



STATE OF
COLORADO

Eschberger - DNR, Amy <amy.eschberger@state.co.us>

wes williams

Wesley Williams <nevadavillewes@gmail.com>

Mon, Apr 6, 2020 at 12:30 PM

To: Amy.Eschberger@state.co.us

Portable water recirculating mill
t- Clip test
Wet gravel operation

3 attachments



Water gravity separation.docx

18K



D73280Milling test.PDF

428K



COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT.docx

16K

Portable water/gravity concentration system

Wesley A. Williams / Company name / Nevadaville Encore LLC.

Active 110-D Mining reclamation Permit # 2014-066, covering ½ acer area on the Wm. Richardson and Iron mining claims.

Permitted to haul 3500 tons a year with Gilpin County. Water for dust control consists of two 250 gal. Containers with a 1-1/2" pump and 1-1/2" fire hose with sprayer on a trailer.

All roads are in place to mining claims; permit signs in place, site markers in place, claim corners in place silt fencing & wedels for erosion control in place, dust control in place. No oil, gas, diesel fuel stored on site.

My request is to operate a 1- ton per. hour water gravity concentrating system on site. No chemicals! Just water in a closed system consisting of:

(1) Impact mill with water feed making slurry to feed (1) 4'x8' shaker table and (1) sand screw to dewater tailings coming off shaker table. All water to be recirculated to impact mill and shaker table. Shaker table has 3 collecting points. Top of table is high grade ore, center collecting point is middling's. Bottom collecting point is tailings. Top and center collecting points come off the table from the side of table into 5 gallon buckets that over flow into a 150 gal. Rubber maid tank with recirculating pump to impact mill and shaker table. Tailing collecting point at bottom of table is transferred to the sand screw hopper and water is returned to impact mill and shaker table. Damp dried tailings are tested and hauled off and used for building materials or to a lay down site designated by the DRMS. There will always be 2 empty 250 gal water containers with a pump and hoses on site to drain the recirculating system for clean up and repairs.

This portable classifying system consists of two 8'x20' steel trailers with side walls 16" high to contain any water overflows or leaks.

Our operating seasons are limited because of weather so we are looking at operating outside for 6 mo. a year. With no night time work, do to operating time set up by Gilpin County. 7 AM. – 6PM. Hauling ore included. It is my intention to comply with all Colorado regulations. This small portable operation will give me a chance to make some progress on this reclamation project this year.

Thank you for this consideration,

W. A. Williams, manager and owner

Nevadaville Encore LLC. 303-681-1111

999 Nevadaville Rd. Central City, CO. 80427-1442

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION

Gravel Pit Summary Page

APPLICANT'S NAME: Wes Williams - Wm. Richardson and Ryan Gulch tailings PERMIT #: 2014066

REVIEW ENGINEER : C. N. Pray

CONTROL ENGINEER: AIRS ID: #N/A

Project Description: Tailings stockpiles

Action Taken: Initial Approval review

Sources of Emissions: Material extraction, handling, transfer, and hauling

Throughputs (tons/year): Materials

Extraction

Raw Material

Stockpile

Products Stockpile Materials

Hauled

0 0 25,000 3,500

Sources of Emission Factors: AP-42

Summary of Emissions (tons per year)*:

TSP PM₁₀ PM_{2.5} SO_x NO_x VOC CO Pb

0.0 0.0 0.0

0.0 0.0 0.0

0.4 0.2 0.0 0.0 0.0 0.0

0.0 0.0 0.0

0.1 0.0 0.0

----- A A A A A A

Specific Emission Standards Regulation No. 1

Note:*

Attainment Status Attainment for: Particulate emissions

Proposed Controls Various control devices and measures as listed on AIRS page 2

Source's Classification Minor source.

Public comment is waived at this time.

MODEL: **Modeling is not required at this time.**

PM₁₀ Flux (g/m

2-sec) 0.000000 24-Hr Conc. (µg/m

3) Annual Conc. (µg/m

3)

Maximum 1 hr. Concentration = **0 0 0.0**

Background conc. from ABC Book, AQCR **13A 84 27.0**

Total Impacts (source contribution + Background): **84 27.0**

PM_{2.5} Flux (g/m

2-sec) 0.000000 24-Hr Conc. (µg/m³) Annual Conc. (µg/m³)

Maximum 1 hr. Concentration = **0 0 0.0**

Background conc. from ABC Book, AQCR **13A 11 4.0**

Total Impacts (source contribution + Background): **11 4.0**

Conversion Factors used: **0.40** to convert from 1-hour to 24-hour concentration

0.08 to convert from 1-hour to Annual concentration

NOTE: 1. All emissions considered fugitive except crushers, screens, conveyors, and transfer points.

2. Modeling is required if PM₁₀ >= 15 tons per year, or 82 lbs per day; or PM_{2.5} >= 5 tons per year or 11 lbs per day.

The flux rates for impact modeling is 0.000000 g/m²-sec; and the property length is 0.00 m

Explanations:

Fugitive Emissions (actual)

Attainment Status

Public Comment override:

This operation is for wet screening of old mine tailings and for the removal of the screened tailings material. The process and fugitive dust are below reporting thresholds.

May 26, 2017

Facility's Total PTE

Controlled Emissions (transfer points)

Uncontrolled Emissions (points & fugitive)

Current Project's PTE

Page 1



08/11/15

Technical Report for

Nevadaville Encore LLC

WM Richardson Ore Milling

Accutest Job Number: D73280

Sampling Date: 07/28/15

Report to:

Nevadaville Encore LLC
17105 Carlson #813
Parker Co, CO 80134
Nevadavillewes@gmail.com

ATTN: Wesley Williams

Total number of pages in report: **27**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Scott Heideman'.

Scott Heideman
Laboratory Director

Client Service contact: Kaila Gaither 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary 3

Section 2: Summary of Hits 4

Section 3: Sample Results 5

3.1: D73280-1: MILLING TAILINGS SAMP. 6

Section 4: Misc. Forms 7

4.1: Chain of Custody 8

Section 5: Misc. Forms (Accutest New Jersey) 10

5.1: Chain of Custody 11

Section 6: Metals Analysis - QC Data (Accutest New Jersey) 13

6.1: Prep QC MP88054: As,Ba,Cd,Cr,Pb,Se,Ag 14

6.2: Prep QC MP88061: Hg 24



Sample Summary

Nevadaville Encore LLC

Job No: D73280

WM Richardson Ore Milling

Sample Number	Collected		Matrix Code	Type	Client Sample ID
	Date	Time By			
D73280-1	07/28/15	14:25 WES	07/28/15	SO Soil	MILLING TAILINGS SAMP.

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: D73280
Account: Nevadaville Encore LLC
Project: WM Richardson Ore Milling
Collected: 07/28/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

D73280-1 MILLING TAILINGS SAMP.

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: MILLING TAILINGS SAMP.**Lab Sample ID:** D73280-1**Matrix:** SO - Soil**Project:** WM Richardson Ore Milling**Date Sampled:** 07/28/15**Date Received:** 07/28/15**Percent Solids:** n/a**Metals Analysis, TCLP Leachate SW846 1311**

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic ^a	< 0.50	D004	5.0	0.50	mg/l	5	07/31/15	08/03/15 ANJ	SW846 6010C ²	SW846 3010A ⁴
Barium ^a	< 1.0	D005	100	1.0	mg/l	5	07/31/15	08/04/15 ANJ	SW846 6010C ³	SW846 3010A ⁴
Cadmium ^a	< 0.025	D006	1.0	0.025	mg/l	5	07/31/15	08/03/15 ANJ	SW846 6010C ²	SW846 3010A ⁴
Chromium ^a	< 0.050	D007	5.0	0.050	mg/l	5	07/31/15	08/04/15 ANJ	SW846 6010C ³	SW846 3010A ⁴
Lead ^a	< 0.50	D008	5.0	0.50	mg/l	5	07/31/15	08/03/15 ANJ	SW846 6010C ²	SW846 3010A ⁴
Mercury ^a	< 0.00020	D009	0.20	0.00020	mg/l	1	07/31/15	07/31/15 ANJ	SW846 7470A ¹	SW846 7470A ⁵
Selenium ^a	< 0.50	D010	1.0	0.50	mg/l	5	07/31/15	08/04/15 ANJ	SW846 6010C ³	SW846 3010A ⁴
Silver ^a	< 0.050	D011	5.0	0.050	mg/l	5	07/31/15	08/03/15 ANJ	SW846 6010C ²	SW846 3010A ⁴

(1) Instrument QC Batch: N:MA37223

(2) Instrument QC Batch: N:MA37239

(3) Instrument QC Batch: N:MA37247

(4) Prep QC Batch: N:MP88054

(5) Prep QC Batch: N:MP88061

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

RL = Reporting Limit

MCL = Maximum Contamination Level (40 CFR 261.6/96)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Mountain States
4036 Youngfield Street Wheat Ridge, Co 80033
TEL. 303-425-6021 877-737-4521
FAX 303-425-6021

FED-EX Tracking #				Bottle Order Control #			
Accutest Quote #				Accutest Job # D73280			
Requested Analysis (see TEST CODE sheet)							Matrix Codes
Location	X	TCLRM					DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
							LAB USE ONLY OL EB RB
Comments / Special Instructions							
Received with in two hours							
Date Time:				Received By:			
Date Time:				Received By:			
Preserved where applicable ☐ N/A				On Ice ☒ No			
Cooler Temp.				23			

4.1

D73280: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D73280 **Client:** NEVADAVILLE ENCOR ELLC **Project:** WM RICHARDSON ORE MILLING
Date / Time Received: 7/28/2015 2:25:00 PM **Delivery Method:** _____ **Airbill #'s:** hd
Cooler Temps (Initial/Adjusted): #1: (23.1/23.1):

Cooler Security
Y or N

- | | |
|--|--|
| 1. Custody Seals Present: ☒ Y ☐ N | 3. COC Present: ☒ Y ☐ N |
| 2. Custody Seals Intact: ☒ Y ☐ N | 4. Smpl Dates/Time OK ☒ Y ☐ N |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ Y ☐ N | IR Gun; |
| 2. Cooler temp verification: | Ice (Bag) |
| 3. Cooler media: | 1 |
| 4. No. Coolers: | |

Quality Control Preservation
Y or N
N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC: | ☐ | ☐ | ☒ |
| 3. Samples preserved properly: | ☒ | ☐ | |
| 4. VOCs headspace free: | ☐ | ☐ | ☒ |

Comments

Sample Integrity - Documentation
Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | ☒ | ☐ |
| 2. Container labeling complete: | ☒ | ☐ |
| 3. Sample container label / COC agree: | ☒ | ☐ |

Sample Integrity - Condition
Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | ☒ | ☐ |
| 2. All containers accounted for: | ☒ | ☐ |
| 3. Condition of sample: | | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume recvd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Misc. Forms

5

Custody Documents and Other Forms

(Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody

LABORATORIES 30 4036 Youngfield Street, Wheat Ridge, CO 80033 TEL: 303-425-6021 FAX: 303-425-6854 www.accutest.com		FED-EX Tracking # 629957029403 Accutest Quote #		Bottle Order Control # D73280		
Client / Reporting Information Company Name: Accutest Laboratories Street Address: 4036 Youngfield Street City: Wheat Ridge, CO 80031 Project Contact: Jacobp E-mail: jacobp@accutest.com Phone #: 303-425-6021 Sampler(s) Name(s): WES		Project Information Project Name: WM Richardson Ore Milling Street: _____ Billing Information (if different from Report to) City: _____ State: _____ Company Name: _____ Project #: _____ Street Address: _____ Client Purchase Order #: _____ City: _____ State: _____ Zip: _____ Project Manager: _____ Attention: _____		Requested Analysis (see TEST CODE sheet) EAG, EAS, EBA, ECD, ECR, ENG, EPP, LESE.		Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Field ID / Point of Collection 1 MILLING TAILING SAMPL.		Collection Date: 7/28/15 Time: 2:25:00 PM Sampled by: WES Matrix: SO # of bottles: 1		Number of preserved Bottles HCl _____ HNO3 _____ H2SO4 _____ NONE _____ DI Water _____ MEOH _____ ENCORE _____		
Accutest Sample # _____		MEQ/HDl Vial # _____		LAB USE ONLY		
Turnaround Time (Business days) _____		Data Deliverable Information _____		Comments / Special Instructions _____		
☐ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☒ other Due 8/11/2015 Emergency & Rush T/A data available VIA Lablink		☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		INITIAL ASSESSMENT LILIA LABEL VERIFICATION REN		
Sample Custody must be documented below each time samples change possession, including courier delivery.						
Relinquished by: 7/28/15 Date: 7/28/15 Relinquished by: 7/28/15 Date: _____ Relinquished by: _____ Date: _____	Received By: 1 Fed Ex Received By: _____ Received By: _____ Date: _____	Relinquished By: 2 Fed Ex Relinquished By: _____ Relinquished By: _____ Date: _____	Date Time: 9:55 Date Time: _____ Date Time: _____	Received By: 2 Received By: _____ Received By: _____ Date: _____	On Ice ☒ Cooler Temp. 4.20°C	

D73280: Chain of Custody

Page 1 of 2

Accutest New Jersey

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D73280 **Client:** _____ **Project:** _____
Date / Time Received: 7/29/2015 9:55:00 AM **Delivery Method:** _____ **Airbill #s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (4.2);
 Cooler Temps (Corrected) °C: Cooler 1: (3.9);

Cooler Security
Y or N

- | | |
|--|--|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | |
| 2. Cooler temp verification: _____ | IR Gun |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 1 |

Quality Control Preservation
Y or N
N/A

- | | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|
| 1. Trip Blank present / cooler: | ☐ | ☒ | ☐ | |
| 2. Trip Blank listed on COC: | ☐ | ☒ | ☐ | |
| 3. Samples preserved properly: | ☒ | ☐ | | |
| 4. VOCs headspace free: | ☐ | ☐ | ☒ | |

Sample Integrity - Documentation
Y or N

- | | | | |
|--|-------------------------------------|--------------------------|--|
| 1. Sample labels present on bottles: | ☒ | ☐ | |
| 2. Container labeling complete: | ☒ | ☐ | |
| 3. Sample container label / COC agree: | ☒ | ☐ | |

Sample Integrity - Condition
Y or N

- | | | | |
|----------------------------------|-------------------------------------|--------------------------|--------|
| 1. Sample recvd within HT: | ☒ | ☐ | |
| 2. All containers accounted for: | ☒ | ☐ | |
| 3. Condition of sample: | | | Intact |

Sample Integrity - Instructions
Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume recvd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Comments

Metals Analysis

QC Data Summaries

(Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D73280
Account: ALMS - Accutest Mountain States
Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 07/31/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1.0	.052	.16		
Antimony	0.50	.012	.015		
Arsenic	0.50	.013	.0099	-0.0037	<0.50
Barium	1.0	.001	.004	0.0026	<1.0
Beryllium	0.025	.0005	.0018		
Bismuth	0.10	.014	.021		
Boron	0.50	.01	.022		
Cadmium	0.025	.002	.0014	-0.00020	<0.025
Calcium	10	.023	.11		
Chromium	0.050	.0045	.0039	0.0023	<0.050
Cobalt	0.25	.002	.0027		
Copper	0.050	.0055	.0093		
Iron	0.50	.0085	.1		
Lead	0.50	.0085	.012	0.0024	<0.50
Lithium	0.10	.0075	.019		
Magnesium	10	.11	.25		
Manganese	0.075	.0005	.0009		
Molybdenum	0.10	.003	.0043		
Nickel	0.050	.0025	.004		
Palladium	0.25	.01	.022		
Potassium	10	.15	.33		
Selenium	0.50	.013	.016	-0.0017	<0.50
Silicon	1.0	.0095	.11		
Silver	0.050	.004	.0066	0.0039	<0.050
Sodium	10	.047	.18		
Strontium	0.050	.0005	.0018		
Sulfur	0.25	.021	.036		
Thallium	0.50	.0095	.0087		
Tin	0.050	.0065	.0096		
Titanium	0.050	.0055	.0043		
Tungsten	0.25	.0095	.028		
Vanadium	0.25	.0035	.0035		
Zinc	0.10	.0015	.024		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D73280
Account: ALMS - Accutest Mountain States
Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 07/31/15

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Zirconium 0.050 .0015 .0036

Associated samples MP88054: D73280-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original MS		SpikeLot MPSPK1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.026	1.8	2.0	88.7	75-125
Barium	0.34	2.3	2.0	98.0	75-125
Beryllium					
Bismuth					
Boron					
Cadmium	0.0038	2.0	2.0	99.8	75-125
Calcium					
Chromium	0.0051	2.0	2.0	99.7	75-125
Cobalt					
Copper	anr				
Iron					
Lead	0.0	2.0	2.0	100.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Palladium					
Potassium					
Selenium	0.0	2.0	2.0	100.0	75-125
Silicon					
Silver	0.0	0.21	0.25	84.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					
Zinc	anr				

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original MS	Spike lot MPSPK1	% Rec	QC Limits
-------	-------------------------	---------------------	-------	--------------

Zirconium

Associated samples MP88054: D73280-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.1.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original	MSD	SpikeLot MPSPK1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.026	1.8	2.0	88.7	0.0	20
Barium	0.34	2.4	2.0	103.0	4.3	20
Beryllium						
Bismuth						
Boron						
Cadmium	0.0038	2.1	2.0	104.8	4.9	20
Calcium						
Chromium	0.0051	2.1	2.0	104.7	4.9	20
Cobalt						
Copper	anr					
Iron						
Lead	0.0	2.1	2.0	105.0	4.9	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Palladium						
Potassium						
Selenium	0.0	2.1	2.0	105.0	4.9	20
Silicon						
Silver	0.0	0.21	0.25	84.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc	anr					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original MSD	Spike lot MPSPK1	% Rec	MSD RPD	QC Limit
-------	--------------------------	---------------------	-------	------------	-------------

Zirconium

Associated samples MP88054: D73280-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.1.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D73280
Account: ALMS - Accutest Mountain States
Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 07/31/15

Metal	BSP Result	Spike lot MPSPK1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1.8	2.0	90.0	80-120
Barium	2.0	2.0	100.0	80-120
Beryllium				
Bismuth				
Boron				
Cadmium	2.0	2.0	100.0	80-120
Calcium				
Chromium	2.1	2.0	105.0	80-120
Cobalt				
Copper	anr			
Iron				
Lead	2.1	2.0	105.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Palladium				
Potassium				
Selenium	2.1	2.0	105.0	80-120
Silicon				
Silver	0.21	0.25	84.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 07/31/15

Metal	BSP Result	Spike lot MPSPK1	% Rec	QC Limits
-------	---------------	---------------------	-------	--------------

Zirconium

Associated samples MP88054: D73280-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

6.1.3

6

SERIAL DILUTION RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/31/15

Metal	JC225-1A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	26.2	0.00	100.0(a)	0-10
Barium	341	349	2.3	0-10
Beryllium				
Bismuth				
Boron				
Cadmium	3.80	0.00	100.0(a)	0-10
Calcium				
Chromium	5.10	0.00	100.0(a)	0-10
Cobalt				
Copper	anr			
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Palladium				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88054
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/31/15

Metal	JC225-1A Original SDL 5:25 %DIF	QC Limits
-------	------------------------------------	--------------

Zirconium

Associated samples MP88054: D73280-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

6.1.4

6

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D73280
Account: ALMS - Accutest Mountain States
Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88061
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 07/31/15

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury 0.00020 .0000092 .000069 -0.0000011<0.00020

Associated samples MP88061: D73280-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88061
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	0.0020	0.0020	100.0 75-125

Associated samples MP88061: D73280-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.2.2

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88061
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/15

Metal	JC225-1A Original MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit	
Mercury	0.0	0.0020	0.0020	100.0	0.0	20

Associated samples MP88061: D73280-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

6.2.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D73280
 Account: ALMS - Accutest Mountain States
 Project: NEVENCOP: WM Richardson Ore Milling

QC Batch ID: MP88061
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/15

Metal	BSP Result	Spike lot HGPW3	% Rec	QC Limits
Mercury	0.0018	0.0020	90.0	80-120

Associated samples MP88061: D73280-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested