ARIZONA MINERALS

2210 E Fort Lowell Rd
Tucson, AZ 85719
Tel: 520-485-1300
Email: info@arizonamining.com
Web: www.arizonamining.com

December 6, 2018

Ms. Monica Phillips
Project Manager
APP and Reuse Unit 1
Groundwater Protection Value Stream
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007

Re: Ambient Groundwater Quality Monitoring—POC-2
Compliance Schedule Item 3.4
Aquifer Protection Permit P-512235

Dear Ms. Phillips:

Arizona Minerals, Inc. has conducted eight rounds of ambient groundwater quality monitoring according to the above-referenced Aquifer Protection Permit (APP). We prepared this submittal to meet the requirements of Compliance Schedule Item 3.4.

Please find the following supporting documentation attached to this cover letter:

- Table 1: Summary of Analytical Results
- Attachment A: Field notes
- Attachment B: Laboratory analytical reports.

Alert levels (ALs) and Aquifer Quality Levels (AQLs) were calculated using the methodology specified in Section 2.5.3.3 of the APP (see attached Table 1). With the exception of cadmium, all of the analytes have a proposed AQL equal to the Ambient Groundwater Quality Standard (AWQS) and the proposed AL is 80% of the AWQS. For cadmium, the proposed AQL is 0.011 mg/L. There is no proposed AL for cadmium, per Section 2.5.3.4 of the APP.

Please feel free to call Sarah Richman with any questions you may have regarding these data at 805-617-9300 or via email at Sarah.Richman@south32.net.

Sincerely,

Johnny Pappas
VP, Environmental and Permitting

ADEQ Arizona Department of Environmental Quality

AQUIFER PROTECTION PROGRAM PERMIT AMENDMENT FORM

GENERAL INFORMATION

1 Applicant [A.A.C. R18-1-503(1)] – Person signing the application

(Check One) ☐ Owner ☐ Operator ☒ Owner and Operator Email

Name Johnny Pappas Phone 520-485-1304

Title VP, Environmental and Permitting Business Arizona Minerals, Inc

Mailing Address 2210 E. Ft. Lowell City Tucson State AZ Zip 85719

2 Permittee – Person responsible for complying with the terms and conditions of the APP

☐ Check this box if the person listed below is not the applicant, include a copy of the Lease or Contract

(Check One) ☐ Owner ☐ Operator ☑ Owner and Operator Email Sarah.Richman@south32.net

Name Sarah Richman Phone 520-848-1330 805-617-9300 (cell)

Title Environmental Coordinator Business Arizona Minerals, Inc.

Mailing Address 2210 E. Ft. Lowell City Tucson State AZ Zip 85719

3 Landowner(s)

☐ Check this box if the person listed below is not the applicant, include a copy of the Lease or Contract

Check One) ☐ Owner ☐ Operator ☐ Owner and Operator Email

Name See applicant info Phone

Title Business

Mailing Address City State Zip

4 Facility Name [A.A.C. R18-1-503(2)]

Facility Name **Trench Camp Property**

5 Authorized Agent [A.A.C. R18-1-503(3)]

☐ Check this box if the person listed below is authorized to act as an "Agent" on behalf of the applicant

Email

Name NA Phone

Title Firm Name

Mailing Address City State Zip

6 Completed Form [A.A.C. R18-1-503(5)]

☐ I have completed and signed the APP amendment form.

7 Initial Fee [A.A.C. R18-1-503(6) and R18-14-103]

☐ Check this box if an initial fee of $2,000 is attached.

☐ Check this box if no initial fee is required (see instructions)

8 Permit Number and Issue Date [A.A.C. R18-9-A202(A)(11)]

Aquifer Protection Permit Number

P-512235

9 Facility Address and Location Information [A.A.C. R18-9-A201(B)(1)]

Address 749 Harshaw Rd

City Patagonia State AZ Zip 85624

County Santa Cruz

Township | Range | Section | Qtr1 | Qtr2 | Qtr3

Latitude 31 ° 27 ' 59.4 "N Longitude 110 ° 43 ' 35.8 "W ☐ NAD27 ☑NAD83

Property is in T22S, 16E sec 32 AND T23S, R16E, unsurveyed sections 4 and 5

10 Emergency Contact [A.A.C. R18-9-A202(A)(11)]

Name Sarah Richman Phone 520-848-1330 805-617-9300 (cell)

11 Certificate of Disclosure [A.A.C. R18-9-A201(B)(2) and A.R.S. § 49-109]

Are you required to file a Certificate of Disclosure? ☐ Yes (attached) ☑ No

SPECIFIC AMENDMENT INFORMATION

12 Amendment Description [A.A.C. R18-9-A211(A)(1)]

☑ I have attached an itemized list of all amendment requests with a justification for each request.

SEE ATTACHED COVER LETTER AND SUPPORTING DATA

13 Design Flow [A.A.C. R18-9-101(13)] ☑ Not Applicable

Please provide the design flow in gallons per day for all the discharging facilities located at the Site. Calculations for determining design flow must be attached as part of this application. "Design flow" means the daily flow rate a facility is designed to accommodate on a sustained basis while satisfying all Aquifer Protection Permit discharge limitations and treatment and operational requirements. The design flow either incorporates or is used with appropriate peaking and safety factors to ensure sustained, reliable operation. The design flow will be used to calculate the Annual Registration Fee in accordance with Arizona Revised Statutes § 49-242.

Design Flow gallons per day

14 Cost Estimates [A.A.C. R18-9-A201(B)(5)] ☑ Not Applicable

Description	Cost Estimate
Construction	$
Operation	$
Maintenance	$
Closure	$
Post-closure	$

I have attached documentation supporting the cost estimates listed above? ☐ Yes (include as attachment)

15 Financial Demonstration [A.A.C. R18-9-A203] ☑ Not Applicable

If this application is for a Significant Amendment, or if this application is for an Other Amendment to a permit that has not been amended in the last 5 years, updated cost estimates and a demonstration of financial assurance are required.

A) I have attached a letter by the Chief Financial Officer stating that the applicant is financially capable of meeting the costs listed in Item 14. ☐ Yes (include as attachment)

B) For government entities, submit a statement that indicates how the entity is capable of meeting the costs in Item 14 above. ☐ Yes (include as attachment)

C) For non-government entities, submit the information required for at least one of the financial assurance mechanisms listed below that covers the closure and post-closure costs submitted in Item 14, including:

1. The selected financial mechanism or mechanisms;
2. The amount covered by each financial mechanism;
3. The institution or company that is responsible for each financial mechanism used in the demonstration; and
4. Any other details that demonstrate how the applicant is financially capable of meeting the costs described in Item 14.

Select Financial Mechanism (Check all that apply)	
☐ Financial Test for Self-Assurance	☐ Letter of Credit
☐ Performance Surety Bond	☐ Insurance Policy
☐ Certificate of Deposit	☐ Cash Deposit
☐ Trust Fund	☐ Guarantees

Note: Please reference A.A.C. R18-9-A203 for specific financial mechanism requirements.

16 Technical Capability [A.A.C. R18-9-A202(B)] ☑ Not Applicable

I have attached evidence that the applicant has the ability to carry out the terms of the permit (design, construction, operation, closure). The attached evidence includes:

A) Pertinent licenses or certifications held by the person.
B) Professional training relevant to the design, construction, or operation of the facility.
C) Work experience relevant to the design, construction, or operation of the facility.

☐ Yes (include as attachment)

17 Facility Compliance History (List all Notices of Violation, Consent Orders or Compliance Orders) ☑ None Issued

Insert additional rows if needed.

18 Process Flow Diagram ☑ Not Applicable

19 Technical Requirements (Check all that have been attached or indicate "Not Applicable" or "NA". See Rule Citation for Specific Requirements)

Description	Page #	NA or Attached?
A) Maps [A.A.C. R18-9-A202(A)(1)]		☑ NA ☐ Attached
B) Site Plan [A.A.C. R18-9-A202(A)(2)]		☑NA ☐ Attached
C) Design Documents [A.A.C. R18-9-A202(A)(3)]		☑NA ☐ Attached
D) Characterization of Discharge [A.A.C. R18-9-A202(A)(4)]		☑NA ☐ Attached
E) Description of Best Available Demonstrated Control Technology [A.A.C. R18-9-A202(A)(5)]		☑NA ☐ Attached
F) Compliance with Aquifer Water Quality Standards at the Point of Compliance [A.A.C. R18-9-A202(A)(6)]		☑NA ☐ Attached
G) Contingency Plan [A.A.C. R18-9-A202(A)(7) and R18-9-A204]		☑ NA ☐ Attached
H) Hydrogeologic Study or ☐ Justification that a limited study or no hydrogeologic study is required [A.A.C. R18-9-A202(A)(8)]		☑ NA ☐ Attached
I) Detailed proposal indicating alert levels, discharge limitations, aquifer quality limits, monitoring requirements (discharge, groundwater and operational monitoring), and compliance schedule items. [A.A.C. R18-9-A202(A)(9)]		☐ NA ☑ Attached
J) Closure and post-closure plans [A.A.C. R18-9-A202(A)(10)]		☑ NA ☐ Attached
SEWAGE TREATMENT FACILITIES (STF) ONLY		
K) For a STF provide a map demonstrating that setbacks have been met [A.A.C. R18-9-B201(I)]		☑ NA ☐ Attached
L) Design Report [A.A.C. R18-9-B202]		☑ NA ☐ Attached
M) Engineering Plans and Specfications [A.A.C. R18-9-B203]		☑ NA ☐ Attached

20 Other Information

List any additional information that is attached as part of this permit amendment.

- Ambient groundwater quality data—Table 1
- Alert level and AQL calculations—Table 1
- Laboratory reports
- Field notes

1110 WEST WASHINGTON, PHOENIX, AZ 85007
WWW.AZDEQ.GOV

(Insert additional rows if needed)

21 Certification Statement (To be completed by the applicant in item 1 above)

I certify under penalty of law that this Aquifer Protection Permit application and all attachments were prepared under my direction or authorization and all information is, to the best of my knowledge, true, accurate and complete. I also certify that the APP discharging facilities described in this form is or will be designed, constructed, operated, and/or closed in accordance with the terms and conditions the Aquifer Protection Permit and applicable requirements of Arizona Revised Statutes Title 49, Chapter 2, and Arizona Administrative Code Title 18, Chapter 9 regarding aquifer protection permits. I am aware that there are significant penalties for submitting false information, including permit revocation as well as the possibility of fine and imprisonment for knowing violations.

Name (Print) Johnny Pappas

Signature [signature] Date 12/6/18

Pursuant to A.R.S. § 41-1030:

(1) ADEQ shall not base a licensing decision, in whole or in part, on a requirement or condition not *specifically* authorized by statute or rule. General authority in a statute does not authorize a requirement or condition *unless* a rule is made pursuant to it that specifically authorizes the requirement or condition.

(2) Prohibited licensing decisions may be challenged in a private civil action. Relief may be awarded to the prevailing party against ADEQ, including reasonable attorney fees, damages, and all fees associated with the license application.

(3) ADEQ employees may not intentionally or knowingly violate the requirement for specific licensing authority. Violation is cause for disciplinary action or dismissal, pursuant to ADEQ's adopted personnel policy. ADEQ employees are still afforded the immunity in A.R.S. §§ 12-821.01 and 12-820.02.

TABLE 1: POC-2 AMBIENT GROUNDWATER QUALITY DATA

APP No. P-512235 Place ID 150279, LTF 65051

	2/26/2018	3/27/2018	4/26/2018	5/29/2018	6/21/2018	7/19/2018	8/21/2018	9/17/2018	Mean	Std Deviation (S)	K	mean + KS	AWQS	AWQS*0.8	AL	AQL
As by ICP/MS, Dissolved (mg/L)	0.01	0.0087	0.0094	0.0087	0.0078	0.0082	0.0068	0.0076	0.0084	0.0010	3.188	0.0117	0.05	0.04	**0.0400**	**0.05**
Ba by ICP/MS Dissolved (mg/L)	0.019	0.022	0.02	0.018	0.018	0.019	0.018	0.018	0.019	0.001	3.188	0.024	2	1.6	**1.6000**	**2**
Be by ICP/MS, Dissolved (mg/L)	0.00062	0.00045	0.00053	<0.0013*	0.00061	0.00069	0.0006	0.00049	Non-detects were changed to half of PQL. See line below for calculations							
Be-- 0.5 x detection limit (if reported as "<")	0.00062	0.00045	0.00053	0.00065	0.00061	0.00069	0.0006	0.00049	0.00058	0.00008	3.188	0.00084	0.004	0.0032	**0.0032**	**0.004**
Cd by ICP/MS Dissolved (mg/L)	0.0056	0.0057	0.0064	0.0058	0.008	0.0082	0.0087	0.0070	0.007	0.001	3.188	0.011	0.005	0.004	**None**	**0.011**
Cr by ICP/MS, Dissolved (mg/L)	0.0011	<0.00050	0.00082	<0.0010*	<0.0010*	<0.00050	<0.00050	<0.00050	Non-detects were changed to half of PQL. See line below for calculations							
Cr-- 0.5 x detection limit (if reported as "<")	0.0011	0.00025	0.00082	0.0005	0.0005	0.00025	0.00025	0.00025	0.0005	0.0003	3.188	0.0015	0.1	0.08	**0.0800**	**0.1**
Cyanide (mg/L)--actual reported	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10**	<0.10	<0.10	Non-detects were changed to half of PQL. See line below for calculations							
Cyanide-- 0.5 x detection limit	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	3.188	0.05	0.2	0.16	**0.16**	**0.2**
F by Ion Chromatography (mg/L)	0.83	<0.50	0.85	<0.50	0.8	<0.50	<0.50	<0.50	Non-detects were changed to half of PQL. See line below for calculations							
F-- 0.5 x detection limit (if reported as "<")	0.83	0.25	0.85	0.25	0.8	0.25	0.25	0.25	0.47	0.30	3.188	1.42	4	3.2	**3.2**	**4**
Hg, Dissolved (mg/L), actual reported	<0.000079	<0.000079	<0.000079	<0.000079	<0.000079	<0.000079	<0.000079	<0.000079	Non-detects were changed to half of PQL. See line below for calculations							
Hg--0.5 x detection limit	0.0000395	0.0000395	0.0000395	0.0000395	0.0000395	0.0000395	0.0000395	0.0000395	0.000040	0.000000	3.188	0.000040	0.002	0.0016	**0.0016**	**0.002**
Ni by ICP/MS, Dissolved (mg/L)	0.057	0.072	0.07	0.064	0.071	0.07	0.063	0.071	0.07	0.01	3.188	0.08	0.1	0.08	**0.08**	**0.1**
Nitrate + Nitrite Sum (mg/L)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	Non-detects were changed to half of PQL. See line below for calculations							
Nitrate+Nitrite-- 0.5 x detection limit	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	3.188	0.05	10	8	**8**	**10**
Pb by ICP/MS, Dissolved (mg/L)	0.0095	<0.00050	0.0026	<0.0010*	0.0036	0.0011	<0.00050	<0.00050	Non-detects were changed to half of PQL. See line below for calculations							
Pb-- 0.5 x detection limit (if reported as "<")	0.0095	0.00025	0.0026	0.0005	0.0036	0.0011	0.00025	0.00025	0.0023	0.0032	3.188	0.0124	0.05	0.04	**0.04**	**0.05**
Sb by ICP/MS, Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.0010*	<0.00050	<0.00050	<0.00050	Non-detects were changed to half of PQL. See line below for calculations							
Sb-- 0.5 x detection limit (if reported as "<")	0.00025	0.00025	0.00025	0.00025	0.0005	0.00025	0.00025	0.00025	0.00028	0.00009	3.188	0.00056	0.006	0.0048	**0.0048**	**0.006**
Se by ICP/MS, Dissolved (mg/L)	0.0017	0.0028	0.0017	0.0018	0.002	0.0017	0.0016	0.0021	0.0019	0.0004	3.188	0.0032	0.05	0.04	**0.04**	**0.05**
Tl by ICP/MS, Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.0010*	<0.0010*	<0.00050	<0.00050	<0.00050	Non-detects were changed to half of PQL. See line below for calculations							
Tl-- 0.5 x detection limit	0.00025	0.00025	0.00025	0.0005	0.0005	0.00025	0.00025	0.00025	0.00031	0.00012	3.188	0.00068	0.002	0.0016	**0.0016**	**0.002**
The analytes below are not "reserved" on Table 4.2.4																
Alkalinity, Total (As CaCO3) (mg/L)	180	190	180	190	180	180	160	170	179	10	3.188	210			**No AL will be calculated**	**No AQL**
Cu by ICP/MS, Dissolved (mg/L)	0.002	0.001	0.0003	<0.00050	0.002	<0.00050	0.00065	0.00050								
Cu--using 0.5 x detection limit for '<" results	0.002	0.001	0.0003	0.00025	0.002	0.00025	0.00065	0.00050	0.001	0.001	3.188	0.003				
Fe by ICP, Dissolved (mg/L)	2.5	1.2	2	1.4	1.6	1.4	<1.5	<0.031								
Fe, using 0.5 x detection limit for '<" results	2.5	1.2	2	1.4	1.6	1.4	0.75	0.0155	1.4	0.8	3.188	3.8				
Mn by ICP/MS, Dissolved (mg/L)	24	25	27	25	28	27	26	26	26	1	3.188	30				
Nitrate by Ion Chromatography (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50								
Nitrate--using 0.5 x detection limit for '<" results	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.00	3.188	0.25				
Nitrite by Ion Chromatography (mg/L)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								
Nitrite--using 0.5 x detection limit for '<" results	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	3.188	0.05				
Sulfate by Ion Chromatography (mg/L)	2200	2200	2200	2200	2100	2200	2100	2100	2163	52	3.188	2327				
Total Dissolved Solids (mg/L)	3200	3300	3300	3300	3300	3400	3300	3200	3288	64	3.188	3492				
Zn by ICP/MS, Dissolved (mg/L)	5.9	5.8	6.2	5.9	6.9	6.4	7.9	6.2	6.4	0.7	3.188	8.6				
pH--standard units	6.67	6.78	6.69	6.64	6.67	6.37	6.64	6.60	6.63	0.12	3.188	7.01				
Depth to Water - Final (ft)	34.17	35.26	33.84	38.3	32.2	33	27	38.2	34.0	3.6	3.188	45.5				
Groundwater Elevation - Final (ft bgs)	4836.83	4835.74	4837.16	4832.7	4838.8	4838	4844	4832.8	4837.0	3.6	3.188	4848.5				
Temp (°C)	19.6	18.2	19	19.8	19.5	20.6	19.5	19.2	19.4	0.7	3.188	21.6				
Specific Conductance (µS/cm)	3205	3232	3818	2991	2982	3548	3474	3519	3346	293	3.188	4280				

Notes: * sample dilution required adjusted MRL
**Turner ran cyanide after hold time due to mix-up in lab

ATTACHMENT A:
FIELD NOTES

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	LocID:	Date: 2/26/18
	Well Name: MW-3 / POC#2	Project #:	Recorded By: MFW Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: OAKTON	Water Level Indicator Type/ID #: WATERLINE 500.01	Carbon Canister: NO
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: YES (alconox)
WELL INFO	Casing I.D. (in) [a]: 2	Unit Casing Volume (gal / lin ft) [b]: 0.16	Initial Depth to Water (ft) [c]: 13.4
	Total Well Depth (ft) [d]: 86	Water Column Thickness (ft) [d-c]: 72.6	Well Volume (gal) {[d-c] x b}: 12
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = ~~MW-3-022618~~ MFW	Cubtainer	NP	Lab Filtered	Radiological	~~Rediflow~~ electric submersible pump	Water Discharged
Sample Time = 0936	~~1liter~~ MFW 500ml	NP	N	Major Cations/Anions wet chem, D Metals		Container Tank
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
POC#2-022618	500-ml	NaOH	N	Cyanide		

Time (24 hr)	Water Level (ft bmp)	Odor (Y/N)	Volume Removed (gal)	Pumping Rate (gpm)	Flow Meter Read (gal)	Temp (C)	Conductivity (uS/cm)	pH	Turbidity (NTU)	Color	Remarks (clarity, etc.)
0919	13.40	N	0	2.5	—	—	—	—	—	Clear	Pump on/
0924	29.95	N	12	2.5	—	18.7	3136	6.66	71.5	clear	
0929	33.33	N	24	2.5	—	19.6	3197	6.69	68.5	Clear	
0934	34.17	N	36	2.5	—	19.6	3205	6.67	47.2	Clear	
0940			51								Pump off
											pump off / after pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	LocID:	Date: 3-27-18
	Well Name: POC#2	Project #:	Recorded By: EP Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: OAKTON	Water Level Indicator Type/ID #: WATERLINE 500.01	Carbon Canister:
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 16.30
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 69.7	Well Volume (gal) {[d-c] x b}: 11
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: GOOD
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2- 32718	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	Water Discharged Container: Tank onsite
Sample Time = 0945	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
0914	16.30	N	0	2.0	—	18.3	3243	6.82	56	CLEAR	0919 TURN Pump on/ OFF. PUMP.
0924	28.91	N	11	2.0	—	18.5	3222.	6.78	74.2	CLEAR.	RE-CALIBRATE. TURBIDITY METER,
0930	33.01	N	23	2.0	—	18.5	3153	6.93	60.6	CLEAR	BY AMI ROBERT DODSON.
0936	35.26	N	35	2.0	—	18.2	3232	6.78	50.7	CLEAR	0923 RE-START PUMP.
0948			59								PUMP OFF
											pump off / after pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 4-26-18
	Well Name: POC#2	Project #: Aquifer Protection Permit No. P-512235	Recorded By: EP. Checked By: MR
EQUIPMENT	Water Quality Meter Type/ID #: OAKTON	Water Level Indicator Type/ID #: WATERLINE 500.01	Carbon Canister: No
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible Pump	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: 2	Unit Casing Volume (gal / lin ft) [b]: 0.16	Initial Depth to Water (ft) [c]: 18.10
	Total Well Depth (ft) [d]: 86	Water Column Thickness (ft) [d-c]: 67.9	Well Volume (gal) {[d-c] x b}: 11 33
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: GOOD.
	Remarks:		

CASING INFO												
	Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
	Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-42618	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 0920	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
0857	18.10	N	0	2	—	21.3	2029	6.75	134	CLEAR	Pump on/
0903	30.00	N	12	2	—	19.2	3690	6.85	37.8	CLEAR	PURGE WATER IN TO STORAGE TANK
0909	32.74	N	24	2	—	19.3	3812	6.70	33.4	CLEAR	
0915	33.84	N	36	2	—	19.0	3818	6.69	14.0	CLEAR	
0925			46								PUMP OFF
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 5-29-18
	Well Name: POC#2	Project #: Aquifer Protection Permit NO. P-512235	Recorded By: RD Checked By: LL
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: NO
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible Pump	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 20.5
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 65.5	Well Volume (gal) {[d-c] x b}: 10.48 31.44
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-052918	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 10:25 a.m.	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	Water Level (ft bmp)	Odor (Y/N)	Volume Removed (gal)	Pumping Rate (gpm)	Flow Meter Read (gal)	Temp (C)	Conductivity (uS/cm)	pH	Turbidity (NTU)	Color	Remarks (clarity, etc.)
09:56	20.5	N	0	2.5	—	23.1	2841	6.52	23	clear	Pump on/
10:02	34.1	N	11	2.5	—	21.3	2850	6.65	22.3	clear	Purge water into storage tank
10:08	36.7	N	20	2.5	—	20.9	3049	6.64	16.3	clear	
10:15	37.8	N	32	2.5	—	21.6	3093	6.66	10.1	clear	
10:20	38.3	N	39	2.5	—	19.8	2991	6.64	7.38	clear	
10:26			44								pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 6-21-18
	Well Name: POC#2	Project #: Aquifer Protection permit p-512235	Recorded By: [illegible] Checked By: [illegible]
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro plus	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: no
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible pump	Equipment Decon: (Alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 14.9
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 71.1	Well Volume (gal) {[d-c] x b}: 11.37 34.12
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: **N/A**	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2- 6-21-18 Sample Time = 12:11 P.M Depth of Pump Inlet = 60 feet btoc	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
11:45am	14.9	N	0	2	—	21°	3170	6.52	33.5	clear	Pump on/
11:50am	27.8	N	10	2	—	20.1°	3043	6.62	13.5	clear	Purge water in to storage tank
11:55am	29.4	N	20	2	—	19.7°	3001	6.67	15.6	clear	
12:03pm	30	N	30	2	—	19.5°	2980	6.67	13.1	clear	
12:08pm	32.2	N	40	2	—	19.5	2982	6.67	8.02	clear	
12:10	25		40	2	—						pump off/ **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

Verdad Group, LLC

pH and Conductivity calibration form
Daily record

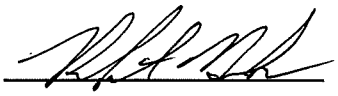
Project: AMI POC-2 Sampling
Date: 6-21-18
Sampler: Robert Dodson

Instrument: YSI Pro Plus
Serial #:

Pre/cal time: 7:40 am
Post/cal time: 8:10 am

Standard	*Lot Number*	*Exp date*	*Store date*	*Temp*	*Pre*	*Calibrated*
pH 4.00						
pH 7.00						
pH 10.00						
Cond 1413						

sampler Robert Dodson

signature 

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	LocID:	Date: 7-19-18
	Well Name: POC#2	Project #: Aquifer Protection Permit No 12-512235	Recorded By: LL Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: N/A
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment: Submersible Pump	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: 2	Unit Casing Volume (gal / lin ft) [b]: 0.16	Initial Depth to Water (ft) [c]: 18.3
	Total Well Depth (ft) [d]: 86	Water Column Thickness (ft) [d-c]: 67.7	Well Volume (gal) ([d-c] x b): 10.83 32.49
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NK	Ground Condition of Well: GOOD
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2- 7-19-18	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 10:45 AM	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
9:58	18.3		0								Pump on/
10:11	29.2	NO	10	2	—	23.0	3500	6.29	11.4	clear	
10:23	31	NO	20	2	—	20.9	3488	6.36	6.33	clear	
10:32	32.5	NO	30	2	—	20.	3576	6.42	3.11	clear	
10:41	33	No	40	2	—	20.6	3548	6.37	0.02	clear	
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 6-21-18
	Well Name: POC#2	Project #:	Recorded By: LL Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: NO
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 16.6
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 69.4	Well Volume (gal) {[d-c] x b}: 11.104
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface	Key Number, if necessary to access well: V4	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 11:05 Am	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
10:22 AM	16.6	No	0	—	—	20.6	1637	6.64	22.2	Clear	Pump on/
10:39 AM	24.9	NO	11	2.5	—	19.4	1818	6.77	14.0	clear	
10:48 AM	25.8	No	20	2.5	—	19.3	3486	6.72	10.02	clear	
10:57 AM	26.5	NO	32	2.5	—	19.3	3469	6.59	9.02	clear	
11:05 AM	27	NO	37	2.5	—	19.5	3474	6.64	9	clear	
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

POC-2 Monthly Suite

	LABORATORY		
Analyte	**Total**	**Dissolved**	**Other**
Metals			
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	
Major Cations			
Hardness	X		
Major Anions			
Total Alkalinity	X		
Acidity	X		
Fluoride	X	X	
Nitrate – Nitrite as N	X	X	
Nitrite - N	X	X	
Nitrate-Nitrite as N 1	X	X	
Sulfate	X	X	
Parameters			
Total Dissolved Solids		X	
RadChem			
Gross Alpha Particle Activity	X	X	
Radium 226 + 228	X	X	
Cyanide			
Free CN	X	X	Free

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 9-17-18
	Well Name: POC#2	Project #: Aquifer Protection Permit No. P-512235	Recorded By: LL Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: YSI Pro	Water Level Indicator Type/ID #: GeoTech water	Carbon Canister: No
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible pump	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 18.6
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 67.4	Well Volume (gal) {[d-c] x b}: 32.352
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-91718	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 1:02	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
12:34	18.6	N	0	2.5	—	22.9	3462	6.56	39.6	clear	Pump on/
12:42	26.34	N	11	2.5	—	22.1	3508	6.58	40.0	clear	
12:51	35.11	N	22	2.5	—	21.4	3479	6.59	18.7	clear	
1:02	38.2	N	33	2.5	—	22.6	3519	6.60	19.2	clear	
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 9-17-18
	Well Name: POC#2	Project #: Aquifer Protection Permit No. P-512235	Recorded By: LL Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: YSI Pro	Water Level Indicator Type/ID #: GeoTech water	Carbon Canister: No
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible pump	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 18.6
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 67.4	Well Volume (gal) {[d-c] x b}: 32.352
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-91718	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 1:02	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
12:34	18.6	N	0	2.5	—	22.9	3462	6.56	39.6	clear	Pump on/
12:42	26.34	N	11	2.5	—	22.1	3508	6.58	40.0	clear	
12:51	35.11	N	22	2.5	—	21.4	3479	6.59	18.7	clear	
1:02	38.2	N	33	2.5	—	22.6	3519	6.60	19.2	clear	
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

ATTACHMENT B:
LABORATORY ANALYTICAL REPORTS

March 14, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18B0633

RE: Ground Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 02/26/2018 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

Kevin Brim
Project Manager

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18B0633-01	POC#2-022618	Ground Water	02/26/2018 0936

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

Case Narrative

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

E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
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.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.

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

Turner Laboratories, Inc.

Date: 03/14/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Lab Sample ID: 18B0633-01

Client Sample ID: POC#2-022618
Collection Date/Time: 02/26/2018 0936
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	02/27/2018 1002	02/27/2018 1429	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	2.5		0.30		mg/L	1	02/27/2018 1655	03/13/2018 1254	MH
Zinc	5.9		0.20	M3	mg/L	5	02/27/2018 1655	03/13/2018 1413	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Arsenic	0.010		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Barium	0.019		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Beryllium	0.00062		0.00050		mg/L	2	02/27/2018 1655	03/06/2018 1427	MH
Cadmium	0.0056		0.00025		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Chromium	0.0011		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Copper	0.0020		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Lead	0.0095		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Manganese	24		0.013		mg/L	50	02/27/2018 1655	03/06/2018 1048	MH
Nickel	0.057		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Selenium	0.0017		0.0025		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
Thallium	ND		0.00050		mg/L	1	02/27/2018 1655	03/05/2018 1652	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	03/05/2018 1139	03/05/2018 1605	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	0.83		0.50		mg/L	1	02/26/2018 1642	02/26/2018 1908	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	02/26/2018 1642	02/26/2018 1908	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	02/27/2018 1002	02/27/2018 1429	AP
Sulfate	2200		500		mg/L	100	02/27/2018 1620	02/28/2018 0324	AP
Cyanide-E335.4									
Cyanide	ND		0.10		mg/L	1	03/05/2018 0910	03/06/2018 1535	AP

Turner Laboratories, Inc.

Date: 03/14/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Lab Sample ID: 18B0633-01

Client Sample ID: POC#2-022618
Collection Date/Time: 02/26/2018 0936
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	02/27/2018 1520	02/27/2018 1555	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	02/27/2018 1520	02/27/2018 1555	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	02/27/2018 1520	02/27/2018 1555	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	02/27/2018 1520	02/27/2018 1555	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	02/27/2018 1520	02/27/2018 1555	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3200		20		mg/L	1	03/01/2018 0830	03/02/2018 1625	EJ

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803028 - E 200.8 (5.4)										
Blank (1803028-BLK1)				Prepared & Analyzed: 03/05/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Manganese	ND	0.00025	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1803028-BS1)				Prepared & Analyzed: 03/05/2018						
Antimony	0.050	0.00050	mg/L	0.05000		101	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115			
Barium	0.050	0.00050	mg/L	0.05000		101	85-115			
Beryllium	0.050	0.00025	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Chromium	0.050	0.00050	mg/L	0.05000		101	85-115			
Copper	0.051	0.00050	mg/L	0.05000		101	85-115			
Lead	0.050	0.00050	mg/L	0.05000		100	85-115			
Manganese	0.052	0.00025	mg/L	0.05000		105	85-115			
Nickel	0.052	0.00050	mg/L	0.05000		104	85-115			
Selenium	0.050	0.0025	mg/L	0.05000		100	85-115			
Thallium	0.051	0.00050	mg/L	0.05000		101	85-115			
LCS Dup (1803028-BSD1)				Prepared & Analyzed: 03/05/2018						
Antimony	0.050	0.00050	mg/L	0.05000		100	85-115	0.5	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.5	20	
Barium	0.050	0.00050	mg/L	0.05000		101	85-115	0.4	20	
Beryllium	0.051	0.00025	mg/L	0.05000		101	85-115	0.4	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	0.4	20	
Chromium	0.051	0.00050	mg/L	0.05000		101	85-115	0.4	20	
Copper	0.050	0.00050	mg/L	0.05000		100	85-115	1	20	
Lead	0.050	0.00050	mg/L	0.05000		100	85-115	0.09	20	
Manganese	0.053	0.00025	mg/L	0.05000		106	85-115	0.8	20	
Nickel	0.052	0.00050	mg/L	0.05000		104	85-115	0.3	20	
Selenium	0.050	0.0025	mg/L	0.05000		100	85-115	0.2	20	
Thallium	0.051	0.00050	mg/L	0.05000		102	85-115	0.8	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803028 - E 200.8 (5.4)										
Matrix Spike (1803028-MS1)		**Source: 18B0491-01**		Prepared & Analyzed: 03/05/2018						
Antimony	0.047	0.00050	mg/L	0.05000	0.0010	92	70-130			
Arsenic	0.067	0.00050	mg/L	0.05000	0.016	102	70-130			
Barium	0.050	0.00050	mg/L	0.05000	0.0043	91	70-130			
Beryllium	0.046	0.00025	mg/L	0.05000	ND	91	70-130			
Cadmium	0.046	0.00025	mg/L	0.05000	ND	92	70-130			
Chromium	0.046	0.00050	mg/L	0.05000	0.00070	91	70-130			
Copper	0.047	0.00050	mg/L	0.05000	0.0019	90	70-130			
Lead	0.046	0.00050	mg/L	0.05000	0.00013	91	70-130			
Manganese	0.052	0.00025	mg/L	0.05000	0.0049	94	70-130			
Nickel	0.046	0.00050	mg/L	0.05000	0.00080	90	70-130			
Selenium	0.055	0.0025	mg/L	0.05000	0.00098	108	70-130			
Thallium	0.046	0.00050	mg/L	0.05000	ND	92	70-130			
Batch 1803032 - E 245.1										
Blank (1803032-BLK1)				Prepared & Analyzed: 03/05/2018						
Mercury	ND	0.0010	mg/L							
LCS (1803032-BS1)				Prepared & Analyzed: 03/05/2018						
Mercury	0.0047	0.0010	mg/L	0.005000		93	85-115			
LCS Dup (1803032-BSD1)				Prepared & Analyzed: 03/05/2018						
Mercury	0.0049	0.0010	mg/L	0.005000		97	85-115	4	20	
Matrix Spike (1803032-MS1)		**Source: 18B0611-01**		Prepared & Analyzed: 03/05/2018						
Mercury	0.0041	0.0010	mg/L	0.005000	ND	82	85-115			M7
Matrix Spike Dup (1803032-MSD1)		**Source: 18B0611-01**		Prepared & Analyzed: 03/05/2018						
Mercury	0.0033	0.0010	mg/L	0.005000	ND	66	85-115	22	20	M7
Batch 1803139 - E 200.7 (4.4)										
Blank (1803139-BLK1)				Prepared & Analyzed: 03/13/2018						
Iron	ND	0.30	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1803139-BS1)				Prepared & Analyzed: 03/13/2018						
Iron	0.96	0.30	mg/L	1.000		96	85-115			
Zinc	0.51	0.040	mg/L	0.5000		103	85-115			
LCS Dup (1803139-BSD1)				Prepared & Analyzed: 03/13/2018						
Iron	0.99	0.30	mg/L	1.000		99	85-115	3	20	
Zinc	0.52	0.040	mg/L	0.5000		104	85-115	1	20	
Matrix Spike (1803139-MS1)		**Source: 18B0633-01**		Prepared & Analyzed: 03/13/2018						
Iron	3.5	0.60	mg/L	1.000	2.5	92	70-130			
Zinc	5.8	0.080	mg/L	0.5000	5.9	NR	70-130			M3

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1802283 - SM2320B										
LCS (1802283-BS1)				Prepared & Analyzed: 02/27/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		95	90-110			
LCS Dup (1802283-BSD1)				Prepared & Analyzed: 02/27/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110	0.8	10	
Matrix Spike (1802283-MS1)		**Source: 18B0501-01**		Prepared & Analyzed: 02/27/2018						
Alkalinity, Total (As CaCO3)	390	2.0	mg/L	250.0	150	94	85-115			
Matrix Spike Dup (1802283-MSD1)		**Source: 18B0501-01**		Prepared & Analyzed: 02/27/2018						
Alkalinity, Total (As CaCO3)	390	2.0	mg/L	250.0	150	94	85-115	0	10	
Batch 1803002 - SM2540 C										
Duplicate (1803002-DUP1)		**Source: 18B0632-03**		Prepared: 03/01/2018 Analyzed: 03/02/2018						
Total Dissolved Solids (Residue, Filterable)	490	20	mg/L		510			5	5	
Batch 1803030 - E335.4										
Blank (1803030-BLK1)				Prepared: 03/05/2018 Analyzed: 03/06/2018						
Cyanide	ND	0.10	mg/L							
LCS (1803030-BS1)				Prepared: 03/05/2018 Analyzed: 03/06/2018						
Cyanide	2.1	0.10	mg/L	2.000		106	90-110			
LCS Dup (1803030-BSD1)				Prepared: 03/05/2018 Analyzed: 03/06/2018						
Cyanide	2.1	0.10	mg/L	2.000		104	90-110	2	20	
Matrix Spike (1803030-MS1)		**Source: 18B0611-01**		Prepared: 03/05/2018 Analyzed: 03/06/2018						
Cyanide	2.1	0.10	mg/L	2.000	ND	104	90-110			
Matrix Spike Dup (1803030-MSD1)		**Source: 18B0611-01**		Prepared: 03/05/2018 Analyzed: 03/06/2018						
Cyanide	1.9	0.10	mg/L	2.000	ND	97	90-110	8	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18B0633
Date Received: 02/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1802266 - E300.0 (2.1)										
Blank (1802266-BLK1)				Prepared & Analyzed: 02/26/2018						
Fluoride	ND	0.50	mg/L							
Nitrogen, Nitrate (As N)	ND	0.50	mg/L							
Sulfate	ND	5.0	mg/L							
LCS (1802266-BS1)				Prepared & Analyzed: 02/26/2018						
Fluoride	2.0	0.50	mg/L	2.000		101	90-110			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		99	90-110			
Sulfate	13	5.0	mg/L	12.50		100	90-110			
LCS Dup (1802266-BSD1)				Prepared & Analyzed: 02/26/2018						
Fluoride	2.0	0.50	mg/L	2.000		102	90-110	0.7	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		100	90-110	0.8	10	
Sulfate	13	5.0	mg/L	12.50		100	90-110	0.5	10	
Matrix Spike (1802266-MS1)		**Source: 18B0627-01**		Prepared & Analyzed: 02/26/2018						
Nitrogen, Nitrate (As N)	7.7	0.50	mg/L	5.000	1.8	118	80-120			
Sulfate	33	5.0	mg/L	12.50	20	105	80-120			
Matrix Spike (1802266-MS3)		**Source: 18B0624-02**		Prepared & Analyzed: 03/05/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.26	96	80-120			
Matrix Spike Dup (1802266-MSD1)		**Source: 18B0627-01**		Prepared & Analyzed: 02/26/2018						
Nitrogen, Nitrate (As N)	7.7	0.50	mg/L	5.000	1.8	118	80-120	0.4	10	
Sulfate	33	5.0	mg/L	12.50	20	106	80-120	0.1	10	
Matrix Spike Dup (1802266-MSD3)		**Source: 18B0624-02**		Prepared & Analyzed: 03/05/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.26	96	80-120	0.09	10	
Batch 1802278 - E300.0 (2.1)										
Blank (1802278-BLK1)				Prepared & Analyzed: 02/27/2018						
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1802278-BS1)				Prepared & Analyzed: 02/27/2018						
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		105	90-110			
LCS Dup (1802278-BSD1)				Prepared & Analyzed: 02/27/2018						
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		106	90-110	0.7	10	
Matrix Spike (1802278-MS3)		**Source: 18B0638-01**		Prepared: 02/27/2018 Analyzed: 02/28/2018						
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	97	80-120			
Matrix Spike (1802278-MS4)		**Source: 18B0642-02**		Prepared: 02/28/2018 Analyzed: 03/01/2018						
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	84	80-120			
Matrix Spike Dup (1802278-MSD3)		**Source: 18B0638-01**		Prepared: 02/27/2018 Analyzed: 02/28/2018						
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	97	80-120	0.8	10	
Matrix Spike Dup (1802278-MSD4)		**Source: 18B0642-02**		Prepared: 02/28/2018 Analyzed: 03/01/2018						
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	84	80-120	0.05	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18B0633 DATE 2/26/18 PAGE _____ OF _____

PROJECT NAME: Surface Water

CONTACT NAME : Johnny Pappas

COMPANY NAME : Arizona Mining

ADDRESS : 3845 N Business Center Drive, Ste 115

CITY Tucson STATE AZ ZIP CODE 85705

PHONE 520-235-5563 FAX

SAMPLER'S SIGNATURE _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	*** See Attachment	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
POC#2-022618	2/26/2018	0936		Groundwater	4	x	

1. RELINQUISHED BY:
Signature Edgar Peralta
Printed Name EDGAR PERALTA
Firm
Date/Time 2-26-18 1427

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature Joseph Catalano
Printed Name
TURNER LABORATORIES, INC.
Firm 2/26/18 1427
Date/Time

TURNAROUND REQUIREMENTS:
_____ Standard (approx.10 days)*
___ Next day ___ 2 Day ___ 5 Day*
___ Email Preliminary Results To:
_____
* Working Days

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 4
Temperature 3.5
☒ Wet Ice ☐ Blue Ice

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	☒
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☒	Received Within Hold Time	☒

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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: February 26, 2018
Sample Received: February 28, 2018
Analysis Completed: March 12, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18B0633-01	4.8 ± 1.3	< 0.5	< 0.7	< 0.7

Date of Analysis	3/7/2018	3/2/2018	3/2/2018	3/2/2018

3/12/2018
Robert L. Metzger, Ph.D., C.H.P. 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: _____

February 26, 2018 (Sample Date) 9:36 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	3/7/2018	4.8 ± 1.3		
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	3/2/2018	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	3/2/2018	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	3/2/2018	< 0.7		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE59999

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: 18B0633-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18B0633

SENDING LABORATORY:

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

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: 18B0633-01 Drinking Water Sampled:02/26/2018 09:36		[redacted]	
Radiochemistry, Radium 226/228	03/28/2018 09:36		
Radiochemistry, Gross Alpha	08/25/2018 09:36		
Containers Supplied:			

59999

Released By	Date	Received By	Date
[signature]	2/28/18 1600	[signature]	2/28/18 1600
Released By	Date	Received By	Date

April 13, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18C0641
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 03/27/2018 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

Max DiSante
Laboratory Director

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18C0641-01	POC#2-32718	Ground Water	03/27/2018 0945
18C0641-02	JA#132718	Ground Water	03/27/2018 1125

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

Case Narrative

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

E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
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.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.
Q5	Sample was received with inadequate chemical preservation, but preserved by the laboratory.

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: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-01

Client Sample ID: POC#2-32718
Collection Date/Time: 03/27/2018 0945
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	1.2		0.30		mg/L	1	03/30/2018 0800	04/02/2018 1545	MH
Manganese	25		0.20		mg/L	10	03/30/2018 0800	04/02/2018 1542	MH
Zinc	5.8		0.40		mg/L	10	03/30/2018 0800	04/02/2018 1542	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Arsenic	0.0087		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Barium	0.022		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Beryllium	0.00045		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Cadmium	0.0057		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Chromium	ND		0.00050		mg/L	1	03/30/2018 0800	04/02/2018 1446	MH
Copper	0.0010		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Lead	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Nickel	0.072		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Selenium	0.0028		0.0025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Thallium	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND		0.0010		mg/L	1	04/06/2018 0940	04/06/2018 1526	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Sulfate	2200		500		mg/L	100	03/28/2018 1615	03/28/2018 1727	AP
Cyanide-E335.4									
Cyanide	ND		0.10	Q5	mg/L	1	04/03/2018 0915	04/04/2018 1635	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	190		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-01

Client Sample ID: POC#2-32718
Collection Date/Time: 03/27/2018 0945
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Total (As CaCO3)	190		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	03/28/2018 0830	03/30/2018 1600	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-02

Client Sample ID: JA#132718
Collection Date/Time: 03/27/2018 1125
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2500				mg/L	10	03/30/2018 0930	04/02/2018 1227	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	0.0045		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Arsenic	0.025		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Barium	0.0050		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Beryllium	ND		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Cadmium	0.00026		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Chromium	ND		0.00050		mg/L	1	03/30/2018 0800	04/02/2018 1430	MH
Lead	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Nickel	0.044		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Selenium	0.0026		0.0025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Thallium	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND		0.0010		mg/L	1	04/06/2018 0940	04/06/2018 1528	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	580		40	M3	mg/L	10	03/30/2018 0930	04/02/2018 1227	MH
Magnesium	250		3.0	M3	mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
Potassium	8.3		5.0		mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
Sodium	83		5.0		mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
ICP/MS Total Metals-E200.8 (5.4)									
Antimony	0.015		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Arsenic	0.12		0.0050		mg/L	10	04/04/2018 0915	04/05/2018 1133	MH
Barium	0.0051		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Beryllium	ND		0.00025		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Cadmium	0.0020		0.00025		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Chromium	ND		0.00050		mg/L	1	04/10/2018 1000	04/11/2018 1719	MH
Lead	0.26		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Nickel	0.037		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Selenium	0.0013	0.00025	0.0025	E4	mg/L	1	04/04/2018 0915	04/05/2018 1111	MH

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-02

Client Sample ID: JA#132718
Collection Date/Time: 03/27/2018 1125
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Thallium	ND		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
CVAA Total Mercury-E245.1									
Mercury	ND		0.0010		mg/L	1	04/09/2018 1015	04/09/2018 1521	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Chloride	16		1.0		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Fluoride	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Sulfate	2300		500		mg/L	100	03/28/2018 1615	03/28/2018 1745	AP
Cyanide-E335.4									
Cyanide	ND		0.10	Q5	mg/L	1	04/03/2018 0915	04/04/2018 1635	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803315 - E 200.8 (5.4)										
Blank (1803315-BLK1)				Prepared & Analyzed: 03/30/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1803315-BS1)				Prepared & Analyzed: 03/30/2018						
Antimony	0.045	0.00050	mg/L	0.05000		90	85-115			
Arsenic	0.046	0.00050	mg/L	0.05000		91	85-115			
Barium	0.046	0.00050	mg/L	0.05000		91	85-115			
Beryllium	0.046	0.00025	mg/L	0.05000		91	85-115			
Cadmium	0.046	0.00025	mg/L	0.05000		92	85-115			
Chromium	0.047	0.00050	mg/L	0.05000		94	85-115			
Copper	0.046	0.00050	mg/L	0.05000		92	85-115			
Lead	0.045	0.00050	mg/L	0.05000		90	85-115			
Nickel	0.046	0.00050	mg/L	0.05000		92	85-115			
Selenium	0.046	0.0025	mg/L	0.05000		92	85-115			
Thallium	0.046	0.00050	mg/L	0.05000		92	85-115			
LCS Dup (1803315-BSD1)				Prepared & Analyzed: 03/30/2018						
Antimony	0.045	0.00050	mg/L	0.05000		90	85-115	0.3	20	
Arsenic	0.046	0.00050	mg/L	0.05000		92	85-115	0.8	20	
Barium	0.045	0.00050	mg/L	0.05000		90	85-115	1	20	
Beryllium	0.045	0.00025	mg/L	0.05000		91	85-115	0.8	20	
Cadmium	0.046	0.00025	mg/L	0.05000		91	85-115	0.8	20	
Chromium	0.047	0.00050	mg/L	0.05000		95	85-115	0.9	20	
Copper	0.046	0.00050	mg/L	0.05000		93	85-115	1	20	
Lead	0.045	0.00050	mg/L	0.05000		90	85-115	0.02	20	
Nickel	0.047	0.00050	mg/L	0.05000		93	85-115	1	20	
Selenium	0.047	0.0025	mg/L	0.05000		95	85-115	3	20	
Thallium	0.046	0.00050	mg/L	0.05000		92	85-115	0.6	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803315 - E 200.8 (5.4)										
Matrix Spike (1803315-MS1)	**Source: 18C0648-06**			Prepared & Analyzed: 03/30/2018						
Antimony	0.049	0.00050	mg/L	0.05000	0.0029	92	70-130			
Arsenic	0.059	0.00050	mg/L	0.05000	0.0055	107	70-130			
Barium	0.064	0.00050	mg/L	0.05000	0.014	100	70-130			
Beryllium	0.027	0.00025	mg/L	0.05000	0.000084	53	70-130			M7
Cadmium	0.042	0.00025	mg/L	0.05000	0.00026	84	70-130			
Chromium	0.048	0.00050	mg/L	0.05000	0.00034	95	70-130			
Copper	0.045	0.00050	mg/L	0.05000	0.0057	78	70-130			
Lead	0.048	0.00050	mg/L	0.05000	0.00018	96	70-130			
Nickel	0.059	0.00050	mg/L	0.05000	0.016	87	70-130			
Selenium	0.064	0.0025	mg/L	0.05000	0.0016	125	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.00039	99	70-130			
Batch 1803317 - E 200.7 (4.4)										
Blank (1803317-BLK1)				Prepared & Analyzed: 04/02/2018						
Iron	ND	0.30	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1803317-BS1)				Prepared & Analyzed: 04/02/2018						
Iron	1.0	0.30	mg/L	1.000		102	85-115			
Manganese	0.52	0.020	mg/L	0.5000		105	85-115			
Zinc	0.52	0.040	mg/L	0.5000		104	85-115			
LCS Dup (1803317-BSD1)				Prepared & Analyzed: 04/02/2018						
Iron	1.0	0.30	mg/L	1.000		101	85-115	2	20	
Manganese	0.51	0.020	mg/L	0.5000		103	85-115	2	20	
Zinc	0.51	0.040	mg/L	0.5000		103	85-115	1	20	
Matrix Spike (1803317-MS1)	**Source: 18C0660-01**			Prepared & Analyzed: 04/02/2018						
Iron	0.99	0.30	mg/L	1.000	0.020	97	70-130			
Manganese	0.50	0.020	mg/L	0.5000	0.010	98	70-130			
Zinc	0.54	0.040	mg/L	0.5000	0.034	100	70-130			
Batch 1803321 - E200.7 (4.4)										
Blank (1803321-BLK1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Sodium	ND	5.0	mg/L							
LCS (1803321-BS1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	9.8	4.0	mg/L	10.00		98	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
Potassium	10	5.0	mg/L	10.00		100	85-115			
Sodium	11	5.0	mg/L	10.00		105	85-115			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803321 - E200.7 (4.4)										
LCS Dup (1803321-BSD1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	10	4.0	mg/L	10.00		100	85-115	1	20	
Magnesium	10	3.0	mg/L	10.00		102	85-115	1	20	
Potassium	10	5.0	mg/L	10.00		101	85-115	0.9	20	
Sodium	11	5.0	mg/L	10.00		106	85-115	0.7	20	
Matrix Spike (1803321-MS1)	**Source: 18C0641-02**			Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	530	40	mg/L	10.00	580	NR	70-130			M3
Magnesium	260	3.0	mg/L	10.00	250	155	70-130			M3
Potassium	19	5.0	mg/L	10.00	8.3	110	70-130			
Sodium	93	5.0	mg/L	10.00	83	102	70-130			
Batch 1804036 - E200.8 (5.4)										
Blank (1804036-BLK1)				Prepared & Analyzed: 04/04/2018						
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							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1804036-BS1)				Prepared & Analyzed: 04/04/2018						
Antimony	0.050	0.00050	mg/L	0.05000		99	85-115			
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.053	0.00025	mg/L	0.05000		106	85-115			
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115			
Chromium	0.049	0.00050	mg/L	0.05000		99	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.048	0.00050	mg/L	0.05000		96	85-115			
Selenium	0.048	0.0025	mg/L	0.05000		95	85-115			
Thallium	0.048	0.00050	mg/L	0.05000		97	85-115			
LCS Dup (1804036-BSD1)				Prepared & Analyzed: 04/04/2018						
Antimony	0.050	0.00050	mg/L	0.05000		100	85-115	0.3	20	
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115	0.3	20	
Barium	0.050	0.00050	mg/L	0.05000		100	85-115	0.04	20	
Beryllium	0.052	0.00025	mg/L	0.05000		103	85-115	2	20	
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115	0.1	20	
Chromium	0.050	0.00050	mg/L	0.05000		100	85-115	1	20	
Lead	0.050	0.00050	mg/L	0.05000		100	85-115	2	20	
Nickel	0.049	0.00050	mg/L	0.05000		97	85-115	0.5	20	
Selenium	0.048	0.0025	mg/L	0.05000		97	85-115	2	20	
Thallium	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804036 - E200.8 (5.4)										
Matrix Spike (1804036-MS1)		**Source: 18D0143-02**		Prepared & Analyzed: 04/04/2018						
Antimony	0.048	0.00050	mg/L	0.05000	0.000058	97	70-130			
Arsenic	0.053	0.0025	mg/L	0.05000	0.0026	101	70-130			
Barium	0.067	0.00050	mg/L	0.05000	0.017	100	70-130			
Beryllium	0.050	0.0013	mg/L	0.05000	0.00010	100	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	ND	99	70-130			
Chromium	0.046	0.00050	mg/L	0.05000	0.00043	92	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.00053	103	70-130			
Nickel	0.044	0.00050	mg/L	0.05000	0.0013	86	70-130			
Selenium	0.050	0.0025	mg/L	0.05000	0.0018	97	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.000035	100	70-130			
Batch 1804065 - E 245.1										
Blank (1804065-BLK1)				Prepared & Analyzed: 04/06/2018						
Mercury	ND	0.0010	mg/L							
LCS (1804065-BS1)				Prepared & Analyzed: 04/06/2018						
Mercury	0.0048	0.0010	mg/L	0.005000		96	85-115			
LCS Dup (1804065-BSD1)				Prepared & Analyzed: 04/06/2018						
Mercury	0.0051	0.0010	mg/L	0.005000		102	85-115	6	20	
Matrix Spike (1804065-MS1)		**Source: 18C0606-01**		Prepared & Analyzed: 04/06/2018						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	99	85-115			
Matrix Spike Dup (1804065-MSD1)		**Source: 18C0606-01**		Prepared & Analyzed: 04/06/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	0.6	20	
Batch 1804074 - E245.1										
Blank (1804074-BLK1)				Prepared & Analyzed: 04/09/2018						
Mercury	ND	0.0010	mg/L							
LCS (1804074-BS1)				Prepared & Analyzed: 04/09/2018						
Mercury	0.0052	0.0010	mg/L	0.005000		104	85-115			
LCS Dup (1804074-BSD1)				Prepared & Analyzed: 04/09/2018						
Mercury	0.0053	0.0010	mg/L	0.005000		107	85-115	3	20	
Matrix Spike (1804074-MS1)		**Source: 18C0692-01**		Prepared & Analyzed: 04/09/2018						
Mercury	0.0048	0.0010	mg/L	0.005000	ND	97	85-115			
Matrix Spike Dup (1804074-MSD1)		**Source: 18C0692-01**		Prepared & Analyzed: 04/09/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	2	20	
Batch 1804103 - E200.8 (5.4)										
Blank (1804103-BLK1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	ND	0.00050	mg/L							
LCS (1804103-BS1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.048	0.00050	mg/L	0.05000		96	85-115			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804103 - E200.8 (5.4)										
LCS Dup (1804103-BSD1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.049	0.00050	mg/L	0.05000		98	85-115	2	20	
Matrix Spike (1804103-MS1)		**Source: 18D0193-01**		Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.046	0.00050	mg/L	0.05000	ND	92	70-130			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803287 - SM2540 C										
Duplicate (1803287-DUP1)		**Source: 18C0639-01**		Prepared: 03/28/2018 Analyzed: 03/29/2018						
Total Dissolved Solids (Residue, Filterable)	410	20	mg/L		420			1	5	
Batch 1804011 - SM2320B										
LCS (1804011-BS1)				Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110			
LCS Dup (1804011-BSD1)				Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110	2	10	
Matrix Spike (1804011-MS1)		**Source: 18C0693-01**		Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	380	2.0	mg/L	250.0	150	93	85-115			
Matrix Spike Dup (1804011-MSD1)		**Source: 18C0693-01**		Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	390	2.0	mg/L	250.0	150	94	85-115	0.5	10	
Batch 1804049 - E335.4										
Blank (1804049-BLK1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	ND	0.10	mg/L							
LCS (1804049-BS1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.1	0.10	mg/L	2.000		107	90-110			
LCS Dup (1804049-BSD1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.2	0.10	mg/L	2.000		109	90-110	2	20	
Matrix Spike (1804049-MS1)		**Source: 18C0606-01**		Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	102	90-110			
Matrix Spike Dup (1804049-MSD1)		**Source: 18C0606-01**		Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.1	0.10	mg/L	2.000	ND	105	90-110	3	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803274 - E300.0 (2.1)										
Blank (1803274-BLK1)				Prepared & Analyzed: 03/27/2018						
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							
LCS (1803274-BS1)				Prepared & Analyzed: 03/27/2018						
Chloride	12	1.0	mg/L	12.50		94	90-110			
Fluoride	2.1	0.50	mg/L	2.000		103	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		98	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
Sulfate	12	5.0	mg/L	12.50		97	90-110			
LCS Dup (1803274-BSD1)				Prepared & Analyzed: 03/27/2018						
Chloride	12	1.0	mg/L	12.50		93	90-110	1	10	
Fluoride	2.0	0.50	mg/L	2.000		102	90-110	1	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500		92	90-110	3	10	
Sulfate	12	5.0	mg/L	12.50		97	90-110	0.02	10	
Matrix Spike (1803274-MS1)	**Source: 18C0637-02**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.044	103	80-120			
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	1.2	95	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120			
Matrix Spike (1803274-MS2)	**Source: 18C0647-08**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Chloride	12	1.0	mg/L	12.50	0.56	94	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.22	95	80-120			
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120			
Matrix Spike Dup (1803274-MSD1)	**Source: 18C0637-02**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.044	103	80-120	0.5	10	
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	1.2	94	80-120	0.9	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	90	80-120	0.4	10	
Sulfate	13	5.0	mg/L	12.50	2.2	90	80-120	1	10	
Matrix Spike Dup (1803274-MSD2)	**Source: 18C0647-08**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Chloride	12	1.0	mg/L	12.50	0.56	94	80-120	0.2	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.22	95	80-120	0.3	10	
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120	0.02	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18C0641 DATE 3/27/18 PAGE _____ OF _____

PROJECT NAME: Surface Water

CONTACT NAME : Johnny Pappas

COMPANY NAME : Arizona Mining

ADDRESS : 3845 N Business Center Drive, Ste 115

CITY Tucson STATE AZ ZIP CODE 85705

PHONE 520-235-5563 FAX

SAMPLER'S SIGNATURE Edgar Pereyra.

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	*** See Attachment	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
POC#2-3278	3-27-18	0945		Groundwater	4	x	
JA#132718	3-27-18	1125		GROUNDWATER	4	x	

1. RELINQUISHED BY: Edgar Pereyra.
Signature
Printed Name
Firm
3/27/18 1351
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
_____ **Standard (approx.10 days)***
___Next day ___2 Day ___5 Day*
____ Email Preliminary Results To:
* Working Days

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 4
Temperature 4.4
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature Joseph Estrada
Printed Name
TURNER LABORATORIES, INC.
Firm
3/27/18 1351
Date/Time

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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

Samples Received: March 28, 2018
Analysis Completed: April 10, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18C0641-01	4.8 ± 1.3	< 0.5	< 0.6	< 0.6
18C0641-02	< 2.4	< 0.5	< 0.6	< 0.6

Jeremy Russell, B.S.E. 4/10/2018
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: _____

March 27, 2018 (Sample Date) 9:45 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	4/4/2018	4.8 ± 1.3		
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	3/30/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	3/30/2018	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	3/30/2018	< 0.6		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60127

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: 18C0641-01

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

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: _____

March 27, 2018 (Sample Date) 11:25 (Sample Time) (24 hour clock)

_____ Owner/Contact Person

_____ Owner/Contact Fax Number

_____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	4/4/2018	< 2.4	
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	3/30/2018	< 0.6	
GammaRay HPGE		1 pCi/L	Radium 226	4020	3/30/2018	< 0.5	
GammaRay HPGE		1 pCi/L	Radium 228	4030	3/30/2018	< 0.6	

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60128

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: 18C0641-02

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18C0641

SENDING LABORATORY:

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

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: 18C0641-01 Drinking Water Sampled:03/27/2018 09:45			
Radiochemistry, Radium 226/228	04/26/2018 09:45		
Radiochemistry, Gross Alpha	09/23/2018 09:45		
Containers Supplied:			
#60127			
Sample ID: 18C0641-02 Drinking Water Sampled:03/27/2018 11:25			
Radiochemistry, Radium 226/228	04/26/2018 11:25		Dissolved
Radiochemistry, Gross Alpha	09/23/2018 11:25		Dissolved
Containers Supplied:			
#60128			

#60127 3/27/18 GXC

Released By	Date	Received By	Date
[signature]	3/28/18 16:00	UPS	3/28/18 16:00
Released By	Date	Received By	Date

October 05, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18C0641
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 03/27/2018 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: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18C0641-01	POC#2-32718	Ground Water	03/27/2018 0945
18C0641-02	JA#132718	Ground Water	03/27/2018 1125

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

Case Narrative

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

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.
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.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.
Q5	Sample was received with inadequate chemical preservation, but preserved by the laboratory.

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

Turner Laboratories, Inc.

Date: 10/05/2018

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-01

Client Sample ID: POC#2-32718
Collection Date/Time: 03/27/2018 0945
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	1.2		0.30		mg/L	1	03/30/2018 0800	04/02/2018 1545	MH
Manganese	25		0.20		mg/L	10	03/30/2018 0800	04/02/2018 1542	MH
Zinc	5.8		0.40		mg/L	10	03/30/2018 0800	04/02/2018 1542	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Arsenic	0.0087		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Barium	0.022		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Beryllium	0.00045		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Cadmium	0.0057		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Chromium	ND		0.00050		mg/L	1	03/30/2018 0800	04/02/2018 1446	MH
Copper	0.0010		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Lead	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Nickel	0.072		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Selenium	0.0028		0.0025		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
Thallium	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1259	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	04/06/2018 0940	04/06/2018 1526	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2242	AP
Sulfate	2200		500		mg/L	100	03/28/2018 1615	03/28/2018 1727	AP
Cyanide-E335.4									
Cyanide	ND		0.10	Q5	mg/L	1	04/03/2018 0915	04/04/2018 1635	AP

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-01

Client Sample ID: POC#2-32718
Collection Date/Time: 03/27/2018 0945
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	190		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Total (As CaCO3)	190		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	03/28/2018 0830	03/30/2018 1600	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-02

Client Sample ID: JA#132718
Collection Date/Time: 03/27/2018 1125
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2500				mg/L	10	03/30/2018 0930	04/02/2018 1227	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	0.0045		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Arsenic	0.025		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Barium	0.0050		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Beryllium	ND		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Cadmium	0.00026		0.00025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Chromium	ND		0.00050		mg/L	1	03/30/2018 0800	04/02/2018 1430	MH
Lead	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Nickel	0.044		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Selenium	0.0026		0.0025		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
Thallium	ND		0.00050		mg/L	1	03/30/2018 0800	03/30/2018 1315	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	04/06/2018 0940	04/06/2018 1528	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	580		40	M3	mg/L	10	03/30/2018 0930	04/02/2018 1227	MH
Magnesium	250		3.0	M3	mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
Potassium	8.3		5.0		mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
Sodium	83		5.0		mg/L	1	03/30/2018 0930	04/02/2018 1211	MH
ICP/MS Total Metals-E200.8 (5.4)									
Antimony	0.015		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Arsenic	0.12		0.0050		mg/L	10	04/04/2018 0915	04/05/2018 1133	MH
Barium	0.0051		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Beryllium	ND		0.00025		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Cadmium	0.0020		0.00025		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Chromium	ND		0.00050		mg/L	1	04/10/2018 1000	04/11/2018 1719	MH
Lead	0.26		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Nickel	0.037		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
Selenium	0.0013	0.00025	0.0025	E4	mg/L	1	04/04/2018 0915	04/05/2018 1111	MH

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Lab Sample ID: 18C0641-02

Client Sample ID: JA#132718
Collection Date/Time: 03/27/2018 1125
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Thallium	ND		0.00050		mg/L	1	04/04/2018 0915	04/05/2018 1111	MH
CVAA Total Mercury-E245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	04/09/2018 1015	04/09/2018 1521	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Chloride	16		1.0		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Fluoride	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	03/27/2018 1624	03/27/2018 2300	AP
Sulfate	2300		500		mg/L	100	03/28/2018 1615	03/28/2018 1745	AP
Cyanide-E335.4									
Cyanide	ND		0.10	Q5	mg/L	1	04/03/2018 0915	04/04/2018 1635	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	04/02/2018 1335	04/02/2018 1505	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803315 - E 200.8 (5.4)										
Blank (1803315-BLK1)				Prepared & Analyzed: 03/30/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1803315-BS1)				Prepared & Analyzed: 03/30/2018						
Antimony	0.045	0.00050	mg/L	0.05000		90	85-115			
Arsenic	0.046	0.00050	mg/L	0.05000		91	85-115			
Barium	0.046	0.00050	mg/L	0.05000		91	85-115			
Beryllium	0.046	0.00025	mg/L	0.05000		91	85-115			
Cadmium	0.046	0.00025	mg/L	0.05000		92	85-115			
Chromium	0.047	0.00050	mg/L	0.05000		94	85-115			
Copper	0.046	0.00050	mg/L	0.05000		92	85-115			
Lead	0.045	0.00050	mg/L	0.05000		90	85-115			
Nickel	0.046	0.00050	mg/L	0.05000		92	85-115			
Selenium	0.046	0.0025	mg/L	0.05000		92	85-115			
Thallium	0.046	0.00050	mg/L	0.05000		92	85-115			
LCS Dup (1803315-BSD1)				Prepared & Analyzed: 03/30/2018						
Antimony	0.045	0.00050	mg/L	0.05000		90	85-115	0.3	20	
Arsenic	0.046	0.00050	mg/L	0.05000		92	85-115	0.8	20	
Barium	0.045	0.00050	mg/L	0.05000		90	85-115	1	20	
Beryllium	0.045	0.00025	mg/L	0.05000		91	85-115	0.8	20	
Cadmium	0.046	0.00025	mg/L	0.05000		91	85-115	0.8	20	
Chromium	0.047	0.00050	mg/L	0.05000		95	85-115	0.9	20	
Copper	0.046	0.00050	mg/L	0.05000		93	85-115	1	20	
Lead	0.045	0.00050	mg/L	0.05000		90	85-115	0.02	20	
Nickel	0.047	0.00050	mg/L	0.05000		93	85-115	1	20	
Selenium	0.047	0.0025	mg/L	0.05000		95	85-115	3	20	
Thallium	0.046	0.00050	mg/L	0.05000		92	85-115	0.6	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803315 - E 200.8 (5.4)										
Matrix Spike (1803315-MS1)	**Source: 18C0648-06**			Prepared & Analyzed: 03/30/2018						
Antimony	0.049	0.00050	mg/L	0.05000	0.0029	92	70-130			
Arsenic	0.059	0.00050	mg/L	0.05000	0.0055	107	70-130			
Barium	0.064	0.00050	mg/L	0.05000	0.014	100	70-130			
Beryllium	0.027	0.00025	mg/L	0.05000	0.000084	53	70-130			M7
Cadmium	0.042	0.00025	mg/L	0.05000	0.00026	84	70-130			
Chromium	0.048	0.00050	mg/L	0.05000	0.00034	95	70-130			
Copper	0.045	0.00050	mg/L	0.05000	0.0057	78	70-130			
Lead	0.048	0.00050	mg/L	0.05000	0.00018	96	70-130			
Nickel	0.059	0.00050	mg/L	0.05000	0.016	87	70-130			
Selenium	0.064	0.0025	mg/L	0.05000	0.0016	125	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.00039	99	70-130			
Batch 1803317 - E 200.7 (4.4)										
Blank (1803317-BLK1)				Prepared & Analyzed: 04/02/2018						
Iron	ND	0.30	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1803317-BS1)				Prepared & Analyzed: 04/02/2018						
Iron	1.0	0.30	mg/L	1.000		102	85-115			
Manganese	0.52	0.020	mg/L	0.5000		105	85-115			
Zinc	0.52	0.040	mg/L	0.5000		104	85-115			
LCS Dup (1803317-BSD1)				Prepared & Analyzed: 04/02/2018						
Iron	1.0	0.30	mg/L	1.000		101	85-115	2	20	
Manganese	0.51	0.020	mg/L	0.5000		103	85-115	2	20	
Zinc	0.51	0.040	mg/L	0.5000		103	85-115	1	20	
Matrix Spike (1803317-MS1)	**Source: 18C0660-01**			Prepared & Analyzed: 04/02/2018						
Iron	0.99	0.30	mg/L	1.000	0.020	97	70-130			
Manganese	0.50	0.020	mg/L	0.5000	0.010	98	70-130			
Zinc	0.54	0.040	mg/L	0.5000	0.034	100	70-130			
Batch 1803321 - E200.7 (4.4)										
Blank (1803321-BLK1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Sodium	ND	5.0	mg/L							
LCS (1803321-BS1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	9.8	4.0	mg/L	10.00		98	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
Potassium	10	5.0	mg/L	10.00		100	85-115			
Sodium	11	5.0	mg/L	10.00		105	85-115			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803321 - E200.7 (4.4)										
LCS Dup (1803321-BSD1)				Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	10	4.0	mg/L	10.00		100	85-115	1	20	
Magnesium	10	3.0	mg/L	10.00		102	85-115	1	20	
Potassium	10	5.0	mg/L	10.00		101	85-115	0.9	20	
Sodium	11	5.0	mg/L	10.00		106	85-115	0.7	20	
Matrix Spike (1803321-MS1)	**Source: 18C0641-02**			Prepared: 03/30/2018 Analyzed: 04/02/2018						
Calcium	530	40	mg/L	10.00	580	NR	70-130			M3
Magnesium	260	3.0	mg/L	10.00	250	155	70-130			M3
Potassium	19	5.0	mg/L	10.00	8.3	110	70-130			
Sodium	93	5.0	mg/L	10.00	83	102	70-130			
Batch 1804036 - E200.8 (5.4)										
Blank (1804036-BLK1)				Prepared & Analyzed: 04/04/2018						
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							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1804036-BS1)				Prepared & Analyzed: 04/04/2018						
Antimony	0.050	0.00050	mg/L	0.05000		99	85-115			
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.053	0.00025	mg/L	0.05000		106	85-115			
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115			
Chromium	0.049	0.00050	mg/L	0.05000		99	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.048	0.00050	mg/L	0.05000		96	85-115			
Selenium	0.048	0.0025	mg/L	0.05000		95	85-115			
Thallium	0.048	0.00050	mg/L	0.05000		97	85-115			
LCS Dup (1804036-BSD1)				Prepared & Analyzed: 04/04/2018						
Antimony	0.050	0.00050	mg/L	0.05000		100	85-115	0.3	20	
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115	0.3	20	
Barium	0.050	0.00050	mg/L	0.05000		100	85-115	0.04	20	
Beryllium	0.052	0.00025	mg/L	0.05000		103	85-115	2	20	
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115	0.1	20	
Chromium	0.050	0.00050	mg/L	0.05000		100	85-115	1	20	
Lead	0.050	0.00050	mg/L	0.05000		100	85-115	2	20	
Nickel	0.049	0.00050	mg/L	0.05000		97	85-115	0.5	20	
Selenium	0.048	0.0025	mg/L	0.05000		97	85-115	2	20	
Thallium	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804036 - E200.8 (5.4)										
Matrix Spike (1804036-MS1)		**Source: 18D0143-02**		Prepared & Analyzed: 04/04/2018						
Antimony	0.048	0.00050	mg/L	0.05000	0.000058	97	70-130			
Arsenic	0.053	0.0025	mg/L	0.05000	0.0026	101	70-130			
Barium	0.067	0.00050	mg/L	0.05000	0.017	100	70-130			
Beryllium	0.050	0.0013	mg/L	0.05000	0.00010	100	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	ND	99	70-130			
Chromium	0.046	0.00050	mg/L	0.05000	0.00043	92	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.00053	103	70-130			
Nickel	0.044	0.00050	mg/L	0.05000	0.0013	86	70-130			
Selenium	0.050	0.0025	mg/L	0.05000	0.0018	97	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.000035	100	70-130			
Batch 1804065 - E 245.1										
Blank (1804065-BLK1)				Prepared & Analyzed: 04/06/2018						
Mercury	ND	0.0010	mg/L							
LCS (1804065-BS1)				Prepared & Analyzed: 04/06/2018						
Mercury	0.0048	0.0010	mg/L	0.005000		96	85-115			
LCS Dup (1804065-BSD1)				Prepared & Analyzed: 04/06/2018						
Mercury	0.0051	0.0010	mg/L	0.005000		102	85-115	6	20	
Matrix Spike (1804065-MS1)		**Source: 18C0606-01**		Prepared & Analyzed: 04/06/2018						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	99	85-115			
Matrix Spike Dup (1804065-MSD1)		**Source: 18C0606-01**		Prepared & Analyzed: 04/06/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	0.6	20	
Batch 1804074 - E245.1										
Blank (1804074-BLK1)				Prepared & Analyzed: 04/09/2018						
Mercury	ND	0.0010	mg/L							
LCS (1804074-BS1)				Prepared & Analyzed: 04/09/2018						
Mercury	0.0052	0.0010	mg/L	0.005000		104	85-115			
LCS Dup (1804074-BSD1)				Prepared & Analyzed: 04/09/2018						
Mercury	0.0053	0.0010	mg/L	0.005000		107	85-115	3	20	
Matrix Spike (1804074-MS1)		**Source: 18C0692-01**		Prepared & Analyzed: 04/09/2018						
Mercury	0.0048	0.0010	mg/L	0.005000	ND	97	85-115			
Matrix Spike Dup (1804074-MSD1)		**Source: 18C0692-01**		Prepared & Analyzed: 04/09/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	2	20	
Batch 1804103 - E200.8 (5.4)										
Blank (1804103-BLK1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	ND	0.00050	mg/L							
LCS (1804103-BS1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.048	0.00050	mg/L	0.05000		96	85-115			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804103 - E200.8 (5.4)										
LCS Dup (1804103-BSD1)				Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.049	0.00050	mg/L	0.05000		98	85-115	2	20	
Matrix Spike (1804103-MS1)		**Source: 18D0193-01**		Prepared: 04/10/2018 Analyzed: 04/11/2018						
Chromium	0.046	0.00050	mg/L	0.05000	ND	92	70-130			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803287 - SM2540 C										
Duplicate (1803287-DUP1)		**Source: 18C0639-01**		Prepared: 03/28/2018 Analyzed: 03/29/2018						
Total Dissolved Solids (Residue, Filterable)	410	20	mg/L		420			1	5	
Batch 1804011 - SM2320B										
LCS (1804011-BS1)				Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110			
LCS Dup (1804011-BSD1)				Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110	2	10	
Matrix Spike (1804011-MS1)		**Source: 18C0693-01**		Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	380	2.0	mg/L	250.0	150	93	85-115			
Matrix Spike Dup (1804011-MSD1)		**Source: 18C0693-01**		Prepared & Analyzed: 04/02/2018						
Alkalinity, Total (As CaCO3)	390	2.0	mg/L	250.0	150	94	85-115	0.5	10	
Batch 1804049 - E335.4										
Blank (1804049-BLK1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	ND	0.10	mg/L							
LCS (1804049-BS1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.1	0.10	mg/L	2.000		107	90-110			
LCS Dup (1804049-BSD1)				Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.2	0.10	mg/L	2.000		109	90-110	2	20	
Matrix Spike (1804049-MS1)		**Source: 18C0606-01**		Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	102	90-110			
Matrix Spike Dup (1804049-MSD1)		**Source: 18C0606-01**		Prepared: 04/03/2018 Analyzed: 04/04/2018						
Cyanide	2.1	0.10	mg/L	2.000	ND	105	90-110	3	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18C0641
Date Received: 03/27/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1803274 - E300.0 (2.1)										
Blank (1803274-BLK1)				Prepared & Analyzed: 03/27/2018						
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							
LCS (1803274-BS1)				Prepared & Analyzed: 03/27/2018						
Chloride	12	1.0	mg/L	12.50		94	90-110			
Fluoride	2.1	0.50	mg/L	2.000		103	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		98	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
Sulfate	12	5.0	mg/L	12.50		97	90-110			
LCS Dup (1803274-BSD1)				Prepared & Analyzed: 03/27/2018						
Chloride	12	1.0	mg/L	12.50		93	90-110	1	10	
Fluoride	2.0	0.50	mg/L	2.000		102	90-110	1	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500		92	90-110	3	10	
Sulfate	12	5.0	mg/L	12.50		97	90-110	0.02	10	
Matrix Spike (1803274-MS1)	**Source: 18C0637-02**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.044	103	80-120			
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	1.2	95	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120			
Matrix Spike (1803274-MS2)	**Source: 18C0647-08**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Chloride	12	1.0	mg/L	12.50	0.56	94	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.22	95	80-120			
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120			
Matrix Spike Dup (1803274-MSD1)	**Source: 18C0637-02**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.044	103	80-120	0.5	10	
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	1.2	94	80-120	0.9	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	90	80-120	0.4	10	
Sulfate	13	5.0	mg/L	12.50	2.2	90	80-120	1	10	
Matrix Spike Dup (1803274-MSD2)	**Source: 18C0647-08**			Prepared: 03/27/2018 Analyzed: 03/28/2018						
Chloride	12	1.0	mg/L	12.50	0.56	94	80-120	0.2	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.22	95	80-120	0.3	10	
Sulfate	14	5.0	mg/L	12.50	2.2	91	80-120	0.02	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18C0641 DATE 3/27/18 PAGE _____ OF _____

PROJECT NAME: Surface Water

CONTACT NAME : Johnny Pappas

COMPANY NAME : Arizona Mining

ADDRESS : 3845 N Business Center Drive, Ste 115

CITY Tucson STATE AZ ZIP CODE 85705

PHONE 520-235-5563 FAX

SAMPLER'S SIGNATURE Edgar Pereyra.

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	*** See Attachment
POC#2-3278	3-27-18	0945		Groundwater	4	x
JA#132718	3-27-18	1125		GROUNDWATER	4	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY: Edgar Pereyra.
Signature
Printed Name
Firm 3/27/18 1351
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
_____ **Standard (approx.10 days)***
___Next day ___2 Day ___5 Day*
____ Email Preliminary Results To:
_____
* Working Days

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 4
Temperature 4.4
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature Joseph Estrada
Printed Name
Firm TURNER LABORATORIES, INC.
3/27/18 1351
Date/Time

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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

Samples Received: March 28, 2018
Analysis Completed: April 10, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18C0641-01	4.8 ± 1.3	< 0.5	< 0.6	< 0.6
18C0641-02	< 2.4	< 0.5	< 0.6	< 0.6

Jeremy Russell, B.S.E. 4/10/2018
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: _____

March 27, 2018 (Sample Date) 9:45 (Sample Time) (24 hour clock) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	4/4/2018	4.8 ± 1.3		
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	3/30/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	3/30/2018	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	3/30/2018	< 0.6		

LABORATORY INFORMATION

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

Specimen Number: RSE60127

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: 18C0641-01

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

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: _____

March 27, 2018 (Sample Date) 11:25 (Sample Time) (24 hour clock) _____ (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	4/4/2018	< 2.4	
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	3/30/2018	< 0.6	
GammaRay HPGE		1 pCi/L	Radium 226	4020	3/30/2018	< 0.5	
GammaRay HPGE		1 pCi/L	Radium 228	4030	3/30/2018	< 0.6	

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60128

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: 18C0641-02

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18C0641

SENDING LABORATORY:

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

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: 18C0641-01 Drinking Water Sampled:03/27/2018 09:45			
Radiochemistry, Radium 226/228	04/26/2018 09:45		
Radiochemistry, Gross Alpha	09/23/2018 09:45		
Containers Supplied:			
#60127			
Sample ID: 18C0641-02 Drinking Water Sampled:03/27/2018 11:25			
Radiochemistry, Radium 226/228	04/26/2018 11:25		Dissolved
Radiochemistry, Gross Alpha	09/23/2018 11:25		Dissolved
Containers Supplied:			
#60128			

#60127 3/27/18 GXC

Released By	Date	Received By	Date
[signature]	3/28/18 16:00	UPS	3/28/18 16:00
Released By	Date	Received By	Date

May 18, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18D0656
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 04/26/2018 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

Max DiSante
Laboratory Director

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18D0656-01	POC#2-42618	Ground Water	04/26/2018 0920

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

Case Narrative

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

E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.

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: Surface Water
Work Order: 18D0656
Lab Sample ID: 18D0656-01

Client Sample ID: POC#2-42618
Collection Date/Time: 04/26/2018 0920
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	2.0		0.30		mg/L	1	05/01/2018 1015	05/04/2018 1219	MH
Manganese	27		0.20		mg/L	10	05/01/2018 1015	05/09/2018 1006	MH
Zinc	6.2		0.40		mg/L	10	05/01/2018 1015	05/09/2018 1006	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Arsenic	0.0094		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Barium	0.020		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Beryllium	0.00053		0.00025		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Cadmium	0.0064		0.00025		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Chromium	0.00082		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Copper	0.00090		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Lead	0.0026		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Nickel	0.070		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Selenium	0.0017	0.00025	0.0025	E4	mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Thallium	ND		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND		0.0010		mg/L	1	05/09/2018 0930	05/09/2018 1346	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	0.85		0.50		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Sulfate	2200		1000		mg/L	200	04/27/2018 0844	04/27/2018 1622	AP
Cyanide-E335.4									
Cyanide	ND		0.10		mg/L	1	05/07/2018 0845	05/08/2018 1600	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Lab Sample ID: 18D0656-01

Client Sample ID: POC#2-42618
Collection Date/Time: 04/26/2018 0920
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	04/30/2018 0820	05/02/2018 0830	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805051 - E 200.7 (4.4)										
Blank (1805051-BLK1)				Prepared & Analyzed: 05/04/2018						
Iron	ND	0.30	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1805051-BS1)				Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000		104	85-115			
Manganese	0.54	0.020	mg/L	0.5000		108	85-115			
Zinc	0.54	0.040	mg/L	0.5000		108	85-115			
LCS Dup (1805051-BSD1)				Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000		105	85-115	0.5	20	
Manganese	0.53	0.020	mg/L	0.5000		106	85-115	2	20	
Zinc	0.53	0.040	mg/L	0.5000		106	85-115	2	20	
Matrix Spike (1805051-MS1)		**Source: 18D0619-01**		Prepared & Analyzed: 05/04/2018						
Iron	1.1	0.30	mg/L	1.000	0.028	105	70-130			
Manganese	0.52	0.020	mg/L	0.5000	ND	105	70-130			
Zinc	0.53	0.040	mg/L	0.5000	0.012	104	70-130			
Matrix Spike (1805051-MS2)		**Source: 18E0021-01**		Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000	0.0060	101	70-130			
Manganese	0.51	0.020	mg/L	0.5000	ND	102	70-130			
Zinc	0.51	0.040	mg/L	0.5000	ND	102	70-130			
Batch 1805069 - E 200.8 (5.4)										
Blank (1805069-BLK1)				Prepared & Analyzed: 05/07/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805069 - E 200.8 (5.4)										
LCS (1805069-BS1)				Prepared & Analyzed: 05/07/2018						
Antimony	0.048	0.00050	mg/L	0.05000		96	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.049	0.00025	mg/L	0.05000		97	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.051	0.00050	mg/L	0.05000		102	85-115			
Selenium	0.051	0.0025	mg/L	0.05000		103	85-115			
Thallium	0.050	0.00050	mg/L	0.05000		101	85-115			
LCS Dup (1805069-BSD1)				Prepared & Analyzed: 05/07/2018						
Antimony	0.048	0.00050	mg/L	0.05000		96	85-115	0.7	20	
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	0.8	20	
Barium	0.051	0.00050	mg/L	0.05000		102	85-115	1	20	
Beryllium	0.049	0.00025	mg/L	0.05000		97	85-115	0.2	20	
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115	0.2	20	
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Copper	0.052	0.00050	mg/L	0.05000		105	85-115	2	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	0.1	20	
Nickel	0.051	0.00050	mg/L	0.05000		103	85-115	0.8	20	
Selenium	0.052	0.0025	mg/L	0.05000		104	85-115	2	20	
Thallium	0.050	0.00050	mg/L	0.05000		101	85-115	0.06	20	
Matrix Spike (1805069-MS1)	**Source: 18D0693-01**			Prepared & Analyzed: 05/07/2018						
Antimony	0.045	0.00050	mg/L	0.05000	0.00024	90	70-130			
Arsenic	0.056	0.00050	mg/L	0.05000	0.0035	104	70-130			
Barium	0.16	0.00050	mg/L	0.05000	0.12	94	70-130			
Beryllium	0.045	0.00025	mg/L	0.05000	0.000029	90	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	ND	94	70-130			
Chromium	0.049	0.00050	mg/L	0.05000	0.00052	98	70-130			
Copper	0.051	0.00050	mg/L	0.05000	0.0020	98	70-130			
Lead	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Nickel	0.049	0.00050	mg/L	0.05000	0.0018	94	70-130			
Selenium	0.057	0.0025	mg/L	0.05000	ND	114	70-130			
Thallium	0.048	0.00050	mg/L	0.05000	0.000038	96	70-130			
Batch 1805102 - E 245.1										
Blank (1805102-BLK1)				Prepared & Analyzed: 05/09/2018						
Mercury	ND	0.0010	mg/L							
LCS (1805102-BS1)				Prepared & Analyzed: 05/09/2018						
Mercury	0.0051	0.0010	mg/L	0.005000		103	85-115			
LCS Dup (1805102-BSD1)				Prepared & Analyzed: 05/09/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		99	85-115	3	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805102 - E 245.1										
Matrix Spike (1805102-MS1)		**Source: 18E0047-03**		Prepared & Analyzed: 05/09/2018						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	103	85-115			
Matrix Spike Dup (1805102-MSD1)		**Source: 18E0047-03**		Prepared & Analyzed: 05/09/2018						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804289 - SM2540 C										
Duplicate (1804289-DUP1)		**Source: 18D0628-13**		Prepared: 04/30/2018 Analyzed: 05/03/2018						
Total Dissolved Solids (Residue, Filterable)	370	20	mg/L		370			0	5	
Duplicate (1804289-DUP2)		**Source: 18D0628-14**		Prepared: 04/30/2018 Analyzed: 05/03/2018						
Total Dissolved Solids (Residue, Filterable)	340	20	mg/L		340			0	5	
Batch 1805027 - SM2320B										
LCS (1805027-BS1)				Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110			
LCS Dup (1805027-BSD1)				Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110	0	10	
Matrix Spike (1805027-MS1)		**Source: 18D0606-02**		Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	370	2.0	mg/L	250.0	130	96	85-115			
Matrix Spike Dup (1805027-MSD1)		**Source: 18D0606-02**		Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	370	2.0	mg/L	250.0	130	95	85-115	0.5	10	
Batch 1805085 - E335.4										
Blank (1805085-BLK1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	ND	0.10	mg/L							
LCS (1805085-BS1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	1.9	0.10	mg/L	2.000		93	90-110			
LCS Dup (1805085-BSD1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	1.8	0.10	mg/L	2.000		92	90-110	0.9	20	
Matrix Spike (1805085-MS1)		**Source: 18E0099-01**		Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	99	90-110			
Matrix Spike Dup (1805085-MSD1)		**Source: 18E0099-01**		Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	2.1	0.10	mg/L	2.000	ND	105	90-110	7	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804274 - E300.0 (2.1)										
Blank (1804274-BLK1)				Prepared & Analyzed: 04/27/2018						
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							
LCS (1804274-BS1)				Prepared & Analyzed: 04/27/2018						
Fluoride	2.1	0.50	mg/L	2.000		105	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
Sulfate	12	5.0	mg/L	12.50		97	90-110			
LCS Dup (1804274-BSD1)				Prepared & Analyzed: 04/27/2018						
Fluoride	2.1	0.50	mg/L	2.000		106	90-110	0.7	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110	0.08	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110	0.04	10	
Sulfate	12	5.0	mg/L	12.50		97	90-110	0.07	10	
Matrix Spike (1804274-MS1)	**Source: 18D0678-01**			Prepared & Analyzed: 04/27/2018						
Fluoride	2.4	0.50	mg/L	2.000	0.31	105	80-120			
Nitrogen, Nitrate (As N)	5.6	0.50	mg/L	5.000	0.88	94	80-120			
Nitrogen, Nitrite (As N)	2.0	0.10	mg/L	2.500	ND	80	80-120			
Matrix Spike (1804274-MS2)	**Source: 18D0678-01RE1**			Prepared & Analyzed: 04/27/2018						
Sulfate	26		mg/L	12.50	15	90	80-120			
Matrix Spike Dup (1804274-MSD1)	**Source: 18D0678-01**			Prepared & Analyzed: 04/27/2018						
Fluoride	2.4	0.50	mg/L	2.000	0.31	107	80-120	2	10	
Nitrogen, Nitrate (As N)	5.6	0.50	mg/L	5.000	0.88	95	80-120	1	10	
Nitrogen, Nitrite (As N)	2.0	0.10	mg/L	2.500	ND	81	80-120	1	10	
Matrix Spike Dup (1804274-MSD2)	**Source: 18D0678-01RE1**			Prepared & Analyzed: 04/27/2018						
Sulfate	26		mg/L	12.50	15	91	80-120	0.2	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18D0656 DATE 4/26/18 PAGE 1 OF 1

PROJECT NAME: Surface Water

CONTACT NAME: Johnny Pappas

COMPANY NAME: Arizona Mining

ADDRESS: 3845 N Business Center Drive, Ste 115

CITY Tucson STATE AZ ZIP CODE 85705

PHONE 520-235-5563 FAX

SAMPLER'S SIGNATURE EDGAR PERALTA.

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	*** See Attachment
POC#2-4261B	4-26-18	0920		Groundwater	4	x
JA#142618	4-26-18	1040		GROUNDWATER	4	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY: EDGAR PERALTA.
Signature
Printed Name
Firm
4-26-18 1406
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
4/26/18 14:06
Date/Time

TURNAROUND REQUIREMENTS:
_____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

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 8
Temperature 1.1
☒ Wet Ice ☐ Blue Ice

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

Client called to request JA#142618 be canceled.
KMS

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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: April 26, 2018
Sample Received: May 01, 2018
Analysis Completed: May 17, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18D0656-01	3.1 ± 1.2	0.6 ± 0.2	< 0.6	0.6 ± 0.2
Date of Analysis	5/15/2018	5/4/2018	5/4/2018	5/4/2018

5/17/2018
Robert L. Metzger, Ph.D., C.H.P. 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: _____

April 26, 2018 (Sample Date) 9:20 (Sample Time) (24 hour clock) _____ 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	5/15/2018	3.1 ± 1.2		
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	5/4/2018	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/4/2018	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	5/4/2018	< 0.6		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60313

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: 18D0656-01

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18D0656

SENDING LABORATORY:

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

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: 18D0656-02 Drinking Water Sampled:04/26/2018 09:20			
Radiochemistry, Radium 226/228	05/26/2018 09:20		
Containers Supplied:			

H60313

Released By	Date	Received By	Date
[signature]	4/30/18 16:00	UPS	4/30/18 16:00
Released By	Date	Received By	Date
		Scarlet D Carter	5/1/18

October 05, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18D0656
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 04/26/2018 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: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18D0656-01	POC#2-42618	Ground Water	04/26/2018 0920

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

Case Narrative

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

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.

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

Turner Laboratories, Inc.

Date: 10/05/2018

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Lab Sample ID: 18D0656-01

Client Sample ID: POC#2-42618
Collection Date/Time: 04/26/2018 0920
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	2.0		0.30		mg/L	1	05/01/2018 1015	05/04/2018 1219	MH
Manganese	27		0.20		mg/L	10	05/01/2018 1015	05/09/2018 1006	MH
Zinc	6.2		0.40		mg/L	10	05/01/2018 1015	05/09/2018 1006	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Arsenic	0.0094		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Barium	0.020		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Beryllium	0.00053		0.00025		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Cadmium	0.0064		0.00025		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Chromium	0.00082		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Copper	0.00090		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Lead	0.0026		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Nickel	0.070		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Selenium	0.0017	0.00025	0.0025	E4	mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
Thallium	ND		0.00050		mg/L	1	05/01/2018 1015	05/07/2018 1219	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	05/09/2018 0930	05/09/2018 1346	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	0.85		0.50		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	04/27/2018 0844	04/27/2018 1103	AP
Sulfate	2200		1000		mg/L	200	04/27/2018 0844	04/27/2018 1622	AP
Cyanide-E335.4									
Cyanide	ND		0.10		mg/L	1	05/07/2018 0845	05/08/2018 1600	AP

Turner Laboratories, Inc.

Date: 10/05/2018

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Lab Sample ID: 18D0656-01

Client Sample ID: POC#2-42618
Collection Date/Time: 04/26/2018 0920
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	05/03/2018 1030	05/03/2018 1210	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	04/30/2018 0820	05/02/2018 0830	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805051 - E 200.7 (4.4)										
Blank (1805051-BLK1)				Prepared & Analyzed: 05/04/2018						
Iron	ND	0.30	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1805051-BS1)				Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000		104	85-115			
Manganese	0.54	0.020	mg/L	0.5000		108	85-115			
Zinc	0.54	0.040	mg/L	0.5000		108	85-115			
LCS Dup (1805051-BSD1)				Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000		105	85-115	0.5	20	
Manganese	0.53	0.020	mg/L	0.5000		106	85-115	2	20	
Zinc	0.53	0.040	mg/L	0.5000		106	85-115	2	20	
Matrix Spike (1805051-MS1)		**Source: 18D0619-01**		Prepared & Analyzed: 05/04/2018						
Iron	1.1	0.30	mg/L	1.000	0.028	105	70-130			
Manganese	0.52	0.020	mg/L	0.5000	ND	105	70-130			
Zinc	0.53	0.040	mg/L	0.5000	0.012	104	70-130			
Matrix Spike (1805051-MS2)		**Source: 18E0021-01**		Prepared & Analyzed: 05/04/2018						
Iron	1.0	0.30	mg/L	1.000	0.0060	101	70-130			
Manganese	0.51	0.020	mg/L	0.5000	ND	102	70-130			
Zinc	0.51	0.040	mg/L	0.5000	ND	102	70-130			
Batch 1805069 - E 200.8 (5.4)										
Blank (1805069-BLK1)				Prepared & Analyzed: 05/07/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805069 - E 200.8 (5.4)										
LCS (1805069-BS1)				Prepared & Analyzed: 05/07/2018						
Antimony	0.048	0.00050	mg/L	0.05000		96	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.049	0.00025	mg/L	0.05000		97	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.051	0.00050	mg/L	0.05000		102	85-115			
Selenium	0.051	0.0025	mg/L	0.05000		103	85-115			
Thallium	0.050	0.00050	mg/L	0.05000		101	85-115			
LCS Dup (1805069-BSD1)				Prepared & Analyzed: 05/07/2018						
Antimony	0.048	0.00050	mg/L	0.05000		96	85-115	0.7	20	
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	0.8	20	
Barium	0.051	0.00050	mg/L	0.05000		102	85-115	1	20	
Beryllium	0.049	0.00025	mg/L	0.05000		97	85-115	0.2	20	
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115	0.2	20	
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Copper	0.052	0.00050	mg/L	0.05000		105	85-115	2	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	0.1	20	
Nickel	0.051	0.00050	mg/L	0.05000		103	85-115	0.8	20	
Selenium	0.052	0.0025	mg/L	0.05000		104	85-115	2	20	
Thallium	0.050	0.00050	mg/L	0.05000		101	85-115	0.06	20	
Matrix Spike (1805069-MS1)		**Source: 18D0693-01**		Prepared & Analyzed: 05/07/2018						
Antimony	0.045	0.00050	mg/L	0.05000	0.00024	90	70-130			
Arsenic	0.056	0.00050	mg/L	0.05000	0.0035	104	70-130			
Barium	0.16	0.00050	mg/L	0.05000	0.12	94	70-130			
Beryllium	0.045	0.00025	mg/L	0.05000	0.000029	90	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	ND	94	70-130			
Chromium	0.049	0.00050	mg/L	0.05000	0.00052	98	70-130			
Copper	0.051	0.00050	mg/L	0.05000	0.0020	98	70-130			
Lead	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Nickel	0.049	0.00050	mg/L	0.05000	0.0018	94	70-130			
Selenium	0.057	0.0025	mg/L	0.05000	ND	114	70-130			
Thallium	0.048	0.00050	mg/L	0.05000	0.000038	96	70-130			
Batch 1805102 - E 245.1										
Blank (1805102-BLK1)				Prepared & Analyzed: 05/09/2018						
Mercury	ND	0.0010	mg/L							
LCS (1805102-BS1)				Prepared & Analyzed: 05/09/2018						
Mercury	0.0051	0.0010	mg/L	0.005000		103	85-115			
LCS Dup (1805102-BSD1)				Prepared & Analyzed: 05/09/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		99	85-115	3	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805102 - E 245.1										
Matrix Spike (1805102-MS1)		**Source: 18E0047-03**		Prepared & Analyzed: 05/09/2018						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	103	85-115			
Matrix Spike Dup (1805102-MSD1)		**Source: 18E0047-03**		Prepared & Analyzed: 05/09/2018						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804289 - SM2540 C										
Duplicate (1804289-DUP1)		**Source: 18D0628-13**		Prepared: 04/30/2018 Analyzed: 05/03/2018						
Total Dissolved Solids (Residue, Filterable)	370	20	mg/L		370			0	5	
Duplicate (1804289-DUP2)		**Source: 18D0628-14**		Prepared: 04/30/2018 Analyzed: 05/03/2018						
Total Dissolved Solids (Residue, Filterable)	340	20	mg/L		340			0	5	
Batch 1805027 - SM2320B										
LCS (1805027-BS1)				Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110			
LCS Dup (1805027-BSD1)				Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110	0	10	
Matrix Spike (1805027-MS1)		**Source: 18D0606-02**		Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	370	2.0	mg/L	250.0	130	96	85-115			
Matrix Spike Dup (1805027-MSD1)		**Source: 18D0606-02**		Prepared & Analyzed: 05/03/2018						
Alkalinity, Total (As CaCO3)	370	2.0	mg/L	250.0	130	95	85-115	0.5	10	
Batch 1805085 - E335.4										
Blank (1805085-BLK1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	ND	0.10	mg/L							
LCS (1805085-BS1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	1.9	0.10	mg/L	2.000		93	90-110			
LCS Dup (1805085-BSD1)				Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	1.8	0.10	mg/L	2.000		92	90-110	0.9	20	
Matrix Spike (1805085-MS1)		**Source: 18E0099-01**		Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	99	90-110			
Matrix Spike Dup (1805085-MSD1)		**Source: 18E0099-01**		Prepared: 05/07/2018 Analyzed: 05/08/2018						
Cyanide	2.1	0.10	mg/L	2.000	ND	105	90-110	7	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18D0656
Date Received: 04/26/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1804274 - E300.0 (2.1)										
Blank (1804274-BLK1)				Prepared & Analyzed: 04/27/2018						
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							
LCS (1804274-BS1)				Prepared & Analyzed: 04/27/2018						
Fluoride	2.1	0.50	mg/L	2.000		105	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
Sulfate	12	5.0	mg/L	12.50		97	90-110			
LCS Dup (1804274-BSD1)				Prepared & Analyzed: 04/27/2018						
Fluoride	2.1	0.50	mg/L	2.000		106	90-110	0.7	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110	0.08	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110	0.04	10	
Sulfate	12	5.0	mg/L	12.50		97	90-110	0.07	10	
Matrix Spike (1804274-MS1)		**Source: 18D0678-01**		Prepared & Analyzed: 04/27/2018						
Fluoride	2.4	0.50	mg/L	2.000	0.31	105	80-120			
Nitrogen, Nitrate (As N)	5.6	0.50	mg/L	5.000	0.88	94	80-120			
Nitrogen, Nitrite (As N)	2.0	0.10	mg/L	2.500	ND	80	80-120			
Matrix Spike (1804274-MS2)		**Source: 18D0678-01RE1**		Prepared & Analyzed: 04/27/2018						
Sulfate	26		mg/L	12.50	15	90	80-120			
Matrix Spike Dup (1804274-MSD1)		**Source: 18D0678-01**		Prepared & Analyzed: 04/27/2018						
Fluoride	2.4	0.50	mg/L	2.000	0.31	107	80-120	2	10	
Nitrogen, Nitrate (As N)	5.6	0.50	mg/L	5.000	0.88	95	80-120	1	10	
Nitrogen, Nitrite (As N)	2.0	0.10	mg/L	2.500	ND	81	80-120	1	10	
Matrix Spike Dup (1804274-MSD2)		**Source: 18D0678-01RE1**		Prepared & Analyzed: 04/27/2018						
Sulfate	26		mg/L	12.50	15	91	80-120	0.2	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18D0656 DATE 4/26/18 PAGE 1 OF 1

PROJECT NAME: Surface Water

CONTACT NAME: Johnny Pappas

COMPANY NAME: Arizona Mining

ADDRESS: 3845 N Business Center Drive, Ste 115

CITY Tucson STATE AZ ZIP CODE 85705

PHONE 520-235-5563 FAX

SAMPLER'S SIGNATURE EDGAR PERALTA.

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	*** See Attachment
POC#2-4261B	4-26-18	0920		Groundwater	4	x
JA#142618	4-26-18	1040		GROUNDWATER	4	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY: EDGAR PERALTA.
Signature
Printed Name
Firm
4-26-18 1406
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
4/26/18 14:06
Date/Time

TURNAROUND REQUIREMENTS:
_____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

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 8
Temperature 1.1
☒ Wet Ice ☐ Blue Ice

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

Client called to request JA#142618 be canceled.
KMS

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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: April 26, 2018
Sample Received: May 01, 2018
Analysis Completed: May 17, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18D0656-01	3.1 ± 1.2	0.6 ± 0.2	< 0.6	0.6 ± 0.2
Date of Analysis	5/15/2018	5/4/2018	5/4/2018	5/4/2018

5/17/2018
Robert L. Metzger, Ph.D., C.H.P. 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: _____

April 26, 2018 (Sample Date) 9:20 (Sample Time) (24 hour clock) _____ 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	5/15/2018	3.1 ± 1.2		
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	5/4/2018	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 226	4020	5/4/2018	0.6 ± 0.2		
GammaRay HPGE		1 pCi/L	Radium 228	4030	5/4/2018	< 0.6		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60313

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: 18D0656-01

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18D0656

SENDING LABORATORY:

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

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: 18D0656-02 Drinking Water Sampled:04/26/2018 09:20			
Radiochemistry, Radium 226/228	05/26/2018 09:20		
Containers Supplied:			

H60313

Released By	Date	Received By	Date
[signature]	4/30/18 16:00	UPS	4/30/18 16:00
Released By	Date	Received By	Date
		Scarlet D Carter	5/1/18

June 15, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18E0634
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 05/29/2018 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

Max DiSante
Laboratory Director

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18E0634-01	POC#2-052918	Ground Water	05/29/2018 1346

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

Case Narrative

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

D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
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.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.

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: Surface Water
Work Order: 18E0634
Lab Sample ID: 18E0634-01

Client Sample ID: POC#2-052918
Collection Date/Time: 05/29/2018 1346
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	2200		62		mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	550		20	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Iron	1.4		0.30		mg/L	1	05/31/2018 0950	05/31/2018 1258	MH
Magnesium	210		3.0	M3	mg/L	1	05/31/2018 0950	05/31/2018 1258	MH
Manganese	25		0.10	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Zinc	5.9		0.20	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Arsenic	0.0087		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Barium	0.018		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Beryllium	ND		0.0013	D5	mg/L	5	05/31/2018 0950	06/11/2018 1948	MH
Cadmium	0.0058		0.00025		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Chromium	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Copper	ND		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Lead	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Nickel	0.064		0.0010		mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Selenium	0.0018	0.00025	0.0025	E4	mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Thallium	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND		0.0010		mg/L	1	06/05/2018 1050	06/05/2018 1535	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
Sulfate	2200		500		mg/L	100	06/01/2018 1050	06/02/2018 0227	AP
Cyanide-E335.4									

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Lab Sample ID: 18E0634-01

Client Sample ID: POC#2-052918
Collection Date/Time: 05/29/2018 1346
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Cyanide	ND		0.10		mg/L	1	06/01/2018 0845	06/04/2018 1515	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	190		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Total (As CaCO3)	190		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	05/30/2018 0845	06/01/2018 0830	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805338 - E 200.7 (4.4)										
Blank (1805338-BLK1)				Prepared & Analyzed: 05/31/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1805338-BS1)				Prepared & Analyzed: 05/31/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Iron	0.94	0.30	mg/L	1.000		94	85-115			
Magnesium	9.6	3.0	mg/L	10.00		96	85-115			
Manganese	0.50	0.020	mg/L	0.5000		99	85-115			
Zinc	0.49	0.040	mg/L	0.5000		99	85-115			
LCS Dup (1805338-BSD1)				Prepared & Analyzed: 05/31/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115	0.05	20	
Iron	0.95	0.30	mg/L	1.000		95	85-115	1	20	
Magnesium	9.6	3.0	mg/L	10.00		96	85-115	0.2	20	
Manganese	0.50	0.020	mg/L	0.5000		100	85-115	0.7	20	
Zinc	0.50	0.040	mg/L	0.5000		99	85-115	0.9	20	
Matrix Spike (1805338-MS1)		**Source: 18E0634-01**		Prepared & Analyzed: 05/31/2018						
Calcium	540	20	mg/L	10.00	550	NR	70-130			M3
Iron	2.7	0.30	mg/L	1.000	1.4	127	70-130			
Magnesium	260	3.0	mg/L	10.00	210	512	70-130			M3
Manganese	25	0.10	mg/L	0.5000	25	NR	70-130			M3
Zinc	6.1	0.20	mg/L	0.5000	5.9	39	70-130			M3
Batch 1806041 - E 245.1										
Blank (1806041-BLK1)				Prepared & Analyzed: 06/05/2018						
Mercury	ND	0.0010	mg/L							
LCS (1806041-BS1)				Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000		108	85-115			
LCS Dup (1806041-BSD1)				Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000		109	85-115	0.9	20	
Matrix Spike (1806041-MS1)		**Source: 18E0641-01**		Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000	ND	108	85-115			
Matrix Spike Dup (1806041-MSD1)		**Source: 18E0641-01**		Prepared & Analyzed: 06/05/2018						
Mercury	0.0053	0.0010	mg/L	0.005000	ND	106	85-115	1	20	
Batch 1806064 - E 200.8 (5.4)										

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806064 - E 200.8 (5.4)										
Blank (1806064-BLK1)				Prepared & Analyzed: 06/07/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1806064-BS1)				Prepared & Analyzed: 06/07/2018						
Antimony	0.049	0.00050	mg/L	0.05000		99	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.056	0.00025	mg/L	0.05000		112	85-115			
Cadmium	0.052	0.00025	mg/L	0.05000		103	85-115			
Chromium	0.050	0.00050	mg/L	0.05000		101	85-115			
Copper	0.050	0.00050	mg/L	0.05000		99	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.049	0.00050	mg/L	0.05000		99	85-115			
Selenium	0.050	0.0025	mg/L	0.05000		101	85-115			
Thallium	0.053	0.00050	mg/L	0.05000		106	85-115			
LCS Dup (1806064-BSD1)				Prepared & Analyzed: 06/07/2018						
Antimony	0.050	0.00050	mg/L	0.05000		99	85-115	0.2	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.1	20	
Barium	0.049	0.00050	mg/L	0.05000		98	85-115	2	20	
Beryllium	0.056	0.00025	mg/L	0.05000		112	85-115	0.5	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	2	20	
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115	1	20	
Copper	0.050	0.00050	mg/L	0.05000		100	85-115	0.1	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	0.1	20	
Nickel	0.050	0.00050	mg/L	0.05000		100	85-115	1	20	
Selenium	0.051	0.0025	mg/L	0.05000		101	85-115	0.5	20	
Thallium	0.053	0.00050	mg/L	0.05000		106	85-115	0.04	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806064 - E 200.8 (5.4)										
Matrix Spike (1806064-MS1)	**Source: 18E0684-01**			Prepared & Analyzed: 06/07/2018						
Antimony	0.047	0.00050	mg/L	0.05000	0.00041	94	70-130			
Arsenic	0.054	0.00050	mg/L	0.05000	0.0034	101	70-130			
Barium	0.14	0.00050	mg/L	0.05000	0.089	95	70-130			
Beryllium	0.040	0.00025	mg/L	0.05000	0.000028	80	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	97	70-130			
Chromium	0.056	0.00050	mg/L	0.05000	0.00068	110	70-130			
Copper	0.054	0.00050	mg/L	0.05000	0.0050	97	70-130			
Lead	0.050	0.00050	mg/L	0.05000	0.0047	90	70-130			
Nickel	0.060	0.00050	mg/L	0.05000	0.0037	112	70-130			
Selenium	0.055	0.0025	mg/L	0.05000	0.00052	108	70-130			
Thallium	0.048	0.00050	mg/L	0.05000	0.000032	97	70-130			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805315 - SM2540 C										
Duplicate (1805315-DUP1)		**Source: 18E0660-01**		Prepared: 05/30/2018 Analyzed: 05/31/2018						
Total Dissolved Solids (Residue, Filterable)	370	20	mg/L		370			1	5	
Duplicate (1805315-DUP2)		**Source: 18E0659-01**		Prepared: 05/30/2018 Analyzed: 06/01/2018						
Total Dissolved Solids (Residue, Filterable)	1500	20	mg/L		1500			0.4	5	
Batch 1805331 - SM2320B										
LCS (1805331-BS1)				Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110			
LCS Dup (1805331-BSD1)				Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110	2	10	
Matrix Spike (1805331-MS1)		**Source: 18E0631-01**		Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	340	2.0	mg/L	250.0	100	95	85-115			
Matrix Spike Dup (1805331-MSD1)		**Source: 18E0631-01**		Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	350	2.0	mg/L	250.0	100	98	85-115	2	10	
Batch 1806021 - E335.4										
Blank (1806021-BLK1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	ND	0.10	mg/L							
LCS (1806021-BS1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000		93	90-110			
LCS Dup (1806021-BSD1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000		94	90-110	0.9	20	
Matrix Spike (1806021-MS1)		**Source: 18E0634-01**		Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.8	0.10	mg/L	2.000	ND	90	90-110			
Matrix Spike Dup (1806021-MSD1)		**Source: 18E0634-01**		Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000	ND	96	90-110	6	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805307 - E300.0 (2.1)										
Blank (1805307-BLK1)				Prepared & Analyzed: 05/29/2018						
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							
LCS (1805307-BS1)				Prepared & Analyzed: 05/29/2018						
Fluoride	2.1	0.50	mg/L	2.000		104	90-110			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		100	90-110			
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		102	90-110			
Sulfate	12	5.0	mg/L	12.50		99	90-110			
LCS Dup (1805307-BSD1)				Prepared & Analyzed: 05/29/2018						
Fluoride	2.1	0.50	mg/L	2.000		105	90-110	1	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		100	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		102	90-110	0	10	
Sulfate	12	5.0	mg/L	12.50		99	90-110	0.06	10	
Matrix Spike (1805307-MS1)		**Source: 18E0642-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.6	0.50	mg/L	2.000	0.48	107	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.15	98	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	96	80-120			
Matrix Spike (1805307-MS2)		**Source: 18E0660-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.7	0.50	mg/L	2.000	0.57	105	80-120			
Nitrogen, Nitrate (As N)	6.1	0.50	mg/L	5.000	1.1	99	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Matrix Spike (1805307-MS3)		**Source: 18E0634-01**		Prepared & Analyzed: 06/06/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.19	100	80-120			
Nitrogen, Nitrate (As N)	4.7	0.50	mg/L	5.000	0.090	93	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	94	80-120			
Matrix Spike (1805307-MS5)		**Source: 18E0666-01**		Prepared: 06/07/2018 Analyzed: 06/08/2018						
Sulfate	37	5.0	mg/L	12.50	28	74	80-120			M7
Matrix Spike Dup (1805307-MSD1)		**Source: 18E0642-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.6	0.50	mg/L	2.000	0.48	107	80-120	0.6	10	
Nitrogen, Nitrate (As N)	5.1	0.50	mg/L	5.000	0.15	98	80-120	0.4	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	97	80-120	0.5	10	
Matrix Spike Dup (1805307-MSD2)		**Source: 18E0660-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.7	0.50	mg/L	2.000	0.57	106	80-120	1	10	
Nitrogen, Nitrate (As N)	6.2	0.50	mg/L	5.000	1.1	101	80-120	1	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	93	80-120	2	10	
Matrix Spike Dup (1805307-MSD3)		**Source: 18E0634-01**		Prepared & Analyzed: 06/06/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.19	100	80-120	0.09	10	
Nitrogen, Nitrate (As N)	4.7	0.50	mg/L	5.000	0.090	93	80-120	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	94	80-120	0.3	10	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805307 - E300.0 (2.1)										
Matrix Spike Dup (1805307-MSD5)	**Source: 18E0666-01**			Prepared: 06/07/2018 Analyzed: 06/08/2018						
Sulfate	37	5.0	mg/L	12.50	28	74	80-120	0.1	10	M7

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18E0634 DATE 5-29-18 PAGE _____ OF _____

PROJECT NAME ~~Hanson~~ Surface water # _____
CONTACT NAME Johnny Pappas
COMPANY NAME Arizona mining
ADDRESS 3845 N Business center Drive Ste 115
ZIP 85705 PHONE 520-235-~~5567~~ EMAIL _____
SAMPLER'S SIGNATURE _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
Poc#2 052918	5/29/18	1:46		Ground water	See Attachment	

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX: Base Neutrals 625/8270 ☐ Acids ☐ | Volatile Organics ☐ 624 ☐ 524.2 ☐ 8260 ☐ TTHMS ☐ HAA5 ☐ | Chloride ☐ Sulfate ☐ Resistivity ☐ NO2 ☐ NO3 ☐ TKN ☐ | 1664 ☐ TPH ☐ Oil & Grease ☐ | TCLP Analysis VOA ☐ Semi-VOA ☐ Pest. ☐ | Metals TCLP ☐ Dissolved ☐ Total ☐ RCRA8 ☐ | Cyanide Total ☐ Amen. ☐ WAD ☐ | SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐ | Coliform MPN ☐ PIA ☐ Fecal ☐ | pH ☐ Cl2 ☐ Cl2 ☐ Turb ☐ | COD ☐ TSS ☐ BOD ☐

1. RELINQUISHED BY:
Signature _____
Printed Name Robert Dodson
Firm AMI
Date/Time 5/29/18 1:46

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results
* Working Days

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 4
Temperature 16.1
☒ Wet Ice
☐ Ambient
☐ Blue Ice NC

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature _____
Printed Name Joseph Catalano
Firm TURNER LABORATORIES, INC.
Date/Time 5-29-18 1396

* LEGEND
SAMPLE MATRIX
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

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 ☒

SPECIAL INSTRUCTIONS/COMMENTS:

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		
Hardness			X

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water
Turbidity

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 5/29/18
	Well Name: POC#2	Project #:	Recorded By: Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: OAKTON	Water Level Indicator Type/ID #: WATERLINE 500.01	Carbon Canister: NO
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: yes (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 20.5
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 65.5	Well Volume (gal) {[d-c] x b}: 9.52
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-052918	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	Water Discharged
Sample Time = 10:25 a.m.	500ml	NP	N	Major Cations/Anions wet chem, D Metals		Container: Tank onsite
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
POC #2 052918	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
09:56	20.5	N	0	2.5		23.1	2841	6.52	23	clear	Pump on/
10:02	34.1	N	11	2.5		21.3	2850	6.65	22.3	clear	
10:08	36.7	N	20	2.5		20.9	3049	6.64	16.3	clear	
10:15	37.8	N	32	2.5		21.6	3093	6.66	10.1	clear	
10:20	38.3	N	39	2.5		19.8	2991	6.64	7.38	clear	
10:26	29.3	N	44								pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

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

Sampling Date: May 29, 2018
Sample Received: June 01, 2018
Analysis Completed: June 14, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18E0634-01	3.7 ± 1.1	< 0.4	< 0.6	< 0.6

Date of Analysis	6/4/2018	6/6/2018	6/6/2018	6/6/2018

Robert L. Metzger, Ph.D., C.H.P. 6/14/2018 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: _____

May 29, 2018 (Sample Date) 13:46 (Sample Time) (24 hour clock) _____ 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	6/4/2018	3.7 ± 1.1		
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	6/6/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/6/2018	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	6/6/2018	< 0.6		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60455

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: 18E0634-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18E0634

SENDING LABORATORY:

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

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: 18E0634-01 Drinking Water Sampled:05/29/2018 13:46			
Radiochemistry, Radium 226/228	06/28/2018 13:46		
Radiochemistry, Gross Alpha	11/25/2018 13:46	60455	
Containers Supplied:			

Released By	Date	Received By	Date
[signature]	5-30-18 16:00	UPS	5-30-18 16:00
Released By	Date	Received By	Date
		Scarlet D Castro	6/1/18

October 05, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18E0634
Order Name: Surface Water

RE: Surface Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 05/29/2018 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: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

Order: Surface Water

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18E0634-01	POC#2-052918	Ground Water	05/29/2018 1346

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

Case Narrative

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

D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
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.
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.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.

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

Turner Laboratories, Inc.

Date: 10/05/2018

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Lab Sample ID: 18E0634-01

Client Sample ID: POC#2-052918
Collection Date/Time: 05/29/2018 1346
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	2200		62		mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	550		20	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Iron	1.4		0.30		mg/L	1	05/31/2018 0950	05/31/2018 1258	MH
Magnesium	210		3.0	M3	mg/L	1	05/31/2018 0950	05/31/2018 1258	MH
Manganese	25		0.10	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
Zinc	5.9		0.20	M3	mg/L	5	05/31/2018 0950	05/31/2018 1413	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Arsenic	0.0087		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Barium	0.018		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Beryllium	ND		0.0013	D5	mg/L	5	05/31/2018 0950	06/11/2018 1948	MH
Cadmium	0.0058		0.00025		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Chromium	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Copper	ND		0.00050		mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Lead	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Nickel	0.064		0.0010		mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
Selenium	0.0018	0.00025	0.0025	E4	mg/L	1	05/31/2018 0950	06/07/2018 1901	MH
Thallium	ND		0.0010	D5	mg/L	2	05/31/2018 0950	06/11/2018 1242	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	06/05/2018 1050	06/05/2018 1535	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	05/29/2018 1635	05/29/2018 2107	AP

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Lab Sample ID: 18E0634-01

Client Sample ID: POC#2-052918
Collection Date/Time: 05/29/2018 1346
Matrix: Ground Water
Order Name: Surface Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Sulfate	2200		500		mg/L	100	06/01/2018 1050	06/02/2018 0227	AP
Cyanide-E335.4									
Cyanide	ND		0.10		mg/L	1	06/01/2018 0845	06/04/2018 1515	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	190		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Alkalinity, Total (As CaCO3)	190		2.0		mg/L	1	05/30/2018 1410	05/30/2018 1700	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	05/30/2018 0845	06/01/2018 0830	EJ

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805338 - E 200.7 (4.4)										
Blank (1805338-BLK1)				Prepared & Analyzed: 05/31/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1805338-BS1)				Prepared & Analyzed: 05/31/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Iron	0.94	0.30	mg/L	1.000		94	85-115			
Magnesium	9.6	3.0	mg/L	10.00		96	85-115			
Manganese	0.50	0.020	mg/L	0.5000		99	85-115			
Zinc	0.49	0.040	mg/L	0.5000		99	85-115			
LCS Dup (1805338-BSD1)				Prepared & Analyzed: 05/31/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115	0.05	20	
Iron	0.95	0.30	mg/L	1.000		95	85-115	1	20	
Magnesium	9.6	3.0	mg/L	10.00		96	85-115	0.2	20	
Manganese	0.50	0.020	mg/L	0.5000		100	85-115	0.7	20	
Zinc	0.50	0.040	mg/L	0.5000		99	85-115	0.9	20	
Matrix Spike (1805338-MS1)		**Source: 18E0634-01**		Prepared & Analyzed: 05/31/2018						
Calcium	540	20	mg/L	10.00	550	NR	70-130			M3
Iron	2.7	0.30	mg/L	1.000	1.4	127	70-130			
Magnesium	260	3.0	mg/L	10.00	210	512	70-130			M3
Manganese	25	0.10	mg/L	0.5000	25	NR	70-130			M3
Zinc	6.1	0.20	mg/L	0.5000	5.9	39	70-130			M3
Batch 1806041 - E 245.1										
Blank (1806041-BLK1)				Prepared & Analyzed: 06/05/2018						
Mercury	ND	0.0010	mg/L							
LCS (1806041-BS1)				Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000		108	85-115			
LCS Dup (1806041-BSD1)				Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000		109	85-115	0.9	20	
Matrix Spike (1806041-MS1)		**Source: 18E0641-01**		Prepared & Analyzed: 06/05/2018						
Mercury	0.0054	0.0010	mg/L	0.005000	ND	108	85-115			
Matrix Spike Dup (1806041-MSD1)		**Source: 18E0641-01**		Prepared & Analyzed: 06/05/2018						
Mercury	0.0053	0.0010	mg/L	0.005000	ND	106	85-115	1	20	
Batch 1806064 - E 200.8 (5.4)										

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806064 - E 200.8 (5.4)										
Blank (1806064-BLK1)				Prepared & Analyzed: 06/07/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1806064-BS1)				Prepared & Analyzed: 06/07/2018						
Antimony	0.049	0.00050	mg/L	0.05000		99	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.056	0.00025	mg/L	0.05000		112	85-115			
Cadmium	0.052	0.00025	mg/L	0.05000		103	85-115			
Chromium	0.050	0.00050	mg/L	0.05000		101	85-115			
Copper	0.050	0.00050	mg/L	0.05000		99	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.049	0.00050	mg/L	0.05000		99	85-115			
Selenium	0.050	0.0025	mg/L	0.05000		101	85-115			
Thallium	0.053	0.00050	mg/L	0.05000		106	85-115			
LCS Dup (1806064-BSD1)				Prepared & Analyzed: 06/07/2018						
Antimony	0.050	0.00050	mg/L	0.05000		99	85-115	0.2	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.1	20	
Barium	0.049	0.00050	mg/L	0.05000		98	85-115	2	20	
Beryllium	0.056	0.00025	mg/L	0.05000		112	85-115	0.5	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	2	20	
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115	1	20	
Copper	0.050	0.00050	mg/L	0.05000		100	85-115	0.1	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	0.1	20	
Nickel	0.050	0.00050	mg/L	0.05000		100	85-115	1	20	
Selenium	0.051	0.0025	mg/L	0.05000		101	85-115	0.5	20	
Thallium	0.053	0.00050	mg/L	0.05000		106	85-115	0.04	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806064 - E 200.8 (5.4)										
Matrix Spike (1806064-MS1)	**Source: 18E0684-01**			Prepared & Analyzed: 06/07/2018						
Antimony	0.047	0.00050	mg/L	0.05000	0.00041	94	70-130			
Arsenic	0.054	0.00050	mg/L	0.05000	0.0034	101	70-130			
Barium	0.14	0.00050	mg/L	0.05000	0.089	95	70-130			
Beryllium	0.040	0.00025	mg/L	0.05000	0.000028	80	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	97	70-130			
Chromium	0.056	0.00050	mg/L	0.05000	0.00068	110	70-130			
Copper	0.054	0.00050	mg/L	0.05000	0.0050	97	70-130			
Lead	0.050	0.00050	mg/L	0.05000	0.0047	90	70-130			
Nickel	0.060	0.00050	mg/L	0.05000	0.0037	112	70-130			
Selenium	0.055	0.0025	mg/L	0.05000	0.00052	108	70-130			
Thallium	0.048	0.00050	mg/L	0.05000	0.000032	97	70-130			

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805315 - SM2540 C										
Duplicate (1805315-DUP1)		**Source: 18E0660-01**		Prepared: 05/30/2018 Analyzed: 05/31/2018						
Total Dissolved Solids (Residue, Filterable)	370	20	mg/L		370			1	5	
Duplicate (1805315-DUP2)		**Source: 18E0659-01**		Prepared: 05/30/2018 Analyzed: 06/01/2018						
Total Dissolved Solids (Residue, Filterable)	1500	20	mg/L		1500			0.4	5	
Batch 1805331 - SM2320B										
LCS (1805331-BS1)				Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110			
LCS Dup (1805331-BSD1)				Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110	2	10	
Matrix Spike (1805331-MS1)		**Source: 18E0631-01**		Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	340	2.0	mg/L	250.0	100	95	85-115			
Matrix Spike Dup (1805331-MSD1)		**Source: 18E0631-01**		Prepared & Analyzed: 05/30/2018						
Alkalinity, Total (As CaCO3)	350	2.0	mg/L	250.0	100	98	85-115	2	10	
Batch 1806021 - E335.4										
Blank (1806021-BLK1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	ND	0.10	mg/L							
LCS (1806021-BS1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000		93	90-110			
LCS Dup (1806021-BSD1)				Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000		94	90-110	0.9	20	
Matrix Spike (1806021-MS1)		**Source: 18E0634-01**		Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.8	0.10	mg/L	2.000	ND	90	90-110			
Matrix Spike Dup (1806021-MSD1)		**Source: 18E0634-01**		Prepared: 06/01/2018 Analyzed: 06/04/2018						
Cyanide	1.9	0.10	mg/L	2.000	ND	96	90-110	6	20	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805307 - E300.0 (2.1)										
Blank (1805307-BLK1)				Prepared & Analyzed: 05/29/2018						
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							
LCS (1805307-BS1)				Prepared & Analyzed: 05/29/2018						
Fluoride	2.1	0.50	mg/L	2.000		104	90-110			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		100	90-110			
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		102	90-110			
Sulfate	12	5.0	mg/L	12.50		99	90-110			
LCS Dup (1805307-BSD1)				Prepared & Analyzed: 05/29/2018						
Fluoride	2.1	0.50	mg/L	2.000		105	90-110	1	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		100	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		102	90-110	0	10	
Sulfate	12	5.0	mg/L	12.50		99	90-110	0.06	10	
Matrix Spike (1805307-MS1)		**Source: 18E0642-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.6	0.50	mg/L	2.000	0.48	107	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.15	98	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	96	80-120			
Matrix Spike (1805307-MS2)		**Source: 18E0660-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.7	0.50	mg/L	2.000	0.57	105	80-120			
Nitrogen, Nitrate (As N)	6.1	0.50	mg/L	5.000	1.1	99	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Matrix Spike (1805307-MS3)		**Source: 18E0634-01**		Prepared & Analyzed: 06/06/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.19	100	80-120			
Nitrogen, Nitrate (As N)	4.7	0.50	mg/L	5.000	0.090	93	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	94	80-120			
Matrix Spike (1805307-MS5)		**Source: 18E0666-01**		Prepared: 06/07/2018 Analyzed: 06/08/2018						
Sulfate	37	5.0	mg/L	12.50	28	74	80-120			M7
Matrix Spike Dup (1805307-MSD1)		**Source: 18E0642-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.6	0.50	mg/L	2.000	0.48	107	80-120	0.6	10	
Nitrogen, Nitrate (As N)	5.1	0.50	mg/L	5.000	0.15	98	80-120	0.4	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	97	80-120	0.5	10	
Matrix Spike Dup (1805307-MSD2)		**Source: 18E0660-01**		Prepared: 05/29/2018 Analyzed: 05/30/2018						
Fluoride	2.7	0.50	mg/L	2.000	0.57	106	80-120	1	10	
Nitrogen, Nitrate (As N)	6.2	0.50	mg/L	5.000	1.1	101	80-120	1	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	93	80-120	2	10	
Matrix Spike Dup (1805307-MSD3)		**Source: 18E0634-01**		Prepared & Analyzed: 06/06/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.19	100	80-120	0.09	10	
Nitrogen, Nitrate (As N)	4.7	0.50	mg/L	5.000	0.090	93	80-120	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	94	80-120	0.3	10	

Client: Arizona Minerals Inc.
Project: Surface Water
Work Order: 18E0634
Date Received: 05/29/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1805307 - E300.0 (2.1)										
Matrix Spike Dup (1805307-MSD5)	**Source: 18E0666-01**			Prepared: 06/07/2018 Analyzed: 06/08/2018						
Sulfate	37	5.0	mg/L	12.50	28	74	80-120	0.1	10	M7

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18E0634 DATE 5-29-18 PAGE _____ OF _____

PROJECT NAME ~~Hanson~~ Surface water # _____
CONTACT NAME Johnny Pappas
COMPANY NAME Arizona mining
ADDRESS 3845 N Business center Drive Ste 115
ZIP 85705 PHONE 520-235-~~5567~~ EMAIL _____
SAMPLER'S SIGNATURE _____

NUMBER OF CONTAINERS

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics ☐ 624 ☐ 524.2 ☐ 8260
TTHMS ☐ HAA5 ☐
Chloride ☐ Sulfate ☐ Resistivity ☐
NO_2 ☐ NO_3 ☐ TKN ☐
TPH ☐ 1664 ☐ Oil & Grease
VOA ☐ TCLP Analysis Semi-VOA ☐ Pest. ☐
TCLP ☐ Metals Dissolved ☐ Total ☐ RCRA8 ☐
Total ☐ Cyanide Amen. ☐ WAD ☐
SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐
MPN ☐ Coliform PIA ☐ Fecal ☐
pH ☐ Cr_6 ☐ Cl_2 ☐ Turb ☐
COD ☐ TSS ☐ BOD ☐

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*
Pool#2 052918	5/29/18	1:46		Ground water

See Attachment

1. RELINQUISHED BY:
Signature _____
Printed Name Robert Dodson
Firm AMI
Date/Time 5/29/18 1:46

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results
* Working Days

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 4
Temperature 16.1
☒ Wet Ice
☐ Ambient
☐ Blue Ice NC

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature _____
Printed Name Joseph Catalano
Firm TURNER LABORATORIES, INC.
Date/Time 5-29-18 1396

* LEGEND
SAMPLE MATRIX
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

Compliance Analysis: ☐ Yes ☐ No		Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No		Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No		COC / Labels Agree ☒	Received Within Hold Time ☒

SPECIAL INSTRUCTIONS/COMMENTS:

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		
Hardness			X

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water
Turbidity

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 5/29/18
	Well Name: POC#2	Project #:	Recorded By: Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: OAKTON	Water Level Indicator Type/ID #: WATERLINE 500.01	Carbon Canister: NO
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: yes (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 20.5
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 65.5	Well Volume (gal) {[d-c] x b}: 9.52
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: NA	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-052918	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	Water Discharged
Sample Time = 10:25 a.m.	500ml	NP	N	Major Cations/Anions wet chem, D Metals		Container: Tank onsite
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
POC#2 052918	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
09:56	20.5	N	0	2.5		23.1	2841	6.52	23	clear	Pump on/
10:02	34.1	N	11	2.5		21.3	2850	6.65	22.3	clear	
10:08	36.7	N	20	2.5		20.9	3049	6.64	16.3	clear	
10:15	37.8	N	32	2.5		21.6	3093	6.66	10.1	clear	
10:20	38.3	N	39	2.5		19.8	2991	6.64	7.38	clear	
10:26	29.3	N	44								pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

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

Sampling Date: May 29, 2018
Sample Received: June 01, 2018
Analysis Completed: June 14, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18E0634-01	3.7 ± 1.1	< 0.4	< 0.6	< 0.6

Date of Analysis	6/4/2018	6/6/2018	6/6/2018	6/6/2018

Robert L. Metzger, Ph.D., C.H.P. 6/14/2018 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: _____

May 29, 2018 (Sample Date) 13:46 (Sample Time) (24 hour clock) _____ 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	6/4/2018	3.7 ± 1.1		
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	6/6/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/6/2018	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	6/6/2018	< 0.6		

LABORATORY INFORMATION

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

Specimen Number: RSE60455

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: 18E0634-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18E0634

SENDING LABORATORY:

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

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: 18E0634-01 Drinking Water Sampled:05/29/2018 13:46			
Radiochemistry, Radium 226/228	06/28/2018 13:46		
Radiochemistry, Gross Alpha	11/25/2018 13:46	60455	
Containers Supplied:			

Released By	Date	Received By	Date
[signature]	5-30-18 1600	UPS	5-30-18 16:00
Released By	Date	Received By	Date
		Scarlet D Carter	6/1/18

July 11, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18F0594

RE: Ground Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 06/21/2018 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
Business Development

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18F0594-01	POC#2	Ground Water	06/21/2018 1211

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

Case Narrative

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

D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
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.
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.

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

Turner Laboratories, Inc.

Date: 07/11/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Lab Sample ID: 18F0594-01

Client Sample ID: POC#2
Collection Date/Time: 06/21/2018 1211
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	06/21/2018 1648	06/21/2018 1648	AP
ICP Dissolved Metals-E 200.7 (4.4)									
Iron	1.6		0.30		mg/L	1	06/22/2018 1000	06/22/2018 1219	MH
Manganese	28		0.10		mg/L	5	06/22/2018 1000	06/22/2018 1255	MH
Zinc	6.9		0.20		mg/L	5	06/22/2018 1000	06/22/2018 1255	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.0010	D5	mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Arsenic	0.0078		0.0010		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Barium	0.018		0.0010		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Beryllium	0.00061		0.00050		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Cadmium	0.0080		0.00050		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Chromium	ND		0.0010	D5	mg/L	2	06/22/2018 1000	06/28/2018 1344	MH
Copper	0.0020		0.0010		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Lead	0.0036		0.0010		mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Nickel	0.071		0.0010		mg/L	2	06/22/2018 1000	06/28/2018 1344	MH
Selenium	0.0020		0.0050	D5, E4	mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
Thallium	ND		0.0010	D5	mg/L	2	06/22/2018 1000	06/27/2018 1437	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	06/25/2018 1050	06/25/2018 1725	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	0.80		0.50		mg/L	1	06/21/2018 1648	06/21/2018 1648	AP
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	06/21/2018 1648	06/21/2018 1648	AP
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	06/21/2018 1648	06/21/2018 1648	AP
Sulfate	2100		500		mg/L	100	06/21/2018 1329	06/22/2018 1328	AP
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	07/02/2018 1615	07/02/2018 1650	EJ

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Lab Sample ID: 18F0594-01

Client Sample ID: POC#2
Collection Date/Time: 06/21/2018 1211
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	07/02/2018 1615	07/02/2018 1650	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	07/02/2018 1615	07/02/2018 1650	EJ
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	07/02/2018 1615	07/02/2018 1650	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	07/02/2018 1615	07/02/2018 1650	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	06/28/2018 0830	06/29/2018 1345	EJ
Cyanide-SM4500-CN BE									
Cyanide	ND		0.10		mg/L	1	06/22/2018 0845	06/22/2018 1525	AP

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806235 - E 200.7 (4.4)										
Blank (1806235-BLK1)				Prepared & Analyzed: 06/22/2018						
Iron	ND	0.30	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1806235-BS1)				Prepared & Analyzed: 06/22/2018						
Iron	1.0	0.30	mg/L	1.000		101	85-115			
Manganese	0.53	0.020	mg/L	0.5000		106	85-115			
Zinc	0.52	0.040	mg/L	0.5000		104	85-115			
LCS Dup (1806235-BSD1)				Prepared & Analyzed: 06/22/2018						
Iron	0.98	0.30	mg/L	1.000		98	85-115	3	20	
Manganese	0.52	0.020	mg/L	0.5000		103	85-115	3	20	
Zinc	0.51	0.040	mg/L	0.5000		102	85-115	2	20	
Matrix Spike (1806235-MS1)	**Source: 18F0566-01**			Prepared & Analyzed: 06/22/2018						
Iron	1.0	0.30	mg/L	1.000	0.034	96	70-130			
Manganese	26	0.40	mg/L	0.5000	26	NR	70-130			M3
Zinc	28	0.80	mg/L	0.5000	29	NR	70-130			M3
Batch 1806246 - E 200.8 (5.4)										
Blank (1806246-BLK1)				Prepared & Analyzed: 06/25/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0025	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1806246-BS1)				Prepared & Analyzed: 06/25/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115			
Barium	0.050	0.00050	mg/L	0.05000		101	85-115			
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115			
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115			
Chromium	0.052	0.00050	mg/L	0.05000		104	85-115			
Copper	0.051	0.00050	mg/L	0.05000		102	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.052	0.00050	mg/L	0.05000		104	85-115			
Selenium	0.050	0.0025	mg/L	0.05000		100	85-115			
Thallium	0.050	0.00050	mg/L	0.05000		100	85-115			

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806246 - E 200.8 (5.4)										
LCS Dup (1806246-BSD1)				Prepared & Analyzed: 06/25/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115	0.2	20	
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	0.04	20	
Barium	0.050	0.00050	mg/L	0.05000		100	85-115	0.4	20	
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115	0.07	20	
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115	0.2	20	
Chromium	0.052	0.00050	mg/L	0.05000		104	85-115	0.2	20	
Copper	0.051	0.00050	mg/L	0.05000		102	85-115	0.6	20	
Lead	0.049	0.00050	mg/L	0.05000		97	85-115	1	20	
Nickel	0.052	0.00050	mg/L	0.05000		104	85-115	0.3	20	
Selenium	0.050	0.0025	mg/L	0.05000		100	85-115	0.5	20	
Thallium	0.049	0.00050	mg/L	0.05000		99	85-115	0.7	20	
Matrix Spike (1806246-MS1)		**Source: 18F0412-01**		Prepared & Analyzed: 06/25/2018						
Antimony	0.046	0.00050	mg/L	0.05000	0.00026	91	70-130			
Arsenic	0.049	0.00050	mg/L	0.05000	0.0024	93	70-130			
Barium	0.11	0.00050	mg/L	0.05000	0.067	92	70-130			
Beryllium	0.046	0.00025	mg/L	0.05000	0.000047	91	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000051	94	70-130			
Chromium	0.052	0.00050	mg/L	0.05000	0.00070	103	70-130			
Copper	0.056	0.00050	mg/L	0.05000	0.011	90	70-130			
Lead	0.069	0.00050	mg/L	0.05000	0.026	87	70-130			
Nickel	0.052	0.00050	mg/L	0.05000	0.0018	100	70-130			
Selenium	0.049	0.0025	mg/L	0.05000	0.00028	97	70-130			
Thallium	0.044	0.00050	mg/L	0.05000	ND	89	70-130			
Batch 1806249 - E 245.1										
Blank (1806249-BLK1)				Prepared & Analyzed: 06/25/2018						
Mercury	ND	0.0010	mg/L							
LCS (1806249-BS1)				Prepared & Analyzed: 06/25/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		101	85-115			
LCS Dup (1806249-BSD1)				Prepared & Analyzed: 06/25/2018						
Mercury	0.0051	0.0010	mg/L	0.005000		101	85-115	0.6	20	
Matrix Spike (1806249-MS1)		**Source: 18F0594-01**		Prepared & Analyzed: 06/25/2018						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	103	85-115			
Matrix Spike Dup (1806249-MSD1)		**Source: 18F0594-01**		Prepared & Analyzed: 06/25/2018						
Mercury	0.0051	0.0010	mg/L	0.005000	ND	102	85-115	0.1	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806256 - SM4500-CN BE										
Blank (1806256-BLK1)				Prepared & Analyzed: 06/22/2018						
Cyanide	ND	0.10	mg/L							
LCS (1806256-BS1)				Prepared & Analyzed: 06/22/2018						
Cyanide	1.9	0.10	mg/L	2.000		96	90-110			
LCS Dup (1806256-BSD1)				Prepared & Analyzed: 06/22/2018						
Cyanide	1.9	0.10	mg/L	2.000		96	90-110	0.4	20	
Matrix Spike (1806256-MS1)		**Source: 18F0582-01**		Prepared & Analyzed: 06/22/2018						
Cyanide	1.6	0.10	mg/L	2.000	ND	78	70-130			
Matrix Spike Dup (1806256-MSD1)		**Source: 18F0582-01**		Prepared & Analyzed: 06/22/2018						
Cyanide	1.6	0.10	mg/L	2.000	ND	81	70-130	4	20	
Batch 1806286 - SM2540 C										
Duplicate (1806286-DUP1)		**Source: 18F0594-01**		Prepared: 06/28/2018 Analyzed: 07/02/2018						
Total Dissolved Solids (Residue, Filterable)	3300	20	mg/L		3300			0.9	5	
Duplicate (1806286-DUP2)		**Source: 18F0662-01**		Prepared: 06/28/2018 Analyzed: 06/29/2018						
Total Dissolved Solids (Residue, Filterable)	590	20	mg/L		570			2	5	
Batch 1807020 - SM2320B										
LCS (1807020-BS1)				Prepared & Analyzed: 07/02/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		96	90-110			
LCS Dup (1807020-BSD1)				Prepared & Analyzed: 07/02/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		98	90-110	2	10	
Matrix Spike (1807020-MS1)		**Source: 18F0678-01**		Prepared & Analyzed: 07/02/2018						
Alkalinity, Total (As CaCO3)	330	2.0	mg/L	250.0	96	94	85-115			
Matrix Spike Dup (1807020-MSD1)		**Source: 18F0678-01**		Prepared & Analyzed: 07/02/2018						
Alkalinity, Total (As CaCO3)	340	2.0	mg/L	250.0	96	96	85-115	1	10	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18F0594
Date Received: 06/21/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1806222 - E300.0 (2.1)										
Blank (1806222-BLK1)				Prepared & Analyzed: 06/21/2018						
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							
LCS (1806222-BS1)				Prepared & Analyzed: 06/21/2018						
Fluoride	1.9	0.50	mg/L	2.000		95	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		96	90-110			
Sulfate	12	5.0	mg/L	12.50		97	90-110			
LCS Dup (1806222-BSD1)				Prepared & Analyzed: 06/21/2018						
Fluoride	1.9	0.50	mg/L	2.000		96	90-110	1	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		97	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.7	10	
Sulfate	12	5.0	mg/L	12.50		97	90-110	0.4	10	
Matrix Spike (1806222-MS1)		**Source: 18F0575-01**		Prepared & Analyzed: 06/21/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.25	96	80-120			
Nitrogen, Nitrate (As N)	8.2	0.50	mg/L	5.000	3.3	99	80-120			
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Sulfate	20	5.0	mg/L	12.50	8.1	91	80-120			
Matrix Spike Dup (1806222-MSD1)		**Source: 18F0575-01**		Prepared & Analyzed: 06/21/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.25	96	80-120	0.3	10	
Nitrogen, Nitrate (As N)	8.2	0.50	mg/L	5.000	3.3	99	80-120	0.1	10	
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120	0.1	10	
Sulfate	19	5.0	mg/L	12.50	8.1	90	80-120	0.9	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18F0594 DATE 6/21/18 PAGE 1 OF 3

PROJECT NAME ground water # _____

CONTACT NAME: Johny pappas

COMPANY NAME: Arizona mining inc

ADDRESS: _____

CITY Tucson STATE Az ZIP CODE 85719

PHONE _____ FAX _____

SAMPLER'S SIGNATURE [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
Pool #2 ~~6-21-18~~	6-21-18	12:11 Pm	6-21-18	ground water	4	See Attached

1. RELINQUISHED BY: Robert Dodson
Signature [signature]
Printed Name
Firm Arizona mining inc
Date/Time 6-21-18 / 12:24pm

2. RECEIVED BY: Sarah Richman
Signature
Printed Name
Firm AMI
Date/Time 6/21/18 1224

3. RELINQUISHED BY: Sarah Richman
Signature
Printed Name
Firm AMI
Date/Time 16:24 6-21-18

4. RECEIVED BY: Alex the Howard
Signature
Printed Name
Firm TURNER LABORATORIES, INC.
Date/Time 6/21/18 16:24

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next day ___ 2 Day ___ 5 Day*
___ Email Preliminary Results To:
* Working Days

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 4
Temperature 0.7
X Wet Ice ☐ Blue Ice

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	☒
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☒	Received Within Hold Time	☐

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	LocID:	Date: 6-21-18
	Well Name: POC#2	Project #: Aquifer Protection permit p-512235	Recorded By: [illegible] Checked By: [illegible]
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro plus	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: no
	Water Quality Meter Calibrated Today? (Y) / N	Sampling Equipment: Submersible pump	Equipment Decon: (Alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 14.9
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 71.1	Well Volume (gal) {[d-c] x b}: 11.37 34.129
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface +2	Key Number, if necessary to access well: **N/A**	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2- 6-21-18	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 12:11 P.M	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	Water Level (ft bmp)	Odor (Y/N)	Volume Removed (gal)	Pumping Rate (gpm)	Flow Meter Read (gal)	Temp (C)	Conductivity (uS/cm)	pH	Turbidity (NTU)	Color	Remarks (clarity, etc.)
11:45am	14.9	N	0	2	—	21°	3170	6.52	33.5	clear	Pump on/
11:50am	27.8	N	10	2	—	20.1°	3043	6.62	13.5	clear	Purge water in to storage tank
11:55am	29.4	N	20	2	—	19.7°	3001	6.67	15.6	clear	
12:03pm	30	N	30	2	—	19.5°	2980	6.67	13.1	clear	
12:08pm	32.2	N	40	2	—	19.5	2982	6.67	8.02	clear	
12:10	25		40	2	—						pump off/ **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

Verdad Group, LLC

pH and Conductivity calibration form
Daily record

Project:	AMI POC-2 Sampling
Date:	6-21-18
Sampler:	Robert Dodson

Instrument:	YSI Pro Plus
Serial #:	

Pre/cal time:	7:40 am
Post/cal time:	8:10 am

Standard	*Lot Number*	*Exp date*	*Store date*	*Temp*	*Pre*	*Calibrated*
pH 4.00						
pH 7.00						
pH 10.00						
Cond 1413						

sampler Robert Dodson

signature

POC #2 – MW3
Monthly

LABORATORY			
Analyte – ICP/MS	**Total**	**Dissolved**	**Other**
Alkalinity	X		
Nitrite – N			As N
Nitrate as N			As N
Nitrate-Nitrite as N 1			As N 1
Free cyanide			Free
Fluoride	X		
Arsenic		X	
Barium		X	
Beryllium		X	
Cadmium		X	
Chromium (as Cr)		X	
Copper		X	
Iron		X	
Lead		X	
Manganese 1		X	
Thallium		X	
Nickel		X	
Zinc (as Zn)		X	
Antimony		X	
Selenium (as Se)		X	
Radium 226 + 228			X
Total Dissolved Solids		X	
Mercury (as Hg)		X	
Gross alpha			X
Sulfate	X		
Hardness			X

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water
Turbidity

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 21, 2018
Sample Received: June 29, 2018
Analysis Completed: July 11, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18F0594-01	< 2.4	< 0.4	< 0.6	< 0.6
Date of Analysis	7/9/2018	6/29/2018	6/29/2018	6/29/2018

Robert L. Metzger, Ph.D., C.H.P. 7/11/2018 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 21, 2018 (Sample Date) 12:11 (Sample Time) (24 hour clock) _____ Owner/Contact Person

_____ Owner/Contact Fax Number _____ Owner/Contact Phone Number

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	7/9/2018	< 2.4		
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	6/29/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	6/29/2018	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	6/29/2018	< 0.6		

LABORATORY INFORMATION

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

Specimen Number: RSE60620

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: 18F0594-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18F0594

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Turner Laboratories, Inc.	Radiation Safety Engineering, Inc.
2445 N. Coyote Drive, Ste #104	3245 N. Washington St.
Tucson, AZ 85745	Chandler, AZ 85225-1121
Phone: 520.882.5880	Phone :(480) 897-9459
Fax: 520.882.9788	Fax: (480) 892-5446
Project Manager: Max DiSante	Please CC Kevin Brim Kbrim@turnerlabs.com

Analysis	Expires	Laboratory ID	Comments
Sample ID: 18F0594-01 Drinking Water Sampled:06/21/2018 12:11			
Radiochemistry, Radium 226/228	07/21/2018 12:11		
Radiochemistry, Gross Alpha	12/18/2018 12:11		
Containers Supplied:			

60620

Released By	Date 6/28/18 1600	Received By JPG	Date 6/28/18 1600
Released By	Date	Received By	Date 6-29-18 10:30

TURNER
LABORATORIES INC.

September 10, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18G0574

RE: Ground Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 07/19/2018 for the analyses presented in the following report.

The attached report has been revised. Please refer to the Case Narrative page for an explanation of the changes. We apologize for any inconvenience this may have caused you.

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

Kevin Brim
Project Manager

Turner Laboratories, Inc.

Date: 09/10/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18G0574
Date Received: 07/19/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18G0574-01	POC#2	Ground Water	07/19/2018 1041

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18G0574
Date Received: 07/19/2018

Case Narrative

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

This report was originally generated on 8/8/2018. It is being revised on 9/10/2018 to include the additional parameters of Cyanide and Radiochemistry, 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.
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.

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: Ground Water
Work Order: 18G0574
Lab Sample ID: 18G0574-01

Client Sample ID: POC#2
Collection Date/Time: 07/19/2018 1041
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2200				mg/L	10	07/26/2018 1105	07/29/2018 1438	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	07/20/2018 1049	07/20/2018 1445	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	520		40		mg/L	10	07/23/2018 1230	07/24/2018 1639	MH
Iron	1.4		0.30		mg/L	1	07/23/2018 1230	07/24/2018 1616	MH
Magnesium	200		3.0		mg/L	1	07/23/2018 1230	07/24/2018 1616	MH
Manganese	27		0.20		mg/L	10	07/23/2018 1230	07/24/2018 1640	MH
Zinc	6.4		0.40		mg/L	10	07/23/2018 1230	07/24/2018 1640	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Arsenic	0.0082		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Barium	0.019		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Beryllium	0.00069		0.00050		mg/L	2	07/23/2018 1230	08/02/2018 1050	MH
Cadmium	0.0082		0.00025		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Chromium	ND		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Copper	ND		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Lead	0.0011		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Nickel	0.070		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Selenium	0.0017	0.00025	0.0025	E4	mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
Thallium	ND		0.00050		mg/L	1	07/23/2018 1230	07/29/2018 1354	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	07/25/2018 1125	07/25/2018 1803	AR
ICP Total Metals-E200.7 (4.4)									
Calcium	520		40		mg/L	10	07/26/2018 1105	07/29/2018 1438	MH
Iron	1.6		0.30		mg/L	1	07/26/2018 1105	07/27/2018 1254	MH
Magnesium	220		3.0		mg/L	1	07/26/2018 1105	07/27/2018 1254	MH
Manganese	27		0.20		mg/L	10	07/26/2018 1105	07/29/2018 1439	MH
Zinc	6.5		0.40		mg/L	10	07/26/2018 1105	07/29/2018 1439	MH

Turner Laboratories, Inc.

Date: 09/10/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18G0574
Lab Sample ID: 18G0574-01

Client Sample ID: POC#2
Collection Date/Time: 07/19/2018 1041
Matrix: Ground Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
ICP/MS Total Metals-E200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Arsenic	0.0057		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Barium	0.022		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Beryllium	0.00060		0.00025		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Cadmium	0.0080		0.00025		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Chromium	ND		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Copper	0.0016		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Lead	0.0017		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Nickel	0.083		0.0050		mg/L	10	07/31/2018 1030	08/06/2018 1340	MH
Selenium	0.00073		0.0025		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
Thallium	ND		0.00050		mg/L	1	07/31/2018 1030	08/01/2018 1347	MH
CVAA Total Mercury-E245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	07/31/2018 0920	07/31/2018 1334	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	07/20/2018 1049	07/20/2018 1445	EJ
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	07/20/2018 1049	07/20/2018 1445	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	07/20/2018 1049	07/20/2018 1445	EJ
Sulfate	2200		500		mg/L	100	07/20/2018 1049	07/31/2018 1821	MH
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	180		2.0		mg/L	1	07/31/2018 1430	07/31/2018 1530	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	07/31/2018 1430	07/31/2018 1530	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	07/31/2018 1430	07/31/2018 1530	EJ
Alkalinity, Total (As CaCO3)	180		2.0		mg/L	1	07/31/2018 1430	07/31/2018 1530	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3400		20		mg/L	1	07/25/2018 0910	08/02/2018 0845	EJ
Cyanide-SM4500-CN BE									
Cyanide	ND		0.10	H1	mg/L	1	08/20/2018 1000	08/22/2018 1715	EJ

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18G0574
Date Received: 07/19/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807247 - E 200.2 D ICP										
Blank (1807247-BLK1)				Prepared & Analyzed: 07/24/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807247-BS1)				Prepared & Analyzed: 07/24/2018						
Calcium	9.4	4.0	mg/L	10.00		94	85-115			
Iron	0.95	0.30	mg/L	1.000		95	85-115			
Magnesium	9.5	3.0	mg/L	10.00		95	85-115			
Manganese	0.48	0.020	mg/L	0.5000		96	85-115			
Zinc	0.47	0.040	mg/L	0.5000		93	85-115			
LCS Dup (1807247-BSD1)				Prepared & Analyzed: 07/24/2018						
Calcium	9.4	4.0	mg/L	10.00		94	85-115	0.09	20	
Iron	0.95	0.30	mg/L	1.000		95	85-115	0.4	20	
Magnesium	9.5	3.0	mg/L	10.00		95	85-115	0.5	20	
Manganese	0.48	0.020	mg/L	0.5000		96	85-115	0.02	20	
Zinc	0.47	0.040	mg/L	0.5000		93	85-115	0.1	20	
Matrix Spike (1807247-MS1)		**Source: 18G0424-01**		Prepared & Analyzed: 07/24/2018						
Calcium	89	4.0	mg/L	10.00	81	80	70-130			
Iron	0.95	0.30	mg/L	1.000	ND	95	70-130			
Magnesium	20	3.0	mg/L	10.00	11	93	70-130			
Manganese	0.87	0.020	mg/L	0.5000	0.42	90	70-130			
Zinc	0.53	0.040	mg/L	0.5000	0.082	91	70-130			
Matrix Spike (1807247-MS2)		**Source: 18G0425-02**		Prepared & Analyzed: 07/24/2018						
Calcium	19	4.0	mg/L	10.00	9.6	91	70-130			
Iron	1.1	0.30	mg/L	1.000	0.12	95	70-130			
Magnesium	13	3.0	mg/L	10.00	4.0	95	70-130			
Manganese	0.57	0.020	mg/L	0.5000	0.087	96	70-130			
Zinc	0.48	0.040	mg/L	0.5000	0.024	91	70-130			
Batch 1807271 - E 245.1_DISS										
Blank (1807271-BLK1)				Prepared & Analyzed: 07/25/2018						
Mercury	ND	0.00050	mg/L							
LCS (1807271-BS1)				Prepared & Analyzed: 07/25/2018						
Mercury	0.0047	0.00050	mg/L	0.005000		94	85-115			
LCS Dup (1807271-BSD1)				Prepared & Analyzed: 07/25/2018						
Mercury	0.0050	0.00050	mg/L	0.005000		100	85-115	7	20	
Matrix Spike (1807271-MS1)		**Source: 18G0541-01**		Prepared & Analyzed: 07/25/2018						
Mercury	0.0050	0.00050	mg/L	0.005000	ND	100	85-115			
Matrix Spike Dup (1807271-MSD1)		**Source: 18G0541-01**		Prepared & Analyzed: 07/25/2018						
Mercury	0.0050	0.00050	mg/L	0.005000	ND	100	85-115	0.3	20	

Client: Arizona Minerals Inc.
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807276 - E 200.8 D ICP/MS										
Blank (1807276-BLK1)				Prepared & Analyzed: 07/29/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1807276-BS1)				Prepared & Analyzed: 07/29/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115			
Barium	0.051	0.00050	mg/L	0.05000		102	85-115			
Beryllium	0.052	0.00025	mg/L	0.05000		104	85-115			
Cadmium	0.052	0.00025	mg/L	0.05000		105	85-115			
Chromium	0.053	0.00050	mg/L	0.05000		105	85-115			
Copper	0.051	0.00050	mg/L	0.05000		102	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Nickel	0.053	0.00050	mg/L	0.05000		107	85-115			
Selenium	0.051	0.0015	mg/L	0.05000		102	85-115			
Thallium	0.052	0.00050	mg/L	0.05000		103	85-115			
LCS Dup (1807276-BSD1)				Prepared & Analyzed: 07/29/2018						
Antimony	0.050	0.00050	mg/L	0.05000		100	85-115	2	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.1	20	
Barium	0.051	0.00050	mg/L	0.05000		102	85-115	0.6	20	
Beryllium	0.051	0.00025	mg/L	0.05000		102	85-115	2	20	
Cadmium	0.053	0.00025	mg/L	0.05000		106	85-115	1	20	
Chromium	0.053	0.00050	mg/L	0.05000		106	85-115	0.7	20	
Copper	0.050	0.00050	mg/L	0.05000		100	85-115	2	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	2	20	
Nickel	0.052	0.00050	mg/L	0.05000		104	85-115	2	20	
Selenium	0.052	0.0015	mg/L	0.05000		103	85-115	1	20	
Thallium	0.053	0.00050	mg/L	0.05000		106	85-115	3	20	

Client: Arizona Minerals Inc.
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807276 - E 200.8 D ICP/MS										
Matrix Spike (1807276-MS1)		**Source: 18G0523-01**		Prepared & Analyzed: 07/29/2018						
Antimony	0.049	0.00050	mg/L	0.05000	0.00020	99	70-130			
Arsenic	0.051	0.00050	mg/L	0.05000	0.0019	99	70-130			
Barium	0.076	0.00050	mg/L	0.05000	0.025	102	70-130			
Beryllium	0.052	0.00025	mg/L	0.05000	0.000041	104	70-130			
Cadmium	0.052	0.00025	mg/L	0.05000	0.00011	103	70-130			
Chromium	0.050	0.00050	mg/L	0.05000	0.00037	100	70-130			
Copper	0.051	0.00050	mg/L	0.05000	0.0048	93	70-130			
Lead	0.048	0.00050	mg/L	0.05000	0.0011	94	70-130			
Nickel	0.050	0.00050	mg/L	0.05000	0.00089	99	70-130			
Selenium	0.052	0.0015	mg/L	0.05000	ND	103	70-130			
Thallium	0.051	0.00050	mg/L	0.05000	ND	102	70-130			
Batch 1807288 - E 200.2 ICP										
Blank (1807288-BLK1)				Prepared: 07/26/2018 Analyzed: 07/27/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807288-BS1)				Prepared: 07/26/2018 Analyzed: 07/27/2018						
Calcium	9.5	4.0	mg/L	10.00		95	85-115			
Iron	1.0	0.30	mg/L	1.000		103	85-115			
Magnesium	9.7	3.0	mg/L	10.00		97	85-115			
Manganese	0.51	0.020	mg/L	0.5000		102	85-115			
Zinc	0.48	0.040	mg/L	0.5000		96	85-115			
LCS Dup (1807288-BSD1)				Prepared: 07/26/2018 Analyzed: 07/27/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115	1	20	
Iron	1.0	0.30	mg/L	1.000		104	85-115	0.4	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	1	20	
Manganese	0.52	0.020	mg/L	0.5000		105	85-115	2	20	
Zinc	0.49	0.040	mg/L	0.5000		98	85-115	2	20	
Matrix Spike (1807288-MS1)		**Source: 18G0585-02**		Prepared: 07/26/2018 Analyzed: 07/27/2018						
Calcium	220	4.0	mg/L	10.00	220	44	70-130			M3
Iron	1.7	0.30	mg/L	1.000	0.68	103	70-130			
Magnesium	56	3.0	mg/L	10.00	46	100	70-130			
Manganese	0.54	0.020	mg/L	0.5000	0.038	101	70-130			
Zinc	0.68	0.040	mg/L	0.5000	0.18	99	70-130			
Matrix Spike (1807288-MS2)		**Source: 18G0666-01**		Prepared: 07/26/2018 Analyzed: 07/27/2018						
Calcium	72	4.0	mg/L	10.00	63	87	70-130			
Iron	1.1	0.30	mg/L	1.000	0.045	106	70-130			
Magnesium	630	30	mg/L	10.00	630	9	70-130			M3
Manganese	0.48	0.020	mg/L	0.5000	ND	97	70-130			
Zinc	0.47	0.040	mg/L	0.5000	0.0039	94	70-130			
Batch 1807341 - E 245.1										

Client: Arizona Minerals Inc.
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807341 - E 245.1										
Blank (1807341-BLK1)				Prepared & Analyzed: 07/31/2018						
Mercury	ND	0.0010	mg/L							
LCS (1807341-BS1)				Prepared & Analyzed: 07/31/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		100	85-115			
LCS Dup (1807341-BSD1)				Prepared & Analyzed: 07/31/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		101	85-115	1	20	
Matrix Spike (1807341-MS1)		**Source: 18G0643-01**		Prepared & Analyzed: 07/31/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115			
Matrix Spike Dup (1807341-MSD1)		**Source: 18G0643-01**		Prepared & Analyzed: 07/31/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	0.05	20	
Batch 1808001 - E 200.8 ICP/MS										
Blank (1808001-BLK1)				Prepared: 07/31/2018 Analyzed: 08/01/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1808001-BS1)				Prepared: 07/31/2018 Analyzed: 08/01/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Barium	0.048	0.00050	mg/L	0.05000		96	85-115			
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115			
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115			
Chromium	0.052	0.00050	mg/L	0.05000		104	85-115			
Copper	0.052	0.00050	mg/L	0.05000		104	85-115			
Lead	0.050	0.00050	mg/L	0.05000		100	85-115			
Nickel	0.050	0.00050	mg/L	0.05000		101	85-115			
Selenium	0.049	0.0015	mg/L	0.05000		99	85-115			
Thallium	0.051	0.00050	mg/L	0.05000		101	85-115			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808001 - E 200.8 ICP/MS										
LCS Dup (1808001-BSD1)				Prepared: 07/31/2018 Analyzed: 08/01/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115	0.3	20	
Arsenic	0.051	0.00050	mg/L	0.05000		101	85-115	2	20	
Barium	0.048	0.00050	mg/L	0.05000		96	85-115	0.5	20	
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115	0.5	20	
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115	2	20	
Chromium	0.050	0.00050	mg/L	0.05000		100	85-115	4	20	
Copper	0.053	0.00050	mg/L	0.05000		106	85-115	2	20	
Lead	0.050	0.00050	mg/L	0.05000		100	85-115	0.2	20	
Nickel	0.053	0.00050	mg/L	0.05000		106	85-115	5	20	
Selenium	0.051	0.0015	mg/L	0.05000		101	85-115	3	20	
Thallium	0.050	0.00050	mg/L	0.05000		99	85-115	2	20	
Matrix Spike (1808001-MS1)		**Source: 18G0635-04**		Prepared: 07/31/2018 Analyzed: 08/01/2018						
Antimony	0.047	0.00050	mg/L	0.05000	0.00014	94	70-130			
Arsenic	0.057	0.00050	mg/L	0.05000	0.0077	99	70-130			
Barium	0.053	0.00050	mg/L	0.05000	0.0050	96	70-130			
Beryllium	0.047	0.00025	mg/L	0.05000	0.000019	95	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	ND	99	70-130			
Chromium	0.064	0.00050	mg/L	0.05000	0.011	104	70-130			
Copper	0.11	0.00050	mg/L	0.05000	0.044	128	70-130			
Lead	0.058	0.00050	mg/L	0.05000	0.0090	98	70-130			
Nickel	0.054	0.00050	mg/L	0.05000	0.0010	107	70-130			
Selenium	0.050	0.0015	mg/L	0.05000	0.0012	98	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.000059	99	70-130			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807263 - GEN CHEM										
Duplicate (1807263-DUP1)		**Source: 18G0576-01**		Prepared: 07/25/2018 Analyzed: 08/02/2018						
Total Dissolved Solids (Residue, Filterable)	440	20	mg/L		420			5	5	
Batch 1808009 - GEN CHEM										
LCS (1808009-BS1)				Prepared & Analyzed: 07/31/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		101	90-110			
LCS Dup (1808009-BSD1)				Prepared & Analyzed: 07/31/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		100	90-110	0.8	10	
Matrix Spike (1808009-MS1)		**Source: 18G0565-01**		Prepared & Analyzed: 07/31/2018						
Alkalinity, Total (As CaCO3)	350	2.0	mg/L	250.0	100	98	70-130			
Matrix Spike Dup (1808009-MSD1)		**Source: 18G0565-01**		Prepared & Analyzed: 07/31/2018						
Alkalinity, Total (As CaCO3)	350	2.0	mg/L	250.0	100	100	70-130	1	10	
Batch 1808286 - SPECTRO PREP										
Blank (1808286-BLK1)				Prepared: 08/20/2018 Analyzed: 08/22/2018						
Cyanide	ND	0.10	mg/L							
LCS (1808286-BS1)				Prepared: 08/20/2018 Analyzed: 08/22/2018						
Cyanide	2.0	0.10	mg/L	2.000		102	90-110			
LCS Dup (1808286-BSD1)				Prepared: 08/20/2018 Analyzed: 08/22/2018						
Cyanide	2.1	0.10	mg/L	2.000		103	90-110	2	20	
Matrix Spike (1808286-MS1)		**Source: 18H0333-07**		Prepared: 08/20/2018 Analyzed: 08/22/2018						
Cyanide	1.9	0.10	mg/L	2.000	ND	96	70-130			
Matrix Spike Dup (1808286-MSD1)		**Source: 18H0333-07**		Prepared: 08/20/2018 Analyzed: 08/22/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	102	70-130	6	20	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807236 - IC PREP										
Blank (1807236-BLK1)				Prepared & Analyzed: 07/20/2018						
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							
LCS (1807236-BS1)				Prepared & Analyzed: 07/20/2018						
Fluoride	2.0	0.50	mg/L	2.000		102	90-110			
Nitrogen, Nitrate (As N)	5.1	0.50	mg/L	5.000		102	90-110			
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500		102	90-110			
Sulfate	12	5.0	mg/L	12.50		98	90-110			
LCS Dup (1807236-BSD1)				Prepared & Analyzed: 07/20/2018						
Fluoride	2.0	0.50	mg/L	2.000		101	90-110	1	10	
Nitrogen, Nitrate (As N)	5.1	0.50	mg/L	5.000		101	90-110	0.4	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110	1	10	
Sulfate	12	5.0	mg/L	12.50		99	90-110	0.3	10	
Matrix Spike (1807236-MS1)		**Source: 18G0529-05**		Prepared & Analyzed: 07/20/2018						
Fluoride	2.0	0.50	mg/L	2.000	0.13	95	80-120			
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	0.85	100	80-120			
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	83	80-120			
Sulfate	44	5.0	mg/L	12.50	33	94	80-120			
Matrix Spike Dup (1807236-MSD1)		**Source: 18G0529-05**		Prepared & Analyzed: 07/20/2018						
Fluoride	2.0	0.50	mg/L	2.000	0.13	96	80-120	1	10	
Nitrogen, Nitrate (As N)	5.9	0.50	mg/L	5.000	0.85	101	80-120	0.4	10	
Nitrogen, Nitrite (As N)	2.1	0.10	mg/L	2.500	ND	84	80-120	1	10	
Sulfate	44	5.0	mg/L	12.50	33	95	80-120	0.2	10	

TURNER LABORATORIES INC
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www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1890574 DATE 7/19/18 PAGE 1 OF 2

PROJECT NAME ~~Surface~~ Ground Water # _____
CONTACT NAME Johnny Pappas
COMPANY NAME Arizona Mining
ADDRESS 3845 N Business Center Drive, Suite 115
ZIP 85705 PHONE 520-235-5503 (EMAIL) _____
SAMPLER'S SIGNATURE Shena Flor

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
PCC#2	7/19/18	10:41		Groundwater	4	* See attached

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX: Base Neutrals 625/8270 ☐ Acids ☐ Volatile Organics ☐ 624 ☐ 524.2 ☐ 8260 ☐ TTHMS ☐ HAAS ☐ Chloride ☐ Sulfate ☐ Resistivity ☐ NO_2 ☐ NO_3 ☐ TKN ☐ TPH ☐ 1664 ☐ Oil & Grease ☐ VOA ☐ TCLP Analysis Semi-VOA ☐ Pest. ☐ TCLP ☐ Metals Total ☐ Dissolved ☐ RCRA8 ☐ Total ☐ Cyanide Amen. ☐ WAD ☐ SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐ MPN ☐ Coliform PIA ☐ Fecal ☐ pH ☐ Cl_2 ☐ Cl_2 ☐ Turb ☐ COD ☐ TSS ☐ BOD ☐

1. RELINQUISHED BY:
Signature: Sarah L
Printed Name: Sarah Richman
Firm: AMI
Date/Time: 7/19/18 1631

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results
* Working Days

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 4
Temperature 7.9
☑ Wet Ice
☐ Ambient
☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name
Firm: TURNER LABORATORIES, INC.
Date/Time: 7/19/18 1631

* LEGEND SAMPLE MATRIX
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

Compliance Analysis: ☐ Yes ☐ No		Custody Seals ☐	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No		Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No		COC / Labels Agree ☒	Received Within Hold Time ☒

SPECIAL INSTRUCTIONS/COMMENTS:

POC-2 Monthly Suite

	LABORATORY		
Analyte	**Total**	**Dissolved**	**Other**
Metals			
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	
Major Cations			
Hardness	X	X	
Major Anions			
Total Alkalinity	X		
Acidity	X		
Fluoride	X	X	
Nitrate – Nitrite as N	X	X	
Nitrite - N	X	X	
Nitrate-Nitrite as N 1	X	X	
Sulfate	X	X	
Parameters			
Total Dissolved Solids		X	
RadChem			
Gross Alpha Particle Activity			
Radium 226 + 228			
Cyanide			
Free CN			Free

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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: July 19, 2018
Sample Received: August 14, 2018
Analysis Completed: August 27, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18G0574-01	2.2 ± 1.0	< 0.4	< 0.6	< 0.6
Date of Analysis	8/20/2018	8/17/2018	8/17/2018	8/17/2018

Robert L. Metzger, Ph.D., C.H.P. 8/27/2018
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: _____

July 19, 2018 (Sample Date) 10:41 (Sample Time) (24 hour clock) _____ 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	8/20/2018	2.2 ± 1.0		
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	8/17/2018	< 0.6		
GammaRay HPGE		1 pCi/L	Radium 226	4020	8/17/2018	< 0.4		
GammaRay HPGE		1 pCi/L	Radium 228	4030	8/17/2018	< 0.6		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60829

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: 18G0574-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18G0574

SENDING LABORATORY:

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

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: 18G0574-01 Drinking Water Sampled:07/19/2018 10:41			
Radiochemistry, Radium 226/228	08/18/2018 10:41		
Radiochemistry, Gross Alpha	01/15/2019 10:41		
Containers Supplied:			

#600829

Released By	Date	Received By	Date
	8/13/18 1600	VD's	8/13/18 1600
Released By	Date	Received By	Date
		Scarlet D Carter	8/14/18 10:50

September 10, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18H0633
Order Name: POC #2

RE: Ground Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 08/22/2018 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: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

Order: POC #2

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18H0633-01	POC#2	Ground Water	08/21/2018 1105

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

Case Narrative

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

D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
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.

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

Turner Laboratories, Inc.

Date: 09/10/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Lab Sample ID: 18H0633-01

Client Sample ID: POC#2
Collection Date/Time: 08/21/2018 1105
Matrix: Ground Water
Order Name: POC #2

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2200				mg/L	10	08/22/2018 1355	08/27/2018 1230	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	08/22/2018 1750	08/22/2018 1950	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	540		20	M3	mg/L	5	08/24/2018 0815	08/24/2018 1022	MH
Iron	ND		1.5	D5	mg/L	5	08/24/2018 0815	08/24/2018 1022	MH
Magnesium	220		15	M3	mg/L	5	08/24/2018 0815	08/24/2018 1022	MH
Manganese	26		0.20	M3	mg/L	10	08/24/2018 0815	08/24/2018 1803	MH
Zinc	7.9		0.20	M3	mg/L	5	08/24/2018 0815	08/24/2018 1023	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Arsenic	0.0068		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Barium	0.018		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Beryllium	0.00060		0.00025		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Cadmium	0.0087		0.00025		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Chromium	ND		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Copper	0.00065		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Lead	ND		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Nickel	0.063		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Selenium	0.0016		0.0015		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
Thallium	ND		0.00050		mg/L	1	08/24/2018 0815	08/30/2018 1652	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	08/24/2018 1105	08/24/2018 1504	RAD
ICP Total Metals-E200.7 (4.4)									
Calcium	500		40		mg/L	10	08/22/2018 1355	08/27/2018 1230	MH
Iron	ND		3.0	D5	mg/L	10	08/22/2018 1355	08/27/2018 1230	MH
Magnesium	220		30		mg/L	10	08/22/2018 1355	08/27/2018 1230	MH
Manganese	27		0.20		mg/L	10	08/22/2018 1355	08/27/2018 1231	MH

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Lab Sample ID: 18H0633-01

Client Sample ID: POC#2
Collection Date/Time: 08/21/2018 1105
Matrix: Ground Water
Order Name: POC #2

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Zinc	6.7		0.40		mg/L	10	08/22/2018 1355	08/27/2018 1231	MH
ICP/MS Total Metals-E200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	08/22/2018 1355	09/06/2018 1510	MH
Arsenic	0.0068		0.0050		mg/L	10	08/22/2018 1355	08/31/2018 1444	MH
Barium	0.017		0.0050		mg/L	10	08/22/2018 1355	08/31/2018 1444	MH
Beryllium	0.00060		0.00025		mg/L	1	08/22/2018 1355	09/05/2018 2035	MH
Cadmium	0.0087		0.0025		mg/L	10	08/22/2018 1355	08/31/2018 1444	MH
Chromium	0.00058		0.00050		mg/L	1	08/22/2018 1355	09/05/2018 2035	MH
Copper	ND		0.00050		mg/L	1	08/22/2018 1355	09/05/2018 2035	MH
Lead	0.0011		0.00050		mg/L	1	08/22/2018 1355	09/06/2018 1510	MH
Nickel	0.071		0.0050		mg/L	10	08/22/2018 1355	08/31/2018 1444	MH
Selenium	0.0020		0.0015		mg/L	1	08/22/2018 1355	09/05/2018 2035	MH
Thallium	ND		0.00050		mg/L	1	08/22/2018 1355	09/06/2018 1510	MH
CVAA Total Mercury-E245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	08/30/2018 1045	08/30/2018 1436	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	08/22/2018 1750	08/22/2018 1950	EJ
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	08/22/2018 1750	08/22/2018 1950	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	08/22/2018 1750	08/22/2018 1950	EJ
Sulfate	2100		500		mg/L	100	08/24/2018 1110	08/24/2018 1435	EJ
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	160		2.0		mg/L	1	08/31/2018 1530	08/31/2018 1630	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	08/31/2018 1530	08/31/2018 1630	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	08/31/2018 1530	08/31/2018 1630	EJ
Alkalinity, Total (As CaCO3)	160		2.0		mg/L	1	08/31/2018 1530	08/31/2018 1630	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3300		20		mg/L	1	08/23/2018 0854	08/30/2018 1700	EJ
Cyanide-SM4500-CN BE									
Cyanide	ND		0.10		mg/L	1	09/04/2018 0900	09/05/2018 1645	EJ

Turner Laboratories, Inc.

Date: 09/10/2018

Client:	Arizona Minerals Inc.	**Client Sample ID:**	POC#2
Project:	Ground Water	**Collection Date/Time:**	08/21/2018 1105
Work Order:	18H0633	**Matrix:**	Ground Water
Lab Sample ID:	18H0633-01	**Order Name:**	POC #2

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808309 - E 200.7 (4.4)										
Blank (1808309-BLK1)				Prepared & Analyzed: 08/24/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1808309-BS1)				Prepared & Analyzed: 08/24/2018						
Calcium	9.8	4.0	mg/L	10.00		98	85-115			
Iron	1.0	0.30	mg/L	1.000		103	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Manganese	0.47	0.020	mg/L	0.5000		94	85-115			
Zinc	0.54	0.040	mg/L	0.5000		109	85-115			
LCS Dup (1808309-BSD1)				Prepared & Analyzed: 08/24/2018						
Calcium	10	4.0	mg/L	10.00		102	85-115	5	20	
Iron	1.1	0.30	mg/L	1.000		106	85-115	3	20	
Magnesium	10	3.0	mg/L	10.00		102	85-115	4	20	
Manganese	0.50	0.020	mg/L	0.5000		100	85-115	6	20	
Zinc	0.53	0.040	mg/L	0.5000		107	85-115	2	20	
Matrix Spike (1808309-MS1)		**Source: 18H0633-01**		Prepared & Analyzed: 08/24/2018						
Calcium	540	20	mg/L	10.00	540	NR	70-130			M3
Iron	2.3	1.5	mg/L	1.000	1.3	104	70-130			
Magnesium	230	15	mg/L	10.00	220	55	70-130			M3
Manganese	27	0.20	mg/L	0.5000	26	210	70-130			M3
Zinc	9.5	0.20	mg/L	0.5000	7.9	321	70-130			M3
Batch 1808319 - E 245.1										
Blank (1808319-BLK1)				Prepared & Analyzed: 08/24/2018						
Mercury	ND	0.00050	mg/L							
LCS (1808319-BS1)				Prepared & Analyzed: 08/24/2018						
Mercury	0.0051	0.00050	mg/L	0.005000		102	85-115			
LCS Dup (1808319-BSD1)				Prepared & Analyzed: 08/24/2018						
Mercury	0.0051	0.00050	mg/L	0.005000		102	85-115	0.7	20	
Matrix Spike (1808319-MS1)		**Source: 18H0669-01**		Prepared & Analyzed: 08/24/2018						
Mercury	0.0050	0.00050	mg/L	0.005000	ND	100	85-115			
Matrix Spike Dup (1808319-MSD1)		**Source: 18H0669-01**		Prepared & Analyzed: 08/24/2018						
Mercury	0.0050	0.00050	mg/L	0.005000	ND	100	85-115	0.5	20	
Batch 1808346 - E200.7 (4.4)										

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808346 - E200.7 (4.4)										
Blank (1808346-BLK1)				Prepared & Analyzed: 08/27/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1808346-BS1)				Prepared & Analyzed: 08/27/2018						
Calcium	11	4.0	mg/L	10.00		108	85-115			
Iron	1.1	0.30	mg/L	1.000		112	85-115			
Magnesium	11	3.0	mg/L	10.00		110	85-115			
Manganese	0.51	0.020	mg/L	0.5000		102	85-115			
Zinc	0.48	0.040	mg/L	0.5000		97	85-115			
LCS Dup (1808346-BSD1)				Prepared & Analyzed: 08/27/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115	12	20	
Iron	1.0	0.30	mg/L	1.000		101	85-115	11	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	11	20	
Manganese	0.51	0.020	mg/L	0.5000		103	85-115	1	20	
Zinc	0.49	0.040	mg/L	0.5000		98	85-115	1	20	
Matrix Spike (1808346-MS1)	**Source: 18H0482-01**			Prepared & Analyzed: 08/27/2018						
Calcium	100	4.0	mg/L	10.00	95	76	70-130			
Iron	1.1	0.30	mg/L	1.000	0.099	99	70-130			
Magnesium	40	3.0	mg/L	10.00	31	93	70-130			
Manganese	0.50	0.020	mg/L	0.5000	ND	100	70-130			
Zinc	0.53	0.040	mg/L	0.5000	0.058	95	70-130			
Batch 1808406 - E 200.8 (5.4)										
Blank (1808406-BLK1)				Prepared & Analyzed: 08/30/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808406 - E 200.8 (5.4)										
LCS (1808406-BS1)				Prepared & Analyzed: 08/30/2018						
Antimony	0.053	0.00050	mg/L	0.05000		105	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Barium	0.051	0.00050	mg/L	0.05000		102	85-115			
Beryllium	0.051	0.00025	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		99	85-115			
Chromium	0.052	0.00050	mg/L	0.05000		103	85-115			
Copper	0.051	0.00050	mg/L	0.05000		101	85-115			
Lead	0.050	0.00050	mg/L	0.05000		100	85-115			
Nickel	0.051	0.00050	mg/L	0.05000		102	85-115			
Selenium	0.049	0.0015	mg/L	0.05000		98	85-115			
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115			
LCS Dup (1808406-BSD1)				Prepared & Analyzed: 08/30/2018						
Antimony	0.051	0.00050	mg/L	0.05000		103	85-115	2	20	
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	2	20	
Barium	0.049	0.00050	mg/L	0.05000		98	85-115	3	20	
Beryllium	0.051	0.00025	mg/L	0.05000		103	85-115	2	20	
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115	1	20	
Chromium	0.052	0.00050	mg/L	0.05000		104	85-115	1	20	
Copper	0.052	0.00050	mg/L	0.05000		104	85-115	2	20	
Lead	0.050	0.00050	mg/L	0.05000		101	85-115	0.8	20	
Nickel	0.051	0.00050	mg/L	0.05000		103	85-115	1	20	
Selenium	0.048	0.0015	mg/L	0.05000		97	85-115	1	20	
Thallium	0.049	0.00050	mg/L	0.05000		99	85-115	0.2	20	
Matrix Spike (1808406-MS1)		**Source: 18H0693-01**		Prepared & Analyzed: 08/30/2018						
Antimony	0.051	0.00050	mg/L	0.05000	0.00031	102	70-130			
Arsenic	0.051	0.00050	mg/L	0.05000	0.0015	100	70-130			
Barium	0.083	0.00050	mg/L	0.05000	0.035	96	70-130			
Beryllium	0.051	0.00025	mg/L	0.05000	0.000075	101	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	0.0027	95	70-130			
Chromium	0.050	0.00050	mg/L	0.05000	0.00035	100	70-130			
Copper	0.056	0.00050	mg/L	0.05000	0.0075	97	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.0014	101	70-130			
Nickel	0.048	0.00050	mg/L	0.05000	ND	97	70-130			
Selenium	0.052	0.0015	mg/L	0.05000	0.00033	104	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	0.000025	100	70-130			
Batch 1808408 - E245.1										
Blank (1808408-BLK1)				Prepared & Analyzed: 08/30/2018						
Mercury	ND	0.0010	mg/L							
LCS (1808408-BS1)				Prepared & Analyzed: 08/30/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		100	85-115			
LCS Dup (1808408-BSD1)				Prepared & Analyzed: 08/30/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		100	85-115	0.4	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808408 - E245.1										
Matrix Spike (1808408-MS1)		**Source: 18H0697-01**		Prepared & Analyzed: 08/30/2018						
Mercury	0.0045	0.0010	mg/L	0.005000	ND	91	85-115			
Matrix Spike (1808408-MS2)		**Source: 18H0767-01**		Prepared & Analyzed: 08/30/2018						
Mercury	0.0044	0.0010	mg/L	0.005000	ND	89	85-115			
Matrix Spike Dup (1808408-MSD1)		**Source: 18H0697-01**		Prepared & Analyzed: 08/30/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	97	85-115	7	20	
Matrix Spike Dup (1808408-MSD2)		**Source: 18H0767-01**		Prepared & Analyzed: 08/30/2018						
Mercury	0.0044	0.0010	mg/L	0.005000	ND	88	85-115	0.9	20	
Batch 1808423 - E200.8 (5.4)										
Blank (1808423-BLK1)				Prepared & Analyzed: 08/31/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1808423-BS1)				Prepared & Analyzed: 08/31/2018						
Antimony	0.052	0.00050	mg/L	0.05000		104	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.049	0.00050	mg/L	0.05000		99	85-115			
Beryllium	0.053	0.00025	mg/L	0.05000		105	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		99	85-115			
Chromium	0.050	0.00050	mg/L	0.05000		100	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.051	0.00050	mg/L	0.05000		103	85-115			
Nickel	0.051	0.00050	mg/L	0.05000		102	85-115			
Selenium	0.048	0.0015	mg/L	0.05000		96	85-115			
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115			

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808423 - E200.8 (5.4)										
LCS Dup (1808423-BSD1)				Prepared & Analyzed: 08/31/2018						
Antimony	0.051	0.00050	mg/L	0.05000		101	85-115	3	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.3	20	
Barium	0.047	0.00050	mg/L	0.05000		95	85-115	4	20	
Beryllium	0.054	0.00025	mg/L	0.05000		107	85-115	2	20	
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115	2	20	
Chromium	0.052	0.00050	mg/L	0.05000		104	85-115	3	20	
Copper	0.052	0.00050	mg/L	0.05000		103	85-115	0.4	20	
Lead	0.050	0.00050	mg/L	0.05000		100	85-115	3	20	
Nickel	0.053	0.00050	mg/L	0.05000		107	85-115	5	20	
Selenium	0.048	0.0015	mg/L	0.05000		96	85-115	0.01	20	
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115	0.2	20	
Matrix Spike (1808423-MS1)		**Source: 18H0555-01**		Prepared & Analyzed: 08/31/2018						
Antimony	0.052	0.00050	mg/L	0.05000	0.00016	103	70-130			
Arsenic	0.051	0.00050	mg/L	0.05000	0.00043	101	70-130			
Barium	0.058	0.00050	mg/L	0.05000	0.010	96	70-130			
Beryllium	0.054	0.00025	mg/L	0.05000	ND	107	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	97	70-130			
Chromium	0.083	0.00050	mg/L	0.05000	0.022	121	70-130			
Copper	0.056	0.00050	mg/L	0.05000	0.0068	99	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.00038	103	70-130			
Nickel	0.070	0.00050	mg/L	0.05000	0.011	119	70-130			
Selenium	0.051	0.0015	mg/L	0.05000	0.00054	100	70-130			
Thallium	0.050	0.00050	mg/L	0.05000	ND	100	70-130			
Matrix Spike (1808423-MS2)		**Source: 18H0575-01**		Prepared & Analyzed: 08/31/2018						
Antimony	0.052	0.00050	mg/L	0.05000	0.000054	104	70-130			
Arsenic	0.053	0.00050	mg/L	0.05000	0.00029	105	70-130			
Barium	0.10	0.00050	mg/L	0.05000	0.053	94	70-130			
Beryllium	0.047	0.00025	mg/L	0.05000	ND	95	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	0.000052	99	70-130			
Chromium	0.053	0.00050	mg/L	0.05000	0.00065	104	70-130			
Copper	0.12	0.00050	mg/L	0.05000	0.068	95	70-130			
Lead	0.055	0.00050	mg/L	0.05000	0.0015	107	70-130			
Nickel	0.049	0.00050	mg/L	0.05000	0.00030	97	70-130			
Selenium	0.054	0.0015	mg/L	0.05000	0.0017	105	70-130			
Thallium	0.052	0.00050	mg/L	0.05000	ND	104	70-130			

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808290 - SM2540 C										
Duplicate (1808290-DUP1)		**Source: 18H0605-10**		Prepared: 08/23/2018 Analyzed: 08/28/2018						
Total Dissolved Solids (Residue, Filterable)	1300	20	mg/L		1300			1	5	
Duplicate (1808290-DUP2)		**Source: 18H0607-01**		Prepared: 08/23/2018 Analyzed: 08/30/2018						
Total Dissolved Solids (Residue, Filterable)	560	20	mg/L		560			0.7	5	
Batch 1809004 - SM2320B										
LCS (1809004-BS1)				Prepared & Analyzed: 08/31/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		101	90-110			
LCS Dup (1809004-BSD1)				Prepared & Analyzed: 08/31/2018						
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		100	90-110	0.8	10	
Matrix Spike (1809004-MS1)		**Source: 18H0605-10**		Prepared & Analyzed: 08/31/2018						
Alkalinity, Total (As CaCO3)	820	2.0	mg/L	250.0	570	98	70-130			
Matrix Spike Dup (1809004-MSD1)		**Source: 18H0605-10**		Prepared & Analyzed: 08/31/2018						
Alkalinity, Total (As CaCO3)	820	2.0	mg/L	250.0	570	98	70-130	0	10	
Batch 1809018 - SM4500-CN BE										
Blank (1809018-BLK1)				Prepared: 09/04/2018 Analyzed: 09/05/2018						
Cyanide	ND	0.10	mg/L							
LCS (1809018-BS1)				Prepared: 09/04/2018 Analyzed: 09/05/2018						
Cyanide	1.8	0.10	mg/L	2.000		90	90-110			
LCS Dup (1809018-BSD1)				Prepared: 09/04/2018 Analyzed: 09/05/2018						
Cyanide	1.9	0.10	mg/L	2.000		97	90-110	7	20	
Matrix Spike (1809018-MS1)		**Source: 18H0577-02**		Prepared: 09/04/2018 Analyzed: 09/05/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	98	70-130			
Matrix Spike Dup (1809018-MSD1)		**Source: 18H0577-02**		Prepared: 09/04/2018 Analyzed: 09/05/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	101	70-130	3	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18H0633
Date Received: 08/22/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808283 - E300.0 (2.1)										
Blank (1808283-BLK1)				Prepared & Analyzed: 08/22/2018						
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							
LCS (1808283-BS1)				Prepared & Analyzed: 08/22/2018						
Fluoride	1.9	0.50	mg/L	2.000		95	90-110			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		99	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		99	90-110			
Sulfate	12	5.0	mg/L	12.50		95	90-110			
LCS Dup (1808283-BSD1)				Prepared & Analyzed: 08/22/2018						
Fluoride	2.0	0.50	mg/L	2.000		99	90-110	5	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		99	90-110	0.2	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		99	90-110	0.5	10	
Sulfate	12	5.0	mg/L	12.50		96	90-110	0.4	10	
Matrix Spike (1808283-MS1)		**Source: 18H0607-01**		Prepared & Analyzed: 08/22/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.26	96	80-120			
Nitrogen, Nitrite (As N)	1.9	0.10	mg/L	2.500	ND	75	80-120			M2
Matrix Spike (1808283-MS2)		**Source: 18H0651-01**		Prepared: 08/22/2018 Analyzed: 08/23/2018						
Fluoride	2.0	0.50	mg/L	2.000	0.10	97	80-120			
Nitrogen, Nitrite (As N)	1.8	0.10	mg/L	2.500	ND	72	80-120			M2
Matrix Spike (1808283-MS3)		**Source: 18H0669-01**		Prepared & Analyzed: 08/23/2018						
Fluoride	1.9	0.50	mg/L	2.000	ND	96	80-120			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.12	96	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	95	80-120			
Sulfate	12	5.0	mg/L	12.50	1.1	85	80-120			
Matrix Spike Dup (1808283-MSD1)		**Source: 18H0607-01**		Prepared & Analyzed: 08/22/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.26	94	80-120	2	10	
Nitrogen, Nitrite (As N)	1.9	0.10	mg/L	2.500	ND	75	80-120	0.7	10	M2
Matrix Spike Dup (1808283-MSD2)		**Source: 18H0651-01**		Prepared: 08/22/2018 Analyzed: 08/23/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.10	98	80-120	1	10	
Nitrogen, Nitrite (As N)	1.9	0.10	mg/L	2.500	ND	74	80-120	3	10	M2
Matrix Spike Dup (1808283-MSD3)		**Source: 18H0669-01**		Prepared & Analyzed: 08/23/2018						
Fluoride	1.9	0.50	mg/L	2.000	ND	96	80-120	0.4	10	
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000	0.12	96	80-120	0.1	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	95	80-120	0.3	10	
Sulfate	12	5.0	mg/L	12.50	1.1	84	80-120	0.2	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18H0633 DATE 8/22/18 PAGE 1 OF 1

PROJECT NAME POCH2 #

CONTACT NAME: Johnny Pappas + Sarah Richman

COMPANY NAME: AMI

ADDRESS: 2210 East Fort Lowell RD

CITY Tucson STATE AZ ZIP CODE 85719

PHONE FAX

SAMPLER'S SIGNATURE

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	See attached
POCH2	8-21-18	11:05Am		GW	4	X

1. RELINQUISHED BY:
Signature: Luis Lagunas
Printed Name: AMI
Firm: 8-21-18 12:55
Date/Time

2. RECEIVED BY:
Signature: Sarah Richman
Printed Name: AMI
Firm: 8/21/18 1255
Date/Time

3. RELINQUISHED BY:
Signature: Sarah Richman
Printed Name: 8-22-18 9:00am
Firm: AMI
Date/Time

4. RECEIVED BY:
Signature: Katie Tobin
Printed Name: 8/22 9:03am
Firm: TURNER LABORATORIES, INC. Ami
Date/Time

TURNAROUND REQUIREMENTS:
___ Standard (approx. 10 days)*
X Next day ___ 2 Day ___ 5 Day*
X Email Preliminary Results To: srichman@arizonamining.com
* Working Days

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 4
Temperature 6.1
☐ Wet Ice ☒ Blue Ice

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes ☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes ☐ No	Container Intact	☒	Appropriate Head Space	☐
Mail ADEQ Forms:	☐ Yes ☐ No	COC/Labels Agree	☐	Received Within Hold Time	☒

Katie Tobin 8/22/2018 9:03

Martha Howard Turner Labs 8/22/18 9:37

MONITORING WELL PUMPED SAMPLE COLLECTION FORM

LOCATION	Project Name: AMI	**LocID:**	Date: 6-21-18
	Well Name: POC#2	Project #:	Recorded By: LL Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: YSI pro	Water Level Indicator Type/ID #: GeoTech water meter	Carbon Canister: NO
	Water Quality Meter Calibrated Today? Y / N	Sampling Equipment:	Equipment Decon: (alconox)
WELL INFO	Casing I.D. (in) [a]: **2**	Unit Casing Volume (gal / lin ft) [b]: **0.16**	Initial Depth to Water (ft) [c]: 16.6
	Total Well Depth (ft) [d]: **86**	Water Column Thickness (ft) [d-c]: 69.4	Well Volume (gal) {[d-c] x b}: 11.104
	Water Level Measuring Point (ft, bls): "+" = below land surface "-" = above land surface	Key Number, if necessary to access well: V4	Ground Condition of Well: Good
	Remarks:		

CASING INFO												
Casing I.D. (in) [a]:	1.5	**2.0**	2.2	3.0	4.0	4.3	**5.0**	6.0	7.0	8.0	**10.0**
Unit Casing Volume (gal/lin ft) [b]:	0.09	**0.16**	0.20	0.37	0.65	0.75	**1.0**	1.5	2.0	2.6	**4.1**

Sample ID #(s)/Time(s)	**No. of Containers/Volume/Type**	**Preserv.**	Filtered (Y/N)	Analysis	Pump Type or Bailer	**Discharge**
Sample ID = POC#2-	Cubtainer	NP	Lab Filtered	Radiological	Electric submersible pump	X Water Discharged Container: Tank onsite
Sample Time = 11:05 Am	500ml	NP	N	Major Cations/Anions wet chem, D Metals		
Depth of Pump Inlet = 60 feet btoc	250-ml	HNO3	N	T Metals		Water Discharged Directly Onto Site
	500-ml	NaOH	N	Cyanide		

Time (24 hr)	**Water Level (ft bmp)**	**Odor (Y/N)**	**Volume Removed (gal)**	**Pumping Rate (gpm)**	**Flow Meter Read (gal)**	**Temp (C)**	**Conductivity (uS/cm)**	**pH**	**Turbidity (NTU)**	**Color**	**Remarks (clarity, etc.)**
10:22 AM	16.6	NO	0	—	—	20.6	1637	6.64	22.2	clear	Pump on/
10:39 AM	24.9	NO	11	2.5	—	19.4	1818	6.77	14.0	clear	
10:48 AM	25.8	NO	20	2.5	—	19.3	3486	6.72	10.02	clear	
10:57 AM	26.5	NO	32	2.5	—	19.3	3469	6.59	9.02	clear	
11:05 AM	27	NO	37	2.5	—	19.5	3474	6.64	9	clear	
											pump off / **after** pump is off, record: water level, volume remove, and flow meter reading

Stabilization: +/- 10%, +/- 0.2 pH, +/- 10% conductivity, for 2 consecutive purge volumes

PLEASE COMPLETE THE FORM FOR ALL FIELDS

POC-2 Monthly Suite			
	LABORATORY		
Analyte	Total	Dissolved	Other
Metals			
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	
Major Cations			
Hardness	X	X	
Major Anions			
Total Alkalinity	X		
Acidity	X		
Fluoride	X	X	
Nitrate – Nitrite as N	X	X	
Nitrite - N	X	X	
Nitrate-Nitrite as N 1	X	X	
Sulfate	X	X	
Parameters			
Total Dissolved Solids		X	
RadChem			
Gross Alpha Particle Activity	X	X	
Radium 226 + 228	X	X	
Cyanide			
Free CN	X	X	Free

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

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: August 21, 2018
Sample Received: August 24, 2018
Analysis Completed: August 31, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18H0633-01	< 2.2	< 0.5	< 0.7	< 0.7

Date of Analysis	8/29/2018	8/24/2018	8/24/2018	8/24/2018

8/31/2018
Robert L. Metzger, Ph.D., C.H.P. 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: _____

August 21, 2018 (Sample Date) 11:05 (Sample Time) (24 hour clock) _____ (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	8/29/2018	< 2.2		
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	8/24/2018	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	8/24/2018	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	8/24/2018	< 0.7		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60879

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: 18H0633-01

Authorized Signature: _____

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18H0633

SENDING LABORATORY:

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

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: 18H0633-01 Drinking Water Sampled:08/21/2018 11:05			
Radiochemistry, Radium 226/228	09/20/2018 11:05		
Radiochemistry, Gross Alpha	02/17/2019 11:05		
Containers Supplied:			

#60879

Released By	Date	Received By	Date
	8/23/18 1600	UPS	8/23/18 1640
Released By	Date	Received By	Date
		Scarlet D Carter	8/24/18 11:23

October 05, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18I0459
Order Name: POC-2 Monthly

RE: Ground Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 09/18/2018 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: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

Order: POC-2 Monthly

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18I0459-01	POC#2-91718	Ground Water	09/17/2018 1310

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

Case Narrative

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

B1	Target analyte detected in the method blank at or above the method reporting limit.
B3	Target analyte detected in calibration blank at or above the method reporting limit.
B7	Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
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.
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.

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

Turner Laboratories, Inc.

Date: 10/05/2018

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Lab Sample ID: 18I0459-01

Client Sample ID: POC#2-91718
Collection Date/Time: 09/17/2018 1310
Matrix: Ground Water
Order Name: POC-2 Monthly

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2100				mg/L	10	09/19/2018 1035	09/21/2018 1214	MH
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	09/18/2018 1130	09/18/2018 1149	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	500		40		mg/L	10	09/21/2018 1555	09/25/2018 1342	MH
Iron	1.4	0.031	3.0	E4	mg/L	10	09/21/2018 1555	09/25/2018 1342	MH
Magnesium	210		30		mg/L	10	09/21/2018 1555	09/25/2018 1342	MH
Manganese	26		0.20		mg/L	10	09/21/2018 1555	09/25/2018 1342	MH
Zinc	6.2		0.40		mg/L	10	09/21/2018 1555	09/25/2018 1342	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Arsenic	0.0076		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Barium	0.018		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Beryllium	0.00049		0.00025		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Cadmium	0.0070		0.00025		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Chromium	ND		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Copper	0.00050		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Lead	0.00092	0.00057	0.0050	E4	mg/L	10	09/21/2018 1555	09/24/2018 1423	MH
Nickel	0.071		0.00050		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Selenium	0.0021		0.0015		mg/L	1	09/21/2018 1555	09/24/2018 1838	MH
Thallium	ND	0.00023	0.0050	E8	mg/L	10	09/21/2018 1555	09/24/2018 1423	MH
CVAA Dissolved Mercury-E 245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	09/26/2018 1050	09/26/2018 1653	AR
ICP Total Metals-E200.7 (4.4)									
Calcium	490		40		mg/L	10	09/19/2018 1035	09/21/2018 1214	MH
Iron	1.8		0.30		mg/L	1	09/19/2018 1035	09/21/2018 1354	MH
Magnesium	210		30		mg/L	10	09/19/2018 1035	09/21/2018 1214	MH
Manganese	26		0.20		mg/L	10	09/19/2018 1035	09/21/2018 1215	MH

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Lab Sample ID: 18I0459-01

Client Sample ID: POC#2-91718
Collection Date/Time: 09/17/2018 1310
Matrix: Ground Water
Order Name: POC-2 Monthly

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Zinc	5.9		0.40		mg/L	10	09/19/2018 1035	09/21/2018 1215	MH
ICP/MS Total Metals-E200.8 (5.4)									
Antimony	ND		0.00050		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Arsenic	0.0068		0.00050		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Barium	0.019		0.00050		mg/L	1	09/19/2018 1105	09/21/2018 1801	MH
Beryllium	0.00053		0.00025		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Cadmium	0.0071		0.00025		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Chromium	ND		0.00050	B3	mg/L	1	09/19/2018 1105	09/21/2018 1801	MH
Copper	0.0012		0.0010		mg/L	2	09/19/2018 1105	09/21/2018 1657	MH
Lead	0.0038		0.00050		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Nickel	0.068		0.00050	B7	mg/L	1	09/19/2018 1105	09/21/2018 1801	MH
Selenium	0.00041	0.00025	0.0015	E4	mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
Thallium	ND		0.00050		mg/L	1	09/19/2018 1105	09/20/2018 1943	MH
CVAA Total Mercury-E245.1									
Mercury	ND	0.000079	0.0010	E8	mg/L	1	09/20/2018 1040	09/20/2018 1430	AR
Anions by Ion Chromatography-E300.0 (2.1)									
Fluoride	ND		0.50		mg/L	1	09/18/2018 1130	09/18/2018 1149	EJ
Nitrogen, Nitrate (As N)	ND		0.50		mg/L	1	09/18/2018 1130	09/18/2018 1149	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	09/18/2018 1130	09/18/2018 1149	EJ
Sulfate	2100		500		mg/L	100	09/18/2018 1305	09/18/2018 1329	EJ
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	170		2.0		mg/L	1	09/25/2018 1500	09/25/2018 1600	EJ
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	09/25/2018 1500	09/25/2018 1600	EJ
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	09/25/2018 1500	09/25/2018 1600	EJ
Alkalinity, Total (As CaCO3)	170		2.0		mg/L	1	09/25/2018 1500	09/25/2018 1600	EJ
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	3200		20		mg/L	1	09/19/2018 0819	09/27/2018 0940	EJ
Cyanide-SM4500-CN BE									
Cyanide	ND		0.10		mg/L	1	09/19/2018 1000	09/21/2018 1505	EJ

Turner Laboratories, Inc.

Date: 10/05/2018

Client:	Arizona Minerals Inc.	**Client Sample ID:**	POC#2-91718
Project:	Ground Water	**Collection Date/Time:**	09/17/2018 1310
Work Order:	18I0459	**Matrix:**	Ground Water
Lab Sample ID:	18I0459-01	**Order Name:**	POC-2 Monthly

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809195 - E200.8 (5.4)										
Blank (1809195-BLK1)				Prepared: 09/19/2018 Analyzed: 09/20/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	0.0040	0.00050	mg/L							B1
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1809195-BS1)				Prepared: 09/19/2018 Analyzed: 09/20/2018						
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	0.051	0.00050	mg/L	0.05000		103	85-115			
Beryllium	0.048	0.00025	mg/L	0.05000		96	85-115			
Cadmium	0.048	0.00025	mg/L	0.05000		97	85-115			
Chromium	0.046	0.00050	mg/L	0.05000		93	85-115			
Copper	0.049	0.00050	mg/L	0.05000		98	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.053	0.00050	mg/L	0.05000		105	85-115			
Selenium	0.047	0.0015	mg/L	0.05000		95	85-115			
Thallium	0.048	0.00050	mg/L	0.05000		97	85-115			
LCS Dup (1809195-BSD1)				Prepared: 09/19/2018 Analyzed: 09/20/2018						
Antimony	0.048	0.00050	mg/L	0.05000		97	85-115	1	20	
Arsenic	0.048	0.00050	mg/L	0.05000		95	85-115	1	20	
Barium	0.050	0.00050	mg/L	0.05000		100	85-115	2	20	
Beryllium	0.047	0.00025	mg/L	0.05000		95	85-115	1	20	
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115	1	20	
Chromium	0.046	0.00050	mg/L	0.05000		92	85-115	1	20	
Copper	0.048	0.00050	mg/L	0.05000		96	85-115	2	20	
Lead	0.047	0.00050	mg/L	0.05000		94	85-115	4	20	
Nickel	0.051	0.00050	mg/L	0.05000		102	85-115	3	20	
Selenium	0.047	0.0015	mg/L	0.05000		93	85-115	1	20	
Thallium	0.047	0.00050	mg/L	0.05000		94	85-115	3	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809195 - E200.8 (5.4)										
Matrix Spike (1809195-MS1)		**Source: 18I0441-01**		Prepared: 09/19/2018 Analyzed: 09/20/2018						
Antimony	0.048	0.00050	mg/L	0.05000	ND	95	70-130			
Arsenic	0.049	0.00050	mg/L	0.05000	0.00026	97	70-130			
Barium	0.075	0.00050	mg/L	0.05000	0.035	79	70-130			
Beryllium	0.048	0.00025	mg/L	0.05000	0.000030	96	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.00023	94	70-130			
Chromium	0.052	0.00050	mg/L	0.05000	0.00094	102	70-130			B3
Copper	0.050	0.00050	mg/L	0.05000	0.0048	90	70-130			
Lead	0.049	0.00050	mg/L	0.05000	0.0012	95	70-130			
Nickel	0.051	0.00050	mg/L	0.05000	0.0034	95	70-130			
Selenium	0.048	0.0015	mg/L	0.05000	ND	97	70-130			
Thallium	0.047	0.00050	mg/L	0.05000	ND	95	70-130			
Batch 1809196 - E200.7 (4.4)										
Blank (1809196-BLK1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1809196-BS1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Calcium	9.8	4.0	mg/L	10.00		98	85-115			
Iron	1.0	0.30	mg/L	1.000		102	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
Manganese	0.52	0.020	mg/L	0.5000		105	85-115			
Zinc	0.50	0.040	mg/L	0.5000		99	85-115			
LCS Dup (1809196-BSD1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Calcium	9.4	4.0	mg/L	10.00		94	85-115	4	20	
Iron	0.97	0.30	mg/L	1.000		97	85-115	5	20	
Magnesium	9.6	3.0	mg/L	10.00		96	85-115	5	20	
Manganese	0.50	0.020	mg/L	0.5000		100	85-115	5	20	
Zinc	0.47	0.040	mg/L	0.5000		94	85-115	5	20	
Matrix Spike (1809196-MS1)		**Source: 18I0418-02**		Prepared: 09/19/2018 Analyzed: 09/21/2018						
Calcium	190	4.0	mg/L	10.00	190	NR	70-130			M3
Iron	1.9	0.30	mg/L	1.000	0.99	92	70-130			
Magnesium	47	3.0	mg/L	10.00	39	81	70-130			
Manganese	0.59	0.020	mg/L	0.5000	0.079	103	70-130			
Zinc	0.68	0.040	mg/L	0.5000	0.20	96	70-130			
Matrix Spike (1809196-MS2)		**Source: 18I0459-01**		Prepared: 09/19/2018 Analyzed: 09/21/2018						
Calcium	500	40	mg/L	10.00	490	118	70-130			
Iron	2.9	0.30	mg/L	1.000	1.8	108	70-130			
Magnesium	220	30	mg/L	10.00	210	113	70-130			
Manganese	26	0.20	mg/L	0.5000	26	92	70-130			
Zinc	6.3	0.40	mg/L	0.5000	5.9	94	70-130			
Batch 1809209 - E245.1										

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809209 - E245.1										
Blank (1809209-BLK1)				Prepared & Analyzed: 09/20/2018						
Mercury	ND	0.0010	mg/L							
LCS (1809209-BS1)				Prepared & Analyzed: 09/20/2018						
Mercury	0.0050	0.0010	mg/L	0.005000		100	85-115			
LCS Dup (1809209-BSD1)				Prepared & Analyzed: 09/20/2018						
Mercury	0.0049	0.0010	mg/L	0.005000		97	85-115	3	20	
Matrix Spike (1809209-MS1)		**Source: 18I0446-01**		Prepared & Analyzed: 09/20/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115			
Matrix Spike Dup (1809209-MSD1)		**Source: 18I0446-01**		Prepared & Analyzed: 09/20/2018						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	85-115	0.1	20	
Batch 1809226 - E 200.8 (5.4)										
Blank (1809226-BLK1)				Prepared & Analyzed: 09/24/2018						
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							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Thallium	ND	0.00050	mg/L							
LCS (1809226-BS1)				Prepared & Analyzed: 09/24/2018						
Antimony	0.049	0.00050	mg/L	0.05000		98	85-115			
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Barium	0.050	0.00050	mg/L	0.05000		100	85-115			
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115			
Cadmium	0.051	0.00025	mg/L	0.05000		101	85-115			
Chromium	0.052	0.00050	mg/L	0.05000		103	85-115			
Copper	0.051	0.00050	mg/L	0.05000		102	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Nickel	0.051	0.00050	mg/L	0.05000		103	85-115			
Selenium	0.049	0.0015	mg/L	0.05000		97	85-115			
Thallium	0.049	0.00050	mg/L	0.05000		98	85-115			

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809226 - E 200.8 (5.4)										
LCS Dup (1809226-BSD1)				Prepared & Analyzed: 09/24/2018						
Antimony	0.051	0.00050	mg/L	0.05000		102	85-115	4	20	
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115	0.5	20	
Barium	0.052	0.00050	mg/L	0.05000		104	85-115	4	20	
Beryllium	0.050	0.00025	mg/L	0.05000		100	85-115	0.3	20	
Cadmium	0.052	0.00025	mg/L	0.05000		105	85-115	4	20	
Chromium	0.051	0.00050	mg/L	0.05000		102	85-115	1	20	
Copper	0.052	0.00050	mg/L	0.05000		104	85-115	1	20	
Lead	0.049	0.00050	mg/L	0.05000		98	85-115	0.3	20	
Nickel	0.051	0.00050	mg/L	0.05000		101	85-115	2	20	
Selenium	0.049	0.0015	mg/L	0.05000		97	85-115	0.004	20	
Thallium	0.051	0.00050	mg/L	0.05000		101	85-115	3	20	
Matrix Spike (1809226-MS1)		**Source: 18I0523-01**		Prepared & Analyzed: 09/24/2018						
Antimony	0.048	0.00050	mg/L	0.05000	0.00034	94	70-130			
Arsenic	0.056	0.00050	mg/L	0.05000	0.0055	101	70-130			
Barium	0.070	0.00050	mg/L	0.05000	0.025	90	70-130			
Beryllium	0.050	0.00025	mg/L	0.05000	0.000045	100	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	0.000087	96	70-130			
Chromium	0.052	0.00050	mg/L	0.05000	0.00030	103	70-130			
Copper	0.050	0.00050	mg/L	0.05000	0.0023	96	70-130			
Lead	0.048	0.00050	mg/L	0.05000	0.00024	96	70-130			
Nickel	0.049	0.00050	mg/L	0.05000	ND	98	70-130			
Selenium	0.052	0.0015	mg/L	0.05000	0.00036	104	70-130			
Thallium	0.048	0.00050	mg/L	0.05000	0.000064	95	70-130			
Batch 1809243 - E 200.7 (4.4)										
Blank (1809243-BLK1)				Prepared & Analyzed: 09/25/2018						
Calcium	ND	4.0	mg/L							
Iron	0.0082	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Manganese	ND	0.020	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1809243-BS1)				Prepared & Analyzed: 09/25/2018						
Calcium	9.9	4.0	mg/L	10.00		99	85-115			
Iron	1.0	0.30	mg/L	1.000		103	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
Manganese	0.52	0.020	mg/L	0.5000		103	85-115			
Zinc	0.53	0.040	mg/L	0.5000		106	85-115			
LCS Dup (1809243-BSD1)				Prepared & Analyzed: 09/25/2018						
Calcium	9.6	4.0	mg/L	10.00		96	85-115	4	20	
Iron	1.0	0.30	mg/L	1.000		101	85-115	2	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	1	20	
Manganese	0.52	0.020	mg/L	0.5000		103	85-115	0.01	20	
Zinc	0.52	0.040	mg/L	0.5000		105	85-115	1	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809243 - E 200.7 (4.4)										
Matrix Spike (1809243-MS1)		**Source: 18I0523-01**		Prepared & Analyzed: 09/25/2018						
Calcium	27	4.0	mg/L	10.00	18	89	70-130			
Iron	1.0	0.30	mg/L	1.000	0.053	98	70-130			
Magnesium	12	3.0	mg/L	10.00	2.1	98	70-130			
Manganese	0.52	0.020	mg/L	0.5000	0.012	101	70-130			
Zinc	0.53	0.040	mg/L	0.5000	ND	105	70-130			
Batch 1809257 - E 245.1										
Blank (1809257-BLK1)				Prepared & Analyzed: 09/26/2018						
Mercury	ND	0.00050	mg/L							
LCS (1809257-BS1)				Prepared & Analyzed: 09/26/2018						
Mercury	0.0048	0.00050	mg/L	0.005000		96	85-115			
LCS Dup (1809257-BSD1)				Prepared & Analyzed: 09/26/2018						
Mercury	0.0048	0.00050	mg/L	0.005000		97	85-115	0.5	20	
Matrix Spike (1809257-MS1)		**Source: 18I0527-01**		Prepared & Analyzed: 09/26/2018						
Mercury	0.0045	0.00050	mg/L	0.005000	ND	90	85-115			
Matrix Spike Dup (1809257-MSD1)		**Source: 18I0527-01**		Prepared & Analyzed: 09/26/2018						
Mercury	0.0046	0.00050	mg/L	0.005000	ND	92	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809191 - SM2540 C										
Duplicate (1809191-DUP1)		**Source: 18I0440-01**		Prepared: 09/19/2018 Analyzed: 09/21/2018						
Total Dissolved Solids (Residue, Filterable)	640	20	mg/L		650			3	5	
Batch 1809218 - SM4500-CN BE										
Blank (1809218-BLK1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Cyanide	ND	0.10	mg/L							
LCS (1809218-BS1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Cyanide	2.0	0.10	mg/L	2.000		99	90-110			
LCS Dup (1809218-BSD1)				Prepared: 09/19/2018 Analyzed: 09/21/2018						
Cyanide	2.0	0.10	mg/L	2.000		99	90-110	0.4	20	
Matrix Spike (1809218-MS1)		**Source: 18I0189-02**		Prepared: 09/19/2018 Analyzed: 09/21/2018						
Cyanide	1.9	0.10	mg/L	2.000	ND	96	70-130			
Matrix Spike Dup (1809218-MSD1)		**Source: 18I0189-02**		Prepared: 09/19/2018 Analyzed: 09/21/2018						
Cyanide	2.0	0.10	mg/L	2.000	ND	99	70-130	4	20	
Batch 1809246 - SM2320B										
LCS (1809246-BS1)				Prepared & Analyzed: 09/25/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		98	90-110			
LCS Dup (1809246-BSD1)				Prepared & Analyzed: 09/25/2018						
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		98	90-110	0	10	
Matrix Spike (1809246-MS1)		**Source: 18I0441-01**		Prepared & Analyzed: 09/25/2018						
Alkalinity, Total (As CaCO3)	290	2.0	mg/L	250.0	62	93	70-130			
Matrix Spike Dup (1809246-MSD1)		**Source: 18I0441-01**		Prepared & Analyzed: 09/25/2018						
Alkalinity, Total (As CaCO3)	290	2.0	mg/L	250.0	62	93	70-130	0	10	

Client: Arizona Minerals Inc.
Project: Ground Water
Work Order: 18I0459
Date Received: 09/18/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1809175 - E300.0 (2.1)										
Blank (1809175-BLK1)				Prepared & Analyzed: 09/18/2018						
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							
LCS (1809175-BS1)				Prepared & Analyzed: 09/18/2018						
Fluoride	2.0	0.50	mg/L	2.000		100	90-110			
Nitrogen, Nitrate (As N)	4.8	0.50	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110			
Sulfate	12	5.0	mg/L	12.50		98	90-110			
LCS Dup (1809175-BSD1)				Prepared & Analyzed: 09/18/2018						
Fluoride	2.0	0.50	mg/L	2.000		99	90-110	0.8	10	
Nitrogen, Nitrate (As N)	4.8	0.50	mg/L	5.000		96	90-110	0.5	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110	0.4	10	
Sulfate	12	5.0	mg/L	12.50		98	90-110	0.5	10	
Matrix Spike (1809175-MS1)		**Source: 18I0463-02**		Prepared & Analyzed: 09/18/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.10	98	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.19	96	80-120			
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500	ND	103	80-120			
Sulfate	13	5.0	mg/L	12.50	1.4	90	80-120			
Matrix Spike (1809175-MS2)		**Source: 18I0510-04**		Prepared & Analyzed: 09/18/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.31	94	80-120			
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.18	96	80-120			
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500	ND	105	80-120			
Sulfate	13	5.0	mg/L	12.50	1.4	92	80-120			
Matrix Spike Dup (1809175-MSD1)		**Source: 18I0463-02**		Prepared & Analyzed: 09/18/2018						
Fluoride	2.1	0.50	mg/L	2.000	0.10	98	80-120	0.5	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000	0.19	95	80-120	0.4	10	
Nitrogen, Nitrite (As N)	2.6	0.10	mg/L	2.500	ND	103	80-120	0.3	10	
Sulfate	13	5.0	mg/L	12.50	1.4	89	80-120	0.2	10	
Matrix Spike Dup (1809175-MSD2)		**Source: 18I0510-04**		Prepared & Analyzed: 09/18/2018						
Fluoride	2.2	0.50	mg/L	2.000	0.31	96	80-120	2	10	
Nitrogen, Nitrate (As N)	5.1	0.50	mg/L	5.000	0.18	98	80-120	2	10	
Nitrogen, Nitrite (As N)	2.7	0.10	mg/L	2.500	ND	107	80-120	2	10	
Sulfate	13	5.0	mg/L	12.50	1.4	93	80-120	1	10	

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

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18I0459 DATE 9/18/18 PAGE 1 OF 1

PROJECT NAME _____ # _____

CONTACT NAME Johnny Pappas, Sarah Richman

COMPANY NAME AMI/South 32

ADDRESS 2210 East Fort Lowell Rd

CITY Tucson STATE AZ ZIP CODE 85719

PHONE _____ FAX _____

SAMPLER'S SIGNATURE [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Cu/Pb Testing	See attached
Roch2-91718	9-17-18	1:10 Pm		GW	5		-

1. RELINQUISHED BY: [signature]
Signature Luis Lagunas
Printed Name AMI/South 32
Firm 9-18-18 7:00 AM
Date/Time

2. RECEIVED BY: [signature]
Signature JUDA VILLA
Printed Name BZ3
Firm 9/18/18 9A
Date/Time

3. RELINQUISHED BY: [signature]
Signature J JUDA VILLA
Printed Name BZ3
Firm 9/18/18 10:30
Date/Time

4. RECEIVED BY: Leandra X. Marshall
Signature Leandra X. Marshall
Printed Name
TURNER LABORATORIES, INC.
Firm 9/18/18 10:30
Date/Time

TURNAROUND REQUIREMENTS:
_____ Standard (approx.10 days)*
_____ Next day ____ 2 Day ____ 5 Day*
_____ Email Preliminary Results To:
_____
* Working Days

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 5
Temperature 2.1
☒ Wet Ice ☐ Blue Ice

***LEGEND**
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☒	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

POC-2 Monthly Suite			
	LABORATORY		
Analyte	**Total**	**Dissolved**	**Other**
Metals			
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	
Major Cations			
Hardness	X	X	
Major Anions			
Total Alkalinity	X		
Acidity	X		
Fluoride	X	X	
Nitrate – Nitrite as N	X	X	
Nitrite - N	X	X	
Nitrate-Nitrite as N 1	X	X	
Sulfate	X	X	
Parameters			
Total Dissolved Solids		X	
RadChem			
Gross Alpha Particle Activity	X	X	
Radium 226 + 228	X	X	
Cyanide			
Free CN	X	X	Free

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Depth to water

Radiation Safety Engineering, Inc.
3245 N. WASHINGTON ST. • CHANDLER, ARIZONA 85225-1121 (480) 897-9459
Website: www.radsafe.com FAX (480) 892-5446

Radiochemical Activity in Water (pCi/L)

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

Sampling Date: September 17, 2018
Sample Received: September 19, 2018
Analysis Completed: September 28, 2018

Sample ID	Gross Alpha Activity Method 600/00-02 (pCi/L)	Radium 226 Activity Method GammaRay HPGE (pCi/L)	Radium 228 Activity Method GammaRay HPGE (pCi/L)	Total Radium (pCi/L)
18I0459-01	< 2.1	< 0.5	< 0.7	< 0.7

Date of Analysis	9/26/2018	9/21/2018	9/21/2018	9/21/2018

9/28/2018
Robert L. Metzger, Ph.D., C.H.P. 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: _____

September 17, 2018 (Sample Date) 13:10 (24 hour clock) (Sample Time) _____ (Owner/Contact Person)

_____ (Owner/Contact Fax Number) _____ (Owner/Contact Phone Number)

Sample Collection Point

☐ EPDS # _____

Compliance Sample Type:

☐ Reduced Monitoring

☐ Quarterly

☐ Composite of four quarterly samples

Date Q1 collected: _____

Date Q2 collected: _____

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	9/26/2018	< 2.1		
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	9/21/2018	< 0.7		
GammaRay HPGE		1 pCi/L	Radium 226	4020	9/21/2018	< 0.5		
GammaRay HPGE		1 pCi/L	Radium 228	4030	9/21/2018	< 0.7		

*****LABORATORY INFORMATION*****

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

Specimen Number: RSE60992

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: 18I0459-01

Authorized Signature: Robert L. Metzger

Date Public Water System Notified: _____

DWAR 6: 11/2007

SUBCONTRACT ORDER

Turner Laboratories, Inc.

18I0459

SENDING LABORATORY:

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

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: 18I0459-01 Drinking Water Sampled:09/17/2018 13:10			
Radiochemistry, Radium 226/228	10/17/2018 13:10		
Radiochemistry, Gross Alpha	03/16/2019 13:10		
Containers Supplied:			

DWAR 9 Form

#60992

9/28/18
DWAR 6 needed per K. Brim

Released By	Date	Received By	Date
Leandra X. Marshall	9/18/18 16:00	UPS	9/18/18 16:00
		Scarlet D Carter	9/19/18 9:55
Released By	Date	Received By	Date