



June 28, 2021

Sheena Leon  
Arizona Minerals Inc.  
2210 E. Fort Lowell Rd  
Tucson, AZ 85719

TEL (802) 235-5563  
FAX

Work Order No.: 21F0453  
Order Name: Groundwater

RE: Groundwater

Dear Sheena Leon,

Turner Laboratories, Inc. received 1 sample(s) on 06/15/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.  
ADHS License AZ0066

Elizabeth Kasik  
Laboratory Director

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21F0453  
**Date Received:** 06/15/2021

**Order:** Groundwater

**Work Order Sample Summary**

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collection Date/Time</b>
21F0453-01	MW3-06142021	Ground Water	06/14/2021 1403

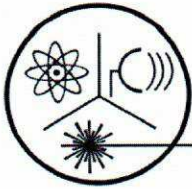
**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21F0453  
**Date Received:** 06/15/2021

**Case Narrative**

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The radiochemistry analysis was performed by Radiation Safety Engineering, Inc. in Chandler, AZ.





# Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121  
Website: www.radsafe.com

(480) 897-9459  
FAX (480) 892-5446


## Radiochemical Activity in Water (pCi/L)

Turner Laboratories  
2445 N. Coyote Drive, Ste. 104  
Tucson, AZ 85745

Sampling Date: June 14, 2021  
Sample Received: June 18, 2021  
Analysis Completed: June 28, 2021

Sample ID	Gross Alpha Activity Method EPA 900 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
21F0453-01	< 8.4	< 0.5	< 0.7	< 0.7

Date of Analysis	6/22/2021	6/18/2021	6/18/2021	6/18/2021
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Robert L. Metzger, Ph.D., C.H.P.      6/28/2021      Date  
Laboratory License Number AZ0462

Arizona Department of Environmental Quality  
**Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report**  
 \*\*\*Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only\*\*\*

PWS ID#: AZ04 \_\_\_\_\_

PWS Name: \_\_\_\_\_

June 14, 2021      14:03      (24 hour clock)  
 Sample Date      Sample Time

Owner/Contact Person \_\_\_\_\_

Owner/Contact Fax Number \_\_\_\_\_

Owner/Contact Phone Number \_\_\_\_\_

Sample Collection Point  
 EPDS # \_\_\_\_\_

**Compliance Sample Type:**

Reduced Monitoring

Date Q1 collected: \_\_\_\_\_

Quarterly

Date Q2 collected: \_\_\_\_\_

Composite of four quarterly samples

Date Q3 collected: \_\_\_\_\_

Date Q4 collected: \_\_\_\_\_

**\*\*\*RADIOCHEMICAL ANALYSIS\*\*\***

>>>To be filled out by laboratory personnel<<<

**\*\*\*Combined Uranium must be reported in micrograms per liter\*\*\***

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	6/22/2021	< 8.4	
7500 - Rn			Radon	4004			
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	6/18/2021	< 0.7	
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/18/2021	< 0.5	
GammaRay HPGE		1 pCi/L	Radium 228	4030	6/18/2021	< 0.7	

**\*\*\*LABORATORY INFORMATION\*\*\***

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE66822

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: 21F0453-01

Authorized Signature: 

Date Public Water System Notified: \_\_\_\_\_



**SUBCONTRACT ORDER**

**Turner Laboratories, Inc.**

**21F0453**

**SENDING LABORATORY:**

Turner Laboratories, Inc.  
2445 N. Coyote Drive, Ste #104  
Tucson, AZ 85745  
Phone: 520.882.5880  
Fax: 520.882.9788  
Project Manager: Elizabeth Kasik

**RECEIVING LABORATORY:**

Radiation Safety Engineering, Inc.  
3245 N. Washington St.  
Chandler, AZ 85225-1121  
Phone : (480) 897-9459  
Fax: (480) 892-5446  
Please CC Kevin Brim      Kbrim@turnerlabs.com

Analysis	Expires	Laboratory ID	Comments
Sample ID: 21F0453-01 Drinking Water    Sampled: 06/14/2021 14:03			
Radiochemistry, Radium 226/228	07/14/2021 14:03		
Radiochemistry, Gross Alpha	12/11/2021 14:03		66822
Containers Supplied:			

Released By: *Zach May*      Date: *6/17/21*      Received By: *UPS*      Date: *6/17/21*  
Released By:      Date:      Received By: *AH*      Date: *6/18/21*

July 12, 2021

Report to:  
Kara Hass  
South32  
2210 E Ft. Lowell Rd.  
Tucson, AZ 85719

Bill to:  
Accounts Payable  
South32  
2210 E Fort Lowell Road  
Tucson, AZ 85719

cc: Sheena Leon

Project ID:  
ACZ Project ID: L66538

Kara Hass:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 16, 2021. This project has been assigned to ACZ's project number, L66538. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L66538. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after July 02, 2023. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Scott Habermehl has reviewed  
and approved this report.





Arizona Minerals Inc.

July 12, 2021

Project ID:

ACZ Project ID: L66538

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 1 groundwater sample from Arizona Minerals Inc. on June 16, 2021. The sample was received in good condition. Upon receipt, the sample custodian removed the sample from the cooler, inspected the contents, and logged the sample into ACZ's computerized Laboratory Information Management System (LIMS). The sample was assigned ACZ LIMS project number L66538. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times.

**Sample Analysis**

This sample was analyzed for inorganic, radiochemistry parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

## 1. (N1) L66538-01/TOTAL DISSOLVED SOLIDS

Oven range is 80 C to 91 C. Over the weekend, the oven had a minor high hit out of range for the temperature. When the oven temperature was checked on Monday 6/21/21, the max temp read at 96.4°C . The WG was removed from the oven on 6/21/21 when the oven was back in range. The WG was examined and there was no splattering of samples.

**Arizona Minerals Inc.**

Project ID:  
Sample ID: MW3-06142021

ACZ Sample ID: **L66538-01**  
Date Sampled: 06/14/21 14:03  
Date Received: 06/16/21  
Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								06/27/21 14:09	kja
Total Hot Plate Digestion	M200.2 ICP-MS								06/28/21 16:20	mfm
Total Hot Plate Digestion	M200.2 ICP								06/27/21 15:03	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U		mg/L	0.0008	0.004	07/01/21 12:33	bsu
Antimony, total	M200.8 ICP-MS	2	<0.0008	U		mg/L	0.0008	0.004	06/30/21 12:03	mfm
Arsenic, dissolved	M200.8 ICP-MS	2	0.00228			mg/L	0.0004	0.002	07/01/21 12:33	bsu
Arsenic, total	M200.8 ICP-MS	2	0.00654			mg/L	0.0004	0.002	06/30/21 12:03	mfm
Barium, dissolved	M200.7 ICP	2	0.0156	B		mg/L	0.014	0.07	06/30/21 16:26	kja
Barium, total	M200.7 ICP	2	0.0256	B		mg/L	0.014	0.07	06/29/21 2:29	kja
Beryllium, dissolved	M200.8 ICP-MS	2	0.000298	B		mg/L	0.00016	0.0005	07/08/21 18:26	bsu
Beryllium, total	M200.8 ICP-MS	2	0.000455	B		mg/L	0.00016	0.0005	06/30/21 12:03	mfm
Cadmium, dissolved	M200.8 ICP-MS	2	0.00500			mg/L	0.0001	0.0005	07/01/21 12:33	bsu
Cadmium, total	M200.8 ICP-MS	2	0.00654			mg/L	0.0001	0.0005	06/30/21 12:03	mfm
Calcium, dissolved	M200.7 ICP	2	467			mg/L	0.2	1	06/30/21 16:26	kja
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/30/21 16:26	kja
Chromium, total	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/29/21 2:29	kja
Copper, dissolved	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	06/30/21 16:26	kja
Copper, total	M200.7 ICP	2	<0.02	U		mg/L	0.02	0.1	06/29/21 2:29	kja
Iron, dissolved	M200.7 ICP	2	<0.12	U		mg/L	0.12	0.3	06/30/21 16:26	kja
Iron, total	M200.7 ICP	2	2.18			mg/L	0.12	0.3	06/29/21 2:29	kja
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	07/01/21 12:33	bsu
Lead, total	M200.8 ICP-MS	2	0.00989			mg/L	0.0002	0.001	06/30/21 12:03	mfm
Magnesium, dissolved	M200.7 ICP	2	193			mg/L	0.4	2	06/30/21 16:26	kja
Manganese, dissolved	M200.7 ICP	2	19.6			mg/L	0.02	0.1	06/30/21 16:26	kja
Manganese, total	M200.7 ICP	2	21.4			mg/L	0.02	0.1	06/29/21 2:29	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/30/21 12:31	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/23/21 13:30	mlh
Nickel, dissolved	M200.7 ICP	2	0.0384	B		mg/L	0.016	0.08	06/30/21 16:26	kja
Nickel, total	M200.7 ICP	2	0.0406	B		mg/L	0.016	0.08	06/29/21 2:29	kja
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.0005	07/01/21 12:33	bsu
Selenium, total	M200.8 ICP-MS	2	0.00022	B		mg/L	0.0002	0.0005	06/30/21 12:03	mfm
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	07/01/21 12:33	bsu
Thallium, total	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/30/21 12:03	mfm
Zinc, dissolved	M200.7 ICP	2	3.78			mg/L	0.04	0.1	06/30/21 16:26	kja
Zinc, total	M200.8 ICP-MS	2	3.59			mg/L	0.012	0.03	06/30/21 12:03	mfm

**Arizona Minerals Inc.**

Project ID:

Sample ID: MW3-06142021

ACZ Sample ID: **L66538-01**

Date Sampled: 06/14/21 14:03

Date Received: 06/16/21

Sample Matrix: Groundwater

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Acidity as CaCO3	SM2310B - Titration	1	<2	U	*	mg/L	2	20	06/18/21 14:47	eep
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	169			mg/L	2	20	06/18/21 0:00	eep
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/18/21 0:00	eep
Total Alkalinity		1	169		*	mg/L	2	20	06/18/21 0:00	eep
Conductivity @25C	SM2510B	1	2970			umhos/cm	1	10	06/18/21 6:49	eep
Cyanide, Free	D6888-09/OIA-1677-09	1	<0.003	U	*	mg/L	0.003	0.01	06/17/21 12:04	md
Fluoride	SM4500F-C	1	0.95			mg/L	0.15	0.35	06/30/21 16:03	eep
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1960			mg/L	0.5	10	07/12/21 0:00	calc
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		<0.02	UH		mg/L	0.02	0.1	07/12/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.02	UH	*	mg/L	0.02	0.1	06/19/21 21:57	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	06/19/21 23:18	pjb
pH (lab)	SM4500H+ B									
pH		1	7.8	H		units	0.1	0.1	06/18/21 0:00	eep
pH measured at		1	19.6			C	0.1	0.1	06/18/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	3010		*	mg/L	20	40	06/18/21 12:29	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	100	2020		*	mg/L	100	500	07/08/21 14:27	wtc

Arizona license number: **AZ0102**

**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

**Method References**

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

**Comments**

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Acidity as CaCO3**

SM2310B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521397</b>													
WG521397PBW1	PBW	06/18/21 14:15				8	mg/L		-20	20			
WG521397LCSW1	LCSW	06/18/21 14:16	PCN63304	1005		978	mg/L	97	90	110			
WG521397PBW2	PBW	06/18/21 14:39				6	mg/L		-20	20			
WG521397LCSW2	LCSW	06/18/21 14:40	PCN63304	1005		955	mg/L	95	90	110			
L66500-01DUP	DUP	06/18/21 14:42			17	18	mg/L				6	20	RA

**Alkalinity as CaCO3**

SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521319</b>													
WG521319PBW1	PBW	06/17/21 19:41				U	mg/L		-20	20			
WG521319LCSW3	LCSW	06/17/21 19:59	WC210604-7	820.0001		780	mg/L	95	90	110			
WG521319LCSW6	LCSW	06/17/21 23:13	WC210604-7	820.0001		781.7	mg/L	95	90	110			
WG521319PBW2	PBW	06/17/21 23:21				U	mg/L		-20	20			
WG521319LCSW9	LCSW	06/18/21 2:24	WC210604-7	820.0001		816.9	mg/L	100	90	110			
WG521319PBW3	PBW	06/18/21 2:31				U	mg/L		-20	20			
WG521319LCSW12	LCSW	06/18/21 5:34	WC210604-7	820.0001		802.9	mg/L	98	90	110			
WG521319PBW4	PBW	06/18/21 5:40				U	mg/L		-20	20			
L66546-03DUP	DUP	06/18/21 7:14			15.7	15.6	mg/L				1	20	RA
WG521319LCSW15	LCSW	06/18/21 8:58	WC210604-7	820.0001		793.7	mg/L	97	90	110			

**Antimony, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.0201		.02038	mg/L	101	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00088	0.00088			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.01		.00948	mg/L	95	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	1	U	.9285	mg/L	93	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	1	U	.94527	mg/L	95	70	130	2	20	

**Antimony, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.0201		.01858	mg/L	92	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.0012	0.0012			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00088	0.00088			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.01		.00911	mg/L	91	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.01	U	.00827	mg/L	83	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.01	U	.0082	mg/L	82	70	130	1	20	

**Arsenic, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.05		.05176	mg/L	104	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00044	0.00044			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.05005		.04874	mg/L	97	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	5.005	U	4.85261	mg/L	97	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	5.005	U	4.79957	mg/L	96	70	130	1	20	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Arsenic, total** M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.04966	mg/L	99	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.0006	0.0006			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00044	0.00044			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05005		.04692	mg/L	94	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05005	.00297	.04702	mg/L	88	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05005	.00297	.04612	mg/L	86	70	130	2	20	

**Barium, dissolved** M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.9712	mg/L	99	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.021	0.021			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.5		.4813	mg/L	96	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.5	.0553	.5365	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.5	.0553	.535	mg/L	96	85	115	0	20	

**Barium, total** M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	II210620-2	2		2	mg/L	100	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.021	0.021			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.0154	0.0154			
WG522005LFB	LFB	06/29/21 2:26	II210622-2	.5		.486	mg/L	97	85	115			
L66608-01LFM	LFM	06/29/21 2:45	II210622-2	.5	U	.512	mg/L	102	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	II210622-2	.5	U	.527	mg/L	105	70	130	3	20	

**Beryllium, dissolved** M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522751</b>													
WG522751ICV	ICV	07/08/21 18:18	MS210630-2	.05		.046552	mg/L	93	90	110			
WG522751ICB	ICB	07/08/21 18:20				.000117	mg/L		-0.000176	0.000176			
WG522751LFB	LFB	07/08/21 18:22	MS210702-2	.05005		.046979	mg/L	94	85	115			
L66655-02AS	AS	07/08/21 18:33	MS210702-2	.05005	.0005	.046094	mg/L	91	70	130			
L66655-02ASD	ASD	07/08/21 18:35	MS210702-2	.05005	.0005	.046227	mg/L	91	70	130	0	20	

**Beryllium, total** M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.045817	mg/L	92	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.00024	0.00024			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.000176	0.000176			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05005		.045213	mg/L	90	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05005	.00011	.046275	mg/L	92	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05005	.00011	.045633	mg/L	91	70	130	1	20	



Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Cadmium, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.05		.05232	mg/L	105	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00011	0.00011			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.05005		.04948	mg/L	99	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	5.005	.0177	4.951293	mg/L	99	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	5.005	.0177	4.997372	mg/L	99	70	130	1	20	

**Cadmium, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.049261	mg/L	99	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.00015	0.00015			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00011	0.00011			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05005		.044539	mg/L	89	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05005	.000087	.04379	mg/L	87	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05005	.000087	.042725	mg/L	85	70	130	2	20	

**Calcium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	11210628-1	100		99.19	mg/L	99	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.3	0.3			
WG522149LFB	LFB	06/30/21 16:23	11210622-2	67.98753		68.71	mg/L	101	85	115			
L66558-03AS	AS	06/30/21 16:41	11210622-2	67.98753	27.2	94.63	mg/L	99	85	115			
L66558-03ASD	ASD	06/30/21 16:44	11210622-2	67.98753	27.2	95.53	mg/L	101	85	115	1	20	

**Chromium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	11210628-1	2		1.951	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.06	0.06			
WG522149LFB	LFB	06/30/21 16:23	11210622-2	.502		.488	mg/L	97	85	115			
L66558-03AS	AS	06/30/21 16:41	11210622-2	.502	U	.48	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	11210622-2	.502	U	.483	mg/L	96	85	115	1	20	

**Chromium, total**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	11210620-2	2		1.957	mg/L	98	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.06	0.06			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.044	0.044			
WG522005LFB	LFB	06/29/21 2:26	11210622-2	.502		.487	mg/L	97	85	115			
L66608-01LFM	LFM	06/29/21 2:45	11210622-2	.502	U	.459	mg/L	91	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	11210622-2	.502	U	.497	mg/L	99	70	130	8	20	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Conductivity @25C** SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521319</b>													
WG521319LCSW2	LCSW	06/17/21 19:48	PCN63133	1410		1434	umhos/cm	102	90	110			
WG521319LCSW5	LCSW	06/17/21 23:02	PCN63133	1410		1429	umhos/cm	101	90	110			
WG521319LCSW8	LCSW	06/18/21 2:11	PCN63133	1410		1423	umhos/cm	101	90	110			
WG521319LCSW11	LCSW	06/18/21 5:22	PCN63133	1410		1413	umhos/cm	100	90	110			
L66546-03DUP	DUP	06/18/21 7:14			734	736	umhos/cm				0	20	
WG521319LCSW14	LCSW	06/18/21 8:47	PCN63133	1410		1406	umhos/cm	100	90	110			

**Copper, dissolved** M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.93	mg/L	97	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.03	0.03			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.502		.475	mg/L	95	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.502	U	.482	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.502	U	.475	mg/L	95	85	115	1	20	

**Copper, total** M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	II210620-2	2		1.978	mg/L	99	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.03	0.03			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.022	0.022			
WG522005LFB	LFB	06/29/21 2:26	II210622-2	.502		.492	mg/L	98	85	115			
L66608-01LFM	LFM	06/29/21 2:45	II210622-2	.502	U	.496	mg/L	99	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	II210622-2	.502	U	.53	mg/L	106	70	130	7	20	

**Cyanide, Free** D6888-09/OIA-1677-09

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521244</b>													
WG521244ICV	ICV	06/17/21 11:48	WI210614-9	.3		.3041	mg/L	101	90	110			
WG521244ICB	ICB	06/17/21 11:50				U	mg/L		-0.003	0.003			
WG521244LFB	LFB	06/17/21 11:54	WI210614-8	.1		.1055	mg/L	106	90	110			
L66538-01AS	AS	06/17/21 12:06	WI210614-8	.1	U	.1101	mg/L	110	90	110			
L66538-01ASD	ASD	06/17/21 12:08	WI210614-8	.1	U	.1058	mg/L	106	90	110	4	20	

**Fluoride** SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522254</b>													
WG522254ICV	ICV	06/30/21 12:25	WC210623-1	2.002		1.99	mg/L	99	90	110			
WG522254ICB	ICB	06/30/21 12:30				U	mg/L		-0.3	0.3			
WG522254LFB1	LFB	06/30/21 12:37	WC201221-2	5.015		4.93	mg/L	98	90	110			
WG522254LFB2	LFB	06/30/21 15:17	WC201221-2	5.015		4.98	mg/L	99	90	110			
L66617-03AS	AS	06/30/21 16:18	WC201221-2	5.015	.17	4.95	mg/L	95	90	110			
L66617-03ASD	ASD	06/30/21 16:21	WC201221-2	5.015	.17	4.98	mg/L	96	90	110	1	20	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Iron, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.928	mg/L	96	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.18	0.18			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	1.0018		1.147	mg/L	114	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	1.0018	U	.994	mg/L	99	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	1.0018	U	.992	mg/L	99	85	115	0	20	

**Iron, total**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	II210620-2	2		1.985	mg/L	99	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.18	0.18			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.132	0.132			
WG522005LFB	LFB	06/29/21 2:26	II210622-2	1.0018		1.015	mg/L	101	85	115			
L66608-01LFM	LFM	06/29/21 2:45	II210622-2	1.0018	1.23	2.392	mg/L	116	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	II210622-2	1.0018	1.23	2.423	mg/L	119	70	130	1	20	

**Lead, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.05		.05211	mg/L	104	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00022	0.00022			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.05005		.04942	mg/L	99	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	5.005	U	4.98735	mg/L	100	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	5.005	U	4.98248	mg/L	100	70	130	0	20	

**Lead, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.05242	mg/L	105	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.0003	0.0003			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00022	0.00022			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05005		.04703	mg/L	94	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05005	.00138	.0477	mg/L	93	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05005	.00138	.04712	mg/L	91	70	130	1	20	

**Magnesium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	100		97.64	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.6	0.6			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	50.00302		49.06	mg/L	98	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	50.00302	7.46	56.58	mg/L	98	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	50.00302	7.46	57.41	mg/L	100	85	115	1	20	

**Arizona Minerals Inc.**

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Manganese, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.949	mg/L	97	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.03	0.03			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.5005		.484	mg/L	97	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.5005	U	.482	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.5005	U	.482	mg/L	96	85	115	0	20	

**Manganese, total**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	II210620-2	2		1.983	mg/L	99	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.03	0.03			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.022	0.022			
WG522005LFB	LFB	06/29/21 2:26	II210622-2	.5005		.484	mg/L	97	85	115			
L66608-01LFM	LFM	06/29/21 2:45	II210622-2	.5005	.398	.891	mg/L	99	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	II210622-2	.5005	.398	.901	mg/L	100	70	130	1	20	

**Mercury, dissolved**

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522141</b>													
WG522141ICV	ICV	06/30/21 10:31	HG210601-3	.00501		.00487	mg/L	97	90	110			
WG522141ICB	ICB	06/30/21 10:31				U	mg/L		-0.0006	0.0006			
<b>WG522208</b>													
WG522208LRB	LRB	06/30/21 12:14				U	mg/L		-0.00044	0.00044			
WG522208LFB	LFB	06/30/21 12:15	HG210628-3	.002002		.00175	mg/L	87	85	115			
L66651-07LFM	LFM	06/30/21 12:37	HG5XPREP	.01001	U	.00835	mg/L	83	85	115			MA
L66651-07LFMD	LFMD	06/30/21 12:38	HG5XPREP	.01001	U	.00865	mg/L	86	85	115	4	20	

**Mercury, total**

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521581</b>													
WG521581ICV	ICV	06/23/21 10:03	HG210601-3	.00501		.00507	mg/L	101	95	105			
WG521581ICB	ICB	06/23/21 10:04				U	mg/L		-0.0002	0.0002			
<b>WG521660</b>													
WG521660LRB	LRB	06/23/21 13:28				U	mg/L		-0.00044	0.00044			
WG521660LFB	LFB	06/23/21 13:29	HG210601-6	.002002		.00174	mg/L	87	85	115			
L66538-01LFM	LFM	06/23/21 13:31	HG210601-6	.002002	U	.00178	mg/L	89	85	115			
L66538-01LFMD	LFMD	06/23/21 13:32	HG210601-6	.002002	U	.00175	mg/L	87	85	115	2	20	

**Nickel, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.93	mg/L	97	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.024	0.024			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.5		.48	mg/L	96	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.5	U	.4781	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.5	U	.4736	mg/L	95	85	115	1	20	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Nickel, total**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522064</b>													
WG522064ICV	ICV	06/29/21 2:05	II210620-2	2		1.9835	mg/L	99	95	105			
WG522064ICB	ICB	06/29/21 2:11				U	mg/L		-0.024	0.024			
WG522005LRB	LRB	06/29/21 2:23				U	mg/L		-0.0176	0.0176			
WG522005LFB	LFB	06/29/21 2:26	II210622-2	.5		.4922	mg/L	98	85	115			
L66608-01LFM	LFM	06/29/21 2:45	II210622-2	.5	U	.4915	mg/L	98	70	130			
L66608-01LFMD	LFMD	06/29/21 2:48	II210622-2	.5	U	.4945	mg/L	99	70	130	1	20	

**Nitrate/Nitrite as N, dissolved**

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521435</b>													
WG521435ICV	ICV	06/19/21 21:33	WI210603-7	2.416		2.258	mg/L	93	90	110			
WG521435ICB	ICB	06/19/21 21:35				U	mg/L		-0.02	0.02			
WG521435LFB	LFB	06/19/21 21:38	WI210331-13	2		2.004	mg/L	100	90	110			
L66459-01AS	AS	06/19/21 22:12	WI210331-13	30	15.3	45.506	mg/L	101	90	110			
L66459-02DUP	DUP	06/19/21 22:14			43.5	43.51	mg/L				0	20	

**Nitrite as N, dissolved**

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521435</b>													
WG521435ICV	ICV	06/19/21 21:33	WI210603-7	.609		.561	mg/L	92	90	110			
WG521435ICB	ICB	06/19/21 21:35				U	mg/L		-0.01	0.01			
WG521435LFB	LFB	06/19/21 21:38	WI210331-13	1		.98	mg/L	98	90	110			
L66459-01AS	AS	06/19/21 21:41	WI210331-13	1	.023	.967	mg/L	94	90	110			
L66459-02DUP	DUP	06/19/21 21:43			.127	.129	mg/L				2	20	

**pH (lab)**

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521319</b>													
WG521319LCSW1	LCSW	06/17/21 19:46	PCN61687	6		6	units	100	5.9	6.1			
WG521319LCSW4	LCSW	06/17/21 23:01	PCN61687	6		6	units	100	5.9	6.1			
WG521319LCSW7	LCSW	06/18/21 2:09	PCN61687	6		6	units	100	5.9	6.1			
WG521319LCSW10	LCSW	06/18/21 5:21	PCN61687	6		6	units	100	5.9	6.1			
L66546-03DUP	DUP	06/18/21 7:14			7.3	7.3	units				0	20	
WG521319LCSW13	LCSW	06/18/21 8:45	PCN61687	6		6	units	100	5.9	6.1			

**Residue, Filterable (TDS) @180C**

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG521391</b>													
WG521391PBW	PBW	06/18/21 11:45				U	mg/L		-20	20			
WG521391LCSW	LCSW	06/18/21 11:47	PCN63552	1000		990	mg/L	99	80	120			
L66561-02DUP	DUP	06/18/21 12:45			248	256	mg/L				3	10	RA

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Selenium, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.05		.05111	mg/L	102	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00022	0.00022			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.05		.04966	mg/L	99	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	5	U	4.84565	mg/L	97	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	5	U	4.8732	mg/L	97	70	130	1	20	

**Selenium, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.05052	mg/L	101	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.0003	0.0003			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00022	0.00022			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05		.04846	mg/L	97	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05	U	.04698	mg/L	94	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05	U	.04424	mg/L	88	70	130	6	20	

**Sulfate**

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522703</b>													
WG522703ICB	ICB	07/08/21 8:36				1	mg/L		-3	3			
WG522703ICV	ICV	07/08/21 8:36	WI210629-1	20.46		20	mg/L	98	90	110			
WG522703LFB	LFB	07/08/21 13:14	WI210105-3	10		10.2	mg/L	102	90	110			
L66531-06AS	AS	07/08/21 14:21	SO4TURB30X	9.99	615	606.3	mg/L	-87	90	110			M3
L66519-01DUP	DUP	07/08/21 14:26			19900	22746.4	mg/L				13	20	

**Thallium, dissolved**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522333</b>													
WG522333ICV	ICV	07/01/21 12:19	MS210630-2	.05		.05247	mg/L	105	90	110			
WG522333ICB	ICB	07/01/21 12:20				U	mg/L		-0.00022	0.00022			
WG522333LFB	LFB	07/01/21 12:22	MS210610-2	.05		.04841	mg/L	97	85	115			
L66600-01AS	AS	07/01/21 12:40	MS210610-2	5	U	4.93844	mg/L	99	70	130			
L66600-01ASD	ASD	07/01/21 12:42	MS210610-2	5	U	4.89615	mg/L	98	70	130	1	20	

**Thallium, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.05079	mg/L	102	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.0003	0.0003			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.00022	0.00022			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.05		.04554	mg/L	91	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.05	U	.04441	mg/L	89	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.05	U	.04508	mg/L	90	70	130	1	20	



Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Zinc, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522149</b>													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.909	mg/L	95	95	105			
WG522149ICB	ICB	06/30/21 16:11				.021	mg/L		-0.06	0.06			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.50075		.472	mg/L	94	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.50075	U	.486	mg/L	97	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.50075	U	.51	mg/L	102	85	115	5	20	

**Zinc, total**

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG522253</b>													
WG522253ICV	ICV	06/30/21 11:53	MS210503-1	.05		.0511	mg/L	102	90	110			
WG522253ICB	ICB	06/30/21 11:54				U	mg/L		-0.018	0.018			
WG522077LRB	LRB	06/30/21 11:56				U	mg/L		-0.0132	0.0132			
WG522077LFB	LFB	06/30/21 11:58	MS210610-2	.050075		.0479	mg/L	96	85	115			
L66595-01LFM	LFM	06/30/21 12:07	MS210610-2	.050075	.0068	.0517	mg/L	90	70	130			
L66595-01LFMD	LFMD	06/30/21 12:09	MS210610-2	.050075	.0068	.0506	mg/L	87	70	130	2	20	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66538-01	WG521397	Acidity as CaCO3	SM2310B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521244	Cyanide, Free	D6888-09/OIA-1677-09	Q10	Sample received in inappropriate sample container.
	WG522208	Mercury, dissolved	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG521435	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
	WG521391	Residue, Filterable (TDS) @180C	SM2540C SM2540C	N1 RA	See Case Narrative. Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522703	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521319	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

**Arizona Minerals Inc.**

Project ID:

Sample ID: MW3-06142021

Locator:

ACZ Sample ID: **L66538-01**

Date Sampled: 06/14/21 14:03

Date Received: 06/16/21

Sample Matrix: *Groundwater*

Gross Alpha &amp; Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha (1312)	07/01/21 0:30		1.4	5.5	29	pCi/L	*	ess
Gross Beta (1312)	07/01/21 0:30		3.8	9.2	19	pCi/L	*	ess

Radium 226 + Alpha Emitting Radium Isotopes, total

Prep Method:

M903.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 + Alpha	07/01/21 0:10		0.36	0.14	0.37	pCi/L	*	ess

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 15:44		-0.15	0.73	1.8	pCi/L	*	fdw

**Arizona license number: AZ0102**

**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

**ACZ Qualifiers (Qual)**

H	Analysis exceeded method hold time.
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**Method Prefix Reference**

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

**Comments**

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Alpha** M900.0 **Units: pCi/L**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
<b>WG521774</b>																
WG521774PBW	PBW	07/01/21						.1	0.51	0.75			1.5			
WG521774LCSWA	LCSW	07/01/21	PCN62436	100				110	9.1	1.3	110	67	144			
L66483-02MSA	MS	07/01/21	PCN62436	100	2.4	1.9	8.7	85	9.3	6.5	83	67	144			
L66483-02DUP	DUP-RPD	07/01/21			2.4	1.9	8.7	1.8	1.5	5.9				29	20	RG
L66483-02DUP	DUP-RER	07/01/21			2.4	1.9	8.7	1.8	1.5	5.9				0.25	2	
L66558-03DUP	DUP-RER	07/01/21			1.2	1.4	5.5	2.4	1.9	6.8				0.51	2	
L66558-03DUP	DUP-RPD	07/01/21			1.2	1.4	5.5	2.4	1.9	6.8				67	20	RG

**Beta** M900.0 **Units: pCi/L**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
<b>WG521774</b>																
WG521774PBW	PBW	07/01/21						-1.1	1.6	1.8			3.6			
WG521774LCSWB	LCSW	07/01/21	RC210621-11	49.9				56	4.9	2.5	112	82	122			
L66483-02DUP	DUP-RPD	07/01/21			13	3.2	6.9	6.2	3.1	8.2				71	20	RG
L66483-02DUP	DUP-RER	07/01/21			13	3.2	6.9	6.2	3.1	8.2				1.53	2	
L66558-03DUP	DUP-RPD	07/01/21			3.3	2.9	9	1.7	2.6	6.7				64	20	RG
L66558-03DUP	DUP-RER	07/01/21			3.3	2.9	9	1.7	2.6	6.7				0.41	2	
L66558-03MSB	MS	07/01/21	RC210621-11	49.9	3.3	2.9	9	55	5.1	11	104	82	122			

**Radium 226 + Alpha Emitting Radium M903.0** **Units: pCi/L**

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
<b>WG521870</b>																
WG521870PBW	PBW	07/01/21						.04	0.08	0.51			1.02			
WG521870LCSW	LCSW	07/01/21	PCN62879	20				19	0.97	0.4	95	66	132			
L66380-02MS	MS	07/01/21	PCN62879	21.74	0.34	0.14	0.37	20	1	0.42	90	66	132			
L66538-01DUP	DUP-RPD	07/01/21			0.36	0.14	0.37	.28	0.12	0.36				25	20	RG
L66538-01DUP	DUP-RER	07/01/21			0.36	0.14	0.37	.28	0.12	0.36				0.43	2	

Arizona Minerals Inc.

ACZ Project ID: **L66538**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Radium 228, total**

M904.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
<b>WG521520</b>																
L66280-01DUP	DUP-RER	07/06/21			0.34	0.88	2.3	-44	0.86	2.2				0.63	2	
WG521520LCSW	LCSW	07/06/21	PCN63356	9.68				8.7	1	0.71	90	47	123			
WG521520PBW	PBW	07/06/21						.73	0.49	0.48			0.96			
L66280-01DUP	DUP-RPD	07/06/21			0.34	0.88	2.3	-44	0.86	2.2				1560	20	RG
L66538-01DUP	DUP-RPD	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				241	20	RG
L66284-03MS	MS	07/06/21	PCN63356	9.68	1.3	0.9	2.1	9.6	1.1	1.9	86	47	123			
L66538-01DUP	DUP-RER	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				1.71	2	



Arizona Minerals Inc.

ACZ Project ID: **L66538**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66538-01	WG521774	Gross Alpha (1312)	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta (1312)	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521870	Radium 226 + Alpha Emitting Radium Isotopes, total	M903.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Arizona Minerals Inc.

ACZ Project ID: **L66538**

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Cyanide, Free

D6888-09/OIA-1677-09

Arizona Minerals Inc.

ACZ Project ID: L66538  
 Date Received: 06/16/2021 11:07  
 Received By:  
 Date Printed: 6/17/2021

**Receipt Verification**

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is the Chain of Custody form or other directive shipping papers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does this project require special handling procedures such as CLP protocol?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Are any samples NRC licensable material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) If samples are received past hold time, proceed with requested short hold time analyses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6) Is the Chain of Custody form complete and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Samples/Containers**

	YES	NO	NA
8) Are all containers intact and with no leaks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Are all labels on containers and are they intact and legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) For preserved bottle types, was the pH checked and within limits? <sup>1</sup> L66538-01 Container B2416719 (RED CUBE): Added 10 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12) Is there sufficient sample volume to perform all requested work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Is the custody seal intact on all containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14) Are samples that require zero headspace acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15) Are all sample containers appropriate for analytical requirements? L66538-01 : A Green container not received and a new container created from the Raw .	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16) Is there an Hg-1631 trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17) Is there a VOA trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18) Were all samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NA indicates Not Applicable

**Chain of Custody Related Remarks**

**Client Contact Remarks**

**Shipping Containers**

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
6000	0.4	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Arizona Minerals Inc.

ACZ Project ID: L66538

Date Received: 06/16/2021 11:07

Received By:

Date Printed: 6/17/2021

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

<sup>1</sup> The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).



Laboratories, Inc. L66538

CHAIN of CUSTODY

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Report to:

Name: Kara Haas  
Company: South32  
E-mail: kara.haas@south32.net

Address: 2210 E. Ft. Lowell Rd.  
Tucson, AZ 85719  
Telephone: 505-947-1738

Copy of Report to:

Name: Sheena Leon  
Company: South32

E-mail: sheena.leon@south32.net  
Telephone: 520-403-9998

Invoice to:

Name: Janel foshee  
Company: South32  
E-mail: hermosaaaccounts@south32.net

Address: 2210 E. Ft. Lowell Rd.  
Tucson, AZ 85719  
Telephone: 520-8481338

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES  NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes  No

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Jaime L. Sampler's Site Information State AZ Zip code 85624 Time Zone AZ

\*Sampler's Signature: [Signature] \*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #:	PO#:	Reporting state for compliance testing:	Check box if samples include NRC licensed material? <input type="checkbox"/>	SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	See attachment									
				<u>MW3-06142021</u>	<u>6.14.21</u>	<u>2:03pm</u>	<u>WW</u>	<u>5</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<u>Jaime Lopez</u>	<u>6.15.21 8:00am</u>	<u>[Signature]</u>	<u>6/16/21 11:07</u>

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L66538 Chain of Custody

## POC-2 Semi-Annual Suite

Analyte	LABORATORY		
	Total	Dissolved	Other
<b>Metals</b>			
Antimony	X	X	
Arsenic	X	X	
Barium	X	X	
Beryllium	X	X	
Cadmium	X	X	
Chromium	X	X	
Copper	X	X	
Iron	X	X	
Lead	X	X	
Manganese	X	X	
Mercury	X	X	
Nickel	X	X	
Selenium	X	X	
Thallium	X	X	
Zinc	X	X	
<b>Major Cations</b>			
Hardness	X		
<b>Major Anions</b>			
Total Alkalinity	X		
<b>Acidity</b>	X		
Fluoride	X		
Nitrate – Nitrite as N	X	X	
Nitrite - N	X	X	
Nitrate-Nitrite as N 1	X	X	
Sulfate	X	X	
<b>Parameters</b>			
Total Dissolved Solids			
pH		X	
Specific Conductivity			X
<b>RadChem</b>			X
Gross Alpha Particle Activity	X	X	
Radium 226 + 228	X	X	
<b>Cyanide</b>			
Free CN	X	X	Free

<b>FIELD MEASUREMENTS</b>
pH
Specific conductance

Temperature
Depth to water

<b>BOTTLE LIST</b>		
<b>Volume</b>	<b>Preservative</b>	<b>Parameter</b>
Cubetainer	Non-Preserved	RadChem
500ml	Non-Preserved	Ions/Dissolved Metals
250ml	HNO3	Total Metals
500ml	NaOH	Cyanide
250ml	Non-Preserved	TDS/pH/Conductivity



October 27, 2021

Sheena Leon  
Arizona Minerals Inc.  
2210 E. Fort Lowell Rd  
Tucson, AZ 85719

TEL (802) 235-5563  
FAX

Work Order No.: 21I0458  
Order Name: Hermosa

RE: Groundwater

Dear Sheena Leon,

Turner Laboratories, Inc. received 2 sample(s) on 09/15/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.  
ADHS License AZ0066

Elizabeth Kasik  
Laboratory Director



**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**Order:** Hermosa

**Work Order Sample Summary**

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collection Date/Time</b>
21I0458-01	POC 2 - 09142021	Ground Water	09/14/2021 1015
21I0458-02	MW3 - 09142021	Ground Water	09/14/2021 1025

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**Case Narrative**

The Cyanide and Cyanide WAD analysis was performed by TestAmerica Laboratories, Inc. in Phoenix, AZ.

The radiochemistry analysis was performed by Radiation Safety Engineering, Inc. in Chandler, AZ.

This report was originally generated on 9/28/2021. It is being revised on 10/26/2021 to include Radium 226 and 228, which was not on the original report.

- E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
- E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
- H1 Sample analysis was performed past holding time.
- H5 This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
- M1 Matrix spike recovery was high; the associated LCS/LCSD was acceptable.
- M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
- M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
- Q9 Insufficient sample received to meet method QC requirements.
- R9 Sample RPD exceeded the laboratory acceptance limit.
- V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

- ND Not Detected at or above the PQL
- PQL Practical Quantitation Limit
- DF Dilution Factor

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-01

**Client Sample ID:** POC 2 - 09142021  
**Collection Date/Time:** 09/14/2021 1015  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
<b>Hardness-Calculation</b>									
Hardness, Calcium/Magnesium (As CaCO3)	2000				mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
<b>Nitrate + Nitrite Sum-Calculation</b>									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	09/15/2021 1037	09/16/2021 0534	JG
<b>ICP Dissolved Metals-E 200.7 (4.4)</b>									
Boron	ND		0.10		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Calcium	490		4.0		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Iron	ND		0.30		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Magnesium	210		3.0		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Potassium	5.8		5.0		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Silica	24		0.20		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
Sodium	31		5.0		mg/L	1	09/20/2021 1030	09/21/2021 1051	MH
<b>ICP/MS Dissolved Metals-E 200.8 (5.4)</b>									
Aluminum	ND		0.040		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Antimony	0.00027	0.000039	0.00050	E4	mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Arsenic	0.0024		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Barium	0.015		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Beryllium	0.00035		0.00025		mg/L	1	09/20/2021 1030	09/23/2021 1251	CR
Cadmium	0.0066		0.00025		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Chromium	ND		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Cobalt	0.023		0.00025		mg/L	1	09/20/2021 1030	09/23/2021 1251	CR
Copper	0.00022	0.00015	0.00050	E4	mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Lead	ND	0.000057	0.00050	E8	mg/L	1	09/20/2021 1030	09/23/2021 1251	CR
Manganese	19		0.013		mg/L	50	09/20/2021 1030	09/23/2021 1241	CR
Nickel	0.035		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Selenium	0.00057	0.00025	0.0025	E4	mg/L	1	09/20/2021 1030	09/23/2021 1251	CR
Silver	ND	0.000021	0.00050	E8	mg/L	1	09/20/2021 1030	09/23/2021 1754	CR
Thallium	0.000029	0.000023	0.00050	E4	mg/L	1	09/20/2021 1030	09/21/2021 1655	CR
Zinc	4.0		2.0		mg/L	50	09/20/2021 1030	09/23/2021 1241	CR

**CVAA Dissolved Mercury-E 245.1**

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-01

**Client Sample ID:** POC 2 - 09142021  
**Collection Date/Time:** 09/14/2021 1015  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Mercury	ND	0.000041	0.0010	E8, V1	mg/L	1	09/21/2021 1332	09/21/2021 1559	CWB
<b>Turbidity-E180.1</b>									
Turbidity	3.6		0.10	H1	NTU	1	09/16/2021 1025	09/16/2021 1040	CWB
<b>ICP Total Metals-E200.7 (4.4)</b>									
Boron	ND		0.10		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
Calcium	460		4.0		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
Iron	0.91		0.30		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
Magnesium	200		3.0		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
Potassium	5.6		5.0		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
Silica	23		1.0		mg/L	5	09/16/2021 1125	09/17/2021 1554	MH
Sodium	29		5.0		mg/L	1	09/16/2021 1125	09/17/2021 1120	MH
<b>ICP/MS Total Metals-E200.8 (5.4)</b>									
Aluminum	ND		0.040		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Antimony	0.00038	0.000039	0.00050	E4	mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Arsenic	0.0048		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Barium	0.017		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Beryllium	0.00046		0.00025		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Cadmium	0.0071		0.00025		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Chromium	0.0056		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Cobalt	0.0240		0.000250		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Copper	0.00052		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Lead	0.0050		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Manganese	18		0.013		mg/L	50	09/17/2021 1030	09/21/2021 1318	CR
Nickel	0.040		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Selenium	0.0011	0.00025	0.0025	E4	mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Silver	ND		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Thallium	ND		0.00050		mg/L	1	09/17/2021 1030	09/21/2021 1118	CR
Zinc	3.4		2.0		mg/L	50	09/17/2021 1030	09/21/2021 1318	CR

**CVAA Total Mercury-E245.1**

Mercury	ND	0.00036	0.0010	E8	mg/L	1	09/23/2021 1015	09/23/2021 1558	CWB
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**Anions by Ion Chromatography-E300.0 (2.1)**

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-01

**Client Sample ID:** POC 2 - 09142021  
**Collection Date/Time:** 09/14/2021 1015  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloride	10		1.0		mg/L	1	09/15/2021 1037	09/16/2021 0534	JG
Fluoride	0.89		0.50		mg/L	1	09/15/2021 1037	09/16/2021 0534	JG
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	09/15/2021 1037	09/16/2021 0534	JG
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	09/15/2021 1037	09/16/2021 0534	JG
Sulfate	1800		500		mg/L	100	09/15/2021 1037	09/21/2021 0242	JG
<b>Alkalinity-SM2320B</b>									
Alkalinity, Bicarbonate (As CaCO3)	190		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Total (As CaCO3)	190		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
<b>Specific Conductance-SM2510 B</b>									
Conductivity	4400		1.0		µmhos/cm	10	09/22/2021 1034	09/22/2021 1036	CWB
<b>Total Dissolved Solids (Residue, Filterable)-SM2540 C</b>									
Total Dissolved Solids (Residue, Filterable)	3000		20		mg/L	1	09/16/2021 0810	09/20/2021 1300	AGC
<b>Total Suspended Solids (Residue, Non-Filterable)-SM2540 D</b>									
Total Suspended Solids	ND		10	Q9	mg/L	1	09/20/2021 0905	09/21/2021 0912	AGC
<b>Ammonia as N-SM4500-NH3 B,C</b>									
Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	09/22/2021 0800	09/22/2021 1305	JG
<b>pH-SW9045D</b>									
pH (pH Units)	7.1			H5	-	1	09/16/2021 1520	09/16/2021 1647	CWB
Temperature (°C)	22			H5	-	1	09/16/2021 1520	09/16/2021 1647	CWB

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-02

**Client Sample ID:** MW3 - 09142021  
**Collection Date/Time:** 09/14/2021 1025  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
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**Hardness-Calculation**

Hardness, Calcium/Magnesium (As CaCO3)	2000				mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
--	------	--	--	--	------	---	-----------------	-----------------	----

**Nitrate + Nitrite Sum-Calculation**

Nitrate and Nitrite Sum	ND		0.10		mg/L	1	09/15/2021 1037	09/16/2021 0554	JG
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**ICP Dissolved Metals-E 200.7 (4.4)**

Boron	ND		0.10		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Calcium	520		4.0		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Iron	ND		0.30		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Magnesium	230		3.0		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Potassium	6.4		5.0		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Silica	24		0.20		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH
Sodium	30		5.0		mg/L	1	09/20/2021 1030	09/21/2021 1054	MH

**ICP/MS Dissolved Metals-E 200.8 (5.4)**

Aluminum	ND		0.040		mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Antimony	0.00029	0.000039	0.00050	E4	mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Arsenic	0.0026		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Barium	0.015		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Beryllium	0.00052		0.00025		mg/L	1	09/20/2021 1030	09/23/2021 1254	CR
Cadmium	0.0065		0.00025		mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Chromium	ND	0.000023	0.00050	E8	mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Cobalt	0.021		0.00025		mg/L	1	09/20/2021 1030	09/23/2021 1254	CR
Copper	0.00016	0.00015	0.00050	E4	mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Lead	ND	0.000057	0.00050	E8	mg/L	1	09/20/2021 1030	09/23/2021 1254	CR
Manganese	17		0.013		mg/L	50	09/20/2021 1030	09/23/2021 1244	CR
Nickel	0.034		0.00050		mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Selenium	0.00047	0.00025	0.0025	E4	mg/L	1	09/20/2021 1030	09/23/2021 1254	CR
Silver	ND	0.000021	0.00050	E8	mg/L	1	09/20/2021 1030	09/23/2021 1757	CR
Thallium	ND	0.000023	0.00050	E8	mg/L	1	09/20/2021 1030	09/21/2021 1659	CR
Zinc	3.7		2.0		mg/L	50	09/20/2021 1030	09/23/2021 1244	CR

**CVAA Dissolved Mercury-E 245.1**

Mercury	ND	0.000041	0.0010	E8, V1	mg/L	1	09/21/2021 1332	09/21/2021 1627	CWB
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**Turbidity-E180.1**

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-02

**Client Sample ID:** MW3 - 09142021  
**Collection Date/Time:** 09/14/2021 1025  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Turbidity	5.7		0.10	H1	NTU	1	09/16/2021 1025	09/16/2021 1040	CWB

**ICP Total Metals-E200.7 (4.4)**

Boron	ND		0.10		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
Calcium	450		4.0		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
Iron	0.88		0.30		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
Magnesium	200		3.0		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
Potassium	5.9		5.0		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH
Silica	24		0.20		mg/L	1	09/16/2021 1125	09/17/2021 1557	MH
Sodium	29		5.0		mg/L	1	09/16/2021 1125	09/17/2021 1123	MH

**ICP/MS Total Metals-E200.8 (5.4)**

Aluminum	0.050		0.040		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Antimony	0.00040	0.000039	0.00050	E4	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Arsenic	0.0043		0.00050		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Barium	0.016		0.00050		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Beryllium	0.00045		0.00025		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Cadmium	0.0075		0.00025		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Chromium	0.00017	0.000023	0.00050	E4	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Cobalt	0.0228		0.000250		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Copper	0.00036	0.00015	0.00050	E4	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Lead	0.0053		0.00050		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Manganese	23		0.013	M3	mg/L	50	09/17/2021 1030	09/21/2021 1002	CR
Nickel	0.036		0.00050		mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Selenium	0.00082	0.00025	0.0025	E4	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Silver	ND	0.000021	0.00050	E8	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Thallium	0.00035	0.000023	0.00050	E4	mg/L	1	09/17/2021 1030	09/20/2021 1801	CR
Zinc	4.8		2.0	M3	mg/L	50	09/17/2021 1030	09/21/2021 1002	CR

**CVAA Total Mercury-E245.1**

Mercury	ND	0.00036	0.0010	E8	mg/L	1	09/23/2021 1015	09/23/2021 1600	CWB
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**Anions by Ion Chromatography-E300.0 (2.1)**

Chloride	10		1.0		mg/L	1	09/15/2021 1037	09/16/2021 0554	JG
Fluoride	0.88		0.50		mg/L	1	09/15/2021 1037	09/16/2021 0554	JG
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	09/15/2021 1037	09/16/2021 0554	JG
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	09/15/2021 1037	09/16/2021 0554	JG
Sulfate	1800		500		mg/L	100	09/15/2021 1037	09/21/2021 0302	JG

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Lab Sample ID:** 21I0458-02

**Client Sample ID:** MW3 - 09142021  
**Collection Date/Time:** 09/14/2021 1025  
**Matrix:** Ground Water  
**Order Name:** Hermosa

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
<b>Alkalinity-SM2320B</b>									
Alkalinity, Bicarbonate (As CaCO3)	210		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
Alkalinity, Total (As CaCO3)	210		2.0		mg/L	1	09/21/2021 1223	09/21/2021 1500	AGC
<b>Specific Conductance-SM2510 B</b>									
Conductivity	3900		1.0		µmhos/cm	10	09/22/2021 1034	09/22/2021 1036	CWB
<b>Total Dissolved Solids (Residue, Filterable)-SM2540 C</b>									
Total Dissolved Solids (Residue, Filterable)	3000		20		mg/L	1	09/16/2021 0810	09/20/2021 1300	AGC
<b>Total Suspended Solids (Residue, Non-Filterable)-SM2540 D</b>									
Total Suspended Solids	ND		10	Q9	mg/L	1	09/20/2021 0905	09/21/2021 0912	AGC
<b>Ammonia as N-SM4500-NH3 B,C</b>									
Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	09/22/2021 0800	09/22/2021 1305	JG
<b>pH-SW9045D</b>									
pH (pH Units)	7.1			H5	-	1	09/16/2021 1520	09/16/2021 1648	CWB
Temperature (°C)	22			H5	-	1	09/16/2021 1520	09/16/2021 1648	CWB



**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
<b>Batch 2109203 - E200.7 (4.4)</b>										
<b>Blank (2109203-BLK1)</b>										
				Prepared: 09/16/2021 Analyzed: 09/17/2021						
Boron	ND	0.10	mg/L							
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Silica	ND	0.20	mg/L							
Sodium	ND	5.0	mg/L							
<b>LCS (2109203-BS1)</b>										
				Prepared: 09/16/2021 Analyzed: 09/17/2021						
Boron	1.0	0.10	mg/L	1.000		100	85-115			
Calcium	9.5	4.0	mg/L	10.00		95	85-115			
Iron	0.99	0.30	mg/L	1.000		99	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Potassium	10	5.0	mg/L	10.00		101	85-115			
Sodium	10	5.0	mg/L	10.00		104	85-115			
<b>LCS (2109203-BS2)</b>										
				Prepared: 09/16/2021 Analyzed: 09/17/2021						
Silica	2.1	0.20	mg/L	2.143		99	85-115			
<b>LCS Dup (2109203-BSD1)</b>										
				Prepared: 09/16/2021 Analyzed: 09/17/2021						
Boron	1.0	0.10	mg/L	1.000		102	85-115	1	20	
Calcium	9.3	4.0	mg/L	10.00		93	85-115	2	20	
Iron	0.98	0.30	mg/L	1.000		98	85-115	1	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	0.6	20	
Potassium	10	5.0	mg/L	10.00		101	85-115	0.4	20	
Sodium	10	5.0	mg/L	10.00		104	85-115	0.5	20	
<b>LCS Dup (2109203-BSD2)</b>										
				Prepared: 09/16/2021 Analyzed: 09/17/2021						
Silica	2.1	0.20	mg/L	2.143		99	85-115	0.08	20	
<b>Matrix Spike (2109203-MS1)</b>										
				Source: 21I0428-02			Prepared: 09/16/2021 Analyzed: 09/17/2021			
Boron	1.1	0.10	mg/L	1.000	0.19	91	70-130			
Calcium	8.9	4.0	mg/L	10.00	0.70	82	70-130			
Iron	0.87	0.30	mg/L	1.000	0.017	86	70-130			
Magnesium	8.9	3.0	mg/L	10.00	0.22	87	70-130			
Potassium	9.6	5.0	mg/L	10.00	0.69	89	70-130			
Sodium	10	5.0	mg/L	10.00	1.7	87	70-130			
<b>Matrix Spike (2109203-MS2)</b>										
				Source: 21I0428-02			Prepared: 09/16/2021 Analyzed: 09/17/2021			
Boron	0.19	0.10	mg/L		0.19		70-130			
Calcium	0.68	4.0	mg/L		0.70		70-130			
Iron	0.018	0.30	mg/L		0.017		70-130			
Magnesium	0.22	3.0	mg/L		0.22		70-130			
Potassium	0.65	5.0	mg/L		0.69		70-130			
Silica	4.0	0.20	mg/L	2.143	1.9	98	70-130			
Sodium	1.6	5.0	mg/L		1.7		70-130			
<b>Batch 2109214 - E 200.7 (4.4)</b>										

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
<b>Batch 2109214 - E 200.7 (4.4)</b>										
<b>Blank (2109214-BLK1)</b>										
				Prepared: 09/17/2021 Analyzed: 09/21/2021						
Boron	ND	0.10	mg/L							
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Silica	ND	0.20	mg/L							
Sodium	ND	5.0	mg/L							
<b>LCS (2109214-BS1)</b>										
				Prepared: 09/17/2021 Analyzed: 09/21/2021						
Boron	1.0	0.10	mg/L	1.000		102	85-115			
Calcium	10	4.0	mg/L	10.00		101	85-115			
Iron	1.0	0.30	mg/L	1.000		100	85-115			
Magnesium	10	3.0	mg/L	10.00		101	85-115			
Potassium	9.9	5.0	mg/L	10.00		99	85-115			
Sodium	9.7	5.0	mg/L	10.00		97	85-115			
<b>LCS (2109214-BS2)</b>										
				Prepared: 09/17/2021 Analyzed: 09/21/2021						
Silica	2.2	0.20	mg/L	2.143		101	85-115			
<b>LCS Dup (2109214-BSD1)</b>										
				Prepared: 09/17/2021 Analyzed: 09/21/2021						
Boron	1.0	0.10	mg/L	1.000		103	85-115	1	20	
Calcium	10	4.0	mg/L	10.00		100	85-115	2	20	
Iron	0.99	0.30	mg/L	1.000		99	85-115	0.7	20	
Magnesium	10	3.0	mg/L	10.00		101	85-115	0.5	20	
Potassium	10	5.0	mg/L	10.00		101	85-115	2	20	
Sodium	10	5.0	mg/L	10.00		101	85-115	4	20	
<b>LCS Dup (2109214-BSD2)</b>										
				Prepared: 09/17/2021 Analyzed: 09/21/2021						
Silica	2.2	0.20	mg/L	2.143		101	85-115	0.2	20	
<b>Matrix Spike (2109214-MS1)</b>										
		<b>Source: 2110483-01</b>		Prepared: 09/17/2021 Analyzed: 09/21/2021						
Boron	1.4	0.10	mg/L	1.000	0.067	129	70-130			
Calcium	74	4.0	mg/L	10.00	65	92	70-130			
Iron	1.1	0.30	mg/L	1.000	0.025	110	70-130			
Magnesium	25	3.0	mg/L	10.00	15	105	70-130			
Potassium	12	5.0	mg/L	10.00	1.2	110	70-130			
Sodium	31	5.0	mg/L	10.00	21	102	70-130			
<b>Matrix Spike (2109214-MS2)</b>										
		<b>Source: 2110261-03</b>		Prepared: 09/17/2021 Analyzed: 09/21/2021						
Boron	1.1	0.10	mg/L	1.000	0.019	111	70-130			
Calcium	36	4.0	mg/L	10.00	27	89	70-130			
Iron	1.0	0.30	mg/L	1.000	0.012	104	70-130			
Magnesium	13	3.0	mg/L	10.00	2.4	102	70-130			
Potassium	14	5.0	mg/L	10.00	3.8	106	70-130			
Sodium	12	5.0	mg/L	10.00	1.0	108	70-130			
<b>Matrix Spike (2109214-MS3)</b>										
		<b>Source: 2110483-01</b>		Prepared: 09/17/2021 Analyzed: 09/21/2021						
Silica	29	0.20	mg/L	2.143	27	80	70-130			

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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**Batch 2109214 - E 200.7 (4.4)**

<b>Matrix Spike (2109214-MS4)</b>		<b>Source: 21I0261-03</b>		Prepared: 09/17/2021		Analyzed: 09/21/2021	
Silica	11	0.20	mg/L	2.143	8.9	96	70-130

**Batch 2109242 - E200.8 (5.4)**

<b>Blank (2109242-BLK1)</b>				Prepared: 09/17/2021		Analyzed: 09/20/2021	
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Aluminum	ND	0.040	mg/L				
Antimony	ND	0.00050	mg/L				
Arsenic	ND	0.00050	mg/L				
Barium	ND	0.00050	mg/L				
Beryllium	ND	0.00025	mg/L				
Cadmium	ND	0.00025	mg/L				
Chromium	ND	0.00050	mg/L				
Cobalt	ND	0.000250	mg/L				
Copper	ND	0.00050	mg/L				
Lead	ND	0.00050	mg/L				
Manganese	ND	0.00025	mg/L				
Nickel	0.00025	0.00050	mg/L				
Selenium	ND	0.0025	mg/L				
Silver	ND	0.00050	mg/L				
Thallium	ND	0.00050	mg/L				
Zinc	ND	0.040	mg/L				

**LCS (2109242-BS1)**

				Prepared: 09/17/2021		Analyzed: 09/20/2021	
Aluminum	0.10	0.040	mg/L	0.1000	104	85-115	
Antimony	0.049	0.00050	mg/L	0.05000	98	85-115	
Arsenic	0.048	0.00050	mg/L	0.05000	96	85-115	
Barium	0.049	0.00050	mg/L	0.05000	98	85-115	
Beryllium	0.049	0.00025	mg/L	0.05000	98	85-115	
Cadmium	0.048	0.00025	mg/L	0.05000	96	85-115	
Chromium	0.049	0.00050	mg/L	0.05000	97	85-115	
Cobalt	0.0486	0.000250	mg/L	0.05000	97	85-115	
Copper	0.048	0.00050	mg/L	0.05000	95	85-115	
Lead	0.046	0.00050	mg/L	0.05000	92	85-115	
Manganese	0.049	0.00025	mg/L	0.05000	97	85-115	
Nickel	0.050	0.00050	mg/L	0.05000	100	85-115	
Selenium	0.046	0.0025	mg/L	0.05000	91	85-115	
Silver	0.045	0.00050	mg/L	0.05000	90	85-115	
Thallium	0.047	0.00050	mg/L	0.05000	93	85-115	
Zinc	0.10	0.040	mg/L	0.1000	101	85-115	

Client: Arizona Minerals Inc.  
 Project: Groundwater  
 Work Order: 21I0458  
 Date Received: 09/15/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch 2109242 - E200.8 (5.4)

LCS Dup (2109242-BSD1)

Prepared: 09/17/2021 Analyzed: 09/20/2021

Aluminum	0.10	0.040	mg/L	0.1000		104	85-115	0.4	20	
Antimony	0.049	0.00050	mg/L	0.05000		99	85-115	0.7	20	
Arsenic	0.048	0.00050	mg/L	0.05000		97	85-115	0.2	20	
Barium	0.049	0.00050	mg/L	0.05000		98	85-115	0.9	20	
Beryllium	0.049	0.00025	mg/L	0.05000		99	85-115	0.3	20	
Cadmium	0.049	0.00025	mg/L	0.05000		97	85-115	2	20	
Chromium	0.049	0.00050	mg/L	0.05000		98	85-115	0.9	20	
Cobalt	0.0483	0.000250	mg/L	0.05000		97	85-115	0.7	20	
Copper	0.048	0.00050	mg/L	0.05000		96	85-115	0.6	20	
Lead	0.047	0.00050	mg/L	0.05000		93	85-115	0.8	20	
Manganese	0.049	0.00025	mg/L	0.05000		98	85-115	0.4	20	
Nickel	0.050	0.00050	mg/L	0.05000		99	85-115	0.08	20	
Selenium	0.047	0.0025	mg/L	0.05000		93	85-115	2	20	
Silver	0.045	0.00050	mg/L	0.05000		90	85-115	0.06	20	
Thallium	0.048	0.00050	mg/L	0.05000		96	85-115	2	20	
Zinc	0.10	0.040	mg/L	0.1000		103	85-115	2	20	

Matrix Spike (2109242-MS1)

Source: 21I0458-02

Prepared: 09/17/2021 Analyzed: 09/20/2021

Aluminum	0.15	0.040	mg/L	0.1000	0.050	95	70-130			
Antimony	0.055	0.00050	mg/L	0.05000	0.00040	110	70-130			
Arsenic	0.056	0.00050	mg/L	0.05000	0.0043	103	70-130			
Barium	0.075	0.00050	mg/L	0.05000	0.016	119	70-130			
Beryllium	0.043	0.00025	mg/L	0.05000	0.00045	85	70-130			
Cadmium	0.058	0.00025	mg/L	0.05000	0.0075	100	70-130			
Chromium	0.049	0.00050	mg/L	0.05000	0.00017	97	70-130			
Cobalt	0.0696	0.000250	mg/L	0.05000	0.0228	93	70-130			
Copper	0.042	0.00050	mg/L	0.05000	0.00036	82	70-130			
Lead	0.058	0.00050	mg/L	0.05000	0.0053	105	70-130			
Manganese	18	0.013	mg/L	0.05000	23	NR	70-130			M3
Nickel	0.081	0.00050	mg/L	0.05000	0.036	91	70-130			
Selenium	0.048	0.0025	mg/L	0.05000	0.00082	94	70-130			
Silver	0.042	0.00050	mg/L	0.05000	ND	85	70-130			
Thallium	0.055	0.00050	mg/L	0.05000	0.00035	110	70-130			
Zinc	3.7	2.0	mg/L	0.1000	4.8	NR	70-130			M3

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 2109242 - E200.8 (5.4)</b>										
<b>Matrix Spike (2109242-MS2)</b>		<b>Source: 21I0459-02</b>			Prepared: 09/17/2021 Analyzed: 09/20/2021					
Aluminum	0.25	0.040	mg/L	0.1000	0.15	102	70-130			
Antimony	0.051	0.00050	mg/L	0.05000	0.00024	101	70-130			
Arsenic	0.051	0.00050	mg/L	0.05000	0.00083	101	70-130			
Barium	0.068	0.00050	mg/L	0.05000	0.014	107	70-130			
Beryllium	0.046	0.00025	mg/L	0.05000	0.00016	92	70-130			
Cadmium	0.087	0.00025	mg/L	0.05000	0.040	92	70-130			
Chromium	0.052	0.00050	mg/L	0.05000	0.0033	97	70-130			
Cobalt	0.0564	0.000250	mg/L	0.05000	0.00764	98	70-130			
Copper	0.053	0.00050	mg/L	0.05000	0.0086	88	70-130			
Lead	0.057	0.00050	mg/L	0.05000	0.0040	107	70-130			
Manganese	47	0.025	mg/L	0.05000	48	NR	70-130			
Nickel	0.080	0.00050	mg/L	0.05000	0.033	94	70-130			
Selenium	0.051	0.0025	mg/L	0.05000	0.0032	95	70-130			
Silver	0.040	0.00050	mg/L	0.05000	ND	81	70-130			
Thallium	0.054	0.00050	mg/L	0.05000	0.00032	108	70-130			
Zinc	6.4	4.0	mg/L	0.1000	6.4	43	70-130			M3

**Batch 2109243 - E 200.8 (5.4)**

<b>Blank (2109243-BLK1)</b>				Prepared: 09/20/2021 Analyzed: 09/21/2021						
Aluminum	ND	0.040	mg/L							
Antimony	ND	0.00050	mg/L							
Arsenic	ND	0.00050	mg/L							
Barium	ND	0.00050	mg/L							
Beryllium	ND	0.00025	mg/L							
Cadmium	ND	0.00025	mg/L							
Chromium	ND	0.00050	mg/L							
Cobalt	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Manganese	ND	0.00025	mg/L							
Nickel	0.000037	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Silver	0.00039	0.00050	mg/L							
Thallium	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							

**Client:** Arizona Minerals Inc.  
**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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**Batch 2109243 - E 200.8 (5.4)**

**LCS (2109243-BS1)**

Prepared: 09/20/2021 Analyzed: 09/21/2021

Aluminum	0.099	0.040	mg/L	0.1000		99	85-115			
Antimony	0.043	0.00050	mg/L	0.05000		86	85-115			
Arsenic	0.048	0.00050	mg/L	0.05000		96	85-115			
Barium	0.044	0.00050	mg/L	0.05000		88	85-115			
Beryllium	0.047	0.00025	mg/L	0.05000		95	85-115			
Cadmium	0.044	0.00025	mg/L	0.05000		87	85-115			
Chromium	0.047	0.00050	mg/L	0.05000		95	85-115			
Cobalt	0.047	0.00025	mg/L	0.05000		93	85-115			
Copper	0.047	0.00050	mg/L	0.05000		94	85-115			
Lead	0.044	0.00050	mg/L	0.05000		89	85-115			
Manganese	0.048	0.00025	mg/L	0.05000		96	85-115			
Nickel	0.047	0.00050	mg/L	0.05000		94	85-115			
Selenium	0.045	0.0025	mg/L	0.05000		90	85-115			
Silver	0.045	0.00050	mg/L	0.05000		89	85-115			
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115			
Zinc	0.10	0.040	mg/L	0.1000		103	85-115			

**LCS Dup (2109243-BSD1)**

Prepared: 09/20/2021 Analyzed: 09/21/2021

Aluminum	0.099	0.040	mg/L	0.1000		99	85-115	0.7	20	
Antimony	0.043	0.00050	mg/L	0.05000		86	85-115	0.04	20	
Arsenic	0.048	0.00050	mg/L	0.05000		95	85-115	1	20	
Barium	0.044	0.00050	mg/L	0.05000		89	85-115	0.9	20	
Beryllium	0.047	0.00025	mg/L	0.05000		94	85-115	0.3	20	
Cadmium	0.044	0.00025	mg/L	0.05000		88	85-115	0.4	20	
Chromium	0.048	0.00050	mg/L	0.05000		95	85-115	0.4	20	
Cobalt	0.047	0.00025	mg/L	0.05000		94	85-115	0.9	20	
Copper	0.047	0.00050	mg/L	0.05000		94	85-115	0.4	20	
Lead	0.045	0.00050	mg/L	0.05000		90	85-115	1	20	
Manganese	0.048	0.00025	mg/L	0.05000		96	85-115	0.2	20	
Nickel	0.048	0.00050	mg/L	0.05000		95	85-115	1	20	
Selenium	0.049	0.0025	mg/L	0.05000		98	85-115	8	20	
Silver	0.048	0.00050	mg/L	0.05000		95	85-115	7	20	
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115	0.04	20	
Zinc	0.10	0.040	mg/L	0.1000		104	85-115	0.6	20	

**Client:** Arizona Minerals Inc.  
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**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 2109243 - E 200.8 (5.4)</b>										
<b>Matrix Spike (2109243-MS1)</b>		<b>Source: 21I0483-01</b>			Prepared: 09/20/2021 Analyzed: 09/21/2021					
Aluminum	0.13	0.040	mg/L	0.1000	ND	127	70-130			
Antimony	0.055	0.00050	mg/L	0.05000	0.000096	111	70-130			
Arsenic	0.068	0.00050	mg/L	0.05000	0.0022	132	70-130			M1
Barium	0.066	0.00050	mg/L	0.05000	0.011	111	70-130			
Beryllium	0.064	0.00025	mg/L	0.05000	ND	128	70-130			
Cadmium	0.054	0.00025	mg/L	0.05000	ND	108	70-130			
Chromium	0.061	0.00050	mg/L	0.05000	0.0011	120	70-130			
Cobalt	0.057	0.00025	mg/L	0.05000	ND	114	70-130			
Copper	0.056	0.00050	mg/L	0.05000	0.0010	110	70-130			
Lead	0.065	0.00050	mg/L	0.05000	0.00026	130	70-130			
Manganese	0.062	0.00025	mg/L	0.05000	0.0018	121	70-130			
Nickel	0.056	0.00050	mg/L	0.05000	0.00031	112	70-130			
Selenium	0.070	0.0025	mg/L	0.05000	0.00068	138	70-130			M1
Silver	0.032	0.00050	mg/L	0.05000	0.00016	63	70-130			M2
Thallium	0.065	0.00050	mg/L	0.05000	ND	130	70-130			
Zinc	0.16	0.040	mg/L	0.1000	0.036	126	70-130			
<b>Matrix Spike (2109243-MS2)</b>		<b>Source: 21I0514-04</b>			Prepared: 09/20/2021 Analyzed: 09/21/2021					
Aluminum	0.12	0.040	mg/L	0.1000	ND	122	70-130			
Antimony	0.050	0.00050	mg/L	0.05000	ND	101	70-130			
Arsenic	0.062	0.00050	mg/L	0.05000	0.0025	118	70-130			
Barium	0.077	0.00050	mg/L	0.05000	0.026	101	70-130			
Beryllium	0.056	0.00025	mg/L	0.05000	0.000034	112	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	ND	100	70-130			
Chromium	0.055	0.00050	mg/L	0.05000	0.000042	109	70-130			
Cobalt	0.054	0.00025	mg/L	0.05000	0.00048	107	70-130			
Copper	0.051	0.00050	mg/L	0.05000	ND	102	70-130			
Lead	0.059	0.00050	mg/L	0.05000	ND	119	70-130			
Manganese	2.8	0.0025	mg/L	0.05000	2.7	187	70-130			M3
Nickel	0.053	0.00050	mg/L	0.05000	ND	105	70-130			
Selenium	0.057	0.0025	mg/L	0.05000	0.00025	114	70-130			
Silver	0.035	0.0050	mg/L	0.05000	0.010	49	70-130			M2
Thallium	0.058	0.00050	mg/L	0.05000	ND	116	70-130			
Zinc	0.53	0.040	mg/L	0.1000	0.41	123	70-130			
<b>Batch 2109260 - E 245.1</b>										
<b>Blank (2109260-BLK1)</b>		Prepared & Analyzed: 09/21/2021								
Mercury	ND	0.0010	mg/L							
<b>LCS (2109260-BS1)</b>		Prepared & Analyzed: 09/21/2021								
Mercury	0.0052	0.0010	mg/L	0.005000		104	85-115			
<b>LCS Dup (2109260-BSD1)</b>		Prepared & Analyzed: 09/21/2021								
Mercury	0.0052	0.0010	mg/L	0.005000		104	85-115	0.04	20	
<b>Matrix Spike (2109260-MS1)</b>		<b>Source: 21I0458-01</b>			Prepared & Analyzed: 09/21/2021					
Mercury	0.0053	0.0010	mg/L	0.005000	ND	106	70-130			

Client: Arizona Minerals Inc.  
 Project: Groundwater  
 Work Order: 21I0458  
 Date Received: 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 2109260 - E 245.1</b>										
<b>Matrix Spike Dup (2109260-MSD1)</b>		<b>Source: 21I0458-01</b>		Prepared & Analyzed: 09/21/2021						
Mercury	0.0053	0.0010	mg/L	0.005000	ND	107	70-130	0.2	20	
<b>Batch 2109292 - E245.1</b>										
<b>Blank (2109292-BLK1)</b>		Prepared & Analyzed: 09/23/2021								
Mercury	ND	0.0010	mg/L							
<b>LCS (2109292-BS1)</b>		Prepared & Analyzed: 09/23/2021								
Mercury	0.0052	0.0010	mg/L	0.005000		103	85-115			
<b>LCS Dup (2109292-BSD1)</b>		Prepared & Analyzed: 09/23/2021								
Mercury	0.0052	0.0010	mg/L	0.005000		105	85-115	2	20	
<b>Matrix Spike (2109292-MS1)</b>		<b>Source: 21I0292-01</b>		Prepared & Analyzed: 09/23/2021						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	70-130			
<b>Matrix Spike (2109292-MS2)</b>		<b>Source: 21I0294-01</b>		Prepared & Analyzed: 09/23/2021						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	102	70-130			
<b>Matrix Spike Dup (2109292-MSD1)</b>		<b>Source: 21I0292-01</b>		Prepared & Analyzed: 09/23/2021						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	70-130	0.09	20	
<b>Matrix Spike Dup (2109292-MSD2)</b>		<b>Source: 21I0294-01</b>		Prepared & Analyzed: 09/23/2021						
Mercury	0.0041	0.0010	mg/L	0.005000	ND	82	70-130	21	20	M2, R9



**Client:** Arizona Minerals Inc.  
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**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 2109193 - SM2540 C</b>										
<b>Duplicate (2109193-DUP1)</b>		<b>Source: 21I0390-01</b>			Prepared: 09/16/2021 Analyzed: 09/20/2021					
Total Dissolved Solids (Residue, Filterable)	570	20	mg/L		560			1	5	
<b>Duplicate (2109193-DUP2)</b>		<b>Source: 21I0390-02</b>			Prepared: 09/16/2021 Analyzed: 09/20/2021					
Total Dissolved Solids (Residue, Filterable)	11000	20	mg/L		10000			3	5	
<b>Batch 2109225 - SW9045D</b>										
<b>Duplicate (2109225-DUP1)</b>		<b>Source: 21I0471-02</b>			Prepared & Analyzed: 09/16/2021					
pH (pH Units)	3.1		-		3.1			0.3	200	H5
Temperature (°C)	22		-		21			0.5	200	H5
<b>Batch 2109226 - E180.1</b>										
<b>Duplicate (2109226-DUP1)</b>		<b>Source: 21I0310-01</b>			Prepared & Analyzed: 09/16/2021					
Turbidity	0.63	0.10	NTU		0.63			0	10	
<b>Batch 2109236 - SM2540 D</b>										
<b>Duplicate (2109236-DUP1)</b>		<b>Source: 21I0309-01</b>			Prepared: 09/20/2021 Analyzed: 09/21/2021					
Total Suspended Solids	ND	10	mg/L		ND				5	Q9
<b>Duplicate (2109236-DUP2)</b>		<b>Source: 21I0483-01</b>			Prepared: 09/20/2021 Analyzed: 09/21/2021					
Total Suspended Solids	ND	10	mg/L		ND				5	Q9
<b>Batch 2109262 - SM2320B</b>										
<b>Blank (2109262-BLK1)</b>		Prepared & Analyzed: 09/21/2021								
Alkalinity, Bicarbonate (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Carbonate (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Hydroxide (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Phenolphthalein (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Total (As CaCO3)	ND	2.0	mg/L							
<b>LCS (2109262-BS1)</b>		Prepared & Analyzed: 09/21/2021								
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		101	90-110			
<b>LCS Dup (2109262-BSD1)</b>		Prepared & Analyzed: 09/21/2021								
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		100	90-110	0.8	10	
<b>Matrix Spike (2109262-MS1)</b>		<b>Source: 21I0483-07</b>			Prepared: 09/21/2021 Analyzed: 09/22/2021					
Alkalinity, Total (As CaCO3)	280	2.0	mg/L	250.0	40	96	70-130			
<b>Matrix Spike Dup (2109262-MSD1)</b>		<b>Source: 21I0483-07</b>			Prepared & Analyzed: 09/21/2021					
Alkalinity, Total (As CaCO3)	290	2.0	mg/L	250.0	40	100	70-130	4	10	
<b>Batch 2109268 - SM2510 B</b>										
<b>LCS (2109268-BS1)</b>		Prepared & Analyzed: 09/22/2021								
Conductivity	150	0.10	µmhos/cm	141.2		105	0-200			
<b>LCS Dup (2109268-BSD1)</b>		Prepared & Analyzed: 09/22/2021								
Conductivity	150	0.10	µmhos/cm	141.2		109	0-200	4	200	

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**Project:** Groundwater  
**Work Order:** 21I0458  
**Date Received:** 09/15/2021

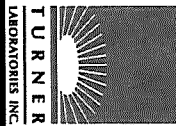
**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 2109268 - SM2510 B</b>										
<b>Duplicate (2109268-DUP1)</b>		<b>Source: 21I0487-01</b>			Prepared & Analyzed: 09/22/2021					
Conductivity	420	0.10	µmhos/cm		410			2	10	
<b>Duplicate (2109268-DUP2)</b>		<b>Source: 21I0487-02</b>			Prepared & Analyzed: 09/22/2021					
Conductivity	270	0.10	µmhos/cm		270			2	10	
<b>Batch 2109278 - SM4500-NH3 B,C</b>										
<b>Blank (2109278-BLK1)</b>					Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
<b>LCS (2109278-BS1)</b>					Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000		97	90-110			
<b>LCS Dup (2109278-BSD1)</b>					Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000		98	90-110	0.9	10	
<b>Matrix Spike (2109278-MS1)</b>		<b>Source: 21I0483-01</b>			Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.090	96	75-120			
<b>Matrix Spike (2109278-MS2)</b>		<b>Source: 21I0514-04</b>			Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	4.8	0.50	mg/L	5.000	0.13	94	75-120			
<b>Matrix Spike Dup (2109278-MSD1)</b>		<b>Source: 21I0483-01</b>			Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.090	95	75-120	0.9	20	
<b>Matrix Spike Dup (2109278-MSD2)</b>		<b>Source: 21I0514-04</b>			Prepared & Analyzed: 09/22/2021					
Nitrogen, Ammonia (As N)	5.0	0.50	mg/L	5.000	0.13	97	75-120	4	20	

**Client:** Arizona Minerals Inc.  
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**Work Order:** 21I0458  
**Date Received:** 09/15/2021

**QC Summary**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
<b>Batch 2109181 - E300.0 (2.1)</b>										
<b>Blank (2109181-BLK1)</b> Prepared & Analyzed: 09/15/2021										
Chloride	ND	1.0	mg/L							
Fluoride	ND	0.50	mg/L							
Nitrogen, Nitrate (As N)	ND	0.50	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
Sulfate	ND	5.0	mg/L							
<b>LCS (2109181-BS1)</b> Prepared & Analyzed: 09/15/2021										
Chloride	12	1.0	mg/L	12.50		95	90-110			
Fluoride	2.0	0.50	mg/L	2.000		98	90-110			
Nitrogen, Nitrate (As N)	4.8	0.50	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110			
Sulfate	13	5.0	mg/L	12.50		105	90-110			
<b>LCS Dup (2109181-BSD1)</b> Prepared & Analyzed: 09/15/2021										
Chloride	12	1.0	mg/L	12.50		95	90-110	0.4	10	
Fluoride	2.0	0.50	mg/L	2.000		98	90-110	0.5	10	
Nitrogen, Nitrate (As N)	4.8	0.50	mg/L	5.000		96	90-110	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.3	10	
Sulfate	13	5.0	mg/L	12.50		104	90-110	0.3	10	
<b>Matrix Spike (2109181-MS1)</b> Source: 2110443-06 Prepared: 09/15/2021 Analyzed: 09/16/2021										
Chloride	1200	100	mg/L	1250	ND	97	80-120			
Fluoride	170	50	mg/L	200.0	ND	87	80-120			
Nitrogen, Nitrate (As N)	630	50	mg/L	500.0	140	98	80-120			
Nitrogen, Nitrite (As N)	240	10	mg/L	250.0	ND	96	80-120			
Sulfate	1500	500	mg/L	1250	240	104	80-120			
<b>Matrix Spike (2109181-MS2)</b> Source: 2110451-02 Prepared: 09/15/2021 Analyzed: 09/22/2021										
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.24	93	80-120			
Sulfate	16	5.0	mg/L	12.50	6.2	75	80-120			M2
<b>Matrix Spike (2109181-MS3)</b> Source: 2110443-08 Prepared: 09/15/2021 Analyzed: 09/22/2021										
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.22	94	80-120			
Sulfate	13	5.0	mg/L	12.50	3.4	75	80-120			M2
<b>Matrix Spike Dup (2109181-MSD1)</b> Source: 2110443-06 Prepared: 09/15/2021 Analyzed: 09/16/2021										
Chloride	1200	100	mg/L	1250	ND	97	80-120	0.2	10	
Fluoride	170	50	mg/L	200.0	ND	87	80-120	0.4	10	
Nitrogen, Nitrate (As N)	630	50	mg/L	500.0	140	98	80-120	0.1	10	
Nitrogen, Nitrite (As N)	240	10	mg/L	250.0	ND	97	80-120	0.6	10	
Sulfate	1500	500	mg/L	1250	240	98	80-120	5	10	
<b>Matrix Spike Dup (2109181-MSD2)</b> Source: 2110451-02 Prepared: 09/15/2021 Analyzed: 09/22/2021										
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.24	94	80-120	0.6	10	
Sulfate	15	5.0	mg/L	12.50	6.2	70	80-120	5	10	M2
<b>Matrix Spike Dup (2109181-MSD3)</b> Source: 2110443-08 Prepared: 09/15/2021 Analyzed: 09/22/2021										
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.22	94	80-120	0.03	10	
Sulfate	13	5.0	mg/L	12.50	3.4	77	80-120	2	10	M2



2445 N. Coyote Drive, Suite 104  
 Tucson, Arizona 85745  
 (520) 882-5880  
 Fax: (520) 882-9788  
 www.turnerlabs.com

PROJECT NAME Hermosa # 25

CONTACT NAME Sheena Leon & Kara Haas

COMPANY NAME South32

ADDRESS 2210 E Ft Lowell Rd

CITY Tucson STATE AZ ZIP CODE 85719

PHONE Kara Haas FAX (505) 947-1738

SAMPLER'S SIGNATURE [Signature]

SAMPLE I.D. DATE TIME LAB I.D. APLE MAT

POC 2-09142021 9.14.21 10:15 GW  
NW 3-09142021 9.14.21 10:25 GW

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM  
 210458  
 TURNER WORK ORDER # 25 DATE 9.15.21 PAGE 1

NUMBER OF CONTAINERS	ANALYSIS REQUESTED
<u>See attachment</u>	<u>See attachment</u>

DATE	TIME	LAB I.D.	APLE MAT
<u>9.14.21</u>	<u>10:15</u>	<u>GW</u>	<u>S</u>
<u>9.14.21</u>	<u>10:25</u>	<u>GW</u>	<u>S</u>

1. RELINQUISHED BY: [Signature]  
 Signature [Signature]  
 Printed Name Yvonne Lopez  
 Firm South 32  
 Date/Time 9.15.21 9:45

TURNAROUND REQUIREMENTS:  
 Standard (approx. 10 days)\*  
 Next day 2 Day  
 5 Day\*  
 Email Preliminary Results  
Kara Haas

REPORT REQUIREMENTS:  
 I. Routine Report  
 II. Report (Includes DUP, MS, MSD, as required, may be charged as samples)  
 III. Date Validation Report (Includes All Raw Data)  
 Add 10% to invoice

INVOICE INFORMATION:  
 Account Y N  
 P.O. #             
 Bill to:           

SAMPLE RECEIPT:  
 Total Containers 10  
 Temperature 9.1  
 Wet Ice  Blue Ice

3. RELINQUISHED BY: [Signature]  
 Signature [Signature]  
 Printed Name Casey Spencer  
 Firm WMC  
 Date/Time 12:45 pm 9/15/21

4. RECEIVED BY: [Signature]  
 Signature [Signature]  
 Printed Name Casey Spencer  
 Firm WMC  
 Date/Time 11:30am 9/15/21

SPECIAL INSTRUCTIONS/COMMENTS:  
 Compliance Analysis:  Yes  No  
 ADEQ Forms:  Yes  No  
 Mail ADEQ Forms:  Yes  No

Custody Seals   
 Container Intact   
 COC/Labels Agree

Preservation Confirmation   
 Appropriate Head Space   
 Received Within Hold Time

\* LEGEND  
 DW = DRINKING WATER  
 GW = GROUNDWATER  
 SD = SOLID  
 SG = SLUDGE  
 SI = SOIL

Groundwater Suite			
LABORATORY			
Analyte	Total	Dissolved	Other
Aluminum	X		
Antimony	X		
Arsenic	X		
Barium	X		
Beryllium	X		
Boron	X		
Cadmium	X		
Chromium	X		
Cobalt	X		
Copper	X		
Iron	X		
Lead	X		
Manganese	X		
Mercury	X		
Nickel	X		
Selenium	X		
Silver	X		
Thallium	X		
Zinc	X		
<b>Major Cations</b>			
Ammonium	X		
Calcium	X		
Magnesium	X		
Potassium	X		
Sodium	X		
Iron	X		
Hardness	X		
<b>Major Anions</b>			
Total Alkalinity	X		
<b>Acidity</b>			
Chloride	X		
Fluoride	X		
Nitrate – Nitrite as N	X		
Nitrite - N	X		
Silica	X		
Sulfate	X		
Sulfide			
<b>Parameters</b>			
Total Dissolved Solids		X	
Total Suspended Solids	X		

## ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix  
4625 East Cotton Ctr Blvd  
Suite 189  
Phoenix, AZ 85040  
Tel: (602)437-3340

Laboratory Job ID: 550-170838-1  
Client Project/Site: 2110458

For:  
Turner Laboratories, Inc.  
2445 North Coyote Drive  
Suite 104  
Tucson, Arizona 85745

Attn: Elizabeth Kasik



Authorized for release by:  
9/22/2021 6:32:30 AM

Ken Baker, Project Manager II  
(602)659-7624  
[Ken.Baker@Eurofinset.com](mailto:Ken.Baker@Eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Sample Summary . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
QC Sample Results . . . . .	8
QC Association Summary . . . . .	9
Lab Chronicle . . . . .	10
Certification Summary . . . . .	11
Method Summary . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	15

# Definitions/Glossary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Case Narrative

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

---

**Job ID: 550-170838-1**

---

**Laboratory: Eurofins TestAmerica, Phoenix**

## Narrative

**Job Narrative**  
**550-170838-1**

## Comments

No additional comments.

## Receipt

The samples were received on 9/17/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

## Receipt Exceptions

5 day rush TAT requested.

2110458-01 (550-170838-1) and 2110458-02 (550-170838-2)

## General Chemistry

Method SM 4500 CN I: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 680-685799 and analytical batch 680-685927 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

- 1
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- 3
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# Sample Summary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-170838-1	2110458-01	Water	09/14/21 10:15	09/17/21 09:45
550-170838-2	2110458-02	Water	09/14/21 10:25	09/17/21 09:45

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# Detection Summary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

**Client Sample ID: 2110458-01**

**Lab Sample ID: 550-170838-1**

NI 118,1 c13

**Client Sample ID: 2110458-02**

**Lab Sample ID: 550-170838-2**

NI 118,1 c13

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Phoenix

# Client Sample Results

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

**Client Sample ID: 2110458-01**

Date Collected: 09/14/21 10:15

Date Received: 09/17/21 09:45

**Lab Sample ID: 550-170838-1**

Matrix: Water

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Weak Acid Dissociable	ND	E8 M2	0.010	0.010	mg/L		09/21/21 12:13	09/22/21 08:24	1

**Client Sample ID: 2110458-02**

Date Collected: 09/14/21 10:25

Date Received: 09/17/21 09:45

**Lab Sample ID: 550-170838-2**

Matrix: Water

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Weak Acid Dissociable	ND	E8	0.010	0.010	mg/L		09/21/21 12:13	09/22/21 08:24	1

# QC Sample Results

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

## Method: SM 4500 CN I - Cyanide, Weak Acid Dissociable

**Lab Sample ID: MB 680-685799/1-A**  
**Matrix: Water**  
**Analysis Batch: 685927**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 685799**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Weak Acid Dissociable	ND	E8	0.010	0.010	mg/L		09/21/21 10:53	09/22/21 08:24	1

**Lab Sample ID: LCS 680-685799/2-A**  
**Matrix: Water**  
**Analysis Batch: 685927**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 685799**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	0.0500	0.0489		mg/L		98	85 - 115

**Lab Sample ID: 550-170838-1 MS**  
**Matrix: Water**  
**Analysis Batch: 685927**

**Client Sample ID: 2110458-01**  
**Prep Type: Total/NA**  
**Prep Batch: 685799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Weak Acid Dissociable	ND	E8 M2	0.0500	0.0392	M2	mg/L		78	85 - 115

**Lab Sample ID: 550-170838-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 685927**

**Client Sample ID: 2110458-01**  
**Prep Type: Total/NA**  
**Prep Batch: 685799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Weak Acid Dissociable	ND	E8 M2	0.0500	0.0410	M2	mg/L		82	85 - 115	5	30

# QC Association Summary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

## General Chemistry

### Prep Batch: 685799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-170838-1	2110458-01	Total/NA	Water	SM 4500 CN I	
550-170838-2	2110458-02	Total/NA	Water	SM 4500 CN I	
MB 680-685799/1-A	Method Blank	Total/NA	Water	SM 4500 CN I	
LCS 680-685799/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN I	
550-170838-1 MS	2110458-01	Total/NA	Water	SM 4500 CN I	
550-170838-1 MSD	2110458-01	Total/NA	Water	SM 4500 CN I	

### Analysis Batch: 685927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-170838-1	2110458-01	Total/NA	Water	SM 4500 CN I	685799
550-170838-2	2110458-02	Total/NA	Water	SM 4500 CN I	685799
MB 680-685799/1-A	Method Blank	Total/NA	Water	SM 4500 CN I	685799
LCS 680-685799/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN I	685799
550-170838-1 MS	2110458-01	Total/NA	Water	SM 4500 CN I	685799
550-170838-1 MSD	2110458-01	Total/NA	Water	SM 4500 CN I	685799

# Lab Chronicle

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

**Client Sample ID: 2110458-01**

**Lab Sample ID: 550-170838-1**

**Date Collected: 09/14/21 10:15**

**Matrix: Water**

**Date Received: 09/17/21 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SM 4500 CN I			685799	09/21/21 12:13	AE	TAL SAV
Total/NA	Analysis	SM 4500 CN I		1	685927	09/22/21 08:24	NVF	TAL SAV

**Client Sample ID: 2110458-02**

**Lab Sample ID: 550-170838-2**

**Date Collected: 09/14/21 10:25**

**Matrix: Water**

**Date Received: 09/17/21 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SM 4500 CN I			685799	09/21/21 12:13	AE	TAL SAV
Total/NA	Analysis	SM 4500 CN I		1	685927	09/22/21 08:24	NVF	TAL SAV

**Laboratory References:**

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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- 10
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- 13
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# Accreditation/Certification Summary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

## Laboratory: Eurofins TestAmerica, Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-22
Alaska (UST)	State	17-016	09-22-22
ANAB	Dept. of Defense ELAP	L2463	09-22-22
ANAB	ISO/IEC 17025	L2463.01	09-22-22
Arkansas DEQ	State	19-015-0	02-01-22
California	State	2939	06-30-22
Connecticut	State	PH-0161	03-31-23
Florida	NELAP	E87052	06-30-22
Georgia	State	E87052	06-30-22
Georgia (DW)	State	803	06-30-22
Guam	State	19-007R	04-17-22
Hawaii	State	<cert No.>	06-30-22
Illinois	NELAP	200022	11-30-21
Indiana	State	C-GA-02	06-30-22
Iowa	State	353	06-30-22
Kentucky (UST)	State	NA	06-30-22
Louisiana	NELAP	02011	06-30-22
Louisiana (DW)	State	LA009	12-31-21
Maine	State	GA00006	09-25-22
Maryland	State	250	12-31-21
Massachusetts	State	M-GA006	06-30-22
Michigan	State	9925	03-05-22
Mississippi	State	<cert No.>	06-30-22
Nebraska	State	NE-OS-7-04	06-30-22
New Jersey	NELAP	GA769	06-30-22
New Mexico	State	GA00006	06-30-22
New York	NELAP	10842	04-01-22
North Carolina (DW)	State	13701	07-01-22
North Carolina (WW/SW)	State	269	12-31-21
Pennsylvania	NELAP	68-00474	06-30-22
Puerto Rico	State	GA00006	01-01-22
South Carolina	State	98001	06-30-22
Tennessee	State	02961	06-30-22
Texas	NELAP	T1047004185-19-14	11-30-21
Texas	TCEQ Water Supply	T104704185	06-30-22
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	10509	06-29-22
Washington	State	C805	06-10-22
Wisconsin	State	999819810	08-31-22
Wyoming	State	8TMS-L	06-30-22



# Method Summary

Client: Turner Laboratories, Inc.  
Project/Site: 2110458

Job ID: 550-170838-1

Method	Method Description	Protocol	Laboratory
SM 4500 CN I	Cyanide, Weak Acid Dissociable	SM	TAL SAV
SM 4500 CN I	Cyanide, Distillation for Weak Acid Dissociable	SM	TAL SAV

**Protocol References:**

SM = "Standard Methods For The Examination Of Water And Wastewater"

**Laboratory References:**

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858



SUBCONTRACT ORDER

Turner Laboratories, Inc.

170838

2110458

SENDING LABORATORY:

Turner Laboratories, Inc.  
2445 N. Coyote Drive, Ste #104  
Tucson, AZ 85745  
Phone: 520.882.5880  
Fax: 520.882.9788  
Project Manager: Elizabeth Kasik

RECEIVING LABORATORY:

TestAmerica Phoenix  
4625 East Cotton Center Boulevard Suite 189  
Phoenix, AZ 85540  
Phone :(602) 437-3340  
Fax:  
Please CC Kevin Brim      Kbrim@turnerlabs.com

Analysis	Expires	Laboratory ID	Comments
-01 Sample ID: 2110458-01    Drinking Water    Sampled:09/14/2021 10:15			
Cyanide WAD	09/28/2021 10:15		
Cyanide	09/28/2021 10:15		
Containers Supplied:			
-02 Sample ID: 2110458-02    Drinking Water    Sampled:09/14/2021 10:25			
Cyanide WAD	09/28/2021 10:25		
Cyanide	09/28/2021 10:25		
Containers Supplied:			



Released By: *[Signature]* Date: 9/16/21 1600      Received By: *[Signature]* Date: 9/16/21 1600  
 Released By: *[Signature]* Date:      Received By: *[Signature]* Date:      1.000 ICE





# Login Sample Receipt Checklist

Client: Turner Laboratories, Inc.

Job Number: 550-170838-1

**Login Number: 170838**

**List Source: Eurofins TestAmerica, Phoenix**

**List Number: 1**

**Creator: Gravlin, Andrea**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

# Login Sample Receipt Checklist

Client: Turner Laboratories, Inc.

Job Number: 550-170838-1

**Login Number: 170838**

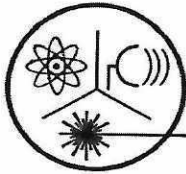
**List Number: 2**

**Creator: Mooken, Darmal**

**List Source: Eurofins TestAmerica, Savannah**

**List Creation: 09/18/21 04:08 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121  
 Website: www.radsafe.com

(480) 897-9459  
 FAX (480) 892-5446


## Radiochemical Activity in Water (pCi/L)

Turner Laboratories  
 2445 N. Coyote Drive, Ste. 104  
 Tucson, AZ 85745

Sampling Date: September 14, 2021  
 Sample Received: September 17, 2021  
 Analysis Completed: October 25, 2021

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Gross Beta Activity Method 900.0 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
21I0458-01	3.1 ± 0.9	< 17.5	1.0 ± 0.2	1.1 ± 0.4	2.1 ± 0.4

Date of Analysis	9/20/2021	9/21/2021	10/15/2021	10/15/2021	10/15/2021
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 Robert L. Metzger, Ph.D., C.H.P.      10/25/2021  
 Laboratory License Number AZ0462      Date



Arizona Department of Environmental Quality  
**Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report**  
 \*\*\*Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only\*\*\*

PWS ID#: AZ04 \_\_\_\_\_ PWS Name: \_\_\_\_\_

September 14, 2021 10:15 (24 hour clock) \_\_\_\_\_  
 Sample Date Sample Time Owner/Contact Person

Owner/Contact Fax Number \_\_\_\_\_ Owner/Contact Phone Number \_\_\_\_\_

Sample Collection Point  
 EPDS # \_\_\_\_\_

**Compliance Sample Type:**

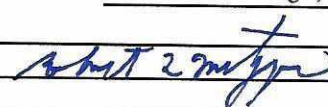
- Reduced Monitoring Date Q1 collected: \_\_\_\_\_
- Quarterly Date Q2 collected: \_\_\_\_\_
- Composite of four quarterly samples Date Q3 collected: \_\_\_\_\_
- Date Q4 collected: \_\_\_\_\_

**\*\*\*RADIOCHEMICAL ANALYSIS\*\*\***  
 >>>To be filled out by laboratory personnel<<<

**\*\*\*Combined Uranium must be reported in micrograms per liter\*\*\***

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	9/20/2021	3.1 ± 0.9	
7500 - Rn			Radon	4004			
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	10/15/2021	2.1 ± 0.4	
GammaRay HPGE		1 pCi/L	Radium 226	4020	10/15/2021	1.0 ± 0.2	
GammaRay HPGE		1 pCi/L	Radium 228	4030	10/15/2021	1.1 ± 0.4	

**\*\*\*LABORATORY INFORMATION\*\*\***  
 >>>To be filled out by laboratory personnel<<<

Specimen Number: RSE67309  
 Lab ID Number: AZ0462  
 Lab Name: Radiation Safety Engineering, Inc.  
 Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459  
 Comments: 21I0458-01  
 Authorized Signature:   
 Date Public Water System Notified: \_\_\_\_\_

Arizona Department of Environmental Quality  
**Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report**  
 \*\*\*Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only\*\*\*

PWS ID#: AZ04 \_\_\_\_\_

PWS Name: \_\_\_\_\_

September 14, 2021 10:15 (24 hour clock)

Sample Date Sample Time

Owner/Contact Person

Owner/Contact Fax Number

Owner/Contact Phone Number

Sample Collection Point

EPDS # \_\_\_\_\_

**Compliance Sample Type:**

Reduced Monitoring

Date Q1 collected: \_\_\_\_\_

Quarterly

Date Q2 collected: \_\_\_\_\_

Composite of four quarterly samples

Date Q3 collected: \_\_\_\_\_

Date Q4 collected: \_\_\_\_\_

**\*\*\*RADIOCHEMICAL ANALYSIS\*\*\***

>>>To be filled out by laboratory personnel<<<

**\*\*\*Combined Uranium must be reported in micrograms per liter\*\*\***

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
900	4 mrem	4 pCi/L	Gross Beta	4100	9/21/2021	< 4 mrem	_____
906	20,000 pCi/L	1,000 pCi/L	Tritium	4102	_____	_____	_____
_____	_____	10 pCi/L	Strontium-89	4172	_____	_____	_____
_____	8 pCi/L	2 pCi/L	Strontium-90	4174	_____	_____	_____
_____	_____	1 pCi/L	Iodine-131	4264	_____	_____	_____
_____	_____	10 pCi/L	Cesium-134	4270	_____	_____	_____

**\*\*\*LABORATORY INFORMATION\*\*\***

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE67309

Lab ID Number: AZ0462

Lab Name: Radiation Safety Engineering, Inc.

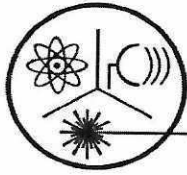
Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459

Comments: 2110458-01

Authorized Signature: *Robert L. Metzger*

Date Public Water System Notified: \_\_\_\_\_





# Radiation Safety Engineering, Inc.

3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121  
 Website: www.radsafe.com

(480) 897-9459  
 FAX (480) 892-5446

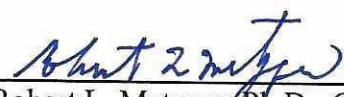
## Radiochemical Activity in Water (pCi/L)

Turner Laboratories  
 2445 N. Coyote Drive, Ste. 104  
 Tucson, AZ 85745

Sampling Date: September 14, 2021  
 Sample Received: September 17, 2021  
 Analysis Completed: October 25, 2021

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Gross Beta Activity Method 900.0 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
21I0458-02	4.1 ± 0.9	< 17.3	< 0.4	0.7 ± 0.4	0.7 ± 0.4

Date of Analysis	9/20/2021	9/21/2021	10/15/2021	10/15/2021	10/15/2021
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 Robert L. Metzger, Ph.D., C.H.P.  
 Laboratory License Number AZ0462

10/25/2021  
 Date

Arizona Department of Environmental Quality  
**Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report**  
 \*\*\*Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only\*\*\*

PWS ID#: AZ04 \_\_\_\_\_ PWS Name: \_\_\_\_\_

September 14, 2021 10:25 (24 hour clock)  
 Sample Date Sample Time Owner/Contact Person

Owner/Contact Fax Number \_\_\_\_\_ Owner/Contact Phone Number \_\_\_\_\_

Sample Collection Point  
 EPDS # \_\_\_\_\_

**Compliance Sample Type:**


- Reduced Monitoring Date Q1 collected: \_\_\_\_\_
- Quarterly Date Q2 collected: \_\_\_\_\_
- Composite of four quarterly samples Date Q3 collected: \_\_\_\_\_
- Date Q4 collected: \_\_\_\_\_

**\*\*\*RADIOCHEMICAL ANALYSIS\*\*\***  
 >>>To be filled out by laboratory personnel<<<

**\*\*\*Combined Uranium must be reported in micrograms per liter\*\*\***

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
	15 pCi/L		Adjusted Gross Alpha	4000			
600/00-02		3 pCi/L	Gross Alpha	4002	9/20/2021	4.1 ± 0.9	
7500 - Rn			Radon	4004			
ASTM D6239	30 µg/L	1 µg/L	Combined Uranium	4006			µg/L
			Uranium 234	4007			
			Uranium 235	4008			
			Uranium 238	4009			
	5 pCi/L	1 pCi/L	Combined Radium (226,228)	4010	10/15/2021	0.7 ± 0.4	
GammaRay HPGE		1 pCi/L	Radium 226	4020	10/15/2021	< 0.4	
GammaRay HPGE		1 pCi/L	Radium 228	4030	10/15/2021	0.7 ± 0.4	

**\*\*\*LABORATORY INFORMATION\*\*\***  
 >>>To be filled out by laboratory personnel<<<

Specimen Number: RSE67310  
 Lab ID Number: AZ0462  
 Lab Name: Radiation Safety Engineering, Inc.  
 Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459  
 Comments: 2110458-02  
 Authorized Signature:   
 Date Public Water System Notified: \_\_\_\_\_

Arizona Department of Environmental Quality  
**Drinking Water Radionuclides-Adjusted Gross Alpha, Radium 226 & 228, Uranium Analysis Report**  
 \*\*\*Samples To Be Taken At Entry Point Into Distribution System (EPDS) Only\*\*\*

PWS ID#: AZ04 \_\_\_\_\_ PWS Name: \_\_\_\_\_

September 14, 2021 10:25 (24 hour clock) \_\_\_\_\_  
 Sample Date Sample Time Owner/Contact Person

Owner/Contact Fax Number \_\_\_\_\_ Owner/Contact Phone Number \_\_\_\_\_

Sample Collection Point  
 EPDS # \_\_\_\_\_

**Compliance Sample Type:**

- Reduced Monitoring Date Q1 collected: \_\_\_\_\_
- Quarterly Date Q2 collected: \_\_\_\_\_
- Composite of four quarterly samples Date Q3 collected: \_\_\_\_\_
- Date Q4 collected: \_\_\_\_\_

**\*\*\*RADIOCHEMICAL ANALYSIS\*\*\***

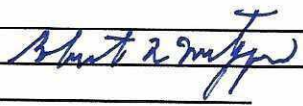
>>>To be filled out by laboratory personnel<<<

**\*\*\*Combined Uranium must be reported in micrograms per liter\*\*\***

Analysis Method	MCL	Reporting Limit	Contaminant Name	Cont. Code	Analyses Run Date	Result	Exceed MCL
900	4 mrem	4 pCi/L	Gross Beta	4100	9/21/2021	< 4 mrem	_____
906	20,000 pCi/L	1,000 pCi/L	Tritium	4102	_____	_____	_____
_____	_____	10 pCi/L	Strontium-89	4172	_____	_____	_____
_____	8 pCi/L	2 pCi/L	Strontium-90	4174	_____	_____	_____
_____	_____	1 pCi/L	Iodine-131	4264	_____	_____	_____
_____	_____	10 pCi/L	Cesium-134	4270	_____	_____	_____

**\*\*\*LABORATORY INFORMATION\*\*\***

>>>To be filled out by laboratory personnel<<<

Specimen Number: RSE67310 \_\_\_\_\_  
 Lab ID Number: AZ0462 \_\_\_\_\_  
 Lab Name: Radiation Safety Engineering, Inc. \_\_\_\_\_  
 Printed Name and Phone Number of Laboratory Contact: Robert L. Metzger, Ph.D., C.H.P. (480) 897-9459 \_\_\_\_\_  
 Comments: 21I0458-02 \_\_\_\_\_  
 Authorized Signature:  \_\_\_\_\_  
 Date Public Water System Notified: \_\_\_\_\_



**SUBCONTRACT ORDER**

**Turner Laboratories, Inc.**

**21I0458**

**SENDING LABORATORY:**

Turner Laboratories, Inc.  
2445 N. Coyote Drive, Ste #104  
Tucson, AZ 85745  
Phone: 520.882.5880  
Fax: 520.882.9788  
Project Manager: Elizabeth Kasik

**RECEIVING LABORATORY:**

Radiation Safety Engineering, Inc.  
3245 N. Washington St.  
Chandler, AZ 85225-1121  
Phone : (480) 897-9459  
Fax: (480) 892-5446  
Please CC Kevin Brim      Kbrim@turnerlabs.com

Analysis	Expires	Laboratory ID	Comments
<b>Sample ID: 21I0458-01 Drinking Water</b> Sampled:09/14/2021 10:15			
Radiochemistry, Gross Alpha Beta	03/13/2022 10:15		
Radiochemistry, Radium 226/228 <i>Add on</i>	10/14/2021 10:15		
<i>Containers Supplied:</i>			67309
<b>Sample ID: 21I0458-02 Drinking Water</b> Sampled:09/14/2021 10:25			
Radiochemistry, Radium 226/228 <i>Add on</i>	10/14/2021 10:25		
Radiochemistry, Gross Alpha Beta	03/13/2022 10:25		
<i>Containers Supplied:</i>			67310

Released By *Elizabeth Kasik* Date 10/14/2021 10:17 Received By \_\_\_\_\_ Date \_\_\_\_\_

Released By \_\_\_\_\_ Date \_\_\_\_\_ Received By *Kevin Brim* Date 10-14-21 4:30