

July 17, 2025

Project No. 210105.10

Mr. Lucas West  
Environmental Protection Specialist  
Division of Reclamation, Mining, and Safety  
Room 215, 1001 E 62<sup>nd</sup> Avenue  
Denver, CO 80216

RE: Battle Mountain Resource Inc's Response to June 5, 2025 comments San Luis Project,  
File No. M-1988-112, 112d-3 Reclamation Permit Amendment (AM-4) Application  
Adequacy Review

Dear Mr. West,

Included in this document are Battle Mountain Resources Inc. (BMRI) responses to the June 5, 2025 San Luis Project, file No. M-1988-112, 112d-3 Reclamation Permit Amendment (AM-4) Application Adequacy Review.

Below is a list of relevant documents.

- BMRI Permit Amendment Application (BMRI April 11, 2025)
  - April 11, 2025 Permit Amendment Application San Luis Mine Project Permit No-1988-112 (sic)
- DRMS 112d-3 Reclamation Permit Application Adequacy Review (DRMS June 5, 2025)
  - June 5, 2025 San Luis Project, File No. M-1988-112, 112d-3 Reclamation Permit Amendment (AM-4) Application Adequacy Review

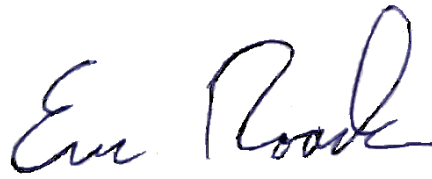
BMRI's responses are included in table format for your review along with the following attachments.

- Attachment A: Clerical error correction and resubmittal of Page 1 of the 112d-3 Permit Amendment Application
- Attachment B: Signed Affidavit of Posting
- Attachment C: Updated Exhibit E Reclamation Plan
- Attachment D: Updated Exhibit L Reclamation Costs

Respectfully Submitted,  
**Engineering Analytics, Inc.**



Melissa Meyer, P.E.  
Senior Professional Engineer



Eric Roads EIT  
Staff Engineer II

Cc. Justin Raglin, Director, US Legacy, Newmont USA Limited  
Devon Horntvedt P.E., US Technical Lead Legacy, Newmont USA Limited  
Karen DeAguiro M.S., Technical Advisor, Newmont USA Limited  
Julio Madrid, Lead Legacy Colorado, Battle Mountain Resources Inc.

# **Battle Mountain Resources Inc. Response to Comments from CDRMS For June 5, 2025 Adequacy Review of Permit Amendment AM-4**

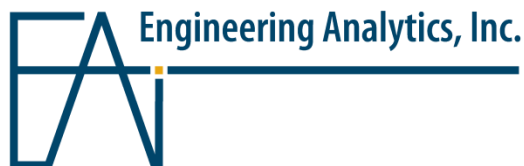
## **San Luis Project, Permit No. M-1988-112 San Luis, Colorado**

*Prepared for:*

Lucas West

Environmental Protection Specialist  
Division of Reclamation, Mining, and Safety

*Prepared by:*



Engineering Analytics, Inc.  
1600 Specht Point Road, Suite 209  
Fort Collins, Colorado 80525  
(970) 488-3111

**On behalf of San Luis Project and Battle Mountain Resources Inc:**

Devon Horntvedt  
US Technical Lead Legacy  
Battle Mountain Resources, Inc.

Project No. 210105.10

*July 17, 2025*

*Rev. 1.0*

Comment Number	Section ID	Page	Comment	Response	Acceptance of EA Response
<b>Colorado Division of Reclamation Mining (CDRMS) Comments, Adequacy Review of Permit Amendment AM-4, Response to Comments, San Luis Project, Battle Mountain Resources, Costilla County, Colorado, Colorado Mining Permit No. M-1988-112</b>					
1	Application	1	<b>CDRMS Comment from June 5, 2025 San Luis Project, File No. M-1988-112, 112d-3 Reclamation Permit Amendment (AM-4) Application Adequacy Review (CDRMS June 5, 2025):</b> The submitted Application Form, Page 1, Item 3 shows 2,200 currently Permitted Acres, with the addition of 1,771.78 Acres and a Total Acreage in Permit Area of 428.22 Acres. This Amendment does not propose the addition of Permitted Acres, therefore the Division interprets this as a clerical error. Please provide a replacement Page 1 of the Application form showing 428.22 Existing Permitted Acres, 0 Change in Permitted Acres and 428.22 Acres for the Total acreage in Permit Area.	A replacement page 1 has been provided in Attachment A Updated Page 1, Application Form.	
2	Application		<b>CDRMS Comment (CDRMS June 5, 2025):</b> The included Affidavit of Posting the sign required by Rule 1.6.2(1)(b) was not signed, however photo documentation of the sign was provided to the Division. Please submit a signed Affidavit of Posting the sign pursuant to Rule 1.6.2(1)(b).	BRMI has included the signed Affidavit of Posting, pursuant to Rule 1.6.2(1)(b) to the Division, as Attachment B Affidavit of Posting.	
3	Exhibit E, Section E.3.7		<b>CDRMS Comment (CDRMS June 5, 2025):</b> Although Section E.3.7 references the approved Section E.2 of the Permit, for this review, please provide the specific reclamation measures to be taken within the footprint of the Slurry Wall. This may be presented in a simple narrative with supporting tables as needed. Pursuant to Rule 6.4.5 (2)(d) please include the total area to be reclaimed in acres, seed mix, seeding rates in P.L.S/acre, seeding method, mulch and fertilizer application if applicable.	The specific reclamation measures to be taken within the footprint of the slurry wall are verification of geomembrane cap, grading as needed, rehabilitating access road, and reseeding as needed.  Please refer to Section E.3.7 Slurry Wall Reclamation in Attachment C Updated Exhibit E: Reclamation Plan	
4	Section 8		<b>CDRMS Comment (CDRMS June 5, 2025):</b> Section 8.0 discusses the proposed modifications and additions to the Monitoring Program following the construction of the slurry wall. The Division has reviewed the proposed changes and accepts them as presented. In addition to the changes, please commit to providing the Division with a written follow up, at the conclusion of the proposed two year monitoring period, analyzing the data collected and summarizing the effectiveness of the slurry wall.	BRMI commits to providing the Division with a written follow up, at the conclusion of the two-year monitoring period. The follow up will include data analysis and summarize effectiveness of the slurry wall.	
5	Exhibit L		<b>CDRMS Comment (CDRMS June 5, 2025):</b> In order to perform an accurate Reclamation Cost Estimate, the Division will require more information. For each of the tasks provided in Exhibit L, and only for the reclamation tasks remaining to be completed, details such as the volume of material to be moved in each task (i.e. backfill material, topsoil, etc), distance it needs to be moved, depth and diameter of the wells to be plugged as well as the closure method, details regarding any demolition tasks required including volume of material to be hauled off for disposal. Additionally, though it is in the approved permit, please provide the seed mix, application rate and number of acres to be revegetated.	BRMI has provided the recalculated information as Attachment D Updated Exhibit L: Reclamation Cost Estimate.	
6	Exhibit E & Exhibit L		<b>CDRMS Comment (CDRMS June 5, 2025):</b> Figure C-3 shows two separate locations labeled as “spoils storage area for waste and materials” however those areas are not discussed in the narratives. Please provide a description of the materials to be stored in those areas, and if that will result in ground disturbance of those areas requiring reclamation. If they do require reclamation activities post construction, please update Exhibit E and Exhibit L accordingly.	The materials in question include trailers, equipment, construction materials including, but not limited to, “supersacks” of bentonite, and top soil generated from pre-construction activities to be used in post-construction site rehabilitation.  Spoils include the swelling slurry mix composed of in-situ soils with	

Comment Number	Section ID	Page	Comment	Response	Acceptance of EA Response
				<p>approximately 4% added bentonite and rejected 8”-10” cobbles and 10”-36” boulders.</p> <p>The two separate locations, labeled as “spoils storage area for waste and materials”, on Figure C-3 in Exhibit U are temporary storage areas and are approximately 1 acre that will be reclaimed by broadcast seeding.</p> <p>We have included the addition of 1 acre of seeding in Exhibit L. In addition, Exhibit E has been updated to reflect the 1 acre of seeding reclamation.</p>	
7	Appendix: Project Specs		<b>CDRMS Comment (CDRMS June 5, 2025):</b> All details included in the Project Specifications, including the QA/QC requirements are acceptable. In addition to the internal requirements, please commit to providing a As-Built Certification by a Professional Engineer or other appropriately qualified professional pursuant to Rule 7.3.2(2).	BMRI commits to providing As-Built Certification by a Professional Engineer or other appropriately qualified professional pursuant to Rule 7.3.2(2)	
8	NA	NA	<b>CDRMS Comment (CDRMS June 5, 2025):</b> When the responses to this review are submitted to the Division, please ensure that a copy of said responses are filed with the Costilla County Clerk and Recorder, and a receipt of filing is submitted to the Division.	This response will be submitted to the Division and filed with the Costilla County Clerk and Recorder and a receipt of filing is submitted will be submitted to the division	

**ATTACHMENT A  
REPLACEMENT PAGE 1 OF PERMIT  
AMENDMENT APPLICATION**



**REGULAR (112d) DESIGNATED MINING OPERATION  
RECLAMATION PERMIT  
APPLICATION FORM**

CHECK ONE:      \_\_\_\_\_ New Application (Rule 1.4.5)      \_\_\_\_\_ Amendment Application (Rule 1.10)  
                         \_\_\_\_\_ Conversion Application (Rule 1.11)

Permit No. M- \_\_\_\_\_ - \_\_\_\_\_ (provide for amendments and conversions of existing permits)

The application for a Regular (112d) Designated Mining Operation Reclamation Permit contains three major parts: (1) the application form; (2) Exhibits A-T, Geotechnical Stability Exhibit, the Emergency Response Plan, and Addendum 1, as required by the Office, and outlined in Rules 6.1, 6.2, 6.3, 6.4.19, 6.5, 8.0, and 1.6.2(1)(b); and, (3) the application fee. When you submit your application, be sure to include one (1) **signed and notarized original** and four (4) copies of the application form, five (5) copies of Exhibits A-T, Rule 6.5 Geotechnical Stability Exhibit, the Emergency Response Plan, Addendum 1, and a check for the appropriate application fee (described under Section (4) on Page 2). Exhibits should not be bound or in a 3-ring binders; maps should be folded to 8 ½" X 11" or 8 ½" X 14" size. To expedite processing, please provide the information in the format and order described in this form.

=====

**GENERAL OPERATION INFORMATION**

Type or print clearly, in the space provided, all information described below.

=====

1. **Applicant/operator or company name (name to be used on permit):** \_\_\_\_\_

1.1 Type of organization (corporation, partnership, etc.): \_\_\_\_\_

1.2 I.R.S. Tax ID No. or Social Security Number: \_\_\_\_\_

2. **Operation name (pit, mine or site name):** \_\_\_\_\_

3. **Permitted acreage:** (new or existing site) \_\_\_\_\_ permitted acres

3.1 Change in acreage (+) \_\_\_\_\_ acres

3.2 Total acreage in Permit area \_\_\_\_\_ acres



**ATTACHMENT B**  
**SIGNED AFFIDAVIT OF POSTING**



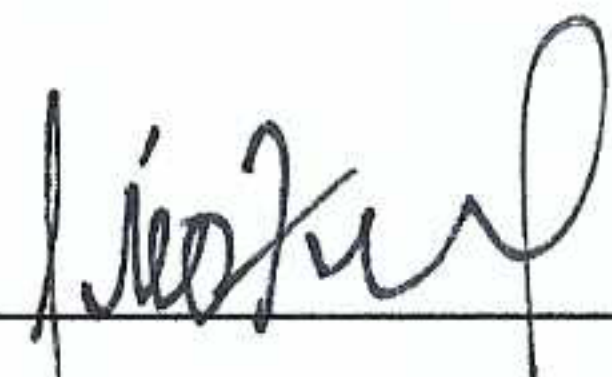
### NOTICE

This site is the location of a proposed mining operation. (Name of the Applicant/Operator) Battle Mountain Resources, Inc., whose address and phone number is (Address and Phone Number of the Applicant/Operator) 5 Rito Seco Rd, San Luis, CO, (719) 379-0827, has applied for a Reclamation Permit with the Colorado Mined Land Reclamation Board. Anyone wishing to comment on the application may view the application at the (County Name) Costilla County Clerk and Recorder's Office, (Clerk and Recorder's Office Address) 406 Gaspar St., San Luis Co 81152, and should send comments prior to the end of the public comment period to the Division of Reclamation, Mining and Safety, 1313 Sherman St, Room 215, Denver, Colorado 80203.

### Certification:

I, Julio Madrid, hereby certify that I posted a sign containing the above notice for the proposed permit area known as the (Name of Operation) San Luis Project, on (Date Posted) 4/22/2025.

SIGNATURE



DATE

6-25-2025

**ATTACHMENT C**  
**UPDATED EXHIBIT E RECLAMATION PLAN**

## Exhibit E Reclamation Plan Amendment

The general reclamation procedures for the San Luis Project will remain the same as those presented in the original 1989 Permit and the Amended AM-01 Permit. Topsoil/growth medium stockpiling and use will occur as discussed in Section E.2.1 of the approved permit. Stockpiles will be graded with side slopes of 2H:1V.

### Updated Table E.2.1 Disturbance Area (This Table is updated annually and submitted in the San Luis Annual Report to CDRMS)

Area	Permitted Disturbance (Acres)	Actual Disturbance Areas (Acres)	Disturbance Areas Released from Permit Area (Acres)	Disturbance Areas Remaining in Permit Area (Acres)
East Pit	20	20	20	0
West Pit (Additional 1 acre from Slurry Wall)	110	101	8.9	92.1
Waste Rock A	0	0	0	0
Waste Rock B	18	18	18	0
Waste Rock C	30	28	25.8	2.2
Waste Rock D	42	42	42	0
South Waste Rock	50	35	35*	0*
Mill Area	25.6	25.6	15.6	10.0
ESI Leach Pad	10	10	10	0
Borrow Area	11	5.5	0	5.5
Roads	30	24.4	13.2	11.2
Tailing Facility	192	192	17.6	174.4
Tailing Collection Pond	5	5	0	5
Admin. Office Complex – Deeded lands to Costilla County Soil Conservation District (CCSCD)	3	3	3	0
Total Area	546.6	509.5	209.1*	300.4*

\*The South Waste Rock Area was fully released in 2021, but it was inadvertently left off the table. The discrepancy is 1.4 acres of unreported released disturbance.

The current unreleased Permit Areas consist of both reclaimed and un-reclaimed land and disturbed and undisturbed land. BMRI did not request or receive a land release in 2024, therefore the 2024 Permit Area remaining is 428.22 acres. The 2025 disturbed Permit Area remaining is anticipated to be 299.4 acres due to the additional acre associated with the slurry wall being reclaimed at the end of construction.

#### **Section E.2.4 Surface and Seedbed Preparation (Verbatim from Original Mine Permit and included per DRMS request))**

Seedbed preparation for areas to be revegetated will take place after grading, stabilization, and top soil placement will include:

1. Compacted surfaces will be loosened and left in a rough condition by ripping, disking, or other mechanical means. Loose erodible surfaces may need to be “dozer-tracked” to prevent sloughing before amendments, seed, and mulch are applied.
2. The soils will be tested at the time of reclamation for fertilizer. If necessary, fertilizer will be applied in the amount and rate specified by the tests. The fertilizer will be evenly spread using a minimum of equipment passes to prevent compaction.
3. The prepared surfaces will then be seeded using the mixtures and seeding rate recommended in the following section. Seeding will either be by rangeland drill or broadcasting, depending on working area and steepness of slope.
4. Hay or other protective mulch will be applied, if necessary, and crimped. If hay is used, the application rate will be approximately two tons per acre. Erosion control practices will be implemented as necessary during ongoing reclamation activities.

#### **Section E.2.5 Seeding Mixtures and Rates (Verbatim from Original Mine Permit and included per DRMS request))**

Recommended seed mixtures and rates have been formulated based on the known climatic and soil conditions of the project area. The average annual precipitation of about 15 inches is sufficient to support grasslands, shrub/grasslands, and pinyon juniper woodland (depending, of course, on slope and aspect). Because most of the areas to be disturbed currently support a sagebrush shrub vegetation with little grass cover, it is believed that both wildlife habitat and range conditions can be improved by establishing a post-mining community that is predominantly a grassland, with scattered shrubs and trees. Because natural invasion of shrubs and trees will occur over time, the proposed seed mixture is comprised mostly of grasses. It should be noted that native topsoil is an excellent source of adopted seeds and will probably result in the growth of both shrub and grass species not included in the seed mix.

The following species and rates are recommended for seeding on the site. This list has been checked with personnel at the U.S. Soil conservation Service (SCS) office in San Luis.

Plant Species	Rate (Pounds Live Seed (sic) /Acre)*
Western wheatgrass	4
Mountain brome	3
Blue Grama	2
Indian ricegrass	2
Mountain muhly	1
Cicer milkvetch	1.5
Mountain mahogany	0.5
Winterfat	0.5

\*Rates shown are for drill seeding. If broadcast seeding is employed, rates will be doubled

Additional plant species may be used or substituted, depending on availability and future trends in seed production. The actual seed mixture to be used will be composited and individual species selected at the time of application. Any changes to the seed mixture shown above will be submitted to the Mine Land Reclamation Division for approval.

In the East Pit area and upper West Pit areas, pinyon and juniper seedlings will be replaced at a rate of 100 seedlings/acre.

### Section E.3.7 Slurry Wall Reclamation

It is anticipated that the slurry wall will disturb less than 1 acre. The seed mix, seeding rates, seeding method, mulch and fertilizer application is included in section E.2.4 and E.2.5 and has not changed from original permit with one exception. The exception is terminology for the seeding rate is now specified as “Pounds of Live Seed” per acre rather than “pounds” per acre.

After installation of the geomembrane, the slurry wall reclamation will include verifying the geomembrane cap, grading of the surface to meet contours identified in our drawing set included as Exhibit U, placement of available topsoil from pre-construction grubbing stockpile or from stockpiles identified in Exhibit F as needed, and rehabilitating the access road.

Affected areas that were disturbed will be returned to their pre-construction condition or as identified in Exhibit U of our application. In particular, there is a 1 acre of “spoils storage area for waste and materials” that will need broadcast seeding post-construction.

**ATTACHMENT D**  
**UPDATED EXHIBIT L RECLAMATION COSTS**



## ***Technical Memorandum***

<b>To:</b>	Lucas West, Environmental Protection Specialist	<b>From:</b>	Melissa Meyer, P.E. Eric Roads, F.E. Larry Coons, P.E., P.Hg, DEE, DGE
<b>Company:</b>	Colorado Department of Reclamation, Mining, and Safety	<b>Date:</b>	July 17, 2025
<b>EA No.:</b>	210105.10		
<b>Re:</b>	Exhibit L 2025 Financial Warranty Re-Evaluation		
<b>Cc:</b>	Karen DeAguero, Technical Advisor, Legacy Sites Devon Horntvedt, P.E. Director of Colorado Legacy Site Management Julio Madrid, Sr. Supervisor Legacy Sites Closure and Reclamation		

### **1.0 INTRODUCTION**

Engineering Analytics, Inc. (EA) has prepared this technical memorandum (TM) to provide an updated summary of final reclamation tasks and items remaining for 2025 Financial Warranty Re-Evaluation for Battle Mountain Resources, Inc San Luis former mine site. Additional tables are provided as attachments for a more detailed cost breakdown.

#### **1.1 Previous Determination of Financial Warranty Amount**

The previous determination of financial warranty calculation is from a March 2000 document titled “Financial Warranty Requirements Re-evaluation San Luis Project, M-88-112” (CDRMS, 2000). The information outlined below is from this document in dollars from the year 2000. The calculation for Water Treatment Plant (WTP) operations was under the assumption that *“in order to clean up the West pit backfill, the operator needs to withdraw, and process, 4.91 pore volumes of water from the lower pit area and 5.24 pore volumes of water from the pink gneiss.”* This comes out to 584,323,495 gallons of water requiring treatment. The reverse osmosis process cost was estimated at \$6.90 per 1,000 gallons. The amount of time to treat that much water was calculated at 7 years for the financial warranty. The seven years of water treatment was calculated to cost \$4,031,832. With additional reclamation requirements, the total 2020 financial warranty amount was \$7,362,354.

### **2.0 LIST OF REMAINING RECLAMATION**

A summary of the remaining items for reclamation is listed in Table 1. For a more detailed summary of financial warranty tasks and calculations, please refer to the attached cost breakdown

Tables A.1 through A.12 in Attachment A. Attachment B includes a copy of spreadsheet calculations with additional detail supporting the costs presented in Table 1 and Attachment A. Costs have been calculated using current (2025) RSMeans information adjusted for local conditions (Alamosa, Colorado) (RSMeans, 2025). In addition, remaining acreage outlined in “San Luis Project – San Luis, Colorado Annual Report and Fee 2023” (BMRI, 2024) was used to recalculate costs based on acreage (Table 2). Attachment C is a summary table of information used to calculate costs for Item H (Monitoring Well Abandonment) presented in Table A.8, Attachment B.

Table 1: Summary of Items Remaining for Reclamation in 2025 Dollars

Item#	Lists of Tasks for Reclamation	Acreage	Cost (\$)
<b>B</b>	Tailing Facility and Collection Pond	27.6	869,135
<b>D</b>	Roads, Parking, and Borrow Area	22.4	514,706
<b>F</b>	Seeding	(79.7)	162,014
<b>G</b>	West Pit	29.7	595,547
<b>H</b>	Monitoring Well Abandonment	NA	111,166
<b>L</b>	<b>Subtotal Remaining Reclamation</b>		<b>2,252,570</b>
<b>I</b>	Equipment Mobilization/Demobilization	NA	112,628
<b>M</b>	Estimated Contractor Costs	NA	295,086
<b>O</b>	10 Years of Water Treatment Plant Operations	NA	9,747,833
	<b>Total</b>	<b>79.7<sup>1</sup></b>	<b>12,408,119</b>

<sup>1</sup>Seeding (Item F) acreage is not included in the Total Acreage as it is already represented in the other B, D and G tasks.

Table 2: Remaining Acreage (BMRI, 2024)

Item#	Lists of Areas	Acreage
<b>4</b>	West Pit	29.7
<b>3</b>	Borrow Area	5.5
<b>3</b>	Road Around Tailings Facility and Collection Pond	4
<b>3</b>	Tailings Facility Perimeter Road	12.9
<b>1</b>	Tailing Facility	22.6
<b>1, 2</b>	Tailings Collection Pond	5
	<b>Total</b>	<b>79.7</b>

## 2.1 Water Treatment Plant

Since 2019, the actual incurred costs to run the San Luis WTP have been as follows:

<u>Year</u>	<u>Total (\$)</u>
2019	771,696
2020	533,694
2021	644,156
2022	778,973



2023	679,288
2024	802,821

The above total costs include all operating/maintenance, materials, and labor costs. WTP costs are expected to increase 3 to 4% (3.5%) beyond the year 2024 cost of \$802,821. The State has requested that bonding be developed for ten years of water treatment. As such, the total projected costs are estimated to be \$9,747,833 for the next ten years through 2034. This reflects an average yearly WTP cost of \$974,783.

## 2.2 Overhead and Profit

Overhead and profit have been historically included in financial warranty calculations and have been included here using the values in RSMeans (reported as Total \$ Including O&P).

## 3.0 CONCLUSION

The previous financial warranty amount that was calculated in 2020 was \$7,362,354. The updated financial warranty calculation amount is estimated at \$11,843,449 which includes 10 years of water treatment estimated to cost \$9,747,833.

## 4.0 REFERENCES

CDRMS, 2000. *Financial Warranty Requirements Re-evaluation San Luis Project, M-88-112*

BMRI, 2024. *San Luis Project – San Luis, Colorado Annual Report and Fee 2024*. Letter from Mr. Julio Madrid (Battle Mountain Resources, Inc.) to Mr. Lucas West (State of Colorado Division of Reclamation, Mining and Safety). March 17, 2025.

RSMeans, 2025. [www.rsmeansonline.com](http://www.rsmeansonline.com), RSMeans data from Gordian (Year 2025, Quarter 2 Release).

### Attachments:

Attachment A - Additional Cost Breakdown Tables

Table A.1 – A: Waste Rock Disposal Area Tasks

Table A.2 – B: Tailing Disposal Area Tasks

Table A.3 – C: Mill Facilities Tasks

Table A.4 – D: Roads and Parking Areas Tasks

Table A.5 – E: Roads Maintenance Tasks

Table A.6 – F: Seeding Costs Tasks

Table A.7 – G: West Pit Reclamation Tasks

Table A.8 – H: Monitoring Well Abandonment Tasks

Table A.9 – I: Equipment Mob/Demob Tasks

Table A.10 – J: Current Approved Monitoring Requirements Tasks

Table A.11 – K: Junk Removal and Miscellaneous Costs Tasks

Table A.12 – Total Cost Calculations

Attachment B – Copy of Spreadsheet for 2025 Financial Warranty Calculations

Attachment C – Summary of Site Wells, Piezometers, Lysimeters and Vibrating Wires

**ATTACHMENT A**  
**ADDITIONAL COST BREAKDOWN TABLES**

Table A.1. Waste Rock Disposal Area Tasks

A: Waste Rock Disposal Area Tasks <sup>1</sup>		Feb 2000 Cost Per Unit		Feb 2000 Units on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
A.1.1	South WR 15 acres of out slope grading	\$3,415.00	acre	15	acres	\$51,225.00	0	acres	NA
A.1.2	South WR 15 acres of topsoil replacement	\$2,567.00	acre	15	acres	\$38,505.00	0	acres	NA
A.1.3	South WR Reseeding cost	\$284.00	acre	50	acres	\$14,200.00	0	acres	NA
A.2	WR disposal area B Reseeding	\$284.00	acre	18	acres	\$5,112.00	0	acres	NA
A.3	WR disposal area C Reseeding	\$284.00	acre	15	acres	\$4,260.00	0	acres	NA
A.4	WR disposal area D Reseeding	\$284.00	acre	25	acres	\$7,100.00	0	acres	NA
A.5	East pit disposal area Reseeding	\$284.00	acre	5	acres	\$1,420.00	0	acres	NA
<b>Total</b>						<b>\$121,822.00</b>			<b>NA</b>

<sup>1</sup> Waste Rock Disposal Area Tasks have been completed.

Table A.2. Tailing Disposal Area Tasks

B: Tailing Disposal Area Tasks		Feb 2000 Cost Per Unit		Feb 2000 Units on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
<b>B.1</b>	Backfill 149,072 cu-yards	\$0.63	cu-yard	149072	cu-yards	\$93,915.36 <sup>6</sup>	0	cu-yards	NA
<b>B.2</b>	Grade backfill material					\$5,937.00			NA
<b>B.3</b>	Re-establish east watershed through impoundment	\$0.26	cu-yard	19667	cu-yards	\$5,113.42	0	cu-yards	NA
<b>B.4.1</b>	Armor low flow trickle channel: Process	\$10.00	cu-yard	1700	cu-yards	\$17,000.00	0	cu-yards	NA
<b>B.4.2</b>	Armor low flow trickle channel: Transport	\$1.53	cu-yard	1700	cu-yards	\$2,608.00	0	cu-yards	NA
<b>B.4.3</b>	Armor low flow trickle channel: Place	\$4.82	cu-yard	1700	cu-yards	\$8,194.00	0	cu-yards	NA
<b>B.5</b>	Topsoil replacement	\$2,567.00	acre	59	acres	\$151,453.00	27.6 <sup>2</sup>	acres	\$529,526.98
<b>B.6</b>	Regrade diversion ditches	\$3,415.00	acre	9	acres	\$30,735.00	NA <sup>3</sup>	acres	NA
<b>B.7.1</b>	Spillway Excavation <sup>4</sup>	\$540.00	acre	7	acres	\$3,780.00	0	acres	NA
<b>B.7.2</b>	Spillway concrete delivery and placement <sup>4</sup>					\$5,000.00			NA
<b>B.7.3</b>	Spillway Rip rap preparation <sup>4</sup>					\$4,000.00			NA
<b>B.7.4</b>	Spillway rip rap transportation <sup>4</sup>					\$675.00			NA
<b>B.7.5</b>	Spillway Rip rap placement (includes collection pond) <sup>4</sup>					\$2,120.00			NA
<b>B.8.1</b>	Collection Pond Liner disposal					\$800.00 <sup>5</sup>			\$2,552.40
<b>B.8.2</b>	Collection Pond Backfill - loader					\$14,145.00 <sup>5</sup>			\$337,056.00
<b>B.8.3</b>	Collection Pond Backfill - Trucks					\$47,970.00 <sup>5</sup>			
<b>Total</b>						<b>\$393,445.78<sup>6</sup></b>			<b>\$869,135.38</b>

<sup>2</sup>**Topsoil Replacement Item (B.5)** for the tailings has been decreased according to continuing efforts to reclaim the tailing disposal area. The 9 acres of topsoil replacement includes the tailings pond and collection pond. Cost parameters using RSMeans include:

- Borrow, Haul, Spread: RSMeans Line 310513100200 – Borrow, haul (2-mile), dozer spread; adjust Total O&P \$ for no material costs and 1.1 mile haul from borrow
  - 66,792 CY @ \$7.45/CY
- Finish Grade: RSMeans Line 312216103300 – Finish grade, gentle slopes
  - 133,584 SY @ \$0.24/SY

<sup>3</sup>Regrading diversion ditches completed.

<sup>4</sup>Spillway completed.

<sup>5</sup>**Collection Pond Items (B.8.1-B.8.3)** were provided as single costs with no additional cost breakdown. For calculation of updated costs, cost items area as follows. Cost parameters using RSMeans include:

- Liner Destruction in-Place: RSMeans Crew No. B-10B – 1 dozer (200hp), 1 operator, 0.5 labor (1 day)

- 1 Day @ \$2,552.40/Day
- Pond Fill Using Berm: RSMeans Line 312316464420 – Bulk dozer bank measure, common earth, 300-ft push
  - 15,000 CY @ \$8.42/CY
- Pond Berm Fill Compaction: RSMeans Line 312323235060 – Compaction, vibratory roller, 2 passes, 12” lifts
  - 15,000 CY @ \$0.23/CY
- Borrow, Haul, Spread Pond Fill: RSMeans Line 310513100200 – Borrow, haul (2-mile), dozer spread; adjust Total O&P \$ for no material costs (2 mile haul from borrow)
  - 27,000 CY @ \$7.45/CY
- Pond Borrow Fill Compaction: RSMeans Line 312323235060 – Compaction, vibratory roller, 2 passes, 12” lifts
  - 27,000 CY @ \$0.23/CY

<sup>6</sup>The reference document incorrectly calculated item B.1 at \$114,297 where it should have been \$93,915.36 and the total cost of the Tailing Disposal is \$393,445.78 instead of \$413,827.

Table A.3. Mill Facilities Tasks

<b>C: Mill Facilities Tasks<sup>7</sup></b>		<b>Feb 2000 Cost Per Unit</b>		<b>Feb 2000 Units on Site</b>		<b>February 2000 Task Costs</b>	<b>Updated Units on Site as of 2024</b>		<b>2025 Estimated Costs</b>
<b>C.1</b>	Building Demolition and removal	\$0.22	cu-ft	1492737	cu-ft	\$328,402.14	0	cu-ft	NA
<b>C.2</b>	Concrete floor and containment removal cost	\$3.23	sq-ft	43898	sq-ft	\$141,790.00	0	sq-ft	NA
<b>C.3</b>	Five-inch concrete floor removal	\$5.05	sq-ft	8250	sq-ft	\$41,662.50	0	sq-ft	NA
<b>C.4</b>	Rip Mill area	\$90.00	acre	23.5	acres	\$2,115.00	0	acres	NA
<b>C.5</b>	Grade mill area	\$330.00	acre	23.5	acres	\$7,755.00	0	acres	NA
<b>C.6</b>	Topsoil placement	\$2,310.00	acre	23.5	acres	\$54,285.00	0	acres	NA
<b>C.7</b>	Topsoil grading	\$257.00	acre	23.5	acres	\$6,039.50	0	acres	NA
<b>C.8</b>	Rip ROM stockpile area	\$90.00	acre	22	acres	\$1,980.00	0	acres	NA
<b>C.9</b>	Grade ROM area	\$330.00	acre	22	acres	\$7,260.00	0	acres	NA
<b>C.10</b>	Topsoil placement ROM area	\$2,310.00	acre	22	acres	\$50,820.00	0	acres	NA
<b>C.11</b>	Grade Topsoil ROM area	\$257.00	acre	22	acres	\$5,654.00	0	acres	NA
	<b>Total</b>					<b>\$647,763.14</b>			<b>NA</b>

<sup>7</sup>Mill Facilities tasks have been completed

Table A.4. Roads and Parking Areas Tasks

D: Roads and Parking Areas Tasks		Feb 2000 Cost Per Unit		Feb 2000 Units on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
D.1	Ripping	\$90.00	acre	35	acres	\$3,150.00	22.4 <sup>8</sup>	acre	\$7,319.48
D.2	Grading	\$330.00	acre	35	acres	\$11,550.00	22.4 <sup>8</sup>	acre	NA
D.3	Topsoil Placement	\$2,310.00	acre	35	acres	\$80,850.00	22.4 <sup>8</sup>	acre	\$481,367.04
D.4	Grade Topsoil	\$257.00	acre	35	acres	\$8,995.00	22.4 <sup>8</sup>	acre	\$26,019.84
<b>Total</b>						<b>\$104,545.00</b>			<b>\$514,706.36</b>

<sup>8</sup> For Roads and Parking Areas Items (D.1-D.4), the 16.9 acres listed include 4 acres of roads around tailings facility and collection pond and 12.9 acres of tailings facility perimeter road. It has been assumed that because of the 18 inches of required topsoil over the ripped surface, grading of the ripped surface is not required. Cost parameters using RSMeans include:

- Ripping: RSMeans Crew No. B-11J – 1 grader (30,000 lb), 1 operator, 1 laborer (1 day), 1 ripper beam/shank; 1 hour/acre
  - 2.8 Days @ \$2,614.10/Day
- Borrow, Haul, Place, Spread Topsoil: RSMeans Line 310513100200 – Borrow, haul (2-mile), dozer spread; adjust Total O&P \$ for no material costs and 1.5 mile haul from borrow
  - 54,208 CY @ \$8.88/CY
- Finish Grade: RSMeans Line 312216103300 – Finish grade, gentle slopes
  - 108,416 SY @ \$0.24/SY

Table A.5. Roads Maintenance Tasks

E: Roads Maintenance Tasks <sup>9</sup>		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
E.1	Water Truck (8hours/day*6time/year*6yrs)	\$75.00	hr	288	hrs	\$21,600.00	0	hrs	NA
E.2	Motor Grader (8hours/day*6time/year*6yrs)	\$70.00	hr	288	hrs	\$20,160.00	0	hrs	NA
<b>Total</b>						<b>\$41,760.00</b>			<b>NA</b>

<sup>9</sup>Under previous bond calculations, road maintenance was included as its own task. Road maintenance costs are now included in the yearly operational costs of the WTP.

Table A.6. Seeding Costs Tasks

F: Seeding		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
F.1	Seeding costs	\$274.00	acre	189.5	acres	\$51,923.00	79.7 <sup>10</sup>	acres	\$162,014.16
	<b>Total</b>					<b>\$51,923.00</b>			<b>\$162,014.16</b>

<sup>10</sup> **Seeding (Item F)** includes the 79.7 acres of all remaining reclamation areas as of 2024. Cost parameters using RSMeans include:

- Seeding: RSMeans Line 329219130101 – seeding, mechanical, 44lb/MSY; adjust seed rate (material costs) to 3.41 lb/MSY
  - 385,748 SY @ \$0.42/SY

Table A.7. West Pit Reclamation Tasks

G: West Pit Reclamation		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs
G.1	Grade backfill area	\$257.00	acre	26	acres	\$6,682.00	29.7 <sup>11</sup>	acres	NA
G.2	topsoil replacement and grading	\$2,567.00	acre	26	acres	\$66,742.00	29.7 <sup>11</sup>	acres	\$595,547.96
G.3	demolition and removal of evaporation system					\$66,000.00			NA <sup>12</sup>
G.4	Demolition and removal of nano-filtration facility <sup>11</sup>					\$76,510.00			NA <sup>13</sup>
	<b>Total</b>					<b>\$215,934.00</b>			<b>\$595,547.96</b>

<sup>11</sup> **West Pit Reclamation (Item G)** original acreage calculation is uncertain; however, current remaining acreage for the west pit is 29.7 acres which includes 1 acre for the slurry wall. The West Pit is backfilled, and it has been assumed that the backfilled surface does not required grading prior to topsoil placement. Cost parameters using RSMeans include:

- Borrow, Haul, Spread: RSMeans Line 310513100200 – Borrow, haul (2-mile), dozer spread; adjust Total O&P \$ for no material costs and 1.2 mile haul from borrow
  - 71,874 CY @ \$7.81/CY
- Finish Grade: RSMeans Line 312216103300 – Finish grade, gentle slopes
  - 143,748 SY @ \$0.24/SY

<sup>12</sup>The evaporation system has been removed from the site.

<sup>13</sup>Nano-filtration is not installed in the current Water Treatment Plant facility.



Table A.8. Monitoring Well Abandonment Tasks

H: Monitoring Well Abandonment Tasks		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024 <sup>14</sup>		2025 Estimated Costs
H.1	39 alluvial wells								
H.2	5 Santa Fe formation wells								
H.3	2 pre-Cambrian bedrock wells								
H.4	8 west pit backfill wells (1 east pit well too)								
H.5	15 piezometers								
H.6	6 lysimeters								
H.7	Total 80 wells <sup>14</sup>								
H.7.1	concrete	\$85.00	cu-yd	26	yards	\$2,210.00			
H.7.2	labor (4hrs/well)	\$25.00	hour	80	wells	\$8,000.00			
H.7.3	small excavator (2hrs/well)	\$55.00	hour	80	wells	\$8,800.00			
H.7.4	Removal of gauge stations (2hrs/station)	\$50.00	hour	8	stations	\$800.00			
	<b>Total</b>					<b>\$19,810.00</b>			<b>\$111,166.16</b>

<sup>14</sup> Refer to **Attachment C** for summary of all wells, piezometers, lysimeters, and vibrating wires (VWs) currently at the site, including related depths, diameters and other completion details used to calculate abandonment costs. In accordance with Rule 16, 2 CCR 402-2, Division of Water Resources, abandonment costs for all wells and piezometers, and instrumentation (lysimeters and VWs) include the following tasks and materials:

- Wells and piezometers: Pressure grout with cement and sand (1:4 bentonite mix) from total depth to surface (total 94 wells/piezometers).
- Lysimeters and VWs: Excavate 3 feet below grade and remove tubing/wiring; backfill excavated void with same mixture as wells and piezometers (total 14 lysimeters/VWs).

Cost parameters using RSMeans include:

- Abandon Wells and Piezometers: RSMeans Line 314313130320 – Concrete pressure grout well, cement and sand, 1:4 bentonite mix
  - 2499.2 CF @ \$41.30/CY (\$1,098.05/well)
- Abandon Lysimeters, VWs: RSMeans Crew B-61 (same as concrete pressure grout well) – 1 labor foreman, 3 laborers, 1 light equipment operator, 1 mixer (2 CY), 1 air compressor; assume 10 holes/day (1.4 days)
  - 1.4 Days @ \$5,678/day

Table A.9. Equipment Mob/Demob Tasks

I: Equipment Mob/Demob Tasks		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs <sup>15</sup>
I.1	Equipment mobilization/demobilization					\$6,000.00	NA	NA	\$112,628.50
	<b>Total</b>					<b>\$6,000.00</b>	NA	NA	<b>\$112,628.50</b>

<sup>15</sup> Use mobilization/demobilization cost equal to 5% of reclamation cost subtotal (see Table A.12).

Table A.10. Current Approved Monitoring Requirements Tasks

J: Current approved monitoring requirements Tasks		Feb 2000 Cost Per Unit		Feb 2000 Number on Site		February 2000 Task Costs	Updated Units on Site as of 2024		2025 Estimated Costs <sup>16</sup>
J.1	Monitor quarterly (wells) (6yrs->24quarters)	\$500.00	sampled well	7	well	\$84,000.00	NA	Wells	NA
J.2	Monitor quarterly (surface stations SS) (6yrs->24quarters)	\$500.00	sampled SS	3	Surface Station	\$36,000.00	NA	Surface Station	NA
J.3	Monitor monthly (surface stations SS) (6yrs->72quarters)	\$500.00	sampled SS	1	Surface Station	\$36,000.00	NA	Surface Station	NA
	<b>Total</b>					<b>\$156,000.00</b>			<b>NA</b>

<sup>16</sup>Monitoring requirements have been included with yearly WTP operational costs.

Table A.11. Junk Removal and Miscellaneous Tasks

<b>K: Miscellaneous Costs Tasks</b>		<b>Feb 2000 Cost Per Unit</b>		<b>Feb 2000 Number on Site</b>		<b>February 2000 Task Costs</b>	<b>Updated Units on Site as of 2024</b>		<b>2025 Estimated Costs</b>
<b>K.1</b>	Removal of used and junk equipment					\$2,000.00	NA		NA <sup>17</sup>
	<b>Total</b>					<b>\$2,000.00</b>	NA		<b>NA</b>

<sup>17</sup>Any used equipment or junk remaining at the site is very minor and not of sufficient quantity to be a factor in the cost calculation.

Table A.12. Total Cost Calculations

L: Remaining Costs of Reclamation M: Contractors Costs N: Combined Reclamation and Contractor Costs O: Water Treatment Plant			Feb 2000 Cost Per Unit		February 2000 Task Costs	2025 Estimated Costs
L	Remaining Costs of Reclamation				\$1,781,385.00	\$2,252,570.02
M	Contractor Costs	13.1% <sup>18</sup>	Reclamation costs	\$233,361.44	\$295,086.67	
N	Combined Estimated Reclamation and Contractor Costs				\$2,014,746.44 <sup>20</sup>	\$2,660,285.19 <sup>19</sup>
O	Water Treatment Plant		Year	\$4,997,020 <sup>20</sup>	\$9,747,833.95 <sup>21</sup>	
	WTP and Reclamation Bond Calculation				\$7,011,766.44	\$12,408,119.14 <sup>22</sup>

<sup>18</sup>The contractor cost was assumed to be 13.1% of the remaining costs of reclamation. This percentage was also used in the February 2000 bond calculation.

<sup>19</sup>Previous calculations included a 5% additional cost for Regulatory Fees. Those costs are not included in this calculation but amount to approximately \$50,000. 2025 Estimated Costs for Item N includes Mobilization/Demobilization Costs (Item I).

<sup>20</sup>The WTP calculation for February 2000 costs was based on the amount of water requiring treatment and the amount shown represents approximately 7 years of water treatment plant operations.

<sup>21</sup>Based upon actual operating costs from the period 2019 through 2024, and an assumed yearly increase in operating costs of 3.5% (from 2024), WTP operating costs are estimated at \$9,747,833.95 for ten years of operations (2025 through 2034).

<sup>22</sup>The total 2025 estimated costs for remaining reclamation, mobilization/demobilization, contractors, and 10 years of WTP operations.

**ATTACHMENT B**  
**COPY OF SPREADSHEET FOR 2025 FINANCIAL**  
**WARRANTY CALCULATIONS**

**Attachment B - Copy of Spreadsheet for 2025 Financial Warranty Calculation**  
**Cost Component Summary**

<b><u>RECLAMATION ITEM NO., ACTIVITY, DESCRIPTION</u></b>	<b><u>UNITS</u></b>	<b><u>UNIT COST \$</u></b>	<b><u>COST</u></b>
<b><u>B: Tailing Disposal Area</u></b>		\$	<b>869,135.38</b>
B.5 - Topsoil Replacement			
B.5.1 - Borrow, Haul, Spread	66,792 CY	7.45	\$ 497,466.82
B.5.2 - Fine Grading	133,584 SY	0.24	\$ 32,060.16
 B.8.1 - Liner Destruction	 1 Day	 2,552.40	 \$ 2,552.40
 B.8.2,3 - Pond Fill Haul, Backfill, Compaction			
B.8.2.1 - Berm Material Dozer Push	15,000 CY	8.42	\$ 126,300.00
B.8.2.1 - Berm Material Compaction	15,000 CY	0.23	\$ 3,450.00
B.8.2.3 - Borrow, Haul, Spread	27,000 CY	7.45	\$ 201,096.00
B.8.2.4 - Borrow Material Compaction	27,000 CY	0.23	\$ 6,210.00
<b><u>D: Roads and Parking Areas</u></b>		\$	<b>514,706.36</b>
D.1 - Ripping	2.8 Days	2,614.10	\$ 7,319.48
 D.2 - Topsoil Replacement and Grading			
D.2.1 - Borrow, Haul, Spread	54,208 CY	8.88	\$ 481,367.04
D.2.2 - Fine Grading	108,416 SY	0.24	\$ 26,019.84
<b><u>F: Seeding All Areas</u></b>		\$	<b>162,014.16</b>
F.1 - Mechanical Seeding	385,748 SY	0.42	\$ 162,014.16
<b><u>G: West Pit Topsoil Repalcement</u></b>		\$	<b>595,547.96</b>
G.2 - Topsoil Replacement and Grading			

G.2.1 - Borrow, Haul, Spread	71,874 CY	7.81	\$	561,048.44
G.2.2 - Fine Grading	143,748 SY	0.24	\$	34,499.52

<b>H: Monitoring Well Abandonment</b>			\$	<b>111,166.16</b>
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H.1-7 - Wells and Piezometers	2,499.2 CF	41.3	\$	103,216.96
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H.1-7 - VWs and Lysimeters	1.4 Days	5,678.00	\$	7,949.20
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<b><u>L: Remaining Cost of Reclamation</u></b>			\$	<b>2,252,570.02</b>
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<b><u>I: Mobilization/Demobilization @ 5% Reclamation Subtotal</u></b>			\$	112,628.50
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<b><u>M: Contractor Costs @ 13.1% Reclamation Subtotal</u></b>			\$	295,086.67
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<b><u>N: Subtotal Reclamation Cost Plus Mob/Demob and Contractor</u></b>			\$	<b>2,660,285.19</b>
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<b><u>O: Water Treatment Plant Operation</u></b>			\$	<b>9,747,833.95</b>
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<b>TOTAL RECLAMATION and WATER TREATMENT</b>			\$	<b>12,408,119.14</b>
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**Attachment B - Copy of Spreadsheet for 2025 Financial Warranty Calculation**  
**RMeans Calculations**

**B: Tailing Disposal Area (Table A.2)**

**B.5 - Topsoil Replacement**

Topsoil volume = 66792 CY

Borrow to place distance = 1.1 Mi

Surface area = 133584 SY

RMeans Line 310513100200 Common Borrow, bare material cost; Spread, 200 HP dozer, no compact, 2 mi haul

<u>Item</u>	<u>Unit (CY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>	<u>Subtract Haul<sup>a</sup></u>	<u>Revised Total O&amp;P (\$)</u>
B.5.1	66792	30.14	19.47	3.22	7.45 per CY

Estimated Cost \$ **497,466.82** (66,792 CY @ \$7.45/CY)

Subtract: material; reduce haul to 1.1 mi Note(a): \$3.58/mi from 2 mile haul

RMeans Line 312216103300 Finish grading, gentle slopes

<u>Item</u>	<u>Unit (SY)</u>	<u>Total O&amp;P (\$)</u>	<u>Revised Total O&amp;P (\$)</u>
B.5.2	133584	0.24	0.24

Estimated Cost \$ **32,060.16** (133,584 SY @ \$0.24/SY)

**Subtotal B.5 Tailing Disposal Area Topsoil Replacement \$ 529,526.98**

**B.8.1 - Pond Liner Destruction**

Liner area = 139392 SF

RMeans Line Crew No. B-10B 1 equipment operator; 0.5 laborer; 1 dozer (200 HP) - 1 day

<u>Item</u>	<u>Operator (\$)</u>	<u>Laborer (\$)</u>	<u>Dozer (\$)</u>
B.8.1	750.40	281.40	1520.6

Daily total = \$ 2,552.40

Estimated Cost \$ **2,552.40** (1 Day @ \$2,552.40/day)

**Subtotal B.8.1 Pond Liner Destruction \$ 2,552.40**

**B.8.2,3 - Pond Fill Haul, Backfill, Compaction**

Pond backfill from berms 15000 CY  
Pond backfill from import 27000 CY  
Borrow to place distance = 1.1 Mi

Berms:

RSMeans Line 312316464420 Bulk dozer excavate bank measure, common earth, 300' push

<u>Item</u>	<u>Unit (BCY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>
B.8.2.1	15000	8.42	0
		Estimated Cost	\$ 126,300.00 (15,000 CY @ \$8.42/CY)

RSMeans Line 312323235060 Compaction, riding vibratory roller, 2 passes, 12" lifts

<u>Item</u>	<u>Unit (BCY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>
B.8.2.2	15000	0.23	0
		Estimated Cost	\$ 3,450.00 (15,000 CY @ \$0.23/CY)

Borrow:

RSMeans Line 310513100200 Common Borrow, bare material cost; Spread, 200 HP dozer, no compaction, 2 mile haul

<u>Item</u>	<u>Unit (CY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>	<u>Subtract Haul<sup>a</sup></u>	<u>Revised Total O&amp;P (\$)</u>
B.2.2.3	27000	30.14	19.47	3.22	7.45 per CY
		Estimated Cost	\$ 201,096.00 (27,000 CY @ \$7.45/CY)		

Subtract: material; reduce haul to 1.1 mi

Note(a): \$3.58/mi from 2 mile haul

RSMeans Line 312323235060 Compaction, riding vibratory roller, 2 passes, 12" lifts

<u>Item</u>	<u>Unit (BCY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>
B.8.2.4	27000	0.23	0
		Estimated Cost	\$ 6,210.00 (27,000 CY @ \$0.23/CY)

**Subtotal B.8.2 Pond Backfill \$ 337,056.00**

**Subtotal B.8 - Tailing Disposal Area \$ 869,135.38**



**D: Roads and Parking Areas (Table A.4)****D.1 - Ripping** 22.4 ac

RSMeans Line	Crew No. B-11J 1 equipment operator; 1 laborers; 1 grader (30,000 lb), 1 ripper beam				
<u>Item</u>	<u>Operator (\$)</u>	<u>Laborer (\$)</u>	<u>Grader (\$)</u>	<u>Ripper (\$)</u>	<u>Total O&amp;P/day (\$)</u>
D.1	750.40	562.80	1200.31	100.59	2614.10
Assume 1 hr/acre rip			No. of Days = 2.8		
Estimated Cost			<b>\$</b>	<b>7,319.48</b>	(2.8 days @ \$2,614.10/day)

**D.2 - Topsoil** 16.9 ac 975744 SF = 108416 SY  
 Topsoil depth = 1.5 FT = 0.5 Y  
 Topsoil volume = 54208 CY  
 Borrow to place distance for Area = 1.5 Mi  
 Fine Grading = 16.9 ac 108416 SY

RSMeans Line	310513100200 Common Borrow, bare material cost; Spread, 200 HP dozer, no compact, 2 mi haul				
<u>Item</u>	<u>Unit (CY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>	<u>Subtract Haul<sup>a</sup></u>	<u>Revised Total O&amp;P (\$)</u>
D.2.1	54208	30.14	19.47	1.79	8.88 per CY
Estimated Cost			<b>\$</b>	<b>481,367.04</b>	(54,208 CY @ \$8.88/CY)

Subtract: material; reduce haul to 1.5 mi Note(a): \$3.58/mi from 2 mile haul

RSMeans Line	312216103300 Finish grading, gentle slopes				
	<u>Unit (SY)</u>	<u>Total O&amp;P (\$)</u>	<u>Revised Total O&amp;P (\$)</u>		
D.2.2	108416	0.24	0.24		
Estimated Cost			<b>\$</b>	<b>26,019.84</b>	(108,416 SY @ \$0.24/SY)

**Subtotal D. Roads and Parking Areas** **\$ 514,706.36**

**F: Seeding (Table A.6)****F.1 - Seeding**

79.7 ac

3471732 SF

385748 SY

RSMMeans Line

329219130101 Seeding, mechanical seeding, 44lb/MSY

<u>Item</u>	<u>Unit (SY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>	<u>Adjust Material (\$)</u>	<u>Revised Total O&amp;P (\$)</u>	
F.1	385748	0.43	0.1	0.01	0.42	per SY
Adjust seeding to 3.41lb/MSY			Estimated Cost	\$	162,014.16	(385,748 SY @ \$0.42/SY)

**Subtotal F. Seeding****\$ 162,014.16****G: West Pit Reclamation (Table A.7)****G.2 - Topsoil and Grading**

29.7 ac =

1293732 SF =

143748 SY

## G.2.1 - Topsoil Placement

29.7 ac =

1293732 SF =

143748 SY

Topsoil depth =

1.5 FT =

0.5 Y

Topsoil volume =

71874 CY

Borrow to place distance =

1.2 mi

RSMMeans Line

310513100200 Common Borrow, less bare material cost; Spread, 200 HP dozer, no compact, 2 mi haul

<u>Item</u>	<u>Unit (CY)</u>	<u>Total O&amp;P (\$)</u>	<u>Material (\$)</u>	<u>Subtract Haul<sup>a</sup></u>	<u>Revised Total O&amp;P (\$)</u>	
G.2.1	71874	30.14	19.47	2.86	7.81	per CY
			Estimated Cost	\$	561,048.44	(71,874 CY @ \$7.81/CY)

Subtract: material; reduce haul to 1.2 mi

Note(a): \$3.58/mi from 2 mile haul

## G.2.2 - Topsoil Grading

29.7 ac

46303 SY

RSMMeans Line

312216103300 Finish grading, gentle slopes

<u>Item</u>	<u>Unit (SY)</u>	<u>Total O&amp;P (\$)</u>		<u>Revised Total O&amp;P (\$)</u>
G.2.2	143748	0.24		0.24
			Estimated Cost	\$ 34,499.52 (143,748 SY @ \$0.24/SY)

**Subtotal G. West Pit****\$ 595,547.96**

## H: Monitoring Well Abandonment (Table A.8)

### H.1 through 7 - Wells and Piezometers

Total volume of wells and piezometers = 2499.2 CF  
Number of wells and piezometers = 94  
Total linear feet of wells and piezometers = 10146 LF

RSMeans Line	314313130320	Concrete pressure grout geothermal wells; cement and sand, 1:4 bentonite mix				
<u>Unit (CF)</u>	<u>Total O&amp;P (\$)</u>	<u>Crew</u>	<u>Bare Materials \$</u>	<u>Daily Output</u>	<u>Days</u>	
2499.2	41.30	B-61	24.5	250	10.0	
Estimated Cost		\$	103,216.96	(2,499.2 CF @ \$41.30/CF)		

#### VWs and Lysimeters

Assume instruments at the surface are removed; dig down 3 ft min to remove and cut tubing;  
Hole = 2'dia x 3'd = 9.4 CF/hole x 14 holes = 131.6 CF  
cut/remove wiring/tubing; fill excavated hole to surface with cement-bentonite mix  
Assume 10 per day @ Crew B-61 rate + materials = 1.4 days

<u>B-61 Crew (\$/d)</u>	<u>Materials/CF \$</u>	<u>Days</u>	<u>Materials Cost (\$)</u>	<u>Crew Cost (\$)</u>	
3375	24.5	1.4	3224.2	4725.0	
Estimated Cost		\$	7,949.20	(\$3,224.20 materials + \$4,725.00 crew)	

**Subtotal H. Monitoring Well Abandonment**

**\$ 111,166.16**

**END RSMEANS CALCULATIONS**

## Attachment B - Copy of Spreadsheet for 2025 Financial Warranty Calculation

### Site Data and Assumptions

#### Topsoil

Total acreage requiring topsoil	<u>Begin</u>	<u>Current</u>	
A - Waste Rock Area	15	0	
B - Tailing Disposal Area	59	27.6	
C - Mill Facilities Area	23.5	0	
D - Roads and Parking	35	22.4	
G - West Pit Area	26	29.7	
TOTAL	158.5	79.7	66% completed

79.7 ac

3471732 SF

3471732 SF = 385748 SY

Topsoil placement depth = 18 in =

1.5 ft

0.5 yd

Topsoil placement volume =

192874 CY

Borrow Area A Haul to West Pit =

1.2 mi

Borrow Area B Haul to Tailing Disposal/Pond =

1.1 mi

Borrow Area B Haul to Roads/Parking (average) =

1.5 mi

#### B: Tailing Disposal Area (Table A.2)

##### **B.5 Topsoil Replacement**

##### B.5.1 - Topsoil Borrow, Haul, Spread

27.6 ac = 1202256 SF = 133584 SY

Topsoil depth = 1.5 FT = 0.5 Y

Topsoil volume = 66792 CY

Borrow to place distance = 1.1 Mi

##### B.5.2 - Grade Topsoil

Fine grade surface 133584 SY

### B.8.1 - Liner Destruction

Liner area =	139392 SF	3.2 AC			
Liner unit weight =	0.30 PSF	60 mil	0.94 g/cc	3470 lb	11500 sf
Liner weight =	42060 LB	21.0 T			REF: www.poly-flex.com (cut sheet)

**NOTE: assume liner ripped in situ using dozer tracks/blade**

### B.8.2,3 - Pond Backfill

Backfill airspace volume =	35000 CY	
Backfill bank volume (x 1.2) =	42000 CY	1.2 compaction shrinkage
Backfill from berms	15000 CY	Dozer push 300'
Backfill from import	27000 CY	
Borrow to place distance =	1.1 Mi	Import from Borrow Area B

### D: Roads and Parking Areas (Table A.4)

**D.1 - Ripping** 22.4 ac Assume motor grader crew, 1 hr rip/acre

**D.2 - Grading** Assume no grading required following rip (due to thick topsoil placement)

#### D.3 - Topsoil Placement

22.4 ac =	975744 SF =	108416 SY
Topsoil depth =	1.5 FT =	0.5 Y
Topsoil volume =		54208 CY
Borrow to place distance =		1.5 Mi

**D.4 - Grade Topsoil** 16.9 ac Fine grade surface

### F: Seeding (Table A.6)

**F.1 - Seeding** 79.7 ac 3471732 SF 385748 SY

Assume rangeland drill w/ hay mulch - no fertilizer

Seed mix/rate:

a. Western wheatgrass (4 lbs/acre)	Total =	16.5 lb/ac	1315.05 lbs seed	
b. Mountain brome (3lbs/acre)		16.5 lb per	43560 SF	4840 SY
c. Blue grama (2 lbs/acre)		3.41 lb/MSY		4.84 MSY
d. Indian Rice grass (2lbs/acre)				
e. Mountain muhly (1lb/acre)				
f. Cicer milkvetch (1.5lbs/acre)				

- g. Mountain mahogany (1.5lbs/acre)
- h. Winterfat (1.5lbs/acre)
- i. **\*east pit and west pit\*** pinyon and juniper seedlings (100 seedlings/ acre)

#### **G: West Pit Reclamation (Table A.7)**

**G.1 - Grade Backfill Area** Assume backfilled area is graded and ready for topsoil placement

#### **G.2 - Topsoil Placement and Grading**

29.7 ac =	1293732 SF =	143748 SY
Topsoil depth =	1.5 FT =	0.5 Y
Topsoil volume =		71874 CY
Borrow to place distance =		1.2 mi
Grade Topsoil	29.7 ac	Fine grade surface

#### **H: Monitoring Well Abandonment (Table A.8)**

NOTE: the Division of Water Resources has Rules and Regulations (2 CCR 402-2) that dictate, among many other things, *Standards for Plugging, Sealing, and Abandoning Wells and Boreholes (Rule 16)*.

*Section 16.4.1 - Abandonment of Dewatering Wells, Monitoring and Observation Holes, and Piezometer Holes*, addresses those requirements applicable to this project. Section 16.4.1 references

Sections 16.2 (Abandonment of wells or boreholes in Type I (confined) aquifers and 16.3 (Abandonment of wells or boreholes in Type II (unconfined bedrock aquifers) and Type III (unconsolidated) aquifers. To meet the requirements of 2 CCR 402-2, assume all wells and piezometers are pressure grouted bottom to surface with cement and sand, 1:4 bentonite mix). Assume lysimeters and vibrating wire piezometers (VW or VWP) are abandoned by excavation 3 feet below grade, tubing/wiring is cut off, and excavated void is backfilled with same cement and sand mixture as wells and piezometers.

#### **I: Equipment Mobilization/Demobilization (Table A.9)**

##### **I.1 - Mobilization and Demobilization**

Assume mobilization/demobilization costs equal 5% of reclamation subtotal costs.

#### **J: Current Approved Monitoring Requirements (Table A.10)**

Monitoring costs are included with yearly Water Treatment Plant operational costs (Item O, Table A.12).

#### **K: Junk Removal and Miscellaneous (Table A.11)**

**K.1 - Removal of Used Junk and Equipment**

The amount of any such items remaining at the site are minor and incidental, and do not impact reclamation costs.

**Items L through O**

See Table A.12 (Total Cost Calculations)

**END SITE DATA AND ASSUMPTIONS**

**ATTACHMENT C**  
**SUMMARY OF SITE WELLS, PIEZOMETERS,**  
**LYSIMETERS AND VIBRATING WIRES**



### Attachment C – Summary of Site Wells, Piezometers, Lysimeters and Vibrating Wires

ID	Type <sup>1</sup>	Site Location <sup>2</sup>	Total Depth (ft)	Diameter <sup>3</sup> (in)	Area <sup>4</sup> (sf)	Volume <sup>5</sup> (cf)
BF-1	Well	West Pit	138	4	0.09	12.0
BF-2	Well	West Pit	138	12	0.79	108.4
BF-3	Well	West Pit	50	6.5	0.23	11.5
BF-4	Well	West Pit	138	6.5	0.23	31.8
BF-5R	Well	West Pit	120	8	0.35	41.9
BF-6	Well	West Pit	97	6	0.20	19.0
BF-7R	Well	Pink	71	6.5	0.23	16.4
BF-8	Well	West Pit	80	6.5	0.23	18.4
BF-9	Well	Pink	60	6.5	0.23	13.8
BF-10	Well	Pink	53	6.5	0.23	12.2
BF-11	Well	Pink	68	6.5	0.23	15.7
BF-12	Well	Pink	53	6.5	0.23	12.2
BF-13	Well	West Pit	48	6.5	0.23	11.1
BF-14	Well	West Pit	63	6.5	0.23	14.5
DW-1	Well		240	12	0.79	188.5
DW-2	Well		250	8.63	0.41	101.4
M-1	Well	West Pit	68	4	0.09	5.9
M-2	Well		100	4	0.09	8.7
M-3	Well		100	4	0.09	8.7
M-5	Well		100	4	0.09	8.7
M-4R	Well	LTF	210	6.25	0.24	50.3
M-6	Well	LTF	210	8	0.35	73.3
M-7	Well	LTF	210	4	0.09	18.3
M-8	Well	LTF	210	8	0.35	73.3
M-9	Well	LTF	210	8	0.35	73.3
M-10	Well	West Pit	56	4.5	0.11	6.2
M-11R	Well	West Pit	65	7	0.27	17.4
M-12	Well	LTF	210	8	0.35	73.3
M-13	Well	LTF	210	8	0.35	73.3
M-13R	Well	LTF	175	8	0.35	61.1
M-14	Well	LTF	180	8	0.35	62.8
M-15	Well	LTF	210	6.25	0.24	50.3
M-16	Well	West Pit	56	8	0.35	19.5
M-17	Well	West Pit	54	8	0.35	18.8
M-18	Well	West Pit	49	6.25	0.24	11.7
M-19	Well	West Pit	50	6.25	0.24	12.0
M-20	Well	West Pit	50	6.25	0.24	12.0
M-21	Well	West Pit	48	6.25	0.24	11.5
M-22	Well	West Pit	45	6.25	0.24	10.8
M-23	Well	West Pit	55	6.25	0.24	13.2
M-24	Well	West Pit	65	6.25	0.24	15.6

## Attachment C – Summary of Site Wells, Piezometers, Lysimeters and Vibrating Wires

ID	Type <sup>1</sup>	Site Location <sup>2</sup>	Total Depth (ft)	Diameter <sup>3</sup> (in)	Area <sup>4</sup> (sf)	Volume <sup>5</sup> (cf)
M-25	Well	West Pit	68	6.25	0.24	16.3
M-26	Well	West Pit	45	6.25	0.24	10.8
M-27	Well	West Pit	52	8	0.35	18.1
M-28	Well	West Pit	49	6.25	0.24	11.7
M-29	Well	West Pit	48	6.25	0.24	11.5
M-30	Well	West Pit	52	6.25	0.24	12.4
M-31	Well	West Pit	62	6.25	0.24	14.8
M-32	Well	West Pit	66	6.25	0.24	15.8
M-33	Well	West Pit	68	6.25	0.24	16.3
M-34	Well	West Pit	68	6.25	0.24	16.3
PC-1	Well	West Pit	300	2	0.02	1.1
PC-2	Well	West Pit	46	2	0.02	1.1
SB-1	Well		50	2	0.02	1.1
SB-2	Well		50	2	0.02	1.1
SB-3	Well		50	2	0.02	1.1
SB-4	Well		50	2	0.02	1.1
SB-5	Well		50	2	0.02	1.1
SB-6	Well		50	2	0.02	1.1
SB-7	Well		40	2	0.02	0.9
SB-8	Well		50	2	0.02	1.1
SB-9	Well		50	2	0.02	1.1
SB-10	Well		50	2	0.02	1.1
PW-1 (SW-1)	Well	West Pit	70	4	0.09	6.1
PW-2 (SW-2)	Well	West Pit	70	4	0.09	6.1
PW-3 (SW-3)	Well	West Pit	70	4	0.09	6.1
PW-4 (SW-4)	Well	West Pit	70	4	0.09	6.1
PW-5 (SW-5)	Well	West Pit	70	4	0.09	6.1
SF-1	Well	West Pit	63	6.25	0.24	15.1
SF-1R	Well	West Pit	96	4	0.09	8.4
SF-2	Well	West Pit	122	8	0.35	42.6
SF-3	Well	West Pit	122	8	0.35	42.6
SF-4	Well	West Pit	140	8	0.35	48.9
SF-5	Well	West Pit	140	8	0.35	48.9
SLM-1	Well	Ranch	181	6.25	0.21	38.6
SLM-2	Well	Ranch	305	4	0.09	26.6
SLM-3	Well	Ranch	180	4	0.09	15.7
SLM-4	Well	Ranch	260	6.25	0.24	62.2
SLM-5	Well	Ranch	48	6.25	0.24	11.5
SLT	Well	Town	305	6.25	0.24	73.0
SRW	Well	Ranch	305	10	0.55	166.3
TAILS	Well	LTF	210	8	0.35	73.3

## Attachment C – Summary of Site Wells, Piezometers, Lysimeters and Vibrating Wires

ID	Type <sup>1</sup>	Site Location <sup>2</sup>	Total Depth (ft)	Diameter <sup>3</sup> (in)	Area <sup>4</sup> (sf)	Volume <sup>5</sup> (cf)
WD-1 <sup>6</sup>	Well	Ranch				
WP-1	Well		60	6	0.20	11.8
WP-2	Well		65.5	6	0.20	12.9
WP-3	Well		46	6	0.20	9.0
WP-4	Well		63	6	0.20	12.4
WP-5	Well		57	6	0.20	11.2
WP-6	Well		89	6	0.20	7.8
COL	Well	LTF	210	6.625	0.24	50.3
SLM 2A-2B	Well		68	6	0.20	13.3
P6	Piezo	LTF	70.75	4	0.09	6.2
P7	Piezo	LTF	90.79	4	0.09	7.9
P8	Piezo	LTF	96.16	4	0.09	8.4
P9	Piezo	LTF	71.11	4	0.09	6.2
P10	Piezo	LTF	56.30	4	0.09	4.9
P11	Piezo	LTF	40.59	4	0.09	3.5
P12	Piezo	LTF	39.81	4	0.09	3.5
P13	Piezo	LTF	39.59	4	0.09	3.5
P14	Piezo	LTF	39.70	4	0.09	3.5
P15	Piezo	LTF	38.72	4	0.09	3.4
L-1D	Lys		50	4	0.09	4.4
L-1S	Lys		25	4	0.09	2.2
L-2D	Lys		50	4	0.09	4.4
L-2S	Lys		25	4	0.09	2.2
L-3D	Lys		50	4	0.09	4.4
L-3S	Lys		25	4	0.09	2.2
VWP-01A	VWP		84	4	NA	NA
VWP-01B	VWP		95	4	NA	NA
VWP-02A	VWP		64	4	NA	NA
VWP-02B	VWP		78	4	NA	NA
VWP-02C	VWP		95	4	NA	NA
VWP-03A	VWP		44	4	NA	NA
VWP-03B	VWP		70	4	NA	NA
VWP-03C	VWP		95	4	NA	NA

Total Wells and Piezometers: 94; Total Lysimeters and VWPs: 14

Total casing volume Wells and Piezometers: 2,499.2 cubic feet; total linear feet Wells and Piezometers = 10,146.0 ft

<sup>1</sup> Lys=lysimeter; piezo=piezometer; VWP/VW=vibrating wire piezometer

<sup>2</sup>LTF=Lower Tailing Facility; Pink=pink gneiss, northwest of site

<sup>3</sup>casing diameter;

<sup>4</sup>cross-sectional area of casing

<sup>5</sup>casing volume; NA indicates area and volume not applicable for abandonment of VWP instrumentation

<sup>6</sup>headgate invert