Rhodium	103-1	16631932	16743471	16129903	16501768	1.98	cps
Rhodium	103-2	6701334	6661498	6794221	6719018	1.01	cps
Scandium	45-1	12599339	12512296	12568392	12560009	0.35	cps
Scandium	45-2	254733	249216	250805	251585	1.13	cps
Selenium	82-1	3110	3247	3024	3127	3.60	cps
Selenium	77-2	33	43	50	42	19.87	cps
Selenium	78-2	227	210	203	213	5.63	cps
Silicon	28-1	973183	954813	967990	965329	0.98	cps
Silver	107-1	47361	48478	48331	48057	1.26	cps
Silver	109-1	45558	45488	46201	45749	0.86	cps
Sodium	23-2	711703	706143	711073	709640	0.43	cps
Strontium	86-1	12853	13453	13203	13170	2.29	cps
Strontium	88-1	108813	110315	110802	109977	0.94	cps
Sulfur	34-1	1027500	1024776	1028169	1026815	0.18	cps
Terbium	159-1	21616221	21270906	21477163	21454764	0.81	cps
Terbium	159-2	7479776	7568008	7449666	7499150	0.82	cps
Thallium	203-1	35509	35298	35756	35521	0.65	cps
Thallium	205-1	85483	85583	85825	85630	0.21	cps
Tin	118-1	154892	156557	154072	155174	0.82	cps
Titanium	47-1	8309	8099	8430	8279	2.02	cps
Uranium	238-1	107000	108187	109077	108088	0.96	cps

Lab Sample ID :PB166435BSInstrumnet Name :P8Client Sample ID :LCS435Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:24:51 DataFile Name: 059LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	35771	36216	36928	36305	1.61	cps
Ytterbium	172-1	100	107	110	106	4.82	cps
Ytterbium	172-2	40	50	60	50	20.00	cps
Ytterbium	176-1	2170	2174	2314	2219	3.69	cps
Ytterbium	176-2	413	413	410	412	0.47	cps
Yttrium	89-1	31199708	30837136	30513802	30850215	1.11	cps
Yttrium	89-2	2269216	2292271	2337516	2299667	1.51	cps
Zinc	66-2	7505	7379	7232	7372	1.86	cps
Zirconium	90-1	67505	66886	67435	67276	0.50	cps
Zirconium	91-1	14788	15309	14498	14865	2.76	cps

Lab Sample ID: Q1200-01 Instrumnet Name: P8

Client Sample ID: ME2964 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Date & Time 7to	quircu . 202	0 02 00 10.20.40	Datari	ic ivallic .	000/ (( \L   . u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	51240	49778	51243	50754	1.66	cps
Antimony	121-1	1683	1643	1653	1660	1.25	cps
Arsenic	75-2	823	917	817	852	6.56	cps
Barium	135-1	176528	180065	181182	179258	1.36	cps
Barium	137-1	309653	312986	311247	311295	0.54	cps
Beryllium	9-1	466	434	432	444	4.31	cps
Bismuth	209-1	12458653	12273019	12114961	12282211	1.40	cps
Bismuth	209-2	5484043	5498748	5542073	5508288	0.55	cps
Bromine	81-1	253012	273519	288332	271621	6.53	cps
Cadmium	108-1	233	217	230	227	3.89	cps
Cadmium	106-1	9330	9133	8933	9132	2.17	cps
Cadmium	111-1	6621	6512	6339	6490	2.19	cps
Calcium	43-1	8712251	8724892	8777483	8738209	0.40	cps
Calcium	44-1	139796071	141964271	142830245	141530196	1.10	cps
Carbon	12-1	18053270	19693402	20469652	19405441	6.36	cps
Carbon	12-2	139566	138037	137886	138496	0.67	cps
Chlorine	35-1	3226629	3399332	3560260	3395407	4.91	cps
Chlorine	35-2	14638	14834	14995	14822	1.21	cps
Chromium	52-2	2437	2250	2374	2354	4.03	cps
Cobalt	59-2	1080	1187	1033	1100	7.15	cps
Copper	63-2	8646	8593	8663	8634	0.42	cps
Dysprosium	156-1	50	47	37	44	15.61	cps
Dysprosium	156-2	13	13	13	13	0.00	cps
Erbium	164-1	150	123	153	142	11.56	cps
Erbium	164-2	33	37	53	41	26.06	cps
Gadolinium	160-1	117	190	193	167	26.00	cps
Gadolinium	160-2	43	37	40	40	8.32	cps
Holmium	165-1	20403894	20519160	20672590	20531881	0.66	cps
Holmium	165-2	7775642	7780223	7802943	7786269	0.19	cps
Indium	115-1	16521604	16797472	16826893	16715323	1.01	cps
Indium	115-2	1764216	1757930	1772742	1764963	0.42	cps
Iron	54-2	5584	5751	5625	5653	1.54	cps
Iron	56-2	100393	100340	100440	100391	0.05	cps
Iron	57-2	2877	2850	2737	2821	2.64	cps
Krypton	83-1	230	260	233	241	6.82	cps
Lead	206-1	4404	4184	4548	4379	4.18	cps

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Lab Sample ID :Q1200-01Instrumnet Name :P8Client Sample ID :ME2964Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:28:48	Datar	ile Name :	060AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3814	3477	3697	3663	4.67	cps
Lead	208-1	17475	16851	17128	17151	1.82	cps
Lithium	6-1	9701016	9749312	9917583	9789304	1.16	cps
Magnesium	24-2	9803	9823	9897	9841	0.50	cps
Manganese	55-2	5084	5308	5141	5178	2.24	cps
Molybdenum	94-1	235411	233490	234623	234508	0.41	cps
Molybdenum	95-1	400381	399236	404224	401280	0.65	cps
Molybdenum	96-1	427093	433415	435221	431910	0.99	cps
Molybdenum	97-1	248069	250055	251695	249940	0.73	cps
Molybdenum	98-1	636628	641431	642983	640347	0.52	cps
Neodymium	150-1	73	103	47	74	38.08	cps
Neodymium	150-2	20	17	20	19	10.18	cps
Nickel	60-2	379467	376213	378016	377899	0.43	cps
Phosphorus	31-2	1963	1830	1837	1877	4.00	cps
Potassium	39-2	11066928	11058974	11217198	11114367	0.80	cps
Rhodium	103-1	15403476	15436774	15387835	15409362	0.16	cps
Rhodium	103-2	6350193	6444883	6480396	6425157	1.05	cps
Scandium	45-1	12278028	12134959	12369549	12260845	0.96	cps
Scandium	45-2	249955	250070	249758	249928	0.06	cps
Selenium	82-1	480	537	447	488	9.33	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	33	27	10	23	51.50	cps
Silicon	28-1	34597737	35374040	35591323	35187700	1.48	cps
Silver	107-1	763	663	637	688	9.71	cps
Silver	109-1	507	400	453	453	11.76	cps
Sodium	23-2	19866365	19576037	19365991	19602798	1.28	cps
Strontium	86-1	7968229	7953764	7931410	7951134	0.23	cps
Strontium	88-1	68285927	69151501	69096647	68844692	0.70	cps
Sulfur	34-1	2003244	1981225	1986882	1990451	0.57	cps
Terbium	159-1	21180661	21307807	21248115	21245527	0.30	cps
Terbium	159-2	7572460	7480834	7544284	7532526	0.62	cps
Thallium	203-1	320	317	380	339	10.52	cps
Thallium	205-1	727	890	903	840	11.71	cps
Tin	118-1	12523	13243	12893	12886	2.80	cps
Titanium	47-1	2257	2170	2290	2239	2.77	cps
Uranium	238-1	80	87	83	83	4.00	cps

Lab Sample ID :Q1200-01Instrumnet Name :P8Client Sample ID :ME2964Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:28:48 DataFile Name: 060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	9250	9323	9160	9244	0.89	cps	
Ytterbium	172-1	127	143	107	126	14.62	cps	
Ytterbium	172-2	40	47	57	48	17.56	cps	
Ytterbium	176-1	2020	2110	1947	2026	4.04	cps	
Ytterbium	176-2	337	310	307	318	5.17	cps	
Yttrium	89-1	30076296	29912715	29641355	29876788	0.74	cps	
Yttrium	89-2	2293720	2283534	2275131	2284128	0.41	cps	
Zinc	66-2	1510	1703	1733	1649	7.35	cps	
Zirconium	90-1	1980	1907	1840	1909	3.67	cps	
Zirconium	91-1	347	413	347	369	10.43	cps	

Lab Sample ID: Q1200-02 Instrumnet Name: P8

Client Sample ID: ME2964D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

Date & Time Ac	quireu . 202	15-02-06 15.32.00	Dalari	ie ivallie .	UU IAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	51009	50885	50250	50715	0.80	cps
Antimony	121-1	1537	1693	1743	1658	6.50	cps
Arsenic	75-2	953	980	937	957	2.28	cps
Barium	135-1	177119	179649	179868	178879	0.85	cps
Barium	137-1	308702	311807	317771	312760	1.47	cps
Beryllium	9-1	410	459	424	431	5.83	cps
Bismuth	209-1	12219642	12305131	12430176	12318316	0.86	cps
Bismuth	209-2	5448425	5441545	5384461	5424810	0.65	cps
Bromine	81-1	272783	295491	305941	291405	5.82	cps
Cadmium	108-1	237	230	193	220	10.60	cps
Cadmium	106-1	9176	8639	8963	8926	3.03	cps
Cadmium	111-1	6541	6157	6412	6370	3.07	cps
Calcium	43-1	8607404	8826610	8637842	8690618	1.37	cps
Calcium	44-1	139269491	141601421	141854731	140908548	1.01	cps
Carbon	12-1	19392921	21006261	21742083	20713755	5.80	cps
Carbon	12-2	141530	142628	143634	142597	0.74	cps
Chlorine	35-1	3121992	3351220	3429743	3300985	4.84	cps
Chlorine	35-2	14918	14444	14938	14767	1.89	cps
Chromium	52-2	2094	1863	1777	1911	8.56	cps
Cobalt	59-2	1167	1073	963	1068	9.53	cps
Copper	63-2	8326	8319	8316	8320	0.06	cps
Dysprosium	156-1	63	37	47	49	27.55	cps
Dysprosium	156-2	7	13	10	10	33.30	cps
Erbium	164-1	90	107	103	100	8.82	cps
Erbium	164-2	47	63	33	48	31.46	cps
Gadolinium	160-1	130	127	160	139	13.22	cps
Gadolinium	160-2	43	40	20	34	36.64	cps
Holmium	165-1	20171637	20587298	20547388	20435441	1.12	cps
Holmium	165-2	7719839	7629993	7632893	7660909	0.67	cps
Indium	115-1	16316606	16609398	16488930	16471645	0.89	cps
Indium	115-2	1741327	1772621	1728042	1747330	1.31	cps
Iron	54-2	4964	5251	5504	5240	5.16	cps
Iron	56-2	96578	95779	95141	95832	0.75	cps
Iron	57-2	2560	2607	2550	2572	1.18	cps
Krypton	83-1	310	283	293	296	4.56	cps
Lead	206-1	4504	4294	4327	4375	2.58	cps

Lab Sample ID: Q1200-02 Instrumnet Name: P8

Client Sample ID: ME2964D Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

Date & Time Act	quireu . 202	25-02-00 15.32.00	Dalar	ile ivallie .	UO TAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3427	3427	3651	3502	3.68	cps
Lead	208-1	16584	16541	16684	16603	0.44	cps
Lithium	6-1	9734163	9742583	9818559	9765101	0.48	cps
Magnesium	24-2	9346	9390	9353	9363	0.25	cps
Manganese	55-2	4844	4878	5044	4922	2.18	cps
Molybdenum	94-1	229785	234992	231566	232114	1.14	cps
Molybdenum	95-1	397118	400331	405382	400944	1.04	cps
Molybdenum	96-1	426458	430221	432384	429688	0.70	cps
Molybdenum	97-1	248042	252665	249521	250076	0.94	cps
Molybdenum	98-1	638459	646263	643423	642715	0.61	cps
Neodymium	150-1	87	83	57	76	21.76	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	372398	369297	376229	372641	0.93	cps
Phosphorus	31-2	1830	1737	1760	1776	2.74	cps
Potassium	39-2	11085011	10942522	11096639	11041391	0.78	cps
Rhodium	103-1	15156085	15604117	15400764	15386989	1.46	cps
Rhodium	103-2	6411505	6326984	6272323	6336937	1.11	cps
Scandium	45-1	12057838	12344412	12182663	12194971	1.18	cps
Scandium	45-2	247130	244482	246824	246145	0.59	cps
Selenium	82-1	403	410	400	404	1.26	cps
Selenium	77-2	3	7	10	7	50.03	cps
Selenium	78-2	33	17	43	31	43.29	cps
Silicon	28-1	34307882	35085873	35190027	34861261	1.38	cps
Silver	107-1	470	407	443	440	7.23	cps
Silver	109-1	293	273	363	310	15.24	cps
Sodium	23-2	18827695	19211877	19429419	19156330	1.59	cps
Strontium	86-1	7928918	8025625	7855429	7936658	1.08	cps
Strontium	88-1	68915072	69767942	69048386	69243800	0.66	cps
Sulfur	34-1	1958058	1947880	1948263	1951400	0.30	cps
Terbium	159-1	21046173	21301841	20908040	21085351	0.95	cps
Terbium	159-2	7308404	7324444	7350923	7327923	0.29	cps
Thallium	203-1	263	297	273	278	6.16	cps
Thallium	205-1	820	790	737	782	5.40	cps
Tin	118-1	13000	13093	12623	12905	1.93	cps
Titanium	47-1	2290	2190	2190	2224	2.60	cps
Uranium	238-1	90	87	87	88	2.19	cps

Lab Sample ID :Q1200-02Instrumnet Name :P8Client Sample ID :ME2964DDilution Factor :1

Date & Time Acquired: 2025-02-06 15:32:00 DataFile Name: 061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
	54.0	0000	2000		0004	4.50	
Vanadium	51-2	8966	8993	9223	9061	1.56	cps
Ytterbium	172-1	130	150	77	119	31.88	cps
Ytterbium	172-2	77	53	67	66	17.86	cps
Ytterbium	176-1	2054	1997	2290	2114	7.36	cps
Ytterbium	176-2	287	310	297	298	3.93	cps
Yttrium	89-1	29558775	30467622	29157221	29727873	2.26	cps
Yttrium	89-2	2219143	2244246	2290573	2251321	1.61	cps
Zinc	66-2	1497	1583	1490	1523	3.42	cps
Zirconium	90-1	1720	1633	1433	1596	9.21	cps
Zirconium	91-1	260	333	323	306	13.01	cps

Lab Sample ID: Q1200-01LX5 Instrumnet Name: P8
Client Sample ID: ME2964L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	10441	10457	10527	10475	0.44	cps
Antimony	121-1	410	397	450	419	6.63	cps
Arsenic	75-2	183	180	167	177	4.99	cps
Barium	135-1	35841	37505	36048	36465	2.49	cps
Barium	137-1	64419	63913	63384	63906	0.81	cps
Beryllium	9-1	451	426	436	438	2.87	cps
Bismuth	209-1	12017786	12839851	13727509	12861715	6.65	cps
Bismuth	209-2	5629237	5656971	5667398	5651202	0.35	cps
Bromine	81-1	81743	82008	82783	82178	0.66	cps
Cadmium	108-1	43	53	43	47	12.37	cps
Cadmium	106-1	8626	8983	9880	9163	7.05	cps
Cadmium	111-1	6065	6324	6969	6453	7.22	cps
Calcium	43-1	1812339	1825508	1774957	1804268	1.45	cps
Calcium	44-1	29191487	29433005	28183229	28935907	2.29	cps
Carbon	12-1	10472095	10650680	10629338	10584038	0.92	cps
Carbon	12-2	67424	67886	67169	67493	0.54	cps
Chlorine	35-1	1399312	1419962	1368034	1395769	1.87	cps
Chlorine	35-2	5421	5728	5321	5490	3.86	cps
Chromium	52-2	1540	1583	1660	1595	3.81	cps
Cobalt	59-2	330	277	283	297	9.80	cps
Copper	63-2	6548	6405	6715	6556	2.37	cps
Dysprosium	156-1	10	23	13	16	44.60	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	143	127	113	128	11.77	cps
Erbium	164-2	77	57	40	58	31.78	cps
Gadolinium	160-1	137	113	143	131	12.01	cps
Gadolinium	160-2	20	43	43	36	37.89	cps
Holmium	165-1	19369681	21164397	21947545	20827208	6.35	cps
Holmium	165-2	7605814	7733471	7715609	7684965	0.90	cps
Indium	115-1	15846492	17209775	17775105	16943791	5.85	cps
Indium	115-2	1782274	1766323	1779922	1776173	0.48	cps
Iron	54-2	1660	1830	1680	1723	5.39	cps
Iron	56-2	29394	29334	29019	29249	0.69	cps
Iron	57-2	780	810	780	790	2.19	cps
Krypton	83-1	300	253	297	283	9.19	cps
Lead	206-1	2097	2187	2174	2152	2.26	cps

Lab Sample ID : Q1200-01LX5 Instrumnet Name : P8
Client Sample ID : ME2964L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:35:18	Datar	ile Name :	062AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1773	1873	1787	1811	3.00	cps
Lead	208-1	8321	8424	8455	8400	0.83	cps
Lithium	6-1	9489644	9868483	10550758	9969629	5.39	cps
Magnesium	24-2	3320	3374	3157	3284	3.44	cps
Manganese	55-2	1157	1090	1130	1126	2.98	cps
Molybdenum	94-1	47691	47384	48033	47703	0.68	cps
Molybdenum	95-1	80056	81722	80840	80872	1.03	cps
Molybdenum	96-1	87496	87809	88288	87864	0.45	cps
Molybdenum	97-1	50445	51639	51094	51059	1.17	cps
Molybdenum	98-1	130202	131197	130338	130579	0.41	cps
Neodymium	150-1	27	27	23	26	7.55	cps
Neodymium	150-2	13	0	10	8	89.21	cps
Nickel	60-2	78817	78036	78016	78289	0.58	cps
Phosphorus	31-2	483	330	440	418	18.92	cps
Potassium	39-2	2302421	2264655	2273920	2280332	0.86	cps
Rhodium	103-1	15054313	15907816	17407594	16123241	7.39	cps
Rhodium	103-2	6449399	6646883	6532677	6542986	1.52	cps
Scandium	45-1	11687209	12393828	12918601	12333213	5.01	cps
Scandium	45-2	242845	250183	246838	246622	1.49	cps
Selenium	82-1	97	90	107	98	8.58	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	10	27	0	12	110.23	cps
Silicon	28-1	7596859	7724092	7545350	7622101	1.21	cps
Silver	107-1	337	353	320	337	4.95	cps
Silver	109-1	163	187	187	179	7.53	cps
Sodium	23-2	3954402	4053029	3998483	4001971	1.23	cps
Strontium	86-1	1647764	1633223	1627864	1636284	0.63	cps
Strontium	88-1	14115455	14217717	14094712	14142628	0.47	cps
Sulfur	34-1	1246788	1246164	1235200	1242717	0.52	cps
Terbium	159-1	20354999	21232266	22741196	21442821	5.63	cps
Terbium	159-2	7380029	7404774	7451490	7412098	0.49	cps
Thallium	203-1	220	253	193	222	13.53	cps
Thallium	205-1	600	507	537	548	8.70	cps
Tin	118-1	4461	4327	4501	4430	2.05	cps
Titanium	47-1	613	780	700	698	11.95	cps
Uranium	238-1	37	43	37	39	9.89	cps

Lab Sample ID : Q1200-01LX5 Instrumnet Name : P8
Client Sample ID : ME2964L Dilution Factor : 5

Date & Time Acquired: 2025-02-06 15:35:18 DataFile Name: 062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1973	1823	1787	1861	5.31	cps
Ytterbium	172-1	80	133	117	110	24.81	cps
Ytterbium	172-2	57	67	53	59	11.79	cps
Ytterbium	176-1	2027	1930	2280	2079	8.70	cps
Ytterbium	176-2	300	280	327	302	7.75	cps
Yttrium	89-1	28559801	30089620	33069555	30572992	7.50	cps
Yttrium	89-2	2227234	2279420	2267584	2258079	1.21	cps
Zinc	66-2	677	650	633	653	3.35	cps
Zirconium	90-1	983	1060	1050	1031	4.04	cps
Zirconium	91-1	217	233	257	236	8.53	cps

Lab Sample ID :Q1200-03Instrumnet Name :P8Client Sample ID :ME2964SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	206486	204848	203280	204871	0.78	cps
Antimony	121-1	2143208	2172044	2166188	2160480	0.71	cps
Arsenic	75-2	15872	16627	16393	16297	2.37	cps
Barium	135-1	8774332	8974217	9089665	8946071	1.78	cps
Barium	137-1	15146524	15339249	15389074	15291615	0.84	cps
Beryllium	9-1	341701	347289	346898	345296	0.90	cps
Bismuth	209-1	10629415	12101710	12220287	11650471	7.61	cps
Bismuth	209-2	5348113	5279124	5354874	5327370	0.79	cps
Bromine	81-1	252617	290059	303540	282072	9.35	cps
Cadmium	108-1	14224	14554	14534	14438	1.28	cps
Cadmium	106-1	27267	28259	28620	28049	2.50	cps
Cadmium	111-1	220266	222304	222526	221698	0.56	cps
Calcium	43-1	8205409	8269119	8173855	8216128	0.59	cps
Calcium	44-1	133181541	133698818	131877075	132919145	0.71	cps
Carbon	12-1	19495893	21439872	22954203	21296656	8.14	cps
Carbon	12-2	154011	154462	158828	155767	1.71	cps
Chlorine	35-1	34185178	37360271	38218883	36588111	5.81	cps
Chlorine	35-2	166498	168641	168447	167862	0.71	cps
Chromium	52-2	884876	881649	878031	881519	0.39	cps
Cobalt	59-2	4279330	4285210	4286268	4283603	0.09	cps
Copper	63-2	1706886	1634674	1693696	1678418	2.29	cps
Dysprosium	156-1	110	103	137	117	15.12	cps
Dysprosium	156-2	20	3	20	14	66.64	cps
Erbium	164-1	110	133	130	124	10.14	cps
Erbium	164-2	57	40	30	42	31.91	cps
Gadolinium	160-1	93	123	177	131	32.19	cps
Gadolinium	160-2	40	40	50	43	13.32	cps
Holmium	165-1	17743254	20064471	19857448	19221724	6.68	cps
Holmium	165-2	7420821	7605075	7558730	7528209	1.27	cps
Indium	115-1	14248805	16515539	16413857	15726067	8.14	cps
Indium	115-2	1744416	1740245	1702200	1728954	1.35	cps
Iron	54-2	211087	211306	207712	210035	0.96	cps
Iron	56-2	3508788	3420109	3470773	3466556	1.28	cps
Iron	57-2	84391	83368	83995	83918	0.61	cps
Krypton	83-1	237	287	280	268	10.14	cps
Lead	206-1	270798	276798	277936	275177	1.39	cps

Lab Sample ID :Q1200-03Instrumnet Name :P8Client Sample ID :ME2964SDilution Factor :1

2

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:38:29	Datar	ile Name :	063AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	231553	237201	240842	236532	1.98	cps
Lead	208-1	1077132	1096402	1105734	1093090	1.33	cps
Lithium	6-1	8440957	9546862	9286359	9091393	6.36	cps
Magnesium	24-2	9110	9150	8943	9067	1.21	cps
Manganese	55-2	874047	868127	861665	867946	0.71	cps
Molybdenum	94-1	216112	220778	223193	220028	1.64	cps
Molybdenum	95-1	375484	375792	380206	377160	0.70	cps
Molybdenum	96-1	400410	403698	408998	404369	1.07	cps
Molybdenum	97-1	236179	238160	238227	237522	0.49	cps
Molybdenum	98-1	603625	609898	610809	608110	0.64	cps
Neodymium	150-1	663	557	603	608	8.80	cps
Neodymium	150-2	30	33	27	30	11.10	cps
Nickel	60-2	1566855	1473530	1563661	1534682	3.45	cps
Phosphorus	31-2	1943	1887	2007	1946	3.09	cps
Potassium	39-2	10390345	10355865	10523440	10423217	0.85	cps
Rhodium	103-1	13199707	14749572	14892827	14280702	6.57	cps
Rhodium	103-2	6205777	6256010	6226150	6229312	0.41	cps
Scandium	45-1	10316228	11724120	11988744	11343031	7.93	cps
Scandium	45-2	240003	242314	239415	240577	0.64	cps
Selenium	82-1	5385	5388	5595	5456	2.21	cps
Selenium	77-2	150	90	93	111	30.35	cps
Selenium	78-2	313	363	343	340	7.40	cps
Silicon	28-1	33002089	33290110	33378104	33223434	0.59	cps
Silver	107-1	1051542	1073142	1082283	1068989	1.48	cps
Silver	109-1	995826	1025448	1031536	1017603	1.88	cps
Sodium	23-2	18407238	18264241	18173316	18281598	0.65	cps
Strontium	86-1	7627821	7541444	7569162	7579476	0.58	cps
Strontium	88-1	65252487	65023049	65266169	65180568	0.21	cps
Sulfur	34-1	1825931	1804450	1819519	1816633	0.61	cps
Terbium	159-1	18059157	20621819	21072883	19917953	8.16	cps
Terbium	159-2	7385558	7241760	7169149	7265489	1.52	cps
Thallium	203-1	821189	831817	846745	833250	1.54	cps
Thallium	205-1	2056671	2123112	2085118	2088300	1.60	cps
Tin	118-1	12409	12312	12609	12444	1.22	cps
Titanium	47-1	2537	2394	2324	2418	4.50	cps
Uranium	238-1	83	77	103	88	15.81	cps

Lab Sample ID :Q1200-03Instrumnet Name :P8Client Sample ID :ME2964SDilution Factor :1

Date & Time Acquired: 2025-02-06 15:38:29 DataFile Name: 063AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1820966	1757141	1790555	1789554	1.78	cps
Ytterbium	172-1	117	130	147	131	11.46	cps
Ytterbium	172-2	40	43	70	51	32.17	cps
Ytterbium	176-1	1863	1967	2047	1959	4.69	cps
Ytterbium	176-2	273	393	397	354	19.82	cps
Yttrium	89-1	25882406	28836703	29224585	27981232	6.53	cps
Yttrium	89-2	2182404	2233132	2219327	2211621	1.19	cps
Zinc	66-2	333062	332541	331252	332285	0.28	cps
Zirconium	90-1	1877	2004	1967	1949	3.34	cps
Zirconium	91-1	583	527	523	544	6.19	cps

Lab Sample ID: Q1200-04 Instrumnet Name: P8

Client Sample ID: ME2981 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Date a Time A	quircu . 202	20 02 00 10.41.00	Datai lie Name.		00+/ (I/L) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	867	933	970	923	5.67	cps
Antimony	121-1	3160	3117	2927	3068	4.05	cps
Arsenic	75-2	210	220	193	208	6.48	cps
Barium	135-1	111323	111696	111215	111411	0.23	cps
Barium	137-1	193543	194096	194628	194089	0.28	cps
Beryllium	9-1	507	456	512	492	6.33	cps
Bismuth	209-1	10029825	11612196	11695319	11112447	8.45	cps
Bismuth	209-2	5290793	5116012	5113035	5173280	1.97	cps
Bromine	81-1	146021	165096	174133	161750	8.87	cps
Cadmium	108-1	47	37	40	41	12.39	cps
Cadmium	106-1	7365	8229	8062	7886	5.81	cps
Cadmium	111-1	5183	5801	5656	5547	5.83	cps
Calcium	43-1	19613453	19910811	20065216	19863160	1.16	cps
Calcium	44-1	318761255	322633889	319875189	320423444	0.62	cps
Carbon	12-1	10452958	10973764	11326268	10917663	4.02	cps
Carbon	12-2	76749	76853	77804	77135	0.75	cps
Chlorine	35-1	5160127	5223725	5156623	5180158	0.73	cps
Chlorine	35-2	20785	20925	20508	20739	1.02	cps
Chromium	52-2	8016	7705	8226	7982	3.28	cps
Cobalt	59-2	683	713	630	676	6.25	cps
Copper	63-2	4768	4768	4871	4802	1.24	cps
Dysprosium	156-1	163	217	130	170	25.72	cps
Dysprosium	156-2	80	40	43	54	40.77	cps
Erbium	164-1	217	287	177	227	24.56	cps
Erbium	164-2	103	90	73	89	16.91	cps
Gadolinium	160-1	207	273	200	227	17.89	cps
Gadolinium	160-2	77	60	67	68	12.38	cps
Holmium	165-1	17165292	20252962	20104986	19174413	9.08	cps
Holmium	165-2	7588783	7457746	7479007	7508512	0.94	cps
Indium	115-1	13716789	16148253	16049263	15304769	8.99	cps
Indium	115-2	1709036	1703102	1662071	1691403	1.51	cps
Iron	54-2	60307	61632	61984	61307	1.44	cps
Iron	56-2	1123197	1128637	1126042	1125958	0.24	cps
Iron	57-2	28656	28579	28719	28651	0.25	cps
Krypton	83-1	263	340	290	298	13.07	cps
Lead	206-1	18036	18196	18366	18200	0.91	cps

Lab Sample ID: Q1200-04 Instrumnet Name: P8

Client Sample ID: ME2981 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Date & Time / te	squired. Zoz	.0 02 00 10.41.00	Datain	c ivallic .	0047 (I (LI .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	15176	15312	15022	15170	0.96	cps
Lead	208-1	69974	70832	70040	70282	0.68	cps
Lithium	6-1	8162926	9330983	9259190	8917700	7.34	cps
Magnesium	24-2	26578447	26226355	26741717	26515507	0.99	cps
Manganese	55-2	34575	35153	33883	34537	1.84	cps
Molybdenum	94-1	24976	24725	25560	25087	1.71	cps
Molybdenum	95-1	41502	41422	41388	41437	0.14	cps
Molybdenum	96-1	44615	45424	45431	45156	1.04	cps
Molybdenum	97-1	25884	25824	26175	25961	0.72	cps
Molybdenum	98-1	66006	68250	67272	67176	1.67	cps
Neodymium	150-1	263	243	243	250	4.62	cps
Neodymium	150-2	57	57	40	51	18.83	cps
Nickel	60-2	1957	1650	1893	1833	8.83	cps
Phosphorus	31-2	160	153	130	148	10.66	cps
Potassium	39-2	573526	581295	580320	578380	0.73	cps
Rhodium	103-1	12431153	14412557	14598026	13813912	8.69	cps
Rhodium	103-2	6074454	6089366	5997231	6053684	0.82	cps
Scandium	45-1	10022299	11694226	11930234	11215587	9.27	cps
Scandium	45-2	239084	236662	238903	238216	0.57	cps
Selenium	82-1	140	23	127	97	66.06	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	13	20	10	14	35.26	cps
Silicon	28-1	71572857	71361751	71041331	71325313	0.38	cps
Silver	107-1	1117	800	713	877	24.22	cps
Silver	109-1	823	680	590	698	16.87	cps
Sodium	23-2	12262323	12225616	12187861	12225267	0.30	cps
Strontium	86-1	59075876	59275779	59575077	59308911	0.42	cps
Strontium	88-1	502609433	512354059	512838406	509267299	1.13	cps
Sulfur	34-1	29190549	29553865	29728945	29491119	0.93	cps
Terbium	159-1	17807660	20201653	20553496	19520936	7.65	cps
Terbium	159-2	7297728	7137780	7127378	7187628	1.33	cps
Thallium	203-1	380	363	380	374	2.57	cps
Thallium	205-1	867	820	767	818	6.12	cps
Tin	118-1	8676	8956	8536	8723	2.45	cps
Titanium	47-1	2170	2210	2260	2214	2.04	cps
Uranium	238-1	1728164	1744616	1775057	1749279	1.36	cps

Lab Sample ID :Q1200-04Instrumnet Name :P8Client Sample ID :ME2981Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:41:35 DataFile Name: 064AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	293	330	253	292	13.12	cps
Ytterbium	172-1	183	177	200	187	6.44	cps
Ytterbium	172-2	60	90	67	72	21.81	cps
Ytterbium	176-1	1783	1937	1827	1849	4.28	cps
Ytterbium	176-2	293	287	347	309	10.65	cps
Yttrium	89-1	24805636	28674485	28642017	27374046	8.13	cps
Yttrium	89-2	2204045	2187255	2161138	2184146	0.99	cps
Zinc	66-2	760	830	847	812	5.66	cps
Zirconium	90-1	2610	2884	2940	2811	6.28	cps
Zirconium	91-1	583	660	647	630	6.50	cps

Lab Sample ID :Q1200-05Instrumnet Name :P8Client Sample ID :ME2982Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Date & Time Ac	quirea: 202	Jired: 2025-02-06 15:44:47 Datafile Name: 065AREF.d					
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1067	1007	1007	1027	3.37	cps
Antimony	121-1	957	777	980	904	12.30	cps
Arsenic	75-2	183	157	177	172	8.06	cps
Barium	135-1	197470	201298	203353	200707	1.49	cps
Barium	137-1	344782	350593	353759	349711	1.30	cps
Beryllium	9-1	460	454	467	460	1.50	cps
Bismuth	209-1	11994156	11892915	11733763	11873611	1.11	cps
Bismuth	209-2	5340426	5153345	5299545	5264439	1.87	cps
Bromine	81-1	106316	117907	122956	115726	7.37	cps
Cadmium	108-1	30	30	47	36	27.07	cps
Cadmium	106-1	9036	8376	8179	8530	5.26	cps
Cadmium	111-1	6328	5875	5723	5975	5.27	cps
Calcium	43-1	23234787	23111305	23631488	23325860	1.17	cps
Calcium	44-1	371197808	373848968	378829861	374625546	1.03	cps
Carbon	12-1	9604154	10618138	11095872	10439388	7.30	cps
Carbon	12-2	75533	76946	77188	76556	1.17	cps
Chlorine	35-1	3621422	3771384	3950182	3780996	4.35	cps
Chlorine	35-2	16042	15862	16466	16124	1.92	cps
Chromium	52-2	3524	3614	3764	3634	3.34	cps
Cobalt	59-2	1357	1367	1327	1350	1.54	cps
Copper	63-2	9530	9563	9607	9567	0.40	cps
Dysprosium	156-1	227	223	183	211	11.42	cps
Dysprosium	156-2	67	83	57	69	19.55	cps
Erbium	164-1	273	300	347	307	12.10	cps
Erbium	164-2	103	133	137	124	14.75	cps
Gadolinium	160-1	287	347	287	307	11.30	cps
Gadolinium	160-2	70	117	100	96	24.75	cps
Holmium	165-1	20565699	20078539	20297095	20313778	1.20	cps
Holmium	165-2	7569314	7551157	7731532	7617334	1.30	cps
Indium	115-1	16591881	16003133	16125038	16240017	1.91	cps
Indium	115-2	1733233	1725935	1740712	1733294	0.43	cps
Iron	54-2	48709	48157	48325	48397	0.58	cps
Iron	56-2	886438	886923	881352	884904	0.35	cps
Iron	57-2	22768	22658	22528	22651	0.53	cps
Krypton	83-1	310	320	323	318	2.18	cps
Lead	206-1	2114	2310	2544	2322	9.27	cps

Lab Sample ID: Q1200-05 Instrumnet Name: P8

Client Sample ID: ME2982 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2024	1954	1980	1986	1.78	cps
Lead	208-1	8981	9278	9565	9275	3.15	cps
Lithium	6-1	9552308	9410674	9481924	9481635	0.75	cps
Magnesium	24-2	27036670	26738758	27122050	26965826	0.75	cps
Manganese	55-2	556218	556008	547902	553376	0.86	cps
Molybdenum	94-1	3164	3510	3274	3316	5.34	cps
Molybdenum	95-1	2884	2997	3070	2984	3.15	cps
Molybdenum	96-1	3304	3274	3284	3287	0.46	cps
Molybdenum	97-1	1850	1783	1847	1827	2.06	cps
Molybdenum	98-1	4334	4674	4861	4623	5.78	cps
Neodymium	150-1	220	273	233	242	11.46	cps
Neodymium	150-2	53	43	60	52	16.07	cps
Nickel	60-2	1567	1657	1777	1667	6.32	cps
Phosphorus	31-2	390	367	357	371	4.61	cps
Potassium	39-2	613020	611003	608986	611003	0.33	cps
Rhodium	103-1	15411488	14966114	14858260	15078621	1.94	cps
Rhodium	103-2	6169616	6054413	6194313	6139447	1.22	cps
Scandium	45-1	11947805	11842250	11834265	11874773	0.53	cps
Scandium	45-2	241987	240019	243636	241881	0.75	cps
Selenium	82-1	70	93	50	71	30.50	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	17	23	7	16	53.90	cps
Silicon	28-1	80865965	83245639	82916120	82342575	1.57	cps
Silver	107-1	580	577	463	540	12.30	cps
Silver	109-1	253	627	280	387	53.89	cps
Sodium	23-2	12549993	12438114	12336639	12441582	0.86	cps
Strontium	86-1	76961397	78891914	80628414	78827242	2.33	cps
Strontium	88-1	668011417	686834376	687507670	680784488	1.63	cps
Sulfur	34-1	32725895	32987114	33707394	33140134	1.53	cps
Terbium	159-1	20681710	20690758	20552770	20641746	0.37	cps
Terbium	159-2	7336743	7182434	7218675	7245951	1.11	cps
Thallium	203-1	333	290	287	303	8.58	cps
Thallium	205-1	637	640	683	653	3.99	cps
Tin	118-1	6795	6895	6962	6884	1.22	cps
Titanium	47-1	2560	2927	2737	2741	6.69	cps
Uranium	238-1	8523	8640	8613	8592	0.71	cps

Lab Sample ID :Q1200-05Instrumnet Name :P8Client Sample ID :ME2982Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:44:47 DataFile Name: 065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	433	463	443	447	3.42	cps
Ytterbium	172-1	183	223	203	203	9.84	cps
Ytterbium	172-2	83	103	103	97	11.95	cps
Ytterbium	176-1	2037	2027	2074	2046	1.20	cps
Ytterbium	176-2	333	350	370	351	5.23	cps
Yttrium	89-1	30038089	29207351	28646688	29297376	2.39	cps
Yttrium	89-2	2237284	2213916	2278704	2243302	1.46	cps
Zinc	66-2	757	853	837	816	6.34	cps
Zirconium	90-1	4341	4591	4244	4392	4.07	cps
Zirconium	91-1	1023	967	1100	1030	6.50	cps

Lab Sample ID: Q1200-06 Instrumnet Name: P8

Client Sample ID: ME2983 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	663	533	627	608	11.03	cps
Antimony	121-1	303	347	337	329	6.90	cps
Arsenic	75-2	33	27	20	27	24.99	cps
Barium	135-1	44509	46112	46322	45648	2.17	cps
Barium	137-1	79750	79344	80430	79841	0.69	cps
Beryllium	9-1	482	512	522	506	4.12	cps
Bismuth	209-1	11293912	11686915	11947854	11642894	2.83	cps
Bismuth	209-2	4789926	4858719	5015425	4888023	2.36	cps
Bromine	81-1	213177	267635	298678	259830	16.66	cps
Cadmium	108-1	43	40	50	44	11.46	cps
Cadmium	106-1	8566	8319	8733	8539	2.44	cps
Cadmium	111-1	6006	5826	6121	5984	2.49	cps
Calcium	43-1	27411239	27523835	27431215	27455430	0.22	cps
Calcium	44-1	438306407	445778767	440349260	441478145	0.87	cps
Carbon	12-1	9966107	10856662	11249835	10690868	6.15	cps
Carbon	12-2	76330	76038	77325	76564	0.88	cps
Chlorine	35-1	11920055	13439485	13919716	13093086	7.97	cps
Chlorine	35-2	60385	60205	61148	60579	0.83	cps
Chromium	52-2	3124	3447	3414	3328	5.34	cps
Cobalt	59-2	820	833	777	810	3.66	cps
Copper	63-2	5665	5554	5898	5706	3.07	cps
Dysprosium	156-1	217	233	203	218	6.90	cps
Dysprosium	156-2	70	77	83	77	8.69	cps
Erbium	164-1	327	303	393	341	13.69	cps
Erbium	164-2	143	97	110	117	20.60	cps
Gadolinium	160-1	267	363	337	322	15.49	cps
Gadolinium	160-2	97	110	157	121	26.01	cps
Holmium	165-1	19445221	19871773	20628346	19981780	3.00	cps
Holmium	165-2	7016588	7130854	7089292	7078911	0.82	cps
Indium	115-1	15665734	16052878	16462520	16060377	2.48	cps
Indium	115-2	1497915	1572114	1625267	1565099	4.09	cps
Iron	54-2	36934	36346	36583	36621	0.81	cps
Iron	56-2	669796	668919	672172	670296	0.25	cps
Iron	57-2	17568	17571	18412	17850	2.73	cps
Krypton	83-1	280	360	283	308	14.70	cps
Lead	206-1	3104	3654	3517	3425	8.36	cps

Lab Sample ID :Q1200-06Instrumnet Name :P8Client Sample ID :ME2983Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Date & Time Acc	quired: 202	25-02-06 15:48:02	DataFi	le Name :	066AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2717	2744	2810	2757	1.74	cps
Lead	208-1	12966	13443	13493	13301	2.19	cps
Lithium	6-1	9009768	9205802	9856923	9357498	4.74	cps
Magnesium	24-2	33522159	33875573	32860519	33419417	1.54	cps
Manganese	55-2	60370	60561	61083	60671	0.61	cps
Molybdenum	94-1	2727	3184	2760	2890	8.82	cps
Molybdenum	95-1	2490	2660	2517	2556	3.58	cps
Molybdenum	96-1	2484	2860	2644	2663	7.10	cps
Molybdenum	97-1	1403	1473	1443	1440	2.44	cps
Molybdenum	98-1	3914	3714	3604	3744	4.20	cps
Neodymium	150-1	207	180	187	191	7.26	cps
Neodymium	150-2	40	47	97	61	50.68	cps
Nickel	60-2	1747	1750	1657	1718	3.08	cps
Phosphorus	31-2	140	123	147	137	8.79	cps
Potassium	39-2	1166762	1166861	1163899	1165841	0.14	cps
Rhodium	103-1	14195927	14611877	14774789	14527531	2.05	cps
Rhodium	103-2	5647157	5687414	5766387	5700319	1.06	cps
Scandium	45-1	11430823	11751614	12317044	11833161	3.79	cps
Scandium	45-2	224574	225738	231809	227374	1.71	cps
Selenium	82-1	207	77	187	157	44.68	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	23	7	33	21	63.80	cps
Silicon	28-1	103509678	105909532	104995498	104804903	1.16	cps
Silver	107-1	600	647	713	653	8.72	cps
Silver	109-1	277	360	400	346	18.21	cps
Sodium	23-2	41466455	41603630	41302385	41457490	0.36	cps
Strontium	86-1	74254294	74579014	74463981	74432429	0.22	cps
Strontium	88-1	630080897	646211404	647045657	641112653	1.49	cps
Sulfur	34-1	37889107	38553770	38242534	38228471	0.87	cps
Terbium	159-1	19374178	20374854	21248278	20332437	4.61	cps
Terbium	159-2	6650780	6705489	6913048	6756439	2.05	cps
Thallium	203-1	267	333	253	284	15.07	cps
Thallium	205-1	630	760	747	712	10.04	cps
Tin	118-1	9110	9280	9216	9202	0.93	cps
Titanium	47-1	2274	2300	2264	2279	0.83	cps
Uranium	238-1	4217	4431	4237	4295	2.74	cps

Lab Sample ID :Q1200-06Instrumnet Name :P8Client Sample ID :ME2983Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:48:02 DataFile Name: 066AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	460	407	443	437	6.25	cps
Ytterbium	172-1	163	230	160	184	21.41	cps
Ytterbium	172-2	73	70	60	68	10.24	cps
Ytterbium	176-1	1867	1837	1970	1891	3.70	cps
Ytterbium	176-2	250	293	333	292	14.26	cps
Yttrium	89-1	27698289	29222907	30029094	28983430	4.08	cps
Yttrium	89-2	2069226	2061569	2133807	2088201	1.90	cps
Zinc	66-2	1567	1497	1430	1498	4.56	cps
Zirconium	90-1	3847	3821	3904	3857	1.10	cps
Zirconium	91-1	827	810	813	817	1.08	cps

Lab Sample ID: Q1200-07 Instrumnet Name: P8

Client Sample ID: ME2984 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	162900	162678	163619	163065	0.30	cps
Antimony	121-1	16777	16787	17064	16876	0.97	cps
Arsenic	75-2	877	783	797	819	6.16	cps
Barium	135-1	411459	416729	413997	414062	0.64	cps
Barium	137-1	717379	720223	732682	723428	1.13	cps
Beryllium	9-1	1182	1165	1246	1198	3.57	cps
Bismuth	209-1	11600059	11545275	11864751	11670028	1.46	cps
Bismuth	209-2	5127799	5128529	5188707	5148345	0.68	cps
Bromine	81-1	147696	158750	161632	156026	4.72	cps
Cadmium	108-1	143	133	143	140	4.12	cps
Cadmium	106-1	8556	8643	8770	8656	1.24	cps
Cadmium	111-1	6212	6247	6348	6269	1.13	cps
Calcium	43-1	18808233	18571093	19025776	18801701	1.21	cps
Calcium	44-1	296957189	299695156	299751742	298801362	0.53	cps
Carbon	12-1	10374742	11280362	11645751	11100285	5.89	cps
Carbon	12-2	79456	79631	80006	79698	0.35	cps
Chlorine	35-1	4132079	4201981	4292473	4208844	1.91	cps
Chlorine	35-2	17244	17007	17310	17187	0.93	cps
Chromium	52-2	19166	19110	19624	19300	1.46	cps
Cobalt	59-2	44329	43382	43734	43815	1.09	cps
Copper	63-2	39137	39946	39889	39657	1.14	cps
Dysprosium	156-1	8073	8246	8183	8167	1.07	cps
Dysprosium	156-2	2614	2657	2817	2696	3.97	cps
Erbium	164-1	6645	6959	6722	6775	2.41	cps
Erbium	164-2	2310	2397	2350	2352	1.84	cps
Gadolinium	160-1	7149	7065	7482	7232	3.05	cps
Gadolinium	160-2	3084	3117	3187	3129	1.69	cps
Holmium	165-1	20060558	20007866	20124289	20064238	0.29	cps
Holmium	165-2	7294641	7342113	7493710	7376822	1.41	cps
Indium	115-1	16123857	15834198	15963217	15973757	0.91	cps
Indium	115-2	1664967	1665562	1681050	1670526	0.55	cps
Iron	54-2	517670	525249	523308	522076	0.75	cps
Iron	56-2	9851186	9830410	9857591	9846396	0.14	cps
Iron	57-2	240418	241913	239875	240735	0.44	cps
Krypton	83-1	297	300	310	302	2.30	cps
Lead	206-1	54852	55629	55284	55255	0.70	cps

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Lab Sample ID :Q1200-07Instrumnet Name :P8Client Sample ID :ME2984Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Date & Time Act	uiled . 2025-02-00 15.51.17		Datarile Name.		00/AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	43924	44275	45128	44443	1.39	cps
Lead	208-1	206983	210306	212573	209954	1.34	cps
Lithium	6-1	9242757	9302312	9564869	9369980	1.83	cps
Magnesium	24-2	26518812	26242109	26023438	26261453	0.95	cps
Manganese	55-2	1515179	1502710	1466191	1494693	1.70	cps
Molybdenum	94-1	53218	53552	53998	53589	0.73	cps
Molybdenum	95-1	69586	70283	70307	70059	0.58	cps
Molybdenum	96-1	74994	75554	76666	75738	1.12	cps
Molybdenum	97-1	42013	43438	42959	42804	1.69	cps
Molybdenum	98-1	109058	111876	110569	110501	1.28	cps
Neodymium	150-1	11068	10995	11225	11096	1.06	cps
Neodymium	150-2	2860	2854	2960	2891	2.07	cps
Nickel	60-2	19574	20054	19821	19816	1.21	cps
Phosphorus	31-2	2200	2187	2294	2227	2.61	cps
Potassium	39-2	1118588	1115454	1111726	1115256	0.31	cps
Rhodium	103-1	14541561	14637372	14706020	14628318	0.56	cps
Rhodium	103-2	5817110	6027371	6089103	5977861	2.39	cps
Scandium	45-1	11924452	11564532	12096110	11861698	2.29	cps
Scandium	45-2	232945	235493	237778	235406	1.03	cps
Selenium	82-1	183	197	157	179	11.39	cps
Selenium	77-2	27	10	7	14	74.18	cps
Selenium	78-2	17	20	17	18	10.81	cps
Silicon	28-1	135693371	138576218	138386441	137552010	1.17	cps
Silver	107-1	907	890	883	893	1.35	cps
Silver	109-1	580	553	623	586	6.03	cps
Sodium	23-2	14552790	14470977	14511014	14511594	0.28	cps
Strontium	86-1	101918708	103346135	104395335	103220060	1.20	cps
Strontium	88-1	878819294	891547533	920195266	896854031	2.36	cps
Sulfur	34-1	24713030	24661472	24847090	24740531	0.39	cps
Terbium	159-1	20433821	20488926	20856163	20592970	1.11	cps
Terbium	159-2	7128035	6895530	7212306	7078624	2.32	cps
Thallium	203-1	1473	1630	1513	1539	5.29	cps
Thallium	205-1	3347	3581	3507	3478	3.43	cps
Tin	118-1	49134	48051	50369	49185	2.36	cps
Titanium	47-1	128294	130641	130320	129752	0.98	cps
Uranium	238-1	163597	165845	165818	165087	0.78	cps

Lab Sample ID :Q1200-07Instrumnet Name :P8Client Sample ID :ME2984Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:51:17 DataFile Name: 067AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	19033	19467	19276	19259	1.13	cps
Ytterbium	172-1	2117	1917	2090	2041	5.32	cps
Ytterbium	172-2	877	923	870	890	3.26	cps
Ytterbium	176-1	3074	3060	3200	3112	2.48	cps
Ytterbium	176-2	803	873	917	864	6.62	cps
Yttrium	89-1	28921436	29138058	29189293	29082929	0.49	cps
Yttrium	89-2	2170175	2166049	2197825	2178016	0.79	cps
Zinc	66-2	12909	13577	13176	13221	2.54	cps
Zirconium	90-1	36103	35722	35722	35849	0.61	cps
Zirconium	91-1	7622	7896	8293	7937	4.25	cps

Lab Sample ID :Q1200-08Instrumnet Name :P8Client Sample ID :ME2985Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Date & Time Ac	quirea: 202	25-02-06 15:54:32	DataFi	DataFile Name :		U68AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	750	767	733	750	2.22	cps	
Antimony	121-1	1333	1130	1227	1230	8.27	cps	
Arsenic	75-2	123	120	123	122	1.58	cps	
Barium	135-1	406146	391701	401846	399898	1.85	cps	
Barium	137-1	713807	700655	690109	701524	1.69	cps	
Beryllium	9-1	396	450	414	420	6.53	cps	
Bismuth	209-1	11456152	11209147	11274699	11313333	1.13	cps	
Bismuth	209-2	4991534	5066911	5317423	5125289	3.33	cps	
Bromine	81-1	146969	160180	173823	160324	8.38	cps	
Cadmium	108-1	33	30	43	36	19.51	cps	
Cadmium	106-1	8433	8112	8029	8191	2.60	cps	
Cadmium	111-1	5923	5704	5640	5756	2.58	cps	
Calcium	43-1	25397550	24008200	24595582	24667111	2.83	cps	
Calcium	44-1	404976514	387165901	397929981	396690799	2.26	cps	
Carbon	12-1	9493032	10284251	10897562	10224948	6.89	cps	
Carbon	12-2	70743	72973	72722	72146	1.69	cps	
Chlorine	35-1	4123066	4160173	4415775	4233004	3.76	cps	
Chlorine	35-2	18131	18749	18802	18561	2.01	cps	
Chromium	52-2	6248	6502	6818	6523	4.38	cps	
Cobalt	59-2	880	863	797	847	5.21	cps	
Copper	63-2	9083	8883	8903	8956	1.23	cps	
Dysprosium	156-1	33	27	50	37	32.78	cps	
Dysprosium	156-2	20	7	10	12	56.76	cps	
Erbium	164-1	107	123	120	117	7.56	cps	
Erbium	164-2	27	33	30	30	11.10	cps	
Gadolinium	160-1	117	160	130	136	16.37	cps	
Gadolinium	160-2	33	33	37	34	5.60	cps	
Holmium	165-1	19800788	19198252	19445882	19481641	1.55	cps	
Holmium	165-2	7171417	7375344	7731144	7425968	3.81	cps	
Indium	115-1	15698630	15130421	15838822	15555957	2.41	cps	
Indium	115-2	1633773	1635471	1741183	1670142	3.68	cps	
Iron	54-2	4848	5331	5138	5105	4.77	cps	
Iron	56-2	89287	89056	87244	88529	1.26	cps	
Iron	57-2	2870	3064	2774	2903	5.09	cps	
Krypton	83-1	343	287	367	332	12.38	cps	
Lead	206-1	2454	2500	2490	2481	0.99	cps	

Lab Sample ID: Q1200-08 Instrumnet Name: P8
Client Sample ID: ME2985 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2227	2150	1974	2117	6.14	cps
Lead	208-1	9855	9551	9461	9623	2.14	cps
Lithium	6-1	9491293	8963569	9245846	9233569	2.86	cps
Magnesium	24-2	12500815	12710984	12485152	12565650	1.00	cps
Manganese	55-2	11251	11702	11235	11396	2.33	cps
Molybdenum	94-1	11068	10210	10224	10501	4.68	cps
Molybdenum	95-1	17338	17157	16954	17150	1.12	cps
Molybdenum	96-1	18412	18426	18476	18438	0.18	cps
Molybdenum	97-1	10758	10257	10637	10551	2.48	cps
Molybdenum	98-1	27828	26869	27437	27378	1.76	cps
Neodymium	150-1	63	87	73	74	15.73	cps
Neodymium	150-2	3	10	13	9	57.30	cps
Nickel	60-2	8439	8246	8466	8384	1.43	cps
Phosphorus	31-2	137	173	117	142	20.21	cps
Potassium	39-2	5713373	5820128	5546850	5693450	2.42	cps
Rhodium	103-1	14391216	13781419	14341615	14171417	2.39	cps
Rhodium	103-2	5874746	5941205	6153881	5989944	2.43	cps
Scandium	45-1	11830938	11396578	11603295	11610271	1.87	cps
Scandium	45-2	232615	234225	243153	236664	2.40	cps
Selenium	82-1	127	163	53	114	48.94	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	17	3	17	12	63.01	cps
Silicon	28-1	65176592	61882266	64007411	63688756	2.62	cps
Silver	107-1	540	513	520	524	2.65	cps
Silver	109-1	227	253	237	239	5.64	cps
Sodium	23-2	21677822	21880771	21446460	21668351	1.00	cps
Strontium	86-1	86088285	83239177	83941422	84422962	1.76	cps
Strontium	88-1	732318416	717154256	718657403	722710025	1.16	cps
Sulfur	34-1	32653141	30096709	31414391	31388080	4.07	cps
Terbium	159-1	20261146	19558494	20052115	19957252	1.81	cps
Terbium	159-2	7040679	7088837	7363405	7164307	2.43	cps
Thallium	203-1	297	293	297	296	0.65	cps
Thallium	205-1	657	703	743	701	6.19	cps
Tin	118-1	5138	4848	4824	4936	3.54	cps
Titanium	47-1	2044	1943	1943	1977	2.92	cps
Uranium	238-1	6462	6478	6779	6573	2.71	cps

Lab Sample ID :Q1200-08Instrumnet Name :P8Client Sample ID :ME2985Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:54:32 DataFile Name: 068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	11078	11531	11265	11291	2.02	cps
Ytterbium	172-1	117	113	153	128	17.37	cps
Ytterbium	172-2	57	77	63	66	15.54	cps
Ytterbium	176-1	2067	1944	1937	1982	3.69	cps
Ytterbium	176-2	263	260	333	286	14.50	cps
Yttrium	89-1	28187651	27721626	28272735	28060671	1.06	cps
Yttrium	89-2	2143203	2158016	2256881	2186033	2.83	cps
Zinc	66-2	517	460	547	508	8.67	cps
Zirconium	90-1	1630	1543	1667	1613	3.93	cps
Zirconium	91-1	370	343	310	341	8.81	cps

Lab Sample ID: Q1200-09 Instrumnet Name: P8

Client Sample ID: ME2986 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Date & Time / to	quircu . 202	20 02 00 10.07.40	Datari	ic ivallic .	0007 (I (LI .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	857	790	857	834	4.61	cps
Antimony	121-1	1630	1660	1667	1652	1.18	cps
Arsenic	75-2	367	347	413	376	9.11	cps
Barium	135-1	295209	295865	307247	299441	2.26	cps
Barium	137-1	517245	520234	530651	522710	1.35	cps
Beryllium	9-1	467	441	457	455	2.91	cps
Bismuth	209-1	11095163	11307730	11064243	11155712	1.19	cps
Bismuth	209-2	4921894	5007915	5269583	5066464	3.57	cps
Bromine	81-1	125642	149349	162047	145679	12.68	cps
Cadmium	108-1	43	33	43	40	14.43	cps
Cadmium	106-1	7952	8426	7922	8100	3.49	cps
Cadmium	111-1	5623	5968	5609	5733	3.55	cps
Calcium	43-1	23807154	23835805	24479700	24040886	1.58	cps
Calcium	44-1	382562474	387199181	392864047	387541901	1.33	cps
Carbon	12-1	9711089	10643189	11047339	10467206	6.55	cps
Carbon	12-2	74752	74501	75713	74989	0.85	cps
Chlorine	35-1	16150599	17613880	18429006	17397828	6.64	cps
Chlorine	35-2	78394	79848	79610	79284	0.98	cps
Chromium	52-2	2644	2744	2867	2751	4.07	cps
Cobalt	59-2	18208	18005	18462	18225	1.26	cps
Copper	63-2	9947	10551	10657	10385	3.69	cps
Dysprosium	156-1	40	47	47	44	8.66	cps
Dysprosium	156-2	40	7	10	19	97.18	cps
Erbium	164-1	120	127	143	130	9.25	cps
Erbium	164-2	57	47	57	53	10.82	cps
Gadolinium	160-1	143	193	160	166	15.38	cps
Gadolinium	160-2	23	30	40	31	26.97	cps
Holmium	165-1	19305161	19273094	18953065	19177107	1.02	cps
Holmium	165-2	7199143	7288287	7735928	7407786	3.88	cps
Indium	115-1	15408018	15496856	15347975	15417617	0.49	cps
Indium	115-2	1642173	1673827	1748065	1688022	3.22	cps
Iron	54-2	144428	144415	142371	143738	0.82	cps
Iron	56-2	2769420	2703652	2710200	2727757	1.33	cps
Iron	57-2	66310	66621	65754	66228	0.66	cps
Krypton	83-1	263	333	347	314	14.23	cps
Lead	206-1	2907	2980	3070	2986	2.74	cps

Lab Sample ID :Q1200-09Instrumnet Name :P8Client Sample ID :ME2986Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Parameter Mass CPS1 CPS2 CPS3 CPSMean	
Lead 207-1 2510 2567 2680 2586	3.35 cps
Lead 208-1 11292 11619 11956 11622	2.85 cps
Lithium 6-1 9076323 9146112 8962411 9061615	1.02 cps
Magnesium 24-2 31100373 30729115 30807505 30878997	0.63 cps
Manganese 55-2 443015 430609 434721 436115	1.45 cps
Molybdenum 94-1 22772 23557 23356 23228	1.76 cps
Molybdenum 95-1 35625 36257 36284 36056	1.03 cps
Molybdenum 96-1 39045 39844 39904 39597	1.21 cps
Molybdenum 97-1 22418 22118 23126 22554	2.30 cps
Molybdenum 98-1 56447 57599 58489 57512	1.78 cps
Neodymium 150-1 110 77 100 96	17.90 cps
Neodymium 150-2 27 3 10 13	90.16 cps
Nickel 60-2 10194 10647 10354 10398	2.21 cps
Phosphorus 31-2 150 120 173 148	18.09 cps
Potassium 39-2 590234 588559 585017 587937	0.45 cps
Rhodium 103-1 13853924 14479293 13983016 14105411	2.34 cps
Rhodium 103-2 5864157 5856543 6047849 5922850	1.83 cps
Scandium 45-1 11399526 11847163 11542778 11596489	1.97 cps
Scandium 45-2 230171 232633 245987 236264	3.60 cps
Selenium 82-1 130 153 110 131	16.54 cps
Selenium 77-2 0 0 3 1	173.21 cps
Selenium 78-2 10 13 20 14	35.26 cps
Silicon 28-1 98278985 98051342 99833059 98721129	0.98 cps
Silver 107-1 547 593 630 590	7.08 cps
Silver 109-1 283 437 450 390	23.75 cps
Sodium 23-2 54897563 55309441 54275298 54827434	0.95 cps
Strontium 86-1 66933134 67782491 68748324 67821316	1.34 cps
Strontium 88-1 573576951 587081378 586728845 58246239	1 1.32 cps
Sulfur 34-1 29097085 28791650 29531247 29139994	1.28 cps
Terbium 159-1 19506273 20134055 19631840 19757389	1.68 cps
Terbium 159-2 7038489 7017795 7366087 7140790	2.74 cps
Thallium 203-1 443 517 423 461	10.66 cps
Thallium 205-1 1167 1057 1023 1082	6.93 cps
Tin 118-1 5038 5131 5021 5063	1.17 cps
Titanium 47-1 2010 2240 2104 2118	5.46 cps
Uranium 238-1 251774 255397 253915 253695	0.72 cps

Lab Sample ID :Q1200-09Instrumnet Name :P8Client Sample ID :ME2986Dilution Factor :1

Date & Time Acquired: 2025-02-06 15:57:45 DataFile Name: 069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	423	430	463	439	4.88	cps
Ytterbium	172-1	103	137	133	124	14.76	cps
Ytterbium	172-2	63	53	43	53	18.75	cps
Ytterbium	176-1	1827	1954	1727	1836	6.19	cps
Ytterbium	176-2	243	337	343	308	18.17	cps
Yttrium	89-1	27897414	28479754	27786840	28054669	1.33	cps
Yttrium	89-2	2174914	2144851	2264971	2194912	2.85	cps
Zinc	66-2	1890	1947	1900	1912	1.58	cps
Zirconium	90-1	7055	6945	6698	6900	2.65	cps
Zirconium	91-1	1400	1510	1500	1470	4.14	cps

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Lab Sample ID: Q1200-10 Instrumnet Name: P8

Client Sample ID: ME2987 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Aluminium         27-2         870         933         973         926         5.63         cps           Antimony         121-1         577         563         623         588         5.36         cps           Arsenic         75-2         90         110         110         103         11.17         cps           Barium         135-1         194361         195596         198026         195940         1.44         cps           Beryllium         9-1         3772         381         399         384         3.48         cps           Beryllium         9-1         372         381         399         384         3.48         cps           Bismuth         209-1         11451128         11497195         11335507         11427877         0.73         cps           Bismuth         209-2         5077515         5083922         5070004         5077174         0.14         cps           Bismuth         108-1         363         27         37         32         15.80         cps           Bismuth         108-1         3686         8096         893         8181         214         0ps           Cadmium         110-1 <th>Parameter</th> <th>Mass</th> <th>CPS1</th> <th>CPS2</th> <th>CPS3</th> <th>CPSMean</th> <th>CPSRSD</th> <th>Units</th>	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Arsenic         75-2         90         110         110         103         11.17         cps           Barlum         135-1         194361         195596         198026         195994         0.95         cps           Barlum         137-1         337169         346035         346315         342840         1.44         cps           Blsmuth         20-1         11461128         11497195         11335307         11427877         0.73         cps           Blsmuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         281661         324108         363812         316493         16.29         cps           Cadmium         106-1         306         8080         8383         8181         2.14         cps           Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Calcium         43-1         2147729         21811929         22060776         21763478         1.49         cps           Calcium         43-1         343734488         347499035         35957328         351469017         2.00         cps	Aluminium	27-2	870	933	973	926	5.63	cps
Barium         135-1         194361         195596         198026         195994         0.95         cps           Barium         137-1         337169         345035         346315         342840         1.44         cps           Beryllum         9-1         372         381         399         384         3.48         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         261661         324108         363812         316493         16.29         cps           Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Cadmium         41-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         34734488         347499035         359673528         351469017         2.00         <	Antimony	121-1	577	563	623	588	5.36	cps
Barium         137-1         337169         345035         346315         342840         1.44         cps           Berylllum         9-1         372         381         399         384         3.48         cps           Bismuth         209-1         11451128         11497195         11335307         11427877         0.73         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         261661         324108         363812         316493         16.29         cps           Cadmium         108-1         33         27         37         32         15.80         cps           Cadmium         101-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         43-1         347334488         347989035         359573528         351469017         2.00         cps           Carbon         12-2         75191         75618         75873         0.88         cps <t< td=""><td>Arsenic</td><td>75-2</td><td>90</td><td>110</td><td>110</td><td>103</td><td>11.17</td><td>cps</td></t<>	Arsenic	75-2	90	110	110	103	11.17	cps
Beryllium         9-1         372         381         399         384         3.48         cps           Bismuth         209-1         11451128         11497195         11335307         11427877         0.73         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         261561         324108         363812         316493         16.29         cps           Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347489035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         1089314         10319431         6.00         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34	Barium	135-1	194361	195596	198026	195994	0.95	cps
Bismuth         209-1         11451128         11497195         11335307         11427877         0.73         cps           Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         261561         324108         363812         316493         16.29         cps           Cadmium         108-1         33         27         37         32         15.80         cps           Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Carbon         12-1         962366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         16181         6205         6328         6238         1.26         cps	Barium	137-1	337169	345035	346315	342840	1.44	cps
Bismuth         209-2         5077515         5083922         5070084         5077174         0.14         cps           Bromine         81-1         261561         324108         363812         316493         16.29         cps           Cadmium         108-1         33         27         37         32         15.80         cps           Cadmium         110-1         8066         8096         8383         8181         2.14         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chiorine         35-1         26037520         2764350         28975349         2752139         5.34         cps           Chiorine         35-2         1618         6205         6328         6238         1.26         0.54 <td>Beryllium</td> <td>9-1</td> <td>372</td> <td>381</td> <td>399</td> <td>384</td> <td>3.48</td> <td>cps</td>	Beryllium	9-1	372	381	399	384	3.48	cps
Bromine         81-1         261561         324108         363812         316493         16.29         cps           Cadmium         108-1         33         27         37         32         15.80         cps           Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-2         76191         76911         76518         75873         0.88         cps           Carbon         12-2         76191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         132229         122801         0.38         cps	Bismuth	209-1	11451128	11497195	11335307	11427877	0.73	cps
Cadmium         108-1         33         27         37         32         15.80         cps           Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359673528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         6181         6205         6328         6238         126         cps           Chhorine         59-2         1057         1063         1037         1052         1.32         cps <tr< td=""><td>Bismuth</td><td>209-2</td><td>5077515</td><td>5083922</td><td>5070084</td><td>5077174</td><td>0.14</td><td>cps</td></tr<>	Bismuth	209-2	5077515	5083922	5070084	5077174	0.14	cps
Cadmium         106-1         8066         8096         8383         8181         2.14         cps           Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76618         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28976349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chhorilum         52-2         1057         1063         1037         1052         1.32         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps	Bromine	81-1	261561	324108	363812	316493	16.29	cps
Cadmium         111-1         5673         5698         5879         5750         1.95         cps           Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps     <	Cadmium	108-1	33	27	37	32	15.80	cps
Calcium         43-1         21417729         21811929         22060776         21763478         1.49         cps           Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chlorine         35-2         1057         1063         1037         1052         1.32         cps           Chobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         100         33         53         49         28.39         cps <td>Cadmium</td> <td>106-1</td> <td>8066</td> <td>8096</td> <td>8383</td> <td>8181</td> <td>2.14</td> <td>cps</td>	Cadmium	106-1	8066	8096	8383	8181	2.14	cps
Calcium         44-1         347334488         347499035         359573528         351469017         2.00         cps           Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Erbium         164-1         130         153         137         140         8.59         cps <t< td=""><td>Cadmium</td><td>111-1</td><td>5673</td><td>5698</td><td>5879</td><td>5750</td><td>1.95</td><td>cps</td></t<>	Cadmium	111-1	5673	5698	5879	5750	1.95	cps
Carbon         12-1         9662366         10402733         10893194         10319431         6.00         cps           Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         166-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Gadolinium	Calcium	43-1	21417729	21811929	22060776	21763478	1.49	cps
Carbon         12-2         75191         75911         76518         75873         0.88         cps           Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1	Calcium	44-1	347334488	347499035	359573528	351469017	2.00	cps
Chlorine         35-1         26037520         27643550         28975349         27552139         5.34         cps           Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Holmium         165-1 <td< td=""><td>Carbon</td><td>12-1</td><td>9662366</td><td>10402733</td><td>10893194</td><td>10319431</td><td>6.00</td><td>cps</td></td<>	Carbon	12-1	9662366	10402733	10893194	10319431	6.00	cps
Chlorine         35-2         122312         122862         123229         122801         0.38         cps           Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Holimium         165-2         57         27         23         36         51.64         cps           Holimium         165-1         19559183	Carbon	12-2	75191	75911	76518	75873	0.88	cps
Chromium         52-2         6181         6205         6328         6238         1.26         cps           Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Holmium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694	Chlorine	35-1	26037520	27643550	28975349	27552139	5.34	cps
Cobalt         59-2         1057         1063         1037         1052         1.32         cps           Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Erbium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         1586	Chlorine	35-2	122312	122862	123229	122801	0.38	cps
Copper         63-2         8156         8096         8039         8097         0.72         cps           Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Iron         54-2 <td>Chromium</td> <td>52-2</td> <td>6181</td> <td>6205</td> <td>6328</td> <td>6238</td> <td>1.26</td> <td>cps</td>	Chromium	52-2	6181	6205	6328	6238	1.26	cps
Dysprosium         156-1         60         33         53         49         28.39         cps           Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Holmium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2	Cobalt	59-2	1057	1063	1037	1052	1.32	cps
Dysprosium         156-2         7         20         7         11         69.25         cps           Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Iron <t< td=""><td>Copper</td><td>63-2</td><td>8156</td><td>8096</td><td>8039</td><td>8097</td><td>0.72</td><td>cps</td></t<>	Copper	63-2	8156	8096	8039	8097	0.72	cps
Erbium         164-1         130         153         137         140         8.59         cps           Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Indium         115-2         1681810         1676136         1705004         1687650         0.91         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Iro	Dysprosium	156-1	60	33	53	49	28.39	cps
Erbium         164-2         63         33         70         56         35.16         cps           Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Indium         115-2         1681810         1676136         1705004         1687650         0.91         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Krypton         83-1         300         347         307         318         7.94         cps	Dysprosium	156-2	7	20	7	11	69.25	cps
Gadolinium         160-1         157         187         177         173         8.81         cps           Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Krypton         83-1         300         347         307         318         7.94         cps	Erbium	164-1	130	153	137	140	8.59	cps
Gadolinium         160-2         57         27         23         36         51.64         cps           Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Indium         115-2         1681810         1676136         1705004         1687650         0.91         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Iron         57-2         17684         17985         17681         17783         0.98         cps           Krypton         83-1         300         347         307         318         7.94         cps	Erbium	164-2	63	33	70	56	35.16	cps
Holmium         165-1         19559183         19648626         19527061         19578290         0.32         cps           Holmium         165-2         7412694         7298410         7441860         7384321         1.03         cps           Indium         115-1         15867215         16059477         16018903         15981865         0.63         cps           Indium         115-2         1681810         1676136         1705004         1687650         0.91         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Iron         57-2         17684         17985         17681         17783         0.98         cps           Krypton         83-1         300         347         307         318         7.94         cps	Gadolinium	160-1	157	187	177	173	8.81	cps
Holmium       165-2       7412694       7298410       7441860       7384321       1.03       cps         Indium       115-1       15867215       16059477       16018903       15981865       0.63       cps         Indium       115-2       1681810       1676136       1705004       1687650       0.91       cps         Iron       54-2       37442       37726       37175       37448       0.74       cps         Iron       56-2       677548       684085       678027       679887       0.54       cps         Iron       57-2       17684       17985       17681       17783       0.98       cps         Krypton       83-1       300       347       307       318       7.94       cps	Gadolinium	160-2	57	27	23	36	51.64	cps
Indium       115-1       15867215       16059477       16018903       15981865       0.63       cps         Indium       115-2       1681810       1676136       1705004       1687650       0.91       cps         Iron       54-2       37442       37726       37175       37448       0.74       cps         Iron       56-2       677548       684085       678027       679887       0.54       cps         Iron       57-2       17684       17985       17681       17783       0.98       cps         Krypton       83-1       300       347       307       318       7.94       cps	Holmium	165-1	19559183	19648626	19527061	19578290	0.32	cps
Indium         115-2         1681810         1676136         1705004         1687650         0.91         cps           Iron         54-2         37442         37726         37175         37448         0.74         cps           Iron         56-2         677548         684085         678027         679887         0.54         cps           Iron         57-2         17684         17985         17681         17783         0.98         cps           Krypton         83-1         300         347         307         318         7.94         cps	Holmium	165-2	7412694	7298410	7441860	7384321	1.03	cps
Iron     54-2     37442     37726     37175     37448     0.74     cps       Iron     56-2     677548     684085     678027     679887     0.54     cps       Iron     57-2     17684     17985     17681     17783     0.98     cps       Krypton     83-1     300     347     307     318     7.94     cps	Indium	115-1	15867215	16059477	16018903	15981865	0.63	cps
Iron     56-2     677548     684085     678027     679887     0.54     cps       Iron     57-2     17684     17985     17681     17783     0.98     cps       Krypton     83-1     300     347     307     318     7.94     cps	Indium	115-2	1681810	1676136	1705004	1687650	0.91	cps
Iron     57-2     17684     17985     17681     17783     0.98     cps       Krypton     83-1     300     347     307     318     7.94     cps	Iron	54-2	37442	37726	37175	37448	0.74	cps
Krypton 83-1 300 347 307 318 7.94 cps	Iron	56-2	677548	684085	678027	679887	0.54	cps
	Iron	57-2	17684	17985	17681	17783	0.98	cps
Lead 206-1 3511 3777 3861 3716 4.92 cps	Krypton	83-1	300	347	307	318	7.94	cps
	Lead	206-1	3511	3777	3861	3716	4.92	cps

Lab Sample ID: Q1200-10 Instrumnet Name: P8
Client Sample ID: ME2987 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Date & Time Acc	quirea: 202	25-02-06 16:01:01	DataFile Name :		070AREF.d			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	2980	3137	3150	3089	3.06	cps	
Lead	208-1	13956	14573	15010	14513	3.65	cps	
Lithium	6-1	9107519	9257333	9406584	9257145	1.62	cps	
Magnesium	24-2	42351289	42798338	42850223	42666617	0.64	cps	
Manganese	55-2	109045	110305	108441	109264	0.87	cps	
Molybdenum	94-1	5568	5701	5778	5682	1.87	cps	
Molybdenum	95-1	7729	7389	7652	7590	2.35	cps	
Molybdenum	96-1	8039	8349	8316	8235	2.07	cps	
Molybdenum	97-1	4614	4661	4838	4704	2.50	cps	
Molybdenum	98-1	11925	12095	12012	12011	0.71	cps	
Neodymium	150-1	80	90	83	84	6.03	cps	
Neodymium	150-2	10	10	13	11	17.30	cps	
Nickel	60-2	4191	4087	4341	4206	3.03	cps	
Phosphorus	31-2	320	277	297	298	7.28	cps	
Potassium	39-2	2515830	2602788	2513972	2544197	1.99	cps	
Rhodium	103-1	13970069	14044016	14448149	14154078	1.82	cps	
Rhodium	103-2	5880505	5968264	5968089	5938953	0.85	cps	
Scandium	45-1	11646944	11746463	11915498	11769635	1.15	cps	
Scandium	45-2	234852	237809	236909	236523	0.64	cps	
Selenium	82-1	177	183	117	159	23.11	cps	
Selenium	77-2	0	0	0	0	0.00	cps	
Selenium	78-2	23	3	10	12	83.33	cps	
Silicon	28-1	94675422	94524442	95928899	95042921	0.81	cps	
Silver	107-1	2629	1987	1113	1910	39.83	cps	
Silver	109-1	2020	1417	800	1412	43.20	cps	
Sodium	23-2	42372136	43117778	42820849	42770254	0.88	cps	
Strontium	86-1	71236689	73025951	71748372	72003671	1.28	cps	
Strontium	88-1	616698964	634400097	616560897	622553320	1.65	cps	
Sulfur	34-1	30886818	30948001	30970290	30935036	0.14	cps	
Terbium	159-1	19796084	20077446	20702109	20191880	2.30	cps	
Terbium	159-2	7056500	7077815	7148874	7094396	0.68	cps	
Thallium	203-1	230	277	213	240	13.68	cps	
Thallium	205-1	573	717	587	626	12.66	cps	
Tin	118-1	8209	8132	8423	8255	1.82	cps	
Titanium	47-1	2547	2770	2664	2660	4.20	cps	
Uranium	238-1	23318	22844	23315	23159	1.18	cps	

Lab Sample ID :Q1200-10Instrumnet Name :P8Client Sample ID :ME2987Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:01:01 DataFile Name: 070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	497	410	390	432	13.12	cps
Ytterbium	172-1	100	173	120	131	28.92	cps
Ytterbium	172-2	40	67	47	51	27.15	cps
Ytterbium	176-1	1750	1954	1887	1863	5.56	cps
Ytterbium	176-2	310	307	290	302	3.54	cps
Yttrium	89-1	28151898	28703350	28919345	28591531	1.38	cps
Yttrium	89-2	2150494	2166075	2202706	2173092	1.23	cps
Zinc	66-2	1140	1143	1120	1135	1.11	cps
Zirconium	90-1	3594	3370	3764	3576	5.52	cps
Zirconium	91-1	747	790	717	751	4.91	cps

Lab Sample ID: Q1200-11 Instrumnet Name: P8
Client Sample ID: ME2988 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5584	5801	5681	5689	1.91	cps
Antimony	121-1	3601	3594	3661	3618	1.02	cps
Arsenic	75-2	1340	1203	1117	1220	9.23	cps
Barium	135-1	271455	275928	273528	273637	0.82	cps
Barium	137-1	472912	478363	479005	476760	0.70	cps
Beryllium	9-1	435	410	426	424	2.99	cps
Bismuth	209-1	11608111	12120414	12103391	11943972	2.44	cps
Bismuth	209-2	5314525	5211789	5345176	5290497	1.32	cps
Bromine	81-1	159256	171444	175672	168791	5.05	cps
Cadmium	108-1	173	163	160	166	4.19	cps
Cadmium	106-1	8366	8356	8679	8467	2.17	cps
Cadmium	111-1	5921	5945	6164	6010	2.22	cps
Calcium	43-1	12208876	12303763	12402421	12305020	0.79	cps
Calcium	44-1	194221097	192705810	196013924	194313610	0.85	cps
Carbon	12-1	9522394	10132377	10500061	10051611	4.91	cps
Carbon	12-2	71050	70023	71416	70829	1.02	cps
Chlorine	35-1	8076986	8457478	8475282	8336582	2.70	cps
Chlorine	35-2	34965	35303	34631	34967	0.96	cps
Chromium	52-2	2954	2990	2780	2908	3.86	cps
Cobalt	59-2	16339	16096	15589	16008	2.39	cps
Copper	63-2	8032	8399	8239	8224	2.24	cps
Dysprosium	156-1	367	250	330	316	18.91	cps
Dysprosium	156-2	133	147	100	127	18.98	cps
Erbium	164-1	417	463	463	448	6.02	cps
Erbium	164-2	110	163	90	121	31.30	cps
Gadolinium	160-1	457	437	460	451	2.80	cps
Gadolinium	160-2	137	190	153	160	17.05	cps
Holmium	165-1	19914420	20850300	20616904	20460541	2.38	cps
Holmium	165-2	7450801	7482479	7660268	7531183	1.50	cps
Indium	115-1	15839581	16657089	16817784	16438151	3.19	cps
Indium	115-2	1702220	1706090	1727918	1712076	0.81	cps
Iron	54-2	29467	30372	29701	29847	1.57	cps
Iron	56-2	546144	551340	543985	547156	0.69	cps
Iron	57-2	14127	13934	13887	13983	0.91	cps
Krypton	83-1	240	313	293	282	13.43	cps
Lead	206-1	4701	4384	4347	4477	4.34	cps

Lab Sample ID : Q1200-11 Instrumnet Name : P8

Client Sample ID : ME2988 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Date	t Time Adquired	u. 2020 0	2 00 10.04.10	Datal lic I	dillo.	07 17 (I CET .G		
Parame	ter	Mass	CPS1 C	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead		207-1	3694	3771	3851	3772	2.08	cps
Lead		208-1	17735	17365	17365	17488	1.22	cps
Lithium		6-1	9362262	9712910	9692763	9589312	2.05	cps
Magnes	ium	24-2	16707737	16356959	16287617	16450771	1.37	cps
Mangan	ese	55-2	1227766	1226082	1224845	1226231	0.12	cps
Molybde	enum	94-1	176417	180049	177693	178053	1.03	cps
Molybde	enum	95-1	301936	305008	309157	305367	1.19	cps
Molybde	enum	96-1	318580	327862	324415	323619	1.45	cps
Molybde	enum	97-1	185638	189549	191845	189010	1.66	cps
Molybde	enum	98-1	483880	488366	493192	488480	0.95	cps
Neodym	nium	150-1	480	510	413	468	10.58	cps
Neodym	nium	150-2	123	93	90	102	17.96	cps
Nickel		60-2	4848	4751	4894	4831	1.51	cps
Phospho	orus	31-2	740	777	773	763	2.66	cps
Potassiu	ım	39-2	1987155	1933107	1937243	1952502	1.54	cps
Rhodiun	n	103-1	14822598	15155129	15218980	15065569	1.41	cps
Rhodiun	n	103-2	6085970	6049127	6262294	6132464	1.86	cps
Scandiu	ım	45-1	11979608	12495987	12749286	12408294	3.16	cps
Scandiu	ım	45-2	240362	241770	243915	242015	0.74	cps
Seleniur	m	82-1	233	143	123	167	35.16	cps
Seleniur	m	77-2	7	0	3	3	100.05	cps
Seleniur	m	78-2	10	23	13	16	44.60	cps
Silicon		28-1	114327065	115203668	114601848	114710861	0.39	cps
Silver		107-1	603	640	660	634	4.53	cps
Silver		109-1	307	327	327	320	3.61	cps
Sodium		23-2	68825032	67154177	66291391	67423533	1.91	cps
Strontiu	m	86-1	98603302	100390919	99184752	99392991	0.92	cps
Strontiu	m	88-1	847310547	852167774	846430307	848636210	0.36	cps
Sulfur		34-1	20703354	20811766	21025156	20846759	0.79	cps
Terbium	ı	159-1	20302760	20855455	21234986	20797733	2.25	cps
Terbium	ı	159-2	7427603	7349226	7324042	7366957	0.73	cps
Thallium	า	203-1	283	277	303	288	4.82	cps
Thallium	ı	205-1	643	707	657	669	4.99	cps
Tin		118-1	17465	17611	17918	17665	1.31	cps
Titanium	า	47-1	11331	11678	11461	11490	1.53	cps
Uranium	ı	238-1	137917	140414	139291	139208	0.90	cps

Lab Sample ID : Q1200-11 Instrumnet Name : P8
Client Sample ID : ME2988 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:04:15 DataFile Name: 071AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1393	1490	1453	1446	3.38	cps
Ytterbium	172-1	213	260	257	243	10.70	cps
Ytterbium	172-2	127	73	87	96	29.05	cps
Ytterbium	176-1	2047	1970	2050	2022	2.24	cps
Ytterbium	176-2	340	353	380	358	5.69	cps
Yttrium	89-1	28865928	30004488	29997202	29622539	2.21	cps
Yttrium	89-2	2212951	2217679	2233076	2221235	0.47	cps
Zinc	66-2	1377	1303	1343	1341	2.74	cps
Zirconium	90-1	4647	4654	4874	4725	2.73	cps
Zirconium	91-1	990	1000	953	981	2.50	cps

Lab Sample ID: Q1200-12 Instrumnet Name: P8

Client Sample ID: ME2992 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Date & Time A	quircu . Zoz	.0 02 00 10.07.01	Datain	ic ivallic .	O7 Z7 (I CET .C		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3754	3927	4067	3916	4.01	cps
Antimony	121-1	423	450	430	434	3.19	cps
Arsenic	75-2	210	257	247	238	10.33	cps
Barium	135-1	33244	33298	34293	33612	1.76	cps
Barium	137-1	57441	58362	59423	58409	1.70	cps
Beryllium	9-1	436	420	412	423	2.87	cps
Bismuth	209-1	11702277	11457559	11455819	11538551	1.23	cps
Bismuth	209-2	4990628	4920652	5017908	4976396	1.01	cps
Bromine	81-1	172008	200313	217898	196740	11.77	cps
Cadmium	108-1	33	27	50	37	32.78	cps
Cadmium	106-1	8376	7892	8149	8139	2.97	cps
Cadmium	111-1	5863	5543	5716	5707	2.81	cps
Calcium	43-1	26596646	26283921	26907161	26595910	1.17	cps
Calcium	44-1	429345980	423403660	438825393	430525011	1.81	cps
Carbon	12-1	9149291	10058191	10563865	9923782	7.22	cps
Carbon	12-2	73003	73764	73804	73524	0.61	cps
Chlorine	35-1	5220039	5518204	5764989	5501077	4.96	cps
Chlorine	35-2	22962	23422	23316	23233	1.04	cps
Chromium	52-2	1757	1827	1927	1837	4.65	cps
Cobalt	59-2	587	623	533	581	7.79	cps
Copper	63-2	6578	6405	6482	6488	1.34	cps
Dysprosium	156-1	133	110	147	130	14.28	cps
Dysprosium	156-2	57	47	43	49	14.20	cps
Erbium	164-1	210	230	180	207	12.18	cps
Erbium	164-2	97	73	63	78	22.00	cps
Gadolinium	160-1	223	237	217	226	4.51	cps
Gadolinium	160-2	50	80	60	63	24.12	cps
Holmium	165-1	19887275	19579312	19888652	19785080	0.90	cps
Holmium	165-2	7292074	7281988	7233519	7269194	0.43	cps
Indium	115-1	15956288	15840123	15915509	15903973	0.37	cps
Indium	115-2	1653988	1654729	1641627	1650115	0.45	cps
Iron	54-2	843555	846027	846670	845417	0.19	cps
Iron	56-2	15869252	15860809	16182879	15970980	1.15	cps
Iron	57-2	391297	383280	388784	387787	1.06	cps
Krypton	83-1	323	350	367	347	6.31	cps
Lead	206-1	2264	2194	2420	2292	5.06	cps

Lab Sample ID: Q1200-12 Instrumnet Name: P8

Client Sample ID: ME2992 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Date & Time Act	quireu . 202	25-02-00 10.07.51	Dalari	ie name.	UIZAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1980	1863	1997	1947	3.73	cps
Lead	208-1	8978	8885	9231	9031	1.99	cps
Lithium	6-1	9139779	9104504	9386948	9210410	1.67	cps
Magnesium	24-2	45876704	45781758	46266458	45974973	0.56	cps
Manganese	55-2	104956	105577	106688	105740	0.83	cps
Molybdenum	94-1	8923	9246	9277	9149	2.14	cps
Molybdenum	95-1	13613	14471	13907	13997	3.11	cps
Molybdenum	96-1	14564	15042	14931	14846	1.68	cps
Molybdenum	97-1	8496	8883	8406	8595	2.95	cps
Molybdenum	98-1	21821	21694	21984	21833	0.67	cps
Neodymium	150-1	160	197	173	177	10.51	cps
Neodymium	150-2	37	27	37	33	17.32	cps
Nickel	60-2	1210	1237	1250	1232	1.65	cps
Phosphorus	31-2	130	117	150	132	12.69	cps
Potassium	39-2	694737	684508	694271	691172	0.84	cps
Rhodium	103-1	14855949	14290799	14564797	14570515	1.94	cps
Rhodium	103-2	5895575	5905622	5911082	5904093	0.13	cps
Scandium	45-1	12123660	11713229	11801704	11879531	1.82	cps
Scandium	45-2	232898	230869	232861	232209	0.50	cps
Selenium	82-1	93	80	117	97	19.20	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	10	7	23	13	66.12	cps
Silicon	28-1	139454648	139062935	140638268	139718617	0.59	cps
Silver	107-1	563	530	580	558	4.56	cps
Silver	109-1	210	360	300	290	26.04	cps
Sodium	23-2	26109885	25882405	26290528	26094273	0.78	cps
Strontium	86-1	70606011	71435264	71586731	71209335	0.74	cps
Strontium	88-1	602991044	617185817	626188551	615455137	1.90	cps
Sulfur	34-1	44983449	44464468	45310419	44919445	0.95	cps
Terbium	159-1	20633877	19941942	20438263	20338027	1.75	cps
Terbium	159-2	7058708	6856405	7047650	6987588	1.63	cps
Thallium	203-1	290	263	223	259	12.96	cps
Thallium	205-1	613	660	670	648	4.67	cps
Tin	118-1	4537	4167	4491	4399	4.58	cps
Titanium	47-1	3124	2767	3057	2983	6.36	cps
Uranium	238-1	43665	43932	45284	44294	1.96	cps

Lab Sample ID :Q1200-12Instrumnet Name :P8Client Sample ID :ME2992Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:07:31 DataFile Name: 072AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	177	160	167	168	5.00	cps
Ytterbium	172-1	133	137	167	146	12.61	cps
Ytterbium	172-2	53	63	70	62	13.48	cps
Ytterbium	176-1	1807	1887	2017	1903	5.57	cps
Ytterbium	176-2	277	337	320	311	9.96	cps
Yttrium	89-1	29037685	28578779	29199410	28938625	1.11	cps
Yttrium	89-2	2153973	2143739	2121190	2139634	0.78	cps
Zinc	66-2	1157	1200	1143	1167	2.54	cps
Zirconium	90-1	2357	2590	2464	2470	4.73	cps
Zirconium	91-1	543	457	600	533	13.54	cps

Lab Sample ID: Q1200-13 Instrumnet Name: P8

Client Sample ID: ME2994 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Date & Time Ac	quireu . 202	3-02-00 10.10.44	Dalari	ie name.	U/ SAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	397	387	390	391	1.30	cps
Antimony	121-1	280	250	210	247	14.24	cps
Arsenic	75-2	40	50	57	49	17.16	cps
Barium	135-1	63568	64640	64914	64374	1.10	cps
Barium	137-1	110551	113976	114721	113083	1.97	cps
Beryllium	9-1	460	442	426	443	3.81	cps
Bismuth	209-1	12115255	11883456	11966696	11988469	0.98	cps
Bismuth	209-2	5328856	5014794	5045169	5129606	3.38	cps
Bromine	81-1	123334	130436	135110	129627	4.57	cps
Cadmium	108-1	30	27	20	26	19.92	cps
Cadmium	106-1	8886	8783	8253	8641	3.94	cps
Cadmium	111-1	6216	6153	5789	6053	3.80	cps
Calcium	43-1	16879150	17030915	16921138	16943734	0.46	cps
Calcium	44-1	272777949	272243243	271240096	272087096	0.29	cps
Carbon	12-1	9453667	10246489	10874255	10191470	6.99	cps
Carbon	12-2	72708	73154	74715	73526	1.43	cps
Chlorine	35-1	3578181	3728729	3822270	3709727	3.32	cps
Chlorine	35-2	15665	15679	15722	15689	0.19	cps
Chromium	52-2	1887	1737	1763	1796	4.46	cps
Cobalt	59-2	210	317	320	282	22.17	cps
Copper	63-2	5708	5971	5808	5829	2.28	cps
Dysprosium	156-1	127	97	120	114	13.76	cps
Dysprosium	156-2	30	53	40	41	28.47	cps
Erbium	164-1	243	237	293	258	12.02	cps
Erbium	164-2	80	63	73	72	11.62	cps
Gadolinium	160-1	263	250	243	252	4.04	cps
Gadolinium	160-2	67	57	63	62	8.18	cps
Holmium	165-1	19911371	20045829	20098154	20018451	0.48	cps
Holmium	165-2	7536232	7166411	7321111	7341251	2.53	cps
Indium	115-1	16624180	16369518	16305538	16433079	1.03	cps
Indium	115-2	1708961	1586971	1658449	1651460	3.71	cps
Iron	54-2	103934	103488	104404	103942	0.44	cps
Iron	56-2	1992493	2010568	2023282	2008781	0.77	cps
Iron	57-2	48215	48753	47576	48181	1.22	cps
Krypton	83-1	290	270	287	282	3.80	cps
Lead	206-1	2460	2427	2444	2444	0.68	cps

Lab Sample ID: Q1200-13 Instrumnet Name: P8
Client Sample ID: ME2994 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Date & Time Act	quireu . 202	25-02-00 10.10.44	Dalari	ie ivallie .	U/ SAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2164	2127	2184	2158	1.33	cps
Lead	208-1	9948	9878	9892	9906	0.38	cps
Lithium	6-1	9628284	9531837	9392822	9517648	1.24	cps
Magnesium	24-2	21080655	20945144	20832662	20952820	0.59	cps
Manganese	55-2	135641	136482	136048	136057	0.31	cps
Molybdenum	94-1	2240	2454	2280	2325	4.88	cps
Molybdenum	95-1	2840	2787	2810	2813	0.95	cps
Molybdenum	96-1	3044	3107	3380	3177	5.63	cps
Molybdenum	97-1	1767	1680	1757	1735	2.73	cps
Molybdenum	98-1	4404	4407	4761	4524	4.53	cps
Neodymium	150-1	83	60	77	73	16.39	cps
Neodymium	150-2	27	10	10	16	61.87	cps
Nickel	60-2	1117	1240	1243	1200	6.02	cps
Phosphorus	31-2	363	370	357	363	1.84	cps
Potassium	39-2	509913	506186	509654	508584	0.41	cps
Rhodium	103-1	14907113	15117504	14845278	14956631	0.95	cps
Rhodium	103-2	6234132	5821223	5993258	6016204	3.45	cps
Scandium	45-1	12186789	11986036	12169371	12114065	0.92	cps
Scandium	45-2	239978	228634	232678	233763	2.46	cps
Selenium	82-1	137	250	137	174	37.51	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	0	7	10	6	91.64	cps
Silicon	28-1	82602847	82533129	83011359	82715778	0.31	cps
Silver	107-1	557	570	540	556	2.71	cps
Silver	109-1	223	247	210	227	8.19	cps
Sodium	23-2	15285588	14951350	14798661	15011866	1.66	cps
Strontium	86-1	81007784	84049240	83601427	82886150	1.98	cps
Strontium	88-1	690711990	709671696	722087403	707490363	2.23	cps
Sulfur	34-1	24176405	23887639	24160975	24075007	0.67	cps
Terbium	159-1	20950452	20535490	20669435	20718459	1.02	cps
Terbium	159-2	7289936	6762041	7018434	7023470	3.76	cps
Thallium	203-1	257	270	277	268	3.80	cps
Thallium	205-1	587	647	607	613	4.98	cps
Tin	118-1	7125	7582	7279	7329	3.17	cps
Titanium	47-1	1893	2047	1760	1900	7.55	cps
Uranium	238-1	7159	7109	7102	7123	0.44	cps

Lab Sample ID :Q1200-13Instrumnet Name :P8Client Sample ID :ME2994Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:10:44 DataFile Name: 073AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	180	150	213	181	17.49	cps
Ytterbium	172-1	150	187	187	174	12.14	cps
Ytterbium	172-2	87	90	83	87	3.85	cps
Ytterbium	176-1	1900	1910	1770	1860	4.20	cps
Ytterbium	176-2	280	307	340	309	9.73	cps
Yttrium	89-1	29585090	29300113	28728282	29204495	1.49	cps
Yttrium	89-2	2226445	2065947	2147747	2146713	3.74	cps
Zinc	66-2	1020	960	907	962	5.89	cps
Zirconium	90-1	1933	1967	1877	1926	2.36	cps
Zirconium	91-1	350	410	340	367	10.33	cps

Lab Sample ID: Q1200-14 Instrumnet Name: P8
Client Sample ID: ME2995 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Date a Time A	quircu . Zoz	0 02 00 10.10.00	Dataii	ic ivallic .	07 47 (I CLI .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	620	620	620	620	0.00	cps
Antimony	121-1	227	173	203	201	13.29	cps
Arsenic	75-2	523	587	630	580	9.25	cps
Barium	135-1	60146	60106	61928	60726	1.71	cps
Barium	137-1	105904	106368	108666	106979	1.38	cps
Beryllium	9-1	422	425	394	414	4.20	cps
Bismuth	209-1	11601505	11578657	11599081	11593081	0.11	cps
Bismuth	209-2	5044893	5102707	5077042	5074881	0.57	cps
Bromine	81-1	160142	196006	213152	189767	14.25	cps
Cadmium	108-1	33	37	27	32	15.80	cps
Cadmium	106-1	8296	8553	8506	8452	1.62	cps
Cadmium	111-1	5804	5975	5952	5910	1.57	cps
Calcium	43-1	24024865	24337981	24575805	24312884	1.14	cps
Calcium	44-1	386637448	391148368	393550407	390445408	0.90	cps
Carbon	12-1	11185850	11987946	12547663	11907153	5.75	cps
Carbon	12-2	83177	84296	84169	83881	0.73	cps
Chlorine	35-1	10454040	11979212	12370593	11601281	8.73	cps
Chlorine	35-2	52883	53940	53900	53574	1.12	cps
Chromium	52-2	1603	1510	1713	1609	6.33	cps
Cobalt	59-2	660	667	730	686	5.64	cps
Copper	63-2	5655	5464	5805	5641	3.02	cps
Dysprosium	156-1	140	113	97	117	18.73	cps
Dysprosium	156-2	37	43	37	39	9.89	cps
Erbium	164-1	180	210	167	186	11.96	cps
Erbium	164-2	53	80	90	74	25.46	cps
Gadolinium	160-1	157	243	250	217	24.03	cps
Gadolinium	160-2	80	77	77	78	2.47	cps
Holmium	165-1	20239297	19981952	20470728	20230659	1.21	cps
Holmium	165-2	7560688	7392652	7388514	7447285	1.32	cps
Indium	115-1	16130214	16256503	16081751	16156156	0.56	cps
Indium	115-2	1677659	1693780	1684591	1685343	0.48	cps
Iron	54-2	424006	424411	431534	426650	0.99	cps
Iron	56-2	8046606	8145991	8122571	8105056	0.64	cps
Iron	57-2	195998	196512	196379	196296	0.14	cps
Krypton	83-1	343	380	310	344	10.16	cps
Lead	206-1	2107	2150	2204	2154	2.25	cps

Lab Sample ID: Q1200-14 Instrumnet Name: P8
Client Sample ID: ME2995 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1753	1730	1660	1715	2.83	cps
Lead	208-1	8161	8188	8201	8183	0.25	cps
Lithium	6-1	9314269	9554572	9576295	9481712	1.53	cps
Magnesium	24-2	28700966	28619684	28279816	28533489	0.78	cps
Manganese	55-2	288332	290501	288506	289113	0.42	cps
Molybdenum	94-1	6261	6585	6181	6343	3.37	cps
Molybdenum	95-1	9276	9460	9690	9476	2.19	cps
Molybdenum	96-1	9934	9677	10571	10060	4.58	cps
Molybdenum	97-1	5785	5931	5998	5905	1.85	cps
Molybdenum	98-1	14341	14871	14818	14677	1.99	cps
Neodymium	150-1	153	140	113	136	15.02	cps
Neodymium	150-2	17	27	37	27	37.50	cps
Nickel	60-2	2044	1823	2034	1967	6.32	cps
Phosphorus	31-2	237	237	223	232	3.31	cps
Potassium	39-2	794685	797791	795951	796142	0.20	cps
Rhodium	103-1	14333708	14910866	14555048	14599874	1.99	cps
Rhodium	103-2	6063829	5991875	6023975	6026560	0.60	cps
Scandium	45-1	11823234	12053936	12091001	11989390	1.21	cps
Scandium	45-2	236326	235438	237881	236548	0.52	cps
Selenium	82-1	87	73	177	112	50.08	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	3	20	0	8	137.80	cps
Silicon	28-1	97164322	98383869	98771059	98106416	0.85	cps
Silver	107-1	547	463	623	544	14.70	cps
Silver	109-1	257	210	230	232	10.08	cps
Sodium	23-2	48989553	47938571	48319276	48415800	1.10	cps
Strontium	86-1	73876006	75670229	76250079	75265438	1.64	cps
Strontium	88-1	650338417	651986884	655922657	652749319	0.44	cps
Sulfur	34-1	33818589	34841997	34789839	34483475	1.67	cps
Terbium	159-1	20340421	20494837	20616053	20483770	0.67	cps
Terbium	159-2	7104822	7104859	7060424	7090035	0.36	cps
Thallium	203-1	247	260	277	261	5.76	cps
Thallium	205-1	597	640	557	598	6.97	cps
Tin	118-1	4724	5184	4914	4941	4.68	cps
Titanium	47-1	2137	2150	2237	2175	2.50	cps
Uranium	238-1	9650	9997	9967	9872	1.95	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1200-14Instrumnet Name :P8Client Sample ID :ME2995Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:13:58 DataFile Name: 074AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	253	250	313	272	13.09	cps	_
Ytterbium	172-1	140	147	123	137	8.79	cps	
Ytterbium	172-2	57	40	50	49	17.16	cps	
Ytterbium	176-1	1880	1994	2000	1958	3.45	cps	
Ytterbium	176-2	310	290	347	316	9.11	cps	
Yttrium	89-1	28916550	29350061	29245642	29170751	0.78	cps	
Yttrium	89-2	2200716	2188531	2171219	2186822	0.68	cps	
Zinc	66-2	343	340	353	346	2.01	cps	
Zirconium	90-1	2790	2810	2714	2771	1.84	cps	
Zirconium	91-1	583	617	563	588	4.58	cps	

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Lab Sample ID :CCV003Instrumnet Name :P8Client Sample ID :CCV003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3866840	3839938	3811867	3839548	0.72	cps
Antimony	121-1	8599857	8561651	8509442	8556983	0.53	cps
Arsenic	75-2	180507	180047	181651	180735	0.46	cps
Barium	135-1	10247205	10364931	10341698	10317944	0.60	cps
Barium	137-1	17825844	18028054	17828047	17893982	0.65	cps
Beryllium	9-1	3204026	3132120	3179670	3171939	1.15	cps
Bismuth	209-1	11256602	11125359	11346154	11242705	0.99	cps
Bismuth	209-2	4832286	4924220	4897235	4884580	0.97	cps
Bromine	81-1	49293	46253	43006	46184	6.81	cps
Cadmium	108-1	163810	165477	165764	165017	0.64	cps
Cadmium	106-1	242091	245226	243561	243626	0.64	cps
Cadmium	111-1	2022986	2070595	2107513	2067031	2.05	cps
Calcium	43-1	14387784	14506459	14370337	14421527	0.51	cps
Calcium	44-1	233053303	233582030	234332843	233656059	0.28	cps
Carbon	12-1	7415317	7453227	7381544	7416696	0.48	cps
Carbon	12-2	53657	53038	52744	53147	0.88	cps
Chlorine	35-1	1369484	1306937	1271035	1315819	3.79	cps
Chlorine	35-2	4714	4561	4321	4532	4.38	cps
Chromium	52-2	2058682	2099141	2098608	2085477	1.11	cps
Cobalt	59-2	3778658	3815775	3838653	3811029	0.79	cps
Copper	63-2	27771220	27507423	28315614	27864752	1.48	cps
Dysprosium	156-1	470	440	503	471	6.73	cps
Dysprosium	156-2	147	90	120	119	23.85	cps
Erbium	164-1	447	507	437	463	8.17	cps
Erbium	164-2	137	180	137	151	16.55	cps
Gadolinium	160-1	393	463	403	420	9.02	cps
Gadolinium	160-2	173	150	170	164	7.68	cps
Holmium	165-1	19713788	19928929	19924209	19855642	0.62	cps
Holmium	165-2	7400188	7187266	7166079	7251178	1.79	cps
Indium	115-1	15034563	15309512	15483666	15275914	1.48	cps
Indium	115-2	1576257	1584558	1619147	1593321	1.43	cps
Iron	54-2	19847032	20305835	20228752	20127206	1.22	cps
Iron	56-2	362144555	362281848	374463741	366296715	1.93	cps
Iron	57-2	9200416	9090730	9368341	9219829	1.52	cps
Krypton	83-1	297	277	300	291	4.34	cps
Lead	206-1	32259020	32793116	32548760	32533632	0.82	cps

Lab Sample ID : CCV003 Instrumnet Name : P8

Client Sample ID : CCV003 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27274639	27971902	27450890	27565810	1.32	cps
Lead	208-1	127561816	128482676	128419596	128154696	0.40	cps
Lithium	6-1	9182515	8691161	9021579	8965085	2.79	cps
Magnesium	24-2	66686411	67632842	67725426	67348226	0.85	cps
Manganese	55-2	8117797	8266432	8350592	8244940	1.43	cps
Molybdenum	94-1	31261647	31271076	31677244	31403322	0.76	cps
Molybdenum	95-1	44557108	43891089	44961633	44469943	1.22	cps
Molybdenum	96-1	48940056	48286618	48564941	48597205	0.67	cps
Molybdenum	97-1	27573120	27278392	27630800	27494104	0.69	cps
Molybdenum	98-1	71412134	71203232	71907409	71507592	0.51	cps
Neodymium	150-1	790	833	843	822	3.45	cps
Neodymium	150-2	80	67	90	79	14.84	cps
Nickel	60-2	964326	962638	985520	970828	1.31	cps
Phosphorus	31-2	37281	36656	37552	37163	1.24	cps
Potassium	39-2	19329416	19628011	19711453	19556293	1.03	cps
Rhodium	103-1	14015950	13970277	13977854	13988027	0.17	cps
Rhodium	103-2	5758948	5730191	5674987	5721375	0.75	cps
Scandium	45-1	11582426	11460268	11527578	11523424	0.53	cps
Scandium	45-2	230971	232161	232190	231774	0.30	cps
Selenium	82-1	125176	126739	124882	125599	0.79	cps
Selenium	77-2	2220	2374	2157	2250	4.95	cps
Selenium	78-2	7736	7479	7906	7707	2.79	cps
Silicon	28-1	7711792	7745811	7831552	7763052	0.79	cps
Silver	107-1	10427449	10387767	10295189	10370135	0.65	cps
Silver	109-1	9720970	9743021	9732005	9731999	0.11	cps
Sodium	23-2	131912235	137950318	137258535	135707029	2.44	cps
Strontium	86-1	2900570	2917227	2906100	2907965	0.29	cps
Strontium	88-1	24766373	25229655	24941694	24979241	0.94	cps
Sulfur	34-1	1665921	1687889	1661256	1671689	0.85	cps
Terbium	159-1	20109921	20361201	20258897	20243340	0.62	cps
Terbium	159-2	6911917	6881204	7003342	6932155	0.92	cps
Thallium	203-1	7946281	8077551	8075714	8033182	0.94	cps
Thallium	205-1	18984031	18874837	19136822	18998563	0.69	cps
Tin	118-1	6848028	6918715	6825808	6864184	0.71	cps
Titanium	47-1	14289458	14149886	14153837	14197727	0.56	cps
Uranium	238-1	26341097	25832433	26258488	26144006	1.04	cps

67.

Lab Sample ID :CCV003Instrumnet Name :P8Client Sample ID :CCV003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:17:15 DataFile Name: 075CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1623814	1639150	1641380	1634781	0.59	cps
Ytterbium	172-1	500	527	483	503	4.34	cps
Ytterbium	172-2	253	227	230	237	6.14	cps
Ytterbium	176-1	40392	40799	40572	40588	0.50	cps
Ytterbium	176-2	14431	14571	14805	14603	1.29	cps
Yttrium	89-1	28371661	28505194	28467234	28448030	0.24	cps
Yttrium	89-2	2112274	2092549	2173764	2126196	1.99	cps
Zinc	66-2	3027343	3016908	3072345	3038865	0.97	cps
Zirconium	90-1	15620001	15728693	15708817	15685837	0.37	cps
Zirconium	91-1	3450699	3494986	3508397	3484694	0.87	cps

Lab Sample ID :CCB003Instrumnet Name :P8Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Date & Time Ac	quireu . 202	3-02-00 10.19.39	Dalar	ile Name.	070CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	190	220	163	191	14.83	cps
Antimony	121-1	2910	2330	2180	2474	15.59	cps
Arsenic	75-2	23	7	13	14	58.06	cps
Barium	135-1	583	470	447	500	14.62	cps
Barium	137-1	1137	810	777	908	21.91	cps
Beryllium	9-1	1527	1424	1322	1424	7.20	cps
Bismuth	209-1	13071260	12963999	12997889	13011049	0.42	cps
Bismuth	209-2	5570537	5646091	5596871	5604499	0.68	cps
Bromine	81-1	23276	22558	20959	22264	5.33	cps
Cadmium	108-1	57	33	30	40	36.33	cps
Cadmium	106-1	8860	8516	8656	8677	1.99	cps
Cadmium	111-1	6369	6081	6188	6213	2.34	cps
Calcium	43-1	1687	1233	1177	1366	20.47	cps
Calcium	44-1	52616	47749	45549	48638	7.44	cps
Carbon	12-1	5551628	5513271	5512024	5525641	0.41	cps
Carbon	12-2	34247	34607	33395	34083	1.83	cps
Chlorine	35-1	835001	802523	783538	807020	3.22	cps
Chlorine	35-2	2934	3084	2870	2963	3.70	cps
Chromium	52-2	1603	1763	1737	1701	5.04	cps
Cobalt	59-2	243	237	253	244	3.43	cps
Copper	63-2	5921	5668	5398	5662	4.62	cps
Dysprosium	156-1	17	7	27	17	59.99	cps
Dysprosium	156-2	13	0	0	4	173.21	cps
Erbium	164-1	90	73	97	87	13.87	cps
Erbium	164-2	40	43	40	41	4.68	cps
Gadolinium	160-1	93	83	150	109	33.02	cps
Gadolinium	160-2	27	30	33	30	11.10	cps
Holmium	165-1	21092273	20638318	20876527	20869040	1.09	cps
Holmium	165-2	7485989	7516689	7545856	7516178	0.40	cps
Indium	115-1	17443802	17445517	17192692	17360670	0.84	cps
Indium	115-2	1782969	1783851	1744217	1770346	1.28	cps
Iron	54-2	1290	1350	1253	1298	3.76	cps
Iron	56-2	20224	20438	20305	20322	0.53	cps
Iron	57-2	517	430	440	462	10.26	cps
Krypton	83-1	273	343	283	300	12.62	cps
Lead	206-1	5745	4951	4684	5127	10.76	cps

Lab Sample ID :CCB003Instrumnet Name :P8Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Date & Time Act	quireu . 202	25-02-00 10.19.59	Dalar	ile ivallie .	070CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4824	4414	3901	4380	10.57	cps
Lead	208-1	22555	19596	18392	20181	10.61	cps
Lithium	6-1	10052540	9999569	9853094	9968401	1.04	cps
Magnesium	24-2	3944	3834	4111	3963	3.52	cps
Manganese	55-2	463	490	487	480	3.03	cps
Molybdenum	94-1	2900	2284	2140	2441	16.54	cps
Molybdenum	95-1	3467	2424	2174	2688	25.53	cps
Molybdenum	96-1	3837	2940	2617	3132	20.19	cps
Molybdenum	97-1	2170	1720	1547	1812	17.76	cps
Molybdenum	98-1	5234	4254	3397	4295	21.40	cps
Neodymium	150-1	13	3	10	9	57.30	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	970	1027	1073	1023	5.06	cps
Phosphorus	31-2	63	63	80	69	13.97	cps
Potassium	39-2	18215	18619	18061	18298	1.57	cps
Rhodium	103-1	16190313	15757209	16324618	16090713	1.84	cps
Rhodium	103-2	6570028	6595127	6613907	6593021	0.33	cps
Scandium	45-1	12444255	12082356	12336104	12287572	1.51	cps
Scandium	45-2	239181	241988	240093	240421	0.60	cps
Selenium	82-1	67	-13	-10	14	313.27	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	0	13	3	6	124.93	cps
Silicon	28-1	737319	724841	717494	726551	1.38	cps
Silver	107-1	1984	1693	1420	1699	16.58	cps
Silver	109-1	1703	1390	1337	1477	13.42	cps
Sodium	23-2	86450	84563	84426	85146	1.33	cps
Strontium	86-1	1110	950	1033	1031	7.76	cps
Strontium	88-1	6625	4911	4718	5418	19.38	cps
Sulfur	34-1	831239	838077	839174	836163	0.51	cps
Terbium	159-1	21110326	21120716	21320952	21183998	0.56	cps
Terbium	159-2	7296067	7333641	7359299	7329669	0.43	cps
Thallium	203-1	1317	1030	970	1106	16.76	cps
Thallium	205-1	2917	2554	2307	2593	11.84	cps
Tin	118-1	3404	3314	3254	3324	2.27	cps
Titanium	47-1	1010	817	700	842	18.59	cps
Uranium	238-1	1500	1157	917	1191	24.62	cps

Lab Sample ID :CCB003Instrumnet Name :P8Client Sample ID :CCB003Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:19:59 DataFile Name: 076CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	57	67	60	61	8.33	cps
Ytterbium	172-1	120	133	90	114	19.40	cps
Ytterbium	172-2	60	40	37	46	27.70	cps
Ytterbium	176-1	1957	1833	1970	1920	3.92	cps
Ytterbium	176-2	380	350	307	346	10.67	cps
Yttrium	89-1	30671960	30230652	30630727	30511113	0.80	cps
Yttrium	89-2	2244046	2236655	2210887	2230530	0.78	cps
Zinc	66-2	373	303	237	304	22.45	cps
Zirconium	90-1	2590	2300	1937	2276	14.39	cps
Zirconium	91-1	547	390	427	454	18.03	cps

Lab Sample ID: Q1200-15 Instrumnet Name: P8

Client Sample ID: ME2999 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	337	350	307	331	6.70	cps
Antimony	121-1	1267	1120	1263	1217	6.88	cps
Arsenic	75-2	100	97	90	96	5.33	cps
Barium	135-1	132975	138830	137537	136447	2.25	cps
Barium	137-1	235938	238205	238769	237637	0.63	cps
Beryllium	9-1	894	852	782	843	6.67	cps
Bismuth	209-1	11456738	11526239	12016847	11666608	2.62	cps
Bismuth	209-2	5162846	5127405	4971035	5087095	2.01	cps
Bromine	81-1	412088	523659	594553	510100	18.03	cps
Cadmium	108-1	63	57	63	61	6.29	cps
Cadmium	106-1	8356	8229	8426	8337	1.20	cps
Cadmium	111-1	5858	5807	5954	5873	1.27	cps
Calcium	43-1	17831972	17843691	18067046	17914236	0.74	cps
Calcium	44-1	289716162	293032256	294117362	292288593	0.78	cps
Carbon	12-1	8678256	9627289	10253857	9519800	8.33	cps
Carbon	12-2	69259	72106	70766	70710	2.01	cps
Chlorine	35-1	8419317	9391608	10014026	9274983	8.67	cps
Chlorine	35-2	42489	42807	42713	42669	0.38	cps
Chromium	52-2	1727	1707	1700	1711	0.81	cps
Cobalt	59-2	13613	13440	13330	13461	1.06	cps
Copper	63-2	5191	5238	5221	5217	0.45	cps
Dysprosium	156-1	37	67	40	48	34.42	cps
Dysprosium	156-2	20	17	30	22	31.22	cps
Erbium	164-1	117	180	140	146	22.00	cps
Erbium	164-2	47	43	23	38	33.41	cps
Gadolinium	160-1	223	137	180	180	24.07	cps
Gadolinium	160-2	33	23	50	36	37.90	cps
Holmium	165-1	19367055	19551414	20345931	19754800	2.63	cps
Holmium	165-2	7288176	7521103	7118866	7309382	2.76	cps
Indium	115-1	15597630	16006404	16278247	15960760	2.15	cps
Indium	115-2	1658956	1711390	1634188	1668178	2.36	cps
Iron	54-2	136044	134553	137387	135994	1.04	cps
Iron	56-2	2554335	2599328	2595345	2583003	0.96	cps
Iron	57-2	62617	62228	64060	62968	1.53	cps
Krypton	83-1	273	297	253	274	7.90	cps
Lead	206-1	3364	3270	3227	3287	2.13	cps

Lab Sample ID :Q1200-15Instrumnet Name :P8Client Sample ID :ME2999Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Lead         207-1         3124         2720         2814         2886         7.32         cps           Lead         208-1         13593         12532         12683         12936         4.44         cps           Lithium         6-1         9324754         9367479         952668         9405300         1.11         cps           Magnesium         24-2         20588823         21370641         206825794         20881753         2.11         cps           Molybdenum         94-1         27454         26983         26749         27062         1.33         cps           Molybdenum         95-1         43307         44049         44956         44104         1.87         cps           Molybdenum         96-1         47049         47628         48344         47674         0.36         cps           Molybdenum         96-1         47049         47628         48344         47674         0.80         cps           Molybdenum         97-1         27494         27918         27671         0.80         cps           Molybdenum         95-1         4933         70049         71647         70396         1.59         cps           Molybd	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lithium         6-1         9324754         9367479         9523668         9405300         1.11         cps           Magnesium         24-2         20588823         21370641         20625794         20861753         2.11         cps           Manganese         55-2         490949         491850         493973         492257         0.32         cps           Molybdenum         94-1         27454         28983         26749         27062         1.33         cps           Molybdenum         95-1         43307         44049         44956         44104         1.87         cps           Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         98-1         68493         70049         71647         70396         1.59         cps           Neodymlum         150-1         73         57         73         68         14.19         cps           Neodymlum         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         420         cps <td< td=""><td>Lead</td><td>207-1</td><td>3124</td><td>2720</td><td>2814</td><td>2886</td><td>7.32</td><td>cps</td></td<>	Lead	207-1	3124	2720	2814	2886	7.32	cps
Magnesium         24-2         20588823         21370641         20625794         20861763         2.11         cps           Manganese         65-2         490949         491850         493973         492257         0.32         cps           Molybdenum         94-1         27454         26983         26749         27062         1.33         cps           Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         97-1         27494         27918         27601         27671         0.80         cps           Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymlum         150-1         73         57         73         68         14.19         cps           Neodymlum         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Phosphoru	Lead	208-1	13593	12532	12683	12936	4.44	cps
Marganese         55-2         49049         491850         493973         492257         0.32         cps           Molybdenum         94-1         27454         26983         26749         27062         1.33         cps           Molybdenum         95-1         43307         44049         44956         44104         1.87         cps           Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         99-1         69493         70049         71647         70396         1.59         cps           Neodymium         150-1         73         57         73         68         14.19         cps           Neodymium         150-2         3         7         10         7         50.03         cps           Phosphorus         31-2 <t< td=""><td>Lithium</td><td>6-1</td><td>9324754</td><td>9367479</td><td>9523668</td><td>9405300</td><td>1.11</td><td>cps</td></t<>	Lithium	6-1	9324754	9367479	9523668	9405300	1.11	cps
Molybdenum         94-1         27454         26983         26749         27062         1.33         cps           Molybdenum         95-1         43307         44049         44956         44104         1.87         cps           Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymlum         150-1         73         57         73         68         14.19         cps           Neodymlum         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Phosphorus         31-2         233         150         103         126         18.65         cps           Phosphorus         31-2	Magnesium	24-2	20588823	21370641	20625794	20861753	2.11	cps
Molybdenum         95-1         43307         44049         44956         44104         1.87         cps           Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         97-1         27494         27918         27601         27671         0.80         cps           Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymium         150-1         73         57         73         68         14.19         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582900         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5866211         5975499         1.93         cps	Manganese	55-2	490949	491850	493973	492257	0.32	cps
Molybdenum         96-1         47049         47628         48344         47674         1.36         cps           Molybdenum         97-1         27494         27918         27601         27671         0.80         cps           Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymium         150-1         73         57         73         68         14.19         cps           Neodymium         150-2         33         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps <td< td=""><td>Molybdenum</td><td>94-1</td><td>27454</td><td>26983</td><td>26749</td><td>27062</td><td>1.33</td><td>cps</td></td<>	Molybdenum	94-1	27454	26983	26749	27062	1.33	cps
Molybdenum         97-1         27494         27918         27601         27671         0.80         cps           Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymium         150-1         73         57         73         68         14.19         cps           Neodymium         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         153042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scaleinium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Seleni	Molybdenum	95-1	43307	44049	44956	44104	1.87	cps
Molybdenum         98-1         69493         70049         71647         70396         1.59         cps           Neodymium         150-1         73         57         73         68         14.19         cps           Neodymium         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         53656         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Scandium         45-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium	Molybdenum	96-1	47049	47628	48344	47674	1.36	cps
Neodymium         150-1         73         57         73         68         14.19         cps           Neodymium         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2 <td>Molybdenum</td> <td>97-1</td> <td>27494</td> <td>27918</td> <td>27601</td> <td>27671</td> <td>0.80</td> <td>cps</td>	Molybdenum	97-1	27494	27918	27601	27671	0.80	cps
Neodymium         150-2         3         7         10         7         50.03         cps           Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         77-2         0         0         0         0         0.00         cps           Silicon	Molybdenum	98-1	69493	70049	71647	70396	1.59	cps
Nickel         60-2         4981         4914         4601         4832         4.20         cps           Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps <t< td=""><td>Neodymium</td><td>150-1</td><td>73</td><td>57</td><td>73</td><td>68</td><td>14.19</td><td>cps</td></t<>	Neodymium	150-1	73	57	73	68	14.19	cps
Phosphorus         31-2         123         150         103         126         18.65         cps           Potassium         39-2         531042         529908         535856         53269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Siliver         107-1         863         737         850         817         8.52         cps	Neodymium	150-2	3	7	10	7	50.03	cps
Potassium         39-2         531042         529908         535856         532269         0.59         cps           Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Sillicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Sillver         107-1         863         737         850         817         8.52         cps	Nickel	60-2	4981	4914	4601	4832	4.20	cps
Rhodium         103-1         14484297         14582090         15157232         14741206         2.47         cps           Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Siliver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sod	Phosphorus	31-2	123	150	103	126	18.65	cps
Rhodium         103-2         6085918         5984367         5856211         5975499         1.93         cps           Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Str	Potassium	39-2	531042	529908	535856	532269	0.59	cps
Scandium         45-1         11723376         11676641         12164866         11854961         2.27         cps           Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Siliver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps	Rhodium	103-1	14484297	14582090	15157232	14741206	2.47	cps
Scandium         45-2         238111         239784         227127         235007         2.93         cps           Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Sulfur         34-1         19496263         1950008         19910929         19635760         1.21         cps           Terb	Rhodium	103-2	6085918	5984367	5856211	5975499	1.93	cps
Selenium         82-1         237         197         400         278         38.78         cps           Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Sulfur         34-1         19496263         1950008         19910929         19635760         1.21         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps	Scandium	45-1	11723376	11676641	12164866	11854961	2.27	cps
Selenium         77-2         0         0         0         0         0.00         cps           Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Siliver         107-1         863         737         850         817         8.52         cps           Siliver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps	Scandium	45-2	238111	239784	227127	235007	2.93	cps
Selenium         78-2         17         10         17         14         26.66         cps           Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Thallium         203-1         967         980         960         969         1.05         cp	Selenium	82-1	237	197	400	278	38.78	cps
Silicon         28-1         103461605         105891772         103899895         104417757         1.24         cps           Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Thallium         203-1         967         980         960         969         1.05         cps           Thallium         205-1         2110         2220         2144         2158         2.61	Selenium	77-2	0	0	0	0	0.00	cps
Silver         107-1         863         737         850         817         8.52         cps           Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps <td>Selenium</td> <td>78-2</td> <td>17</td> <td>10</td> <td>17</td> <td>14</td> <td>26.66</td> <td>cps</td>	Selenium	78-2	17	10	17	14	26.66	cps
Silver         109-1         607         530         533         557         7.78         cps           Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Thallium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps           Titanium         47-1         2050         1943         2050         2015         3.06	Silicon	28-1	103461605	105891772	103899895	104417757	1.24	cps
Sodium         23-2         31539367         31579212         31598235         31572271         0.10         cps           Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps           Titanium         47-1         2050         1943         2050         2015         3.06         cps	Silver	107-1	863	737	850	817	8.52	cps
Strontium         86-1         63285314         64068482         63570972         63641590         0.62         cps           Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Thallium         205-1         2110         2220         2144         2158         2.61         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps           Titanium         47-1         2050         1943         2050         2015         3.06         cps	Silver	109-1	607	530	533	557	7.78	cps
Strontium         88-1         542576819         555665565         557122765         551788383         1.45         cps           Sulfur         34-1         19496263         19500088         19910929         19635760         1.21         cps           Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Thallium         205-1         2110         2220         2144         2158         2.61         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps           Titanium         47-1         2050         1943         2050         2015         3.06         cps	Sodium	23-2	31539367	31579212	31598235	31572271	0.10	cps
Sulfur       34-1       19496263       19500088       19910929       19635760       1.21       cps         Terbium       159-1       20268544       20405680       21204487       20626237       2.45       cps         Terbium       159-2       7173036       7145553       6873923       7064171       2.34       cps         Thallium       203-1       967       980       960       969       1.05       cps         Thallium       205-1       2110       2220       2144       2158       2.61       cps         Tin       118-1       3931       3967       3794       3897       2.34       cps         Titanium       47-1       2050       1943       2050       2015       3.06       cps	Strontium	86-1	63285314	64068482	63570972	63641590	0.62	cps
Terbium         159-1         20268544         20405680         21204487         20626237         2.45         cps           Terbium         159-2         7173036         7145553         6873923         7064171         2.34         cps           Thallium         203-1         967         980         960         969         1.05         cps           Thallium         205-1         2110         2220         2144         2158         2.61         cps           Tin         118-1         3931         3967         3794         3897         2.34         cps           Titanium         47-1         2050         1943         2050         2015         3.06         cps	Strontium	88-1	542576819	555665565	557122765	551788383	1.45	cps
Terbium       159-2       7173036       7145553       6873923       7064171       2.34       cps         Thallium       203-1       967       980       960       969       1.05       cps         Thallium       205-1       2110       2220       2144       2158       2.61       cps         Tin       118-1       3931       3967       3794       3897       2.34       cps         Titanium       47-1       2050       1943       2050       2015       3.06       cps	Sulfur	34-1	19496263	19500088	19910929	19635760	1.21	cps
Thallium       203-1       967       980       960       969       1.05       cps         Thallium       205-1       2110       2220       2144       2158       2.61       cps         Tin       118-1       3931       3967       3794       3897       2.34       cps         Titanium       47-1       2050       1943       2050       2015       3.06       cps	Terbium	159-1	20268544	20405680	21204487	20626237	2.45	cps
Thallium       205-1       2110       2220       2144       2158       2.61       cps         Tin       118-1       3931       3967       3794       3897       2.34       cps         Titanium       47-1       2050       1943       2050       2015       3.06       cps	Terbium	159-2	7173036	7145553	6873923	7064171	2.34	cps
Tin     118-1     3931     3967     3794     3897     2.34     cps       Titanium     47-1     2050     1943     2050     2015     3.06     cps	Thallium	203-1	967	980	960	969	1.05	cps
Titanium 47-1 2050 1943 2050 2015 3.06 cps	Thallium	205-1	2110	2220	2144	2158	2.61	cps
	Tin	118-1	3931	3967	3794	3897	2.34	cps
Uranium 238-1 152249 156038 157205 155164 1.67 cps	Titanium	47-1	2050	1943	2050	2015	3.06	cps
	Uranium	238-1	152249	156038	157205	155164	1.67	cps

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Lab Sample ID: Q1200-15 Instrumnet Name: P8

Client Sample ID: ME2999 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:23:19 DataFile Name: 077AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	110	113	100	108	6.44	cps
Ytterbium	172-1	147	190	160	166	13.41	cps
Ytterbium	172-2	60	53	67	60	11.12	cps
Ytterbium	176-1	1917	1930	1970	1939	1.43	cps
Ytterbium	176-2	283	287	310	293	4.95	cps
Yttrium	89-1	28088775	28979790	29248173	28772246	2.11	cps
Yttrium	89-2	2178127	2229531	2077033	2161564	3.59	cps
Zinc	66-2	697	760	770	742	5.36	cps
Zirconium	90-1	4367	3921	3817	4035	7.25	cps
Zirconium	91-1	910	783	860	851	7.50	cps

<sub>3</sub> 679

Lab Sample ID :Q1200-16Instrumnet Name :P8Client Sample ID :ME2997Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Date a Time Adquire	.a. 2020 c	2 00 10.20.00	Datai iic i	vario .	OTOTALLI .d		
Parameter	Mass	CPS1 (	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	747	770	743	753	1.93	cps
Antimony	121-1	983	957	1063	1001	5.55	cps
Arsenic	75-2	587	553	547	562	3.81	cps
Barium	135-1	283015	285335	291344	286564	1.50	cps
Barium	137-1	495071	503649	501945	500221	0.91	cps
Beryllium	9-1	722	810	689	740	8.45	cps
Bismuth	209-1	12042725	12077612	12111776	12077371	0.29	cps
Bismuth	209-2	5479943	5339460	5202348	5340584	2.60	cps
Bromine	81-1	137426	127009	116401	126945	8.28	cps
Cadmium	108-1	83	97	77	86	11.90	cps
Cadmium	106-1	8816	8679	8503	8666	1.81	cps
Cadmium	111-1	6210	6075	5965	6083	2.02	cps
Calcium	43-1	11561919	11679811	11750854	11664195	0.82	cps
Calcium	44-1	186085597	187613664	190320604	188006622	1.14	cps
Carbon	12-1	8977537	9838284	10140653	9652158	6.25	cps
Carbon	12-2	69758	70705	70990	70484	0.92	cps
Chlorine	35-1	2504718	2581131	2553689	2546513	1.52	cps
Chlorine	35-2	10247	9823	10084	10051	2.13	cps
Chromium	52-2	2334	2317	2357	2336	0.86	cps
Cobalt	59-2	10607	10497	10320	10475	1.38	cps
Copper	63-2	5241	5341	5428	5337	1.75	cps
Dysprosium	156-1	177	190	177	181	4.25	cps
Dysprosium	156-2	43	53	60	52	16.07	cps
Erbium	164-1	237	210	283	243	15.26	cps
Erbium	164-2	63	73	57	64	13.01	cps
Gadolinium	160-1	227	240	307	258	16.63	cps
Gadolinium	160-2	80	80	100	87	13.32	cps
Holmium	165-1	20520188	20567701	20664233	20584041	0.36	cps
Holmium	165-2	7693443	7625985	7589374	7636268	0.69	cps
Indium	115-1	16593653	16616115	16682409	16630726	0.28	cps
Indium	115-2	1785533	1734429	1713159	1744374	2.13	cps
Iron	54-2	100712	100513	100144	100456	0.29	cps
Iron	56-2	1889787	1931863	1950222	1923957	1.61	cps
Iron	57-2	46104	46322	45924	46117	0.43	cps
Krypton	83-1	280	327	277	294	9.49	cps
Lead	206-1	2930	2887	2914	2910	0.75	cps
	Aluminium Antimony Arsenic Barium Barium Beryllium Bismuth Bismuth Bromine Cadmium Cadmium Cadmium Calcium Calcium Carbon Carbon Chlorine Chlorine Chlorine Chromium Cobalt Copper Dysprosium Dysprosium Erbium Erbium Gadolinium Holmium Holmium Indium Indium Iron Iron Iron Krypton	Aluminium 27-2 Antimony 121-1 Arsenic 75-2 Barium 135-1 Barium 137-1 Beryllium 9-1 Bismuth 209-1 Bismuth 209-2 Bromine 81-1 Cadmium 106-1 Cadmium 106-1 Cadmium 43-1 Calcium 44-1 Carbon 12-1 Carbon 12-2 Chlorine 35-1 Chlorine 35-2 Chromium 52-2 Chromium 52-2 Copper 63-2 Dysprosium 156-1 Dysprosium 156-1 Erbium 164-1 Erbium 164-2 Gadolinium 160-1 Gadolinium 165-2 Indium 115-1 Indium 115-2 Iron 56-2 Iron 56-2 Iron 57-2 Krypton 83-1	Aluminium 27-2 747 Antimony 121-1 983 Arsenic 75-2 587 Barium 135-1 283015 Barium 137-1 495071 Beryllium 9-1 722 Bismuth 209-1 12042725 Bismuth 209-2 5479943 Bromine 81-1 137426 Cadmium 108-1 83 Cadmium 106-1 8816 Cadmium 111-1 6210 Calcium 43-1 11561919 Calcium 44-1 186085597 Carbon 12-1 8977537 Carbon 12-1 8977537 Chlorine 35-1 2504718 Chlorine 35-2 10247 Chromium 52-2 2334 Cobalt 59-2 10607 Copper 63-2 5241 Dysprosium 156-1 177 Dysprosium 156-2 43 Erbium 164-1 237 Erbium 164-2 63 Gadolinium 160-2 80 Holmium 165-1 20520188 Holmium 165-2 1785533 Iron 54-2 100712 Iron 56-2 1889787 Iron 57-2 46104 Krypton 83-1 280	Aluminium       27-2       747       770         Antimony       121-1       983       957         Arsenic       75-2       587       553         Barium       135-1       283015       285335         Barium       137-1       495071       503649         Beryllium       9-1       722       810         Bismuth       209-1       12042725       12077612         Bismuth       209-2       5479943       5339460         Bromine       81-1       137426       127009         Cadmium       108-1       83       97         Cadmium       106-1       8816       8679         Cadmium       111-1       6210       6075         Calcium       43-1       11561919       11679811         Calcium       44-1       186085597       187613664         Carbon       12-1       8977537       9838284         Carbon       12-2       69758       70705         Chlorine       35-1       2504718       2581131         Chlorine       35-2       10247       9823         Chromium       52-2       2334       2317         Cobalt       <	Aluminium         27-2         747         770         743           Antimony         121-1         983         957         1063           Arsenic         75-2         587         553         547           Barium         135-1         283015         285335         291344           Barium         137-1         495071         503649         501945           Beryllium         9-1         722         810         689           Bismuth         209-1         12042725         12077612         12111776           Bismuth         209-2         5479943         5339460         5202348           Bromine         81-1         137426         127009         116401           Cadmium         108-1         83         97         77           Cadmium         106-1         8816         8679         8503           Cadmium         111-1         6210         6075         5965           Calcium         43-1         11561919         11679811         11750854           Calcium         44-1         186085597         187613664         190320604           Carbon         12-1         8977537         9838284         10140653 </td <td>Aluminium         27-2         747         770         743         753           Antimony         121-1         983         957         1063         1001           Arsenic         75-2         587         553         547         562           Barium         135-1         283015         285335         291344         286564           Barium         137-1         495071         503649         501945         500221           Beryllium         9-1         722         810         689         740           Bismuth         209-1         12042725         12077612         12111776         12077371           Bismuth         209-2         5479943         533960         5202348         5340584           Bromine         81-1         137426         127009         116401         126945           Cadmium         106-1         8816         8679         8503         8666           Cadmium         111-1         6210         6075         5965         6083           Calcium         43-1         11561919         11679811         11750854         11664195           Calcium         44-1         18608597         187613664         190320604<td>Aluminium         27-2         747         770         743         753         1,93           Antimory         121-1         983         957         1063         1001         5.55           Arsenic         75-2         587         553         547         562         3.81           Barium         135-1         283015         285335         291344         286564         1.50           Berulium         9-1         495071         50849         501945         500221         0.91           Beryllium         9-1         722         810         689         740         8.45           Bismuth         209-1         12042725         12077612         12111776         12077371         0.29           Bismuth         209-2         5479943         5339460         5202348         5340664         2.60           Bromine         81-1         137426         127009         116401         126945         8.28           Cadmium         108-1         8816         8679         8503         8666         1.81           Cadmium         111-1         6210         6075         5965         6083         2.02           Calcium         111-1</td></td>	Aluminium         27-2         747         770         743         753           Antimony         121-1         983         957         1063         1001           Arsenic         75-2         587         553         547         562           Barium         135-1         283015         285335         291344         286564           Barium         137-1         495071         503649         501945         500221           Beryllium         9-1         722         810         689         740           Bismuth         209-1         12042725         12077612         12111776         12077371           Bismuth         209-2         5479943         533960         5202348         5340584           Bromine         81-1         137426         127009         116401         126945           Cadmium         106-1         8816         8679         8503         8666           Cadmium         111-1         6210         6075         5965         6083           Calcium         43-1         11561919         11679811         11750854         11664195           Calcium         44-1         18608597         187613664         190320604 <td>Aluminium         27-2         747         770         743         753         1,93           Antimory         121-1         983         957         1063         1001         5.55           Arsenic         75-2         587         553         547         562         3.81           Barium         135-1         283015         285335         291344         286564         1.50           Berulium         9-1         495071         50849         501945         500221         0.91           Beryllium         9-1         722         810         689         740         8.45           Bismuth         209-1         12042725         12077612         12111776         12077371         0.29           Bismuth         209-2         5479943         5339460         5202348         5340664         2.60           Bromine         81-1         137426         127009         116401         126945         8.28           Cadmium         108-1         8816         8679         8503         8666         1.81           Cadmium         111-1         6210         6075         5965         6083         2.02           Calcium         111-1</td>	Aluminium         27-2         747         770         743         753         1,93           Antimory         121-1         983         957         1063         1001         5.55           Arsenic         75-2         587         553         547         562         3.81           Barium         135-1         283015         285335         291344         286564         1.50           Berulium         9-1         495071         50849         501945         500221         0.91           Beryllium         9-1         722         810         689         740         8.45           Bismuth         209-1         12042725         12077612         12111776         12077371         0.29           Bismuth         209-2         5479943         5339460         5202348         5340664         2.60           Bromine         81-1         137426         127009         116401         126945         8.28           Cadmium         108-1         8816         8679         8503         8666         1.81           Cadmium         111-1         6210         6075         5965         6083         2.02           Calcium         111-1

Lab Sample ID :Q1200-16Instrumnet Name :P8Client Sample ID :ME2997Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2504	2554	2687	2581	3.67	cps
Lead	208-1	11459	11559	11539	11519	0.46	cps
Lithium	6-1	9655495	9747612	10027917	9810341	1.98	cps
Magnesium	24-2	23024753	23364395	23027329	23138825	0.84	cps
Manganese	55-2	260466	259361	262823	260883	0.68	cps
Molybdenum	94-1	58077	57819	59875	58590	1.91	cps
Molybdenum	95-1	96573	98822	99600	98332	1.60	cps
Molybdenum	96-1	104888	105860	106699	105816	0.86	cps
Molybdenum	97-1	60541	61756	60541	60946	1.15	cps
Molybdenum	98-1	155474	156578	160129	157394	1.55	cps
Neodymium	150-1	140	190	207	179	19.40	cps
Neodymium	150-2	50	50	47	49	3.93	cps
Nickel	60-2	7872	7852	7969	7898	0.79	cps
Phosphorus	31-2	133	117	160	137	15.99	cps
Potassium	39-2	509522	508543	519638	512568	1.20	cps
Rhodium	103-1	15183440	15291659	15364477	15279859	0.60	cps
Rhodium	103-2	6264131	6230788	6119908	6204943	1.22	cps
Scandium	45-1	12072953	12270324	12402418	12248565	1.35	cps
Scandium	45-2	249017	245445	239175	244546	2.04	cps
Selenium	82-1	167	107	127	133	22.91	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	20	23	20	21	9.11	cps
Silicon	28-1	96998472	98806009	99153999	98319493	1.18	cps
Silver	107-1	580	510	577	556	7.11	cps
Silver	109-1	287	283	300	290	3.04	cps
Sodium	23-2	17922098	17958284	17925574	17935318	0.11	cps
Strontium	86-1	37088914	37517277	37417298	37341163	0.60	cps
Strontium	88-1	320535842	322871035	323843695	322416857	0.53	cps
Sulfur	34-1	11865113	11974641	12041475	11960410	0.74	cps
Terbium	159-1	20792209	20779444	21181187	20917614	1.09	cps
Terbium	159-2	7414008	7406873	7175700	7332194	1.85	cps
Thallium	203-1	1010	967	923	967	4.48	cps
Thallium	205-1	2144	2234	2097	2158	3.22	cps
Tin	118-1	3957	3684	3784	3808	3.63	cps
Titanium	47-1	2304	2264	2434	2334	3.81	cps
Uranium	238-1	795397	807701	819588	807562	1.50	cps

Lab Sample ID :Q1200-16Instrumnet Name :P8Client Sample ID :ME2997Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:26:35 DataFile Name: 078AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	173	160	157	163	5.40	cps
Ytterbium	172-1	210	220	210	213	2.71	cps
Ytterbium	172-2	80	63	50	64	23.32	cps
Ytterbium	176-1	2057	2047	2044	2049	0.34	cps
Ytterbium	176-2	360	310	347	339	7.64	cps
Yttrium	89-1	29890805	29834361	30069390	29931519	0.41	cps
Yttrium	89-2	2297431	2261175	2163112	2240573	3.10	cps
Zinc	66-2	1593	1620	1557	1590	2.00	cps
Zirconium	90-1	5611	5945	5835	5797	2.93	cps
Zirconium	91-1	1237	1310	1340	1296	4.10	cps

Lab Sample ID: Q1200-17 Instrumnet Name: P8
Client Sample ID: ME2998 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Date a Time A	quircu . Zoz	0 02 00 10.25.40	Datari	ic ivallic .	07 57 (TCL) .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	477	503	523	501	4.67	cps
Antimony	121-1	787	680	770	746	7.70	cps
Arsenic	75-2	617	647	447	570	18.92	cps
Barium	135-1	293140	296282	290691	293371	0.96	cps
Barium	137-1	510939	509534	513852	511441	0.43	cps
Beryllium	9-1	631	651	604	629	3.79	cps
Bismuth	209-1	9434164	11888869	12119085	11147373	13.35	cps
Bismuth	209-2	5163595	5238183	5194542	5198773	0.72	cps
Bromine	81-1	69444	71732	72161	71112	2.05	cps
Cadmium	108-1	60	63	77	67	13.23	cps
Cadmium	106-1	6865	8740	8930	8178	13.95	cps
Cadmium	111-1	4877	6113	6290	5760	13.37	cps
Calcium	43-1	11932470	11867015	11919913	11906466	0.29	cps
Calcium	44-1	191220650	193365264	189620037	191401984	0.98	cps
Carbon	12-1	8963024	9809739	10022122	9598295	5.84	cps
Carbon	12-2	68374	69463	69329	69056	0.86	cps
Chlorine	35-1	2161163	2259053	2298400	2239539	3.16	cps
Chlorine	35-2	9633	9356	9360	9450	1.68	cps
Chromium	52-2	1850	1643	1607	1700	7.72	cps
Cobalt	59-2	9790	10110	10024	9975	1.66	cps
Copper	63-2	5064	5048	5064	5059	0.19	cps
Dysprosium	156-1	200	130	190	173	21.84	cps
Dysprosium	156-2	50	40	50	47	12.37	cps
Erbium	164-1	253	263	267	261	2.66	cps
Erbium	164-2	107	77	100	94	16.68	cps
Gadolinium	160-1	267	243	270	260	5.59	cps
Gadolinium	160-2	60	73	57	63	13.92	cps
Holmium	165-1	16088341	20654665	20680028	19141011	13.81	cps
Holmium	165-2	7392208	7523320	7532223	7482584	1.05	cps
Indium	115-1	12931005	16549804	16668231	15383013	13.81	cps
Indium	115-2	1674103	1730288	1704743	1703045	1.65	cps
Iron	54-2	101802	99708	100551	100687	1.05	cps
Iron	56-2	1896783	1949635	1930121	1925513	1.39	cps
Iron	57-2	47248	46108	46064	46473	1.44	cps
Krypton	83-1	283	267	300	283	5.88	cps
Lead	206-1	2757	2920	2827	2835	2.89	cps

Lab Sample ID: Q1200-17 Instrumnet Name: P8

Client Sample ID: ME2998 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2304	2494	2454	2417	4.15	cps
Lead	208-1	10895	11209	11062	11055	1.42	cps
Lithium	6-1	8154444	9634388	9935362	9241398	10.32	cps
Magnesium	24-2	22915700	23645905	23579585	23380397	1.73	cps
Manganese	55-2	260312	260086	256804	259068	0.76	cps
Molybdenum	94-1	59195	59185	59483	59288	0.29	cps
Molybdenum	95-1	99654	100839	99177	99890	0.86	cps
Molybdenum	96-1	105463	105416	107116	105998	0.91	cps
Molybdenum	97-1	62238	61874	62751	62288	0.71	cps
Molybdenum	98-1	158389	160331	158383	159034	0.71	cps
Neodymium	150-1	153	167	173	164	6.19	cps
Neodymium	150-2	30	53	23	36	44.31	cps
Nickel	60-2	6988	7445	7279	7237	3.19	cps
Phosphorus	31-2	120	103	110	111	7.55	cps
Potassium	39-2	520075	519264	517970	519103	0.20	cps
Rhodium	103-1	11618943	14713996	15107076	13813338	13.83	cps
Rhodium	103-2	5991665	6115795	6148105	6085189	1.36	cps
Scandium	45-1	9454511	12077949	12315599	11282686	14.07	cps
Scandium	45-2	235113	238063	241182	238119	1.27	cps
Selenium	82-1	43	170	47	87	83.30	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	27	3	10	13	90.16	cps
Silicon	28-1	98946765	101409632	99965462	100107286	1.24	cps
Silver	107-1	437	590	540	522	14.97	cps
Silver	109-1	340	270	317	309	11.54	cps
Sodium	23-2	18406852	18459116	18759942	18541970	1.03	cps
Strontium	86-1	39814923	39298404	39354384	39489237	0.72	cps
Strontium	88-1	341909482	342582095	338866922	341119499	0.58	cps
Sulfur	34-1	12362539	12253311	12209645	12275165	0.64	cps
Terbium	159-1	16577680	20442996	21349293	19456657	13.02	cps
Terbium	159-2	7069274	7129641	7238931	7145949	1.20	cps
Thallium	203-1	823	760	890	824	7.89	cps
Thallium	205-1	2217	2050	2030	2099	4.88	cps
Tin	118-1	5114	5171	5251	5179	1.33	cps
Titanium	47-1	2087	2064	2020	2057	1.64	cps
Uranium	238-1	811387	805217	809707	808770	0.39	cps

Lab Sample ID :Q1200-17Instrumnet Name :P8Client Sample ID :ME2998Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:29:48 DataFile Name: 079AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	173	170	103	149	26.52	cps
Ytterbium	172-1	200	200	217	206	4.68	cps
Ytterbium	172-2	93	70	77	80	15.02	cps
Ytterbium	176-1	1653	1964	2010	1876	10.34	cps
Ytterbium	176-2	300	290	353	314	10.83	cps
Yttrium	89-1	23224387	29385835	30454480	27688234	14.09	cps
Yttrium	89-2	2167367	2224737	2234342	2208815	1.64	cps
Zinc	66-2	1087	1023	1113	1074	4.30	cps
Zirconium	90-1	4461	4861	4818	4713	4.66	cps
Zirconium	91-1	1067	1077	950	1031	6.83	cps

Lab Sample ID : Q1200-18 Instrumnet Name : P8
Client Sample ID : ME29A0 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Date & Time A	quircu . Zoz	0 02 00 10.00.00	Datain	ic ivallic .	OOO/ II (LI .u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	847	767	760	791	6.10	cps
Antimony	121-1	257	313	297	289	10.08	cps
Arsenic	75-2	50	27	17	31	54.97	cps
Barium	135-1	84193	85917	84981	85030	1.01	cps
Barium	137-1	145563	147096	149486	147382	1.34	cps
Beryllium	9-1	646	666	631	648	2.71	cps
Bismuth	209-1	10144513	11652673	11801974	11199720	8.19	cps
Bismuth	209-2	5111656	5036220	5151216	5099697	1.15	cps
Bromine	81-1	129227	154069	172078	151791	14.17	cps
Cadmium	108-1	50	43	57	50	13.34	cps
Cadmium	106-1	7599	8770	8663	8344	7.76	cps
Cadmium	111-1	5358	6192	6081	5877	7.71	cps
Calcium	43-1	16398709	16775029	16806989	16660242	1.36	cps
Calcium	44-1	263214216	264801903	267694709	265236943	0.86	cps
Carbon	12-1	9757168	10495874	11023222	10425421	6.10	cps
Carbon	12-2	76608	74116	76407	75710	1.83	cps
Chlorine	35-1	14357529	16327247	17110438	15931738	8.90	cps
Chlorine	35-2	73237	72802	74447	73495	1.16	cps
Chromium	52-2	1667	1690	1547	1635	4.71	cps
Cobalt	59-2	453	427	493	458	7.33	cps
Copper	63-2	5081	5088	5468	5212	4.25	cps
Dysprosium	156-1	117	107	73	99	22.95	cps
Dysprosium	156-2	50	63	37	50	26.66	cps
Erbium	164-1	187	167	193	182	7.62	cps
Erbium	164-2	63	63	53	60	9.62	cps
Gadolinium	160-1	133	187	240	187	28.57	cps
Gadolinium	160-2	73	77	77	76	2.55	cps
Holmium	165-1	17304782	20375794	20120469	19267015	8.84	cps
Holmium	165-2	7332989	7401075	7385725	7373263	0.48	cps
Indium	115-1	14024659	16356831	16110966	15497485	8.27	cps
Indium	115-2	1652923	1647626	1648677	1649742	0.17	cps
Iron	54-2	333089	338141	340547	337259	1.13	cps
Iron	56-2	6460281	6450881	6432033	6447732	0.22	cps
Iron	57-2	158655	155986	155200	156614	1.16	cps
Krypton	83-1	260	263	317	280	11.36	cps
Lead	206-1	2517	2427	2487	2477	1.85	cps

Lab Sample ID : Q1200-18 Instrumnet Name : P8
Client Sample ID : ME29A0 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2050	2090	2060	2067	1.01	cps
Lead	208-1	9528	9925	9648	9700	2.10	cps
Lithium	6-1	8565219	9328134	9503396	9132250	5.46	cps
Magnesium	24-2	25722927	25525910	25969748	25739529	0.86	cps
Manganese	55-2	78135	77797	79757	78563	1.33	cps
Molybdenum	94-1	44170	44431	44591	44397	0.48	cps
Molybdenum	95-1	73784	74143	75694	74541	1.36	cps
Molybdenum	96-1	79217	79117	80179	79504	0.74	cps
Molybdenum	97-1	44595	45829	47421	45948	3.08	cps
Molybdenum	98-1	116542	119865	119304	118570	1.50	cps
Neodymium	150-1	163	113	110	129	23.18	cps
Neodymium	150-2	33	37	50	40	22.05	cps
Nickel	60-2	1140	1123	1070	1111	3.29	cps
Phosphorus	31-2	167	123	123	138	18.16	cps
Potassium	39-2	774469	763459	776928	771619	0.93	cps
Rhodium	103-1	12716309	14831826	14523053	14023729	8.15	cps
Rhodium	103-2	5901351	6038240	5853323	5930971	1.62	cps
Scandium	45-1	10347427	12177624	12053374	11526142	8.87	cps
Scandium	45-2	235164	233009	238313	235495	1.13	cps
Selenium	82-1	50	190	143	128	55.79	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	7	17	17	13	43.29	cps
Silicon	28-1	140838568	142819108	144519571	142725749	1.29	cps
Silver	107-1	570	700	984	751	28.15	cps
Silver	109-1	347	383	457	396	14.16	cps
Sodium	23-2	64041224	63969089	64427204	64145839	0.38	cps
Strontium	86-1	118150642	118518262	120243242	118970715	0.94	cps
Strontium	88-1	1010807958	1036927958	1024039905	1023925274	1.28	cps
Sulfur	34-1	19944768	20526124	20736483	20402458	2.01	cps
Terbium	159-1	17585827	20646261	20296703	19509597	8.59	cps
Terbium	159-2	7188784	7083709	7163984	7145492	0.77	cps
Thallium	203-1	413	357	323	364	12.49	cps
Thallium	205-1	923	957	900	927	3.07	cps
Tin	118-1	4157	3887	4264	4103	4.73	cps
Titanium	47-1	2930	3097	2960	2996	2.97	cps
Uranium	238-1	31526	31736	31790	31684	0.44	cps

Lab Sample ID :Q1200-18Instrumnet Name :P8Client Sample ID :ME29A0Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:33:05 DataFile Name: 080AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	503	527	477	502	4.98	cps
Ytterbium	172-1	113	143	123	127	12.06	cps
Ytterbium	172-2	83	53	73	70	21.82	cps
Ytterbium	176-1	1563	1840	1857	1753	9.40	cps
Ytterbium	176-2	267	283	343	298	13.54	cps
Yttrium	89-1	25317880	29511900	28594523	27808101	7.93	cps
Yttrium	89-2	2166757	2113605	2182309	2154224	1.67	cps
Zinc	66-2	917	933	963	938	2.52	cps
Zirconium	90-1	4121	4294	4271	4228	2.23	cps
Zirconium	91-1	940	920	887	916	2.94	cps

Lab Sample ID: Q1200-19 Instrumnet Name: P8
Client Sample ID: ME29A1 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Date a Time /	equired. Zoz	.0 02 00 10.00.10	Datain	ic ivallic .	00 17 (I CLI . G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	24604	24594	24501	24566	0.23	cps
Antimony	121-1	470	590	523	528	11.39	cps
Arsenic	75-2	170	167	177	171	2.98	cps
Barium	135-1	65849	66763	66341	66318	0.69	cps
Barium	137-1	114816	116170	115491	115492	0.59	cps
Beryllium	9-1	605	655	566	609	7.31	cps
Bismuth	209-1	11785224	11700029	11783485	11756246	0.41	cps
Bismuth	209-2	5082384	5096300	5044460	5074381	0.53	cps
Bromine	81-1	141593	163866	177121	160860	11.16	cps
Cadmium	108-1	33	50	60	48	28.20	cps
Cadmium	106-1	8906	8606	8199	8571	4.14	cps
Cadmium	111-1	6291	6109	5767	6056	4.39	cps
Calcium	43-1	27551340	27780782	28490825	27940982	1.75	cps
Calcium	44-1	441310793	446634447	453979753	447308331	1.42	cps
Carbon	12-1	9466907	10328555	10660493	10151985	6.07	cps
Carbon	12-2	74414	74799	76551	75255	1.51	cps
Chlorine	35-1	6023169	6533670	6690027	6415622	5.44	cps
Chlorine	35-2	27563	27823	27353	27580	0.86	cps
Chromium	52-2	4671	4631	4697	4666	0.72	cps
Cobalt	59-2	3484	3547	3584	3538	1.43	cps
Copper	63-2	8006	8169	8156	8110	1.12	cps
Dysprosium	156-1	1550	1533	1427	1503	4.45	cps
Dysprosium	156-2	487	500	493	493	1.35	cps
Erbium	164-1	1210	1307	1220	1246	4.27	cps
Erbium	164-2	433	490	437	453	7.01	cps
Gadolinium	160-1	1420	1573	1567	1520	5.70	cps
Gadolinium	160-2	723	680	663	689	4.50	cps
Holmium	165-1	20219627	20222143	20370211	20270661	0.43	cps
Holmium	165-2	7240834	7380294	7302714	7307947	0.96	cps
Indium	115-1	16334223	16279574	16268028	16293942	0.22	cps
Indium	115-2	1634280	1662862	1616902	1638015	1.42	cps
Iron	54-2	738710	738665	740935	739437	0.18	cps
Iron	56-2	13893257	14205928	14171832	14090339	1.22	cps
Iron	57-2	335779	340279	344932	340330	1.34	cps
Krypton	83-1	267	300	287	284	5.90	cps
Lead	206-1	5648	5695	5681	5675	0.42	cps

Lab Sample ID :Q1200-19Instrumnet Name :P8Client Sample ID :ME29A1Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Date & Time Acc	uired: 2025-02-06 16:36:18		DataFi	DataFile Name :		081AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	4498	4654	4884	4679	4.16	cps	
Lead	208-1	21410	21841	22418	21890	2.31	cps	
Lithium	6-1	9632176	9554364	9417007	9534515	1.14	cps	
Magnesium	24-2	37649950	38644692	37700009	37998217	1.47	cps	
Manganese	55-2	192206	198899	197980	196362	1.85	cps	
Molybdenum	94-1	24331	25186	25016	24844	1.82	cps	
Molybdenum	95-1	34934	34576	34506	34672	0.66	cps	
Molybdenum	96-1	36384	37718	38012	37371	2.32	cps	
Molybdenum	97-1	21377	21550	21363	21430	0.49	cps	
Molybdenum	98-1	54811	56544	56273	55876	1.67	cps	
Neodymium	150-1	2077	2104	2224	2135	3.66	cps	
Neodymium	150-2	543	543	520	536	2.51	cps	
Nickel	60-2	3667	3354	3400	3474	4.87	cps	
Phosphorus	31-2	277	280	247	268	6.86	cps	
Potassium	39-2	1003402	1024770	1015293	1014488	1.06	cps	
Rhodium	103-1	14867940	14675311	14787284	14776845	0.65	cps	
Rhodium	103-2	5914670	5981636	5883848	5926718	0.84	cps	
Scandium	45-1	12103113	12306168	12104798	12171360	0.96	cps	
Scandium	45-2	234250	236049	238283	236194	0.86	cps	
Selenium	82-1	113	113	193	140	32.99	cps	
Selenium	77-2	3	3	3	3	0.00	cps	
Selenium	78-2	10	10	10	10	0.00	cps	
Silicon	28-1	115260178	116546012	116315742	116040644	0.59	cps	
Silver	107-1	537	580	633	583	8.30	cps	
Silver	109-1	310	297	350	319	8.70	cps	
Sodium	23-2	28124313	28247214	28564048	28311858	0.80	cps	
Strontium	86-1	74068021	74804034	74457001	74443018	0.49	cps	
Strontium	88-1	632271577	640899404	635599257	636256746	0.68	cps	
Sulfur	34-1	43434924	43700996	44253458	43796459	0.95	cps	
Terbium	159-1	20805120	20791974	20559135	20718743	0.67	cps	
Terbium	159-2	7079457	7020806	7170371	7090211	1.06	cps	
Thallium	203-1	567	613	553	578	5.45	cps	
Thallium	205-1	1430	1440	1247	1372	7.93	cps	
Tin	118-1	6842	7189	7039	7023	2.48	cps	
Titanium	47-1	23824	24100	24675	24200	1.79	cps	
Uranium	238-1	20103	21128	20584	20605	2.49	cps	

Lab Sample ID :Q1200-19Instrumnet Name :P8Client Sample ID :ME29A1Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:36:18 DataFile Name: 081AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2737	2847	2984	2856	4.33	cps
Ytterbium	172-1	433	427	440	433	1.54	cps
Ytterbium	172-2	197	177	190	188	5.42	cps
Ytterbium	176-1	2100	2114	2147	2120	1.13	cps
Ytterbium	176-2	443	400	420	421	5.15	cps
Yttrium	89-1	29100710	29376425	28988800	29155311	0.68	cps
Yttrium	89-2	2165484	2151834	2163395	2160237	0.34	cps
Zinc	66-2	1337	1250	1370	1319	4.70	cps
Zirconium	90-1	12392	12903	12839	12711	2.19	cps
Zirconium	91-1	2844	2627	2887	2786	5.00	cps

Lab Sample ID :Q1200-20Instrumnet Name :P8Client Sample ID :ME29A2Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	517	457	503	492	6.40	cps
Antimony	121-1	480	617	577	558	12.60	cps
Arsenic	75-2	97	87	67	83	18.33	cps
Barium	135-1	185391	189344	192366	189034	1.85	cps
Barium	137-1	328183	338048	336168	334133	1.57	cps
Beryllium	9-1	539	522	499	520	3.87	cps
Bismuth	209-1	11264869	11544259	11679292	11496140	1.84	cps
Bismuth	209-2	5222355	5075525	5248748	5182209	1.80	cps
Bromine	81-1	152749	181435	197396	177193	12.77	cps
Cadmium	108-1	23	20	27	23	14.29	cps
Cadmium	106-1	8386	8666	8446	8499	1.74	cps
Cadmium	111-1	5881	6072	5910	5954	1.73	cps
Calcium	43-1	19837742	20215363	20065998	20039701	0.95	cps
Calcium	44-1	319972602	321569322	318937129	320159684	0.41	cps
Carbon	12-1	9820980	10578452	11351029	10583487	7.23	cps
Carbon	12-2	77865	78893	79175	78644	0.88	cps
Chlorine	35-1	13164906	14313520	14750511	14076312	5.82	cps
Chlorine	35-2	62066	62374	63060	62500	0.81	cps
Chromium	52-2	2214	2214	2284	2237	1.81	cps
Cobalt	59-2	533	520	493	516	3.95	cps
Copper	63-2	5374	5341	5364	5360	0.32	cps
Dysprosium	156-1	153	130	170	151	13.30	cps
Dysprosium	156-2	53	37	30	40	30.04	cps
Erbium	164-1	230	220	213	221	3.79	cps
Erbium	164-2	87	83	33	68	44.08	cps
Gadolinium	160-1	247	240	220	236	5.89	cps
Gadolinium	160-2	50	80	57	62	25.32	cps
Holmium	165-1	19109030	19470456	20423895	19667794	3.45	cps
Holmium	165-2	7473484	7394684	7452075	7440081	0.55	cps
Indium	115-1	15479239	15847000	16069713	15798651	1.89	cps
Indium	115-2	1675454	1666943	1699635	1680677	1.01	cps
Iron	54-2	30189	29106	29143	29479	2.08	cps
Iron	56-2	535011	533664	536166	534947	0.23	cps
Iron	57-2	14157	13873	14688	14239	2.90	cps
Krypton	83-1	280	283	277	280	1.19	cps
Lead	206-1	2277	2270	2350	2299	1.93	cps

Lab Sample ID: Q1200-20 Instrumnet Name: P8

Client Sample ID: ME29A2 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1840	1974	1997	1937	4.36	cps
Lead	208-1	8848	8981	9175	9001	1.83	cps
Lithium	6-1	9267798	9426585	9620115	9438166	1.87	cps
Magnesium	24-2	24983750	23863157	24015748	24287552	2.50	cps
Manganese	55-2	227271	224968	227406	226548	0.60	cps
Molybdenum	94-1	3050	2977	3124	3050	2.40	cps
Molybdenum	95-1	2297	2270	2360	2309	2.00	cps
Molybdenum	96-1	2504	2807	2584	2631	5.98	cps
Molybdenum	97-1	1310	1337	1437	1361	4.91	cps
Molybdenum	98-1	3581	3300	3444	3442	4.07	cps
Neodymium	150-1	137	157	150	148	6.89	cps
Neodymium	150-2	30	43	40	38	18.36	cps
Nickel	60-2	1290	1167	1370	1276	8.03	cps
Phosphorus	31-2	237	237	240	238	0.81	cps
Potassium	39-2	1000537	990174	998940	996551	0.56	cps
Rhodium	103-1	14185308	14286854	14532368	14334843	1.24	cps
Rhodium	103-2	5953667	5921164	5928060	5934297	0.29	cps
Scandium	45-1	11549304	11931104	11967243	11815884	1.96	cps
Scandium	45-2	238912	234594	241263	238256	1.42	cps
Selenium	82-1	93	160	197	150	34.93	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	10	20	10	13	43.30	cps
Silicon	28-1	86586255	84238802	85163845	85329634	1.39	cps
Silver	107-1	470	537	600	536	12.14	cps
Silver	109-1	313	360	283	319	12.12	cps
Sodium	23-2	43079428	41441249	42403650	42308109	1.95	cps
Strontium	86-1	82785264	85615765	85772849	84724626	1.98	cps
Strontium	88-1	733554549	746185696	746145429	741961891	0.98	cps
Sulfur	34-1	25981417	26086102	26038329	26035283	0.20	cps
Terbium	159-1	19743500	20107836	20438572	20096636	1.73	cps
Terbium	159-2	7238858	7081227	7231449	7183845	1.24	cps
Thallium	203-1	287	290	350	309	11.54	cps
Thallium	205-1	613	717	723	684	9.01	cps
Tin	118-1	5978	5958	5971	5969	0.17	cps
Titanium	47-1	2034	2170	2017	2074	4.06	cps
Uranium	238-1	1793	1810	1884	1829	2.62	cps

Lab Sample ID :Q1200-20Instrumnet Name :P8Client Sample ID :ME29A2Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:39:34 DataFile Name: 082AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	440	467	427	444	4.58	cps
Ytterbium	172-1	173	197	193	188	6.72	cps
Ytterbium	172-2	87	57	77	73	20.83	cps
Ytterbium	176-1	1960	1893	1903	1919	1.87	cps
Ytterbium	176-2	280	307	320	302	6.74	cps
Yttrium	89-1	28525804	28856110	29104772	28828895	1.01	cps
Yttrium	89-2	2194424	2150827	2188930	2178060	1.09	cps
Zinc	66-2	410	420	347	392	10.14	cps
Zirconium	90-1	4584	4918	5168	4890	5.99	cps
Zirconium	91-1	1043	1047	1097	1062	2.81	cps

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Lab Sample ID: Q1200-21 Instrumnet Name: P8
Client Sample ID: ME29A3 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7432	7462	7332	7409	0.92	cps
Antimony	121-1	4237	4377	4411	4342	2.12	cps
Arsenic	75-2	110	127	100	112	12.01	cps
Barium	135-1	40892	40490	41881	41088	1.74	cps
Barium	137-1	70151	71052	71662	70955	1.07	cps
Beryllium	9-1	595	577	561	578	2.92	cps
Bismuth	209-1	12173282	11841766	11283006	11766018	3.82	cps
Bismuth	209-2	5246442	5127444	5050491	5141459	1.92	cps
Bromine	81-1	109685	114035	118697	114139	3.95	cps
Cadmium	108-1	67	53	30	50	37.12	cps
Cadmium	106-1	9100	8536	8029	8555	6.26	cps
Cadmium	111-1	6567	6198	5869	6211	5.62	cps
Calcium	43-1	29287466	29812592	29683008	29594355	0.92	cps
Calcium	44-1	468962300	482318473	479867193	477049322	1.49	cps
Carbon	12-1	9262891	9898322	10456882	9872698	6.05	cps
Carbon	12-2	69172	70083	70628	69961	1.05	cps
Chlorine	35-1	3505740	3575329	3572229	3551099	1.11	cps
Chlorine	35-2	13576	14351	14284	14070	3.05	cps
Chromium	52-2	2724	2567	2617	2636	3.04	cps
Cobalt	59-2	2387	2397	2294	2359	2.42	cps
Copper	63-2	13460	13597	13053	13370	2.12	cps
Dysprosium	156-1	583	520	453	519	12.53	cps
Dysprosium	156-2	233	163	187	194	18.33	cps
Erbium	164-1	590	507	570	556	7.83	cps
Erbium	164-2	193	160	187	180	9.80	cps
Gadolinium	160-1	600	587	537	574	5.81	cps
Gadolinium	160-2	227	297	247	257	14.05	cps
Holmium	165-1	20954913	20290814	19166957	20137561	4.49	cps
Holmium	165-2	7488852	7260044	7313741	7354212	1.63	cps
Indium	115-1	16511543	16028882	15785386	16108604	2.29	cps
Indium	115-2	1718875	1664346	1654109	1679110	2.07	cps
Iron	54-2	440283	438252	435284	437939	0.57	cps
Iron	56-2	8344682	8457960	8333163	8378602	0.82	cps
Iron	57-2	202578	201962	200600	201714	0.50	cps
Krypton	83-1	333	290	277	300	9.88	cps
Lead	206-1	6922	6418	6608	6650	3.82	cps

Lab Sample ID :Q1200-21Instrumnet Name :P8Client Sample ID :ME29A3Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Date & Time Acc	quirea: 202	25-02-06 16:42:47	DataFi	ie Name :	083AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5378	5248	5498	5375	2.33	cps
Lead	208-1	25710	24596	25677	25328	2.50	cps
Lithium	6-1	9734309	9290094	9124922	9383108	3.36	cps
Magnesium	24-2	26496858	26296005	26660865	26484576	0.69	cps
Manganese	55-2	184060	184814	182825	183900	0.55	cps
Molybdenum	94-1	15966	16143	16523	16211	1.76	cps
Molybdenum	95-1	24261	25079	24695	24679	1.66	cps
Molybdenum	96-1	26402	26899	26943	26748	1.12	cps
Molybdenum	97-1	15288	15919	15612	15607	2.02	cps
Molybdenum	98-1	38948	39349	39874	39390	1.18	cps
Neodymium	150-1	730	730	727	729	0.26	cps
Neodymium	150-2	217	120	180	172	28.34	cps
Nickel	60-2	3621	3677	3497	3598	2.56	cps
Phosphorus	31-2	400	393	443	412	6.59	cps
Potassium	39-2	675246	676220	681652	677706	0.51	cps
Rhodium	103-1	15055564	14684105	13972397	14570689	3.78	cps
Rhodium	103-2	6086933	5958567	5930125	5991875	1.39	cps
Scandium	45-1	12258997	11955763	11278209	11830990	4.24	cps
Scandium	45-2	241166	234852	232552	236190	1.89	cps
Selenium	82-1	43	123	143	103	51.20	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	3	7	20	10	88.20	cps
Silicon	28-1	129205998	132161748	132848428	131405391	1.47	cps
Silver	107-1	527	610	483	540	11.92	cps
Silver	109-1	270	257	317	281	11.21	cps
Sodium	23-2	12328926	12287984	12422217	12346376	0.56	cps
Strontium	86-1	91360599	92453615	93199439	92337884	1.00	cps
Strontium	88-1	792058468	797498441	808707988	799421633	1.06	cps
Sulfur	34-1	38749437	39165587	39266520	39060515	0.70	cps
Terbium	159-1	21538506	20499479	19605204	20547730	4.71	cps
Terbium	159-2	7262234	7068745	7018543	7116508	1.81	cps
Thallium	203-1	290	373	313	326	13.20	cps
Thallium	205-1	810	927	810	849	7.94	cps
Tin	118-1	4754	4287	4417	4486	5.37	cps
Titanium	47-1	8262	8232	8376	8290	0.91	cps
Uranium	238-1	10444	10641	10925	10670	2.26	cps

Lab Sample ID :Q1200-21Instrumnet Name :P8Client Sample ID :ME29A3Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:42:47 DataFile Name: 083AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1017	993	917	976	5.36	cps
Ytterbium	172-1	223	240	237	233	3.78	cps
Ytterbium	172-2	93	80	133	102	27.16	cps
Ytterbium	176-1	2070	2007	1807	1961	7.01	cps
Ytterbium	176-2	350	293	323	322	8.80	cps
Yttrium	89-1	29743030	28938590	28124660	28935427	2.80	cps
Yttrium	89-2	2218145	2131544	2132316	2160668	2.30	cps
Zinc	66-2	3534	3434	3427	3465	1.72	cps
Zirconium	90-1	4597	4881	4761	4746	3.00	cps
Zirconium	91-1	1090	1073	1093	1086	0.99	cps

Lab Sample ID: WATER-01 Instrumnet Name: P8

Client Sample ID: WATER-01 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Date & Time Acquired . 2025-02-00 10.40.05		Dalari	ie name.	UO4AREF.U	004ANEF.U			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	1113	1037	1107	1086	3.91	cps	
Antimony	121-1	24482	25023	25200	24902	1.50	cps	
Arsenic	75-2	37	33	60	43	33.53	cps	
Barium	135-1	139356	142480	144057	141964	1.69	cps	
Barium	137-1	245417	251805	252392	249871	1.55	cps	
Beryllium	9-1	532	480	470	494	6.79	cps	
Bismuth	209-1	11316564	12023414	11782312	11707430	3.07	cps	
Bismuth	209-2	5225430	5300786	5332857	5286357	1.04	cps	
Bromine	81-1	69733	73511	72318	71854	2.69	cps	
Cadmium	108-1	23	27	23	24	7.89	cps	
Cadmium	106-1	8446	8876	8720	8681	2.51	cps	
Cadmium	111-1	5939	6225	6141	6102	2.40	cps	
Calcium	43-1	1884511	1875837	1952999	1904449	2.22	cps	
Calcium	44-1	30557733	30110620	31588420	30752258	2.46	cps	
Carbon	12-1	93884609	102563328	102556588	99668175	5.03	cps	
Carbon	12-2	640591	636589	628693	635291	0.95	cps	
Chlorine	35-1	7784291	8348569	8886512	8339790	6.61	cps	
Chlorine	35-2	36630	37047	37144	36940	0.74	cps	
Chromium	52-2	1577	1790	1650	1672	6.49	cps	
Cobalt	59-2	747	697	707	717	3.69	cps	
Copper	63-2	18355	18632	18365	18451	0.85	cps	
Dysprosium	156-1	300	280	257	279	7.78	cps	
Dysprosium	156-2	120	103	97	107	11.27	cps	
Erbium	164-1	107	140	137	128	14.37	cps	
Erbium	164-2	37	40	60	46	27.70	cps	
Gadolinium	160-1	387	403	323	371	11.37	cps	
Gadolinium	160-2	157	150	120	142	13.73	cps	
Holmium	165-1	18773243	20178102	19447572	19466306	3.61	cps	
Holmium	165-2	7397805	7477639	7473299	7449581	0.60	cps	
Indium	115-1	15158099	16428659	15964111	15850290	4.06	cps	
Indium	115-2	1673618	1707413	1694127	1691719	1.01	cps	
Iron	54-2	1337	1200	1153	1230	7.75	cps	
Iron	56-2	17668	18175	17958	17934	1.42	cps	
Iron	57-2	463	553	527	514	8.99	cps	
Krypton	83-1	280	280	297	286	3.37	cps	
Lead	206-1	2337	2304	2384	2341	1.72	cps	

Lab Sample ID: WATER-01 Instrumnet Name: P8

Client Sample ID: WATER-01 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Date & Time Act	quireu . 202	25-02-06 16.46.03	Dalar	ile ivallie .	U04AREF.U			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	1974	1977	1967	1972	0.26	cps	
Lead	208-1	9028	8895	9271	9065	2.11	cps	
Lithium	6-1	9025522	9739912	9654169	9473201	4.12	cps	
Magnesium	24-2	2997170	3009583	3049384	3018712	0.90	cps	
Manganese	55-2	10327	10601	10517	10482	1.34	cps	
Molybdenum	94-1	3050	2734	3004	2929	5.84	cps	
Molybdenum	95-1	3787	4121	4064	3991	4.47	cps	
Molybdenum	96-1	4291	4688	4444	4474	4.47	cps	
Molybdenum	97-1	2370	2580	2577	2509	4.79	cps	
Molybdenum	98-1	6325	6472	6505	6434	1.49	cps	
Neodymium	150-1	37	43	37	39	9.89	cps	
Neodymium	150-2	7	0	3	3	100.05	cps	
Nickel	60-2	2914	2927	2944	2928	0.51	cps	
Phosphorus	31-2	1037	963	883	961	7.98	cps	
Potassium	39-2	327170	324741	324136	325349	0.49	cps	
Rhodium	103-1	14261654	15430605	14870286	14854182	3.94	cps	
Rhodium	103-2	6210975	6271990	6237930	6240298	0.49	cps	
Scandium	45-1	11187994	11749523	11621681	11519733	2.55	cps	
Scandium	45-2	233876	237677	236485	236013	0.82	cps	
Selenium	82-1	77	83	3	54	81.52	cps	
Selenium	77-2	0	0	0	0	0.00	cps	
Selenium	78-2	3	10	13	9	57.30	cps	
Silicon	28-1	35969396	35901414	36901883	36257564	1.54	cps	
Silver	107-1	573	627	623	608	4.92	cps	
Silver	109-1	477	353	450	427	15.21	cps	
Sodium	23-2	25772894	26326675	25904749	26001439	1.11	cps	
Strontium	86-1	943477	964332	974994	960934	1.67	cps	
Strontium	88-1	8468859	8644830	8677371	8597020	1.30	cps	
Sulfur	34-1	2253545	2241879	2265584	2253669	0.53	cps	
Terbium	159-1	19456717	21100788	20103484	20220330	4.10	cps	
Terbium	159-2	7067376	7201941	7167141	7145486	0.98	cps	
Thallium	203-1	483	430	497	470	7.51	cps	
Thallium	205-1	933	1110	1163	1069	11.26	cps	
Tin	118-1	3297	3400	3400	3366	1.77	cps	
Titanium	47-1	1330	1410	1397	1379	3.11	cps	
Uranium	238-1	540	653	680	624	11.90	cps	

Lab Sample ID :WATER-01Instrumnet Name :P8Client Sample ID :WATER-01Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:46:03 DataFile Name: 084AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	303	320	310	311	2.70	cps	
Ytterbium	172-1	247	193	223	221	12.09	cps	
Ytterbium	172-2	113	90	77	93	19.89	cps	
Ytterbium	176-1	1920	2024	1924	1956	3.00	cps	
Ytterbium	176-2	340	287	357	328	11.16	cps	
Yttrium	89-1	27264894	29316066	28267485	28282815	3.63	cps	
Yttrium	89-2	2116684	2170336	2152059	2146359	1.27	cps	
Zinc	66-2	2964	2780	2920	2888	3.32	cps	
Zirconium	90-1	1537	1577	1413	1509	5.64	cps	
Zirconium	91-1	323	290	357	323	10.31	cps	

Lab Sample ID: WATER-02RE Instrumnet Name: P8

Client Sample ID: WATER-02RE Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Aluminium         27-2         1930         1887         1860         1892         1.87         cps           Antimony         121-1         2804         2950         3007         2920         3.59         cps           Arsenic         75-2         67         57         60         61         8.33         cps           Barlum         135-1         156429         160924         162646         159087         1.48         cps           Beryllium         9-1         509         544         283220         278807         1.48         cps           Beryllium         9-1         509         544         492         515         5.08         cps           Beryllium         20-1         12064900         7301749         60380         6482833         93.39         cps           Bismuth         209-2         5338300         5362641         5286969         5328233         0.72         cps           Berwill         40         94328         5588         60         4897         92.53         cps           Cadmium         10-1         6033         967         6529         3472         91.83         cps           Calcium <td< th=""><th>Parameter</th><th>Mass</th><th>CPS1</th><th>CPS2</th><th>CPS3</th><th>CPSMean</th><th>CPSRSD</th><th>Units</th></td<>	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Arsenic         75-2         67         57         60         61         8.33         cps           Barlum         135-1         156429         160824         162846         159999         2.01         cps           Barlum         137-1         275055         278146         283220         278807         1.48         cps           Blsmuth         20-1         12084900         7301749         60380         6482363         33.39         cps           Blsmuth         209-2         5335360         5362841         5286989         5328323         0.72         cps           Bromine         81-1         90460         97328         96704         94831         4.00         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Calcium         43-1         1851169         1907824         1954297         1904430         271         cps           Calcium         411-1         9893826         30905061         3082245         3590447         1.72         cps	Aluminium	27-2	1930	1887	1860	1892	1.87	cps
Barium         135-1         156429         160924         162846         159999         2.01         cps           Barium         137-1         275055         278146         283220         278807         1.48         cps           Beryllum         9-1         509         544         492         515         5.08         cps           Bismuth         209-1         12084800         7301749         60380         6482363         93.39         cps           Bismuth         209-2         5335390         5362641         5286969         5328323         0.72         cps           Bismuth         209-2         5335300         5362641         5286969         5328323         0.72         cps           Bromine         81-1         90430         5588         60         4887         92.53         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29933826         30905061         3082454         3059047         1.72         cps <td>Antimony</td> <td>121-1</td> <td>2804</td> <td>2950</td> <td>3007</td> <td>2920</td> <td>3.59</td> <td>cps</td>	Antimony	121-1	2804	2950	3007	2920	3.59	cps
Barium         137-1         275055         278146         283220         278807         1.48         cps           Berylllum         9-1         509         544         492         515         5.08         cps           Bismuth         209-1         12084960         7301749         60380         6482363         93.39         cps           Bismuth         209-2         5335360         5362641         5268969         5328323         0.72         cps           Bromine         81-1         90460         97328         96704         94831         4.00         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         43-1         1951169         1907824         1954297         1904430         2.71         cps           Calcium         43-1         1951169         1907824         1954297         1904430         2.71         cps	Arsenic	75-2	67	57	60	61	8.33	cps
Beryllium         9-1         509         544         492         515         5.08         cps           Bismuth         209-1         12084960         7301749         60380         6482363         93.39         cps           Bismuth         209-2         5335300         5362841         5286969         5328323         0.72         cps           Bromine         81-1         90400         97328         96704         94831         4.00         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         3082454         30590447         1.72         cps           Carbon         12-2         91503245         97541475         98594042         95879587         3.99         cps           Chiorine         35-1         7930488         8707740         8916077         851802         6.10         cps	Barium	135-1	156429	160924	162646	159999	2.01	cps
Bismuth         209-1         12084960         7301749         60380         6482363         93.39         cps           Bismuth         209-2         5335360         5362641         5286969         5328323         0,72         cps           Bromine         81-1         90460         97328         96704         94831         4,00         cps           Cadmium         108-1         20         30         20         23         24.74         cps           Cadmium         111-1         6383         5588         60         4897         92.53         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30882454         30590447         1,72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3,99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-2         37962         37559         37452         37662         0.74         cps     <	Barium	137-1	275055	278146	283220	278807	1.48	cps
Bismuth         209-2         533560         5362641         5286969         5328323         0.72         cps           Bromine         81-1         90460         97328         96704         94831         4.00         cps           Cadmium         108-1         20         30         20         23         24.74         cps           Cadmium         1106-1         9043         5588         60         4897         92.53         cps           Calcium         43-1         185169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30892454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chiorine         35-1         7990488         8707740         8916077         8518102         6.10         cps           Chiorine         35-2         37976         37559         37452         37662         0.74         cps </td <td>Beryllium</td> <td>9-1</td> <td>509</td> <td>544</td> <td>492</td> <td>515</td> <td>5.08</td> <td>cps</td>	Beryllium	9-1	509	544	492	515	5.08	cps
Bromine         81-1         90460         97328         96704         94831         4.00         cps           Cadmium         108-1         20         30         20         23         24.74         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29883826         30905061         30882454         30590447         1.72         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chlorine         59-2         1160         1340         1347         1282         8.26         cps           C	Bismuth	209-1	12084960	7301749	60380	6482363	93.39	cps
Cadmium         108-1         20         30         20         23         24.74         cps           Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30882454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chhorime         52-2         1407         1470         1563         1480         5.33         cps	Bismuth	209-2	5335360	5362641	5286969	5328323	0.72	cps
Cadmium         106-1         9043         5588         60         4897         92.53         cps           Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30882454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1160         1340         1347         1282         8.26         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps <t< td=""><td>Bromine</td><td>81-1</td><td>90460</td><td>97328</td><td>96704</td><td>94831</td><td>4.00</td><td>cps</td></t<>	Bromine	81-1	90460	97328	96704	94831	4.00	cps
Cadmium         111-1         6383         3967         65         3472         91.83         cps           Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30882454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chlorine         35-2         1407         1470         1563         1480         5.33         cps           Chlorine         59-2         1160         1340         1347         1282         8.26         cps           Chromium         156-1         267         250         290         269         7.47         cps <t< td=""><td>Cadmium</td><td>108-1</td><td>20</td><td>30</td><td>20</td><td>23</td><td>24.74</td><td>cps</td></t<>	Cadmium	108-1	20	30	20	23	24.74	cps
Calcium         43-1         1851169         1907824         1954297         1904430         2.71         cps           Calcium         44-1         29983826         30905061         30882454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps	Cadmium	106-1	9043	5588	60	4897	92.53	cps
Calcium         44-1         29983826         30905061         30882454         30590447         1.72         cps           Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Erbium         164-1         163         110         23         99         71.46         cps	Cadmium	111-1	6383	3967	65	3472	91.83	cps
Carbon         12-1         91503245         97541475         98594042         95879587         3.99         cps           Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium	Calcium	43-1	1851169	1907824	1954297	1904430	2.71	cps
Carbon         12-2         609738         609633         611149         610173         0.14         cps           Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1	Calcium	44-1	29983826	30905061	30882454	30590447	1.72	cps
Chlorine         35-1         7930488         8707740         8916077         8518102         6.10         cps           Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Holmium         165-1	Carbon	12-1	91503245	97541475	98594042	95879587	3.99	cps
Chlorine         35-2         37976         37559         37452         37662         0.74         cps           Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Holimium         165-2         187         173         143         168         13.23         cps           Holimium         165-1         2019	Carbon	12-2	609738	609633	611149	610173	0.14	cps
Chromium         52-2         1407         1470         1563         1480         5.33         cps           Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         1093044         92.84         cps           Indium         115-1	Chlorine	35-1	7930488	8707740	8916077	8518102	6.10	cps
Cobalt         59-2         1160         1340         1347         1282         8.26         cps           Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1	Chlorine	35-2	37976	37559	37452	37662	0.74	cps
Copper         63-2         464771         458417         462393         461860         0.70         cps           Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron	Chromium	52-2	1407	1470	1563	1480	5.33	cps
Dysprosium         156-1         267         250         290         269         7.47         cps           Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-	Cobalt	59-2	1160	1340	1347	1282	8.26	cps
Dysprosium         156-2         113         87         130         110         19.87         cps           Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57	Copper	63-2	464771	458417	462393	461860	0.70	cps
Erbium         164-1         163         110         23         99         71.46         cps           Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1 </td <td>Dysprosium</td> <td>156-1</td> <td>267</td> <td>250</td> <td>290</td> <td>269</td> <td>7.47</td> <td>cps</td>	Dysprosium	156-1	267	250	290	269	7.47	cps
Erbium         164-2         33         50         43         42         19.87         cps           Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Dysprosium	156-2	113	87	130	110	19.87	cps
Gadolinium         160-1         450         393         307         383         18.83         cps           Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Erbium	164-1	163	110	23	99	71.46	cps
Gadolinium         160-2         187         173         143         168         13.23         cps           Holmium         165-1         20193437         12512704         83992         10930044         92.84         cps           Holmium         165-2         7385854         7360123         7415224         7387067         0.37         cps           Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Indium         115-2         1696197         1682709         1664429         1681111         0.95         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Erbium	164-2	33	50	43	42	19.87	cps
Holmium       165-1       20193437       12512704       83992       10930044       92.84       cps         Holmium       165-2       7385854       7360123       7415224       7387067       0.37       cps         Indium       115-1       16607524       10319469       72390       8999794       92.74       cps         Indium       115-2       1696197       1682709       1664429       1681111       0.95       cps         Iron       54-2       2134       2037       1953       2041       4.41       cps         Iron       56-2       33239       33239       33379       33286       0.24       cps         Iron       57-2       843       877       960       893       6.73       cps         Krypton       83-1       347       363       453       388       14.80       cps	Gadolinium	160-1	450	393	307	383	18.83	cps
Holmium       165-2       7385854       7360123       7415224       7387067       0.37       cps         Indium       115-1       16607524       10319469       72390       8999794       92.74       cps         Indium       115-2       1696197       1682709       1664429       1681111       0.95       cps         Iron       54-2       2134       2037       1953       2041       4.41       cps         Iron       56-2       33239       33239       33379       33286       0.24       cps         Iron       57-2       843       877       960       893       6.73       cps         Krypton       83-1       347       363       453       388       14.80       cps	Gadolinium	160-2	187	173	143	168	13.23	cps
Indium         115-1         16607524         10319469         72390         8999794         92.74         cps           Indium         115-2         1696197         1682709         1664429         1681111         0.95         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Holmium	165-1	20193437	12512704	83992	10930044	92.84	cps
Indium         115-2         1696197         1682709         1664429         1681111         0.95         cps           Iron         54-2         2134         2037         1953         2041         4.41         cps           Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Holmium	165-2	7385854	7360123	7415224	7387067	0.37	cps
Iron     54-2     2134     2037     1953     2041     4.41     cps       Iron     56-2     33239     33239     33379     33286     0.24     cps       Iron     57-2     843     877     960     893     6.73     cps       Krypton     83-1     347     363     453     388     14.80     cps	Indium	115-1	16607524	10319469	72390	8999794	92.74	cps
Iron         56-2         33239         33239         33379         33286         0.24         cps           Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Indium	115-2	1696197	1682709	1664429	1681111	0.95	cps
Iron         57-2         843         877         960         893         6.73         cps           Krypton         83-1         347         363         453         388         14.80         cps	Iron	54-2	2134	2037	1953	2041	4.41	cps
Krypton 83-1 347 363 453 388 14.80 cps	Iron	56-2	33239	33239	33379	33286	0.24	cps
	Iron	57-2	843	877	960	893	6.73	cps
Lead 206-1 4031 3917 3981 3976 1.43 cps	Krypton	83-1	347	363	453	388	14.80	cps
	Lead	206-1	4031	3917	3981	3976	1.43	cps

Lab Sample ID: WATER-02RE Instrumnet Name: P8

Client Sample ID: WATER-02RE Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3511	3484	3350	3448	2.49	cps
Lead	208-1	15937	15731	15480	15716	1.46	cps
Lithium	6-1	9795637	6025612	227331	5349527	90.10	cps
Magnesium	24-2	3068373	3109640	3092040	3090018	0.67	cps
Manganese	55-2	16423	16253	16129	16268	0.91	cps
Molybdenum	94-1	2977	2987	2897	2954	1.67	cps
Molybdenum	95-1	4071	4151	4301	4174	2.80	cps
Molybdenum	96-1	4514	4417	4544	4492	1.47	cps
Molybdenum	97-1	2474	2927	2580	2660	8.91	cps
Molybdenum	98-1	6562	6578	6482	6540	0.79	cps
Neodymium	150-1	37	27	20	28	30.20	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	1820	1680	1907	1802	6.35	cps
Phosphorus	31-2	993	907	970	957	4.69	cps
Potassium	39-2	333474	331538	334721	333244	0.48	cps
Rhodium	103-1	15332309	9533143	69769	8311740	92.69	cps
Rhodium	103-2	6247364	6178945	6190409	6205573	0.59	cps
Scandium	45-1	11864748	7653591	75356	6531232	91.47	cps
Scandium	45-2	234864	236414	235087	235455	0.36	cps
Selenium	82-1	0	70	93	54	89.21	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	10	7	10	9	21.63	cps
Silicon	28-1	35723382	36763201	36788104	36424896	1.67	cps
Silver	107-1	647	487	430	521	21.56	cps
Silver	109-1	387	477	430	431	10.44	cps
Sodium	23-2	26850467	26591170	26436009	26625882	0.79	cps
Strontium	86-1	961173	991366	1000962	984500	2.11	cps
Strontium	88-1	8727501	9033502	9137983	8966329	2.38	cps
Sulfur	34-1	2229426	2257103	2213705	2233412	0.98	cps
Terbium	159-1	20928964	12548791	87868	11188541	93.73	cps
Terbium	159-2	7169057	7188857	7059913	7139276	0.97	cps
Thallium	203-1	440	440	473	451	4.27	cps
Thallium	205-1	1030	1080	1037	1049	2.59	cps
Tin	118-1	3571	3631	3587	3596	0.86	cps
Titanium	47-1	1543	1253	1327	1375	10.97	cps
Uranium	238-1	1780	2017	2077	1958	8.01	cps

Lab Sample ID: WATER-02RE Instrumnet Name: P8
Client Sample ID: WATER-02RE Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:49:18 DataFile Name: 085AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	297	287	270	284	4.73	cps
Ytterbium	172-1	203	147	113	154	29.46	cps
Ytterbium	172-2	90	90	103	94	8.15	cps
Ytterbium	176-1	2090	1343	90	1175	86.05	cps
Ytterbium	176-2	307	290	347	314	9.26	cps
Yttrium	89-1	29374782	18673498	132856	16060379	92.12	cps
Yttrium	89-2	2158010	2156187	2093625	2135941	1.72	cps
Zinc	66-2	8696	9013	9080	8930	2.30	cps
Zirconium	90-1	1753	1807	1127	1562	24.21	cps
Zirconium	91-1	330	330	290	317	7.29	cps

<sup>3</sup>

Lab Sample ID: WATER-02 Instrumnet Name: P8

Client Sample ID: WATER-02 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Date & Time Acquired . 2025-02-00 10.52.57		Dalar	ile ivallie .	UOUAREF.U			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1827	1757	1790	1791	1.95	cps
Antimony	121-1	2727	2834	2840	2800	2.27	cps
Arsenic	75-2	53	60	40	51	19.92	cps
Barium	135-1	156088	159504	160819	158804	1.54	cps
Barium	137-1	269291	277593	279283	275389	1.94	cps
Beryllium	9-1	472	460	467	467	1.35	cps
Bismuth	209-1	12351607	12023493	12109899	12161666	1.40	cps
Bismuth	209-2	5264951	5231481	5230732	5242388	0.37	cps
Bromine	81-1	82397	91244	92774	88805	6.31	cps
Cadmium	108-1	27	50	37	38	30.98	cps
Cadmium	106-1	8923	8713	8666	8767	1.56	cps
Cadmium	111-1	6284	6127	6091	6167	1.67	cps
Calcium	43-1	1859494	1878309	1889945	1875916	0.82	cps
Calcium	44-1	29705809	29841103	30499078	30015330	1.41	cps
Carbon	12-1	86804672	93361249	95002839	91722920	4.73	cps
Carbon	12-2	597079	592003	591631	593571	0.51	cps
Chlorine	35-1	7875474	8551370	8953847	8460230	6.44	cps
Chlorine	35-2	37786	38033	38448	38089	0.88	cps
Chromium	52-2	1497	1537	1480	1505	1.94	cps
Cobalt	59-2	1317	1103	1120	1180	10.06	cps
Copper	63-2	461505	458641	458860	459668	0.35	cps
Dysprosium	156-1	277	273	263	271	2.56	cps
Dysprosium	156-2	130	117	130	126	6.13	cps
Erbium	164-1	160	133	163	152	10.80	cps
Erbium	164-2	47	40	43	43	7.70	cps
Gadolinium	160-1	390	373	373	379	2.54	cps
Gadolinium	160-2	193	190	147	177	14.74	cps
Holmium	165-1	20662672	20035084	20213420	20303725	1.59	cps
Holmium	165-2	7336092	7327539	7339749	7334460	0.09	cps
Indium	115-1	16488608	16329727	16407831	16408722	0.48	cps
Indium	115-2	1673699	1661038	1636860	1657199	1.13	cps
Iron	54-2	1990	1960	2007	1986	1.19	cps
Iron	56-2	33376	33209	32962	33182	0.63	cps
Iron	57-2	947	890	873	903	4.26	cps
Krypton	83-1	267	257	207	243	13.21	cps
Lead	206-1	4154	4364	4061	4193	3.71	cps

Lab Sample ID :WATER-02Instrumnet Name :P8Client Sample ID :WATER-02Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Date & Time Acquired : 2025-02-06 16:52:37			ile Name :	U86AREF.0			
Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
207-1	3367	3424	3597	3463	3.46	cps	
208-1	15297	16411	15861	15856	3.51	cps	
6-1	9728602	9649287	9744429	9707439	0.53	cps	
24-2	3102057	3066755	3075000	3081271	0.60	cps	
55-2	16396	15722	16844	16321	3.46	cps	
94-1	2797	2920	3044	2920	4.22	cps	
95-1	3821	3987	4124	3977	3.82	cps	
96-1	4284	4291	4597	4391	4.08	cps	
97-1	2497	2757	2694	2649	5.12	cps	
98-1	6572	6578	6535	6562	0.36	cps	
150-1	50	37	27	38	30.98	cps	
150-2	3	3	13	7	86.65	cps	
60-2	1810	1903	1823	1846	2.74	cps	
31-2	890	943	933	922	3.07	cps	
39-2	331614	330602	326892	329703	0.75	cps	
103-1	15647739	15306900	15048909	15334516	1.96	cps	
103-2	6145883	6113800	6242288	6167323	1.08	cps	
45-1	12140643	11715811	11814883	11890446	1.87	cps	
45-2	229893	233623	231813	231776	0.80	cps	
82-1	70	157	183	137	43.36	cps	
77-2	7	0	3	3	100.05	cps	
78-2	17	17	20	18	10.81	cps	
28-1	35406234	35795679	36343641	35848518	1.31	cps	
107-1	517	537	563	539	4.34	cps	
109-1	367	377	403	382	4.96	cps	
23-2	26287520	26361933	26367920	26339124	0.17	cps	
86-1	956042	983445	984692	974726	1.66	cps	
88-1	8553616	8763362	8772274	8696417	1.42	cps	
34-1	2229974	2209693	2181002	2206890	1.11	cps	
159-1	20709181	20526659	20578772	20604871	0.46	cps	
159-2	7131028	6929217	7009036	7023093	1.45	cps	
203-1	437	450	420	436	3.45	cps	
205-1	1077	1137	1153	1122	3.59	cps	
118-1	3530	3927	3827	3762	5.49	cps	
47-1	1450	1297	1440	1396	6.15	cps	
238-1	1937	2060	2197	2065	6.30	cps	
	Mass  207-1 208-1 6-1 24-2 55-2 94-1 95-1 96-1 97-1 98-1 150-2 60-2 31-2 39-2 103-1 103-2 45-1 45-2 82-1 77-2 78-2 28-1 107-1 109-1 23-2 86-1 88-1 34-1 159-1 159-2 203-1 205-1 118-1 47-1	Mass         CPS1           207-1         3367           208-1         15297           6-1         9728602           24-2         3102057           55-2         16396           94-1         2797           95-1         3821           96-1         4284           97-1         2497           98-1         6572           150-2         3           60-2         1810           31-2         890           39-2         331614           103-1         15647739           103-2         6145883           45-1         12140643           45-2         229893           82-1         70           77-2         7           78-2         17           28-1         35406234           107-1         517           109-1         367           23-2         26287520           86-1         956042           88-1         8553616           34-1         2229974           159-2         7131028           203-1         437           205-1         1077	Mass         CPS1         CPS2           207-1         3367         3424           208-1         15297         16411           6-1         9728602         9649287           24-2         3102057         3066755           55-2         16396         15722           94-1         2797         2920           95-1         3821         3987           96-1         4284         4291           97-1         2497         2757           98-1         6572         6578           150-2         3         3           60-2         1810         1903           31-2         890         943           39-2         331614         330602           103-1         15647739         15306900           103-2         6145883         6113800           45-1         12140643         11715811           45-2         229893         233623           82-1         70         157           77-2         7         0           78-2         17         17           28-1         35406234         35795679           107-1         517	Mass         CPS1         CPS2         CPS3           207-1         3367         3424         3597           208-1         15297         16411         15861           6-1         9728602         9649287         9744429           24-2         3102057         3066755         3075000           55-2         16396         15722         16844           94-1         2797         2920         3044           95-1         3821         3987         4124           96-1         4284         4291         4597           97-1         2497         2757         2694           98-1         6572         6578         6535           150-1         50         37         27           150-2         3         3         13           60-2         1810         1903         1823           31-2         890         943         933           39-2         331614         330602         326892           103-1         15647739         15306900         15048909           103-2         6145883         6113800         6242288           45-1         12140643         11715811 </td <td>Mass         CPS1         CPS2         CPS3         CPSMean           207-1         3367         3424         3597         3463           208-1         15297         16411         15861         15856           6-1         9728602         9649287         9744429         9707439           24-2         3102057         3066755         3075000         3081271           55-2         16396         15722         16844         16321           94-1         2797         2920         3044         2920           95-1         3821         3987         4124         3977           96-1         4284         4291         4597         4391           97-1         2497         2757         2694         2649           98-1         6572         6578         6535         6562           150-1         50         37         27         38           31-2         890         943         933         922           39-2         331614         330602         326892         329703           103-1         15647739         15306900         15048909         15334516           103-2         6145883</td> <td>Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         3367         3424         3597         3463         3.46           208-1         15297         16411         15861         15866         3.51           6-1         9728602         9649287         9744429         9707439         0.53           24-2         3102057         3066755         3075000         3081271         0.60           55-2         16396         15722         16844         16321         3.46           94-1         2797         2920         3044         2920         4.22           95-1         3821         3987         4124         3977         3.82           96-1         4284         4291         4597         4391         4.08           97-1         2497         2757         2694         2649         5.12           98-1         6572         6578         6535         6562         0.36           150-1         50         37         27         38         30.98           150-2         3         3         13         7         86.65           60-2         1810</td>	Mass         CPS1         CPS2         CPS3         CPSMean           207-1         3367         3424         3597         3463           208-1         15297         16411         15861         15856           6-1         9728602         9649287         9744429         9707439           24-2         3102057         3066755         3075000         3081271           55-2         16396         15722         16844         16321           94-1         2797         2920         3044         2920           95-1         3821         3987         4124         3977           96-1         4284         4291         4597         4391           97-1         2497         2757         2694         2649           98-1         6572         6578         6535         6562           150-1         50         37         27         38           31-2         890         943         933         922           39-2         331614         330602         326892         329703           103-1         15647739         15306900         15048909         15334516           103-2         6145883	Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         3367         3424         3597         3463         3.46           208-1         15297         16411         15861         15866         3.51           6-1         9728602         9649287         9744429         9707439         0.53           24-2         3102057         3066755         3075000         3081271         0.60           55-2         16396         15722         16844         16321         3.46           94-1         2797         2920         3044         2920         4.22           95-1         3821         3987         4124         3977         3.82           96-1         4284         4291         4597         4391         4.08           97-1         2497         2757         2694         2649         5.12           98-1         6572         6578         6535         6562         0.36           150-1         50         37         27         38         30.98           150-2         3         3         13         7         86.65           60-2         1810	

Lab Sample ID :WATER-02Instrumnet Name :P8Client Sample ID :WATER-02Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:52:37 DataFile Name: 086AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	297	340	277	304	10.64	cps
variadium	012	201	0-10	211	004	10.04	оро
Ytterbium	172-1	257	290	207	251	16.70	cps
Ytterbium	172-2	97	83	80	87	10.18	cps
Ytterbium	176-1	2044	2000	1857	1967	4.97	cps
Ytterbium	176-2	357	303	347	336	8.45	cps
Yttrium	89-1	29037190	29003786	28877180	28972718	0.29	cps
Yttrium	89-2	2143627	2134157	2110249	2129344	0.81	cps
Zinc	66-2	8840	8726	8486	8684	2.08	cps
Zirconium	90-1	1700	1577	1737	1671	5.02	cps
Zirconium	91-1	320	300	370	330	10.93	cps

3 /06

Lab Sample ID :CCV004Instrumnet Name :P8Client Sample ID :CCV004Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3807617	3843368	3858931	3836639	0.69	cps
Antimony	121-1	8641902	8697132	8669926	8669653	0.32	cps
Arsenic	75-2	181067	179609	182424	181033	0.78	cps
Barium	135-1	10362241	10565981	10549416	10492546	1.08	cps
Barium	137-1	17968265	18135305	17986543	18030038	0.51	cps
Beryllium	9-1	3247016	3197423	3169378	3204606	1.23	cps
Bismuth	209-1	11425115	11556220	11160109	11380481	1.77	cps
Bismuth	209-2	4896604	4872044	4904686	4891111	0.35	cps
Bromine	81-1	11848	11999	11622	11823	1.61	cps
Cadmium	108-1	170876	171472	167255	169867	1.34	cps
Cadmium	106-1	249503	250122	248675	249433	0.29	cps
Cadmium	111-1	2117150	2122150	2144341	2127880	0.68	cps
Calcium	43-1	14273397	14596220	14458687	14442768	1.12	cps
Calcium	44-1	236417383	237908136	238938936	237754819	0.53	cps
Carbon	12-1	6369145	6562986	6601598	6511243	1.91	cps
Carbon	12-2	51108	51302	52202	51538	1.13	cps
Chlorine	35-1	1211747	1155363	1074038	1147049	6.04	cps
Chlorine	35-2	3884	3794	3804	3827	1.29	cps
Chromium	52-2	2079602	2105430	2121033	2102022	1.00	cps
Cobalt	59-2	3847259	3855023	3826231	3842838	0.39	cps
Copper	63-2	28102955	27837473	28342267	28094232	0.90	cps
Dysprosium	156-1	440	460	547	482	11.76	cps
Dysprosium	156-2	153	100	103	119	25.13	cps
Erbium	164-1	430	420	470	440	6.01	cps
Erbium	164-2	163	160	217	180	17.67	cps
Gadolinium	160-1	453	393	423	423	7.09	cps
Gadolinium	160-2	120	120	147	129	11.95	cps
Holmium	165-1	19858605	20087465	20199700	20048590	0.87	cps
Holmium	165-2	7214807	7210762	7265697	7230422	0.42	cps
Indium	115-1	15491835	15943295	15379631	15604920	1.91	cps
Indium	115-2	1601444	1581395	1572397	1585079	0.94	cps
Iron	54-2	19992941	20040008	20144205	20059051	0.39	cps
Iron	56-2	363345235	366272261	367184128	365600541	0.55	cps
Iron	57-2	9256209	9268680	9309459	9278116	0.30	cps
Krypton	83-1	253	327	243	274	16.58	cps
Lead	206-1	32692330	33165402	32729316	32862349	0.80	cps

Lab Sample ID :CCV004Instrumnet Name :P8Client Sample ID :CCV004Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

Date & Time Act	Date & Time Acquired . 2025-02-00 10.55.55		DalaFii	Datarile Name.		067CCV.u			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Lead	207-1	28131153	28696223	28606513	28477963	1.07	cps		
Lead	208-1	129945993	132135842	130345266	130809034	0.89	cps		
Lithium	6-1	9101729	9032857	8754180	8962922	2.05	cps		
Magnesium	24-2	66916932	66704331	67925226	67182163	0.97	cps		
Manganese	55-2	8172445	8169854	8278186	8206829	0.75	cps		
Molybdenum	94-1	31865521	32009919	32054500	31976646	0.31	cps		
Molybdenum	95-1	45103036	44883049	44929211	44971765	0.26	cps		
Molybdenum	96-1	49746129	49393953	48956883	49365655	0.80	cps		
Molybdenum	97-1	28086375	27965981	27960960	28004438	0.25	cps		
Molybdenum	98-1	73461777	73824396	73640791	73642321	0.25	cps		
Neodymium	150-1	903	920	840	888	4.75	cps		
Neodymium	150-2	63	70	100	78	25.11	cps		
Nickel	60-2	972522	965171	975139	970944	0.53	cps		
Phosphorus	31-2	37304	36576	38304	37395	2.32	cps		
Potassium	39-2	19330338	19597060	20030998	19652799	1.80	cps		
Rhodium	103-1	14015619	14156216	14156216	14109350	0.58	cps		
Rhodium	103-2	5651026	5581942	5599848	5610938	0.64	cps		
Scandium	45-1	11410978	11702409	11475173	11529520	1.33	cps		
Scandium	45-2	230154	231810	233043	231669	0.63	cps		
Selenium	82-1	127875	128858	128491	128408	0.39	cps		
Selenium	77-2	2200	2380	2340	2307	4.10	cps		
Selenium	78-2	7425	7742	7716	7628	2.30	cps		
Silicon	28-1	7673688	7873611	7738896	7762065	1.31	cps		
Silver	107-1	10430190	10544921	10493761	10489624	0.55	cps		
Silver	109-1	9927295	9885159	9899035	9903830	0.22	cps		
Sodium	23-2	137164075	135801955	138720231	137228754	1.06	cps		
Strontium	86-1	2984903	3040041	2935064	2986669	1.76	cps		
Strontium	88-1	24846106	25607614	25019257	25157659	1.59	cps		
Sulfur	34-1	1691591	1684817	1667172	1681194	0.75	cps		
Terbium	159-1	20712100	20307366	20741602	20587022	1.18	cps		
Terbium	159-2	7070734	7002941	7064731	7046135	0.53	cps		
Thallium	203-1	8125712	8089181	8149715	8121536	0.38	cps		
Thallium	205-1	19176294	19112408	19080328	19123010	0.26	cps		
Tin	118-1	6913621	7038330	6955256	6969069	0.91	cps		
Titanium	47-1	14040733	14123641	14085111	14083162	0.29	cps		
Uranium	238-1	26815988	27133716	26609172	26852959	0.98	cps		

Lab Sample ID :CCV004Instrumnet Name :P8Client Sample ID :CCV004Dilution Factor :1

Date & Time Acquired: 2025-02-06 16:55:55 DataFile Name: 087CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
								_
Vanadium	51-2	1658060	1661987	1678302	1666116	0.64	cps	
Ytterbium	172-1	553	520	477	517	7.44	cps	
Ytterbium	172-2	250	207	177	211	17.46	cps	
Ytterbium	176-1	41311	42749	41696	41918	1.78	cps	
Ytterbium	176-2	14405	14561	14581	14516	0.67	cps	
Yttrium	89-1	28485836	28759681	28573338	28606285	0.49	cps	
Yttrium	89-2	2081546	2102219	2140839	2108201	1.43	cps	
Zinc	66-2	3069723	3040297	3088507	3066175	0.79	cps	
Zirconium	90-1	15899796	15746816	15844301	15830304	0.49	cps	
Zirconium	91-1	3496262	3566983	3515231	3526159	1.04	cps	

Lab Sample ID :CCB004Instrumnet Name :P8Client Sample ID :CCB004Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

Date & Time At	quireu . 202	3-02-00 17.02.11	Dalar	ile ivallie .	009CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	123	93	117	111	14.18	cps
Antimony	121-1	587	520	573	560	6.30	cps
Arsenic	75-2	3	3	0	2	86.60	cps
Barium	135-1	113	97	73	94	21.27	cps
Barium	137-1	127	93	100	107	16.54	cps
Beryllium	9-1	932	825	844	867	6.62	cps
Bismuth	209-1	13040516	12663931	12814424	12839624	1.48	cps
Bismuth	209-2	5687997	5600005	5673016	5653673	0.83	cps
Bromine	81-1	8529	8363	8429	8440	0.99	cps
Cadmium	108-1	33	37	13	28	45.44	cps
Cadmium	106-1	8683	8543	9140	8788	3.55	cps
Cadmium	111-1	6085	6008	6412	6168	3.48	cps
Calcium	43-1	717	760	770	749	3.79	cps
Calcium	44-1	35350	36002	36085	35812	1.12	cps
Carbon	12-1	5329292	5242932	5230972	5267732	1.02	cps
Carbon	12-2	33972	33809	33699	33827	0.41	cps
Chlorine	35-1	593422	585235	578491	585716	1.28	cps
Chlorine	35-2	2187	2290	2150	2209	3.29	cps
Chromium	52-2	1690	1643	1563	1632	3.93	cps
Cobalt	59-2	167	113	167	149	20.68	cps
Copper	63-2	4584	4597	4494	4559	1.23	cps
Dysprosium	156-1	10	13	23	16	44.60	cps
Dysprosium	156-2	0	3	10	4	114.60	cps
Erbium	164-1	123	87	97	102	18.54	cps
Erbium	164-2	60	17	37	38	57.40	cps
Gadolinium	160-1	120	100	113	111	9.16	cps
Gadolinium	160-2	47	17	10	24	79.90	cps
Holmium	165-1	20768149	20906592	20875388	20850043	0.35	cps
Holmium	165-2	7661746	7651587	7549143	7620825	0.82	cps
Indium	115-1	17422205	17329403	17246577	17332728	0.51	cps
Indium	115-2	1774994	1756429	1787002	1772808	0.87	cps
Iron	54-2	887	793	850	843	5.58	cps
Iron	56-2	11408	11625	12065	11699	2.86	cps
Iron	57-2	303	247	327	292	14.08	cps
Krypton	83-1	337	277	263	292	13.37	cps
Lead	206-1	2877	2904	2717	2833	3.56	cps

<sub>1</sub> 710

Lab Sample ID :CCB004Instrumnet Name :P8Client Sample ID :CCB004Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2280	2334	2154	2256	4.10	cps
Lead	208-1	10995	10869	10632	10832	1.70	cps
Lithium	6-1	10138752	10064632	9922487	10041957	1.09	cps
Magnesium	24-2	2680	2507	2714	2634	4.21	cps
Manganese	55-2	250	223	230	234	5.92	cps
Molybdenum	94-1	750	643	697	697	7.66	cps
Molybdenum	95-1	483	413	373	423	13.15	cps
Molybdenum	96-1	593	547	470	537	11.60	cps
Molybdenum	97-1	307	223	217	249	20.15	cps
Molybdenum	98-1	770	667	617	684	11.43	cps
Neodymium	150-1	7	17	3	9	78.08	cps
Neodymium	150-2	0	10	3	4	114.60	cps
Nickel	60-2	1307	1303	1273	1295	1.42	cps
Phosphorus	31-2	90	83	117	97	18.25	cps
Potassium	39-2	18462	18035	17491	17996	2.70	cps
Rhodium	103-1	16512364	16367319	16629933	16503205	0.80	cps
Rhodium	103-2	6674502	6664648	6555641	6631597	0.99	cps
Scandium	45-1	12604265	12371738	12337353	12437785	1.17	cps
Scandium	45-2	243770	244811	245438	244673	0.34	cps
Selenium	82-1	-83	17	13	-18	-319.47	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	13	7	13	11	34.61	cps
Silicon	28-1	654852	650819	651463	652378	0.33	cps
Silver	107-1	690	560	607	619	10.64	cps
Silver	109-1	517	533	470	507	6.48	cps
Sodium	23-2	76569	76455	76616	76547	0.11	cps
Strontium	86-1	663	707	657	676	4.02	cps
Strontium	88-1	1583	1570	1467	1540	4.15	cps
Sulfur	34-1	918622	923051	869671	903781	3.28	cps
Terbium	159-1	21714971	21535569	21291342	21513961	0.99	cps
Terbium	159-2	7354226	7256651	7343696	7318191	0.73	cps
Thallium	203-1	520	480	420	473	10.63	cps
Thallium	205-1	1197	1127	1030	1118	7.49	cps
Tin	118-1	3130	3027	3154	3104	2.17	cps
Titanium	47-1	297	227	287	270	14.02	cps
Uranium	238-1	83	80	77	80	4.16	cps

Lab Sample ID :CCB004Instrumnet Name :P8Client Sample ID :CCB004Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:02:11 DataFile Name: 089CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	3	20	13	66.16	cps
Ytterbium	172-1	107	83	123	104	19.24	cps
Ytterbium	172-2	47	27	23	32	39.17	cps
Ytterbium	176-1	1934	2020	1880	1945	3.63	cps
Ytterbium	176-2	297	313	330	313	5.32	cps
Yttrium	89-1	31096651	30464528	30430926	30664035	1.22	cps
Yttrium	89-2	2204711	2281917	2258579	2248402	1.76	cps
Zinc	66-2	230	217	237	228	4.47	cps
Zirconium	90-1	1130	1160	1290	1193	7.13	cps
Zirconium	91-1	220	183	223	209	10.62	cps

<sub>3</sub> 712

Lab Sample ID :PB166532BLInstrumnet Name :P8Client Sample ID :PBS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:12:19 DataFile Name: 092CCBE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	90	93	63	82	20.00	cps
Antimony	121-1	157	157	173	162	5.93	cps
Arsenic	75-2	7	7	0	4	86.60	cps
Barium	135-1	70	83	53	69	21.82	cps
Barium	137-1	93	133	120	116	17.63	cps
Beryllium	9-1	604	549	601	585	5.31	cps
Bismuth	209-1	12613388	12763764	12901827	12759660	1.13	cps
Bismuth	209-2	5558355	5561627	5308178	5476053	2.66	cps
Bromine	81-1	7349	7465	7162	7325	2.09	cps
Cadmium	108-1	27	10	43	27	62.49	cps
Cadmium	106-1	8716	8336	9073	8708	4.23	cps
Cadmium	111-1	6126	5858	6344	6109	3.98	cps
Calcium	43-1	713	757	757	742	3.37	cps
Calcium	44-1	36082	36319	36794	36398	1.00	cps
Carbon	12-1	4971379	4930742	4935698	4945940	0.45	cps
Carbon	12-2	31424	31420	31146	31330	0.51	cps
Chlorine	35-1	421981	417875	411508	417122	1.27	cps
Chlorine	35-2	1433	1733	1770	1646	11.22	cps
Chromium	52-2	2774	2814	2774	2787	0.83	cps
Cobalt	59-2	140	170	170	160	10.83	cps
Copper	63-2	4657	4454	4507	4540	2.32	cps
Dysprosium	156-1	10	10	30	17	69.28	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	107	120	83	103	17.96	cps
Erbium	164-2	53	23	50	42	38.95	cps
Gadolinium	160-1	137	107	103	116	15.89	cps
Gadolinium	160-2	27	23	23	24	7.89	cps
Holmium	165-1	20674739	20651396	20584304	20636813	0.23	cps
Holmium	165-2	7594621	7482221	7170660	7415834	2.96	cps
Indium	115-1	17040463	17108529	17335185	17161392	0.90	cps
Indium	115-2	1767232	1795908	1686853	1749998	3.23	cps
Iron	54-2	857	847	800	834	3.62	cps
Iron	56-2	11895	12392	12402	12230	2.37	cps
Iron	57-2	260	337	463	353	29.07	cps
Krypton	83-1	290	360	263	304	16.40	cps
Lead	206-1	2107	2007	1970	2028	3.49	cps

Lab Sample ID :PB166532BLInstrumnet Name :P8Client Sample ID :PBS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:12:19 DataFile Name: 092CCBE.d

quirea: 202	25-02-06 17:12:19	DataF	ile Name :	092CCBE.d		
Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
207-1	1580	1800	1673	1685	6.56	cps
208-1	8091	8068	8094	8084	0.18	cps
6-1	9945357	9914203	9886982	9915514	0.29	cps
24-2	2904	2874	2917	2898	0.77	cps
55-2	297	270	263	277	6.37	cps
94-1	577	453	660	563	18.46	cps
95-1	377	230	257	288	27.15	cps
96-1	370	350	360	360	2.78	cps
97-1	150	150	167	156	6.19	cps
98-1	357	333	293	328	9.77	cps
150-1	10	0	13	8	89.21	cps
150-2	0	0	0	0	0.00	cps
60-2	1723	1643	1623	1663	3.18	cps
31-2	67	70	67	68	2.84	cps
39-2	17651	17597	17718	17655	0.34	cps
103-1	16344934	16300461	16136420	16260605	0.68	cps
103-2	6645920	6541218	6187032	6458057	3.72	cps
45-1	12585739	12588869	12602300	12592303	0.07	cps
45-2	241808	244692	228973	238491	3.51	cps
82-1	20	-43	37	4	950.02	cps
77-2	0	0	7	2	173.21	cps
78-2	10	10	3	8	49.52	cps
28-1	654818	651847	650492	652386	0.34	cps
107-1	453	353	427	411	12.60	cps
109-1	187	213	207	202	6.86	cps
23-2	77705	78121	77022	77616	0.71	cps
86-1	667	617	573	619	7.55	cps
88-1	1443	1357	1367	1389	3.41	cps
34-1	1000365	984007	979001	987791	1.13	cps
159-1	21261369	21075148	20932319	21089612	0.78	cps
159-2	7278257	7248822	6799670	7108916	3.77	cps
203-1	230	333	330	298	19.72	cps
205-1	720	663	637	673	6.32	cps
118-1	2000	1910	2040	1984	3.36	cps
47-1	287	340	267	298	12.73	cps
238-1	37	30	37	34	11.18	cps
	Mass  207-1 208-1 6-1 24-2 55-2 94-1 95-1 96-1 97-1 98-1 150-2 60-2 31-2 39-2 103-1 103-2 45-1 45-2 82-1 77-2 78-2 28-1 107-1 109-1 23-2 86-1 88-1 34-1 159-1 159-2 203-1 205-1 118-1 47-1	Mass         CPS1           207-1         1580           208-1         8091           6-1         9945357           24-2         2904           55-2         297           94-1         577           95-1         377           96-1         370           97-1         150           98-1         357           150-1         10           150-2         0           60-2         1723           31-2         67           39-2         17651           103-1         16344934           103-2         6645920           45-1         12585739           45-2         241808           82-1         20           77-2         0           78-2         10           28-1         654818           107-1         453           109-1         187           23-2         77705           86-1         667           88-1         1443           34-1         1000365           159-1         21261369           159-2         7278257	Mass         CPS1         CPS2           207-1         1580         1800           208-1         8091         8068           6-1         9945357         9914203           24-2         2904         2874           55-2         297         270           94-1         577         453           95-1         377         230           96-1         370         350           97-1         150         150           98-1         357         333           150-1         10         0           150-2         0         0           60-2         1723         1643           31-2         67         70           39-2         17651         17597           103-1         16344934         16300461           103-2         6645920         6541218           45-1         12585739         12588869           45-2         241808         244692           82-1         20         -43           77-2         0         0           78-2         10         10           28-1         654818         651847	Mass         CPS1         CPS2         CPS3           207-1         1580         1800         1673           208-1         8091         8068         8094           6-1         9945357         9914203         9886982           24-2         2904         2874         2917           55-2         297         270         263           94-1         577         453         660           95-1         377         230         257           96-1         370         350         360           97-1         150         150         167           98-1         357         333         293           150-1         10         0         13           150-2         0         0         0           60-2         1723         1643         1623           31-2         67         70         67           39-2         17651         17597         17718           103-1         16344934         16300461         16136420           103-2         6645920         6541218         6187032           45-1         12585739         1258869         12602300	Mass         CPS1         CPS2         CPS3         CPSMean           207-1         1580         1800         1673         1685           208-1         8091         8068         8094         8084           6-1         9945357         9914203         9886982         9915514           24-2         2904         2874         2917         2898           55-2         297         270         263         277           94-1         577         453         660         563           95-1         377         230         257         288           96-1         370         350         360         360           97-1         150         150         167         156           98-1         357         333         293         328           150-1         10         0         13         8           150-2         0         0         0         0           60-2         1723         1643         1623         1663           31-2         67         70         67         68           39-2         17651         17597         17718         17655	Mass         CPS1         CPS2         CPS3         CPSMean         CPSRD           207-1         1580         1800         1673         1685         6.56           208-1         8091         8068         8094         8084         0.18           6-1         9945357         9914203         9886982         9915514         0.29           24-2         2904         2874         2917         2898         0.77           55-2         297         270         263         277         6.37           94-1         577         453         660         563         18.46           95-1         377         230         257         288         27.15           96-1         370         350         360         360         2.78           97-1         150         167         156         6.19           98-1         357         333         293         328         9.77           150-1         10         0         13         8         89.21           150-2         0         0         0         0         0         0           60-2         1723         1643         1623         1

<sup>2</sup> 714

LB Number : LB134612

Lab Sample ID : PB166532BL

Client Sample ID: PBS532 Instrumnet Name:

Operator:

Jaswal P8

092CCBE.d

Dilution Factor:

1

Date & Time Acquired : 2025-02-06 17:12:19 DataFile Name :

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	13	27	23	21	32.88	cps	
Ytterbium	172-1	87	110	143	113	25.13	cps	
Ytterbium	172-2	40	47	43	43	7.70	cps	
Ytterbium	176-1	1994	1913	1960	1956	2.06	cps	
Ytterbium	176-2	280	270	293	281	4.16	cps	
Yttrium	89-1	30648092	30078025	30674639	30466919	1.11	cps	
Yttrium	89-2	2270997	2260709	2125744	2219150	3.65	cps	
Zinc	66-2	183	187	207	192	6.56	cps	
Zirconium	90-1	1137	1000	1013	1050	7.18	cps	
Zirconium	91-1	263	270	183	239	20.19	cps	

Lab Sample ID :PB166532BSInstrumnet Name :P8Client Sample ID :LCS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

Date & Time Ac	quireu . 202	3-02-00 17.13.37	Dalar	ile ivallie .	093LC33.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	783368	773277	779555	778733	0.65	cps
Antimony	121-1	9132077	9268429	9177018	9192508	0.76	cps
Arsenic	75-2	188888	189013	188010	188637	0.29	cps
Barium	135-1	10604452	10770742	10584678	10653290	0.96	cps
Barium	137-1	18687618	18685379	18458213	18610403	0.71	cps
Beryllium	9-1	3348429	3308003	3353778	3336737	0.75	cps
Bismuth	209-1	12176058	12218489	10899873	11764807	6.37	cps
Bismuth	209-2	4828324	5056227	5206487	5030346	3.79	cps
Bromine	81-1	6835	6401	6755	6664	3.46	cps
Cadmium	108-1	178354	178085	181669	179369	1.11	cps
Cadmium	106-1	260575	261650	261172	261132	0.21	cps
Cadmium	111-1	2225992	2295970	2272692	2264885	1.57	cps
Calcium	43-1	3095357	3081612	3205288	3127419	2.17	cps
Calcium	44-1	50241413	50286444	51586024	50704627	1.51	cps
Carbon	12-1	6239638	6302938	6380907	6307827	1.12	cps
Carbon	12-2	42170	42551	42548	42423	0.52	cps
Chlorine	35-1	404966	405662	405524	405384	0.09	cps
Chlorine	35-2	1733	1710	1777	1740	1.94	cps
Chromium	52-2	2171260	2166132	2186521	2174638	0.49	cps
Cobalt	59-2	4056382	4049295	3986492	4030723	0.95	cps
Copper	63-2	30617894	30454045	30534128	30535356	0.27	cps
Dysprosium	156-1	187	197	207	197	5.08	cps
Dysprosium	156-2	30	23	20	24	20.83	cps
Erbium	164-1	187	190	160	179	9.19	cps
Erbium	164-2	83	57	63	68	20.47	cps
Gadolinium	160-1	223	190	197	203	8.68	cps
Gadolinium	160-2	50	50	53	51	3.76	cps
Holmium	165-1	20936474	20528967	18108538	19857993	7.70	cps
Holmium	165-2	6770547	6965625	7278146	7004773	3.66	cps
Indium	115-1	16619953	16665296	14363380	15882876	8.29	cps
Indium	115-2	1447528	1574815	1614574	1545639	5.65	cps
Iron	54-2	4347392	4357408	4364540	4356447	0.20	cps
Iron	56-2	78304549	78094017	78022047	78140204	0.19	cps
Iron	57-2	2002405	1989528	1991814	1994582	0.34	cps
Krypton	83-1	267	277	253	266	4.41	cps
Lead	206-1	34053805	34294794	34738063	34362221	1.01	cps

Lab Sample ID :PB166532BSInstrumnet Name :P8Client Sample ID :LCS532Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

Date & Time Acc	fulled. 202	0 02 00 17.10.07	Datain	C Name .	0302000.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	29614515	29429160	29798315	29613997	0.62	cps
Lead	208-1	137210728	136620835	137272313	137034625	0.26	cps
Lithium	6-1	9527915	9509604	8768401	9268640	4.68	cps
Magnesium	24-2	14562863	14320961	14765614	14549813	1.53	cps
Manganese	55-2	8525311	8595631	8531109	8550683	0.46	cps
Molybdenum	94-1	32421633	33146343	31846695	32471557	2.01	cps
Molybdenum	95-1	46208873	46225441	45846314	46093543	0.46	cps
Molybdenum	96-1	50774883	50209068	50919899	50634616	0.74	cps
Molybdenum	97-1	28524838	28538878	28626865	28563527	0.19	cps
Molybdenum	98-1	73872642	75192344	74034082	74366356	0.97	cps
Neodymium	150-1	690	743	777	737	5.93	cps
Neodymium	150-2	33	17	17	22	43.28	cps
Nickel	60-2	1122774	1113694	1104336	1113601	0.83	cps
Phosphorus	31-2	38792	38431	38010	38411	1.02	cps
Potassium	39-2	4148527	4131338	4148974	4142946	0.24	cps
Rhodium	103-1	15455474	15276974	13481231	14737893	7.41	cps
Rhodium	103-2	5628832	5820803	5969822	5806486	2.94	cps
Scandium	45-1	12290280	12132109	10818264	11746884	6.88	cps
Scandium	45-2	217099	228877	235780	227252	4.16	cps
Selenium	82-1	136051	136389	138839	137093	1.11	cps
Selenium	77-2	2477	2467	2260	2401	5.09	cps
Selenium	78-2	8136	7796	8503	8145	4.34	cps
Silicon	28-1	8037995	8071476	7880993	7996821	1.27	cps
Silver	107-1	11262203	11335918	11370372	11322831	0.49	cps
Silver	109-1	10788447	10678957	10748333	10738579	0.52	cps
Sodium	23-2	29498673	29219000	29606735	29441470	0.68	cps
Strontium	86-1	3010529	3108398	2946656	3021861	2.70	cps
Strontium	88-1	26150661	25608765	25606261	25788563	1.22	cps
Sulfur	34-1	1757463	1740853	1742466	1746928	0.52	cps
Terbium	159-1	20814403	21019119	18402894	20078806	7.25	cps
Terbium	159-2	6633444	6902464	7010368	6848759	2.83	cps
Thallium	203-1	8386474	8371913	8564147	8440845	1.27	cps
Thallium	205-1	20010166	20087786	19810491	19969481	0.72	cps
Tin	118-1	7279194	7297633	7176012	7250947	0.90	cps
Titanium	47-1	14578806	14528802	14803296	14636968	1.00	cps
Uranium	238-1	26498280	26551275	26959343	26669633	0.95	cps

<sup>2</sup> 717

LB Number: LB134612

Lab Sample ID : PB166532BS

Client Sample ID: LCS532 Dilution Factor:

Date & Time Acquired: 2025-02-06 17:15:37 DataFile Name: 093LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1708375	1710955	1665296	1694876	1.51	cps
Ytterbium	172-1	180	250	233	221	16.54	cps
Ytterbium	172-2	113	83	80	92	19.91	cps
Ytterbium	176-1	40081	40522	40382	40328	0.56	cps
Ytterbium	176-2	14738	14118	14782	14546	2.55	cps
Yttrium	89-1	29921811	29990363	25779136	28563770	8.44	cps
Yttrium	89-2	1995705	2127189	2112732	2078542	3.47	cps
Zinc	66-2	3396964	3394601	3407555	3399707	0.20	cps
Zirconium	90-1	16190447	16271850	16017864	16160054	0.80	cps
Zirconium	91-1	3572864	3597326	3638204	3602798	0.92	cps

Operator:

Instrumnet Name:

Jaswal

P8

1

<sub>3</sub> 718

Lab Sample ID: Q1271-03 Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	280	410	307	332	20.67	cps
Antimony	121-1	2760	2607	2280	2549	9.62	cps
Arsenic	75-2	13	10	13	12	15.73	cps
Barium	135-1	757	577	540	624	18.57	cps
Barium	137-1	1270	1007	840	1039	20.87	cps
Beryllium	9-1	1672	1449	1385	1502	10.05	cps
Bismuth	209-1	10424841	12178149	12847806	11816932	10.59	cps
Bismuth	209-2	5551890	5647628	5582344	5593954	0.87	cps
Bromine	81-1	7142	7312	7872	7442	5.14	cps
Cadmium	108-1	197	210	233	213	8.70	cps
Cadmium	106-1	7175	8466	8459	8034	9.25	cps
Cadmium	111-1	5275	6083	6048	5802	7.87	cps
Calcium	43-1	8946	9056	9240	9081	1.63	cps
Calcium	44-1	176313	175642	174231	175395	0.61	cps
Carbon	12-1	10792470	11213618	11262307	11089465	2.33	cps
Carbon	12-2	72488	74652	74253	73797	1.56	cps
Chlorine	35-1	376400	377413	377164	376992	0.14	cps
Chlorine	35-2	1450	1477	1580	1502	4.57	cps
Chromium	52-2	7802	8102	7826	7910	2.11	cps
Cobalt	59-2	273	383	327	328	16.78	cps
Copper	63-2	5578	5391	5645	5538	2.37	cps
Dysprosium	156-1	23	33	33	30	19.25	cps
Dysprosium	156-2	20	27	13	20	33.35	cps
Erbium	164-1	100	147	143	130	20.03	cps
Erbium	164-2	60	33	37	43	33.53	cps
Gadolinium	160-1	137	143	163	148	9.39	cps
Gadolinium	160-2	40	27	30	32	21.53	cps
Holmium	165-1	16894136	19825124	20514330	19077863	10.08	cps
Holmium	165-2	7749431	7688327	7567024	7668261	1.21	cps
Indium	115-1	13796437	16574554	17255862	15875618	11.54	cps
Indium	115-2	1808443	1762886	1745756	1772361	1.83	cps
Iron	54-2	3941	4064	3991	3998	1.55	cps
Iron	56-2	65600	63762	64592	64651	1.42	cps
Iron	57-2	1687	1610	1633	1643	2.39	cps
Krypton	83-1	333	247	270	283	15.83	cps
Lead	206-1	6652	5818	5478	5983	10.10	cps

Lab Sample ID: Q1271-03 Instrumnet Name: P8

Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5791	5058	4818	5222	9.71	cps
Lead	208-1	25910	23065	21604	23526	9.31	cps
Lithium	6-1	8294409	9619875	9990482	9301588	9.59	cps
Magnesium	24-2	23105	23178	23155	23146	0.16	cps
Manganese	55-2	1333	1450	1330	1371	4.98	cps
Molybdenum	94-1	242611	240661	240485	241252	0.49	cps
Molybdenum	95-1	419435	417962	410779	416059	1.11	cps
Molybdenum	96-1	450518	450220	448233	449657	0.28	cps
Molybdenum	97-1	262152	260454	260077	260895	0.42	cps
Molybdenum	98-1	670733	673751	662773	669086	0.85	cps
Neodymium	150-1	70	50	50	57	20.38	cps
Neodymium	150-2	20	27	7	18	57.27	cps
Nickel	60-2	3277	3344	3237	3286	1.64	cps
Phosphorus	31-2	690	627	713	677	6.63	cps
Potassium	39-2	19880	19730	20101	19904	0.94	cps
Rhodium	103-1	13289869	15774275	16134283	15066142	10.28	cps
Rhodium	103-2	6587758	6664263	6511796	6587939	1.16	cps
Scandium	45-1	10071393	11819753	12283572	11391573	10.24	cps
Scandium	45-2	249612	245018	242540	245723	1.46	cps
Selenium	82-1	-27	23	-20	-8	-349.04	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	7	17	13	12	41.65	cps
Silicon	28-1	781848	784488	775177	780505	0.61	cps
Silver	107-1	1767	1540	1443	1583	10.48	cps
Silver	109-1	1440	1247	1040	1242	16.10	cps
Sodium	23-2	90042	90471	91216	90576	0.66	cps
Strontium	86-1	1293	1100	1143	1179	8.61	cps
Strontium	88-1	6678	6101	5891	6224	6.55	cps
Sulfur	34-1	922789	933500	913256	923182	1.10	cps
Terbium	159-1	17521638	20312388	21357979	19730669	10.05	cps
Terbium	159-2	7402821	7312017	7374117	7362985	0.63	cps
Thallium	203-1	1130	1027	933	1030	9.55	cps
Thallium	205-1	2687	2160	2200	2349	12.48	cps
Tin	118-1	13527	13427	13617	13524	0.70	cps
Titanium	47-1	1473	1127	1287	1296	13.39	cps
Uranium	238-1	1317	877	700	964	32.93	cps

Lab Sample ID :Q1271-03Instrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:18:21 DataFile Name: 094AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
- arameter	IVIASS	01 31	01 02	CI 33	Of Sivican	CI GINOD	Office
Vanadium	51-2	120	113	63	99	31.32	cps
Ytterbium	172-1	93	110	100	101	8.30	cps
Ytterbium	172-2	53	33	60	49	28.39	cps
Ytterbium	176-1	1543	1863	1987	1798	12.73	cps
Ytterbium	176-2	310	333	303	316	4.99	cps
Yttrium	89-1	24730161	29399896	30368281	28166113	10.70	cps
Yttrium	89-2	2270398	2259635	2187924	2239319	2.00	cps
Zinc	66-2	217040	218424	216406	217290	0.47	cps
Zirconium	90-1	1723	1513	1590	1609	6.60	cps
Zirconium	91-1	380	323	257	320	19.29	cps

<sup>3</sup> 72

Lab Sample ID: Q1271-03DUP Instrumnet Name: P8
Client Sample ID: 3189-3196 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Date & Time / te	squired. Zoz	0 02 00 17.21.40	Datai	iic i vairic .	000/ (I (E) .d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	383	350	410	381	7.89	cps
Antimony	121-1	1003	1110	1057	1057	5.05	cps
Arsenic	75-2	10	3	7	7	50.03	cps
Barium	135-1	540	613	520	558	8.81	cps
Barium	137-1	947	953	867	922	5.23	cps
Beryllium	9-1	1004	932	930	955	4.38	cps
Bismuth	209-1	12543496	12867175	12916232	12775634	1.59	cps
Bismuth	209-2	5661761	5624980	5635801	5640847	0.34	cps
Bromine	81-1	7035	7539	7836	7470	5.42	cps
Cadmium	108-1	200	153	193	182	13.85	cps
Cadmium	106-1	8459	8139	8649	8416	3.06	cps
Cadmium	111-1	5978	5850	6173	6000	2.71	cps
Calcium	43-1	8756	8833	8823	8804	0.47	cps
Calcium	44-1	171692	175315	171769	172925	1.20	cps
Carbon	12-1	10959186	11643694	11841936	11481606	4.03	cps
Carbon	12-2	74813	76096	76977	75962	1.43	cps
Chlorine	35-1	363511	362741	363982	363411	0.17	cps
Chlorine	35-2	1437	1610	1443	1497	6.56	cps
Chromium	52-2	7786	7949	7999	7911	1.41	cps
Cobalt	59-2	297	343	277	306	11.20	cps
Copper	63-2	5418	5424	5248	5363	1.87	cps
Dysprosium	156-1	53	43	47	48	10.66	cps
Dysprosium	156-2	30	37	23	30	22.23	cps
Erbium	164-1	120	133	130	128	5.43	cps
Erbium	164-2	70	30	47	49	41.10	cps
Gadolinium	160-1	170	130	150	150	13.33	cps
Gadolinium	160-2	40	27	23	30	29.40	cps
Holmium	165-1	20277021	20925106	21250883	20817670	2.38	cps
Holmium	165-2	7821138	7667232	7537044	7675138	1.85	cps
Indium	115-1	16407045	17254425	17496781	17052750	3.36	cps
Indium	115-2	1800298	1779680	1782737	1787572	0.62	cps
Iron	54-2	2534	2484	2760	2592	5.69	cps
Iron	56-2	41992	42657	42359	42336	0.79	cps
Iron	57-2	1137	1073	1057	1089	3.88	cps
Krypton	83-1	243	323	263	277	15.05	cps
Lead	206-1	4611	4728	4434	4591	3.22	cps

Lab Sample ID :Q1271-03DUPInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Date & Time Act	quireu . 202	25-02-00 17.21.40	Dalar	ile ivallie .	U9SAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4057	3981	3844	3961	2.73	cps
Lead	208-1	18332	18248	17582	18054	2.28	cps
Lithium	6-1	9677645	10002271	10202124	9960680	2.66	cps
Magnesium	24-2	23402	22925	23172	23166	1.03	cps
Manganese	55-2	1283	1247	1197	1242	3.50	cps
Molybdenum	94-1	240646	244050	245650	243449	1.05	cps
Molybdenum	95-1	413254	420225	424532	419337	1.36	cps
Molybdenum	96-1	442300	452551	450569	448473	1.21	cps
Molybdenum	97-1	258157	262966	263651	261591	1.14	cps
Molybdenum	98-1	668259	671287	679205	672917	0.84	cps
Neodymium	150-1	33	67	73	58	37.09	cps
Neodymium	150-2	17	13	17	16	12.40	cps
Nickel	60-2	3090	3327	3240	3219	3.72	cps
Phosphorus	31-2	650	557	630	612	8.03	cps
Potassium	39-2	19824	20077	19667	19856	1.04	cps
Rhodium	103-1	15495706	16440658	16772789	16236385	4.08	cps
Rhodium	103-2	6629503	6614608	6645482	6629864	0.23	cps
Scandium	45-1	12039424	12552266	12430459	12340716	2.17	cps
Scandium	45-2	248304	248077	246779	247720	0.33	cps
Selenium	82-1	47	17	-3	20	125.81	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	7	23	7	12	78.69	cps
Silicon	28-1	751638	760135	761073	757615	0.69	cps
Silver	107-1	537	627	693	619	12.70	cps
Silver	109-1	470	450	530	483	8.61	cps
Sodium	23-2	90833	89955	90703	90497	0.52	cps
Strontium	86-1	1100	1063	1033	1066	3.13	cps
Strontium	88-1	6118	5868	5625	5870	4.20	cps
Sulfur	34-1	947147	944689	950978	947605	0.33	cps
Terbium	159-1	20547711	21484308	21565886	21199302	2.67	cps
Terbium	159-2	7395978	7306615	7433169	7378587	0.88	cps
Thallium	203-1	530	527	570	542	4.45	cps
Thallium	205-1	1520	1520	1307	1449	8.50	cps
Tin	118-1	14228	14548	14014	14264	1.88	cps
Titanium	47-1	1237	1253	1033	1175	10.43	cps
Uranium	238-1	707	640	610	652	7.59	cps

<sup>2</sup> /23

LB Number : LB134612 Operator :

Lab Sample ID : Q1271-03DUP Instrumnet Name : P8
Client Sample ID : 3189-3196 Dilution Factor : 1

Date & Time Acquired: 2025-02-06 17:21:40 DataFile Name: 095AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	97	117	67	93	26.96	cps
Ytterbium	172-1	90	157	147	131	27.42	cps
Ytterbium	172-2	43	50	33	42	19.87	cps
Ytterbium	176-1	1743	2067	2017	1942	8.96	cps
Ytterbium	176-2	277	250	383	303	23.26	cps
Yttrium	89-1	29644003	30457540	30807708	30303084	1.97	cps
Yttrium	89-2	2257230	2254410	2237775	2249805	0.47	cps
Zinc	66-2	214623	215418	211994	214011	0.84	cps
Zirconium	90-1	1297	1430	1450	1392	5.99	cps
Zirconium	91-1	323	220	217	253	23.94	cps

Jaswal

<sub>3</sub> 724

Lab Sample ID: Q1271-03LX5 Instrumnet Name: P8

Client Sample ID: 3189-3196L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Date & Time / to	quircu . 202	0 02 00 17.20.00	Datai	iic i vairie .	030/ (( \L   . u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	217	180	180	192	11.01	cps
Antimony	121-1	870	840	843	851	1.93	cps
Arsenic	75-2	10	7	10	9	21.63	cps
Barium	135-1	160	207	170	179	13.74	cps
Barium	137-1	213	327	283	274	20.84	cps
Beryllium	9-1	784	739	760	761	2.96	cps
Bismuth	209-1	12762885	12890355	12775628	12809622	0.55	cps
Bismuth	209-2	6285193	5451637	4851229	5529353	13.02	cps
Bromine	81-1	6372	6732	6702	6602	3.03	cps
Cadmium	108-1	67	50	90	69	29.17	cps
Cadmium	106-1	8733	8493	8666	8631	1.44	cps
Cadmium	111-1	6163	5997	6057	6072	1.39	cps
Calcium	43-1	2494	2444	2430	2456	1.36	cps
Calcium	44-1	63071	63543	63365	63326	0.38	cps
Carbon	12-1	6653542	6797132	6759841	6736838	1.11	cps
Carbon	12-2	42842	42110	42037	42330	1.05	cps
Chlorine	35-1	339659	336982	334469	337037	0.77	cps
Chlorine	35-2	1267	1387	1243	1299	5.92	cps
Chromium	52-2	2140	2254	2297	2230	3.63	cps
Cobalt	59-2	173	193	120	162	23.37	cps
Copper	63-2	4397	4291	4134	4274	3.10	cps
Dysprosium	156-1	17	17	20	18	10.81	cps
Dysprosium	156-2	3	10	10	8	49.52	cps
Erbium	164-1	87	107	123	106	17.39	cps
Erbium	164-2	47	27	57	43	35.25	cps
Gadolinium	160-1	113	123	137	124	9.41	cps
Gadolinium	160-2	47	17	17	27	64.94	cps
Holmium	165-1	20857701	20787874	20433243	20692939	1.10	cps
Holmium	165-2	8576183	7261781	6672666	7503543	12.99	cps
Indium	115-1	17384031	17216318	16829475	17143275	1.66	cps
Indium	115-2	2004654	1710034	1472478	1729055	15.42	cps
Iron	54-2	1303	1357	1203	1288	6.04	cps
Iron	56-2	18966	19897	19200	19354	2.50	cps
Iron	57-2	540	457	483	493	8.63	cps
Krypton	83-1	293	370	330	331	11.58	cps
Lead	206-1	2684	2697	2640	2674	1.11	cps

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Lab Sample ID: Q1271-03LX5 Instrumnet Name: P8
Client Sample ID: 3189-3196L Dilution Factor: 5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Date & Time Act	quireu . 202	25-02-06 17.25.00	Dalar	ile ivallie .	U90AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2244	2297	2174	2238	2.76	cps
Lead	208-1	10448	10548	10365	10454	0.88	cps
Lithium	6-1	10085155	9718210	9755311	9852892	2.05	cps
Magnesium	24-2	7225	7489	7269	7327	1.93	cps
Manganese	55-2	320	413	297	343	17.98	cps
Molybdenum	94-1	46564	48019	47233	47272	1.54	cps
Molybdenum	95-1	81427	82423	82426	82092	0.70	cps
Molybdenum	96-1	86510	87409	87510	87143	0.63	cps
Molybdenum	97-1	50167	50642	50783	50530	0.64	cps
Molybdenum	98-1	130406	130651	130160	130406	0.19	cps
Neodymium	150-1	13	27	17	19	36.75	cps
Neodymium	150-2	3	3	17	8	99.04	cps
Nickel	60-2	1670	1700	1707	1692	1.15	cps
Phosphorus	31-2	213	200	187	200	6.67	cps
Potassium	39-2	18262	18108	18075	18148	0.55	cps
Rhodium	103-1	16208630	16442414	16126427	16259157	1.01	cps
Rhodium	103-2	7373179	6390099	5685138	6482806	13.08	cps
Scandium	45-1	12540421	12660600	12298785	12499936	1.47	cps
Scandium	45-2	278308	241207	213212	244242	13.37	cps
Selenium	82-1	-13	-63	-63	-47	-61.87	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	7	7	17	10	57.72	cps
Silicon	28-1	673274	674565	670975	672938	0.27	cps
Silver	107-1	427	397	417	413	3.70	cps
Silver	109-1	253	237	320	270	16.33	cps
Sodium	23-2	72579	73289	72727	72865	0.51	cps
Strontium	86-1	667	600	700	656	7.77	cps
Strontium	88-1	2354	2404	2277	2345	2.72	cps
Sulfur	34-1	930253	929347	935005	931535	0.33	cps
Terbium	159-1	21046426	21405159	20859354	21103646	1.31	cps
Terbium	159-2	8210941	7119020	6364369	7231443	12.84	cps
Thallium	203-1	367	373	367	369	1.04	cps
Thallium	205-1	883	837	847	856	2.87	cps
Tin	118-1	4364	4277	4267	4303	1.24	cps
Titanium	47-1	477	517	520	504	4.78	cps
Uranium	238-1	127	123	80	110	23.67	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1271-03LX5Instrumnet Name :P8Client Sample ID :3189-3196LDilution Factor :5

Date & Time Acquired: 2025-02-06 17:25:00 DataFile Name: 096AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	47	33	23	34	34.00	cps
Ytterbium	172-1	103	143	93	113	23.35	cps
Ytterbium	172-2	50	77	57	61	22.71	cps
Ytterbium	176-1	1753	1913	1853	1840	4.39	cps
Ytterbium	176-2	357	273	250	293	19.12	cps
Yttrium	89-1	30302706	30659936	30051279	30337974	1.01	cps
Yttrium	89-2	2516331	2204761	1949393	2223495	12.77	cps
Zinc	66-2	41928	42958	41019	41969	2.31	cps
Zirconium	90-1	1067	1060	1097	1074	1.82	cps
Zirconium	91-1	243	230	220	231	5.07	cps

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<sup>3</sup> 727

Lab Sample ID :Q1271-03MSInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Date & Time Acquired . 2025-02-00 17.26.		.5-02-00 17.26.19	Dalar	ile ivallie .	U9/AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	128145	127389	127378	127637	0.34	cps
Antimony	121-1	1810940	1831906	1695284	1779377	4.13	cps
Arsenic	75-2	27	23	23	24	7.89	cps
Barium	135-1	1815267	1850458	1739886	1801870	3.14	cps
Barium	137-1	3135856	3104398	2977111	3072455	2.74	cps
Beryllium	9-1	627227	641607	591590	620141	4.15	cps
Bismuth	209-1	11661936	12347014	11459415	11822789	3.93	cps
Bismuth	209-2	4989386	4978190	5037620	5001732	0.63	cps
Bromine	81-1	8409	9166	9767	9114	7.46	cps
Cadmium	108-1	31513	32348	30146	31336	3.55	cps
Cadmium	106-1	55541	57054	52135	54910	4.59	cps
Cadmium	111-1	410028	420694	388031	406251	4.10	cps
Calcium	43-1	570030	584352	531415	561932	4.87	cps
Calcium	44-1	9218580	9584623	8660328	9154510	5.08	cps
Carbon	12-1	10012838	10399768	10402188	10271598	2.18	cps
Carbon	12-2	66807	66145	66918	66623	0.63	cps
Chlorine	35-1	11782844	13751573	13233935	12922784	7.90	cps
Chlorine	35-2	57323	59224	59920	58822	2.29	cps
Chromium	52-2	360137	356767	364210	360371	1.03	cps
Cobalt	59-2	697438	689502	695650	694197	0.60	cps
Copper	63-2	5496397	5497075	5592623	5528699	1.00	cps
Dysprosium	156-1	80	77	113	90	22.53	cps
Dysprosium	156-2	23	40	7	23	71.42	cps
Erbium	164-1	183	190	140	171	15.87	cps
Erbium	164-2	43	53	47	48	10.66	cps
Gadolinium	160-1	170	207	160	179	13.74	cps
Gadolinium	160-2	40	10	80	43	81.04	cps
Holmium	165-1	18945572	19873059	18788046	19202226	3.05	cps
Holmium	165-2	6784714	6761551	6889393	6811886	1.00	cps
Indium	115-1	15660730	16202986	15448906	15770874	2.47	cps
Indium	115-2	1520180	1525752	1552523	1532818	1.13	cps
Iron	54-2	674259	669510	679784	674518	0.76	cps
Iron	56-2	12507583	12398081	12566485	12490716	0.68	cps
Iron	57-2	306027	301858	310498	306128	1.41	cps
Krypton	83-1	340	227	257	274	21.40	cps
Lead	206-1	6445540	6443789	5934481	6274604	4.69	cps

Lab Sample ID :Q1271-03MSInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Date & Time Acquired: 202		25-02-06 17:28:19	Datar	DataFile Name :		U9/AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	5631447	5589179	5103724	5441450	5.39	cps	
Lead	208-1	25636742	25807204	23692791	25045579	4.69	cps	
Lithium	6-1	9235819	9877278	9198718	9437272	4.04	cps	
Magnesium	24-2	2489496	2465039	2492325	2482287	0.60	cps	
Manganese	55-2	1522837	1481809	1538326	1514324	1.93	cps	
Molybdenum	94-1	3112265	3201586	2876605	3063485	5.48	cps	
Molybdenum	95-1	3501839	3619227	3171627	3430898	6.76	cps	
Molybdenum	96-1	3948567	4032097	3691988	3890884	4.56	cps	
Molybdenum	97-1	2185173	2201917	2049225	2145438	3.90	cps	
Molybdenum	98-1	5643128	5721689	5216972	5527263	4.91	cps	
Neodymium	150-1	173	173	163	170	3.40	cps	
Neodymium	150-2	7	20	13	13	49.99	cps	
Nickel	60-2	194993	193051	193537	193861	0.52	cps	
Phosphorus	31-2	720	640	597	652	9.59	cps	
Potassium	39-2	653916	651447	654666	653343	0.26	cps	
Rhodium	103-1	14814187	15382743	14795018	14997316	2.23	cps	
Rhodium	103-2	5885546	5920341	5946596	5917494	0.52	cps	
Scandium	45-1	11318209	12106945	11374572	11599908	3.79	cps	
Scandium	45-2	225953	223118	224395	224489	0.63	cps	
Selenium	82-1	25694	26666	24542	25634	4.15	cps	
Selenium	77-2	363	433	417	404	9.04	cps	
Selenium	78-2	1443	1390	1560	1465	5.94	cps	
Silicon	28-1	745390	759987	738929	748102	1.44	cps	
Silver	107-1	357915	368034	338455	354801	4.24	cps	
Silver	109-1	332356	346022	321077	333152	3.75	cps	
Sodium	23-2	5005735	4915691	5050540	4990655	1.38	cps	
Strontium	86-1	640834	658266	605869	634990	4.20	cps	
Strontium	88-1	5743217	5985839	5436532	5721863	4.81	cps	
Sulfur	34-1	965937	974934	926220	955697	2.71	cps	
Terbium	159-1	19537497	20362615	19658967	19853026	2.24	cps	
Terbium	159-2	6548041	6564647	6680562	6597750	1.09	cps	
Thallium	203-1	1480116	1518483	1418289	1472296	3.43	cps	
Thallium	205-1	3727442	3814537	3481486	3674488	4.70	cps	
Tin	118-1	1197218	1230489	1139304	1189003	3.88	cps	
Titanium	47-1	2027	2124	1843	1998	7.12	cps	
Uranium	238-1	4936789	5023273	4527696	4829253	5.48	cps	

Lab Sample ID :Q1271-03MSInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:28:19 DataFile Name: 097AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	291013	285441	290486	288980	1.06	cps
Ytterbium	172-1	180	173	210	188	10.40	cps
Ytterbium	172-2	93	50	90	78	31.00	cps
Ytterbium	176-1	8950	9057	8396	8801	4.03	cps
Ytterbium	176-2	2744	2660	2710	2705	1.55	cps
Yttrium	89-1	27929105	29419106	27514837	28287683	3.54	cps
Yttrium	89-2	1988936	2025646	2045072	2019885	1.41	cps
Zinc	66-2	743195	736016	747139	742117	0.76	cps
Zirconium	90-1	2935034	3011661	2785142	2910612	3.96	cps
Zirconium	91-1	626428	643631	594744	621601	3.99	cps

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Lab Sample ID :Q1271-03MSDInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	143436	142052	140562	142017	1.01	cps	
Antimony	121-1	1809337	1878621	1850839	1846265	1.89	cps	
Arsenic	75-2	7	23	23	18	54.11	cps	
Barium	135-1	1817448	1899493	1849926	1855622	2.23	cps	
Barium	137-1	3204775	3272895	3242521	3240064	1.05	cps	
Beryllium	9-1	634652	650389	649582	644875	1.37	cps	
Bismuth	209-1	12336773	12632209	13226932	12731971	3.56	cps	
Bismuth	209-2	5270569	5683739	5650191	5534833	4.15	cps	
Bromine	81-1	7799	8709	8900	8469	6.95	cps	
Cadmium	108-1	31476	33280	33006	32587	2.98	cps	
Cadmium	106-1	56411	58102	58825	57779	2.14	cps	
Cadmium	111-1	416243	429845	426997	424362	1.69	cps	
Calcium	43-1	570561	588646	591342	583516	1.94	cps	
Calcium	44-1	9189723	9715903	9665820	9523815	3.05	cps	
Carbon	12-1	10293551	10840919	11039658	10724709	3.60	cps	
Carbon	12-2	71402	70488	71834	71241	0.96	cps	
Chlorine	35-1	13131564	14778019	15559933	14489838	8.55	cps	
Chlorine	35-2	67295	67680	68330	67769	0.77	cps	
Chromium	52-2	402547	401358	400324	401409	0.28	cps	
Cobalt	59-2	777995	776224	778350	777523	0.15	cps	
Copper	63-2	6147616	6068575	6151143	6122445	0.76	cps	
Dysprosium	156-1	110	83	123	106	19.30	cps	
Dysprosium	156-2	27	37	17	27	37.50	cps	
Erbium	164-1	150	143	150	148	2.60	cps	
Erbium	164-2	53	50	40	48	14.52	cps	
Gadolinium	160-1	183	213	170	189	11.75	cps	
Gadolinium	160-2	47	43	50	47	7.15	cps	
Holmium	165-1	20391607	20848776	21608140	20949508	2.93	cps	
Holmium	165-2	7296987	7842066	7620148	7586401	3.61	cps	
Indium	115-1	16440518	16961400	17634174	17012031	3.52	cps	
Indium	115-2	1645806	1822120	1804641	1757522	5.53	cps	
Iron	54-2	761399	751787	753459	755548	0.68	cps	
Iron	56-2	14149686	13653350	13919736	13907591	1.79	cps	
Iron	57-2	343050	340101	341497	341549	0.43	cps	
Krypton	83-1	300	253	260	271	9.31	cps	
Lead	206-1	6405349	6650215	6648327	6567964	2.14	cps	

Lab Sample ID :Q1271-03MSDInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:31:23 DataFile Name: 098AREF.d

Lead         207-1         6479200         5758778         5735494         5657824         2.74         cps           Lead         208-1         253005990         26086329         261483661         25545293         1.83         cps           Lithium         6-1         9600123         9934454         10519114         2563611         1.33         cps           Mangensium         24-2         2750565         2735897         2805481         12736311         1.96         cps           Molybdenum         94-1         3094407         3200146         3187998         3160851         1.83         cps           Molybdenum         96-1         3529272         3655020         3591876         3592056         1.75         cps           Molybdenum         96-1         3529272         3655020         3591876         3592056         1.75         cps           Molybdenum         96-1         218215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymlum         150-1         213         213         20         209	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lithium         6-1         9690123         9934454         10519114         10047897         4_24         cps           Magnesium         24-2         2750565         2755387         2805481         2763811         1,33         cps           Manganese         55-2         1717403         1652736         1674721         1681620         1,96         cps           Molybdenum         94-1         3094407         3200146         3187998         3160851         1,83         cps           Molybdenum         96-1         3931953         4126994         4102073         4053674         2,62         cps           Molybdenum         96-1         2931953         4126994         4102073         4053674         2,62         cps           Molybdenum         97-1         2188215         2272759         2271427         2244134         2,16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1,11         cps           Neodymium         150-1         213         213         20         209         3,69         cps           Neodymium         150-2         13         13         27         18         43.33<	Lead	207-1	5479200	5758778	5735494	5657824	2.74	cps
Magnesium         24-2         2750565         2735387         2805481         2763811         1.33         cps           Manganese         55-2         1717403         1652736         1674721         1681620         1.96         cps           Molybdenum         94-1         3094407         3200146         3187998         3160851         1.83         cps           Molybdenum         96-1         3931953         4126994         4102073         4053674         2.62         cps           Molybdenum         97-1         218215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymlum         150-1         213         213         20         209         3.69         cps           Neodymlum         150-2         13         13         27         18         43.33         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         567         cps <td>Lead</td> <td>208-1</td> <td>25300590</td> <td>26086329</td> <td>26148961</td> <td>25845293</td> <td>1.83</td> <td>cps</td>	Lead	208-1	25300590	26086329	26148961	25845293	1.83	cps
Manganese         55-2         1717403         1652736         1674721         1681620         1.96         cps           Molybdenum         94-1         3094407         3200146         3187998         3160851         1.83         cps           Molybdenum         95-1         3629272         3656020         3591876         3592056         1.75         cps           Molybdenum         96-1         3931953         4126984         4102073         4053674         2.62         cps           Molybdenum         99-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Neodymium         150-2         13         13         27         18         43.33         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         567         cps           Phosphorus         31-2         787         703         760         750         567         cps	Lithium	6-1	9690123	9934454	10519114	10047897	4.24	cps
Molybdenum         94-1         3094407         3200146         3187998         3160851         1.83         cps           Molybdenum         95-1         3529272         3655020         3591876         3592056         1.75         cps           Molybdenum         96-1         3931953         4126994         4102073         4053674         2.62         cps           Molybdenum         97-1         2188215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Neodymium         150-2         13         13         27         18         43.33         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Photassium         39-2         73063         724608         725138         726603         0.41         cps           Rhodium         103-1         15736694         16152444         16937925         16275344         3.76         <	Magnesium	24-2	2750565	2735387	2805481	2763811	1.33	cps
Molybdenum         95-1         3529272         3655020         3591876         3592056         1.75         cps           Molybdenum         96-1         3931953         4126994         4102073         4053674         2.62         cps           Molybdenum         97-1         2188215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76	Manganese	55-2	1717403	1652736	1674721	1681620	1.96	cps
Molybdenum         96-1         3931953         4126994         4102073         4053674         2.62         cps           Molybdenum         97-1         2188215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         6675061         6753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Neodymium         150-2         214138         214431         212743         213771         0.42         cps           Nickel         60-2         241438         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodlum         103-1         15736694         16152444         16937925         16275354         3.75         cps           Scandlum         45-1         111866643         1248956         13045867         12467155         4.73	Molybdenum	94-1	3094407	3200146	3187998	3160851	1.83	cps
Molybdenum         97-1         2188215         2272759         2271427         2244134         2.16         cps           Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         7         703         760         750         5.667         cps           Phosphorus         31-2         7         703         760         750         5.667         cps           Phosphorus         31-2         730063         724608         725138         726603         0.41         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         1627354         3.75         cps           Scandium         45-1         11866843         1248956         13045867         12467155         4.73         cps	Molybdenum	95-1	3529272	3655020	3591876	3592056	1.75	cps
Molybdenum         98-1         5675061         5753704         5800976         5743247         1.11         cps           Neodymium         150-1         213         213         200         209         3.69         cps           Neodymium         150-2         13         13         27         18         43.33         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         1627354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-2         235116         251785         250335         245745         4.73         cps           Scelenium         45-2         235116         251785         250335         245745         3.76         cps	Molybdenum	96-1	3931953	4126994	4102073	4053674	2.62	cps
Neodymium         150-1         213         213         200         209         3.69         cps           Neodymium         150-2         13         13         27         18         43.33         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scelenium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         77-2         480         427         543         483         12.08         cps	Molybdenum	97-1	2188215	2272759	2271427	2244134	2.16	cps
Neodymium         150-2         13         13         27         18         43.33         cps           Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps	Molybdenum	98-1	5675061	5753704	5800976	5743247	1.11	cps
Nickel         60-2         214138         214431         212743         213771         0.42         cps           Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selicenium         78-2         1537         1643         1653         1611         4.01         cps           Siliver         107-1         355939         376300         371484         367908         2.89         cps	Neodymium	150-1	213	213	200	209	3.69	cps
Phosphorus         31-2         787         703         760         750         5.67         cps           Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps <td>Neodymium</td> <td>150-2</td> <td>13</td> <td>13</td> <td>27</td> <td>18</td> <td>43.33</td> <td>cps</td>	Neodymium	150-2	13	13	27	18	43.33	cps
Potassium         39-2         730063         724608         725138         726603         0.41         cps           Rhodium         103-1         15735694         16152444         16937925         16275354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps <td>Nickel</td> <td>60-2</td> <td>214138</td> <td>214431</td> <td>212743</td> <td>213771</td> <td>0.42</td> <td>cps</td>	Nickel	60-2	214138	214431	212743	213771	0.42	cps
Rhodium         103-1         1573694         16152444         16937925         16275354         3.75         cps           Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Siliver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps	Phosphorus	31-2	787	703	760	750	5.67	cps
Rhodium         103-2         6178560         6608727         6587933         6458407         3.76         cps           Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Siliver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Strontium         86-1         643774         671839         666599         569163         1.00         cps </td <td>Potassium</td> <td>39-2</td> <td>730063</td> <td>724608</td> <td>725138</td> <td>726603</td> <td>0.41</td> <td>cps</td>	Potassium	39-2	730063	724608	725138	726603	0.41	cps
Scandium         45-1         11866643         12488956         13045867         12467155         4.73         cps           Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps	Rhodium	103-1	15735694	16152444	16937925	16275354	3.75	cps
Scandium         45-2         235116         251785         250335         245745         3.76         cps           Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Siliver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps	Rhodium	103-2	6178560	6608727	6587933	6458407	3.76	cps
Selenium         82-1         26185         26719         27114         26673         1.75         cps           Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps	Scandium	45-1	11866643	12488956	13045867	12467155	4.73	cps
Selenium         77-2         480         427         543         483         12.08         cps           Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps </td <td>Scandium</td> <td>45-2</td> <td>235116</td> <td>251785</td> <td>250335</td> <td>245745</td> <td>3.76</td> <td>cps</td>	Scandium	45-2	235116	251785	250335	245745	3.76	cps
Selenium         78-2         1537         1643         1653         1611         4.01         cps           Silicon         28-1         752015         763358         765095         760156         0.93         cps           Siliver         107-1         355939         376300         371484         367908         2.89         cps           Siliver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44	Selenium	82-1	26185	26719	27114	26673	1.75	cps
Silicon         28-1         752015         763358         765095         760156         0.93         cps           Silver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97	Selenium	77-2	480	427	543	483	12.08	cps
Silver         107-1         355939         376300         371484         367908         2.89         cps           Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28	Selenium	78-2	1537	1643	1653	1611	4.01	cps
Silver         109-1         337047         351997         351200         346748         2.43         cps           Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26	Silicon	28-1	752015	763358	765095	760156	0.93	cps
Sodium         23-2         5592194         5540666         5652629         5595163         1.00         cps           Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26<	Silver	107-1	355939	376300	371484	367908	2.89	cps
Strontium         86-1         643774         671839         666599         660738         2.26         cps           Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26         cps	Silver	109-1	337047	351997	351200	346748	2.43	cps
Strontium         88-1         5831094         5939998         5921408         5897500         0.99         cps           Sulfur         34-1         947165         957050         954170         952795         0.53         cps           Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26         cps	Sodium	23-2	5592194	5540666	5652629	5595163	1.00	cps
Sulfur       34-1       947165       957050       954170       952795       0.53       cps         Terbium       159-1       20280094       21461661       22241881       21327879       4.63       cps         Terbium       159-2       6940239       7486254       7400066       7275519       4.03       cps         Thallium       203-1       1498366       1569101       1555576       1541015       2.44       cps         Thallium       205-1       3796055       3855779       3864572       3838802       0.97       cps         Tin       118-1       1206997       1254105       1257798       1239633       2.28       cps         Titanium       47-1       2007       1923       2174       2035       6.26       cps	Strontium	86-1	643774	671839	666599	660738	2.26	cps
Terbium         159-1         20280094         21461661         22241881         21327879         4.63         cps           Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26         cps	Strontium	88-1	5831094	5939998	5921408	5897500	0.99	cps
Terbium         159-2         6940239         7486254         7400066         7275519         4.03         cps           Thallium         203-1         1498366         1569101         1555576         1541015         2.44         cps           Thallium         205-1         3796055         3855779         3864572         3838802         0.97         cps           Tin         118-1         1206997         1254105         1257798         1239633         2.28         cps           Titanium         47-1         2007         1923         2174         2035         6.26         cps	Sulfur	34-1	947165	957050	954170	952795	0.53	cps
Thallium       203-1       1498366       1569101       1555576       1541015       2.44       cps         Thallium       205-1       3796055       3855779       3864572       3838802       0.97       cps         Tin       118-1       1206997       1254105       1257798       1239633       2.28       cps         Titanium       47-1       2007       1923       2174       2035       6.26       cps	Terbium	159-1	20280094	21461661	22241881	21327879	4.63	cps
Thallium       205-1       3796055       3855779       3864572       3838802       0.97       cps         Tin       118-1       1206997       1254105       1257798       1239633       2.28       cps         Titanium       47-1       2007       1923       2174       2035       6.26       cps	Terbium	159-2	6940239	7486254	7400066	7275519	4.03	cps
Tin     118-1     1206997     1254105     1257798     1239633     2.28     cps       Titanium     47-1     2007     1923     2174     2035     6.26     cps	Thallium	203-1	1498366	1569101	1555576	1541015	2.44	cps
Titanium 47-1 2007 1923 2174 2035 6.26 cps	Thallium	205-1	3796055	3855779	3864572	3838802	0.97	cps
	Tin	118-1	1206997	1254105	1257798	1239633	2.28	cps
Uranium 238-1 4909493 5011781 4974057 4965111 1.04 cps	Titanium	47-1	2007	1923	2174	2035	6.26	cps
	Uranium	238-1	4909493	5011781	4974057	4965111	1.04	cps

Lab Sample ID :Q1271-03MSDInstrumnet Name :P8Client Sample ID :3189-3196Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:31:23 DataFile Name: 098AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	321635	317143	318979	319252	0.71	cps	
Ytterbium	172-1	220	210	150	193	19.58	cps	
Ytterbium	172-2	83	67	67	72	13.32	cps	
Ytterbium	176-1	8886	9077	9497	9153	3.41	cps	
Ytterbium	176-2	2880	2967	2874	2907	1.79	cps	
Yttrium	89-1	29274225	30331589	31611856	30405890	3.85	cps	
Yttrium	89-2	2133831	2239502	2259511	2210948	3.05	cps	
Zinc	66-2	833145	828393	829758	830432	0.29	cps	
Zirconium	90-1	2915061	3011612	3033322	2986665	2.11	cps	
Zirconium	91-1	618963	647728	647586	638092	2.60	cps	

<sup>3</sup> 733

Lab Sample ID :Q1271-03AInstrumnet Name :P8Client Sample ID :3189-3196ADilution Factor :1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	139595	140534	138711	139613	0.65	cps
Antimony	121-1	1851350	1856405	1857210	1854988	0.17	cps
Arsenic	75-2	27	33	27	29	13.31	cps
Barium	135-1	1850213	1827644	1853085	1843647	0.76	cps
Barium	137-1	3123546	3233018	3211596	3189387	1.82	cps
Beryllium	9-1	630043	643778	642702	638841	1.20	cps
Bismuth	209-1	13023512	12797615	12722858	12847995	1.22	cps
Bismuth	209-2	5492066	5538979	5565924	5532323	0.68	cps
Bromine	81-1	7492	8289	8433	8071	6.28	cps
Cadmium	108-1	32315	32722	32538	32525	0.63	cps
Cadmium	106-1	56800	57536	57415	57250	0.69	cps
Cadmium	111-1	414737	425633	426229	422200	1.53	cps
Calcium	43-1	573256	579064	581371	577897	0.72	cps
Calcium	44-1	9516077	9597302	9616300	9576560	0.56	cps
Carbon	12-1	10021123	10596879	10901346	10506449	4.25	cps
Carbon	12-2	69041	69222	70230	69498	0.92	cps
Chlorine	35-1	13695803	15386136	16104193	15062044	8.21	cps
Chlorine	35-2	69670	68139	69271	69027	1.15	cps
Chromium	52-2	400145	403272	392149	398522	1.44	cps
Cobalt	59-2	770450	777426	766772	771549	0.70	cps
Copper	63-2	6048315	6062598	6129094	6080002	0.71	cps
Dysprosium	156-1	80	143	117	113	28.06	cps
Dysprosium	156-2	30	20	43	31	37.62	cps
Erbium	164-1	160	140	183	161	13.46	cps
Erbium	164-2	47	50	70	56	22.71	cps
Gadolinium	160-1	190	217	193	200	7.26	cps
Gadolinium	160-2	53	57	43	51	13.58	cps
Holmium	165-1	21472213	20574001	20544542	20863585	2.53	cps
Holmium	165-2	7557123	7439163	7586012	7527433	1.03	cps
Indium	115-1	17145931	16695366	17126682	16989326	1.50	cps
Indium	115-2	1746481	1725335	1731513	1734443	0.63	cps
Iron	54-2	751885	753759	740306	748650	0.97	cps
Iron	56-2	13611177	13910161	13603577	13708305	1.28	cps
Iron	57-2	338204	340558	337164	338642	0.51	cps
Krypton	83-1	237	270	283	263	9.13	cps
Lead	206-1	6513372	6690879	6611007	6605086	1.35	cps

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Lab Sample ID: Q1271-03A Instrumnet Name: P8

Client Sample ID: 3189-3196A Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Date & Time Act	quireu . 202	25-02-06 17.34.22	Dalar	ile ivallie .	U99AREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5651269	5759770	5693421	5701486	0.96	cps
Lead	208-1	25842153	26366049	26128162	26112121	1.00	cps
Lithium	6-1	10265330	9769689	9897259	9977426	2.58	cps
Magnesium	24-2	2701933	2736700	2714614	2717749	0.65	cps
Manganese	55-2	1655787	1695395	1641089	1664090	1.69	cps
Molybdenum	94-1	3129686	3111197	3144664	3128516	0.54	cps
Molybdenum	95-1	3534867	3509626	3595524	3546672	1.24	cps
Molybdenum	96-1	4009298	4021619	3991138	4007352	0.38	cps
Molybdenum	97-1	2172624	2245161	2232178	2216655	1.74	cps
Molybdenum	98-1	5719281	5806023	5812852	5779385	0.90	cps
Neodymium	150-1	207	160	210	192	14.54	cps
Neodymium	150-2	13	7	20	13	49.99	cps
Nickel	60-2	212739	213427	211455	212541	0.47	cps
Phosphorus	31-2	660	713	833	736	12.07	cps
Potassium	39-2	719180	715303	709641	714708	0.67	cps
Rhodium	103-1	16560556	16508854	15978792	16349400	1.97	cps
Rhodium	103-2	6482514	6548237	6480834	6503861	0.59	cps
Scandium	45-1	12798590	12480788	12497643	12592340	1.42	cps
Scandium	45-2	244451	244796	244516	244588	0.07	cps
Selenium	82-1	25500	26479	26552	26177	2.24	cps
Selenium	77-2	360	470	550	460	20.74	cps
Selenium	78-2	1583	1640	1537	1587	3.26	cps
Silicon	28-1	757447	758479	760055	758660	0.17	cps
Silver	107-1	361177	371306	373739	368741	1.81	cps
Silver	109-1	341250	346571	351228	346349	1.44	cps
Sodium	23-2	5485203	5451551	5343413	5426722	1.37	cps
Strontium	86-1	652564	663455	669366	661795	1.29	cps
Strontium	88-1	5889685	5813739	5838404	5847276	0.66	cps
Sulfur	34-1	967261	938182	951016	952153	1.53	cps
Terbium	159-1	21694990	21196436	21379973	21423800	1.18	cps
Terbium	159-2	7257307	7367620	7179861	7268263	1.30	cps
Thallium	203-1	1513654	1547407	1550365	1537142	1.33	cps
Thallium	205-1	3881575	3873346	3863230	3872717	0.24	cps
Tin	118-1	1206869	1237642	1239809	1228107	1.50	cps
Titanium	47-1	2137	2184	2050	2124	3.19	cps
Uranium	238-1	4899217	5026521	5059401	4995046	1.69	cps

Lab Sample ID :Q1271-03AInstrumnet Name :P8Client Sample ID :3189-3196ADilution Factor :1

Date & Time Acquired: 2025-02-06 17:34:22 DataFile Name: 099AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	316258	317752	317441	317150	0.25	cps
Ytterbium	172-1	163	187	213	188	13.32	cps
Ytterbium	172-2	67	73	90	77	15.68	cps
Ytterbium	176-1	8993	9390	8943	9109	2.69	cps
Ytterbium	176-2	2867	3030	2990	2963	2.87	cps
Yttrium	89-1	31239248	30098863	30194879	30510996	2.07	cps
Yttrium	89-2	2191677	2253035	2224171	2222961	1.38	cps
Zinc	66-2	818565	820563	815521	818216	0.31	cps
Zirconium	90-1	2949925	3041153	3015424	3002167	1.57	cps
Zirconium	91-1	626505	643491	650605	640201	1.93	cps

Lab Sample ID :CCV005Instrumnet Name :P8Client Sample ID :CCV005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3837921	3867795	3925672	3877129	1.15	cps
Antimony	121-1	8303360	8398786	8342650	8348265	0.57	cps
Arsenic	75-2	176832	180301	178607	178580	0.97	cps
Barium	135-1	9819433	9886462	9976222	9894039	0.80	cps
Barium	137-1	17191024	17176974	17260867	17209622	0.26	cps
Beryllium	9-1	3076029	3116096	3064182	3085436	0.88	cps
Bismuth	209-1	11232972	11104466	11042275	11126571	0.87	cps
Bismuth	209-2	4506220	4933425	4855644	4765097	4.78	cps
Bromine	81-1	5581	5848	5895	5775	2.93	cps
Cadmium	108-1	161048	163329	163558	162645	0.85	cps
Cadmium	106-1	237239	238969	239924	238711	0.57	cps
Cadmium	111-1	1995687	2038745	2052712	2029048	1.46	cps
Calcium	43-1	14662527	14403205	14280227	14448653	1.35	cps
Calcium	44-1	237704916	236659116	236488536	236950856	0.28	cps
Carbon	12-1	6257660	6273228	6421477	6317455	1.43	cps
Carbon	12-2	47376	48393	48075	47948	1.08	cps
Chlorine	35-1	944834	919967	894952	919918	2.71	cps
Chlorine	35-2	3454	3344	3284	3360	2.57	cps
Chromium	52-2	2055685	2080115	2055461	2063754	0.69	cps
Cobalt	59-2	3716351	3775751	3760521	3750874	0.82	cps
Copper	63-2	27798099	27559985	27964612	27774232	0.73	cps
Dysprosium	156-1	390	430	533	451	16.40	cps
Dysprosium	156-2	117	67	117	100	28.87	cps
Erbium	164-1	443	410	420	424	4.03	cps
Erbium	164-2	153	143	150	149	3.42	cps
Gadolinium	160-1	447	403	403	418	5.99	cps
Gadolinium	160-2	137	100	203	147	35.72	cps
Holmium	165-1	19823489	19839266	19478170	19713641	1.04	cps
Holmium	165-2	6673238	7396993	7143414	7071215	5.19	cps
Indium	115-1	15608196	15179795	15164193	15317395	1.64	cps
Indium	115-2	1457440	1590433	1557562	1535145	4.51	cps
Iron	54-2	19974763	20295518	19912419	20060900	1.02	cps
Iron	56-2	371532088	368655875	368319261	369502408	0.48	cps
Iron	57-2	9214272	9253167	9190487	9219308	0.34	cps
Krypton	83-1	293	310	307	303	2.91	cps
Lead	206-1	30190390	30758854	31686660	30878635	2.45	cps

Lab Sample ID :CCV005Instrumnet Name :P8Client Sample ID :CCV005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	26366985	26909122	27171272	26815793	1.53	000
Lead	207-1	121089920	123397798	124474826	122987515	1.41	cps
Leau Lithium	6-1	9033077	8854623	8837084	8908261	1.41	cps
	24-2	67103702	66168516	67327789	66866669	0.92	cps
Magnesium	55-2	8142965	8199256	8099850	8147357	0.92	cps
Manganese Molybdenum	94-1	30260795	31020079	30514633	30598502	1.26	cps
Molybdenum	94-1 95-1	42873132	44041143	42979121	43297799	1.49	cps
Molybdenum	96-1	47479096	48447758	47773953	47900269	1.49	cps
Molybdenum	90-1	26585945	26677245	27333910	26865700	1.52	cps
Molybdenum	98-1	69160702	70562467	71079932	70267701	1.41	cps
Neodymium	150-1	767	70302407	71079932	761	4.21	cps
Neodymium	150-1	53	67	50	57	15.57	cps cps
Nickel	60-2	965791	963871	963767	964477	0.12	cps
Phosphorus	31-2	37512	37692	37201	37468	0.66	cps
Potassium	39-2	19467770	19635863	19770558	19624730	0.77	cps
Rhodium	103-1	13981486	13925092	14126393	14010990	0.74	cps
Rhodium	103-2	5266787	5695885	5600425	5521032	4.08	cps
Scandium	45-1	11994527	11566904	11623449	11728293	1.98	cps
Scandium	45-2	215409	236753	232644	228269	4.96	cps
Selenium	82-1	122354	125051	122932	123445	1.15	cps
Selenium	77-2	2334	2287	2237	2286	2.12	cps
Selenium	78-2	7919	7872	7749	7847	1.12	cps
Silicon	28-1	7520093	7664471	7610112	7598225	0.96	cps
Silver	107-1	10039426	10171173	9986749	10065783	0.94	cps
Silver	109-1	9472292	9557491	9460565	9496782	0.56	cps
Sodium	23-2	136362598	138637828	133815718	136272048	1.77	cps
Strontium	86-1	2830568	2871290	2898925	2866928	1.20	cps
Strontium	88-1	24576885	24434506	24701007	24570799	0.54	cps
Sulfur	34-1	1670896	1655558	1661856	1662770	0.46	cps
Terbium	159-1	20109014	20026348	19841071	19992145	0.69	cps
Terbium	159-2	6380263	6911953	6860493	6717570	4.37	cps
Thallium	203-1	7551101	7620450	7929354	7700302	2.62	cps
Thallium	205-1	18190430	17912142	18318125	18140232	1.14	cps
Tin	118-1	6699396	6715918	6696698	6704004	0.16	cps
Titanium	47-1	13904944	13915456	13817289	13879230	0.39	cps
Uranium	238-1	24792958	25542172	24797098	25044076	1.72	cps
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Lab Sample ID :CCV005Instrumnet Name :P8Client Sample ID :CCV005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:39:33 DataFile Name: 100CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1632120	1626078	1629345	1629181	0.19	cps
Ytterbium	172-1	477	467	420	454	6.66	cps
Ytterbium	172-2	203	213	237	218	7.85	cps
Ytterbium	176-1	38486	39552	39064	39034	1.37	cps
Ytterbium	176-2	14181	14491	14608	14427	1.53	cps
Yttrium	89-1	29123899	28422285	28733330	28759838	1.22	cps
Yttrium	89-2	1931651	2155171	2115803	2067542	5.77	cps
Zinc	66-2	2980099	3022738	2981082	2994640	0.81	cps
Zirconium	90-1	15223440	15554068	15438509	15405339	1.09	cps
Zirconium	91-1	3413585	3530209	3406848	3450214	2.01	cps

Lab Sample ID: CCB005 Instrumnet Name: P8
Client Sample ID: CCB005 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Date & Time Ac	quired. 202	3-02-00 17.42.10	Dalar	ile ivallie .	101CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	177	173	183	178	2.86	cps
Antimony	121-1	2790	2500	2250	2514	10.75	cps
Arsenic	75-2	7	0	3	3	100.05	cps
Barium	135-1	597	490	340	476	27.11	cps
Barium	137-1	1347	710	500	852	51.74	cps
Beryllium	9-1	1930	1716	1557	1734	10.78	cps
Bismuth	209-1	12849331	12755888	12646106	12750441	0.80	cps
Bismuth	209-2	5277034	6196866	5791068	5754989	8.01	cps
Bromine	81-1	5798	5695	5821	5771	1.17	cps
Cadmium	108-1	27	33	10	23	51.50	cps
Cadmium	106-1	8616	8966	8573	8718	2.48	cps
Cadmium	111-1	6243	6363	6117	6241	1.97	cps
Calcium	43-1	1397	1203	1117	1239	11.57	cps
Calcium	44-1	51669	45061	42392	46374	10.30	cps
Carbon	12-1	5001327	4977383	4861908	4946873	1.51	cps
Carbon	12-2	31317	31333	30779	31143	1.01	cps
Chlorine	35-1	697404	684482	669230	683705	2.06	cps
Chlorine	35-2	2687	2634	2657	2659	1.01	cps
Chromium	52-2	1997	2357	2347	2234	9.18	cps
Cobalt	59-2	300	287	227	271	14.41	cps
Copper	63-2	5091	5084	5174	5117	0.98	cps
Dysprosium	156-1	20	13	7	13	49.99	cps
Dysprosium	156-2	0	13	0	4	173.21	cps
Erbium	164-1	73	127	103	101	26.45	cps
Erbium	164-2	60	43	27	43	38.46	cps
Gadolinium	160-1	120	157	110	129	19.06	cps
Gadolinium	160-2	17	23	23	21	18.21	cps
Holmium	165-1	20563532	20515853	20523622	20534336	0.12	cps
Holmium	165-2	6966179	8487519	7633374	7695691	9.91	cps
Indium	115-1	17329234	17119488	17044922	17164548	0.86	cps
Indium	115-2	1657344	1999755	1804229	1820443	9.44	cps
Iron	54-2	1177	1270	1180	1209	4.38	cps
Iron	56-2	20301	19223	19604	19709	2.77	cps
Iron	57-2	510	543	483	512	5.87	cps
Krypton	83-1	303	327	273	301	8.88	cps
Lead	206-1	6178	5094	4581	5284	15.43	cps

Lab Sample ID :CCB005Instrumnet Name :P8Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Date & Time Ac	quirea: 202	25-02-06 17:42:16	Datar	ile Name :	101CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5331	4594	3831	4585	16.36	cps
Lead	208-1	24830	20530	18522	21294	15.13	cps
Lithium	6-1	9972755	9816754	9688517	9826009	1.45	cps
Magnesium	24-2	4494	4577	4501	4524	1.02	cps
Manganese	55-2	553	483	467	501	9.18	cps
Molybdenum	94-1	3370	2107	1827	2435	33.78	cps
Molybdenum	95-1	3647	2667	2120	2811	27.52	cps
Molybdenum	96-1	4231	2880	2270	3127	32.08	cps
Molybdenum	97-1	2360	1547	1250	1719	33.44	cps
Molybdenum	98-1	5888	3801	3017	4235	35.04	cps
Neodymium	150-1	20	10	10	13	43.30	cps
Neodymium	150-2	3	0	10	4	114.60	cps
Nickel	60-2	1527	1463	1580	1523	3.83	cps
Phosphorus	31-2	40	73	83	66	34.61	cps
Potassium	39-2	18719	18302	18709	18577	1.28	cps
Rhodium	103-1	16214348	15913099	16005191	16044213	0.96	cps
Rhodium	103-2	6240590	7399311	6597350	6745750	8.80	cps
Scandium	45-1	12545600	12535958	12263741	12448433	1.29	cps
Scandium	45-2	229835	271615	249934	250462	8.34	cps
Selenium	82-1	-47	60	17	10	536.34	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	3	7	13	8	65.47	cps
Silicon	28-1	651738	644589	646084	647470	0.58	cps
Silver	107-1	1957	1633	1423	1671	16.08	cps
Silver	109-1	1877	1417	1147	1480	24.94	cps
Sodium	23-2	84975	84744	83369	84363	1.03	cps
Strontium	86-1	860	727	670	752	12.97	cps
Strontium	88-1	2787	2304	2070	2387	15.32	cps
Sulfur	34-1	831066	831570	833446	832027	0.15	cps
Terbium	159-1	21082891	21233463	20615436	20977264	1.54	cps
Terbium	159-2	6879964	8108457	7564632	7517684	8.19	cps
Thallium	203-1	1290	1120	910	1107	17.20	cps
Thallium	205-1	3024	2690	2444	2719	10.71	cps
Tin	118-1	2684	2354	2300	2446	8.49	cps
Titanium	47-1	1133	810	730	891	23.97	cps
Uranium	238-1	1920	1120	823	1288	44.05	cps

<sup>2</sup> 741

Lab Sample ID :CCB005Instrumnet Name :P8Client Sample ID :CCB005Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:42:16 DataFile Name: 101CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	63	63	60	62	3.09	cps
Ytterbium	172-1	123	113	107	114	7.33	cps
Ytterbium	172-2	57	40	43	47	18.90	cps
Ytterbium	176-1	1893	1934	1797	1875	3.75	cps
Ytterbium	176-2	250	413	343	336	24.42	cps
Yttrium	89-1	30581417	30111525	30266210	30319717	0.79	cps
Yttrium	89-2	2097458	2505411	2247259	2283376	9.04	cps
Zinc	66-2	343	367	337	349	4.52	cps
Zirconium	90-1	2547	2214	2024	2261	11.72	cps
Zirconium	91-1	510	373	417	433	16.12	cps

<sub>3</sub> 742

Lab Sample ID :PB166282BLInstrumnet Name :P8Client Sample ID :PBW282Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:45:57 DataFile Name: 102CCBD.d

Date & Time Ac	quireu . 202	25-02-06 17.45.57	Dalar	ile ivallie .	102CCBD.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	103	100	127	110	13.21	cps
Antimony	121-1	580	707	727	671	11.85	cps
Arsenic	75-2	3	20	0	8	137.80	cps
Barium	135-1	110	63	80	84	28.01	cps
Barium	137-1	117	120	113	117	2.86	cps
Beryllium	9-1	1080	1017	1096	1064	3.91	cps
Bismuth	209-1	12972110	12839069	12915724	12908968	0.52	cps
Bismuth	209-2	5610570	5626813	5645676	5627686	0.31	cps
Bromine	81-1	5641	5648	5244	5511	4.19	cps
Cadmium	108-1	33	23	27	28	18.33	cps
Cadmium	106-1	8886	9010	8666	8854	1.97	cps
Cadmium	111-1	6237	6367	6094	6233	2.19	cps
Calcium	43-1	580	610	570	587	3.55	cps
Calcium	44-1	35046	34485	34662	34731	0.83	cps
Carbon	12-1	5261433	5345440	5312517	5306463	0.80	cps
Carbon	12-2	33548	33892	33177	33539	1.07	cps
Chlorine	35-1	580848	570178	563396	571474	1.54	cps
Chlorine	35-2	2324	2154	2084	2187	5.64	cps
Chromium	52-2	1133	1160	1270	1188	6.10	cps
Cobalt	59-2	133	180	120	144	21.81	cps
Copper	63-2	4134	3884	4227	4082	4.35	cps
Dysprosium	156-1	13	17	20	17	20.01	cps
Dysprosium	156-2	3	7	13	8	65.47	cps
Erbium	164-1	130	107	120	119	9.84	cps
Erbium	164-2	40	40	23	34	27.94	cps
Gadolinium	160-1	150	113	113	126	16.86	cps
Gadolinium	160-2	27	23	23	24	7.89	cps
Holmium	165-1	20827949	20516533	20894875	20746452	0.97	cps
Holmium	165-2	7610377	7572344	7662356	7615025	0.59	cps
Indium	115-1	17368095	17577208	17498962	17481421	0.60	cps
Indium	115-2	1765548	1783835	1838287	1795890	2.11	cps
Iron	54-2	737	677	730	714	4.60	cps
Iron	56-2	9894	9750	9910	9851	0.89	cps
Iron	57-2	247	227	260	244	6.86	cps
Krypton	83-1	280	327	310	306	7.74	cps
Lead	206-1	2990	2807	2874	2890	3.21	cps

Lab Sample ID :PB166282BLInstrumnet Name :P8Client Sample ID :PBW282Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:45:57 DataFile Name: 102CCBD.d

Date & Time Act	quireu . 202	25-02-00 17.45.57	Dalar	ile ivallie .	102CCBD.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2607	2494	2504	2535	2.48	cps
Lead	208-1	11796	11319	11099	11404	3.12	cps
Lithium	6-1	9918251	10090131	9950667	9986350	0.91	cps
Magnesium	24-2	3734	3847	3904	3828	2.26	cps
Manganese	55-2	210	230	223	221	4.61	cps
Molybdenum	94-1	737	730	703	723	2.44	cps
Molybdenum	95-1	470	437	453	453	3.68	cps
Molybdenum	96-1	563	500	473	512	9.02	cps
Molybdenum	97-1	310	313	287	303	4.79	cps
Molybdenum	98-1	727	693	577	666	11.83	cps
Neodymium	150-1	3	10	27	13	90.16	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	1280	1300	1167	1249	5.76	cps
Phosphorus	31-2	107	100	77	94	16.68	cps
Potassium	39-2	18018	18288	18459	18255	1.22	cps
Rhodium	103-1	16665474	16573781	16683774	16641010	0.35	cps
Rhodium	103-2	6618371	6674134	6685914	6659473	0.54	cps
Scandium	45-1	12590160	12735279	12844455	12723298	1.00	cps
Scandium	45-2	247110	246507	249519	247712	0.64	cps
Selenium	82-1	17	3	-37	-6	-499.50	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	3	10	0	4	114.60	cps
Silicon	28-1	645843	644639	645787	645423	0.11	cps
Silver	107-1	610	570	507	562	9.27	cps
Silver	109-1	397	343	297	346	14.48	cps
Sodium	23-2	69564	69963	70640	70056	0.78	cps
Strontium	86-1	620	617	610	616	0.83	cps
Strontium	88-1	1293	1193	1320	1269	5.26	cps
Sulfur	34-1	935733	916711	913464	921969	1.30	cps
Terbium	159-1	21376220	21360445	21275912	21337525	0.25	cps
Terbium	159-2	7470122	7393752	7374846	7412907	0.68	cps
Thallium	203-1	597	437	523	519	15.44	cps
Thallium	205-1	1420	1370	1287	1359	4.96	cps
Tin	118-1	2444	2300	2350	2365	3.08	cps
Titanium	47-1	370	287	277	311	16.47	cps
Uranium	238-1	83	53	43	60	34.70	cps

LB Number: LB134612

Lab Sample ID : PB166282BL

Client Sample ID: PBW282

Date & Time Acquired : 2025-02-06 17:45:57

Operator: Jaswal

Instrumnet Name : P8

Dilution Factor: 1

DataFile Name : 102CCBD.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	17	10	13	25.01	cps
Ytterbium	172-1	117	127	120	121	4.20	cps
Ytterbium	172-2	47	47	47	47	0.00	cps
Ytterbium	176-1	2120	1980	2014	2038	3.59	cps
Ytterbium	176-2	343	327	333	334	2.51	cps
Yttrium	89-1	31095025	31329525	30805903	31076818	0.84	cps
Yttrium	89-2	2286012	2260938	2276923	2274624	0.56	cps
Zinc	66-2	177	210	177	188	10.25	cps
Zirconium	90-1	1157	1230	1197	1195	3.07	cps
Zirconium	91-1	193	210	253	219	14.15	cps

<sub>3</sub> 745

Lab Sample ID :PB166282BSInstrumnet Name :P8Client Sample ID :LCS282Dilution Factor :1

Date & Time Acquired: 2025-02-06 17:49:27 DataFile Name: 103LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	788810	798476	784662	790649	0.90	cps
Antimony	121-1	9111695	9187005	9411248	9236649	1.69	cps
Arsenic	75-2	192000	191759	191932	191897	0.06	cps
Barium	135-1	10679816	10617431	10970321	10755856	1.75	cps
Barium	137-1	18465371	18688577	18707032	18620327	0.72	cps
Beryllium	9-1	3435732	3365695	3340713	3380713	1.46	cps
Bismuth	209-1	12034868	12175296	12080544	12096902	0.59	cps
Bismuth	209-2	5253578	5368771	5266311	5296220	1.19	cps
Bromine	81-1	5808	5725	5671	5735	1.20	cps
Cadmium	108-1	179668	183154	182147	181656	0.99	cps
Cadmium	106-1	261942	261370	265592	262968	0.87	cps
Cadmium	111-1	2261525	2291746	2293844	2282372	0.79	cps
Calcium	43-1	3208305	3175605	3172602	3185504	0.62	cps
Calcium	44-1	51412978	51597063	51868241	51626094	0.44	cps
Carbon	12-1	6110031	6154946	6305416	6190131	1.65	cps
Carbon	12-2	41285	41940	41361	41529	0.86	cps
Chlorine	35-1	512134	505985	509035	509051	0.60	cps
Chlorine	35-2	1853	1987	1903	1915	3.52	cps
Chromium	52-2	2193624	2218691	2194944	2202420	0.64	cps
Cobalt	59-2	4067730	4087122	4054284	4069712	0.41	cps
Copper	63-2	31004570	30962315	30867650	30944845	0.23	cps
Dysprosium	156-1	163	187	190	180	8.07	cps
Dysprosium	156-2	43	30	30	34	22.34	cps
Erbium	164-1	243	207	237	229	8.53	cps
Erbium	164-2	73	80	97	83	14.43	cps
Gadolinium	160-1	223	197	217	212	6.54	cps
Gadolinium	160-2	43	53	40	46	15.23	cps
Holmium	165-1	19727949	20840070	20403160	20323726	2.76	cps
Holmium	165-2	7391876	7574985	7539335	7502065	1.29	cps
Indium	115-1	16091911	16605106	16413251	16370089	1.58	cps
Indium	115-2	1623974	1683812	1687363	1665050	2.14	cps
Iron	54-2	4390419	4426313	4353811	4390181	0.83	cps
Iron	56-2	78766435	79011189	78107604	78628409	0.59	cps
Iron	57-2	2032395	2006871	2003508	2014258	0.78	cps
Krypton	83-1	250	260	327	279	14.94	cps
Lead	206-1	34594727	34313957	34751519	34553401	0.64	cps

Lab Sample ID :PB166282BSInstrumnet Name :P8Client Sample ID :LCS282Dilution Factor :1

Date & Time Acquired : 2025-02-06 17:49:27 DataFile Name : 103LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	29440015	29706970	29796660	29647882	0.63	cps
Lead	208-1	136400550	136543365	136913704	136619206	0.19	cps
Lithium	6-1	9647429	9596327	9536866	9593541	0.58	cps
Magnesium	24-2	14987341	14882710	14682342	14850798	1.04	cps
Manganese	55-2	8651401	8806291	8568046	8675246	1.39	cps
Molybdenum	94-1	32377070	32890964	32785129	32684388	0.83	cps
Molybdenum	95-1	46261461	46609618	47145929	46672336	0.95	cps
Molybdenum	96-1	50533208	51444643	50655976	50877942	0.97	cps
Molybdenum	97-1	28466218	29507514	28262887	28745540	2.32	cps
Molybdenum	98-1	74630459	76083987	74463176	75059207	1.19	cps
Neodymium	150-1	677	803	693	724	9.50	cps
Neodymium	150-2	20	7	33	20	66.65	cps
Nickel	60-2	1128403	1115585	1118456	1120815	0.60	cps
Phosphorus	31-2	40273	40189	39310	39924	1.34	cps
Potassium	39-2	4220788	4221897	4152677	4198454	0.94	cps
Rhodium	103-1	14917019	15821929	15049048	15262665	3.20	cps
Rhodium	103-2	5971852	6143292	6169406	6094850	1.76	cps
Scandium	45-1	11763825	12396173	12284063	12148020	2.78	cps
Scandium	45-2	236935	243866	243604	241468	1.63	cps
Selenium	82-1	136160	137216	138038	137138	0.69	cps
Selenium	77-2	2550	2514	2387	2484	3.45	cps
Selenium	78-2	7746	8403	8436	8195	4.75	cps
Silicon	28-1	7968609	7995378	8069853	8011280	0.65	cps
Silver	107-1	11497659	11371213	11797747	11555540	1.90	cps
Silver	109-1	10775501	10840196	10828124	10814607	0.32	cps
Sodium	23-2	30517800	30238424	29677624	30144616	1.42	cps
Strontium	86-1	3065617	3073406	3065584	3068202	0.15	cps
Strontium	88-1	25945038	26333176	26346007	26208074	0.87	cps
Sulfur	34-1	1725711	1727646	1766896	1740084	1.34	cps
Terbium	159-1	20486605	20948348	21141041	20858665	1.61	cps
Terbium	159-2	7025131	7190974	7079256	7098454	1.19	cps
Thallium	203-1	8372167	8561059	8479963	8471063	1.12	cps
Thallium	205-1	20177702	19618636	20074694	19957011	1.49	cps
Tin	118-1	7257685	7326277	7240204	7274722	0.63	cps
Titanium	47-1	14657052	14812342	14884809	14784734	0.79	cps
Uranium	238-1	26758680	26886289	26327307	26657425	1.10	cps

<sup>2</sup> 747

LB Number: LB134612

Lab Sample ID : PB166282BS

Client Sample ID: LCS282

Date & Time Acquired : 2025-02-06 17:49:27

Operator: Jaswal

Instrumnet Name: P8

Dilution Factor: 1

DataFile Name : 103LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1695328	1700808	1682696	1692944	0.55	cps
Ytterbium	172-1	207	257	183	216	17.38	cps
Ytterbium	172-2	100	93	67	87	20.35	cps
Ytterbium	176-1	40144	40716	40622	40494	0.76	cps
Ytterbium	176-2	14625	14348	14745	14573	1.40	cps
Yttrium	89-1	29538938	30268563	29979701	29929067	1.23	cps
Yttrium	89-2	2166223	2213434	2173615	2184424	1.16	cps
Zinc	66-2	3452970	3401397	3389909	3414759	0.98	cps
Zirconium	90-1	16259081	16196349	16312471	16255967	0.36	cps
Zirconium	91-1	3656236	3648432	3678016	3660895	0.42	cps

<sub>3</sub> 748

LB134612 LB Number : Operator: Jaswal

Lab Sample ID : Q1193-01 Client Sample ID: TAPIAL3-MW04S-01242 Dilution Factor: 1

Date & Time Acquired : 2025-02-06 17:53:19 DataFile Name : 104AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6562	6425	6615	6534	1.50	cps
Antimony	121-1	4527	4304	4391	4407	2.56	cps
Arsenic	75-2	1753	1827	1963	1848	5.77	cps
Barium	135-1	662122	664526	660210	662286	0.33	cps
Barium	137-1	1161346	1168919	1165196	1165154	0.33	cps
Beryllium	9-1	1916	1779	1825	1840	3.80	cps
Bismuth	209-1	12551705	12408013	12630236	12529985	0.90	cps
Bismuth	209-2	5773603	5356077	5375571	5501751	4.28	cps
Bromine	81-1	19948	20405	21547	20633	3.99	cps
Cadmium	108-1	103	77	97	92	15.05	cps
Cadmium	106-1	8693	8609	9066	8790	2.77	cps
Cadmium	111-1	6496	6370	6695	6520	2.52	cps
Calcium	43-1	4275137	4258375	4255749	4263087	0.25	cps
Calcium	44-1	68498687	69827559	68683667	69003305	1.04	cps
Carbon	12-1	10054681	11017184	11526980	10866282	6.88	cps
Carbon	12-2	76598	76662	78531	77264	1.42	cps
Chlorine	35-1	541931	550619	560590	551047	1.69	cps
Chlorine	35-2	2184	2300	2200	2228	2.83	cps
Chromium	52-2	3370	3374	3267	3337	1.82	cps
Cobalt	59-2	610166	617665	619360	615731	0.79	cps
Copper	63-2	8166	8186	8102	8151	0.53	cps
Dysprosium	156-1	2954	2927	2780	2887	3.23	cps
Dysprosium	156-2	980	940	940	953	2.42	cps
Erbium	164-1	2067	1987	1974	2009	2.51	cps
Erbium	164-2	757	723	680	720	5.34	cps
Gadolinium	160-1	2740	2487	2527	2585	5.27	cps
Gadolinium	160-2	1113	1250	1117	1160	6.72	cps
Holmium	165-1	20469810	20256690	20345049	20357183	0.53	cps
Holmium	165-2	7666290	7422114	7400447	7496284	1.97	cps
Indium	115-1	16815190	16670658	16727514	16737787	0.44	cps
Indium	115-2	1792882	1716472	1737866	1749073	2.25	cps
Iron	54-2	3967812	4047240	3964294	3993115	1.17	cps
Iron	56-2	71626461	72819944	71936167	72127524	0.86	cps
Iron	57-2	1849714	1871059	1840099	1853624	0.85	cps
Krypton	83-1	303	270	280	284	6.01	cps
Lead	206-1	11492	11385	11125	11334	1.67	cps

P8

Instrumnet Name:

Client Sample ID: TAPIAL3-MW04S-01242t Dilution Factor: 1

Q1193-01

Lab Sample ID :

Date & Time Acquired: 2025-02-06 17:53:19 DataFile Name: 104AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	9614	9303	9040	9319	3.08	cps
Lead	208-1	44834	43218	42571	43541	2.68	cps
Lithium	6-1	9808804	9849880	9709916	9789533	0.73	cps
Magnesium	24-2	2294863	2275568	2297348	2289260	0.52	cps
Manganese	55-2	3573047	3619385	3582432	3591621	0.68	cps
Molybdenum	94-1	4394	4294	4091	4260	3.63	cps
Molybdenum	95-1	4091	3647	3444	3727	8.87	cps
Molybdenum	96-1	4818	4111	4057	4329	9.80	cps
Molybdenum	97-1	2634	2197	2164	2331	11.25	cps
Molybdenum	98-1	6255	5378	5161	5598	10.35	cps
Neodymium	150-1	4314	4077	4134	4175	2.96	cps
Neodymium	150-2	1020	1073	1083	1059	3.22	cps
Nickel	60-2	165122	165649	167604	166125	0.79	cps
Phosphorus	31-2	127	120	127	124	3.09	cps
Potassium	39-2	507658	508182	510978	508939	0.35	cps
Rhodium	103-1	15627058	15650832	15552136	15610009	0.33	cps
Rhodium	103-2	6576977	6236634	6271378	6361663	2.94	cps
Scandium	45-1	11909744	12301999	12432284	12214676	2.23	cps
Scandium	45-2	251750	239802	241633	244395	2.63	cps
Selenium	82-1	90	103	100	98	7.10	cps
Selenium	77-2	7	7	10	8	24.71	cps
Selenium	78-2	13	17	23	18	28.64	cps
Silicon	28-1	98641812	98105972	97933915	98227233	0.38	cps
Silver	107-1	1323	1010	1137	1157	13.63	cps
Silver	109-1	1010	967	1010	996	2.51	cps
Sodium	23-2	1425535	1451670	1438861	1438689	0.91	cps
Strontium	86-1	2018077	2044459	2066547	2043027	1.19	cps
Strontium	88-1	17490179	17706751	17490413	17562448	0.71	cps
Sulfur	34-1	2564712	2611502	2591406	2589207	0.91	cps
Terbium	159-1	20683541	20924196	21209183	20938973	1.26	cps
Terbium	159-2	7488097	7147123	7087413	7240878	2.99	cps
Thallium	203-1	4931	5058	4808	4932	2.54	cps
Thallium	205-1	11792	11882	11802	11825	0.42	cps
Tin	118-1	7299	7022	6979	7100	2.45	cps
Titanium	47-1	7705	7182	7425	7438	3.52	cps
Uranium	238-1	11859	11202	11435	11499	2.90	cps

Instrumnet Name:

P8

<sup>2</sup> 750

Lab Sample ID: Q1193-01 Instrumnet Name: P8
Client Sample ID: TAPIAL3-MW04S-01242t Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:53:19 DataFile Name: 104AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Farameter	IVIASS	UF31	UF 32	<u> </u>	CFSIVICALI	CFSRSD	Offics
Vanadium	51-2	1503	1417	1500	1473	3.33	cps
Ytterbium	172-1	713	853	770	779	9.04	cps
Ytterbium	172-2	337	347	320	334	4.03	cps
Ytterbium	176-1	2420	2534	2430	2461	2.55	cps
Ytterbium	176-2	420	533	473	476	11.92	cps
Yttrium	89-1	29623970	30394017	30164567	30060851	1.32	cps
Yttrium	89-2	2301143	2149961	2198502	2216536	3.48	cps
Zinc	66-2	901349	916162	903298	906936	0.89	cps
Zirconium	90-1	6098	6241	5755	6031	4.15	cps
Zirconium	91-1	1280	1197	1280	1252	3.84	cps

<sub>3</sub> 751

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Q1193-02

Lab Sample ID :

Date & Time Acquired: 2025-02-06 17:56:30 DataFile Name: 105AREF.d

Date & Time / to	quired. Zoz	.0 02 00 17.00.00	Datai	iic i tairic .	1007 (I LL I .u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	14387	14771	15183	14780	2.69	cps
Antimony	121-1	2324	2340	2294	2319	1.02	cps
Arsenic	75-2	1493	1397	1430	1440	3.41	cps
Barium	135-1	175882	171957	174710	174183	1.16	cps
Barium	137-1	300190	302055	300362	300869	0.34	cps
Beryllium	9-1	1126	1176	1135	1146	2.33	cps
Bismuth	209-1	12198984	12727255	12448021	12458087	2.12	cps
Bismuth	209-2	5429857	5526423	5411111	5455797	1.13	cps
Bromine	81-1	22839	26512	28589	25980	11.21	cps
Cadmium	108-1	67	73	57	66	12.79	cps
Cadmium	106-1	8993	9317	8870	9060	2.55	cps
Cadmium	111-1	6345	6527	6229	6367	2.36	cps
Calcium	43-1	2312389	2318200	2248582	2293057	1.68	cps
Calcium	44-1	37452899	37704161	36728667	37295242	1.36	cps
Carbon	12-1	12751819	13941498	14705313	13799543	7.13	cps
Carbon	12-2	95199	97061	96430	96230	0.98	cps
Chlorine	35-1	5537949	6315604	6680311	6177955	9.44	cps
Chlorine	35-2	28899	29467	29891	29419	1.69	cps
Chromium	52-2	6465	6632	6388	6495	1.92	cps
Cobalt	59-2	3991	4234	4057	4094	3.07	cps
Copper	63-2	6865	6848	7145	6953	2.40	cps
Dysprosium	156-1	3267	3290	3094	3217	3.34	cps
Dysprosium	156-2	800	947	823	857	9.20	cps
Erbium	164-1	1773	2014	1850	1879	6.52	cps
Erbium	164-2	667	580	697	648	9.35	cps
Gadolinium	160-1	2164	2130	2220	2171	2.10	cps
Gadolinium	160-2	1027	1020	933	993	5.24	cps
Holmium	165-1	20169047	21047938	20537306	20584763	2.14	cps
Holmium	165-2	7449821	7629643	7654265	7577910	1.47	cps
Indium	115-1	16469906	17235184	17066180	16923757	2.38	cps
Indium	115-2	1764132	1765430	1763002	1764188	0.07	cps
Iron	54-2	3321343	3371754	3361533	3351544	0.80	cps
Iron	56-2	60254714	61780302	59870824	60635280	1.67	cps
Iron	57-2	1553511	1565858	1545952	1555107	0.65	cps
Krypton	83-1	260	297	250	269	9.14	cps
Lead	206-1	5298	5385	5671	5451	3.59	cps

Instrumnet Name:

P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Q1193-02

Lab Sample ID :

Date & Time Acquired: 2025-02-06 17:56:30 DataFile Name: 105AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5725	5064	4779	5190	9.36	cps
Lead	208-1	23053	21677	21489	22073	3.87	cps
Lithium	6-1	9772568	9906972	9891218	9856919	0.75	cps
Magnesium	24-2	695305	702938	696060	698101	0.60	cps
Manganese	55-2	279418	283204	282781	281801	0.74	cps
Molybdenum	94-1	24268	24592	29632	26164	11.49	cps
Molybdenum	95-1	31566	32638	32120	32108	1.67	cps
Molybdenum	96-1	35014	35602	35151	35256	0.87	cps
Molybdenum	97-1	19624	20051	19954	19877	1.13	cps
Molybdenum	98-1	51897	51525	50766	51396	1.12	cps
Neodymium	150-1	4786	5980	3837	4868	22.06	cps
Neodymium	150-2	1030	900	957	962	6.77	cps
Nickel	60-2	2944	2850	2884	2893	1.64	cps
Phosphorus	31-2	153	157	140	150	5.88	cps
Potassium	39-2	325521	331115	327468	328035	0.87	cps
Rhodium	103-1	15448470	16169041	15852151	15823221	2.28	cps
Rhodium	103-2	6484754	6457818	6478488	6473687	0.22	cps
Scandium	45-1	12350236	12982402	12691294	12674644	2.50	cps
Scandium	45-2	246683	249507	246453	247548	0.69	cps
Selenium	82-1	50	23	67	47	46.83	cps
Selenium	77-2	3	3	3	3	0.00	cps
Selenium	78-2	27	13	17	19	36.75	cps
Silicon	28-1	53483393	50996366	52052583	52177447	2.39	cps
Silver	107-1	530	647	550	576	10.84	cps
Silver	109-1	360	473	400	411	13.98	cps
Sodium	23-2	33459529	33826382	33692657	33659523	0.55	cps
Strontium	86-1	485561	495284	490530	490458	0.99	cps
Strontium	88-1	4422124	4424243	4381756	4409374	0.54	cps
Sulfur	34-1	1038348	1027877	1014173	1026799	1.18	cps
Terbium	159-1	20688183	21793194	21187280	21222886	2.61	cps
Terbium	159-2	7307436	7364737	7264625	7312266	0.69	cps
Thallium	203-1	727	783	770	760	3.90	cps
Thallium	205-1	1887	1710	1803	1800	4.91	cps
Tin	118-1	5024	4854	5128	5002	2.76	cps
Titanium	47-1	15709	19587	15492	16929	13.61	cps
Uranium	238-1	22001	20453	20563	21006	4.11	cps

Instrumnet Name:

P8

Lab Sample ID: Q1193-02 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:56:30 DataFile Name: 105AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3811	3937	3570	3773	4.94	cps
Ytterbium	172-1	840	730	693	754	10.12	cps
Ytterbium	172-2	327	343	307	326	5.64	cps
Ytterbium	176-1	2334	2530	3092	2652	14.83	cps
Ytterbium	176-2	420	537	557	504	14.63	cps
Yttrium	89-1	29528988	30864485	30423100	30272191	2.25	cps
Yttrium	89-2	2264555	2273660	2268983	2269066	0.20	cps
Zinc	66-2	1060	1020	1060	1047	2.21	cps
Zirconium	90-1	15052	15453	18120	16208	10.29	cps
Zirconium	91-1	3284	3367	3140	3264	3.52	cps

<sub>3</sub> 754

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7536	7316	8270	7707	6.48	cps
Antimony	121-1	1987	1713	2004	1901	8.57	cps
Arsenic	75-2	1407	1387	1377	1390	1.10	cps
Barium	135-1	168868	168534	169553	168985	0.31	cps
Barium	137-1	296466	294421	297176	296021	0.48	cps
Beryllium	9-1	1031	990	961	994	3.54	cps
Bismuth	209-1	12658731	11914101	12506831	12359888	3.18	cps
Bismuth	209-2	5433937	5563027	5513157	5503373	1.18	cps
Bromine	81-1	24064	26372	28205	26214	7.92	cps
Cadmium	108-1	47	33	53	44	22.92	cps
Cadmium	106-1	9040	9040	8576	8885	3.01	cps
Cadmium	111-1	6352	6374	6003	6243	3.34	cps
Calcium	43-1	2288936	2292708	2269981	2283875	0.53	cps
Calcium	44-1	36660629	37309896	37101594	37024040	0.90	cps
Carbon	12-1	13789435	14586542	15379413	14585130	5.45	cps
Carbon	12-2	98507	101581	102860	100982	2.22	cps
Chlorine	35-1	6319759	7085003	7281852	6895538	7.37	cps
Chlorine	35-2	30823	31504	32223	31517	2.22	cps
Chromium	52-2	5951	6278	6311	6180	3.22	cps
Cobalt	59-2	4234	4244	3974	4151	3.69	cps
Copper	63-2	6485	6582	6538	6535	0.74	cps
Dysprosium	156-1	3004	3120	3010	3045	2.15	cps
Dysprosium	156-2	770	760	760	763	0.76	cps
Erbium	164-1	1680	1917	1833	1810	6.63	cps
Erbium	164-2	683	570	623	626	9.06	cps
Gadolinium	160-1	2170	2254	2150	2191	2.50	cps
Gadolinium	160-2	820	840	817	826	1.53	cps
Holmium	165-1	21102485	20213181	20994235	20769967	2.34	cps
Holmium	165-2	7704231	7676912	7708904	7696682	0.22	cps
Indium	115-1	17066122	16403147	17098365	16855878	2.33	cps
Indium	115-2	1765268	1782245	1787340	1778285	0.65	cps
Iron	54-2	3286241	3274118	3329140	3296500	0.88	cps
Iron	56-2	60050126	60029167	59686176	59921823	0.34	cps
Iron	57-2	1522535	1549930	1529305	1533923	0.93	cps
Krypton	83-1	203	293	253	250	18.04	cps
Lead	206-1	4788	4758	4724	4757	0.67	cps

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4307	3851	3991	4050	5.78	cps
Lead	208-1	19330	18292	18225	18616	3.33	cps
Lithium	6-1	9987759	10087023	10242011	10105598	1.27	cps
Magnesium	24-2	700867	691195	697543	696535	0.71	cps
Manganese	55-2	278744	279507	277375	278542	0.39	cps
Molybdenum	94-1	22455	23117	22919	22830	1.49	cps
Molybdenum	95-1	31472	32050	31422	31648	1.10	cps
Molybdenum	96-1	35088	34543	35131	34921	0.94	cps
Molybdenum	97-1	19193	19908	19297	19466	1.98	cps
Molybdenum	98-1	49943	51344	50726	50671	1.39	cps
Neodymium	150-1	3741	3324	3370	3478	6.57	cps
Neodymium	150-2	890	967	980	946	5.14	cps
Nickel	60-2	2877	2777	3054	2903	4.83	cps
Phosphorus	31-2	123	130	170	141	17.88	cps
Potassium	39-2	322100	323835	326364	324100	0.66	cps
Rhodium	103-1	16140748	15617116	16100306	15952724	1.83	cps
Rhodium	103-2	6517204	6434801	6443360	6465122	0.70	cps
Scandium	45-1	12852749	12122496	12705694	12560313	3.07	cps
Scandium	45-2	250826	251239	252366	251477	0.32	cps
Selenium	82-1	123	10	93	76	77.72	cps
Selenium	77-2	3	3	10	6	69.34	cps
Selenium	78-2	17	7	10	11	45.82	cps
Silicon	28-1	50249663	51946751	50713206	50969873	1.72	cps
Silver	107-1	440	427	477	448	5.78	cps
Silver	109-1	267	253	253	258	2.99	cps
Sodium	23-2	33719116	33650787	33828352	33732752	0.27	cps
Strontium	86-1	485978	482557	484880	484472	0.36	cps
Strontium	88-1	4390150	4399595	4369942	4386562	0.35	cps
Sulfur	34-1	1038051	1040172	1017431	1031885	1.22	cps
Terbium	159-1	21356891	20612118	21216962	21061990	1.88	cps
Terbium	159-2	7282472	7359682	7288093	7310082	0.59	cps
Thallium	203-1	577	557	580	571	2.21	cps
Thallium	205-1	1373	1353	1313	1347	2.27	cps
Tin	118-1	4704	5384	5104	5064	6.75	cps
Titanium	47-1	4974	13843	9061	9293	47.77	cps
Uranium	238-1	20346	19966	20530	20281	1.42	cps

Lab Sample ID: Q1193-02DUP Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 17:59:44 DataFile Name: 106AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3357	3244	3340	3314	1.85	cps
Ytterbium	172-1	680	680	800	720	9.62	cps
Ytterbium	172-2	333	353	307	331	7.07	cps
Ytterbium	176-1	2380	2327	2324	2344	1.36	cps
Ytterbium	176-2	457	567	533	519	10.87	cps
Yttrium	89-1	31231075	30199485	30757517	30729359	1.68	cps
Yttrium	89-2	2278871	2266869	2272079	2272606	0.26	cps
Zinc	66-2	1417	1330	1157	1301	10.18	cps
Zirconium	90-1	12129	12612	12166	12302	2.19	cps
Zirconium	91-1	2640	2934	2734	2769	5.41	cps

<sub>3</sub> 757

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2034	1507	1470	1670	18.90	cps
Antimony	121-1	833	1003	953	930	9.39	cps
Arsenic	75-2	273	237	290	267	10.23	cps
Barium	135-1	32900	33548	34080	33509	1.76	cps
Barium	137-1	58503	58181	58348	58344	0.28	cps
Beryllium	9-1	869	760	799	809	6.81	cps
Bismuth	209-1	12678198	12315235	12552331	12515254	1.47	cps
Bismuth	209-2	5509333	5701795	5626596	5612575	1.73	cps
Bromine	81-1	12025	12145	11722	11964	1.83	cps
Cadmium	108-1	20	33	30	28	24.98	cps
Cadmium	106-1	9300	8750	8646	8899	3.95	cps
Cadmium	111-1	6543	6115	6068	6242	4.19	cps
Calcium	43-1	439959	435645	435498	437034	0.58	cps
Calcium	44-1	7203675	7341782	7250317	7265258	0.97	cps
Carbon	12-1	7668732	7578762	7781927	7676474	1.33	cps
Carbon	12-2	47393	48266	47751	47803	0.92	cps
Chlorine	35-1	2040037	2049740	2083590	2057789	1.11	cps
Chlorine	35-2	8259	8726	8486	8490	2.75	cps
Chromium	52-2	2947	2857	2927	2910	1.62	cps
Cobalt	59-2	893	913	920	909	1.53	cps
Copper	63-2	4401	4464	4617	4494	2.48	cps
Dysprosium	156-1	617	597	603	606	1.68	cps
Dysprosium	156-2	153	197	133	161	20.09	cps
Erbium	164-1	417	370	450	412	9.75	cps
Erbium	164-2	130	140	150	140	7.14	cps
Gadolinium	160-1	480	447	440	456	4.70	cps
Gadolinium	160-2	197	207	203	202	2.52	cps
Holmium	165-1	20361010	20127007	19980630	20156216	0.95	cps
Holmium	165-2	7692021	7815522	7640134	7715893	1.17	cps
Indium	115-1	17323329	16769724	17038151	17043735	1.62	cps
Indium	115-2	1791133	1871738	1814071	1825647	2.27	cps
Iron	54-2	641262	639943	640728	640644	0.10	cps
Iron	56-2	11771785	12150382	12021316	11981161	1.61	cps
Iron	57-2	293807	295034	293810	294217	0.24	cps
Krypton	83-1	320	230	227	259	20.45	cps
Lead	206-1	2667	2660	2440	2589	4.98	cps

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2327	2130	2137	2198	5.08	cps
Lead	208-1	10408	10322	9845	10192	2.98	cps
Lithium	6-1	10294147	10253947	9745087	10097727	3.03	cps
Magnesium	24-2	141095	142246	142074	141805	0.44	cps
Manganese	55-2	55979	55193	56251	55807	0.98	cps
Molybdenum	94-1	4891	5188	4871	4983	3.56	cps
Molybdenum	95-1	6538	6181	6435	6385	2.88	cps
Molybdenum	96-1	7142	6838	7002	6994	2.17	cps
Molybdenum	97-1	3914	4057	4151	4041	2.95	cps
Molybdenum	98-1	10204	10244	10477	10308	1.43	cps
Neodymium	150-1	580	683	677	647	8.94	cps
Neodymium	150-2	193	157	170	173	10.71	cps
Nickel	60-2	1793	1890	1793	1826	3.06	cps
Phosphorus	31-2	120	77	103	100	21.86	cps
Potassium	39-2	79832	79484	80147	79821	0.42	cps
Rhodium	103-1	16336001	16020467	15998813	16118427	1.17	cps
Rhodium	103-2	6642594	6710278	6710751	6687874	0.59	cps
Scandium	45-1	12884482	12674593	12409730	12656268	1.88	cps
Scandium	45-2	255028	256484	251036	254183	1.11	cps
Selenium	82-1	-67	70	120	41	235.04	cps
Selenium	77-2	3	10	0	4	114.60	cps
Selenium	78-2	17	10	13	13	25.01	cps
Silicon	28-1	10357386	10390958	10355459	10367935	0.19	cps
Silver	107-1	367	317	327	337	7.86	cps
Silver	109-1	170	240	200	203	17.27	cps
Sodium	23-2	6636453	6766172	6624045	6675557	1.18	cps
Strontium	86-1	94741	95016	96131	95296	0.77	cps
Strontium	88-1	824411	829158	835182	829584	0.65	cps
Sulfur	34-1	951051	951360	926871	943094	1.49	cps
Terbium	159-1	21371542	20916724	20746570	21011612	1.54	cps
Terbium	159-2	7295283	7357766	7354554	7335868	0.48	cps
Thallium	203-1	393	463	457	438	8.83	cps
Thallium	205-1	953	963	940	952	1.23	cps
Tin	118-1	2517	2530	2684	2577	3.59	cps
Titanium	47-1	1190	4881	1240	2437	86.86	cps
Uranium	238-1	3887	3841	3951	3893	1.42	cps

Lab Sample ID: Q1193-02LX5 Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:02:55 DataFile Name: 107AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	670	617	660	649	4.37	cps
Ytterbium	172-1	230	227	250	236	5.36	cps
Ytterbium	172-2	87	103	103	98	9.84	cps
Ytterbium	176-1	1907	2044	1930	1960	3.73	cps
Ytterbium	176-2	280	333	330	314	9.50	cps
Yttrium	89-1	30943825	30041316	30731429	30572190	1.54	cps
Yttrium	89-2	2331873	2296466	2338997	2322445	0.98	cps
Zinc	66-2	447	450	377	424	9.76	cps
Zirconium	90-1	3310	3204	3194	3236	2.00	cps
Zirconium	91-1	643	700	593	646	8.27	cps

<sup>3</sup> 760

Lab Sample ID : Q1193-02MS Instrumnet Name : P8
Client Sample ID : TAPIAL2-MW01-012425- Dilution Factor : 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	747552	741632	736353	741845	0.76	cps
Antimony	121-1	9054385	9011684	8793767	8953279	1.56	cps
Arsenic	75-2	1440	1340	1500	1427	5.67	cps
Barium	135-1	9722377	9559816	9618132	9633442	0.85	cps
Barium	137-1	16767882	16691503	16458847	16639411	0.97	cps
Beryllium	9-1	3380779	3408674	3348336	3379263	0.89	cps
Bismuth	209-1	11321665	12040418	12046751	11802945	3.53	cps
Bismuth	209-2	5216579	5282711	5283105	5260798	0.73	cps
Bromine	81-1	25233	27704	29254	27397	7.40	cps
Cadmium	108-1	162546	161134	162580	162087	0.51	cps
Cadmium	106-1	256598	250171	254343	253704	1.29	cps
Cadmium	111-1	2220223	2171476	2226475	2206058	1.36	cps
Calcium	43-1	5270242	5177729	5136383	5194785	1.32	cps
Calcium	44-1	86398189	84414475	82416417	84409694	2.36	cps
Carbon	12-1	11326400	12152152	12763821	12080791	5.97	cps
Carbon	12-2	84709	85949	86881	85846	1.27	cps
Chlorine	35-1	83682244	87252409	89003549	86646067	3.13	cps
Chlorine	35-2	381965	387762	382712	384146	0.82	cps
Chromium	52-2	2124934	2124172	2068692	2105933	1.53	cps
Cobalt	59-2	3992819	4012575	4017828	4007740	0.33	cps
Copper	63-2	30219140	29903585	29571104	29897943	1.08	cps
Dysprosium	156-1	3601	3200	3057	3286	8.57	cps
Dysprosium	156-2	777	830	767	791	4.30	cps
Erbium	164-1	1853	1827	1910	1863	2.28	cps
Erbium	164-2	690	647	770	702	8.91	cps
Gadolinium	160-1	2310	2204	1980	2165	7.78	cps
Gadolinium	160-2	983	1715	973	1224	34.76	cps
Holmium	165-1	19389040	20732335	20072698	20064691	3.35	cps
Holmium	165-2	7410532	7657701	7477473	7515235	1.70	cps
Indium	115-1	15650361	16863696	16427052	16313703	3.77	cps
Indium	115-2	1707243	1722109	1666883	1698745	1.68	cps
Iron	54-2	6897737	6884219	6809197	6863718	0.69	cps
Iron	56-2	125694048	125997255	124816678	125502660	0.49	cps
Iron	57-2	3209583	3211917	3163076	3194859	0.86	cps
Krypton	83-1	313	317	367	332	8.99	cps
Lead	206-1	32739858	32582576	32716156	32679530	0.26	cps

<sub>1</sub> 761

Lab Sample ID: Q1193-02MS Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	28272566	28154281	27908275	28111708	0.66	cps
Lead	208-1	129406416	129312785	129225909	129315037	0.07	cps
Lithium	6-1	9374678	9771702	9874075	9673485	2.73	cps
Magnesium	24-2	14641828	14203164	14263917	14369636	1.65	cps
Manganese	55-2	8684909	8625791	8580006	8630235	0.61	cps
Molybdenum	94-1	15409664	15265024	15176383	15283690	0.77	cps
Molybdenum	95-1	16657950	16453698	16365395	16492347	0.91	cps
Molybdenum	96-1	18697601	18473428	18646130	18605720	0.63	cps
Molybdenum	97-1	10100139	10188517	10054422	10114359	0.67	cps
Molybdenum	98-1	26765685	26720789	26649305	26711926	0.22	cps
Neodymium	150-1	8007	4017	3904	5309	44.01	cps
Neodymium	150-2	940	1137	1000	1026	9.83	cps
Nickel	60-2	1044339	1046852	1037208	1042799	0.48	cps
Phosphorus	31-2	187	137	140	154	18.10	cps
Potassium	39-2	4099177	4037349	3975290	4037272	1.53	cps
Rhodium	103-1	14687632	15555404	15234134	15159057	2.89	cps
Rhodium	103-2	6254645	6229388	6139599	6207877	0.97	cps
Scandium	45-1	12027101	12699084	12135885	12287357	2.94	cps
Scandium	45-2	247539	249352	249876	248923	0.49	cps
Selenium	82-1	135524	132112	133589	133742	1.28	cps
Selenium	77-2	2360	2564	2364	2429	4.79	cps
Selenium	78-2	8456	8129	8146	8244	2.23	cps
Silicon	28-1	49315929	50725704	50546021	50195885	1.53	cps
Silver	107-1	1951759	1923861	1936983	1937534	0.72	cps
Silver	109-1	1847541	1805575	1801691	1818269	1.40	cps
Sodium	23-2	59283264	58256114	58626339	58721906	0.89	cps
Strontium	86-1	4045521	4026755	4029844	4034040	0.25	cps
Strontium	88-1	34206203	34850178	34173113	34409831	1.11	cps
Sulfur	34-1	1014463	1010401	983672	1002845	1.67	cps
Terbium	159-1	20336849	20850360	20949020	20712076	1.59	cps
Terbium	159-2	7220920	7240720	7144002	7201881	0.71	cps
Thallium	203-1	8045105	7918623	8061465	8008398	0.98	cps
Thallium	205-1	18953566	18814763	19071204	18946511	0.68	cps
Tin	118-1	6371944	6346920	6377942	6365602	0.26	cps
Titanium	47-1	18033	31121	17950	22368	33.89	cps
Uranium	238-1	25180491	25341510	25312335	25278112	0.34	cps

Lab Sample ID: Q1193-02MS Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:06:12 DataFile Name: 108AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1715288	1689270	1685977	1696845	0.95	cps
Ytterbium	172-1	997	1053	1003	1018	3.04	cps
Ytterbium	172-2	500	503	403	469	12.11	cps
Ytterbium	176-1	39569	39626	40502	39899	1.31	cps
Ytterbium	176-2	14358	14481	14668	14502	1.08	cps
Yttrium	89-1	28500819	30718156	30143680	29787552	3.86	cps
Yttrium	89-2	2212135	2264089	2192925	2223050	1.66	cps
Zinc	66-2	3232257	3253231	3212938	3232809	0.62	cps
Zirconium	90-1	16005739	15578077	15699876	15761230	1.40	cps
Zirconium	91-1	3541244	3484904	3505003	3510384	0.81	cps

<sup>3</sup> 763

Lab Sample ID: Q1193-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Date & Time / to	quircu . Zoz	0 02 00 10.00.04	Datain	ic ivallic .	1007(11)		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	711659	721831	719511	717667	0.74	cps
Antimony	121-1	8594988	8665678	8662515	8641061	0.46	cps
Arsenic	75-2	1370	1417	1350	1379	2.48	cps
Barium	135-1	9170767	9396843	9317642	9295084	1.23	cps
Barium	137-1	15827225	16037944	16157202	16007457	1.04	cps
Beryllium	9-1	3273924	3261485	3297409	3277606	0.56	cps
Bismuth	209-1	11987159	12096863	12012782	12032268	0.48	cps
Bismuth	209-2	5246068	5301141	5232920	5260043	0.69	cps
Bromine	81-1	24966	27043	28025	26678	5.85	cps
Cadmium	108-1	155645	159140	157263	157349	1.11	cps
Cadmium	106-1	242763	248194	244734	245230	1.12	cps
Cadmium	111-1	2068124	2082196	2129226	2093182	1.53	cps
Calcium	43-1	4991182	4961723	5032780	4995228	0.71	cps
Calcium	44-1	81212732	79840410	81390110	80814418	1.05	cps
Carbon	12-1	11244392	12319761	12559433	12041195	5.82	cps
Carbon	12-2	84923	86070	87290	86094	1.38	cps
Chlorine	35-1	80200552	84711084	87488952	84133529	4.37	cps
Chlorine	35-2	371017	380289	379740	377016	1.38	cps
Chromium	52-2	2003468	2011897	2016510	2010625	0.33	cps
Cobalt	59-2	3903488	3840073	3861283	3868281	0.83	cps
Copper	63-2	29005895	28917175	28543843	28822304	0.85	cps
Dysprosium	156-1	3160	3407	3120	3229	4.81	cps
Dysprosium	156-2	783	803	797	794	1.28	cps
Erbium	164-1	1977	2010	1860	1949	4.04	cps
Erbium	164-2	610	677	670	652	5.63	cps
Gadolinium	160-1	2197	2104	2264	2188	3.68	cps
Gadolinium	160-2	1013	893	863	923	8.60	cps
Holmium	165-1	20711435	20214117	20057877	20327810	1.68	cps
Holmium	165-2	7515322	7413044	7490514	7472960	0.71	cps
Indium	115-1	16561494	16350087	16480978	16464186	0.65	cps
Indium	115-2	1663086	1683425	1702157	1682889	1.16	cps
Iron	54-2	6755759	6743462	6678613	6725945	0.62	cps
Iron	56-2	122903858	121104632	123031292	122346594	0.88	cps
Iron	57-2	3196935	3111886	3134399	3147740	1.40	cps
Krypton	83-1	250	310	327	296	13.64	cps
Lead	206-1	31751249	31575510	31422239	31582999	0.52	cps

Lab Sample ID: Q1193-02MSD Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Date & Time Act	quireu . 202	25-02-00 16.06.54	Dalari	ie name.	109AREF.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27431808	27579465	27090140	27367137	0.92	cps
Lead	208-1	126176694	126947634	125257699	126127342	0.67	cps
Lithium	6-1	9702216	9575345	9752348	9676636	0.94	cps
Magnesium	24-2	13844332	14060580	14183780	14029564	1.22	cps
Manganese	55-2	8346784	8404861	8479068	8410238	0.79	cps
Molybdenum	94-1	14503727	14570144	14548469	14540780	0.23	cps
Molybdenum	95-1	15553246	15527727	15646751	15575908	0.40	cps
Molybdenum	96-1	17650953	17774703	17975041	17800232	0.92	cps
Molybdenum	97-1	9702193	9668031	9816330	9728851	0.80	cps
Molybdenum	98-1	25477453	25675118	25633192	25595254	0.41	cps
Neodymium	150-1	3984	3964	4084	4011	1.60	cps
Neodymium	150-2	983	947	1351	1094	20.44	cps
Nickel	60-2	1007877	1008710	1006921	1007836	0.09	cps
Phosphorus	31-2	233	327	243	268	19.14	cps
Potassium	39-2	3848117	3926919	3803579	3859538	1.62	cps
Rhodium	103-1	15468839	15253686	15109822	15277449	1.18	cps
Rhodium	103-2	6151623	6193367	6133928	6159640	0.50	cps
Scandium	45-1	12519986	12095128	12237468	12284194	1.76	cps
Scandium	45-2	244593	246043	243774	244803	0.47	cps
Selenium	82-1	128945	130018	129929	129631	0.46	cps
Selenium	77-2	2387	2447	2277	2370	3.64	cps
Selenium	78-2	7826	8139	7806	7923	2.36	cps
Silicon	28-1	47340696	50287129	47544458	48390761	3.40	cps
Silver	107-1	1867944	1878296	1853554	1866598	0.67	cps
Silver	109-1	1712618	1726823	1704888	1714776	0.65	cps
Sodium	23-2	57590321	58628762	57963759	58060947	0.91	cps
Strontium	86-1	3873515	3905286	3894325	3891042	0.41	cps
Strontium	88-1	33128081	33413540	33040720	33194114	0.59	cps
Sulfur	34-1	985020	979459	960860	975113	1.30	cps
Terbium	159-1	20772736	20918103	20913026	20867955	0.40	cps
Terbium	159-2	7111301	7191083	7296232	7199539	1.29	cps
Thallium	203-1	7612514	7858206	7700276	7723665	1.61	cps
Thallium	205-1	18215895	18645164	18395532	18418864	1.17	cps
Tin	118-1	6180488	6171756	6184232	6178825	0.10	cps
Titanium	47-1	13945	29740	28285	23990	36.39	cps
Uranium	238-1	24577916	24867512	24703092	24716174	0.59	cps

Lab Sample ID : Q1193-02MSD Instrumnet Name : P8
Client Sample ID : TAPIAL2-MW01-012425- Dilution Factor : 1

Date & Time Acquired: 2025-02-06 18:08:54 DataFile Name: 109AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1677221	1646800	1631660	1651894	1.40	cps
Ytterbium	172-1	1040	933	937	970	6.25	cps
Ytterbium	172-2	480	437	513	477	8.06	cps
Ytterbium	176-1	38118	38777	38790	38562	1.00	cps
Ytterbium	176-2	13724	13764	14304	13931	2.33	cps
Yttrium	89-1	30082084	29971693	29858653	29970810	0.37	cps
Yttrium	89-2	2206775	2215465	2196138	2206126	0.44	cps
Zinc	66-2	3191274	3113086	3083022	3129127	1.79	cps
Zirconium	90-1	14939318	15123978	15182031	15081776	0.84	cps
Zirconium	91-1	3284683	3374760	3366374	3341939	1.49	cps

<sub>3</sub> 766

Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Q1193-02A

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Date & Time / to	quircu . Zoz	.0 02 00 10.11.00	Datain	ic ivallic .	TTO/TTELL.G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	704826	715592	715377	711932	0.86	cps
Antimony	121-1	8880912	8995122	8923632	8933222	0.65	cps
Arsenic	75-2	1483	1393	1327	1401	5.61	cps
Barium	135-1	9231109	9315813	9207320	9251414	0.62	cps
Barium	137-1	16045884	15922202	16030110	15999398	0.42	cps
Beryllium	9-1	3238638	3237153	3264618	3246803	0.48	cps
Bismuth	209-1	12111091	11729346	12093775	11978071	1.80	cps
Bismuth	209-2	5281509	5227854	5242993	5250785	0.53	cps
Bromine	81-1	24842	26829	28205	26625	6.35	cps
Cadmium	108-1	156329	157930	158042	157434	0.61	cps
Cadmium	106-1	244030	245622	246346	245333	0.48	cps
Cadmium	111-1	2079626	2130539	2105097	2105087	1.21	cps
Calcium	43-1	4999340	4960913	4987844	4982699	0.40	cps
Calcium	44-1	80326660	80154335	79451902	79977633	0.58	cps
Carbon	12-1	11487335	12357680	12905593	12250202	5.84	cps
Carbon	12-2	85376	87495	88098	86990	1.64	cps
Chlorine	35-1	81465049	86483122	87584529	85177567	3.83	cps
Chlorine	35-2	372828	376201	380315	376448	1.00	cps
Chromium	52-2	2053167	2019599	2024790	2032519	0.89	cps
Cobalt	59-2	3868650	3839991	3878330	3862324	0.52	cps
Copper	63-2	28555084	28711900	28493105	28586696	0.39	cps
Dysprosium	156-1	3374	3634	3174	3394	6.80	cps
Dysprosium	156-2	1037	873	897	936	9.45	cps
Erbium	164-1	1964	1750	2010	1908	7.27	cps
Erbium	164-2	590	817	600	669	19.15	cps
Gadolinium	160-1	2244	2284	2334	2287	1.97	cps
Gadolinium	160-2	1007	983	973	988	1.73	cps
Holmium	165-1	20307105	20296673	19971961	20191913	0.94	cps
Holmium	165-2	7511941	7311691	7346768	7390134	1.45	cps
Indium	115-1	16026168	16030813	16215887	16090956	0.67	cps
Indium	115-2	1689184	1637344	1686446	1670991	1.75	cps
Iron	54-2	6654683	6706663	6701925	6687757	0.43	cps
Iron	56-2	123005635	121426528	121670625	122034263	0.70	cps
Iron	57-2	3118339	3084641	3119369	3107450	0.64	cps
Krypton	83-1	323	337	367	342	6.49	cps
Lead	206-1	31579561	31951848	32168309	31899906	0.93	cps

Р8

Instrumnet Name:

Lab Sample ID: Q1193-02A Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27175280	27445151	27687227	27435886	0.93	cps
Lead	208-1	125475641	125641393	127380075	126165703	0.84	cps
Lithium	6-1	9764754	9728654	9626719	9706709	0.74	cps
Magnesium	24-2	13794833	14103656	13785568	13894686	1.30	cps
Manganese	55-2	8252656	8269149	8355442	8292416	0.67	cps
Molybdenum	94-1	14512446	14699175	14593937	14601853	0.64	cps
Molybdenum	95-1	15807179	15985191	15646244	15812872	1.07	cps
Molybdenum	96-1	17736096	17919326	17870620	17842014	0.53	cps
Molybdenum	97-1	9636908	9417068	9894844	9649607	2.48	cps
Molybdenum	98-1	25373640	25235734	25871513	25493629	1.31	cps
Neodymium	150-1	3927	4321	4074	4107	4.84	cps
Neodymium	150-2	787	1073	950	937	15.35	cps
Nickel	60-2	999675	999781	1002261	1000572	0.15	cps
Phosphorus	31-2	823	793	907	841	6.98	cps
Potassium	39-2	3750598	3815236	3871676	3812503	1.59	cps
Rhodium	103-1	15075203	14782035	15155268	15004169	1.31	cps
Rhodium	103-2	6262679	6074594	6105538	6147604	1.64	cps
Scandium	45-1	12052280	12002541	12075774	12043531	0.31	cps
Scandium	45-2	245316	241027	242115	242819	0.92	cps
Selenium	82-1	127591	130221	129538	129117	1.06	cps
Selenium	77-2	2137	2437	2304	2292	6.56	cps
Selenium	78-2	7756	7899	7972	7876	1.40	cps
Silicon	28-1	50381676	52641501	49407098	50810091	3.27	cps
Silver	107-1	1861238	1900547	1846231	1869338	1.50	cps
Silver	109-1	1713825	1734620	1735131	1727859	0.70	cps
Sodium	23-2	56589781	57785512	57283646	57219646	1.05	cps
Strontium	86-1	3855380	3886303	3896501	3879395	0.55	cps
Strontium	88-1	33208481	33619562	33495391	33441145	0.63	cps
Sulfur	34-1	979671	957003	959856	965510	1.28	cps
Terbium	159-1	20977252	21145212	20738882	20953782	0.97	cps
Terbium	159-2	7113746	7107943	7171831	7131173	0.50	cps
Thallium	203-1	7693122	7887858	7709286	7763422	1.39	cps
Thallium	205-1	18388431	18716988	18655144	18586854	0.94	cps
Tin	118-1	6099756	6161889	6150087	6137244	0.54	cps
Titanium	47-1	18310	28198	52541	33016	53.36	cps
Uranium	238-1	25000515	24841831	25016755	24953034	0.39	cps

Lab Sample ID: Q1193-02A Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW01-012425- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:11:39 DataFile Name: 110AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1634156	1624462	1651969	1636863	0.85	cps
Ytterbium	172-1	1113	1023	1037	1058	4.59	cps
Ytterbium	172-2	941	430	493	621	44.82	cps
Ytterbium	176-1	38085	38135	38275	38165	0.26	cps
Ytterbium	176-2	13894	14468	14321	14228	2.10	cps
Yttrium	89-1	30010702	29829969	29991331	29944001	0.33	cps
Yttrium	89-2	2264005	2160448	2141072	2188509	3.02	cps
Zinc	66-2	3109240	3121641	3087713	3106198	0.55	cps
Zirconium	90-1	15075734	15469931	15019193	15188286	1.62	cps
Zirconium	91-1	3339537	3436787	3373887	3383404	1.46	cps

<sup>3</sup> 769

Lab Sample ID :CCV006Instrumnet Name :P8Client Sample ID :CCV006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Date & Time Ac	quireu . 202	25-02-00 16.14.21	Dalari	ie ivailie .	TTTCCV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3834868	3881918	3806823	3841203	0.99	cps
Antimony	121-1	8321343	8401719	8437561	8386874	0.71	cps
Arsenic	75-2	180720	179232	176513	178822	1.19	cps
Barium	135-1	9952057	9883110	10038159	9957775	0.78	cps
Barium	137-1	17204684	17395224	17467642	17355850	0.78	cps
Beryllium	9-1	3129208	3121700	3147262	3132723	0.42	cps
Bismuth	209-1	10863676	10978579	11007407	10949887	0.69	cps
Bismuth	209-2	4861912	4855920	4844192	4854008	0.19	cps
Bromine	81-1	9213	8719	8319	8751	5.12	cps
Cadmium	108-1	160961	164698	165234	163631	1.42	cps
Cadmium	106-1	238005	241248	238198	239150	0.76	cps
Cadmium	111-1	2039057	2042162	2014735	2031984	0.74	cps
Calcium	43-1	14388859	14671341	14368102	14476101	1.17	cps
Calcium	44-1	232279677	238553176	230127963	233653605	1.87	cps
Carbon	12-1	7096899	7144903	7253721	7165175	1.12	cps
Carbon	12-2	52828	51951	52965	52581	1.05	cps
Chlorine	35-1	5857370	5528454	5123164	5502996	6.68	cps
Chlorine	35-2	18459	18218	16700	17792	5.36	cps
Chromium	52-2	2023197	2018278	2037160	2026212	0.48	cps
Cobalt	59-2	3748529	3720976	3772299	3747268	0.69	cps
Copper	63-2	27512566	27670460	27819369	27667465	0.55	cps
Dysprosium	156-1	467	497	460	474	4.12	cps
Dysprosium	156-2	120	130	103	118	11.44	cps
Erbium	164-1	397	423	420	413	3.52	cps
Erbium	164-2	200	163	177	180	10.31	cps
Gadolinium	160-1	370	420	460	417	10.82	cps
Gadolinium	160-2	130	117	133	127	6.96	cps
Holmium	165-1	18843898	19346669	19540908	19243825	1.87	cps
Holmium	165-2	7340118	7267692	7209266	7272359	0.90	cps
Indium	115-1	14688916	14962826	15339911	14997217	2.18	cps
Indium	115-2	1576672	1632097	1579398	1596056	1.96	cps
Iron	54-2	20027837	20080403	20311967	20140069	0.75	cps
Iron	56-2	363812675	366830008	367193835	365945506	0.51	cps
Iron	57-2	9181668	9216122	9305387	9234392	0.69	cps
Krypton	83-1	330	240	313	294	16.26	cps
Lead	206-1	31314195	31532485	31233087	31359923	0.49	cps

Lab Sample ID :CCV006Instrumnet Name :P8Client Sample ID :CCV006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lood	207.4	26541661	27200055	26040720		1.23	ana
Lead	207-1	26541661	27200955	26818730	26853782		cps
Lead	208-1	122650642	125501971	122454673	123535762	1.38	cps
Lithium	6-1	8967199	8782924	8847382	8865835	1.05	cps
Magnesium	24-2	67137931	67905231	66331194	67124785	1.17	cps
Manganese	55-2	7968041	8064113	8201483	8077879	1.45	cps
Molybdenum	94-1	30886780	30582991	31102544	30857438	0.85	cps
Molybdenum	95-1	43892184	44016756	44176591	44028510	0.32	cps
Molybdenum	96-1	47199818	48313366	48523289	48012158	1.48	cps
Molybdenum	97-1	26234736	27116118	27449412	26933422	2.33	cps
Molybdenum	98-1	70373587	69899256	71027784	70433542	0.80	cps
Neodymium	150-1	690	840	800	777	10.00	cps
Neodymium	150-2	43	77	60	60	27.78	cps
Nickel	60-2	959547	961771	966465	962594	0.37	cps
Phosphorus	31-2	37107	37485	36760	37117	0.98	cps
Potassium	39-2	19741726	19560303	19499887	19600639	0.64	cps
Rhodium	103-1	13381875	13890073	14094763	13788904	2.66	cps
Rhodium	103-2	5664695	5638914	5645145	5649585	0.24	cps
Scandium	45-1	11146676	11520856	11648516	11438682	2.28	cps
Scandium	45-2	233619	236411	232217	234082	0.91	cps
Selenium	82-1	122758	123154	123703	123205	0.39	cps
Selenium	77-2	2284	2320	2494	2366	4.74	cps
Selenium	78-2	7832	7852	7766	7817	0.58	cps
Silicon	28-1	7511109	7669865	7596495	7592490	1.05	cps
Silver	107-1	10189817	10193089	9938659	10107188	1.44	cps
Silver	109-1	9523932	9621895	9487168	9544332	0.73	cps
Sodium	23-2	136326141	135901761	134565448	135597784	0.68	cps
Strontium	86-1	2834753	2869579	2872868	2859067	0.74	cps
Strontium	88-1	23864573	25002436	24600280	24489097	2.36	cps
Sulfur	34-1	1643209	1689088	1658040	1663446	1.41	cps
Terbium	159-1	19569048	19657389	20074581	19767006	1.37	cps
Terbium	159-2	7001171	6929089	6890384	6940214	0.81	cps
Thallium	203-1	7783033	7813486	7808599	7801706	0.21	cps
Thallium	205-1	18308359	18109093	18174847	18197433	0.56	cps
Tin	118-1	6522564	6695350	6678152	6632022	1.44	cps
Titanium	47-1	13714209	13815224	14016582	13848672	1.11	cps
Uranium	238-1	24803367	25573135	24986725	25121075	1.60	cps

Lab Sample ID :CCV006Instrumnet Name :P8Client Sample ID :CCV006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:14:21 DataFile Name: 111CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1660576	1600590	1612008	1624391	1.96	cps
Ytterbium	172-1	540	500	517	519	3.87	cps
Ytterbium	172-2	193	200	213	202	5.04	cps
Ytterbium	176-1	38927	39235	40412	39525	1.98	cps
Ytterbium	176-2	14198	14251	14131	14193	0.42	cps
Yttrium	89-1	27834386	28247964	28689188	28257179	1.51	cps
Yttrium	89-2	2138775	2113696	2094812	2115761	1.04	cps
Zinc	66-2	3034743	3023738	3040987	3033156	0.29	cps
Zirconium	90-1	15701564	15334014	15465429	15500336	1.20	cps
Zirconium	91-1	3447564	3510626	3483967	3480719	0.91	cps

Lab Sample ID: CCB006 Instrumnet Name: P8
Client Sample ID: CCB006 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	130	167	120	139	17.69	cps
Antimony	121-1	1220	1267	1203	1230	2.67	cps
Arsenic	75-2	3	3	10	6	69.34	cps
Barium	135-1	280	180	230	230	21.74	cps
Barium	137-1	490	357	333	393	21.49	cps
Beryllium	9-1	2240	2125	2042	2136	4.64	cps
Bismuth	209-1	11132727	12471865	12528760	12044451	6.56	cps
Bismuth	209-2	5560582	5562889	5515088	5546187	0.49	cps
Bromine	81-1	6241	6718	6368	6443	3.83	cps
Cadmium	108-1	23	17	27	22	22.91	cps
Cadmium	106-1	7649	8129	8643	8140	6.11	cps
Cadmium	111-1	5458	5792	6161	5804	6.06	cps
Calcium	43-1	837	773	787	799	4.18	cps
Calcium	44-1	39143	37592	38608	38448	2.05	cps
Carbon	12-1	5182861	5130009	5133362	5148744	0.57	cps
Carbon	12-2	32332	32346	31714	32131	1.12	cps
Chlorine	35-1	1920695	1792378	1677974	1797015	6.76	cps
Chlorine	35-2	6161	5891	5731	5928	3.67	cps
Chromium	52-2	2347	2374	2304	2341	1.51	cps
Cobalt	59-2	267	253	223	248	8.96	cps
Copper	63-2	4531	4637	4928	4699	4.37	cps
Dysprosium	156-1	17	3	0	7	132.33	cps
Dysprosium	156-2	7	10	7	8	24.71	cps
Erbium	164-1	77	83	147	102	37.80	cps
Erbium	164-2	30	33	40	34	14.78	cps
Gadolinium	160-1	140	103	157	133	20.47	cps
Gadolinium	160-2	33	13	13	20	57.74	cps
Holmium	165-1	18071493	19690647	20357116	19373085	6.07	cps
Holmium	165-2	7543805	7386519	7431590	7453971	1.09	cps
Indium	115-1	14843373	16501616	17058191	16134393	7.14	cps
Indium	115-2	1717976	1751768	1727638	1732461	1.00	cps
Iron	54-2	1197	1177	1170	1181	1.18	cps
Iron	56-2	18222	19023	19337	18860	3.05	cps
Iron	57-2	440	493	447	460	6.32	cps
Krypton	83-1	307	263	280	283	7.71	cps
Lead	206-1	4501	4301	4141	4314	4.18	cps

Lab Sample ID :CCB006Instrumnet Name :P8Client Sample ID :CCB006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Parameter	IVIASS	CFS1	UP32	CP33	CFSIVIEATI	CPSRSD	Units
Lead	207-1	3991	3484	3434	3636	8.47	cps
Lead	208-1	17978	16855	16451	17095	4.63	cps
Lithium	6-1	8926280	9592247	9895162	9471229	5.23	cps
Magnesium	24-2	4297	4848	4504	4550	6.11	cps
Manganese	55-2	470	497	463	477	3.70	cps
Molybdenum	94-1	1467	1173	1297	1312	11.22	cps
Molybdenum	95-1	1270	1043	1020	1111	12.43	cps
Molybdenum	96-1	1607	1233	1293	1378	14.55	cps
Molybdenum	97-1	890	593	637	707	22.68	cps
Molybdenum	98-1	2034	1613	1590	1746	14.29	cps
Neodymium	150-1	13	27	3	14	81.07	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	1560	1583	1683	1609	4.07	cps
Phosphorus	31-2	97	73	63	78	22.00	cps
Potassium	39-2	20071	19954	19834	19953	0.59	cps
Rhodium	103-1	14007312	15967844	15983537	15319564	7.42	cps
Rhodium	103-2	6402876	6572741	6505723	6493780	1.32	cps
Scandium	45-1	10802222	11858081	12062974	11574426	5.85	cps
Scandium	45-2	238794	242269	241685	240916	0.77	cps
Selenium	82-1	0	-17	-3	-7	-132.23	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	7	17	17	13	43.29	cps
Silicon	28-1	664154	665444	664317	664638	0.11	cps
Silver	107-1	827	1000	877	901	9.90	cps
Silver	109-1	763	727	647	712	8.38	cps
Sodium	23-2	87483	87000	85441	86642	1.23	cps
Strontium	86-1	613	600	540	584	6.68	cps
Strontium	88-1	1387	1087	1123	1199	13.65	cps
Sulfur	34-1	845934	849539	847100	847524	0.22	cps
Terbium	159-1	18356439	19917553	20613223	19629072	5.89	cps
Terbium	159-2	7196522	7297144	7153856	7215841	1.02	cps
Thallium	203-1	1537	1450	1410	1466	4.42	cps
Thallium	205-1	3644	3454	3317	3472	4.73	cps
Tin	118-1	2234	2030	2110	2125	4.82	cps
Titanium	47-1	507	383	477	456	14.12	cps
Uranium	238-1	487	313	370	390	22.66	cps

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Lab Sample ID :CCB006Instrumnet Name :P8Client Sample ID :CCB006Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:18:31 DataFile Name: 112CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	47	47	53	49	7.86	cps
Ytterbium	172-1	97	97	120	104	12.90	cps
Ytterbium	172-2	73	37	40	50	40.55	cps
Ytterbium	176-1	1707	1940	2074	1907	9.73	cps
Ytterbium	176-2	287	323	313	308	6.16	cps
Yttrium	89-1	26511997	29640960	29774347	28642435	6.45	cps
Yttrium	89-2	2181240	2209239	2230496	2206992	1.12	cps
Zinc	66-2	363	327	310	333	8.18	cps
Zirconium	90-1	1603	1690	1583	1626	3.49	cps
Zirconium	91-1	310	343	357	337	7.14	cps

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Lab Sample ID :PB166378BLInstrumnet Name :P8Client Sample ID :PBW378Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:21:50 DataFile Name: 113CCBE.d

Date & Time Ac	quireu . 202	25-02-00 16.21.50	Dalar	ile Name.	113CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	120	90	130	113	18.37	cps
Antimony	121-1	470	497	467	478	3.44	cps
Arsenic	75-2	7	7	7	7	0.00	cps
Barium	135-1	113	83	103	100	15.28	cps
Barium	137-1	173	153	153	160	7.22	cps
Beryllium	9-1	1487	1554	1477	1506	2.75	cps
Bismuth	209-1	12481677	12763549	12679605	12641610	1.14	cps
Bismuth	209-2	5562554	5605564	5557153	5575090	0.48	cps
Bromine	81-1	5608	5858	5715	5727	2.19	cps
Cadmium	108-1	30	20	23	24	20.83	cps
Cadmium	106-1	8316	8213	8693	8407	3.01	cps
Cadmium	111-1	5883	5778	6135	5932	3.09	cps
Calcium	43-1	667	697	660	674	2.90	cps
Calcium	44-1	35063	34899	34902	34955	0.27	cps
Carbon	12-1	5271856	5393765	5340657	5335426	1.15	cps
Carbon	12-2	33615	33765	33562	33647	0.31	cps
Chlorine	35-1	1085451	1043881	1018406	1049246	3.23	cps
Chlorine	35-2	3897	4024	3681	3867	4.49	cps
Chromium	52-2	957	1010	1090	1019	6.59	cps
Cobalt	59-2	220	157	207	194	17.17	cps
Copper	63-2	4011	4101	3981	4031	1.55	cps
Dysprosium	156-1	10	20	7	12	56.76	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	103	63	77	81	25.11	cps
Erbium	164-2	43	57	43	48	16.12	cps
Gadolinium	160-1	83	113	140	112	25.26	cps
Gadolinium	160-2	23	30	23	26	15.07	cps
Holmium	165-1	20213805	20187432	20334728	20245322	0.39	cps
Holmium	165-2	7603875	7497275	7584258	7561803	0.75	cps
Indium	115-1	16782509	16884089	16732298	16799632	0.46	cps
Indium	115-2	1798211	1792324	1744410	1778315	1.66	cps
Iron	54-2	697	713	767	726	5.04	cps
Iron	56-2	10531	11148	10477	10718	3.48	cps
Iron	57-2	267	200	223	230	14.71	cps
Krypton	83-1	333	363	323	340	6.12	cps
Lead	206-1	3504	3237	3160	3300	5.46	cps

Lab Sample ID :PB166378BLInstrumnet Name :P8Client Sample ID :PBW378Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:21:50 DataFile Name: 113CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2884	2837	2840	2854	0.91	cps
Lead	208-1	13309	12939	13049	13099	1.45	cps
Lithium	6-1	10130947	9931908	9959526	10007460	1.08	cps
Magnesium	24-2	3867	4084	3804	3918	3.75	cps
Manganese	55-2	247	290	280	272	8.34	cps
Molybdenum	94-1	740	710	877	776	11.45	cps
Molybdenum	95-1	457	470	427	451	4.92	cps
Molybdenum	96-1	540	550	497	529	5.36	cps
Molybdenum	97-1	250	240	267	252	5.34	cps
Molybdenum	98-1	633	630	623	629	0.81	cps
Neodymium	150-1	3	23	7	11	96.43	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	1337	1257	1457	1350	7.46	cps
Phosphorus	31-2	50	67	83	67	25.00	cps
Potassium	39-2	18953	19119	19467	19179	1.37	cps
Rhodium	103-1	16253016	15898831	16246447	16132765	1.26	cps
Rhodium	103-2	6668796	6685266	6544614	6632892	1.16	cps
Scandium	45-1	12325101	12381759	12401870	12369577	0.32	cps
Scandium	45-2	246613	246024	246049	246229	0.14	cps
Selenium	82-1	-70	-153	-13	-79	-89.27	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	3	10	13	9	57.30	cps
Silicon	28-1	667213	659360	656986	661186	0.81	cps
Silver	107-1	537	470	557	521	8.71	cps
Silver	109-1	330	360	350	347	4.41	cps
Sodium	23-2	73634	72234	72365	72744	1.06	cps
Strontium	86-1	570	573	503	549	7.19	cps
Strontium	88-1	940	1087	1100	1042	8.52	cps
Sulfur	34-1	846139	848625	848722	847829	0.17	cps
Terbium	159-1	21202456	20911194	20756488	20956713	1.08	cps
Terbium	159-2	7229223	7268822	7297345	7265130	0.47	cps
Thallium	203-1	1010	977	1003	997	1.77	cps
Thallium	205-1	2627	2414	2147	2396	10.04	cps
Tin	118-1	2294	2314	2460	2356	3.86	cps
Titanium	47-1	310	380	320	337	11.25	cps
Uranium	238-1	117	97	97	103	11.17	cps

LB Number : LB134612

Lab Sample ID : PB166378BL Client Sample ID: PBW378

Date & Time Acquired : 2025-02-06 18:21:50 DataFile Name : 113CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3	23	23	17	69.30	cps
Ytterbium	172-1	110	113	123	116	6.01	cps
Ytterbium	172-2	57	40	43	47	18.90	cps
Ytterbium	176-1	1950	1943	1833	1909	3.43	cps
Ytterbium	176-2	280	337	323	313	9.46	cps
Yttrium	89-1	30013750	30289450	29926630	30076610	0.63	cps
Yttrium	89-2	2280269	2252500	2229497	2254089	1.13	cps
Zinc	66-2	963	1020	913	966	5.53	cps
Zirconium	90-1	1167	1163	1277	1202	5.36	cps
Zirconium	91-1	200	217	230	216	6.97	cps

Operator:

Instrumnet Name:

Dilution Factor:

Jaswal

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Lab Sample ID :PB166378BSInstrumnet Name :P8Client Sample ID :LCS378Dilution Factor :1

Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	787348	790288	790928	789521	0.24	cps
Antimony	121-1	8955494	8993682	8835811	8928329	0.92	cps
Arsenic	75-2	190723	191009	192340	191357	0.45	cps
Barium	135-1	10554059	10624601	10552231	10576964	0.39	cps
Barium	137-1	18269626	18618574	18350340	18412847	0.99	cps
Beryllium	9-1	3301563	3311751	3307655	3306990	0.16	cps
Bismuth	209-1	12066354	12110779	11898192	12025108	0.93	cps
Bismuth	209-2	5272382	5251311	5291660	5271784	0.38	cps
Bromine	81-1	5251	5394	5291	5312	1.39	cps
Cadmium	108-1	175675	177066	179081	177274	0.97	cps
Cadmium	106-1	260454	261695	261152	261100	0.24	cps
Cadmium	111-1	2256503	2223205	2232640	2237449	0.77	cps
Calcium	43-1	3141341	3149261	3161986	3150862	0.33	cps
Calcium	44-1	50682588	51351826	52087873	51374095	1.37	cps
Carbon	12-1	5703956	5977252	5998809	5893339	2.79	cps
Carbon	12-2	41839	40917	40890	41215	1.31	cps
Chlorine	35-1	800693	797421	790363	796159	0.66	cps
Chlorine	35-2	3164	3337	3137	3213	3.38	cps
Chromium	52-2	2195737	2200073	2193453	2196421	0.15	cps
Cobalt	59-2	4131937	4136925	4141864	4136909	0.12	cps
Copper	63-2	31165467	30370500	30817404	30784457	1.29	cps
Dysprosium	156-1	167	203	193	188	10.09	cps
Dysprosium	156-2	30	73	37	47	49.99	cps
Erbium	164-1	207	207	200	204	1.88	cps
Erbium	164-2	93	50	80	74	29.81	cps
Gadolinium	160-1	213	180	163	186	13.72	cps
Gadolinium	160-2	57	67	30	51	37.09	cps
Holmium	165-1	20032036	20150038	19855042	20012372	0.74	cps
Holmium	165-2	7408260	7546853	7518443	7491186	0.98	cps
Indium	115-1	16346967	16173419	15979167	16166518	1.14	cps
Indium	115-2	1707017	1690941	1680787	1692915	0.78	cps
Iron	54-2	4383858	4392986	4443080	4406641	0.72	cps
Iron	56-2	79414069	80151207	78772069	79445782	0.87	cps
Iron	57-2	2024870	2063987	2019460	2036106	1.19	cps
Krypton	83-1	293	310	337	313	6.98	cps
Lead	206-1	33738685	34024552	33699774	33821003	0.52	cps

Lab Sample ID: PB166378BS Instrumnet Name: P8
Client Sample ID: LCS378 Dilution Factor: 1

Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	28630360	28976463	29287962	28964928	1.14	cps
Lead	208-1	133058583	134162682	134327668	133849644	0.52	cps
Lithium	6-1	9475163	9731346	9296417	9500975	2.30	cps
Magnesium	24-2	14644096	14697776	14852085	14731319	0.73	cps
Manganese	55-2	8723079	8762150	8702857	8729362	0.35	cps
Molybdenum	94-1	32138259	32021697	32729871	32296609	1.18	cps
Molybdenum	95-1	45665263	46000524	46472253	46046013	0.88	cps
Molybdenum	96-1	50535294	50414424	51860431	50936716	1.57	cps
Molybdenum	97-1	28606066	28181270	29000242	28595860	1.43	cps
Molybdenum	98-1	74491217	73502842	75478501	74490853	1.33	cps
Neodymium	150-1	643	683	633	653	4.05	cps
Neodymium	150-2	20	23	30	24	20.83	cps
Nickel	60-2	1065006	1064126	1070170	1066434	0.31	cps
Phosphorus	31-2	38682	39240	39307	39076	0.88	cps
Potassium	39-2	4192791	4190328	4193411	4192177	0.04	cps
Rhodium	103-1	15179304	15294266	15197151	15223574	0.41	cps
Rhodium	103-2	6194663	6164435	6147808	6168969	0.39	cps
Scandium	45-1	12085458	11922192	12240556	12082736	1.32	cps
Scandium	45-2	243443	244181	243320	243648	0.19	cps
Selenium	82-1	134029	137002	134165	135065	1.24	cps
Selenium	77-2	2420	2394	2444	2419	1.03	cps
Selenium	78-2	8399	8333	8329	8354	0.47	cps
Silicon	28-1	7768240	7809244	7825762	7801082	0.38	cps
Silver	107-1	11383879	11415208	11311754	11370281	0.47	cps
Silver	109-1	10760205	10606395	10749953	10705518	0.80	cps
Sodium	23-2	29996001	29866635	29897824	29920153	0.23	cps
Strontium	86-1	2989869	3050371	3048229	3029490	1.13	cps
Strontium	88-1	25582315	26075485	26306392	25988064	1.42	cps
Sulfur	34-1	1686865	1690164	1678394	1685141	0.36	cps
Terbium	159-1	21002492	20735963	20436668	20725041	1.37	cps
Terbium	159-2	7165827	7126885	7154969	7149227	0.28	cps
Thallium	203-1	8324905	8274418	8252487	8283936	0.45	cps
Thallium	205-1	19731430	19919296	19532047	19727591	0.98	cps
Tin	118-1	7141210	7177610	7212358	7177059	0.50	cps
Titanium	47-1	14709919	14839997	15056991	14868969	1.18	cps
Uranium	238-1	26015354	26397854	26274160	26229122	0.74	cps

LB Number: LB134612

Lab Sample ID : PB166378BS

Client Sample ID: LCS378

Dilution Factor: 1

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Date & Time Acquired : 2025-02-06 18:25:12 DataFile Name : 114LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1697670	1691243	1738928	1709280	1.51	cps
Ytterbium	172-1	180	207	197	194	6.93	cps
Ytterbium	172-2	63	123	90	92	32.60	cps
Ytterbium	176-1	39275	41074	40435	40261	2.27	cps
Ytterbium	176-2	14168	14335	14528	14343	1.26	cps
Yttrium	89-1	29455209	29200625	29695151	29450328	0.84	cps
Yttrium	89-2	2212601	2181656	2183470	2192576	0.79	cps
Zinc	66-2	3287401	3253973	3310342	3283905	0.86	cps
Zirconium	90-1	15855702	15993035	16112148	15986962	0.80	cps
Zirconium	91-1	3589797	3591784	3654426	3612003	1.02	cps

Operator:

Instrumnet Name:

<sup>3</sup> 78

Client Sample ID: TAPHHA-MW12-012725- Dilution Factor: 1

Q1201-01

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:28:00 DataFile Name: 115AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1817	1623	1670	1703	5.92	cps
Antimony	121-1	2684	2404	2210	2432	9.79	cps
Arsenic	75-2	523	607	480	537	12.00	cps
Barium	135-1	190432	192674	193779	192295	0.89	cps
Barium	137-1	334382	334859	333140	334127	0.27	cps
Beryllium	9-1	2676	2546	2471	2564	4.04	cps
Bismuth	209-1	12663285	12834575	12455976	12651279	1.50	cps
Bismuth	209-2	5635308	5674534	5623698	5644514	0.47	cps
Bromine	81-1	71625	73836	76923	74128	3.59	cps
Cadmium	108-1	43	43	67	51	26.37	cps
Cadmium	106-1	8329	8299	9236	8622	6.18	cps
Cadmium	111-1	6310	6266	6839	6472	4.93	cps
Calcium	43-1	651982	658834	669976	660264	1.38	cps
Calcium	44-1	10915482	11048017	10851816	10938438	0.92	cps
Carbon	12-1	11437456	12810610	13058392	12435486	7.02	cps
Carbon	12-2	86379	86740	87713	86944	0.79	cps
Chlorine	35-1	952045	975063	988373	971827	1.89	cps
Chlorine	35-2	4107	4037	4071	4072	0.86	cps
Chromium	52-2	2257	2394	2384	2345	3.25	cps
Cobalt	59-2	49328	49365	49198	49297	0.18	cps
Copper	63-2	8192	8379	8336	8302	1.18	cps
Dysprosium	156-1	2780	2380	2620	2594	7.76	cps
Dysprosium	156-2	993	987	903	961	5.22	cps
Erbium	164-1	2114	2070	2244	2142	4.21	cps
Erbium	164-2	723	777	750	750	3.56	cps
Gadolinium	160-1	2907	2624	2664	2731	5.62	cps
Gadolinium	160-2	1123	1137	1157	1139	1.47	cps
Holmium	165-1	20410726	20623479	20589832	20541346	0.56	cps
Holmium	165-2	7627924	7681529	7507619	7605691	1.17	cps
Indium	115-1	17197890	17078519	17008640	17095016	0.56	cps
Indium	115-2	1804729	1836794	1789630	1810384	1.33	cps
Iron	54-2	1291386	1285109	1311066	1295854	1.05	cps
Iron	56-2	24298279	24274318	24279973	24284190	0.05	cps
Iron	57-2	595962	591929	599071	595654	0.60	cps
Krypton	83-1	310	287	293	297	4.05	cps
Lead	206-1	6111	6158	5595	5955	5.25	cps

Instrumnet Name:

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Lab Sample ID : Q1201-01 Client Sample ID: TAPHHA-MW12-012725-Dilution Factor: 1

Date & Time Acquired : 2025-02-06 18:28:00 DataFile Name : 115AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5548	5388	4924	5287	6.13	cps
Lead	208-1	24963	23939	22111	23671	6.10	cps
Lithium	6-1	10216554	9855473	9889141	9987056	2.00	cps
Magnesium	24-2	2540767	2504190	2499730	2514896	0.90	cps
Manganese	55-2	7365887	7298111	7371480	7345159	0.56	cps
Molybdenum	94-1	2587	2170	1913	2224	15.29	cps
Molybdenum	95-1	2954	2570	2067	2530	17.58	cps
Molybdenum	96-1	3354	2937	2520	2937	14.19	cps
Molybdenum	97-1	1707	1363	1250	1440	16.51	cps
Molybdenum	98-1	4421	4014	3257	3897	15.15	cps
Neodymium	150-1	3374	3374	3200	3316	3.02	cps
Neodymium	150-2	853	917	873	881	3.67	cps
Nickel	60-2	43984	43309	44289	43861	1.14	cps
Phosphorus	31-2	143	117	120	127	11.47	cps
Potassium	39-2	405692	405329	411433	407485	0.84	cps
Rhodium	103-1	16217737	16296777	16071353	16195289	0.71	cps
Rhodium	103-2	6656579	6652029	6467602	6592070	1.64	cps
Scandium	45-1	12434108	12702817	12592981	12576636	1.07	cps
Scandium	45-2	249579	249503	250864	249982	0.31	cps
Selenium	82-1	80	93	-17	52	114.96	cps
Selenium	77-2	3	0	10	4	114.60	cps
Selenium	78-2	3	23	27	18	71.00	cps
Silicon	28-1	31816674	32087473	31270287	31724811	1.31	cps
Silver	107-1	1570	1327	1237	1378	12.52	cps
Silver	109-1	1327	1187	1127	1213	8.46	cps
Sodium	23-2	2084017	2091126	2119709	2098284	0.90	cps
Strontium	86-1	314382	313684	308174	312080	1.09	cps
Strontium	88-1	2809731	2806560	2773268	2796520	0.72	cps
Sulfur	34-1	1215417	1214299	1209162	1212959	0.28	cps
Terbium	159-1	21433338	21437108	21410690	21427045	0.07	cps
Terbium	159-2	7370722	7517532	7423588	7437281	1.00	cps
Thallium	203-1	1500	1400	1357	1419	5.18	cps
Thallium	205-1	3654	3250	3120	3342	8.32	cps
Tin	118-1	4611	4731	4628	4656	1.40	cps
Titanium	47-1	1747	1787	1447	1660	11.20	cps
Uranium	238-1	2040	2004	1753	1932	8.07	cps

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Instrumnet Name:

Lab Sample ID: Q1201-01 Instrumnet Name: P8
Client Sample ID: TAPHHA-MW12-012725- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:28:00 DataFile Name: 115AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	960	940	1007	969	3.53	cps
Ytterbium	172-1	997	1007	1017	1007	0.99	cps
Ytterbium	172-2	463	447	513	474	7.31	cps
Ytterbium	176-1	2484	2510	2287	2427	5.03	cps
Ytterbium	176-2	600	530	537	556	6.95	cps
Yttrium	89-1	30656168	30492276	29992369	30380271	1.14	cps
Yttrium	89-2	2356110	2303990	2251321	2303807	2.27	cps
Zinc	66-2	8426	8516	8099	8347	2.63	cps
Zirconium	90-1	2180	2140	2310	2210	4.02	cps
Zirconium	91-1	420	463	440	441	4.92	cps

<sup>3</sup> /8<sup>2</sup>

Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Q1211-01

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Auminium         27-2         1503         1654         1417         1525         7.86         cps           Artsmony         121-1         940         943         1050         978         6.40         cps           Arsenic         75-2         37         23         63         41         49.54         cps           Barlum         135-1         96330         95984         95510         5964         10.43         cps           Barlum         137-1         166335         166755         166346         166479         0.14         cps           Beryllium         9-1         1462         1440         1451         1451         0.78         cps           Bismuth         209-1         13005101         12806254         12503388         12771765         1.98         cps           Bismuth         209-2         5546868         5554523         553276         551495         0.42         cps           Bromine         81-1         31402         33246         35385         33338         595         cps           Cadmium         106-1         8266         8868         8459         8671         2.35         cps           Cadmium	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Arsenic         75-2         37         23         63         41         49.54         cps           Barium         135-1         96330         95984         95510         95941         0.43         cps           Barium         137-1         166335         166755         166346         168479         0.14         cps           Bismuth         9-1         1462         1440         1451         1451         0.78         cps           Bismuth         209-1         13005101         12806254         12503938         12771765         1.98         cps           Bismuth         209-2         5546886         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         106-1         8866         8869         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         180819         1827459         1.57         cps           Calcium <td< td=""><td>Aluminium</td><td>27-2</td><td>1503</td><td>1654</td><td>1417</td><td>1525</td><td>7.86</td><td>cps</td></td<>	Aluminium	27-2	1503	1654	1417	1525	7.86	cps
Barlum         135-1         96330         95984         95510         96941         0.43         cps           Barlum         137-1         166335         166755         166346         166479         0.14         cps           Beryllum         9-1         1462         1440         1451         1451         0.78         cps           Bismuth         209-1         13005101         12806254         12503938         12771765         1.98         cps           Bismuth         209-2         55466868         5504523         5543276         5531495         0.42         cps           Bismuth         209-2         55466868         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         106-1         8866         8686         8459         8671         2.35         cps           Cadmium         11-1         6277         8172         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556571         0.66         cps	Antimony	121-1	940	943	1050	978	6.40	cps
Barium         137-1         166335         166755         166346         166479         0.14         cps           Beryllium         9-1         1462         1440         1451         1451         0.78         cps           Bismuth         209-1         13005101         12806254         12503938         12771765         1.98         cps           Bismuth         209-2         5546686         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         106-1         8866         8686         8459         8671         2.35         cps           Caldium         43-1         1806513         1813246         1808619         1827459         1.57         cps           Calcium         43-1         1980613         1813246         1808619         1827459         1.57         cps           Calcium         43-1         19860513         1813246         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         2978362         297556571         0.66	Arsenic	75-2	37	23	63	41	49.54	cps
Beryllium         9-1         1462         1440         1451         1451         0.78         cps           Bismuth         209-1         13005101         12806254         12503938         12771765         1.98         cps           Bismuth         209-2         5546686         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         3338         5.95         cps           Cadmium         106-1         8866         8686         8469         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1880513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556671         0.66         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps	Barium	135-1	96330	95984	95510	95941	0.43	cps
Bismuth         209-1         13005101         12806254         12503938         12771765         1.98         cps           Bismuth         209-2         5546686         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         108-1         57         40         20         39         47.21         cps           Cadmium         106-1         8686         8686         8459         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860613         1813245         1808619         1827459         1.57         cps           Carbon         12-1         10624128         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps	Barium	137-1	166335	166755	166346	166479	0.14	cps
Bismuth         209-2         5546686         5504523         5543276         5531495         0.42         cps           Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         108-1         57         40         20         39         47.21         cps           Cadmium         116-1         8866         8668         8459         8671         2.35         cps           Cadmium         111-1         66277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556571         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chiorine         35-1         1947143         2076439         2171543         2065042         5.45         cps	Beryllium	9-1	1462	1440	1451	1451	0.78	cps
Bromine         81-1         31402         33246         35365         33338         5.95         cps           Cadmium         108-1         57         40         20         39         47.21         cps           Cadmium         106-1         8866         8686         8459         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556671         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps	Bismuth	209-1	13005101	12806254	12503938	12771765	1.98	cps
Cadmium         108-1         57         40         20         39         47.21         cps           Cadmium         106-1         8866         8686         8459         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556671         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9740         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps	Bismuth	209-2	5546686	5504523	5543276	5531495	0.42	cps
Cadmium         106-1         8866         8686         8459         8671         2.35         cps           Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556671         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chlorine         52-2         2740         2677         2874         2764         3.63         cps	Bromine	81-1	31402	33246	35365	33338	5.95	cps
Cadmium         111-1         6277         6172         6031         6160         2.00         cps           Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29556571         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chlorine         35-2         2740         2677         2874         2764         3.63         cps	Cadmium	108-1	57	40	20	39	47.21	cps
Calcium         43-1         1860513         1813245         1808619         1827459         1.57         cps           Calcium         44-1         29462356         29424995         29782362         29566571         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps	Cadmium	106-1	8866	8686	8459	8671	2.35	cps
Calcium         44-1         29462356         29424995         29782362         2956671         0.66         cps           Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium<	Cadmium	111-1	6277	6172	6031	6160	2.00	cps
Carbon         12-1         10624126         11636484         11871696         11377435         5.83         cps           Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Gadolinium	Calcium	43-1	1860513	1813245	1808619	1827459	1.57	cps
Carbon         12-2         78367         78408         79953         78909         1.15         cps           Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1	Calcium	44-1	29462356	29424995	29782362	29556571	0.66	cps
Chlorine         35-1         1947143         2076439         2171543         2065042         5.45         cps           Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Holmium         165-1	Carbon	12-1	10624126	11636484	11871696	11377435	5.83	cps
Chlorine         35-2         9110         8950         9156         9072         1.20         cps           Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Holmium         165-2         270         290         310         290         6.90         cps           Holidium         1165-1         20991995 </td <td>Carbon</td> <td>12-2</td> <td>78367</td> <td>78408</td> <td>79953</td> <td>78909</td> <td>1.15</td> <td>cps</td>	Carbon	12-2	78367	78408	79953	78909	1.15	cps
Chromium         52-2         2740         2677         2874         2764         3.63         cps           Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-	Chlorine	35-1	1947143	2076439	2171543	2065042	5.45	cps
Cobalt         59-2         16293         16927         16440         16553         2.01         cps           Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Indium         115-1         17432461         1721433         17054240         17202711         1.17         cps           Iron         54-2<	Chlorine	35-2	9110	8950	9156	9072	1.20	cps
Copper         63-2         6495         6558         6765         6606         2.14         cps           Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         1712433         17054240         17202711         1.17         cps           Iron	Chromium	52-2	2740	2677	2874	2764	3.63	cps
Dysprosium         156-1         897         890         987         924         5.84         cps           Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron	Cobalt	59-2	16293	16927	16440	16553	2.01	cps
Dysprosium         156-2         227         243         240         237         3.73         cps           Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron	Copper	63-2	6495	6558	6765	6606	2.14	cps
Erbium         164-1         550         570         627         582         6.83         cps           Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton	Dysprosium	156-1	897	890	987	924	5.84	cps
Erbium         164-2         207         217         207         210         2.75         cps           Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Dysprosium	156-2	227	243	240	237	3.73	cps
Gadolinium         160-1         687         757         660         701         7.12         cps           Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Iron         54-2         1776596         1779810         1763278         1773228         0.49         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Erbium	164-1	550	570	627	582	6.83	cps
Gadolinium         160-2         270         290         310         290         6.90         cps           Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Indium         115-2         1776596         1779810         1763278         1773228         0.49         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Erbium	164-2	207	217	207	210	2.75	cps
Holmium         165-1         20991995         20640413         20437761         20690056         1.36         cps           Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Indium         115-2         1776596         1779810         1763278         1773228         0.49         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Gadolinium	160-1	687	757	660	701	7.12	cps
Holmium         165-2         7607015         7603210         7631046         7613757         0.20         cps           Indium         115-1         17432461         17121433         17054240         17202711         1.17         cps           Indium         115-2         1776596         1779810         1763278         1773228         0.49         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Gadolinium	160-2	270	290	310	290	6.90	cps
Indium       115-1       17432461       17121433       17054240       17202711       1.17       cps         Indium       115-2       1776596       1779810       1763278       1773228       0.49       cps         Iron       54-2       10661       10637       11135       10811       2.60       cps         Iron       56-2       193972       196027       191912       193970       1.06       cps         Iron       57-2       5008       4958       4958       4974       0.58       cps         Krypton       83-1       297       277       257       277       7.23       cps	Holmium	165-1	20991995	20640413	20437761	20690056	1.36	cps
Indium         115-2         1776596         1779810         1763278         1773228         0.49         cps           Iron         54-2         10661         10637         11135         10811         2.60         cps           Iron         56-2         193972         196027         191912         193970         1.06         cps           Iron         57-2         5008         4958         4958         4974         0.58         cps           Krypton         83-1         297         277         257         277         7.23         cps	Holmium	165-2	7607015	7603210	7631046	7613757	0.20	cps
Iron     54-2     10661     10637     11135     10811     2.60     cps       Iron     56-2     193972     196027     191912     193970     1.06     cps       Iron     57-2     5008     4958     4958     4974     0.58     cps       Krypton     83-1     297     277     257     277     7.23     cps	Indium	115-1	17432461	17121433	17054240	17202711	1.17	cps
Iron     56-2     193972     196027     191912     193970     1.06     cps       Iron     57-2     5008     4958     4958     4974     0.58     cps       Krypton     83-1     297     277     257     277     7.23     cps	Indium	115-2	1776596	1779810	1763278	1773228	0.49	cps
Iron     57-2     5008     4958     4958     4974     0.58     cps       Krypton     83-1     297     277     257     277     7.23     cps	Iron	54-2	10661	10637	11135	10811	2.60	cps
Krypton 83-1 297 277 257 277 7.23 cps	Iron	56-2	193972	196027	191912	193970	1.06	cps
	Iron	57-2	5008	4958	4958	4974	0.58	cps
Lead 206-1 6375 6615 6505 6498 1.85 cps	Krypton	83-1	297	277	257	277	7.23	cps
	Lead	206-1	6375	6615	6505	6498	1.85	cps

Instrumnet Name:

Р8

Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Q1211-01

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5451	5668	5455	5525	2.25	cps
Lead	208-1	25607	25967	25357	25644	1.20	cps
Lithium	6-1	9924490	9825268	9976480	9908746	0.78	cps
Magnesium	24-2	1691771	1636002	1674885	1667553	1.72	cps
Manganese	55-2	524122	524576	523171	523956	0.14	cps
Molybdenum	94-1	1373	1357	1297	1342	3.00	cps
Molybdenum	95-1	1003	963	980	982	2.05	cps
Molybdenum	96-1	1143	1120	1320	1195	9.16	cps
Molybdenum	97-1	693	620	640	651	5.82	cps
Molybdenum	98-1	1667	1440	1340	1482	11.29	cps
Neodymium	150-1	1327	1413	1430	1390	3.99	cps
Neodymium	150-2	303	330	327	320	4.54	cps
Nickel	60-2	3114	3437	3277	3276	4.94	cps
Phosphorus	31-2	93	127	107	109	15.41	cps
Potassium	39-2	494950	487656	485488	489365	1.01	cps
Rhodium	103-1	16557549	16054739	15724015	16112101	2.60	cps
Rhodium	103-2	6643400	6477841	6426505	6515915	1.74	cps
Scandium	45-1	13101936	12631281	12454136	12729118	2.63	cps
Scandium	45-2	247629	247663	248308	247866	0.15	cps
Selenium	82-1	647	637	827	703	15.20	cps
Selenium	77-2	13	33	17	21	50.75	cps
Selenium	78-2	57	70	50	59	17.29	cps
Silicon	28-1	55294051	55416879	55695774	55468901	0.37	cps
Silver	107-1	587	487	567	547	9.68	cps
Silver	109-1	423	367	413	401	7.54	cps
Sodium	23-2	6175695	6136671	6154692	6155686	0.32	cps
Strontium	86-1	528091	531473	527178	528914	0.43	cps
Strontium	88-1	4724120	4732397	4645721	4700746	1.02	cps
Sulfur	34-1	1656582	1629453	1621562	1635865	1.12	cps
Terbium	159-1	21854645	21415621	20821493	21363920	2.43	cps
Terbium	159-2	7136338	7314207	7332838	7261128	1.49	cps
Thallium	203-1	1173	1290	1120	1195	7.28	cps
Thallium	205-1	2984	2894	2944	2940	1.53	cps
Tin	118-1	11512	11392	11782	11562	1.73	cps
Titanium	47-1	2294	2360	2387	2347	2.05	cps
Uranium	238-1	700	680	630	670	5.38	cps

Instrumnet Name:

Р8

Lab Sample ID: Q1211-01 Instrumnet Name: P8
Client Sample ID: TAPHHA-MW01-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:31:16 DataFile Name: 116AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	253	233	270	252	7.28	cps
Ytterbium	172-1	227	253	233	238	5.84	cps
Ytterbium	172-2	107	130	90	109	18.45	cps
Ytterbium	176-1	2117	2030	1937	2028	4.44	cps
Ytterbium	176-2	323	413	320	352	15.03	cps
Yttrium	89-1	31414936	30529560	30135160	30693219	2.14	cps
Yttrium	89-2	2252303	2266186	2244612	2254367	0.49	cps
Zinc	66-2	3494	3360	3704	3519	4.92	cps
Zirconium	90-1	2134	2020	2124	2092	3.00	cps
Zirconium	91-1	493	947	420	620	46.06	cps

<sub>3</sub> 787

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Q1211-02

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:34:29 DataFile Name: 117AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	15919	16206	16380	16168	1.44	cps
Antimony	121-1	1047	1060	1033	1047	1.27	cps
Arsenic	75-2	1797	1743	1793	1778	1.68	cps
Barium	135-1	166081	169827	170421	168777	1.39	cps
Barium	137-1	301157	298752	297462	299124	0.63	cps
Beryllium	9-1	1440	1441	1416	1432	0.98	cps
Bismuth	209-1	12642646	12698270	12548383	12629766	0.60	cps
Bismuth	209-2	5640039	5711276	5411939	5587751	2.80	cps
Bromine	81-1	20081	21426	21460	20989	3.75	cps
Cadmium	108-1	47	53	53	51	7.52	cps
Cadmium	106-1	9156	9073	8960	9063	1.09	cps
Cadmium	111-1	6447	6377	6298	6374	1.17	cps
Calcium	43-1	888034	878339	878923	881765	0.62	cps
Calcium	44-1	14700221	14428829	14196691	14441914	1.75	cps
Carbon	12-1	12736820	13551283	14059599	13449234	4.96	cps
Carbon	12-2	91234	92770	92713	92239	0.94	cps
Chlorine	35-1	932378	939805	943794	938659	0.62	cps
Chlorine	35-2	3577	3791	3781	3716	3.24	cps
Chromium	52-2	7192	6932	6978	7034	1.97	cps
Cobalt	59-2	59905	59393	59711	59670	0.43	cps
Copper	63-2	8953	9700	9200	9284	4.10	cps
Dysprosium	156-1	4314	4084	4191	4196	2.74	cps
Dysprosium	156-2	1473	1467	1400	1447	2.80	cps
Erbium	164-1	3257	3304	3487	3349	3.63	cps
Erbium	164-2	1217	1233	1067	1172	7.83	cps
Gadolinium	160-1	3791	3834	4004	3876	2.91	cps
Gadolinium	160-2	1830	1603	1590	1675	8.06	cps
Holmium	165-1	20210077	20714924	20672811	20532604	1.36	cps
Holmium	165-2	7717327	7564456	7583057	7621614	1.09	cps
Indium	115-1	16925137	17275026	17134504	17111556	1.03	cps
Indium	115-2	1761473	1786028	1798214	1781905	1.05	cps
Iron	54-2	6488031	6566587	6595636	6550084	0.85	cps
Iron	56-2	119954912	121139775	118691882	119928856	1.02	cps
Iron	57-2	3119417	3124277	2989760	3077818	2.48	cps
Krypton	83-1	200	290	273	254	18.82	cps
Lead	206-1	6021	5905	6001	5976	1.04	cps

Instrumnet Name:

Р8

Lab Sample ID : Q1211-02 Client Sample ID: TAPIAL2-MW03-012825-Dilution Factor: 1

Date & Time Acquired : 2025-02-06 18:34:29 DataFile Name : 117AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5571	5485	5054	5370	5.16	cps
Lead	208-1	24726	24309	23645	24227	2.25	cps
Lithium	6-1	9823046	9763397	10194518	9926987	2.35	cps
Magnesium	24-2	871282	868000	861430	866904	0.58	cps
Manganese	55-2	1894204	1948683	1962295	1935060	1.86	cps
Molybdenum	94-1	6128	6071	6242	6147	1.41	cps
Molybdenum	95-1	2924	3177	2904	3001	5.08	cps
Molybdenum	96-1	4177	4264	4284	4242	1.34	cps
Molybdenum	97-1	1873	1817	1823	1838	1.69	cps
Molybdenum	98-1	4891	4864	4587	4781	3.51	cps
Neodymium	150-1	6672	6435	6622	6576	1.90	cps
Neodymium	150-2	1763	1660	1780	1735	3.75	cps
Nickel	60-2	5508	5328	5081	5305	4.04	cps
Phosphorus	31-2	173	157	207	179	14.23	cps
Potassium	39-2	453780	462595	455673	457349	1.01	cps
Rhodium	103-1	16141947	16306370	16649311	16365876	1.58	cps
Rhodium	103-2	6605576	6607659	6597630	6603622	0.08	cps
Scandium	45-1	12434122	12442557	12440452	12439044	0.04	cps
Scandium	45-2	249304	253295	247147	249915	1.25	cps
Selenium	82-1	100	63	43	69	41.73	cps
Selenium	77-2	7	13	3	8	65.47	cps
Selenium	78-2	17	13	27	19	36.75	cps
Silicon	28-1	34251530	34126250	35158341	34512041	1.63	cps
Silver	107-1	433	413	487	444	8.53	cps
Silver	109-1	283	270	333	296	11.30	cps
Sodium	23-2	1115256	1118072	1074416	1102581	2.22	cps
Strontium	86-1	320835	327488	319126	322483	1.37	cps
Strontium	88-1	2963257	2905168	2912477	2926967	1.08	cps
Sulfur	34-1	1866184	1861613	1891658	1873152	0.86	cps
Terbium	159-1	21062093	20896653	21718416	21225721	2.05	cps
Terbium	159-2	7353496	7427895	7240847	7340746	1.28	cps
Thallium	203-1	783	710	717	737	5.51	cps
Thallium	205-1	1867	1873	1827	1856	1.36	cps
Tin	118-1	5545	5428	5911	5628	4.48	cps
Titanium	47-1	13387	15110	14607	14368	6.17	cps
Uranium	238-1	5688	5685	5811	5728	1.26	cps

Instrumnet Name:

Р8

Lab Sample ID : Instrumnet Name: Р8 Q1211-02 Client Sample ID: TAPIAL2-MW03-012825-Dilution Factor:

1

Date & Time Acquired : 2025-02-06 18:34:29 DataFile Name : 117AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	10467	10491	10297	10418	1.01	cps	_
Ytterbium	172-1	1287	1243	1233	1255	2.26	cps	
Ytterbium	172-2	497	557	560	538	6.63	cps	
Ytterbium	176-1	2814	2807	2650	2757	3.35	cps	
Ytterbium	176-2	600	660	667	642	5.72	cps	
Yttrium	89-1	30860784	30844259	30363790	30689611	0.92	cps	
Yttrium	89-2	2275858	2311930	2250056	2279281	1.36	cps	
Zinc	66-2	3074	3170	3147	3130	1.61	cps	
Zirconium	90-1	11558	11328	11602	11496	1.28	cps	
Zirconium	91-1	2697	2947	2570	2738	7.00	cps	

Lab Sample ID: Q1211-02DUP Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	45418	47289	46288	46332	2.02	cps
Antimony	121-1	1140	1203	1083	1142	5.26	cps
Arsenic	75-2	1930	1793	1927	1883	4.14	cps
Barium	135-1	169967	174117	171285	171790	1.23	cps
Barium	137-1	298970	301403	303413	301262	0.74	cps
Beryllium	9-1	1384	1322	1336	1347	2.39	cps
Bismuth	209-1	12679488	12595211	12621558	12632086	0.34	cps
Bismuth	209-2	5607968	5547928	5565648	5573848	0.55	cps
Bromine	81-1	17922	18325	18656	18301	2.01	cps
Cadmium	108-1	53	107	210	123	64.60	cps
Cadmium	106-1	9263	8840	9033	9045	2.34	cps
Cadmium	111-1	6497	6150	6233	6293	2.88	cps
Calcium	43-1	866826	890474	886791	881364	1.44	cps
Calcium	44-1	14386109	14814393	14629615	14610039	1.47	cps
Carbon	12-1	12177418	13671333	14010589	13286446	7.34	cps
Carbon	12-2	90406	92515	92089	91670	1.22	cps
Chlorine	35-1	802951	829636	851180	827922	2.92	cps
Chlorine	35-2	3524	3504	3684	3570	2.76	cps
Chromium	52-2	8779	8653	8526	8653	1.47	cps
Cobalt	59-2	60638	61033	60226	60633	0.67	cps
Copper	63-2	9920	10863	10057	10280	4.95	cps
Dysprosium	156-1	4501	4511	4357	4456	1.93	cps
Dysprosium	156-2	1567	1413	1537	1506	5.40	cps
Erbium	164-1	4298	3417	3400	3705	13.86	cps
Erbium	164-2	1043	1087	1313	1148	12.63	cps
Gadolinium	160-1	3961	4094	3717	3924	4.87	cps
Gadolinium	160-2	1780	1817	1773	1790	1.30	cps
Holmium	165-1	20952507	20708459	20453703	20704890	1.20	cps
Holmium	165-2	7685150	7577626	7583741	7615506	0.79	cps
Indium	115-1	17231206	16984474	17088786	17101489	0.72	cps
Indium	115-2	1796213	1768074	1793797	1786028	0.87	cps
Iron	54-2	6690325	6746330	6680166	6705607	0.53	cps
Iron	56-2	123632645	121303942	120316172	121750919	1.40	cps
Iron	57-2	3108072	3099752	3125146	3110990	0.42	cps
Krypton	83-1	277	250	290	272	7.48	cps
Lead	206-1	6545	6345	6729	6540	2.94	cps

Lab Sample ID: Q1211-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Date a Time Acc	1411CG . 202	.0 02 00 10.07.44	Datai	iic i tairic .	TTO/TITEL .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5278	5291	5408	5326	1.34	cps
Lead	208-1	26250	26012	26397	26220	0.74	cps
Lithium	6-1	10039206	9724731	9665886	9809941	2.05	cps
Magnesium	24-2	883378	880838	875095	879771	0.48	cps
Manganese	55-2	1973600	1941288	1886546	1933811	2.28	cps
Molybdenum	94-1	8493	19157	8393	12014	51.49	cps
Molybdenum	95-1	2974	2910	2924	2936	1.14	cps
Molybdenum	96-1	5515	4584	6508	5536	17.38	cps
Molybdenum	97-1	1773	1760	2017	1850	7.81	cps
Molybdenum	98-1	4604	4451	4397	4484	2.39	cps
Neodymium	150-1	6905	7422	7426	7251	4.13	cps
Neodymium	150-2	1807	1787	1753	1782	1.51	cps
Nickel	60-2	5755	5881	6205	5947	3.91	cps
Phosphorus	31-2	207	180	187	191	7.26	cps
Potassium	39-2	464375	463398	470787	466187	0.86	cps
Rhodium	103-1	16735737	15836006	15808999	16126914	3.27	cps
Rhodium	103-2	6702034	6500979	6494958	6565991	1.79	cps
Scandium	45-1	12778099	12919232	12459202	12718844	1.85	cps
Scandium	45-2	245205	248761	249256	247741	0.89	cps
Selenium	82-1	23	83	83	63	54.69	cps
Selenium	77-2	13	10	27	17	52.93	cps
Selenium	78-2	10	23	20	18	39.03	cps
Silicon	28-1	40405990	40968046	41704489	41026175	1.59	cps
Silver	107-1	420	417	380	406	5.47	cps
Silver	109-1	253	247	200	233	12.46	cps
Sodium	23-2	1123277	1120430	1127429	1123712	0.31	cps
Strontium	86-1	318609	320085	323140	320611	0.72	cps
Strontium	88-1	2913862	2896640	2868154	2892885	0.80	cps
Sulfur	34-1	1872855	1879216	1866412	1872828	0.34	cps
Terbium	159-1	21911164	20683378	20691031	21095191	3.35	cps
Terbium	159-2	7273457	7330740	7241377	7281858	0.62	cps
Thallium	203-1	680	600	700	660	8.02	cps
Thallium	205-1	1753	1580	1723	1686	5.50	cps
Tin	118-1	5771	5698	5938	5802	2.12	cps
Titanium	47-1	72652	77852	79760	76755	4.79	cps
Uranium	238-1	5671	6068	6700	6146	8.44	cps

Lab Sample ID: Q1211-02DUP Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:37:44 DataFile Name: 118AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	12222	12275	11621	12040	3.02	cps
Ytterbium	172-1	1270	1283	1627	1393	14.51	cps
Ytterbium	172-2	607	583	643	611	4.95	cps
Ytterbium	176-1	2890	2750	2860	2834	2.60	cps
Ytterbium	176-2	670	703	1067	813	27.07	cps
Yttrium	89-1	32010645	30603868	30390041	31001518	2.84	cps
Yttrium	89-2	2292528	2269765	2261508	2274600	0.71	cps
Zinc	66-2	3187	3304	3314	3268	2.16	cps
Zirconium	90-1	26622	21586	23899	24036	10.49	cps
Zirconium	91-1	4851	6384	8068	6435	25.01	cps

<sup>3</sup> 793

Lab Sample ID : Q1211-02LX5 Instrumnet Name : P8

Client Sample ID : TAPIAL2-MW03-012825- Dilution Factor : 5

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4765	4064	3974	4268	10.14	cps
Antimony	121-1	367	377	337	360	5.78	cps
Arsenic	75-2	353	417	340	370	11.07	cps
Barium	135-1	33381	33174	33996	33517	1.28	cps
Barium	137-1	57867	59396	57810	58358	1.54	cps
Beryllium	9-1	1084	1104	1040	1076	3.03	cps
Bismuth	209-1	12932278	12721450	12765641	12806456	0.87	cps
Bismuth	209-2	5554157	5506199	5577850	5546068	0.66	cps
Bromine	81-1	9096	8990	9073	9053	0.62	cps
Cadmium	108-1	43	20	30	31	37.62	cps
Cadmium	106-1	8609	8810	8803	8741	1.30	cps
Cadmium	111-1	6033	6193	6191	6139	1.49	cps
Calcium	43-1	173637	176499	176353	175496	0.92	cps
Calcium	44-1	2941316	2992232	2957522	2963690	0.88	cps
Carbon	12-1	7472909	7545906	7609239	7542685	0.90	cps
Carbon	12-2	46169	46497	46176	46280	0.40	cps
Chlorine	35-1	558854	551197	542913	550988	1.45	cps
Chlorine	35-2	2047	2044	2144	2078	2.73	cps
Chromium	52-2	3050	3024	3440	3172	7.36	cps
Cobalt	59-2	11802	12362	12089	12084	2.32	cps
Copper	63-2	5094	5101	4861	5019	2.72	cps
Dysprosium	156-1	790	820	793	801	2.05	cps
Dysprosium	156-2	373	310	253	312	19.23	cps
Erbium	164-1	717	757	710	728	3.47	cps
Erbium	164-2	287	293	290	290	1.15	cps
Gadolinium	160-1	840	870	877	862	2.26	cps
Gadolinium	160-2	333	343	293	323	8.18	cps
Holmium	165-1	20804734	20239151	20462629	20502171	1.39	cps
Holmium	165-2	7411530	7416369	7469291	7432396	0.43	cps
Indium	115-1	17731850	17100475	16997284	17276537	2.30	cps
Indium	115-2	1751452	1736016	1751801	1746423	0.52	cps
Iron	54-2	1283690	1295595	1300306	1293197	0.66	cps
Iron	56-2	24596722	24559919	24530237	24562293	0.14	cps
Iron	57-2	586608	596668	597993	593756	1.05	cps
Krypton	83-1	280	340	307	309	9.73	cps
Lead	206-1	3177	3044	2970	3064	3.42	cps

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 5

Q1211-02LX5

Lab Sample ID :

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Date & Time Adquire	Ju . 2020 (	2 00 10.40.00	Datai lic i	vario .	110/ (I \L I . G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2497	2657	2580	2578	3.10	cps
Lead	208-1	12116	12222	11776	12038	1.94	cps
Lithium	6-1	10144239	9953432	9866511	9988061	1.42	cps
Magnesium	24-2	178458	177908	179432	178599	0.43	cps
Manganese	55-2	367593	376246	370992	371610	1.17	cps
Molybdenum	94-1	1623	1977	1713	1771	10.38	cps
Molybdenum	95-1	837	813	843	831	1.90	cps
Molybdenum	96-1	1163	1180	1050	1131	6.25	cps
Molybdenum	97-1	513	540	490	514	4.86	cps
Molybdenum	98-1	1403	1280	1337	1340	4.61	cps
Neodymium	150-1	1307	1270	1313	1297	1.80	cps
Neodymium	150-2	303	377	290	323	14.43	cps
Nickel	60-2	2674	2554	2614	2614	2.30	cps
Phosphorus	31-2	77	120	97	98	22.18	cps
Potassium	39-2	107285	108628	109071	108328	0.86	cps
Rhodium	103-1	16606072	16432750	16054148	16364323	1.72	cps
Rhodium	103-2	6355776	6510518	6560856	6475717	1.65	cps
Scandium	45-1	12869395	12478416	12711420	12686410	1.55	cps
Scandium	45-2	245744	247733	248586	247355	0.59	cps
Selenium	82-1	-37	-83	-7	-42	-91.51	cps
Selenium	77-2	3	3	7	4	43.40	cps
Selenium	78-2	10	13	23	16	44.60	cps
Silicon	28-1	7605174	7622300	7629499	7618991	0.16	cps
Silver	107-1	323	367	360	350	6.67	cps
Silver	109-1	130	203	140	158	25.21	cps
Sodium	23-2	280730	280429	282137	281098	0.32	cps
Strontium	86-1	62633	64062	63085	63260	1.16	cps
Strontium	88-1	540444	553537	545952	546644	1.20	cps
Sulfur	34-1	1131723	1139820	1110895	1127479	1.32	cps
Terbium	159-1	21497200	20776869	21005012	21093027	1.75	cps
Terbium	159-2	7242362	7141338	7293604	7225768	1.07	cps
Thallium	203-1	490	587	647	574	13.76	cps
Thallium	205-1	1277	1277	1383	1312	4.69	cps
Tin	118-1	2560	2924	2570	2685	7.71	cps
Titanium	47-1	3277	4082	3461	3607	11.70	cps
Uranium	238-1	1177	1087	1117	1127	4.07	cps

Instrumnet Name:

P8

Lab Sample ID: Q1211-02LX5 Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 5

Date & Time Acquired: 2025-02-06 18:40:56 DataFile Name: 119AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2237	2060	1947	2081	7.02	cps
Ytterbium	172-1	337	290	313	313	7.45	cps
Ytterbium	172-2	137	163	147	149	9.05	cps
Ytterbium	176-1	2234	2334	2160	2242	3.88	cps
Ytterbium	176-2	363	430	357	383	10.58	cps
Yttrium	89-1	30981195	30280863	30726580	30662880	1.16	cps
Yttrium	89-2	2199884	2275325	2236489	2237232	1.69	cps
Zinc	66-2	937	997	927	953	3.97	cps
Zirconium	90-1	3154	3231	3370	3252	3.38	cps
Zirconium	91-1	687	720	2818	1408	86.69	cps

<sub>3</sub> 796

Lab Sample ID: Q1211-02MS Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	711930	704652	693853	703478	1.29	cps
Antimony	121-1	8544787	8604655	8597067	8582170	0.38	cps
Arsenic	75-2	1673	1593	1737	1668	4.31	cps
Barium	135-1	9176916	9173814	9149774	9166835	0.16	cps
Barium	137-1	15610290	16076222	15869198	15851903	1.47	cps
Beryllium	9-1	3171188	3293487	3229472	3231383	1.89	cps
Bismuth	209-1	12051891	11989426	11908531	11983283	0.60	cps
Bismuth	209-2	5086287	5210607	5610196	5302363	5.16	cps
Bromine	81-1	19807	22047	22638	21498	6.95	cps
Cadmium	108-1	152844	155647	154481	154324	0.91	cps
Cadmium	106-1	238862	243886	244246	242331	1.24	cps
Cadmium	111-1	2073766	2091210	2068752	2077909	0.57	cps
Calcium	43-1	3777627	3776788	3772193	3775536	0.08	cps
Calcium	44-1	60378772	60367174	60881129	60542359	0.48	cps
Carbon	12-1	10713394	11819554	12385382	11639443	7.31	cps
Carbon	12-2	81869	82597	83425	82630	0.94	cps
Chlorine	35-1	69993797	75696797	78650435	74780343	5.88	cps
Chlorine	35-2	339046	339845	341517	340136	0.37	cps
Chromium	52-2	2005385	2032396	1971772	2003184	1.52	cps
Cobalt	59-2	3946468	3954728	3856443	3919213	1.39	cps
Copper	63-2	29014180	28687833	28860755	28854256	0.57	cps
Dysprosium	156-1	3794	3957	3984	3912	2.63	cps
Dysprosium	156-2	1417	1337	1470	1408	4.77	cps
Erbium	164-1	3064	2844	3074	2994	4.34	cps
Erbium	164-2	1073	1080	1070	1075	0.47	cps
Gadolinium	160-1	3450	3624	3694	3589	3.49	cps
Gadolinium	160-2	1600	1510	1677	1596	5.23	cps
Holmium	165-1	20477652	20305507	20182528	20321896	0.73	cps
Holmium	165-2	7155329	7396236	7926721	7492762	5.27	cps
Indium	115-1	16529267	16436425	16289847	16418513	0.74	cps
Indium	115-2	1639105	1669782	1755450	1688112	3.57	cps
Iron	54-2	9700914	9730961	9592089	9674654	0.76	cps
Iron	56-2	178348917	176984131	173055157	176129402	1.56	cps
Iron	57-2	4428316	4432162	4391995	4417491	0.50	cps
Krypton	83-1	303	320	267	297	9.20	cps
Lead	206-1	31257913	31209400	31580940	31349418	0.64	cps

Lab Sample ID: Q1211-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Lead         207-1         26803170         27232350         27361024         27132181         1.08         cps           Lead         208-1         122772002         124980044         126247021         124666356         1.41         cps           Lithium         6-1         9859708         9765901         9552391         9726000         1.62         cps           Magnesium         24-2         14165760         13939724         13941164         14015550         0.93         cps           Manganese         55-2         9863465         9850447         9728544         9814152         0.76         cps           Molybdenum         94-1         14353911         14729246         14465408         14516188         1.33         cps           Molybdenum         95-1         15897985         15709830         15847715         15818510         0.62         cps           Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Neodymium         150-1         6535         6428         6488	
Lithium         6-1         9859708         9765901         9552391         9726000         1.62         cps           Magnesium         24-2         14165760         13939724         13941164         14015550         0.93         cps           Manganese         55-2         9863465         9850447         9728544         9814152         0.76         cps           Molybdenum         94-1         14353911         14729246         14465408         14516188         1.33         cps           Molybdenum         95-1         15897985         15709830         15847715         15818510         0.62         cps           Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Nickel         60-2         1003804         1012450         998278	
Magnesium24-2141657601393972413941164140155500.93cpsManganese55-298634659850447972854498141520.76cpsMolybdenum94-1143539111472924614465408145161881.33cpsMolybdenum95-1158979851570983015847715158185100.62cpsMolybdenum96-1178083081796834617910000178955510.45cpsMolybdenum97-197534689879339980085998112220.65cpsMolybdenum98-1252352562593335025568550255790521.37cpsNeodymium150-165356428648864840.83cpsNeodymium150-213701463144314263.45cpsNickel60-21003804101245099827810048440.71cpsPhosphorus31-221019017019010.53cps	
Manganese         55-2         9863465         9850447         9728544         9814152         0.76         cps           Molybdenum         94-1         14353911         14729246         14465408         14516188         1.33         cps           Molybdenum         95-1         15897985         15709830         15847715         15818510         0.62         cps           Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Molybdenum         94-1         14353911         14729246         14465408         14516188         1.33         cps           Molybdenum         95-1         15897985         15709830         15847715         15818510         0.62         cps           Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Molybdenum         95-1         15897985         15709830         15847715         15818510         0.62         cps           Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Molybdenum         96-1         17808308         17968346         17910000         17895551         0.45         cps           Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Molybdenum         97-1         9753468         9879339         9800859         9811222         0.65         cps           Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Molybdenum         98-1         25235256         25933350         25568550         25579052         1.37         cps           Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Neodymium         150-1         6535         6428         6488         6484         0.83         cps           Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Neodymium         150-2         1370         1463         1443         1426         3.45         cps           Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Nickel         60-2         1003804         1012450         998278         1004844         0.71         cps           Phosphorus         31-2         210         190         170         190         10.53         cps	
Phosphorus 31-2 210 190 170 190 10.53 cps	
Potassium 39-2 3980808 3933893 3979627 3964776 0.67 cps	
Rhodium 103-1 15465832 15534479 15259212 15419841 0.93 cps	
Rhodium 103-2 6011741 6137078 6615570 6254797 5.09 cps	
Scandium 45-1 12503580 12513769 12343739 12453696 0.77 cps	
Scandium 45-2 240865 240071 260201 247046 4.61 cps	
Selenium 82-1 127014 129942 129635 128864 1.25 cps	
Selenium 77-2 2480 2314 2397 2397 3.48 cps	
Selenium 78-2 8122 7612 7889 7874 3.24 cps	
Silicon 28-1 31289713 31280500 31718346 31429520 0.80 cps	
Silver 107-1 1843294 1880714 1908635 1877548 1.75 cps	
Silver 109-1 1742551 1764428 1742658 1749879 0.72 cps	
Sodium 23-2 27954680 27844790 27514195 27771222 0.83 cps	
Strontium 86-1 3656004 3751582 3665936 3691174 1.42 cps	
Strontium 88-1 31009335 31776831 31733576 31506581 1.37 cps	
Sulfur 34-1 1784457 1779907 1771881 1778748 0.36 cps	
Terbium 159-1 20810940 20633188 20661293 20701807 0.46 cps	
Terbium 159-2 7022959 6977977 7630290 7210409 5.05 cps	
Thallium 203-1 7565799 7541093 7585873 7564255 0.30 cps	
Thallium 205-1 17833898 18046549 18135609 18005352 0.86 cps	
Tin 118-1 6185457 6259693 6267112 6237421 0.72 cps	
Titanium 47-1 17700 17598 16533 17277 3.74 cps	
Uranium 238-1 23459649 24257549 24761122 24159440 2.72 cps	

Lab Sample ID: Q1211-02MS Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:44:15 DataFile Name: 120AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1661595	1650397	1643458	1651817	0.55	cps
Ytterbium	172-1	1463	1490	1460	1471	1.12	cps
Ytterbium	172-2	620	620	650	630	2.75	cps
Ytterbium	176-1	36664	37423	38025	37371	1.82	cps
Ytterbium	176-2	13534	14031	13794	13786	1.80	cps
Yttrium	89-1	30504624	30244353	29672505	30140494	1.41	cps
Yttrium	89-2	2173865	2187804	2392682	2251450	5.44	cps
Zinc	66-2	3160347	3136596	3073604	3123516	1.44	cps
Zirconium	90-1	14878016	15233619	14981724	15031120	1.22	cps
Zirconium	91-1	3398818	3417140	3323347	3379768	1.47	cps

<sup>3</sup> 799

Lab Sample ID: Q1211-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Date & Time Ac	quireu . 202	13-02-00 16.46.39	Dalari	ie ivallie .	12 IAREF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	712805	707613	704288	708235	0.61	cps
Antimony	121-1	8647073	8727697	8689597	8688122	0.46	cps
Arsenic	75-2	1653	1603	1797	1685	5.96	cps
Barium	135-1	9136778	9302045	9175482	9204768	0.94	cps
Barium	137-1	15794470	16199264	15851240	15948325	1.37	cps
Beryllium	9-1	3223798	3267287	3213123	3234736	0.89	cps
Bismuth	209-1	11846516	11959230	12098583	11968110	1.06	cps
Bismuth	209-2	5170277	5176506	5262763	5203182	0.99	cps
Bromine	81-1	17061	18112	18703	17958	4.63	cps
Cadmium	108-1	157009	157232	157863	157368	0.28	cps
Cadmium	106-1	243223	245152	248116	245497	1.00	cps
Cadmium	111-1	2121497	2133304	2125644	2126815	0.28	cps
Calcium	43-1	3694068	3725120	3718582	3712590	0.44	cps
Calcium	44-1	60339111	59990477	60139931	60156506	0.29	cps
Carbon	12-1	11169025	12255775	12372621	11932474	5.56	cps
Carbon	12-2	83988	83167	84082	83746	0.60	cps
Chlorine	35-1	77683517	82529945	84326939	81513467	4.22	cps
Chlorine	35-2	353539	358753	359056	357116	0.87	cps
Chromium	52-2	2025318	2055654	2061919	2047630	0.96	cps
Cobalt	59-2	3943611	3951407	3915496	3936838	0.48	cps
Copper	63-2	29347480	28788594	29171138	29102404	0.98	cps
Dysprosium	156-1	3971	3974	3881	3942	1.34	cps
Dysprosium	156-2	1437	1297	1247	1327	7.42	cps
Erbium	164-1	3157	3174	3184	3172	0.42	cps
Erbium	164-2	1007	1113	1060	1060	5.03	cps
Gadolinium	160-1	3651	3884	3781	3772	3.10	cps
Gadolinium	160-2	1673	1610	1640	1641	1.93	cps
Holmium	165-1	20121167	20048198	20447146	20205504	1.05	cps
Holmium	165-2	7463731	7306592	7348726	7373016	1.10	cps
Indium	115-1	16271591	16329799	16665351	16422247	1.29	cps
Indium	115-2	1707836	1652570	1646849	1669085	2.02	cps
Iron	54-2	9596859	9594719	9610155	9600577	0.09	cps
Iron	56-2	175751017	175754857	174379524	175295133	0.45	cps
Iron	57-2	4412610	4332694	4374229	4373178	0.91	cps
Krypton	83-1	273	290	323	296	8.61	cps
Lead	206-1	31546452	31922815	32054659	31841308	0.83	cps

Lab Sample ID: Q1211-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27097317	27716055	27701680	27505017	1.28	cps
Lead	208-1	124462775	127575061	127183447	126407095	1.34	cps
Lithium	6-1	9646449	9582993	9741999	9657147	0.83	cps
Magnesium	24-2	14003447	14306101	13804927	14038158	1.80	cps
Manganese	55-2	9883877	9931763	9851995	9889212	0.41	cps
Molybdenum	94-1	14456544	14555748	14563900	14525397	0.41	cps
Molybdenum	95-1	15915112	15737361	15725256	15792576	0.67	cps
Molybdenum	96-1	17937700	17890260	17831816	17886592	0.30	cps
Molybdenum	97-1	9584707	9688768	9781698	9685058	1.02	cps
Molybdenum	98-1	25223974	25284969	25588837	25365927	0.77	cps
Neodymium	150-1	6275	6602	6448	6442	2.54	cps
Neodymium	150-2	1733	1570	1593	1632	5.41	cps
Nickel	60-2	1016293	1008852	1011019	1012054	0.38	cps
Phosphorus	31-2	167	147	140	151	9.18	cps
Potassium	39-2	3946486	3994482	3948446	3963138	0.69	cps
Rhodium	103-1	15087524	15166981	15513641	15256049	1.49	cps
Rhodium	103-2	6221670	6165853	6132843	6173455	0.73	cps
Scandium	45-1	12405548	12226254	12420579	12350793	0.88	cps
Scandium	45-2	244197	240209	243677	242695	0.89	cps
Selenium	82-1	129403	131610	131318	130777	0.92	cps
Selenium	77-2	2244	2290	2150	2228	3.20	cps
Selenium	78-2	7972	7585	7639	7732	2.71	cps
Silicon	28-1	31010268	31612998	31390258	31337841	0.97	cps
Silver	107-1	1915913	1871560	1904819	1897430	1.22	cps
Silver	109-1	1789269	1781083	1776845	1782399	0.35	cps
Sodium	23-2	27358661	28312030	28071534	27914075	1.78	cps
Strontium	86-1	3684254	3762094	3763838	3736729	1.22	cps
Strontium	88-1	31283910	32283871	32219205	31928996	1.75	cps
Sulfur	34-1	1716693	1735754	1728266	1726904	0.56	cps
Terbium	159-1	20505009	20599824	20787876	20630903	0.70	cps
Terbium	159-2	7234624	7043161	7212453	7163413	1.46	cps
Thallium	203-1	7693141	7782134	7786864	7754046	0.68	cps
Thallium	205-1	18267175	18533363	18809608	18536715	1.46	cps
Tin	118-1	6174383	6248530	6215840	6212918	0.60	cps
Titanium							
	47-1	17284	21699	22913	20632	14.36	cps

Lab Sample ID: Q1211-02MSD Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:46:59 DataFile Name: 121AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1633328	1672164	1664825	1656772	1.25	cps
Ytterbium	172-1	1513	1457	1443	1471	2.53	cps
Ytterbium	172-2	653	623	693	657	5.35	cps
Ytterbium	176-1	38111	39014	38777	38634	1.21	cps
Ytterbium	176-2	13781	13597	13884	13754	1.06	cps
Yttrium	89-1	29417972	29801319	30112070	29777120	1.17	cps
Yttrium	89-2	2226967	2158101	2141181	2175416	2.09	cps
Zinc	66-2	3146290	3145686	3089939	3127305	1.03	cps
Zirconium	90-1	14922144	14975630	15025046	14974273	0.34	cps
Zirconium	91-1	3469861	3414927	3388639	3424476	1.21	cps

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Q1211-02A

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	741316	745071	743925	743437	0.26	cps
Antimony	121-1	8615779	8791368	8767378	8724842	1.09	cps
Arsenic	75-2	1593	1583	1640	1606	1.88	cps
Barium	135-1	9090670	9315401	9237168	9214413	1.24	cps
Barium	137-1	15957674	16284347	16000144	16080722	1.10	cps
Beryllium	9-1	3185658	3265187	3282046	3244297	1.59	cps
Bismuth	209-1	12367986	12068758	12013193	12149979	1.57	cps
Bismuth	209-2	5283283	5313934	5293138	5296785	0.30	cps
Bromine	81-1	16443	17558	18355	17452	5.50	cps
Cadmium	108-1	155965	158813	159531	158103	1.19	cps
Cadmium	106-1	244078	248182	248614	246958	1.01	cps
Cadmium	111-1	2131905	2145889	2115413	2131069	0.72	cps
Calcium	43-1	3676593	3792307	3787823	3752241	1.75	cps
Calcium	44-1	60214836	61541957	60393441	60716745	1.19	cps
Carbon	12-1	10955643	12061481	12474022	11830382	6.64	cps
Carbon	12-2	83512	84628	85255	84465	1.05	cps
Chlorine	35-1	78598941	84064382	85038499	82567274	4.20	cps
Chlorine	35-2	358819	362825	366756	362800	1.09	cps
Chromium	52-2	2114941	2050572	2045677	2070397	1.87	cps
Cobalt	59-2	3975640	3960079	3908410	3948043	0.89	cps
Copper	63-2	29467110	29169710	29066031	29234284	0.71	cps
Dysprosium	156-1	4094	4124	4027	4082	1.21	cps
Dysprosium	156-2	1260	1380	1317	1319	4.55	cps
Erbium	164-1	3090	3527	3037	3218	8.36	cps
Erbium	164-2	1190	1130	1250	1190	5.04	cps
Gadolinium	160-1	3824	3981	3771	3858	2.83	cps
Gadolinium	160-2	1430	1673	1623	1576	8.16	cps
Holmium	165-1	20469259	20194190	20536423	20399958	0.89	cps
Holmium	165-2	7521233	7376304	7416942	7438160	1.01	cps
Indium	115-1	16840644	16642547	16224300	16569164	1.90	cps
Indium	115-2	1683494	1684388	1668453	1678778	0.53	cps
Iron	54-2	9487035	9646604	9626589	9586743	0.91	cps
Iron	56-2	176804624	174081111	175268064	175384600	0.78	cps
Iron	57-2	4476368	4400379	4443491	4440080	0.86	cps
Krypton	83-1	283	307	293	294	3.98	cps
Lead	206-1	32301535	32695755	32677694	32558328	0.68	cps

P8

Instrumnet Name:

803

Lab Sample ID :

Lab Sample ID: Q1211-02A Instrumnet Name: P8

Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27698528	28398652	28089292	28062157	1.25	cps
Lead	208-1	127252350	129734402	128115111	128367288	0.98	cps
Lithium	6-1	9809962	9726348	9631873	9722728	0.92	cps
Magnesium	24-2	14288654	14522705	14244049	14351803	1.04	cps
Manganese	55-2	9934038	9985384	10028910	9982778	0.48	cps
Molybdenum	94-1	14426312	14680104	14668959	14591792	0.98	cps
Molybdenum	95-1	15654702	16007276	15946700	15869559	1.19	cps
Molybdenum	96-1	17779473	18350138	18178883	18102831	1.62	cps
Molybdenum	97-1	9929834	9986976	9922017	9946276	0.36	cps
Molybdenum	98-1	25585110	25736195	26030416	25783907	0.88	cps
Neodymium	150-1	7129	6745	6815	6897	2.96	cps
Neodymium	150-2	1547	1580	1507	1545	2.38	cps
Nickel	60-2	1026353	1020996	1021056	1022802	0.30	cps
Phosphorus	31-2	127	157	160	148	12.42	cps
Potassium	39-2	4012782	4021225	4005808	4013271	0.19	cps
Rhodium	103-1	15711485	15510809	15215591	15479295	1.61	cps
Rhodium	103-2	6330502	6183898	6099780	6204727	1.88	cps
Scandium	45-1	12546133	12349353	12138411	12344632	1.65	cps
Scandium	45-2	247230	241576	246519	245108	1.26	cps
Selenium	82-1	128606	132408	132821	131278	1.77	cps
Selenium	77-2	2314	2414	2430	2386	2.65	cps
Selenium	78-2	7956	8049	7816	7940	1.48	cps
Silicon	28-1	35119170	35816491	36852879	35929513	2.43	cps
Silver	107-1	1899517	1911153	1937785	1916152	1.02	cps
Silver	109-1	1772597	1832758	1801267	1802207	1.67	cps
Sodium	23-2	28188105	28494315	28230423	28304281	0.59	cps
Strontium	86-1	3664507	3719329	3724162	3702666	0.89	cps
Strontium	88-1	32024481	32239013	31665158	31976217	0.91	cps
Sulfur	34-1	1712142	1731317	1710022	1717827	0.68	cps
Terbium	159-1	21175004	21118214	20357520	20883579	2.19	cps
Terbium	159-2	7111556	7049292	7156119	7105656	0.76	cps
Thallium	203-1	7861529	7971026	7967429	7933328	0.78	cps
Thallium	205-1	18715821	18926953	18875946	18839573	0.58	cps
Tin	118-1	6169999	6333734	6320300	6274678	1.45	cps
Titanium	47-1	49486	51797	40362	47215	12.81	cps
Uranium	238-1	24495213	25354332	24907648	24919064	1.72	cps

Lab Sample ID: Q1211-02A Instrumnet Name: P8
Client Sample ID: TAPIAL2-MW03-012825- Dilution Factor: 1

Date & Time Acquired: 2025-02-06 18:49:45 DataFile Name: 122AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1665619	1641318	1700385	1669107	1.78	cps
Ytterbium	172-1	1417	1704	1694	1605	10.14	cps
Ytterbium	172-2	733	730	633	699	8.13	cps
Ytterbium	176-1	38854	39184	38884	38974	0.47	cps
Ytterbium	176-2	14118	14278	14154	14183	0.59	cps
Yttrium	89-1	30792810	29785462	29377890	29985387	2.43	cps
Yttrium	89-2	2230846	2180474	2180979	2197433	1.32	cps
Zinc	66-2	3192464	3150878	3156863	3166735	0.71	cps
Zirconium	90-1	14948774	15154355	15281155	15128095	1.11	cps
Zirconium	91-1	3321877	3419305	3401322	3380835	1.53	cps

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Date & Time Ac	quireu . 202	3-02-00 16.32.26	DalaFii	e name .	123CCV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3845763	3862495	3796385	3834881	0.90	cps
Antimony	121-1	8070374	8155636	8304320	8176776	1.45	cps
Arsenic	75-2	175289	178317	180237	177948	1.40	cps
Barium	135-1	9591170	9842416	9914482	9782689	1.73	cps
Barium	137-1	16792821	16999703	16916218	16902914	0.62	cps
Beryllium	9-1	3034455	3109644	3048982	3064360	1.30	cps
Bismuth	209-1	11342832	10883827	11076048	11100902	2.08	cps
Bismuth	209-2	4860946	4541681	4610691	4671106	3.60	cps
Bromine	81-1	6251	5878	6225	6118	3.41	cps
Cadmium	108-1	156818	160904	163088	160270	1.99	cps
Cadmium	106-1	230662	233805	238514	234327	1.69	cps
Cadmium	111-1	1963559	1996119	2025183	1994954	1.55	cps
Calcium	43-1	14027736	14129160	14095468	14084121	0.37	cps
Calcium	44-1	227435997	229714763	228471157	228540639	0.50	cps
Carbon	12-1	6609949	6784223	6986239	6793470	2.77	cps
Carbon	12-2	50426	50443	50901	50590	0.53	cps
Chlorine	35-1	5127423	4812195	4548909	4829509	6.00	cps
Chlorine	35-2	16393	16129	15805	16109	1.83	cps
Chromium	52-2	2052872	2029577	2017191	2033213	0.89	cps
Cobalt	59-2	3700956	3782854	3726229	3736680	1.12	cps
Copper	63-2	27189207	27125057	27102416	27138893	0.17	cps
Dysprosium	156-1	400	457	437	431	6.67	cps
Dysprosium	156-2	133	130	103	122	13.46	cps
Erbium	164-1	403	397	427	409	3.85	cps
Erbium	164-2	170	160	170	167	3.46	cps
Gadolinium	160-1	390	377	383	383	1.74	cps
Gadolinium	160-2	157	140	110	136	17.45	cps
Holmium	165-1	20271291	19225875	19279816	19592327	3.00	cps
Holmium	165-2	7045053	6519517	7027727	6864099	4.35	cps
Indium	115-1	15875189	14950155	15084348	15303231	3.27	cps
Indium	115-2	1557725	1414405	1471200	1481110	4.87	cps
Iron	54-2	19861976	20107217	20260622	20076605	1.00	cps
Iron	56-2	362233221	364109795	365803568	364048861	0.49	cps
Iron	57-2	9151672	9264255	9159943	9191957	0.68	cps
Krypton	83-1	350	320	333	334	4.49	cps
Lead	206-1	29811493	30765306	31117292	30564697	2.21	cps

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Date & Time Acc	uired: 2025-02-06 18:52:28		DataFi	Datafile Name :		123CCV.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	25904464	26306471	26335337	26182091	0.92	cps	
Lead	208-1	119111466	121040730	121557423	120569873	1.07	cps	
Lithium	6-1	9160208	8944903	9110054	9071722	1.24	cps	
Magnesium	24-2	65665711	67050971	67239884	66652188	1.29	cps	
Manganese	55-2	7938829	7988579	8146709	8024706	1.35	cps	
Molybdenum	94-1	29434890	30553633	30181242	30056588	1.90	cps	
Molybdenum	95-1	41625443	42834743	43086609	42515598	1.84	cps	
Molybdenum	96-1	46470713	46335001	47233048	46679587	1.04	cps	
Molybdenum	97-1	25870254	26410942	26672420	26317872	1.55	cps	
Molybdenum	98-1	67435997	69425869	68663504	68508457	1.47	cps	
Neodymium	150-1	790	797	733	773	4.50	cps	
Neodymium	150-2	43	53	47	48	10.66	cps	
Nickel	60-2	951214	954355	951683	952417	0.18	cps	
Phosphorus	31-2	36526	37405	36967	36966	1.19	cps	
Potassium	39-2	19299719	19499945	19754290	19517984	1.17	cps	
Rhodium	103-1	14325696	13428607	13785434	13846579	3.26	cps	
Rhodium	103-2	5653266	5182983	5399773	5412007	4.35	cps	
Scandium	45-1	11808637	11432970	11433770	11558459	1.87	cps	
Scandium	45-2	233037	218122	225314	225491	3.31	cps	
Selenium	82-1	119742	121719	122075	121179	1.04	cps	
Selenium	77-2	2174	2127	2290	2197	3.83	cps	
Selenium	78-2	7485	7902	7449	7612	3.31	cps	
Silicon	28-1	7445029	7432273	7430265	7435856	0.11	cps	
Silver	107-1	9666025	10053664	10134307	9951332	2.52	cps	
Silver	109-1	9245008	9345922	9636827	9409252	2.16	cps	
Sodium	23-2	133200381	136572505	137391478	135721455	1.64	cps	
Strontium	86-1	2758673	2819540	2816385	2798200	1.22	cps	
Strontium	88-1	23515334	23735344	23714868	23655182	0.51	cps	
Sulfur	34-1	1650004	1650883	1621417	1640768	1.02	cps	
Terbium	159-1	20255307	19865042	19748831	19956393	1.33	cps	
Terbium	159-2	6824926	6345208	6641035	6603723	3.66	cps	
Thallium	203-1	7372236	7552879	7603523	7509546	1.62	cps	
Thallium	205-1	17273860	18304818	18168505	17915728	3.13	cps	
Tin	118-1	6491027	6485525	6543434	6506662	0.49	cps	
Titanium	47-1	13368029	13560956	13475508	13468164	0.72	cps	
Uranium	238-1	24282185	24283115	24433879	24333060	0.36	cps	

Lab Sample ID :CCV007Instrumnet Name :P8Client Sample ID :CCV007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:52:28 DataFile Name: 123CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1612573	1635945	1602062	1616860	1.07	cps
Ytterbium	172-1	437	580	413	477	18.93	cps
Ytterbium	172-2	210	243	253	236	9.63	cps
Ytterbium	176-1	37567	38272	39195	38344	2.13	cps
Ytterbium	176-2	13841	14298	13971	14036	1.68	cps
Yttrium	89-1	29072290	28111999	28097209	28427166	1.97	cps
Yttrium	89-2	2124875	1961757	1987638	2024757	4.33	cps
Zinc	66-2	2947327	2992846	2982635	2974269	0.80	cps
Zirconium	90-1	14550203	15475511	15118671	15048128	3.10	cps
Zirconium	91-1	3328275	3392710	3393437	3371474	1.11	cps

Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Date & Time?	toquired . Zoz	0 02 00 10.00.24	Datai	iic i tairic .	12400BL.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	143	147	153	148	3.45	cps
Antimony	121-1	1037	1007	1107	1050	4.89	cps
Arsenic	75-2	7	7	7	7	0.00	cps
Barium	135-1	190	187	233	203	12.80	cps
Barium	137-1	323	283	330	312	8.08	cps
Beryllium	9-1	1789	1804	1741	1778	1.84	cps
Bismuth	209-1	12888537	11991596	12408072	12429401	3.61	cps
Bismuth	209-2	5347108	5673923	5667063	5562698	3.36	cps
Bromine	81-1	5948	5611	5708	5756	3.01	cps
Cadmium	108-1	7	13	27	16	65.47	cps
Cadmium	106-1	8486	7906	8659	8350	4.73	cps
Cadmium	111-1	6059	5585	6166	5937	5.21	cps
Calcium	43-1	793	780	740	771	3.60	cps
Calcium	44-1	37622	36626	37255	37168	1.36	cps
Carbon	12-1	4669530	4459030	4471560	4533373	2.60	cps
Carbon	12-2	27740	27763	28067	27856	0.66	cps
Chlorine	35-1	1597809	1550775	1456086	1534890	4.70	cps
Chlorine	35-2	5755	5471	5408	5544	3.33	cps
Chromium	52-2	1677	1690	1783	1717	3.39	cps
Cobalt	59-2	253	277	253	261	5.16	cps
Copper	63-2	4084	4167	3941	4064	2.82	cps
Dysprosium	156-1	13	17	23	18	28.64	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	113	87	90	97	15.03	cps
Erbium	164-2	53	50	37	47	18.89	cps
Gadolinium	160-1	143	103	137	128	16.78	cps
Gadolinium	160-2	20	43	33	32	36.33	cps
Holmium	165-1	20393242	19133824	20018978	19848681	3.26	cps
Holmium	165-2	7155366	7515857	7510981	7394068	2.80	cps
Indium	115-1	16995465	16345357	16940321	16760381	2.15	cps
Indium	115-2	1684566	1788950	1777622	1750379	3.27	cps
Iron	54-2	1127	1133	1340	1200	10.11	cps
Iron	56-2	17738	18616	18198	18184	2.41	cps
Iron	57-2	450	433	397	427	6.39	cps
Krypton	83-1	357	347	323	342	5.00	cps
Lead	206-1	3904	3697	3947	3850	3.47	cps

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Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Date & Time Act	quireu . 202	25-02-00 16.56.24	Dalar	ile ivallie .	124CCBE.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3544	3644	3564	3584	1.48	cps
Lead	208-1	15864	15477	15567	15636	1.29	cps
Lithium	6-1	9987623	9561051	9893784	9814153	2.28	cps
Magnesium	24-2	5818	5801	6048	5889	2.34	cps
Manganese	55-2	570	527	537	544	4.17	cps
Molybdenum	94-1	1123	1027	1070	1073	4.51	cps
Molybdenum	95-1	887	753	813	818	8.17	cps
Molybdenum	96-1	933	943	983	953	2.78	cps
Molybdenum	97-1	527	473	513	504	5.50	cps
Molybdenum	98-1	1323	1213	1253	1263	4.41	cps
Neodymium	150-1	20	10	20	17	34.64	cps
Neodymium	150-2	3	7	3	4	43.40	cps
Nickel	60-2	1577	1760	1717	1685	5.69	cps
Phosphorus	31-2	53	83	90	76	25.85	cps
Potassium	39-2	21680	21186	20939	21268	1.77	cps
Rhodium	103-1	16584018	15302121	16100915	15995684	4.05	cps
Rhodium	103-2	6242253	6596772	6594567	6477864	3.15	cps
Scandium	45-1	12789678	11872818	12373549	12345348	3.72	cps
Scandium	45-2	236671	249246	246079	243999	2.68	cps
Selenium	82-1	-3	23	40	20	109.33	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	3	10	17	10	66.70	cps
Silicon	28-1	641040	649121	640781	643647	0.74	cps
Silver	107-1	640	610	637	629	2.61	cps
Silver	109-1	467	467	563	499	11.19	cps
Sodium	23-2	82381	82474	81499	82118	0.66	cps
Strontium	86-1	723	680	733	712	3.98	cps
Strontium	88-1	1083	1013	1103	1067	4.43	cps
Sulfur	34-1	850786	852434	851103	851441	0.10	cps
Terbium	159-1	21166899	20015414	20722345	20634886	2.81	cps
Terbium	159-2	6946735	7286104	7311378	7181406	2.84	cps
Thallium	203-1	1450	1307	1360	1372	5.28	cps
Thallium	205-1	3390	3247	3187	3275	3.19	cps
Tin	118-1	2040	2160	2087	2096	2.89	cps
Titanium	47-1	433	323	347	368	15.76	cps
Uranium	238-1	243	193	223	220	11.44	cps

Lab Sample ID :CCB007Instrumnet Name :P8Client Sample ID :CCB007Dilution Factor :1

Date & Time Acquired: 2025-02-06 18:58:24 DataFile Name: 124CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	30	33	43	36	19.51	cps
Ytterbium	172-1	103	123	87	104	17.57	cps
Ytterbium	172-2	43	50	27	40	30.04	cps
Ytterbium	176-1	2017	1940	2030	1996	2.43	cps
Ytterbium	176-2	273	333	277	294	11.45	cps
Yttrium	89-1	31265022	29130775	30027465	30141087	3.56	cps
Yttrium	89-2	2156169	2280003	2274692	2236955	3.13	cps
Zinc	66-2	507	497	597	533	10.33	cps
Zirconium	90-1	1333	1420	1487	1413	5.44	cps
Zirconium	91-1	260	320	277	286	10.85	cps

<sub>3</sub> 811

Lab Sample ID :Q1159-01AInstrumnet Name :P8Client Sample ID :YE8C9ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Date & Time Ac	uired: 2025-02-06 19:55:15		DataFi	ie Name :	125AREF.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1892254	1853194	1787313	1844254	2.88	cps
Antimony	121-1	18105	17959	17808	17957	0.83	cps
Arsenic	75-2	22001	22969	22174	22381	2.31	cps
Barium	135-1	978873	995852	981656	985460	0.92	cps
Barium	137-1	1763742	1818263	1740934	1774313	2.24	cps
Beryllium	9-1	7974	7991	7851	7939	0.96	cps
Bismuth	209-1	12126629	11940975	12108961	12058855	0.85	cps
Bismuth	209-2	5399777	4961415	5829899	5397030	8.05	cps
Bromine	81-1	13226	12112	11615	12318	6.70	cps
Cadmium	108-1	143	157	210	170	20.75	cps
Cadmium	106-1	8646	8816	8850	8771	1.24	cps
Cadmium	111-1	6822	6955	6998	6925	1.32	cps
Calcium	43-1	375419	378017	371744	375060	0.84	cps
Calcium	44-1	6267391	6318462	6124037	6236630	1.62	cps
Carbon	12-1	5063958	5085706	5082170	5077278	0.23	cps
Carbon	12-2	32386	31647	31427	31820	1.58	cps
Chlorine	35-1	218017010	235938296	242593710	232183005	5.47	cps
Chlorine	35-2	1031124	1035134	1035472	1033910	0.23	cps
Chromium	52-2	226614	226674	226544	226610	0.03	cps
Cobalt	59-2	235306	235245	235768	235440	0.12	cps
Copper	63-2	660187	663384	649253	657608	1.13	cps
Dysprosium	156-1	71148	72217	71996	71787	0.79	cps
Dysprosium	156-2	28657	27929	29038	28542	1.97	cps
Erbium	164-1	68334	69540	69071	68982	0.88	cps
Erbium	164-2	25100	24933	24509	24848	1.23	cps
Gadolinium	160-1	76333	75690	76565	76196	0.60	cps
Gadolinium	160-2	34050	34585	34067	34234	0.89	cps
Holmium	165-1	20171306	20083131	19841763	20032067	0.85	cps
Holmium	165-2	7400539	6836693	7942626	7393286	7.48	cps
Indium	115-1	16763666	16423181	16466461	16551103	1.12	cps
Indium	115-2	1709792	1592037	1824925	1708918	6.81	cps
Iron	54-2	10780242	10664809	10578170	10674407	0.95	cps
Iron	56-2	196890284	197396850	194887544	196391559	0.68	cps
Iron	57-2	5031092	5046010	4965387	5014163	0.86	cps
Krypton	83-1	500	473	467	480	3.67	cps
Lead	206-1	336095	338167	344643	339635	1.31	cps

Lab Sample ID :Q1159-01AInstrumnet Name :P8Client Sample ID :YE8C9ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	272841	277773	273723	274779	0.96	cps
Lead	208-1	1288810	1303811	1308090	1300237	0.78	cps
Lithium	6-1	10536485	10555516	10359388	10483796	1.03	cps
Magnesium	24-2	3260980	3267199	3124869	3217683	2.50	cps
Manganese	55-2	863738	862956	859374	862022	0.27	cps
Molybdenum	94-1	17668	17064	17348	17360	1.74	cps
Molybdenum	95-1	11348	11265	10921	11178	2.02	cps
Molybdenum	96-1	14024	14014	14454	14164	1.77	cps
Molybdenum	97-1	6775	6648	6818	6747	1.31	cps
Molybdenum	98-1	18249	18222	18062	18178	0.56	cps
Neodymium	150-1	77180	76114	77006	76766	0.75	cps
Neodymium	150-2	20269	19908	19901	20026	1.05	cps
Nickel	60-2	181056	181830	179243	180710	0.73	cps
Phosphorus	31-2	2807	2634	2564	2668	4.70	cps
Potassium	39-2	121462	120891	121600	121318	0.31	cps
Rhodium	103-1	15929331	16167841	15820660	15972611	1.11	cps
Rhodium	103-2	6458937	5898130	6741101	6366056	6.74	cps
Scandium	45-1	13203603	13004366	12984535	13064168	0.93	cps
Scandium	45-2	256884	238784	270070	255246	6.15	cps
Selenium	82-1	3090	3140	3404	3212	5.24	cps
Selenium	77-2	223	163	180	189	16.40	cps
Selenium	78-2	290	330	317	312	6.52	cps
Silicon	28-1	101934285	101193965	99945629	101024626	0.99	cps
Silver	107-1	7756	7872	7759	7796	0.85	cps
Silver	109-1	7015	7365	7295	7225	2.56	cps
Sodium	23-2	125903	129054	130164	128374	1.72	cps
Strontium	86-1	318866	319859	319915	319547	0.18	cps
Strontium	88-1	2905401	2893620	2880870	2893297	0.42	cps
Sulfur	34-1	792851	757288	737730	762623	3.66	cps
Terbium	159-1	20685736	20395725	20489361	20523607	0.72	cps
Terbium	159-2	7147816	6571764	7742883	7154154	8.19	cps
Thallium	203-1	6759	7496	8003	7419	8.43	cps
Thallium	205-1	16798	18623	19655	18359	7.88	cps
Tin	118-1	6878	7095	7245	7073	2.61	cps
Titanium	47-1	65856	65204	65237	65433	0.56	cps
Uranium	238-1	23712	23746	24868	24109	2.73	cps

Lab Sample ID :Q1159-01AInstrumnet Name :P8Client Sample ID :YE8C9ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:55:15 DataFile Name: 125AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	222651	221882	219240	221258	0.81	cps
Ytterbium	172-1	19361	20279	19331	19657	2.74	cps
Ytterbium	172-2	8946	8770	8906	8874	1.04	cps
Ytterbium	176-1	13834	13260	14034	13709	2.93	cps
Ytterbium	176-2	5781	5901	5748	5810	1.39	cps
Yttrium	89-1	31247817	31211472	31161848	31207046	0.14	cps
Yttrium	89-2	2354129	2115670	2417043	2295614	6.93	cps
Zinc	66-2	93100	91332	91499	91977	1.06	cps
Zirconium	90-1	30113	29648	29471	29744	1.11	cps
Zirconium	91-1	6478	6722	6735	6645	2.18	cps

<sub>3</sub> 814

Lab Sample ID : Q1186-09A Instrumnet Name : P8
Client Sample ID : ME2959A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	620	600	523	581	8.78	cps
Antimony	121-1	433	443	430	436	1.59	cps
Arsenic	75-2	70	97	63	77	23.01	cps
Barium	135-1	65223	65631	65032	65295	0.47	cps
Barium	137-1	111585	113091	114940	113205	1.48	cps
Beryllium	9-1	599	662	664	642	5.79	cps
Bismuth	209-1	10694342	10889084	10996755	10860061	1.41	cps
Bismuth	209-2	4787088	4816182	4771969	4791746	0.47	cps
Bromine	81-1	101752	127340	142943	124012	16.77	cps
Cadmium	108-1	27	30	43	33	26.45	cps
Cadmium	106-1	7282	7996	8096	7791	5.70	cps
Cadmium	111-1	5179	5639	5713	5510	5.26	cps
Calcium	43-1	25329312	25245306	25862190	25478936	1.31	cps
Calcium	44-1	397314141	411621767	411091221	406675709	1.99	cps
Carbon	12-1	7842130	9037136	9488076	8789114	9.68	cps
Carbon	12-2	67561	68247	69487	68432	1.43	cps
Chlorine	35-1	41561986	43853666	43988924	43134859	3.16	cps
Chlorine	35-2	183501	182924	182060	182828	0.40	cps
Chromium	52-2	1917	1800	2104	1940	7.89	cps
Cobalt	59-2	537	537	557	543	2.13	cps
Copper	63-2	4811	4798	4868	4825	0.77	cps
Dysprosium	156-1	63	63	57	61	6.29	cps
Dysprosium	156-2	27	30	23	27	12.51	cps
Erbium	164-1	133	97	163	131	25.47	cps
Erbium	164-2	50	43	47	47	7.15	cps
Gadolinium	160-1	143	163	143	150	7.70	cps
Gadolinium	160-2	43	50	50	48	8.06	cps
Holmium	165-1	18744206	18889408	18839471	18824362	0.39	cps
Holmium	165-2	6918172	7006706	6963094	6962657	0.64	cps
Indium	115-1	14757475	14856706	14892118	14835433	0.47	cps
Indium	115-2	1559349	1559347	1506358	1541684	1.98	cps
Iron	54-2	217355	215956	215971	216427	0.37	cps
Iron	56-2	4032464	4041513	4053319	4042432	0.26	cps
Iron	57-2	99820	100645	99598	100021	0.55	cps
Krypton	83-1	327	277	340	314	10.62	cps
Lead	206-1	3544	3134	3014	3230	8.60	cps

Lab Sample ID :Q1186-09AInstrumnet Name :P8Client Sample ID :ME2959ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Date & Time Ac	quirea: 202	uired: 2025-02-06 19:58:30		DataFile Name :		126AREF.0			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Lead	207-1	2927	2854	2704	2828	4.03	cps		
Lead	208-1	13696	12649	12209	12852	5.94	cps		
Lithium	6-1	8796999	9115929	9182995	9031974	2.28	cps		
Magnesium	24-2	39531196	38714454	39059852	39101834	1.05	cps		
Manganese	55-2	82406	80746	80639	81264	1.22	cps		
Molybdenum	94-1	4544	4667	4661	4624	1.50	cps		
Molybdenum	95-1	6228	6598	6918	6582	5.25	cps		
Molybdenum	96-1	6678	7072	6925	6892	2.89	cps		
Molybdenum	97-1	3911	4084	4001	3998	2.17	cps		
Molybdenum	98-1	9854	10277	10231	10120	2.30	cps		
Neodymium	150-1	60	73	83	72	16.21	cps		
Neodymium	150-2	13	17	30	20	44.10	cps		
Nickel	60-2	1570	1823	1803	1732	8.13	cps		
Phosphorus	31-2	127	177	107	137	26.38	cps		
Potassium	39-2	762170	759560	763375	761702	0.26	cps		
Rhodium	103-1	13101464	13563816	13465537	13376939	1.82	cps		
Rhodium	103-2	5571090	5661562	5568465	5600372	0.95	cps		
Scandium	45-1	11021823	11133652	11338025	11164500	1.44	cps		
Scandium	45-2	229409	227998	225318	227575	0.91	cps		
Selenium	82-1	2834	2870	2944	2883	1.94	cps		
Selenium	77-2	37	57	57	50	23.09	cps		
Selenium	78-2	180	213	200	198	8.48	cps		
Silicon	28-1	110588908	114044522	114474198	113035876	1.88	cps		
Silver	107-1	657	763	830	750	11.66	cps		
Silver	109-1	447	473	507	476	6.32	cps		
Sodium	23-2	100065769	100601322	99726712	100131267	0.44	cps		
Strontium	86-1	76995879	76175342	78063039	77078087	1.23	cps		
Strontium	88-1	665739750	664813537	677846217	669466501	1.09	cps		
Sulfur	34-1	36202033	36412238	37051357	36555209	1.21	cps		
Terbium	159-1	19185310	19360542	19512891	19352915	0.85	cps		
Terbium	159-2	6727972	6845383	6570632	6714662	2.05	cps		
Thallium	203-1	1290	1270	1407	1322	5.58	cps		
Thallium	205-1	3117	2997	2954	3023	2.80	cps		
Tin	118-1	8960	9193	12316	10156	18.45	cps		
Titanium	47-1	2310	2240	2320	2290	1.90	cps		
Uranium	238-1	11932	12563	12496	12331	2.81	cps		

Lab Sample ID :Q1186-09AInstrumnet Name :P8Client Sample ID :ME2959ADilution Factor :1

Date & Time Acquired: 2025-02-06 19:58:30 DataFile Name: 126AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	107	70	127	101	28.42	cps	
Ytterbium	172-1	123	113	107	114	7.33	cps	
Ytterbium	172-2	57	30	53	47	31.14	cps	
Ytterbium	176-1	1763	1783	1777	1775	0.57	cps	
Ytterbium	176-2	287	360	353	333	12.17	cps	
Yttrium	89-1	27204633	27835045	27723190	27587623	1.22	cps	
Yttrium	89-2	2058880	2060886	2057871	2059213	0.07	cps	
Zinc	66-2	860	850	933	881	5.16	cps	
Zirconium	90-1	2820	2614	2520	2651	5.79	cps	
Zirconium	91-1	560	550	527	546	3.14	cps	

Lab Sample ID : Q1200-01A Instrumnet Name : P8

Client Sample ID : ME2964A Dilution Factor : 1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Date a Time	Acquired . Zoz.	0 02 00 20.01.47	Datai ii	c ivallic .	12// (IXEL .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	48755	47798	48243	48265	0.99	cps
Antimony	121-1	74823	74739	76721	75428	1.49	cps
Arsenic	75-2	930	950	783	888	10.25	cps
Barium	135-1	166705	169190	170198	168698	1.07	cps
Barium	137-1	291919	297069	295328	294772	0.89	cps
Beryllium	9-1	654	712	671	679	4.44	cps
Bismuth	209-1	12111736	12217610	12064634	12131327	0.65	cps
Bismuth	209-2	5339697	5318389	5293808	5317298	0.43	cps
Bromine	81-1	250639	273800	290257	271566	7.33	cps
Cadmium	108-1	227	193	217	212	8.06	cps
Cadmium	106-1	9043	9000	8486	8843	3.50	cps
Cadmium	111-1	6461	6471	6105	6346	3.29	cps
Calcium	43-1	8158629	8269608	8304445	8244227	0.92	cps
Calcium	44-1	132607435	134140455	133701298	133483062	0.59	cps
Carbon	12-1	18225983	20513686	21706421	20148697	8.78	cps
Carbon	12-2	145643	147126	148434	147068	0.95	cps
Chlorine	35-1	7538743	7466393	7258851	7421329	1.96	cps
Chlorine	35-2	28775	28341	28054	28390	1.28	cps
Chromium	52-2	2667	2780	2914	2787	4.43	cps
Cobalt	59-2	1153	1217	1287	1219	5.47	cps
Copper	63-2	11141	10834	10714	10896	2.02	cps
Dysprosium	156-1	60	103	50	71	39.87	cps
Dysprosium	156-2	17	17	37	23	49.48	cps
Erbium	164-1	117	173	137	142	20.21	cps
Erbium	164-2	43	33	30	36	19.51	cps
Gadolinium	160-1	130	173	133	146	16.57	cps
Gadolinium	160-2	17	37	57	37	54.54	cps
Holmium	165-1	20205834	20513926	19978921	20232894	1.33	cps
Holmium	165-2	7371317	7415501	7388182	7391667	0.30	cps
Indium	115-1	16439712	16488467	16406286	16444821	0.25	cps
Indium	115-2	1684084	1685495	1679329	1682970	0.19	cps
Iron	54-2	7222	7262	7122	7202	1.00	cps
Iron	56-2	132648	130521	129485	130885	1.23	cps
Iron	57-2	3624	3480	3701	3602	3.10	cps
Krypton	83-1	310	240	260	270	13.36	cps
Lead	206-1	8056	7829	8133	8006	1.97	cps

Lab Sample ID :Q1200-01AInstrumnet Name :P8Client Sample ID :ME2964ADilution Factor :1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Date & Time Ac	quirea: 202	25-02-06 20:01:47	Datar	ile Name :	12/AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6578	6832	6822	6744	2.13	cps
Lead	208-1	31222	31242	31936	31466	1.29	cps
Lithium	6-1	10290078	9743188	9879250	9970839	2.86	cps
Magnesium	24-2	13696	13266	12659	13207	3.95	cps
Manganese	55-2	5621	5564	5304	5497	3.07	cps
Molybdenum	94-1	222045	220522	223467	222011	0.66	cps
Molybdenum	95-1	374828	380276	382696	379267	1.06	cps
Molybdenum	96-1	399139	407216	409661	405339	1.36	cps
Molybdenum	97-1	238409	238910	238505	238608	0.11	cps
Molybdenum	98-1	602384	613293	613143	609607	1.03	cps
Neodymium	150-1	93	67	103	88	21.59	cps
Neodymium	150-2	40	10	17	22	70.88	cps
Nickel	60-2	352338	349742	353609	351896	0.56	cps
Phosphorus	31-2	1740	1693	1547	1660	6.08	cps
Potassium	39-2	10132441	10200235	10230104	10187593	0.49	cps
Rhodium	103-1	15270700	15100229	14947797	15106242	1.07	cps
Rhodium	103-2	6099273	6152131	6131478	6127627	0.43	cps
Scandium	45-1	12223504	12101345	12079493	12134781	0.64	cps
Scandium	45-2	243853	242870	240242	242322	0.77	cps
Selenium	82-1	3190	3064	3120	3125	2.03	cps
Selenium	77-2	23	43	50	39	35.69	cps
Selenium	78-2	200	233	240	224	9.55	cps
Silicon	28-1	32956152	33204272	33261833	33140752	0.49	cps
Silver	107-1	597	573	533	568	5.64	cps
Silver	109-1	393	377	350	373	5.85	cps
Sodium	23-2	18380020	18380008	17859754	18206594	1.65	cps
Strontium	86-1	7466294	7554714	7635543	7552184	1.12	cps
Strontium	88-1	64575866	66191431	65086131	65284476	1.26	cps
Sulfur	34-1	1877975	1885690	1862947	1875538	0.62	cps
Terbium	159-1	21096382	20630413	20565227	20764007	1.40	cps
Terbium	159-2	7248421	7182653	7097742	7176272	1.05	cps
Thallium	203-1	967	987	950	968	1.90	cps
Thallium	205-1	2130	2237	2157	2175	2.55	cps
Tin	118-1	10624	10878	10591	10698	1.47	cps
Titanium	47-1	2157	2280	2334	2257	4.02	cps
Uranium	238-1	107	90	113	103	11.63	cps

Lab Sample ID :Q1200-01AInstrumnet Name :P8Client Sample ID :ME2964ADilution Factor :1

Date & Time Acquired: 2025-02-06 20:01:47 DataFile Name: 127AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	8796	9140	8736	8891	2.45	cps
Ytterbium	172-1	120	160	117	132	18.24	cps
Ytterbium	172-2	67	63	90	73	19.81	cps
Ytterbium	176-1	1974	2050	2057	2027	2.28	cps
Ytterbium	176-2	320	370	313	334	9.26	cps
Yttrium	89-1	29855660	29536735	29621802	29671399	0.56	cps
Yttrium	89-2	2169553	2166534	2191777	2175955	0.63	cps
Zinc	66-2	2610	2570	2764	2648	3.85	cps
Zirconium	90-1	1860	1827	1763	1817	2.70	cps
Zirconium	91-1	357	390	353	367	5.53	cps

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:04:59 DataFile Name: 128CCBE.d

Date & Time Ac	quireu . 202	25-02-06 20.04.59	Dalar	ile ivallie .	120CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	183	93	143	140	32.21	cps
Antimony	121-1	133	133	120	129	5.98	cps
Arsenic	75-2	3	0	3	2	86.60	cps
Barium	135-1	117	87	97	100	15.27	cps
Barium	137-1	170	127	157	151	14.69	cps
Beryllium	9-1	680	679	631	663	4.19	cps
Bismuth	209-1	13226366	12868132	13029590	13041363	1.38	cps
Bismuth	209-2	5529971	5625985	5476001	5543986	1.37	cps
Bromine	81-1	33139	28846	25410	29132	13.29	cps
Cadmium	108-1	27	30	23	27	12.51	cps
Cadmium	106-1	9177	8983	9353	9171	2.02	cps
Cadmium	111-1	6412	6297	6564	6424	2.09	cps
Calcium	43-1	1057	1077	1017	1050	2.91	cps
Calcium	44-1	44479	41202	40862	42181	4.73	cps
Carbon	12-1	5979986	5569361	5204699	5584682	6.95	cps
Carbon	12-2	30939	30659	29774	30457	2.00	cps
Chlorine	35-1	2963265	2800786	2662559	2808870	5.36	cps
Chlorine	35-2	9630	9393	9080	9368	2.95	cps
Chromium	52-2	850	857	773	827	5.60	cps
Cobalt	59-2	103	130	120	118	11.44	cps
Copper	63-2	3727	3560	3827	3705	3.64	cps
Dysprosium	156-1	7	3	20	10	88.20	cps
Dysprosium	156-2	13	13	7	11	34.61	cps
Erbium	164-1	107	100	107	104	3.69	cps
Erbium	164-2	53	33	33	40	28.87	cps
Gadolinium	160-1	107	123	137	122	12.30	cps
Gadolinium	160-2	20	13	33	22	45.83	cps
Holmium	165-1	21169503	20588914	20577490	20778636	1.63	cps
Holmium	165-2	7478656	7539409	7431627	7483230	0.72	cps
Indium	115-1	17339391	17076685	16981560	17132545	1.08	cps
Indium	115-2	1758624	1775913	1671330	1735289	3.23	cps
Iron	54-2	693	620	593	636	8.15	cps
Iron	56-2	8669	9086	9103	8953	2.74	cps
Iron	57-2	217	193	220	210	6.92	cps
Krypton	83-1	287	313	343	314	9.02	cps
Lead	206-1	2220	1984	2020	2075	6.14	cps

Lab Sample ID: PB166570BL Instrumnet Name: P8
Client Sample ID: PBW570 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:04:59 DataFile Name: 128CCBE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1920	1773	1743	1812	5.22	cps
Lead	208-1	8518	8104	8094	8239	2.93	cps
Lithium	6-1	10096924	9875620	9927693	9966746	1.16	cps
Magnesium	24-2	4181	4591	4557	4443	5.13	cps
Manganese	55-2	347	337	293	326	8.71	cps
Molybdenum	94-1	407	507	470	461	10.97	cps
Molybdenum	95-1	283	267	223	258	12.01	cps
Molybdenum	96-1	330	327	373	343	7.58	cps
Molybdenum	97-1	180	170	157	169	6.93	cps
Molybdenum	98-1	353	467	353	391	16.73	cps
Neodymium	150-1	10	3	20	11	75.52	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	1250	1293	1280	1275	1.74	cps
Phosphorus	31-2	53	67	83	68	22.18	cps
Potassium	39-2	24080	24391	23693	24055	1.45	cps
Rhodium	103-1	16358421	16327764	16245769	16310651	0.36	cps
Rhodium	103-2	6519830	6629310	6343857	6497665	2.22	cps
Scandium	45-1	12521292	12197146	12291108	12336515	1.35	cps
Scandium	45-2	248174	245923	238320	244139	2.11	cps
Selenium	82-1	43	0	27	23	93.68	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	10	3	13	9	57.30	cps
Silicon	28-1	658508	642960	635395	645621	1.83	cps
Silver	107-1	417	363	363	381	8.08	cps
Silver	109-1	173	193	187	184	5.52	cps
Sodium	23-2	72505	72954	73688	73049	0.82	cps
Strontium	86-1	1293	1020	940	1085	17.09	cps
Strontium	88-1	6478	4964	4111	5184	23.13	cps
Sulfur	34-1	1017853	1012964	1010730	1013849	0.36	cps
Terbium	159-1	21276601	20670504	21038158	20995087	1.45	cps
Terbium	159-2	7190883	7376379	7033854	7200372	2.38	cps
Thallium	203-1	767	670	697	711	7.02	cps
Thallium	205-1	1730	1690	1663	1695	1.98	cps
Tin	118-1	1810	1973	1837	1873	4.68	cps
Titanium	47-1	313	250	250	271	13.49	cps
Uranium	238-1	33	50	37	40	22.05	cps

LB Number: LB134612

Lab Sample ID : PB166570BL

Client Sample ID : PBW570

Date & Time Acquired : 2025-02-06 20:04:59

Operator: Jaswal

Instrumnet Name : P8

Dilution Factor: 1

DataFile Name : 128CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	17	10	18	47.19	cps
Ytterbium	172-1	133	137	133	134	1.43	cps
Ytterbium	172-2	67	63	73	68	7.51	cps
Ytterbium	176-1	2050	1863	1927	1947	4.88	cps
Ytterbium	176-2	333	363	353	350	4.36	cps
Yttrium	89-1	30616748	30229846	29948091	30264895	1.11	cps
Yttrium	89-2	2245744	2230263	2143752	2206587	2.49	cps
Zinc	66-2	657	607	607	623	4.63	cps
Zirconium	90-1	917	1040	1143	1033	10.98	cps
Zirconium	91-1	177	177	197	183	6.30	cps

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3557	3454	3307	3439	3.65	cps
Antimony	121-1	74217	74475	75239	74643	0.71	cps
Arsenic	75-2	700	773	930	801	14.67	cps
Barium	135-1	86366	86480	86927	86591	0.34	cps
Barium	137-1	152240	152107	151653	152000	0.20	cps
Beryllium	9-1	15228	15178	15085	15164	0.48	cps
Bismuth	209-1	12746760	12705111	12472804	12641558	1.17	cps
Bismuth	209-2	5594151	5505548	5434922	5511541	1.45	cps
Bromine	81-1	13747	12936	12509	13064	4.81	cps
Cadmium	108-1	753	743	833	777	6.35	cps
Cadmium	106-1	9987	10107	10090	10062	0.65	cps
Cadmium	111-1	15673	15688	15450	15604	0.86	cps
Calcium	43-1	65549	65903	65803	65752	0.28	cps
Calcium	44-1	1081428	1086998	1087996	1085474	0.33	cps
Carbon	12-1	4388123	4407541	4356894	4384186	0.58	cps
Carbon	12-2	27185	26751	27078	27005	0.84	cps
Chlorine	35-1	3482127	3649476	3757695	3629766	3.82	cps
Chlorine	35-2	15438	15325	15515	15426	0.62	cps
Chromium	52-2	18215	17771	17941	17976	1.25	cps
Cobalt	59-2	16827	17271	17287	17128	1.52	cps
Copper	63-2	31872	31461	32013	31782	0.90	cps
Dysprosium	156-1	20	40	7	22	75.49	cps
Dysprosium	156-2	7	7	13	9	43.25	cps
Erbium	164-1	93	117	120	110	13.21	cps
Erbium	164-2	47	33	33	38	20.39	cps
Gadolinium	160-1	90	93	147	110	28.91	cps
Gadolinium	160-2	27	50	7	28	78.06	cps
Holmium	165-1	20738157	20386979	20630771	20585302	0.87	cps
Holmium	165-2	7379629	7460997	7324270	7388299	0.93	cps
Indium	115-1	17095729	16680089	16876049	16883956	1.23	cps
Indium	115-2	1686926	1719830	1705572	1704109	0.97	cps
Iron	54-2	73186	71377	71504	72023	1.40	cps
Iron	56-2	1328347	1322947	1321858	1324384	0.26	cps
Iron	57-2	33569	33566	33078	33405	0.85	cps
Krypton	83-1	337	303	307	316	5.82	cps
Lead	206-1	29697	29006	29604	29436	1.27	cps

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	25832	25756	25662	25750	0.33	cps
Lead	208-1	118355	118591	117706	118217	0.39	cps
Lithium	6-1	10102089	10077382	9930646	10036705	0.92	cps
Magnesium	24-2	293288	295272	291887	293483	0.58	cps
Manganese	55-2	4067	4157	3767	3997	5.11	cps
Molybdenum	94-1	77276	77240	76968	77161	0.22	cps
Molybdenum	95-1	92412	93046	91354	92271	0.93	cps
Molybdenum	96-1	103593	103169	103774	103512	0.30	cps
Molybdenum	97-1	57060	58329	56953	57447	1.33	cps
Molybdenum	98-1	148542	148185	145577	147435	1.10	cps
Neodymium	150-1	33	20	43	32	36.33	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	6021	6181	5838	6014	2.86	cps
Phosphorus	31-2	267	257	273	266	3.16	cps
Potassium	39-2	188372	186079	187647	187366	0.63	cps
Rhodium	103-1	16331657	16034266	15672556	16012826	2.06	cps
Rhodium	103-2	6319580	6392952	6430286	6380939	0.88	cps
Scandium	45-1	12115969	12226114	12050947	12131010	0.73	cps
Scandium	45-2	241371	240029	239385	240262	0.42	cps
Selenium	82-1	2967	3024	2984	2992	0.97	cps
Selenium	77-2	40	23	33	32	26.04	cps
Selenium	78-2	190	170	150	170	11.76	cps
Silicon	28-1	883262	969150	966510	939641	5.20	cps
Silver	107-1	45351	45906	46174	45810	0.92	cps
Silver	109-1	43020	43763	44150	43644	1.32	cps
Sodium	23-2	682360	672478	670124	674987	0.96	cps
Strontium	86-1	12729	12609	12662	12667	0.47	cps
Strontium	88-1	106687	105995	107641	106774	0.77	cps
Sulfur	34-1	1014752	994238	985423	998138	1.51	cps
Terbium	159-1	21116382	21262457	20646026	21008288	1.53	cps
Terbium	159-2	7233092	7144732	7043471	7140431	1.33	cps
Thallium	203-1	34777	35208	35124	35036	0.65	cps
Thallium	205-1	84319	84063	84687	84356	0.37	cps
Tin	118-1	149398	152576	149741	150571	1.16	cps
Titanium	47-1	7662	7692	7756	7703	0.62	cps
Uranium	238-1	105779	106761	106273	106271	0.46	cps

LB Number: LB134612

Lab Sample ID : PB166570BS

Client Sample ID: LCS570

70 Dilution Factor :

Date & Time Acquired: 2025-02-06 20:08:20 DataFile Name: 129LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	35517	34916	34816	35083	1.08	cps
Ytterbium	172-1	123	117	140	127	9.49	cps
Ytterbium	172-2	47	50	47	48	4.02	cps
Ytterbium	176-1	2324	2354	2194	2290	3.71	cps
Ytterbium	176-2	320	427	383	377	14.24	cps
Yttrium	89-1	30020640	29727902	29826517	29858353	0.50	cps
Yttrium	89-2	2153006	2171568	2161497	2162024	0.43	cps
Zinc	66-2	7565	7369	7662	7532	1.99	cps
Zirconium	90-1	63922	65134	65382	64813	1.21	cps
Zirconium	91-1	14327	14758	14471	14519	1.51	cps

Operator :

Instrumnet Name:

Jaswal

P8

1

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:11:38 DataFile Name: 130AREF.d

Date & Time / to	quircu . 202	0 02 00 20.11.00	Datai	iic i vairie .	1007 (T CET .C		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	230	247	207	228	8.82	cps
Antimony	121-1	150	150	143	148	2.60	cps
Arsenic	75-2	13	0	0	4	173.21	cps
Barium	135-1	180	183	250	204	19.31	cps
Barium	137-1	353	307	363	341	8.87	cps
Beryllium	9-1	599	647	560	602	7.28	cps
Bismuth	209-1	12876771	13154187	13035415	13022125	1.07	cps
Bismuth	209-2	5537205	5436342	5318960	5430836	2.01	cps
Bromine	81-1	9130	8643	8476	8749	3.88	cps
Cadmium	108-1	10	20	23	18	39.03	cps
Cadmium	106-1	9166	9053	9116	9112	0.62	cps
Cadmium	111-1	6423	6363	6409	6398	0.49	cps
Calcium	43-1	957	900	907	921	3.36	cps
Calcium	44-1	39217	39441	39364	39340	0.29	cps
Carbon	12-1	5150368	5638162	5942125	5576885	7.16	cps
Carbon	12-2	39777	40185	41275	40412	1.92	cps
Chlorine	35-1	1252466	1200593	1097279	1183446	6.68	cps
Chlorine	35-2	4097	3961	3904	3987	2.49	cps
Chromium	52-2	2067	1927	2017	2003	3.54	cps
Cobalt	59-2	110	103	153	122	22.21	cps
Copper	63-2	3651	3664	3324	3546	5.43	cps
Dysprosium	156-1	17	3	7	9	78.08	cps
Dysprosium	156-2	0	10	10	7	86.60	cps
Erbium	164-1	153	100	93	116	28.46	cps
Erbium	164-2	30	40	50	40	25.00	cps
Gadolinium	160-1	133	123	103	120	12.73	cps
Gadolinium	160-2	37	47	17	33	45.82	cps
Holmium	165-1	20907143	20846976	20974382	20909500	0.30	cps
Holmium	165-2	7390860	7304764	6955964	7217196	3.19	cps
Indium	115-1	17220728	17223822	16958391	17134314	0.89	cps
Indium	115-2	1678447	1655964	1646462	1660291	0.99	cps
Iron	54-2	870	870	893	878	1.54	cps
Iron	56-2	13156	12936	12973	13022	0.91	cps
Iron	57-2	290	283	327	300	7.78	cps
Krypton	83-1	283	303	300	296	3.63	cps
Lead	206-1	2967	2734	2867	2856	4.10	cps

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:11:38 DataFile Name: 130AREF.d

Date & Time Acc	1011 Cu . 202	0 02 00 20.11.00	Datai	iic ivairie .	100/11121 .0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2504	2504	2344	2450	3.77	cps
Lead	208-1	11642	11182	11022	11282	2.85	cps
Lithium	6-1	10209876	10162623	10103904	10158801	0.52	cps
Magnesium	24-2	4898	4714	4961	4858	2.64	cps
Manganese	55-2	833	757	917	836	9.58	cps
Molybdenum	94-1	453	560	540	518	10.95	cps
Molybdenum	95-1	210	203	163	192	13.13	cps
Molybdenum	96-1	243	230	240	238	2.92	cps
Molybdenum	97-1	150	110	127	129	15.59	cps
Molybdenum	98-1	247	247	243	246	0.78	cps
Neodymium	150-1	23	13	20	19	26.96	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	1127	1270	1163	1187	6.28	cps
Phosphorus	31-2	50	100	53	68	41.25	cps
Potassium	39-2	18742	18465	18936	18714	1.26	cps
Rhodium	103-1	16530386	15989324	16163671	16227793	1.70	cps
Rhodium	103-2	6346675	6195258	6079844	6207259	2.16	cps
Scandium	45-1	12457686	12258001	12091689	12269126	1.49	cps
Scandium	45-2	239034	233983	229068	234028	2.13	cps
Selenium	82-1	7	-63	-93	-50	-102.64	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	7	0	3	3	100.05	cps
Silicon	28-1	813572	819373	824874	819273	0.69	cps
Silver	107-1	527	510	490	509	3.61	cps
Silver	109-1	320	303	283	302	6.07	cps
Sodium	23-2	80480	80178	80088	80249	0.26	cps
Strontium	86-1	827	920	800	849	7.42	cps
Strontium	88-1	4221	4464	4107	4264	4.28	cps
Sulfur	34-1	997305	956437	975392	976378	2.09	cps
Terbium	159-1	21250961	21269801	20960823	21160528	0.82	cps
Terbium	159-2	7047595	7022613	6718135	6929448	2.65	cps
Thallium	203-1	643	540	580	588	8.86	cps
Thallium	205-1	1483	1480	1290	1418	7.81	cps
Tin	118-1	3370	3010	3250	3210	5.71	cps
Titanium	47-1	373	343	243	320	21.27	cps
Uranium	238-1	40	50	67	52	25.80	cps

LB Number : LB134612 Operator :

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:11:38 DataFile Name: 130AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	3	13	20	12	68.66	cps	
Ytterbium	172-1	117	150	133	133	12.50	cps	
Ytterbium	172-2	27	60	47	44	37.74	cps	
Ytterbium	176-1	2237	1934	2014	2061	7.63	cps	
Ytterbium	176-2	327	320	323	323	1.03	cps	
Yttrium	89-1	30595300	29865875	29909489	30123555	1.36	cps	
Yttrium	89-2	2184752	2119178	2091416	2131782	2.25	cps	
Zinc	66-2	283	263	273	273	3.66	cps	
Zirconium	90-1	1030	1093	1070	1064	3.01	cps	
Zirconium	91-1	233	197	230	220	9.22	cps	

Jaswal

Lab Sample ID: Q1223-17 Instrumnet Name: P8

Client Sample ID: A6310 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Date & Time / to	quircu . Zoz	.0 02 00 20.14.00	Datai	iic ivairie .	1017 (IXE) .G		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	123	193	157	158	22.19	cps
Antimony	121-1	140	80	120	113	26.96	cps
Arsenic	75-2	7	3	7	6	34.70	cps
Barium	135-1	167	177	190	178	6.58	cps
Barium	137-1	210	263	273	249	13.68	cps
Beryllium	9-1	610	621	587	606	2.83	cps
Bismuth	209-1	13560246	13090179	13073526	13241317	2.09	cps
Bismuth	209-2	5616740	5649540	5572291	5612857	0.69	cps
Bromine	81-1	7045	6628	6775	6816	3.10	cps
Cadmium	108-1	13	30	40	28	48.51	cps
Cadmium	106-1	9390	9183	9173	9249	1.32	cps
Cadmium	111-1	6584	6434	6423	6480	1.38	cps
Calcium	43-1	1020	833	910	921	10.19	cps
Calcium	44-1	39344	39547	38478	39123	1.45	cps
Carbon	12-1	5604158	5998760	6292415	5965111	5.79	cps
Carbon	12-2	41124	41739	43193	42019	2.53	cps
Chlorine	35-1	824286	806053	785596	805312	2.40	cps
Chlorine	35-2	2954	3127	3040	3040	2.85	cps
Chromium	52-2	1593	1790	1670	1685	5.89	cps
Cobalt	59-2	113	77	93	94	19.44	cps
Copper	63-2	3447	3677	3290	3472	5.60	cps
Dysprosium	156-1	17	20	13	17	20.01	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	117	90	123	110	16.04	cps
Erbium	164-2	20	27	67	38	66.81	cps
Gadolinium	160-1	150	100	123	124	20.10	cps
Gadolinium	160-2	47	23	27	32	39.17	cps
Holmium	165-1	21347342	20988046	20416420	20917269	2.24	cps
Holmium	165-2	7377339	7545911	7342003	7421751	1.47	cps
Indium	115-1	17938056	17194233	17073670	17401986	2.69	cps
Indium	115-2	1704371	1734503	1706925	1715267	0.97	cps
Iron	54-2	1230	1257	1087	1191	7.68	cps
Iron	56-2	18976	19500	20221	19566	3.19	cps
Iron	57-2	570	483	493	516	9.20	cps
Krypton	83-1	273	213	273	253	13.67	cps
Lead	206-1	2040	2050	1987	2026	1.68	cps

Lab Sample ID: Q1223-17 Instrumnet Name: P8

Client Sample ID: A6310 Dilution Factor: 1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1863	1593	1687	1715	8.00	cps
Lead	208-1	8561	7948	7744	8084	5.26	cps
Lithium	6-1	10340232	10018861	10004243	10121112	1.88	cps
Magnesium	24-2	5191	5054	5258	5168	2.01	cps
Manganese	55-2	3084	3167	3190	3147	1.78	cps
Molybdenum	94-1	533	507	527	522	2.66	cps
Molybdenum	95-1	203	187	177	189	7.13	cps
Molybdenum	96-1	253	247	243	248	2.06	cps
Molybdenum	97-1	120	87	83	97	20.98	cps
Molybdenum	98-1	233	213	280	242	14.12	cps
Neodymium	150-1	17	27	13	19	36.75	cps
Neodymium	150-2	10	0	0	3	173.21	cps
Nickel	60-2	1307	1293	1453	1351	6.57	cps
Phosphorus	31-2	63	70	67	67	5.00	cps
Potassium	39-2	19166	19220	19477	19287	0.86	cps
Rhodium	103-1	16771138	16153869	16174289	16366432	2.14	cps
Rhodium	103-2	6548027	6463506	6350753	6454095	1.53	cps
Scandium	45-1	12761454	12360805	12346363	12489541	1.89	cps
Scandium	45-2	238698	239559	239867	239374	0.25	cps
Selenium	82-1	-7	20	-57	-14	-269.42	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	10	10	20	13	43.30	cps
Silicon	28-1	608358	617019	627637	617671	1.56	cps
Silver	107-1	313	287	333	311	7.53	cps
Silver	109-1	157	190	140	162	15.69	cps
Sodium	23-2	129552	128214	128361	128709	0.57	cps
Strontium	86-1	467	560	583	537	11.50	cps
Strontium	88-1	1690	1703	1663	1686	1.21	cps
Sulfur	34-1	988681	994179	986708	989856	0.39	cps
Terbium	159-1	22302898	21355260	21198957	21619038	2.76	cps
Terbium	159-2	7181101	7212307	7215317	7202908	0.26	cps
Thallium	203-1	677	553	450	560	20.26	cps
Thallium	205-1	1337	1283	1140	1253	8.12	cps
Tin	118-1	2587	2467	2660	2571	3.80	cps
Titanium	47-1	347	403	247	332	23.88	cps
Uranium	238-1	37	23	23	28	27.73	cps

Lab Sample ID :Q1223-17Instrumnet Name :P8Client Sample ID :A6310Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:14:59 DataFile Name: 131AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	43	13	24	67.26	cps
Ytterbium	172-1	93	100	130	108	18.12	cps
Ytterbium	172-2	43	43	43	43	0.00	cps
Ytterbium	176-1	2174	2000	2170	2115	4.69	cps
Ytterbium	176-2	327	310	343	327	5.10	cps
Yttrium	89-1	31703748	30483279	30095424	30760817	2.73	cps
Yttrium	89-2	2192880	2230967	2217447	2213765	0.87	cps
Zinc	66-2	270	293	277	280	4.29	cps
Zirconium	90-1	1153	983	1050	1062	8.06	cps
Zirconium	91-1	190	207	163	187	11.71	cps

Lab Sample ID :CCV008Instrumnet Name :P8Client Sample ID :CCV008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Date & Time Ac	quireu . 202	.5-02-00 20.22.50	DalaFii	e name.	133CCV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3817099	3713247	3714835	3748394	1.59	cps
Antimony	121-1	8134081	8149523	8090330	8124644	0.38	cps
Arsenic	75-2	173454	174313	174684	174151	0.36	cps
Barium	135-1	9686434	9859643	9741236	9762438	0.91	cps
Barium	137-1	16711770	17022066	16993717	16909184	1.01	cps
Beryllium	9-1	3050084	3023258	3076331	3049891	0.87	cps
Bismuth	209-1	11145529	10925203	11002541	11024424	1.01	cps
Bismuth	209-2	4876597	4873621	4802522	4850913	0.86	cps
Bromine	81-1	5905	5855	6088	5949	2.07	cps
Cadmium	108-1	159506	159100	158186	158931	0.43	cps
Cadmium	106-1	234035	233138	232795	233323	0.27	cps
Cadmium	111-1	1971705	2000982	1976026	1982904	0.80	cps
Calcium	43-1	14137429	14149540	14361845	14216271	0.89	cps
Calcium	44-1	227965877	232184457	229220037	229790123	0.94	cps
Carbon	12-1	5790350	5891776	6091438	5924521	2.59	cps
Carbon	12-2	45500	46135	45671	45769	0.72	cps
Chlorine	35-1	519554	514665	512425	515548	0.71	cps
Chlorine	35-2	1933	2004	2084	2007	3.74	cps
Chromium	52-2	1968952	1948750	1942404	1953369	0.71	cps
Cobalt	59-2	3680225	3642349	3697421	3673332	0.77	cps
Copper	63-2	26807432	26661860	26691086	26720126	0.29	cps
Dysprosium	156-1	490	427	510	476	9.15	cps
Dysprosium	156-2	133	73	117	108	28.74	cps
Erbium	164-1	413	477	357	416	14.45	cps
Erbium	164-2	140	177	153	157	11.85	cps
Gadolinium	160-1	443	460	430	444	3.38	cps
Gadolinium	160-2	170	100	183	151	29.62	cps
Holmium	165-1	19573912	18892531	19067247	19177897	1.85	cps
Holmium	165-2	7108152	7044166	7060311	7070876	0.47	cps
Indium	115-1	14932032	14855530	14950625	14912729	0.34	cps
Indium	115-2	1543125	1484039	1520091	1515752	1.96	cps
Iron	54-2	19713612	19542981	19283018	19513204	1.11	cps
Iron	56-2	355173168	358402248	352598981	355391466	0.82	cps
Iron	57-2	9060862	8999774	9055954	9038863	0.38	cps
Krypton	83-1	323	307	287	306	6.01	cps
Lead	206-1	30506098	30585222	30315508	30468943	0.46	cps

Lab Sample ID :CCV008Instrumnet Name :P8Client Sample ID :CCV008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	26117323	26331855	25854298	26101159	0.92	cps
Lead	208-1	121084767	121125130	119938365	120716087	0.56	cps
Lithium	6-1	9082385	8919122	8773148	8924885	1.73	cps
Magnesium	24-2	66068654	66332417	64840206	65747092	1.21	cps
Manganese	55-2	7764332	7895635	7744172	7801380	1.05	cps
Molybdenum	94-1	29281030	30117688	29261425	29553381	1.65	cps
Molybdenum	95-1	42382280	42102794	41398075	41961050	1.21	cps
Molybdenum	96-1	46340876	46731189	46649891	46573985	0.44	cps
Molybdenum	97-1	25921270	25913224	26484596	26106363	1.25	cps
Molybdenum	98-1	67690796	68370292	68578691	68213260	0.68	cps
Neodymium	150-1	663	737	700	700	5.24	cps
Neodymium	150-2	60	53	47	53	12.50	cps
Nickel	60-2	1067516	1061134	1068222	1065624	0.37	cps
Phosphorus	31-2	36379	36011	36332	36241	0.55	cps
Potassium	39-2	19343522	19117490	18966298	19142437	0.99	cps
Rhodium	103-1	13784182	13266755	13773599	13608179	2.17	cps
Rhodium	103-2	5537415	5542928	5493798	5524714	0.49	cps
Scandium	45-1	11358769	11226323	11366600	11317231	0.70	cps
Scandium	45-2	231236	228763	230577	230192	0.56	cps
Selenium	82-1	122583	122963	121191	122246	0.76	cps
Selenium	77-2	2220	2284	2084	2196	4.66	cps
Selenium	78-2	7319	7605	7545	7490	2.02	cps
Silicon	28-1	7478043	7340813	7316448	7378435	1.18	cps
Silver	107-1	9886458	9942735	9686405	9838533	1.37	cps
Silver	109-1	9324890	9258465	9084443	9222599	1.35	cps
Sodium	23-2	135147358	133116521	132889331	133717737	0.93	cps
Strontium	86-1	2720542	2774434	2785511	2760162	1.26	cps
Strontium	88-1	23375475	23859483	24083481	23772813	1.52	cps
Sulfur	34-1	1629236	1603090	1599335	1610554	1.01	cps
Terbium	159-1	19844679	19455556	19292836	19531024	1.45	cps
Terbium	159-2	6825766	6852299	6779706	6819257	0.54	cps
Thallium	203-1	7573716	7518244	7376341	7489433	1.36	cps
Thallium	205-1	18057735	18142651	18084056	18094814	0.24	cps
Tin	118-1	6464690	6451611	6452107	6456136	0.11	cps
Titanium	47-1	13496406	13390980	13667136	13518174	1.03	cps
Uranium	238-1	24885900	24664076	24403866	24651281	0.98	cps

Lab Sample ID :CCV008Instrumnet Name :P8Client Sample ID :CCV008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:22:56 DataFile Name: 133CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1563366	1576872	1568775	1569671	0.43	cps
Ytterbium	172-1	503	413	493	470	10.50	cps
Ytterbium	172-2	173	237	173	194	18.80	cps
Ytterbium	176-1	37894	38834	38733	38487	1.34	cps
Ytterbium	176-2	13811	13247	14191	13750	3.46	cps
Yttrium	89-1	27638800	27548702	27510380	27565960	0.24	cps
Yttrium	89-2	2083211	2055876	2036625	2058570	1.14	cps
Zinc	66-2	2914623	2913864	2920902	2916463	0.13	cps
Zirconium	90-1	14717945	15128159	14548981	14798362	2.01	cps
Zirconium	91-1	3291743	3380108	3273550	3315134	1.72	cps

Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

Date & Time / to	quircu . Zoz	0 02 00 20.20.40	Datai	iic i vairie .	10+00BL.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	163	157	180	167	7.21	cps
Antimony	121-1	3060	2717	2270	2683	14.77	cps
Arsenic	75-2	7	7	20	11	69.25	cps
Barium	135-1	657	473	403	511	25.60	cps
Barium	137-1	1073	870	677	873	22.71	cps
Beryllium	9-1	1951	1841	1662	1818	8.02	cps
Bismuth	209-1	12847865	12857383	12914101	12873116	0.28	cps
Bismuth	209-2	5426447	5395756	5546765	5456322	1.46	cps
Bromine	81-1	5625	5655	5598	5626	0.50	cps
Cadmium	108-1	53	50	23	42	38.95	cps
Cadmium	106-1	8716	8429	8399	8515	2.05	cps
Cadmium	111-1	6227	6012	5993	6078	2.14	cps
Calcium	43-1	1373	1157	1083	1205	12.52	cps
Calcium	44-1	45532	42479	39995	42669	6.50	cps
Carbon	12-1	4162319	4038204	3967446	4055990	2.43	cps
Carbon	12-2	24604	24768	25379	24917	1.64	cps
Chlorine	35-1	444557	435469	431245	437090	1.56	cps
Chlorine	35-2	1640	1637	1740	1672	3.51	cps
Chromium	52-2	830	863	893	862	3.67	cps
Cobalt	59-2	190	223	170	194	13.86	cps
Copper	63-2	3791	3921	3841	3851	1.70	cps
Dysprosium	156-1	17	23	17	19	20.36	cps
Dysprosium	156-2	3	7	7	6	34.70	cps
Erbium	164-1	113	100	133	116	14.52	cps
Erbium	164-2	23	40	43	36	30.14	cps
Gadolinium	160-1	113	123	103	113	8.82	cps
Gadolinium	160-2	13	27	17	19	36.75	cps
Holmium	165-1	20976475	20640560	20079916	20565650	2.20	cps
Holmium	165-2	7305318	7158543	7457284	7307048	2.04	cps
Indium	115-1	17348882	16922505	16938079	17069822	1.42	cps
Indium	115-2	1698996	1661037	1730608	1696880	2.05	cps
Iron	54-2	1000	1073	1193	1089	8.96	cps
Iron	56-2	16066	16807	17541	16804	4.39	cps
Iron	57-2	453	377	397	409	9.72	cps
Krypton	83-1	323	197	300	273	24.66	cps
Lead	206-1	6071	5545	4834	5483	11.32	cps

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Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

2.02 1.11 .03 .86 5.45 7.70 .3.67 .4.31 .2.01 .1.06 .4.60 .73.21 .1.11	cps
1.11 .03 .86 5.45 7.70 3.67 4.31 22.01 11.06 4.60 73.21 5.11	cps
.03 .86 5.45 7.70 3.67 4.31 2.01 11.06 4.60 73.21 5.11	cps
.86 5.45 7.70 .3.67 .4.31 .2.01 .1.06 .4.60 .73.21 .1.11	cps
5.45 7.70 3.67 4.31 2.01 1.06 4.60 73.21 5.11	cps
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11.06 4.60 73.21 5.11 11.96	cps cps cps cps
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.22	cps
.98	cps
2.48	cps
72.04	cps
73.21	cps
9.52	cps
0.25	cps
7.69	cps
7.75	cps
.89	cps
1.25	cps
4.47	cps
0.26	cps
2.84	cps
2.53	cps
6.20	cps
4.61	cps
.83	cps
2.24	cps
:	cps
4	3.47 26 84 53 3.20 4.61 83

Lab Sample ID :CCB008Instrumnet Name :P8Client Sample ID :CCB008Dilution Factor :1

Date & Time Acquired: 2025-02-06 20:25:40 DataFile Name: 134CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	43	33	53	43	23.08	cps	_
Ytterbium	172-1	107	120	107	111	6.93	cps	
Ytterbium	172-2	53	57	80	63	22.94	cps	
Ytterbium	176-1	1970	1803	1937	1903	4.63	cps	
Ytterbium	176-2	337	277	313	309	9.79	cps	
Yttrium	89-1	30796411	30220110	29995989	30337503	1.36	cps	
Yttrium	89-2	2148080	2147751	2264305	2186712	3.07	cps	
Zinc	66-2	683	690	713	696	2.26	cps	
Zirconium	90-1	2384	2224	1737	2115	15.93	cps	
Zirconium	91-1	460	507	373	447	15.15	cps	

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8021125 MS.b\

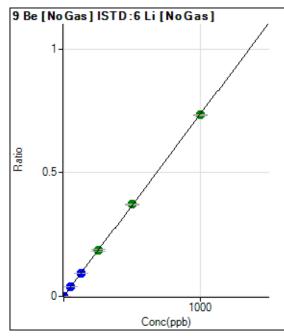
Analysis File: P8021125 MS.batch.bin
DA Date-Time: 2025-02-11 16:41:16

Calibration Title:

Calibration Method: External Calibration

VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-02-11 12:05:13
2	005CALS.d	S02	2025-02-11 12:08:35
3	006CALB.d	S03	2025-02-11 12:11:58
4	007CALS.d	S04	2025-02-11 12:15:02
5	008CALS.d	S05	2025-02-11 12:18:01
6	009CALS.d	S06	2025-02-11 12:20:51
7	010CALS.d	S07	2025-02-11 12:23:38
8	011CALS d	508	2025-02-11 12:26:23

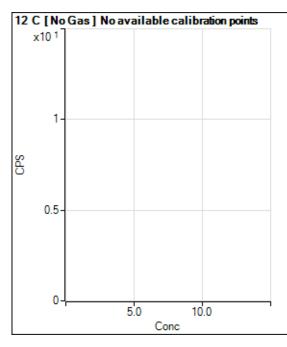


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	361.63	0.0000	Р	1.2
2		1.000	1.074	6278.90	0.0008	Р	1.1
3		50.000	51.377	280845.21	0.0379	Р	2.5
4		125.000	125.718	687140.12	0.0927	Р	2.1
5		250.000	253.365	1368162.02	0.1867	Α	2.4
6		500.000	505.733	2695154.28	0.3726	Α	0.9
7		1000.000	996.134	5226624.33	0.7338	Α	0.3
8				1942.39	0.0003	Р	10.4

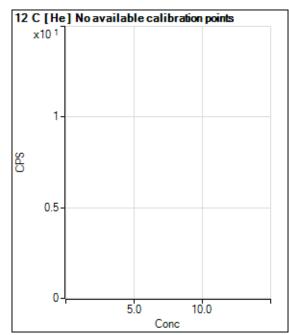
y = 7.3661E-004 \* x + 4.8717E-005

R = 1.0000DL = 0.00238

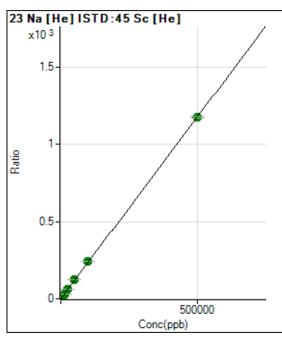
BEC = 0.06614



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				3360557.45		Α	1.2
2				3369094.92		Α	0.1
3				3438303.32		Α	0.4
4				3592506.75		Α	0.6
5				3714614.04		Α	1.3
6				3972299.70		Α	1.7
7				4509665.94		Α	3.1
8				4069612.27		Α	2.3



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				22745.42		Р	1.3
2				22698.71		Р	1.5
3				23193.93		Р	0.5
4				24332.42		Р	1.1
5				26180.01		Р	1.6
6				28867.23		Р	1.0
7				34647.49		Р	2.1
8				38443.49		Р	0.4



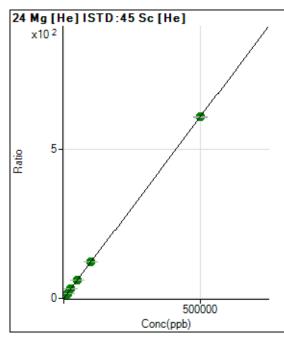
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	56834.43	0.3075	Р	1.5
2		500.000	541.926	296212.48	1.5827	Р	0.9
3		5000.000	5395.509	2384490.40	13.0036	Α	1.7
4		12500.000	13008.194	5714264.08	30.9169	Α	0.1
5		25000.000	26266.120	11455199.41	62.1139	Α	2.8
6		50000.000	52959.770	22737010.22	124.9263	Α	0.9
7		100000.00	103433.66	44802141.00	243.6956	Α	0.1
8		500000.00	498937.28	205456994.7	1,174.348	Α	1.2

y = 0.0024 \* x + 0.3075

R = 1.0000

DL = 5.923

BEC = 130.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	4133.96	0.0224	Р	4.3
2		500.000	535.768	126672.02	0.6768	Р	0.5
3		5000.000	5346.022	1201561.62	6.5525	Α	1.4
4		12500.000	12958.730	2929735.09	15.8514	Α	0.7
5		25000.000	25946.260	5849317.27	31.7157	Α	2.8
6		50000.000	51175.425	11381502.05	62.5332	Α	0.4
7		100000.00	100144.98	22493654.67	122.3495	Α	0.6
8		500000.00	499791.18	106819078.4	610.5175	Α	0.3

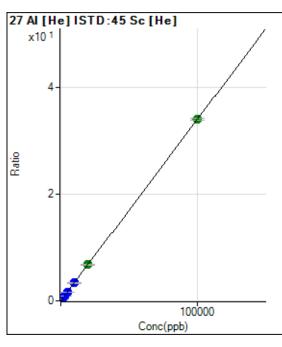
y = 0.0012 \* x + 0.0224

R = 1.0000

DL = 2.376

BEC = 18.3

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	113.33	0.0006	Р	11.1
2		20.000	18.890	1317.85	0.0070	Р	4.6
3		1000.000	1002.990	62685.38	0.3418	Р	0.2
4		2500.000	2460.172	154800.30	0.8376	Р	8.0
5		5000.000	4942.658	310252.35	1.6821	Р	2.1
6		10000.000	9829.508	608743.34	3.3446	Р	0.5
7		20000.000	19944.046	1247461.68	6.7856	Α	1.6
8		100000.00	100032.07	5954172.07	34.0317	Α	0.9

y = 3.4020E-004 \* x + 6.1331E-004

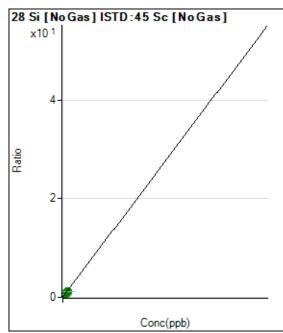
R = 1.0000

DL = 0.5992

BEC = 1.803

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	513265.19	0.0490	Р	0.6
2		10.000	6.376	590083.28	0.0567	Р	0.4
3		50.000	51.081	1168455.04	0.1105	Α	8.0
4		125.000	128.798	2134505.19	0.2041	Α	1.2
5		250.000	253.013	3706115.15	0.3536	Α	2.6
6		500.000	512.571	6836667.26	0.6661	Α	2.9
7		1000.000	992.469	12718038.98	1.2438	Α	1.5
8				670331.67	0.0697	Р	2.2

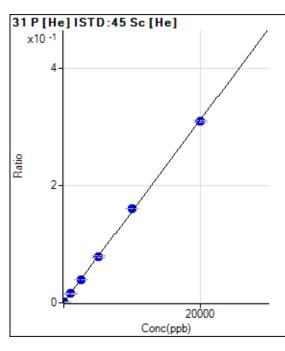
y = 0.0012 \* x + 0.0490

R = 0.9999

DL = 0.7172

BEC = 40.75

Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	-11.458	86.67	0.0005	Р	16.3
2		0.000	11.458	154.45	0.0008	Р	18.3
3		1000.000	982.833	2924.77	0.0160	Р	5.7
4		2500.000	2513.659	7354.15	0.0398	Р	0.4
5		5000.000	4977.904	14412.81	0.0782	Р	3.8
6		10000.000	10324.689	29379.74	0.1614	Р	0.3
7		20000.000	19842.330	56922.18	0.3096	Р	0.9
8				88.89	0.0005	Р	18.3

y = 1.5572E-005 \* x + 6.4699E-004

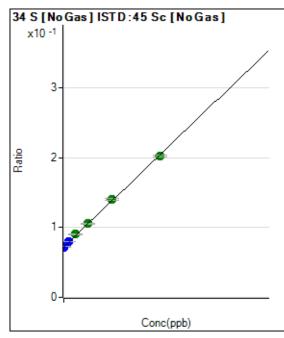
R = 0.9998

DL = 21.95

BEC = 41.55

Weight: <None>

Min Conc: 0



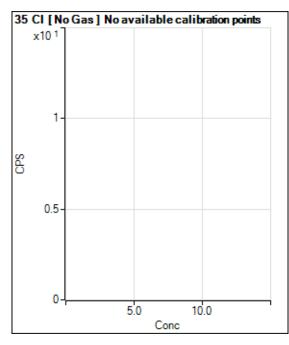
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	-122.073	746544.49	0.0713	Р	0.2
2		0.000	122.073	758825.73	0.0729	Р	0.2
3		1000.000	1186.137	844998.56	0.0799	Р	0.6
4		2500.000	2786.306	946100.82	0.0905	Α	1.5
5		5000.000	5051.511	1104109.44	0.1053	Α	2.0
6		10000.000	10299.215	1435460.71	0.1398	Α	1.9
7		20000.000	19792.420	2067919.90	0.2022	Α	1.3
8				682747.53	0.0710	Р	1.3

y = 6.5727E-006 \* x + 0.0721

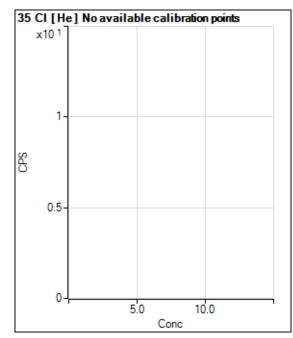
R = 0.9997

DL = 52.29

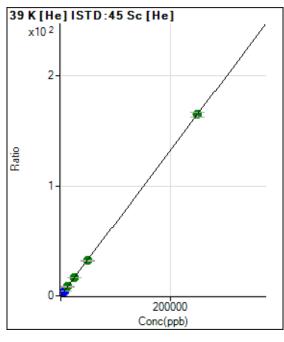
BEC = 1.098E + 04



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				127507.58		Р	0.4
2				127300.34		Р	1.0
3				126941.70		Р	0.1
4				128789.58		Р	0.7
5				132751.66		Р	1.2
6				143977.44		Р	1.3
7				165127.62		Р	1.8
8				125792.96		Р	1.6



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				496.68		Р	4.4
2				426.68		Р	6.8
3				451.12		Р	10.6
4				468.90		Р	15.1
5				474.46		Р	5.4
6				556.68		Р	2.2
7				630.02		Р	7.4
8				472.23		Р	12.0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	9404.26	0.0509	Р	2.0
2		500.000	511.948	72701.71	0.3885	Р	0.9
3		2500.000	2515.987	313557.84	1.7099	Р	8.0
4		6250.000	6130.526	756536.93	4.0933	Р	0.6
5		12500.000	12535.253	1533826.82	8.3166	Α	2.5
6		25000.000	25173.078	3030279.68	16.6499	Α	1.2
7		50000.000	48434.432	5880779.98	31.9883	Α	0.9
8		250000.00	250296.84	28881381.23	165.0952	Α	2.5

y = 6.5939E-004 \* x + 0.0509

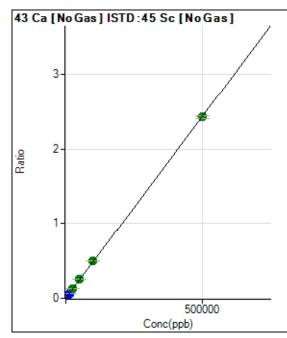
R = 1.0000

DL = 4.646

BEC = 77.16

Weight: <None>

Min Conc: 0



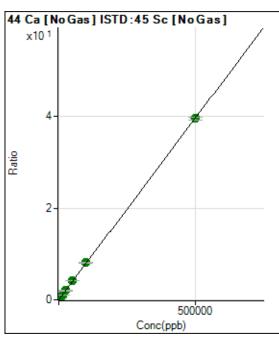
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	418.90	0.0000	Р	8.2
2		500.000	557.274	28606.29	0.0027	Р	1.0
3		5000.000	5237.620	269627.71	0.0255	Р	1.6
4		12500.000	12948.521	658945.87	0.0630	Р	1.0
5		25000.000	25865.046	1318677.40	0.1258	Α	2.3
6		50000.000	52812.055	2636408.17	0.2569	Α	2.6
7		100000.00	102909.14	5117125.24	0.5005	Α	1.9
8		500000.00	499080.06	23340811.32	2.4270	Α	1.8

y = 4.8628E-006 \* x + 4.0045E-005

R = 1.0000DL = 2.029

BEC = 8.235

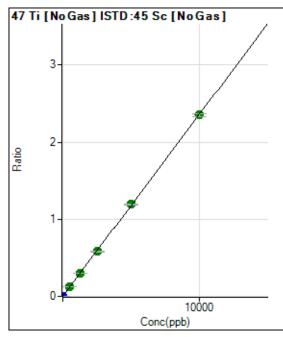
Weight: <None>
Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	29255.37	0.0028	Р	1.1
2		500.000	550.279	482897.91	0.0464	Р	0.9
3		5000.000	5237.700	4418528.03	0.4180	Α	1.7
4		12500.000	12884.254	10712373.38	1.0243	Α	0.1
5		25000.000	25348.293	21091365.24	2.0124	Α	2.7
6		50000.000	52048.012	42391909.09	4.1292	Α	1.5
7		100000.00	102351.35	83002634.32	8.1172	Α	1.1
8		500000.00	499295.47	380710749.8	39.5869	Α	1.9

y = 7.9280E-005 \* x + 0.0028

R = 1.0000 DL = 1.132 BEC = 35.26



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	640.08	0.0001	Р	15.8
2		5.000	5.289	13608.75	0.0013	Р	0.9
3		500.000	512.437	1277689.90	0.1209	Α	1.8
4		1250.000	1266.661	3124153.88	0.2987	Α	0.9
5		2500.000	2461.336	6083835.88	0.5804	Α	1.1
6		5000.000	5058.425	12245010.10	1.1927	Α	1.2
7		10000.000	9977.749	24056862.42	2.3526	Α	1.3
8				4429.62	0.0005	Р	3.8

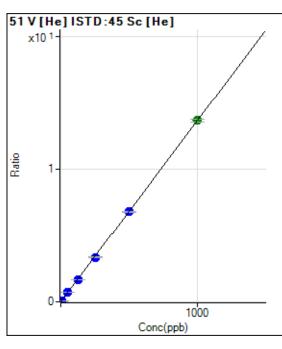
y = 2.3578E-004 \* x + 6.1210E-005

R = 1.0000

DL = 0.1232

BEC = 0.2596

Weight: <None>
Min Conc: 0



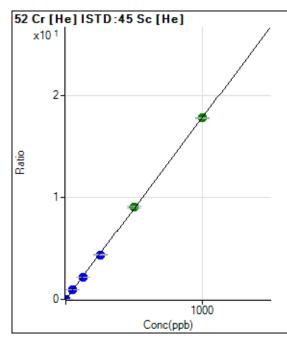
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	15.55	0.0001	Р	45.5
2		5.000	5.287	13518.69	0.0722	Р	1.4
3		50.000	50.766	127068.63	0.6929	Р	0.7
4		125.000	124.016	312836.60	1.6926	Р	0.2
5		250.000	246.737	621038.67	3.3674	Р	2.7
6		500.000	497.839	1236563.13	6.7943	Р	1.2
7		1000.000	1001.980	2513928.26	13.6746	Α	1.4
8				721.14	0.0041	Р	5.7

y = 0.0136 \* x + 8.4396E-005

R = 1.0000

DL = 0.008434

BEC = 0.006184



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	746.69	0.0040	Р	5.8
2		2.000	2.074	7658.78	0.0409	Р	1.3
3		50.000	50.527	165473.33	0.9024	Р	0.7
4		125.000	123.544	406715.60	2.2006	Р	0.4
5		250.000	243.673	799782.35	4.3364	Р	2.2
6		500.000	506.313	1639015.11	9.0059	Α	2.1
7		1000.000	998.581	3264720.71	17.7580	Α	0.5
8				10331.59	0.0590	Р	1.9

y = 0.0178 \* x + 0.0040

R = 0.9999

DL = 0.03972

BEC = 0.2271

Weight: <None>
Min Conc: 0

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	2-			-/-
Ratio	1-			<b>≠</b>
	<del>Г</del>	_	200000	
		C	onc(ppb)	)

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	363.34	0.0020	Р	15.0
2		50.000	56.743	7796.63	0.0417	Р	1.1
3		2500.000	2696.478	346196.43	1.8879	Р	0.6
4		6250.000	6564.854	848945.15	4.5934	Р	1.1
5		12500.000	13288.875	1714697.87	9.2961	Α	1.8
6		25000.000	26612.619	3387818.60	18.6147	Α	1.5
7		50000.000	51759.812	6655597.40	36.2025	Α	0.4
8		250000.00	249437.49	30521899.54	174.4570	Α	1.2

y = 6.9939E-004 \* x + 0.0020

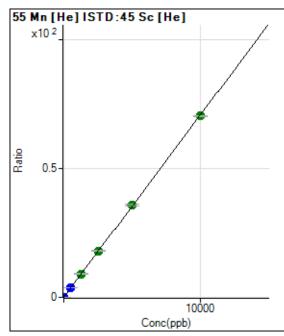
R = 1.0000

DL = 1.267

 $\mathsf{BEC} = 2.814$ 

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	164.45	0.0009	Р	13.9
2		1.000	1.039	1540.10	0.0082	Р	3.3
3		500.000	514.385	666753.06	3.6359	Р	0.4
4		1250.000	1288.953	1683574.99	9.1096	Α	1.8
5		2500.000	2554.575	3330009.78	18.0535	Α	1.5
6		5000.000	5051.624	6497271.29	35.6995	Α	1.6
7		10000.000	9954.956	12933611.89	70.3502	Α	0.3
8				5867.92	0.0335	Р	2.6

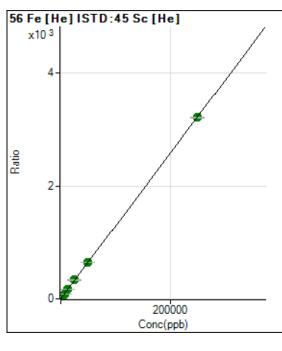
y = 0.0071 \* x + 8.8853E-004

R = 1.0000

DL = 0.05231

BEC = 0.1257

Weight: <None>
Min Conc: 0



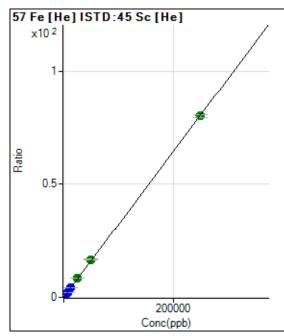
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	5986.86	0.0324	Р	1.5
2		50.000	55.418	139578.56	0.7458	Р	0.7
3		2500.000	2687.743	6350587.89	34.6310	Α	8.0
4		6250.000	6542.381	15571277.27	84.2508	Α	8.0
5		12500.000	12986.197	30836203.98	167.2004	Α	2.6
6		25000.000	25941.773	60784408.54	333.9742	Α	1.1
7		50000.000	50686.796	119961205.9	652.5106	Α	0.3
8		250000.00	249734.96	562514476.0	3,214.807	Α	0.7

y = 0.0129 \* x + 0.0324

R = 1.0000

DL = 0.1131

 $\mathsf{BEC} = 2.516$ 



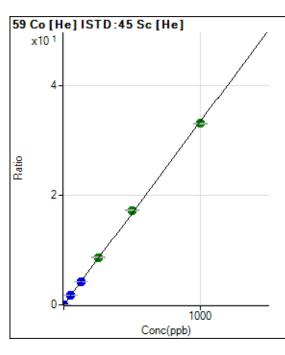
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	137.78	0.0007	Р	10.4
2		50.000	54.915	3446.01	0.0184	Р	2.5
3		2500.000	2653.277	156656.71	0.8543	Р	0.5
4		6250.000	6481.522	385499.25	2.0858	Р	0.7
5		12500.000	12791.724	759108.12	4.1157	Р	2.0
6		25000.000	26686.958	1562671.56	8.5857	Α	8.0
7		50000.000	51971.331	3073859.16	16.7194	Α	1.2
8		250000.00	249415.13	14037437.98	80.2350	Α	1.6

y = 3.2169E-004 \* x + 7.4458E-004

R = 1.0000DL = 0.722

BEC = 2.315

Weight: <None>
Min Conc: 0

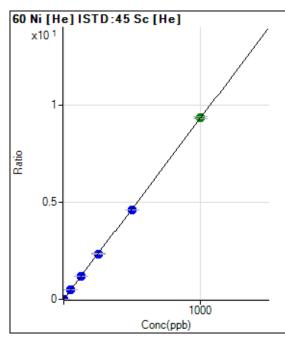


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	174.45	0.0009	Р	11.1
2		1.000	1.137	7277.47	0.0389	Р	2.1
3		50.000	52.741	322956.36	1.7612	Р	8.0
4		125.000	127.362	785770.42	4.2516	Р	1.0
5		250.000	257.217	1583511.76	8.5854	Α	2.1
6		500.000	515.545	3131815.65	17.2069	Α	0.6
7		1000.000	989.991	6074573.17	33.0413	Α	8.0
8				12716.88	0.0727	Р	1.8

y = 0.0334 \* x + 9.4281E-004

R = 0.9998 DL = 0.009399

BEC = 0.02825



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	911.15	0.0049	Р	3.1
2		1.000	1.088	2815.86	0.0150	Р	1.5
3		50.000	52.412	90244.72	0.4921	Р	8.0
4		125.000	127.271	219562.39	1.1880	Р	0.9
5		250.000	250.554	430456.00	2.3340	Р	2.4
6		500.000	494.517	837554.47	4.6017	Р	0.4
7		1000.000	1002.199	1713577.08	9.3209	Α	1.1
8				6671.63	0.0381	Р	3.2

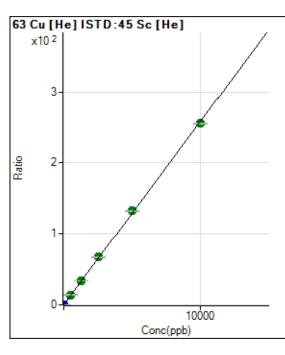
y = 0.0093 \* x + 0.0049

R = 1.0000

DL = 0.04913

BEC = 0.5304

Weight: <None>
Min Conc: 0



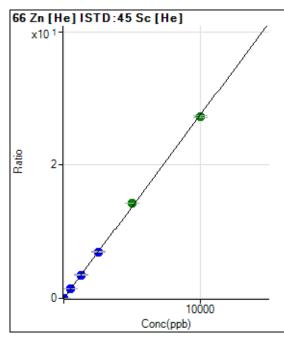
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	3408.22	0.0184	Р	4.3
2		2.000	2.254	14341.79	0.0766	Р	1.1
3		500.000	549.997	2607152.39	14.2175	Α	1.0
4		1250.000	1309.061	6249460.25	33.8139	Α	1.1
5		2500.000	2606.155	12411753.15	67.3005	Α	2.8
6		5000.000	5119.625	24058980.75	132.1897	Α	8.0
7		10000.000	9903.766	47009129.30	255.6999	Α	8.0
8				11176.73	0.0639	Р	2.1

y = 0.0258 \* x + 0.0184

R = 0.9998

DL = 0.09155

BEC = 0.7144



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	195.56	0.0011	Р	19.7
2		2.000	5.719	3142.60	0.0168	Р	3.5
3		500.000	529.429	267299.64	1.4576	Р	0.9
4		1250.000	1280.881	651513.04	3.5251	Р	8.0
5		2500.000	2534.639	1286339.64	6.9745	Р	2.2
6		5000.000	5189.570	2598898.36	14.2788	Α	0.1
7		10000.000	9891.223	5003111.38	27.2142	Α	0.9
8				2770.30	0.0158	Р	5.2

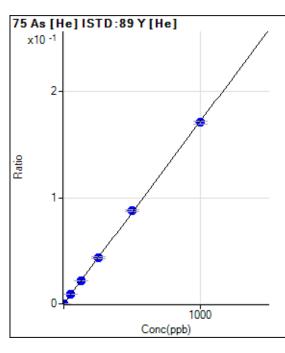
y = 0.0028 \* x + 0.0011

R = 0.9997

DL = 0.228

BEC = 0.3851

Weight: <None>
Min Conc: 0



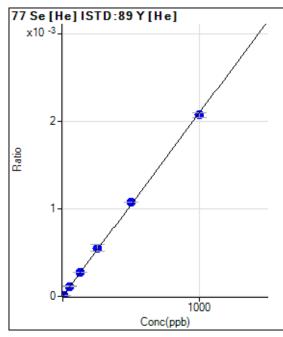
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	11.11	0.0000	Р	86.6
2		1.000	1.035	321.12	0.0002	Р	6.4
3		50.000	51.271	15063.70	0.0088	Р	1.3
4		125.000	125.336	36952.74	0.0215	Р	0.1
5		250.000	254.368	74181.62	0.0437	Р	4.4
6		500.000	510.113	146407.79	0.0877	Р	1.7
7		1000.000	993.746	289459.19	0.1708	Р	1.3
8				161.11	0.0001	Р	11.4

y = 1.7185E-004 \* x + 6.4940E-006

R = 0.9999

DL = 0.09818

BEC = 0.03779



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	1.11	0.0000	Р	173.2
2		5.000	4.860	18.89	0.0000	Р	26.6
3		50.000	53.081	191.11	0.0001	Р	8.7
4		125.000	130.536	470.01	0.0003	Р	2.6
5		250.000	264.367	938.93	0.0006	Р	12.2
6		500.000	513.088	1795.69	0.0011	Р	0.6
7		1000.000	989.019	3512.70	0.0021	Р	2.4
8				5.56	0.0000	Р	91.3

y = 2.0943E-006 \* x + 6.4547E-007

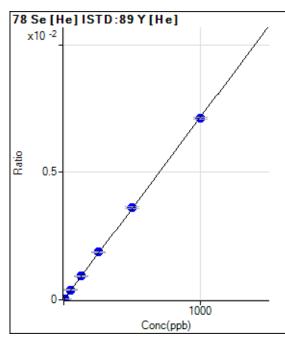
R = 0.9998

DL = 1.601

BEC = 0.3082

Weight: <None>

Min Conc: 0



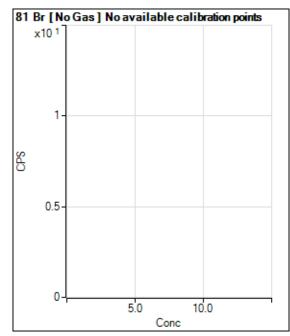
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	3.33	0.0000	Р	99.6
2		5.000	5.251	68.89	0.0000	Р	19.6
3		50.000	53.807	661.13	0.0004	Р	6.4
4		125.000	130.981	1610.11	0.0009	Р	3.7
5		250.000	261.912	3183.72	0.0019	Р	1.4
6		500.000	503.494	6016.91	0.0036	Р	2.2
7		1000.000	994.336	12056.36	0.0071	Р	1.1
8				15.56	0.0000	Р	52.3

y = 7.1519E-006 \* x + 1.9431E-006

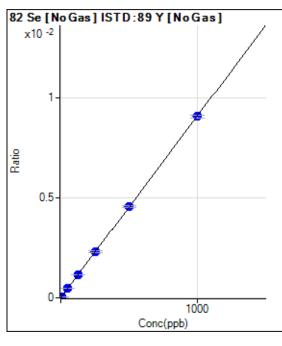
R = 0.9999

DL = 0.8116

BEC = 0.2717



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				3632.73		Р	4.5
2				3846.13		Р	1.9
3				3836.12		Р	1.4
4				3917.26		Р	1.7
5				3969.49		Р	2.4
6				3911.70		Р	1.8
7				4038.40		Р	3.3
8				4264.02		Р	2.2



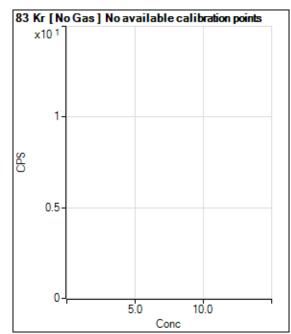
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	-35.56	0.0000	Р	-108.
2		5.000	5.690	1360.11	0.0001	Р	6.7
3		50.000	51.353	12673.84	0.0005	Р	3.7
4		125.000	125.574	30977.02	0.0011	Р	0.3
5		250.000	255.037	62439.44	0.0023	Р	3.5
6		500.000	500.836	122328.15	0.0046	Р	1.9
7		1000.000	998.180	240507.81	0.0091	Р	1.5
8				-31.12	0.0000	Р	-86.4

y = 9.1072E-006 \* x - 1.3157E-006

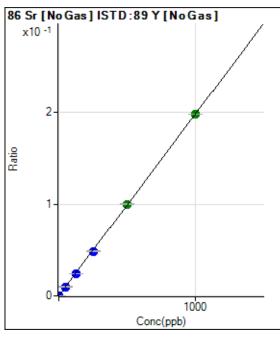
R = 1.0000

DL = 0.4707

BEC = -0.1445



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				285.56		Р	17.3
2				291.12		Р	15.6
3				262.23		Р	15.9
4				277.78		Р	5.9
5				264.45		Р	9.5
6				291.12		Р	0.7
7				317.79		Р	4.2
8				357.79		Р	6.9



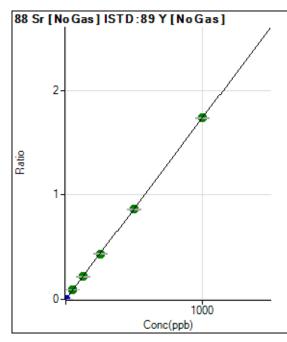
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	781.14	0.0000	Р	6.5
2		1.000	1.039	6325.94	0.0002	Р	2.4
3		50.000	50.116	270837.62	0.0100	Р	1.2
4		125.000	123.384	664050.36	0.0245	Р	1.2
5		250.000	245.451	1309660.60	0.0487	Р	2.7
6		500.000	504.909	2685975.69	0.1001	Α	1.5
7		1000.000	998.879	5240817.01	0.1980	Α	0.2
8				15965.88	0.0006	Р	1.7

y = 1.9824E-004 \* x + 2.8879E-005

R = 1.0000

DL = 0.02836

BEC = 0.1457



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	2825.87	0.0001	Р	5.6
2		1.000	1.051	51967.28	0.0019	Р	0.6
3		50.000	51.020	2410345.68	0.0887	Α	1.4
4		125.000	125.158	5894713.10	0.2174	Α	1.2
5		250.000	250.752	11713536.63	0.4354	Α	2.0
6		500.000	498.039	23198508.54	0.8647	Α	1.0
7		1000.000	1000.722	45973874.87	1.7374	Α	0.6
8				136274.86	0.0055	Р	8.0

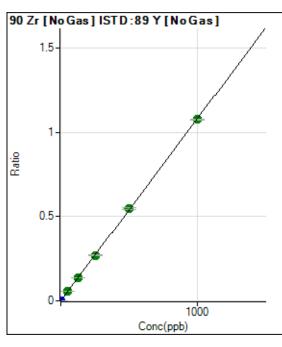
y = 0.0017 \* x + 1.0448E-004

R = 1.0000

DL = 0.01018

BEC = 0.06018

Weight: <None>
Min Conc: 0



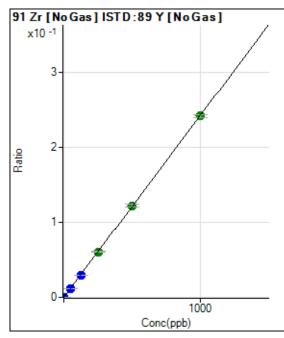
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	913.37	0.0000	Р	0.9
2		1.000	1.028	30819.64	0.0011	Р	0.7
3		50.000	51.000	1497319.02	0.0551	Α	2.0
4		125.000	125.544	3675817.06	0.1356	Α	1.3
5		250.000	250.667	7280292.88	0.2706	Α	2.2
6		500.000	506.355	14665439.92	0.5466	Α	1.7
7		1000.000	996.538	28467033.47	1.0758	Α	8.0
8				46238.69	0.0019	Р	0.2

y = 0.0011 \* x + 3.3766E-005

R = 1.0000

DL = 0.0008525

BEC = 0.03128



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	174.45	0.0000	Р	10.5
2		1.000	1.011	6780.59	0.0003	Р	2.2
3		50.000	49.304	325406.46	0.0120	Р	2.6
4		125.000	121.120	797307.97	0.0294	Р	1.0
5		250.000	250.640	1636637.43	0.0608	Α	2.2
6		500.000	504.843	3287332.35	0.1225	Α	2.3
7		1000.000	997.938	6409197.75	0.2422	Α	1.4
8				10289.43	0.0004	Р	0.9

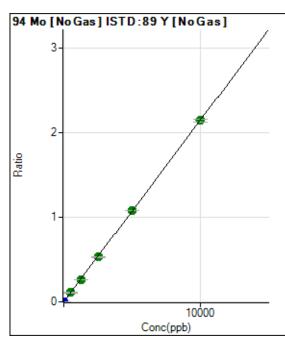
y = 2.4270E-004 \* x + 6.4489E-006

R = 1.0000

DL = 0.008347

BEC = 0.02657

Weight: <None>
Min Conc: 0



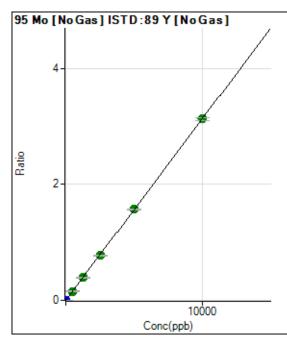
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	391.12	0.0000	Р	11.5
2		5.000	6.230	36412.05	0.0014	Р	1.0
3		500.000	504.362	2942752.00	0.1083	Α	2.7
4		1250.000	1234.020	7183080.38	0.2649	Α	0.1
5		2500.000	2481.328	14327663.40	0.5326	Α	2.3
6		5000.000	5027.630	28951671.24	1.0791	Α	8.0
7		10000.000	9992.632	56753204.71	2.1448	Α	1.4
8				40232.46	0.0016	Р	0.9

y = 2.1464E-004 \* x + 1.4461E-005

R = 1.0000

DL = 0.02315

BEC = 0.06737



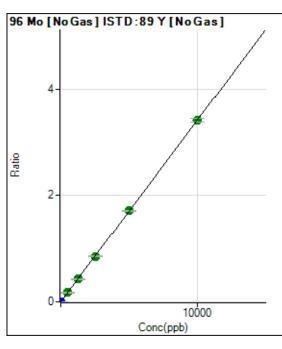
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	152.23	0.0000	Р	12.5
2		5.000	5.167	43726.33	0.0016	Р	0.6
3		500.000	502.824	4278614.90	0.1574	Α	1.4
4		1250.000	1248.540	10597854.98	0.3908	Α	1.0
5		2500.000	2487.536	20947410.10	0.7786	Α	2.1
6		5000.000	5012.688	42095429.37	1.5691	Α	1.1
7		10000.000	9996.813	82800687.10	3.1292	Α	1.4
8				41343.55	0.0017	Р	1.8

y = 3.1302E-004 \* x + 5.6281E-006

R = 1.0000DL = 0.006769

BEC = 0.01798

Weight: <None>
Min Conc: 0

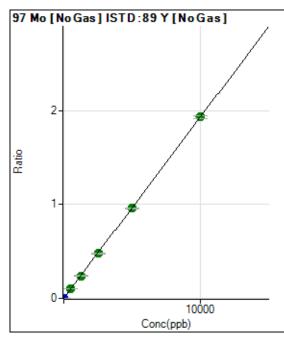


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	245.56	0.0000	Р	6.5
2		5.000	5.321	49197.85	0.0018	Р	1.4
3		500.000	506.172	4699074.41	0.1729	Α	1.3
4		1250.000	1246.948	11548227.88	0.4259	Α	0.6
5		2500.000	2496.006	22931215.21	0.8524	Α	2.5
6		5000.000	5008.971	45893952.65	1.7106	Α	1.3
7		10000.000	9996.586	90334759.76	3.4140	Α	2.0
8				47771.86	0.0019	Р	1.7

y = 3.4151E-004 \* x + 9.0788E-006

R = 1.0000 DL = 0.005151

BEC = 0.02658



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	122.22	0.0000	Р	11.2
2		5.000	5.281	27557.40	0.0010	Р	0.6
3		500.000	510.788	2677493.29	0.0985	Α	1.7
4		1250.000	1246.636	6519029.76	0.2404	Α	1.1
5		2500.000	2490.455	12919576.75	0.4803	Α	2.4
6		5000.000	4979.357	25761610.17	0.9602	Α	8.0
7		10000.000	10012.589	51090981.46	1.9308	Α	1.7
8				25497.94	0.0010	Р	1.0

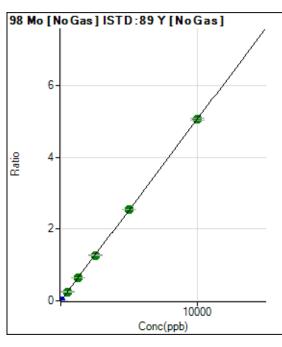
y = 1.9284E-004 \* x + 4.5188E-006

R = 1.0000

DL = 0.007839

BEC = 0.02343

Weight: <None>
Min Conc: 0



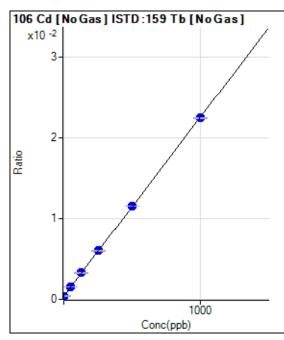
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	196.67	0.0000	Р	9.6
2		5.000	5.179	70761.38	0.0026	Р	0.6
3		500.000	502.440	6906871.50	0.2541	Α	2.0
4		1250.000	1247.750	17112852.80	0.6310	Α	0.6
5		2500.000	2500.990	34024028.66	1.2649	Α	2.8
6		5000.000	5027.166	68212822.32	2.5425	Α	8.0
7		10000.000	9986.329	133643052.4	5.0505	Α	1.1
8				65447.77	0.0026	Р	0.6

y = 5.0574E-004 \* x + 7.2715E-006

R = 1.0000

DL = 0.004143

BEC = 0.01438



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	8269.21	0.0004	Р	0.7
2		1.000	0.475	8583.87	0.0004	Р	4.0
3		50.000	53.290	33574.09	0.0016	Р	1.4
4		125.000	130.198	69305.01	0.0033	Р	1.1
5		250.000	255.105	127219.42	0.0061	Р	2.4
6		500.000	503.967	244847.64	0.0116	Р	0.5
7		1000.000	995.927	467069.89	0.0225	Р	0.6
8				7897.89	0.0004	Р	2.8

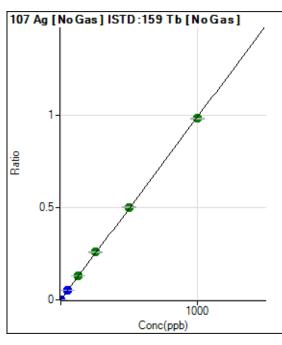
y = 2.2169E-005 \* x + 4.0012E-004

R = 1.0000

DL = 0.361

BEC = 18.05

Weight: <None>
Min Conc: 0



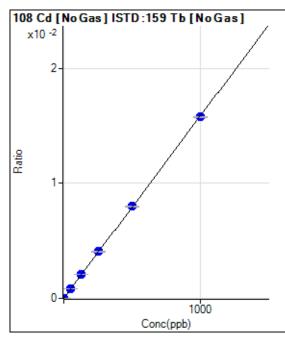
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	232.23	0.0000	Р	7.7
2		1.000	1.052	21977.59	0.0011	Р	1.9
3		50.000	52.011	1091906.39	0.0514	Р	1.4
4		125.000	132.119	2755006.56	0.1306	Α	0.4
5		250.000	260.734	5416344.64	0.2578	Α	2.1
6		500.000	506.633	10598469.63	0.5009	Α	1.0
7		1000.000	993.010	20400324.14	0.9818	Α	0.7
8				3576.06	0.0002	Р	2.7

y = 9.8873E-004 \* x + 1.1244E-005

R = 0.9999

DL = 0.002643

BEC = 0.01137



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	20.00	0.0000	Р	43.1
2		1.000	1.069	374.45	0.0000	Р	5.8
3		50.000	52.508	17692.57	0.0008	Р	2.3
4		125.000	131.307	43924.10	0.0021	Р	0.7
5		250.000	257.135	85667.25	0.0041	Р	2.9
6		500.000	504.141	169137.44	0.0080	Р	8.0
7		1000.000	995.232	327895.52	0.0158	Р	0.6
8				264.45	0.0000	Р	22.2

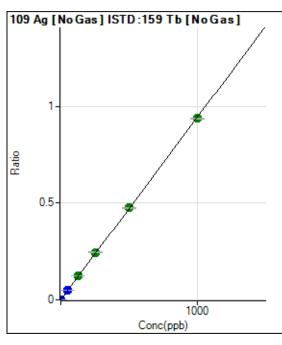
y = 1.5855E-005 \* x + 9.6494E-007

R = 0.9999

DL = 0.07876

BEC = 0.06086

Weight: <None>
Min Conc: 0



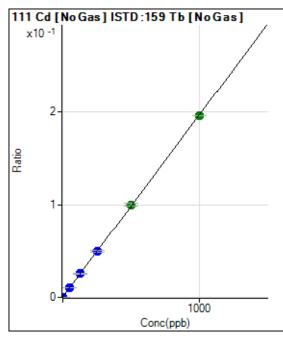
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	66.66	0.0000	Р	17.9
2		1.000	1.067	21104.05	0.0010	Р	1.9
3		50.000	52.147	1043710.47	0.0492	Р	1.8
4		125.000	132.450	2633330.61	0.1249	Α	1.1
5		250.000	258.777	5125797.43	0.2440	Α	2.1
6		500.000	505.377	10080838.12	0.4765	Α	1.2
7		1000.000	994.079	19473775.13	0.9372	Α	8.0
8				3310.43	0.0002	Р	8.7

y = 9.4279E-004 \* x + 3.2280E-006

R = 0.9999

DL = 0.001837

BEC = 0.003424



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	5794.45	0.0003	Р	8.0
2		1.000	1.092	10342.96	0.0005	Р	2.3
3		50.000	52.063	222924.08	0.0105	Р	1.6
4		125.000	128.359	537297.32	0.0255	Р	1.7
5		250.000	252.065	1045505.93	0.0498	Р	2.6
6		500.000	507.835	2115317.97	0.1000	Α	2.4
7		1000.000	995.043	4064870.65	0.1956	Α	0.1
8				6083.44	0.0003	Р	3.6

y = 1.9632E-004 \* x + 2.8038E-004

R = 0.9999DL = 0.03577

BEC = 1.428

Weight: <None>
Min Conc: 0

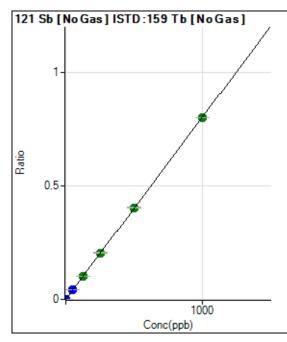
		as] ISTD:159 Tb [NoGas]
Star Star	5-	
	0	1000
		Conc(ppb)

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	3199.33	0.0002	Р	1.4
2		5.000	5.406	75531.26	0.0036	Р	1.0
3		50.000	51.155	697930.70	0.0329	Р	1.7
4		125.000	128.995	1743462.38	0.0827	Α	0.2
5		250.000	255.483	3437226.72	0.1636	Α	1.4
6		500.000	499.030	6757281.01	0.3194	Α	0.6
7		1000.000	998.555	13275721.05	0.6389	Α	0.7
8				4106.22	0.0002	Р	7.3

y = 6.3969E-004 \* x + 1.5482E-004

R = 1.0000DL = 0.01045

 $\mathsf{BEC} = 0.242$ 



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	52.22	0.0000	Р	20.8
2		2.000	2.170	36398.34	0.0017	Р	1.1
3		50.000	50.695	862187.81	0.0406	Р	1.5
4		125.000	128.994	2179274.22	0.1033	Α	0.3
5		250.000	254.133	4277443.27	0.2036	Α	1.9
6		500.000	503.651	8536571.33	0.4035	Α	8.0
7		1000.000	996.607	16589281.14	0.7984	Α	0.0
8				13604.64	0.0007	Р	3.0

y = 8.0110E-004 \* x + 2.5284E-006

R = 1.0000

DL = 0.001972

BEC = 0.003156

Weight: <None>
Min Conc: 0

135	Ba [N	oGas] ISTD:159 Tb [NoGas]
Ratio	0.5	
	0-	5000
		Conc(ppb)

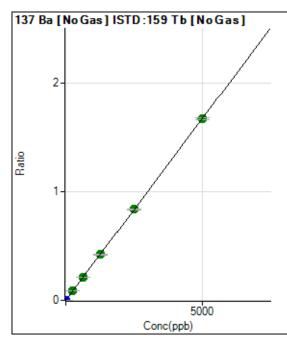
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	258.90	0.0000	Р	3.4
2		10.000	10.674	43544.16	0.0021	Р	1.5
3		250.000	252.123	1038393.20	0.0489	Р	1.1
4		625.000	650.192	2659638.67	0.1261	Α	1.5
5		1250.000	1270.549	5177905.86	0.2464	Α	1.9
6		2500.000	2516.167	10325885.82	0.4880	Α	0.2
7		5000.000	4983.523	20084869.70	0.9666	Α	0.5
8				7615.55	0.0004	Р	2.4

y = 1.9396E-004 \* x + 1.2526E-005

R = 1.0000

DL = 0.006518

BEC = 0.06458

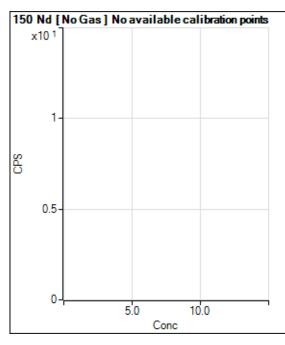


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	338.90	0.0000	Р	6.9
2		10.000	10.756	75685.51	0.0036	Р	1.4
3		250.000	257.171	1829544.00	0.0862	Α	1.1
4		625.000	640.558	4525920.42	0.2146	Α	2.3
5		1250.000	1263.268	8892373.48	0.4233	Α	2.6
6		2500.000	2501.767	17734934.73	0.8382	Α	0.6
7		5000.000	4993.495	34762336.70	1.6731	Α	1.2
8				13198.77	0.0007	Р	2.6

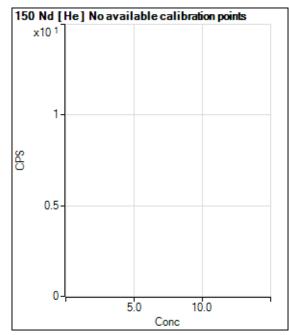
y = 3.3505E-004 \* x + 1.6387E-005

R = 1.0000DL = 0.01019

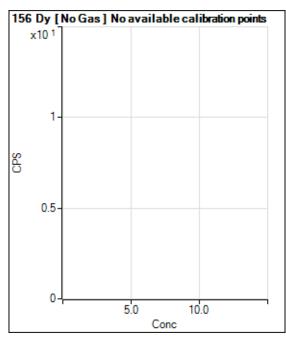
BEC = 0.04891



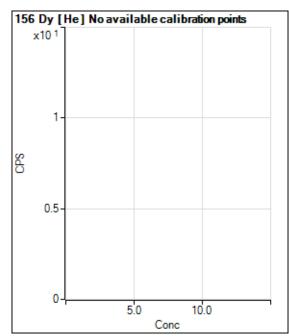
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				10.00		Р	57.7
2				13.33		Р	50.0
3				92.22		Р	32.4
4				184.45		Р	25.6
5				342.23		Р	7.2
6				650.02		Р	7.2
7				1277.85		Р	6.8
8				373.35		Р	4.1



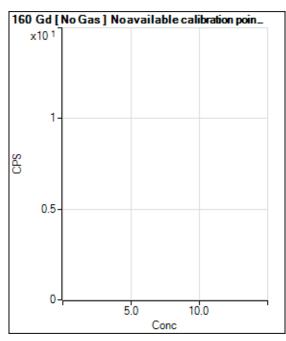
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				1.11		Р	173.2
2				3.33		Р	100.1
3				3.33		Р	100.1
4				3.33		Р	173.2
5				12.22		Р	56.8
6				16.67		Р	20.0
7				41.11		Р	32.8
8				70.00		Р	26.5



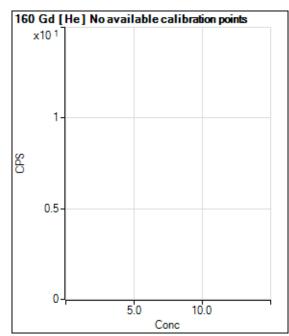
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				136.67		Р	21.7
2				150.00		Р	9.7
3				203.34		Р	16.6
4				267.78		Р	12.0
5				314.45		Р	3.4
6				354.45		Р	6.1
7				524.46		Р	5.8
8				696.69		Р	7.8



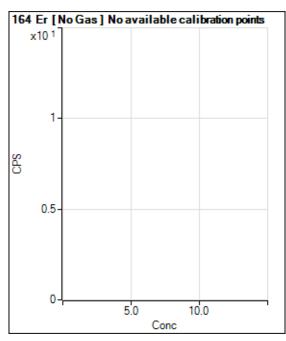
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				3.33		Р	100.1
2				12.22		Р	31.5
3				11.11		Р	96.4
4				8.89		Р	94.4
5				23.33		Р	49.5
6				27.78		Р	18.3
7				44.44		Р	18.9
8				196.67		Р	10.6



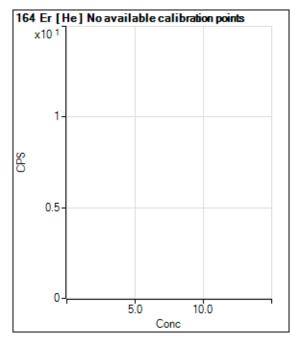
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				135.56		Р	14.8
2				131.12		Р	8.2
3				123.34		Р	27.0
4				145.56		Р	16.6
5				165.56		Р	15.1
6				203.34		Р	12.8
7				245.56		Р	5.7
8				626.69		Р	4.5



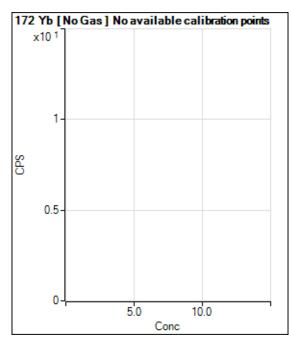
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				25.56		Р	49.4
2				18.89		Р	27.0
3				16.67		Р	20.0
4				28.89		Р	37.1
5				37.78		Р	35.7
6				54.44		Р	9.4
7				70.00		Р	40.7
8				233.34		Р	8.0



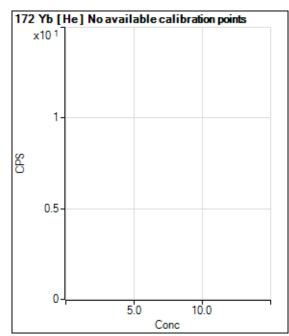
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				122.22		Р	20.7
2				86.67		Р	24.0
3				143.34		Р	15.2
4				140.00		Р	8.6
5				138.89		Р	6.9
6				182.22		Р	11.2
7				271.12		Р	6.2
8				733.36		Р	6.1



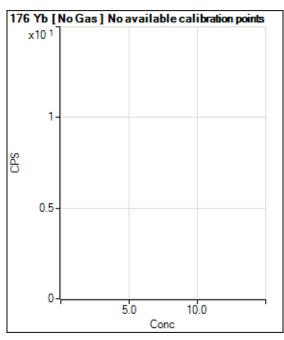
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				32.22		Р	21.5
2				26.67		Р	37.5
3				41.11		Р	18.7
4				46.67		Р	28.6
5				54.45		Р	19.7
6				55.55		Р	12.5
7				97.78		Р	20.5
8				225.56		Р	14.6



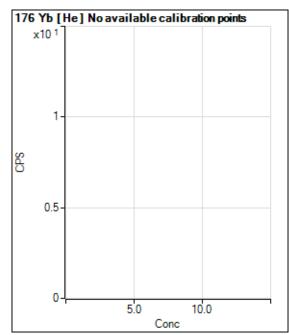
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				125.56		Р	8.1
2				128.89		Р	9.1
3				103.33		Р	8.5
4				144.45		Р	25.5
5				148.89		Р	7.2
6				230.01		Р	12.9
7				313.34		Р	15.1
8				862.26		Р	7.6



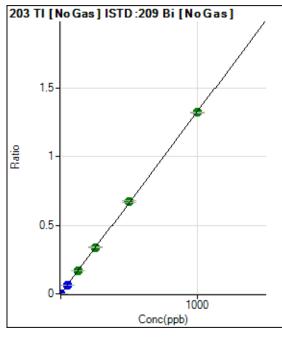
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				34.44		Р	47.7
2				40.00		Р	30.0
3				47.78		Р	14.5
4				54.44		Р	9.4
5				75.55		Р	22.2
6				58.89		Р	18.2
7				127.78		Р	6.6
8				332.23		Р	11.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				2189.10		Р	15.6
2				2255.77		Р	4.4
3				6351.59		Р	1.6
4				12213.51		Р	1.8
5				22188.75		Р	1.4
6				41934.12		Р	2.2
7				81353.87		Р	0.6
8				2636.96		Р	2.1



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1				372.23		Р	8.5
2				364.45		Р	9.8
3				1597.89		Р	4.4
4				3502.72		Р	0.7
5				6598.38		Р	1.5
6				13139.95		Р	1.5
7				25828.58		Р	0.3
8				527.79		Р	6.0



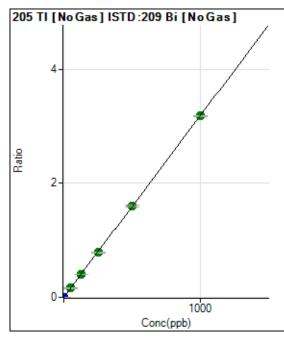
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	378.90	0.0000	Р	9.1
2		1.000	1.022	18387.57	0.0014	Р	2.3
3		50.000	49.097	870915.41	0.0652	Р	1.3
4		125.000	125.576	2198868.73	0.1667	Α	1.2
5		250.000	253.695	4390439.31	0.3368	Α	2.2
6		500.000	505.342	8583471.26	0.6708	Α	1.7
7		1000.000	996.378	16498236.97	1.3225	Α	8.0
8				1481.21	0.0001	Р	6.1

y = 0.0013 \* x + 2.8773E-005

R = 1.0000

DL = 0.005924

BEC = 0.02168



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	924.49	0.0001	Р	6.8
2		1.000	1.029	44425.90	0.0033	Р	8.0
3		50.000	50.454	2146047.26	0.1607	Α	1.4
4		125.000	125.413	5266100.86	0.3992	Α	0.2
5		250.000	246.593	10233455.05	0.7849	Α	2.0
6		500.000	504.412	20543266.50	1.6055	Α	2.2
7		1000.000	998.572	39649768.30	3.1782	Α	0.7
8				3630.55	0.0003	Р	12.2

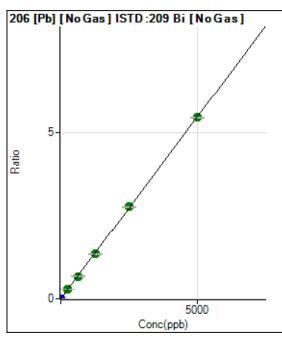
y = 0.0032 \* x + 7.0190E-005

R = 1.0000

DL = 0.004501

BEC = 0.02205

Weight: <None>
Min Conc: 0



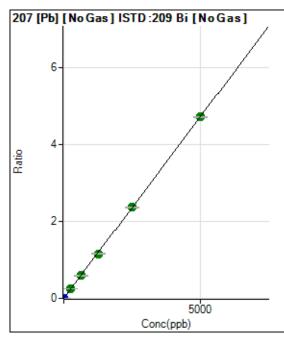
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	2149.09	0.0002	Р	4.1
2		1.000	0.992	16577.36	0.0012	Р	1.5
3		250.000	256.478	3751403.03	0.2808	Α	1.3
4		625.000	619.413	8942510.35	0.6780	Α	1.1
5		1250.000	1241.290	17711257.79	1.3585	Α	2.0
6		2500.000	2531.068	35444687.25	2.7698	Α	1.3
7		5000.000	4987.018	68080247.88	5.4573	Α	0.6
8				14608.32	0.0013	Р	2.0

y = 0.0011 \* x + 1.6316E-004

R = 1.0000

DL = 0.01856

BEC = 0.1491



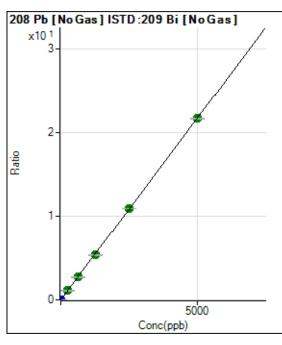
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	1734.58	0.0001	Р	4.7
2		1.000	0.989	14113.35	0.0011	Р	0.5
3		250.000	253.715	3193850.86	0.2391	Α	1.1
4		625.000	622.848	7738943.15	0.5867	Α	1.2
5		1250.000	1229.328	15095505.61	1.1579	Α	2.4
6		2500.000	2514.433	30306275.94	2.3682	Α	0.9
7		5000.000	4998.034	58722289.68	4.7072	Α	8.0
8				12411.59	0.0011	Р	4.1

y = 9.4178E-004 \* x + 1.3168E-004

R = 1.0000DL = 0.01967

BEC = 0.1398

Weight: <None>
Min Conc: 0

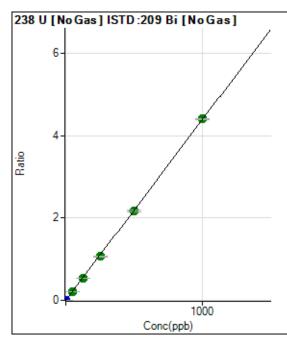


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	8146.64	0.0006	Р	2.5
2		1.000	0.998	65729.19	0.0050	Р	0.4
3		250.000	252.313	14643378.98	1.0962	Α	1.0
4		625.000	623.682	35727693.22	2.7086	Α	0.9
5		1250.000	1233.854	69852444.24	5.3580	Α	2.4
6		2500.000	2515.575	139786392.0	10.9232	Α	0.9
7		5000.000	4996.298	270640306.5	21.6944	Α	0.6
8				57768.68	0.0053	Р	3.9

y = 0.0043 \* x + 6.1846E-004

R = 1.0000 DL = 0.01061 BEC = 0.1424

## Calibration for 055AREF.d



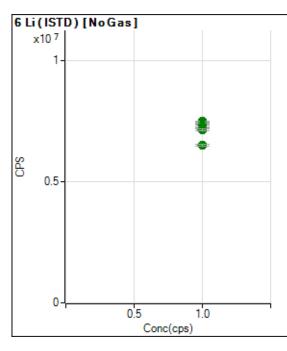
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		0.000	0.000	164.45	0.0000	Р	24.8
2		1.000	0.965	56322.17	0.0042	Р	0.7
3		50.000	49.554	2901633.08	0.2172	Α	0.7
4		125.000	122.784	7098609.54	0.5382	Α	1.2
5		250.000	242.499	13858141.04	1.0629	Α	2.0
6		500.000	495.160	27770835.42	2.1703	Α	2.0
7		1000.000	1004.594	54930364.18	4.4031	Α	0.7
8				2419.15	0.0002	Р	9.0

y = 0.0044 \* x + 1.2491E-005

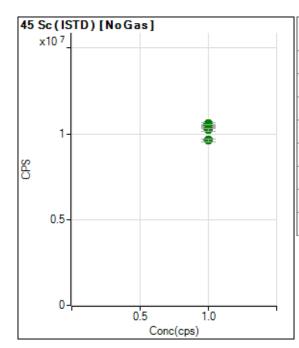
R = 1.0000

DL = 0.002124

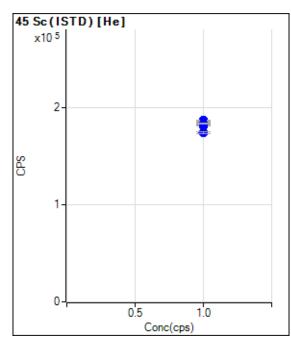
BEC = 0.00285



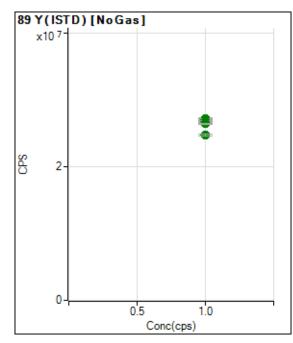
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		7423441.25		Α	1.3
2		1.000		7477615.36		Α	8.0
3		1.000		7413901.76		Α	2.1
4		1.000		7417953.29		Α	1.7
5		1.000		7331348.65		Α	2.1
6		1.000		7234025.45		Α	1.0
7		1.000		7122742.22		Α	1.2
8		1.000		6504285.31		Α	1.5



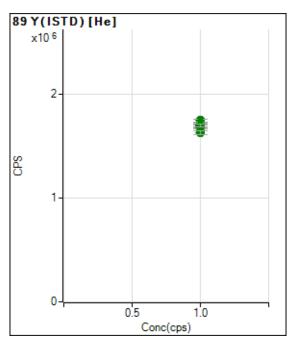
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		10464420.81		Α	0.7
2		1.000		10402583.87		Α	0.4
3		1.000		10570873.94		Α	1.1
4		1.000		10458657.14		Α	0.4
5		1.000		10482539.64		Α	1.2
6		1.000		10267841.31		Α	2.0
7		1.000		10226560.54		Α	1.4
8		1.000		9618838.75		Α	1.5



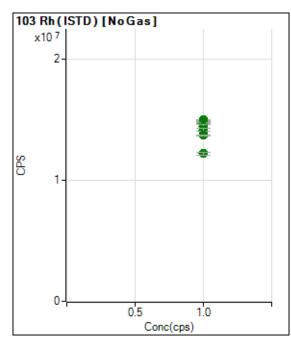
	ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		184856.14		Р	1.5
2		1.000		187166.28		Р	8.0
3		1.000		183381.76		Р	0.5
4		1.000		184827.42		Р	0.7
5		1.000		184491.19		Р	2.0
6		1.000		182010.14		Р	0.7
7		1.000		183845.21		Р	0.3
8		1.000		174968.61		Р	1.1



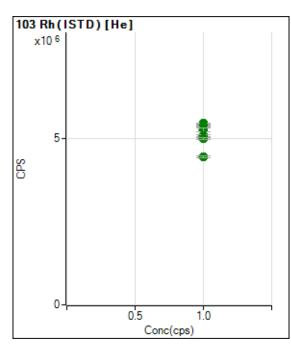
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		27049771.54		Α	0.2
2		1.000		26941753.77		Α	0.9
3		1.000		27185464.87		Α	1.4
4		1.000		27118289.32		Α	8.0
5		1.000		26909883.49		Α	2.1
6		1.000		26830286.27		Α	1.1
7		1.000		26462815.44		Α	0.9
8		1.000		24838338.52		Α	1.1



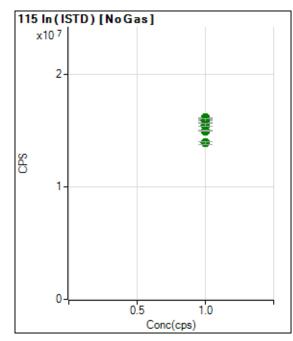
	ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		1714175.79		Α	8.0
2		1.000		1742951.64		Α	1.3
3		1.000		1708394.14		Α	1.4
4		1.000		1715072.35		Α	0.6
5		1.000		1698412.36		Α	3.4
6		1.000		1670128.03		Α	0.9
7		1.000		1695056.34		Α	1.4
8		1.000		1624114.92		Α	2.4



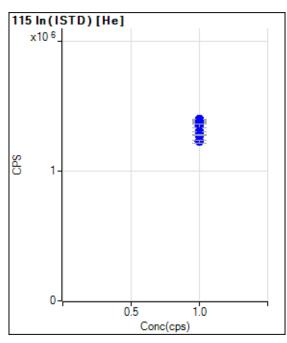
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		14734637.00		Α	1.2
2		1.000		14971739.50		Α	0.3
3		1.000		14808382.14		Α	8.0
4		1.000		14683971.45		Α	1.1
5		1.000		14422062.98		Α	2.0
6		1.000		14146720.90		Α	2.0
7		1.000		13695039.24		Α	0.9
8		1.000		12196135.93		Α	1.7



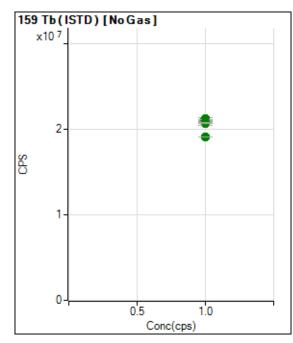
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		5414031.86		Α	0.9
2		1.000		5440344.36		Α	0.7
3		1.000		5350975.03		Α	0.6
4		1.000		5313886.52		Α	0.6
5		1.000		5250853.19		Α	2.2
6		1.000		5075515.90		Α	1.1
7		1.000		4980942.39		Α	1.3
8		1.000		4445461.63		Α	1.1



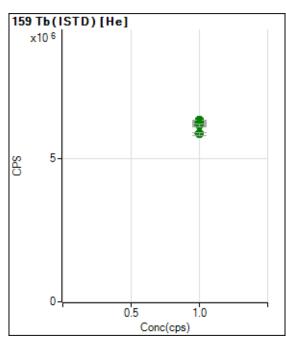
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		16037263.07		Α	0.3
2		1.000		16147299.06		Α	0.7
3		1.000		16138883.73		Α	0.9
4		1.000		15937920.51		Α	0.7
5		1.000		15889066.42		Α	2.1
6		1.000		15514528.60		Α	1.8
7		1.000		15001307.48		Α	0.6
8		1.000		13929933.79		Α	1.6



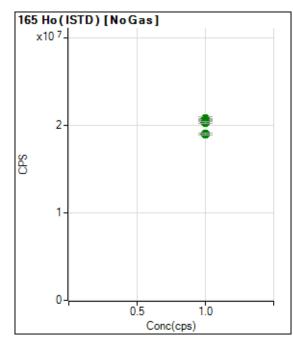
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		1386412.82		Р	0.3
2		1.000		1398261.54		Р	0.7
3		1.000		1375348.97		Р	0.6
4		1.000		1365568.58		Р	0.2
5		1.000		1349042.93		Р	2.7
6		1.000		1306108.62		Р	0.3
7		1.000		1276745.53		Р	0.4
8		1.000		1227208.67		Р	1.8



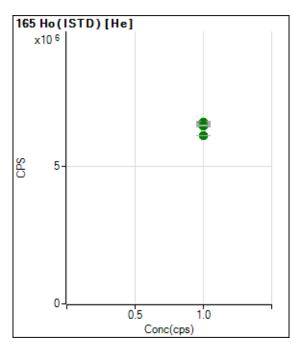
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		20667778.17		Α	1.4
2		1.000		20907060.52		Α	0.7
3		1.000		21230676.63		Α	1.1
4		1.000		21088796.21		Α	8.0
5		1.000		21014332.47		Α	1.6
6		1.000		21157596.76		Α	0.1
7		1.000		20778610.11		Α	0.7
8		1.000		19114230.83		Α	0.1



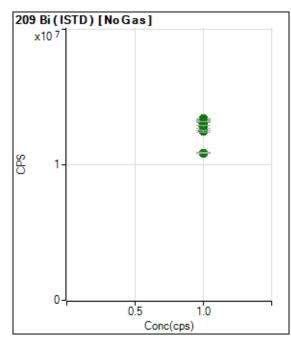
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		6324544.28		Α	0.3
2		1.000		6272043.17		Α	0.5
3		1.000		6237170.18		Α	0.4
4		1.000		6241130.19		Α	1.0
5		1.000		6254895.67		Α	2.9
6		1.000		6191560.88		Α	1.3
7		1.000		6151420.25		Α	1.3
8		1.000		5858378.73		Α	1.8



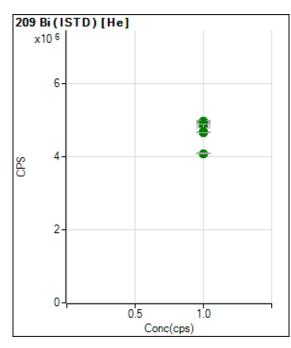
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		20556050.94		Α	0.9
2		1.000		20696992.19		Α	0.3
3		1.000		20675908.02		Α	0.6
4		1.000		20629429.42		Α	0.3
5		1.000		20735622.33		Α	2.2
6		1.000		20600766.22		Α	0.7
7		1.000		20305066.09		Α	0.9
8		1.000		19042269.30		Α	1.0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		6514911.64		Α	1.0
2		1.000		6552088.93		Α	0.9
3		1.000		6532102.61		Α	0.7
4		1.000		6576114.35		Α	0.9
5		1.000		6475222.33		Α	2.1
6		1.000		6457489.56		Α	0.4
7		1.000		6449639.21		Α	0.6
8		1.000		6103709.08		Α	0.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		13173314.94		Α	0.7
2		1.000		13274347.72		Α	0.5
3		1.000		13358852.16		Α	0.3
4		1.000		13190892.16		Α	0.7
5		1.000		13041023.84		Α	1.9
6		1.000		12798423.28		Α	1.5
7		1.000		12475585.37		Α	0.9
8		1.000		10847304.42		Α	0.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1		1.000		4950087.91		Α	8.0
2		1.000		4968419.44		Α	1.2
3		1.000		4901413.89		Α	0.1
4		1.000		4844027.50		Α	0.5
5		1.000		4848751.70		Α	2.1
6		1.000		4674437.26		Α	1.0
7		1.000		4658149.07		Α	0.4
8		1.000		4090868.55		Α	1.0

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8021125 MS.b

**Acq. Date-Time** 2025-02-11 11:22:52

Report Comment ---

Instrument Name G8403A SG19224459

## [No Gas]

## Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		33681	336808.90			0.576	5.000
24		317868	3178681.60			0.536	5.000
25		42868	428682.00			0.422	5.000
26		47889	478886.16			0.369	5.000
59		185789	1857886.03			0.885	5.000
113		22196	221964.29			0.425	5.000
115		292044	2920437.87			0.944	5.000
206		71039	710393.19			0.629	5.000
207		61658	616576.70			0.147	5.000
208		151245	1512454.00			1.139	5.000
220		1	5.60			27.808	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

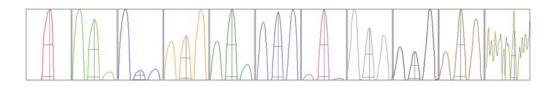
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	33985	33739	33573	33481	33626
24	319455	319239	318551	315819	316277
25	43132	42889	42923	42709	42689
26	48036	47949	48043	47636	47779
59	186794	183813	187922	184624	185790
113	22279	22315	22152	22100	22137
115	296208	290284	292469	292333	288926
206	71568	71184	71292	70628	70524
207	61722	61735	61715	61554	61563
208	152775	151737	150449	148645	152622

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	1	0	1	0

Integration Time [sec]

0.1

#### Resolution/Axis



Mass	Peak Heigh	t	Axis		Axis (Required)		Axis (Flag)
9	56451.76		9.10		8.90 - 9.10		
24	540315.86		24.00	)	23.90 - 24.10		
25	72844.30		25.00	)	24.90 - 25.10		
26	82942.97		26.00	)	25.90 - 26.10		
59	334772.90		59.00	)	58.90 - 59.10		
113	43756.33		113.0	)5	112.90 - 113.10		
115	573082.19		115.0	)5	114.90 - 115.10		
206	141412.16		206.0	00	205.90 - 206.10		
207	122171.00		206.9	95	206.90 - 207.10		
208	302103.53		207.9	207.95   207.90 - 208.10			
l	0.80		220.50				
220	0.80		220.5	0	-		
Mass	0.80 W-50%	W-5			-5% (Required)	۷	V-5% (Flag)
		W-5°	%	W-	- -5% (Required) 900	٧	V-5% (Flag)
Mass	W-50%	_	%	W-	. ,	V	V-5% (Flag)
Mass 9	W-50% 0.63	0.77	% 7 7	0.9 0.9	900	V	V-5% (Flag)
Mass 9 24	W-50% 0.63 0.63	0.77	% 7 7 2	0.9 0.9	900	V	V-5% (Flag)
Mass 9 24 25	W-50% 0.63 0.63 0.63	0.77 0.78 0.79	% 7 7 2 8	0.9 0.9 0.9	900	V	V-5% (Flag)
Mass 9 24 25 26	W-50% 0.63 0.63 0.63 0.62	0.77 0.78 0.79 0.78	% 7 7 2 8 9	W- 0.8 0.9 0.9 0.9	900	V	V-5% (Flag)
Mass 9 24 25 26 59	W-50% 0.63 0.63 0.63 0.62 0.59	0.77 0.78 0.79 0.78 0.77	% 7 7 7 2 8 9	W- 0.9 0.9 0.9 0.9 0.9	900 900 900 900	V	V-5% (Flag)
Mass 9 24 25 26 59 1113	W-50% 0.63 0.63 0.63 0.62 0.59 0.52	0.77 0.78 0.79 0.78 0.77 0.73	% 7 7 7 2 8 9 3 4	W- 9.0 9.0 9.0 9.0 9.0 9.0	900 900 900 900 900	V	V-5% (Flag)
Mass 9 24 25 26 59 113 115	W-50% 0.63 0.63 0.62 0.59 0.52	0.77 0.78 0.79 0.78 0.77 0.73	% 7 7 2 8 9 3 4	W-0.29.0 92.0 92.0 92.0 92.0 92.0 92.0 92.	900 900 900 900 900	V	V-5% (Flag)

Integration Time [sec] 0.1

0.27

Acquisition Time [sec] 256.770000000002

0.388

Y Axis Linear

**Tune Parameters** 

220

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.72 L/min Dilution Gas 0.40 L/min

RF Power	1600 W	Option Gas		Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		
Lens Parameters					
Extract 1	-6.0 V	Omega Lens	8.6 V	Deflect	14.2 V
Extract 2	-210.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-95 V	Cell Exit	-50 V		
Cell Parameters					
Use Gas	No	3rd Gas Flow		Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow		OctP RF	170 V		
QP Parameters					
Mass Gain	103	Axis Gain	0.9959	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	0.05		
Hardware Settings					
Torch					
Torch H	-0.2 mm	Torch V	1.5 mm		
EM					
Discriminator	4.0 mV	Analog HV	2179 V	Pulse HV	1089 V

### [He]

### Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		32890	328904.85			0.370	
89		31748	317475.54			0.361	
205		36794	367944.69			0.422	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	32961	32954	32822	33005	32711
89	31847	31724	31819	31788	31559
205	36762	36981	36899	36755	36575

Integration Time [sec] 0.1

### **Tune Parameters**

## Plasma Parameters

Plasma Mode		Nebulizer Gas	0.72 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas		Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Denth	9 0 mm	S/C Temp	2°C		

#### Lens Parameters

Extract 1 -6.0 V Omega Lens 8.6 V	Deflect 3.4 V
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Extract 2	-210.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-95 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow		Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow		OctP RF	200 V		
QP Parameters					
Mass Gain	103	Axis Gain	0.9959	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.05		
Hardware Settings					
Torch					
Torch H	-0.2 mm	Torch V	1.5 mm		
EM					
Discriminator	4.0 mV	Analog HV	2179 V	Pulse HV	1089 V

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Date & Time Ac	quired: 202	25-02-11 12:05:13	Data	File Name :	004CALB.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.14	0.23	-0.08	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.02	-0.04	0.02	0.00	N/A	ppb
Barium	135-1	0.00	0.00	0.00	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	-0.01	0.03	0.00	N/A	ppb
Cadmium	106-1	0.12	-0.12	0.00	0.00	N/A	ppb
Cadmium	111-1	0.01	-0.01	0.00	0.00	N/A	ppb
Calcium	43-1	0.00	-0.68	0.67	0.00	N/A	ppb
Calcium	44-1	0.40	-0.35	-0.06	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	0.02	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.03	0.00	-0.03	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	54-2	0.18	0.30	-0.48	0.00	N/A	ppb
Iron	56-2	-0.04	0.03	0.02	0.00	N/A	ppb
Iron	57-2	-0.11	-0.17	0.28	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.01	0.00	N/A	ppb

Jaswal

LB Number : LB134674 Operator :

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Date & Time Ac	quirea: 202	25-02-11 12:05:13	Data	riie Name :	004CALB.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.01	0.00	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.11	-0.84	0.73	0.00	N/A	ppb
Manganese	55-2	-0.02	0.00	0.02	0.00	N/A	ppb
Molybdenum	94-1	0.01	0.00	-0.01	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.02	-0.02	0.00	N/A	ppb
Phosphorus	31-2	-17.01	-7.69	-9.67	-11.46		ppb
Potassium	39-2	1.78	-0.99	-0.80	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	-0.17	0.02	0.14	0.00	N/A	ppb
Selenium	77-2	-0.31	0.62	-0.31	0.00	N/A	ppb
Selenium	78-2	0.00	-0.27	0.27	0.00	N/A	ppb
Silicon	28-1	-0.05	-0.21	0.26	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	1.79	0.33	-2.12	0.00	N/A	ppb
Strontium	86-1	-0.01	0.01	0.00	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-105.34	-141.26	-119.61	-122.07		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.00	0.00	0.00	0.00	N/A	ppb
Titanium	47-1	0.00	-0.04	0.04	0.00	N/A	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.08	-0.02	-0.06	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

Jaswal

LB Number : LB134674 Operator :

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

Date & Time Ac	quireu . 202	25-02-11 12.06.35	Datai	-lie Name.	005CALS.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	18.64	19.93	18.09	18.89	5.00	ppb
Antimony	121-1	2.17	2.14	2.19	2.17	1.14	ppb
Arsenic	75-2	0.98	1.11	1.02	1.03	6.60	ppb
Barium	135-1	10.54	10.63	10.85	10.67	1.48	ppb
Barium	137-1	10.83	10.59	10.85	10.76	1.37	ppb
Beryllium	9-1	1.09	1.06	1.07	1.07	1.22	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	1.01	1.14	1.06	1.07	6.11	ppb
Cadmium	106-1	0.96	-0.37	0.84	0.47	154.54	ppb
Cadmium	111-1	1.12	1.02	1.13	1.09	5.37	ppb
Calcium	43-1	551.26	561.62	558.94	557.27	0.96	ppb
Calcium	44-1	546.24	556.45	548.15	550.28	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.08	2.10	2.04	2.07	1.49	ppb
Cobalt	59-2	1.12	1.12	1.16	1.14	2.10	ppb
Copper	63-2	2.23	2.24	2.29	2.25	1.45	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				101		%
Indium	115-2				101		%
Iron	54-2	56.02	57.30	56.90	56.74	1.16	ppb
Iron	56-2	55.85	55.21	55.19	55.42	0.68	ppb
Iron	57-2	55.31	56.12	53.32	54.91	2.62	ppb
Krypton	83-1						cps
Lead	206-1	0.97	1.00	1.00	0.99	1.70	ppb

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

	•						
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.98	0.99	0.99	0.99	0.55	ppb
Lead	208-1	0.99	1.00	1.00	1.00	0.42	ppb
Lithium	6-1				101		%
Magnesium	24-2	534.80	533.80	538.70	535.77	0.48	ppb
Manganese	55-2	1.07	1.00	1.05	1.04	3.70	ppb
Molybdenum	94-1	6.24	6.28	6.16	6.23	0.96	ppb
Molybdenum	95-1	5.20	5.16	5.14	5.17	0.64	ppb
Molybdenum	96-1	5.31	5.40	5.25	5.32	1.39	ppb
Molybdenum	97-1	5.31	5.25	5.27	5.28	0.59	ppb
Molybdenum	98-1	5.16	5.21	5.16	5.18	0.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.06	1.10	1.10	1.09	2.20	ppb
Phosphorus	31-2	5.65	6.05	22.68	11.46	84.83	ppb
Potassium	39-2	515.69	505.55	514.61	511.95	1.09	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	5.95	5.86	5.26	5.69	6.55	ppb
Selenium	77-2	6.10	3.39	5.09	4.86	28.26	ppb
Selenium	78-2	4.02	5.68	6.05	5.25	20.61	ppb
Silicon	28-1	6.57	6.39	6.16	6.38	3.21	ppb
Silver	107-1	1.03	1.05	1.07	1.05	1.92	ppb
Silver	109-1	1.06	1.05	1.09	1.07	1.91	ppb
Sodium	23-2	545.49	534.97	545.32	541.93	1.11	ppb
Strontium	86-1	1.07	1.03	1.02	1.04	2.69	ppb
Strontium	88-1	1.06	1.05	1.05	1.05	0.59	ppb
Sulfur	34-1	110.19	141.26	114.77	122.07	13.74	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	1.02	1.04	1.00	1.02	2.36	ppb
Thallium	205-1	1.02	1.04	1.03	1.03	0.78	ppb
Tin	118-1	5.37	5.38	5.47	5.41	1.03	ppb
Titanium	47-1	5.32	5.23	5.32	5.29	0.91	ppb
Uranium	238-1	0.96	0.96	0.97	0.97	0.71	ppb

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.34	5.20	5.32	5.29	1.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				102		%
Zinc	66-2	5.79	5.48	5.89	5.72	3.76	ppb
Zirconium	90-1	1.03	1.02	1.03	1.03	0.70	ppb
Zirconium	91-1	1.02	1.02	0.98	1.01	2.24	ppb

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LB Number : LB134674 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1000.11	1004.42	1004.44	1002.99	0.25	ppb
Antimony	121-1	50.05	50.52	51.51	50.70	1.47	ppb
Arsenic	75-2	50.55	51.41	51.85	51.27	1.28	ppb
Barium	135-1	249.33	251.94	255.10	252.12	1.15	ppb
Barium	137-1	253.97	258.84	258.70	257.17	1.08	ppb
Beryllium	9-1	50.34	52.78	51.01	51.38	2.46	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	51.10	53.11	53.32	52.51	2.34	ppb
Cadmium	106-1	52.75	52.71	54.41	53.29	1.81	ppb
Cadmium	111-1	51.10	52.31	52.78	52.06	1.67	ppb
Calcium	43-1	5157.25	5231.17	5324.44	5237.62	1.60	ppb
Calcium	44-1	5175.53	5200.27	5337.31	5237.70	1.66	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	50.15	50.53	50.90	50.53	0.74	ppb
Cobalt	59-2	52.32	53.14	52.76	52.74	0.78	ppb
Copper	63-2	543.79	553.81	552.39	550.00	0.99	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				101		%
Indium	115-2				99		%
Iron	54-2	2686.28	2687.32	2715.83	2696.48	0.62	ppb
Iron	56-2	2668.67	2710.60	2683.97	2687.74	0.79	ppb
Iron	57-2	2640.37	2665.37	2654.10	2653.28	0.47	ppb
Krypton	83-1						cps
Lead	206-1	252.95	259.35	257.13	256.48	1.27	ppb

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	255.35	255.37	250.43	253.71	1.12	ppb
Lead	208-1	249.78	254.64	252.51	252.31	0.96	ppb
Lithium	6-1				100		%
Magnesium	24-2	5263.02	5363.97	5411.07	5346.02	1.41	ppb
Manganese	55-2	511.92	514.75	516.49	514.38	0.45	ppb
Molybdenum	94-1	490.82	518.46	503.81	504.36	2.74	ppb
Molybdenum	95-1	497.38	510.59	500.51	502.82	1.37	ppb
Molybdenum	96-1	498.69	508.80	511.03	506.17	1.30	ppb
Molybdenum	97-1	500.99	517.68	513.70	510.79	1.71	ppb
Molybdenum	98-1	490.85	507.33	509.14	502.44	2.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	51.99	52.78	52.47	52.41	0.76	ppb
Phosphorus	31-2	924.57	1041.83	982.10	982.83	5.97	ppb
Potassium	39-2	2492.98	2521.59	2533.38	2515.99	0.83	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	49.15	52.40	52.51	51.35	3.72	ppb
Selenium	77-2	48.28	57.51	53.46	53.08	8.71	ppb
Selenium	78-2	52.26	57.78	51.38	53.81	6.44	ppb
Silicon	28-1	50.54	50.81	51.89	51.08	1.40	ppb
Silver	107-1	51.25	52.03	52.75	52.01	1.44	ppb
Silver	109-1	51.07	52.72	52.65	52.15	1.79	ppb
Sodium	23-2	5285.78	5437.97	5462.77	5395.51	1.78	ppb
Strontium	86-1	49.44	50.44	50.47	50.12	1.17	ppb
Strontium	88-1	50.19	51.44	51.42	51.02	1.40	ppb
Sulfur	34-1	1170.00	1116.80	1271.62	1186.14	6.63	ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	48.36	49.42	49.51	49.10	1.31	ppb
Thallium	205-1	50.09	50.02	51.25	50.45	1.37	ppb
Tin	118-1	50.13	51.51	51.82	51.15	1.76	ppb
Titanium	47-1	505.16	509.07	523.08	512.44	1.84	ppb
Uranium	238-1	49.90	49.24	49.53	49.55	0.66	ppb

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	50.89	51.04	50.36	50.77	0.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	525.46	528.11	534.71	529.43	0.90	ppb
Zirconium	90-1	49.85	51.84	51.31	51.00	2.02	ppb
Zirconium	91-1	47.83	50.25	49.83	49.30	2.63	ppb

Lab Sample ID: S04 Instrumnet Name: P8
Client Sample ID: S04 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

Date & Time Ac	quircu . 202	0 02 11 12.10.02	Datai	iic ivairie .	007 07 (EO.a		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2452.01	2482.76	2445.74	2460.17	0.81	ppb
Antimony	121-1	128.58	129.34	129.06	128.99	0.30	ppb
Arsenic	75-2	125.33	125.43	125.25	125.34	0.07	ppb
Barium	135-1	641.19	649.16	660.22	650.19	1.47	ppb
Barium	137-1	626.80	656.04	638.83	640.56	2.29	ppb
Beryllium	9-1	123.17	125.60	128.38	125.72	2.07	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	130.89	132.33	130.70	131.31	0.68	ppb
Cadmium	106-1	128.74	129.94	131.91	130.20	1.23	ppb
Cadmium	111-1	125.87	129.90	129.30	128.36	1.69	ppb
Calcium	43-1	12871.82	12875.29	13098.45	12948.52	1.00	ppb
Calcium	44-1	12892.34	12882.67	12877.75	12884.25	0.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	123.46	124.13	123.04	123.54	0.45	ppb
Cobalt	59-2	127.17	128.71	126.21	127.36	0.99	ppb
Copper	63-2	1313.74	1320.59	1292.85	1309.06	1.10	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				98		%
Iron	54-2	6528.84	6646.90	6518.82	6564.85	1.09	ppb
Iron	56-2	6543.12	6597.46	6486.57	6542.38	0.85	ppb
Iron	57-2	6446.64	6535.56	6462.37	6481.52	0.73	ppb
Krypton	83-1						cps
Lead	206-1	613.17	618.22	626.85	619.41	1.12	ppb

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	619.82	617.05	631.68	622.85	1.25	ppb
Lead	208-1	619.77	621.16	630.11	623.68	0.90	ppb
Lithium	6-1				100		%
Magnesium	24-2	12857.97	13045.94	12972.29	12958.73	0.73	ppb
Manganese	55-2	1291.88	1310.64	1264.34	1288.95	1.81	ppb
Molybdenum	94-1	1232.34	1235.58	1234.14	1234.02	0.13	ppb
Molybdenum	95-1	1243.85	1262.15	1239.62	1248.54	0.96	ppb
Molybdenum	96-1	1246.51	1254.70	1239.64	1246.95	0.60	ppb
Molybdenum	97-1	1243.74	1262.09	1234.07	1246.64	1.14	ppb
Molybdenum	98-1	1239.97	1249.14	1254.15	1247.75	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	126.80	128.56	126.45	127.27	0.89	ppb
Phosphorus	31-2	2503.53	2512.45	2525.00	2513.66	0.43	ppb
Potassium	39-2	6140.98	6162.98	6087.62	6130.53	0.63	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	125.09	125.91	125.72	125.57	0.34	ppb
Selenium	77-2	129.50	127.73	134.38	130.54	2.64	ppb
Selenium	78-2	125.80	135.58	131.56	130.98	3.75	ppb
Silicon	28-1	130.02	126.49	129.88	128.80	1.55	ppb
Silver	107-1	131.64	132.04	132.67	132.12	0.40	ppb
Silver	109-1	130.81	133.38	133.16	132.45	1.07	ppb
Sodium	23-2	13002.08	13021.11	13001.39	13008.19	0.09	ppb
Strontium	86-1	121.73	124.39	124.03	123.38	1.17	ppb
Strontium	88-1	123.43	126.02	126.02	125.16	1.20	ppb
Sulfur	34-1	2686.04	3018.98	2653.91	2786.31	7.25	ppb
Terbium	159-1				102		%
Terbium	159-2				99		%
Thallium	203-1	123.82	126.09	126.81	125.58	1.24	ppb
Thallium	205-1	125.69	125.07	125.48	125.41	0.25	ppb
Tin	118-1	129.34	128.92	128.73	128.99	0.24	ppb
Titanium	47-1	1258.34	1262.23	1279.41	1266.66	0.88	ppb
Uranium	238-1	121.27	122.79	124.29	122.78	1.23	ppb

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	123.67	124.14	124.24	124.02	0.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	1273.20	1291.67	1277.77	1280.88	0.75	ppb
Zirconium	90-1	124.42	127.43	124.78	125.54	1.31	ppb
Zirconium	91-1	120.11	122.39	120.86	121.12	0.96	ppb

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4976.89	5023.54	4827.55	4942.66	2.07	ppb
Antimony	121-1	248.56	257.69	256.15	254.13	1.92	ppb
Arsenic	75-2	253.94	265.65	243.51	254.37	4.35	ppb
Barium	135-1	1243.70	1289.50	1278.45	1270.55	1.88	ppb
Barium	137-1	1227.65	1290.54	1271.61	1263.27	2.55	ppb
Beryllium	9-1	246.82	254.51	258.76	253.37	2.39	ppb
Bismuth	209-1				99		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	250.61	265.10	255.70	257.13	2.86	ppb
Cadmium	106-1	248.19	261.43	255.69	255.10	2.60	ppb
Cadmium	111-1	244.72	257.77	253.71	252.06	2.65	ppb
Calcium	43-1	25182.11	26272.37	26140.66	25865.05	2.30	ppb
Calcium	44-1	24569.66	25761.95	25713.26	25348.29	2.66	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	243.84	248.96	238.22	243.67	2.20	ppb
Cobalt	59-2	259.44	261.13	251.08	257.22	2.09	ppb
Copper	63-2	2591.07	2685.56	2541.84	2606.16	2.80	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				99		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	54-2	13441.49	13415.10	13010.04	13288.87	1.82	ppb
Iron	56-2	12987.00	13323.70	12647.90	12986.20	2.60	ppb
Iron	57-2	12736.75	13075.28	12563.14	12791.72	2.04	ppb
Krypton	83-1						cps
Lead	206-1	1214.61	1246.17	1263.09	1241.29	1.98	ppb

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Date & Time Act	dilica . Zoz	.0 02 11 12.10.01	Datai	iic i vairie .	0000/ \LO.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1195.71	1241.10	1251.17	1229.33	2.40	ppb
Lead	208-1	1200.16	1246.56	1254.84	1233.85	2.39	ppb
Lithium	6-1				99		%
Magnesium	24-2	26315.73	26400.75	25122.30	25946.26	2.76	ppb
Manganese	55-2	2554.89	2593.99	2514.85	2554.58	1.55	ppb
Molybdenum	94-1	2415.32	2515.21	2513.45	2481.33	2.30	ppb
Molybdenum	95-1	2427.42	2527.43	2507.75	2487.54	2.13	ppb
Molybdenum	96-1	2426.05	2540.19	2521.78	2496.01	2.46	ppb
Molybdenum	97-1	2423.84	2506.70	2540.83	2490.46	2.42	ppb
Molybdenum	98-1	2419.32	2535.62	2548.04	2500.99	2.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	250.16	256.81	244.69	250.55	2.42	ppb
Phosphorus	31-2	4992.78	5158.69	4782.24	4977.90	3.79	ppb
Potassium	39-2	12508.10	12857.28	12240.38	12535.25	2.47	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	245.18	262.84	257.09	255.04	3.53	ppb
Selenium	77-2	278.17	287.32	227.61	264.37	12.16	ppb
Selenium	78-2	262.02	265.48	258.24	261.91	1.38	ppb
Silicon	28-1	245.83	252.27	260.94	253.01	3.00	ppb
Silver	107-1	255.07	266.16	260.96	260.73	2.13	ppb
Silver	109-1	252.96	263.78	259.59	258.78	2.11	ppb
Sodium	23-2	26488.44	26881.63	25428.29	26266.12	2.86	ppb
Strontium	86-1	238.03	247.47	250.86	245.45	2.71	ppb
Strontium	88-1	244.86	253.91	253.49	250.75	2.04	ppb
Sulfur	34-1	4706.98	5102.59	5344.96	5051.51	6.38	ppb
Terbium	159-1				102		%
Terbium	159-2				99		%
Thallium	203-1	247.15	257.06	256.88	253.69	2.24	ppb
Thallium	205-1	240.95	249.27	249.56	246.59	1.98	ppb
Tin	118-1	251.39	256.84	258.22	255.48	1.41	ppb
Titanium	47-1	2434.28	2489.18	2460.55	2461.34	1.12	ppb
Uranium	238-1	237.15	246.29	244.06	242.50	1.96	ppb

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	248.07	252.56	239.59	246.74	2.67	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	2535.77	2590.85	2477.30	2534.64	2.24	ppb
Zirconium	90-1	244.22	254.34	253.44	250.67	2.23	ppb
Zirconium	91-1	244.60	251.55	255.77	250.64	2.25	ppb

Lab Sample ID: S06 Instrumnet Name: P8
Client Sample ID: S06 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9883.79	9794.63	9810.11	9829.51	0.48	ppb
Antimony	121-1	499.07	505.10	506.78	503.65	0.81	ppb
Arsenic	75-2	500.30	517.61	512.43	510.11	1.74	ppb
Barium	135-1	2513.58	2523.15	2511.77	2516.17	0.24	ppb
Barium	137-1	2516.93	2489.70	2498.67	2501.77	0.55	ppb
Beryllium	9-1	507.98	500.56	508.66	505.73	0.89	ppb
Bismuth	209-1				97		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	503.90	500.35	508.18	504.14	0.78	ppb
Cadmium	106-1	503.93	506.41	501.56	503.97	0.48	ppb
Cadmium	111-1	500.58	522.01	500.92	507.83	2.42	ppb
Calcium	43-1	51417.80	54154.09	52864.28	52812.05	2.59	ppb
Calcium	44-1	51209.24	52209.30	52725.49	52048.01	1.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	517.83	503.85	497.25	506.31	2.08	ppb
Cobalt	59-2	516.27	512.29	518.08	515.54	0.57	ppb
Copper	63-2	5166.74	5101.16	5090.98	5119.63	0.80	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				94		%
Iron	54-2	27081.10	26348.20	26408.56	26612.62	1.53	ppb
Iron	56-2	26194.12	26000.63	25630.57	25941.77	1.10	ppb
Iron	57-2	26721.47	26878.62	26460.78	26686.96	0.79	ppb
Krypton	83-1						cps
Lead	206-1	2503.78	2568.80	2520.62	2531.07	1.33	ppb

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2502.93	2541.56	2498.81	2514.43	0.94	ppb
Lead	208-1	2500.96	2542.70	2503.06	2515.58	0.93	ppb
Lithium	6-1				97		%
Magnesium	24-2	51355.01	50925.34	51245.92	51175.42	0.44	ppb
Manganese	55-2	5131.32	5058.12	4965.43	5051.62	1.65	ppb
Molybdenum	94-1	4985.02	5068.08	5029.78	5027.63	0.83	ppb
Molybdenum	95-1	4947.27	5041.60	5049.20	5012.69	1.13	ppb
Molybdenum	96-1	4937.70	5019.56	5069.65	5008.97	1.33	ppb
Molybdenum	97-1	4938.52	5016.56	4982.99	4979.36	0.79	ppb
Molybdenum	98-1	5018.96	5069.36	4993.18	5027.17	0.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	495.33	495.81	492.42	494.52	0.37	ppb
Phosphorus	31-2	10353.82	10324.76	10295.48	10324.69	0.28	ppb
Potassium	39-2	25511.32	24922.23	25085.69	25173.08	1.21	ppb
Rhodium	103-1				96		%
Rhodium	103-2				94		%
Scandium	45-1				98		%
Scandium	45-2				98		%
Selenium	82-1	494.54	511.98	495.99	500.84	1.93	ppb
Selenium	77-2	509.92	516.16	513.18	513.09	0.61	ppb
Selenium	78-2	499.41	495.24	515.83	503.49	2.16	ppb
Silicon	28-1	494.84	525.63	517.24	512.57	3.11	ppb
Silver	107-1	501.21	507.30	511.39	506.63	1.01	ppb
Silver	109-1	498.69	509.69	507.75	505.38	1.16	ppb
Sodium	23-2	53437.00	52517.32	52924.99	52959.77	0.87	ppb
Strontium	86-1	497.27	512.31	505.14	504.91	1.49	ppb
Strontium	88-1	492.20	501.31	500.62	498.04	1.02	ppb
Sulfur	34-1	9939.85	10748.57	10209.22	10299.22	4.00	ppb
Terbium	159-1				102		%
Terbium	159-2				98		%
Thallium	203-1	495.69	512.45	507.89	505.34	1.72	ppb
Thallium	205-1	493.47	515.22	504.54	504.41	2.16	ppb
Tin	118-1	496.15	501.81	499.13	499.03	0.57	ppb
Titanium	47-1	4998.97	5118.22	5058.09	5058.43	1.18	ppb
Uranium	238-1	488.89	506.71	489.88	495.16	2.02	ppb

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.97	495.01	493.54	497.84	1.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				97		%
Zinc	66-2	5185.91	5191.04	5191.76	5189.57	0.06	ppb
Zirconium	90-1	497.78	506.39	514.90	506.36	1.69	ppb
Zirconium	91-1	493.87	503.72	516.94	504.84	2.29	ppb

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

Date & Time 7to	quircu . 202	0 02 11 12.20.00	Datai	ic ivallic .	0100/1L0.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20040.16	20199.80	19592.17	19944.05	1.58	ppb
Antimony	121-1	996.63	997.03	996.16	996.61	0.04	ppb
Arsenic	75-2	981.78	1007.52	991.94	993.75	1.30	ppb
Barium	135-1	4996.89	4957.10	4996.59	4983.52	0.46	ppb
Barium	137-1	5059.63	4975.99	4944.87	4993.49	1.19	ppb
Beryllium	9-1	998.40	992.81	997.19	996.13	0.29	ppb
Bismuth	209-1				95		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	992.14	1002.25	991.31	995.23	0.61	ppb
Cadmium	106-1	996.24	1002.23	989.31	995.93	0.65	ppb
Cadmium	111-1	995.79	994.87	994.47	995.04	0.07	ppb
Calcium	43-1	102320.07	105137.98	101269.39	102909.15	1.94	ppb
Calcium	44-1	102047.33	103629.06	101377.68	102351.36	1.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1004.68	996.88	994.19	998.58	0.55	ppb
Cobalt	59-2	994.35	980.75	994.88	989.99	0.81	ppb
Copper	63-2	9997.46	9861.91	9851.93	9903.77	0.82	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				99		%
Indium	115-1				94		%
Indium	115-2				92		%
Iron	54-2	51723.88	51963.26	51592.29	51759.81	0.36	ppb
Iron	56-2	50852.48	50551.90	50656.01	50686.80	0.30	ppb
Iron	57-2	51801.28	51429.18	52683.53	51971.33	1.24	ppb
Krypton	83-1						cps
Lead	206-1	4993.66	4951.94	5015.45	4987.02	0.65	ppb

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5034.46	4955.81	5003.84	4998.03	0.79	ppb
Lead	208-1	5012.52	4963.14	5013.24	4996.30	0.57	ppb
Lithium	6-1				96		%
Magnesium	24-2	100216.27	99523.94	100694.75	100144.98	0.59	ppb
Manganese	55-2	9980.64	9916.80	9967.43	9954.96	0.34	ppb
Molybdenum	94-1	9832.46	10076.92	10068.52	9992.63	1.39	ppb
Molybdenum	95-1	9832.32	10057.16	10100.96	9996.81	1.44	ppb
Molybdenum	96-1	9778.17	10042.93	10168.66	9996.59	1.99	ppb
Molybdenum	97-1	9824.77	10061.13	10151.87	10012.59	1.69	ppb
Molybdenum	98-1	9864.05	10064.97	10029.97	9986.33	1.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1013.46	1002.59	990.55	1002.20	1.14	ppb
Phosphorus	31-2	19938.05	19957.51	19631.43	19842.33	0.92	ppb
Potassium	39-2	48504.25	48818.05	47980.99	48434.43	0.87	ppb
Rhodium	103-1				93		%
Rhodium	103-2				92		%
Scandium	45-1				98		%
Scandium	45-2				99		%
Selenium	82-1	981.40	1007.40	1005.74	998.18	1.46	ppb
Selenium	77-2	1008.55	962.83	995.68	989.02	2.38	ppb
Selenium	78-2	982.07	996.32	1004.62	994.34	1.15	ppb
Silicon	28-1	984.63	1009.92	982.86	992.47	1.53	ppb
Silver	107-1	1000.56	990.85	987.62	993.01	0.68	ppb
Silver	109-1	989.94	1003.64	988.66	994.08	0.84	ppb
Sodium	23-2	103396.66	103579.29	103325.04	103433.66	0.13	ppb
Strontium	86-1	999.26	997.18	1000.20	998.88	0.15	ppb
Strontium	88-1	995.67	1007.02	999.48	1000.72	0.58	ppb
Sulfur	34-1	19857.95	20140.36	19378.96	19792.42	1.94	ppb
Terbium	159-1				101		%
Terbium	159-2				97		%
Thallium	203-1	999.10	987.27	1002.77	996.38	0.81	ppb
Thallium	205-1	993.21	996.06	1006.44	998.57	0.70	ppb
Tin	118-1	996.36	1006.89	992.42	998.56	0.75	ppb
Titanium	47-1	10020.64	10077.57	9835.04	9977.75	1.27	ppb
Uranium	238-1	1000.74	999.94	1013.11	1004.59	0.74	ppb

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1008.13	1012.17	985.64	1001.98	1.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				99		%
Zinc	66-2	9930.79	9952.97	9789.91	9891.22	0.89	ppb
Zirconium	90-1	987.30	1000.81	1001.50	996.54	0.80	ppb
Zirconium	91-1	984.69	996.58	1012.55	997.94	1.40	ppb

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Date & Time Ac	quireu . 202	25-02-11 12.26.25	Dalari	ie name.	UTICALS.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	100001.44	99145.65	100949.12	100032.07	0.90	ppb	
Antimony	121-1	0.92	0.88	0.86	0.89	3.02	ppb	
Arsenic	75-2	0.47	0.57	0.59	0.54	12.16	ppb	
Barium	135-1	2.03	2.01	1.93	1.99	2.45	ppb	
Barium	137-1	2.07	1.98	1.98	2.01	2.69	ppb	
Beryllium	9-1	0.39	0.32	0.31	0.34	12.43	ppb	
Bismuth	209-1				82		%	
Bismuth	209-2				83		%	
Bromine	81-1						cps	
Cadmium	108-1	0.92	0.93	0.59	0.81	23.82	ppb	
Cadmium	106-1	1.13	0.53	0.11	0.59	87.38	ppb	
Cadmium	111-1	0.26	0.17	0.15	0.19	30.09	ppb	
Calcium	43-1	496458.64	491689.72	509091.84	499080.07	1.80	ppb	
Calcium	44-1	500231.92	489395.68	508258.84	499295.48	1.90	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	3.15	3.02	3.11	3.09	2.07	ppb	
Cobalt	59-2	2.11	2.16	2.18	2.15	1.80	ppb	
Copper	63-2	1.74	1.82	1.72	1.76	3.02	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				93		%	
Holmium	165-2				94		%	
Indium	115-1				87		%	
Indium	115-2				89		%	
Iron	54-2	247511.87	247946.59	252854.03	249437.49	1.19	ppb	
Iron	56-2	249835.80	251502.37	247866.72	249734.97	0.73	ppb	
Iron	57-2	249954.84	245133.83	253156.72	249415.13	1.62	ppb	
Krypton	83-1						cps	
Lead	206-1	1.10	1.09	1.05	1.08	2.31	ppb	

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.11	1.10	1.02	1.08	4.63	ppb
Lead	208-1	1.13	1.10	1.03	1.08	4.43	ppb
Lithium	6-1				88		%
Magnesium	24-2	498044.63	499922.23	501406.70	499791.18	0.34	ppb
Manganese	55-2	4.48	4.67	4.71	4.62	2.69	ppb
Molybdenum	94-1	7.41	7.49	7.54	7.48	0.87	ppb
Molybdenum	95-1	5.32	5.20	5.39	5.30	1.83	ppb
Molybdenum	96-1	5.49	5.67	5.66	5.61	1.73	ppb
Molybdenum	97-1	5.24	5.35	5.31	5.30	1.05	ppb
Molybdenum	98-1	5.18	5.18	5.23	5.20	0.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.45	3.55	3.71	3.57	3.66	ppb
Phosphorus	31-2	-3.91	-7.46	-15.54	-8.97		ppb
Potassium	39-2	246285.44	247204.60	257400.49	250296.85	2.46	ppb
Rhodium	103-1				83		%
Rhodium	103-2				82		%
Scandium	45-1				92		%
Scandium	45-2				95		%
Selenium	82-1	0.03	-0.12	0.11	0.01	1565.73	ppb
Selenium	77-2	2.57	1.64	-0.31	1.30	112.87	ppb
Selenium	78-2	1.70	1.16	0.32	1.06	65.72	ppb
Silicon	28-1	18.54	16.06	16.86	17.15	7.37	ppb
Silver	107-1	0.18	0.18	0.17	0.18	2.86	ppb
Silver	109-1	0.20	0.18	0.16	0.18	8.87	ppb
Sodium	23-2	493861.44	497536.67	505413.75	498937.28	1.18	ppb
Strontium	86-1	3.15	3.04	3.11	3.10	1.79	ppb
Strontium	88-1	3.09	3.08	3.13	3.10	0.78	ppb
Sulfur	34-1	-151.56	-325.66	-49.80	-175.67		ppb
Terbium	159-1				92		%
Terbium	159-2				93		%
Thallium	203-1	0.08	0.09	0.07	0.08	7.75	ppb
Thallium	205-1	0.10	0.08	0.07	0.08	15.49	ppb
Tin	118-1	0.11	0.10	0.07	0.09	26.00	ppb
Titanium	47-1	1.61	1.72	1.75	1.69	4.42	ppb
Uranium	238-1	0.05	0.05	0.04	0.05	9.57	ppb

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Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.28	0.31	0.30	0.30	5.80	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				92		%
Yttrium	89-2				95		%
Zinc	66-2	5.06	5.40	5.65	5.37	5.55	ppb
Zirconium	90-1	1.69	1.70	1.69	1.69	0.19	ppb
Zirconium	91-1	1.69	1.66	1.68	1.68	0.94	ppb

Lab Sample ID :ICV005Instrumnet Name :P8Client Sample ID :ICV005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Date & Time Acquired : 2025-02-11 13:2		25-02-11 13:29:04	Datal	File Name :	012ICV.d			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	474.38	474.26	479.22	475.96	0.59	ppb	
Antimony	121-1	203.39	205.37	208.33	205.70	1.21	ppb	
Arsenic	75-2	204.81	205.88	210.12	206.93	1.36	ppb	
Barium	135-1	99.44	100.04	101.23	100.24	0.91	ppb	
Barium	137-1	99.75	101.13	102.64	101.17	1.43	ppb	
Beryllium	9-1	100.05	103.59	101.43	101.69	1.76	ppb	
Bismuth	209-1				102		%	
Bismuth	209-2				101		%	
Bromine	81-1						cps	
Cadmium	108-1	130.63	135.70	136.19	134.17	2.29	ppb	
Cadmium	106-1	79.71	80.20	82.71	80.87	1.99	ppb	
Cadmium	111-1	103.51	105.21	105.35	104.69	0.98	ppb	
Calcium	43-1	2228.40	2264.92	2255.92	2249.74	0.85	ppb	
Calcium	44-1	2182.53	2171.05	2225.64	2193.08	1.31	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	101.29	101.03	101.25	101.19	0.14	ppb	
Cobalt	59-2	105.02	106.03	105.30	105.45	0.49	ppb	
Copper	63-2	106.08	107.80	107.31	107.06	0.83	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				102		%	
Holmium	165-2				100		%	
Indium	115-1				101		%	
Indium	115-2				100		%	
Iron	54-2	2115.83	2152.87	2133.01	2133.90	0.87	ppb	
Iron	56-2	2084.94	2069.91	2056.00	2070.28	0.70	ppb	
Iron	57-2	2071.76	2042.39	2063.45	2059.20	0.74	ppb	
Krypton	83-1						cps	
Lead	206-1	207.14	205.46	203.00	205.20	1.01	ppb	

909

Lab Sample ID :ICV005Instrumnet Name :P8Client Sample ID :ICV005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Date a Time Act	1011CG . 202	.0 02 11 10.20.0 <del>+</del>	Datai	iic ivairie .	01210 V.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	192.93	197.39	195.74	195.35	1.15	ppb
Lead	208-1	197.10	199.05	197.91	198.02	0.50	ppb
Lithium	6-1				102		%
Magnesium	24-2	1145.83	1144.18	1153.22	1147.74	0.42	ppb
Manganese	55-2	98.59	101.58	99.41	99.86	1.55	ppb
Molybdenum	94-1	3842.15	3894.58	3854.33	3863.69	0.71	ppb
Molybdenum	95-1	4712.46	4804.91	4737.07	4751.48	1.01	ppb
Molybdenum	96-1	4640.67	4669.45	4688.96	4666.36	0.52	ppb
Molybdenum	97-1	4648.16	4742.05	4780.20	4723.47	1.44	ppb
Molybdenum	98-1	4655.45	4808.26	4725.23	4729.64	1.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	104.55	106.57	104.77	105.29	1.05	ppb
Phosphorus	31-2	-9.47	-16.25	-11.58	-12.44		ppb
Potassium	39-2	1902.58	1911.28	1905.26	1906.37	0.23	ppb
Rhodium	103-1				101		%
Rhodium	103-2				100		%
Scandium	45-1				103		%
Scandium	45-2				101		%
Selenium	82-1	206.07	211.41	213.32	210.27	1.79	ppb
Selenium	77-2	202.75	241.20	235.75	226.57	9.18	ppb
Selenium	78-2	219.67	213.51	224.26	219.15	2.46	ppb
Silicon	28-1	1.21	1.33	1.70	1.41	18.19	ppb
Silver	107-1	47.78	49.27	49.02	48.69	1.64	ppb
Silver	109-1	48.15	49.05	49.75	48.98	1.63	ppb
Sodium	23-2	2042.96	2019.09	2032.96	2031.67	0.59	ppb
Strontium	86-1	522.12	526.86	536.76	528.58	1.41	ppb
Strontium	88-1	514.76	523.90	526.72	521.79	1.20	ppb
Sulfur	34-1	-30.06	2.37	20.86	-2.28		ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	205.48	201.73	200.40	202.54	1.30	ppb
Thallium	205-1	200.43	199.20	199.02	199.55	0.38	ppb
Tin	118-1	0.04	0.06	0.06	0.06	21.39	ppb
Titanium	47-1	0.44	0.44	0.46	0.45	3.13	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	9.50	ppb

Lab Sample ID :ICV005Instrumnet Name :P8Client Sample ID :ICV005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	98.19	99.33	98.44	98.65	0.61	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				100		%
Zinc	66-2	199.47	204.25	200.58	201.43	1.24	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	16.21	ppb
Zirconium	91-1	0.12	0.11	0.14	0.12	11.20	ppb

Lab Sample ID: ICB005 Instrumnet Name: P8

Client Sample ID: ICB005 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Date & Time / to	quircu . 202	0 02 11 10.00.20	Datai	iic i vairie .	01000BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.97	-0.51	-0.04	-0.51		ppb
Antimony	121-1	0.04	0.03	0.03	0.03	17.21	ppb
Arsenic	75-2	-0.02	-0.03	-0.03	-0.02		ppb
Barium	135-1	0.01	0.01	0.00	0.01	87.14	ppb
Barium	137-1	0.01	0.01	0.01	0.01	14.33	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	30.13	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.06	0.06	0.04	50.68	ppb
Cadmium	106-1	-0.24	-0.65	-1.28	-0.72		ppb
Cadmium	111-1	-0.01	-0.05	-0.10	-0.05		ppb
Calcium	43-1	0.47	-1.32	0.19	-0.22		ppb
Calcium	44-1	-4.99	-5.50	-6.09	-5.53		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	0.00	0.00	313.17	ppb
Cobalt	59-2	-0.01	-0.01	-0.01	-0.01		ppb
Copper	63-2	-0.11	-0.16	-0.11	-0.13		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				102		%
Indium	115-2				100		%
Iron	54-2	0.35	0.31	0.20	0.29	26.23	ppb
Iron	56-2	0.03	-0.16	-0.05	-0.06		ppb
Iron	57-2	-0.44	-0.07	0.04	-0.16		ppb
Krypton	83-1						cps
Lead	206-1	0.01	0.02	0.02	0.02	32.46	ppb

Lab Sample ID: ICB005 Instrumnet Name: P8
Client Sample ID: ICB005 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Date & Time Acc	quirea: 202	25-02-11 13:33:28	Datai	-ile Name :	013CCBE.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.03	0.01	0.03	0.02	40.64	ppb
Lead	208-1	0.02	0.02	0.02	0.02	15.86	ppb
Lithium	6-1				103		%
Magnesium	24-2	-7.24	-6.36	-7.31	-6.97		ppb
Manganese	55-2	0.00	0.02	0.00	0.01	162.70	ppb
Molybdenum	94-1	0.09	0.05	0.07	0.07	23.72	ppb
Molybdenum	95-1	0.10	0.09	0.07	0.09	17.36	ppb
Molybdenum	96-1	0.09	0.08	0.08	0.08	11.10	ppb
Molybdenum	97-1	0.09	0.08	0.08	0.08	6.97	ppb
Molybdenum	98-1	0.10	0.10	0.08	0.09	12.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.08	-0.12	-0.12	-0.10		ppb
Phosphorus	31-2	-14.26	-21.16	-6.53	-13.99		ppb
Potassium	39-2	-1.16	-0.70	-1.00	-0.95		ppb
Rhodium	103-1				102		%
Rhodium	103-2				101		%
Scandium	45-1				102		%
Scandium	45-2				102		%
Selenium	82-1	0.20	-0.06	0.21	0.12	127.21	ppb
Selenium	77-2	-0.31	-0.31	-0.31	-0.31		ppb
Selenium	78-2	0.00	0.00	0.00	0.00		ppb
Silicon	28-1	-0.44	-0.47	-0.70	-0.53		ppb
Silver	107-1	0.01	0.01	0.01	0.01	31.91	ppb
Silver	109-1	0.01	0.01	0.01	0.01	8.40	ppb
Sodium	23-2	-5.25	-4.47	-6.40	-5.37		ppb
Strontium	86-1	-0.02	-0.01	-0.03	-0.02		ppb
Strontium	88-1	-0.01	-0.01	-0.01	-0.01		ppb
Sulfur	34-1	-69.67	-118.01	-132.30	-106.66		ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.01	0.01	0.00	0.00	55.64	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	2.06	ppb
Tin	118-1	0.00	0.00	-0.01	0.00		ppb
Titanium	47-1	-0.03	-0.07	-0.05	-0.05		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :ICB005Instrumnet Name :P8Client Sample ID :ICB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				101		%
Zinc	66-2	0.03	0.15	0.25	0.14	78.78	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00		ppb
Zirconium	91-1	0.00	0.01	0.01	0.01	83.82	ppb

Lab Sample ID: ICSA005 Instrumnet Name: P8
Client Sample ID: ICSA005 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Date & Time Ac	quirea: 202	25-02-11 13:40:53	DataFi	ie Name :	015ICSA.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93753.99	95541.18	93981.70	94425.62	1.03	ppb
Antimony	121-1	1.19	1.15	1.17	1.17	1.75	ppb
Arsenic	75-2	0.34	0.22	0.21	0.26	28.27	ppb
Barium	135-1	1.40	1.35	1.39	1.38	1.87	ppb
Barium	137-1	1.44	1.44	1.47	1.45	1.23	ppb
Beryllium	9-1	0.29	0.29	0.30	0.30	2.31	ppb
Bismuth	209-1				92		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	19.33	18.14	18.36	18.61	3.38	ppb
Cadmium	106-1	-2.58	-1.61	-2.62	-2.27		ppb
Cadmium	111-1	0.44	0.56	0.44	0.48	14.44	ppb
Calcium	43-1	107230.28	106378.29	108303.47	107304.01	0.90	ppb
Calcium	44-1	104007.83	104537.69	106853.62	105133.05	1.44	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.67	20.30	20.28	20.09	1.78	ppb
Cobalt	59-2	1.16	1.20	1.18	1.18	1.52	ppb
Copper	63-2	8.01	8.20	8.16	8.13	1.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	54-2	103355.70	105396.89	104119.06	104290.55	0.99	ppb
Iron	56-2	103556.33	105216.25	104118.86	104297.15	0.81	ppb
Iron	57-2	103931.65	107096.75	104442.56	105156.98	1.62	ppb
Krypton	83-1						cps
Lead	206-1	4.86	4.80	4.83	4.83	0.71	ppb

Lab Sample ID :ICSA005Instrumnet Name :P8Client Sample ID :ICSA005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Date & Time Act	1011CG . 202	20 02 11 10.40.00	Datai	iic riame .	01010071.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.45	4.39	4.48	4.44	1.13	ppb
Lead	208-1	4.55	4.48	4.51	4.51	0.80	ppb
Lithium	6-1				96		%
Magnesium	24-2	96157.04	98164.13	98421.79	97580.99	1.27	ppb
Manganese	55-2	7.68	7.67	7.98	7.78	2.24	ppb
Molybdenum	94-1	1602.24	1609.96	1640.90	1617.70	1.26	ppb
Molybdenum	95-1	1956.97	1975.72	2029.65	1987.45	1.90	ppb
Molybdenum	96-1	1947.66	1964.03	2020.11	1977.27	1.92	ppb
Molybdenum	97-1	2001.49	1984.19	2025.85	2003.84	1.04	ppb
Molybdenum	98-1	1983.79	1987.71	2032.34	2001.28	1.35	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.00	5.15	5.21	5.12	2.11	ppb
Phosphorus	31-2	103511.66	104900.69	104989.08	104467.14	0.79	ppb
Potassium	39-2	99496.96	100608.07	100327.40	100144.14	0.58	ppb
Rhodium	103-1				94		%
Rhodium	103-2				94		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	0.13	0.58	0.23	0.31	75.27	ppb
Selenium	77-2	-0.31	0.62	-0.31	0.00	20462.25	ppb
Selenium	78-2	0.26	0.82	0.80	0.63	50.24	ppb
Silicon	28-1	25.53	26.12	28.05	26.57	4.96	ppb
Silver	107-1	0.02	0.02	0.02	0.02	20.11	ppb
Silver	109-1	0.02	0.02	0.03	0.02	30.13	ppb
Sodium	23-2	105227.50	109112.01	106874.08	107071.20	1.82	ppb
Strontium	86-1	33.93	34.72	34.79	34.48	1.39	ppb
Strontium	88-1	35.29	35.74	35.56	35.53	0.63	ppb
Sulfur	34-1	98761.46	99159.30	99908.90	99276.55	0.59	ppb
Terbium	159-1				101		%
Terbium	159-2				98		%
Thallium	203-1	0.06	0.05	0.07	0.06	13.35	ppb
Thallium	205-1	0.05	0.05	0.06	0.05	13.41	ppb
Tin	118-1	0.12	0.10	0.10	0.11	9.36	ppb
Titanium	47-1	2081.60	2090.38	2152.89	2108.29	1.84	ppb
Uranium	238-1	0.01	0.01	0.02	0.01	9.36	ppb
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Lab Sample ID :ICSA005Instrumnet Name :P8Client Sample ID :ICSA005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.13	0.16	0.14	0.14	9.13	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				101		%
Zinc	66-2	10.82	11.31	11.08	11.07	2.21	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	17.68	ppb
Zirconium	91-1	0.01	0.02	0.01	0.01	30.62	ppb

Lab Sample ID: ICSAB005 Instrumnet Name: P8

Client Sample ID: ICSAB005 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

Date & Time Ac	quireu . 202	25-02-11 15.44.07	Dalari	ie name.	0101C3B.u			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	92838.93	94469.11	93063.81	93457.28	0.95	ppb	
Antimony	121-1	22.07	22.24	22.10	22.14	0.40	ppb	
Arsenic	75-2	21.18	22.22	21.86	21.75	2.44	ppb	
Barium	135-1	22.31	21.93	22.27	22.17	0.94	ppb	
Barium	137-1	22.44	22.72	22.35	22.50	0.87	ppb	
Beryllium	9-1	21.42	20.87	21.72	21.34	2.02	ppb	
Bismuth	209-1				94		%	
Bismuth	209-2				92		%	
Bromine	81-1						cps	
Cadmium	108-1	34.81	34.99	34.94	34.91	0.26	ppb	
Cadmium	106-1	13.22	14.10	13.41	13.58	3.38	ppb	
Cadmium	111-1	20.78	20.64	20.52	20.65	0.62	ppb	
Calcium	43-1	105683.57	106579.58	108123.02	106795.39	1.16	ppb	
Calcium	44-1	104794.82	105729.87	105617.30	105380.66	0.48	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	39.71	39.76	39.90	39.79	0.24	ppb	
Cobalt	59-2	21.38	21.89	21.63	21.63	1.18	ppb	
Copper	63-2	28.41	28.36	28.53	28.43	0.32	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				100		%	
Holmium	165-2				100		%	
Indium	115-1				97		%	
Indium	115-2				96		%	
Iron	54-2	104816.97	104548.16	103730.56	104365.23	0.54	ppb	
Iron	56-2	102910.05	104311.05	103267.01	103496.04	0.70	ppb	
Iron	57-2	104934.36	105261.70	103525.25	104573.77	0.88	ppb	
Krypton	83-1						cps	
Lead	206-1	25.97	24.96	25.75	25.56	2.07	ppb	

Lab Sample ID :ICSAB005Instrumnet Name :P8Client Sample ID :ICSAB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

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Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	24.71	24.23	24.66	24.53	1.08	ppb
Lead	208-1	25.02	24.47	25.01	24.83	1.27	ppb
Lithium	6-1				97		%
Magnesium	24-2	96682.97	97260.00	97640.71	97194.56	0.50	ppb
Manganese	55-2	27.46	27.92	27.30	27.56	1.17	ppb
Molybdenum	94-1	1619.40	1608.19	1644.86	1624.15	1.16	ppb
Molybdenum	95-1	2019.46	1990.68	2005.22	2005.12	0.72	ppb
Molybdenum	96-1	1982.97	1946.65	1956.62	1962.08	0.96	ppb
Molybdenum	97-1	2014.48	1996.99	1995.50	2002.32	0.53	ppb
Molybdenum	98-1	2022.90	1966.70	2004.50	1998.03	1.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.81	25.20	25.15	25.05	0.85	ppb
Phosphorus	31-2	103987.60	104893.04	104661.69	104514.11	0.45	ppb
Potassium	39-2	99869.44	100245.41	99341.59	99818.81	0.45	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				101		%
Scandium	45-2				102		%
Selenium	82-1	21.09	21.15	20.39	20.88	2.03	ppb
Selenium	77-2	21.47	26.60	24.55	24.21	10.67	ppb
Selenium	78-2	23.64	29.89	26.15	26.56	11.83	ppb
Silicon	28-1	28.23	29.29	30.26	29.26	3.48	ppb
Silver	107-1	19.41	19.55	19.61	19.52	0.52	ppb
Silver	109-1	19.58	19.49	19.65	19.57	0.42	ppb
Sodium	23-2	105675.64	107130.02	107019.12	106608.26	0.76	ppb
Strontium	86-1	34.39	34.23	34.42	34.34	0.29	ppb
Strontium	88-1	35.44	35.27	35.66	35.46	0.55	ppb
Sulfur	34-1	96935.89	97847.31	99160.36	97981.19	1.14	ppb
Terbium	159-1				102		%
Terbium	159-2				98		%
Thallium	203-1	21.19	21.13	21.08	21.13	0.25	ppb
Thallium	205-1	21.36	20.71	21.35	21.14	1.76	ppb
Tin	118-1	0.16	0.15	0.15	0.15	1.26	ppb
Titanium	47-1	2118.93	2117.62	2144.11	2126.89	0.70	ppb
Uranium	238-1	0.02	0.01	0.01	0.01	8.87	ppb

Lab Sample ID :ICSAB005Instrumnet Name :P8Client Sample ID :ICSAB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	20.07	20.23	20.18	20.16	0.40	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				101		%
Zinc	66-2	31.09	31.28	31.66	31.34	0.92	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	4.08	ppb
Zirconium	91-1	0.02	0.01	0.03	0.02	38.41	ppb

Lab Sample ID : CCV021 Instrumnet Name : P8
Client Sample ID : CCV021 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Date a Time Ac	quircu . Zoz	0 02 11 10.47.10	Datai	ic ivailie .	017000.0		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49746.73	49962.40	49673.39	49794.17	0.30	ppb
Antimony	121-1	492.27	507.99	502.80	501.02	1.60	ppb
Arsenic	75-2	489.17	502.13	498.52	496.60	1.35	ppb
Barium	135-1	2560.98	2595.31	2559.67	2571.98	0.79	ppb
Barium	137-1	2549.68	2577.32	2530.49	2552.49	0.92	ppb
Beryllium	9-1	500.37	509.58	508.55	506.17	1.00	ppb
Bismuth	209-1				90		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	492.93	502.30	489.47	494.90	1.34	ppb
Cadmium	106-1	484.39	496.86	489.92	490.39	1.27	ppb
Cadmium	111-1	497.56	514.74	499.46	503.92	1.87	ppb
Calcium	43-1	261716.52	264345.47	260408.05	262156.68	0.76	ppb
Calcium	44-1	259926.82	258880.09	261089.02	259965.31	0.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	493.18	507.34	496.51	499.01	1.48	ppb
Cobalt	59-2	490.85	492.97	496.95	493.59	0.63	ppb
Copper	63-2	4796.25	4769.19	4751.78	4772.41	0.47	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				99		%
Indium	115-1				94		%
Indium	115-2				93		%
Iron	54-2	125145.17	126385.42	125291.99	125607.53	0.54	ppb
Iron	56-2	124763.32	126027.15	123663.34	124817.94	0.95	ppb
Iron	57-2	126361.39	126526.43	125710.97	126199.60	0.34	ppb
Krypton	83-1						cps
Lead	206-1	2535.08	2592.49	2547.84	2558.47	1.18	ppb

Lab Sample ID : CCV021 Instrumnet Name : P8
Client Sample ID : CCV021 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2507.54	2587.80	2491.55	2528.96	2.04	ppb
Lead	208-1	2527.18	2594.66	2509.28	2543.71	1.77	ppb
Lithium	6-1				94		%
Magnesium	24-2	248815.27	248704.63	246424.06	247981.32	0.54	ppb
Manganese	55-2	4868.97	4970.08	4908.91	4915.99	1.04	ppb
Molybdenum	94-1	5019.61	5102.96	5111.91	5078.16	1.00	ppb
Molybdenum	95-1	4986.78	5107.91	5010.17	5034.95	1.28	ppb
Molybdenum	96-1	4953.94	5045.19	5056.66	5018.60	1.12	ppb
Molybdenum	97-1	4977.78	5008.55	5064.46	5016.93	0.88	ppb
Molybdenum	98-1	5011.44	5050.31	5029.28	5030.34	0.39	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	465.89	462.76	459.05	462.57	0.74	ppb
Phosphorus	31-2	10304.56	10225.77	10004.64	10178.32	1.53	ppb
Potassium	39-2	125522.40	124299.99	123606.73	124476.37	0.78	ppb
Rhodium	103-1				90		%
Rhodium	103-2				91		%
Scandium	45-1				98		%
Scandium	45-2				101		%
Selenium	82-1	498.03	495.27	497.46	496.92	0.29	ppb
Selenium	77-2	501.74	496.66	503.50	500.63	0.71	ppb
Selenium	78-2	482.50	496.57	493.30	490.79	1.50	ppb
Silicon	28-1	506.51	512.50	522.84	513.95	1.61	ppb
Silver	107-1	492.30	496.81	491.40	493.50	0.59	ppb
Silver	109-1	484.14	487.15	484.71	485.33	0.33	ppb
Sodium	23-2	259278.15	260931.82	253667.77	257959.25	1.48	ppb
Strontium	86-1	509.64	506.46	508.21	508.10	0.31	ppb
Strontium	88-1	495.64	503.77	504.26	501.22	0.97	ppb
Sulfur	34-1	9637.46	9749.82	9754.52	9713.93	0.68	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	505.41	518.79	509.41	511.20	1.34	ppb
Thallium	205-1	505.47	516.84	515.98	512.76	1.23	ppb
Tin	118-1	501.13	501.98	503.51	502.21	0.24	ppb
Titanium	47-1	5053.52	5005.06	5030.24	5029.61	0.48	ppb
Uranium	238-1	513.31	521.68	506.84	513.94	1.45	ppb

Lab Sample ID :CCV021Instrumnet Name :P8Client Sample ID :CCV021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	494.98	498.21	503.46	498.88	0.86	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				100		%
Zinc	66-2	4926.43	4849.19	4750.30	4841.97	1.82	ppb
Zirconium	90-1	503.35	513.17	511.35	509.29	1.03	ppb
Zirconium	91-1	509.81	520.64	501.30	510.58	1.90	ppb

Lab Sample ID :CCB021Instrumnet Name :P8Client Sample ID :CCB021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

Date & Time At	quireu . 202	25-02-11 15.50.25	Dala	riie Naille .	U16CCBE.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.57	0.55	0.74	0.95	56.70	ppb
Antimony	121-1	0.11	0.11	0.11	0.11	3.97	ppb
Arsenic	75-2	-0.02	0.03	-0.01	0.00	1376.36	ppb
Barium	135-1	0.05	0.07	0.02	0.05	53.82	ppb
Barium	137-1	0.07	0.06	0.06	0.07	13.62	ppb
Beryllium	9-1	0.14	0.12	0.11	0.12	12.79	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.09	0.09	0.00	0.06	89.63	ppb
Cadmium	106-1	-0.82	-0.90	-1.03	-0.92		ppb
Cadmium	111-1	-0.03	-0.05	-0.06	-0.05		ppb
Calcium	43-1	6.86	5.14	4.39	5.46	23.15	ppb
Calcium	44-1	2.75	2.16	1.42	2.11	31.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.02	-0.02	-0.01		ppb
Cobalt	59-2	-0.01	0.00	-0.01	0.00		ppb
Copper	63-2	-0.02	-0.07	-0.03	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				103		%
Indium	115-1				105		%
Indium	115-2				103		%
Iron	54-2	3.10	3.80	3.58	3.49	10.18	ppb
Iron	56-2	3.39	3.51	2.66	3.18	14.38	ppb
Iron	57-2	4.06	3.76	2.92	3.58	16.64	ppb
Krypton	83-1						cps
Lead	206-1	0.19	0.17	0.18	0.18	5.38	ppb

Lab Sample ID :CCB021Instrumnet Name :P8Client Sample ID :CCB021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

Date & Time Ac	quirea: 202	uired: 2025-02-11 13:50:25		DataFile Name :					
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units		
Lead	207-1	0.23	0.19	0.18	0.20	13.37	ppb		
Lead	208-1	0.20	0.18	0.17	0.19	7.74	ppb		
Lithium	6-1				106		%		
Magnesium	24-2	-7.45	-7.79	-7.77	-7.67		ppb		
Manganese	55-2	0.12	0.08	0.08	0.10	23.51	ppb		
Molybdenum	94-1	0.19	0.14	0.16	0.17	14.97	ppb		
Molybdenum	95-1	0.20	0.16	0.14	0.17	17.58	ppb		
Molybdenum	96-1	0.18	0.15	0.15	0.16	12.28	ppb		
Molybdenum	97-1	0.20	0.17	0.12	0.16	25.60	ppb		
Molybdenum	98-1	0.21	0.16	0.15	0.17	18.77	ppb		
Neodymium	150-1						cps		
Neodymium	150-2						cps		
Nickel	60-2	-0.04	-0.01	-0.06	-0.04		ppb		
Phosphorus	31-2	-14.10	-13.15	-9.90	-12.38		ppb		
Potassium	39-2	23.30	23.49	17.96	21.59	14.55	ppb		
Rhodium	103-1				106		%		
Rhodium	103-2				105		%		
Scandium	45-1				106		%		
Scandium	45-2				106		%		
Selenium	82-1	0.13	0.03	0.38	0.18	99.36	ppb		
Selenium	77-2	1.46	-0.31	-0.31	0.28	363.03	ppb		
Selenium	78-2	-0.27	-0.02	-0.27	-0.19		ppb		
Silicon	28-1	0.51	0.53	0.28	0.44	31.16	ppb		
Silver	107-1	0.05	0.05	0.04	0.05	6.99	ppb		
Silver	109-1	0.05	0.05	0.05	0.05	8.31	ppb		
Sodium	23-2	41.53	37.40	37.65	38.86	5.95	ppb		
Strontium	86-1	-0.03	-0.03	-0.02	-0.03		ppb		
Strontium	88-1	-0.03	-0.03	-0.03	-0.03		ppb		
Sulfur	34-1	-895.39	-901.33	-837.69	-878.14		ppb		
Terbium	159-1				103		%		
Terbium	159-2				102		%		
Thallium	203-1	0.07	0.06	0.05	0.06	14.39	ppb		
Thallium	205-1	0.06	0.06	0.06	0.06	6.55	ppb		
Tin	118-1	0.03	0.03	0.03	0.03	10.03	ppb		
Titanium	47-1	0.14	0.08	0.05	0.09	51.00	ppb		
Uranium	238-1	0.01	0.01	0.00	0.01	30.82	ppb		

Lab Sample ID :CCB021Instrumnet Name :P8Client Sample ID :CCB021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.00	0.00	0.00	177.05	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				105		%
Zinc	66-2	0.24	0.28	0.14	0.22	32.21	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	4.02	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	6.96	ppb

Lab Sample ID : Q1159-01DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9 Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	13023.36	14394.10	11685.31	13034.26	10.39	ppb
Antimony	121-1	0.30	0.31	0.32	0.31	2.84	ppb
Arsenic	75-2	30.52	32.85	28.60	30.66	6.93	ppb
Barium	135-1	122.54	121.85	124.77	123.05	1.24	ppb
Barium	137-1	124.03	122.86	126.67	124.52	1.57	ppb
Beryllium	9-1	0.54	0.56	0.58	0.56	3.14	ppb
Bismuth	209-1				102		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Cadmium	108-1	0.24	0.32	0.35	0.30	17.89	ppb
Cadmium	106-1	-0.74	-2.10	-0.88	-1.24		ppb
Cadmium	111-1	0.03	-0.07	0.04	0.00		ppb
Calcium	43-1	3008.15	3068.24	3074.69	3050.36	1.20	ppb
Calcium	44-1	3071.52	3128.00	3114.64	3104.72	0.95	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	30.35	33.66	27.15	30.39	10.71	ppb
Cobalt	59-2	17.41	19.05	15.35	17.27	10.74	ppb
Copper	63-2	57.85	63.83	52.54	58.07	9.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				93		%
Indium	115-1				104		%
Indium	115-2				92		%
Iron	54-2	37361.70	40875.82	33179.24	37138.92	10.37	ppb
Iron	56-2	37468.64	40947.72	33117.73	37178.03	10.55	ppb
Iron	57-2	38292.27	42114.28	33816.90	38074.48	10.91	ppb
Krypton	83-1						cps
Lead	206-1	12.44	13.27	13.07	12.92	3.36	ppb

Lab Sample ID : Q1159-01DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9 Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Date & Time Act	quircu . Zoz	0 02 11 10.00.40	Datai	iic i vairie .	O 107 (I CLI . C		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	11.66	12.26	12.29	12.07	2.95	ppb
Lead	208-1	11.98	12.69	12.60	12.43	3.12	ppb
Lithium	6-1				106		%
Magnesium	24-2	6468.64	7253.99	5886.28	6536.31	10.50	ppb
Manganese	55-2	281.46	307.38	248.21	279.02	10.63	ppb
Molybdenum	94-1	1.04	1.10	1.12	1.08	3.90	ppb
Molybdenum	95-1	0.43	0.44	0.46	0.44	3.32	ppb
Molybdenum	96-1	0.52	0.53	0.55	0.54	3.07	ppb
Molybdenum	97-1	0.44	0.43	0.47	0.45	5.50	ppb
Molybdenum	98-1	0.45	0.44	0.45	0.45	1.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	44.36	48.92	39.56	44.28	10.58	ppb
Phosphorus	31-2	363.48	392.51	331.15	362.38	8.47	ppb
Potassium	39-2	381.04	467.73	354.22	401.00	14.80	ppb
Rhodium	103-1				103		%
Rhodium	103-2				93		%
Scandium	45-1				106		%
Scandium	45-2				97		%
Selenium	82-1	0.28	0.69	0.44	0.47	43.97	ppb
Selenium	77-2	10.28	18.52	13.72	14.17	29.19	ppb
Selenium	78-2	3.67	3.10	2.81	3.19	13.78	ppb
Silicon	28-1	4646.41	4621.42	4555.06	4607.63	1.02	ppb
Silver	107-1	0.22	0.20	0.20	0.20	6.79	ppb
Silver	109-1	0.22	0.21	0.20	0.21	5.34	ppb
Sodium	23-2	95.23	120.94	74.20	96.79	24.19	ppb
Strontium	86-1	25.73	26.66	26.77	26.38	2.16	ppb
Strontium	88-1	25.76	26.41	27.11	26.42	2.56	ppb
Sulfur	34-1	-1264.00	-1287.51	-1350.87	-1300.79		ppb
Terbium	159-1				104		%
Terbium	159-2				91		%
Thallium	203-1	0.15	0.15	0.15	0.15	1.48	ppb
Thallium	205-1	0.15	0.16	0.15	0.15	1.92	ppb
Tin	118-1	0.06	0.04	0.04	0.05	30.26	ppb
Titanium	47-1	7.72	17.21	8.95	11.30	45.69	ppb
Uranium	238-1	0.22	0.23	0.24	0.23	4.52	ppb

Lab Sample ID :Q1159-01DLX2Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	36.91	41.04	32.92	36.96	11.00	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				97		%
Zinc	66-2	79.68	87.61	71.45	79.58	10.15	ppb
Zirconium	90-1	0.42	0.52	0.40	0.45	14.05	ppb
Zirconium	91-1	0.45	0.43	0.44	0.44	2.86	ppb

Lab Sample ID: Q1159-02DLX2 Instrumnet Name: P8
Client Sample ID: YE8C9D Dilution Factor: 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	11561.18	11886.15	11611.28	11686.20	1.50	ppb
Antimony	121-1	0.29	0.31	0.29	0.29	4.87	ppb
Arsenic	75-2	27.26	27.31	27.30	27.29	0.09	ppb
Barium	135-1	122.65	123.90	123.83	123.46	0.57	ppb
Barium	137-1	124.22	125.41	126.74	125.46	1.00	ppb
Beryllium	9-1	0.53	0.54	0.53	0.53	0.86	ppb
Bismuth	209-1				101		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.32	0.27	0.31	0.30	8.46	ppb
Cadmium	106-1	-0.95	-1.07	-0.33	-0.78		ppb
Cadmium	111-1	0.02	-0.02	0.07	0.02	170.11	ppb
Calcium	43-1	2972.83	2977.04	3038.29	2996.06	1.22	ppb
Calcium	44-1	3064.28	3107.29	3060.81	3077.46	0.84	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	26.72	27.54	26.92	27.06	1.58	ppb
Cobalt	59-2	15.27	15.65	15.16	15.36	1.67	ppb
Copper	63-2	51.93	53.12	51.96	52.34	1.30	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				103		%
Iron	54-2	33969.75	34104.99	33496.20	33856.98	0.94	ppb
Iron	56-2	33247.33	33763.27	33265.81	33425.47	0.88	ppb
Iron	57-2	33419.82	34680.30	33739.07	33946.40	1.93	ppb
Krypton	83-1						cps
Lead	206-1	12.93	13.00	12.83	12.92	0.67	ppb

Lab Sample ID : Q1159-02DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Date & Time Act	quircu . Zoz	20 02 11 10.07.00	Datai	iic i vairie .	020/ (( \L   . \d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	12.21	12.32	12.00	12.18	1.36	ppb
Lead	208-1	12.50	12.61	12.33	12.48	1.12	ppb
Lithium	6-1				107		%
Magnesium	24-2	5759.46	5886.64	5713.79	5786.63	1.55	ppb
Manganese	55-2	247.83	252.15	247.37	249.11	1.06	ppb
Molybdenum	94-1	1.08	1.08	1.07	1.08	0.73	ppb
Molybdenum	95-1	0.44	0.43	0.41	0.43	3.08	ppb
Molybdenum	96-1	0.60	0.51	0.53	0.55	7.97	ppb
Molybdenum	97-1	0.43	0.40	0.43	0.42	4.68	ppb
Molybdenum	98-1	0.43	0.42	0.45	0.43	3.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	39.02	40.07	39.13	39.41	1.46	ppb
Phosphorus	31-2	284.44	294.45	281.87	286.92	2.32	ppb
Potassium	39-2	342.05	334.95	326.08	334.36	2.39	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				108		%
Scandium	45-2				108		%
Selenium	82-1	0.65	0.57	0.57	0.60	7.54	ppb
Selenium	77-2	21.14	16.38	13.33	16.95	23.22	ppb
Selenium	78-2	5.00	3.59	2.72	3.77	30.53	ppb
Silicon	28-1	4436.20	4555.18	4722.87	4571.42	3.15	ppb
Silver	107-1	0.17	0.18	0.19	0.18	5.40	ppb
Silver	109-1	0.16	0.18	0.19	0.17	8.56	ppb
Sodium	23-2	57.58	63.40	58.45	59.81	5.24	ppb
Strontium	86-1	26.33	26.30	26.34	26.32	0.08	ppb
Strontium	88-1	26.22	26.10	26.30	26.20	0.38	ppb
Sulfur	34-1	-1856.16	-1819.99	-1776.82	-1817.66		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.13	0.14	0.15	0.14	8.79	ppb
Thallium	205-1	0.12	0.13	0.15	0.14	10.27	ppb
Tin	118-1	0.04	0.03	0.05	0.04	20.09	ppb
Titanium	47-1	10.97	9.88	10.81	10.55	5.54	ppb
Uranium	238-1	0.23	0.24	0.23	0.23	2.32	ppb

Lab Sample ID : Q1159-02DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	33.13	33.71	32.46	33.10	1.89	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				108		%
Zinc	66-2	69.55	72.57	70.08	70.73	2.28	ppb
Zirconium	90-1	0.36	0.39	0.39	0.38	5.30	ppb
Zirconium	91-1	2.01	0.39	0.40	0.93	99.83	ppb

Lab Sample ID: Q1159-01LDLX10 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Date & Time 7to	quircu . 202	0 02 11 14.00.10	Datai	iic ivaiiic .	02 17 (I \L1 .G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2400.28	2390.35	2349.19	2379.94	1.14	ppb
Antimony	121-1	0.06	0.07	0.06	0.06	10.99	ppb
Arsenic	75-2	5.55	5.50	5.42	5.49	1.15	ppb
Barium	135-1	25.07	25.01	25.12	25.07	0.22	ppb
Barium	137-1	25.29	25.32	25.25	25.28	0.15	ppb
Beryllium	9-1	0.11	0.14	0.12	0.12	10.04	ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.11	0.06	0.06	61.76	ppb
Cadmium	106-1	-1.25	-2.51	-1.39	-1.72		ppb
Cadmium	111-1	-0.06	-0.18	-0.09	-0.11		ppb
Calcium	43-1	603.43	613.59	614.48	610.50	1.01	ppb
Calcium	44-1	598.40	604.87	602.29	601.85	0.54	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.43	5.50	5.53	5.49	0.90	ppb
Cobalt	59-2	3.18	3.16	3.08	3.14	1.74	ppb
Copper	63-2	10.63	10.64	10.45	10.57	1.01	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				103		%
Indium	115-1				104		%
Indium	115-2				103		%
Iron	54-2	6818.56	6734.57	6797.43	6783.52	0.64	ppb
Iron	56-2	6943.74	6870.90	6739.86	6851.50	1.51	ppb
Iron	57-2	6833.96	6719.21	6704.60	6752.59	1.05	ppb
Krypton	83-1						cps
Lead	206-1	2.68	2.69	2.71	2.69	0.53	ppb

Lab Sample ID: Q1159-01LDLX10 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Date & Time Act	quircu . Zoz	20 02 11 14.00.10	Datai	iic i vairie .	02 17 (I \L I . G		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.60	2.55	2.61	2.59	1.13	ppb
Lead	208-1	2.64	2.60	2.65	2.63	0.92	ppb
Lithium	6-1				106		%
Magnesium	24-2	1155.73	1165.48	1147.05	1156.09	0.80	ppb
Manganese	55-2	51.37	52.55	50.56	51.49	1.94	ppb
Molybdenum	94-1	0.21	0.24	0.26	0.24	10.05	ppb
Molybdenum	95-1	0.09	0.09	0.09	0.09	2.58	ppb
Molybdenum	96-1	0.12	0.10	0.10	0.10	9.12	ppb
Molybdenum	97-1	0.11	0.08	0.09	0.09	13.91	ppb
Molybdenum	98-1	0.10	0.09	0.10	0.09	6.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	8.03	7.98	8.00	8.00	0.36	ppb
Phosphorus	31-2	52.51	55.53	52.81	53.61	3.11	ppb
Potassium	39-2	73.45	70.78	73.02	72.42	1.98	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				107		%
Scandium	45-2				105		%
Selenium	82-1	0.13	0.14	0.16	0.14	8.81	ppb
Selenium	77-2	1.45	1.43	1.42	1.43	1.05	ppb
Selenium	78-2	1.27	0.24	0.99	0.84	64.18	ppb
Silicon	28-1	1072.16	925.27	921.76	973.06	8.82	ppb
Silver	107-1	0.03	0.04	0.03	0.03	9.23	ppb
Silver	109-1	0.04	0.04	0.04	0.04	4.44	ppb
Sodium	23-2	19.72	18.98	15.41	18.04	12.78	ppb
Strontium	86-1	5.26	5.37	5.32	5.32	1.03	ppb
Strontium	88-1	5.26	5.33	5.35	5.31	0.88	ppb
Sulfur	34-1	-2065.35	-2018.08	-2105.45	-2062.96		ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.04	0.04	0.04	0.04	7.85	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	8.44	ppb
Tin	118-1	-0.03	-0.05	-0.05	-0.04		ppb
Titanium	47-1	1.31	1.62	1.92	1.62	18.81	ppb
Uranium	238-1	0.04	0.04	0.04	0.04	2.83	ppb

Lab Sample ID : Q1159-01LDLX10 Instrumnet Name : P8
Client Sample ID : YE8C9L Dilution Factor : 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	6.67	6.66	6.91	6.75	2.12	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				107		%
Zinc	66-2	14.79	15.05	14.50	14.78	1.86	ppb
Zirconium	90-1	0.07	0.07	0.08	0.07	5.33	ppb
Zirconium	91-1	0.16	0.09	0.08	0.11	35.29	ppb

Lab Sample ID :Q1159-03DLX2Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Date & Time Ac	quireu . 202	25-02-11 14.05.40	Dalar	ile Name.	UZZAREF.U			
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units	
Aluminium	27-2	11817.93	11598.56	11695.75	11704.08	0.94	ppb	
Antimony	121-1	10.63	10.66	10.82	10.71	0.95	ppb	
Arsenic	75-2	31.28	29.60	30.06	30.32	2.87	ppb	
Barium	135-1	319.70	316.23	324.64	320.19	1.32	ppb	
Barium	137-1	333.76	325.61	340.15	333.17	2.19	ppb	
Beryllium	9-1	5.24	5.52	5.38	5.38	2.53	ppb	
Bismuth	209-1				101		%	
Bismuth	209-2				102		%	
Bromine	81-1						cps	
Cadmium	108-1	4.80	5.06	4.75	4.87	3.47	ppb	
Cadmium	106-1	2.74	2.31	2.32	2.46	10.00	ppb	
Cadmium	111-1	5.21	5.01	5.18	5.13	2.07	ppb	
Calcium	43-1	3469.65	3419.18	3466.52	3451.78	0.82	ppb	
Calcium	44-1	3388.72	3342.93	3337.58	3356.41	0.84	ppb	
Carbon	12-1						cps	
Carbon	12-2						cps	
Chlorine	35-1						cps	
Chlorine	35-2						cps	
Chromium	52-2	46.23	45.55	46.60	46.13	1.15	ppb	
Cobalt	59-2	65.59	63.55	65.21	64.78	1.68	ppb	
Copper	63-2	76.84	75.67	75.73	76.08	0.87	ppb	
Dysprosium	156-1						cps	
Dysprosium	156-2						cps	
Erbium	164-1						cps	
Erbium	164-2						cps	
Gadolinium	160-1						cps	
Gadolinium	160-2						cps	
Holmium	165-1				103		%	
Holmium	165-2				104		%	
Indium	115-1				103		%	
Indium	115-2				104		%	
Iron	54-2	33676.35	32324.28	32977.96	32992.86	2.05	ppb	
Iron	56-2	32908.36	32418.20	32906.12	32744.23	0.86	ppb	
Iron	57-2	33510.95	32992.49	32868.36	33123.93	1.03	ppb	
Krypton	83-1						cps	
Lead	206-1	14.74	14.72	14.85	14.77	0.49	ppb	

Lab Sample ID: Q1159-03DLX2 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Date & Time Act	quircu . Zoz	0 02 11 14.00.40	Datai	iic ivairie .	OZZ/ (I (LI .u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	14.07	13.94	14.07	14.03	0.52	ppb
Lead	208-1	14.32	14.26	14.32	14.30	0.26	ppb
Lithium	6-1				107		%
Magnesium	24-2	5828.44	5634.15	5669.03	5710.54	1.81	ppb
Manganese	55-2	295.45	288.16	294.65	292.75	1.37	ppb
Molybdenum	94-1	42.43	42.64	43.55	42.87	1.39	ppb
Molybdenum	95-1	50.52	50.99	51.69	51.06	1.16	ppb
Molybdenum	96-1	49.31	50.27	50.70	50.09	1.42	ppb
Molybdenum	97-1	50.99	51.28	52.13	51.46	1.15	ppb
Molybdenum	98-1	50.43	51.31	51.35	51.03	1.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	89.04	87.19	88.84	88.36	1.15	ppb
Phosphorus	31-2	307.28	321.91	335.74	321.64	4.42	ppb
Potassium	39-2	328.75	320.98	317.06	322.26	1.85	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				108		%
Scandium	45-2				108		%
Selenium	82-1	2.50	2.28	2.44	2.40	4.63	ppb
Selenium	77-2	16.51	16.57	18.74	17.27	7.35	ppb
Selenium	78-2	4.65	3.68	5.05	4.46	15.81	ppb
Silicon	28-1	4814.84	4428.17	4447.94	4563.65	4.77	ppb
Silver	107-1	5.09	5.12	5.22	5.14	1.27	ppb
Silver	109-1	5.10	5.08	5.27	5.15	2.06	ppb
Sodium	23-2	51.34	48.19	52.67	50.73	4.54	ppb
Strontium	86-1	1013.38	1013.92	1008.09	1011.80	0.32	ppb
Strontium	88-1	997.55	1000.36	1009.06	1002.32	0.60	ppb
Sulfur	34-1	-2288.41	-2352.42	-2366.66	-2335.83		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	4.90	4.98	5.01	4.96	1.12	ppb
Thallium	205-1	4.98	5.01	5.02	5.00	0.35	ppb
Tin	118-1	0.02	0.00	0.01	0.01	80.18	ppb
Titanium	47-1	7.87	14.07	18.01	13.32	38.38	ppb
Uranium	238-1	0.23	0.24	0.23	0.23	1.30	ppb

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Lab Sample ID : Q1159-03DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9S Dilution Factor : 2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	80.97	79.34	81.19	80.50	1.26	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				107		%
Zinc	66-2	120.38	116.92	119.63	118.98	1.53	ppb
Zirconium	90-1	0.39	0.38	0.41	0.40	3.64	ppb
Zirconium	91-1	0.41	0.41	0.64	0.49	27.50	ppb

Lab Sample ID: PB166570BL Instrumnet Name: P8
Client Sample ID: PBW570 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Date & Time / to	quircu . 202	0 02 11 14.10.20	Datai	iic radiiic .	02000BL.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.44	-0.06	-0.57	-0.36		ppb
Antimony	121-1	0.01	0.00	0.00	0.01	27.52	ppb
Arsenic	75-2	-0.01	0.02	-0.02	0.00		ppb
Barium	135-1	-0.01	-0.01	-0.02	-0.02		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	177.07	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.04	0.04	0.04	0.04	3.00	ppb
Cadmium	106-1	-1.04	-2.27	-0.58	-1.30		ppb
Cadmium	111-1	-0.09	-0.18	-0.05	-0.10		ppb
Calcium	43-1	-1.33	0.21	-0.47	-0.53		ppb
Calcium	44-1	-5.67	-5.48	-6.31	-5.82		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	0.00	-0.02	-0.01		ppb
Cobalt	59-2	0.00	-0.01	0.00	0.00		ppb
Copper	63-2	-0.17	-0.19	-0.20	-0.19		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				104		%
Iron	54-2	0.95	0.99	0.80	0.91	10.67	ppb
Iron	56-2	0.70	0.67	0.59	0.65	8.86	ppb
Iron	57-2	0.29	1.74	1.54	1.19	65.91	ppb
Krypton	83-1						cps
Lead	206-1	0.04	0.03	0.04	0.04	11.08	ppb

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Date a Time Act	quirca. 202	20 02 11 14.10.20	Datai	iic ivailic .	02000DL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.04	0.04	0.03	0.03	17.37	ppb
Lead	208-1	0.04	0.04	0.04	0.04	7.15	ppb
Lithium	6-1				107		%
Magnesium	24-2	-6.62	-7.13	-6.81	-6.85		ppb
Manganese	55-2	-0.01	0.00	0.00	-0.01		ppb
Molybdenum	94-1	0.00	0.01	0.01	0.01	28.98	ppb
Molybdenum	95-1	0.00	0.01	0.00	0.00	75.43	ppb
Molybdenum	96-1	0.00	0.01	-0.01	0.00		ppb
Molybdenum	97-1	0.00	-0.01	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	49.42	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.06	-0.06	-0.06		ppb
Phosphorus	31-2	-7.49	-19.80	-24.33	-17.21		ppb
Potassium	39-2	3.85	1.80	3.12	2.92	35.55	ppb
Rhodium	103-1				105		%
Rhodium	103-2				105		%
Scandium	45-1				107		%
Scandium	45-2				107		%
Selenium	82-1	0.17	0.00	0.39	0.19	104.02	ppb
Selenium	77-2	-0.31	-0.31	-0.31	-0.31		ppb
Selenium	78-2	0.98	-0.27	0.99	0.57	128.24	ppb
Silicon	28-1	-0.46	-1.52	-1.63	-1.20		ppb
Silver	107-1	0.00	0.00	0.00	0.00	747.58	ppb
Silver	109-1	0.00	0.00	0.00	0.00	33.98	ppb
Sodium	23-2	3.59	-0.52	-0.45	0.87	268.83	ppb
Strontium	86-1	-0.04	-0.05	-0.04	-0.04		ppb
Strontium	88-1	-0.04	-0.04	-0.03	-0.03		ppb
Sulfur	34-1	-1377.16	-1655.54	-1520.32	-1517.67		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.02	0.02	0.02	0.02	8.36	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	2.03	ppb
Tin	118-1	-0.01	-0.02	-0.01	-0.02		ppb
Titanium	47-1	-0.06	-0.04	-0.08	-0.06		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				108		%
Zinc	66-2	0.13	0.00	-0.02	0.04	230.14	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	210.07	ppb
Zirconium	91-1	0.01	0.00	0.00	0.01	97.99	ppb

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Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Date & Time / to	quircu . 202	0 02 11 14.10.40	Datai	iic ivairie .	024L00L.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	41.27	41.94	40.43	41.22	1.83	ppb
Antimony	121-1	4.33	4.44	4.32	4.36	1.52	ppb
Arsenic	75-2	2.29	2.31	2.31	2.30	0.50	ppb
Barium	135-1	20.75	21.44	21.01	21.07	1.64	ppb
Barium	137-1	20.69	21.35	21.13	21.06	1.59	ppb
Beryllium	9-1	2.15	2.18	2.13	2.15	1.08	ppb
Bismuth	209-1				102		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	2.65	2.30	2.43	2.46	7.11	ppb
Cadmium	106-1	1.04	1.23	2.02	1.43	36.25	ppb
Cadmium	111-1	2.09	2.17	2.23	2.17	3.38	ppb
Calcium	43-1	1074.02	1108.22	1084.79	1089.01	1.61	ppb
Calcium	44-1	1048.57	1074.68	1066.03	1063.09	1.25	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.95	4.11	4.07	4.04	1.99	ppb
Cobalt	59-2	2.11	2.18	2.16	2.15	1.65	ppb
Copper	63-2	4.52	4.58	4.59	4.56	0.90	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				105		%
Iron	54-2	426.73	438.04	442.64	435.80	1.88	ppb
Iron	56-2	426.95	434.63	438.82	433.47	1.39	ppb
Iron	57-2	435.76	431.17	440.14	435.69	1.03	ppb
Krypton	83-1						cps
Lead	206-1	1.98	2.09	2.07	2.05	2.93	ppb

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Date & Time Act	quircu . 202	0 02 11 14.10.40	Datai	iic i vairie .	024L00L.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.04	2.06	2.16	2.09	3.06	ppb
Lead	208-1	2.01	2.09	2.09	2.07	2.21	ppb
Lithium	6-1				107		%
Magnesium	24-2	988.05	1005.11	1021.90	1005.02	1.68	ppb
Manganese	55-2	2.04	2.07	2.11	2.07	1.68	ppb
Molybdenum	94-1	21.14	21.64	21.79	21.52	1.57	ppb
Molybdenum	95-1	21.27	21.91	21.84	21.67	1.62	ppb
Molybdenum	96-1	21.10	21.74	21.67	21.50	1.62	ppb
Molybdenum	97-1	21.43	22.10	22.02	21.85	1.68	ppb
Molybdenum	98-1	20.97	21.66	21.72	21.45	1.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.03	2.00	2.16	2.06	4.24	ppb
Phosphorus	31-2	37.48	48.04	29.93	38.48	23.65	ppb
Potassium	39-2	1007.03	1024.04	1046.03	1025.70	1.91	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				107		%
Scandium	45-2				108		%
Selenium	82-1	10.37	11.04	10.92	10.78	3.34	ppb
Selenium	77-2	10.76	6.73	7.66	8.38	25.20	ppb
Selenium	78-2	12.20	13.12	11.40	12.24	7.01	ppb
Silicon	28-1	22.33	23.73	23.24	23.10	3.08	ppb
Silver	107-1	2.11	2.20	2.18	2.16	2.22	ppb
Silver	109-1	2.13	2.19	2.16	2.16	1.50	ppb
Sodium	23-2	1047.44	1061.84	1096.05	1068.44	2.34	ppb
Strontium	86-1	3.55	3.74	3.73	3.68	2.86	ppb
Strontium	88-1	3.61	3.72	3.74	3.69	1.93	ppb
Sulfur	34-1	-1344.14	-1162.81	-1173.22	-1226.72		ppb
Terbium	159-1				104		%
Terbium	159-2				103		%
Thallium	203-1	2.00	2.04	2.08	2.04	1.92	ppb
Thallium	205-1	2.08	2.06	2.11	2.08	1.23	ppb
Tin	118-1	10.53	10.92	10.83	10.76	1.87	ppb
Titanium	47-1	2.49	2.48	2.49	2.48	0.22	ppb
Uranium	238-1	1.85	1.91	1.90	1.89	1.82	ppb

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.50	10.55	10.69	10.58	0.92	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				106		%
Zinc	66-2	10.84	10.69	10.44	10.66	1.87	ppb
Zirconium	90-1	1.98	2.08	2.02	2.03	2.36	ppb
Zirconium	91-1	1.95	2.03	2.00	1.99	2.05	ppb

Lab Sample ID: Q1135-09 Instrumnet Name: P8
Client Sample ID: YE8H7 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Date & Time / to	quircu . Zoz	20 02 11 14.22.10	Datai	iic i vairie .	020/ (I (E) .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.92	0.71	0.43	0.69	35.58	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	9.62	ppb
Arsenic	75-2	-0.02	-0.01	0.02	0.00		ppb
Barium	135-1	0.01	0.03	0.03	0.02	59.93	ppb
Barium	137-1	0.02	0.01	0.02	0.02	36.15	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00		ppb
Bismuth	209-1				106		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.04	-0.01	0.02	0.02	158.61	ppb
Cadmium	106-1	-1.57	-1.07	-0.66	-1.10		ppb
Cadmium	111-1	-0.12	-0.08	-0.05	-0.08		ppb
Calcium	43-1	5.89	6.03	4.72	5.55	12.95	ppb
Calcium	44-1	-0.70	-0.97	-0.61	-0.76		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.20	0.21	0.20	0.20	3.59	ppb
Cobalt	59-2	-0.02	-0.01	-0.01	-0.01		ppb
Copper	63-2	-0.18	-0.18	-0.18	-0.18		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				108		%
Indium	115-2				107		%
Iron	54-2	1.60	1.62	2.71	1.98	32.12	ppb
Iron	56-2	1.46	1.26	1.42	1.38	7.95	ppb
Iron	57-2	1.69	1.05	0.71	1.15	43.11	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.11	0.09	0.11	26.33	ppb

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Date & Time Act	1011CG . 202	20 02 11 14.22.10	Datai	iic ivailie .	020/ (( \L   . u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.15	0.11	0.09	0.12	25.40	ppb
Lead	208-1	0.15	0.10	0.09	0.11	25.54	ppb
Lithium	6-1				110		%
Magnesium	24-2	-6.21	-6.11	-4.80	-5.71		ppb
Manganese	55-2	0.36	0.32	0.44	0.37	17.13	ppb
Molybdenum	94-1	-0.02	0.00	0.00	-0.01		ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	97-1	0.00	-0.01	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.08	-0.08	-0.05	-0.07		ppb
Phosphorus	31-2	-5.50	-8.36	-5.50	-6.45		ppb
Potassium	39-2	-0.07	3.15	1.86	1.64	98.63	ppb
Rhodium	103-1				109		%
Rhodium	103-2				106		%
Scandium	45-1				109		%
Scandium	45-2				110		%
Selenium	82-1	0.11	-0.19	0.36	0.09	296.96	ppb
Selenium	77-2	0.55	-0.31	-0.31	-0.02		ppb
Selenium	78-2	-0.02	0.23	-0.27	-0.02		ppb
Silicon	28-1	9.11	9.60	10.48	9.73	7.17	ppb
Silver	107-1	0.01	0.01	0.01	0.01	22.27	ppb
Silver	109-1	0.01	0.01	0.01	0.01	20.21	ppb
Sodium	23-2	16.24	13.37	16.33	15.31	11.01	ppb
Strontium	86-1	-0.02	0.01	0.03	0.01	302.91	ppb
Strontium	88-1	0.03	0.02	0.02	0.02	6.22	ppb
Sulfur	34-1	-1364.05	-1398.69	-1313.04	-1358.59		ppb
Terbium	159-1				108		%
Terbium	159-2				105		%
Thallium	203-1	0.03	0.02	0.01	0.02	29.65	ppb
Thallium	205-1	0.03	0.02	0.01	0.02	31.39	ppb
Tin	118-1	-0.02	-0.01	-0.01	-0.01		ppb
Titanium	47-1	-0.13	-0.14	-0.15	-0.14		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID: Q1135-09 Instrumnet Name: P8
Client Sample ID: YE8H7 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				107		%
Zinc	66-2	0.06	0.04	0.07	0.06	23.92	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	455.02	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	685.88	ppb

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

Date & Time Ac	quired: 2025-02-11 14:25:40		Datai	DataFile Name :		026CCBE.d	
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.55	-0.39	-0.10	-0.35		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	27.86	ppb
Arsenic	75-2	0.01	-0.03	-0.04	-0.02		ppb
Barium	135-1	-0.03	0.00	-0.02	-0.02		ppb
Barium	137-1	0.00	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	-0.01	-0.01	0.00	-0.01		ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.06	0.03	0.00	0.03	106.61	ppb
Cadmium	106-1	-0.32	-1.94	-1.65	-1.31		ppb
Cadmium	111-1	-0.03	-0.15	-0.13	-0.10		ppb
Calcium	43-1	0.71	-0.96	-0.85	-0.37		ppb
Calcium	44-1	-6.00	-6.37	-6.05	-6.14		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.02	-0.03	-0.02		ppb
Cobalt	59-2	0.00	-0.01	-0.01	-0.01		ppb
Copper	63-2	-0.19	-0.18	-0.16	-0.18		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				102		%
Indium	115-1				104		%
Indium	115-2				103		%
Iron	54-2	0.62	0.60	0.74	0.66	11.65	ppb
Iron	56-2	0.26	0.16	0.33	0.25	34.51	ppb
Iron	57-2	-0.46	0.47	0.71	0.24	259.86	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	-0.01	0.00		ppb

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

Date a Time Act	quircu . Zoz	20 02 11 14.20.40	Datai	iic i vairie .	02000BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	431.31	ppb
Lead	208-1	-0.01	0.00	0.00	0.00		ppb
Lithium	6-1				107		%
Magnesium	24-2	-6.23	-4.83	-5.74	-5.60		ppb
Manganese	55-2	-0.02	-0.04	-0.05	-0.04		ppb
Molybdenum	94-1	0.01	0.00	0.00	0.00	108.41	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	123.60	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.01	0.00	0.00	40.48	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.10	-0.08	-0.13	-0.10		ppb
Phosphorus	31-2	-12.00	-15.04	-17.47	-14.84		ppb
Potassium	39-2	-2.26	4.77	1.38	1.29	271.38	ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				105		%
Scandium	45-2				105		%
Selenium	82-1	-0.12	0.11	-0.11	-0.04		ppb
Selenium	77-2	-0.31	1.43	-0.31	0.27	369.72	ppb
Selenium	78-2	0.76	0.75	0.25	0.59	49.33	ppb
Silicon	28-1	0.81	0.53	0.90	0.75	25.56	ppb
Silver	107-1	0.00	0.00	0.00	0.00	80.06	ppb
Silver	109-1	0.00	0.00	0.00	0.00	18.23	ppb
Sodium	23-2	-2.97	-0.92	-2.43	-2.11		ppb
Strontium	86-1	-0.04	-0.04	-0.03	-0.04		ppb
Strontium	88-1	-0.03	-0.03	-0.03	-0.03		ppb
Sulfur	34-1	-784.35	-839.37	-769.86	-797.86		ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	37.44	ppb
Thallium	205-1	0.01	0.00	0.00	0.00	36.05	ppb
Tin	118-1	-0.01	-0.01	-0.02	-0.01		ppb
Titanium	47-1	-0.04	-0.06	-0.06	-0.05		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	388.11	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				105		%
Zinc	66-2	0.11	0.08	-0.02	0.06	120.33	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	37.00	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00		ppb

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

Date & Time / to	quircu . 202	20 02 11 14.25.00	Datai	iic ivairie .	027 LOOL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	42.31	42.79	44.10	43.07	2.15	ppb
Antimony	121-1	4.26	4.25	4.41	4.30	2.03	ppb
Arsenic	75-2	2.23	2.25	1.98	2.16	7.12	ppb
Barium	135-1	20.53	20.66	21.20	20.80	1.72	ppb
Barium	137-1	21.16	20.98	21.35	21.17	0.86	ppb
Beryllium	9-1	2.13	2.13	2.13	2.13	0.04	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	2.38	2.52	2.55	2.48	3.60	ppb
Cadmium	106-1	0.75	-0.04	0.50	0.41	99.68	ppb
Cadmium	111-1	2.10	2.06	2.11	2.09	1.21	ppb
Calcium	43-1	1088.25	1085.67	1107.36	1093.76	1.08	ppb
Calcium	44-1	1052.90	1079.72	1069.48	1067.37	1.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.96	4.01	3.96	3.98	0.68	ppb
Cobalt	59-2	2.20	2.19	2.18	2.19	0.59	ppb
Copper	63-2	4.52	4.52	4.49	4.51	0.43	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				104		%
Iron	54-2	434.99	440.43	442.39	439.27	0.87	ppb
Iron	56-2	431.43	431.64	432.54	431.87	0.14	ppb
Iron	57-2	424.58	435.20	425.04	428.27	1.40	ppb
Krypton	83-1						cps
Lead	206-1	2.00	1.99	2.00	2.00	0.16	ppb

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LB Number : LB134674 Operator :

Lab Sample ID: PB166317BS Instrumnet Name: P8
Client Sample ID: LCS317 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.07	2.02	2.01	2.04	1.75	ppb
Lead	208-1	2.03	2.01	1.99	2.01	0.82	ppb
Lithium	6-1				107		%
Magnesium	24-2	1006.20	1006.22	998.56	1003.66	0.44	ppb
Manganese	55-2	2.01	2.13	2.05	2.06	2.86	ppb
Molybdenum	94-1	11.84	11.98	12.10	11.97	1.07	ppb
Molybdenum	95-1	9.86	9.90	10.30	10.02	2.40	ppb
Molybdenum	96-1	10.20	10.35	10.47	10.34	1.29	ppb
Molybdenum	97-1	9.92	10.23	10.21	10.12	1.67	ppb
Molybdenum	98-1	9.81	10.04	10.34	10.06	2.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.08	2.01	2.06	2.05	1.62	ppb
Phosphorus	31-2	27.21	33.22	20.52	26.98	23.54	ppb
Potassium	39-2	1036.66	1027.66	1018.88	1027.73	0.87	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				105		%
Scandium	45-2				108		%
Selenium	82-1	10.58	10.13	11.63	10.78	7.10	ppb
Selenium	77-2	10.30	6.79	11.19	9.43	24.71	ppb
Selenium	78-2	11.63	12.45	14.24	12.77	10.43	ppb
Silicon	28-1	23.48	24.72	24.85	24.35	3.10	ppb
Silver	107-1	2.08	2.16	2.19	2.15	2.67	ppb
Silver	109-1	2.13	2.16	2.18	2.15	1.21	ppb
Sodium	23-2	1069.85	1074.81	1064.19	1069.62	0.50	ppb
Strontium	86-1	1.91	2.10	2.03	2.01	4.72	ppb
Strontium	88-1	1.97	1.99	2.07	2.01	2.47	ppb
Sulfur	34-1	-1022.63	-878.23	-794.16	-898.34		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	2.07	2.02	2.03	2.04	1.07	ppb
Thallium	205-1	2.04	2.03	2.03	2.03	0.37	ppb
Tin	118-1	10.58	10.68	10.81	10.69	1.09	ppb
Titanium	47-1	2.54	2.44	2.55	2.51	2.45	ppb
Uranium	238-1	1.87	1.88	1.87	1.87	0.31	ppb

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.75	10.54	10.39	10.56	1.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				105		%
Zinc	66-2	10.33	10.49	10.33	10.38	0.87	ppb
Zirconium	90-1	1.98	2.03	2.05	2.02	1.81	ppb
Zirconium	91-1	1.97	1.99	1.98	1.98	0.42	ppb

Lab Sample ID: Q1186-01 Instrumnet Name: P8

Client Sample ID: ME2948 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Date a Time 7to	quiicu . Zoz	0 02 11 14.02.20	Datai	iic radific .	020/ (I (LI .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7.88	8.23	7.75	7.95	3.10	ppb
Antimony	121-1	0.05	0.05	0.05	0.05	2.94	ppb
Arsenic	75-2	0.38	0.42	0.29	0.36	18.40	ppb
Barium	135-1	18.49	18.85	18.32	18.55	1.45	ppb
Barium	137-1	18.38	19.41	18.88	18.89	2.73	ppb
Beryllium	9-1	-0.01	0.00	-0.01	-0.01		ppb
Bismuth	209-1				93		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.02	0.04	0.04	38.81	ppb
Cadmium	106-1	-1.26	-0.50	-0.46	-0.74		ppb
Cadmium	111-1	-0.09	-0.04	-0.03	-0.06		ppb
Calcium	43-1	374945.38	382182.11	378143.76	378423.75	0.96	ppb
Calcium	44-1	369342.36	378084.91	371452.94	372960.07	1.22	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.46	0.48	0.37	0.44	13.37	ppb
Cobalt	59-2	0.02	0.02	0.03	0.02	11.96	ppb
Copper	63-2	-0.07	-0.07	-0.08	-0.07		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	54-2	832.33	822.93	845.38	833.55	1.35	ppb
Iron	56-2	861.23	856.04	854.50	857.26	0.41	ppb
Iron	57-2	828.22	818.88	849.52	832.21	1.89	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.08	0.07	0.08	9.53	ppb

Lab Sample ID : Q1186-01 Instrumnet Name : P8
Client Sample ID : ME2948 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Date & Time Acc	quirea: 202	25-02-11 14:32:25	DataF	ile Name :	028AREF.d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.09	0.08	0.08	8.32	ppb
Lead	208-1	0.09	0.09	0.08	0.08	5.00	ppb
Lithium	6-1				102		%
Magnesium	24-2	115372.05	114712.95	117417.01	115834.00	1.22	ppb
Manganese	55-2	29.45	28.85	30.14	29.48	2.19	ppb
Molybdenum	94-1	0.47	0.44	0.43	0.45	4.07	ppb
Molybdenum	95-1	0.35	0.38	0.37	0.37	3.43	ppb
Molybdenum	96-1	0.36	0.35	0.36	0.36	1.97	ppb
Molybdenum	97-1	0.38	0.35	0.39	0.37	5.75	ppb
Molybdenum	98-1	0.35	0.36	0.37	0.36	2.35	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.14	0.11	0.24	0.16	38.58	ppb
Phosphorus	31-2	-2.59	-7.24	-16.73	-8.85		ppb
Potassium	39-2	3592.20	3548.37	3600.33	3580.30	0.78	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				101		%
Scandium	45-2				104		%
Selenium	82-1	0.48	0.75	1.15	0.80	41.92	ppb
Selenium	77-2	-0.31	0.60	-0.31	0.00		ppb
Selenium	78-2	0.26	0.00	1.35	0.54	134.40	ppb
Silicon	28-1	5575.50	5692.76	5550.32	5606.19	1.36	ppb
Silver	107-1	0.02	0.02	0.02	0.02	4.85	ppb
Silver	109-1	0.01	0.01	0.01	0.01	14.79	ppb
Sodium	23-2	31661.82	31845.38	32335.28	31947.49	1.09	ppb
Strontium	86-1	13988.20	13770.49	13947.12	13901.94	0.83	ppb
Strontium	88-1	14047.29	13802.44	13960.21	13936.65	0.89	ppb
Sulfur	34-1	405453.53	410350.89	405708.20	407170.87	0.68	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.01	0.01	0.01	20.51	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	21.90	ppb
Tin	118-1	0.95	0.94	0.92	0.94	1.80	ppb
Titanium	47-1	0.44	0.50	0.52	0.49	9.27	ppb
Uranium	238-1	0.21	0.21	0.20	0.21	1.57	ppb

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.09	0.11	0.11	0.11	11.23	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				102		%
Zinc	66-2	1.93	1.84	1.66	1.81	7.41	ppb
Zirconium	90-1	0.08	0.08	0.08	0.08	5.74	ppb
Zirconium	91-1	0.09	0.08	0.08	0.08	4.69	ppb

<sup>3</sup> 956

Lab Sample ID: Q1159-01DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9 Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	6120.53	6733.47	6024.12	6292.71	6.11	ppb
Antimony	121-1	0.13	0.15	0.13	0.14	5.82	ppb
Arsenic	75-2	13.92	15.11	13.64	14.22	5.47	ppb
Barium	135-1	61.94	62.33	63.67	62.65	1.45	ppb
Barium	137-1	62.01	62.76	63.86	62.88	1.48	ppb
Beryllium	9-1	0.27	0.25	0.24	0.25	4.96	ppb
Bismuth	209-1				103		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.13	0.18	0.11	0.14	26.71	ppb
Cadmium	106-1	-0.63	-0.53	-0.51	-0.56		ppb
Cadmium	111-1	-0.01	-0.01	0.01	0.00		ppb
Calcium	43-1	1553.81	1560.82	1605.62	1573.42	1.79	ppb
Calcium	44-1	1606.90	1581.39	1631.06	1606.45	1.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	14.31	15.63	14.08	14.67	5.69	ppb
Cobalt	59-2	7.95	8.73	7.82	8.17	6.04	ppb
Copper	63-2	27.02	30.02	26.35	27.80	7.03	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				99		%
Indium	115-1				104		%
Indium	115-2				97		%
Iron	54-2	17690.27	19473.78	17272.69	18145.58	6.44	ppb
Iron	56-2	17495.32	19344.66	16867.81	17902.59	7.19	ppb
Iron	57-2	17252.54	19015.37	16941.64	17736.52	6.31	ppb
Krypton	83-1						cps
Lead	206-1	6.72	6.71	6.90	6.78	1.55	ppb

Lab Sample ID :Q1159-01DL2X4Instrumnet Name :P8Client Sample ID :YE8C9Dilution Factor :4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	6.39	6.34	6.45	6.39	0.81	ppb
Lead	208-1	6.50	6.44	6.63	6.52	1.51	ppb
Lithium	6-1				108		%
Magnesium	24-2	2970.90	3304.07	2915.53	3063.50	6.86	ppb
Manganese	55-2	131.55	143.90	127.23	134.23	6.45	ppb
Molybdenum	94-1	0.53	0.82	2.08	1.14	72.07	ppb
Molybdenum	95-1	0.20	0.22	0.21	0.21	4.27	ppb
Molybdenum	96-1	0.27	0.25	0.27	0.26	4.03	ppb
Molybdenum	97-1	0.21	0.21	0.23	0.22	6.08	ppb
Molybdenum	98-1	0.22	0.20	0.21	0.21	3.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	20.62	22.58	20.09	21.09	6.22	ppb
Phosphorus	31-2	184.17	167.87	147.01	166.35	11.20	ppb
Potassium	39-2	177.62	205.22	202.41	195.09	7.79	ppb
Rhodium	103-1				105		%
Rhodium	103-2				98		%
Scandium	45-1				106		%
Scandium	45-2				101		%
Selenium	82-1	-0.01	0.07	0.21	0.09	122.26	ppb
Selenium	77-2	9.64	3.72	6.72	6.69	44.24	ppb
Selenium	78-2	2.11	0.61	1.27	1.33	56.40	ppb
Silicon	28-1	2264.31	2262.80	2400.82	2309.31	3.43	ppb
Silver	107-1	0.10	0.09	0.10	0.10	5.14	ppb
Silver	109-1	0.10	0.10	0.10	0.10	3.02	ppb
Sodium	23-2	38.00	55.69	35.00	42.90	26.06	ppb
Strontium	86-1	13.93	13.78	14.17	13.96	1.42	ppb
Strontium	88-1	13.82	13.83	14.31	13.99	2.00	ppb
Sulfur	34-1	-472.09	-658.16	-433.60	-521.28		ppb
Terbium	159-1				105		%
Terbium	159-2				98		%
Thallium	203-1	0.06	0.05	0.05	0.05	9.18	ppb
Thallium	205-1	0.05	0.05	0.05	0.05	5.32	ppb
Tin	118-1	0.01	-0.02	-0.02	-0.01		ppb
Titanium	47-1	4.39	6.02	6.02	5.48	17.21	ppb
Uranium	238-1	0.11	0.11	0.11	0.11	0.72	ppb

Lab Sample ID: Q1159-01DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9 Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	17.20	19.14	17.03	17.79	6.60	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				100		%
Zinc	66-2	37.30	41.40	34.96	37.89	8.60	ppb
Zirconium	90-1	0.22	0.19	0.24	0.22	10.97	ppb
Zirconium	91-1	0.18	0.21	0.23	0.21	10.23	ppb

Lab Sample ID :Q1159-02DL2X4Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :4

Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5782.66	5937.85	6258.60	5993.04	4.05	ppb
Antimony	121-1	0.13	0.13	0.13	0.13	1.45	ppb
Arsenic	75-2	13.13	13.62	13.23	13.33	1.95	ppb
Barium	135-1	59.91	61.64	61.84	61.13	1.74	ppb
Barium	137-1	59.87	62.10	62.30	61.42	2.20	ppb
Beryllium	9-1	0.26	0.24	0.25	0.25	3.35	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.14	0.09	0.13	0.12	21.58	ppb
Cadmium	106-1	-1.18	-0.49	-0.05	-0.57		ppb
Cadmium	111-1	-0.05	0.01	0.05	0.00	1589.24	ppb
Calcium	43-1	1497.54	1518.41	1499.20	1505.05	0.77	ppb
Calcium	44-1	1531.91	1587.68	1524.09	1547.89	2.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	13.41	13.71	14.25	13.79	3.11	ppb
Cobalt	59-2	7.60	7.77	8.14	7.84	3.53	ppb
Copper	63-2	25.87	26.34	27.68	26.63	3.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				102		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	54-2	17128.44	17166.35	17876.01	17390.27	2.42	ppb
Iron	56-2	16652.95	16717.50	17607.67	16992.71	3.14	ppb
Iron	57-2	16193.05	16623.95	17514.74	16777.25	4.02	ppb
Krypton	83-1						cps
Lead	206-1	6.25	6.29	6.45	6.33	1.69	ppb

Lab Sample ID :Q1159-02DL2X4Instrumnet Name :P8Client Sample ID :YE8C9DDilution Factor :4

Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5.88	5.98	6.04	5.97	1.37	ppb
Lead	208-1	5.99	6.08	6.18	6.09	1.57	ppb
Lithium	6-1				107		%
Magnesium	24-2	2807.75	2860.61	3024.39	2897.58	3.90	ppb
Manganese	55-2	123.72	126.12	131.82	127.22	3.27	ppb
Molybdenum	94-1	0.48	0.50	0.49	0.49	2.69	ppb
Molybdenum	95-1	0.19	0.20	0.19	0.19	1.64	ppb
Molybdenum	96-1	0.39	0.24	0.24	0.29	29.64	ppb
Molybdenum	97-1	0.19	0.18	0.20	0.19	4.94	ppb
Molybdenum	98-1	0.18	0.21	0.19	0.19	7.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	19.42	19.45	21.18	20.01	5.03	ppb
Phosphorus	31-2	127.15	164.37	172.30	154.61	15.59	ppb
Potassium	39-2	159.33	164.65	181.12	168.37	6.75	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	0.71	0.14	0.67	0.51	62.04	ppb
Selenium	77-2	9.29	4.95	4.27	6.17	44.18	ppb
Selenium	78-2	2.28	1.52	3.21	2.34	36.11	ppb
Silicon	28-1	2412.98	2281.59	2251.33	2315.30	3.71	ppb
Silver	107-1	0.07	0.08	0.09	0.08	10.45	ppb
Silver	109-1	0.08	0.08	0.08	0.08	1.56	ppb
Sodium	23-2	26.02	27.70	37.00	30.24	19.56	ppb
Strontium	86-1	12.73	13.29	13.23	13.08	2.36	ppb
Strontium	88-1	12.92	13.42	13.19	13.18	1.89	ppb
Sulfur	34-1	-1081.76	-1034.96	-1116.36	-1077.69		ppb
Terbium	159-1				106		%
Terbium	159-2				101		%
Thallium	203-1	0.04	0.04	0.05	0.04	10.09	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	8.37	ppb
Tin	118-1	-0.02	-0.03	-0.03	-0.03		ppb
Titanium	47-1	3.65	5.44	3.86	4.32	22.70	ppb
Uranium	238-1	0.10	0.11	0.30	0.17	65.55	ppb

Lab Sample ID : Q1159-02DL2X4 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 4

Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	16.53	16.81	17.83	17.06	4.03	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				105		%
Zinc	66-2	35.42	35.57	37.40	36.13	3.05	ppb
Zirconium	90-1	0.52	0.18	0.20	0.30	63.48	ppb
Zirconium	91-1	0.21	0.19	0.17	0.19	10.60	ppb

Lab Sample ID: Q1159-01LDL2X20 Instrumnet Name: P8

Client Sample ID: YE8C9L Dilution Factor: 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Darameter	Mass	ConDon1	ConDon?	ConDon?	Ava Cono	CanaDCD	Llaita
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1185.86	1170.09	1181.89	1179.28	0.70	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	3.62	ppb
Arsenic	75-2	2.72	2.86	2.88	2.82	3.14	ppb
Barium	135-1	12.27	12.56	12.20	12.34	1.54	ppb
Barium	137-1	12.72	12.45	12.14	12.43	2.35	ppb
Beryllium	9-1	0.05	0.05	0.04	0.05	12.60	ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.05	0.04	24.26	ppb
Cadmium	106-1	-0.57	-1.17	-1.07	-0.94		ppb
Cadmium	111-1	-0.04	-0.08	-0.08	-0.07		ppb
Calcium	43-1	309.95	313.56	312.82	312.11	0.61	ppb
Calcium	44-1	300.54	308.19	301.31	303.34	1.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.76	2.74	2.81	2.77	1.32	ppb
Cobalt	59-2	1.52	1.47	1.54	1.51	2.51	ppb
Copper	63-2	5.15	4.97	5.19	5.11	2.25	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				104		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	54-2	3396.72	3295.62	3391.22	3361.19	1.69	ppb
Iron	56-2	3430.21	3340.32	3394.33	3388.29	1.34	ppb
Iron	57-2	3362.70	3314.57	3327.66	3334.98	0.75	ppb
Krypton	83-1						cps
Lead	206-1	1.25	1.28	1.27	1.27	1.06	ppb

Lab Sample ID: Q1159-01LDL2X20 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.21	1.20	1.21	1.20	0.64	ppb
Lead	208-1	1.23	1.23	1.24	1.24	0.47	ppb
Lithium	6-1				106		%
Magnesium	24-2	574.27	562.38	569.19	568.62	1.05	ppb
Manganese	55-2	25.08	24.98	25.37	25.15	0.81	ppb
Molybdenum	94-1	0.13	0.09	0.08	0.10	26.45	ppb
Molybdenum	95-1	0.04	0.04	0.04	0.04	4.71	ppb
Molybdenum	96-1	0.05	0.05	0.05	0.05	0.98	ppb
Molybdenum	97-1	0.03	0.03	0.04	0.03	13.73	ppb
Molybdenum	98-1	0.04	0.04	0.04	0.04	5.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.04	3.83	3.94	3.94	2.62	ppb
Phosphorus	31-2	31.46	9.79	12.80	18.01	65.18	ppb
Potassium	39-2	34.81	34.61	35.99	35.14	2.12	ppb
Rhodium	103-1				107		%
Rhodium	103-2				104		%
Scandium	45-1				107		%
Scandium	45-2				107		%
Selenium	82-1	-0.10	0.21	0.05	0.06	273.95	ppb
Selenium	77-2	1.43	1.46	-0.31	0.86	117.73	ppb
Selenium	78-2	0.74	-0.01	0.24	0.32	118.89	ppb
Silicon	28-1	456.61	463.09	460.45	460.05	0.71	ppb
Silver	107-1	0.02	0.02	0.01	0.02	19.40	ppb
Silver	109-1	0.01	0.02	0.02	0.02	8.13	ppb
Sodium	23-2	8.58	5.59	6.63	6.93	21.92	ppb
Strontium	86-1	2.62	2.58	2.72	2.64	2.67	ppb
Strontium	88-1	2.71	2.66	2.69	2.68	0.85	ppb
Sulfur	34-1	-861.10	-781.07	-978.68	-873.61		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	0.01	0.01	0.01	0.01	31.18	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	16.17	ppb
Tin	118-1	-0.07	-0.06	-0.06	-0.06		ppb
Titanium	47-1	0.67	1.38	0.76	0.94	41.10	ppb
Uranium	238-1	0.02	0.02	0.02	0.02	5.48	ppb

Lab Sample ID : Q1159-01LDL2X20 Instrumnet Name : P8
Client Sample ID : YE8C9L Dilution Factor : 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.37	3.30	3.24	3.30	1.95	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				106		%
Zinc	66-2	7.26	7.44	7.64	7.45	2.56	ppb
Zirconium	90-1	0.03	0.04	0.05	0.04	17.19	ppb
Zirconium	91-1	0.04	0.03	0.05	0.04	24.86	ppb

Lab Sample ID: Q1159-03DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Date & Time / to	quircu . Zoz	10 02 11 14.40.00	Datai	iic i vairie .	002/ ((\LI .d		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5861.59	5939.44	5911.28	5904.10	0.67	ppb
Antimony	121-1	5.33	5.38	5.40	5.37	0.67	ppb
Arsenic	75-2	15.75	15.82	16.65	16.08	3.10	ppb
Barium	135-1	157.52	161.28	161.89	160.23	1.48	ppb
Barium	137-1	162.49	162.13	160.43	161.68	0.68	ppb
Beryllium	9-1	2.72	2.68	2.68	2.69	0.75	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	2.58	2.82	2.56	2.65	5.44	ppb
Cadmium	106-1	1.83	1.61	1.65	1.70	7.04	ppb
Cadmium	111-1	2.69	2.64	2.54	2.62	2.89	ppb
Calcium	43-1	1735.13	1761.32	1756.07	1750.84	0.79	ppb
Calcium	44-1	1681.63	1743.82	1689.34	1704.93	1.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	23.10	23.66	23.50	23.42	1.22	ppb
Cobalt	59-2	32.49	32.92	33.12	32.84	0.99	ppb
Copper	63-2	38.13	38.68	38.72	38.51	0.85	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				103		%
Iron	54-2	17011.13	17097.42	17037.73	17048.76	0.26	ppb
Iron	56-2	16430.19	16967.92	16656.89	16685.00	1.62	ppb
Iron	57-2	16160.89	16417.63	16404.64	16327.72	0.89	ppb
Krypton	83-1						cps
Lead	206-1	7.31	7.43	7.31	7.35	0.95	ppb

Lab Sample ID : Q1159-03DL2X4 Instrumnet Name : P8
Client Sample ID : YE8C9S Dilution Factor : 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	6.92	6.93	6.95	6.93	0.21	ppb
Lead	208-1	7.04	7.12	7.10	7.09	0.59	ppb
Lithium	6-1				108		%
Magnesium	24-2	2796.90	2853.05	2845.39	2831.78	1.08	ppb
Manganese	55-2	146.05	149.86	147.88	147.93	1.29	ppb
Molybdenum	94-1	21.19	21.60	21.79	21.53	1.43	ppb
Molybdenum	95-1	25.00	25.52	25.84	25.45	1.66	ppb
Molybdenum	96-1	24.67	25.60	25.07	25.11	1.87	ppb
Molybdenum	97-1	25.61	25.99	25.99	25.86	0.85	ppb
Molybdenum	98-1	25.04	25.68	25.66	25.46	1.42	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	44.57	45.10	45.63	45.10	1.17	ppb
Phosphorus	31-2	145.62	150.27	131.23	142.37	6.97	ppb
Potassium	39-2	159.20	163.31	162.03	161.51	1.30	ppb
Rhodium	103-1				106		%
Rhodium	103-2				103		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	0.98	1.25	1.08	1.11	12.34	ppb
Selenium	77-2	8.18	8.50	7.64	8.10	5.37	ppb
Selenium	78-2	4.45	1.28	2.83	2.85	55.68	ppb
Silicon	28-1	2289.32	2274.59	2256.08	2273.33	0.73	ppb
Silver	107-1	2.54	2.56	2.60	2.57	1.18	ppb
Silver	109-1	2.53	2.56	2.59	2.56	1.25	ppb
Sodium	23-2	23.02	25.35	24.77	24.38	4.99	ppb
Strontium	86-1	505.30	516.54	514.22	512.02	1.16	ppb
Strontium	88-1	498.56	503.13	503.41	501.70	0.54	ppb
Sulfur	34-1	-944.73	-1030.80	-1124.20	-1033.24		ppb
Terbium	159-1				104		%
Terbium	159-2				102		%
Thallium	203-1	2.44	2.46	2.43	2.45	0.73	ppb
Thallium	205-1	2.45	2.47	2.48	2.47	0.64	ppb
Tin	118-1	-0.02	-0.02	-0.03	-0.03		ppb
Titanium	47-1	4.66	4.19	3.91	4.25	8.81	ppb
Uranium	238-1	0.11	0.11	0.11	0.11	0.98	ppb

Lab Sample ID : Q1159-03DL2X4 Instrumnet Name : P8
Client Sample ID : YE8C9S Dilution Factor : 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	40.38	41.14	41.46	40.99	1.35	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				107		%
Zinc	66-2	59.73	60.48	60.43	60.21	0.69	ppb
Zirconium	90-1	0.27	0.20	0.17	0.21	23.51	ppb
Zirconium	91-1	0.31	0.21	0.19	0.24	27.93	ppb

Lab Sample ID : CCV022 Instrumnet Name : P8

Client Sample ID : CCV022 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Date & Time / to	quircu . 202	10 02 11 14.00.20	Datai	ic raine .	00000 V.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49473.08	50852.87	49571.92	49965.96	1.54	ppb
Antimony	121-1	500.02	494.86	504.80	499.89	0.99	ppb
Arsenic	75-2	487.40	491.14	504.57	494.37	1.83	ppb
Barium	135-1	2496.16	2493.42	2549.64	2513.07	1.26	ppb
Barium	137-1	2501.67	2474.06	2558.13	2511.29	1.71	ppb
Beryllium	9-1	500.52	507.65	513.65	507.27	1.30	ppb
Bismuth	209-1				89		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	490.12	489.13	497.07	492.11	0.88	ppb
Cadmium	106-1	485.95	486.92	498.25	490.38	1.40	ppb
Cadmium	111-1	494.44	489.39	489.82	491.22	0.57	ppb
Calcium	43-1	251891.84	256836.15	257808.16	255512.05	1.24	ppb
Calcium	44-1	251129.51	254691.67	258252.44	254691.21	1.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	494.07	509.62	501.30	501.66	1.55	ppb
Cobalt	59-2	483.63	500.88	494.21	492.91	1.76	ppb
Copper	63-2	4675.94	4785.34	4839.99	4767.09	1.75	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				98		%
Indium	115-1				94		%
Indium	115-2				92		%
Iron	54-2	126998.97	126869.85	126346.19	126738.34	0.27	ppb
Iron	56-2	124234.33	124820.26	126837.43	125297.34	1.09	ppb
Iron	57-2	123184.09	125502.80	128336.49	125674.46	2.05	ppb
Krypton	83-1						cps
Lead	206-1	2522.20	2536.34	2554.74	2537.76	0.64	ppb

Lab Sample ID :CCV022Instrumnet Name :P8Client Sample ID :CCV022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Date & Time Act	1011CG . 202	0 02 11 14.00.20	Datai	ic ivallic .	00000 v.a		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2504.87	2554.04	2554.47	2537.79	1.12	ppb
Lead	208-1	2510.03	2528.91	2567.73	2535.56	1.16	ppb
Lithium	6-1				95		%
Magnesium	24-2	248488.64	254072.12	251785.19	251448.65	1.12	ppb
Manganese	55-2	4907.71	4910.09	4980.29	4932.70	0.84	ppb
Molybdenum	94-1	4970.75	5022.10	5000.65	4997.83	0.52	ppb
Molybdenum	95-1	4889.76	5034.01	5021.77	4981.85	1.61	ppb
Molybdenum	96-1	5018.54	4996.00	5009.63	5008.06	0.23	ppb
Molybdenum	97-1	5003.00	4979.73	5046.74	5009.82	0.68	ppb
Molybdenum	98-1	4948.35	4974.32	5009.33	4977.33	0.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	454.13	461.18	465.59	460.30	1.26	ppb
Phosphorus	31-2	10071.28	10178.72	10008.37	10086.12	0.85	ppb
Potassium	39-2	124622.77	124504.20	124051.56	124392.84	0.24	ppb
Rhodium	103-1				92		%
Rhodium	103-2				91		%
Scandium	45-1				101		%
Scandium	45-2				101		%
Selenium	82-1	487.62	482.38	487.99	486.00	0.64	ppb
Selenium	77-2	488.48	506.20	518.79	504.49	3.02	ppb
Selenium	78-2	497.94	509.27	484.95	497.39	2.45	ppb
Silicon	28-1	495.28	503.58	512.53	503.80	1.71	ppb
Silver	107-1	479.98	485.27	491.56	485.60	1.19	ppb
Silver	109-1	482.97	480.11	492.81	485.30	1.37	ppb
Sodium	23-2	255912.08	259221.77	262756.68	259296.84	1.32	ppb
Strontium	86-1	504.63	506.68	504.67	505.33	0.23	ppb
Strontium	88-1	495.14	501.11	501.71	499.32	0.73	ppb
Sulfur	34-1	9714.57	9591.88	9677.16	9661.20	0.65	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	513.72	509.84	519.45	514.34	0.94	ppb
Thallium	205-1	505.56	503.58	514.11	507.75	1.10	ppb
Tin	118-1	494.57	492.56	511.79	499.64	2.12	ppb
Titanium	47-1	4907.00	4955.37	5009.43	4957.26	1.03	ppb
Uranium	238-1	502.77	501.12	520.47	508.12	2.11	ppb

Lab Sample ID :CCV022Instrumnet Name :P8Client Sample ID :CCV022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	490.40	493.86	496.20	493.49	0.59	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				100		%
Zinc	66-2	4799.76	4821.03	4892.93	4837.91	1.01	ppb
Zirconium	90-1	496.36	506.21	506.57	503.04	1.15	ppb
Zirconium	91-1	492.65	513.94	511.09	505.90	2.28	ppb

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Lab Sample ID :CCB022Instrumnet Name :P8Client Sample ID :CCB022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d							
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.21	0.35	0.53	0.37	43.41	ppb
Antimony	121-1	0.11	0.10	0.09	0.10	9.96	ppb
Arsenic	75-2	-0.02	-0.02	0.01	-0.01		ppb
Barium	135-1	0.06	0.04	0.03	0.04	40.70	ppb
Barium	137-1	0.09	0.05	0.05	0.07	31.20	ppb
Beryllium	9-1	0.10	0.09	0.09	0.09	9.24	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.07	0.03	0.11	0.07	62.70	ppb
Cadmium	106-1	-2.03	-0.94	-2.09	-1.69		ppb
Cadmium	111-1	-0.15	-0.05	-0.14	-0.11		ppb
Calcium	43-1	4.61	4.53	3.57	4.24	13.59	ppb
Calcium	44-1	1.47	-1.02	-1.53	-0.36		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	0.02	0.01	0.00	656.28	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.08	-0.05	-0.04	-0.06		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				102		%
Indium	115-1				104		%
Indium	115-2				102		%
Iron	54-2	2.58	2.55	2.44	2.52	2.88	ppb
Iron	56-2	2.08	2.16	1.88	2.04	6.95	ppb
Iron	57-2	1.85	2.24	2.46	2.18	14.30	ppb
Krypton	83-1						cps
Lead	206-1	0.13	0.11	0.12	0.12	8.23	ppb

Lab Sample ID :CCB022Instrumnet Name :P8Client Sample ID :CCB022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

Date a Time Act	quircu . Zoz	20 02 11 14.00.40	Datai	iic i vairie .	00+00BL.u		
Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.11	0.11	0.12	11.70	ppb
Lead	208-1	0.14	0.12	0.11	0.12	13.58	ppb
Lithium	6-1				105		%
Magnesium	24-2	-7.64	-8.31	-7.42	-7.79		ppb
Manganese	55-2	0.09	0.09	0.12	0.10	13.07	ppb
Molybdenum	94-1	0.17	0.10	0.11	0.13	29.44	ppb
Molybdenum	95-1	0.17	0.11	0.12	0.13	23.74	ppb
Molybdenum	96-1	0.16	0.13	0.10	0.13	25.47	ppb
Molybdenum	97-1	0.15	0.12	0.09	0.12	23.51	ppb
Molybdenum	98-1	0.17	0.13	0.10	0.13	27.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.17	0.19	0.28	0.21	27.26	ppb
Phosphorus	31-2	-15.11	-16.37	-11.62	-14.36		ppb
Potassium	39-2	9.76	10.98	8.69	9.81	11.67	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				105		%
Scandium	45-2				105		%
Selenium	82-1	0.26	0.08	0.44	0.26	69.22	ppb
Selenium	77-2	-0.31	0.57	-0.31	-0.02		ppb
Selenium	78-2	-0.27	0.50	1.56	0.60	154.39	ppb
Silicon	28-1	0.36	0.17	0.21	0.25	40.52	ppb
Silver	107-1	0.04	0.03	0.02	0.03	21.86	ppb
Silver	109-1	0.05	0.04	0.03	0.04	21.61	ppb
Sodium	23-2	20.93	20.89	19.72	20.51	3.38	ppb
Strontium	86-1	-0.03	-0.03	-0.04	-0.03		ppb
Strontium	88-1	-0.02	-0.02	-0.02	-0.02		ppb
Sulfur	34-1	-948.11	-935.85	-935.81	-939.92		ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	0.04	0.03	0.03	0.03	9.60	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	14.66	ppb
Tin	118-1	0.01	0.01	0.01	0.01	28.03	ppb
Titanium	47-1	0.08	0.06	0.05	0.06	23.17	ppb
Uranium	238-1	0.01	0.01	0.00	0.01	49.94	ppb

Lab Sample ID :CCB022Instrumnet Name :P8Client Sample ID :CCB022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.00	0.00	176.56	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				105		%
Zinc	66-2	0.23	0.12	0.15	0.17	33.12	ppb
Zirconium	90-1	0.01	0.02	0.01	0.01	29.26	ppb
Zirconium	91-1	0.02	0.02	0.00	0.01	78.92	ppb

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	103	127	110	113	10.61	cps
Antimony	121-1	57	40	60	52	20.52	cps
Arsenic	75-2	17	0	17	11	86.60	cps
Barium	135-1	253	270	253	259	3.72	cps
Barium	137-1	307	357	353	339	8.25	cps
Beryllium	9-1	366	360	359	362	1.11	cps
Bismuth	209-1	13275325	13140858	13103762	13173315	0.69	cps
Bismuth	209-2	4988262	4906578	4955423	4950088	0.83	cps
Bromine	81-1	3557	3821	3520	3633	4.51	cps
Cadmium	108-1	13	17	30	20	44.10	cps
Cadmium	106-1	8193	8269	8346	8269	0.93	cps
Cadmium	111-1	5752	5787	5844	5794	0.81	cps
Calcium	43-1	420	387	450	419	7.56	cps
Calcium	44-1	29641	29133	28993	29255	1.17	cps
Carbon	12-1	3404220	3349154	3328299	3360557	1.17	cps
Carbon	12-2	23021	22427	22788	22745	1.32	cps
Chlorine	35-1	127939	127697	126887	127508	0.43	cps
Chlorine	35-2	477	520	493	497	4.40	cps
Chromium	52-2	717	713	810	747	7.35	cps
Cobalt	59-2	153	173	197	174	12.43	cps
Copper	63-2	3527	3374	3324	3408	3.11	cps
Dysprosium	156-1	147	103	160	137	21.68	cps
Dysprosium	156-2	3	0	7	3	100.05	cps
Erbium	164-1	133	93	140	122	20.65	cps
Erbium	164-2	40	27	30	32	21.53	cps
Gadolinium	160-1	133	157	117	136	14.82	cps
Gadolinium	160-2	17	20	40	26	49.38	cps
Holmium	165-1	20745007	20390432	20532713	20556051	0.87	cps
Holmium	165-2	6570019	6536123	6438593	6514912	1.05	cps
Indium	115-1	15990482	16095920	16025387	16037263	0.33	cps
Indium	115-2	1383269	1384341	1391629	1386413	0.33	cps
Iron	54-2	383	400	307	363	13.70	cps
Iron	56-2	5831	6001	6128	5987	2.49	cps
Iron	57-2	130	127	157	138	11.93	cps
Krypton	83-1	340	273	243	286	17.33	cps
Lead	206-1	2120	2087	2240	2149	3.75	cps

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Date & Time Acc	quired: 2025-02-11 12:05:13		Datar	DataFile Name :		004CALB.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Lead	207-1	1710	1823	1670	1735	4.59	cps	
Lead	208-1	8051	8355	8034	8147	2.21	cps	
Lithium	6-1	7490438	7316961	7462925	7423441	1.26	cps	
Magnesium	24-2	4121	3911	4371	4134	5.57	cps	
Manganese	55-2	140	163	190	164	15.21	cps	
Molybdenum	94-1	440	380	353	391	11.35	cps	
Molybdenum	95-1	173	147	137	152	12.45	cps	
Molybdenum	96-1	237	263	237	246	6.27	cps	
Molybdenum	97-1	110	137	120	122	11.02	cps	
Molybdenum	98-1	213	200	177	197	9.44	cps	
Neodymium	150-1	17	7	7	10	57.72	cps	
Neodymium	150-2	0	3	0	1	173.21	cps	
Nickel	60-2	907	930	897	911	1.88	cps	
Phosphorus	31-2	70	97	93	87	16.77	cps	
Potassium	39-2	9537	9210	9467	9404	1.83	cps	
Rhodium	103-1	14912726	14564954	14726231	14734637	1.18	cps	
Rhodium	103-2	5463921	5364977	5413198	5414032	0.91	cps	
Scandium	45-1	10482385	10523577	10387300	10464421	0.67	cps	
Scandium	45-2	183202	183361	188006	184856	1.48	cps	
Selenium	82-1	-77	-30	0	-36	-108.66	cps	
Selenium	77-2	0	3	0	1	173.21	cps	
Selenium	78-2	3	0	7	3	100.05	cps	
Silicon	28-1	513562	513497	512737	513265	0.09	cps	
Silver	107-1	247	233	217	232	6.47	cps	
Silver	109-1	73	53	73	67	17.32	cps	
Sodium	23-2	57104	56526	56874	56834	0.51	cps	
Strontium	86-1	730	830	783	781	6.41	cps	
Strontium	88-1	2950	2874	2654	2826	5.45	cps	
Sulfur	34-1	748981	749440	741213	746544	0.62	cps	
Terbium	159-1	20338462	20804449	20860423	20667778	1.39	cps	
Terbium	159-2	6329934	6305846	6337854	6324544	0.26	cps	
Thallium	203-1	343	407	387	379	8.55	cps	
Thallium	205-1	883	993	897	924	6.49	cps	
Tin	118-1	3200	3187	3210	3199	0.37	cps	
Titanium	47-1	633	547	740	640	15.14	cps	
Uranium	238-1	133	210	150	164	24.52	cps	

LB Number : LB134674 Operator :

Lab Sample ID :S00Instrumnet Name :P8Client Sample ID :S0Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:05:13 DataFile Name: 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	23	10	16	44.60	cps
Ytterbium	172-1	117	123	137	126	8.11	cps
Ytterbium	172-2	27	53	23	34	47.73	cps
Ytterbium	176-1	2584	2007	1977	2189	15.62	cps
Ytterbium	176-2	337	397	383	372	8.46	cps
Yttrium	89-1	27036724	26993352	27119239	27049772	0.24	cps
Yttrium	89-2	1699120	1719689	1723718	1714176	0.77	cps
Zinc	66-2	237	183	167	196	18.70	cps
Zirconium	90-1	903	917	920	913	0.97	cps
Zirconium	91-1	193	157	173	174	10.52	cps

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Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

Date & Time At	quiled . 2025-02-11 12.06.55		Dalar	Datarile Name.		005CALS.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	1293	1397	1263	1318	5.31	cps	
Antimony	121-1	36368	36245	36582	36398	0.47	cps	
Arsenic	75-2	303	340	320	321	5.72	cps	
Barium	135-1	42958	43680	43994	43544	1.22	cps	
Barium	137-1	76106	75060	75891	75686	0.73	cps	
Beryllium	9-1	6302	6256	6279	6279	0.37	cps	
Bismuth	209-1	13305169	13319359	13198515	13274348	0.50	cps	
Bismuth	209-2	4897531	5006140	5001587	4968419	1.24	cps	
Bromine	81-1	3884	3764	3891	3846	1.85	cps	
Cadmium	108-1	353	400	370	374	6.32	cps	
Cadmium	106-1	8796	8256	8700	8584	3.36	cps	
Cadmium	111-1	10444	10143	10441	10343	1.67	cps	
Calcium	43-1	28308	28715	28796	28606	0.91	cps	
Calcium	44-1	479668	486118	482908	482898	0.67	cps	
Carbon	12-1	3363525	3372602	3371157	3369095	0.14	cps	
Carbon	12-2	22377	23045	22674	22699	1.47	cps	
Chlorine	35-1	126567	126605	128729	127300	0.97	cps	
Chlorine	35-2	393	443	443	427	6.77	cps	
Chromium	52-2	7622	7826	7529	7659	1.98	cps	
Cobalt	59-2	7135	7269	7429	7277	2.02	cps	
Copper	63-2	14134	14411	14481	14342	1.28	cps	
Dysprosium	156-1	133	157	160	150	9.68	cps	
Dysprosium	156-2	17	10	10	12	31.50	cps	
Erbium	164-1	70	80	110	87	24.02	cps	
Erbium	164-2	37	17	27	27	37.50	cps	
Gadolinium	160-1	127	143	123	131	8.17	cps	
Gadolinium	160-2	20	13	23	19	26.96	cps	
Holmium	165-1	20748497	20702416	20640064	20696992	0.26	cps	
Holmium	165-2	6496169	6612263	6547834	6552089	0.89	cps	
Indium	115-1	16067441	16277713	16096744	16147299	0.71	cps	
Indium	115-2	1390285	1408611	1395889	1398262	0.67	cps	
Iron	54-2	7652	7942	7796	7797	1.86	cps	
Iron	56-2	139733	140366	138636	139579	0.63	cps	
Iron	57-2	3447	3550	3340	3446	3.05	cps	
Krypton	83-1	270	343	260	291	15.63	cps	
Lead	206-1	16337	16728	16667	16577	1.27	cps	

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Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

Date & Time Act	quircu . 202	20 02 11 12.00.00	Datai	iic i vairie .	0000/ (LO.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	14084	14235	14021	14113	0.78	cps
Lead	208-1	65676	65889	65622	65729	0.21	cps
Lithium	6-1	7417028	7533299	7482519	7477615	0.78	cps
Magnesium	24-2	125642	127387	126987	126672	0.72	cps
Manganese	55-2	1570	1497	1553	1540	2.50	cps
Molybdenum	94-1	36150	36735	36351	36412	0.82	cps
Molybdenum	95-1	43618	43702	43859	43726	0.28	cps
Molybdenum	96-1	48615	49963	49016	49198	1.41	cps
Molybdenum	97-1	27477	27430	27764	27557	0.66	cps
Molybdenum	98-1	69878	71265	71141	70761	1.08	cps
Neodymium	150-1	13	7	20	13	49.99	cps
Neodymium	150-2	0	7	3	3	100.05	cps
Nickel	60-2	2750	2860	2837	2816	2.06	cps
Phosphorus	31-2	137	140	187	154	18.10	cps
Potassium	39-2	72698	72578	72829	72702	0.17	cps
Rhodium	103-1	14933407	15023952	14957859	14971740	0.31	cps
Rhodium	103-2	5415561	5419026	5486447	5440344	0.73	cps
Scandium	45-1	10404605	10362599	10440548	10402584	0.38	cps
Scandium	45-2	185967	188890	186642	187166	0.82	cps
Selenium	82-1	1410	1403	1267	1360	5.95	cps
Selenium	77-2	23	13	20	19	26.96	cps
Selenium	78-2	53	73	80	69	20.15	cps
Silicon	28-1	592652	588031	589567	590083	0.40	cps
Silver	107-1	21587	22044	22301	21978	1.65	cps
Silver	109-1	20906	20973	21433	21104	1.36	cps
Sodium	23-2	295886	295862	296889	296212	0.20	cps
Strontium	86-1	6432	6291	6255	6326	1.47	cps
Strontium	88-1	51819	51832	52250	51967	0.47	cps
Sulfur	34-1	758163	757218	761096	758826	0.27	cps
Terbium	159-1	20876308	21064451	20780423	20907061	0.69	cps
Terbium	159-2	6254713	6310590	6250826	6272043	0.53	cps
Thallium	203-1	18463	18857	17842	18388	2.78	cps
Thallium	205-1	44195	44921	44162	44426	0.97	cps
Tin	118-1	74953	75711	75929	75531	0.68	cps
Titanium	47-1	13680	13420	13727	13609	1.22	cps
Uranium	238-1	56194	56314	56458	56322	0.24	cps

LB Number : LB134674 Operator :

Lab Sample ID :S02Instrumnet Name :P8Client Sample ID :S02Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:08:35 DataFile Name: 005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13557	13423	13577	13519	0.62	cps
Ytterbium	172-1	140	130	117	129	9.08	cps
Ytterbium	172-2	50	43	27	40	30.04	cps
Ytterbium	176-1	2177	2367	2224	2256	4.39	cps
Ytterbium	176-2	333	357	403	364	9.78	cps
Yttrium	89-1	26691519	26956347	27177395	26941754	0.90	cps
Yttrium	89-2	1737480	1722980	1768395	1742952	1.33	cps
Zinc	66-2	3157	3047	3224	3143	2.84	cps
Zirconium	90-1	30577	30607	31275	30820	1.28	cps
Zirconium	91-1	6805	6868	6668	6781	1.51	cps

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Lab Sample ID: S03 Instrumnet Name: P8
Client Sample ID: S03 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

Date & Time At	quiled . 2025-02-11 12.11.56		Dalar	Datarile Name.		000CALB.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Aluminium	27-2	62842	62641	62574	62685	0.22	cps	
Antimony	121-1	861745	857215	867603	862188	0.60	cps	
Arsenic	75-2	14811	15335	15045	15064	1.74	cps	
Barium	135-1	1039569	1035146	1040465	1038393	0.27	cps	
Barium	137-1	1829036	1837006	1822590	1829544	0.39	cps	
Beryllium	9-1	280527	282353	279656	280845	0.49	cps	
Bismuth	209-1	13375628	13388117	13312811	13358852	0.30	cps	
Bismuth	209-2	4898733	4904587	4900921	4901414	0.06	cps	
Bromine	81-1	3841	3781	3887	3836	1.39	cps	
Cadmium	108-1	17431	17855	17792	17693	1.29	cps	
Cadmium	106-1	33731	33223	33768	33574	0.91	cps	
Cadmium	111-1	221619	223413	223740	222924	0.51	cps	
Calcium	43-1	267443	270725	270715	269628	0.70	cps	
Calcium	44-1	4398491	4410493	4446600	4418528	0.57	cps	
Carbon	12-1	3434325	3453165	3427420	3438303	0.39	cps	
Carbon	12-2	23108	23148	23325	23194	0.50	cps	
Chlorine	35-1	126987	126803	127035	126942	0.10	cps	
Chlorine	35-2	440	410	503	451	10.56	cps	
Chromium	52-2	165134	165134	166152	165473	0.36	cps	
Cobalt	59-2	322127	324722	322021	322956	0.47	cps	
Copper	63-2	2591688	2619645	2610124	2607152	0.55	cps	
Dysprosium	156-1	167	210	233	203	16.64	cps	
Dysprosium	156-2	3	7	23	11	96.43	cps	
Erbium	164-1	123	167	140	143	15.25	cps	
Erbium	164-2	37	50	37	41	18.72	cps	
Gadolinium	160-1	123	157	90	123	27.03	cps	
Gadolinium	160-2	13	20	17	17	20.01	cps	
Holmium	165-1	20808719	20581035	20637970	20675908	0.57	cps	
Holmium	165-2	6534923	6575449	6485936	6532103	0.69	cps	
Indium	115-1	16309522	16038421	16068709	16138884	0.92	cps	
Indium	115-2	1365235	1378947	1381864	1375349	0.65	cps	
Iron	54-2	346744	344288	347558	346196	0.49	cps	
Iron	56-2	6339515	6390928	6321320	6350588	0.57	cps	
Iron	57-2	156734	157035	156201	156657	0.27	cps	
Krypton	83-1	263	303	220	262	15.90	cps	
Lead	206-1	3704497	3801680	3748032	3751403	1.30	cps	

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

1.42 1.04 2.06 0.96 0.12 1.85 1.24 0.13 0.61	cps
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32.40	cps
100.05	cps
0.42	cps
5.37	cps
0.35	cps
0.83	cps
0.63	cps
1.08	cps
0.47	cps
2.36	cps
9.60	cps
7.82	cps
0.32	cps
0.38	cps
0.86	cps
1.27	cps
0.26	cps
0.18	cps
0.57	cps
1.12	cps
0.36	cps
1.21	cps
1.06	cps
0.67	cps
0.77	cps
0.71	cps
	0.38 0.86 1.27 0.26 0.18 0.57 1.12 0.36 1.21 1.06 0.67 0.77

LB Number : LB134674 Operator :

Lab Sample ID :S03Instrumnet Name :P8Client Sample ID :S03Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:11:58 DataFile Name: 006CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	128063	127488	125655	127069	0.99	cps
Ytterbium	172-1	93	107	110	103	8.54	cps
Ytterbium	172-2	40	50	53	48	14.52	cps
Ytterbium	176-1	6368	6442	6245	6352	1.57	cps
Ytterbium	176-2	1517	1640	1637	1598	4.40	cps
Yttrium	89-1	27626859	27006856	26922680	27185465	1.41	cps
Yttrium	89-2	1703513	1734378	1687292	1708394	1.40	cps
Zinc	66-2	266730	266070	269099	267300	0.60	cps
Zirconium	90-1	1487592	1512282	1492083	1497319	0.88	cps
Zirconium	91-1	320865	329555	325799	325406	1.34	cps

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Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

Date & Time Ac	equired: 2025-02-11 12:15:02		DataFile Name :		007CALS.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	154440	155120	154841	154800	0.22	cps
Antimony	121-1	2191182	2173691	2172950	2179274	0.47	cps
Arsenic	75-2	36721	36988	37149	36953	0.58	cps
Barium	135-1	2645811	2641562	2691543	2659639	1.04	cps
Barium	137-1	4467736	4611294	4498732	4525920	1.67	cps
Beryllium	9-1	683968	688060	689392	687140	0.41	cps
Bismuth	209-1	13265025	13219506	13088146	13190892	0.70	cps
Bismuth	209-2	4846478	4819631	4865973	4844027	0.48	cps
Bromine	81-1	3901	3861	3991	3917	1.70	cps
Cadmium	108-1	44167	44033	43572	43924	0.71	cps
Cadmium	106-1	69226	68820	69869	69305	0.76	cps
Cadmium	111-1	531645	540851	539395	537297	0.92	cps
Calcium	43-1	653566	658458	664813	658946	0.86	cps
Calcium	44-1	10694724	10763806	10678590	10712373	0.42	cps
Carbon	12-1	3568904	3600141	3608475	3592507	0.58	cps
Carbon	12-2	24177	24183	24637	24332	1.09	cps
Chlorine	35-1	127730	129358	129281	128790	0.71	cps
Chlorine	35-2	550	437	420	469	15.09	cps
Chromium	52-2	406849	405764	407534	406716	0.22	cps
Cobalt	59-2	785348	788507	783457	785770	0.32	cps
Copper	63-2	6278072	6260123	6210186	6249460	0.56	cps
Dysprosium	156-1	297	273	233	268	11.96	cps
Dysprosium	156-2	0	17	10	9	94.38	cps
Erbium	164-1	127	150	143	140	8.58	cps
Erbium	164-2	33	60	47	47	28.58	cps
Gadolinium	160-1	130	173	133	146	16.57	cps
Gadolinium	160-2	33	37	17	29	37.08	cps
Holmium	165-1	20665574	20655454	20567261	20629429	0.26	cps
Holmium	165-2	6614905	6506883	6606556	6576114	0.91	cps
Indium	115-1	16051284	15834460	15928018	15937921	0.68	cps
Indium	115-2	1367194	1367196	1362316	1365569	0.21	cps
Iron	54-2	845134	853505	848197	848945	0.50	cps
Iron	56-2	15588463	15591745	15533624	15571277	0.21	cps
Iron	57-2	383801	385971	386725	385499	0.39	cps
Krypton	83-1	270	267	297	278	5.92	cps
Lead	206-1	8902627	8945081	8979823	8942510	0.43	cps

Lab Sample ID: S04 Instrumnet Name: P8
Client Sample ID: S04 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7744967	7683947	7787916	7738943	0.68	cps
Lead	208-1	35704779	35662100	35816200	35727693	0.22	cps
Lithium	6-1	7534394	7433388	7286078	7417953	1.68	cps
Magnesium	24-2	2909807	2928592	2950806	2929735	0.70	cps
Manganese	55-2	1689134	1699911	1661680	1683575	1.17	cps
Molybdenum	94-1	7208966	7126941	7213334	7183080	0.68	cps
Molybdenum	95-1	10610964	10616673	10565929	10597855	0.26	cps
Molybdenum	96-1	11601820	11514836	11528028	11548228	0.41	cps
Molybdenum	97-1	6536549	6540304	6480236	6519030	0.52	cps
Molybdenum	98-1	17090663	16976508	17271388	17112853	0.87	cps
Neodymium	150-1	130	210	213	184	25.58	cps
Neodymium	150-2	10	0	0	3	173.21	cps
Nickel	60-2	218976	220218	219494	219562	0.28	cps
Phosphorus	31-2	7332	7299	7432	7354	0.94	cps
Potassium	39-2	758554	755128	755929	756537	0.24	cps
Rhodium	103-1	14654109	14546289	14851517	14683971	1.05	cps
Rhodium	103-2	5339703	5322778	5279178	5313887	0.59	cps
Scandium	45-1	10434892	10510160	10430920	10458657	0.43	cps
Scandium	45-2	185004	183519	185959	184827	0.67	cps
Selenium	82-1	31012	30778	31142	30977	0.60	cps
Selenium	77-2	463	460	487	470	3.09	cps
Selenium	78-2	1537	1667	1627	1610	4.14	cps
Silicon	28-1	2145101	2115919	2142495	2134505	0.76	cps
Silver	107-1	2768892	2738971	2757157	2755007	0.55	cps
Silver	109-1	2623589	2637883	2638520	2633331	0.32	cps
Sodium	23-2	5717072	5679413	5746307	5714264	0.59	cps
Strontium	86-1	658443	663419	670289	664050	0.90	cps
Strontium	88-1	5842458	5881541	5960140	5894713	1.02	cps
Sulfur	34-1	937034	966793	934475	946101	1.90	cps
Terbium	159-1	21272376	20977451	21016563	21088796	0.76	cps
Terbium	159-2	6301849	6242359	6179182	6241130	0.98	cps
Thallium	203-1	2180431	2212830	2203345	2198869	0.76	cps
Thallium	205-1	5307194	5263150	5227958	5266101	0.75	cps
Tin	118-1	1763345	1733193	1733849	1743462	0.99	cps
Titanium	47-1	3096615	3128598	3147248	3124154	0.82	cps
Uranium	238-1	7051129	7114458	7130242	7098610	0.59	cps

Lab Sample ID :S04Instrumnet Name :P8Client Sample ID :S04Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:15:02 DataFile Name: 007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	312258	310936	315316	312837	0.72	cps
Ytterbium	172-1	110	183	140	144	25.53	cps
Ytterbium	172-2	53	60	50	54	9.35	cps
Ytterbium	176-1	12089	12473	12079	12214	1.84	cps
Ytterbium	176-2	3507	3524	3477	3503	0.68	cps
Yttrium	89-1	27252918	26872171	27229779	27118289	0.79	cps
Yttrium	89-2	1704380	1715493	1725344	1715072	0.61	cps
Zinc	66-2	648243	652368	653929	651513	0.45	cps
Zirconium	90-1	3661290	3697553	3668607	3675817	0.52	cps
Zirconium	91-1	794656	798387	798881	797308	0.29	cps

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	312364	309106	309287	310252	0.59	cps
Antimony	121-1	4252500	4266716	4313114	4277443	0.74	cps
Arsenic	75-2	73845	75042	73658	74182	1.01	cps
Barium	135-1	5151990	5169594	5212134	5177906	0.60	cps
Barium	137-1	8784702	8937141	8955277	8892373	1.05	cps
Beryllium	9-1	1361679	1373684	1369123	1368162	0.44	cps
Bismuth	209-1	13313163	12990345	12819564	13041024	1.92	cps
Bismuth	209-2	4764676	4822292	4959287	4848752	2.06	cps
Bromine	81-1	3901	3927	4081	3969	2.45	cps
Cadmium	108-1	84879	86892	85231	85667	1.25	cps
Cadmium	106-1	126049	128057	127552	127219	0.82	cps
Cadmium	111-1	1032022	1051711	1052785	1045506	1.12	cps
Calcium	43-1	1299438	1340927	1315668	1318677	1.59	cps
Calcium	44-1	20692978	21459617	21121501	21091365	1.82	cps
Carbon	12-1	3662095	3721340	3760407	3714614	1.33	cps
Carbon	12-2	26460	25709	26370	26180	1.57	cps
Chlorine	35-1	130946	133482	133828	132752	1.19	cps
Chlorine	35-2	447	480	497	474	5.37	cps
Chromium	52-2	800262	801017	798068	799782	0.19	cps
Cobalt	59-2	1597019	1575898	1577618	1583512	0.74	cps
Copper	63-2	12339749	12538734	12356776	12411753	0.89	cps
Dysprosium	156-1	310	327	307	314	3.41	cps
Dysprosium	156-2	30	30	10	23	49.49	cps
Erbium	164-1	133	133	150	139	6.93	cps
Erbium	164-2	67	47	50	54	19.68	cps
Gadolinium	160-1	167	140	190	166	15.11	cps
Gadolinium	160-2	50	23	40	38	35.67	cps
Holmium	165-1	21209266	20709873	20287729	20735622	2.22	cps
Holmium	165-2	6530785	6320486	6574396	6475222	2.10	cps
Indium	115-1	16271167	15630076	15765957	15889066	2.13	cps
Indium	115-2	1338590	1319639	1388900	1349043	2.65	cps
Iron	54-2	1734082	1696726	1713286	1714698	1.09	cps
Iron	56-2	30837090	31015804	30655718	30836204	0.58	cps
Iron	57-2	755760	760624	760940	759108	0.38	cps
Krypton	83-1	293	253	247	264	9.54	cps
Lead	206-1	17696720	17716294	17720760	17711258	0.07	cps

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	14993644	15185476	15107397	15095506	0.64	cps
Lead	208-1	69383994	70318296	69855043	69852444	0.67	cps
Lithium	6-1	7487475	7325423	7181148	7331349	2.09	cps
Magnesium	24-2	5932262	5834666	5781024	5849317	1.31	cps
Manganese	55-2	3329841	3314469	3345719	3330010	0.47	cps
Molybdenum	94-1	14283499	14390014	14309477	14327663	0.39	cps
Molybdenum	95-1	20934362	21087313	20820556	20947410	0.64	cps
Molybdenum	96-1	22827276	23123186	22843183	22931215	0.73	cps
Molybdenum	97-1	12877961	12884673	12996096	12919577	0.51	cps
Molybdenum	98-1	33710703	34181160	34180223	34024029	0.80	cps
Neodymium	150-1	333	370	323	342	7.18	cps
Neodymium	150-2	7	20	10	12	56.76	cps
Nickel	60-2	429757	432499	429113	430456	0.42	cps
Phosphorus	31-2	14457	14641	14140	14413	1.76	cps
Potassium	39-2	1530442	1542048	1528991	1533827	0.47	cps
Rhodium	103-1	14729377	14394934	14141878	14422063	2.04	cps
Rhodium	103-2	5212580	5156799	5383180	5250853	2.25	cps
Scandium	45-1	10608094	10492659	10346866	10482540	1.25	cps
Scandium	45-2	184421	180803	188250	184491	2.02	cps
Selenium	82-1	61482	63769	62068	62439	1.90	cps
Selenium	77-2	987	990	840	939	9.12	cps
Selenium	78-2	3174	3124	3254	3184	2.06	cps
Silicon	28-1	3659628	3701099	3757618	3706115	1.33	cps
Silver	107-1	5386278	5439302	5423455	5416345	0.50	cps
Silver	109-1	5093295	5139964	5144134	5125797	0.55	cps
Sodium	23-2	11551552	11492227	11321819	11455199	1.04	cps
Strontium	86-1	1300823	1308379	1319779	1309661	0.73	cps
Strontium	88-1	11714221	11751618	11674771	11713537	0.33	cps
Sulfur	34-1	1093495	1108879	1109954	1104109	0.83	cps
Terbium	159-1	21356366	20668220	21018412	21014332	1.64	cps
Terbium	159-2	6156864	6143251	6464572	6254896	2.91	cps
Thallium	203-1	4367558	4432607	4371154	4390439	0.83	cps
Thallium	205-1	10210487	10306705	10183173	10233455	0.63	cps
Tin	118-1	3437706	3398946	3475028	3437227	1.11	cps
Titanium	47-1	6089271	6158833	6003403	6083836	1.28	cps
Uranium	238-1	13838342	14022877	13713204	13858141	1.12	cps

LB Number : LB134674 Operator :

Lab Sample ID :S05Instrumnet Name :P8Client Sample ID :S05Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:18:01 DataFile Name: 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	624364	623205	615548	621039	0.77	cps
Ytterbium	172-1	157	153	137	149	7.20	cps
Ytterbium	172-2	93	60	73	76	22.20	cps
Ytterbium	176-1	22503	21892	22172	22189	1.38	cps
Ytterbium	176-2	6512	6575	6708	6598	1.52	cps
Yttrium	89-1	27551317	26654479	26523855	26909883	2.08	cps
Yttrium	89-2	1691862	1643530	1759845	1698412	3.44	cps
Zinc	66-2	1286808	1288963	1283248	1286340	0.22	cps
Zirconium	90-1	7264335	7319011	7257533	7280293	0.46	cps
Zirconium	91-1	1635766	1627491	1646655	1636637	0.59	cps

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Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

Date & Time Ac	quireu . 202	3-02-11 12.20.51	Dalar	ile ivaille .	009CALS.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	607203	609205	609822	608743	0.22	cps
Antimony	121-1	8463293	8562131	8584291	8536571	0.75	cps
Arsenic	75-2	145118	148051	146054	146408	1.02	cps
Barium	135-1	10320615	10355662	10301380	10325886	0.27	cps
Barium	137-1	17851688	17651255	17701861	17734935	0.59	cps
Beryllium	9-1	2727373	2678639	2679451	2695154	1.04	cps
Bismuth	209-1	12942676	12583387	12869207	12798423	1.48	cps
Bismuth	209-2	4657111	4725707	4640494	4674437	0.97	cps
Bromine	81-1	3991	3884	3861	3912	1.77	cps
Cadmium	108-1	169143	167884	170385	169137	0.74	cps
Cadmium	106-1	244958	246018	243566	244848	0.50	cps
Cadmium	111-1	2086245	2174443	2085266	2115318	2.42	cps
Calcium	43-1	2620377	2650772	2638075	2636408	0.58	cps
Calcium	44-1	42570386	41686527	42918814	42391909	1.50	cps
Carbon	12-1	3906252	3971130	4039518	3972300	1.68	cps
Carbon	12-2	28985	29075	28541	28867	0.99	cps
Chlorine	35-1	142735	143116	146082	143977	1.27	cps
Chlorine	35-2	553	570	547	557	2.16	cps
Chromium	52-2	1662985	1638207	1615854	1639015	1.44	cps
Cobalt	59-2	3111036	3125440	3158972	3131816	0.79	cps
Copper	63-2	24086260	24076182	24014500	24058981	0.16	cps
Dysprosium	156-1	353	377	333	354	6.12	cps
Dysprosium	156-2	27	23	33	28	18.33	cps
Erbium	164-1	200	160	187	182	11.18	cps
Erbium	164-2	53	63	50	56	12.49	cps
Gadolinium	160-1	220	217	173	203	12.80	cps
Gadolinium	160-2	60	53	50	54	9.35	cps
Holmium	165-1	20759480	20549427	20493392	20600766	0.68	cps
Holmium	165-2	6442398	6488947	6441124	6457490	0.42	cps
Indium	115-1	15762101	15568416	15213068	15514529	1.79	cps
Indium	115-2	1302560	1305982	1309783	1306109	0.28	cps
Iron	54-2	3420010	3368823	3374623	3387819	0.83	cps
Iron	56-2	60885091	61186556	60281579	60784409	0.76	cps
Iron	57-2	1552134	1580667	1555214	1562672	1.00	cps
Krypton	83-1	293	290	290	291	0.66	cps
Lead	206-1	35462491	35373334	35498237	35444687	0.18	cps

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

Date & Time Act	quireu . 202	25-02-11 12.20.51	Dalari	ie Name.	009CALS.0		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	30510363	30121232	30287233	30306276	0.64	cps
Lead	208-1	140553358	138932536	139873282	139786392	0.58	cps
Lithium	6-1	7287956	7263823	7150297	7234025	1.02	cps
Magnesium	24-2	11329883	11374769	11439855	11381502	0.49	cps
Manganese	55-2	6547180	6534003	6410631	6497271	1.16	cps
Molybdenum	94-1	29031846	28887644	28935524	28951671	0.25	cps
Molybdenum	95-1	42017699	41907868	42360721	42095429	0.56	cps
Molybdenum	96-1	45754286	45523233	46404339	45893953	1.00	cps
Molybdenum	97-1	25840026	25689890	25754914	25761610	0.29	cps
Molybdenum	98-1	68871937	68083521	67683009	68212822	0.89	cps
Neodymium	150-1	650	697	603	650	7.18	cps
Neodymium	150-2	13	20	17	17	20.01	cps
Nickel	60-2	832191	843350	837122	837554	0.67	cps
Phosphorus	31-2	29226	29507	29407	29380	0.48	cps
Potassium	39-2	3046379	3013239	3031221	3030280	0.55	cps
Rhodium	103-1	14460019	14043339	13936805	14146721	1.95	cps
Rhodium	103-2	5084232	5127604	5014711	5075516	1.12	cps
Scandium	45-1	10478442	10064474	10260609	10267841	2.02	cps
Scandium	45-2	180549	182793	182689	182010	0.70	cps
Selenium	82-1	122166	123786	121032	122328	1.13	cps
Selenium	77-2	1803	1800	1783	1796	0.60	cps
Selenium	78-2	6031	5898	6121	6017	1.87	cps
Silicon	28-1	6755868	6861979	6892155	6836667	1.05	cps
Silver	107-1	10490453	10613701	10691255	10598470	0.96	cps
Silver	109-1	9952605	10168089	10121820	10080838	1.13	cps
Sodium	23-2	22758015	22645304	22807711	22737010	0.37	cps
Strontium	86-1	2675469	2697756	2684703	2685976	0.42	cps
Strontium	88-1	23186521	23113263	23295741	23198509	0.40	cps
Sulfur	34-1	1440525	1437112	1428745	1435461	0.42	cps
Terbium	159-1	21168585	21159863	21144342	21157597	0.06	cps
Terbium	159-2	6117703	6281247	6175733	6191561	1.34	cps
Thallium	203-1	8515575	8559202	8675637	8583471	0.96	cps
Thallium	205-1	20328353	20635199	20666248	20543267	0.91	cps
Tin	118-1	6721864	6795603	6754376	6757281	0.55	cps
Titanium	47-1	12351255	12146266	12237509	12245010	0.84	cps
Uranium	238-1	27733745	27946810	27631951	27770835	0.58	cps

Lab Sample ID :S06Instrumnet Name :P8Client Sample ID :S06Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:20:51 DataFile Name: 009CALS.d

_F	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
_	/anadium	51-2	1244265	1234892	1230532	1236563	0.57	cps
`	/tterbium	172-1	197	253	240	230	12.88	cps
`	⁄tterbium	172-2	47	67	63	59	18.19	cps
`	⁄tterbium	176-1	42602	40863	42337	41934	2.23	cps
`	⁄tterbium	176-2	12960	13117	13343	13140	1.47	cps
`	⁄ttrium	89-1	27132938	26555681	26802240	26830286	1.08	cps
`	⁄ttrium	89-2	1687718	1664263	1658404	1670128	0.93	cps
Z	Zinc	66-2	2576205	2610806	2609684	2598898	0.76	cps
Z	Zirconium	90-1	14580628	14517316	14898375	14665440	1.39	cps
Z	Zirconium	91-1	3252433	3246713	3362852	3287332	1.99	cps

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

Date & Time Ac	quirea: 202	25-02-11 12:23:38	DataFi	ie Name :	010CALS.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1253403	1259425	1229557	1247462	1.27	cps
Antimony	121-1	16472252	16591189	16704403	16589281	0.70	cps
Arsenic	75-2	290723	290754	286900	289459	0.77	cps
Barium	135-1	19996131	19972217	20286261	20084870	0.87	cps
Barium	137-1	34975251	34631722	34680037	34762337	0.53	cps
Beryllium	9-1	5173412	5268338	5238123	5226624	0.93	cps
Bismuth	209-1	12406000	12609147	12411609	12475585	0.93	cps
Bismuth	209-2	4678991	4655771	4639686	4658149	0.42	cps
Bromine	81-1	3901	4044	4171	4038	3.35	cps
Cadmium	108-1	324564	330107	329015	327896	0.90	cps
Cadmium	106-1	463915	469838	467456	467070	0.64	cps
Cadmium	111-1	4039130	4062925	4092556	4064871	0.66	cps
Calcium	43-1	5099674	5152446	5099255	5117125	0.60	cps
Calcium	44-1	82942632	82818747	83246524	83002634	0.27	cps
Carbon	12-1	4366607	4520629	4641762	4509666	3.06	cps
Carbon	12-2	34110	34340	35493	34647	2.14	cps
Chlorine	35-1	161836	165790	167757	165128	1.83	cps
Chlorine	35-2	630	583	677	630	7.41	cps
Chromium	52-2	3284374	3248647	3261141	3264721	0.56	cps
Cobalt	59-2	6100678	5998346	6124696	6074573	1.10	cps
Copper	63-2	47449666	46659593	46918129	47009129	0.86	cps
Dysprosium	156-1	490	547	537	524	5.77	cps
Dysprosium	156-2	53	37	43	44	18.87	cps
Erbium	164-1	273	287	253	271	6.19	cps
Erbium	164-2	100	77	117	98	20.55	cps
Gadolinium	160-1	257	250	230	246	5.65	cps
Gadolinium	160-2	100	43	67	70	40.69	cps
Holmium	165-1	20252447	20507497	20155254	20305066	0.90	cps
Holmium	165-2	6470568	6469976	6408374	6449639	0.55	cps
Indium	115-1	14918787	15100736	14984400	15001307	0.61	cps
Indium	115-2	1276170	1281772	1272294	1276746	0.37	cps
Iron	54-2	6650436	6660262	6656094	6655597	0.07	cps
Iron	56-2	120342328	119255895	120285395	119961206	0.51	cps
Iron	57-2	3063447	3031906	3126224	3073859	1.56	cps
Krypton	83-1	333	310	310	318	4.24	cps
Lead	206-1	67793259	68327722	68119762	68080248	0.40	cps

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	58822957	58852269	58491642	58722290	0.34	cps
Lead	208-1	270014228	271731893	270174799	270640307	0.35	cps
Lithium	6-1	7034089	7203445	7130692	7122742	1.19	cps
Magnesium	24-2	22507369	22281817	22691778	22493655	0.91	cps
Manganese	55-2	12965757	12842416	12992662	12933612	0.62	cps
Molybdenum	94-1	56381386	56842971	57035257	56753205	0.59	cps
Molybdenum	95-1	82222499	82734274	83445289	82800687	0.74	cps
Molybdenum	96-1	89213772	90138465	91652042	90334760	1.36	cps
Molybdenum	97-1	50615808	50990074	51667063	51090981	1.04	cps
Molybdenum	98-1	133276021	133777898	133875238	133643052	0.24	cps
Neodymium	150-1	1267	1370	1197	1278	6.82	cps
Neodymium	150-2	27	43	53	41	32.76	cps
Nickel	60-2	1732698	1708735	1699299	1713577	1.00	cps
Phosphorus	31-2	57192	57068	56506	56922	0.64	cps
Potassium	39-2	5888830	5908282	5845228	5880780	0.55	cps
Rhodium	103-1	13592335	13824641	13668142	13695039	0.87	cps
Rhodium	103-2	5052150	4924117	4966561	4980942	1.31	cps
Scandium	45-1	10248553	10077105	10354024	10226561	1.37	cps
Scandium	45-2	183829	183252	184454	183845	0.33	cps
Selenium	82-1	238742	241081	241701	240508	0.65	cps
Selenium	77-2	3641	3387	3510	3513	3.61	cps
Selenium	78-2	12105	11969	12095	12056	0.63	cps
Silicon	28-1	12650303	12745443	12758371	12718039	0.46	cps
Silver	107-1	20410596	20350261	20440115	20400324	0.22	cps
Silver	109-1	19255426	19655148	19510751	19473775	1.04	cps
Sodium	23-2	44782258	44720581	44903584	44802141	0.21	cps
Strontium	86-1	5292860	5195921	5233670	5240817	0.93	cps
Strontium	88-1	46179984	45946558	45795083	45973875	0.42	cps
Sulfur	34-1	2077008	2060966	2065786	2067920	0.40	cps
Terbium	159-1	20631501	20772228	20932101	20778610	0.72	cps
Terbium	159-2	6240808	6136736	6076717	6151420	1.35	cps
Thallium	203-1	16451770	16523171	16519770	16498237	0.24	cps
Thallium	205-1	39217547	39974092	39757666	39649768	0.98	cps
Tin	118-1	13152923	13382500	13291741	13275721	0.87	cps
Titanium	47-1	24214779	23944945	24010863	24056862	0.58	cps
Uranium	238-1	54415436	55262309	55113348	54930364	0.82	cps

Lab Sample ID :S07Instrumnet Name :P8Client Sample ID :S07Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:23:38 DataFile Name: 010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2529206	2531372	2481206	2513928	1.13	cps
Ytterbium	172-1	297	367	277	313	15.08	cps
Ytterbium	172-2	137	127	120	128	6.57	cps
Ytterbium	176-1	81700	81553	80808	81354	0.59	cps
Ytterbium	176-2	25899	25735	25852	25829	0.33	cps
Yttrium	89-1	26715645	26280949	26391853	26462815	0.85	cps
Yttrium	89-2	1723020	1679193	1682955	1695056	1.43	cps
Zinc	66-2	5022769	5018198	4968367	5003111	0.60	cps
Zirconium	90-1	28473997	28393913	28533190	28467033	0.25	cps
Zirconium	91-1	6384881	6356800	6485913	6409198	1.06	cps

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Date & Time Ac	quired. 202	.5-02-11 12.20.25	DalaFii	ie name.	UTICALS.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5997963	5929553	5935001	5954172	0.64	cps
Antimony	121-1	14071	13460	13283	13605	3.04	cps
Arsenic	75-2	143	170	170	161	9.55	cps
Barium	135-1	7749	7692	7405	7616	2.42	cps
Barium	137-1	13600	12990	13006	13199	2.64	cps
Beryllium	9-1	2172	1882	1772	1942	10.64	cps
Bismuth	209-1	10846868	10800313	10894732	10847304	0.44	cps
Bismuth	209-2	4114555	4113727	4044323	4090869	0.99	cps
Bromine	81-1	4161	4291	4341	4264	2.18	cps
Cadmium	108-1	297	300	197	264	22.21	cps
Cadmium	106-1	8129	7876	7689	7898	2.80	cps
Cadmium	111-1	6329	6013	5908	6083	3.61	cps
Calcium	43-1	23143771	23365488	23513175	23340811	0.80	cps
Calcium	44-1	380211594	379181701	382738954	380710750	0.48	cps
Carbon	12-1	3965885	4095558	4147394	4069612	2.30	cps
Carbon	12-2	38413	38300	38617	38443	0.42	cps
Chlorine	35-1	128061	124644	124674	125793	1.56	cps
Chlorine	35-2	530	417	470	472	12.01	cps
Chromium	52-2	10574	10157	10264	10332	2.10	cps
Cobalt	59-2	12559	12856	12736	12717	1.17	cps
Copper	63-2	11171	11501	10858	11177	2.88	cps
Dysprosium	156-1	710	743	637	697	7.83	cps
Dysprosium	156-2	190	220	180	197	10.58	cps
Erbium	164-1	747	683	770	733	6.12	cps
Erbium	164-2	263	210	203	226	14.58	cps
Gadolinium	160-1	597	630	653	627	4.54	cps
Gadolinium	160-2	213	250	237	233	7.95	cps
Holmium	165-1	19232303	18871630	19022875	19042269	0.95	cps
Holmium	165-2	6129933	6094578	6086617	6103709	0.38	cps
Indium	115-1	14053919	14057400	13678483	13929934	1.56	cps
Indium	115-2	1231167	1247569	1202890	1227209	1.84	cps
Iron	54-2	30519369	30485153	30561177	30521900	0.12	cps
Iron	56-2	566999965	569142645	551400818	562514476	1.72	cps
Iron	57-2	14176053	13862700	14073561	14037438	1.14	cps
Krypton	83-1	367	377	330	358	6.87	cps
Lead	206-1	14862	14618	14345	14608	1.77	cps

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12766	12586	11882	12412	3.76	cps
Lead	208-1	59731	58038	55537	57769	3.65	cps
Lithium	6-1	6501263	6605274	6406319	6504285	1.53	cps
Magnesium	24-2	107258228	107353318	105845688	106819078	0.79	cps
Manganese	55-2	5738	5955	5911	5868	1.95	cps
Molybdenum	94-1	40154	40505	40037	40232	0.61	cps
Molybdenum	95-1	41793	40756	41482	41344	1.29	cps
Molybdenum	96-1	47166	48548	47601	47772	1.48	cps
Molybdenum	97-1	25403	25891	25200	25498	1.39	cps
Molybdenum	98-1	65755	65557	65031	65448	0.57	cps
Neodymium	150-1	377	387	357	373	4.09	cps
Neodymium	150-2	90	53	67	70	26.51	cps
Nickel	60-2	6528	6672	6815	6672	2.15	cps
Phosphorus	31-2	103	93	70	89	19.24	cps
Potassium	39-2	28639990	28664270	29339885	28881381	1.38	cps
Rhodium	103-1	12204182	12400409	11983816	12196136	1.71	cps
Rhodium	103-2	4457509	4488489	4390386	4445462	1.13	cps
Scandium	45-1	9586493	9772201	9497822	9618839	1.46	cps
Scandium	45-2	176300	175794	172812	174969	1.08	cps
Selenium	82-1	-27	-60	-7	-31	-86.60	cps
Selenium	77-2	10	7	0	6	91.64	cps
Selenium	78-2	23	17	7	16	53.90	cps
Silicon	28-1	684150	668266	658579	670332	1.93	cps
Silver	107-1	3537	3687	3504	3576	2.73	cps
Silver	109-1	3584	3340	3007	3310	8.75	cps
Sodium	23-2	204932184	205863817	205574984	205456995	0.23	cps
Strontium	86-1	16333	15759	15806	15966	2.00	cps
Strontium	88-1	136805	136295	135725	136275	0.40	cps
Sulfur	34-1	682056	684087	682100	682748	0.17	cps
Terbium	159-1	19117023	19123370	19102300	19114231	0.06	cps
Terbium	159-2	5916969	5920016	5738151	5858379	1.78	cps
Thallium	203-1	1523	1537	1383	1481	5.73	cps
Thallium	205-1	4134	3450	3307	3631	12.17	cps
Tin	118-1	4324	4231	3764	4106	7.31	cps
Titanium	47-1	4224	4561	4504	4430	4.07	cps
Uranium	238-1	2630	2424	2204	2419	8.82	cps

LB Number: LB134674

Lab Sample ID :S08Instrumnet Name :P8Client Sample ID :S08Dilution Factor :1

Date & Time Acquired: 2025-02-11 12:26:23 DataFile Name: 011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	683	763	717	721	5.57	cps
Ytterbium	172-1	837	813	937	862	7.60	cps
Ytterbium	172-2	290	360	347	332	11.19	cps
Ytterbium	176-1	2664	2574	2674	2637	2.09	cps
Ytterbium	176-2	563	517	503	528	5.97	cps
Yttrium	89-1	25019185	24974695	24521135	24838339	1.11	cps
Yttrium	89-2	1658061	1631685	1582599	1624115	2.36	cps
Zinc	66-2	2640	2800	2870	2770	4.26	cps
Zirconium	90-1	46524	46591	45601	46239	1.20	cps
Zirconium	91-1	10447	10241	10180	10289	1.36	cps

Operator :

Jaswal

Lab Sample ID :ICV005Instrumnet Name :P8Client Sample ID :ICV005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Date & Time Ac	quirea: 202	25-02-11 13:29:04	Datar	ile Name :	012ICV.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	30272	30151	30395	30273	0.40	cps
Antimony	121-1	3516543	3504548	3549952	3523681	0.67	cps
Arsenic	75-2	60432	61571	60881	60961	0.94	cps
Barium	135-1	416525	413590	417893	416003	0.53	cps
Barium	137-1	721616	722114	731831	725187	0.79	cps
Beryllium	9-1	570422	571316	566929	569556	0.41	cps
Bismuth	209-1	13542598	13433284	13461624	13479169	0.42	cps
Bismuth	209-2	4961829	5012488	4997408	4990575	0.52	cps
Bromine	81-1	3794	3814	3871	3826	1.04	cps
Cadmium	108-1	44719	45849	45950	45506	1.50	cps
Cadmium	106-1	46772	46394	47512	46893	1.21	cps
Cadmium	111-1	444618	445941	445885	445481	0.17	cps
Calcium	43-1	118516	118563	116853	117977	0.83	cps
Calcium	44-1	1915951	1876150	1902369	1898157	1.07	cps
Carbon	12-1	4283972	4408284	4393500	4361919	1.56	cps
Carbon	12-2	30121	30161	29954	30079	0.37	cps
Chlorine	35-1	120728	119004	119471	119734	0.74	cps
Chlorine	35-2	433	533	413	460	13.98	cps
Chromium	52-2	337270	335155	335097	335841	0.37	cps
Cobalt	59-2	655095	658932	652897	655641	0.47	cps
Copper	63-2	515175	521522	517964	518220	0.61	cps
Dysprosium	156-1	100	110	93	101	8.30	cps
Dysprosium	156-2	3	13	7	8	65.47	cps
Erbium	164-1	127	103	140	123	15.04	cps
Erbium	164-2	30	50	37	39	26.18	cps
Gadolinium	160-1	123	100	153	126	21.30	cps
Gadolinium	160-2	17	20	13	17	20.01	cps
Holmium	165-1	21315476	20733988	20844497	20964653	1.47	cps
Holmium	165-2	6508822	6500566	6488707	6499365	0.16	cps
Indium	115-1	16337170	16282833	16102265	16240756	0.76	cps
Indium	115-2	1390167	1384283	1386422	1386958	0.21	cps
Iron	54-2	276886	280677	277450	278338	0.74	cps
Iron	56-2	5021218	4966507	4921785	4969837	1.00	cps
Iron	57-2	124676	122453	123428	123519	0.90	cps
Krypton	83-1	267	240	290	266	9.42	cps
Lead	206-1	3071860	3022364	2992500	3028908	1.32	cps

Lab Sample ID :ICV005Instrumnet Name :P8Client Sample ID :ICV005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Date & Time Act	quireu . 202	25-02-11 15.29.04	Dalar	ile ivallie .	0121CV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2462501	2498942	2483373	2481605	0.74	cps
Lead	208-1	11597939	11618483	11576345	11597589	0.18	cps
Lithium	6-1	7734904	7482279	7583045	7600076	1.67	cps
Magnesium	24-2	265715	264350	265791	265286	0.31	cps
Manganese	55-2	130355	133803	130647	131602	1.45	cps
Molybdenum	94-1	23123643	22878052	22585228	22862308	1.18	cps
Molybdenum	95-1	41360599	41162430	40480217	41001082	1.13	cps
Molybdenum	96-1	44438539	43643673	43716906	43933039	1.00	cps
Molybdenum	97-1	25133275	25027085	25165682	25108681	0.29	cps
Molybdenum	98-1	66017892	66552564	65240604	65937020	1.00	cps
Neodymium	150-1	57	47	67	57	17.65	cps
Neodymium	150-2	3	7	7	6	34.70	cps
Nickel	60-2	182518	185330	181802	183217	1.02	cps
Phosphorus	31-2	93	73	87	84	12.06	cps
Potassium	39-2	243935	244095	242794	243608	0.29	cps
Rhodium	103-1	15167069	14817089	14778421	14920860	1.43	cps
Rhodium	103-2	5406739	5414773	5356488	5392667	0.59	cps
Scandium	45-1	10896802	10725958	10613273	10745344	1.33	cps
Scandium	45-2	186862	186166	185737	186255	0.30	cps
Selenium	82-1	52586	52656	53001	52747	0.42	cps
Selenium	77-2	730	880	833	814	9.43	cps
Selenium	78-2	2700	2660	2707	2689	0.94	cps
Silicon	28-1	550322	543271	542306	545300	0.80	cps
Silver	107-1	1019729	1037840	1031261	1029610	0.89	cps
Silver	109-1	979772	985028	997669	987490	0.93	cps
Sodium	23-2	955750	941739	945627	947705	0.76	cps
Strontium	86-1	2902978	2859200	2905685	2889287	0.90	cps
Strontium	88-1	25059375	24893650	24965774	24972933	0.33	cps
Sulfur	34-1	783983	773978	767137	775033	1.09	cps
Terbium	159-1	21581733	21301225	21270942	21384633	0.80	cps
Terbium	159-2	6304495	6245242	6273710	6274482	0.47	cps
Thallium	203-1	3693848	3597194	3581029	3624024	1.68	cps
Thallium	205-1	8639799	8517454	8527706	8561653	0.79	cps
Tin	118-1	3921	4097	4174	4064	3.20	cps
Titanium	47-1	1807	1757	1807	1790	1.61	cps
Uranium	238-1	747	820	713	760	7.18	cps

Lab Sample ID: ICV005 Instrumnet Name: P8
Client Sample ID: ICV005 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 13:29:04 DataFile Name: 012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	250410	252391	249556	250786	0.58	cps
Ytterbium	172-1	120	127	123	123	2.70	cps
Ytterbium	172-2	37	27	47	37	27.27	cps
Ytterbium	176-1	1893	2110	2094	2032	5.93	cps
Ytterbium	176-2	383	457	417	419	8.77	cps
Yttrium	89-1	28039401	27368147	27300040	27569196	1.48	cps
Yttrium	89-2	1716657	1739921	1685710	1714096	1.59	cps
Zinc	66-2	102745	104814	102695	103418	1.17	cps
Zirconium	90-1	1407	1483	1543	1478	4.64	cps
Zirconium	91-1	970	917	1083	990	8.60	cps

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Lab Sample ID :ICB005Instrumnet Name :P8Client Sample ID :ICB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Date & Time Ac	quireu . 202	3-02-11 13.33.26	Dalar	ile ivallie .	U13CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	53	83	113	83	36.01	cps
Antimony	121-1	693	527	550	590	15.30	cps
Arsenic	75-2	7	3	3	4	43.40	cps
Barium	135-1	307	293	270	290	6.40	cps
Barium	137-1	423	440	453	439	3.42	cps
Beryllium	9-1	429	446	427	434	2.41	cps
Bismuth	209-1	13542910	13478139	13431154	13484068	0.42	cps
Bismuth	209-2	5023546	5052107	5098193	5057949	0.74	cps
Bromine	81-1	3781	3704	3741	3742	1.03	cps
Cadmium	108-1	27	40	40	36	21.64	cps
Cadmium	106-1	8379	8203	7976	8186	2.47	cps
Cadmium	111-1	5900	5764	5592	5752	2.69	cps
Calcium	43-1	450	357	437	414	12.18	cps
Calcium	44-1	25509	25025	24648	25061	1.72	cps
Carbon	12-1	3370678	3347989	3363624	3360764	0.35	cps
Carbon	12-2	23112	22654	22684	22817	1.12	cps
Chlorine	35-1	118402	118587	118399	118463	0.09	cps
Chlorine	35-2	503	477	367	449	16.14	cps
Chromium	52-2	763	790	753	769	2.47	cps
Cobalt	59-2	123	130	143	132	7.70	cps
Copper	63-2	2944	2717	2957	2873	4.70	cps
Dysprosium	156-1	67	77	40	61	31.02	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	67	80	87	78	13.09	cps
Erbium	164-2	47	23	23	31	43.32	cps
Gadolinium	160-1	130	113	120	121	6.92	cps
Gadolinium	160-2	13	17	7	12	41.65	cps
Holmium	165-1	20726861	20697862	20552567	20659097	0.45	cps
Holmium	165-2	6563018	6656614	6557052	6592228	0.85	cps
Indium	115-1	16348563	16375735	16276626	16333641	0.31	cps
Indium	115-2	1384810	1388247	1400582	1391213	0.60	cps
Iron	54-2	417	413	400	410	2.15	cps
Iron	56-2	6175	5735	6011	5974	3.73	cps
Iron	57-2	113	137	143	131	12.01	cps
Krypton	83-1	260	297	267	274	7.12	cps
Lead	206-1	2374	2457	2514	2448	2.88	cps

Lab Sample ID :ICB005Instrumnet Name :P8Client Sample ID :ICB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Date & Time Acc	quirea: 202	25-02-11 13:33:28	Datar	ile Name :	013CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2154	1927	2094	2058	5.71	cps
Lead	208-1	9258	9358	9508	9375	1.34	cps
Lithium	6-1	7831695	7526308	7659804	7672603	2.00	cps
Magnesium	24-2	2544	2757	2544	2615	4.71	cps
Manganese	55-2	167	190	170	176	7.19	cps
Molybdenum	94-1	907	710	840	819	12.21	cps
Molybdenum	95-1	1040	890	780	903	14.45	cps
Molybdenum	96-1	1140	1033	963	1046	8.51	cps
Molybdenum	97-1	600	550	543	564	5.49	cps
Molybdenum	98-1	1560	1533	1280	1458	10.60	cps
Neodymium	150-1	3	30	17	17	80.01	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	797	727	727	750	5.39	cps
Phosphorus	31-2	80	60	103	81	26.74	cps
Potassium	39-2	9436	9530	9517	9494	0.53	cps
Rhodium	103-1	15177009	14880696	14964620	15007442	1.02	cps
Rhodium	103-2	5459983	5501569	5487777	5483110	0.39	cps
Scandium	45-1	10629244	10604165	10655321	10629577	0.24	cps
Scandium	45-2	188292	189013	189489	188932	0.32	cps
Selenium	82-1	13	-50	17	-7	-563.47	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	3	3	3	3	0.00	cps
Silicon	28-1	515777	514132	513703	514537	0.21	cps
Silver	107-1	487	463	370	440	14.03	cps
Silver	109-1	293	303	270	289	5.92	cps
Sodium	23-2	55572	56134	55415	55707	0.68	cps
Strontium	86-1	660	733	653	682	6.51	cps
Strontium	88-1	2427	2330	2230	2329	4.22	cps
Sulfur	34-1	761967	756800	759449	759405	0.34	cps
Terbium	159-1	21228205	21269873	21450672	21316250	0.55	cps
Terbium	159-2	6331759	6283236	6392654	6335883	0.87	cps
Thallium	203-1	497	503	417	472	10.21	cps
Thallium	205-1	1143	1137	1127	1136	0.74	cps
Tin	118-1	3250	3347	3244	3280	1.76	cps
Titanium	47-1	567	477	520	521	8.64	cps
Uranium	238-1	60	40	60	53	21.65	cps

Lab Sample ID :ICB005Instrumnet Name :P8Client Sample ID :ICB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:33:28 DataFile Name: 013CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	17	10	13	25.01	cps
Ytterbium	172-1	143	150	83	126	29.25	cps
Ytterbium	172-2	43	37	47	42	12.06	cps
Ytterbium	176-1	2124	1890	2087	2034	6.17	cps
Ytterbium	176-2	377	373	473	408	13.93	cps
Yttrium	89-1	27524396	27509838	27491057	27508430	0.06	cps
Yttrium	89-2	1726713	1728911	1737181	1730935	0.32	cps
Zinc	66-2	213	277	330	273	21.37	cps
Zirconium	90-1	943	860	950	918	5.46	cps
Zirconium	91-1	180	237	220	212	13.72	cps

Lab Sample ID :ICSA005Instrumnet Name :P8Client Sample ID :ICSA005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Date & Time Ac	quireu . 202	13-02-11 13.40.33	DalaFi	ie ivallie .	UTSICSA.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6006961	6017654	5975984	6000200	0.36	cps
Antimony	121-1	19811	19554	19634	19666	0.67	cps
Arsenic	75-2	113	77	73	88	25.28	cps
Barium	135-1	5885	5821	5911	5872	0.79	cps
Barium	137-1	10337	10554	10631	10508	1.45	cps
Beryllium	9-1	1885	1909	1940	1911	1.44	cps
Bismuth	209-1	12029610	12211727	12245480	12162272	0.95	cps
Bismuth	209-2	4573909	4578975	4543534	4565473	0.42	cps
Bromine	81-1	5815	5731	6145	5897	3.71	cps
Cadmium	108-1	6372	6115	6105	6197	2.44	cps
Cadmium	106-1	7109	7722	7145	7325	4.70	cps
Cadmium	111-1	7618	8290	7680	7863	4.73	cps
Calcium	43-1	5446983	5383944	5352264	5394397	0.89	cps
Calcium	44-1	86158472	86280525	86114075	86184358	0.10	cps
Carbon	12-1	42514864	42940103	43689409	43048125	1.38	cps
Carbon	12-2	298031	297683	295211	296975	0.52	cps
Chlorine	35-1	82030902	86693605	88162952	85629153	3.74	cps
Chlorine	35-2	345867	349596	352022	349162	0.89	cps
Chromium	52-2	66631	67569	68161	67454	1.14	cps
Cobalt	59-2	7482	7575	7519	7525	0.63	cps
Copper	63-2	42430	42630	42831	42630	0.47	cps
Dysprosium	156-1	143	150	120	138	11.43	cps
Dysprosium	156-2	27	33	17	26	32.81	cps
Erbium	164-1	157	143	197	166	16.76	cps
Erbium	164-2	53	37	20	37	45.45	cps
Gadolinium	160-1	187	150	170	169	10.87	cps
Gadolinium	160-2	37	50	37	41	18.72	cps
Holmium	165-1	20617565	20658430	20432159	20569385	0.59	cps
Holmium	165-2	6575024	6500270	6485179	6520158	0.74	cps
Indium	115-1	15318846	15519039	15363973	15400619	0.68	cps
Indium	115-2	1333767	1308138	1324311	1322072	0.98	cps
Iron	54-2	13614068	13647490	13610834	13624131	0.15	cps
Iron	56-2	251060403	250758690	250514036	250777710	0.11	cps
Iron	57-2	6296719	6378436	6279789	6318315	0.83	cps
Krypton	83-1	307	223	330	287	19.56	cps
Lead	206-1	65993	66077	66694	66255	0.58	cps

Lab Sample ID :ICSA005Instrumnet Name :P8Client Sample ID :ICSA005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Date & Time Ac	quirea: 202	25-02-11 13:40:53	Datar	ile Name :	015ICSA.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	52004	52047	53333	52461	1.44	cps
Lead	208-1	245054	244953	247366	245791	0.56	cps
Lithium	6-1	7116545	7220420	7096544	7144503	0.93	cps
Magnesium	24-2	22124691	22203375	22474322	22267462	0.82	cps
Manganese	55-2	10394	10204	10707	10435	2.44	cps
Molybdenum	94-1	9372882	9387651	9455733	9405422	0.47	cps
Molybdenum	95-1	16694674	16800269	17056196	16850380	1.10	cps
Molybdenum	96-1	18127939	18221306	18521591	18290279	1.12	cps
Molybdenum	97-1	10519083	10394462	10488139	10467228	0.62	cps
Molybdenum	98-1	27343355	27308917	27594248	27415507	0.57	cps
Neodymium	150-1	57	117	67	80	40.18	cps
Neodymium	150-2	10	27	23	20	44.10	cps
Nickel	60-2	9680	9773	9970	9808	1.51	cps
Phosphorus	31-2	303682	302537	305684	303968	0.52	cps
Potassium	39-2	12365498	12291436	12374273	12343736	0.37	cps
Rhodium	103-1	13889221	13856253	13797442	13847639	0.34	cps
Rhodium	103-2	5155276	5050942	5055983	5087400	1.16	cps
Scandium	45-1	10445305	10407103	10161973	10338127	1.49	cps
Scandium	45-2	188330	185136	186905	186790	0.86	cps
Selenium	82-1	-3	107	20	41	140.98	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	7	13	13	11	34.61	cps
Silicon	28-1	833414	837674	841634	837574	0.49	cps
Silver	107-1	570	580	707	619	12.31	cps
Silver	109-1	383	460	633	492	26.02	cps
Sodium	23-2	46690169	47590618	47061028	47113938	0.96	cps
Strontium	86-1	184074	187746	185923	185914	0.99	cps
Strontium	88-1	1672683	1688072	1660178	1673644	0.83	cps
Sulfur	34-1	7533888	7533547	7406167	7491201	0.98	cps
Terbium	159-1	20728528	21187189	20896471	20937396	1.11	cps
Terbium	159-2	6251593	6204603	6115550	6190582	1.12	cps
Thallium	203-1	1243	1177	1427	1282	10.10	cps
Thallium	205-1	2637	2940	3247	2941	10.37	cps
Tin	118-1	4744	4584	4624	4651	1.79	cps
Titanium	47-1	5127233	5130039	5158978	5138750	0.34	cps
Uranium	238-1	840	940	1000	927	8.72	cps

Lab Sample ID :ICSA005Instrumnet Name :P8Client Sample ID :ICSA005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:40:53 DataFile Name: 015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	350	410	380	380	7.89	cps	
Ytterbium	172-1	110	113	163	129	23.18	cps	
Ytterbium	172-2	57	33	37	42	29.89	cps	
Ytterbium	176-1	1843	1870	1967	1893	3.43	cps	
Ytterbium	176-2	337	297	387	340	13.26	cps	
Yttrium	89-1	27253494	27165486	26846611	27088530	0.79	cps	
Yttrium	89-2	1740354	1705133	1737976	1727821	1.14	cps	
Zinc	66-2	5808	5958	5898	5888	1.28	cps	
Zirconium	90-1	1343	1337	1207	1296	5.95	cps	
Zirconium	91-1	240	283	240	254	9.83	cps	

Lab Sample ID :ICSAB005Instrumnet Name :P8Client Sample ID :ICSAB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5994950	6050514	6012247	6019237	0.47	cps
Antimony	121-1	367934	374470	374622	372342	1.03	cps
Arsenic	75-2	6395	6562	6505	6487	1.31	cps
Barium	135-1	90305	89677	91640	90541	1.11	cps
Barium	137-1	156772	160371	158749	158631	1.14	cps
Beryllium	9-1	114145	113164	114488	113932	0.60	cps
Bismuth	209-1	12210319	12504837	12347249	12354135	1.19	cps
Bismuth	209-2	4532101	4527686	4588239	4549342	0.74	cps
Bromine	81-1	5584	5708	5871	5721	2.51	cps
Cadmium	108-1	11505	11682	11738	11642	1.05	cps
Cadmium	106-1	14424	14978	14755	14719	1.89	cps
Cadmium	111-1	90717	91055	91173	90982	0.26	cps
Calcium	43-1	5475465	5503974	5520666	5500035	0.42	cps
Calcium	44-1	88541132	89041159	87942689	88508326	0.62	cps
Carbon	12-1	43781208	44817178	45099161	44565849	1.56	cps
Carbon	12-2	305040	304895	306385	305440	0.27	cps
Chlorine	35-1	83283905	88733885	91018935	87678909	4.53	cps
Chlorine	35-2	352440	351440	356498	353459	0.76	cps
Chromium	52-2	134774	133849	135467	134697	0.60	cps
Cobalt	59-2	135601	137711	137267	136860	0.81	cps
Copper	63-2	142732	141295	143382	142469	0.75	cps
Dysprosium	156-1	77	83	120	93	25.00	cps
Dysprosium	156-2	13	40	30	28	48.51	cps
Erbium	164-1	180	190	160	177	8.65	cps
Erbium	164-2	50	57	37	48	21.31	cps
Gadolinium	160-1	167	217	147	177	20.41	cps
Gadolinium	160-2	37	37	47	40	14.43	cps
Holmium	165-1	20356436	20579217	20516423	20484025	0.56	cps
Holmium	165-2	6491588	6517134	6543364	6517362	0.40	cps
Indium	115-1	15409433	15753983	15620919	15594778	1.11	cps
Indium	115-2	1328865	1327857	1344972	1333898	0.72	cps
Iron	54-2	13914743	13765982	13776885	13819203	0.60	cps
Iron	56-2	251448883	252795470	252437643	252227332	0.28	cps
Iron	57-2	6407290	6374912	6324172	6368792	0.66	cps
Krypton	83-1	280	260	327	289	11.84	cps
Lead	206-1	348955	343612	349910	347492	0.98	cps

Lab Sample ID :ICSAB005Instrumnet Name :P8Client Sample ID :ICSAB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

Date & Time Act	quireu . 202	25-02-11 15.44.07	Dalar	ile ivallie .	0101C3B.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	285791	286962	288338	287030	0.44	cps
Lead	208-1	1334026	1336093	1348284	1339468	0.58	cps
Lithium	6-1	7211124	7338204	7134991	7228106	1.42	cps
Magnesium	24-2	22420017	22370046	22652528	22480864	0.67	cps
Manganese	55-2	36995	37305	36797	37032	0.69	cps
Molybdenum	94-1	9434009	9597543	9730634	9587396	1.55	cps
Molybdenum	95-1	17156441	17325048	17299038	17260175	0.53	cps
Molybdenum	96-1	18380093	18484234	18416512	18426946	0.29	cps
Molybdenum	97-1	10543509	10707248	10605771	10618843	0.78	cps
Molybdenum	98-1	27766905	27654863	27940059	27787276	0.52	cps
Neodymium	150-1	70	77	93	80	15.02	cps
Neodymium	150-2	20	20	10	17	34.64	cps
Nickel	60-2	44707	45024	45339	45023	0.70	cps
Phosphorus	31-2	307469	307618	309604	308230	0.39	cps
Potassium	39-2	12509024	12453781	12448709	12470505	0.27	cps
Rhodium	103-1	13875978	13887588	13857661	13873742	0.11	cps
Rhodium	103-2	5051135	5024338	5086858	5054110	0.62	cps
Scandium	45-1	10653580	10619027	10499199	10590602	0.77	cps
Scandium	45-2	189806	188260	189894	189320	0.49	cps
Selenium	82-1	5178	5318	5081	5192	2.29	cps
Selenium	77-2	80	97	90	89	9.44	cps
Selenium	78-2	300	370	327	332	10.63	cps
Silicon	28-1	884565	895282	897462	892436	0.77	cps
Silver	107-1	399566	406427	410427	405473	1.35	cps
Silver	109-1	384188	386227	391978	387464	1.04	cps
Sodium	23-2	47256234	47515498	47878381	47550038	0.66	cps
Strontium	86-1	185800	189458	188823	188027	1.04	cps
Strontium	88-1	1672451	1705470	1709037	1695653	1.19	cps
Sulfur	34-1	7556280	7595385	7600287	7583984	0.32	cps
Terbium	159-1	20806117	21019011	21155095	20993407	0.84	cps
Terbium	159-2	6166700	6246593	6249932	6221075	0.76	cps
Thallium	203-1	343738	351025	345870	346878	1.08	cps
Thallium	205-1	830755	825084	839998	831946	0.90	cps
Tin	118-1	5304	5318	5344	5322	0.38	cps
Titanium	47-1	5323245	5302710	5308434	5311463	0.20	cps
Uranium	238-1	977	973	857	936	7.31	cps

Lab Sample ID :ICSAB005Instrumnet Name :P8Client Sample ID :ICSAB005Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:44:07 DataFile Name: 016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Tarameter	IVIGOS	01 01	01 02	01 00	Or Olvicari	OI OI OI	Office
Vanadium	51-2	52001	51981	52322	52101	0.37	cps
Ytterbium	172-1	113	113	123	117	4.95	cps
Ytterbium	172-2	37	47	70	51	33.46	cps
Ytterbium	176-1	1900	2077	1997	1991	4.44	cps
Ytterbium	176-2	253	270	300	274	8.62	cps
Yttrium	89-1	27140585	27803564	27560562	27501570	1.22	cps
Yttrium	89-2	1754140	1715352	1728686	1732726	1.14	cps
Zinc	66-2	16436	16400	16740	16525	1.13	cps
Zirconium	90-1	1207	1223	1237	1222	1.23	cps
Zirconium	91-1	290	277	373	313	16.72	cps

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Lab Sample ID : CCV021 Instrumnet Name : P8
Client Sample ID : CCV021 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Date & Tille F	Acquired . 202	5-02-11 15.47.19	DalaFii	ie name.	017CCV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3169562	3158720	3180349	3169544	0.34	cps
Antimony	121-1	8126634	8256109	8224264	8202336	0.82	cps
Arsenic	75-2	145802	147048	145903	146251	0.47	cps
Barium	135-1	10236305	10212767	10137241	10195438	0.51	cps
Barium	137-1	17604237	17519349	17311526	17478371	0.86	cps
Beryllium	9-1	2576460	2577644	2639292	2597798	1.38	cps
Bismuth	209-1	11869031	11730148	11919163	11839447	0.83	cps
Bismuth	209-2	4387952	4352452	4342162	4360855	0.55	cps
Bromine	81-1	4527	4387	4731	4549	3.80	cps
Cadmium	108-1	161075	161590	158476	160381	1.04	cps
Cadmium	106-1	229534	231582	229930	230349	0.47	cps
Cadmium	111-1	2018720	2055838	2007825	2027461	1.24	cps
Calcium	43-1	13148554	13299301	12898214	13115356	1.54	cps
Calcium	44-1	212923063	212363910	210857070	212048015	0.50	cps
Carbon	12-1	4363138	4466232	4590958	4473443	2.55	cps
Carbon	12-2	37261	37377	37217	37285	0.22	cps
Chlorine	35-1	5495177	5120077	4779648	5131634	6.97	cps
Chlorine	35-2	15842	14467	14117	14809	6.16	cps
Chromium	52-2	1642859	1676960	1662017	1660612	1.03	cps
Cobalt	59-2	3068121	3057566	3121376	3082354	1.11	cps
Copper	63-2	23192514	22883593	23089720	23055275	0.68	cps
Dysprosium	156-1	437	490	517	481	8.47	cps
Dysprosium	156-2	77	107	157	113	35.66	cps
Erbium	164-1	443	473	417	444	6.38	cps
Erbium	164-2	167	120	127	138	18.32	cps
Gadolinium	160-1	427	383	377	396	6.86	cps
Gadolinium	160-2	107	133	147	129	15.80	cps
Holmium	165-1	20411443	20154997	20036150	20200863	0.95	cps
Holmium	165-2	6471011	6410590	6391546	6424382	0.65	cps
Indium	115-1	15192598	14994091	15205673	15130787	0.78	cps
Indium	115-2	1291644	1281693	1287447	1286928	0.39	cps
Iron	54-2	16391840	16426451	16491236	16436509	0.31	cps
Iron	56-2	300779982	301480556	299584496	300615011	0.32	cps
Iron	57-2	7612747	7563826	7610558	7595710	0.36	cps
Krypton	83-1	290	327	300	306	6.20	cps
Lead	206-1	32927185	33278853	33232704	33146247	0.58	cps

Lab Sample ID :CCV021Instrumnet Name :P8Client Sample ID :CCV021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Date & Time Act	quireu . 202	13-02-11 13.47.19	Dalari	ie name.	017CCV.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	28030996	28589648	27969801	28196815	1.21	cps
Lead	208-1	130245371	132158258	129869079	130757569	0.94	cps
Lithium	6-1	6989319	6866152	7044700	6966724	1.31	cps
Magnesium	24-2	56922591	56457906	56650966	56677154	0.41	cps
Manganese	55-2	6443935	6526941	6528521	6499799	0.74	cps
Molybdenum	94-1	28434377	28922759	28848190	28735108	0.92	cps
Molybdenum	95-1	41195852	42220186	41233199	41549745	1.40	cps
Molybdenum	96-1	44650248	45498248	45404404	45184300	1.03	cps
Molybdenum	97-1	25333663	25504583	25677749	25505332	0.67	cps
Molybdenum	98-1	66889372	67446061	66874679	67070037	0.49	cps
Neodymium	150-1	817	783	803	801	2.09	cps
Neodymium	150-2	57	37	60	51	24.69	cps
Nickel	60-2	811957	800282	803952	805397	0.74	cps
Phosphorus	31-2	30171	29710	29440	29774	1.24	cps
Potassium	39-2	15510131	15240570	15348176	15366292	0.88	cps
Rhodium	103-1	13239419	13303216	13345204	13295946	0.40	cps
Rhodium	103-2	4993708	4819310	4900803	4904607	1.78	cps
Scandium	45-1	10331161	10345687	10185383	10287410	0.86	cps
Scandium	45-2	187276	185830	188191	187099	0.64	cps
Selenium	82-1	119667	119070	119079	119272	0.29	cps
Selenium	77-2	1823	1773	1797	1798	1.39	cps
Selenium	78-2	5988	6055	6011	6018	0.56	cps
Silicon	28-1	6806029	6890147	6910203	6868793	0.80	cps
Silver	107-1	10030707	9965765	9920619	9972364	0.55	cps
Silver	109-1	9406048	9317862	9330627	9351512	0.51	cps
Sodium	23-2	114315252	114155588	112389225	113620022	0.94	cps
Strontium	86-1	2667082	2651919	2649561	2656187	0.36	cps
Strontium	88-1	22710773	23095957	23018726	22941819	0.89	cps
Sulfur	34-1	1399744	1409353	1387830	1398975	0.77	cps
Terbium	159-1	20607077	20287746	20418101	20437641	0.79	cps
Terbium	159-2	6157029	6132648	6072720	6120799	0.71	cps
Thallium	203-1	7962308	8077453	8059295	8033019	0.77	cps
Thallium	205-1	19095211	19296247	19574710	19322056	1.25	cps
Tin	118-1	6609116	6517790	6579674	6568860	0.71	cps
Titanium	47-1	12310534	12209617	12080906	12200352	0.94	cps
Uranium	238-1	26703386	26821364	26478126	26667625	0.65	cps

Lab Sample ID :CCV021Instrumnet Name :P8Client Sample ID :CCV021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:47:19 DataFile Name: 017CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1265108	1263519	1293057	1273895	1.30	cps
Ytterbium	172-1	573	537	510	540	5.89	cps
Ytterbium	172-2	200	227	197	208	7.91	cps
Ytterbium	176-1	41866	41843	41050	41586	1.12	cps
Ytterbium	176-2	12946	12850	13163	12986	1.24	cps
Yttrium	89-1	26391441	26406276	26292052	26363257	0.24	cps
Yttrium	89-2	1734264	1703945	1702916	1713708	1.04	cps
Zinc	66-2	2538499	2479406	2459708	2492538	1.65	cps
Zirconium	90-1	14341067	14629049	14514052	14494723	1.00	cps
Zirconium	91-1	3265633	3336903	3199049	3267195	2.11	cps

Lab Sample ID : CCB021 Instrumnet Name : P8
Client Sample ID : CCB021 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

Date & Time Ac	quireu . 202	25-02-11 15.50.25	Dalar	ile ivallie .	U10CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	223	157	170	183	19.24	cps
Antimony	121-1	2004	1880	1870	1918	3.87	cps
Arsenic	75-2	7	20	10	12	56.76	cps
Barium	135-1	483	563	353	467	22.71	cps
Barium	137-1	887	757	817	820	7.93	cps
Beryllium	9-1	1172	1077	1002	1084	7.86	cps
Bismuth	209-1	13602345	13556552	13597166	13585354	0.18	cps
Bismuth	209-2	5091491	5063225	5023979	5059565	0.67	cps
Bromine	81-1	4037	4191	4337	4188	3.58	cps
Cadmium	108-1	50	50	20	40	43.30	cps
Cadmium	106-1	8169	8109	8086	8121	0.53	cps
Cadmium	111-1	5870	5781	5739	5797	1.15	cps
Calcium	43-1	817	720	680	739	9.51	cps
Calcium	44-1	33540	32851	32206	32866	2.03	cps
Carbon	12-1	3791397	3747498	3721546	3753480	0.94	cps
Carbon	12-2	24524	24170	24223	24306	0.78	cps
Chlorine	35-1	2413313	2255758	2144908	2271327	5.94	cps
Chlorine	35-2	7245	7169	6592	7002	5.10	cps
Chromium	52-2	757	727	730	738	2.23	cps
Cobalt	59-2	140	200	140	160	21.65	cps
Copper	63-2	3470	3277	3444	3397	3.09	cps
Dysprosium	156-1	17	27	43	29	46.62	cps
Dysprosium	156-2	0	10	7	6	91.64	cps
Erbium	164-1	113	73	117	101	23.85	cps
Erbium	164-2	37	20	47	34	39.11	cps
Gadolinium	160-1	110	117	150	126	17.07	cps
Gadolinium	160-2	43	23	7	24	75.09	cps
Holmium	165-1	21356763	21051391	20935684	21114612	1.03	cps
Holmium	165-2	6774222	6739237	6656540	6723333	0.90	cps
Indium	115-1	16981189	16889178	16766820	16879062	0.64	cps
Indium	115-2	1428029	1431880	1436139	1432016	0.28	cps
Iron	54-2	807	907	877	863	5.94	cps
Iron	56-2	14808	15192	13066	14355	7.89	cps
Iron	57-2	400	383	330	371	9.85	cps
Krypton	83-1	297	287	250	278	8.85	cps
Lead	206-1	5074	4771	4891	4912	3.11	cps

Lab Sample ID :CCB021Instrumnet Name :P8Client Sample ID :CCB021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

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Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4721	4204	4071	4332	7.93	cps
Lead	208-1	20426	19239	18735	19467	4.46	cps
Lithium	6-1	7817610	7793227	7890989	7833942	0.65	cps
Magnesium	24-2	2584	2517	2524	2541	1.45	cps
Manganese	55-2	340	290	287	306	9.78	cps
Molybdenum	94-1	1603	1300	1400	1435	10.78	cps
Molybdenum	95-1	1960	1630	1413	1668	16.51	cps
Molybdenum	96-1	2017	1690	1667	1791	10.93	cps
Molybdenum	97-1	1253	1070	780	1034	23.07	cps
Molybdenum	98-1	3230	2544	2304	2693	17.87	cps
Neodymium	150-1	30	27	27	28	6.92	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	893	943	853	897	5.03	cps
Phosphorus	31-2	83	87	97	89	7.81	cps
Potassium	39-2	12913	13009	12302	12741	3.01	cps
Rhodium	103-1	15562460	15619567	15483628	15555218	0.44	cps
Rhodium	103-2	5666831	5643167	5677840	5662612	0.31	cps
Scandium	45-1	11127491	11072012	11074482	11091328	0.28	cps
Scandium	45-2	194925	196014	196136	195692	0.34	cps
Selenium	82-1	-3	-30	60	9	519.86	cps
Selenium	77-2	7	0	0	2	173.21	cps
Selenium	78-2	0	3	0	1	173.21	cps
Silicon	28-1	552574	550187	546972	549911	0.51	cps
Silver	107-1	1277	1277	1160	1238	5.44	cps
Silver	109-1	1150	997	1020	1056	7.83	cps
Sodium	23-2	78985	77524	77685	78065	1.03	cps
Strontium	86-1	657	673	710	680	4.01	cps
Strontium	88-1	1417	1540	1457	1471	4.28	cps
Sulfur	34-1	737293	733184	737981	736153	0.35	cps
Terbium	159-1	21390943	21324923	21431668	21382511	0.25	cps
Terbium	159-2	6463678	6407162	6523040	6464627	0.90	cps
Thallium	203-1	1653	1460	1340	1485	10.65	cps
Thallium	205-1	3737	3564	3394	3565	4.82	cps
Tin	118-1	3737	3701	3667	3702	0.95	cps
Titanium	47-1	1057	880	817	918	13.55	cps
Uranium	238-1	690	543	450	561	21.56	cps

LB Number : LB134674 Operator :

Lab Sample ID :CCB021Instrumnet Name :P8Client Sample ID :CCB021Dilution Factor :1

Date & Time Acquired: 2025-02-11 13:50:25 DataFile Name: 018CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	37	20	13	23	51.52	cps
Ytterbium	172-1	150	130	93	124	23.10	cps
Ytterbium	172-2	20	57	33	37	50.62	cps
Ytterbium	176-1	1997	2077	2074	2049	2.21	cps
Ytterbium	176-2	287	407	327	340	17.97	cps
Yttrium	89-1	28736425	28773251	28317320	28608999	0.89	cps
Yttrium	89-2	1801139	1820729	1780353	1800740	1.12	cps
Zinc	66-2	333	357	283	324	11.55	cps
Zirconium	90-1	1477	1507	1443	1476	2.15	cps
Zirconium	91-1	327	313	327	322	2.39	cps

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Lab Sample ID: Q1159-01DLX2 Instrumnet Name: P8
Client Sample ID: YE8C9 Dilution Factor: 2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	786934	787424	783325	785894	0.28	cps
Antimony	121-1	5301	5378	5481	5387	1.68	cps
Arsenic	75-2	8683	8599	8933	8738	1.99	cps
Barium	135-1	513366	514803	513554	513908	0.15	cps
Barium	137-1	897467	896559	900540	898189	0.23	cps
Beryllium	9-1	3550	3658	3683	3630	1.94	cps
Bismuth	209-1	13875169	13260921	13231291	13455793	2.70	cps
Bismuth	209-2	4459130	4193644	4973991	4542255	8.73	cps
Bromine	81-1	6472	6602	6878	6651	3.12	cps
Cadmium	108-1	103	130	137	123	14.30	cps
Cadmium	106-1	8283	7696	8072	8017	3.71	cps
Cadmium	111-1	6165	5793	6095	6018	3.29	cps
Calcium	43-1	163865	165986	165236	165029	0.65	cps
Calcium	44-1	2751631	2782490	2752449	2762190	0.64	cps
Carbon	12-1	3755278	3775489	3849006	3793257	1.30	cps
Carbon	12-2	24971	25546	25329	25282	1.15	cps
Chlorine	35-1	85416520	92934442	95239615	91196859	5.63	cps
Chlorine	35-2	377007	383788	382155	380984	0.93	cps
Chromium	52-2	96530	96872	95899	96433	0.51	cps
Cobalt	59-2	103369	102361	101096	102275	1.11	cps
Copper	63-2	268500	267913	270868	269094	0.58	cps
Dysprosium	156-1	38940	38896	40070	39302	1.69	cps
Dysprosium	156-2	13450	13300	12910	13220	2.11	cps
Erbium	164-1	37245	37192	36644	37027	0.90	cps
Erbium	164-2	11418	11715	11218	11451	2.18	cps
Gadolinium	160-1	40016	40358	41524	40633	1.95	cps
Gadolinium	160-2	15499	15746	16353	15866	2.77	cps
Holmium	165-1	21747282	21212370	20677916	21212523	2.52	cps
Holmium	165-2	5978041	5520067	6732015	6076708	10.07	cps
Indium	115-1	16805816	16664419	16428827	16633020	1.14	cps
Indium	115-2	1264795	1167322	1412911	1281676	9.65	cps
Iron	54-2	4640873	4596754	4572174	4603267	0.76	cps
Iron	56-2	85661732	84754087	83996755	84804192	0.98	cps
Iron	57-2	2187726	2178328	2143375	2169810	1.08	cps
Krypton	83-1	390	377	380	382	1.82	cps
Lead	206-1	191067	194698	191358	192374	1.05	cps

Lab Sample ID : Q1159-01DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9 Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	154180	154894	154844	154639	0.26	cps
Lead	208-1	730424	739031	732268	733908	0.62	cps
Lithium	6-1	7916853	7900556	7764911	7860774	1.06	cps
Magnesium	24-2	1407189	1428229	1420957	1418792	0.75	cps
Manganese	55-2	353384	349390	345747	349507	1.09	cps
Molybdenum	94-1	6935	7165	7185	7095	1.96	cps
Molybdenum	95-1	4081	4134	4201	4138	1.45	cps
Molybdenum	96-1	5491	5451	5612	5518	1.51	cps
Molybdenum	97-1	2604	2484	2710	2599	4.36	cps
Molybdenum	98-1	6928	6642	6598	6723	2.67	cps
Neodymium	150-1	41604	42086	41918	41869	0.58	cps
Neodymium	150-2	9133	9290	8800	9074	2.76	cps
Nickel	60-2	74108	73907	73411	73809	0.49	cps
Phosphorus	31-2	1120	1087	1143	1117	2.55	cps
Potassium	39-2	53656	57768	56040	55821	3.70	cps
Rhodium	103-1	15403632	15227061	15063333	15231342	1.12	cps
Rhodium	103-2	5021695	4595390	5563967	5060350	9.59	cps
Scandium	45-1	11171588	11095183	11021964	11096245	0.67	cps
Scandium	45-2	177590	160780	197014	178462	10.16	cps
Selenium	82-1	37	143	77	86	62.98	cps
Selenium	77-2	37	60	53	50	24.03	cps
Selenium	78-2	47	37	40	41	12.39	cps
Silicon	28-1	63034696	62269712	60978356	62094255	1.67	cps
Silver	107-1	4924	4451	4337	4571	6.81	cps
Silver	109-1	4504	4314	3984	4267	6.17	cps
Sodium	23-2	94404	95194	94978	94859	0.43	cps
Strontium	86-1	150285	152145	150981	151137	0.62	cps
Strontium	88-1	1313137	1315579	1334872	1321196	0.90	cps
Sulfur	34-1	713149	706556	697304	705670	1.13	cps
Terbium	159-1	21587427	21770691	21210543	21522887	1.33	cps
Terbium	159-2	5638770	5275075	6353839	5755895	9.54	cps
Thallium	203-1	3157	3000	2937	3032	3.74	cps
Thallium	205-1	7609	7492	7269	7457	2.32	cps
Tin	118-1	4224	3971	3774	3990	5.66	cps
Titanium	47-1	21026	45709	23942	30226	44.62	cps
Uranium	238-1	13694	13681	14278	13884	2.46	cps

LB Number : LB134674 Operator :

Lab Sample ID: Q1159-01DLX2 Instrumnet Name: P8

Client Sample ID: YE8C9 Dilution Factor: 2

Date & Time Acquired: 2025-02-11 13:53:45 DataFile Name: 019AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	89477	90071	88518	89355	0.88	cps
Ytterbium	172-1	11061	10978	10845	10961	1.00	cps
Ytterbium	172-2	4154	4131	4177	4154	0.56	cps
Ytterbium	176-1	8890	9150	8643	8894	2.85	cps
Ytterbium	176-2	2894	2854	2794	2847	1.77	cps
Yttrium	89-1	29300030	28633977	28299642	28744550	1.77	cps
Yttrium	89-2	1653632	1521640	1814806	1663359	8.83	cps
Zinc	66-2	39121	38923	38937	38994	0.28	cps
Zirconium	90-1	14230	16986	13248	14821	13.07	cps
Zirconium	91-1	3421	3167	3214	3267	4.13	cps

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Lab Sample ID : Q1159-02DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	787887	793634	794972	792164	0.48	cps
Antimony	121-1	5011	5421	4978	5137	4.81	cps
Arsenic	75-2	8706	8519	8773	8666	1.52	cps
Barium	135-1	516247	517418	513193	515619	0.42	cps
Barium	137-1	903102	904596	907246	904981	0.23	cps
Beryllium	9-1	3561	3521	3472	3518	1.26	cps
Bismuth	209-1	13341991	13263071	13500420	13368494	0.90	cps
Bismuth	209-2	4999734	5089382	5005155	5031424	1.00	cps
Bromine	81-1	6548	6832	6438	6606	3.07	cps
Cadmium	108-1	130	113	127	123	7.15	cps
Cadmium	106-1	8223	8099	8389	8237	1.77	cps
Cadmium	111-1	6175	5967	6274	6138	2.55	cps
Calcium	43-1	165759	164600	166305	165555	0.53	cps
Calcium	44-1	2809852	2824930	2755439	2796740	1.31	cps
Carbon	12-1	3764537	3800606	3767791	3777644	0.53	cps
Carbon	12-2	24798	25242	24387	24809	1.72	cps
Chlorine	35-1	92171485	98496822	101397535	97355281	4.85	cps
Chlorine	35-2	388465	390742	394418	391208	0.77	cps
Chromium	52-2	95956	96882	97127	96655	0.64	cps
Cobalt	59-2	102291	102656	101965	102304	0.34	cps
Copper	63-2	272221	272737	273649	272869	0.27	cps
Dysprosium	156-1	39725	39946	39261	39644	0.88	cps
Dysprosium	156-2	13157	13093	13393	13214	1.20	cps
Erbium	164-1	36941	37834	37570	37448	1.22	cps
Erbium	164-2	11322	11615	11542	11493	1.33	cps
Gadolinium	160-1	41401	40421	41775	41199	1.70	cps
Gadolinium	160-2	16126	16033	15976	16045	0.47	cps
Holmium	165-1	21192754	20869823	21286825	21116467	1.04	cps
Holmium	165-2	6702922	6701684	6707447	6704018	0.05	cps
Indium	115-1	16970463	16555997	16425235	16650565	1.71	cps
Indium	115-2	1418939	1422114	1426504	1422519	0.27	cps
Iron	54-2	4758906	4681142	4714342	4718130	0.83	cps
Iron	56-2	85727040	85295132	86172644	85731605	0.51	cps
Iron	57-2	2153417	2189400	2184073	2175630	0.89	cps
Krypton	83-1	347	320	333	333	4.00	cps
Lead	206-1	191020	190852	191727	191200	0.24	cps

Lab Sample ID : Q1159-02DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Date & Time Ac	quirea: 202	25-02-11 13:57:03	Datar	ile Name :	020AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	155231	155657	154311	155066	0.44	cps
Lead	208-1	732461	734613	731401	732825	0.22	cps
Lithium	6-1	8068817	7925836	7936917	7977190	1.00	cps
Magnesium	24-2	1413547	1415420	1408880	1412615	0.24	cps
Manganese	55-2	350951	349835	351926	350904	0.30	cps
Molybdenum	94-1	7143	7216	7092	7150	0.87	cps
Molybdenum	95-1	4121	4141	3921	4061	3.00	cps
Molybdenum	96-1	6168	5401	5518	5696	7.26	cps
Molybdenum	97-1	2540	2377	2567	2495	4.12	cps
Molybdenum	98-1	6465	6418	6815	6566	3.30	cps
Neodymium	150-1	42674	42975	42808	42819	0.35	cps
Neodymium	150-2	9180	9217	9046	9148	0.98	cps
Nickel	60-2	73636	74051	74185	73957	0.39	cps
Phosphorus	31-2	1017	1027	1013	1019	0.68	cps
Potassium	39-2	55365	53325	53503	54064	2.09	cps
Rhodium	103-1	15652344	15521410	15464494	15546083	0.62	cps
Rhodium	103-2	5668511	5587718	5595542	5617257	0.79	cps
Scandium	45-1	11434626	11338657	11225776	11333020	0.92	cps
Scandium	45-2	200289	196235	201218	199247	1.33	cps
Selenium	82-1	133	113	113	120	9.62	cps
Selenium	77-2	83	63	53	67	22.91	cps
Selenium	78-2	70	50	40	53	28.64	cps
Silicon	28-1	61625207	62732102	64373659	62910323	2.20	cps
Silver	107-1	3891	4077	4241	4070	4.30	cps
Silver	109-1	3307	3694	3844	3615	7.66	cps
Sodium	23-2	88727	89616	89549	89298	0.55	cps
Strontium	86-1	152357	153306	152864	152842	0.31	cps
Strontium	88-1	1323988	1328012	1332306	1328102	0.31	cps
Sulfur	34-1	685435	682378	678770	682195	0.49	cps
Terbium	159-1	21689531	21520336	21356510	21522126	0.77	cps
Terbium	159-2	6413932	6484973	6479243	6459383	0.61	cps
Thallium	203-1	2620	2814	3087	2840	8.26	cps
Thallium	205-1	6185	6535	7436	6718	9.60	cps
Tin	118-1	3847	3767	3937	3851	2.21	cps
Titanium	47-1	30264	27117	29291	28891	5.58	cps
Uranium	238-1	13738	14022	13637	13799	1.45	cps

Lab Sample ID : Q1159-02DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 2

Date & Time Acquired: 2025-02-11 13:57:03 DataFile Name: 020AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	90581	90282	89149	90004	0.84	cps
Ytterbium	172-1	11041	10347	10908	10766	3.42	cps
Ytterbium	172-2	3994	4127	3984	4035	1.98	cps
Ytterbium	176-1	8369	8786	8256	8471	3.30	cps
Ytterbium	176-2	2807	2760	2930	2833	3.10	cps
Yttrium	89-1	29025150	29242992	29117978	29128707	0.38	cps
Yttrium	89-2	1855512	1812381	1867467	1845120	1.57	cps
Zinc	66-2	38536	39388	39010	38978	1.10	cps
Zirconium	90-1	12179	13409	13277	12955	5.21	cps
Zirconium	91-1	14334	2964	3010	6769	96.78	cps

Lab Sample ID: Q1159-01LDLX10 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	158094	157917	156052	157354	0.72	cps
Antimony	121-1	1077	1250	1027	1118	10.49	cps
Arsenic	75-2	1737	1743	1727	1736	0.48	cps
Barium	135-1	103189	103324	103888	103467	0.36	cps
Barium	137-1	179713	180557	180221	180164	0.24	cps
Beryllium	9-1	1075	1171	1074	1107	5.05	cps
Bismuth	209-1	13344141	13335717	13371543	13350467	0.14	cps
Bismuth	209-2	5027330	4999458	4986469	5004419	0.42	cps
Bromine	81-1	5111	4868	4928	4969	2.55	cps
Cadmium	108-1	30	57	40	42	31.91	cps
Cadmium	106-1	7886	7315	7852	7684	4.17	cps
Cadmium	111-1	5676	5221	5569	5488	4.33	cps
Calcium	43-1	33542	33730	33883	33718	0.51	cps
Calcium	44-1	566526	566097	565576	566066	0.08	cps
Carbon	12-1	3401329	3372305	3410232	3394622	0.58	cps
Carbon	12-2	22294	22017	22247	22186	0.67	cps
Chlorine	35-1	23640878	24282560	24549559	24157665	1.93	cps
Chlorine	35-2	89940	90937	90430	90436	0.55	cps
Chromium	52-2	19470	19757	19971	19733	1.27	cps
Cobalt	59-2	20738	20665	20241	20548	1.31	cps
Copper	63-2	56682	56867	56244	56598	0.56	cps
Dysprosium	156-1	7832	8103	8056	7997	1.81	cps
Dysprosium	156-2	2544	2527	2537	2536	0.33	cps
Erbium	164-1	7922	7499	7646	7689	2.80	cps
Erbium	164-2	2344	2267	2350	2320	2.00	cps
Gadolinium	160-1	8333	8456	8196	8328	1.56	cps
Gadolinium	160-2	3320	2990	3154	3155	5.23	cps
Holmium	165-1	21130163	21033594	21145315	21103024	0.29	cps
Holmium	165-2	6744963	6721301	6754975	6740413	0.26	cps
Indium	115-1	16624632	16656734	16653562	16644976	0.11	cps
Indium	115-2	1420798	1433569	1432512	1428960	0.50	cps
Iron	54-2	922965	914357	927957	921760	0.75	cps
Iron	56-2	17298692	17169068	16934226	17133995	1.08	cps
Iron	57-2	425449	419573	420960	421994	0.73	cps
Krypton	83-1	347	300	313	320	7.51	cps
Lead	206-1	41296	41406	41787	41496	0.62	cps

Lab Sample ID: Q1159-01LDLX10 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	34436	33824	34593	34284	1.18	cps
Lead	208-1	161422	159033	162024	160826	0.98	cps
Lithium	6-1	8112199	7784870	7781458	7892842	2.41	cps
Magnesium	24-2	277438	280587	277735	278587	0.62	cps
Manganese	55-2	70402	72228	69880	70837	1.74	cps
Molybdenum	94-1	1743	1914	2027	1895	7.53	cps
Molybdenum	95-1	973	947	927	949	2.47	cps
Molybdenum	96-1	1393	1203	1270	1289	7.48	cps
Molybdenum	97-1	727	590	613	643	11.36	cps
Molybdenum	98-1	1640	1483	1610	1578	5.27	cps
Neodymium	150-1	8463	8123	8276	8287	2.06	cps
Neodymium	150-2	1787	1790	1823	1800	1.13	cps
Nickel	60-2	15402	15345	15475	15407	0.42	cps
Phosphorus	31-2	283	293	287	288	1.77	cps
Potassium	39-2	19213	18929	19321	19154	1.06	cps
Rhodium	103-1	15608584	15555282	15515258	15559708	0.30	cps
Rhodium	103-2	5648208	5651796	5566470	5622158	0.86	cps
Scandium	45-1	11277031	11154690	11189552	11207091	0.56	cps
Scandium	45-2	193460	194045	195111	194205	0.43	cps
Selenium	82-1	-3	0	3	0	0.00	cps
Selenium	77-2	7	7	7	7	0.00	cps
Selenium	78-2	20	7	17	14	48.02	cps
Silicon	28-1	15108019	12971658	12964946	13681541	9.03	cps
Silver	107-1	860	983	963	936	7.08	cps
Silver	109-1	850	813	883	849	4.13	cps
Sodium	23-2	68466	68333	67070	67956	1.13	cps
Strontium	86-1	30884	31415	31024	31108	0.88	cps
Strontium	88-1	266199	268715	268934	267950	0.57	cps
Sulfur	34-1	660483	656784	652411	656559	0.62	cps
Terbium	159-1	21170761	21242148	21264433	21225781	0.23	cps
Terbium	159-2	6384698	6380939	6412947	6392861	0.27	cps
Thallium	203-1	1180	1093	1073	1116	5.08	cps
Thallium	205-1	2680	2674	2440	2598	5.26	cps
Tin	118-1	2827	2620	2607	2685	4.60	cps
Titanium	47-1	4184	4935	5757	4959	15.87	cps
Uranium	238-1	2600	2660	2747	2669	2.76	cps

Lab Sample ID: Q1159-01LDLX10 Instrumnet Name: P8
Client Sample ID: YE8C9L Dilution Factor: 10

Date & Time Acquired: 2025-02-11 14:00:19 DataFile Name: 021AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17631	17644	18419	17898	2.52	cps
Ytterbium	172-1	2350	2194	2350	2298	3.94	cps
Ytterbium	172-2	827	923	843	864	5.98	cps
Ytterbium	176-1	3337	3337	3364	3346	0.46	cps
Ytterbium	176-2	770	820	817	802	3.48	cps
Yttrium	89-1	28809450	28723675	28621494	28718207	0.33	cps
Yttrium	89-2	1809980	1831621	1840499	1827367	0.86	cps
Zinc	66-2	8076	8242	7992	8103	1.57	cps
Zirconium	90-1	3280	3127	3357	3255	3.60	cps
Zirconium	91-1	1277	847	760	961	28.81	cps

Lab Sample ID : Q1159-03DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9S Dilution Factor : 2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	797069	797291	790296	794885	0.50	cps
Antimony	121-1	183308	183810	183605	183574	0.14	cps
Arsenic	75-2	9677	9610	9510	9599	0.87	cps
Barium	135-1	1334111	1319852	1333404	1329122	0.60	cps
Barium	137-1	2405793	2347400	2413247	2388813	1.51	cps
Beryllium	9-1	31781	32166	32006	31984	0.60	cps
Bismuth	209-1	13211981	13356044	13213564	13260530	0.62	cps
Bismuth	209-2	4981856	5106176	5018677	5035570	1.27	cps
Bromine	81-1	6328	6175	6275	6259	1.24	cps
Cadmium	108-1	1657	1747	1613	1672	4.07	cps
Cadmium	106-1	9914	9710	9560	9728	1.82	cps
Cadmium	111-1	28014	27188	27453	27552	1.53	cps
Calcium	43-1	190726	190399	190862	190662	0.12	cps
Calcium	44-1	3061299	3059579	3020440	3047106	0.76	cps
Carbon	12-1	3552608	3489118	3554285	3532004	1.05	cps
Carbon	12-2	23208	22748	23101	23019	1.05	cps
Chlorine	35-1	98296909	105543818	106494978	103445235	4.33	cps
Chlorine	35-2	413648	409340	412045	411678	0.53	cps
Chromium	52-2	163735	164416	165323	164491	0.48	cps
Cobalt	59-2	434104	428666	432375	431715	0.64	cps
Copper	63-2	396899	398399	391909	395736	0.86	cps
Dysprosium	156-1	38639	38184	38943	38589	0.99	cps
Dysprosium	156-2	13013	13484	13103	13200	1.89	cps
Erbium	164-1	36884	37108	37115	37036	0.35	cps
Erbium	164-2	11258	11512	11548	11439	1.38	cps
Gadolinium	160-1	40632	40144	40585	40453	0.67	cps
Gadolinium	160-2	15916	15215	16063	15732	2.88	cps
Holmium	165-1	21287211	21277550	21040518	21201759	0.66	cps
Holmium	165-2	6716757	6807545	6765005	6763102	0.67	cps
Indium	115-1	16660537	16584356	16495135	16580009	0.50	cps
Indium	115-2	1416180	1461441	1431521	1436381	1.60	cps
Iron	54-2	4669113	4567689	4580795	4605866	1.20	cps
Iron	56-2	83977314	84314410	84127760	84139828	0.20	cps
Iron	57-2	2137003	2144325	2099925	2127084	1.12	cps
Krypton	83-1	317	417	323	352	15.87	cps
Lead	206-1	215290	217253	216902	216481	0.48	cps

Lab Sample ID : Q1159-03DLX2 Instrumnet Name : P8
Client Sample ID : YE8C9S Dilution Factor : 2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Date & Time Ac	quirea: 202	25-02-11 14:03:40	Datar	ile Name :	022AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	176817	177127	176811	176918	0.10	cps
Lead	208-1	829800	835145	830012	831652	0.36	cps
Lithium	6-1	8126044	7823808	7982229	7977360	1.90	cps
Magnesium	24-2	1415658	1394885	1379623	1396722	1.30	cps
Manganese	55-2	414044	411582	413682	413103	0.32	cps
Molybdenum	94-1	266772	266921	269245	267646	0.52	cps
Molybdenum	95-1	462600	464936	465465	464334	0.33	cps
Molybdenum	96-1	492747	500256	498231	497078	0.78	cps
Molybdenum	97-1	287678	288080	289234	288331	0.28	cps
Molybdenum	98-1	746046	755861	747095	749667	0.72	cps
Neodymium	150-1	41424	41655	42153	41744	0.89	cps
Neodymium	150-2	8693	9063	8986	8914	2.19	cps
Nickel	60-2	165041	164741	164987	164923	0.10	cps
Phosphorus	31-2	1077	1143	1167	1129	4.14	cps
Potassium	39-2	53054	53038	51622	52572	1.56	cps
Rhodium	103-1	15706758	15715586	15271326	15564557	1.63	cps
Rhodium	103-2	5548197	5693487	5588961	5610215	1.34	cps
Scandium	45-1	11277452	11423889	11295612	11332318	0.70	cps
Scandium	45-2	198222	202026	198590	199613	1.05	cps
Selenium	82-1	627	567	600	598	5.03	cps
Selenium	77-2	63	67	73	68	7.51	cps
Selenium	78-2	63	53	70	62	13.48	cps
Silicon	28-1	65918487	61456946	61035739	62803724	4.31	cps
Silver	107-1	108510	109158	109419	109029	0.43	cps
Silver	109-1	103518	103119	105336	103991	1.14	cps
Sodium	23-2	84898	85029	85676	85201	0.49	cps
Strontium	86-1	5875990	5854101	5748111	5826067	1.17	cps
Strontium	88-1	50649066	50575569	50381243	50535293	0.27	cps
Sulfur	34-1	643974	647530	639202	643569	0.65	cps
Terbium	159-1	21510672	21514100	21172030	21398934	0.92	cps
Terbium	159-2	6339971	6636163	6450137	6475424	2.31	cps
Thallium	203-1	86338	88643	88247	87743	1.41	cps
Thallium	205-1	210506	213957	211916	212126	0.82	cps
Tin	118-1	3661	3377	3434	3490	4.30	cps
Titanium	47-1	21618	38599	48649	36289	37.65	cps
Uranium	238-1	13547	14045	13671	13754	1.88	cps

LB Number : LB134674 Operator :

Lab Sample ID :Q1159-03DLX2Instrumnet Name :P8Client Sample ID :YE8C9SDilution Factor :2

Date & Time Acquired: 2025-02-11 14:03:40 DataFile Name: 022AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	219071	218766	220072	219303	0.31	cps
Ytterbium	172-1	10741	11075	10751	10856	1.75	cps
Ytterbium	172-2	4074	4021	3934	4010	1.76	cps
Ytterbium	176-1	8640	8469	8496	8535	1.07	cps
Ytterbium	176-2	3034	2977	2830	2947	3.56	cps
Yttrium	89-1	29245657	29121253	28759335	29042082	0.87	cps
Yttrium	89-2	1797706	1886557	1838348	1840870	2.42	cps
Zinc	66-2	65862	65202	65574	65546	0.50	cps
Zirconium	90-1	13424	13010	13737	13390	2.73	cps
Zirconium	91-1	3120	3067	4670	3619	25.15	cps

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Lab Sample ID: PB166570BL Instrumnet Name: P8
Client Sample ID: PBW570 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Date & Time Ac	quireu . 202	3-02-11 14.13.26	Dalar	ile ivallie .	UZ3CCBE.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	90	117	83	97	18.25	cps
Antimony	121-1	180	133	137	150	17.35	cps
Arsenic	75-2	10	17	7	11	45.82	cps
Barium	135-1	217	227	177	207	12.80	cps
Barium	137-1	257	250	283	263	6.70	cps
Beryllium	9-1	390	401	380	390	2.72	cps
Bismuth	209-1	13670634	13653845	13398026	13574169	1.13	cps
Bismuth	209-2	5187091	5095157	5064013	5115420	1.25	cps
Bromine	81-1	4551	4274	4357	4394	3.23	cps
Cadmium	108-1	33	33	33	33	0.00	cps
Cadmium	106-1	8122	7632	8259	8005	4.12	cps
Cadmium	111-1	5679	5366	5785	5610	3.88	cps
Calcium	43-1	367	463	427	419	11.65	cps
Calcium	44-1	25630	26645	25937	26070	2.00	cps
Carbon	12-1	3605543	3592543	3579270	3592452	0.37	cps
Carbon	12-2	23839	23886	24090	23938	0.56	cps
Chlorine	35-1	1338505	1291060	1256272	1295279	3.19	cps
Chlorine	35-2	4357	4277	4241	4292	1.39	cps
Chromium	52-2	730	787	717	744	4.99	cps
Cobalt	59-2	170	140	170	160	10.83	cps
Copper	63-2	2744	2640	2657	2680	2.07	cps
Dysprosium	156-1	50	40	40	43	13.32	cps
Dysprosium	156-2	0	7	10	6	91.64	cps
Erbium	164-1	90	107	127	108	17.03	cps
Erbium	164-2	20	37	33	30	29.40	cps
Gadolinium	160-1	100	113	110	108	6.44	cps
Gadolinium	160-2	23	20	23	22	8.65	cps
Holmium	165-1	20787672	20804899	21211138	20934570	1.14	cps
Holmium	165-2	6718900	6698914	6811720	6743178	0.89	cps
Indium	115-1	16835605	16913182	16632480	16793756	0.86	cps
Indium	115-2	1447892	1446196	1447121	1447070	0.06	cps
Iron	54-2	513	523	503	513	1.95	cps
Iron	56-2	8062	8066	7946	8025	0.85	cps
Iron	57-2	163	257	247	222	23.06	cps
Krypton	83-1	297	307	240	281	12.79	cps
Lead	206-1	2837	2717	2700	2751	2.71	cps

Lab Sample ID: PB166570BL Instrumnet Name: P8
Client Sample ID: PBW570 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2294	2274	2110	2226	4.52	cps
Lead	208-1	10685	10912	10402	10666	2.40	cps
Lithium	6-1	7863288	8008021	7889288	7920199	0.97	cps
Magnesium	24-2	2780	2687	2794	2754	2.11	cps
Manganese	55-2	160	170	173	168	4.14	cps
Molybdenum	94-1	433	457	460	450	3.23	cps
Molybdenum	95-1	187	207	167	187	10.71	cps
Molybdenum	96-1	230	313	190	244	25.74	cps
Molybdenum	97-1	130	93	103	109	17.41	cps
Molybdenum	98-1	263	223	260	249	8.92	cps
Neodymium	150-1	17	20	17	18	10.81	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	873	867	863	868	0.59	cps
Phosphorus	31-2	103	67	53	74	34.78	cps
Potassium	39-2	10407	10250	10531	10396	1.35	cps
Rhodium	103-1	15457629	15488946	15541379	15495985	0.27	cps
Rhodium	103-2	5692630	5711550	5675582	5693254	0.32	cps
Scandium	45-1	10925194	11284694	11300287	11170058	1.90	cps
Scandium	45-2	194836	196880	198941	196885	1.04	cps
Selenium	82-1	7	-37	63	11	451.11	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	17	0	17	11	86.60	cps
Silicon	28-1	529888	532878	532114	531627	0.29	cps
Silver	107-1	223	227	293	248	15.94	cps
Silver	109-1	133	170	120	141	18.35	cps
Sodium	23-2	61556	60301	60963	60940	1.03	cps
Strontium	86-1	613	557	613	594	5.50	cps
Strontium	88-1	1180	1227	1390	1266	8.71	cps
Sulfur	34-1	689294	691328	702327	694316	1.01	cps
Terbium	159-1	21541026	21814210	21328514	21561250	1.13	cps
Terbium	159-2	6474682	6448495	6461725	6461634	0.20	cps
Thallium	203-1	780	743	707	743	4.93	cps
Thallium	205-1	1820	1787	1757	1788	1.77	cps
Tin	118-1	3130	3120	3107	3119	0.38	cps
Titanium	47-1	523	583	487	531	9.19	cps
Uranium	238-1	53	23	20	32	56.98	cps

LB Number : LB134674 Operator :

Lab Sample ID :PB166570BLInstrumnet Name :P8Client Sample ID :PBW570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:15:28 DataFile Name: 023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	7	17	10	11	45.82	cps
Ytterbium	172-1	127	117	123	122	4.17	cps
Ytterbium	172-2	40	47	40	42	9.12	cps
Ytterbium	176-1	1900	1920	2160	1994	7.26	cps
Ytterbium	176-2	373	260	303	312	18.32	cps
Yttrium	89-1	28024745	28083446	28461445	28189879	0.84	cps
Yttrium	89-2	1869135	1819412	1844663	1844404	1.35	cps
Zinc	66-2	277	207	200	228	18.65	cps
Zirconium	90-1	900	993	1083	992	9.24	cps
Zirconium	91-1	267	200	200	222	17.32	cps

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<sub>3</sub> 1031

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2977	2987	2840	2935	2.79	cps
Antimony	121-1	75366	75648	74682	75232	0.66	cps
Arsenic	75-2	747	730	723	733	1.64	cps
Barium	135-1	87701	88611	88033	88115	0.52	cps
Barium	137-1	150924	152317	152849	152030	0.65	cps
Beryllium	9-1	13068	12988	12857	12971	0.82	cps
Bismuth	209-1	13613427	13381374	13318186	13437662	1.16	cps
Bismuth	209-2	5172859	5024255	5066970	5088028	1.50	cps
Bromine	81-1	4427	4431	4507	4455	1.02	cps
Cadmium	108-1	933	797	850	860	8.01	cps
Cadmium	106-1	9193	9080	9583	9285	2.85	cps
Cadmium	111-1	14995	15028	15487	15170	1.81	cps
Calcium	43-1	59516	60366	59526	59802	0.82	cps
Calcium	44-1	971725	978430	977811	975989	0.38	cps
Carbon	12-1	3703673	3698098	3626819	3676197	1.17	cps
Carbon	12-2	24404	24554	24253	24404	0.62	cps
Chlorine	35-1	2471597	2683294	2719997	2624963	5.11	cps
Chlorine	35-2	10731	10360	10807	10633	2.25	cps
Chromium	52-2	15101	15475	15095	15224	1.43	cps
Cobalt	59-2	14524	14821	14411	14585	1.45	cps
Copper	63-2	27427	27417	27083	27309	0.72	cps
Dysprosium	156-1	53	60	20	44	48.22	cps
Dysprosium	156-2	13	10	3	9	57.30	cps
Erbium	164-1	127	100	127	118	13.07	cps
Erbium	164-2	27	27	33	29	13.31	cps
Gadolinium	160-1	83	97	123	101	20.15	cps
Gadolinium	160-2	17	0	13	10	88.20	cps
Holmium	165-1	21165149	21009167	20945289	21039869	0.54	cps
Holmium	165-2	6931859	6694296	6726824	6784326	1.90	cps
Indium	115-1	17125488	16701437	16724763	16850563	1.41	cps
Indium	115-2	1468491	1452864	1437365	1452907	1.07	cps
Iron	54-2	61029	61883	61582	61498	0.70	cps
Iron	56-2	1123086	1129415	1122975	1125159	0.33	cps
Iron	57-2	28629	27988	28135	28250	1.19	cps
Krypton	83-1	287	307	260	284	8.23	cps
Lead	206-1	31699	32798	32370	32289	1.72	cps

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27937	27736	28835	28170	2.08	cps
Lead	208-1	127395	129665	129344	128801	0.95	cps
Lithium	6-1	7987905	7860001	7945430	7931112	0.82	cps
Magnesium	24-2	249722	250900	251155	250592	0.31	cps
Manganese	55-2	3110	3117	3124	3117	0.21	cps
Molybdenum	94-1	133130	133298	133321	133250	0.08	cps
Molybdenum	95-1	194910	196405	194471	195262	0.52	cps
Molybdenum	96-1	211036	212659	210606	211434	0.51	cps
Molybdenum	97-1	120998	122092	120817	121302	0.57	cps
Molybdenum	98-1	310432	313712	312357	312167	0.53	cps
Neodymium	150-1	17	37	17	23	49.48	cps
Neodymium	150-2	0	7	0	2	173.21	cps
Nickel	60-2	4828	4724	4951	4834	2.35	cps
Phosphorus	31-2	250	280	220	250	12.00	cps
Potassium	39-2	145232	145737	146396	145788	0.40	cps
Rhodium	103-1	15702396	15603961	15735173	15680510	0.44	cps
Rhodium	103-2	5721737	5712566	5611819	5682041	1.07	cps
Scandium	45-1	11308777	11119028	11199264	11209023	0.85	cps
Scandium	45-2	203148	200705	197666	200506	1.37	cps
Selenium	82-1	2724	2840	2790	2785	2.10	cps
Selenium	77-2	43	27	30	33	26.45	cps
Selenium	78-2	167	173	150	163	7.36	cps
Silicon	28-1	858676	863063	862674	861471	0.28	cps
Silver	107-1	45505	46455	46605	46188	1.29	cps
Silver	109-1	43636	43980	43967	43861	0.44	cps
Sodium	23-2	563172	563198	570580	565650	0.75	cps
Strontium	86-1	21453	22044	21847	21781	1.38	cps
Strontium	88-1	186315	187855	187589	187253	0.44	cps
Sulfur	34-1	715949	717189	721598	718245	0.41	cps
Terbium	159-1	21719594	21247044	21540591	21502409	1.11	cps
Terbium	159-2	6613024	6455192	6464170	6510795	1.36	cps
Thallium	203-1	36508	36622	37096	36742	0.85	cps
Thallium	205-1	91164	88540	90301	90002	1.49	cps
Tin	118-1	149724	151703	152553	151327	0.96	cps
Titanium	47-1	7319	7175	7255	7250	0.99	cps
Uranium	238-1	110374	112207	111189	111257	0.83	cps

LB Number : LB134674 Operator :

Lab Sample ID :PB166570BSInstrumnet Name :P8Client Sample ID :LCS570Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:18:49 DataFile Name: 024LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units	
Vanadium	51-2	29133	28909	28852	28965	0.51	cps	
Ytterbium	172-1	137	133	127	132	3.85	cps	
Ytterbium	172-2	57	33	60	50	29.06	cps	
Ytterbium	176-1	2197	2374	2244	2271	4.03	cps	
Ytterbium	176-2	380	340	380	367	6.30	cps	
Yttrium	89-1	29247055	28613975	28421315	28760782	1.50	cps	
Yttrium	89-2	1868754	1810392	1796589	1825245	2.10	cps	
Zinc	66-2	6271	6118	5888	6092	3.17	cps	
Zirconium	90-1	63483	65061	63058	63867	1.65	cps	
Zirconium	91-1	14010	14261	13990	14087	1.07	cps	

Jaswal

Lab Sample ID: Q1135-09 Instrumnet Name: P8
Client Sample ID: YE8H7 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Date & Time Ac	quirea: 202	25-02-11 14:22:18	Datar	ile Name :	025AREF.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	187	177	153	172	9.93	cps
Antimony	121-1	160	167	147	158	6.45	cps
Arsenic	75-2	7	10	17	11	45.82	cps
Barium	135-1	310	397	397	368	13.61	cps
Barium	137-1	503	447	540	497	9.47	cps
Beryllium	9-1	374	365	394	377	3.90	cps
Bismuth	209-1	14183191	13980729	13698153	13954024	1.75	cps
Bismuth	209-2	5278453	5217033	5201244	5232243	0.78	cps
Bromine	81-1	4121	4154	4254	4176	1.66	cps
Cadmium	108-1	37	17	30	28	36.66	cps
Cadmium	106-1	8226	8326	8496	8349	1.64	cps
Cadmium	111-1	5776	5863	5973	5871	1.68	cps
Calcium	43-1	787	797	720	768	5.43	cps
Calcium	44-1	31381	31241	31401	31341	0.28	cps
Carbon	12-1	4231120	4687188	4994199	4637502	8.28	cps
Carbon	12-2	34654	35610	36037	35434	2.00	cps
Chlorine	35-1	870118	834926	807230	837425	3.76	cps
Chlorine	35-2	2744	2904	2734	2794	3.42	cps
Chromium	52-2	1520	1607	1537	1555	2.96	cps
Cobalt	59-2	63	103	110	92	27.37	cps
Copper	63-2	2800	2874	2774	2816	1.84	cps
Dysprosium	156-1	40	23	53	39	38.65	cps
Dysprosium	156-2	7	3	0	3	100.05	cps
Erbium	164-1	103	117	130	117	11.43	cps
Erbium	164-2	37	27	17	27	37.50	cps
Gadolinium	160-1	150	90	110	117	26.19	cps
Gadolinium	160-2	23	17	20	20	16.65	cps
Holmium	165-1	21936966	21759127	21289691	21661928	1.54	cps
Holmium	165-2	6811110	6915124	6808524	6844919	0.89	cps
Indium	115-1	17424113	17382266	17230353	17345577	0.59	cps
Indium	115-2	1496153	1485910	1463527	1481863	1.13	cps
Iron	54-2	623	640	780	681	12.63	cps
Iron	56-2	10334	10020	10240	10198	1.58	cps
Iron	57-2	260	223	197	227	14.03	cps
Krypton	83-1	267	337	273	292	13.22	cps
Lead	206-1	4571	3924	3534	4010	13.06	cps

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Date & Time Act	quireu . 202	25-02-11 14.22.16	Dalar	ile ivallie .	UZSAKEF.U		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3857	3234	3000	3364	13.17	cps
Lead	208-1	17855	14963	13936	15585	13.04	cps
Lithium	6-1	8273041	7982010	8195113	8150055	1.85	cps
Magnesium	24-2	2980	3074	3330	3128	5.80	cps
Manganese	55-2	687	643	807	712	11.88	cps
Molybdenum	94-1	307	443	403	384	18.28	cps
Molybdenum	95-1	137	150	143	143	4.65	cps
Molybdenum	96-1	227	220	220	222	1.73	cps
Molybdenum	97-1	120	100	117	112	9.55	cps
Molybdenum	98-1	230	220	157	202	19.66	cps
Neodymium	150-1	17	3	43	21	96.48	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	843	857	897	866	3.21	cps
Phosphorus	31-2	113	107	113	111	3.46	cps
Potassium	39-2	10260	10931	10521	10571	3.20	cps
Rhodium	103-1	16255988	16127922	15905401	16096437	1.10	cps
Rhodium	103-2	5740710	5808568	5741725	5763668	0.67	cps
Scandium	45-1	11452886	11489165	11429967	11457339	0.26	cps
Scandium	45-2	201861	206424	201915	203400	1.29	cps
Selenium	82-1	-10	-90	57	-14	-508.44	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	3	7	0	3	100.05	cps
Silicon	28-1	687300	696304	704874	696159	1.26	cps
Silver	107-1	417	500	447	454	9.29	cps
Silver	109-1	317	257	233	269	15.99	cps
Sodium	23-2	69786	69967	69846	69866	0.13	cps
Strontium	86-1	760	927	1023	903	14.75	cps
Strontium	88-1	4474	4297	4151	4307	3.76	cps
Sulfur	34-1	723574	723250	725958	724261	0.20	cps
Terbium	159-1	22512836	22125871	22043115	22227274	1.13	cps
Terbium	159-2	6712862	6576837	6556106	6615268	1.29	cps
Thallium	203-1	927	837	663	809	16.55	cps
Thallium	205-1	2197	1800	1590	1862	16.55	cps
Tin	118-1	3190	3277	3320	3263	2.03	cps
Titanium	47-1	340	330	290	320	8.27	cps
Uranium	238-1	27	47	63	46	40.29	cps

Lab Sample ID :Q1135-09Instrumnet Name :P8Client Sample ID :YE8H7Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:22:18 DataFile Name: 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	20	10	14	35.26	cps
Ytterbium	172-1	130	123	123	126	3.06	cps
Ytterbium	172-2	50	37	47	44	15.61	cps
Ytterbium	176-1	2087	2134	1930	2050	5.20	cps
Ytterbium	176-2	277	320	327	308	8.82	cps
Yttrium	89-1	30242858	29585202	29054671	29627577	2.01	cps
Yttrium	89-2	1854619	1841045	1811419	1835695	1.20	cps
Zinc	66-2	247	243	253	248	2.06	cps
Zirconium	90-1	1110	1043	907	1020	10.16	cps
Zirconium	91-1	223	183	177	194	12.98	cps

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

Date & Time Ac	quirea: 202	25-02-11 14:25:40	Datar	ile Name :	026CCBE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	83	93	113	97	15.81	cps
Antimony	121-1	130	97	117	114	14.66	cps
Arsenic	75-2	13	3	0	6	124.93	cps
Barium	135-1	157	250	203	203	22.95	cps
Barium	137-1	323	260	287	290	10.96	cps
Beryllium	9-1	354	344	357	352	2.02	cps
Bismuth	209-1	13607290	13346546	13285507	13413114	1.27	cps
Bismuth	209-2	5077988	5004051	5070557	5050866	0.81	cps
Bromine	81-1	4304	4204	4257	4255	1.18	cps
Cadmium	108-1	40	30	20	30	33.33	cps
Cadmium	106-1	8339	7592	7772	7901	4.93	cps
Cadmium	111-1	5829	5330	5450	5537	4.71	cps
Calcium	43-1	477	390	393	420	11.69	cps
Calcium	44-1	25422	25272	25356	25350	0.30	cps
Carbon	12-1	4081839	3981313	3922052	3995068	2.02	cps
Carbon	12-2	25515	25452	24951	25306	1.22	cps
Chlorine	35-1	671964	655612	643981	657186	2.14	cps
Chlorine	35-2	2224	2160	2177	2187	1.50	cps
Chromium	52-2	787	710	693	730	6.82	cps
Cobalt	59-2	160	120	137	139	14.47	cps
Copper	63-2	2624	2657	2804	2695	3.55	cps
Dysprosium	156-1	57	50	60	56	9.17	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	80	127	77	94	29.60	cps
Erbium	164-2	40	37	43	40	8.32	cps
Gadolinium	160-1	127	110	113	117	7.56	cps
Gadolinium	160-2	20	17	30	22	31.22	cps
Holmium	165-1	20849235	20700029	20724787	20758017	0.39	cps
Holmium	165-2	6630606	6721061	6661490	6671052	0.69	cps
Indium	115-1	16716741	16976759	16474929	16722810	1.50	cps
Indium	115-2	1424596	1423002	1428478	1425359	0.20	cps
Iron	54-2	470	463	487	473	2.54	cps
Iron	56-2	6998	6675	7169	6947	3.61	cps
Iron	57-2	117	173	190	160	24.03	cps
Krypton	83-1	297	307	327	310	4.93	cps
Lead	206-1	2177	2224	2014	2138	5.16	cps

Lab Sample ID :PB166317BLInstrumnet Name :P8Client Sample ID :PBW317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

	ulleu . 202	3-02-11 14.23.40	Dalai	ile ivallie .	020CCBE.u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1767	1773	1777	1772	0.29	cps
Lead	208-1	8098	8171	8034	8101	0.84	cps
Lithium	6-1	8023640	7851060	7912857	7929185	1.10	cps
Magnesium	24-2	2884	3190	3000	3025	5.12	cps
Manganese	55-2	143	113	110	122	15.02	cps
Molybdenum	94-1	477	430	410	439	7.80	cps
Molybdenum	95-1	177	153	193	174	11.52	cps
Molybdenum	96-1	270	213	247	243	11.70	cps
Molybdenum	97-1	117	110	140	122	12.89	cps
Molybdenum	98-1	257	297	257	270	8.55	cps
Neodymium	150-1	23	10	10	14	53.28	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	790	813	733	779	5.28	cps
Phosphorus	31-2	90	80	73	81	10.34	cps
Potassium	39-2	9660	10471	10127	10086	4.03	cps
Rhodium	103-1	15528866	15403719	15276956	15403181	0.82	cps
Rhodium	103-2	5654509	5636026	5547759	5612765	1.02	cps
Scandium	45-1	10958050	11031114	10947004	10978723	0.42	cps
Scandium	45-2	195596	193825	195548	194990	0.52	cps
Selenium	82-1	-70	-10	-67	-49	-68.97	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	13	13	7	11	34.61	cps
Silicon	28-1	548179	548170	548837	548395	0.07	cps
Silver	107-1	283	310	247	280	11.36	cps
Silver	109-1	130	157	153	147	9.91	cps
Sodium	23-2	58778	59179	59012	58990	0.34	cps
Strontium	86-1	620	590	650	620	4.84	cps
Strontium	88-1	1403	1267	1283	1318	5.66	cps
Sulfur	34-1	734063	734969	734366	734466	0.06	cps
Terbium	159-1	21220697	21266101	21382802	21289867	0.39	cps
Terbium	159-2	6390756	6477218	6413859	6427278	0.70	cps
Thallium	203-1	603	477	550	543	11.70	cps
Thallium	205-1	1253	1080	1127	1153	7.78	cps
Tin	118-1	3154	3097	3060	3104	1.52	cps
Titanium	47-1	577	517	520	538	6.27	cps
Uranium	238-1	43	57	63	54	18.71	cps

LB Number: LB134674

Lab Sample ID : PB166317BL Instrumnet Name : Client Sample ID : PBW317 Dilution Factor :

Date & Time Acquired: 2025-02-11 14:25:40 DataFile Name: 026CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	23	13	18	28.64	cps
Ytterbium	172-1	110	110	107	109	1.77	cps
Ytterbium	172-2	33	37	47	39	17.85	cps
Ytterbium	176-1	1920	2007	2057	1995	3.47	cps
Ytterbium	176-2	263	337	290	297	12.51	cps
Yttrium	89-1	28525805	27944335	28395065	28288402	1.08	cps
Yttrium	89-2	1802541	1830850	1777917	1803769	1.47	cps
Zinc	66-2	267	247	197	237	15.23	cps
Zirconium	90-1	1020	1023	997	1013	1.43	cps
Zirconium	91-1	190	153	157	167	12.16	cps

Operator:

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P8

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Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

Date & Time Ac	quirea: 202	25-02-11 14:29:05	Datar	ile Name :	02/LCSE.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2990	2997	3124	3037	2.47	cps
Antimony	121-1	73164	73570	74753	73829	1.12	cps
Arsenic	75-2	703	707	623	678	6.96	cps
Barium	135-1	85568	86799	87302	86556	1.03	cps
Barium	137-1	152251	152195	151750	152065	0.18	cps
Beryllium	9-1	12958	12820	12892	12890	0.53	cps
Bismuth	209-1	13328545	13389641	13465396	13394528	0.51	cps
Bismuth	209-2	5030484	4988085	5151591	5056720	1.68	cps
Bromine	81-1	4231	4291	4121	4214	2.05	cps
Cadmium	108-1	830	883	877	863	3.37	cps
Cadmium	106-1	8930	8623	8706	8753	1.81	cps
Cadmium	111-1	14836	14788	14687	14770	0.51	cps
Calcium	43-1	59395	58585	59218	59066	0.72	cps
Calcium	44-1	960994	973542	956067	963534	0.94	cps
Carbon	12-1	4138020	4170033	4118816	4142290	0.62	cps
Carbon	12-2	27532	27332	27469	27445	0.37	cps
Chlorine	35-1	2134645	2312818	2396382	2281281	5.86	cps
Chlorine	35-2	9713	9613	9393	9573	1.71	cps
Chromium	52-2	14848	14875	14885	14869	0.13	cps
Cobalt	59-2	14838	14641	14724	14734	0.67	cps
Copper	63-2	26926	26698	26859	26828	0.44	cps
Dysprosium	156-1	77	53	43	58	29.61	cps
Dysprosium	156-2	7	7	7	7	0.00	cps
Erbium	164-1	130	80	87	99	27.45	cps
Erbium	164-2	33	30	47	37	24.06	cps
Gadolinium	160-1	123	157	97	126	23.94	cps
Gadolinium	160-2	23	7	27	19	56.72	cps
Holmium	165-1	21165296	20695327	20723832	20861485	1.26	cps
Holmium	165-2	6700262	6684173	6711955	6698797	0.21	cps
Indium	115-1	16722258	16569250	16367012	16552840	1.08	cps
Indium	115-2	1433909	1425313	1460030	1439751	1.26	cps
Iron	54-2	61010	61241	62285	61512	1.10	cps
Iron	56-2	1113026	1104063	1120262	1112450	0.73	cps
Iron	57-2	27363	27804	27500	27556	0.82	cps
Krypton	83-1	283	280	320	294	7.54	cps
Lead	206-1	31335	31388	31595	31439	0.44	cps

Lab Sample ID :PB166317BSInstrumnet Name :P8Client Sample ID :LCS317Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

Date & Time Acc	1011CG . 202	20 02 11 14.20.00	Datai	iic i vairie .	027 LOOL.d		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27800	27292	27215	27436	1.16	cps
Lead	208-1	125494	125344	124861	125233	0.26	cps
Lithium	6-1	8014041	7922727	7968687	7968485	0.57	cps
Magnesium	24-2	249348	247223	248463	248345	0.43	cps
Manganese	55-2	3010	3147	3080	3079	2.22	cps
Molybdenum	94-1	73405	73067	72927	73133	0.34	cps
Molybdenum	95-1	88784	87755	90177	88905	1.37	cps
Molybdenum	96-1	100315	100171	100097	100194	0.11	cps
Molybdenum	97-1	55085	55855	55099	55346	0.80	cps
Molybdenum	98-1	142735	143718	146215	144222	1.24	cps
Neodymium	150-1	40	20	23	28	38.58	cps
Neodymium	150-2	0	10	3	4	114.60	cps
Nickel	60-2	4831	4671	4814	4772	1.84	cps
Phosphorus	31-2	213	230	193	212	8.65	cps
Potassium	39-2	146340	143916	144569	144942	0.87	cps
Rhodium	103-1	15840646	15491205	15403042	15578298	1.49	cps
Rhodium	103-2	5717431	5611434	5580524	5636463	1.27	cps
Scandium	45-1	11139448	11013459	10915987	11022965	1.02	cps
Scandium	45-2	199251	197548	200035	198945	0.64	cps
Selenium	82-1	2730	2570	2920	2740	6.40	cps
Selenium	77-2	40	27	43	37	24.04	cps
Selenium	78-2	153	163	187	168	10.19	cps
Silicon	28-1	861258	867916	861934	863703	0.42	cps
Silver	107-1	44364	46441	46154	45653	2.46	cps
Silver	109-1	42997	44060	43498	43519	1.22	cps
Sodium	23-2	562873	560366	562423	561887	0.24	cps
Strontium	86-1	11715	12582	12032	12110	3.62	cps
Strontium	88-1	101418	100471	103104	101664	1.31	cps
Sulfur	34-1	728769	730980	730542	730097	0.16	cps
Terbium	159-1	21422802	21596873	21166609	21395428	1.01	cps
Terbium	159-2	6461743	6438002	6506708	6468817	0.54	cps
Thallium	203-1	36916	36357	36702	36658	0.77	cps
Thallium	205-1	87466	87338	87794	87533	0.27	cps
Tin	118-1	148309	150870	149667	149616	0.86	cps
Titanium	47-1	7349	6998	7219	7189	2.46	cps
Uranium	238-1	109229	110345	110417	109997	0.61	cps

LB Number : LB134674 Operator :

Lab Sample ID : PB166317BS Instrumnet Name : P8
Client Sample ID : LCS317 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 14:29:05 DataFile Name: 027LCSE.d

	Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
-	Vanadium	51-2	29247	28438	28385	28690	1.68	cps
	Ytterbium	172-1	137	97	150	128	21.72	cps
	Ytterbium	172-2	43	27	53	41	32.76	cps
	Ytterbium	176-1	2107	2107	2014	2076	2.60	cps
	Ytterbium	176-2	360	360	343	354	2.72	cps
	Yttrium	89-1	28717067	28257405	27930601	28301691	1.40	cps
	Yttrium	89-2	1800960	1795141	1798872	1798324	0.16	cps
	Zinc	66-2	5875	5908	5895	5892	0.29	cps
	Zirconium	90-1	62275	62945	62656	62625	0.54	cps
	Zirconium	91-1	13947	13837	13620	13801	1.21	cps

Jaswal

Lab Sample ID: Q1186-01 Instrumnet Name: P8

Client Sample ID: ME2948 Dilution Factor: 1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Date & Time / to	quircu . 202	0 02 11 14.02.20	Datari	ic ivallic .	020/ ((\L) .u		
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	633	660	617	637	3.43	cps
Antimony	121-1	903	930	933	922	1.78	cps
Arsenic	75-2	127	137	97	120	17.35	cps
Barium	135-1	75804	75274	74966	75348	0.56	cps
Barium	137-1	129997	133766	133326	132363	1.56	cps
Beryllium	9-1	320	350	314	328	5.91	cps
Bismuth	209-1	12360129	12159719	12388507	12302785	1.01	cps
Bismuth	209-2	4583568	4728328	4545485	4619127	2.09	cps
Bromine	81-1	97093	109353	119480	108642	10.32	cps
Cadmium	108-1	37	27	33	32	15.80	cps
Cadmium	106-1	7836	7982	8199	8006	2.28	cps
Cadmium	111-1	5519	5602	5753	5625	2.10	cps
Calcium	43-1	19410115	19496383	19674969	19527156	0.69	cps
Calcium	44-1	311745822	314473229	315117255	313778769	0.57	cps
Carbon	12-1	6199554	7069999	7530544	6933366	9.75	cps
Carbon	12-2	55039	56003	57006	56016	1.76	cps
Chlorine	35-1	2997063	3260922	3342415	3200133	5.64	cps
Chlorine	35-2	12916	13126	12799	12947	1.28	cps
Chromium	52-2	2337	2434	2013	2261	9.73	cps
Cobalt	59-2	310	327	340	326	4.62	cps
Copper	63-2	3204	3200	3110	3172	1.67	cps
Dysprosium	156-1	310	287	260	286	8.76	cps
Dysprosium	156-2	73	110	107	97	20.98	cps
Erbium	164-1	397	347	330	358	9.70	cps
Erbium	164-2	97	143	100	113	22.97	cps
Gadolinium	160-1	340	433	310	361	17.81	cps
Gadolinium	160-2	103	83	113	100	15.28	cps
Holmium	165-1	20402756	20299464	20834414	20512211	1.38	cps
Holmium	165-2	6471565	6596433	6540870	6536289	0.96	cps
Indium	115-1	15717160	16056269	15887126	15886852	1.07	cps
Indium	115-2	1341717	1366135	1338539	1348797	1.12	cps
Iron	54-2	112323	111709	112559	112197	0.39	cps
Iron	56-2	2138185	2137755	2093256	2123066	1.22	cps
Iron	57-2	51379	51098	51994	51490	0.89	cps
Krypton	83-1	280	260	233	258	9.08	cps
Lead	206-1	3084	3084	2950	3039	2.53	cps

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2604	2644	2530	2593	2.22	cps
Lead	208-1	12252	12129	11932	12105	1.33	cps
Lithium	6-1	7521436	7514477	7612071	7549328	0.72	cps
Magnesium	24-2	27104995	27107735	27218039	27143589	0.24	cps
Manganese	55-2	40190	39602	40577	40123	1.22	cps
Molybdenum	94-1	3080	2997	2934	3004	2.45	cps
Molybdenum	95-1	3107	3397	3317	3274	4.58	cps
Molybdenum	96-1	3594	3560	3620	3592	0.84	cps
Molybdenum	97-1	2097	1977	2170	2081	4.69	cps
Molybdenum	98-1	4958	5274	5261	5164	3.47	cps
Neodymium	150-1	297	350	340	329	8.62	cps
Neodymium	150-2	90	70	57	72	23.23	cps
Nickel	60-2	1207	1157	1350	1238	8.11	cps
Phosphorus	31-2	117	103	73	98	22.70	cps
Potassium	39-2	465288	462418	460109	462605	0.56	cps
Rhodium	103-1	13979210	14231310	14297942	14169488	1.19	cps
Rhodium	103-2	5113480	5203076	5125784	5147447	0.94	cps
Scandium	45-1	10645510	10490357	10699503	10611790	1.02	cps
Scandium	45-2	192303	193427	189742	191824	0.98	cps
Selenium	82-1	83	153	250	162	51.59	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	7	3	20	10	88.20	cps
Silicon	28-1	71972664	72404511	72013361	72130178	0.33	cps
Silver	107-1	643	597	647	629	4.45	cps
Silver	109-1	340	353	287	327	10.80	cps
Sodium	23-2	14386268	14553925	14495396	14478530	0.59	cps
Strontium	86-1	74586052	75384509	75645964	75205508	0.73	cps
Strontium	88-1	655917177	661681910	663061857	660220315	0.57	cps
Sulfur	34-1	29137359	29050366	29303048	29163591	0.44	cps
Terbium	159-1	21058938	20520894	21024976	20868270	1.44	cps
Terbium	159-2	6212668	6300243	6226391	6246434	0.75	cps
Thallium	203-1	533	530	480	514	5.81	cps
Thallium	205-1	1360	1177	1233	1257	7.47	cps
Tin	118-1	16113	15549	15639	15767	1.92	cps
Titanium	47-1	1750	1890	1977	1872	6.11	cps
Uranium	238-1	11555	11188	11228	11324	1.78	cps

Lab Sample ID :Q1186-01Instrumnet Name :P8Client Sample ID :ME2948Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:32:25 DataFile Name: 028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	260	317	310	296	10.48	cps
Ytterbium	172-1	210	200	273	228	17.46	cps
Ytterbium	172-2	117	67	97	93	26.96	cps
Ytterbium	176-1	1970	1960	1997	1976	0.96	cps
Ytterbium	176-2	267	327	283	292	10.60	cps
Yttrium	89-1	26897138	27614868	27359726	27290577	1.33	cps
Yttrium	89-2	1759827	1741395	1721147	1740789	1.11	cps
Zinc	66-2	1223	1187	1070	1160	6.90	cps
Zirconium	90-1	3370	3314	3157	3280	3.37	cps
Zirconium	91-1	740	713	710	721	2.28	cps

Lab Sample ID: Q1159-01DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9 Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	395065	398170	400313	397849	0.66	cps
Antimony	121-1	2347	2590	2310	2416	6.30	cps
Arsenic	75-2	4221	4114	4261	4198	1.81	cps
Barium	135-1	263062	263693	262978	263244	0.15	cps
Barium	137-1	454804	458529	455521	456285	0.43	cps
Beryllium	9-1	1957	1850	1796	1868	4.40	cps
Bismuth	209-1	13591849	13756356	13351588	13566598	1.50	cps
Bismuth	209-2	4808751	4506674	4991613	4769013	5.14	cps
Bromine	81-1	24461	21984	19864	22103	10.41	cps
Cadmium	108-1	67	83	57	69	19.55	cps
Cadmium	106-1	8446	8463	8273	8394	1.25	cps
Cadmium	111-1	6106	6049	6024	6060	0.69	cps
Calcium	43-1	85405	85140	84831	85125	0.34	cps
Calcium	44-1	1463817	1430183	1428002	1440667	1.39	cps
Carbon	12-1	4138647	3945005	3858322	3980658	3.61	cps
Carbon	12-2	24958	24310	24641	24636	1.31	cps
Chlorine	35-1	43411424	47142591	48764209	46439408	5.91	cps
Chlorine	35-2	188403	192053	191233	190563	1.00	cps
Chromium	52-2	49020	48990	49683	49231	0.79	cps
Cobalt	59-2	50533	50804	51135	50824	0.59	cps
Copper	63-2	135819	137888	136441	136716	0.78	cps
Dysprosium	156-1	19965	20496	20235	20232	1.31	cps
Dysprosium	156-2	6665	6895	6712	6757	1.80	cps
Erbium	164-1	19154	19000	19010	19055	0.45	cps
Erbium	164-2	5921	5905	5711	5846	2.00	cps
Gadolinium	160-1	20753	20886	21404	21014	1.64	cps
Gadolinium	160-2	8083	8056	7982	8040	0.64	cps
Holmium	165-1	21647737	21639675	20968669	21418694	1.82	cps
Holmium	165-2	6596876	6022539	6760849	6460088	6.00	cps
Indium	115-1	16910936	16796880	16312313	16673376	1.91	cps
Indium	115-2	1371047	1256496	1425605	1351049	6.39	cps
Iron	54-2	2347148	2367068	2359350	2357855	0.43	cps
Iron	56-2	42723857	43277743	42406692	42802764	1.03	cps
Iron	57-2	1052842	1063091	1064368	1060100	0.60	cps
Krypton	83-1	373	303	303	327	12.37	cps
Lead	206-1	102138	103271	102945	102785	0.57	cps

Lab Sample ID: Q1159-01DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9 Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	83577	83973	82806	83452	0.71	cps
Lead	208-1	391785	393009	392610	392468	0.16	cps
Lithium	6-1	8020270	7999226	7939024	7986173	0.53	cps
Magnesium	24-2	692569	705208	699792	699190	0.91	cps
Manganese	55-2	176496	176864	175741	176367	0.32	cps
Molybdenum	94-1	3681	5527	12868	7359	66.04	cps
Molybdenum	95-1	1967	2127	1970	2021	4.52	cps
Molybdenum	96-1	2907	2750	2854	2837	2.81	cps
Molybdenum	97-1	1307	1310	1390	1336	3.53	cps
Molybdenum	98-1	3394	3204	3180	3259	3.59	cps
Neodymium	150-1	21674	20876	21260	21270	1.88	cps
Neodymium	150-2	4444	4601	4411	4485	2.26	cps
Nickel	60-2	37285	37322	37423	37343	0.19	cps
Phosphorus	31-2	667	567	573	602	9.28	cps
Potassium	39-2	31866	32356	35998	33407	6.76	cps
Rhodium	103-1	15602222	15689223	15218615	15503353	1.62	cps
Rhodium	103-2	5408489	4920301	5581312	5303367	6.46	cps
Scandium	45-1	11243628	11158606	10809521	11070585	2.08	cps
Scandium	45-2	189677	173770	195272	186240	5.99	cps
Selenium	82-1	-40	-20	17	-14	-198.99	cps
Selenium	77-2	37	13	27	26	45.82	cps
Selenium	78-2	30	10	20	20	50.00	cps
Silicon	28-1	31199160	30942935	31770877	31304324	1.35	cps
Silver	107-1	2444	2220	2270	2311	5.07	cps
Silver	109-1	2057	2027	2090	2058	1.54	cps
Sodium	23-2	75286	76204	76127	75872	0.67	cps
Strontium	86-1	80627	79732	79314	79891	0.84	cps
Strontium	88-1	696377	696572	697194	696714	0.06	cps
Sulfur	34-1	776270	756753	749033	760686	1.85	cps
Terbium	159-1	21873285	21788643	21273626	21645185	1.50	cps
Terbium	159-2	6287415	5763645	6470174	6173744	5.94	cps
Thallium	203-1	1443	1283	1317	1348	6.26	cps
Thallium	205-1	3020	3254	2964	3079	4.99	cps
Tin	118-1	3480	3107	3057	3215	7.20	cps
Titanium	47-1	12329	16533	16015	14959	15.33	cps
Uranium	238-1	6892	7059	6855	6935	1.56	cps

LB Number : LB134674 Operator:

Lab Sample ID: Q1159-01DL2X4 Instrumnet Name: Client Sample ID: YE8C9 Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:35:40 DataFile Name: 029AREF.d

CPS2 CPS3 CPSMean **CPSRSD** Parameter Mass CPS1 Units Vanadium 51-2 44529 45415 45412 45119 1.13 cps Ytterbium 172-1 5855 5368 5715 5646 4.44 cps Ytterbium 172-2 1980 2000 1997 1992 0.54 cps Ytterbium 176-1 5418 5618 5274 5437 3.17 cps

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P8

Ytterbium 176-2 1563 1523 1567 1551 1.55 cps Yttrium 89-1 28890959 28890585 27947100 28576214 1.91 cps Yttrium 89-2 1760044 1580711 1812029 1717594 7.07 cps Zinc 66-2 19667 19978 18989 19545 2.59 cps 90-1 Zirconium 7909 7052 8273 7745 8.10 cps Zirconium 91-1 1477 1647 1714 1612 7.57 cps

Lab Sample ID : Q1159-02DL2X4 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 4

Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	394539	399122	400812	398158	0.82	cps
Antimony	121-1	2364	2347	2337	2349	0.57	cps
Arsenic	75-2	4127	4264	3967	4120	3.61	cps
Barium	135-1	261469	260329	260701	260833	0.22	cps
Barium	137-1	451253	452919	453575	452582	0.26	cps
Beryllium	9-1	1910	1785	1816	1837	3.54	cps
Bismuth	209-1	13976918	13761008	13669871	13802599	1.14	cps
Bismuth	209-2	5035629	4999301	4814980	4949970	2.39	cps
Bromine	81-1	10190	9917	9630	9912	2.83	cps
Cadmium	108-1	73	53	67	64	15.80	cps
Cadmium	106-1	8406	8469	8663	8513	1.57	cps
Cadmium	111-1	6093	6121	6307	6174	1.89	cps
Calcium	43-1	83976	84640	83675	84097	0.59	cps
Calcium	44-1	1424936	1466966	1411174	1434359	2.03	cps
Carbon	12-1	3623350	3648599	3554004	3608651	1.36	cps
Carbon	12-2	23439	23636	23672	23582	0.53	cps
Chlorine	35-1	45358834	48994671	49941608	48098371	5.03	cps
Chlorine	35-2	194606	194228	196559	195131	0.64	cps
Chromium	52-2	48602	48930	48452	48661	0.50	cps
Cobalt	59-2	51048	51429	51322	51266	0.38	cps
Copper	63-2	137602	137942	137946	137830	0.14	cps
Dysprosium	156-1	20025	19641	19918	19862	1.00	cps
Dysprosium	156-2	6622	6622	6625	6623	0.03	cps
Erbium	164-1	19090	18700	18757	18849	1.12	cps
Erbium	164-2	6035	5688	5668	5797	3.56	cps
Gadolinium	160-1	20526	20756	20669	20651	0.56	cps
Gadolinium	160-2	7492	7922	7772	7729	2.83	cps
Holmium	165-1	21964920	21607424	21604339	21725561	0.95	cps
Holmium	165-2	6807637	6715741	6489741	6671040	2.45	cps
Indium	115-1	17547066	17010786	16858082	17138645	2.11	cps
Indium	115-2	1436699	1428601	1380214	1415171	2.16	cps
Iron	54-2	2402154	2371806	2353217	2375726	1.04	cps
Iron	56-2	42985084	42512439	42661534	42719686	0.57	cps
Iron	57-2	1044522	1056428	1060472	1053807	0.79	cps
Krypton	83-1	253	350	290	298	16.39	cps
Lead	206-1	97873	96943	98743	97853	0.92	cps

Lab Sample ID: Q1159-02DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9D Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	79230	79327	79579	79379	0.23	cps
Lead	208-1	372206	371999	375374	373193	0.51	cps
Lithium	6-1	7998777	7854681	7918074	7923844	0.91	cps
Magnesium	24-2	692091	694592	699443	695375	0.54	cps
Manganese	55-2	175459	176210	175477	175715	0.24	cps
Molybdenum	94-1	3494	3577	3494	3522	1.37	cps
Molybdenum	95-1	1953	1963	1930	1949	0.88	cps
Molybdenum	96-1	4233	2650	2674	3186	28.47	cps
Molybdenum	97-1	1217	1170	1277	1221	4.38	cps
Molybdenum	98-1	2944	3284	2984	3070	6.05	cps
Neodymium	150-1	21137	21077	21210	21141	0.32	cps
Neodymium	150-2	4601	4381	4574	4519	2.66	cps
Nickel	60-2	37175	36684	37971	37277	1.74	cps
Phosphorus	31-2	527	633	627	596	10.03	cps
Potassium	39-2	31264	31494	32050	31603	1.28	cps
Rhodium	103-1	15952254	15704533	15706497	15787762	0.90	cps
Rhodium	103-2	5750914	5692490	5401751	5615052	3.33	cps
Scandium	45-1	11468688	11401294	11414894	11428292	0.31	cps
Scandium	45-2	200489	197519	188192	195400	3.28	cps
Selenium	82-1	153	0	140	98	86.87	cps
Selenium	77-2	37	20	17	24	43.83	cps
Selenium	78-2	33	23	43	33	30.00	cps
Silicon	28-1	33876204	31873827	31496015	32415348	3.95	cps
Silver	107-1	1863	1917	2150	1977	7.71	cps
Silver	109-1	1750	1743	1727	1740	0.69	cps
Sodium	23-2	73926	73611	74254	73930	0.44	cps
Strontium	86-1	76280	77791	77835	77302	1.15	cps
Strontium	88-1	673699	683407	675406	677504	0.76	cps
Sulfur	34-1	745852	744975	739757	743528	0.44	cps
Terbium	159-1	22477586	21752451	21711200	21980412	1.96	cps
Terbium	159-2	6504189	6473149	6241538	6406292	2.24	cps
Thallium	203-1	1113	1147	1240	1167	5.63	cps
Thallium	205-1	2660	2687	2884	2744	4.45	cps
Tin	118-1	3170	2974	2937	3027	4.15	cps
Titanium	47-1	10564	15330	11098	12331	21.17	cps
Uranium	238-1	6455	6945	18343	10581	63.57	cps

LB Number : LB134674 Operator :

Lab Sample ID : Q1159-02DL2X4 Instrumnet Name : P8
Client Sample ID : YE8C9D Dilution Factor : 4

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Date & Time Acquired: 2025-02-11 14:38:57 DataFile Name: 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	45238	45332	45820	45463	0.69	cps
Ytterbium	172-1	5445	5495	5528	5489	0.76	cps
Ytterbium	172-2	2077	2180	1950	2069	5.57	cps
Ytterbium	176-1	5338	5431	5274	5348	1.47	cps
Ytterbium	176-2	1537	1490	1477	1501	2.10	cps
Yttrium	89-1	29887880	29202368	29353155	29481134	1.22	cps
Yttrium	89-2	1823742	1816380	1739654	1793258	2.60	cps
Zinc	66-2	19751	19540	19564	19618	0.59	cps
Zirconium	90-1	17892	6815	7260	10656	58.85	cps
Zirconium	91-1	1707	1507	1393	1536	10.33	cps

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Lab Sample ID : Q1159-01LDL2X20 Instrumnet Name : P8
Client Sample ID : YE8C9L Dilution Factor : 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	79372	79797	79312	79494	0.33	cps
Antimony	121-1	560	530	570	553	3.76	cps
Arsenic	75-2	870	900	910	893	2.33	cps
Barium	135-1	51307	52612	51932	51950	1.26	cps
Barium	137-1	91732	89977	89151	90287	1.46	cps
Beryllium	9-1	669	696	627	664	5.21	cps
Bismuth	209-1	13593550	13690941	13583113	13622535	0.44	cps
Bismuth	209-2	5115381	5093541	5117037	5108653	0.26	cps
Bromine	81-1	6665	7095	6472	6744	4.73	cps
Cadmium	108-1	30	33	37	33	10.01	cps
Cadmium	106-1	8309	8042	8219	8190	1.66	cps
Cadmium	111-1	5855	5673	5764	5764	1.58	cps
Calcium	43-1	17381	17327	17568	17425	0.72	cps
Calcium	44-1	299052	301504	300249	300268	0.41	cps
Carbon	12-1	3287613	3269004	3232258	3262959	0.86	cps
Carbon	12-2	20928	20721	21332	20994	1.48	cps
Chlorine	35-1	11481970	12038564	12089150	11869895	2.84	cps
Chlorine	35-2	46060	44920	45063	45348	1.37	cps
Chromium	52-2	10421	10544	10624	10530	0.97	cps
Cobalt	59-2	10167	10004	10327	10166	1.59	cps
Copper	63-2	29758	29397	30019	29725	1.05	cps
Dysprosium	156-1	3944	4084	3884	3971	2.59	cps
Dysprosium	156-2	1390	1250	1307	1316	5.35	cps
Erbium	164-1	3687	3834	3671	3731	2.41	cps
Erbium	164-2	1130	1053	1197	1127	6.37	cps
Gadolinium	160-1	4197	4291	4344	4277	1.74	cps
Gadolinium	160-2	1690	1693	1640	1675	1.78	cps
Holmium	165-1	21417206	21035082	21238486	21230258	0.90	cps
Holmium	165-2	6768829	6681310	6783680	6744606	0.82	cps
Indium	115-1	17108891	16553209	17235246	16965782	2.14	cps
Indium	115-2	1434679	1433619	1432150	1433483	0.09	cps
Iron	54-2	467067	461735	467522	465441	0.69	cps
Iron	56-2	8680549	8612885	8612136	8635190	0.45	cps
Iron	57-2	212648	213565	210980	212398	0.62	cps
Krypton	83-1	367	290	287	314	14.39	cps
Lead	206-1	20864	21414	21040	21106	1.33	cps

Lab Sample ID : Q1159-01LDL2X20 Instrumnet Name : P8
Client Sample ID : YE8C9L Dilution Factor : 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17285	17222	17238	17248	0.19	cps
Lead	208-1	81257	81660	81674	81531	0.29	cps
Lithium	6-1	7911939	7881317	7897384	7896880	0.19	cps
Magnesium	24-2	142192	141970	141337	141833	0.31	cps
Manganese	55-2	34993	35514	35491	35333	0.83	cps
Molybdenum	94-1	1230	987	907	1041	16.18	cps
Molybdenum	95-1	560	530	540	543	2.81	cps
Molybdenum	96-1	753	770	750	758	1.41	cps
Molybdenum	97-1	283	297	323	301	6.76	cps
Molybdenum	98-1	780	840	763	794	5.08	cps
Neodymium	150-1	4254	4431	4301	4329	2.12	cps
Neodymium	150-2	990	930	970	963	3.17	cps
Nickel	60-2	8346	8119	8189	8218	1.41	cps
Phosphorus	31-2	223	160	167	183	18.98	cps
Potassium	39-2	14504	14751	14694	14650	0.88	cps
Rhodium	103-1	15639084	15929314	15735520	15767973	0.94	cps
Rhodium	103-2	5670506	5713143	5587403	5657017	1.13	cps
Scandium	45-1	11233172	11072895	11252287	11186118	0.88	cps
Scandium	45-2	196443	200153	196953	197850	1.02	cps
Selenium	82-1	-63	17	-23	-23	-171.40	cps
Selenium	77-2	7	7	0	4	86.60	cps
Selenium	78-2	13	3	7	8	65.47	cps
Silicon	28-1	6725510	6715857	6789004	6743457	0.59	cps
Silver	107-1	617	577	503	566	10.16	cps
Silver	109-1	370	380	427	392	7.71	cps
Sodium	23-2	64371	64177	63635	64061	0.60	cps
Strontium	86-1	15892	15796	16186	15958	1.27	cps
Strontium	88-1	138943	138058	136022	137674	1.09	cps
Sulfur	34-1	746827	741995	739402	742741	0.51	cps
Terbium	159-1	21443601	21492268	21838417	21591429	1.00	cps
Terbium	159-2	6421779	6436396	6451816	6436663	0.23	cps
Thallium	203-1	640	533	557	577	9.72	cps
Thallium	205-1	1467	1347	1470	1428	4.92	cps
Tin	118-1	2387	2537	2520	2481	3.31	cps
Titanium	47-1	2467	4286	2717	3157	31.24	cps
Uranium	238-1	1437	1333	1443	1405	4.39	cps

LB Number : LB134674 Operator :

Lab Sample ID: Q1159-01LDL2X20 Instrumnet Name: P8

Client Sample ID: YE8C9L Dilution Factor: 20

Date & Time Acquired: 2025-02-11 14:42:16 DataFile Name: 031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9043	9043	8719	8935	2.09	cps
Ytterbium	172-1	1327	1270	1187	1261	5.58	cps
Ytterbium	172-2	483	453	430	456	5.87	cps
Ytterbium	176-1	2827	2594	2620	2680	4.77	cps
Ytterbium	176-2	550	647	547	581	9.77	cps
Yttrium	89-1	28941980	29236530	28515229	28897913	1.25	cps
Yttrium	89-2	1836518	1805555	1814570	1818881	0.88	cps
Zinc	66-2	4134	4307	4351	4264	2.69	cps
Zirconium	90-1	2017	2187	2397	2200	8.66	cps
Zirconium	91-1	500	400	527	476	14.04	cps

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Lab Sample ID: Q1159-03DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	399248	399250	396295	398264	0.43	cps
Antimony	121-1	92121	93198	93175	92831	0.66	cps
Arsenic	75-2	5088	4928	5171	5062	2.44	cps
Barium	135-1	659197	676656	676357	670737	1.49	cps
Barium	137-1	1174499	1174928	1157640	1169022	0.84	cps
Beryllium	9-1	16233	16352	16084	16223	0.83	cps
Bismuth	209-1	13477260	13373927	13372090	13407759	0.45	cps
Bismuth	209-2	5096951	5003598	5068133	5056227	0.95	cps
Bromine	81-1	6555	6855	7045	6818	3.62	cps
Cadmium	108-1	903	987	893	928	5.52	cps
Cadmium	106-1	9507	9423	9403	9444	0.58	cps
Cadmium	111-1	17424	17270	16768	17154	2.00	cps
Calcium	43-1	95642	97037	96659	96446	0.75	cps
Calcium	44-1	1535606	1590562	1540406	1555525	1.96	cps
Carbon	12-1	3540591	3481082	3491315	3504329	0.91	cps
Carbon	12-2	23112	23051	22975	23046	0.30	cps
Chlorine	35-1	44460349	49241239	50759261	48153617	6.83	cps
Chlorine	35-2	196621	198561	198729	197970	0.59	cps
Chromium	52-2	83026	83888	83120	83344	0.57	cps
Cobalt	59-2	217191	217202	217936	217443	0.20	cps
Copper	63-2	200739	200907	200566	200737	0.08	cps
Dysprosium	156-1	19247	19130	19688	19355	1.52	cps
Dysprosium	156-2	6578	6588	6482	6549	0.90	cps
Erbium	164-1	18590	18894	18506	18663	1.09	cps
Erbium	164-2	5525	5454	5765	5581	2.91	cps
Gadolinium	160-1	20139	20252	21170	20520	2.76	cps
Gadolinium	160-2	7956	7846	7609	7803	2.27	cps
Holmium	165-1	21701512	20860310	21360731	21307518	1.99	cps
Holmium	165-2	6756859	6825851	6768275	6783661	0.55	cps
Indium	115-1	16735828	17117051	16559487	16804122	1.70	cps
Indium	115-2	1429242	1413529	1430059	1424277	0.65	cps
Iron	54-2	2381679	2362409	2347861	2363983	0.72	cps
Iron	56-2	42338631	43151463	42247184	42579092	1.17	cps
Iron	57-2	1040689	1043374	1039757	1041273	0.18	cps
Krypton	83-1	347	330	297	324	7.85	cps
Lead	206-1	110022	110960	109188	110057	0.81	cps

Lab Sample ID: Q1159-03DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	89644	89000	89278	89307	0.36	cps
Lead	208-1	420428	421848	420576	420951	0.19	cps
Lithium	6-1	7922571	8074597	7956145	7984438	1.00	cps
Magnesium	24-2	688272	692805	689107	690061	0.35	cps
Manganese	55-2	206758	209365	206042	207388	0.84	cps
Molybdenum	94-1	135428	135132	137084	135881	0.77	cps
Molybdenum	95-1	232443	232211	236468	233707	1.02	cps
Molybdenum	96-1	250356	254301	250412	251690	0.90	cps
Molybdenum	97-1	146739	145739	146571	146350	0.37	cps
Molybdenum	98-1	376165	377509	379402	377692	0.43	cps
Neodymium	150-1	20796	20703	20890	20796	0.45	cps
Neodymium	150-2	4711	4361	4611	4561	3.95	cps
Nickel	60-2	83915	83784	84529	84076	0.47	cps
Phosphorus	31-2	583	590	530	568	5.79	cps
Potassium	39-2	31194	31321	31070	31195	0.40	cps
Rhodium	103-1	15686615	15630359	15672034	15663003	0.19	cps
Rhodium	103-2	5594299	5609929	5605256	5603161	0.14	cps
Scandium	45-1	11281676	11276946	11266322	11274981	0.07	cps
Scandium	45-2	200150	197529	197000	198227	0.85	cps
Selenium	82-1	227	293	250	257	13.18	cps
Selenium	77-2	33	33	30	32	5.97	cps
Selenium	78-2	63	20	40	41	52.75	cps
Silicon	28-1	31644432	31431149	31150558	31408713	0.79	cps
Silver	107-1	54423	54939	55588	54983	1.06	cps
Silver	109-1	51429	52232	52643	52101	1.19	cps
Sodium	23-2	72385	72522	72060	72322	0.33	cps
Strontium	86-1	2974241	2975719	2979157	2976373	0.08	cps
Strontium	88-1	25694321	25378242	25536191	25536252	0.62	cps
Sulfur	34-1	743850	737159	729548	736852	0.97	cps
Terbium	159-1	21567101	21622441	21530871	21573471	0.21	cps
Terbium	159-2	6449663	6378566	6517109	6448446	1.07	cps
Thallium	203-1	44031	44138	43523	43897	0.75	cps
Thallium	205-1	106039	106265	106462	106255	0.20	cps
Tin	118-1	3044	3007	2864	2971	3.20	cps
Titanium	47-1	13076	11844	11086	12002	8.37	cps
Uranium	238-1	6745	6635	6762	6714	1.03	cps

LB Number : LB134674 Operator :

Lab Sample ID: Q1159-03DL2X4 Instrumnet Name: P8
Client Sample ID: YE8C9S Dilution Factor: 4

Date & Time Acquired: 2025-02-11 14:45:35 DataFile Name: 032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	110324	110925	111483	110911	0.52	cps
Ytterbium	172-1	5224	5354	5471	5350	2.31	cps
Ytterbium	172-2	2077	1927	2067	2024	4.15	cps
Ytterbium	176-1	5351	5224	5411	5329	1.79	cps
Ytterbium	176-2	1523	1577	1647	1582	3.91	cps
Yttrium	89-1	29683754	29052123	29216939	29317605	1.12	cps
Yttrium	89-2	1874750	1807609	1803031	1828463	2.20	cps
Zinc	66-2	33105	33075	32962	33047	0.23	cps
Zirconium	90-1	9641	7263	6405	7769	21.58	cps
Zirconium	91-1	2452	1657	1543	1884	26.28	cps

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Lab Sample ID :CCV022Instrumnet Name :P8Client Sample ID :CCV022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Date & Time Acquired : 2025-02-11 14:50:23		DataFi	ie Name :	033CCV.d			
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3166656	3219302	3114011	3166656	1.66	cps
Antimony	121-1	8221670	8147852	8174881	8181468	0.46	cps
Arsenic	75-2	145397	144569	145717	145228	0.41	cps
Barium	135-1	9937428	9940063	9997160	9958217	0.34	cps
Barium	137-1	17203885	17037235	17326678	17189266	0.85	cps
Beryllium	9-1	2654376	2638062	2629882	2640773	0.47	cps
Bismuth	209-1	11681266	11866256	11665631	11737718	0.95	cps
Bismuth	209-2	4363116	4439537	4297792	4366815	1.62	cps
Bromine	81-1	4537	4661	4708	4635	1.90	cps
Cadmium	108-1	159518	159413	159338	159423	0.06	cps
Cadmium	106-1	229326	230084	231381	230264	0.45	cps
Cadmium	111-1	1998080	1980420	1949594	1976031	1.24	cps
Calcium	43-1	13159966	13127658	13087303	13124976	0.28	cps
Calcium	44-1	213926557	212261650	213758237	213315481	0.43	cps
Carbon	12-1	4181315	4287135	4447376	4305276	3.11	cps
Carbon	12-2	35727	36181	35927	35945	0.63	cps
Chlorine	35-1	2206331	2077000	2001406	2094912	4.95	cps
Chlorine	35-2	6278	6281	6098	6219	1.69	cps
Chromium	52-2	1653403	1686750	1646399	1662184	1.30	cps
Cobalt	59-2	3036918	3110755	3045672	3064448	1.32	cps
Copper	63-2	22715015	22991670	23074881	22927189	0.82	cps
Dysprosium	156-1	483	447	587	506	14.36	cps
Dysprosium	156-2	73	103	113	97	21.54	cps
Erbium	164-1	437	477	523	479	9.06	cps
Erbium	164-2	163	140	113	139	18.01	cps
Gadolinium	160-1	373	367	467	402	13.90	cps
Gadolinium	160-2	103	97	133	111	17.58	cps
Holmium	165-1	20402021	20415796	19953943	20257253	1.30	cps
Holmium	165-2	6456381	6399193	6303048	6386208	1.21	cps
Indium	115-1	15336206	14961998	14961161	15086455	1.43	cps
Indium	115-2	1272665	1272647	1264877	1270063	0.35	cps
Iron	54-2	16711327	16511395	16316438	16513053	1.20	cps
Iron	56-2	300885262	298991562	301480322	300452382	0.43	cps
Iron	57-2	7455539	7512635	7623014	7530396	1.13	cps
Krypton	83-1	390	310	330	343	12.13	cps
Lead	206-1	32241649	32935878	32613916	32597148	1.07	cps

Lab Sample ID : CCV022 Instrumnet Name : P8

Client Sample ID : CCV022 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Parameter Mass CPS1 CPS2 CPS3	CPSMean	CPSRSD	Units
Lead 207-1 27558165 28544111 28066145	28056141	1.76	cps
Lead 208-1 127315260 130303960 130067121	129228780	1.29	cps
Lithium 6-1 7198645 7053892 6949829	7067455	1.77	cps
Magnesium 24-2 57109904 57753171 56791991	57218355	0.86	cps
Manganese 55-2 6525140 6456763 6498567	6493490	0.53	cps
Molybdenum 94-1 28787649 28763611 28791932	28781064	0.05	cps
Molybdenum 95-1 41298139 42046620 42165827	41836862	1.12	cps
Molybdenum 96-1 46244529 45528104 45893288	45888640	0.78	cps
Molybdenum 97-1 26031702 25624298 26106169	25920723	1.00	cps
Molybdenum 98-1 67525102 67129362 67958714	67537726	0.61	cps
Neodymium 150-1 767 727 793	762	4.40	cps
Neodymium 150-2 57 77 50	61	22.71	cps
Nickel 60-2 795131 798610 800029	797923	0.32	cps
Phosphorus 31-2 29627 29614 28895	29379	1.42	cps
Potassium 39-2 15470017 15285944 15112951	15289637	1.17	cps
Rhodium 103-1 13755072 13393762 13307405	13485413	1.76	cps
Rhodium 103-2 4992220 4898282 4830914	4907139	1.65	cps
Scandium 45-1 10743417 10510735 10438920	10564357	1.51	cps
Scandium 45-2 188139 186078 184643	186286	0.94	cps
Selenium 82-1 119786 117190 119178	118718	1.14	cps
Selenium 77-2 1777 1817 1827	1807	1.46	cps
Selenium 78-2 6185 6241 5831	6086	3.65	cps
Silicon 28-1 6932328 6887328 6952648	6924101	0.48	cps
Silver 107-1 9740600 9861581 9825098	9809093	0.63	cps
Silver 109-1 9345849 9303077 9392373	9347100	0.48	cps
Sodium 23-2 113351995 113559018 114219115	113710043	0.40	cps
Strontium 86-1 2699948 2680982 2684403	2688445	0.38	cps
Strontium 88-1 23195249 23215707 23366180	23259045	0.40	cps
Sulfur 34-1 1461045 1420926 1417068	1433013	1.70	cps
Terbium 159-1 20524883 20552897 20215143	20430974	0.92	cps
Terbium 159-2 6089691 6109674 6000073	6066479	0.96	cps
Thallium 203-1 7965201 8030308 8043287	8012932	0.52	cps
Thallium 205-1 18796496 19019243 19088752	18968163	0.80	cps
Tin 118-1 6496653 6479065 6621326	6532348	1.19	cps
Titanium 47-1 12430604 12281259 12330399	12347421	0.62	cps
Uranium 238-1 25741353 26063259 26611831	26138814	1.68	cps

Lab Sample ID :CCV022Instrumnet Name :P8Client Sample ID :CCV022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:50:23 DataFile Name: 033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1259175	1254168	1250385	1254576	0.35	cps
Ytterbium	172-1	497	567	473	512	9.48	cps
Ytterbium	172-2	143	200	200	181	18.06	cps
Ytterbium	176-1	41552	40696	41284	41177	1.06	cps
Ytterbium	176-2	12483	12583	12389	12485	0.78	cps
Yttrium	89-1	26981940	26683772	26824623	26830112	0.56	cps
Yttrium	89-2	1735726	1712686	1680361	1709591	1.63	cps
Zinc	66-2	2484632	2468297	2485788	2479572	0.39	cps
Zirconium	90-1	14458267	14582043	14669493	14569934	0.73	cps
Zirconium	91-1	3226371	3328566	3327612	3294183	1.78	cps

Lab Sample ID : CCB022 Instrumnet Name : P8
Client Sample ID : CCB022 Dilution Factor : 1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

Date & Time AC	quireu . 202	3-02-11 14.55.49	Dalar	ile Name.	034CCBE.u				
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units		
Aluminium	27-2	133	143	153	143	6.98	cps		
Antimony	121-1	1943	1767	1633	1781	8.73	cps		
Arsenic	75-2	7	7	13	9	43.25	cps		
Barium	135-1	513	437	380	443	15.09	cps		
Barium	137-1	987	750	740	826	16.91	cps		
Beryllium	9-1	969	892	879	913	5.31	cps		
Bismuth	209-1	13465650	13521157	13574240	13520349	0.40	cps		
Bismuth	209-2	4917479	5017297	4941901	4958892	1.05	cps		
Bromine	81-1	4254	4204	4354	4271	1.79	cps		
Cadmium	108-1	43	30	60	44	33.82	cps		
Cadmium	106-1	7542	8176	7649	7789	4.36	cps		
Cadmium	111-1	5339	5832	5449	5540	4.67	cps		
Calcium	43-1	690	680	630	667	4.82	cps		
Calcium	44-1	32173	29754	29347	30425	5.02	cps		
Carbon	12-1	3727055	3700262	3695860	3707726	0.46	cps		
Carbon	12-2	23923	23452	23896	23757	1.11	cps		
Chlorine	35-1	1188619	1153433	1080475	1140842	4.84	cps		
Chlorine	35-2	3697	3807	3524	3676	3.89	cps		
Chromium	52-2	700	873	820	798	11.13	cps		
Cobalt	59-2	160	163	213	179	16.70	cps		
Copper	63-2	3194	3360	3350	3302	2.83	cps		
Dysprosium	156-1	30	57	37	41	33.76	cps		
Dysprosium	156-2	3	0	3	2	86.60	cps		
Erbium	164-1	90	100	103	98	7.10	cps		
Erbium	164-2	30	20	23	24	20.83	cps		
Gadolinium	160-1	103	137	83	108	25.00	cps		
Gadolinium	160-2	27	17	23	22	22.91	cps		
Holmium	165-1	20753346	20800179	21049186	20867570	0.76	cps		
Holmium	165-2	6634503	6665388	6623623	6641171	0.33	cps		
Indium	115-1	16616756	16574874	16616445	16602692	0.15	cps		
Indium	115-2	1420781	1423616	1401077	1415158	0.87	cps		
Iron	54-2	733	733	710	726	1.86	cps		
Iron	56-2	11481	11765	10931	11392	3.72	cps		
Iron	57-2	260	287	297	281	6.74	cps		
Krypton	83-1	240	267	240	249	6.19	cps		
Lead	206-1	4087	3817	3957	3954	3.42	cps		

Lab Sample ID :CCB022Instrumnet Name :P8Client Sample ID :CCB022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

	•						
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3507	3214	3220	3314	5.06	cps
Lead	208-1	16334	15170	14587	15364	5.79	cps
Lithium	6-1	7785162	7739798	7829087	7784682	0.57	cps
Magnesium	24-2	2530	2387	2567	2495	3.81	cps
Manganese	55-2	300	303	330	311	5.29	cps
Molybdenum	94-1	1437	1037	1057	1177	19.16	cps
Molybdenum	95-1	1643	1110	1237	1330	20.95	cps
Molybdenum	96-1	1850	1487	1217	1518	20.94	cps
Molybdenum	97-1	953	790	643	796	19.49	cps
Molybdenum	98-1	2707	2064	1657	2142	24.72	cps
Neodymium	150-1	17	20	20	19	10.18	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	1260	1307	1447	1338	7.26	cps
Phosphorus	31-2	80	77	90	82	8.44	cps
Potassium	39-2	11134	11365	10931	11143	1.95	cps
Rhodium	103-1	15716142	15441275	15807817	15655078	1.22	cps
Rhodium	103-2	5591971	5701259	5524253	5605828	1.59	cps
Scandium	45-1	11047170	10958330	10971621	10992374	0.44	cps
Scandium	45-2	194278	195551	193100	194309	0.63	cps
Selenium	82-1	30	-17	77	30	155.53	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	0	10	23	11	105.35	cps
Silicon	28-1	546624	539718	540953	542432	0.68	cps
Silver	107-1	1023	937	753	904	15.24	cps
Silver	109-1	987	873	670	843	19.03	cps
Sodium	23-2	69310	69746	68335	69130	1.04	cps
Strontium	86-1	650	627	623	633	2.29	cps
Strontium	88-1	1967	1793	1817	1859	5.06	cps
Sulfur	34-1	728143	723170	724050	725121	0.37	cps
Terbium	159-1	21242294	21554426	21619358	21472026	0.94	cps
Terbium	159-2	6363219	6345993	6358420	6355877	0.14	cps
Thallium	203-1	1050	953	960	988	5.47	cps
Thallium	205-1	2427	2264	2064	2251	8.08	cps
Tin	118-1	3387	3470	3524	3460	1.99	cps
Titanium	47-1	883	837	800	840	4.97	cps
Uranium	238-1	827	517	430	591	35.28	cps

Lab Sample ID :CCB022Instrumnet Name :P8Client Sample ID :CCB022Dilution Factor :1

Date & Time Acquired: 2025-02-11 14:53:49 DataFile Name: 034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	30	20	21	39.75	cps
Ytterbium	172-1	93	83	123	100	20.82	cps
Ytterbium	172-2	60	37	47	48	24.50	cps
Ytterbium	176-1	1910	1954	1923	1929	1.15	cps
Ytterbium	176-2	280	237	297	271	11.42	cps
Yttrium	89-1	28370380	28226698	28540556	28379211	0.55	cps
Yttrium	89-2	1811326	1814681	1779172	1801726	1.09	cps
Zinc	66-2	330	273	287	297	9.99	cps
Zirconium	90-1	1393	1420	1223	1346	7.93	cps
Zirconium	91-1	300	343	197	280	26.91	cps





# **Prep Standard - Chemical Standard Summary**

Order ID: Q1186

Test: Metals CLP MS

Prepbatch ID: PB166317,

Sequence ID/Qc Batch ID: LB134612,LB134674,

#### Standard ID:

#### Chemical ID:

M4884, M4888, M5192, M5288, M5289, M5295, M5298, M5304, M5472, M5476, M5496, M5497, M5498, M5513, M5516, M5519, M5658, M5697, M5739, M5751, M5768, M5798, M5799, M5800, M5801, M5802, M5806, M5811, M5815, M5816, M5817, M5819, M5820, M5873, M5874, M5960, M5961, M5962, M5976, M5977, M5978, M5981, M5983, M5993, M5999, M6021, M6023, M6025, M6028, M6030, M6032, M6055, M6079, M6121, M6126, M6127, M6128, M6144, M6145, M6146, M6150, W 3112, M6126, M6127, M6128, M6144, M6145, M6146, M6150, W 3112, M6126, M6127, M6128, M6144, M6145, M6146, M6150, W 3112, M6126, M6150, W 3112, M6126, M





# **Metals STANDARD PREPARATION LOG**

Recipe ID	NAME 1:1HCL	NO. MP83499	Prep Date 12/09/2024		Prepared By Eman Mughal	ScaleID None	<u>PipettelD</u> None	Supervised By Sarabjit Jaswal
.,,	1.1102	<u>WII 00400</u>	12/00/2024	01/00/2020	Linaii Magnai	110110	140110	12/09/2024

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u> 169	NAME 1:1HNO3	NO.	Prep Date 01/14/2025	<u>Date</u> 07/14/2025	<u><b>By</b></u> Eman Mughal	<u>ScaleID</u> None	PipetteID None	Sarabjit Jaswal
109	1.111103	<u>IVIP 6404 I</u>	01/14/2025	07/14/2025	Eman Mughai	None	None	01/16/2025

**FROM** 1250.00000ml of M6126 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml





### **Metals STANDARD PREPARATION LOG**

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Mohan Bera
	ICPMS CALIB BLANK(S0/ICB/CCB)	MP84042	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP ETTE_3 (A)	01/16/2025

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3947	S7(SFAM,6020,200.8)	MP84043	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

# **FROM**

1.00000 ml of M5476 + 1.00000 ml of M5799 + 1.00000 ml of M5981 + 1.00000 ml of M5983 + 1.90000 ml of M5476 + 10.00000 ml of M5976 + 10.00000 ml of M5978 + 10.00000 ml of M6126 + 2.00000 ml of M5815 + 2.00000 ml of M5817 + 4.00000 ml of M6025 + 4.00000 ml of M6032 + 4.90000 ml of M5298 + 4.90000 ml of M5519 + 5.00000 ml of M6121 + 50.00000 ml of M5304 + 830.60000 ml of W3112 + 9.00000 ml of M5751 + 9.00000 ml of M5819 + 9.00000 ml of M5806 + 9.90000 ml of M6127 = Final Quantity: 1000.000 ml





# **Metals STANDARD PREPARATION LOG**

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3948	S6(SFAM,6020,200.8)	MP84044	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3949	S5(SFAM,6020,200.8)	MP84045	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 73.50000ml of W3112 + 25.00000ml of MP84043 = Final Quantity: 100.000 ml





# Metals STANDARD PREPARATION LOG

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3954	S4(SFAM,6020,200.8)	MP84046	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025
	0.50000   6.10000   6.00000   6					10 5 10		•

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3951	S3(SFAM, 6020,200.8)	MP84047	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 88.50000ml of W3112 + 10.00000ml of MP84044 = Final Quantity: 100.000 ml





## **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3955	S2CONC(SFAM,6020,200.8)	MP84048	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

**FROM** 

0.05000 ml of M5476 + 0.05000 ml of M5798 + 0.05000 ml of M5800 + 0.05000 ml of M5801 + 0.05000 ml of M5961 + 0.05000 ml of M5983 + 0.05000 ml of M6023 + 0.05000 ml of M6025 + 0.05000 ml of M6028 + 0.05000 ml of M5496 + 0.10000 ml of M5658 + 0.10000 ml of M5751 + 0.10000 ml of M5802 + 0.25000 ml of M5799 + 0.25000 ml of M5819 + 0.25000 ml of M5962 + 0.25000 ml of M5976 + 0.25000 ml of M5976 + 0.25000 ml of M5976 + 0.25000 ml of M5815 + 2.00000 ml of M5817 + 2.50000 ml of M5819 + 2.50000 ml of M6121 + 2.50000 ml of M6127 + 225.25000 ml of W3112 + 5.00000 ml of M6126 = Final Quantity: 250.000 ml

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3956	S2(SFAM,6020,200.8)	MP84049	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 98.00000ml of W3112 + 0.50000ml of MP84048 = Final Quantity: 100.000 ml





# **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3957	S1(SFAM,6020,200.8)	MP84050	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3958	ICV(SFAM)	MP84051	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

**FROM** 2.00000ml of M5295 + 98.00000ml of MP84042 = Final Quantity: 100.000 ml





### **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	NO.	Prep Date		<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3961	CCV	MP84052	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP ETTE_3 (A)	01/16/2025

**FROM** 

0.20000 ml of M5513 + 0.50000 ml of M5476 + 0.50000 ml of M5799 + 0.50000 ml of M5981 + 0.50000 ml of M5983 + 1.00000 ml of M5815 + 1.00000 ml of M5817 + 10.00000 ml of M6126 + 12.45000 ml of M5298 + 12.45000 ml of M5519 + 2.00000 ml of M5519 + 2.00000 ml of M5032 + 24.95000 ml of M5498 + 24.95000 ml of M5496 + 24.95000 ml of M5496 + 5.00000 ml of M5304 + 4.50000 ml of M5431 + 4.50000 ml of M5496 + 5.00000 ml of M5976 + 5.00000 ml of M6121 + 830.60000 ml of W3112 = Final Quantity: 1000.000 ml

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
1142	ICSA ICPMS	MP84053	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

**FROM** 10.00000ml of M5873 + 90.00000ml of MP84042 = Final Quantity: 100.000 ml





# Metals STANDARD PREPARATION LOG

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
1143	ICSAB ICPMS	MP84054	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP ETTE 3 (A)	
FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP84042 = Final Quantity: 100.000 ml								

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3962	MG 10PPM FOR TUNE	MP84055	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

0.01000 ml of M6127 + 9.99000 ml of MP84042 = Final Quantity: 100.000 ml**FROM** 





# Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	<u>PipetteID</u>	Supervised By  Mohan Bera
3894	TUNE 200PPB	MP84056	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP ETTE_3 (A)	
	0.00000   (140055   0.00000   1							

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
3903	ISS 3PPM	MP84057	01/14/2025	02/07/2025	Sarabjit Jaswal	None	METALS_PIP	
							ETTE_3 (A)	01/16/2025

FROM 5.00000ml of M6126 + 75.00000ml of M5739 + 170.00000ml of MP84042 = Final Quantity: 250.000 ml





# Metals STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Mohan Bera
2902	S8 ICPMS	MP84073	01/14/2025	02/07/2025	Janvi Patel	None	None	04/40/0005
								01/16/2025

FROM 1.00000ml of M5496 + 2.50000ml of M5288 + 2.50000ml of M5298 + 5.00000ml of M5497 + 5.00000ml of M5806 + 5.00000ml of M6127 + 79.00000ml of MP84042 = Final Quantity: 100.000 ml

Recipe	NAME	NO	Dron Data	Expiration	<u>Prepared</u>	SeelelD	DinettelD	Supervised By
<u>ID</u> 870	NAME ICPMS SPIKE SOL.B	NO. MP84074	<b>Prep Date</b> 01/16/2025	<u>Date</u> 02/07/2025	<u>By</u> Janvi Patel	<u>ScaleID</u> None	PipetteID  METALS PIP	Sarabjit Jaswal
							ETTE_3 (A)	01/17/2025

FROM 0.45000ml of M5962 + 5.00000ml of M5993 + 5.00000ml of M5999 + 39.55000ml of MP84042 = Final Quantity: 50.000 ml





## **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sarabjit Jaswal
3963	CONC.LCSW SPIKE	MP84099	01/16/2025	02/07/2025	Janvi Patel	None	METALS_PIP	
							ETTE_3 (A)	01/17/2025

**FROM** 

 $0.05000ml\ of\ M5472+0.05000ml\ of\ M5798+0.05000ml\ of\ M5800+0.05000ml\ of\ M5801+0.05000ml\ of\ M5961+0.05000ml\ of\ M5961+0.05000ml\ of\ M5981+0.05000ml\ of\ M5983+0.05000ml\ of\ M6023+0.05000ml\ of\ M6025+0.05000ml\ of\ M6028+0.05000ml\ of\ M6030+0.10000ml\ of\ M5289+0.10000ml\ of\ M5658+0.10000ml\ of\ M5697+0.10000ml\ of\ M5802+0.25000ml\ of\ M5799+0.25000ml\ of\ M5819+0.25000ml\ of\ M5962+0.25000ml\ of\ M5978+0.25000ml\ of\ M6021+0.25000ml\ of\ M6128+0.50000ml\ of\ M6032+1.00000ml\ of\ M5298+1.25000ml\ of\ M5816+1.25000ml\ of\ M5820+1.25000ml\ of\ M6121+2.50000ml\ of\ M5497+2.50000ml\ of\ M5516+2.50000ml\ of\ M5519+2.50000ml\ of\ M5768+2.50000ml\ of\ M6126+226.35000ml\ of\ W3112=Final\ Quantity: 250.000\ ml$ 

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Mohan Bera
1883	SE 10PPM	MP84378	02/05/2025	02/07/2025	Sarabjit Jaswal	None	None	
								02/07/2025

**FROM** 0.10000ml of M5962 + 9.90000ml of MP84042 = Final Quantity: 10.000 ml





# **Metals STANDARD PREPARATION LOG**

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sohil Jodhani
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP84414	02/07/2025	02/28/2025	Janvi Patel	None	None	02/11/2025

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sohil Jodhani
2902	S8 ICPMS	MP84415	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	

FROM 1.00000ml of M5496 + 2.50000ml of M5288 + 2.50000ml of M5811 + 5.00000ml of M5498 + 5.00000ml of M6127 + 5.00000ml of M6144 + 79.00000ml of MP84414 = Final Quantity: 100.000 ml





### **Metals STANDARD PREPARATION LOG**

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sohil Jodhani
3947	S7(SFAM,6020,200.8)	MP84416	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	02/11/2025

**FROM** 

 $0.00000ml\ of\ M4884+0.00000ml\ of\ M4888+0.00000ml\ of\ M5192+0.00000ml\ of\ M5288+0.00000ml\ of\ M5513+1.00000ml\ of\ M5476+1.00000ml\ of\ M5799+1.00000ml\ of\ M5981+1.00000ml\ of\ M6079+1.90000ml\ of\ M5496+10.00000ml\ of\ M5977+10.00000ml\ of\ M5978+10.00000ml\ of\ M6126+2.00000ml\ of\ M5815+2.00000ml\ of\ M5817+4.00000ml\ of\ M6025+4.00000ml\ of\ M6032+4.90000ml\ of\ M5519+4.90000ml\ of\ M5811+5.00000ml\ of\ M6121+50.00000ml\ of\ M5304+830.60000ml\ of\ W3112+9.00000ml\ of\ M5751+9.00000ml\ of\ M6128+9.00000ml\ of\ M6145+9.90000ml\ of\ M5498+9.90000ml\ of\ M6127+9.90000ml\ of\ M6144=Final\ Quantity:\ 1000.000\ ml$ 

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	NAME.	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sohil Jodhani
3948	S6(SFAM,6020,200.8)	MP84417	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP	
							ETTE_3 (A)	02/11/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 48.50000ml of W3112 + 50.00000ml of MP84416 = Final Quantity: 100.000 ml





# Metals STANDARD PREPARATION LOG

Recipe ID I	<u>NAME</u>	NO.	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sohil Jodhani
3949	S5(SFAM,6020,200.8)	MP84418	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	02/11/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 73.50000ml of W3112 + 25.0	00000ml of MP84416 = Final Quantity: 100.000 ml
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Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)		02/07/2025	02/28/2025	Janvi Patel		METALS_PIP ETTE_3 (A)	Sohil Jodhani 02/11/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 86.00000ml of W3112 + 12.50000ml of MP84416 = Final Quantity: 100.000 ml





### **Metals STANDARD PREPARATION LOG**

		<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sohil Jodhani
3951 S3(SFAM	FAM, 6020,200.8)	MP84420	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	02/11/2025

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sohil Jodhani
3955	S2CONC(SFAM,6020,200.8)	MP84421	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	

# **FROM**

0.05000 ml of M5476 + 0.05000 ml of M5798 + 0.05000 ml of M5800 + 0.05000 ml of M5801 + 0.05000 ml of M5960 + 0.05000 ml of M5960 + 0.05000 ml of M6023 + 0.05000 ml of M6025 + 0.05000 ml of M6028 + 0.05000 ml of M6030 + 0.05000 ml of M6079 + 0.05000 ml of M6128 + 0.10000 ml of M5496 + 0.10000 ml of M5658 + 0.10000 ml of M5751 + 0.10000 ml of M6146 + 0.25000 ml of M5799 + 0.25000 ml of M5811 + 0.25000 ml of M5962 + 0.25000 ml of M5977 + 0.25000 ml of M5978 + 0.25000 ml of M6032 + 2.00000 ml of M5815 + 2.00000 ml of M5817 + 2.50000 ml of M5498 + 2.50000 ml of M6121 + 2.50000 ml of M6122 + 2.50000 ml of M6123 + 2.50000 ml of M6124 + 2.50000 ml of M6124 + 2.50000 ml of M6125 + 2.00000 ml of M6125 + 2.00000 ml of M6126 + 2.50000 ml of M6127 + 2.50000 ml of M6127





### Metals STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sohil Jodhani
3956	S2(SFAM,6020,200.8)	MP84422	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	02/11/2025

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sohil Jodhani
3957	S1(SFAM,6020,200.8)	MP84423	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP	
							ETTE_3 (A)	02/11/2025

FROM 0.50000ml of M6121 + 1.00000ml of M6126 + 88.50000ml of W3112 + 10.00000ml of MP84422 = Final Quantity: 100.000 ml





### Metals STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sohil Jodhani
3961	CCV	MP84438	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP ETTE_4 (B)	

**FROM** 

 $0.00000ml\ of\ M4884+0.00000ml\ of\ M5978+0.20000ml\ of\ M5513+0.50000ml\ of\ M5476+0.50000ml\ of\ M5799+0.50000ml\ of\ M5981+0.50000ml\ of\ M6079+1.00000ml\ of\ M5815+1.00000ml\ of\ M5817+10.00000ml\ of\ M6126+12.45000ml\ of\ M6126+12.45000ml\ of\ M6126+12.45000ml\ of\ M6127+24.95000ml\ of\ M6127+24.95000ml\ of\ M6144+25.00000ml\ of\ M5304+4.50000ml\ of\ M5751+4.50000ml\ of\ M6128+4.50000ml\ of\ M6145+4.95000ml\ of\ M5496+5.00000ml\ of\ M5977+5.00000ml\ of\ M6121+830.60000ml\ of\ W3112=Final\ Quantity:\ 1000.000\ ml$ 

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u> 3958	NAME ICV(SFAM)	NO. MP84439	Prep Date 02/07/2025	<u> </u>	<u>By</u> Janvi Patel	<u>ScaleID</u> None	PipetteID  METALS_PIP	Sohil Jodhani
	, ,						ETTE_3 (A)	02/11/2025

**FROM** 2.00000ml of M6150 + 98.00000ml of MP84414 = Final Quantity: 100.000 ml





### Metals STANDARD PREPARATION LOG

Recipe				Expiration	Prepared			Supervised By	
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	By	<u>ScaleID</u>	<u>PipetteID</u>	Sohil Jodhani	
1142	ICSA ICPMS	MP84440	02/07/2025	02/28/2025	Janvi Patel	None	METALS_PIP		
							ETTE_3 (A)	02/11/2025	
FROM	FROM 10.00000ml of M5873 + 90.00000ml of MP84414 = Final Quantity: 100.000 ml								

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1143			02/07/2025	02/28/2025	Janvi Patel		METALS_PIP ETTE_3 (A)	Sohil Jodhani 02/11/2025

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP84414 = Final Quantity: 100.000 ml





### **Metals STANDARD PREPARATION LOG**

3962 MG 10PPM FOR TUNE MP84442 02/07/2025 02/28/2025 Janvi Patel None METALS_PIP	Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	<u>PipetteID</u>	Supervised By Sohil Jodhani
	3962	MG 10PPM FOR TUNE	MP84442	02/07/2025	02/28/2025	Janvi Patel	None	_	

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894			02/07/2025	02/28/2025	Janvi Patel		METALS_PIP	
							ETTE_3 (A)	02/11/2025

FROM 2.00000ml of M6055 + 2.00000ml of MP84442 + 96.00000ml of MP84414 = Final Quantity: 100.000 ml





### **Metals STANDARD PREPARATION LOG**

Recipe <u>ID</u> 3903	NAME ISS 3PPM	NO. MP84444	Prep Date 02/07/2025	Expiration Date 02/28/2025	Prepared By Janvi Patel	<u>ScaleID</u> None	PipetteID  METALS_PIP ETTE_3 (A)	Supervised By Sohil Jodhani 02/11/2025
FROM	5.00000ml of M6126 + 75.00000ml o	L f M5739 + 1	1 70.00000ml c	l of MP84414 = I	Final Quantity: 2	250.000 ml	(/ /)	02/11/2023



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	030921	03/09/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4884
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57022 / Ti, 1000 PPM, 125 ml	070721	09/27/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4888
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	051722	05/17/2025	07/01/2022 / bin	06/17/2022 / jaswal	M5192
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Supplier  Absolute Standards, Inc.	ItemCode / ItemName  58113 / Aluminum (Al) 10,000PPM	Lot # 070622	-	-		
Absolute	58113 / Aluminum (Al)		Date	Opened By 09/02/2022 /	<b>Received By</b> 07/12/2022 /	Lot #



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	020422	02/04/2025	05/02/2023 / jaswal	06/15/2022 / jaswal	M5298
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	08/07/2024 / jaswal	04/01/2022 / jaswal	M5304
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	01/14/2025 / Jaswal	03/16/2023 / jaswal	M5472
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/29/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Absolute Standards, Inc.	58113 / AI, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	022123	11/06/2025	11/06/2024 / kareem	03/17/2023 / bin	M5516
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS ) STOCK SOLN	CP-MS ICSA-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/03/2024 / kareem	06/11/2024 / kareem	M5960



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5976
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	01/16/2025 / JANVI	02/22/2024 / Jaswal	M5977
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57092 / U, 1000 PPM, 125	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5983
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-SPK-4 / SOIL/WATER SPIKE SOLN 4, 125mL	V2-MEB742036	03/12/2029	10/04/2024 / Jaswal	02/22/2024 / Jaswal	M5993
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-SPK-1 / SOIL/WATER SPIKE SOLN 1, 125mL	T2-MEB721963	07/27/2027	09/04/2024 / Jaswal	02/22/2024 / kareem	M5999
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021
					1	
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Supplier  Absolute Standards, Inc.	ItemCode / ItemName 57081 / TI, 1000 PPM, 125 ml	Lot # 0624724	l -	I -		
Absolute	57081 / TI, 1000 PPM, 125		Date	Opened By 08/05/2024 /	<b>Received By</b> 08/05/2024 /	Lot #



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	01/15/2025 / Jaswal	09/30/2024 / Jaswal	M6079
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Supplier  Absolute Standards, Inc.	ItemCode / ItemName  58030 / Zinc, Zn, 500 ml, 1000 PPM	Lot # 121724	1 -			
Absolute	58030 / Zinc, Zn, 500 ml,		Date	Opened By 02/04/2025 /	<b>Received By</b> 01/13/2025 /	Lot #



Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / lwona	W3112



### Certificate of Analysis

Refine your results. Redefine your industry.

R:02/22/24 M5991 M5992 M5993 M5994 M5995

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 PRODUCT DESCRIPTION

**Product Code:** 

Multi Analyte Custom Grade Solution

Catalog Number:

CLPP-SPK-4

Lot Number:

V2-MEB742036

Matrix:

3% (v/v) HNO3

Value / Analyte(s):

100 µg/mL ea:

Antimony,

50 µg/mL ea:

Cadmium,

Thallium,

40 µg/mL ea:

Arsenic,

20 μg/mL ea:

Lead,

10 µg/mL ea:

Selenium

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE Antimony, Sb CERTIFIED VALUE 100.0 ± 0.7 µg/mL ANALYTE

CERTIFIED VALUE 40.00 ± 0.26 µg/mL

Arsenic, As

Cadmium, Cd

50.00 ± 0.22 μg/mL

Lead, Pb

20.00 ± 0.09 µg/mL

Selenium, Se

10.00 ± 0.04 µg/mL

Thaillum, Ti

50.00 ± 0.22 µg/mL

Density:

1.016 g/mL (measured at 20 ± 4 °C)

**Assay Information:** 

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
TI	ICP Assay	3158	151215
TI	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

 $X_{CRM/RM} = \Sigma(w_i)(X_i)$ 

 $X_i$  = mean of Assay Method i with standard uncertainty  $v_{char}$ 

w<sub>i</sub> = the weighting factors for each method calculated using the inverse square of the variance:

 $w_i = (1/u_{\rm char\;i})^2/\left(\Sigma(1/(u_{\rm char\;i})^2)\right.$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  i are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

uits = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value, X<sub>CRWRM</sub>, where one method of characterization is used is the mean of individual results:

XCRM/RM = (Xa) (uchar a)

X<sub>m</sub> = mean of Assay Method A with

uchar a = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM}$  = k ( $u_{chara}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2$ )  $^{1/2}$ 

k = coverage factor = 2

uchar a = the errors from characterization

u<sub>bb</sub> = bottle to bottle homogeneity standard uncertainty

uits = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

### 6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures <u>Terms and Conditions of Sale</u>, <a href="https://www.inorganicventures.com/terms-and-conditions-sale">https://www.inorganicventures.com/terms-and-conditions-sale</a>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit
- www.inorganicventures.com/TCT

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; Info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

March 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- March 12, 2029
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: \_\_\_\_\_
- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

Paul R Saine

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:** 

Joseph Burns Custom VS Manager

**Certifying Officer:** 

Paul Gaines Chairman / Senior Technical Director Lot # 010924

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

CERTIFIED WEIGHT REPORT

## Certified Reference Material CRM

M6032

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ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

31815124

Lot #

Compound Nominal Concentration (µg/mL): Weight shown below was diluted to (mL): Recommended Storage: **NIST Test Number: Expiration Date:** Part Number: Lot Number: Description: RV# 57056 010924 Barium (Ba) **6UTB** 1000 Ambient (20 °C) 010927 Number Lot Conc. (µg/mL) 2000.02 Nominal 0.058 Flask Uncertainty 5E-05 Balance Uncertainty Purity Uncertainty Assay 8 Purity (%) Solvent: 24002546 8 2% Weight (g) Target 40.0 Nitric Acid Weight (g) Conc. (µg/mL) Nitric Acid Actual Actual

Barium nitrate (Ba)

IN023 BAD022019A1

8

99.999

0,10

52.3

3.82417

3.82441

1000.1

2.0

10022-31-B

0.5 mg/m3

orl-rat 355 mg/kg 3104a

+/- (µg/mL)

CAS#

(Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50

NIST SRM

SDS Information

Expanded Uncertainty Reviewed By: Formulated By: Giovanni Esposito Pedro L. Rentas 010924 010924

Variable	N III	m/z->>	1.005	m/z->	1.0E@	2.OE6
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		170		70		
		180		80		
		190		9		
		200		100		

Giovannie

Labore L

www.absolutestandards.com

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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Trace Metals Verification by ICP-MS (μg/mL)           Hf         <0.02         Li         <0.02         Ni         <0.02         Pr         <0.02         Se         <0.02         Tb         <0.02         W           Ho         <0.02			Δ	ନ	Ga	2	5	딸	Ę	1 ,	Ų			
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Fire analyte         Fr House         Up /mL)           U2         Ni         <0.02         Pr         <0.02         Se         <0.2         Tb         <0.02         W           02         Nb         <0.02		NO	S I	5	弄	Min	ď	Mo	Lu	<u> </u>		STIEN.	ecais	
CP-MS (µg/mL)         Se         <0.2         Tb         <0.02         W           <0.02		\$0.02	60.02	3	8	40.02	0.01	A0.01	40.02	10108	A) (7)	STATISTICS IN	Verifica	
CP-MS (µg/mL)         Se         <0.2         Tb         <0.02         W           <0.02	cet ana	F	; ;	₽	Þ	Pd	! 8	<u>ک</u>	Ş		Z.	A STATE OF	ation	
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## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

\* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Lot # 070124

Certified Reference Material CRM

Absolute Standards, Inc.

www.absolutestandards.com

800-368-1131

CERTIFIED WEIGHT REPORT:

Part Number:

M6028



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

R 815/24

Solvent: 24002546 Lot # Nitric Acid

Lot Number: Description: 57048 070124 Cadmium (Cd) 2% 40.0

Nominal Concentration (µg/mL): Recommended Storage: **Expiration Date:** 1000 070127 Ambient (20 °C)

<u>a</u>L

Nitric Acid

Formulated By:

Aleah O'Brady

070124

Aller PRESE

Weight shown below was dliuted to (mL): NIST Test Number: 6UTB Lot 2000.07 Nominal 0.100 Flask Uncertainty 5E-05 Balance Uncertainty Purity Uncertainty Assay Target Actual Actual Reviewed By: Uncertainty Expanded Pedro L. Rentas

RM#

Number

Conc. (µg/mL)

8

Purity (%)

8

Weight (g)

**SDS Information** 

TSIN SRM

070124

 Cadmium nitrate tetrahydrate (Cd) IN024 CDM092021A1 1000 99.999 0.10 36.5 5.4797 Weight (g) Conc. (µg/mL) 5.4804 1000.1 +/- (µg/mL) 2.0 10022-68-1 CAS# (Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50 0.01 mg/m3 orl-rat 60.2mg/kg 3108

m/z-> -z/m m/z-> 1.0E7 2.0E7 5.OE4 1.0E5 2.5E4 5.0M4 [1] Spectrum No.1 010 110 0 220 120 NO [ 12.514 sec]:58148.D# [Count] [Linear] 230 130 30 240 140 40 200 150 50 2000 160 60 170 70 180 80 190 Ö 200 100

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number 1104

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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yte	<b>∆</b> 0,2	40.02	<0.02	<0.02	<0.02	<0.02	20.02	3	l	by ICP-	
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	<b>∆</b> 0.02	<b>∆</b> .02	40.02	<b>40.2</b>	40.02	40.02	40.2				
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	Z	21	ĸ	¥	<	U	Q	Section 1			
	<0.02	<0.02	40.02	40.02	40.02	40.02	40.02				

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 57048

T/2->

210

220

230

240

250

260

Certified Reference Material CRM

M5810 M5811



www.absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: Lot Number: Description:

58126 051523 Iron (Fe)

800-368-1131

Absolute Standards, Inc.

R: 01/03/24

Solvent: 21110221

Nitric Acid

Lot #

5.0%

250.0 1

Nitric Acid

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

Formulated By:

Disvarance.

ASSES OF

Giovanni Esposito

Pedro L. Rentas

051523

Reviewed By:

SDS Information

Expanded

1. Iron (Fe)

m/2->

10

20

30

40

S O

60

70

1.0E4

2.0E4

[1] Spectrum No.1 [ 30.763 sec]:58126.D# [Count] [Linear]

IN346 2302010-500

10000

99.995

0.10

100.0

50.0034

50.0111

10001.5

20.0

7439-89-6

5 mg/m3

orl-rat 7500mg/kg 3126a

1.0E8

m/z->

110

120

130

140

150

160

170

5.0E7

1.0E8-

5.0E7

Compound

RM#

Number E E

Conc. (µg/mL)

36

Purity (%)

8

Weight (g)

Weight (g) Conc. (µg/mL)

+/- (µg/mL)

CAS#

OSHA PEL (TWA)

LD50

SRM

Uncertainty

(Solvent Safety Info. On Attached pg.)

Target

Nominal

Purity Uncertainty Assay

Nominal Concentration (µg/mL):

**NIST Test Number:** 

**BTUB** 10000

5E-05 Balance Uncertainty 0.12 Flask Uncertainty

Recommended Storage:

Ambient (20 °C) 051526

**Expiration Date:** 

Weight shown below was diluted to (mL):

5000.1

1105

051523

180 BO 190 90 200 100

https://Absolutestandards@m ANAB ISO 17034 Accredited AR-1539 Certificate Number

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	Sb Ba Ba	
	40.02 40.02 40.02 40.02 40.02	
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	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	स स म इ. इ. इ.	
	40.02 40.02 40.02 40.02	Trace M
	Mo Mg	etals
(T) = Target analyte	40.22 40.22 40.23 40.23 40.23	Verifica
ene teo	K P P B OS N	tion t
VID	40.02 40.02 40.02 40.02 40.02	y ICP-M
	Sch Sch	S (µg
	40.02 40.02 40.02 40.02	/mL)
	S S S S S S S S S S S S S S S S S S S	
	40.02 40.02 40.02 40.02 40.02	
	T T T T T	
	4000 4000 4000 4000	
	Z Z ≺ Z < ⊂ €	
	60.00 60.00 60.00 60.00 60.00	

(1) = larger arrange

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. 
\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

\* All standard containers are meticulously cleaned prior to use.
\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.
\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST
\* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 58126

2 of 2

Certified Reference Material CRM

M6025

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CERTIFIED WEIGHT REPORT:

Part Number:

57182

110923 Lead (Pb)

800-368-1131

Absolute Standards, Inc.

R: 8/5/24

Lot#

Solvent: 24002546 Nitric Acid

2%

40.0

1 Nitric Acid

Nominal Concentration (µg/mL):

NIST Test Number:

**6UTB** 10000 Recommended Storage:

**Expiration Date:** 

110926

Ambient (20 °C)

Description: Lot Number:

Weight shown below was diluted to (mL):

2000.02

0.058 Flask Uncertainty

5E-05 Balance Uncertainty

Reviewed By:

Lead(II) nitrate (Pb)

IN029 PBD122016A1

10000

99.999

0.10

62.5

32.0006

32,0040

10001.1

20.0

10099-74-8

0.05 mg/m3

intryns-rat 93 mg/kg

3128

RW#

Number Cot

Conc. (µg/mL)

Nominal

Purity 38

Uncertainty Assay

Purity (%)

\$

Weight (g) Target

Weight (g) Conc. (µg/mL)

+/- (µg/mL)

CAS#

# OSHA PEL (TWA) LD50

TSIN SRM

SDS information

OSHA PEL (TWA)

Actual

Actual

Uncertainty Expanded

Pedro L. Rentas 110923

Formulated By: Lawence Barry 110923

German

1107

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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Au	<b>8</b>	ූ	ව	멸	Ē	Ŋ	Name of the		
20.02	A 68	<u> </u>	<b>40,02</b>	40.02	40.02	40.02			
3	<u> </u>	' 쟈	두	5	Н	胼	i		
<b>-</b>	40,02	0,2	<b>60.02</b>	40.02	<b>∆</b> 0,02	40.02		Trace Me	
Zď	Mo	Ж	M	Mg	Ę	E		Metals	
<0.02	0.02	<b>6</b> 2	40.02	40.01	<0.02	<0.02		<b>Verifica</b>	
×	₽	70	B	õ	\$	Z:		tion	
<0.2	40,02	<0.02	40.02	40.02	40.02	<0.02		by ICP-	
Sc	Sm	Ru	Rb	R	Re	꾸		Š	
<0.02	40.02	40,02	40.02	40.02	<b>∆</b> 0.02	<0.02		(Jm/pu	
Ta	S	Ş	N <sub>2</sub>	Agr	S:	æ	THE STATE OF		l
40,02	40.02	△0.02	40.2	<0.02	∆0.02	40.2			
Ħ	S	Tm	Ħ	Ħ	귾	급	i		
40.02	<0.02	<0.02	<0.02	40.02	40.02	<0.02			
72	Zn	~	<b>¥</b>	<	c	W			
40.02	0.02	0.02	40.02	40.02	40.02	<0.02			

Physical Characterization:

(T)= Target analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Son F Mills

Certified by:

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \*Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in
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- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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  \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

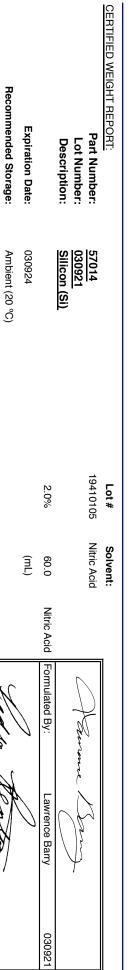
  \* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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## Certified Reference Material CRM



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Compound

Number Part

Number Сţ

Vol. (mL) Pipette (mL) Conc. (µg/mL)

Conc. (µg/mL)

Conc. (µg/mL)

Final

Uncertainty Expanded

(Solvent Safety Info. On Attached pg.) OSHA PEL (TWA)

> NIST SRM

**SDS Information** 

Reviewed By:

Pedro L. Rentas

030921

Dilution Factor

Initial

Uncertainty

Nominal

Nominal Concentration (µg/mL):

1000

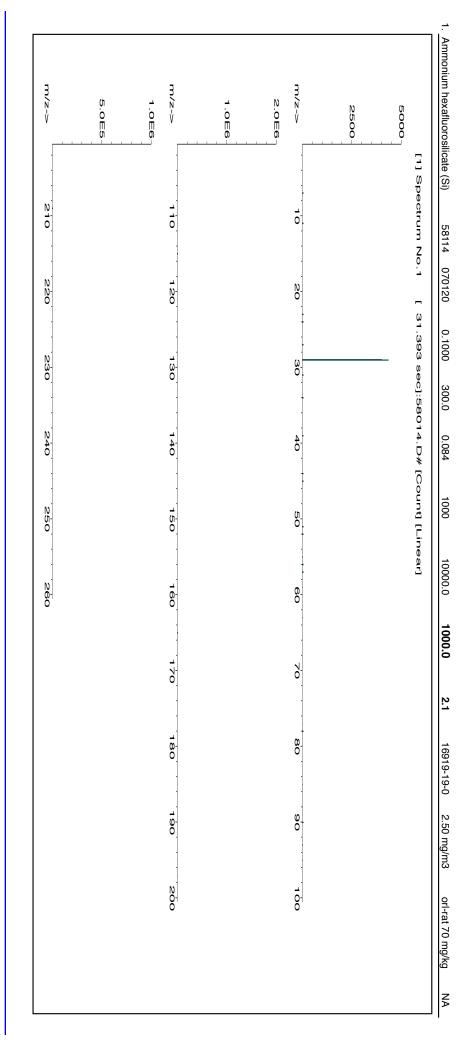
**NIST Test Number:** 

Volume shown below was diluted to (mL):

3000.41

0.058 5E-05

Flask Uncertainty Balance Uncertainty



Part # 57014

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1110

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Tace Metals Verification by ICP-MS (µg/mL)           40.02         Ni         <0.02
Verification by ICP-MS (µg/mL)           <0.02
Cation by ICP-MS (µg/mL)   Ni
A by ICP-MS (μg/mL)    COD2   Pr   COD2   Se   COD2   Tb     COD2   Re   COD2   Si   T   Te     COD2   Rh   COD2   Ag   COD2   Tl
Pr < <0.02 Se < <0.2 Tb Re < <0.02 Si T Te Rh < <0.02 Ag < <0.02 Tl
40.02 Se <0.2 Tb
Se <0.2 Tb Si T Te Ar
40.2 Tb
Ть Те
-0.02 W -0.02 U -0.02 V
< □ ₹

(I)= larget analyte

### **Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

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\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

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\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.

## Certified Reference Material CRM



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number



Nominal Concentration (µg/mL): Recommended Storage: NIST Test Number: **Expiration Date: Lot Number:** Description: 070724 6UTB 57022 070721 1000 Ambient (20 °C) Titanium (Ti) 2.0% (mL) 40.0 Nitric Acid

Volume shown below was diluted to (mL):

2000.02

Part

Lot

Dilution

Initial

Uncertainty

Nominal

Initial

Final

Uncertainty

(Solvent Safety Info. On Attached pg.)

SDS Information

Expanded

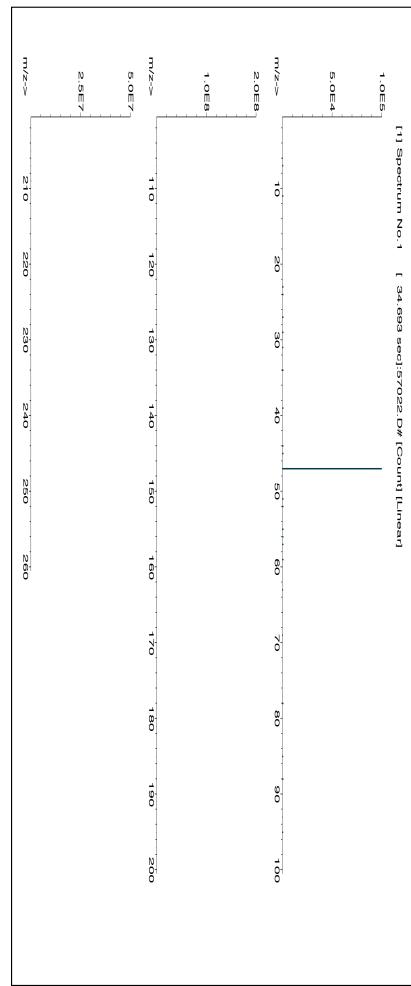
0.058 5E-05 Flask Uncertainty Balance Uncertainty Reviewed By: Pedro L. Rentas ento 070721

Formulated By:

Lawrence Barry

070721

Compound	Number	Number Number	Factor	Vol. (mL)	Pipette	Factor Vol. (mL) Pipette Conc. (µg/mL) Conc. (µg/mL) Conc. (µg/mL)	Conc. (µg/mL)	Conc. (µg/mL)	+/- (μg/mL)	CAS#	OSHA PEL (TWA)	LD50	SRM
Ammonium hexafluorotitanate (Ti)	58122	58122 070120 0.1000 200.0 0.084	0.1000	200.0	0.084	1000	10000.1	1000.0	2.2	16962-40-6	2.5 (F) mg/m3	NA	3162a



Part # 57022

# AS.COIII

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

							Trace M	<u>letals</u>	<b>Verifica</b>	tion l	oy ICP-N	IS (µo	₃/mL)						
A	<0.02	Сд	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	N:	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	먁	<0.02	Но	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si:	<0.02	Te	<0.02	U	< 0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	T1	<0.02	<	< 0.02
Ва	<0.02	Cs	<0.02	Gd	<0.02	ŀ	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Υъ	< 0.02
Ве	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	40.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Υ	< 0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Мо	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
В	<0.02	Cu	< 0.02	Au	<0.02	Рь	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	Η	Zr	<0.02
									Ì										

(T)= Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

  \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in
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## Certified Reference Material CRM

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

113

1

CERTIFIED WEIGHT REPORT: Ammonium molybdate (Mo) Compound Nominal Concentration (µg/mL): m/z-> M/z-> Recommended Storage: m/z-> Volume shown below was diluted to (mL): 2.0E6 1.0E6 1.0E5 2.0E5 2000 1000 **NIST Test Number: Expiration Date:** Part Number: Lot Number: Description: [1] Spectrum No.1 110 210 0 58142 Number Part **BTU9** 1000 57042 Ambient (20 °C) 051722 051725 Molybdenum (Mo) 022222 Fot 120 220 20 [ 8.594 sec]:57042.D# [Count] [Linear] 3000.41 0.1000 Factor Dilution 130 230 30 5E-05 Vol. (mL) 300.0 0.058 Initial M.5192 Flask Uncertainty Balance Uncertainty Pipette (mL) Conc. (µg/mL) Uncertainty 0.084 240 140 40 MKBQ8597V Ammonium hydroxide Nominal Lot # 0.5% 1000 150 250 50 Conc. (µg/mL) 10001.0 Initial (III) 15.0 160 260 60 Conc. (µg/mL) Ammonium hydroxide 1000.0 Final 170 70 Formulated By: Reviewed By: Uncertainty +/- (µg/mL) Expanded 2.1 180 80 13106-76-8 (Solvent Safety Info. On Attached pg.) Lawrence Barry OSHA PEL (TWA) Pedro L. Rentas 5 mg(Mo)/m3 190 90 SDS Information 200 100 orl-rat 333 mg/kg 051722 051722

3134

SRM TSIN

111

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

	I		dipositi		KAF.	-	-				7	能	_	
		B	Id	Ď.	Be	Ва	1 ;	As	Sb	: ;	A			
	MANAGEMENT OF THE PARTY OF THE	40.02	20.02	3	0.01	40.02	É	4	0.02	10.04	AM			
		5	S	2 د	?	ಜ	ξ	5	ದ್ದ	2	2			
	ALL DESCRIPTION OF THE PERSON	0.02	40.02	20.0	3	40.02	20.02	3	A0.2	20.02	000			
	l	Au	င္ပ	2	3	ව	EU.	7	Ę,	Ų				
		40.00	<0.02	20.02	200	<0.02	20.02	2	<b>40.02</b>	20.02				
		字	7	re	1 1	<u>-</u>	h		<u>.</u>	H				
	70.02	3	<b>∆</b> .02	202		A) (7)	40.02	20.02	3	40.02			Trace N	
	170	2	Mo	ВН		\$	Mg	Ę	- T ::	<u></u>			etals	-
( <del>)</del> =	20.02	3	-	40.2	10.04	2	<0.01	70.02	3	0.02		0	Verifica	
(T)= Target analyte	,,	۲ :	<b>P</b>	P	2	2	ဝွ	INO	F	Z		100	ă.	
nalyte	2.02	20.01	3	40.02	20.02	3	40.02	20.02	3	40.02		101	P-42 A4	
	SC	, E	Si .	R	NO	2	<b>R</b>	Xe	· :	P		5	アード	
	<0.02	10.02	3	<0.02	20.02	0 1	40.02	20.02	20.02	CO 02		9/11115/	1/m/ )	
	Ta	0	2	Sr	Na		Ao	S	: 8	ŝ				
	<0.02	20.02	3	40.02	40.2	20.01	4000	40.02	10.6	40				
	Ti	No.	,	F -	Т	:	3	Te	10	7				
	<0.02	20.02		40.02	40.02	10.02	2	<0.02	20.02	2000				
	72	1	1,	<	4,4	~	<	c	*	W,				
	<0.02	<0.02	20.02	A) (7)	<0.02	20.02	3	40.02	20.02					

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

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Part # 57042

Lot # 051722

Lot # 071122

Absolute Standards, Inc. 800-368-1131

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CERTIFIED WEIGHT REPORT:

Part Number:

58119 071122

## Certified Reference Material CRM

f O 12022

Lot #

Solvent: 20510011 Nitric Acid

2% 40.0 Nitric Acid

(<u>m</u>L

Nominal Concentration (µg/mL): Recommended Storage: 10000 Ambient (20 °C)

**Expiration Date:** 

071125

Description: Lot Number:

Potassium (K)

NIST Test Number: 6UTB

Potassium nitrate (K)

IN034 KD022021A1

10000

99.999

37.6

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty 5E-05 Balance Uncertainty

Conc. (µg/mL)

Purity (%)

8

Weight (g)

Weight (g) Conc. (µg/mL)

+/- (μg/mL)

CAS#

RM# Number Ĕ Nominal Purity Uncertainty Assay 8 Target Actual Uncertainty Expanded SDS Information
(Solvent Safety Info. On Attached pg.)
LD50 SRM

Reviewed By: Formulated By: Herronce Pedro L. Rentas Lawrence Barry 071122

071122

m/z-> m/z-> m/z-> 1.0⊞4 1.0 € 5 2.0E5 5000 1.0E6 2.0 € 6 [1] Spectrum No.1 210 110 10 220 120 20 [ 35.763 sec]:58119.D# [Count] [Linear] 230 130 30 240 0.10 140 40 250 150 50 53.1925 53.1934 260 60 10000.2 170 70 20.0 180 80 7757-79-1 190 90 5 mg/m3 200 100 orl-rat 3015 mg/kg 3141a

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.csm

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

							Trace M	<b>detals</b>	) Verifica	ation	by ICP-	Š	(µg/mL)						
AI	<0.02	8	<0.02	Dγ	<0.02	Ħ	<0.02		<0.02	Z.	2000	Þ	20.02	S	3	7	2003	W	A
Sb —	<0.02	್ಟ	<0.2	Ţ,	<b>△</b> 0.03	픙	3 6	- I	A003	ş :	3 6	D. :	2 6	e 5	5 6	7 5	3 6	: *	60.02
-		,	, ¦ i					ţ	10.02	140	10.04	100	10.02	01	20.02	16	<0.02	0	<0.02
AS	<0.2	Ç	<0.02	Еп	<0.02	Б	<b>△</b> 0.02	Mg	<0.01	ွှ	<0.02	R.	<0.02	Ag	<b>△</b> 0.02	=	<0.02	<	A) (02
<del>2</del>	8	2	3	3	3	<del>-</del>	3	7.	2	2	50.00	71.	3			1 :		: .	6.01
	0.01	(	20.02	2	10.02	=	20.02	TIAT	<0.02	72	<0.02	80	<0.02	Na	2.0>	I h	<0.02	d Y	<0.02
Ве	<0.01	Ü	<0.02	Ga	<0.02	퓽	0.2	Hg	<0.2	P	<0.02	₽	0.02	S.	<b>△</b> 0.02	7	A.03	<b>∀</b>	8
₩.	<0.02	င	<0.02	G.	A).02	<u>-</u>	200	<u></u>	3	₹	2	î	7000	9	5	3	3	7 .	5 6 6
=	5	2			,	!			10101		10.02	OMI	10.06	c	10.02	III	20.02	117	20.02
В	<0.02	Cu	<0.02	Au	<0.02	РЪ	<0.02	M	<0.02	×	H	Sc	<0.02	Ta	<0.02	Ξ.	<0.02	72	<0.02
									<del>,</del>	(T) Tourst seekt				İ					

Physical Characterization:

(I)= larget analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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  Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

2 of 2

Part # 58119

Lot # 071122

1 of 2

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M528 Certified Reference Material CRM

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

m/z->	1.0E6	m/z->	N. 5 O E 6	m/z->	Ŋ. E	5.0E5	1. Aluminum nitrate nonahydrate (AI)	Compound	Weight shown	Nominal Concentration (µg/mL):  NIST Test Number:	Expiration Date: Recommended Storage:	CERTIFIED WEIGHT REPORT: Part i Lot I Des
210		110		10		[1] Spectrum No.1		RM#	s dilute			Number: Number: cription:
220		120		20		_	IN022 ALD012021A1 10000	Lot Nominal Number Conc. (µg/mL)	to (mL): 2000.02	10000 6UTB	070625 Ambient (20 °C)	58113 070622 Aluminum (Al)
230		130		30		15.014 sec]:58113.D# [Count] [Linear]	00 99.999 0.10	nal Purity Uncertainty Assay g/mL) (%) Purity (%) (%)	.02 0.058 Flask Uncertainty	AE-OA Balana		
240 250		140 150		40 50		3.D# [Count]	7.10		Incertainty			Solvent: 2037
260		160		60		[Linear]		Target Actual Weight (g) Weight (g)			(mL)	Lot # 20370011 Nitric Acid
		170		70				Exp Actual Und Conc. (µg/mL) +/-	He	7	<u>-</u>	
		180		80			20.0 7784-27-2	Expanded Uncertainty +/- (µg/mL) CAS#	Heviewed By:	tach	Offilialian by.	Have
		190		90			2 mg/m3	SDS Information (Solvent Safety Info. On Attached pg.)  SHA PEL (TWA) LD5(	Pedro L. Hentas	pento	Lawrence barry	
		NO O		100			orl-rat	<b>nation</b> in Attached pg.) A) LD50	070622	/	0/0622	Ψ
							/kg 3101a	NIST	322		22	

www.absolutestandards.com

800-368-1131

Absolute Standards, Inc.

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

						Trace Me	tals	Verificat	tion	ý	S S	µg/mL)						
					ı				ı	ŀ	II,	· ·	ı		ш			
Т	5	<0.02	Dy	<0.02	H	<0.02	Li	<0.02	Z.	<b>&lt;</b> 0.02	7	<0.02	Se	A).2			1	40.02
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Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \*Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in
- \* All standard containers are meticulously cleaned prior to use.

the preparation of all standards.

- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- \* All Standards should be stored with caps tight and under appropriate laboratory conditions.
  \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST
  \* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program" R: 1120 | 2 |

Instructions for QATS Reference Material: Inorganic ICV Solutions

### QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** Read instructions carefully before opening bottle(s) and proceeding with

the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions HAZARDOUS MATERIAL

> Safety Data Sheets Available Upon Request

M5291 N15292 IN15293 NN5294 NN5295

### (A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

### (C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in  $\mu g/L$  (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014

<u>For ICP-AES analysis</u>, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Page 1 of 2









### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

### Instructions for QATS Reference Material: Inorganic ICV Solutions

ICV1-1014

For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K<sub>3</sub>Fe(CN)<sub>6</sub>, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

### (D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

	ICV1-1014	
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
TI	1000	210
V	500	100
Zn	1000	200

	ICV5-0415		ICV6-0400
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN-	99

# Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com



CERTIFIED WEIGHT BEDOOT.													
=1.						Lot #							
Part Number: Lot Number: Description:	58126 020422 Iron (Fe)	M5298	860	Solv	/ent:	<b>Solvent:</b> 20370011	Nitric Acid	_	Giora	rive	Giovanni Especto		
	020425 Ambient (20 °C)	(2)			2.0%	150.0 (mL)	Nitric Acid		Formulated By:		Giovanni Esposito	020422	
Nominal Concentration (µg/mL): NIST Test Nimber:	10000		ļ						Kar	of to	Hento		
ıs dilul	ted to (mL):	3000.41	5E-05 B	Balance Uncertainty Flask Uncertainty	ainty ity				Reviewed By:		Pedro L. Rentas	020422	
RM#	Lot Number	Lot Nominal Purity RM# Number Conc. (µg/mL) (%)	11	Uncertainty Assay Purity (%) (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Expanded Actual Actual Uncertainty Weight (g) Conc. (µg/mL) +/- (µg/mL)		(Solve	SDS Information (Solvent Safety Info. On Attached pg.)  # OSHA PEL (TWA) LD5(	od pg.)	NIST

1. Iron(III) nitrate nonahydrate (Fe)	- 11	IN346 221035107	10000	99.999	0.10	100.0	30.0044	30.0090	30.0090 10001.5	20.0	7782-61-8	5 mg/m3	orl-rat 7500mg/kg 3126a
	pectrum No.1	[1] Spectrum No.1 [ 30.763 sec]:58126.D# [Count] [Linear]	[Count] [Linear]										
2.054													
1.064													
1.0E8	10	20	30		04		20	0.9	20		-08	06	001
m/z->	011	120	130		140		150	160	170		180	190	200
S.0E/ m/2->	210	220	230	0	240		250	260					

Lot # 020422



Absolute Standards, Inc.

www.absolutestandards.com

800-368-1131



# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

							Trace M	etals	Verificat	9 HO	by ICP-MS		( Jal					1		-
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3	1000	5	C.U.>	5	<0.02	P.	<0.2	Hg	<0.2	۵	<0.00	Δ.	50 07	5	ç	E			20:05	
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						1					70.7	300	<0.02	E	Z0'05	Ξ	000	7.	200	

(T)= Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



Certified by:

1122

<sup>\*</sup> Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. the preparation of all standards.

All standard containers are meticulously cleaned prior to use.

<sup>\*</sup> Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

All Standards should be stored with caps tight and under appropriate laboratory conditions.

Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



### Certificate of Analysis

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

 Catalog Number:
 6020CAL-1

 Lot Number:
 S2-MEB711244

 Matrix:
 5% (v/v) HNO3

tr. HF

Value / Analyte(s): 20 µg/mL ea:

Silver, Aluminum, Arsenic, Barium, Beryllium, Calcium, Cadmium, Cobalt, Chromium, Copper, Potassium, Iron, Magnesium, Manganese, Sodium, Nickel, Lead, Antimony, Selenium. Thallium, Zinc Vanadium,

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE Aluminum, Al	CERTIFIED VALUE 20.01 ± 0.08 µg/mL	ANALYTE Antimony, Sb	CERTIFIED VALUE 20.01 ± 0.12 μg/mL
Arsenic, As	20.01 ± 0.18 μg/mL	Barium, Ba	20.01 ± 0.11 μg/mL
Beryllium, Be	20.01 ± 0.14 μg/mL	Cadmium, Cd	20.01 ± 0.11 μg/mL
Calcium, Ca	20.01 ± 0.10 μg/mL	Chromium, Cr	20.01 ± 0.16 μg/mL
Cobalt, Co	20.01 ± 0.11 μg/mL	Copper, Cu	20.01 ± 0.10 μg/mL
Iron, Fe	20.01 ± 0.09 μg/mL	Lead, Pb	20.01 ± 0.11 μg/mL
Magnesium, Mg	19.99 ± 0.10 μg/mL	Manganese, Mn	20.01 ± 0.10 μg/mL
Nickel, Ni	20.01 ± 0.11 μg/mL	Potassium, K	20.01 ± 0.10 μg/mL
Selenium, Se	20.02 ± 0.14 μg/mL	Silver, Ag	20.02 ± 0.09 μg/mL
Sodium, Na	20.01 ± 0.10 μg/mL	Thallium, Tl	20.01 ± 0.13 μg/mL
Vanadium, V	20.01 ± 0.11 μg/mL	Zinc, Zn	20.01 ± 0.11 μg/mL

Page 1 of 4

**Density:** 1.026 g/mL (measured at 20  $\pm$  4 °C)

### **Assay Information:**

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ва	ICP Assay	3104a	140909
Ва	Gravimetric		See Sec. 4.2
Ве	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Fe	Calculated		See Sec. 4.2
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
TI	ICP Assay	3158	151215
TI	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
<b>.</b>			

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods Characterization of CRM/RM by One Method Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are Certified Value, $X_{CRM/RM}$ , where one method of characterization used is the weighted mean of the results: is used is the mean of individual results: $X_{CRM/RM} = \Sigma(w_i) (X_i)$ $X_{CRM/RM} = (X_a) (u_{char} a)$ X<sub>i</sub> = mean of Assay Method i with standard uncertainty u<sub>char i</sub> Xa = mean of Assay Method A with $\mathbf{w_i}$ = the weighting factors for each method calculated using the inverse square of u<sub>char a</sub> = the standard uncertainty of characterization Method A $\mathbf{w_i} = (1/u_{\text{char i}})^2 / (\Sigma (1/(u_{\text{char i}})^2)$ CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{\frac{1}{2}}$ CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k (u_{char}^2 a + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$ k = coverage factor = 2 k = coverage factor = 2 $\mathbf{u_{char}} = [\Sigma((\mathbf{w_i})^2 (\mathbf{u_{char}}_i)^2)]^{1/2}$ where $\mathbf{u_{char}}_i$ are the errors from each characterization method u<sub>char a</sub> = the errors from characterization ubb = bottle to bottle homogeneity standard uncertainty $\mathbf{u_{bb}}$ = bottle to bottle homogeneity standard uncertainty ults = long term stability standard uncertainty (storage) u<sub>lts</sub> = long term stability standard uncertainty (storage) uts = transport stability standard uncertainty u<sub>ts</sub> = transport stability standard uncertainty

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (μg/mL)

### INTENDED USE

6.0

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

**HF Note:** This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganic ventures.com; info@inorganic ventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

October 20, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- October 20, 2026
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

<ul> <li>Sealed TCT Bag Open Date:</li> </ul>	

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

Michael 2 Booth

Paul R Lines

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

### **Certificate Approved By:**

Michael Booth Director, Quality Control

### **Certifying Officer:**

Paul Gaines

Chairman / Senior Technical Director

Lot # 011623

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: **Lot Number:** Description:

> 011623 58113

> > Solvent:

20510011 Nitric Acid

2%

40.0 (III)

Nitric Acid

Aluminum (AI)

## Certified Reference Material CRM

7 20 23

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

Lot #

Giovannie Jacob P

Formulated By: Giovanni Esposito 011623 011623

Reviewed By: Pedro L. Rentas

Number Conc. (µg/mL) 38 Purity (%) 8 Weight (g) Weight (g) Conc. (µg/mL) +/- (µg/mL) CAS# OSHA PEL (TWA) LD50 SRM

Compound

Nominal Concentration (µg/mL):

**NIST Test Number:** 

6UTB 10000 Recommended Storage:

Ambient (20 °C) 011626

**Expiration Date:** 

Weight shown below was diluted to (mL):

2000.02

0.058 Flask Uncertainty

5E-05 Balance Uncertainty

ξ

Nominal

Purity Uncertainty Assay

Target

Actual

Actual

Uncertainty Expanded

(Solvent Safety Info. On Attached pg.)

NIST

SDS Information

1. Aluminum nitrate nonahydrate (Al) IN022 ALM112021A1 m/z-> m/z-> m/z-> 1.0 € 6 2.0 € 6 2.5E6 5.0E6 2.5E5 5.0E5 [1] Spectrum No.1 210 110 0 220 120 20 [ 15.014 sec]:58113.D# [Count] [Linear] 10000 230 130 30 99.999 0.10 240 140 40 7.30 273.9779 250 150 50 274.0078 260 160 60 10001.1 170 0 180 80 7784-27-2 190 90 2 mg/m3 200 100 ori-rat 3671 mg/kg 3101a





ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com Liovannie

Nitric Acid

Solvent: 21110221

Nitric Acid

60.0

%

Calcium (Ca)

031523 58120

Part Number: Lot Number: Description:

CERTIFIED WEIGHT REPORT:

031523

Giovanni Esposito Formulated By:

Expiration Date:	031526			(m)
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (ug/mL):	10000			
NIST Test Number:	6UTB	5E-05 B	E-05 Balance Uncertainty	
Weight shown below was diluted to (mL):	iluted to (mL): 3000.41	0.058 F	0.058 Flask Uncertainty	

				July 1	lessa		
5E-05 Balance Uncertainty				Reviewed By:	Pedro L. Rentas	031523	
0.058 Flask Uncertainty							
Danieles I face and a					SDS Information		
runty oncertainty Assay larget	larger	Actual	Actual	Uncertainty (S	(Solvent Safety Info. On Attached pg.)	SIN ( D	ļ

Weight (g)         Weight (g)         Conc. (µg/mL)         +/- (µg/mL)         CAS#         OSHA PEL (TWA)         LD50           75.1990         75.2093         10001.4         20.0         471-34-1         5 mg/m3         orl-rat >2000mg/kg 3			ğ	Nominal Purity Uncertainty Assay	Purity	Uncertainty	Assay	Target	Actual	Actual	Uncertainty	(So	Ivent Safety Info. On Al	tached og )	NIST
(Ca) IN014 cAD072022A1 10000 99,999 0.10 38,9 75,1990 75,2093 <b>10001.4 20.0</b> 471-34-1 5 mg/m3	Compound	RM#	Number	Conc. (µg/ml	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (ug/mL)	+/- (ug/mL)	CAS#	OSHA PEL (TWA)	LD50	SRM
13.2030 13.2030 13.2030 13.2030 471.34-1 5 mg/m3	1. Calcium carbonate (Ca)	INO14 CA	D07202241	10001	00000	010	000	75 1000	75 2002	7 70007					
					00000	$\ $	00.0	73,1330	13,2033	1.1001	20.0	471-34-1	5 mg/m3	orl-rat >2000mg/	a 3109a

1. Calcium carbonate (Ca)	4 INOTA	INO14 CAD072022A1	10000	666.66	0.10	38.9	75,1990	75.2093	99.999 0.10 38.9 75.1990 75.2093 10001.4 20.0 473.24.1	20.0	471.34.1	e molm3	
13	[1] Spectrum No.1	l	12.514	8ec]:58	120.D#	000	[ 12.514 sec]:68120.D# [Count) [Linear]	B.7.				O DE	or-rat >coong/kg
2.0E4				i		_							
1.0E4													
m/z->	0 T	Q		Ö	-6		0	09	22		80	Ō	0

Part # 58120

200

190

180

170

180

150

040

130

120

110

**∀-½/E** 

1.0E5

5.0日4

2.5E4

260

250

240

220

210

W/z->





ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

												٤	1						
							Hace M	etals	Vermica		9 17.	ξ	(AB/ML)						
	THE RESIDENCE OF THE PERSON NAMED IN		THE RESERVE THE PERSON NAMED IN		CONTRACTOR STATE	District of the last		Del Portug	日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日		のかいのかんとうこと	1	THE REAL PROPERTY.	Name of Street	STATE OF STREET	THE PERSON NAMED IN		1455.60	
7	<0.02	3	<0.02	Š	<0.02	H	Ĺ	ī	<0.02	Z	<0.02	占	<0.02	Se	<0.2	Ð	<0.02	≱	<0.02
S	<0.02	రే	F	占	₹0:05	윒	_	3	<b>40.02</b>	Ź	<0.02	2	<0.02	Si	<0.02	Je	<0.02	ב	₹0.02
As	<0.2	පී	<b>40.02</b>	超	<0.02	되	_	Mg	40.01	ő	<0.02	쥪	<0.02	Ag	<0.02	F	<0.02	>	<0.02
Ba	<0.02	ඊ	<0.02	3	<0.02	ㅂ	_	Ā	<b>40.02</b>	Z	<0.02	8	<0.02	ğ	<0.2	Ę	<0.02	χp	<0.02
Be	<0.01	Ö	<0.02	ජි	₹0.02	먎	40.2	Hg	<0.2	Δ,	<0.02	Æ	<0.02	ઢ	<0.02	E,	<0.02	<del>-</del>	₹0.02
ã	<0.02	රි	<0.02	පි	<b>40.02</b>	25	_	Wo	<0.02	盂	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	7	₹0.02
В	<0.02	₫	<0.02	Ϋ́	<0.02	£	_	PX	<0.02	×	40.2	S	<0.02	Ta	<0.02	Ξ	<0.02	Z	40.02

(T) = Target analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

the preparation of all standards.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above). All standard containers are meticulously cleaned prior to use.

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

Threertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994). \* All Standards should be stored with caps tight and under appropriate laboratory conditions.





ccredited Number ards.com		
ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com		031523
ANAB I AR-153 https://Ab	Expecte	Giovanni Esposito
123 (M)	Hierannie	Formulated By:

	Liorannie Especto	Formulated By: Giovanni Esposito	Reviewed By: Pedro L. Rentas
	Solvent: 21110221 Nitric Acid	Nitric Acid	
Lot #	21110221	(mL)	
	Solvent:	%2	5E-05 Balance Uncertainty 0.058 Flask Uncertainty
	58120 031523 Calclum (Ca)	031526 Ambient (20 °C) 10000	6UTB Iluted to (mL): 3000.41
CERTIFIED WEIGHT REPORT:	Part Number: Lot Number: Description:	Expiration Date: Recommended Storage: Nominal Concentration (µg/mL):	Weight shown below was diluted to (mL):

031523

[1] Speci	SZ AT	Conc (im/mi)	7077			anger.	TO COLOR	100 TO	Uncertainty				
S E Special	EA.	Cortes (1997 line) (20)	- 11	Purity (%)	W (96)	Weight (g)	Weight (g) C	Weight (g) Conc. (μg/mL) +/- (μg/mL)	+/- (ug/mL	3	OSHA PEL (TWA)	LDSO	SRM
4 4		10000 99.999	66.66	0.10	39.9	75,1990	75.2093	10001.4	20.0	471-34-1	5 mg/m3	orl-rat >2000mg/kg 3109a	3109
4		12.514 sec]:58120.D# [Count] [Linear]	sec]:66	3120.D#	Cour	nt] [Line	ari						
m/z-> 10 5.0E4	Q	OB	0	<u>4</u>		0	00	70		80	08	000	. = =
2.554													
m/z-> 110	120	130	Q	041		150	160	170	0	180	190	200 200	
5.0E4													
m/2-> ≥10	220	230	0	240		250	280						





ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

							Trace Me	tals	Verificat	tion	by ICP-	SY.	(Jm/g/)		T				
SATURAL PROPERTY.	THE REAL PROPERTY.	280 milys	OTHER PROPERTY.	SAMPLE S	STANDARD ST		THE STREET STREET, STREET	STATE OF THE PARTY	THE PARTY OF THE	SELECT OF SELECT		1	THE STATE OF THE PARTY.	STATE OF	Total Control of the	STATE OF THE PARTY		SECTION.	
V	<0.02	පි	<0.02	Ą	40.02	H	Ľ	Li I	<0.02	Z	<0.02	占	<0.02	Š	<0.2	e	<0.02	≥	<0.02
Sp	<0.02	రే	[ <del></del>	占	₹0:05	윒	<b>₹0.02</b>	3	<0.02	ź	<0.02	2	<0.02	ಜ	<0.02	j.	<0.02	Þ	<0.02
As	<b>40.2</b>	රී	<b>40.02</b>	超	<0.02	되	_	Mg	40.01	ő	40.02	招	<0.02	Ag	<0.02	F	<0.02	>	<0.02
Ba	<b>40.02</b>	೮	<0.02	3	<0.02	片	_	Ψ	<0.02	Z	<0.02	8	<0.02	ğ	<0.2	E	<0.02	χ.	<0.02
Be	<0.01	ţ	<0.02	පී	40.02	Fe		Hg	<0.2	Д	<0.02	Ru	<0.02	స	<0.02	Ę	<b>40.02</b>	×	₹0.05
ñ	<0.02	රි	<0.02	ප	₹0.02	2	_	Wo	<0.02	武	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	2	<0.02
В	<0.02	₫	<0.02	Αū	<0.02	£	_	PR	<0.02	×	40.2	Š	<0.02	Ta	<0.02	Ξ	<0.02	77	<0.02

(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

the preparation of all standards.
All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.

+Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST —Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc. 800-368-1131

ANAB ISO 17034 Accredited AR-1539 Certificate Number https:///Absolutestandards.com 061522 061522 Miorannie Saposate Giovanni Esposito Pedro L. Rentas Formulated By: Reviewed By: Certified Reference Material CRM Nitric Acid Nitric Acid Solvent: 20510011 Lot # 40.0 (JEL) % 5E-05 Balance Uncertainty 0.058 Flask Uncertainty 2000.02 Ambient (20 °C) Weight shown below was diluted to (mL): Lead (Pb) 57182 061522 061525 10000 **6UTB** Expiration Date: Recommended Storage: Nominal Concentration (µg/mL): Part Number: Lot Number: Description: NIST Test Number: www.absolutestandards.com CERTIFIED WEIGHT REPORT:

			ž	Nominal	לבושה השונה	Uncertainty Assay	Assay	Target	Actual	Actual	Uncertainty	(Salvent Safety Info. On Artached in	
Weight fol Weight (a) Con (any/mi)	Inpound	RM#	Number	Conc. (ug/mt)	(%)	Purity (%)	(%)	Weight (a)	Weight (a)	Conc (my/m)	. / free food )	(BA POLICE CONTRACT TO ACAD	. !

SRM	3100	O Pue
LD50	intermeted to make 3100	26 18 10 18 18 18 18 18 18 18 18 18 18 18 18 18
CASH CASH CONTROL (1) CASH CASH CONTROL (1)	0.05 ma/m3	b
CAS#	20.0 10099-74-8	
+/- (Jug/mL)	20.0	
COINC. (Mg/ IIIL.)	10001.1	
(A) THEIR (A)	32.0041	
(B) august	32.0006 32.0041 10001.1	
	0.10 62.5	
	Ĭ	
	98.998	
	10000	
	IN029 PBD122016A1	F11 Consideration Nicolary
	Lead(II) nifrate (Pb)	

			32.0041 10001.1 20.0 10099-74-8 0.05 mg/m3 introne-rat 83 mg/m3 introne-rat 83 mg/m3	32.W41	L.LOOOL	20.0	10099-74-8	0.05 mg/m3	intryns-rat 93 mg/kg	9
	[1] Spectrum No.1	_	[ 17.284 sec]:58182.D# [Count] [Linear]							Ш
1.0E7	· ·			-						
5.0EB										
	and the second s									
m/z->	0.	000	30 40 50 60	0	20,		80	80	100	

2.0E6

1.0E6

W/Z->	1.0E6	5.0ES	^ **
110	To a magical delicated del	er e	C C
120			220
130			230
140			0 0
150			260

200

190

180

170

160

Part # 57182

260



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

						•	Trace Me	etals	Verifica	tion	by ICP	SY	( lm/p//)		,				
	AN PROPERTY OF	Ì	WSSHIR/ARE	STEWNSTON	Destil to The But to	-	SENTENCE MANAGEMENT	Married			,		2	-					
₹	<0.02	3	<0.02	δ	<0.02	H	<0.02	Ľ	<0.02	ž	<0.02	d	2002	3	202	4	200		200
S.	200	ع	5	d	500	17.	8		000			:	***************************************	3	10.4	0.7	70.05	\$	70.02
,		\$	70	3	70:0	2	70.00	3	70.02	2	<b>40.02</b>	2	<b>Q</b> .02	2	<b>40.02</b>	<u>e</u>	\$0.02	n	<0.02
As	97	ඊ	<0.05	ß	<0.02	ם	<b>40.02</b>	Mg	40.01	ő	<0.02	R.	200	ΔG	200	Ē	9	1	9
Ba	<b>CO 0&gt;</b>	č	200	3	8	,1	8	3	000			1	90'00	ig C	70.00	17	70:05	>	70705
		3	3000	3	70.02	<b>=</b>	70.02	MIN	Z0:0>	로	<0.02	<b>&amp;</b>	<b>40.02</b>	Na Na	97	E	₹0.05	۶	<b>₹0.02</b>
eg Eg	<0.01	ඊ	<b>₹0.02</b>	Š	<b>40.02</b>	æ	<b>40</b> 2	Ħ	<0.7	Д	<0.02	Ru	<b>40.02</b>	à	2002	Ę	8	>	8
Bi	<0.02	රි	<0.02	ජී	<0.02	Ę,	<0.02	Ž.	2000	ā	2	8	6	; 0		1 0	70.00	٠,	70.02
ď	200	Č	000	4	8	2	E				70'07		70'05	2	70.02	og	Q.02	5	<b>₹0.0</b> 2
	2000		70'05	AN A	Z0:02	2	1	ğ	<0.02	×	97	S	<b>40.02</b>	E B	₹0.02	Ħ	<0.02	75	Ø 02

Physical Characterization:

(T)= Target analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

<sup>\*</sup> The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

the preparation of all standards.

<sup>\*</sup> Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above). All standard containers are meticulously cleaned prior to use.

<sup>\*</sup> Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

<sup>\*</sup>All Standards should be stored with caps tight and under appropriate laboratory conditions.

<sup>\*</sup>Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Opheasurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

www.absolutestandards.com



# Certified Reference Material CRM

B

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Nitric Acid

21110221

Solvent:

Lot #

Lawrence Barry Formulated By:

022123

Pedro L. Rentas

022123

Nitric Acid 60.0 (mL) %

Ambient (20 °C)

10000

Nominal Concentration (µg/mL):

NIST Test Number:

**6UTB** 

022126

**Expiration Date:** Recommended Storage: Weight shown below was diluted to (mL):

Sodium (Na)

022123

Part Number: Lot Number: Description:

CERTIFIED WEIGHT REPORT:

Reviewed By:

5E-05 Balance Uncertainty 3000.41

0.06 Flask Uncertainty

SIEM SIEM LD50 SDS Information (Solvent Safety Info. On Attached pg.) OSHA PEL (TWA) CAS# Expanded Uncertainty +/- (mg/ml\_) Conc. (ug/mt.) Actual Weight (g) Actual Weight (g) Target Uncertainty Assay 8 Purity (%) Purity (%) Conc. (ug/mL) Nominal Number ğ RM# Compound

orl-rat 3430 mg/kg 3152a 5 mg/m3 7631-99-4 20.0 100001 111.5410 111.5406 26.9 0.10 88.88 10000 IN036 NAV01201511 1. Sodium nitrate (Na)

10 80 8.935 sec]:58111.D# [Count] [Linear] 50 9 30 50 [1] Spectrum No.1 0 2.5E5 5.0E6 V-2/E

100

06

80

200

190

180

170

160

150

140

130

5.0E6 2.5E6

120 110 M/z->

5.0E6 2.5E6

m/z->

260

250

240

230

220

210





AR-1539 Certificate Number https://Absolutestandards.com

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-IMS):

							Trace M	Metals	Verification b	즲	호	MS (£	Ja/mr)						
	STATE OF THE PARTY	100	NAME OF TAXABLE PARTY.	THE REAL PROPERTY.			STATISTICS.	STAND	MENCE NETWORK	CHEST	STATE OF THE REAL PROPERTY.		DOCUMENT OF STREET				TOTAL CONTRACTOR OF THE PARTY O		Ministeration
IA	40.02	ਲ	<0.02	Š	<0.02	Hf	<0.02	ŗ	<0.02	Z	<0.02	占	<0.02	B	<0.7	£	40.02	B	2000
ŝ	Ø.02	రే	407	占	<b>40.02</b>	유	<b>₹000</b>	己	<0.02	£	<0.02	2	<0.02	:Zi	Ø.02	ည	Q (Q)	=	4000
As	₩	ප	<0.02	超	₩	멸	<b>40.02</b>	Mg	40.01	රී	<0.02	2	<0.02	Ag	Ø102	F	200	>	200
Ba	<b>Q</b> .02	ථ	<0.02	3	<0.02	ᅩ	<0.02	묫	<0.02	Pd	<0.02	2	<0.00	ž	į į–	Ę	É	\$	100
æ	10.0x	ඊ	<0.02	පී	40.02	용	₩	H	<b>8</b>	Δ,	<b>40.02</b>	콥	40.02	δī	, Ø	Ę	200	<b>;</b> >	7 8
盗	<b>40.02</b>	රි	<0.02	පී	<b>40.02</b>	ٿ	<b>40,02</b>	Ş.	<0.02	Æ	<b>₹0.02</b>	Sm	<0.02	S	<b>Q</b>	5	8	2, 2	9 8
æ	<b>40.02</b>	ਰ	<0.02	Υn	<b>40.02</b>	2	<b>₹0.02</b>	2	₹005	M	<b>Q</b>	S	<0.02	Ē	<b>Q</b> 00	}  =	<b>Q</b> 00	3 2	2 6

(T) = Target analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

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\* All Standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 58111

Lot # 120822

Certified Reference Material CRM

800-368-1131 www.absolutestandards.com Absolute Standards, Inc.

CERTIFIED WEIGHT REPORT

Part Number:

Description: Lot Number:

58119 120822 Potassium (K)

Lot #

Solvent: 20510011 Nitric Acid

Lavanva

BERREL

2%

60.0 <u>a</u>

Nitric Acid

Formulated By: Giovanni Esposito

Reviewed By:

Pedro L. Rentas

3141a	orl-rat 3015 mg/kg 3141a	5 mg/m3	7757-79-1	20.0	79.7990 79.8075 10001.1 20.0 7757-79-1	79.8075	79.7990
SRM	ttached pg.)	Target Actual Actual Uncertainty (Solvent Safety Info. On Attached pg.) Weight (g) Weight (g) Conc. (ug/mL) +/- (ug/mL) CAS# OSHA PEL (TWA) LD50	(Solv	Uncertainty +/- (µg/mL)	Actual Conc. (µg/mL)	Actual Weight (g)	Target Weight (g)

1. Potassium nitrate (K)

IN034 KD022021A1

10000

99.999

0.10

37.6

Compound

**P** 

Conc. (µg/mL)

38

8

ទ្ធ

Nominal

Purity

Uncertainty Assay Purity (%)

Nominal Concentration (µg/mL):

NIST Test Number:

**6UTB** 10000 Ambient (20 °C) 120825

Recommended Storage:

Expiration Date:

Weight shown below was diluted to (mL):

3000.4

5E-05 Balance Uncertainty

0.06 Flask Uncertainty

m/z->	5000	m/z->	1.005	m/z->	1.000	2.000
					39 2000	
210		1		ō		
0		0		0		
220		<b></b>		N		
ö		20		N.		
Ņ		<u>.</u>		ta.		
200		30		<u> </u>		
N		4				
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N.						
N O		0- O		0		[
M.		٠		*		9
20 0		160		0		
		170		70		
		180		Ö		
		190		0		
				-		
		200		100		

120822

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

B Bi	
40.02 40.02 40.02 40.02 40.02	
5850005	
40.02 40.02 40.02 40.02 40.02	
F'은 명 전 표 보고	
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	Cd         40.02         Dy         40.02         Hf         40.02         Li         40.02         Pr         40.02         Pr         40.02         Tb         40.02         W           Ca         40.2         Br         40.02         Ho         40.02         Lu         40.02         Re         40.02         Si         40.02         Te         40.02         U           Ce         40.02         Bu         40.02         In         40.02         Mg         40.01         Os         40.02         Rh         40.02         Ag         40.02         U           Cs         40.02         Gd         40.02         Fe         40.2         Pd         40.02         Rb         40.02         Na         40.02         Y           Co         40.02         Ga         40.02         Fe         40.2         Pe         40.02         Ru         40.02         Na         40.02         Y           Co         40.02         Ge         40.02         Pb         40.02         Pr         40.02         Su         40.02         Th         40.02         Y           Cu         40.02         Pb         40.02         Pk         40.02

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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  \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 58119

Lot # 120822



Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

1. Chromium(III)	Compound					Nominal	70						CERTIFIED WEIGHT REPORT:
Chromium(III) nitrate nonahydrate (Cr) 58124				Volume shown below was diluted to (mL):	NIST Test Number:	Nominal Concentration (µg/mL):	Recommended Storage:	Expiration Date:		Description:	Lot Number:	Part Number:	HT REPORT:
58124	Number	Part		as dilute									
071122	Number	Lot		d to (mL):	BTD9	1000	Ambient (20 °C)	060526		Chromium (Cr)	060523	58024	
0.1000	Factor	Dilution		2000.02			ෆු			5			
200.0	Vol. (mL)	Initial		0.058	5E-05								
0.084	Pipette (mL)	Uncertainty		Flask Uncertainty	Balance Uncertainty								
1000	Conc. (µg/mL)	Nominal		Ą	bainty				2.0%			21110221	Lot #
10000.1	Vol. (mL) Pipette (mL) Conc. (µg/mL) Conc. (µg/mL)	Initial						(mL)	40.0			Nitric Acid	Solvent:
1000.0	Conc. (µg/mL) +/- (µg/mL)	Final							Nitric Acid				
2.2	+/- (µg/mL)	Uncertainty	Expanded		Reviewed By:	Tues	N	\	Formulated By:		4	1	
7789-02-8	CAS#	(Solv				1	1	7	7.5		Ferrence	l)	
0.5 mg(Cr)/m3	OSHA PEL (TWA)	(Solvent Safety Info. On Attached pg.)	SDS Information		Pedro L. Rentas	1	of the same of the	0	Lawrence Barry		Jan	7	
7789-02-8 0.5 mg(Cr)/m3 ori-rat 3250 mg/kg 3112a	LD50	ttached pg.)	ion		060523				060523				
3112a	SRM	TSIN								1	1	3	88

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1139

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Al         4002         Cd         4002         Dy         4002         Hf         4002         Li         4002         Ni         4002         Pr         4002           Sb         4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02         Rc         40.02           As         40.2         Cc         40.02         Eu         40.02         In         40.02         Mg         40.01         Os         40.02         Rh         40.02           Ba         40.02         Cs         40.02         Gd         40.02         Ir         40.02         Mn         40.02         Pd         40.02         Rb         40.02           Bi         40.02         Cs         40.02         Ge         40.02         Fe         40.02         Mo         40.02         Pt         40.02         Sm         40.02           Bi         40.02         Cs         40.02         Au         40.02         Ph         40.02         Sm         40.02           Bi         40.02         Cs         40.02         Au         40.02         Ph         40.02         Sc         40.02 </th <th>4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02         Re           40.2         Cc         40.02         Eu         40.02         Ir         40.02         Mg         40.01         Os         40.02         Rh           40.02         Cs         40.02         Gd         40.02         Ir         40.02         Mg         40.02         Pd         40.02         Rb           40.02         Cs         40.02         Fe         40.02         Hg         40.02         Pt         40.02         Sm           40.02         Cs         40.02         Pt         40.02         Pt         40.02         Sm</th>	4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02         Re           40.2         Cc         40.02         Eu         40.02         Ir         40.02         Mg         40.01         Os         40.02         Rh           40.02         Cs         40.02         Gd         40.02         Ir         40.02         Mg         40.02         Pd         40.02         Rb           40.02         Cs         40.02         Fe         40.02         Hg         40.02         Pt         40.02         Sm           40.02         Cs         40.02         Pt         40.02         Pt         40.02         Sm
4002         Cd         4002         Dy         4002         Hf         4002         Li         4002         Ni         4002           4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Ca         40.02         Eu         40.02         Ir         40.02         Mg         40.01         Os         40.02           40.01         Cr         T         Ga         40.02         Fe         40.2         Hg         40.2         Pr         40.02           40.02         Co         40.02         Ge         40.02         La         40.02         Mo         40.02         Pr         40.02	4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Cc         40.02         Eu         40.02         In         40.02         Mg         40.01         0s         40.02           40.01         Cs         40.02         Gd         40.02         Ir         40.02         Mg         40.01         Pd         40.02           40.02         Cs         40.02         Ge         40.02         Fe         40.02         Hg         40.2         Pt         40.02           40.02         Cs         40.02         Ge         40.02         La         40.02         Mg         40.02         Pt         40.02
40.02         Cd         40.02         Dy         40.02         Hf         40.02         Li         40.02         Ni         40.02           40.02         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.02         Ce         40.02         Eu         40.02         in         40.02         Mg         40.01         Os         40.02           40.01         Cr         T         Ga         40.02         Fe         40.2         Hg         40.2         P         40.02	4002         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Ce         40.02         Eu         40.02         Ir         40.02         Mg         40.01         0s         40.02           40.01         Cs         40.02         Gd         40.02         Ir         40.02         Mg         40.02         Pd         40.02           40.01         Cr         T         Ga         40.02         Fe         40.2         Hg         40.2         P         40.02
40.02         Cd         40.02         Dy         40.02         Hf         40.02         Li         40.02         Ni         40.02           40.02         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.02         Ce         40.02         Eu         40.02         in         40.02         Mg         40.01         0s         40.02           40.02         Cs         40.02         Gd         40.02         ir         40.02         Mn         40.02         Pd         40.02	40.02         Ca         40.2         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Ce         40.02         Eu         40.02         In         40.02         Mg         40.01         Os         40.02           40.02         Cs         40.02         Gd         40.02         Ir         40.02         Mn         40.02         Pd         40.02
40.02         Cd         40.02         Dy         40.02         Hf         40.02         Li         40.02         Ni         40.02           40.02         Ca         40.02         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Ce         40.02         Eu         40.02         In         40.02         Mg         40.01         0s         40.02	40.02         Ca         40.02         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02           40.2         Ce         40.02         Eu         40.02         In         40.02         Mg         40.01         Os         40.02
40.02         Cd         40.02         Dy         40.02         Hf         40.02         Li         40.02         Ni         40.02           40.02         Ca         40.02         Er         40.02         Ho         40.02         Lu         40.02         Nb         40.02	4002 Ca 40.2 Er 40.02 Ho 40.02 Lu 40.02 Nb 40.02
-0.02 Cd -0.02 Dy -0.02 Hr -0.02 Li -0.02 Ni -0.02	
	0.002   Cd   0.002   Dy   0.002   Hf   0.002   Li   0.002   Ni   0.002

(I)= larget analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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### Certified by:

Part # 58024

Lot # 102523

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com



# Certified Reference Material CRM

M5697 R: 10/27/23

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

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					man para	near]	ount] [Lin	33.422 sec]:58029.D# [Count] [Linear]	³ec]:580	33 42 22	_	trum Z	[1] Spectrum No.1	1.0E6
3114	ori-rat 794 mg/kg 3	1 mg/m3	10031-43-3	2.2	1000.0	10000.1	1000	0.084	200.0	0.1000	100223	58129	drate (Cu)	Copper(II) nitrate trihydrate (Cu)
SRM		OSHA PEL (TWA)	CAS#	+/- (µg/mL)	Conc. (µg/mL)	E.	nc. (µg/mL)	Pipette (mL) Conc. (µg/mL)	<u>`</u>	Factor	Number	Number		Compound
TSIN		SDS Information (Solvent Safety Info. On Attached pg.)	(Solve	Expanded Uncertainty	Final	Initial	Nominal	Uncertainty	Initial	Dilution	Εţ	Part		
								Flask Uncertainty	0.058	2000.02	od to (mL):	was dilute	Volume shown below was diluted to (mL):	Volume
	102523	Pedro L. Rentas		Reviewed By:			У	Balance Uncertainty	5E-05 ⊩		BTU9		NIST Test Number:	NIS
		er of	M. g.	M		(mL)				°C)	102526 Ambient (20 °C) 1000		Expiration Date: Recommended Storage: I Concentration (µg/mL):	Expiration Date: Recommended Storage: Nominal Concentration (µg/mL):
	102523	Benson Chan	13	Formulated By:	Nitric Acid	40.0	2.0%			ļ				
114						Nitric Acid	24002546			٤	102523 Copper (Cu)	# A A	Lot Number: Description:	
0						Solvent:	Lot #						) []	CERTIFIED WEIGHT REPORT:



# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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	L	<u></u>	ě	2	-	-St	_		l
	<b>40.02</b>	A0.03	40.01	40.02	40.2	40.02	40.02		
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	40.02	40.02	40.2	40.02	40.02	40.02	<0.02	Trace M	
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Target analyte	~	7	ק	Pd	၀ွ	ş	Z	ltion Tion	ı
yte	40.2	₩.02	40.02	40.02	40.02	<0.02	40,02	by ICP-N	
	8	Sm	Ru	Rb	Rh	Re	Pr	dS (m	
	40.02	40.02	40.02	40.02	40.02	<b>40.02</b>	<b>∆</b> 0.02	g/mL)	
	Ta	S	Sr	Z	Ag	Si	Se.		
	40,02	40.02	40.02	40.2	40.02	<b>∆0,02</b>	40.2		
	77	Sn	F	Ħ	::	Te	4		
	40,02	<0.02	<0.02	40.02	△0.02	40.02	40.02		
	25	2	ĸ	4,	<	ď	¥		
	<0.02	<b>&amp;</b>	A 0.02	<0.02	<b>6002</b>	<b>\$</b>	<0.02		

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard

Certifled by:

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ırt # 58029

Absolute Standards, Inc. 800-368-1131

www.absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: Lot Number: Description:

58029 071723

Copper (Cu)

R:8/25/23

Lot # Solvent:

21110221

Nitric Acid

Nitric Acid

Benson Chan

071723

Formulated By:

(mL) 40.0

2.0%

Nominal Concentration (µg/mL): Recommended Storage:

**Expiration Date:** 

NIST Test Number:

**BTU9** 1000

5E-05 0.058

Ambient (20 °C) 071726

Volume shown below was diluted to (mL):

2000.02

Flask Uncertainty Balance Uncertainty

Reviewed By:

Pedro L. Rentas

071723

SDS Information

N N	+/- (µg/mL)	Uncertainty
10031-43-3	CAS#	(Solvi
1 ma/m3	OSHA PEL (TWA)	(Solvent Safety Info. On Attached pg.)
ori-rat 794 mo/ko 3114	LDS0	ttached pg.)
3114	SRM	TSIN

3114

1.0E6	
	[1] Spectrum No.1
	[ 33.422 sec]:58029.D# [Count] [Linear]

Copper(II) nitrate trihydrate (Cu)

58129

022723

0.1000

200.0

0.084

1000

10000.5

1000.0

22

Number Part

Number Lot

Vol. (mL)

Pipette (mL) Conc. (µg/mL)

Conc. (µg/mL) Conc. (µg/mL)

Final

Uncertainty Expanded

Dilution Factor

Initia

Uncertainty

Nominal

m/z->	5.0E5	1.0E6
0		
20		
30		
6		
50		
80		
70 80		
1		

110	m/z->	1.0E7	m/z-> 2.0E7	2.5E7	m/z-> 5.0E7
20 30 40 50 60 70 60 60 120 130 140 150 160 170 180 190					
130 140 150 160 170 180 190 230 240 250 260	0		110		10
30 40 50 60 70 80 90 130 140 150 160 170 180 190 230 240 250 260	220		120		N O
140 150 160 170 180 190 240 250 260	N		4		
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			200		100

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ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

800-368-1131 www.absolutestandards.com

Absolute Standards, Inc.

## Certified Reference Material CRM



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.653h

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	[	, <u>p</u>	# # # # # # # # # # # # # # # # # # #	На	As	S	2		Г
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	5	. ზ	. Ω	ڻ	င္ပ	<u>ي</u>	Ω		
	-	0.02	40.02	40.02	40.02	40.2	<0.02	Michigan Street	
	Au	င္ပ	င္အ	8	臣	育	Dу	Mark Sales	
	<b>∆</b> 0.02	0.02	40.02	40.02	40.02	40.02	<0.02		
	Pb	La	7	4	5	·Ho	ЭH	The Part of the Pa	
	<b>∆</b> 0.02	40.02	40.2	40.02	40.02	40.02	<0.02	HEADER STATES	Trace M
	Z	Mo	ВH	Mn	Mg	£	Ē	William Street	etals
(T) = Tar	<b>40,02</b>	40.02	<b>0.2</b>	40,02	<0.01	40.02	<0.02	MINISTERNATION OF THE PERSON O	Verifica
Target analyte	×	72	ק	B	õ	\$	Z	MINISTER STATES	tion t
6	<b>∆0.2</b>	<0.02	<0.02	40.02	40.02	<0.02	<0.02		y ICP-N
	Sc	Sm	₽.	8	R.	Re	뫄		S (µg
	40.02	40.02	<0.02	<b>∆</b> 0.02	40.02	∆0,02	40.02		I/mL)
	Ta	Ø	Ş	Z	A gq	S:	%		
	<b>40,02</b>	40.02	<b>40.02</b>	<b>∆</b> 0.2	40.02	40.02	40.2		
	Ti	Sn	īm	H	∄	급	4.1		
	40.02	40.02	<0.02	A0.02	<0.02	40.02	<0.02		
	Zr	Z <sub>1</sub>	×	<b>4</b>	<	๘	W	THE REAL PROPERTY.	
	<0.02	<b>△</b> 0.02	<b>♦</b> 0.02	<b>4</b> 0.02	<b>♦</b> 0.02	<0.02	<0.02		

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

CERTIFIED WEIGHT REPORT: Lot #

Part Number: Lot Number: Description: 58112 091823

Solvent: 24002546 Nitric Acid

Magnesium (Mg)

Ambient (20°C) (M548, M548)

Nominal Concentration (µg/mL):

NIST Test Number:

**BTU9** 

10000

Recommended Storage:

**Expiration Date:** 

091826

Weight shown below was diluted to (mL):

Magnesium nitrate hexahydrate (Mg) IN030 марозгогам

Compound

꽃

Number ğ

Conc. (µg/mL)

8

Purity (%) (%)

Weight (g) Target

Weight (g) Conc. (µg/mL)

+/- (µg/mL) Expanded Uncertainty

(Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50

SS NS

SDS Information

Actual

Actual

Nominal

Purity Uncertainty Assay

2000.02 0.058 Flask Uncertainty 5E-05 Balance Uncertainty

(mL)

7

Nitric Acid

091823	Pedro L. Rentas	Reviewed By:
4	tens	Kello
091823	Lawrence Barry	Formulated By:

1144

m/z->	1.0E4	m/z-> 2.0⊑4	1000	m/z->	5.0E5	1.0E6
, ,	•				ži.	[1] Spectrum No.1
210		4 4 0:		10		ectrum
4						Z 0.1
N N O		120		20		3.5
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Ö				0		1ec]:58
240		140		30 40		[ 19.923 sec]:58112.D# [Count] [Linear]
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				4		
		NOO		100		

Part # 58112

Lot # 091823

### https://Absolutestandards.com 5 1145 ANAB ISO 17034 Accredited AR-1539 Certificate Number

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Ali		Г	_	_	-	_	_	_			7
Cd 4002 Dy 4002 Hf 4002 Li 4002 Ni 4002 Re 4002 Si 4002 Th 4002 V Cs 4002 Th 400		<u> </u>	<u> </u>	Ве	Ba	As	Sb	A			
A002   Dy   A002   Hf   A002   Li   A002   Ni   A002   Re   A002   Te   A002		40.02	0.02	10.0	<0.02	40.2	<0.02	<0.02	THE PARTY OF		
Dy		ਹ	ප	Ω	င္တ	ප	C2	8			
Trace   Hetals   Verification   by ICP-MS (µg/mL)   W   4002   Ni   40.02   Pr   40.02   Si   40.02   Ti   40.02   U   40.02   Ni   40.02   Ri   40.02   Ti   40.02   U   40.02   Ni   40.02   Ri   40.02   Ti   40.02   U   40.02   Pr   40.02   Ni   40.02   Ti   40.02   U   40.02   Pr   40.02   Ri   40.02   Ti   40.02   V   40.02   Pr   40.02   Ri   40.02   Ni   40.02   Ti   40.02   Yi   40.02   Pr   40.02   Ri   40.02   Si   40.02   Ti   40.02   Yi   40.02   Pr   40.02   Si   40.02   Ti   40.02   Yi   40.02   Pr   40.02   Si   40.02   Si   40.02   Ti   40.02   Yi   40.02   Pr   40.02   Si   40.02   Si   40.02   Yi   40.02   Yi   40.02   Ti   40.02   Yi   40.02   Ti   40.02		40.02	40.02	<0.02	40.02	40.02	40.2	<0.02			
Trace   Metals   Verification   by ICP-MS (µg/mL)   Se   40.2   Tb   40.02   W		Au	භ	୍ଲ	8	돧	耳	Dy			
Trace   Wetals   Verification   by ICP-MS (µg/mL)   Se   40.2   Tb   40.02   W   40.02   Mg   T   Os   40.02   Rb   40.02   Mg   T   Os   40.02   Rb   40.02   Mg   40.02   Pd   40.02   Rb   40.02   Mg   40.02   Tb   40.02   U   40.02   Mg   40.02   Pd   40.02   Rb   40.02   Na   40.2   Th   40.02   V   40.02   Mg   40.02   Pd   40.02   Rb   40.02   Sr   40.02   Th   40.02   Yb   40.02   Mg   40.02   Pd   40.02   Sm   40.02   Sr   40.02   Sm   40.02   Yb   40.02   Na   40.02   Sm   40.02   Sm   40.02   Sm   40.02   Th   40.02   Zh   40.02   Th   40.02   Zh   40.02   Th   40.02   Th   40.02   Zh   40.02   Th   40.02   Th   40.02   Zh   40.02   Th   40.02   Zh   40.02   Th   20.02   Zh   40.02   Zh   20.02   Zh   20.02   Zh   20.02   Zh		<0.02	40.02	<0.02	<0.02	<0.02	<0.02	<0.02			
Li		7	5	स	Ħ	Ħ	땅	民			
Verification by ICP-MS (μg/mL)         Se         40.2         Tb         40.02         W           40.02         Ni         40.02         Re         40.02         Si         40.02         Te         40.02         U           T         Os         40.02         Rh         40.02         Ng         40.02         Ti         40.02         U           40.02         Pd         40.02         Rh         40.02         Ng         40.02         Th         40.02         Yb           40.02         P         40.02         Sm         40.02         Sr         40.02         Yb           40.02         P         40.02         Sm         40.02         Sm         40.02         Yb           40.02         F         40.02         Sm         40.02         Sm         40.02         Yb           40.02         F         40.02         Sm         40.02         Ti         40.02         Zh           40.02         F         40.02         Sc         40.02         Ti         40.02         Zh		<0.02	<0.02	40.2	<0.02	<0.02	<0.02	<0.02		Trace M	
Verification by ICP-MS (μg/mL)         Se         40.2         Tb         40.02         W           40.02         Ni         40.02         Re         40.02         Si         40.02         Te         40.02         U           T         Os         40.02         Rh         40.02         Ng         40.02         Ti         40.02         U           40.02         Pd         40.02         Rh         40.02         Ng         40.02         Th         40.02         Yb           40.02         P         40.02         Sm         40.02         Sr         40.02         Yb           40.02         P         40.02         Sm         40.02         Sm         40.02         Yb           40.02         F         40.02         Sm         40.02         Sm         40.02         Yb           40.02         F         40.02         Sm         40.02         Ti         40.02         Zh           40.02         F         40.02         Sc         40.02         Ti         40.02         Zh		æ	Mo	Hg	Mn	Mg	Ę	<u></u>	I	etals	
Ni         Φ0.02         Pr         Φ0.02         Se         Φ0.2         Tb         Φ0.02         W           Nb         Φ0.02         Re         Φ0.02         Si         Φ0.02         Te         Φ0.02         U           Os         Φ0.02         Rh         Φ0.02         Ag         Φ0.02         Ti         Φ0.02         V           Pd         Φ0.02         Rb         Φ0.02         Na         Φ0.2         Th         Φ0.02         Yb           Pt         Φ0.02         Sm         Φ0.02         Sr         Φ0.02         Yr         Φ0.02         Yr           Pt         Φ0.02         Sm         Φ0.02         Sn         Φ0.02         Yr           Rk         Φ0.02         Sc         Φ0.02         Ti         Φ0.02         Yr           Pt         Φ0.02         Sc         Φ0.02         Ti         Φ0.02         Yr           Rk         Φ0.02         Sc         Φ0.02         Ti         Φ0.02         Zr	9	<0.02	<0.02	40.2	<0.02	<b></b> ]	<0.02	<0.02		<	
P-MS (µg/mL)         Se         40.2         Tb         40.02         W           02         Re         40.02         Si         40.02         Te         40.02         U           02         Rh         40.02         Ag         40.02         Te         40.02         U           02         Rh         40.02         Na         40.2         Th         40.02         Yb           02         Ru         40.02         Sr         40.02         Tm         40.02         Y           02         Sm         40.02         S         40.02         Y         40.02         Y           02         Sm         40.02         Ta         40.02         Y         40.02         Y           02         Sc         40.02         Ta         40.02         Zn         Zn	Target	~	72	7	Pd	õ	¥	Z	I	tion	
49/mL)       Se       Φ0.2       Tb       Φ0.02       W         Φ0.02       Si       Φ0.02       Te       Φ0.02       U         Φ0.02       Ag       Φ0.02       Tl       Φ0.02       V         Φ0.02       Na       Φ0.2       Th       Φ0.02       Yb         Φ0.02       Sr       Φ0.02       Tm       Φ0.02       Y         Φ0.02       Sa       Φ0.02       Sn       Φ0.02       Zh         Φ0.02       Th       Φ0.02       Ti       Φ0.02       Zr	analyte	40.2	40.02	<0.02	40.02	0.02	<0.02	<0.02		by ICP-N	
ODL         Se         40.2         Tb         40.02         W           40.02         Si         40.02         Te         40.02         U           40.02         Ng         40.02         Ti         40.02         U           40.02         Na         40.2         Th         40.02         Yb           40.02         Sr         40.02         Tm         40.02         Y           40.02         S         40.02         Sn         40.02         Zn           40.02         Ta         40.02         Ti         40.02         Zn		Sc	Sm	Ru	Rb	Rh	Re	77	l	n) Sl	l
40.2       Tb       40.02       W         40.02       Te       40.02       U         40.02       Ti       40.02       V         40.02       Th       40.02       Yb         40.02       Ti       40.02       Y         40.02       Sn       40.02       Y         40.02       Ti       40.02       Zr		<0.02	<0.02	<0.02	40.02	<0.02	<0.02	<0.02		-	
Tb < <0.02 W Te < <0.02 U Tl < <0.02 V Th < <0.02 V Th < <0.02 Yb Tm < <0.02 Y Sn < <0.02 Y Th < <0.02 Y Sn < <0.02 Y Th < <0.02 Y Th < <0.02 Y Th < <0.02 Z Th <0.02 Z Th < .02 Z Th < .02 Z Th < .02 Z Th < <0.02 Z Th <0		Ta	C/2	Ş	Na	βÅ	ī.	Se.	Į		
40.02 W 40.02 U 40.02 V 40.02 Y 40.02 Y 40.02 Y 40.02 Z 21		<0.02	<0.02	<0.02	40.2	<0.02	<0.02	40.2			
Zr		Ti	Sn	Im	Th	∄	Te	ď			
		40.02	\$0.02	0.02	40.02	40.02	<0.02	<0.02			
40.02 40.02 40.02 40.02		Zr	Zn	×	44	٧	c	¥			
		<0.02	<b>∆</b> 0.02	40.02	<b>♦</b> 0.02	<b>∆</b> .02	40.02	<b>4</b> 0.02			

(1) = larget analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- \* All standard containers are meticulously cleaned prior to use.
- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above). \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- \* All Standards should be stored with caps tight and under appropriate laboratory conditions.
- \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 58112

Lot # 091823

m/z->

210

220

230

240

250

260

2.5E7

Certified Reference Material CRM



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Absolute Standards, Inc. 800-368-1131

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CERTIFIED WEIGHT REPORT:

Part Number: Lot Number: Description:

57004 102523

Beryllium (Be)

02/09/24 Lot #

24002546 Nitric Acid Solvent:

(IE) 40.0

2.0%

Nitric Acid

Benson Chan

102523

Formulated By:

Nominal Concentration (µg/mL):

NIST Test Number:

BTU<sub>9</sub> 1000

Volume shown below was diluted to (mL):

2000.02

0.058

Flask Uncertainty Balance Uncertainty

5E-05

Recommended Storage:

Ambient (20 °C) 102526

**Expiration Date:** 

Reviewed By:

Pedro L. Rentas

Expanded SDS Information

CAS# (Solvent Safety Info. On Attached pg.) OSHA PEL (TWA) LD50

22 13597-99-4

1. Beryllium nitrate (Be)

m/z->

70

20

30

40

50

60

70

80

90

100

1.0E4

2.0E4

[1] Spectrum No.1 [ Z9.233 sec]:58004R.D# [Count] [Linear]

58104

091423

0.1000

200.0

0.084

98

10001.5

1000.0

Number Part

Number Lot

Vol. (mL.)

Pipette (mL) Conc. (µg/mL)

Conc. (µg/mL)

Conc. (µg/mL)

+/- (µg/mL Uncertainty

Final

Dilution Factor

hitia

Uncertainty

Nominal

5.0E7

m/z->

011

120

130

140

051

160

170

180

190

200

2.5E7

5.0E7

0.2ug/m3

intryns-rat 3.16mg/kg

₹

SRM

102523 NIST

1146





800-368-1131



# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

																		I	
							Trace M	etals	Verificat	tion	by ICP-M	300	g/mL)						
		100000					THE SHAPE OF THE STATE	A STATE OF	NEW PROPERTY.		DANS BUILDING	Validadia			Control of the Assessment		9		
V	<0.02	3	<0.02	δ	<0.02	Hf	<0.02	ī	<0.02	z	<0.02	Æ	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sp	<0.02	ථ	40.2	占	₹0.02	Но	<0.02	3	<0.02	£	<0.02	Re	<0.02	Š	<0.02	Ę	₹0.02	Þ	<b>40.02</b>
As	40.2	ඊ	<0.02	립	₹0.02	ង	₹0.02	Mg	10.0>	ő	<0.02	Rh	Z0:0>	Ag	<0.02	F	<0.02	>	<b>₹0.02</b>
Ba	<b>40.02</b>	ర	<0.02	3	<0.02	ㅂ	<0.02	Mn	<0.02	Z	<0.02	8	<0.02	ž	40.2	E	<0.02	22	<0.02
æ	۳	Ö	<b>40.02</b>	g	<b>20.02</b>	£	<0.7	H	<0.7	ρ.	<0.02	Ru	<0.02	Ķ	<0.02	T	₹0.02	>	<b>₹000</b>
洒	40.05	රි	<0.02	පී	<0.02	ឌ	<0.02	Wo	<0.02	Æ	<0.02	Sm	<b>40.02</b>	S	<0.02	S	<0.02	22	<b>40.02</b>
æ	<0.02	<sub>ਹ</sub>	<0.02	Αm	<0.02	£	<b>40.02</b>	PN	<0.02	×	<0.2	Sc	<b>40.02</b>	Ta	<0.02	F	₹0.02	Z	<b>40.02</b>
											The second secon								

(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.





\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

the preparation of all standards.

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Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

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All Standards should be stored with caps tight and under appropriate laboratory conditions. Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

1147

Lot # 102523

Part # 57004

Printed: 2/8/2024, 5:01:11 PM

,02/04

Absolute Standards, Inc. 800-368-1131

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CERTIFIED WEIGHT REPORT:

Certified Reference Material CRM

1224

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

1148

1. Ammonium hexafluorostannate(IV) (Sn)

IN010 SND042023A1

1000

0.10

44.2

1.13107 Weight (g)

1.13286

1001.6

2.0

Weight (g) Conc. (µg/ml.)

+/- (µg/mL)

CAS#

SRM

RM#

Number

Conc. (µg/mL)

<u>3</u>

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	B B B B AS A
	0000 0000 0000 0000 0000 0000
	5 8 5 5 8 8 8
	40.02 40.02 40.02 40.02 40.02
	AL CG CG EP EP Dy
	40.00 40 40.00 40 40.00 40 40 40.00 40 40 40 40 40 40 40 40
	# H H H H H H H H H
	Trace Ann Ann Ann Ann Ann Ann Ann Ann Ann An
	Metals  Lu  Mg  Mg  Mg  Mg  Mg
9	40.02 40.02 40.02 40.02 40.02
= Target	Icati
Target analyte	R P P R OS B
	4022 4022 4022 4022 4022 4022
	R R R R R R R R R R R R R R R R R R R
	9/mL)
	To St Z & S. S.
	4000 4000 4000 4000 4000
	おかれた。
	602 602 602 602 602
	Z X X C &
	600 600 600 600 600 600

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. the preparation of all standards.

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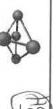
2012

Lot # 071123

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com







ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com Certified Reference Material CRM [RM] BIADALCA I a

				4	こくこし	イイル		2				
CERTIFIED WEIGHT REPORT:						Lot #	Solvent:					
Part Number:		57027				24002546	Nitric Acid		(	i		
Lot Number:	).	091923							C tan	me Com		
Description:	Ü:	Cobalt (Co)	7							9		
						2.0%	40.0	Nitric Acid	Formulated By:	Lawrence Barry	091923	
Expiration Date:	te:	091926					(mL)		7	0		
Recommended Storage:	<b>:e</b> f	Ambient (20 °C)	(Ç)							A		
Nominal Concentration (µg/mL):	Ë	1000							Kerly	Here		
NIST Test Number:		eUTB		5E-05	Balance Uncertainty	uty		-	Reviewed By:	Pedro L. Rentas	091923	
Volume shown below was diluted to (mL):	www dilute	ed to (mL):	2000.02	0.058	Flask Uncertainty			u				
									Expanded	SDS Information		
	Part	Lot	Dilution	Initial	Uncertainty	Nominal	Initial	Final	Uncertainty	(Solvent Safety Info. On Attached pg.)		NST
Compound	Number	Number	Factor	Vol. (mL)	Pipette (mL) (	Pipette (mL) Conc. (µg/mL)	Conc. (ug/mL)	Conc. (µg/mt.) Conc. (µg/mt.) +/- (µg/mt.)		CAS# OSHA PEL (TWA)		SRM

	8									b				CENT
Cobatt(II) nitrate hexahydrate (Co)	ydrate (Co)	58127	58127 050923	0.1000	200.0	0.084	1000	10000.0	1000.0	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113
1.0E6	\$00,000 April 100 April 10	[1] Speatrum No.1		34.243 8	ec]:580	27.D# [¢	[ 34.243 sec]:58027.D# [Count] [Linear]							-
5.0														
m/≥-> 1.0E8		.0	08	O O		.0	09		70		80	0	100	
5.0E7														
TV2->-	Γ	0	081	130	0	041	0.00	160	170		160	180	500	
5.057														
115	W	210	220	230	.0	240	250	280						

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Absolute Standards, Inc.

www.absolutestandards.com

800-368-1131



# Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

							Trace M	letals	Verifical	tion	by ICP-N	J) SI	g/mL)						
			The second secon	0	200		SHAROLINA SA	September 1	MADE SHIP SEE	<b>MENNANNA</b>	San	Market Land	Sandard Sandard	NAME OF TAXABLE PARTY.	The Part of the Pa	Name and Address of		ı	STATE OF STREET
¥	<0.02	ಶ	<b>40.02</b>	斉	<0.02	H	<0.02	I,	<0.02	ž	<b>40.02</b>	Æ	<0.02	Z	40.2	T9	<0.02	A	<0.02
ક્ર	<b>40.02</b>	ඊ	407	占	<0.02	H	<0.02	.3	<b>₹0.02</b>	£	40.02	8	<0.02	Š	40,02	Te	<0.02	5	40.02
As	<b>Q</b> 2	ඊ	<b>40.02</b>	呂	<0.02	I	<0.02	Mg	40.01	ඊ	40.02	R.	<0.02	Ag	40.02	F	<0.02	>	₩
æ	<b>40.02</b>	చ	₹0.02	ප	<b>40.02</b>	4	<0.02	Mn	<b>40.02</b>	콘	40.02	₽₽ PP	<0.02	Na	40.2	Ħ	40.02	χ	<b>Q</b> .02
<b>&amp;</b>	40.01	ඊ	<b>40.02</b>	ජී	<b>₹0.02</b>	's	Ø2	異	40.2	م	₹0.02	Ru	<0.02	Sr	40.02	Ę	₩900	<b>&gt;</b>	₹0.02
盗	<b>200</b> 02	රි	۲	ජී	₹000	Ę	₹0.02	Mo	40.02	云	40.02	Sm	<0.02	S	40.02	S	<0.0>	2	Ø.02
В	<0.02	ට්	<0.02	Αn	<0.02	윤	₹0.02	PR	<0.02	м	<b>7</b> 05	S	<0.02	T.	<b>40.02</b>	Ħ	<b>40.02</b>	77	Ø.02

(T)= Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



the preparation of all standards.

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\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

1151

Part # 57027

Lot # 111323

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### R: 02/00/24 Certified Reference Material CRM

MS801 (84)





ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Compound		Nominal				CERTIFIED WEIGHT REPORT:
Part Number	NIST Test Number: 6UTB Volume shown below was diluted to (mL):	Recommended Storage: Nominal Concentration (µg/mL):	Expiration Date:	Description:	Part Number:	HT REPORT:
t Lot ber Number	6UTB luted to (mL):	Ambient (20 °C)	111308	Arsenic (As)	57033	
Dilution	4000.0	Ĵ		la.		
initial	5E-05					
Uncertainty Pipette (mL)	5E-05 Balance Uncertainty 0.06 Flask Uncertainty					
Initial Uncertainty Nominal Initial  Vol. (ml.) Pipette (ml.) Conc. (µg/ml.) Conc. (µg/ml.)	ertainty ainty		2.0%		24002546	Lot #
Initial Conc. (µg/mL)		â	80.0		Nitric Acid	Solvent:
Expanded Final Uncertainty Conc. (µg/mL) +/- (µg/mL)			Nitric Acid			
Expanded Uncertainty +/- (ug/mL)	Reviewed By:	M	Formulated By:	Ta		
SDS Information (Solvent Safety Info. On Attached pg.) CAS# OSHA PEL (TWA) LD50	Pedro L. Rentas	" Rena	Lawrence Barry	Enounce Son	2	
	111323		111323			
NIST				11	52	2

1. Arsenic (As)

58133

	Ø	1000	N III 4	m/z-> 5.0≣4	1.0E5	N.OE5
				######################################	Beeffield books of colonia dans accionage	3
Ŋ		110		ō		[1] Speatrum No. 1
						3 Z 0.1
220		120		N.		
N		4		۵		4.433
230 0		100		30		890]:57
N 0		140		<b>4</b>		[ 34.433 sec]:57033.D# [Count] [Linear]
						# [Cou
250		150		50		nt] [Lin
N 60				0		earj
ő		160		80		
		170		7		
				Jacobson George Control of State Control	ele de constitue de la constit	
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		No.		100		
		¥ (		w		

115

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

(1) = larger analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

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\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 57033

B102109124

Certified Reference Material CRM

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

Absolute Standards, Inc. 800-368-1131 CERTIFIED WEIGHT REPORT: www.absolutestandards.com

57115

Solvent: 21110221

Nitric Acid

Lot #

とうなら

Part Number:

**Lot Number:** Description:

041723 Phosphorous (P)

Recommended Storage: **Expiration Date:** 041726 Ambient (20 °C)

Nominal Concentration (µg/mL): NIST Test Number: **BTUB** 10000

1. Ammonium dihydrogen phosphate (P)

IN008 PV082019A1

10000

99.999

0.10

27.5

72.7289

10000.0

20.0

RM#

Number

Conc. (µg/mL)

3

E

Weight (g) 72.7287

5

Nominal

Purity

Uncertainty Assay Purity (%)

Target

Actual

Actual

Compound

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty 5E-05 Balance Uncertainty

22% 

40.0 Nitric Acid

Formulated By:

Lawrence Barry

041723

were

Pedro L. Rentas

041723

Reviewed By:

Weight (g) Conc. (ug/mL) Uncertainty Expanded

CAS#

+/- (µg/mL)

(Solvent Safety Info. On Attached pg.)

# OSHA PEL (TWA) LD50

SDS Information

NIST SRM

7722-76-1 5 mg/m3 orl-rat >2000mg/kg 3186

1154

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

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(I)= larget analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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Part # 57115

Lot # 041723

Certified Reference Material CRM

R1 02/09/24

Solvent:

122923

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: Lot Number: Description:

57016 122923 Sulfur (S)

Lot #

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

M5816

ASTM Type 1 Water Formulated By: Benson Chan

122923

Reviewed By: Pedro L. Rentas 122923

IN117 SLBR7225V <del></del> Number Conc. (µg/mL) Nominal 1000 Purity 99.9 38 Uncertainty Assay Purity (%) 0.10 24.3 8 Weight (g) 16.4979 Target Weight (g) Conc. (µg/mL) 16.4980 Actual 1000.0 +/- (µg/mL) Expanded Uncertainty 20 7783-20-2 CAS# SDS Information
(Solvent Safety Info. On Attached pg.)
LD50 ¥ orl-rat 4250mg/kg 3181 SRM

Ammonium sulfate (S)

Compound

Nominal Concentration (µg/mL):

**NIST Test Number:** 

**6UTB** 1000

5E-05 Balance Uncertainty

Recommended Storage:

**Expiration Date:** 

122926 Ambient (20 °C)

Weight shown below was diluted to (mL):

4000.0

0.06 Flask Uncertainty

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		80		<b>0</b>		
		190		90		
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### https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(I) = larget analyte

## Physical Characterization:

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Certified by:

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Part # 57016

2 of 2

m/z->

210

220

230

240

1250 0

260

m/z->

10

100

130

140

150

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170

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200

2.5E5

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1.0E5

m/z->

0

NO

30

6

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60

70

80

90

100

1000

5.OE5

Certified Reference Material CRM

M5817

800-368-1131 www.absolutestandards.com Absolute Standards, Inc.

CERTIFIED WEIGHT REPORT:

Part Number: Lot Number: Description:

> 57116 071123

Sulfur (S)

19124

Solvent: Lot #

071123 **ASTM Type 1 Water** 

Formulated By:

Lawrence Barry

Pedro L. Rentas

Reviewed By: 071123

Actual Expanded

Weight (g) Conc. (µg/mL) Uncertainty

+/- (µg/mL)

CAS#

Ammonium sulfate (S)

IN117 SLBR7225V

10000

99.9

0.10

24.3

82.4675

82,4682

10000.1

20.0

7783-20-2

₽ ₩

Number Ĕ

Conc. (µg/mL)

3

8

Weight (g)

Nominal

Purity

Uncertainty Assay Purity (%)

Target

Actual

2000

[1] Spectrum No.1

[ 24.004 sec]:58116.D# [Count] [Linear]

Nominal Concentration (µg/mL):

NIST Test Number:

BIO9 10000 Recommended Storage:

Ambient (20 °C) 071126

**Expiration Date:** 

Weight shown below was diluted to (mL):

1999.48

0.058 Flask Uncertainty 5E-05 Balance Uncertainty

(Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50 OSHA PEL (TWA)

SDS Information

Z

orl-rat 4250mg/kg

3181

SRM TSIN

071123

158

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

https://Absolutestandards@m ANAB ISO 17034 Accredited AR-1539 Certificate Number

\$ 1 1

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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Physi	Physical Characterizatio	acteri	zation:						(T)= Target analyte	t analy	te								

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. the preparation of all standards.

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Part # 57116





https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

02/06 ング F Lot #

Solvent: 24002546

<u>%</u>

60.0

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

Lot Number: Description:

111623 Zinc (Zn)

58030

Nitric Acid Nitric Acid Formulated By: Benson Chan 111623

(<u>a</u>L Reviewed By: Pedro L. Rentas 111623

Weight shown below was diluted to (mL): 5 3000.4 Nominal Purity 0.06 Flask Uncertainty Uncertainty Assay Target Actual Actual Uncertainty Expanded **SDS** Information

**BTU9** 1000

5E-05 Balance Uncertainty

Ambient (20 °C)

111626

Zinc nitrate hexahydrate (Zn) 2.0E8 5.0E4 [1] Spectrum No.1 [ 31.103 sec]:58130.D# [Count] [Linear] 10 IN016 ZNE032021A1 RW# Number 20 Conc. (µg/ml.) 1000 30 99.999 8 Purity (%) 0.10 40 24.3 3 12.3475 Weight (g) 50 Weight (g) Conc. (µg/ml.) 12.3502 60 1000.2 70 +/- (µg/mL) 2.0 80 10196-18-6 CAS# (Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50 OSHA PEL (TWA) 90 100 orl-rat 1190mg/kg 3168 SRM SRM

Part # 58030

Lot # 111623

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(T) = Target analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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Part # 58030

--z/m

210

220

230

240

250

260

1 of 2

Printed: 2/8/2024, 5:01:19 PM

2500

m/z->

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130

140

150

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170

180

190

200

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17Z-Y

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1000

500

2.5E4

5.0E4

Absolute Standards, Inc. 800-368-1131

Certified Reference Material CRM

https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

CERTIFIED WEIGHT REPORT: www.absolutestandards.com Lot #

Lot Number: Description: 091123 Phosphorous (P)

Part Number:

57015

Solvent: 24002546

Nitric Acid

2%

Nitric Acid

Formulated By:

(JE) 40.0

Nominal Concentration (µg/mL): Recommended Storage: 1000 Ambient (20 °C)

Expiration Date:

091126

**NIST Test Number:** BITUB

Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty 5E-05 Balance Uncertainty

 Ammonium dihydrogen phosphate (P) IN008 Pvos2018A1 RM# Number Lot Conc. (µg/mL) Nominal 1000 99.999 Purity 8 Uncertainty Assay Purity (%) 0.10 27.5 3 Weight (g) 7.2729 Target Weight (g) Conc. (µg/mL) 7.2730 1000.0 +/- (µg/mL) Uncertainty 2.0 7722-76-1 CAS# 5 mg/m3 rl-rat >2000mg/ki 3186 SRM

[1] Spectrum No.1 [ 12.074 sec]:58115.D# [Count] [Linear]

Expanded

Reviewed By:

**SDS** information

(Solvent Safety Info. On Attached pg.)
# OSHA PEL (TWA) LD50

Pedro L. Rentas 091123

Lawrence Barry rento 091123

1162

1 6

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(I) = larget analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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\* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 57015

Lot # 091123

Absolute Standards, Inc.

800-368-1131 www.absolutestandards.com

CERTIFIED WEIGHT REPORT:

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6/11	,
R.	
KK	
15960	
75	

124	,	
6/11	,	
R		Nitric Acid
アア	Lot #	Solvent: 24002546 Nitric Acid
175960		Solvent:
		57028
		mper:

Part Number: Lot Number: Description:	57028 041124 Nickel (Ni)	Solvent:	Solvent: 24002546 Nitric Acid	Nitric Acid
		2%	5.0	Nitric Acid
Expiration Date:	041127		(mL)	
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	1000			
NIST Test Number:	6UTB	5E-05 Balance Uncertainty		

5.0 Nitric Acid Formulated By: Bria (mL) Reviewed By: Pec		s 041124	Les	ntas 041124		SDS Information
5.0 Nitric Acid Form (mL) Revie		Brian Gedde	Hen	Pedro L. Rei		SDS In
5.0 (mL)	J. W.	Formulated By:	Mary	Reviewed By:		Expanded
5.0 (mL)						
Solvent: 24002546  2% 5.0 (mL) 5E-05 Balance Uncertainty 0.002 Flask Uncertainty	Nifric Acid	Nitric Acid				
Solvent: 2% 5E-05 Balance Uncertainty 0.002 Flask Uncertainty	24002546	5.0	(mL)			
	Solvent:	2%		5E-05 Balance Uncertainty	0.002 Flask Uncertainty	

Uncertainty Expanded

249.85

Weight shown below was diluted to (mL):

		Lot	Nominal	Purity	Uncertainty Assay	Assav	Target	Actual	Actual	Incertainty	(Solvant	(Solvent Safety Info On Attached no.)	Attached ne )	Folly
Compound	#M#	<u>.</u>	m/m/ Juoj	(86)	Printing (px)	(70)	( ) 44-i-44	Meridia		Composition (Section	1124122	Salety IIIO, OII	ייהא השוייר	I I
	Wints.	ш	conc. (pg/mL) (%)	(%)	Punty (%)	<u>@</u>	weignt (g)	Weight (g)	Weight (g) Conc. (µg/mL) +/- (µg/mL)	+/- (ng/mL)	CAS#	OSHA PEL (TWA)	LD50	SRM
1. Nickel(II) nitrate hexahydrate (NI)	IN033 N	IN033 NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	1000.0	2.0	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136
[1] Spectrum No.1	strum N		12.374	sec]:58	3128.D#	[Con	[ 12.374 sec]:58128.D# [Count] [Linear]	22						
2.0E5														
-1-1-1														
1.0E5-														
X								_						
w/z->	10	20	(O)	30	40		50	- 09	70		80	90 1	100	
100														
1 4														
50														
11 123														
m/z->	110	120		130	140		150	160	170		180	190 2	200	
1.0E6														
5.0E5														
2. (1)														_
														_

260

250

240

230

1164

### Absolute Standards, Inc. www.absolutestandards.com 800-368-1131





## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS);

															ı	ı	ı			
							Trace Me	stals	Veri	fication	by IC	ICP-MS	( <i>ug/mL</i> )							
															ı		ı			
ΑI	<0.02	PO	<0.02	Dy	<0.02	Ή	<0.02	I.i.	<0.02	ï	H	r	L	r	L	22	H.L.	2007	m	200
Sp	<0.02	౮	<0.2	亞	<0.02	Ж	<0.02	רֵ	<0.02	Np	<0.02		Re <0.02	·	_	200	- L	70.07	= =	20.02
As	<0.2	೦	<0.02	B	<0.02	II	<0.02	Mg	<0.01	ő	<0.0						? F	70:00	> >	70.07
Ba	<0.02	Ş	<0.02	J.	<0.00	Ļ	2007	Ž	2007	PG	9	_	_				-	20:02	>	<0.02
Be	<0.01	Č	900	) E	000	i Li	10:57	III	70:02	2 6	70.0		K0 <0.02				- Ih	<0.02	χρ	<0.02
Ď.	20.00	5 6	20:00	Š	70.00	2 .	7.0.5	ž ;	2.05	۲ ,	<0.02						Tm	<0.02	<b>&gt;</b>	<0.02
<u> </u>	20.02	3 6	<0.02	š .	<0.02	r .	<0.02	Mo	<0.02	Ł	<0.0		Sm <0.02	S	_	02	Sn	<0.02	Zu	<0.02
Q	<0.02	3	<0.02	Au	<0.02	P.	<0.02	PZ	<0.02	К	<0.2		Ì			02	Ţ	<0.02	Zr	<0.02
						ĺ														The same of the sa

(T) = Target analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



the preparation of all standards,

1165

Part # 57028

<sup>\*</sup> Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

All standard containers are meticulously cleaned prior to use.

Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

All standards should be stored with caps tight and under appropriate laboratory conditions.
Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT: Part Number: Lot #

**Solvent:** 24002546

Nitric Acid

2%

Nitric Acid

1 5.0

Lot Number: 57028 041124

Description: Nickel (Ni)

Recommended Storage: Ambient (20 °C)

**Expiration Date:** 

041127

Nominal Concentration (µg/mL): Weight shown below was diluted to (mL): NIST Test Number: 6UTB 1000 249.85 0.002 Flask Uncertainty 5E-05 Balance Uncertainty Reviewed By: Expanded

Nominal SDS Information

Pedro L. Rentas

Formulated By: Brian Geddes 041124 041124

 Nickel(II) nitrate hexahydrate (Ni) N033 NIM052023A1 RM# Number <u>6</u> Conc. (µg/mL) 100 99.999 Purity Uncertainty Assay 8 Purity (%) 0.10 20.2 8 Weight (g) 1.2369 Target Weight (g) 1.2369 Actual Conc. (µg/mL) 1000.0 Actual +/- (µg/mL) Uncertainty 2.0 13478-00-7 CAS# (Solvent Safety Info. On Attached pg.) OSHA PEL (TWA) 1 mg/m3 orl-rat 1620 mg/kg 3136 NIST SRM

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Î	В	В	В		Ą	Sb	A		Г	
	F		(3)	<u>a</u>	60	<b>J</b>	_			
	<b>♦</b> 0.02	<0.02	<0.01	< 0.02	802	<0.02	<0.02	Į		
	Ω	<u>و</u>	ਨ	Ω	Q	Ω	Q	i		
	F	•	_	SA	-		_	۱		
	<0.02	<0.02	40.02	<0.02	<0.02	<0.2	<0.02	ļ		
	Au	Ç	Ga	වු	臣	팕	Dy	I		
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	į		
	Pъ	La	Fe	ᅣ	5	Но	Ж	ı		
	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	İ	race Me	
	Nd	Mo	Hg	Mn	Mg	Lu	17.	۱	etals	
(T) T	<0.02	<0.02	<0.2	<0.02	<0.01	<0.02	<0.02		Verifica	
	×	Pŧ	Ď	Pd	S <sub>o</sub>	₽	Z.	ı	ation	
1	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	T		by ICP-	
	Sc	Sm	Ru	Rb	Rh.	Re	P	I	NS (	
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		$\mu$ g/mL)	
	Ta	S	Sr	Na	Ag	Si	Se	I		I
	<0.02	40.02	40.02	<0.2	40.02	40.02	<0.2			
	Ti	Sn	Tm	Ħ	Ħ	Te	4T	l		I
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
	Zr	Zn	Υ.	4.7 1.0	<	ď	W			
	<0.02	40.02	<0.02	40.02	40.02	<0.02	<0.02			

= larget analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in

the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 57028

m/z->

210

220

230

240

250

260

m/z->

110

120

130

140

150

160

170

180

190

200

1.0⊑8

2.0E8

1.0≣8

W/z-V

0

20

30

40

Ó

60

8

80

000

100

2.0≣8

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## Certified Reference Material CRM

R: 06/14/24

1

CERTIFIED WEIGHT REPORT: 1. Selenium (Se) Compound Nominal Concentration (µg/mL): 1.0≣4 2.0∈4 Recommended Storage: Volume shown below was diluted to (mL): **NIST Test Number: Expiration Date:** Part Number: Lot Number: Description: [1] Spectrum No.1 58134 Number Part 57034 060624 **BTU9** 1000 Ambient (20 °C) Selenium (Se) 060627 071223 Number Ē [ 33.702 sec]:58034.D# [Count] [Linear] 2000.07 0.1000 Dilution Factor Val. (mL) 0.100 5E-05 Balance Uncertainty 200.0 Initial Flask Uncertainty Pipette (mL) Conc. (µg/mL) Uncertainty M5962 0.084 24002546 Nominal Lot # 2.0% 1000 Conc. (µg/mL) Nitric Acid 10002.5 Solvent: 40.0 (mL) Conc. (µg/mL) Nitric Acid 1000.0 Final Formulated By: Reviewed By: +/- (µg/mL) Uncertainty Expanded 2.2 7782-49-2 CAS# (Solvent Safety Info. On Attached pg.) Pedro L. Rentas Benson Chan OSHA PEL (TWA) SDS Information 0.2 mg/m3 ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com orl-rat 6700 mg/kg 1.050 060624 060624 3149 ISIN SRM

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

				П		П	Trace M	etals	Verifica	tion	by ICP-№	S (µ	g/mL)	П		П		Н	
≥	40.02	ß	40.02	Dy	<0.02	HF	40.02	<u> </u>	<0.02	Z.	40.02	Pr	40.02	Se	н	큠	40,02	W	40.02
Sb	40.02	ධු	<0.2	퍔	<0.02	Но	<0.02	Ę	<0.02	¥	<0.02	Re	40.02	Si	<0.02	Te	40.02	U	40.02
As	<0.2	ද	<0.02	臣	<0.02	ħ	<0.02	Mg	<0.01	၀ွ	<0.02	짪	♦0.02	Ag	<0.02	∄	40.02	۷	<0.02
Ва	40.02	S S	<0.02	ନ୍ଦ	<0.02	Ir	<0.02	Mn	<0.02	Pd	40.02	RЪ	40.02	Na	<0.2	Ħ	40.02	44	<0.02
Ве	40.01	Ç	<0.02	Ga	<0.02	F	<0.2	Hg	<b>402</b>	P	<0.02	Ru	40.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	40.02	င္ပ	40.02	G G	<0.02	Ľ	<0.02	Mo	<0.02	7	<0.02	Sm	40.02	S	<0.02	Sn	40.02	Zn	<0.02
В	40.02	δ	<0.02	Au	<0.02	Рь	<0.02	Nd	<0.02	×	<0.2	Sc	<0.02	Ta	<0.02	Ħ	40.02	Zr	<0.02

(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



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### 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 **PRODUCT DESCRIPTION**

**Product Code:** 

Single Analyte Custom Grade Solution

Catalog Number:

CGMO1

Lot Number:

T2-MO720876

Matrix:

**H2O** 

Value / Analyte(s):

tr. NH40H

1 000 µg/mL ea:

Molybdenum

Starting Material:

Ammonium Molybdate

Starting Material Lot#:

2361

Starting Material Purity: 99.9893%

### 3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

**Certified Value:** 

 $998 \pm 7 \, \mu g/mL$ 

Density:

1.000 g/mL (measured at 20 ± 4 °C)

### Assav Information:

Assay Method #1

998 ± 4 µg/mL

ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

 $X_{CRM/RM} = \Sigma(w_i) \{X_i\}$ 

Xi = mean of Assay Method : with standard uncertainty uchar i

wi = the weighting factors for each method calculated using the inverse square of

 $w_i = (1/u_{chari})^2 / (\Sigma (1/(u_{chari})^2)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{cs})^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

u<sub>(s</sub> = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mean of individual results;

X<sub>CRM/RM</sub> = (X<sub>a</sub>) (u<sub>char a</sub>)

X<sub>a</sub> = mean of Assay Method A with

ucher a = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{chara} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{\frac{1}{2}}$ 

k = coverage factor = 2

uchar a = the errors from characterization

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

Page 1 of 4

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

 All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

 An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

```
0.008000 M Zn
M Ag <
          0.000590 M Eu <
                           0.000300 M Na
                                             0.000879 M Se <
                                                                               0.000598
M AI
          0.000563 M Fe <
                          0.006500 M Nb <
                                            0.029000 i
                                                       Si <
                                                                     M Zr <
                                                                               0.001800
M As <
         0.002100 M Ga <
                          0.000300 i
                                                    M Sm <
                                                              0.000300
                                     Nd <
M
   Au <
         0.000300 M Gd <
                           0.000300 M Ni <
                                            0.008000 M Sn <
                                                              0.008900
М
   B <
         0.003300 M
                    Ge <
                           0.000300 M Os <
                                            0.000590 M Sr
                                                              0.000175
М
   Ba
          0.001689 M
                    Hf <
                           0.001800 i
                                     P <
                                                    М
                                                       Ta <
                                                              0.004200
M
   Be <
         0.000890 M Hg <
                          0.003300 M Pb <
                                            0.000300 M
                                                       Tb <
                                                              0.000300
M
  Ri <
         0.000890 M Ho < 0.000300 M Pd <
                                            0.001800 M
                                                       Te <
                                                              0.021000
   Ca
         0.006334 M In < 0.032000 M Pr <
0
                                            0.013000 M Th <
                                                              0.000300
0
   Cd <
         0.026000 M Ir < 0.000300 M Pt <
                                            0.000300 O Ti <
                                                              0.032000
M Ce <
         0.008300 M K
                           0.130213 M Rb
                                            0.004575 M TI
                                                              0.001266
M Co
         0.000598 M La < 0.000300 M Re <
                                            0.000300 M Tm <
                                                              0.000300
                           0.000059 M Rh <
M Cr
         0.000527 O Li
                                            0.000300 M U <
                                                              0.005300
                                            0.079000 M V <
М
   Cs
         0.000527 M Lu <
                           0.000300 M Ru <
                                                              0.000890
М
   Cu
         0.002252 M Mg
                           0.000563 i
                                      S <
                                                    M W
                                                              0.087982
         0.000300 M
М
   Dy <
                    Mn <
                           0.005900 M
                                      Sb
                                            0.001513 M
                                                       Y <
                                                              0.000300
М
  Er <
         0.000300 s
                    Mo <
                                  M
                                     Sc <
                                            0.001200 M
                                                      Yb <
                                                              0.000300
```

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

**Stability -** 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH40H in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1
			6O,190Os2+,190Pt
			2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRWRM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

- 10.1 ISO 9001 Quality Management System Registration
  - QSR Certificate Number QSR-1034
- 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"
  - Chemical Testing Accredited / A2LA Certificate Number 883.01
- 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"
  - Reference Material Producer Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRMRM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- July 17, 2027
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: \_\_\_\_\_
- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS Certificate Prepared By:

Uyen Truong Supervisor, Product Documentation

Meyer Trusing

### **Certificate Approved By:**

Michael Booth Director, Technical Michael 2 Booth

### **Certifying Officer:**

Paul Gaines Chairman / Senior Technical Director Paul R Line



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### 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 **PRODUCT DESCRIPTION**

**Product Code:** 

Single Analyte Custom Grade Solution

Catalog Number:

CGMO1

Lot Number:

T2-MO720876

Matrix:

**H2O** 

Value / Analyte(s):

tr. NH40H 1 000 µg/mL ea:

Molybdenum

Starting Material:

Ammonium Molybdate

Starting Material Lot#:

2361

Starting Material Purity: 99.9893%

### 3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

**Certified Value:** 

 $998 \pm 7 \, \mu g/mL$ 

Density:

1.000 g/mL (measured at 20 ± 4 °C)

### Assav Information:

Assay Method #1

998 ± 4 µg/mL

ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

 $X_{CRM/RM} = \Sigma(w_i) \{X_i\}$ 

Xi = mean of Assay Method : with standard uncertainty uchar i

wi = the weighting factors for each method calculated using the inverse square of

 $w_i = (1/u_{chari})^2 / (\Sigma (1/(u_{chari})^2)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{cs})^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

u<sub>(s</sub> = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mean of individual results;

X<sub>CRM/RM</sub> = (X<sub>a</sub>) (u<sub>char a</sub>)

X<sub>a</sub> = mean of Assay Method A with

ucher a = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{chara} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{\frac{1}{2}}$ 

k = coverage factor = 2

uchar a = the errors from characterization

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

Page 1 of 4

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

 An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

```
0.008000 M Zn
M Ag <
          0.000590 M Eu <
                           0.000300 M Na
                                             0.000879 M Se <
                                                                                0.000598
          0.000563 M Fe <
M AI
                           0.006500 M Nb <
                                             0.029000 i
                                                        Si <
                                                                      M Zr <
                                                                                0.001800
M As <
          0.002100 M Ga <
                           0.000300 i
                                                    M Sm <
                                                              0.000300
                                      Nd <
M
   Au <
          0.000300 M
                    Gd <
                           0.000300 M Ni <
                                             0.008000 M Sn <
                                                               0.008900
М
   B <
          0.003300 M
                    Ge <
                           0.000300 M Os <
                                             0.000590 M Sr
                                                               0.000175
М
   Ba
          0.001689 M
                    Hf <
                           0.001800 i
                                      P <
                                                    М
                                                       Ta <
                                                               0.004200
M
   Be <
          0.000890 M Hg <
                           0.003300 M Pb <
                                             0.000300 M
                                                       Tb <
                                                               0.000300
M
  Ri <
          0.000890 M Ho <
                          0.000300 M Pd <
                                             0.001800 M
                                                       Te <
                                                              0.021000
   Ca
          0.006334 M In < 0.032000 M Pr <
0
                                             0.013000 M Th <
                                                              0.000300
0
   Cd <
          0.026000 M Ir < 0.000300 M Pt <
                                             0.000300 O Ti <
                                                              0.032000
M Ce <
          0.008300 M K
                           0.130213 M Rb
                                             0.004575 M TI
                                                               0.001266
M Co
          0.000598 M La < 0.000300 M Re <
                                             0.000300 M Tm <
                                                               0.000300
                           0.000059 M Rh <
M Cr
          0.000527 O Li
                                             0.000300 M U <
                                                              0.005300
М
   Cs
          0.000527 M Lu <
                           0.000300 M
                                      Ru <
                                             0.079000 M V <
                                                              0.000890
М
   Cu
          0.002252 M
                    Mg
                           0.000563 i
                                      S <
                                                    M W
                                                              0.087982
М
   Dy <
          0.000300 M
                    Mn <
                           0.005900 M
                                      Sb
                                             0.001513 M
                                                       Y <
                                                              0.000300
М
  Er <
          0.000300 s
                    Mo <
                                   M
                                      Sc <
                                             0.001200 M
                                                       Yb
                                                              0.000300
```

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

**Stability -** 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl). Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1
			6O,190Os2+,190Pt
			2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRWRM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

- 10.1 ISO 9001 Quality Management System Registration
  - QSR Certificate Number QSR-1034
- 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"
  - Chemical Testing Accredited / A2LA Certificate Number 883.01
- 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"
  - Reference Material Producer Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganic ventures.com; info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRMRM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- July 17, 2027
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

Sealed TCT Bag Open Date:	
Sealed TOT Day Open Date.	

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS Certificate Prepared By:

Uyen Truong Supervisor, Product Documentation Mega Trum

### **Certificate Approved By:**

Michael Booth Director, Technical Michael 2 Booth

### **Certifying Officer:**

Paul Gaines Chairman / Senior Technical Director Paul R Simo

### 6652M , 8782M

INORGANIC"
VENTURES

Certificate of Analysis

Refine your results. Redefine your industry.

R:2/22/24

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com



info@inorganicventures.com

P: 800-669-6799/540-585-3030 F: 540-585-3030

### **ACCREDITATION / REGISTRATION**

Number QSR-1034). the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (GSR Certificate INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for

### РКОDUCT DESCRIPTION

Single Analyte Custom Grade Solution Product Code:

2% (v/v) HNO3 :xintsM T2-TI719972 Lot Number: CGTN Catalog Number:

muine)II 1 000 hg/mL ea: Value / Analyte(s): tr. HF

Starting Material Lot#: 2094 IsteM iT Starting Material:

**CERTIFIED VALUES AND UNCERTAINTIES** Starting Material Purity: 99.9975%

1.012 g/mL (measured at 20  $\pm$  4 °C) Density: 1002 ± 5 µg/mL Certified Value:

Assay Information:

ICP Assay NIST SRM 3162a Lot Number: 130925 1002 ± 4 µg/mL Assay Method #1

The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. 8 Millonal Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance  $\frac{1}{1}$ 

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expressed at approximately the 95% confidence level using a coverage factor of  $K=\Sigma$ .

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mosn of individual results: Characterization of CRM/RM by One Method

 $(u_{chart}) (u_{chart}) = Mgq$  with A bothsey Messey Messey = x = x

Characterization of CRM/RM by Two or More Methods

### Page 2 of 4

INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

M - Checked by ICP-MS O - Checked by ICP-OES i - Specital Interference n - Not Checked For s - Solution Standard Element

7.7 Storage and Handling Recommendations

oM M 882000.0

INTENDED USE

4.0 TRACEABILITY TO NIST

M Et < O Cn < Mn < Mg < Li < O 892000.0 > mT M 882000.0 > U M 882000.0 > V M 682000.0 W M > US M 882000.0 > S i 544500.0 228610.0 O S37000.0 M 882000.0 > 9A M 882000.0 > AA M 822720.0 992000.0 0.000268 0.000268 M K 0.0004293 M La < > bq M 882000.0 > rq M 888200.0 > rq M 682000.0 > dg M 571100.0 > IT s 852000.0 M 882000.0 0.000268 M 882000.0 0.053663 > 6T M 882000.0 > AT M 882000.0 0.001341 > oH M 903100.0 M Bi < sT M 024450.0 > dT M E70100.0 > q O f81200.0 > dq M f82800.0 892000.0 > 6H M 885800.0 0.010560 O B < ĴΗ M £83200.0 > 00 M GG8020 O.004577 M Gd < 960000'0 JS O.000269 O > iN O 882000.0 > aO M 841200.0 960000.0 n2 M 068010.0 > UA M 89Z000'0 > WS M 89Z000'0 > dN O 322500.0 > bN M 882000.0 0.000872 O Fe > 0.008586 M Ga < 0.004735 O 2r < 0.043560 O.043560 O IA O 78260.0 > nZ O 402100.0 0.032670 M Se > gN O 882000.0 > u3 M 868000.0 ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to CRM/RMs are tested for trace metallic impurities by Axial ICP-DES and ICP-MS. The result from the most sensitive method for each element, is reported below, solutions tested by ICP-MS were analyzed in an III bA-Bitter of ore sech element, is reported below, solutions tested by ICP-MS were snalyzed in an III bA-Bitter of the property 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/ml) - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRWIRMs. used for testing are annually compared to master weights and are traceable to NIST. - All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights 4.2 Balance Calibration

All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration

volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is - This product is traceable to MIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRMINM uncertainty error and the measurement, weighing and

### Page 3 of 4

- Chemical Testing - Accredited / A2LA Certificate Number 863.01

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- QSR Certificate Number QSR-1034

1.01 ISO 9001 Qualify Management System Registration

### MOITATY STANDARD DOCUMENTATION 0.01

Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

### HOMOGENEITY

Please refer to the Safety Data Sheet for information regarding this CRWRM.

### NOITAMROANI SUOGRASAH

HF Note: This standard should not be prepared or stored in glass. W, Mo, Co Jm/gy 450000.0 \ 5300.0 Nb, Ta, Cr, U ICb-0E2 336.121 nm 0.0038 / 0.000028 µg/mL Ce, Ar, Ni ICb-OES 334 341 nm Jm/gu Se000.0 \ +800.0 (Where X = Zr, Mo, Ru)] ICb-OES 353'425 nm 48Ca, [96X=2 14N17N2, 36Ar12C, 14N160180, 32S160, 32S14N, Inferterences (underlined indicates severe) A/N 14q pt Order ICE-MS 48 smu

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view): Technique/Line

1:1:1 H2O / HF./ H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite Volority); Oxide - Numberature history enables or rutile (Dissolved by heating in 1:1:1 HZO / HF / HZSO4); Oxide - Numberature history (-800EC) brookite (fuse in Pt0 with KZSZO7); Ores (fuse in Pt0 with KZSZO7); Ores (fuse in Pt0 with KZSZO7); Ores (fuse in Pt0 with KZSZO7); Ores (fuse in Pt0 with KZSZO7); Oxes (fuse in Pt0 with KZSZO7); Ores (fuse in Pt0 with KZSZO7); Oxes (fuse in Pt0 with KZSZO7); Oxes (fuse in Pt0 with KZZZO7); Oxes (fuse in Pt0 with KZZO7); Oxes (fuse in TI Containing Samples (Preparation and Solution) - Metal (Soluble in HZO / HF caution -powder reacts viving - Internation by the cast of the control of the

HVOS / LDPs container. 1-10,000 ppm single element solutions as the TI(F)6-2 chemically stable for years in TI Confaining Semanter (Preparation and Solution). Metal (Solution in JOO) LDF containing Semanter (Preparation and Solution). with a landency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1%

HN03 / LDPE container. 1-10.000 ppm sincle element solutions as the Ti(F)6-2 chemically stabile for year media. Unstable at ppm levels with metals that would pull F-away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrafed oxide in all dilute adds except HF. Chemical Compatibility - Soluble in concentrated HCI, HF, H3PO4 H2SO4 and HWO3. Avoid neutral to basic

Atomical Commentation Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2 - For more information, visit www.inorganicventures.com/TCT 

Afromic Weinher Valence: Coordination Number: Chemical Engage

reported density. Do not pipette from the container. Do not refurn removed aliquots to container. - After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^\circ$  -  $24^\circ$  C to minimize the effects of transpiration. Use at  $20^\circ \pm 4^\circ$  C to minimize the effects of transpiration. Use at  $20^\circ \pm 4^\circ$  C to minimize volumetric dilution error when using the removed allenots to container.

Twitte sociate in the secied 101 beg, trainspleaded for the orderiver in the shalfy concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss. - While stored in the sealed TCT bag, transpiration of this CRWRM is negligible. After opening the sealed TCT bag, transpiration in a negligible in the capture managed in the capture

. Store between approximately 4° - 30° C while in sealed TCT bag.

Page 4 of 4

Chairman / Senior Technical Director Paul Gaines

Certifying Officer:

12.0

Thomas Kozikowski Manager, Quality Control

Certificate Approved By:

### NAMES AND SIGNATURES OF CERTIFYING OFFICERS

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is confingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

- Sealed TCT Bag Open Date:

transpiration (loss of water from the solution) and infrequently by chemical stability. stability studies conducted on properly stored and handled CRWRMs. Lot expiration is limited primarily by - The lot expiration date reflects the period of time that the stability of a CRMRM can be supported by long term

- The date after which this CRM/RM should not be used.

- June 17, 2027

### 11.2 Lot Expiration Date

- The certification is valid within the measurement uncertainty specified provided the CRMRM is stored and handled in accordance with instructions juven in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRMRM is damaged, confaminated, or otherwise modified.

June 17, 2022

### 11.1 Certification Issue Date

### CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY 0.11

norganic Ventures, 300 Technology Drive, Christiansburg, Ve. 24073, USA; Telephone: 800,669,6796; 540,685,3030, Fax: 540,585,3012; Inaxgar

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com

4	Certified Reference Material CRM	Material CRM		ANAB ISO 1 AB-1539 Ce
1657	8 1	119:2	となく	https://Absolu
	Lot#	Solvent:		
	24002546	24002546 Nitric Acid		

17034 Accredited ertificate Number utestandards.com g 룶 Ambient (20 °C) 57092 060724 Uranium (U) Volume shown below was diluted to (mL): 060727 **6UTB** Ę 1000 Part Part Number: Lot Number: Description: **Expiration Date:** Recommended Storage: Nominal Concentration (ug/mL): NIST Test Number: CERTIFIED WEIGHT REPORT:

	24002340	Z4002546 Nifric Acid		Hierannie Eap	i Especto	
2.0	2.0%	40.0	Nitric Acid	Formulated By:	Glovanni Esposito	060724
		(mf.)		1	CA	
				of least to	Rendo	
5E-05 Balance Uncertainty				Reviewed By:	Pedro L. Rentas	060724
0.100 Flask Uncertainty			u.			
				Expanded	SDS Information	_
Initial Uncertainty Nominal		Initial	Final	Uncertainty	(Solvent Safety Info. On Attached pg.)	tached pg.)
Conc. (ug/ml	3	Conc. (ug/mL)	Vol. (mL) Pipette (mL) Conc. (µg/mL) Conc. (µg/mL) +/- (µg/mL) +/- (µg/mL)		CAS# OSHA PEL (TWA)	LD50

Number

Number

Compound

Uranyi nitrate hexahydrate (U)	58192	041524		0.1000	200.0	0.084	1000	10001.5	1000.0	2.2	13520-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164
1.0E6	[1] Spectrum No.1	10.1	52 1	254 89	c]:570£	22.D# [C	[ 23.254 sec]:57092.D# [Count] [Linear]	[ Sec						
5.0 ES														
m/z->	0	Q	80	00		04	0	Og .	0		98	oa	100	
2.5E4														
m/z->>	0	T	120	130		440	150	160	170		- Ø	190	002	
8.0E8														
~-z/w	0	220	Q	000		240	280	280						

<del>11</del>82

Part # 57092

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## Certified Reference Material CRM

ANAB ISO 17034 Accredited AR-1539 Certificate Number https:///Absolutestandards.com

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

						**													ì
CONTRACTOR OF THE PARTY OF THE						Lace M	etais	Verifica	TION	5√  CP-M	D S								_
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_	ć	50.00		5	ı	000	1	70.02	1	70.02	E	20:05	0	<b>40.02</b>	Sn	<b>Q</b> .02	20	<b>Q</b> .02	
	3	20.02	Au.	70:05	2	Z0.02	Ž	<b>\$0.02</b>	×	802	Sc	2000	Ĕ	500	F	200	t	9	

(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.





\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

All standard containers are meticulously cleaned prior to use.

Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All standards should be stored with caps tight and under appropriate laboratory conditions. \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Lot # 060724

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ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Certified Reference Material CRM

Absolute Standards, Inc. 800-368-1131 www.absolutestandards.com







CERTIFIED WEIGHT REPORT:				•		Lot #	Solvent:						
Part Number:		57040				21110221	Nitric Acid						
Lot Number:	e:	071423							1	R	, ,		
Description:		Zirconium (Zr)	(Zr)						S. Comments		Service Common C		
						2.0%	40.0	Nitric Acid	Formulated By:	Ben	Benson Chan	071423	_
Expiration Date:	*	071426					(mL)		7	122	2		_
Recommended Storage:	2.0	Ambient (20 °C)	ပ္				•			A			
Nominal Concentration (ug/mL):		1000							Market	He			
NIST Test Number:	**	6UTB		5E-05	Balance Uncertainty	ainty			Reviewed By:	Ped	Pedro L. Rentas	071423	127
Volume shown below was diluted to (mL):	was dilute	ed to (mL):	2000.02	0.058	Flask Uncertainty	ıţ		4					<b>a</b>
									Expanded	Ø	SDS Information		
	Part	Lot	Dilution	Initial	Uncertainty	Nomina	Initial	Final	Uncertainty	(Solvent S.	(Solvent Safety Info. On Attached pg.)	ed pg.)	NIST
Compound	Number	Number Number	Factor	Vol. (mL)	Pipette (mL)	Conc. (µg/mL)	Vol. (ml.) Pipette (ml.) Conc. (ug/ml.) Conc. (ug/ml.) Conc. (ug/ml.)	Conc. (ug/mL)	+/- (na/ml.)	CAS# OSH	OSHA PEL (TWA)	1050	SRM

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1. Zirconyl chloride octahydrate (Zr)			Ľ		E		c
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Part # 57040

Printed: 6/7/2024, 3:58:47 PM

Absolute Standards, Inc. www.absolutestandards.com 800-368-1131



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	-	Test of	_			_	_	_	_	_	
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(T) = Target analyte

## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

ない

<sup>\*</sup> The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated,

<sup>\*</sup> Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards

<sup>\*</sup> All standard containers are meticulously cleaned prior to use.

<sup>\*</sup> Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above). \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

<sup>\*</sup> All standards should be stored with caps tight and under appropriate laboratory conditions. \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



### Certificate of Analysis

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com

R: 2/22/2024 M5999

P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### **ACCREDITATION / REGISTRATION** 1.0

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 **PRODUCT DESCRIPTION**

**Product Code:** 

Multi Analyte Custom Grade Solution

Catalog Number:

CLPP-SPK-1

Lot Number:

T2-MEB721963

Matrix:

7% (v/v) HNO3

Value / Analyte(s):

2 000 µg/mL ea:

Aluminum,

Barium,

1 000 µg/mL ea:

Iron,

500 μg/mL ea:

Manganese,

Nickel, Zinc,

Vanadium, Cobalt,

250 µg/mL ea:

Copper,

200 µg/mL ea: Chromium,

50 µg/mL ea:

Beryllium,

Silver

### 3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

**ANALYTE CERTIFIED VALUE ANALYTE CERTIFIED VALUE** Aluminum, Al 2 000 ± 7 µg/mL 2 000 ± 9 µg/mL Barium, Ba Beryllium, Be 50.00 ± 0.26 µg/mL Chromium, Cr 200.0 ± 1.1 µg/mL 500.0 ± 2.4 µg/mL Cobalt, Co Copper, Cu 250.0 ± 1.0 µg/mL Iron, Fe 1 000 ± 4 µg/mL 500.0 ± 2.0 µg/mL Manganese, Mn Nickel, Ni 500.0 ± 2.2 µg/mL

Vanadium, V

500.0 ± 2.2 μg/mL

Silver, Ag Zinc, Zn

50.00 ± 0.22 µg/mL

500.0 ± 2.2 µg/mL

**Density:** 

1.070 g/mL (measured at 20 ± 4 °C)

**Assay Information:** 

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ва	ICP Assay	3104a	140909
Ва	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Со	ICP Assay	3113	190630
Со	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
V	IC Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

 $X_{CRM/RM} = \Sigma(w_i)(X_i)$ 

 $\mathbf{X}_i$  = mean of Assay Method i with standard uncertainty  $\mathbf{u}_{\text{char }i}$ 

 $\mathbf{w}_i$  = the weighting factors for each method calculated using the inverse square of the variance:

 $w_i = (1/u_{\mathrm{char}\,i})^2/(\Sigma(1/(u_{\mathrm{char}\,i})^2)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k \left(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts}\right)^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mean of individual results:

X<sub>CRM/RM</sub> = (X<sub>a</sub>) (u<sub>char a</sub>)

X<sub>a</sub> = mean of Assay Method A with

u<sub>char a</sub> = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (‡) =  $U_{CRM/RM} = k (u^2_{char a} + u^2_{bb} + u^2_{lts} + u^2_{bs})^{1/2}$ 

k = coverage factor = 2

uchar a = the errors from characterization

u<sub>bb</sub> = bottle to bottle homogeneity standard uncertainty u<sub>lts</sub> = long term stability standard uncertainty (storage)

uts = transport slability standard uncertainty

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

 - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (μg/mL)

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganic ventures.com; info@inorganic ventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 27, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- July 27, 2027
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date:	
-----------------------------	--

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

Paul R Line

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

### **Certificate Approved By:**

Thomas Kozikowski Manager, Quality Control

### **Certifying Officer:**

Paul Gaines

Chairman / Senior Technical Director



### Certificate of Analysis

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com

P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### 1.0 **ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 PRODUCT DESCRIPTION

Product Code:

Multi Analyte Custom Grade Solution

Catalog Number:

IV-STOCK-12

Lot Number:

U2-MEB734294

Matrix:

5% (v/v) HNO3

Value / Analyte(s):

10 µg/mL ea:

Barium, Bismuth, Cobalt, Lithium.

Beryllium, Cerium, Indium,

Nickel.

Lead,

Uranium

### 3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ANALYTE Barium, Ba	CERTIFIED VALUE 10.01 ± 0.04 µg/mL	ANALYTE Beryllium, Be	CERTIFIED VALUE 10.01 ± 0.05 µg/mL
Bismuth, Bi	10.01 ± 0.06 μg/mL	Cerium, Ce	10.01 ± 0.04 μg/mL
Cobalt, Co	10.01 ± 0.05 μg/mL	Indium, in	10.01 ± 0.04 µg/mL
Lead, Pb	10.00 ± 0.04 μg/mL	Lithium, Li	10.01 ± 0.04 μg/mL
Nickel, Ni	10.01 ± 0.04 µg/mL	Uranium, U	10.01 ± 0.05 µg/mL

Density:

1.025 g/mL (measured at 20  $\pm$  4 °C)

**Assay Information:** 

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ва	ICP Assay	3104a	140909
Ва	Calculated		See Sec. 4.2
Ва	Gravimetric		See Sec. 4.2
Ве	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	180815
Се	ICP Assay	3110	160830
Ce	EDTA	928	928
Ce	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Со	EDTA	928	928
Co	Calculated		See Sec. 4.2
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li	ICP Assay	3129a	100714
Lí	Calculated		See Sec. 4.2
Li	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
U	ICP Assay	traceable to 3164	R2-U689597
U	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRMRM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

### $X_{CRM/RM} = \Sigma\{w_i\}\{X_i\}$

 $X_i$  = mean of Assay Method i with standard uncertainty  $u_{char\ i}$ 

 $\mathbf{w}_{\parallel}$  = the weighting factors for each method calculated using the inverse square of the variance:

 $w_i = (1/u_{\text{char }i})^2/\left(\Sigma(1/(u_{\text{char }i})^2)\right)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value, X<sub>CRMRM</sub>, where one method of characterization is used is the mean of individual results:

 $X_{CRM/RM} = (X_a) (u_{char} a)$ 

X<sub>a</sub> = mean of Assay Method A with

uchar a = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (1) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{tts} + u^2_{ts})^{1/2}$ 

k = coverage factor = 2

u<sub>char a</sub> = the errors from characterization

 $u_{f bb}^{--}$  = bottle to bottle homogeneity standard uncertainty

uits = long term stability standard uncertainty (storage)

u<sub>ts</sub> = transport stability standard uncertainty

### **Certified Abundance:**

### IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

 All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

 An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

### 6.0 INTENDED USE

- **6.1** This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.
- 6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures <u>Terms and Conditions of Sale.</u>

  <a href="https://www.inorganicventures.com/terms-and-conditions-sale">https://www.inorganicventures.com/terms-and-conditions-sale</a>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- June 21, 2028
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

-	Sealed TCT	Bag	Open Date:	
	oodiog roi	203	opon bato.	

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

### Certificate Approved By:

Thomas Kozikowski Manager, Quality Control

### **Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

Paul R. Lines

Lot # 071423

www.absolutestandards.com Absolute Standards, Inc. 800-368-1131

## Certified Reference Material CRM

MEDTO

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

Part Lot	Volume shown below was diluted to (mL):	NIST Test Number:	Nominal Concentration (µg/mL):	Expiration Date:	Des	Pa Lc	CERTIFIED WEIGHT REPORT:
	Ē		₩ 9	n Date:	Description:	Part Number: Lot Number:	iii
	ed to (mL):	6UTB	Ambient (20 °C) 1000	071426	Zirconium (Zr)	57040 071423	
Dilution	2000.02		Ċ		(Zr)		
mitia	0.058	5E-05					
Uncertainty	Flask Uncertainty	Balance Uncertainty					
Nominal	inty	dainty		2.0%	9	21110221	Lot #
Initial				(mL)	ò	Nitric Acid	Solvent:
Final				Nitric Acid			, , ,
Expanded Uncertainty		Reviewed By:	Kelly	Formulated by:	Constitution of the Consti		*
SDS Information (Solvent Safety Info. On Attached pg.)		Pedro L. Rentas	Henra	Benson Chan	Action of the Control		
ched pa.)		071423		071			
i ilidi — Oliver (dility	Expanded	Expanded Final December	Reviewed By: Pedro L. Rentas  Expanded SDS Information  Expanded (Solvert School of Arrobot of Arro	Reviewed By: Pedro L. Rentas  Expanded SDS Information  Expanded Information	Reviewed By:  Expanded  Expanded  Expanded  Final Theoretists  Formulated By:  Reviewed By:  Pedro L. Rentas  Expanded  SDS Information	Nitric Acid Formulated By: Benson Chan Reviewed By: Pedro L. Rentas Expanded SDS Information Expanded SDS Information	Nitric Acid Formulated By: Benson Chan  Reviewed By: Pedro L. Rentas  Expanded SDS Information  Expanded SDS Information

m/2>	5,067	m/z->> 1.0E8	5.0E7	1.0E8	5.OE5	: <del>1</del> O	
						Spe	
N 0		110		ō		[1] Spectrum No.1	
N N O		100		20			
230		130		30		41.153	
ō		ŏ		0		40C]:57	
240		4		0		040.D#	
N O		150		ti O		[ 41.153 %ec]:57040.D# [Count] [Linear]	
Ŋ		4		0		[Linear]	
N 0 0		160		0			
		170		70			
		180		80			
				ze.			
		790		<b>9</b>	nde erredegjelde gjeldege trifte jarredeke e n.e.k k		
		200		100			

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	B B B B B		
	40.02 40.02 40.02 40.02 40.01 40.02		
	5 8 5 5 5 5 5		
	40.02 40.02 40.02 40.02 40.02		
	AL CO DE DE DE DE DE DE DE DE DE DE DE DE DE		
	40.02 40.02 40.02 40.02 40.02		
	# # # # # # # # # # # # # # # # # # #		
	40.02 40.02 40.02 40.02 40.02	Trace	
	Mo Hg Li	Metals	
(T) = Ta	40.02 40.02 40.01 40.02 40.02 40.02	Verifica	
Target analyte	K P P R OS NI	tion b	
îte	40.02 40.02 40.02 40.02 40.02 40.02	y ICP-M	
	Re Re Se	S (µg/	
	40.02 40.02 40.02 40.02 40.02 40.02	mL)	
	Se Si Na Si Si Si Si Si Si Si Si Si Si Si Si Si		
	40.00 40.00 40.00 40.00 40.00 40.00		
	t ti mis		
	40.02 40.02 40.02 40.02 40.02		
	Z Z ≺ Z < □ €		
	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0		

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # | 57040

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis





R->16/13/24 Metdig

M 6121

Material No.: 9530-33 Batch No.: 0000275677 Manufactured Date: 2020/12/16 Retest Date: 2025/12/15

Revision No: 1

### Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl2)	<= 0.5 ppm	< 0.5
Phosphate (PO4)	<= 0.05 ppm	< 0.03
Sulfate (SO <sub>4</sub> )	<= 0.5 ppm	< 0.3
Sulfite (SO <sub>3</sub> )	<= 0.8 ppm	0.3
Ammonium (NH <sub>4</sub> )	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Frace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Frace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Frace Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
race Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
race Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
race Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
race Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

Material No.: 9530-33 Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Frace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Frace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities ~ Silicon (Si)	<= 100.0 ppb	< 10.0
race Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
race Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
race Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
race Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
race Impurities – Thallium (TI)	<= 5.0 ppb	< 2.0
race Impurities – Tin (Sn)	<= 5.0 ppb	
race Impurities - Titanium (Ti)	<= 1.0 ppb	< 0.8 0.2
race Impurities – Vanadium (V)	<= 1.0 ppb	
race Impurities - Zinc (Zn)	<= 5.0 ppb	< 0.2
race Impurities – Zirconium (Zr)	<= 1.0 ppb	0.3 < 0.1

For Laboratory, Research or Manufacturing Use Product Information (not specifications): Appearance (clear, fuming liquid) Meets ACS Specifications

Country of Origin:

US

Packaging Site:

Phillipsburg Mfg Ctr & DC







R-> 11/12/24

Material No.: 9606-03 Batch No.: 24D1062002

Manufactured Date: 2024-03-26

Retest Date: 2029-03-25

Revision No.: 0

### Certificate of Analysis

Test	Specification	Result
Assay (HNO3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (CI)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO <sub>4</sub> )	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO <sub>4</sub> )	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (AI)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69% CMOS





Material No.: 9606-03 Batch No.: 24D1062002

Test Specification Result

For Microelectronic Use

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC

## Certified Reference Material CRM



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

CERTIFIED WEIGHT REPORT: Part Number: Description: Lot Number: 112124

Magneslum (Mg)

112127

Ambient (20 °C)

Noon Travarie

Nominal Concentration (µg/mL):

**NIST Test Number:** 

BIN9

Recommended Storage:

**Expiration Date:** 

Weight shown below was diluted to (mL):

2000.07

0.100 Flask Uncertainty

5E-05 Balance Uncertainty

5

Nominal

Purity

Uncertainty

Assay

Target

Reviewed By: Formulated By: Pedro L. Rentas Giovanni Esposito Broade 112124 112124

Actual Actual Uncertainty Expanded (Solvent Safety Info. On Attached pg.) **SDS** Information

TSIN

RM# Number Conc. (µg/mL) 10000 99.999 3 Purity (%) 0.10 8.51 3 234.9183 Weight (g) 234.9459 Weight (g) Conc. (µg/mL) 10001.2 +/- (µg/mL) 20.0 13446-18-9 CAS# OSHA PEL (TWA) ₹ orl-rat 5440 mg/kg 3131a LD50 SRM

1. Magnesium nitrate hexahydrate (Mg) IN030 мgpo6202341 1.0回日 [1] Spectrum No.1 [ 19.923 sec];58112.D# [Count] [Linear]

Part # 58112

www.absolutestandards.com

1201

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	Œ	В	Be	Ва	Às	Sh	≥	I		
		_					$\exists$			
	<0.02	40.02	0.01	40.02	402	40.02	0.02			
8	Cu	င္ပ	Ω	ပ္တ	င္ပ	ರಿ	CQ.	Į		
	<0.02	<0.02	<0.02	<0.02	<0.02	0.2	<0.02			
	Αü	ဂ္ဂ	Ga	8	띨	탐	Dy			
	<0.02	<0.02	<0.02	<0.02	40.02	<0.02	<0.02			
	Pb	F	Fe	ŀ	In	Но	Hf			
	<0.02	<0.02	40.2	<0.02	<0.02	<0.02	<0.02		Trace M	
	Nd	Mo	Hg	Mn	Mg	Ŀ	E.		etals	
Tomat and to	<0.02	<0.02	40.2	<0.02	Н	40.02	<0.02		Verifica	
	5	77	ď	Pd	õ	\$	2		tion	
+	40.2	<0.02	<0.02	<0.02	40,02	40.02	40.02		by ICP-N	
	Sc	Sm	Ru	Rb	RB	Re	P		NS (H	
	<0.02	40.02	€0.02	<0.02	40.02	40.02	<0.02		g/mL)	
	1.00	1 (/	Sr	20	Ag	Si	Se			
	20.02	40.02	<b>♦</b> 0.02	2.05	40.02	40.02	<b>∆</b> 0.2			
	111	1 K	m	1 5	1 =	le	10			
	20.02	20.02	20.02	20.02	20.02	40.02	\$0.0Z			
		2 1	7 -	10	\$ <	; ⊏	; ≼			
	20.02	20.6	8 6.52	20.02	A 60.02	200	20.02	200		

(I) = larget analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

## Certified Reference Material CRM



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

m/z->	5.067	m/z->	5.027	m/z->	N. 55 M. 00	5.OE6	1. Manganese(II) nitrate hydrate (Mn)	Weight sh	Expiration Date: Recommended Storage: Nominal Concentration (µg/mL): NIST Test Number:	CERTIFIED WEIGHT REPORT: Part I Lot Des
20		110		<b>1</b>		[1] Spectrum No.1	drate (Mn)	own below wa	Expiration Date: Recommended Storage: Il Concentration (µg/mL): NIST Test Number:	Part Number: Lot Number: Description:
N N O		120		N O			IN031 MNM082020A1	Weight shown below was diluted to (mL):  Lot  RM# Number	101127 Ambient (20 °C) 1000 6UTB	58025 101124 Mangan
230		190		<b>a</b> _		34.243 800	1000	4000.2  Nominal  Conc. (µg/mL)	o°C)	58025 A -> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
240		4.0		<b>\$</b>		]:57025.D#	99.999 0.10	0.10 Flask Uncertainty Purity Uncertainty As (%) Purity (%) (	SE-05 Balance Uncertainty	R-71/13/28 Solvent:
250		150		<b>5</b> 0		[ 34.243 sec]:57025.D# [Count] [Linear]	20.8 19.2322	ainty Assay Target (%) Weight (g)	ertainty	Lot # bivent: 24002546 2% 80.0
260		100		<b>8</b> .		19ar)	22 19.2344	t Actual (g) Welght (g)		846 Nitric Acid
		170		7			1000.1	Actual ( Cone. (ug/ml.)	ब्रा	
		180		<b>8</b>			<b>2.0</b> 15710-66-4	Expanded Uncertainty (So	Reviewed By:	Howannie Formulated By:
		<b>1</b>		90			56-4 5 mg/m3	olvent s	Pedro L. Rentas	Glovanr
		N O		100				SDS Information Safety Info. On Attached ISHA PEL (TWA)	antas	Esposito
							orl-rat >300mg/kg 3132	d pg.) NIST	101124	1202

1203

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	В	В	Ве	В	As	Sb	A	1		1
	H			_	-	_				I
	40.02	0.02	40.01	40.02	40.2	40.02	<0.02			
	Ω	င္ပ	ť	င္က	රි	ರಿ	Ω			ı
	\$0.02	40.02	<0.02	40.02	<0.02	0.2	<0.02			
	Au	ନ୍ମ	ဂ္ဂ	ନୁ	Eu	뎍	Dγ	İ		
	<0.02	<0.02	40.02	<0.02	<0.02	<0.02	<0.02	1000		
	РЬ	La	ह्य	F,	ln	Н	胀	ı		
	<0.02	<0.02	<0.2	A0.02	<0.02	<0.02	<0.02	A 10000 PM	Trace M	
	Nd	Мо	Hg	Mn	Mg	Ę	Ε.	I	Metals	
	<0.02	<0.02	<0.2	H	10.0>	<0.02	<0.02		Verifica	
	*	7	ס	Pd	0°	Z	Z	I	ation	
	40.2	<0.02	<0.02	40.02	<0.02	<0.02	<0.02		by ICP	
	Sc	Sm	Ru	Rb	R.	Re	Pr	I	SN	
	<0.02	<0.02	<0.02	40.02	<0.02	<0.02	<0.02		(µg/mL)	
	Ta	S	Sr	Na	A	S.	Se	I		
	<0.02	△0.02	<0.02	40.2	40.02	<0.02	40.2	Secretary Section		
	Ti	Sn	Tm	H	1	e i	41	I		
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	The second second		
	Zr	Zn	×	4	۷	C	W			
	<0.02	<0.02	<0.02	<0.02	<0.02	40.02	<0.02			
L		_	_	-	-	_	_		_	4

(1) = larget analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard

### Certified by:

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- \* Purified acids, 18.2 megohm delonized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- \* All standard containers are meticulously cleaned prior to use.
- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- \* All standards should be stored with caps tight and under appropriate laboratory conditions.
- \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Lot # 072424

## Certified Reference Material CRM



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

CERTIFIED WEIGHT REPORT: Part Number: R->1/13/2 Solvent:

www.absolutestandards.com

800-368-1131

Absolute Standards, Inc.

Lot Number: Description:

58111 072424 Sodium (Na)

M6144

Neminal Concentration (µg/mL):

NIST Test Number:

**6UTB** 

10000

Ambient (20 °C)

Weight shown below was diluted to (mL):

4000.2

5E-05 Balance Uncertainty

0.10 Flask Uncertainty

Recommended Storage:

**Expiration Date:** 

072427

24002546 Nitric Acid

Nitric Acid

Formulated By:

Benson Chan

072424

1204

2%

(mL)

Reviewed By:

Pedro L. Rentas

072424

CAS# **SDS** Information

7631-99-4

5 mg/m3

(Solvent Safety Info. On Attached pg.) OSHA PEL (TWA) orl-rat 3430 mg/kg 3152a

TSIN MES.

5.0E5 [1] Spectrum No.1 [ 8.935 sec]:58111.D# [Count] [Linear] 1. Sodium nitrate (Na)

IN036 NAV01201511

10000

99.999

0.10

26.9

148.7096

######

10000.0

20.0

RM#

Number Lot

Conc. (µg/mL)

(96)

(%)

Weight (g) Target

Weight (g) Conc. (µg/mL)

+/- (µg/mL) Uncertainty

Actual

Actual

Expanded

Nominal

Purity

Uncertainty Assay Purity (%)

M/X-Y 2.5E5 0

2.500

5.0E6

NO

30

4

50

0

70

80

90

100

m/z->

110

120

130

140

150

160

170

180

180

200

5.0E6

2.5E6

m/z->

210

220

240

250

260

1 of 2

Printed: 1/10/2025, 4:48:22 PM

### https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

1205

## www.absolutestandards.com

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

B	Bi	Be	Ba	As	Sb	Α	100		
<0.02	<0.02	<0.01	<0.02	40.2	<0.02	<0.02			
Ç	င္ပ	む	င္တ	දි	Ç	ß			
<0.02	<0.02	<0.02	<0.02	<0.02	402	<0.02			
Au	ဂူ	G	S.	틷	耳	Дy	I		
<0.02	<0.02	<0.02	40.02	<0.02	40.02	<0.02	NAME OF TAXABLE		
Pb	La	Fe	'n	'n	Но	Ж			
<0.02	<0.02	<0.2	40.02	<0.02	<0.02	<0.02		Trace M	
Nd	Mo	Hg	M	Z gg	L	E		etals	
40.02	40.02	40.2	<0.02	<0.01	<0.02	<0.02		Verifica	
K	7.7	٦	Pd	0°	3	Z	ı	tion	
40.2	<0.02	0.02	A.02	40.02	40.02	40.02		by ICP-N	
Sc	Sm	Ru	Rb	Rh	Re	Pr		IS (L	
<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		g/mL)	
Ta	Ç0	Sr	Z	Ag	S:	Se.			
<0.02	<0.02	<0.02	Т	<0.02	<0.02	<0.2			
12	Sn	Tm	Th.	1	Te	4L	į		١
<0.02	△0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
127	Zn	۲	4	<	c	W	100		
\$0.02	40.02	40.02	<0.02	<0.02	<0.02	<0.02			

(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

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Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

All Standards should be stored with caps tight and under appropriate laboratory conditions.

Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # 58111

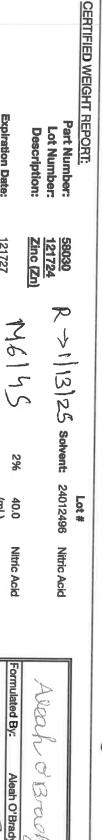
2 of 2

www.absolutestandards.com

## Certified Reference Material CRM



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com



2%

40.0

Nitric Acid

Formulated By:

Aleah O'Brady

121724

즲

Compound

RN#

Number ğ

Conc. (µg/mL)

Nominal

Purity 8

Uncertainty Purity (%)

Assay

Target

3

Weight (g)

Weight (g) Actual

Conc. (µg/mL)

+/- (µg/mL Uncertainty Expanded

CAS#

OSHA PEL (TWA)

LD50

NIST SRM

(Solvent Safety Info. On Attached pg.)

**SDS Information** 

Actual

Nominal Concentration (µg/mL): Recommended Storage:

**Expiration Date:** 

**NIST Test Number:** 

BID9 1000

Ambient (20 °C) 121727

Weight shown below was diluted to (mL):

2000.1

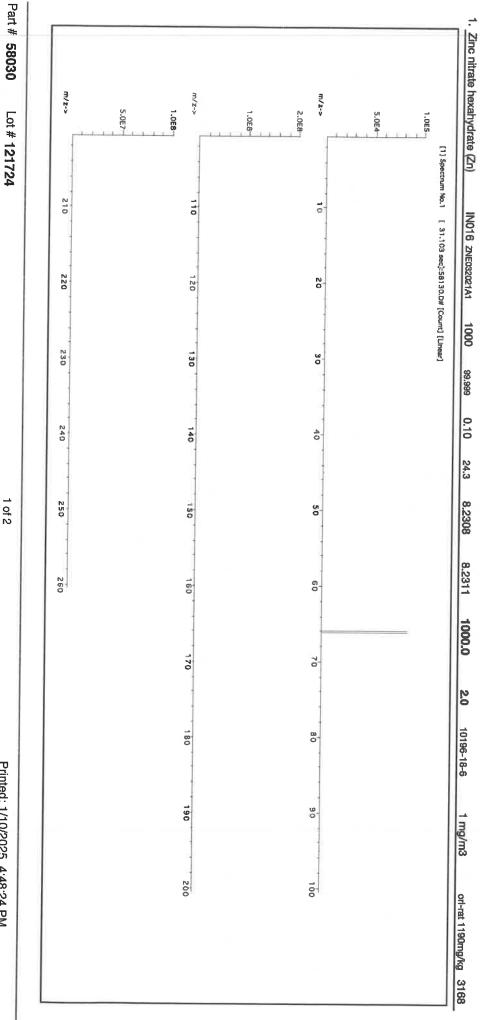
5E-05 Balance Uncertainty

Reviewed By:

Pedro L. Rentas

121724

0.10 Flask Uncertainty



1206

1207

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(T) = Target analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard

Certified by:

- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- \* All standard containers are meticulously cleaned prior to use.
- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- \* All standards should be stored with caps tight and under appropriate laboratory conditions.
- \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994)

Part # 58030

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### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

R: 4/20/21

Instructions for QATS Reference Material: Inorganic ICV Solutions

### QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION:

For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** 

Read instructions carefully before opening bottle(s) and proceeding with

the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions HAZARDOUS MATERIAL

> Safety Data Sheets Available Upon Request

### (A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

### (C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014

For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Page 1 of 2

RMs ICV 1, 5, 6 SFAM.docx

QATS Form 20-007F188R00, 04-19-2021







### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

### Instructions for QATS Reference Material: Inorganic ICV Solutions

ICV1-1014

For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K<sub>3</sub>Fe(CN)<sub>8</sub>, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

### (D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

	ICV1-1014			
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)		
Al	2500	500		
Sb	1000	200		
As	1000	200		
Ba	520	100		
Be	510	100		
Cd	510	100		
Ca	10000	2000		
Cr	520	100		
Co	520	100		
Cu	510	100		
Fe	10000	2000		
Pb	1000	200		
Mg	6000	1200		
Mn	520	100		
Ni	530	110		
K	9900	2000		
Se	1000	200		
Ag	250	50		
Na	10000	2000		
TI	1000	210		
V	500	100		
Zn	1000	200		

	ICV5-0415	ICV6-0400		
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)	
Hg	4.0	CN-	99	

CERTIFIED WEIGHT REPORT:

Part Number:

58111 122223

Sodium (Na)

2%

60.0 (III)

Nitric Acid

Lot Number: Description:

Nominal Concentration (µg/mL):

**NIST Test Number:** 

**6UTB** 10000

Weight shown below was diluted to (mL):

3000.4

0.06 Flask Uncertainty 5E-05 Balance Uncertainty Recommended Storage:

Ambient (20 °C)

122226

**Expiration Date:** 

Part # 58111

Certified Reference Material CRM



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

Solvent: 24002546 Nitric Acid Lot # M5807

Formulated By: Reviewed By: 13817 P Pedro L. Rentas Aleah O'Brady Back 122223 22223

Uncertainty Expanded (Solvent Safety Info. On Attached pg.) **SDS Information** TSIN

Weight (g) Conc. (µg/mL) 111.5479 Actual 10000.7 Actual +/- (µg/mL) 20.0 7631-99-4 CAS# OSHA PEL (TWA) 5 mg/m3 ori-rat 3430 mg/kg 3152a SRM

1. Sodium nitrate (Na)

IN036 NAV01201511

10000

98.999

0.10

26.9

111.5406

Compound

RW#

Number Lot

Conc. (µg/mL)

8

8

Weight (g) Target

Nominal

Purity

Uncertainty Assay Purity (%)

1 m/z-> 17/z-Y m/z-> N.5E6 5.0E6 2.5E6 5.0E6 2.5E5 5.0E5 [1] Spectrum No.1 210 110 0 220 120 NO. [ 8.935 sec]:58111.D# [Count] [Linear] 130 230 30 140 240 6 150 250 50 160 260 0 170 70 180 80 190 90 100 200

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## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above). \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.
\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

12

Part # 58111



Certificate of Analysis
M5738 M5739 M5740 M5741 M5742

Refine your results. Redefine your industry.

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com

P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### 1.0 **ACCREDITATION / REGISTRATION**

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 PRODUCT DESCRIPTION

**Product Code:** 

Multi Analyte Custom Grade Solution

Catalog Number:

6020ISS

Lot Number:

S2-MEB709511

Matrix:

7% (v/v) HNO3

Value / Analyte(s):

10 µg/mL ea:

Bismuth,

Holmium,

Indium,

6-Lithium.

Rhodium,

Scandium,

Terbium,

Yttrium

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE 6-Lithium, Li6 **CERTIFIED VALUE**  $10.00 \pm 0.03 \,\mu g/mL$ 

**ANALYTE** Bismuth, Bi **CERTIFIED VALUE** 

 $10.00 \pm 0.05 \,\mu g/mL$ 

Holmium, Ho

 $10.00 \pm 0.05 \,\mu g/mL$ 

Indium, In

10.00 ± 0.04 µg/mL

Rhodium, Rh

10.00 ± 0.07 µg/mL

Scandlum, Sc

10.00 ± 0.04 µg/mL

Terbium, Tb

10.00 ± 0.04 µg/mL

Yttrium, Y

 $10.00 \pm 0.04 \, \mu g/mL$ 

Density:

1.035 g/mL (measured at 20  $\pm$  4 °C)

**Assay Information:** 

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Bi	ICP Assay	3106	180815
Bi	Calculated		See Sec. 4.2
Но	ICP Assay	3123a	090408
Но	EDTA	928	928
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li6	Gravimetric		See Sec. 4.2
Rh	ICP Assay	3144	070619
Sc	ICP Assay	3148a	100701
Sc	EDTA	928	928
Tb	ICP Assay	3157a	100518
Tb	EDTA	928	928
Tb	Calculated		See Sec. 4,2
Υ	ICP Assay	3167a	120314
Υ	EDTA	928	928
Υ	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

	•
Characterization of CRM/RM by Two or More Methods	Characterization of CRM/RM by One Method
Certified Value, $X_{\text{CRWRM}}$ , where two or more methods of characterization are used is the weighted mean of the results:	Certified Value, $\mathbf{X}_{\text{CRMRM}}$ , where one method of characterization is used is the mean of individual results:
$\begin{split} & \text{X}_{\text{CRM/RM}} = \Sigma(w_j)  (X_j) \\ & X_j = \text{mean of Assay Method i with standard uncertainty } u_{\text{char i}} \\ & w_i = \text{the weighting factors for each method calculated using the inverse square of the variance:} \\ & w_i = (1/u_{\text{char i}})^2 / \left( \Sigma (1/(u_{\text{char i}})^2) \right) \end{split}$	$X_{crnn/rm} = (X_a)^{(u)}$ char $a$ ) $X_a = mean \text{ of Assay Method A with}$ $u_{char a} = the standard uncertainty of characterization Method A$
CRM/RM Expanded Uncertainty (\$\frac{1}{2}\$) = $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ta})^{1/2}$ $k = coverage factor = 2$ $u_{char} = [\Sigma((w_i)^2 (u_{char}_i)^2]]^{1/2}$ where $u_{char}$ i are the errors from each characterization method $u_{bb} = $ bottle to bottle homogeneity standard uncertainty $u_{lts} = long$ term stability standard uncertainty (storage) $u_{bs} = t$ transport stability standard uncertainty	CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/a}$ k = coverage factor = 2 $U_{char\ a} = 0$ the errors from characterization $U_{bb} = 0$ bottle to bottle homogeneity standard uncertainty $U_{lta} = 0$ torg term stability standard uncertainty (storage) $U_{tb} = 0$ transport stability standard uncertainty

### **Certified Abundance:**

### **IV's Certified Abundance**

<u>isotope</u>	Atom %
Lithium Li6	95.6 ± 0.3
Lithium Li7	$4.4 \pm 0.1$

### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### **4.1 Thermometer Calibration**

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

Page 2 of 4

### 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (μg/mL)

N/A

### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRWRM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

September 03, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- September 03, 2026
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRWRM can be supported by long term stability studies conducted on properly stored and handled CRWRMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

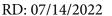
- Sealed TCT Bag Open Date: \_\_\_\_\_
- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS Certificate Approved By:

Michael Booth Director, Quality Control Paul R Lains

### **Certifying Officer:**

Paul Gaines Chairman / Senior Technical Director





### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: ICP-MS ICS

### QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

**APPLICATION:** For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

### (A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".

<u>CAUTION:</u> The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.** 

### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at <a href="miller.ross@epa.gov">miller.ross@epa.gov</a>. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

### (C) ANALYSIS OF SAMPLES

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:



Page 1 of 2



### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: ICP-MS ICS

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this ICSAB solution by ICP-MS.

### (D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

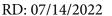
ICSA: M5873

	Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803									
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)			
Al	20.0	[100000]			[100000]					
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0			
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9			
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0			
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9			
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0			
Ca	500	[100000]			[100000]					
С		[200000]			[200000]					
CI		[1000000]			[1000000]					
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0			
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0			
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0			
Fe	200	[100000]			[100000]					
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8			
Mg	500	[100000]			[100000]					
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1			
Мо		[2000]			[2000]					
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6			
Р		[100000]			[100000]					
K	500	[100000]			[100000]					
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0			
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7			
Na	500	[100000]			[100000]					
S		[100000]			[100000]					
TI	1.0	(0)	-2.0	2.0	21.0	17.9	24.2			
Ti		[2000]			[2000]					
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0			
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0			

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value  $\pm$  2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value  $\pm$  15 percent of the listed certified value.

ICSB: M5874





### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: ICP-MS ICS

### QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

**APPLICATION:** For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

### (A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".

<u>CAUTION:</u> The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.** 

### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at <a href="miller.ross@epa.gov">miller.ross@epa.gov</a>. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

### (C) ANALYSIS OF SAMPLES

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:



Page 1 of 2



### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: ICP-MS ICS

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this ICSAB solution by ICP-MS.

### (D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

ICSA: M5873

	Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803										
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)				
Al	20.0	[100000]			[100000]						
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0				
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9				
Ва	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0				
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9				
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0				
Ca	500	[100000]			[100000]						
С		[200000]			[200000]						
Cl		[1000000]			[1000000]						
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0				
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0				
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0				
Fe	200	[100000]			[100000]						
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8				
Mg	500	[100000]			[100000]						
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1				
Мо		[2000]			[2000]						
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6				
Р		[100000]			[100000]						
K	500	[100000]			[100000]						
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0				
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7				
Na	500	[100000]			[100000]						
S		[100000]			[100000]						
TI	1.0	(0)	-2.0	2.0	21.0	17.9	24.2				
Ti		[2000]			[2000]						
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0				
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0				

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value  $\pm$  2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value  $\pm$  15 percent of the listed certified value.

ICSB: M5874

R:01/03/24

Certified Reference Material CRM

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Absolute Standards, Inc. 800-368-1131

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

1. Antimony (Sb)	Compound					Nomina							CERTIFIED WEIGHT REPORT:	
b)				Volume shown below was diluted to (mL):	NIST Test Number:	Nominal Concentration (µg/mL):	Recommended Storage:	Expiration Date:		Description:	Lot Number:	Part Number:	SHT REPORT:	
58151	Number	Part		as dilute										١,
100923	Number	Lot		ed to (mL):	6UTB	1000	Ambient (20 °C)	120526		Antimony (Sb)	120523	57051		
0.1000	Factor	Dilution		3000.41			<u>ල</u>			(4S)				X 01103 22
300.0	Vol. (mL)	Initial		0.058	5E-05								,	03
0.084	Pipette (mL)	Uncertainty		0.058 Flask Uncertainty	Balance Uncertainty									120
1000	Vol. (ml.) Pipette (ml.) Conc. (ug/ml.)	Nominal		V	tainty				2.0%			24002546	Lot#	7.5
10001.4	Conc. (µg/mL)	Initial						(mL)	60.0			Nitric Acid	Solvent:	M.5802 N
1000.0	Conc. (µg/ml.) +/- (µg/ml.)	Final							Nitric Acid					MARCA
2.1	+/- (µg/mL)	Uncertainty	Expanded		Reviewed By:	tous	1	\	Formulated By:		The			
7440-36-0	CAS#	(Sol				1 00		1	7:		Therence	9		•
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оп-rat 7000 mg/kg 3102a	LD50	Attached pg.)	tion		120523				120523					
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## Certified Reference Material CRM



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(1) = raiger analyte

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm delonized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.
\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
\* Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

1 of 2

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CERTIFIED WEIGHT REPORT:

Part Number: Lot Number:



## Certified Reference Material CRM

M6030

AR-1539 Certificate Number https://Absolutestandards.com ANAB ISO 17034 Accredited

5/24

57047 122823 Solvent: 24002546 Lot # Nitric Acid

Recommended Storage: **Expiration Date:** Description: 1000 Ambient (20 °C) Silver (Ag) 122826 2%

> <u>E</u> 80.0

> > Nitric Acid

Formulated By:

Benson Chan

122823

Nominal Concentration (µg/mL): NIST Test Number: **6UTB** 4000.30 0.058 Flask Uncertainty 5E-05 Balance Uncertainty

Compound Weight shown below was diluted to (mL): RM# Number 헏 Conc. (µg/mL) Nominal Purity Uncertainty Assay 8 Purity (%) Ê Weight (g) Target Weight (g) Conc. (µg/mL) Actual Actual +/- (µg/mL) Uncertainty Reviewed By: Expanded CAS# (Solvent Safety Info. On Attached pg.) Pedro L. Rentas OSHA PEL (TWA) SDS Information 122823

1. Silver nitrate (Ag) [1] Spectrum No.1 IN035 J0612AGA1 [ 14.044 sec]:58147.D# [Count] [Linear] 1000.0 0.10 63.7 6.27992 6.27998 1000.0 2.0 7761-88-B 10 ug/m3 Z 3151 NIST SRM

## www.absolutestandards.com

## Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard

Certified by:

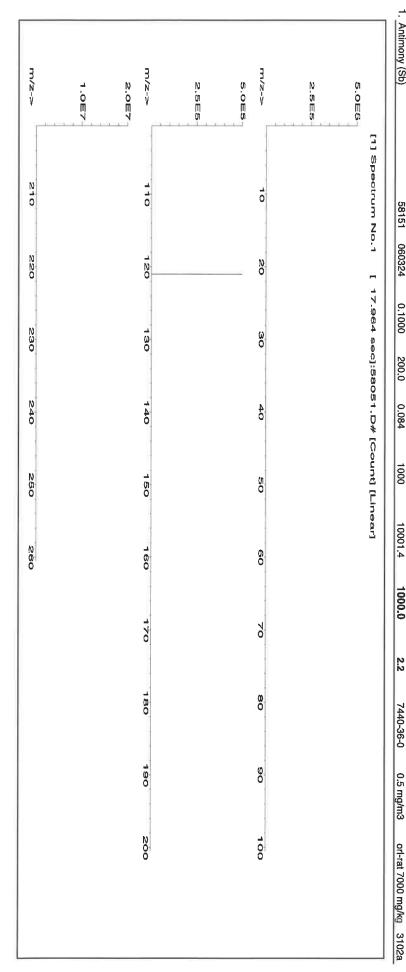
- \* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- \* All standard containers are meticulously cleaned prior to use.
- \* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- \* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- \* All Standards should be stored with caps tight and under appropriate laboratory conditions.

  \* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



### R:10/18/24 Certified Reference Material CRM

800-368-1131 www.absolutestandards.com		R:101	Certified	Certified Reference Material CRM り/ ひみ	Material CR	M			http:	AR-1539 Certificate Number https://Absolutestandards.com	ficate Nurstandards
CERTIFIED WEIGHT REPORT:		ということ	5	Lot #	Solvent:						
Part Number:	57051	برواط	•	24002546	Nitric Acid		2		)   		
Lot Number:	071724						P. T.	さるって	できると とうらずた	0	
Description:	Antimony (Sb)	(Sb)					3				
				2.0%	40.0	Nitric Acid	Formulated By:		Giovanni Esposito	0	071724
Expiration Date:	071727				(mL)		\	7	)		
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Volume shown below was diluted to (mL):	ted to (mL):	2000.26 0.058	58 Flask Uncertainty	inty							
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Part	Lot	Dilution Init	Initial Uncertainty	Nominal	Initial	Final	Uncertainty	(Solve	(Solvent Safety Info. On Attached pg.)	n Attached pg.)	NIST
Compound Number	Number	Factor Vol.	Vol. (mL) Pipette (mL) Conc. (µg/mL) Conc. (µg/mL) Conc. (µg/mL) +/- (µg/mL)	Conc. (µg/mL)	Conc. (µg/mL)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	SRM



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

	₩	Bi	Ве	Ba	As	Sb	Ą	I	
	<0.02	<0.02	<0.01	<0.02	<0.2	Н	<0.02		
	υ Ω	င	다	ς,	င္ပ	Ca	δ		
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02		
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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
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	Ta	s	Sr	N <sub>a</sub>	Ag	Si	Se		
	<0.02	<0.02	<0.02	<0.2	<0.02	40.02	<0.2		
	11	Sn	Tm	∄	7	Te	Τb		
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		

### **Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

All Standards should be stored with caps tight and under appropriate laboratory conditions. Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



### Certificate of Analysis

Refine your results. Redefine your industry.

R: 8/5/24

M6019

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

### 1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



### 2.0 PRODUCT DESCRIPTION

**Product Code:** 

Single Analyte Custom Grade Solution

Catalog Number:

CGSR1

Lot Number:

U2-SR730227

Matrix:

0.1% (v/v) HNO3

Value / Analyte(s):

1 000 μg/mL ea:

Strontium

Starting Material:

SrCO3

Starting Material Lot#:

M2-2192

Starting Material Purity:

99.9993%

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 

1001 ± 3 µg/mL

Density:

1.000 g/mL (measured at 20 ± 4 °C)

### Assay Information:

Assay Method #1

998 ± 4 µg/mL

ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2

1001 ± 3 µg/mL

EDTA NIST SRM 928 Lot Number: 928

Assay Method #3

1001 ± 2 µg/mL

Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

### $X_{CRM/RM} = \Sigma(w_i) (X_i)$

X<sub>i</sub> = mean of Assay Method i with standard uncertainty uchar i

w<sub>i</sub> = the weighting factors for each method calculated using the inverse square of the variance:

 $\mathbf{w_i} = (1/u_{\mathrm{char}\,i})^2/(\Sigma(1/(u_{\mathrm{char}\,i})^2)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM} = k (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$ 

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{1/2}$  where  $u_{char}$  are the errors from each characterization method

ubb = bottle to bottle homogeneity standard uncertainty

uits = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

### 4.0 TRACEABILITY TO NIST

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mean of individual results: 
X<sub>CRM/RM</sub> = (X<sub>B</sub>) (u<sub>char e</sub>)

X<sub>B</sub> = mean of Assay Method A with

u<sub>char a</sub> = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = U<sub>CRM/RM</sub> = k (u<sup>2</sup><sub>char a</sub> + u<sup>2</sup><sub>bb</sub> + u<sup>2</sup><sub>tts</sub> + u<sup>2</sup><sub>ts</sub>)<sup>Va</sup>
k = coverage factor = 2

u<sub>char a</sub> = the errors from characterization
u<sub>bb</sub> = bottle to bottle homogeneity standard uncertainty
u<sub>ths</sub> = long term stability standard uncertainty
u<sub>ths</sub> = transport stability standard uncertainty

Characterization of CRM/RM by One Method

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to  $0.3~\mu m$ .

М	Ag	<	0.001980	М	Eu	<	0.000495	0	Na		0.000200	M	Se	<	0.013862	0	Zn		0.000143
0	Al		0.000370	0	Fe		0.000410	M	Nb	<	0.000495	i	Si	<		М	Zr	<	0.000495
М	As	<	0.000495	М	Ga	<	0.000495	М	Nd	<	0.000495	M	Sm	<	0.000495				
M	Au	<	0.000989	М	Gd	<	0.000495	0	Ni	<	0.007631	M	Sn	<	0.000990				
M	В	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<					
M	Ba		0.006486	M	Hf	<	0.000495	i	Р	<		М	Та	<	0.000495				
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	М	Tb	<	0.000495				
М	Bi	<	0.000495	M	Но	<	0.000495	М	Pd	<	0.003957	М	Te	<	0.027724				
0	Ca		0.004255	M	ln	<	0.000495	М	Pr	<	0.000495	М	Th	<	0.000990				
M	Cd		0.001339	M	lr	<	0.000494	M	Pt	<	0.002970	М	Tī	<	0.005940				
М	Çe	<	0.004950	0	K	<	0.008184	М	Rb	<	0.002970	М	TI	<	0.000495				
М	Co	<	0.000495	M	La	<	0.000495	М	Re	<	0.000495	М	Tm	<	0.000495				
0	Cr	<	0.003207	0	Li	<	0.000884	0	Rh	<	0.012829	М	U	<	0.001485				
M	Cs	<	0.000990	M	Lu	<	0.002970	М	Ru	<	0.000989	М	٧	<	0.001980				
M	Cu		0.000099	0	Mg		0.000064	i	S	<		М	W	<	0.003960				
М	Dy	<	0.000495	0	Mn		0.000066	М	Sb	<	0.014852	0	Υ	<	0.000995				
М	Ег	<	0.000495	М	Мо	<	0.001980	М	Sc	<	0.001980	М	Yb	<	0.000495				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

### 6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

**6.2** For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale.

<a href="https://www.inorganicventures.com/terms-and-conditions-sale">https://www.inorganicventures.com/terms-and-conditions-sale</a>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H2O)6+2 Chemical Compatibility - Soluble in HCl, and HNO3. Avoid H2SO4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

**Stability -** 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO3 / LDPE container.

**Sr Containing Samples (Preparation and Solution) -**Metal (Best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2,
			176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 μg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 μg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 μg/mL	1	Се

### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

### 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Ve. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; Inorganicventures.com; Info@inorganicventures.com

### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- March 03, 2028
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date:
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- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

### 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:** 

Thomas Kozikowski Manager, Quality Control

**Certifying Officer:** 

Paul Gaines Chairman / Senior Technical Director 20178hi

Lot # 082922

Certified Reference Material CRM

Absolute Standards, Inc. 800-368-1131

www.absolutestandards.com

CERTIFIED WEIGHT REPORT:



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

R: 03/16/23 MS473 MS474, MS475, MS Lot #

Nitric Acid

Part Number: 56138 082922 Strontium (Sr) Solvent: 20510011 2% 20.0

Description: Lot Number:

Recommended Storage: **Expiration Date:** Ambient (20 °C) 082925

<u>P</u>

Nitric Acid

1000.12 0.058 Flask Uncertainty

RM#

Number

Conc. (µg/mL)

8

Purity (%)

8

Weight (g)

Weight (g) Conc. (µg/mL) +/- (µg/mL)

CAS#

OSHA PEL (TWA)

LD50

SRM SRM

Uncertainty

Ę,

Nominal

Purity Uncertainty Assay

Nominal Concentration (µg/mL): Weight shown below was diluted to (mL): NIST Test Number: 6UTB 10000 5E-05 Balance Uncertainty

Reviewed By:

Formulated By: Lawrence Barry

082922

Pedro L. Rentas 082922

Expanded SDS Information (Solvent Safety Info. On Attached pg.)

Strontium nitrate (Sr 5.0E6 [1] Spectrum No.1 IN017 SRZ022018A1 [ 14.495 sec]:58138.D# [Count] [Linear] 10000 99.997 0:10 41.2 24.2756 24.2758 10000.1 20.0 10042-76-9 Ι₹ orl-rat >2000mg/kg 3153a



https://Absolutestandards.com ANAB ISO 17034 Accredited AR-1539 Certificate Number

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

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٤	40.02	Тъ	<0.2	Se	<0.02	Pr	<0.02	<u>Z</u> .	<0.02	Li	<0.02	H	<0.02	Dy	<0.02	$\mathbb{S}$	<0.02	A
					μg/mL)	MS (	by ICP-I	tion	Verifica	etals	race Me							

(T)= Target analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Physical Characterization:

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.

\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Lot # 082922

1 of 2

Printed: 8/1/2024, 2:13:42 PM

Lot # 062724

Certified Reference Material CRM

Absolute Standards, Inc. 800-368-1131

www.absolutestandards.com



ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

M6023

CERTIFIED WEIGHT REPORT: Nominal Concentration (µg/mL): Weight shown below was diluted to (mL): Recommended Storage: NIST Test Number: **Expiration Date:** Part Number: **Lot Number:** Description: 57081 062724 **6UTB** 062727 1000 Ambient (20 °C) Thaillum (TI) 2000.1 5E-05 Balance Uncertainty 0.10 Flask Uncertainty Solvent: 24002546 2% (IE) 40.0 Nitric Acid Nitric Acid Reviewed By: Formulated By: ARBENT O'B' WANT

						arj	unt] [Line	# [Co	7081.D	(c)	14.044 8	No.3	[1] Spectrum No.1 [ 14.044 sec]:57081.D# [Count] [Linear]	
3158	orl-mus 15mg/kg 3158	<b>2.0</b> 10102-45-1 0.1 mg/m3	10102-45-1	2.0	1000.1	2.5977	2.5975	77.0	0.10	99.999	IN037 BCCF4399 1000 99.889 0.10 77.0 2.5975 2.5977 1000.1	BCCF4399		allium nitrate (TI)
SRM	LD50	OSHA PEL (TWA)		+/- (µg/mL)	Conc. (µg/mL) (%) Purity (%) (%) Weight (g) Weight (g) Conc. (µg/mL) +/- (µg/mL) CAS#	Weight (g)	Weight (g)	(%)	Purity (%)	(%)	Conc. (µg/mL)	Number	RM#	mpound
TSIN	Attached pg.)	Uncertainty (Solvent Safety Info. On Attached pg.) NIST	(Solven	Uncertainty	Actual	Actual	Target	Assay	Uncertainty	Purity	Nominal Purity Uncertainty Assay Target	Lot		

Expanded

SDS Information

Pedro L. Rentas

062724

	est.	i.
	Thallium nitrate (TI)	Compound
[1] Spectrum No.1	IN037 BCC	RM# No
	CF4399	ımber C
[ 14.044 sec]:57081.D# [Count] [Linear]	IN037 BCCF4399 1000 99.999 0.10 77.0 2.5975 2.5977	onc. (µg/mL)
ec]:57	99.999	(%)
7081.D#	0.10	Purity (%)
t [Cor	77.0	(%)
int] [Line	2.5975	Weight (g)
arj	2.5977	Weight (g)
	1000.1	RM# Number Conc. (µg/mL) (%) Purity (%) (%) Weight (g) Weight (g) Conc. (µg/mL) +/- (µg/mL) CAS#
	2.0	+/- (µg/mL)
	10102-45-1	CAS#
	0.1 mg/m3	OSHA PEL (TWA)
	orl-mus 15mg/kg	LD50
	3158	SRM

		-
1.0E6	N. 0 III 6	1. Thallium nitrate (TI)
	[1] Spectrum No.1  [ 14.044 sec]:57081.D# [Count] [Linear]	IN037 BCCF4399
	14.044	1000
	sec]:57	686768
	081.D	0.10
	# [Cou	77.0
	oul] [Line	77.0 2.5975
		2.5977
		1000.1
		2.0
		10102-45-1
		0.1 mg/m3
		orl-mus 15mg/kg
		3158

V-2/17	o.om	1.0巨6	m/z->	5000	1.OE4	m/z->	1.0E6	2.016
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			180			80		
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			200			100		

Aleah O'Brady

062724

1233

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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	Ta	S	Sr	Na	, 6	Δσ	Si	Se				
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## Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.

\* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

\* All standard containers are meticulously cleaned prior to use.

\* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).

\* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.

\* All Standards should be stored with caps tight and under appropriate laboratory conditions.
\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST
\* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Certified Reference Material CRM

800-368-1131

Absolute Standards, Inc.

ANAB ISO 17034 Accredited AR-1539 Certificate Number https://Absolutestandards.com

www.absolutestandards.com CERTIFIED WEIGHT REPORT: Part Number: 57023 062424 Solvent: M6021

24002546

Nitric Acid

2.0% (mL) 40.0 Nitric Acid Formulated By: AND CORON Aleah O'Brady

Reviewed By: Pedro L. Rentas 062424

Expanded SDS Information

Ammonium metavanadate (V) [1] Spectrum No.1 021224 0.1000 200.0 0.084 1000 10000.3 1000.0 22 7803-55-6 0.05 mg/m3 orl-rat 58.1mg/kg 3165

Compound

Number Part

Number D D

Vol. (mL) Pipette (mL) Conc. (µg/mL)

Conc. (µg/mL)

Conc. (µg/mL)

+/- (µg/mL) Uncertainty

CAS#

OSHA PEL (TWA)

LD50

NIST SRM

(Solvent Safety Info. On Attached pg.)

Dilution Factor

Initial

Uncertainty

Nominal

initial

Final

Nominal Concentration (µg/mL):

**NIST Test Number:** 

**6UTB** 1000

5E-05

Volume shown below was diluted to (mL):

2000.3

0.06

Flask Uncertainty Balance Uncertainty Recommended Storage:

Ambient (20 °C) 062427

**Expiration Date:** 

Lot Number: Description:

Vanadium (V)

1.0回6 2.0E6 [ 34.243 sec]:58029:D# [Count] [Linear]

062424

1235

## www.absolutestandards.com

# Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

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	11:	Sh	m	1	3	d	Te	10				
	<0.02	40.02	<0.02	10.02	3	40.02	40.02	20.02	200			
	Zr	Zn	~	-	ş	٧ 	٦	*				
	<0.02	<b>∆</b> 0.02	A0.02	20.02	3	-1	A).02	<0.02				

### Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

\* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated. \* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.

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\* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST

\* Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

### **Water Metals Preparation Sheet**



SOP ID:

M200.8-Trace Elements-22, MSFAM01.1-Metals ICPMS-2

SDG No:

ME2948

Matrix:

WATER

Pippete ID:

Balance ID:

Filter paper ID: N/A

pH Strip ID:

Hood ID: #3

Block ID:

ICP A

N/A

M6069

1. HOT BLOCK #1

2. N/A

Start Digest Date: **End Digest Date:** 

Digestion tube ID:

01/28/2025

01/28/2025

MET-DIG. #1

Time: 15:40

Time: 13:35

**Temp:** 96 °C

**Temp:** 96 °C

M5595

**Block thermometer ID:** 

Dig Technician Signature:

Supervisor Signature:

Temp:

**1.** 96°C

2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
LCSW	0.50	MP84099
Spike Sol. B	0.50	MP84074
N/A	N/A	N/A
V/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
1:1 HNO3	1.00	MP84041
1:1 HCL	050	MP83499
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
I/A	N/A	N/A
I/A	N/A	N/A
/A	N/A	N/A
/A	N/A	N/A

### **Extraction Conformance/Non-Conformance Comments:**

HOT BLOCK#1 CELL#55: 96

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
1 28/25 16:40	she met disestion	make no les
	Preparation Group	Analysis Group



Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Fina Vol (ml)	Color	Color After	Clarity Before	Clarity After	Comment	Prep
PB166317BL	PBW317	<2	50	50	Colories	Colorless	Clear	Clear	N/A	1
PB166317BS	LCS317	<2	50	50	Colorless	Colorless	Clear	Clear	MP84099	
Q1186-01	ME2948	<2	50	50	Coloriess		Clear	Clear		2
Q1186-02	ME2949	<2	50	50	Coloriess				N/A	3
Q1186-03	ME2955	<2	50	50	Colorless		Clear	Clear	N/A	4
Q1186-04	ME2956	<2	50				Clear	Clear	N/A	5
01186-05	ME2957			50	Colorless	Colorless	Clear	Clear	N/A	6
Q1186-06		<2	50	50	Colorless	Colorless	Clear	Clear	N/A	7
	ME2960	<2	50	50	Colorless	Coloriess	Clear	Clear	N/A	8
Q1186-07 	ME2961	<2	50	50	Coloriess	Colorless	Clear	Clear	N/A	9
Q1186-08	ME2962	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	
21186-09	ME2959	<2	50	50	Colorless	Colorless	Clear		N/A	10
21186-10	ME2959D	<2	50	50	Colorless	Colorless	Clear			11
1186-11	ME2959S	<2	50	50	Coloriess	Colorless			N/A	12
1186-12	ME2963	<2	50	50			Clear	Clear	MP84074	13
1186-13	ME2967	-			Colorless	Colorless	Clear	Clear	N/A	14
1186-14	ME2965	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	15
		<2	50	50	Colorless	Colorless	Clear	Clear	N/A	16
1186-15	ME2966	<2	50	50	Colorless	Colorless	Clear	Clear I	N/A	17
1186-16	ME2958	<2	50	50	Colorless	Colorless	Clear	Clear N	N/A	18
186-17	ME2968	<2	50	50	Coloriess	Colorless	Clear	Clear N	I/A	
.186-18	ME2974	<2	50	50	Colorless	Colorless	Clear			19
186-19	ME2977	<2	50		Colorless	Coloriess			I/A	20
186-20	ME2980	<2	50	_			Clear		/A	21
			30	30	Colorless	Coloriess	Clear	Clear N	/A	22





**Instrument ID:** P8

Review By	Sarabjit Jaswal	Review On	2/7/2025 9:21:46 AM			
Supervise By	Mohan Bera	Supervise On	2/7/2025 11:31:39 AM			
STD. NAME	STD REF.#	STD REF.#				
ICAL Standard	MP84042,MP84050,MI	P84049,MP84047,MP84046,N	MP84045,MP84044,MP84043,MP84073			
ICV Standard	MP84051					
CCV Standard	MP84052					
ICSA Standard	MP84053,MP84054					
CRI Standard						
LCS Standard	MP84099					
Chk Standard	MP84057,MP84056					

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE001	TUNE	02/06/25 11:25		Jaswal	ОК
2	S00	S0	CAL1	02/06/25 12:08		Jaswal	ОК
3	S02	S02	CAL3	02/06/25 12:12		Jaswal	ОК
4	S03	S03	CAL4	02/06/25 12:15		Jaswal	ОК
5	S04	S04	CAL5	02/06/25 12:18		Jaswal	ОК
6	S05	S05	CAL6	02/06/25 12:21		Jaswal	ОК
7	S06	S06	CAL7	02/06/25 12:24		Jaswal	ОК
8	S07	S07	CAL8	02/06/25 12:27		Jaswal	ОК
9	S08	S08	CAL9	02/06/25 12:29		Jaswal	ОК
10	ICV001	ICV001	ICV	02/06/25 12:45	Inst. paused for Calibration review	Jaswal	ОК
11	ICB001	ICB001	ICB	02/06/25 12:50		Jaswal	ОК
12	ICSA001	ICSA001	ICSA	02/06/25 12:54		Jaswal	ОК
13	ICSAB001	ICSAB001	ICSAB	02/06/25 12:57		Jaswal	ОК
14	CCV001	CCV001	CCV	02/06/25 13:00		Jaswal	ОК
15	CCB001	CCB001	ССВ	02/06/25 13:07	Inst. paused for review	Jaswal	ОК
16	Q1177-01A	MH2GW9A	PS	02/06/25 13:10	PS For Se-0.01ml mp84378	Jaswal	ОК



**Instrument ID:** P8

Review By	Sai	rabjit Jaswal	Review On	2/7/2025 9:21:46 AM		
Supervise By	Мо	han Bera	Supervise On	2/7/2025 11:31:39 AM		
STD. NAME		STD REF.#				
ICAL Standard		MP84042,MP84050,MF	P84049,MP84047,MP84046,MP84045	,MP84044,MP84043,MP84073		
ICV Standard		MP84051				
CCV Standard		MP84052				
ICSA Standard		MP84053,MP84054				
CRI Standard						
LCS Standard		MP84099				
Chk Standard		MP84057,MP84056				
		I				

17	Q1178-01A	MH2GX0A	PS	02/06/25 13:14	PS For Ba-0.018 ml m6032, Cd-0.056 ml mp84379, Ni-0.0031ml m5748, Se-0.01ml mp84378	Jaswal	OK
18	PB166302BL	PBS302	МВ	02/06/25 13:22		Jaswal	ОК
19	PB166302BS	LCS302	LCS	02/06/25 13:26		Jaswal	ОК
20	Q1159-01	YE8C9	SAM	02/06/25 13:29	Sr High in MS	Jaswal	Dilution
21	Q1159-02	YE8C9D	DUP	02/06/25 13:32	Sr High in MS	Jaswal	Dilution
22	Q1159-01L	YE8C9L	SD	02/06/25 13:35	Sr High in MS	Jaswal	Dilution
23	Q1159-03	YE8C9S	MS	02/06/25 13:39	Sr High , MS Fail in Se Below RI)	Jaswal	Dilution
24	PB166317BL	PBW317	МВ	02/06/25 13:42	Not Use	Jaswal	Not Ok
25	PB166317BS	LCS317	LCS	02/06/25 13:45	Not Use	Jaswal	Not Ok
26	Q1186-01	ME2948	SAM	02/06/25 13:48	Not Use	Jaswal	Not Ok
27	Q1186-02	ME2949	SAM	02/06/25 13:52		Jaswal	ОК
28	Q1186-03	ME2955	SAM	02/06/25 13:55		Jaswal	ОК
29	Q1186-04	ME2956	SAM	02/06/25 13:58		Jaswal	ОК
30	Q1186-05	ME2957	SAM	02/06/25 14:01		Jaswal	ОК
31	Q1186-06	ME2960	SAM	02/06/25 14:05		Jaswal	ОК
32	Q1186-07	ME2961	SAM	02/06/25 14:08		Jaswal	ОК
33	Q1186-08	ME2962	SAM	02/06/25 14:11		Jaswal	ОК
34	Q1186-09	ME2959	SAM	02/06/25 14:14		Jaswal	ОК



**Instrument ID:** P8

Review By	Sai	rabjit Jaswal	Review On	2/7/2025 9:21:46 AM		
Supervise By	Мо	han Bera	Supervise On	2/7/2025 11:31:39 AM		
STD. NAME		STD REF.#				
ICAL Standard		MP84042,MP84050,N	MP84042,MP84050,MP84049,MP84047,MP84046,MP84045,MP84044,MP84043,MP84073			
ICV Standard		MP84051				
CCV Standard		MP84052				
ICSA Standard		MP84053,MP84054				
CRI Standard						
LCS Standard		MP84099				
Chk Standard		MP84057,MP84056				
ĺ						

35	Q1186-10	ME2959D	DUP	02/06/25 14:18		Jaswal	ОК
36	Q1186-09L	ME2959L	SD	02/06/25 14:21		Jaswal	ОК
37	Q1186-11	ME2959S	MS	02/06/25 14:24		Jaswal	ок
38	Q1186-12	ME2963	SAM	02/06/25 14:28		Jaswal	ОК
39	Q1186-13	ME2967	SAM	02/06/25 14:31		Jaswal	ОК
40	Q1186-14	ME2965	SAM	02/06/25 14:34		Jaswal	ок
41	CCV002	CCV002	CCV	02/06/25 14:37		Jaswal	ок
42	CCB002	CCB002	ССВ	02/06/25 14:40		Jaswal	ОК
43	Q1186-15	ME2966	SAM	02/06/25 14:44		Jaswal	ок
44	Q1186-16	ME2958	SAM	02/06/25 14:47		Jaswal	ОК
45	Q1186-17	ME2968	SAM	02/06/25 14:50		Jaswal	ок
46	Q1186-18	ME2974	SAM	02/06/25 14:53		Jaswal	ок
47	Q1186-19	ME2977	SAM	02/06/25 14:57		Jaswal	ОК
48	Q1186-20	ME2980	SAM	02/06/25 15:00		Jaswal	ОК
49	Q1186-09RE	ME2959	SAM	02/06/25 15:03	Not Use	Jaswal	Not Ok
50	Q1186-10RE	ME2959D	DUP	02/06/25 15:06	Not Use	Jaswal	Not Ok
51	Q1186-09LRE	ME2959L	SD	02/06/25 15:10	Not Use	Jaswal	Not Ok
52	Q1186-11RE	ME2959S	MS	02/06/25 15:13	Not Use	Jaswal	Not Ok
53	PB166435BL	PBW435	МВ	02/06/25 15:16		Jaswal	ок
54	PB166435BS	LCS435	LCS	02/06/25 15:24		Jaswal	ок



**Instrument ID:** P8

Review By	Sar	abjit Jaswal	Review On	2/7/2025 9:21:46 AM
Supervise By	Moł	nan Bera	Supervise On	2/7/2025 11:31:39 AM
STD. NAME		STD REF.#		
ICAL Standard		MP84042,MP84050,MF	P84049,MP84047,MP84046,MP84	4045,MP84044,MP84043,MP84073
ICV Standard		MP84051		
CCV Standard		MP84052		
ICSA Standard		MP84053,MP84054		
CRI Standard				
LCS Standard		MP84099		
Chk Standard		MP84057,MP84056		

55	Q1200-01	ME2964	SAM	02/06/25 15:28	Jaswal	ОК
56	Q1200-02	ME2964D	DUP	02/06/25 15:32	Jaswal	ок
57	Q1200-01L	ME2964L	SD	02/06/25 15:35	Jaswal	ОК
58	Q1200-03	ME2964S	MS	02/06/25 15:38	Jaswal	ОК
59	Q1200-04	ME2981	SAM	02/06/25 15:41	Jaswal	ОК
60	Q1200-05	ME2982	SAM	02/06/25 15:44	Jaswal	ок
61	Q1200-06	ME2983	SAM	02/06/25 15:48	Jaswal	ОК
62	Q1200-07	ME2984	SAM	02/06/25 15:51	Jaswal	ОК
63	Q1200-08	ME2985	SAM	02/06/25 15:54	Jaswal	ОК
64	Q1200-09	ME2986	SAM	02/06/25 15:57	Jaswal	ОК
65	Q1200-10	ME2987	SAM	02/06/25 16:01	Jaswal	ОК
66	Q1200-11	ME2988	SAM	02/06/25 16:04	Jaswal	ОК
67	Q1200-12	ME2992	SAM	02/06/25 16:07	Jaswal	ОК
68	Q1200-13	ME2994	SAM	02/06/25 16:10	Jaswal	ОК
69	Q1200-14	ME2995	SAM	02/06/25 16:13	Jaswal	ОК
70	CCV003	CCV003	CCV	02/06/25 16:17	Jaswal	ОК
71	CCB003	CCB003	ССВ	02/06/25 16:19	Jaswal	ОК
72	Q1200-15	ME2999	SAM	02/06/25 16:23	Jaswal	ОК
73	Q1200-16	ME2997	SAM	02/06/25 16:26	Jaswal	ОК
74	Q1200-17	ME2998	SAM	02/06/25 16:29	Jaswal	ОК



**Instrument ID:** P8

Review By	Sara	abjit Jaswal	Review On	2/7/2025 9:21:46 AM	
Supervise By	Moh	an Bera	Supervise On	2/7/2025 11:31:39 AM	
STD. NAME		STD REF.#			
ICAL Standard		MP84042,MP84050,N	MP84049,MP84047,MP84046,MI	P84045,MP84044,MP84043,MP84073	
ICV Standard		MP84051			
CCV Standard		MP84052			
ICSA Standard		MP84053,MP84054			
CRI Standard					
LCS Standard		MP84099			
Chk Standard MP84057,MP84056					

75	Q1200-18	ME29A0	SAM	02/06/25 16:33		Jaswal	ок
76	Q1200-19	ME29A1	SAM	02/06/25 16:36		Jaswal	ок
77	Q1200-20	ME29A2	SAM	02/06/25 16:39		Jaswal	ОК
78	Q1200-21	ME29A3	SAM	02/06/25 16:42		Jaswal	ОК
79	WATER-01	WATER-01	SAM	02/06/25 16:46		Jaswal	ОК
80	WATER-02RE	WATER-02RE	SAM	02/06/25 16:49	Not Use	Jaswal	Not Ok
81	WATER-02	WATER-02	SAM	02/06/25 16:52		Jaswal	ОК
82	CCV004	CCV004	CCV	02/06/25 16:55		Jaswal	ОК
83	CCB004	CCB004	ССВ	02/06/25 17:02	Inst. paused for review	Jaswal	ок
84	PB166532BL	PBS532	МВ	02/06/25 17:12	Not Use	Jaswal	Not Ok
85	PB166532BS	LCS532	LCS	02/06/25 17:15	Not Use	Jaswal	Not Ok
86	Q1271-03	3189-3196	SAM	02/06/25 17:18	Not Use	Jaswal	Not Ok
87	Q1271-03DUP	3189-3196	DUP	02/06/25 17:21	Not Use	Jaswal	Not Ok
88	Q1271-03L	3189-3196L	SD	02/06/25 17:25	Not Use	Jaswal	Not Ok
89	Q1271-03MS	3189-3196	MS	02/06/25 17:28	Not Use	Jaswal	Not Ok
90	Q1271-03MSD	3189-3196	MSD	02/06/25 17:31	Not Use	Jaswal	Not Ok
91	Q1271-03A	3189-3196A	PS	02/06/25 17:34	Not Use	Jaswal	Not Ok
92	CCV005	CCV005	CCV	02/06/25 17:39		Jaswal	ОК
93	CCB005	CCB005	ССВ	02/06/25 17:42		Jaswal	ОК
94	PB166282BL	PBW282	МВ	02/06/25 17:45	Not Use	Jaswal	Not Ok





**Instrument ID:** P8

Review By	Sarabjit Jaswal	Review On	2/7/2025 9:21:46 AM	
Supervise By	Mohan Bera	Supervise On	2/7/2025 11:31:39 AM	
STD. NAME STD REF.#				
ICAL Standard	MP84042,MP84050,N	MP84049,MP84047,MP84046,MI	P84045,MP84044,MP84043,MP84073	
ICV Standard	MP84051			
CCV Standard	MP84052			
ICSA Standard	ICSA Standard MP84053,MP84054			
CRI Standard				
LCS Standard MP84099				
Chk Standard MP84057,MP84056				

95	PB166282BS	LCS282	LCS	02/06/25 17:49	Not Use	Jaswal	Not Ok
96	Q1193-01	TAPIAL3-MW04S-012	SAM	02/06/25 17:53	Not Use	Jaswal	Not Ok
97	Q1193-02	TAPIAL2-MW01-0124	SAM	02/06/25 17:56	Not Use	Jaswal	Not Ok
98	Q1193-02DUP	TAPIAL2-MW01-0124	DUP	02/06/25 17:59	Not Use	Jaswal	Not Ok
99	Q1193-02L	TAPIAL2-MW01-0124	SD	02/06/25 18:02	Not Use	Jaswal	Not Ok
100	Q1193-02MS	TAPIAL2-MW01-0124	MS	02/06/25 18:06	Not Use	Jaswal	Not Ok
101	Q1193-02MSD	TAPIAL2-MW01-0124	MSD	02/06/25 18:08	Not Use	Jaswal	Not Ok
102	Q1193-02A	TAPIAL2-MW01-0124	PS	02/06/25 18:11	Not Use	Jaswal	Not Ok
103	CCV006	CCV006	CCV	02/06/25 18:14		Jaswal	ок
104	CCB006	CCB006	ССВ	02/06/25 18:18		Jaswal	ОК
105	PB166378BL	PBW378	MB	02/06/25 18:21	Not Use	Jaswal	Not Ok
106	PB166378BS	LCS378	LCS	02/06/25 18:25	Not Use	Jaswal	Not Ok
107	Q1201-01	TAPHHA-MW12-0127	SAM	02/06/25 18:28	Not Use	Jaswal	Not Ok
108	Q1211-01	TAPHHA-MW01-0128	SAM	02/06/25 18:31	Not Use	Jaswal	Not Ok
109	Q1211-02	TAPIAL2-MW03-0128	SAM	02/06/25 18:34	Not Use	Jaswal	Not Ok
110	Q1211-02DUP	TAPIAL2-MW03-0128	DUP	02/06/25 18:37	Not Use	Jaswal	Not Ok
111	Q1211-02L	TAPIAL2-MW03-0128	SD	02/06/25 18:40	Not Use	Jaswal	Not Ok
112	Q1211-02MS	TAPIAL2-MW03-0128	MS	02/06/25 18:44	Not Use	Jaswal	Not Ok
113	Q1211-02MSD	TAPIAL2-MW03-0128	MSD	02/06/25 18:46	Not Use	Jaswal	Not Ok
114	Q1211-02A	TAPIAL2-MW03-0128	PS	02/06/25 18:49	Not Use	Jaswal	Not Ok





**Instrument ID:** P8

Review By	Sarabjit Jaswal	Review On	2/7/2025 9:21:46 AM	
Supervise By	Mohan Bera	Supervise On	2/7/2025 11:31:39 AM	
STD. NAME STD REF.#				
ICAL Standard	Standard MP84042,MP84050,MP84049,MP84047,MP84046,MP84045,		P84045,MP84044,MP84043,MP84073	
ICV Standard	MP84051			
CCV Standard	MP84052			
ICSA Standard	ICSA Standard MP84053,MP84054			
CRI Standard	CRI Standard			
LCS Standard	ndard MP84099			
Chk Standard MP84057,MP84056				

115	CCV007	CCV007	CCV	02/06/25 18:52		Jaswal	ОК
116	CCB007	CCB007	ССВ	02/06/25 18:58	Inst. paused for review	Jaswal	ок
117	Q1159-01A	YE8C9A	PS	02/06/25 19:55	PS For Se(0.01ML MP84378)	Jaswal	OK
118	Q1186-09A	ME2959A	PS	02/06/25 19:58	PS For Se(0.01ML MP84378-10ML SAMPLE)	Jaswal	OK
119	Q1200-01A	ME2964A	PS	02/06/25 20:01	PS For Se(0.01ML MP84378-10ML SAMPLE)	Jaswal	OK
120	PB166570BL	PBW570	МВ	02/06/25 20:04		Jaswal	ок
121	PB166570BS	LCS570	LCS	02/06/25 20:08		Jaswal	ок
122	Q1135-09	YE8H7	SAM	02/06/25 20:11	Not Use	Jaswal	Not Ok
123	Q1223-17	A6310	SAM	02/06/25 20:14		Jaswal	ок
124	CCV008	CCV008	CCV	02/06/25 20:22		Jaswal	ок
125	CCB008	CCB008	ССВ	02/06/25 20:25		Jaswal	ОК





**Instrument ID:** P8

Review By	Janvi Patel	Review On	2/12/2025 11:01:11 AM
Supervise By	Mohan Bera	Supervise On	2/12/2025 11:10:40 AM
STD. NAME	STD. NAME STD REF.#		
ICAL Standard	MP84414,MP84423,MF	P84422,MP84420,MP84419,MP8	84418,MP84417,MP84416,MP84415
ICV Standard	MP84473		
CCV Standard	MP84438		
ICSA Standard	ICSA Standard MP84440,MP84441		
CRI Standard			
LCS Standard			
Chk Standard MP84444,MP84443			

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE005	TUNE	02/11/25 11:22		Jaswal	ОК
2	S00	S0	CAL1	02/11/25 12:05		Jaswal	ОК
3	S02	S02	CAL3	02/11/25 12:08		Jaswal	ок
4	S03	S03	CAL4	02/11/25 12:11		Jaswal	ок
5	S04	S04	CAL5	02/11/25 12:15		Jaswal	ок
6	S05	S05	CAL6	02/11/25 12:18		Jaswal	ок
7	S06	S06	CAL7	02/11/25 12:20		Jaswal	ОК
8	S07	S07	CAL8	02/11/25 12:23		Jaswal	ОК
9	S08	S08	CAL9	02/11/25 12:26		Jaswal	ок
10	ICV005	ICV005	ICV	02/11/25 13:29	Inst. paused for Calibration review	Jaswal	ОК
11	ICB005	ICB005	ICB	02/11/25 13:33		Jaswal	ок
12	ICSA005	ICSA005	ICSA	02/11/25 13:40	Inst. paused for review	Jaswal	ОК
13	ICSAB005	ICSAB005	ICSAB	02/11/25 13:44		Jaswal	ОК
14	CCV021	CCV021	CCV	02/11/25 13:47		Jaswal	ОК
15	CCB021	CCB021	ССВ	02/11/25 13:50		Jaswal	ОК
16	Q1159-01DL	YE8C9	SAM	02/11/25 13:53	Sr high in MS	Jaswal	Not Ok
17	Q1159-02DL	YE8C9D	DUP	02/11/25 13:57	Sr high in MS	Jaswal	Not Ok
18	Q1159-01LDL	YE8C9L	SD	02/11/25 14:00	Sr high in MS	Jaswal	Not Ok





**Instrument ID:** P8

Review By	Janvi Patel	Review On	2/12/2025 11:01:11 AM
Supervise By	Mohan Bera	Supervise On	2/12/2025 11:10:40 AM
STD. NAME STD REF.#		F.#	
ICAL Standard	MP84414,N	MP84423,MP84422,MP84420,MP84419,MP8	84418,MP84417,MP84416,MP84415
ICV Standard	MP84473		
CCV Standard	MP84438		
ICSA Standard	ICSA Standard MP84440,MP84441		
CRI Standard			
LCS Standard			
Chk Standard MP84444,MP84443		1P84443	

19	Q1159-03DL	YE8C9S	MS	02/11/25 14:03	2x for Sr still Sr high	Jaswal	Not Ok
20	PB166570BL	PBW570	МВ	02/11/25 14:15		Jaswal	ОК
21	PB166570BS	LCS570	LCS	02/11/25 14:18		Jaswal	ОК
22	Q1135-09	YE8H7	SAM	02/11/25 14:22		Jaswal	ОК
23	PB166317BL	PBW317	МВ	02/11/25 14:25		Jaswal	ОК
24	PB166317BS	LCS317	LCS	02/11/25 14:29		Jaswal	ОК
25	Q1186-01	ME2948	SAM	02/11/25 14:32		Jaswal	ОК
26	Q1159-01DL2	YE8C9	SAM	02/11/25 14:35	4x For Sr	Jaswal	Confirms
27	Q1159-02DL2	YE8C9D	DUP	02/11/25 14:38	4x For Sr	Jaswal	Confirms
28	Q1159-01LDL2	YE8C9L	SD	02/11/25 14:42	20x For Sr	Jaswal	Confirms
29	Q1159-03DL2	YE8C9S	MS	02/11/25 14:45	4x For Sr	Jaswal	Confirms
30	CCV022	CCV022	CCV	02/11/25 14:50		Jaswal	ОК
31	CCB022	CCB022	ССВ	02/11/25 14:53		Jaswal	ок
32	Q1204-01A	ME2975A	PS	02/11/25 15:21	Se 0.1ml of mp84474	Jaswal	ОК
33	Q1245-09A	A6335A	PS	02/11/25 15:25	Se 0.1ml of mp84474	Jaswal	ОК
34	PB166636BL	PBW636	МВ	02/11/25 15:28		Jaswal	ОК
35	PB166636BS	LCS636	LCS	02/11/25 15:31		Jaswal	ОК
36	Q1255-01	MDCZM3	SAM	02/11/25 15:41		Jaswal	ОК
37	Q1255-02	MDCZP0	SAM	02/11/25 15:45		Jaswal	ОК
38	Q1255-03	MDCZP1	SAM	02/11/25 15:48		Jaswal	ок



**Instrument ID:** P8

Review By	eview By Janvi Patel		Review On	2/12/2025 11:01:11 AM
Supervise By	Mohar	n Bera	Supervise On	2/12/2025 11:10:40 AM
STD. NAME STD REF.#				
ICAL Standard	MF	P84414,MP84423,MF	84422,MP84420,MP84419,MP84418	,MP84417,MP84416,MP84415
ICV Standard	MF	P84473		
CCV Standard	MF	P84438		
ICSA Standard	ICSA Standard MP84440,MP84441			
CRI Standard				
LCS Standard				
Chk Standard MP84444,MP84443				

39	Q1255-04	MDCZP5	SAM	02/11/25 15:51		Jaswal	ОК
40	Q1255-05	MDCZM4	SAM	02/11/25 15:54		Jaswal	ОК
41	Q1255-06	MDCZN3	SAM	02/11/25 15:58		Jaswal	ОК
42	Q1255-07	MDCZP2	SAM	02/11/25 16:01		Jaswal	ОК
43	Q1255-08	MDCZN8	SAM	02/11/25 16:04		Jaswal	ОК
44	Q1255-09	MDCZN8D	DUP	02/11/25 16:08		Jaswal	ОК
45	Q1255-08L	MDCZN8L	SD	02/11/25 16:11		Jaswal	ОК
46	Q1255-10	MDCZN8S	MS	02/11/25 16:14	MS fail for Se(Below RL)	Jaswal	ОК
47	Q1255-11	MDCZL6	SAM	02/11/25 16:17		Jaswal	ОК
48	CCV023	CCV023	CCV	02/11/25 16:21		Jaswal	ОК
49	CCB023	CCB023	ССВ	02/11/25 16:24		Jaswal	ОК
50	Q1255-12	MDCZL9	SAM	02/11/25 16:32		Jaswal	ОК
51	Q1255-13	MDCZN9	SAM	02/11/25 16:36		Jaswal	ОК
52	Q1255-14	MDCZN2	SAM	02/11/25 16:39		Jaswal	ОК
53	Q1255-15	MDCZN7	SAM	02/11/25 16:42		Jaswal	ОК
54	Q1255-16	MDCZP4	SAM	02/11/25 16:46		Jaswal	ОК
55	CCV024	CCV024	CCV	02/11/25 16:49		Jaswal	ОК
56	CCB024	CCB024	ССВ	02/11/25 16:52		Jaswal	ОК

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2948	

Lab	Name:	Alliance	Technical	Group.	LLC	Contract:	68HERH20D001

Lab Code: ACE Case No.: 51900 MA No.: SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-01

% Solids: Date Received: 01/24/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

шу/ ь

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1244

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2949	

	Lab Name:	Alliance	Technical	Group,	LLC	Contract:	68HERH20D0011
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Lab Code: ACE Case No.: 51900 MA No.: SDG No.: ME2948

Matrix: Water Lab Sample ID: Q1186-02

% Solids: Date Received: 01/24/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

шу/ ь

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1247

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-03

% Solids: Date Received: 01/24/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1249

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2956	

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

Matrix: Water Lab Sample ID: Q1186-04

% Solids: Date Received: 01/24/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1251

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2957	

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

Matrix: Water Lab Sample ID: Q1186-05

% Solids: Date Received: 01/24/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1253

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-16

% Solids: Date Received: 01/27/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1323

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2959		

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

Matrix: Water Lab Sample ID: Q1186-09

% Solids: Date Received: 01/27/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1302

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN

ME2960

INORGANIC	ANALYSTS	DATA	SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011 Case No.: 51900 MA No.: SDG No.: ME2948 Lab Code: ACE Lab Sample ID: Q1186-06 Matrix: Water % Solids: Date Received: 01/24/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1256

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2961	

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

Matrix: Water Lab Sample ID: Q1186-07

% Solids: Date Received: 01/24/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

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CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1258

NOTE: Hardness (total) is reported in  $\ensuremath{\text{mg}/\text{L}}$ 

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2962	

T.ah	Name •	Alliance	Technical	Groun	T.T.C	Contract.	68HERH20D0011
ьαр	Name:	ATTTAILCE	Technical	Group,		Contract:	COUPKUZODOOTI

Matrix: Water Lab Sample ID: Q1186-08

% Solids: Date Received: 01/24/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1300

NOTE: Hardness (total) is reported in mg/L

### FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-12

% Solids: Date Received: 01/27/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1309

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2965	

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

Matrix: Water Lab Sample ID: Q1186-14

% Solids: Date Received: 01/27/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight)}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1314

NOTE: Hardness (total) is reported in mg/L

Date Received: 01/27/2025

FORM 1 - IN

### INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011 Case No.: 51900 MA No.: SDG No.: ME2948 Lab Code: ACE Lab Sample ID: Q1186-15 Matrix: Water

Analytical Method: Hq

% Solids:

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1316

NOTE: Hardness (total) is reported in mg/L

## FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2967	

Lab Name: Alliance Technical Group, LLC Co	ontract: 68HERH20D0011
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Matrix: Water Lab Sample ID: Q1186-13

% Solids: Date Received: 01/27/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1311

NOTE: Hardness (total) is reported in mg/L

## FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2968	

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

Matrix: Water Lab Sample ID: Q1186-17

% Solids: Date Received: 01/28/2025

Analytical Method: Hg

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No. Analyte Concentration Q Date Analyzed Time Analyzed 7439-97-6 Mercury 0.20 U 02/07/2025 1325

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-18

% Solids: Date Received: 01/28/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1327

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2977	

Matrix: Water Lab Sample ID: Q1186-19

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

% Solids: Date Received: 01/28/2025

Analytical Method: Hq

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}, \mu g, or \mu g/cm^2)$ : ug/L

ад/ п

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1330

NOTE: Hardness (total) is reported in  $\ensuremath{\text{mg}/\text{L}}$ 

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2980	
--------	--

Lab Name:	Alliance Technical	Group, LLC	Contract:	68HERH20D0011
Lab Name.	ATTIANCE TECHNICAL	Group, The	Concract.	001111111120110011

Matrix: Water Lab Sample ID: Q1186-20

% Solids: Date Received: 01/28/2025

Analytical Method: Hg

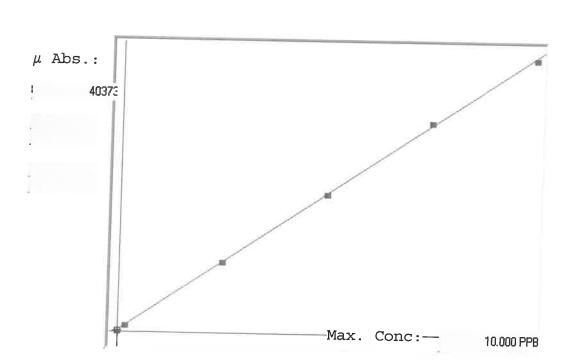
Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	02/07/2025	1332

NOTE: Hardness (total) is reported in mg/L

# LB 134618

SFAMO1.1 INSTRUMENT ID: CYL



A=	0.0000e+000
B=	2.4707e-004 Slope
C=	-6.3044e-002 = mie cap
Rho=	0.9998511
Accept:	=Accepted

-

Linear

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Don 2	D 200 M	D =====	%)
0.00 0.05	0.000 0.050	-0.016	-0.016	191	0.000	191	iveh 2	Rep 3	Rep 4	Rep 5	7017
0.20 2.50	0.200 2.500	0.187 2.514	-0.013 0.014	1013 10432	0.0 %	1013					-7
5.00 7.50	5.000 7.500	4.978	-0.022	20402	0.0 % 0.0 %	10432 20402					0
10.0	10.000	7.624 9.912	0.124 -0.088	31114 40373	0.0 % 0.0 %	31114 40373					2

#### LB134618 INSTRUMENT ID : CV1

			INSTRU	MENT ID:	CV1		
Sample ID		μ Abs. Con	c. Stnd C	onc Meth	nod Ur	its Date	Туре
	0 S0	191 -		0 SFAN	101.1 PP		
1	0.2 S01	1013 -		0.2 SFAN	101.1 PP		
	2.5 SO2	10432 -		2.5 SFAN			
	5 S03	20402 -		5 SFAM		, ,	
-	7.5 S04	31114 -		7.5 SFAM		_, -,	
	10 S05	40373 -		10 SFAM			
ICV090	ICV090	16401 3.9	892 -		01.1 PP		
ICB090	ICB090	-84 -0.0	1838 -	SFAM		_, -,	
CCV037	CCV037	20765 5.0	674 -		01.1 PPE	-/ - /	
CCB037	CCB037	-55 -0.0	766 -	SFAM		_, ,	
PB166616B	L PBW616	109 -0.0	361 -	SFAM		, ,	
Q1135-09	YE8H7	113 -0.0	351 -	SFAM	_		
Q1176-01	ME2931	218 -0.0	092 -	SFAM		, , , = - =	
Q1176-02	ME2933	134 -0.0	299 -	SFAMO		-, -,	
Q1176-03	ME2937	292 0.00	091 -	SFAMO			
Q1176-04	ME2945	191 -0.03	159 -	SFAMO		2/7/2025 11:5	
Q1176-05	ME2942	165 -0.02	223 -	SFAMO		2/7/2025 11:5	
Q1176-06	ME2943	114 -0.03	349 -	SFAMO		2/7/2025 11:5	
Q1176-07	ME2940	389 0.03	331 -	SFAMO		2/7/2025 12:0	
Q1176-08	ME2941	79 -0.04	35 -	SFAMO		2/7/2025 12:0	
Q1176-09	ME2944	139 -0.02	87 -	SFAMO		2/7/2025 12:0	
Q1176-10	ME2944D	217 -0.00	94 -	SFAM0		2/7/2025 12:0	
Q1176-11	ME2944S	4335 1.0	08 -	SFAM0		2/7/2025 12:10	
Q1176-12	ME2938	230 -0.00	62 -	SFAM0:		2/7/2025 12:13	
Q1176-13	ME2939	264 0.00	22 -	SFAM0:		2/7/2025 12:15	
Q1176-14	ME2932	340 0.0	21 -	SFAM0:		2/7/2025 12:17	
Q1176-15	ME2936	101 -0.03	81 -	SFAM01		2/7/2025 12:19	
Q1176-16	ME2934	319 0.01	58 -	SFAM01		2/7/2025 12:22	
Q1176-17	ME2935	93 -0.040	01 -	SFAM01		2/7/2025 12:24	
Q1176-18	ME2950	150 -0.02	26 -	SFAM01	.1 PPB	2/7/2025 12:26	
CCV038	CCV038	20175 4.921	17 -		.1 PPB	2/7/2025 12:28	
CCB038	CCB038	-37 -0.072	2 -	SFAM01		2/7/2025 12:31	
Q1176-19	ME2951	192 -0.015	i6 -	SFAM01	.1 PPB	2/7/2025 12:33	
Q1176-20	ME2953	259 0.000	9 -	SFAM01	.1 PPB	2/7/2025 12:35	
Q1176-21	ME2954	180 -0.018	6 -	SFAM01	.1 PPB	2/7/2025 12:37	
	PBW617	86 -0.041	8 -	SFAM01	.1 PPB	2/7/2025 12:40	
Q1151-13	MC0B02	106 -0.036	9 -	SFAM01.	1 PPB	2/7/2025 12:42	
	ME2948	170 -0.02	1 -	SFAM01.	1 PPB	2/7/2025 12:44	
	ME2949	135 -0.029	7 -	SFAM01.	1 PPB	2/7/2025 12:47	
	ME2955	143 -0.027	7 -	SFAM01.	1 PPB	2/7/2025 12:49	
	ME2956	159 -0.023	3 -	SFAM01.	1 PPB	2/7/2025 12:51	
	ME2957	186 -0.017	L -	SFAM01.		2/7/2025 12:53	
	ME2960	184 -0.0176	5 -	SFAM01.		2/7/2025 12:56	
	ME2961	124 -0.0324	F -	SFAM01.		2/7/2025 12:58 5	
_	ME2962	181 -0.0183	-	SFAM01.3		2/7/2025 13:00 5	
Q1186-09 I	ME2959	127 -0.0317	' -	SFAM01.1	L PPB	2/7/2025 13:02 9	

#### LB134618 INSTRUMENT ID : CV1

Q1186-10	ME2959D	119 -0.0336 -	SFAM01.1 PPB	2/7/2025 12:05 58401
Q1186-11	ME2959S	4265 0.9907 -	SFAMO1.1 PPB	2/7/2025 13:05 SMPL
Q1186-12	ME2963	82 -0.0428 -	_	2/7/2025 13:07 SMPL
Q1186-13	ME2967	171 -0.0208 -	SFAM01.1 PPB	2/7/2025 13:09 SMPL
Q1186-14	ME2965		SFAM01.1 PPB	2/7/2025 13:11 SMPL
Q1186-15	- · · · -	263 0.0019 -	SFAM01.1 PPB	2/7/2025 13:14 SMPL
	ME2966	166 -0.022 -	SFAM01.1 PPB	2/7/2025 13:16 SMPL
CCV039	CCV039	20280 4.9476 -	SFAM01.1 PPB	2/7/2025 13:18 SMPL
CCB039	CCB039	-94 -0.0863 -	SFAM01.1 PPB	2/7/2025 13:21 SMPL
Q1186-16	ME2958	76 -0.0443 -	SFAM01.1 PPB	
Q1186-17	ME2968	95 -0.0396 -		2/7/2025 13:23 SMPL
Q1186-18	ME2974	121 -0.0331 -		2/7/2025 13:25 SMPL
Q1186-19	ME2977		SFAM01.1 PPB	2/7/2025 13:27 SMPL
Q1186-20		149 -0.0262 -	SFAM01.1 PPB	2/7/2025 13:30 SMPL
-	ME2980	177 -0.0193 -	SFAM01.1 PPB	2/7/2025 13:32 SMPL
CCV040	CCV040	20372 4.9703 -	SFAM01.1 PPB	2/7/2025 13:34 SMPL
CCB040	CCB040	-33 -0.0712 -	SFAM01.1 PPB	2/7/2025 13:36 SMPL
				2///2023 13:30 SIVIPL





8900, Fax: 908 789 8922

### **Prep Standard - Chemical Standard Summary**

Order ID :	Q1186
Test :	Mercury
Prepbatch ID : Sequence ID/Qc Bat	PB166617, <b>ch ID:</b> LB134618,
	MP83693,MP83694,MP84364,MP84365,MP84366,MP84367,MP84368,MP84369,MP84370,MP843 73,MP84374,MP84408,
Chemical ID : M4371,M4465,M491	6,M5062,M5532,M5789,M5882,M5884,M6041,M6121,M6126,W3112,





Fax: 908 789 8922

#### Metals STANDARD PREPARATION LOG

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabjit Jaswal
3965	2:1 H2SO4 : HNO3	MP83691	12/18/2024	06/03/2025	Mohan Bera	None	None	10/10/2024
								12/18/2024

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabjit Jaswal
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP83692	12/18/2024	06/18/2025		METALS_SCA LE_3 (M SC-3)		12/18/2024

**FROM** 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml





Fax: 908 789 8922

#### **Metals STANDARD PREPARATION LOG**

Recipe ID	NAME	NO.	Prep Date	Expiration Date	<u>Prepared</u> <u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabjit Jaswal
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP83693	12/18/2024	06/18/2025		METALS_SCA LE_3 (M SC-3)		12/18/2024

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabjit Jaswal
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP83694	12/18/2024	06/18/2025		METALS_SCA LE_3 (M SC-3)		12/18/2024

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml



Aliance

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#### Metals STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sarabjit Jaswal
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP84364	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP ETTE_5 (HG	•
FROM	1.00000ml of M6126 + 2.50000ml of	M5062 + 96	3.50000ml of V	V3112 = Final	Quantity: 100.0	00 ml	A)	

I			

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabiit Jaswal
1340	Hg 0.00 PPB STD	MP84365	02/06/2025	02/07/2025	Mohan Bera		METALS_PIP ETTE_5 (HG	,

**FROM** 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml





Fax: 908 789 8922

#### **Metals STANDARD PREPARATION LOG**

Recipe				<b>Expiration</b>	<u>Prepared</u>			Supervised By	
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sarabjit Jaswal	
1341	Hg 0.2 PPB STD	MP84366	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP	,	
							ETTE_5 (HG	02/10/2025	
FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84364 = Final Quantity: 250.000 ml									

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sarabjit Jaswal
1342	Hg 2.5 PPB STD	MP84367	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP ETTE_5 (HG	

FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84364 = Final Quantity: 250.000 ml



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TECHNICAL GROUP

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#### Metals STANDARD PREPARATION LOG

Recipe				Expiration	Prepared			Supervised By		
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sarabjit Jaswal		
1343	Hg 5.0 PPB STD	MP84368	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP			
							ETTE_5 (HG	02/10/2025		
FROM	FROM 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84364 = Final Quantity: 250.000 ml									

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sarabjit Jaswal
1344	Hg 7.5 PPB STD	MP84369	02/06/2025	02/07/2025	Mohan Bera		METALS_PIP ETTE_5 (HG	,

**FROM** 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84364 = Final Quantity: 250.000 ml



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#### **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sarabjit Jaswal
1345	Hg 10.0 PPB STD	MP84370	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP	
							ETTE_5 (HG	02/10/2025
FROM	2.50000ml of M6126 + 237.50000ml	of W3112 +	10.00000ml d	of MP84364 =	Final Quantity: 2	250.000 ml	A)	

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Sarabjit Jaswal
1346	Hg ICV SOLUTION	MP84371	02/06/2025	02/07/2025	Mohan Bera		METALS_PIP	
							ETTE_5 (HG	02/10/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml



Fax: 908 789 8922

#### **Metals STANDARD PREPARATION LOG**

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	NAME	NO.	Prep Date	<u>Date</u>	By	<u>ScaleID</u>	<u>PipetteID</u>	Sarabiit Jaswal
1351	ICB (Hg 0.00 PPB SOLUTION)	MP84372	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP ETTE_5 (HG	,
FROM	2.50000ml of M5789 + 247.50000ml	of W3112 =	Final Quanti	ty: 250.000 ml			A)	

FROM	2.50000mi of M5789 + $247.50000$ mi of W3112 = Final Quantity: $250.000$ mi

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sarabjit Jaswal
1358	CCV (Hg 5.0 PPB SOLUTION)	MP84373	02/06/2025	02/07/2025	Mohan Bera		METALS_PIP ETTE_5 (HG	•

485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84364 = Final Quantity: 500.000 ml **FROM** 





Fax: 908 789 8922

#### Metals STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Sarabjit Jaswal
1352	CCB (Hg 0.00 PPB SOLUTION)	MP84374	02/06/2025	02/07/2025	Mohan Bera	None	METALS_PIP ETTE_5 (HG	
FDOM	A)  A)  A)  A)  A)  A)  A)							

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Sarabjit Jaswal
68	STANNOUS CHLORIDE SOLUTION	MP84408	02/07/2025	02/08/2025	Mohan Bera	None	None	02/10/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = Final Quantity: 500.000 ml



#### **CHEMICAL RECEIPT LOG BOOK**

ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371
ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / jaswal	07/25/2019 / manojkumar	M4465
ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916
ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
MSHG-10PPM / MERCURY HCI 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062
ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date /	Chemtech Lot #
ICV-5 / ICV (HG)STOCK SOLN	ICV5-0415	02/28/2025	01/02/2025 / jaswal	03/30/2023 / mohan	M5532
ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	23G1262003	07/30/2025	02/08/2024 / Al-Terek	06/26/2023 / Al-Terek	M5789
	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)  ItemCode / ItemName  BA-3238-05 / Potassium Persulfate (2.5kg)  ItemCode / ItemName  BA-3227-05 / Potassium Permanganate (2.5kg)  ItemCode / ItemName  MSHG-10PPM / MERCURY HCI 125mL 10ug/mL  ItemCode / ItemName  ICV-5 / ICV ( HG ) STOCK SOLN  ItemCode / ItemName  BA-9598-34 / Nitric Acid,	BA-2196-01 /	RemCode / ItemName	RemCode / ItemName	Received By   Received By   BA-2196-01 / Hydroxylamine   Hydroxholide, Crystal (cs/4x500g)



#### **CHEMICAL RECEIPT LOG BOOK**

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
						200 //
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121
Seidler Chemical  Supplier	Acid, Instra-Analyzed	0000275677 Lot #		11/13/2024 /	10/13/2024 /	
	Acid, Instra-Analyzed (cs/6x2.5L)		05/13/2025 Expiration	11/13/2024 / Eman  Date Opened /	10/13/2024 / Eman	M6121
Supplier	Acid, Instra-Analyzed (cs/6x2.5L)  ItemCode / ItemName  BA-9598-34 / Nitric Acid,	Lot #	05/13/2025  Expiration Date	11/13/2024 / Eman  Date Opened / Opened By  12/03/2024 /	10/13/2024 / Eman  Received Date / Received By  11/12/2024 /	M6121  Chemtech Lot #



Certificate of Analysis

Quality System has had 1001:2015 1

1 Reagent Lane Fair Lawn, NJ 07410 201,796,7100 tel

201,796,1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System

Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023		
Lot Number	232820				
Description	STANNOUS CHLORIDE, DIH	IYDRATE CERTIFIED ACS (Suitable for Me	ercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028		
Chemical Origin	Inorganic-non animal				
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.				

N/A					
Result Name	Units	Specifications	Test Value		
APPEARANCE		REPORT	Clear crystals		
ASSAY	%	Inclusive Between 98 - 103	100.65		
CALCIUM	%	<= 0.005	0.0017		
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST		
IRON (Fe)	%	<= 0.003	0.0011		
LEAD (Pb)	%	<= 0.01	0.0006		
MERCURY (Hg)	ppm	<= 0.05	<0.05		
POTASSIUM (K)	%	<= 0.005	0.0001		
SODIUM (Na)	%	<= 0.01	<0.01		
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST		
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)		

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Hydroxylamine Hydrochloride, Crystal BAKER ANALYZED® A.C.S. Reagent

Suitable for Mercury Determination (hydroxylammonium chloride)

Rec - 06.07.12





Material No.: 2196-01

Batch No.: 0000215387

Manufactured Date: 2018/06/27 Retest Date: 2025/06/25

Revision No: 1

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NH2OH·HCI) (by KMnO4 titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH4)	Passes Test	PT
Sulfur Compounds (as SO <sub>4</sub> )	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities – Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin:

CN

Packaging Site:

Paris Mfg Ctr & DC



Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

Jamie Ethier
Vice President Global Quality



M4913- 16



## Certificate of Analysis

1 Reagent Lane Fair Lawn, NJ 07410 201.796.7100 tel 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306	N 100 100 100 100 100 100 100 100 100 10	
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A				
Result Name	Units	Specifications	Test Value	
APPEARANCE		REPORT	Dark purple to purple green crystals	
ASSAY	%	>= 99	99.3	
CHLORIDE & CHLORATE	%	<= 0.005	<0.005	
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test	
INSOLUBLE MATTER	%	<= 0.2	<0.2	
MERCURY (Hg)	ppm	<= 0.05	<0.004	
SULFATE (SO4)	%	<= 0.02	<0.02	

Julian Burton

Julian Burton - Quality Control Manager - Fair Lawn



# Certificate of Analysis

300 Technology Drive Christiansburg, VA 24073 USA inorganicventures.com M5062 M5063

P: 800-669-6799/540-585-3030 F: 540-585-3012 info@inorganicventures.com

#### 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



#### 2.0 PRODUCT DESCRIPTION

Product Code:

Single Analyte Mass Spec Solution

Catalog Number:

MSHG-10PPM

Lot Number:

S2-HG709270

Matrix:

10% (v/v) HCI

Value / Analyte(s):

10 μg/mL ea:

Mercury

Starting Material:

Hg metal

Starting Material Lot#:

1959

Starting Material Purity:

99.9994%

#### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 

 $10.001 \pm 0.053 \,\mu g/mL$ 

Density:

1.020 g/mL (measured at 20 ± 4 °C)

#### **Assay Information:**

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
На	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

#### Characterization of CRM/RM by Two or More Methods

Certified Value, X<sub>CRM/RM</sub>, where two or more methods of characterization are used is the weighted mean of the results:

 $X_{CRM/RM} = \Sigma(w_i) (X_i)$ 

 $X_i$  = mean of Assay Method i with standard uncertainty  $u_{char}$  i

w<sub>i</sub> = the weighting factors for each method calculated using the inverse square of

the variance.

 $w_i = (1/u_{char\ i})^2 / (\Sigma (1/(u_{char\ i})^2)$ 

CRM/RM Expanded Uncertainty (±) =  $U_{CRM/RM}$  = k ( $u^2_{char}$  +  $u^2_{bb}$  +  $u^2_{lts}$  +  $u^2_{ts}$ )<sup>1/2</sup>

k = coverage factor = 2

 $u_{char} = [\Sigma((w_i)^2 (u_{char})^2)]^{\frac{1}{2}}$  where  $u_{char}$  i are the errors from each characterization method

u<sub>bb</sub> = bottle to bottle homogeneity standard uncertainty

ults = long term stability standard uncertainty (storage)

u<sub>ts</sub> = transport stability standard uncertainty

#### Characterization of CRM/RM by One Method

Certified Value, X<sub>CRM/RM</sub>, where one method of characterization is used is the mean of individual results:

X<sub>CRM/RM</sub> = (X<sub>a</sub>) (u<sub>char a</sub>)

Xa = mean of Assay Method A with

uchar a = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = UCRM/RM = k (u<sup>2</sup>char a + u<sup>2</sup>bb + u<sup>2</sup>lts + u<sup>2</sup>ts)<sup>1/2</sup>

k = coverage factor = 2

u<sub>char a</sub> = the errors from characterization

u<sub>bb</sub> = bottle to bottle homogeneity standard uncertainty

u<sub>lts</sub> = long term stability standard uncertainty (storage)

uts = transport stability standard uncertainty

#### 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

#### 4.1 Thermometer Calibration

 All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

#### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

#### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

#### 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

```
0
  Ag
          0.000011 M Eu <
                            0.000201 O Na
                                              0.000004 M Se <
                                                                0.015915 O Zn <
                                                                                  0.001510
0
   Al
          0.000001 O Fe
                            0.000001 M Nb <
                                              0.000201 O Si
                                                                0.000005 M Zr <
                                                                                  0.000201
M
   As <
          0.000402 M Ga <
                            0.000201 M Nd <
                                              0.000201 M Sm <
                                                                0.000201
M
   Au <
          0.003631 M Gd <
                            0.000201 M Ni <
                                              0.000402 M
                                                        Sn <
                                                                0.001007
M
   B <
          0.001208 M Ge <
                            0.000201 M Os <
                                              0.000605 M
                                                        Sr <
                                                                0.000201
M
  Ba <
          0.000201 M Hf <
                            0.000201 O P <
                                              0.032370 M
                                                        Ta <
                                                                0.000201
M
  Be <
          0.000201 s
                                   M Pb <
                    Hq <
                                              0.000201 M Tb <
                                                                0.000201
M
  Bi <
          0.000201 M
                            0.000201 M Pd <
                    Ho <
                                              0.000403 M
                                                        Te <
                                                                0.002216
0
   Ca
          0.000007 M In <
                            0.000201 M Pr <
                                              0.000201 M Th <
                                                                0.000201
M
   Cd <
          0.000201 M Ir
                            0.000201 M Pt <
                                              0.000402 M Ti <
                                                                0.000402
M
  Ce <
          0.000201 O K
                            0.000020 M Rb <
                                              0.000201 O TI <
                                                                0.016508
M
  Co <
          0.000201 M La <
                            0.000201 M Re <
                                              0.000201 M Tm <
                                                                0.000201
  Cr <
0
          0.003021 O Li <
                            0.000107 M Rh <
                                              0.000201 M U <
                                                                0.008058
M
  Cs <
          0.001208 M Lu <
                            0.000201 M Ru <
                                              0.000201 M
                                                        V
                                                                0.000201
M
  Cu <
          0.000402 O
                    Mg
                            0.000001 O
                                      S <
                                              0.053950 M W <
                                                                0.000604
  Dy <
M
          0.000201 M Mn <
                            0.000604 M Sb <
                                              0.001208 M Y
                                                            <
                                                                0.000201
  Er <
          0.000201 M Mo
                            0.000009 M Sc <
                                              0.000201 M Yb <
                                                                0.000201
```

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

#### 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

#### 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

#### 7.1 Storage and Handling Recommendations

- Store between approximately 4° 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between  $4^{\circ}$   $24^{\circ}$  C to minimize the effects of transpiration. Use at  $20^{\circ} \pm 4^{\circ}$  C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution -** 200.59 +2 4 Hg(OH)(aq) 1+ **Chemical Compatibility -** Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

**Stability -** 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

**Hg Containing Samples (Preparation and Solution) -** Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 μg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 μg/mL	1	Ta, Co, Th ,Rh , Fe,
			U

#### 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

#### 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

#### 10.0 QUALITY STANDARD DOCUMENTATION

#### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

#### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

#### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

#### 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

#### 11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

#### 11.2 Lot Expiration Date

- September 22, 2026
- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

#### 11.3 Period of Validity

- Sealed TCT Bag	Open Date:		

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

# 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS Certificate Prepared By:

Uyen Truong Supervisor, Product Documentation

Mya Truong

#### Certificate Approved By:

Michael Booth Director, Quality Control Michael 2 Booth

#### Certifying Officer:

Paul Gaines Chairman / Senior Technical Director Paul R Laines



# QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: Inorganic ICV Solutions

# QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION:

For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** 

Read instructions carefully before opening bottle(s) and proceeding with

the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions HAZARDOUS MATERIAL

> Safety Data Sheets Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

#### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

#### (C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in  $\mu g/L$  (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014

For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Page 1 of 2

RMs ICV 1, 5, 6 SFAM (1)

QATS Form 20-007F188R00, 04-19-2021



The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC



# QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: Inorganic ICV Solutions

ICV1-1014

For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K<sub>3</sub>Fe(CN)<sub>6</sub>, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

## (D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

ICV1-1014			
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)	
Al	2500	500	
Sb	1000	200	
As	1000	200	
Ba	520	100	
Be	510	100	
Cd	510	100	
Ca	10000	2000	
Cr	520	100	
Co	520	100	
Cu	510	100	
Fe	10000	2000	
Pb	1000	2000	
Mg	6000	1200	
Mn	520	100	
Ni	530	110	
K	9900	2000	
Se	1000	200	
Ag	250	50	
Na	10000	2000	
TI	1000	210	
V	500		
Zn	1000	100 200	

	ICV5-0415		ICV6-0400
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN-	99

Sodium Chloride, Crystal BAKER ANALYZED® A.C.S. Reagent







Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

Retest Date: 2026-06-07

Revision No.: 1

# **Certificate of Analysis**

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
lodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO₃)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO <sub>4</sub> )	≤ 5 ppm	< 5 ppm
Sulfate (SO <sub>4</sub> )	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
ron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory, Research, or Manufacturing Use Meets Reagent Specifications for testing USP/NF monographs Country of Origin: USA

Packaging Site: Paris Mfg Ctr & DC



Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium





Material No.: 9673-33

Batch No.: 23D2462010 Manufactured Date: 2023-03-22

Retest Date: 2028-03-20

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
ACS - Assay (H2SO4)	95.0 - 98.0 %	96,1 %
Appearance	Passes Test	Passes Test
ACS - Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH <sub>4</sub> )	≤ 1 ppm	1 ppm
Chloride (CI)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities - Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities - Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities - Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities - Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities - Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities - Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities - Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities - Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium





Material No.: 9673-33 Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC

Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis





R->16/13/24 Metdig

M 6/21

Material No.: 9530-33 Batch No.: 0000275677 Manufactured Date: 2020/12/16 Retest Date: 2025/12/15

Revision No: 1

# Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl2)	<= 0.5 ppm	< 0.5
Phosphate (PO4)	<= 0.05 ppm	< 0.03
Sulfate (SO <sub>4</sub> )	<= 0.5 ppm	< 0.3
Sulfite (SO₃)	<= 0.8 ppm	0.3
Ammonium (NH₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Гrace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Frace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
race Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
race Impurities – Boron (B)	<= 20.0 ppb	< 5.0
race Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
race Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
race Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
race Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
race Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
race Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

Material No.: 9530-33 Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Frace Impurities - Selenium (Se), For Information Only	ppb	1.0
Frace Impurities ~ Silicon (Si)	<= 100.0 ppb	< 10.0
Frace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
race Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
race Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
race Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
race Impurities – Thallium (TI)	<= 5.0 ppb	< 2.0
race Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
race Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
race Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
race Impurities – Zinc (Zn)	<= 5.0 ppb	
race Impurities – Zirconium (Zr)	<= 1.0 ppb	0.3 < 0.1

For Laboratory, Research or Manufacturing Use Product Information (not specifications): Appearance (clear, fuming liquid) Meets ACS Specifications

Country of Origin:

US

Packaging Site:

Phillipsburg Mfg Ctr & DC







R-> 11/12/24

Material No.: 9606-03 Batch No.: 24D1062002

Manufactured Date: 2024-03-26

Retest Date: 2029-03-25

Revision No.: 0

# Certificate of Analysis

Test	Specification	Result
Assay (HNO3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (CI)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO <sub>4</sub> )	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO <sub>4</sub> )	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (AI)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities ~ Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69% CMOS





Material No.: 9606-03 Batch No.: 24D1062002

Test Specification Result

For Microelectronic Use

Country of Origin: USA

Packaging Site: Phillipsburg Mfg Ctr & DC



PB166617



SOP ID: M7470A-Mercury-19, MSFAM01.1-Mercury in Water-2 SDG No: MC0AZ0/ME2948 Start Digest Date: 02/06/2025 Time: 15:50 Temp: 95 °C Matrix: WATER End Digest Date: 02/06/2025 Time: 17:50 **Temp:** 96 °C Pippete ID: HG A Digestion tube ID: M6054 Balance ID: N/A **Block thermometer ID:** HG-DIG#1 Filter paper ID: NA Dig Technician Signature: pH Strip ID: M6069 **Supervisor Signature: Hood ID:** #1 Temp: 95°C 2. N/A

Block ID: 1. HG HOT BLOCK#1 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG	
ICV	100mL	MP84371	
CCV	100mL	MP84373	
Matrix Spike	0.40mL	MP84364	
N/A	N/A	N/A	
N/A	N/A	N/A	

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	7.5mL	MP83691
KMnO4 (5%)	15,0mL	MP83692
K2S208 (5%)	8.0mL	MP83693
Hydroxylamine HCL (12%)	6.0mL	MP83694
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	100mL	MP84365
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	100mL	MP84366
2.5 ppb	S2.5	100mL	MP84367
5.0 ppb	S5.0	100mL	MP84368
7.5 ppb	S7.5	100mL	MP84369
10.0 ppb	S10.0	100mL	MP84370
ICV	ICV	100mL	MP84371
ICB	ICB	100mL	MP84372
CCV	CCV	100mL	MP84373
ССВ	ССВ	100mL	MP84374
CRI	CRI	N/A	N/A
CHK STD	CHK STD	N/A	N/A

#### **Extraction Conformance/Non-Conformance Comments:**

N/A		
Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
2/6/25 18:25	ABS- Dig. Les	org - one to law
	Preparation Group	Analysis Group 1296



Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	рН	Comment	Prep
PB166617BL	PBW617	100	100	<2	N/A	2-1
Q1151-13	MC0B02	100	100	<2	N/A	2
Q1186-01	ME2948	100	100	<2	N/A	3
Q1186-02	ME2949	100	100	<2	N/A	4
21186-03	ME2955	100	100	<2	N/A	5
21186-04	ME2956	100	100	<2	N/A	6
21186-05	ME2957	100	100	<2	N/A	7
21186-06	ME2960	100	100	<2	N/A	8
1186-07	ME2961	100	100	<2	N/A	9
1186-08	ME2962	100	100	<2	N/A	10
1186-09	ME2959	100	100	<2	N/A	11
1186-10	ME2959D	100	100	<2	N/A	12
1186-11	ME2959S	100	100	<2	MP84364	13
1186-12	ME2963	100	100	<2	N/A	14
1186-13	ME2967	100	100	<2	N/A	15
1186-14	ME2965	100	100	<2	N/A	16
186-15	ME2966	100	100	<2	N/A	17
.186-16	ME2958	100	100	<2	N/A	18
186-17	ME2968	100	100	<2	N/A	19
186-18	ME2974	100	100	<2	N/A	
186-19	ME2977	100	100	<2	N/A	20
186-20	ME2980	100	100	<2	N/A	21





**Instrument ID:** CV1

Review By	Mohan Bera	Review On	2/10/2025 5:30:16 PM	
Supervise By	Kareem Khairalla	Supervise On	2/10/2025 5:31:19 PM	
	<del>_</del>			
STD. NAME	STD REF.#			
ICAL Standard	MP84365,MP84366,MI	P84367,MP84368,MP84369,MP84	370	
ICV Standard	MP84371			
CCV Standard	MP84373			
ICSA Standard				
CRI Standard				
LCS Standard				
Chk Standard MP84372,MP84374,MP84408		P84408		

Sr#	Sampleld	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/07/25 11:14		Mohan	ОК
2	S0.2	S01	CAL2	02/07/25 11:16		Mohan	ОК
3	S2.5	S02	CAL3	02/07/25 11:19		Mohan	ОК
4	S5	S03	CAL4	02/07/25 11:21		Mohan	ОК
5	S7.5	S04	CAL5	02/07/25 11:23		Mohan	ОК
6	S10	S05	CAL6	02/07/25 11:25		Mohan	ОК
7	ICV090	ICV090	ICV	02/07/25 11:31		Mohan	ОК
8	ICB090	ICB090	ICB	02/07/25 11:34		Mohan	ОК
9	CCV037	CCV037	CCV	02/07/25 11:36		Mohan	ОК
10	CCB037	CCB037	ССВ	02/07/25 11:41		Mohan	ОК
11	PB166616BL	PBW616	МВ	02/07/25 11:43		Mohan	ОК
12	Q1135-09	YE8H7	SAM	02/07/25 11:45		Mohan	ОК
13	Q1176-01	ME2931	SAM	02/07/25 11:48		Mohan	ОК
14	Q1176-02	ME2933	SAM	02/07/25 11:50		Mohan	ОК
15	Q1176-03	ME2937	SAM	02/07/25 11:52		Mohan	ОК
16	Q1176-04	ME2945	SAM	02/07/25 11:54		Mohan	ОК
17	Q1176-05	ME2942	SAM	02/07/25 11:57		Mohan	ОК
18	Q1176-06	ME2943	SAM	02/07/25 11:59		Mohan	OK





**Instrument ID:** CV1

Review By	Moh	nan Bera	Review On	2/10/2025 5:30:16 PM
Supervise By	Kar	eem Khairalla	Supervise On	2/10/2025 5:31:19 PM
STD. NAME STD REF.#				
ICAL Standard		MP84365,MP84366,N	IP84367,MP84368,MP84369,MF	P84370
ICV Standard		MP84371		
CCV Standard		MP84373		
ICSA Standard				
CRI Standard				
LCS Standard	LCS Standard			
Chk Standard MP84372,MP84374,MP84408		IP84408		

19	Q1176-07	ME2940	SAM	02/07/25 12:01	Mohan	ОК
20	Q1176-08	ME2941	SAM	02/07/25 12:03	Mohan	ок
21	Q1176-09	ME2944	SAM	02/07/25 12:06	Mohan	ОК
22	Q1176-10	ME2944D	DUP	02/07/25 12:08	Mohan	ОК
23	Q1176-11	ME2944S	MS	02/07/25 12:10	Mohan	ОК
24	Q1176-12	ME2938	SAM	02/07/25 12:12	Mohan	ок
25	Q1176-13	ME2939	SAM	02/07/25 12:15	Mohan	ОК
26	Q1176-14	ME2932	SAM	02/07/25 12:17	Mohan	ОК
27	Q1176-15	ME2936	SAM	02/07/25 12:19	Mohan	ок
28	Q1176-16	ME2934	SAM	02/07/25 12:22	Mohan	ОК
29	Q1176-17	ME2935	SAM	02/07/25 12:24	Mohan	ОК
30	Q1176-18	ME2950	SAM	02/07/25 12:26	Mohan	ОК
31	CCV038	CCV038	CCV	02/07/25 12:28	Mohan	ОК
32	CCB038	CCB038	ССВ	02/07/25 12:31	Mohan	ОК
33	Q1176-19	ME2951	SAM	02/07/25 12:33	Mohan	ОК
34	Q1176-20	ME2953	SAM	02/07/25 12:35	Mohan	ОК
35	Q1176-21	ME2954	SAM	02/07/25 12:37	Mohan	ОК
36	PB166617BL	PBW617	МВ	02/07/25 12:40	Mohan	ок
37	Q1151-13	MC0B02	SAM	02/07/25 12:42	Mohan	ОК
38	Q1186-01	ME2948	SAM	02/07/25 12:44	Mohan	ок



**Instrument ID:** CV1

Review By	Moh	nan Bera	Review On	2/10/2025 5:30:16 PM
Supervise By	Kar	eem Khairalla	Supervise On	2/10/2025 5:31:19 PM
STD. NAME STD REF.#				
ICAL Standard		MP84365,MP84366,N	IP84367,MP84368,MP84369,MF	P84370
ICV Standard		MP84371		
CCV Standard		MP84373		
ICSA Standard				
CRI Standard				
LCS Standard	LCS Standard			
Chk Standard MP84372,MP84374,MP84408		IP84408		

39	Q1186-02	ME2949	SAM	02/07/25 12:47	Mohan	ОК
40	Q1186-03	ME2955	SAM	02/07/25 12:49	Mohan	ок
41	Q1186-04	ME2956	SAM	02/07/25 12:51	Mohan	ОК
42	Q1186-05	ME2957	SAM	02/07/25 12:53	Mohan	ОК
43	Q1186-06	ME2960	SAM	02/07/25 12:56	Mohan	ОК
44	Q1186-07	ME2961	SAM	02/07/25 12:58	Mohan	ок
45	Q1186-08	ME2962	SAM	02/07/25 13:00	Mohan	ОК
46	Q1186-09	ME2959	SAM	02/07/25 13:02	Mohan	ОК
47	Q1186-10	ME2959D	DUP	02/07/25 13:05	Mohan	ОК
48	Q1186-11	ME2959S	MS	02/07/25 13:07	Mohan	ОК
49	Q1186-12	ME2963	SAM	02/07/25 13:09	Mohan	ОК
50	Q1186-13	ME2967	SAM	02/07/25 13:11	Mohan	ОК
51	Q1186-14	ME2965	SAM	02/07/25 13:14	Mohan	ОК
52	Q1186-15	ME2966	SAM	02/07/25 13:16	Mohan	ОК
53	CCV039	CCV039	CCV	02/07/25 13:18	Mohan	ОК
54	CCB039	CCB039	ССВ	02/07/25 13:21	Mohan	ОК
55	Q1186-16	ME2958	SAM	02/07/25 13:23	Mohan	ОК
56	Q1186-17	ME2968	SAM	02/07/25 13:25	Mohan	ок
57	Q1186-18	ME2974	SAM	02/07/25 13:27	Mohan	ОК
58	Q1186-19	ME2977	SAM	02/07/25 13:30	Mohan	ок





**Instrument ID:** CV1

Review By	Mohan Bera	Review On	2/10/2025 5:30:16 PM
Supervise By	pervise By Kareem Khairalla		2/10/2025 5:31:19 PM
STD. NAME STD REF.#			
ICAL Standard	CAL Standard MP84365,MP84366,MP84367,MP84368,MP84369,MP84370		IP84370
ICV Standard	MP84371		
CCV Standard	MP84373		
ICSA Standard			
CRI Standard			
LCS Standard	LCS Standard		
Chk Standard	Chk Standard MP84372,MP84374,MP84408		

59	Q1186-20	ME2980	SAM	02/07/25 13:32	Mohan	ок
60	CCV040	CCV040	CCV	02/07/25 13:34	Mohan	ок
61	CCB040	CCB040	ССВ	02/07/25 13:36	Mohan	ок

# FORM 1 - IN

ME2948

#### INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011 Case No.: 51900 MA No.: SDG No.: ME2948 Lab Code: ACE Lab Sample ID: Q1186-01 Matrix: Water % Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2949	

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

Matrix: Water Lab Sample ID: Q1186-02

% Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1104

NOTE: Hardness (total) is reported in mg/L

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

ME2955		

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

Matrix: Water Lab Sample ID: Q1186-03

% Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	7.2	J	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

# FORM 1 - IN

ME2956

INORGANIC ANALYSIS DATA SHEET

Lab Name:	Alliance Technical Group, LLC		Contract: 68H	ERH20D00	11		
Lab Code:	ACE	Case No.:	51900	MA No.:		SDG No.:	ME2948
Matrix:	Water			Lab Sample ID:	<u>Q1186-</u>	-04	
% Solids:				Date Received:	01/24	/2025	

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2957
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Lab	Name:	Alliance	Technical	Group,	LLC	Contract:	68HERH20D0011

Matrix: Water Lab Sample ID: Q1186-05

% Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in  $\ensuremath{\text{mg}/\text{L}}$ 

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2958	1122300
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Lab 1	Name:	Alliance	Technical	Group,	LLC	Contract:	68HERH20D001

Matrix: Water Lab Sample ID: Q1186-16

% Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1059

NOTE: Hardness (total) is reported in  $\ensuremath{\text{mg}/\text{L}}$ 

# FORM 1 - IN

ME2959

#### INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011 Case No.: 51900 MA No.: SDG No.: ME2948 Lab Code: ACE Lab Sample ID: Q1186-09 Matrix: Water % Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN

ME2960

#### INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011 Case No.: 51900 MA No.: SDG No.: ME2948 Lab Code: ACE Lab Sample ID: Q1186-06 Matrix: Water % Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2961	

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

Matrix: Water Lab Sample ID: Q1186-07

% Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}, \mu g, or \mu g/cm^2)$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

# FORM 1 - IN INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-08

% Solids: Date Received: 01/24/2025

Analytical Method: CN

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1052

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2963		

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

Matrix: Water Lab Sample ID: Q1186-12

% Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}, \mu g, or \mu g/cm^2)$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2965	

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

Matrix: Water Lab Sample ID: Q1186-14

% Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	20		01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2966	

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

Matrix: Water Lab Sample ID: Q1186-15

% Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	19		01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2967	

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

Matrix: Water Lab Sample ID: Q1186-13

% Solids: Date Received: 01/27/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2968	

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

Matrix: Water Lab Sample ID: Q1186-17

% Solids: Date Received: 01/28/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	41		01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

N4TO 0 7 4	
ME2974	

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

Matrix: Water Lab Sample ID: Q1186-18

% Solids: Date Received: 01/28/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1059

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

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

Matrix: Water Lab Sample ID: Q1186-19

% Solids: Date Received: 01/28/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight, \mu g, or \mu g/cm^2)}$ : ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	01/29/2025	1104

NOTE: Hardness (total) is reported in mg/L

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

ME2980	

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

Matrix: Water Lab Sample ID: Q1186-20

% Solids: Date Received: 01/28/2025

Analytical Method: CN

Concentration Units  $\overline{(\mu g/L, mg/L, mg/kg dry weight}$ ,  $\mu g$ , or  $\mu g/cm^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	8.0	J	01/29/2025	1104

NOTE: Hardness (total) is reported in mg/L

Test results

Aquakem 7.2AQ1

Page:

CHEMTECH CONSULTING GROUP INC 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF Instrument ID : Konelab

1/29/2025 11:55 \_\_\_\_\_

Test: CNEPA-NE	W			
Sample Id	Result	Dil.	1 + Response	Errors
ICV001 ICV001	95.000	0.0	0.086	
ICB001 ICB001	-0.255	0.0	0.000	
CCV001 CCV001	236.328	0.0	0.212	
CCB001 CCB001		0.0	0.000	
NF PB166303BL PBW30		0.0	0.001	
ÖTT10-01 ME7331			1.609	Test limit high
01.29.2025 Q1176-02 ME2933		0.0	0.000	
Q1176-03 ME2937		0.0	0.001	
Q1176-04 ME2945 Q1176-05 ME2942	-0.437 -0.426	0.0	0.000	
Q1176-05 ME2942 Q1176-06 ME2943	-0.426	0.0	0.000 0.000	
Q1176-07 ME2940	-0.032	0.0	0.001	
Q1176-08 ME2941	-0.200	0.0	0.001	
Q1176-09 ME2944	-0.265	0.0	0.000	
Q1176-10 ME29441		0.0	0.000	
Q1176-11 ME29448		0.0	0.085	
Q1176-12 ME2938	6.840	0.0	0.007	
Q1176-13 ME2939		0.0	0.002	
Q1176-14 ME2932		0.0	0.000	
Q1176-15 ME2936	-0.653	0.0	0.000	
Q1176-16 ME2934	-0.644	0.0	0.000	
Q1176-17 ME2935	-0.342	0.0	0.000	
Q1176-18 ME2950 Q1176-19 ME2951	-0.420 -0.259	0.0	0.000	
Q1176-19 ME2951 Q1176-20 ME2953	6.825	0.0	0.000 0.007	
Q1176-21 ME2954	11.010	0.0	0.011	
CCV002 CCV002	236.511	0.0	0.212	
CCB002 CCB002	-0.223	0.0	0.000	
NF PB166327BL PBW327		0.0	0.000	
Ol. 29.2025 Ol186-01 ME2948	0.121	0.0	0.001	
2	7.196	0.0	0.007	
Q1186-04 ME2956	-0.092	0.0	0.001	
Q1186-05 ME2957	0.222	0.0	0.001	
	0.004 -0.068	0.0	0.001	
	-0.487	0.0	0.001 0.000	
Q1186-09 ME2959	-0.115	0.0	0.001	
Q1186-10 ME2959D	0.147	0.0	0.001	
Q1186-11 ME2959S	81.109	0.0	0.073	
Q1186-12 ME2963	2.386	0.0	0.003	
Q1186-13 ME2967	1.965	0.0	0.002	
Q1186-14 ME2965	19.932	0.0	0.019	
Q1186-15 ME2966	18.922	0.0	0.018	
Q1186-16 ME2958	-0.208	0.0	0.001	
Q1186-17 ME2968 Q1186-18 ME2974	40.964	0.0	0.037	
Q1186-18 ME2974 Q1186-19 ME2977	1.855 -0.179	0.0	0.002 0.001	
Q1186-19 ME2977 Q1186-20 ME2980	7.959	0.0	0.001	
Q1186-02 ME2949	1.949	0.0	0.002	
CCV003 CCV003	248.649	0.0	0.223	
CCB003 CCB003	0.254	0.0	0.001	
NF 911 76-01DLX5 ME2931	351.774	0.0	0.315	
0129.262 CCV004 CCV004	240.003	0.0	0.215	
01:29:2625 CCV004 CCV004 CCB004 CCB004	-0.246	0.0	0.000	

Test results

Aquakem 7.2AQ1

Page:

CHEMTECH CONSULTING GROUP INC

284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF Instrument ID : Konelab

1/29/2025 11:55

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Test: CNEPA-NEW

Sample Id Result Dil. 1 + Response  $\hat{O}\square_{\prime\prime}$ 

N 54

Mean 64.897 SD 252.8092 CV% 389.55

Aquakem v. 7.2AQ1 Results from time period: Wed Jan 29 09:19:51 2025 Wed Jan 29 11:45:23 2025

1700701120 111 10120 202	. •						
Sample Id	Sa	ım/ Test short name	Test	Result	Result unit	Result date and time	Stat
S0.0	Α	CNEPA-NEW	Р	-0.5298	µg/l	1/29/2025 9:19:51	
S5.0	Α	<b>CNEPA-NEW</b>	Р	4.3117	µg/l	1/29/2025 9:19:52	
S10.0	Α	<b>CNEPA-NEW</b>	Р	9.3447	µg/l	1/29/2025 9:19:53	
S100.0	Α	<b>CNEPA-NEW</b>	Р	102.5068	µg/l	1/29/2025 9:19:54	
S250.0	Α	<b>CNEPA-NEW</b>	Р	249.6959	µg/l	1/29/2025 9:19:55	
S500.0	Α	<b>CNEPA-NEW</b>	Р	499.6707	µg/l	1/29/2025 9:19:56	
ICV001 ICV001	S	<b>CNEPA-NEW</b>	Р	95.0002	µg/l	1/29/2025 10:29:21	
ICB001 ICB001	S	CNEPA-NEW	Р	-0.255	µg/l	1/29/2025 10:29:22	
CCV001 CCV001	S	CNEPA-NEW	Р	236.3283	µg/l	1/29/2025 10:29:24	
CCB001 CCB001	S	CNEPA-NEW	Р	-0.2332	µg/l	1/29/2025 10:29:27	
PB166303BL PBW303	S	CNEPA-NEW	Р	0.4298	µg/l	1/29/2025 10:29:29	
Q1176-01 ME2931	S	<b>CNEPA-NEW</b>	Р	1797.914	µg/l	1/29/2025 10:29:30	
Q1176-02 ME2933	S	CNEPA-NEW	Р	-0.7313	µg/l	1/29/2025 10:36:55	
Q1176-03 ME2937	S	CNEPA-NEW	Р	0.159 į	µg/l	1/29/2025 10:36:56	
Q1176-04 ME2945	S	CNEPA-NEW	P	-0.4375	ug/l	1/29/2025 10:36:57	
Q1176-05 ME2942	S	CNEPA-NEW	Р	-0.4263 µ	ug/l	1/29/2025 10:36:58	
Q1176-06 ME2943	S	CNEPA-NEW	Р	-0.4435 µ	ıg/l	1/29/2025 10:36:59	
Q1176-07 ME2940	S	CNEPA-NEW	Р	-0.0325 µ	ıg/l	1/29/2025 10:37:00	
Q1176-08 ME2941	S	CNEPA-NEW	Р	-0.2003 µ	ıg/l	1/29/2025 10:37:01	
Q1176-09 ME2944	S	CNEPA-NEW	Р	-0.2649 µ	ıg/l	1/29/2025 10:37:02	
Q1176-10 ME2944D	S	CNEPA-NEW	Р	-0.339 µ	ıg/l	1/29/2025 10:37:03	
Q1176-11 ME2944S	S	CNEPA-NEW	Р	94.5807 μ	ıg/l	1/29/2025 10:37:05	
Q1176-12 ME2938	S	CNEPA-NEW	Р	6.8401 µ	ıg/l	1/29/2025 10:44:30	
Q1176-13 ME2939	S	CNEPA-NEW	Р	1.5585 μ	ıg/l	1/29/2025 10:44:31	
Q1176-14 ME2932	S	CNEPA-NEW	Р	-0.4059 μ	ıg/l	1/29/2025 10:44:32	
Q1176-15 ME2936	S	CNEPA-NEW	Р	-0.6527 μ	g/l	1/29/2025 10:44:33	
Q1176-16 ME2934	S	CNEPA-NEW	Р	-0.6437 μ	g/l	1/29/2025 10:44:34	
Q1176-17 ME2935	S	CNEPA-NEW	Р	-0.3415 μ	g/l	1/29/2025 10:44:35	
Q1176-18 ME2950	S	CNEPA-NEW	Р	-0.4197 μ	g/l	1/29/2025 10:44:36	
Q1176-19 ME2951	S	CNEPA-NEW	Р	-0.2587 μ	g/l	1/29/2025 10:44:37	
Q1176-20 ME2953	S	CNEPA-NEW	Р	6.8246 µ	g/l	1/29/2025 10:44:38	
Q1176-21 ME2954	S	CNEPA-NEW	Р	11.0103 µ	g/l	1/29/2025 10:44:39	
CCV002 CCV002	S	CNEPA-NEW	P :	236.5114 µį	g/l	1/29/2025 10:52:05	
CCB002 CCB002	S	CNEPA-NEW	Р	-0.2225 µį	g/l :	1/29/2025 10:52:06	
PB166327BL PBW327	S	CNEPA-NEW	Р	-0.4197 μլ	g/l :	1/29/2025 10:52:07	
Q1186-01 ME2948	S	CNEPA-NEW	Р	0.1207 με	g/l 1	L/29/2025 10:52:08	
Q1186-03 ME2955	S	CNEPA-NEW	Р	7.1964 µg	g/l 1	1/29/2025 10:52:10	
Q1186-04 ME2956	S	CNEPA-NEW	Р	-0.0916 µg	g/l 1	1/29/2025 10:52:11	
Q1186-05 ME2957	S	CNEPA-NEW	Р	0.2216 µg	g/l 1	/29/2025 10:52:12	

Q1186-06 ME2960	S	CNEPA-NEW	Ρ	0.0041 µg/l	1/29/2025 10:52:13
Q1186-07 ME2961	S	<b>CNEPA-NEW</b>	Р	-0.0678 µg/l	1/29/2025 10:52:14
Q1186-08 ME2962	S	<b>CNEPA-NEW</b>	Р	-0.4872 µg/l	1/29/2025 10:52:15
Q1186-09 ME2959	S	CNEPA-NEW	Р	-0.1145 µg/l	1/29/2025 10:59:38
Q1186-10 ME2959D	S	<b>CNEPA-NEW</b>	Р	0.147 μg/l	1/29/2025 10:59:39
Q1186-11 ME2959S	S	<b>CNEPA-NEW</b>	Р	81.1085 µg/l	1/29/2025 10:59:40
Q1186-12 ME2963	S	<b>CNEPA-NEW</b>	Ρ	2.3861 µg/l	1/29/2025 10:59:42
Q1186-13 ME2967	S	<b>CNEPA-NEW</b>	Р	1.9649 µg/l	1/29/2025 10:59:43
Q1186-14 ME2965	S	<b>CNEPA-NEW</b>	Р	19.9324 µg/l	1/29/2025 10:59:44
Q1186-15 ME2966	S	CNEPA-NEW	Р	18.9218 μg/l	1/29/2025 10:59:45
Q1186-16 ME2958	S	CNEPA-NEW	Р	-0.2082 μg/l	1/29/2025 10:59:46
Q1186-17 ME2968	S	CNEPA-NEW	Р	40.9638 μg/l	1/29/2025 10:59:47
Q1186-18 ME2974	S	CNEPA-NEW	Р	1.8549 µg/l	1/29/2025 10:59:48
Q1186-19 ME2977	S	CNEPA-NEW	P	-0.1789 µg/l	1/29/2025 11:04:53
Q1186-20 ME2980	S	CNEPA-NEW	Р	7.9592 µg/l	1/29/2025 11:04:54
Q1186-02 ME2949	S	<b>CNEPA-NEW</b>	Р	1.9495 µg/l	1/29/2025 11:04:55
CCV003 CCV003	S	<b>CNEPA-NEW</b>	Р	248.6495 µg/l	1/29/2025 11:04:56
CCB003 CCB003	S	<b>CNEPA-NEW</b>	Р	0.2542 μg/l	1/29/2025 11:04:57
Q1176-01DLX5 ME2931	S	<b>CNEPA-NEW</b>	Р	351.7744 µg/l	1/29/2025 11:45:19
CCV004 CCV004	S	CNEPA-NEW	Р	240.0026 μg/l	1/29/2025 11:45:20
CCB004 CCB004	S	CNEPA-NEW	Р	-0.2461 µg/l	1/29/2025 11:45:22
				. •	

Calibration results

Aquakem 7.2AQ1

Page:

CHEMTECH CONSULTING GROUP INC 284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF

Instrument ID : Konelab

1/29/2025 9:21

Test CNEPA-NEW

Accepted

1/29/2025 9:21

Factor Slope

Bias Intercept

0.001

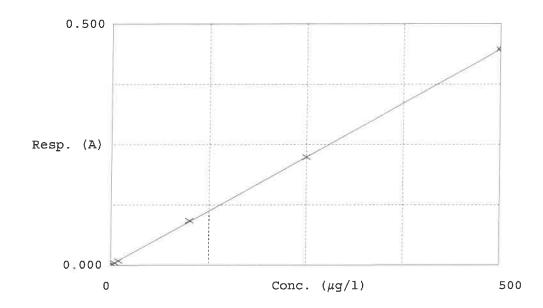
NF

01, 30.2025

Coeff. of det.

0.999961

Errors



Calibrator	Response	Calc. con.	Conc.	Re Errors	
150.0 0.0PPBCN 255.0 5.0PPBCN 3510.010PPBCN 4500.0100PPBCN 54200250PPBCN 64500500PPBCN	0.000 0.005 0.009 0.092 0.224 0.448	-0.5298 4.3117 9.3447 102.5068 249.6959 499.6707	0.0000 5.0000 10.0000 100.0000 250.0000 500.0000	-13.8 -6.6 2.5 -0.1	NF- 81:29:2025





8900, Fax : 908 789 8922

## **Prep Standard - Chemical Standard Summary**

Order ID :	Q1186
Test :	Cyanide
Prepbatch ID :	PB166327,
Sequence ID/Qc Ba	tch ID: LB134471,
	90,WP110391,WP111286,WP111294,WP111295,WP111387,WP111661,WP111663,WP111664WP1 P111666,WP111667,WP111668,WP111669,WP111688,
<b>Chemical ID :</b> M5673,M6121,W266	68,W2882,W3001,W3012,W3019,W3101,W3112,W3113,W3121,W3139,W3154,





## Wet Chemistry STANDARD PREPARATION LOG

	Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
	539	CN BUFFER	WP110103	10/08/2024	04/08/2025	Rubina Mughal	WETCHEM_S	None	,
							CALE_5 (WC		10/08/2024
ſ	FROM	138.00000gram of W2668 + 862.000	00ml of W3	112 = Final C	uantity: 1000.0	000 ml	SC-5)		

FROM	136.00000gram of W2006 + 602.00000m of W3112 - Final Quantity. 1000.000 mil	

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	<u>WP110390</u>	10/24/2024	04/24/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC		10/24/2024

**FROM** 500.00000ml of W3112 + 510.00000gram of W3001 = Final Quantity: 1000.000 ml





### Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
1714	Sulfuric Acid, 50% (v/v)	WP110391	10/24/2024	04/24/2025	Niha Farheen Shaik	None	None	10/24/2024

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
2816	,	<u>WP111286</u>	01/02/2025	04/30/2025		WETCHEM_S		
	solution				Shaik	CALE_5 (WC	Pipette-A	01/02/2025

FROM 15.00000gram of W2882 + 15.00000ml of M6121 + 75.00000ml of W3019 + 895.00000ml of W3112 = Final Quantity: 1000.000 ml





## Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME_	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
11	Sodium hydroxide absorbing solution 0.25 N	<u>WP111294</u>	01/07/2025	07/07/2025	Niha Farheen Shaik	WETCHEM_S CALE_5 (WC		01/07/2025
					_	SC-5)		

Recipe ID	NAME_	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
3850	Cyanide MS-MSD spiking solution, 5PPM	<u>WP111295</u>	01/07/2025	07/07/2025	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3 (WC)	01/07/2025

**FROM** 1.00000ml of W3154 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml



Aliance

Fax: 908 789 8922

## Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME.	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By  Jignesh Parikh
1581	Sodium hydroxide solution, 1.25N	WP111387	01/14/2025	07/14/2025	Rubina Mughal	_	None	
						CALE_8 (WC		01/14/2025
FDOM	50 00000gram of W2112 ± 050 0000	0ml of \\/211	I2 = Final Ou	antity: 1000 00	ı0 ml	SC-7)		

FROM	50.00000gram of W3113 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml
------	--

Recipe ID	<u>NAME</u>	<u>NO.</u>	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipettelD</u>	Supervised By Iwona Zarych
1585	Cyanide Intermediate standard solution, 10PPM	<u>WP111661</u>	01/28/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_P IPETTE_3 (WC)	01/30/2025

FROM 1.00000ml of W3154 + 79.00000ml of W3112 + 20.00000ml of WP111387 = Final Quantity: 100.000 ml





## Wet Chemistry STANDARD PREPARATION LOG

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
1592	Cyanide CCV Std, 250 PPB	<u>WP111663</u>	01/28/2025	01/29/2025	Niha Farheen Shaik	None	Glass Pipette-A	01/30/2025
					Onan		1 ipolio /	01/30/2025

<b>FROM</b>	2.50000ml of WP111661	+ 97.50000ml of WP111294	= Final Quantity: 0.100 L
-------------	-----------------------	--------------------------	---------------------------

Recipe				Expiration	<u>Prepared</u>			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
1588	Cyanide Cal Std, 100 PPB	WP111665	01/28/2025	01/29/2025	Niha Farheen	None	WETCHEM_F	
					Shaik		IPETTE_3	01/30/2025

FROM 1.00000ml of WP111661 + 99.00000ml of WP111294 = Final Quantity: 0.100 L





## Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	<u>NAME</u>	NO.	Prep Date	Expiration Date	Prepared By	<u>ScaleID</u>	<u>PipetteID</u>	Supervised By Iwona Zarych
1589	Cyanide Cal Std, 10 PPB	<u>WP111666</u>	01/28/2025	01/29/2025	Niha Farheen Shaik	None	WETCHEM_F IPETTE_3	01/30/2025
EDOM	4 00000ml of WP111664 ± 96 00000	ml of \MD111	1204 - Final (	Quantity: 0.100	. 1		(WC)	

<b>FROM</b>	4.00000ml of WP111664 + 96.00000ml of WP111294 = Final Quantity: 0.100 L
-------------	--

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	<u>NAME</u>	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
1590	Cyanide Cal Std, 5 PPB	WP111667	01/28/2025	01/29/2025	Niha Farheen	None	WETCHEM_F	
					Shaik		IPETTE_3	01/30/2025

**FROM** 2.00000ml of WP111664 + 98.00000ml of WP111294 = Final Quantity: 0.100 L





## Wet Chemistry STANDARD PREPARATION LOG

Recipe				Expiration	Prepared			Supervised By
<u>ID</u>	NAME	<u>NO.</u>	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych
1591	Cyanide blank std, 0 PPB	WP111668	01/28/2025	01/29/2025	Niha Farheen	None	None	
					Shaik			01/30/2025
FROM	100 00000ml of WP111294 = Final 0	Quantity: 0.1	00 1					

FROM	100.00000ml of WP111294 = Final Quantity: 0.100 L

Recipe				Expiration	Prepared			Supervised By	
<u>ID</u>	NAME	NO.	Prep Date	<u>Date</u>	<u>By</u>	<u>ScaleID</u>	<u>PipetteID</u>	Iwona Zarych	
1763	Cyanide ICV Std	WP111669	01/28/2025	01/29/2025	Niha Farheen	None	WETCHEM_F		
					Shaik		IPETTE_3	01/30/2025	
(WC)									

**FROM** 0.50000ml of W3012 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml





### Wet Chemistry STANDARD PREPARATION LOG

Recipe ID 1582	NAME Chloramine T solution, 0.014M	<b>NO.</b> WP111688	Prep Date 01/29/2025		Prepared By Niha Farheen Shaik	ScaleID WETCHEM_S CALE_5 (WC	<u>PipetteID</u> None	Supervised By Iwona Zarych 01/30/2025
FROM	0.08000gram of W3139 + 20.00000m	nl of W3112	= Final Quan	ntity: 20.000 ml		<del>sc</del> - <del>s)</del>		0 110012020



**CHEMICAL RECEIPT LOG BOOK** 

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYS, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	1.00132.0100	04/30/2025	12/07/2021 / jaswal	11/30/2021 / apatel	W2882
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Megnasium Chloride Hexahydrate ACS 10KG	002251-03319	06/06/2027	01/23/2023 / Iwona	06/06/2022 / Iwona	W3001
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2025	01/08/2025 / Iwona	02/20/2020 / Iwona	W3012



### **CHEMICAL RECEIPT LOG BOOK**

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / Iwona	04/03/2023 / Iwona	W3019
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	470112-662 / TEST STRIPES, NITRATE/NITRITE, PK50	402403	04/30/2026	05/02/2024 / Iwona	04/10/2024 / Iwona	W3101
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / Iwona	W3112
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-7 / Sodium Hydroxide Pellets 12 Kg	23B1556310	12/31/2025	07/08/2024 / Iwona	07/08/2024 / Iwona	W3113
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	HC446507	07/25/2029	07/25/2024 / Iwona	07/25/2024 / Iwona	W3121
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #



**CHEMICAL RECEIPT LOG BOOK** 

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1411J58	05/31/2025	12/02/2024 / Iwona	12/02/2024 / Iwona	W3154

Chem-Impex International, Inc. 06/06/27

Tel: (630) 766-2112

E-mail: sales@chemimpex.com Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site: 825 Dillon Drive

Wood Dale, IL 60191

## Certificate of Analysis

Catalogue Number

01237

Product

Magnesium chloride hexahydrate

Lot Number

002251-03319

Magnesium chloride•6H2O

CAS Number

7791-18-6

Molecular Formula

MgCl<sub>2</sub>•6H<sub>2</sub>O

Molecular Weight

203.3

Appearance

Colorless crystals, very deliquescent

**Heavy Metals** 

< 5 ppm

Anion

Nitrate: < 0.001% Phosphate : < 5 ppm Sulfate: < 0.002%

Cation

Ammonium: < 0.002% Barium : < 0.005% Calcium: 0.0006% Iron: < 5 ppm Manganese: 1.8 ppm Potassium: 0.0006% Sodium: 0.0008% Strontium: 0.0015%

Insoluble material

0.0025%

Assay by titration

100.29%

Grade

ACS reagent

Storage

Store at RT

Country of Origin

India

Catalog Number: 01237

Lot Number: 002251-03319

Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Bala Kumar

**Quality Control Manager** 

# W3019 Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

Product Name:

# **Certificate of Analysis**

Pyridine - anhydrous, 99.8%

**Product Number:** 

270970

**Batch Number:** 

SHBQ2113

Brand:

SIAL

CAS Number:

110-86-1

MDL Number:

MFCD00011732

Formula:

C5H5N

Formula Weight:

79.10 g/mol

Quality Release Date:

15 DEC 2022

ĮĮ.	//
	N

Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	> 99.75 %	99.99 %
Water (by Karl Fischer)	_ < 0.003 %	0.002 %
Residue on Evaporation	_ < 0.0005 %	< 0.0001 %

Larry Coers, Director Quality Control

Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



### QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: Inorganic ICV Solutions

### **QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS** (ICV1, ICV5, AND ICV6)

These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

Read instructions carefully before opening bottle(s) and proceeding with **CAUTION:** 

the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions **HAZARDOUS MATERIAL** 

> Safety Data Sheets Available Upon Request

W2160, W2161, W2162, W2163, W2164 Receive by AP on 9/2/2016

### (A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

### (B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

> QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY **APTIM Federal Services, LLC** 2700 Chandler Avenue - Building C Las Vegas, NV 89120

### (C) ANALYSIS OF SAMPLES

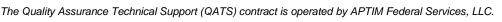
The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1

concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Page 1 of 2





QATS Form 20-007F188R00, 04-19-2021





# QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY "An ISO 9001:2015 Certified Program"

### Instructions for QATS Reference Material: Inorganic ICV Solutions

ICV1-1014

<u>For ICP-MS analysis</u>, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v)  $K_2Cr_2O_7$  and 5% (v/v) nitric acid.

ICV6-0400

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K<sub>3</sub>Fe(CN)<sub>6</sub>, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

### (D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

	ICV1-1014					
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)				
Al	2500	500				
Sb	1000	200				
As	1000	200				
Ва	520	100				
Be	510	100				
Cd	510	100				
Ca	10000	2000				
Cr	520	100				
Со	520	100				
Cu	510	100				
Fe	10000	2000				
Pb	1000	200				
Mg	6000	1200				
Mn	520	100				
Ni	530	110				
K	9900	2000				
Se	1000	200				
Ag	250	50				
Na	10000	2000				
TI	1000	210				
٧	500	100				
Zn	1000	200				

ICV5-0415		ICV6-0400		
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)	
Hg	4.0	CN <sup>-</sup>	99	

Sulfuric Acid BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis Low Selenium

MSb43-





Material No.: 9673-33 Batch No.: 23D2462010

Manufactured Date: 2023-03-22

Retest Date: 2028-03-20 Revision No.: 0

# Certificate of Analysis

Test	Specification	Result
ACS - Assay (H <sub>2</sub> SO <sub>4</sub> )	95.0 - 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH <sub>4</sub> )	≤ 1 ppm	1 ppm
Chloride (CI)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO <sub>3</sub> )	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO <sub>4</sub> )	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities - Aluminum (AI)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities - Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities - Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities - Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities - Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities - Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities - Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities - Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities - Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid BAKER INSTRA-ANALYZED® Reagent For Trace Metal Analysis Low Selenium





Material No.: 9673-33 Batch No.: 23D2462010

Specification	Result
≤ 500.0 ppb	5.4 ppb
≤ 5.0 ppb	< 0.2 ppb
≤ 5.0 ppb	< 0.8 ppb
≤ 5.0 ppb	0.4 ppb
	≤ 500.0 ppb ≤ 5.0 ppb ≤ 5.0 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA Packaging Site: Phillipsburg Mfg Ctr & DC



Hydrochloric Acid, 36.5-38.0% BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis





R->16/13/24 Metdis

M 6/21

Material No.: 9530-33 Batch No.: 0000275677 Manufactured Date: 2020/12/16 Retest Date: 2025/12/15

Revision No: 1

# Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 – 1.192	1,190
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl2)	<= 0.5 ppm	< 0.5
Phosphate (PO <sub>4</sub> )	<= 0.05 ppm	< 0.03
Sulfate (SO4)	<= 0.5 ppm	< 0.3
Sulfite (SO₃)	<= 0.8 ppm	0.3
Ammonium (NH <sub>4</sub> )	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Frace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Frace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
race Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
race Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
race Impurities – Boron (B)	<= 20.0 ppb	< 5.0
race Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
race Impurities – Calcium (Ca)	<= 50.0 ppb	29.7
race Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
race Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.4
race Impurities – Copper (Cu)	<= 1.0 ppb	< 0.3
race Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.1

Material No.: 9530-33 Batch No.: 0000275677

Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	<1
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Frace Impurities - Selenium (Se), For Information Only	ppb	1.0
Frace Impurities ~ Silicon (Si)	<= 100.0 ppb	< 10.0
Frace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
race Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
race Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
race Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
race Impurities – Thallium (TI)	<= 5.0 ppb	< 2.0
race Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
race Impurities - Titanium (Ti)	<= 1.0 ppb	0.2
race Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
race Impurities – Zinc (Zn)	<= 5.0 ppb	
race Impurities – Zirconium (Zr)	<= 1.0 ppb	0.3 < 0.1

For Laboratory, Research or Manufacturing Use Product Information (not specifications): Appearance (clear, fuming liquid) Meets ACS Specifications

Country of Origin:

US

Packaging Site:

Phillipsburg Mfg Ctr & DC





1.00132.0000 Barbituric acid for analysis EMSURE® N020065932

	Spec. Values		Batch Values	
Assay (acidimetric)	≥ 99	%	99.6	%
Identity (IR-spectrum)	passes test		passes test	
Chloride (CI)	≤ 40	ppm	≤ 40	ppm
Heavy metals (as Pb)	≤ 50	ppm	≤ 50	ppm
Fe (Iron)	≤ 10	ppm	≤ 10	ppm
Sulfated ash	≤ 0.1	%	≤ 0.1	%
Loss on Drying (105 °C)	≤ 0.1	%	≤ 0.1	%
Suitability as reagent (for cyanide determination)	passes test		passes test	

Date of release (DD.MM.YYYY) 17.04.2020 Minimum shelf life (DD.MM.YYYY) 30.04.2025

Ioannis Chartomatsidis

Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.

Sodium Phosphate, Monobasic, Monohydrate, Crystal BAKER ANALYZED® A.C.S. Reagent **C**Vavantor™ J.T.Baker

(sodium dihydrogen phosphate, monohydrate)

Material No.: 3818-05 Batch No.: 0000225799

Manufactured Date: 2018/12/05 Retest Date: 2025/12/03

Revision No: 1

# Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaH2PO4 · H2O)	98.0 - 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 - 4.5	4.3
Insoluble Matter	<= 0.01 %	< 0.01
Chloride (CI)	<= 5 ppm	< 5
ACS – Sulfate (SO <sub>4</sub> )	<= 0.003 %	< 0.003
Calcium (Ca)	<= 0.005 %	< 0.005
Potassium (K)	<= 0.01 %	< 0.01
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Trace Impurities – Iron (Fe)	<= 0.001 %	< 0.001

For Laboratory, Research or Manufacturing Use Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: IN

Packaging Site: Paris Mfg Ctr & DC





12/14/2022

12/31/2025

# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40

CAS #: 1310-73-2

Appearance: Storage: Room Temperature

**Pellets** 

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Manufacture Date:

**Expiration Date:** 

Internal ID #: 710

### Signature Additional Information

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid

without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon

VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

VWR International LLC, Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA

rinted: 02/15/2023



12/14/2022

12/31/2025

Room Temperature

Manufacture Date:

**Expiration Date:** 

Storage:

# **Sodium Hydroxide (Pellets)**

Material: 0583

Grade: ACS GRADE Batch Number: 23B1556310

Chemical Formula: NaOH Molecular Weight: 40

CAS #: 1310-73-2

Appearance:

**Pellets** 

Spec Set: 0583ACS

Internal ID #: 710

Signature Additional Information

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC.

28600 Fountain Parkway, Solon OH 44139 USA

Product meets analytical specifications of the grades listed.

Analysis may have been rounded to significant digits in specification limits.

VWR International LLC, Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087, USA

Printed: 02/15/2023



W3139 Received on 9/9/24 by IZ

Product No.: A12044

Product: Chloramine-T trihydrate, 98%

Lot No.: 10239484

Appearance: White powder Melting Point: 166°C(dec)
Assay (Iodometric titration): 100.5% Identification (FTIR): Conforms

Order our products online thermofisher.com/chemicals

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448 West Fork Dr Arlington, TX 76012 http://www.riccachemical.com 1-888-GO-RICCA

customerservice@riccachemical.com

# Certificate of Analysis

Cyanide Standard, 1000 ppm CN

Lot Number: 1411J58 Product Number: 2543

Manufacture Date: NOV 22, 2024

Expiration Date: MAY 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.

Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225% (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN)	995-1005 ppm	1000 ppm

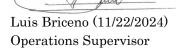
Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Part Number Size / Package Type Shelf Life (Und		
2543-16	500 mL amber poly	6 months	
2543-32	1 L amber poly	6 months	
2543-4	120 mL amber poly	6 months	

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Version: 1.3 Lot Number: 1411J58 Product Number: 2543 Page 1 of 2



This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

 Version: 1.3
 Lot Number: 1411J58
 Product Number: 2543
 Page 2 of 2

### **Water Cyanide Preparation Sheet**



**SOP ID:** MSFAM01.1-Cyanide-2

Matrix: WATER End Digest Date: 01/28/2025 Time: 10:30 Temp: 127 °C

11:00 batch 01/28/2025 12400 Pippete ID: WC 0128/2025 12:30 126° C 01/28/2025 13:00 123 % Balance ID: N/A 14030 01/28/2025

Hood ID: HOOD#1 Digestion tube ID: M5595 Block Thermometer ID: WC CYANIDE

Block ID: MC-1, MC-2 Filter paper ID: N/A Prep Technician Signature:

Weigh By: N/A pH Meter ID: N/A Supervisor Signature:

Standared Name	MLS USED	STD REF. # FROM LOG	
PBW	50.0ML	W3112	
MATRIX SPIKE SOLUTION	1.0ML	WP111295	
N/A	N/A	N/A	
N/A	N/A	N/A	
N/A	N/A	N/A	

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP111294
50% v/v H2SO4	5.0ML	WP110391
51% w/v MgCL2	2.0ML	WP110390
pH Paper 0-14	N/A	W3121
Nitrate/Nitrite Strip	N/A	W3101
Lead Acetate strip	N/A	W3134
KI-starch paper	N/A	W3155
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment	
S0	S0	50.0ML	WP111668 I batch	
\$5.0	S5.0	50.0ML	WP111667 //	
S10.0	S10.0	50.0ML	WP111666 "/	
S100.0	S100.0	50.0ML	WP111665 %	
S250.0	S250.0	50.0ML	WP111664 '/	
S500.0	S500.0	50.0ML	WP111662 %	
ICV	ICV	50.0ML	WP111669 <sup>†</sup>	
ICB	ICB	50.0ML	WP111294 1/	
ccv	ccv	50.0ML	WP111663 "	
ССВ	ССВ	50.0ML	WP111294 "/	
Midrange	Midrange	N/A	N/A	
HIGHSTD	HIGHSTD	N/A	N/A	
LOWSTD	LOWSTD	N/A	N/A	

### **Extraction Conformance/Non-Conformance Comments:**

MIDI-DISTILATION\_AQUEOUS; I-ST BATCH MC-2 START TEMP:123 C; MC-2 END TEMP: 126 C; II-ND BATCH MC-2
START TEMP:124 C; MC-2 END TEMP: 127 C, III-RD BATCH MC-2 START TEMP:123 C; MC-2 END TEMP: 126 C. BIOCK THEM IB:
WC CHAN

Date / Time	Prepped Sample Relinquished By/Location Received By/Location			
61. 28.2025 14:45	78/69C NA(WC)			
	Preparation Group	Analysis Group 1353		



Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol	рH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Pre Po
PB166327BL	PBW327	50	50	>10	Negative	Negative	Negative	N/A I batch	N/
Q1186-01	ME2948	50	50	>10	Negative	Negative	Negative	N/A ()	N/
Q1186-02	ME2949	50	50	>10	Negative	Negative	Negative	N/A I7	N/
Q1186-03	ME2955	50	50	>10	Negative	Negative	Negative	N/A (j	N/
Q1186-04	ME2956	50	50	>10	Negative	Negative	Negative	N/A III batch	N/A
Q1186-05	ME2957	50	50	>10	Negative	Negative	Negative	N/A 19	N//
Q1186-06	ME2960	50	50	>10	Negative	Negative	Negative	N/A ()	N/A
21186-07	ME2961	50	50	>10	Negative	Negative	Negative	N/A II	N/A
21186-08	ME2962	50	50	>10	Negative	Negative	Negative	N/A II	N/A
1186-09	ME2959	50	50	>10	Negative	Negative	Negative	N/A ft	N/A
1186-10	ME2959D	50	50	>10	Negative	Negative	Negative	N/A \	N/A
1186-11	ME2959S	50	50	>10	Negative	Negative	Negative	N/A i	N/A
1186-12	ME2963	50	50	>10	Negative	Negative	Negative	N/A (7	N/A
1186-13	ME2967	50	50	>10	Negative	Negative	Negative	N/A 11	N/A
1186-14	ME2965	50	50	>10	Negative	Negative	Negative	N/A	N/A
186-15	ME2966	50	50	>10	Negative	Negative	Negative	N/A V	N/A
.186-16	ME2958	50	50	>10	Negative	Negative	Negative	N/A	N/A
186-17	ME2968	50	50	>10	Negative	Negative	Negative	N/A II	N/A
186-18	ME2974	50	50	>10	Negative	Negative	Negative	N/A lj	N/A
186-19	ME2977	50	50 :	>10	Negative	Negative	Negative	N/A IJ	N/A
186-20	ME2980	50	50 ;	>10	Negative	Negative	Negative [	N/A 21	N/A





**Instrument ID:** 

**KONELAB** 

Review By	Niha Farheen Shaik	Review On	1/30/2025 9:38:57 AM
Supervise By	Iwona Zarych	Supervise On	1/30/2025 9:52:35 AM
STD. NAME	STD REF.#		
ICAL Standard	WP111668,WP111667,V	VP111666,WP111665,WP1	11664,WP111662
ICV Standard	WP111669		
CCV Standard	WP111663		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	WP110103,WP111286,V	VP111688	

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0.0	S0	CAL1	01/29/25 09:19		Niha	ОК
2	S5.0	S01	CAL2	01/29/25 09:19		Niha	ОК
3	S10.0	S02	CAL3	01/29/25 09:19		Niha	ОК
4	S100.0	S03	CAL4	01/29/25 09:19		Niha	ОК
5	S250.0	S04	CAL5	01/29/25 09:19		Niha	ОК
6	S500.0	S05	CAL6	01/29/25 09:19		Niha	ОК
7	ICV001	ICV001	ICV	01/29/25 10:29		Niha	ОК
8	ICB001	ICB001	ICB	01/29/25 10:29		Niha	ОК
9	CCV001	CCV001	CCV	01/29/25 10:29		Niha	ОК
10	CCB001	CCB001	ССВ	01/29/25 10:29		Niha	ОК
11	PB166303BL	PBW303	МВ	01/29/25 10:29		Niha	ОК
12	Q1176-01	ME2931	SAM	01/29/25 10:29	High	Niha	Dilution
13	Q1176-02	ME2933	SAM	01/29/25 10:36		Niha	ОК
14	Q1176-03	ME2937	SAM	01/29/25 10:36		Niha	ОК
15	Q1176-04	ME2945	SAM	01/29/25 10:36		Niha	ОК
16	Q1176-05	ME2942	SAM	01/29/25 10:36		Niha	ОК
17	Q1176-06	ME2943	SAM	01/29/25 10:36		Niha	ОК
18	Q1176-07	ME2940	SAM	01/29/25 10:37		Niha	OK



**Instrument ID:** KONELAB

Review By	Niha Farheen Shaik	Review On	1/30/2025 9:38:57 AM
Supervise By	Iwona Zarych	Supervise On	1/30/2025 9:52:35 AM
STD. NAME	STD REF.#		
ICAL Standard	WP111668,WP111667,V	VP111666,WP111665,WP111	1664,WP111662
ICV Standard	WP111669		
CCV Standard	WP111663		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	WP110103,WP111286,V	VP111688	

19	Q1176-08	ME2941	SAM	01/29/25 10:37	Niha	ок
20	Q1176-09	ME2944	SAM	01/29/25 10:37	Niha	ок
21	Q1176-10	ME2944D	DUP	01/29/25 10:37	Niha	ОК
22	Q1176-11	ME2944S	MS	01/29/25 10:37	Niha	ОК
23	Q1176-12	ME2938	SAM	01/29/25 10:44	Niha	ОК
24	Q1176-13	ME2939	SAM	01/29/25 10:44	Niha	ок
25	Q1176-14	ME2932	SAM	01/29/25 10:44	Niha	ОК
26	Q1176-15	ME2936	SAM	01/29/25 10:44	Niha	ОК
27	Q1176-16	ME2934	SAM	01/29/25 10:44	Niha	ок
28	Q1176-17	ME2935	SAM	01/29/25 10:44	Niha	ОК
29	Q1176-18	ME2950	SAM	01/29/25 10:44	Niha	ок
30	Q1176-19	ME2951	SAM	01/29/25 10:44	Niha	ок
31	Q1176-20	ME2953	SAM	01/29/25 10:44	Niha	ОК
32	Q1176-21	ME2954	SAM	01/29/25 10:44	Niha	ОК
33	CCV002	CCV002	CCV	01/29/25 10:52	Niha	ОК
34	CCB002	CCB002	ССВ	01/29/25 10:52	Niha	ОК
35	PB166327BL	PBW327	МВ	01/29/25 10:52	Niha	ОК
36	Q1186-01	ME2948	SAM	01/29/25 10:52	Niha	ок
37	Q1186-03	ME2955	SAM	01/29/25 10:52	Niha	ОК
38	Q1186-04	ME2956	SAM	01/29/25 10:52	Niha	ок



**Instrument ID:** KONELAB

Review By	Niha Farheen Shaik	Review On	1/30/2025 9:38:57 AM
Supervise By	Iwona Zarych	Supervise On	1/30/2025 9:52:35 AM
STD. NAME	STD REF.#		
ICAL Standard	WP111668,WP111667,V	VP111666,WP111665,WP1116	964,WP111662
ICV Standard	WP111669		
CCV Standard	WP111663		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	WP110103,WP111286,V	VP111688	

39	Q1186-05	ME2957	SAM	01/29/25 10:52		Niha	ОК
40	Q1186-06	ME2960	SAM	01/29/25 10:52		Niha	ОК
41	Q1186-07	ME2961	SAM	01/29/25 10:52		Niha	ОК
42	Q1186-08	ME2962	SAM	01/29/25 10:52		Niha	ОК
43	Q1186-09	ME2959	SAM	01/29/25 10:59		Niha	ОК
44	Q1186-10	ME2959D	DUP	01/29/25 10:59		Niha	ок
45	Q1186-11	ME2959S	MS	01/29/25 10:59		Niha	ок
46	Q1186-12	ME2963	SAM	01/29/25 10:59		Niha	ок
47	Q1186-13	ME2967	SAM	01/29/25 10:59		Niha	ок
48	Q1186-14	ME2965	SAM	01/29/25 10:59		Niha	ок
49	Q1186-15	ME2966	SAM	01/29/25 10:59		Niha	ОК
50	Q1186-16	ME2958	SAM	01/29/25 10:59		Niha	ок
51	Q1186-17	ME2968	SAM	01/29/25 10:59		Niha	ОК
52	Q1186-18	ME2974	SAM	01/29/25 10:59		Niha	ОК
53	Q1186-19	ME2977	SAM	01/29/25 11:04		Niha	ОК
54	Q1186-20	ME2980	SAM	01/29/25 11:04		Niha	ОК
55	Q1186-02	ME2949	SAM	01/29/25 11:04		Niha	ОК
56	CCV003	CCV003	CCV	01/29/25 11:04		Niha	ок
57	CCB003	CCB003	ССВ	01/29/25 11:04		Niha	ок
58	Q1176-01DL	ME2931	SAM	01/29/25 11:45	Report 5X	Niha	Confirms





**Instrument ID:** KONELAB

Review By	Niha Farheen Shaik	Review On	1/30/2025 9:38:57 AM				
Supervise By	lwona Zarych	Supervise On	1/30/2025 9:52:35 AM				
STD. NAME	STD REF.#						
ICAL Standard	WP111668,WP111667,V	WP111668,WP111667,WP111666,WP111665,WP111664,WP111662					
ICV Standard	WP111669						
CCV Standard	WP111663						
ICSA Standard							
CRI Standard							
LCS Standard							
Chk Standard	WP110103,WP111286,V	VP111688					

59	CCV004	CCV004	CCV	01/29/25 11:45	Niha	ок
60	CCB004	CCB004	ССВ	01/29/25 11:45	Niha	ок

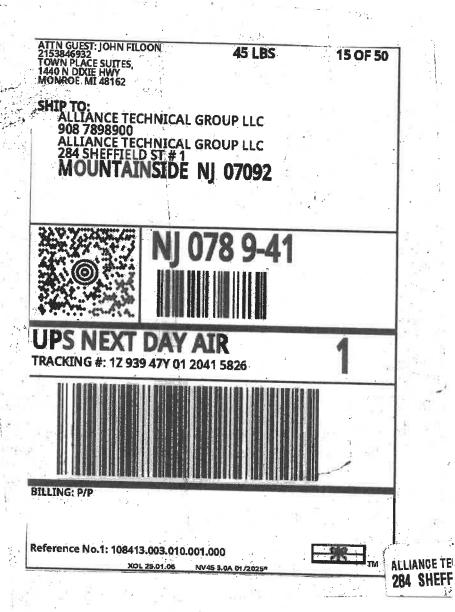








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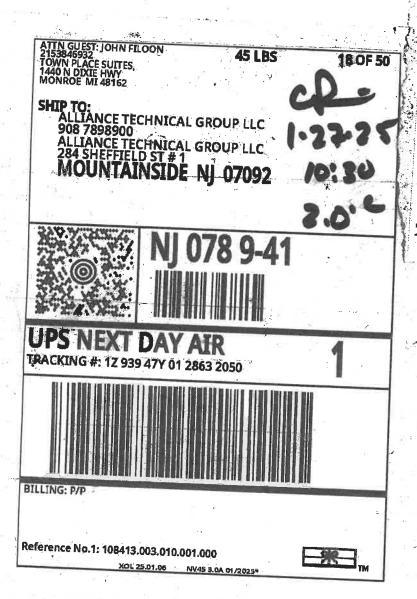


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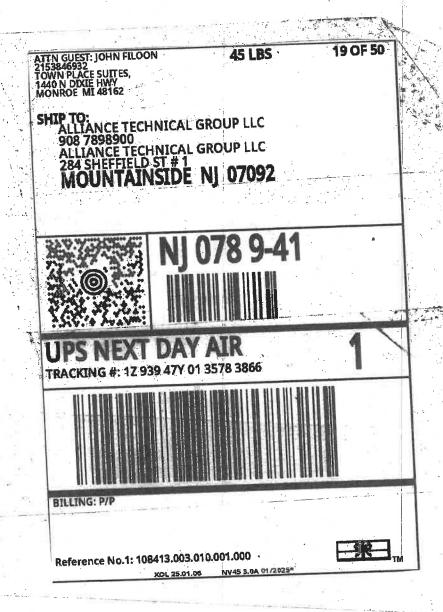
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3.3°

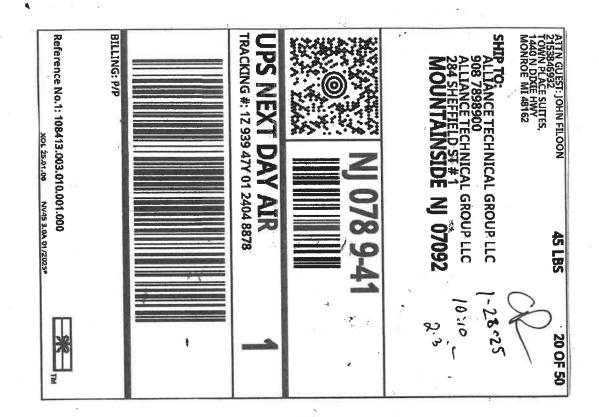




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# Login Summary Report

Order ID :	Q1186	Order Date :	1/28/2025 10:10:00 AM	Project Mgr :	Deepak
Client:	USEPA CLP SMO	Project:	51900	Report Type:	USEPA CLP
Contact:	Anita Kapadia	Receive Date :	1/28/2025 10:10:00 AM	EDD Type :	EPA CLP
Date Sign Off:	1/28/2025 11:49:14 AM				

Sample ID	Client ID	Matrix	Sampling Date	Test	Test Group	Method	TAT Days	Fax Due Date	HC Due Date
Q1186-01	ME2948	Water	01/22/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025
Q1186-02	ME2949	Water	01/22/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025
Q1186-03	ME2955	Water	01/23/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025
Q1186-04	ME2956	Water	01/23/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025
Q1186-05	ME2957	Water	01/23/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025
Q1186-06	ME2960	Water	01/23/2025						
				Cyanide		SFAM_CN	15	02/18/2025	02/18/2025
				Hardness, Total		SFAM_MS	15	02/18/2025	02/18/2025
				Mercury		SFAM_HG	15	02/18/2025	02/18/2025
				Metals CLP MS		SFAM_MS	15	02/18/2025	02/18/2025

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Q1186-07	ME2961	Water	01/23/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-08	ME2962	Water	01/23/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-09	ME2959	Water	01/23/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-10	ME2959D	Water	01/23/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-11	ME2959S	Water	01/23/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-12	ME2963	Water	01/24/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-13	ME2967	Water	01/24/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-14	ME2965	Water	01/24/2025				
				Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
				Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
				Mercury	SFAM_HG	15	02/18/2025 02/18/2025
				Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-15	ME2966	Water	01/24/2025				
							1270

			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-16	ME2958	Water 01/23/2025				
			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-17	ME2968	Water 01/24/2025				
			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-18	ME2974	Water 01/27/2025				
			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-19	ME2977	Water 01/27/2025				
			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025
Q1186-20	ME2980	Water 01/27/2025				
			Cyanide	SFAM_CN	15	02/18/2025 02/18/2025
			Hardness, Total	SFAM_MS	15	02/18/2025 02/18/2025
			Mercury	SFAM_HG	15	02/18/2025 02/18/2025
			Metals CLP MS	SFAM_MS	15	02/18/2025 02/18/2025

# WORKLIST(Hardcopy Internal Chain)

WorkList Name: PB166317 WorkList ID: 187223 Department: Digestion Date: 01-28-2025 13:13:45

Siching								: 
	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage	Collect Date Method	Method 13
Q1186-01	ME2948	Water	Matt			Location		
Q1186-02	ME2949	Water	Motols CLF MS	1:1 HNO3 to pH < 2	USEP01	C11	01/22/2025 S	SFAM MS
Q1186-03	ME2955	14/-	Models CLT MO	1:1 HNO3 to pH < 2	USEP01	C11	- 1	
Q1186-04	MESONS	Anatal	Metals CLP MS	1:1 HNO3 to pH < 2	USEP01	C11	- 1	Cis and land
	אורבססס	Water	Metals CLP MS	1:1 HNO3 to 50 Co		=	01/23/2025 S	SFAM_MS
Q1186-05	ME2957	Water	Metals CI P Ms	THINGS TO PH < 2	USEP01	C11	01/23/2025 SI	SFAM_MS
Q1186-06	ME2960	Water	Matala Ci a sa	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025 SI	SFAM MS
Q1186-07	ME2961	Water	Maria Oct. Mio	1:1 HNO3 to pH < 2	USEP01	C11	- 1	SEAM MO
Q1186-08	ME2962	Water	Model Of Financial	1:1 HNO3 to pH < 2	USEP01	C11	- 1	SEAM MC
Q1186-09	ME2959	Water	Maria OLI MO	1:1 HNO3 to pH < 2	USEP01	C11	- 1	SEAM MC
Q1186-10	ME2959D	Water	Matel Of Mo	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025 SF	SFAM MS
Q1186-11	ME2959S	Water	Metals CLD NO	1:1 HNO3 to pH < 2	USEP01	C11	- 1	SFAM MS
Q1186-12	ME2963	Water	Metals CI D Ms	131 HNO3 to pH < 2	USEP01	C11	01/23/2025 SF	SFAM MS
Q1186-13	ME2967	Water	Metals CI P Ms	1:1 HNO3 to pH < 2	USEP01	C11	01/24/2025 SF	SFAM_MS
Q1186-14	ME2965	Water	Metals CLD Ms	1.1 HNO3 to pH < 2	USEP01	C11	01/24/2025 SF	SFAM MS
Q1186-15	ME2966	Water	Metals CI D MS	1:1 HNO3 to pH < 2	USEP01	C11	01/24/2025 SF	SFAM MS
Q1186-16	ME2958	Water	Motor City Wo	1:1 HNO3 to pH < 2	USEP01	C11	01/24/2025 SF/	SFAM MS
Q1186-17	ME2968	Water	Matal CLT MO	1:1 HNO3 to pH < 2	USEP01	C11	- 1	SEAM MO
Q1186-18	ME2974		Weldis CLP MS	1:1 HNO3 to pH < 2	USEP01	C11	- 1	
Q1186-19	MF2977	vvaler	Metals CLP MS	1:1 HNO3 to pH < 2	USEP01	C11	- 1	OLWIN IND
Q1186-20	ME2980		Metals CLP MS	1:1 HNO3 to pH < 2	USEP01	C11	- 1	MAM_MS
		vvater	Metals CLP MS	1:1 HNO3 to pH < 2	USEP01	2		OF AIM MO
						=	01/27/2025 SFA	SFAM_MS

Date/Time 01/28/25

Raw Sample Received by: (SP) med

Raw Sample Relinquished by:

Date/Time

01/28/25

Raw Sample Received by:

Raw Sample Relinquished by:

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Page 1 of 1

# WORKLIST(Hardcopy Internal Chain)

WorkList ID: 187547

WorkList Name: Q1186\_HgW

The state of the s	41186_HgW	WorkList ID :	ID: 187547	Department: Digestion	stion	Date:		02-06-2025 14:36:05
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method	Method
Q1151-13	MC0B02	Water	Mercury	1:1 HNO3 to pH < 2	HSEDIA	200		
Q1186-01	ME2948	Water	Mercury	THE STOCKE STOCKE		93	01/20/2025	SFAM_HG
Q1186-02	ME2949	Water	Morour		USEP01	C11	01/22/2025	SFAM_HG
01186-03	MEDORE	Malci	iviercury	1:1 HNO3 to pH < 2	USEP01	C11	01/22/2025	SFAM_HG
03186 04	INICESCO	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM_HG
Q1100-04	MEZ956	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM_HG
01186 10	ME295/	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM_HG
01186-10	ME29/4	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/27/2025	SFAM_HG
91-00-19	ME2977	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/27/2025	SFAM HG
Q1186-20	ME2980	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/27/2025	SFAM HG
Q1186-12	ME2963	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/24/2025	SFAM HG
Q1186-13	ME2967	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	04/24/2025	SEAM LD
Q1186-14	ME2965	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	5 5	0404040	
Q1186-15	ME2966	Water	Mercury		20 2	5 3	0.1124/2025	SFAM_HG
Q1186-16	ME2958	Water	Mercury			5	01/24/2025	SFAM_HG
Q1186-17	ME2968	Mater	Moroning	2 > Ed 01 60 viii   1.1	USEP01	C11	01/23/2025	SFAM_HG
01186-06	MESOGO	Male	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/24/2025	SFAM_HG
01186-07	MF50054	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM_HG
04186 00	MEZ901	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM_HG
W1100-00	MEZ962	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM HG
Q1186-09	ME2959	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM HG
01-99117	ME2959D	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM HG
37	ME2959S	Water	Mercury	1:1 HNO3 to pH < 2	USEP01	C11	01/23/2025	SFAM HG
Dead/Time	2/6/25 p 11:10				Date/Time	216(2)	3	1
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Page 1 of 1

Raw Sample Relinquished by: 1992 1995

Raw Sample Received by:

Raw Sample Relinquished by: Raw Sample Received by:

188-1017 Lucs

# WORKLIST(Hardcopy Internal Chain)

WorkList Name :	CN Q1186	WorkList ID :	D: 187215	Department: [	Distillation	Dai	Date: 01-28-20;	01-28-2025 12:01:29
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location		Method
Q1186-01 (3	ME2948	Water	Cyanide	1:1 NaOH to pH >12	I I SEDO4	044		
Q1186-02 (3	ME2949	Water	Cyanide	1:1 NaOH to H of H of H		5 3	01/22/2025	SFAM_CN
Q1186-03 B	ME2955	Water	Cvanide	4.4 M.O. 10 -410 -414 -414	ו פוס	5	01/22/2025	SFAM_CN
Q1186-04 B	ME2956	Water	Chinaco	LI NAOH TO PH >12	USEP01	C11	01/23/2025	SFAM_CN
Q1186-05 B	ME2957		Cyallide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM_CN
01186-06 [3	ME2960	water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM_CN
Q1186-07 B	ME2961	water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM_CN
Q1186-08 B	MESSES	water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM_CN
1	MEDOGO	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM CN
	MEZSOS	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM CN
01186 14	MEZBOBD	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM CN
01186-12	MEZBSS	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM CN
1	ME2967	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/24/2025	SFAM_CN
		water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/24/2025	SFAM_CN
Q1186-15 B	ME2966	Water Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/24/2025	SFAM_CN
Q1186-16 13	ME2958	, age	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/24/2025	SFAM_CN
	ME2968	water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/23/2025	SFAM_CN
7	ME2974	Water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/24/2025	SFAM_CN
		water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/27/2025	SFAM_CN
		water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/27/2025	SFAM CN
		water	Cyanide	1:1 NaOH to pH >12	USEP01	C11	01/27/2025	SFAM_CN
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01.28.2025 Raw Sample Received by: Date/Time

15:00

Raw Sample Relinquished by:

08130

01.28.2025

137<mark>4</mark>

Raw Sample Received by: 199 (92)

Raw Sample Relinquished by: