

January 18, 2021

Via Federal Express

Mr. Bill Childress District Manager, Las Cruces District Office Bureau of Land Management 1800 Marquess Street Las Cruces, NM 88005

Mr. Holland Shepherd Program Manager, Mining Act Reclamation Program New Mexico Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

RE: Permit Tracking No. LU035MN

Submittal of American Magnesium, LLC's Revised Financial Assurance Cost Estimates, Foothill Dolomite Mine

Dear Messrs. Childress and Shepherd:

American Magnesium, LLC (AmMg) is pleased to submit the enclosed revised financial assurance cost estimates for the proposed Foothill Dolomite Mine. Daniel B. Stephens & Associates, Inc. (DBS&A) revised the original cost estimates to address comments received from the New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division (MMD).

Enclosed is a letter prepared by DBS&A that provides responses to the MMD comments and the revised cost estimates. The cost estimates are being submitted to the Bureau of Land Management and MMD to support AmMg's Minimal Impact New Mine Permit Application (permit tracking number LU035MN).

AmMg hopes that the revised financial assurance cost estimates are sufficient for BLM and MMD to issue the required permits for AmMg to operate a new minimal impact dolomite mine near Deming, New Mexico. Magnesium has been identified as a critical mineral under Presidential Executive Order 13817 signed December 20, 2017 and the Final List of Critical Minerals issued by the U.S. Geological Survey on May 18, 2018. The AmMg Foothill Dolomite Mine will provide the nation with a reliable source of this critical mineral.



Should you have any questions, please contact AmMg's permitting lead, Mr. John Ayarbe, PG, with DBS&A at 505-822-9400 or by e-mail at jayarbe@geo-logic.com.

Regards,

American Magnesium, LLC

Can Pleas Breeten

Carol Ness Brewka, Managing Member

Enclosure: Financial Assurance Cost Estimates (Revision 1)



Mr. Bill Childress
District Manager, Las Cruces District Office
Bureau of Land Management
1800 Marquess Street
Las Cruces, NM 88005

Mr. Holland Shepherd
Program Manager, Mining Act Reclamation Program
New Mexico Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Permit Tracking No. LU035MN
Submittal of American Magnesium, LLC's
Revised Financial Assurance Cost Estimates, Foothill Dolomite Mine

Dear Messrs. Childress and Shepherd:

On December 9, 2020, the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department issued a letter to American Magnesium, LLC (AmMg) providing technical comments on the financial assurance cost estimates for AmMg's Foothill Dolomite Mine dated October 16, 2020. On behalf of AmMg, Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this letter responding to each of MMD's technical comments. DBS&A developed the original and revised cost estimates using the Standardized Reclamation Cost Estimator (SRCE) Version 1.4.1, Build 17b (revised May 16, 2019).

MMD's letter required that AmMg submit responses to comments within 15 days of receipt of this letter, which would have been December 24, 2020. DBS&A contacted Jennifer Johnson, MMD Permit Lead, and requested an extension of time to respond to comments. In an e-mail dated December 16, 2020, MMD kindly extended the response deadline to January 23, 2021.

Although some of MMD's comments refer to the Plan of Operations for the Foothill Dolomite Mine (Revision 5) dated August 27, 2020, those comments do not require any changes to the Plan of Operations. MMD's complete comment is provided in italics, followed by AmMg's response in regular text.

1. American Magnesium provided a cost estimate for a 20-year mine plan. MMD only requires financial assurance for a 5-year mine plan. American Magnesium can provide a cost estimate for the 5-year plan mentioned in section 3.4 of the Plan of Operations ("PoO") if they would like.

AmMg understands that MMD only requires financial assurance for a 5-year mine plan. Following discussions with MMD, it was decided that AmMg would submit financial assurance

Daniel B. Stephens & Associates, Inc.

cost estimates for reclamation of disturbed areas at the site at two points in time: (1) following completion of the resource verification drilling program and (2) at the end of mine life (20-year mine plan).

- 2. Cost Data File: In the tab "Equipment Costs" the costs for the following equipment should be changed in accordance with the costs currently in EquipmentWatch:
 - a. The D6R dozer should be changed to \$7,222.35/month from \$6,570.00/month.
 - b. The D7R dozer should be changed to \$10,466.40/month from \$18,300/month.
 - c. The 966G loader should be changed to \$5,856.20/month from \$11,500.00/month.
 - d. The 725 truck should be changed to \$9,300.06/month from \$10,824.00/month.
 - e. The 120H motor grader should be changed to \$3,964.95/month from \$8,670.00/month.
 - f. The 325C track excavator should be changed to \$10,047.96/month from \$10,750.00/month.

Rates for the equipment identified in the tab "Equipment Costs" and used in the AmMg SRCEs have been revised in accordance with the rates currently in EquipmentWatch. The revisions are consistent with the rates listed above.

- 3. In the tab "Labor Rates" the labor rates for the following equipment should be changed in accordance with the New Mexico Department of Workforce Solutions prevailing wage rates for Type H Heavy Engineering:
 - a. The labor rates for the D6R and D7R bulldozers should be changed to \$28.02/hour from \$21.14/hour.
 - b. The 966G loader labor rate should be changed to \$28.02/hour from \$27.12/hour.
 - c. The 725 truck labor rate should be changed to \$28.02/hour from \$18.97/hour.
 - d. The 120H motor grader labor rate should be changed to \$30.23/hour (or \$28.31/hour) from \$21.14/hour.
 - e. The 325C track excavator labor rate should be changed to \$30.23/hour from \$27.12/hour.
 - f. Any remaining labor rates for equipment not mentioned in this letter should be adjusted to the New Mexico Department Workforce Solutions Type H Heavy Engineering labor rates.

Labor rates for the operators of the equipment identified in the tab "Labor Rates" and used in the AmMg SRCEs have been revised in accordance with the New Mexico Department of Workforce Solutions prevailing wage rates for Type H – Heavy Engineering. The revisions are consistent with the rates listed above.

In addition, the following labor rate changes were made: (1) scraper operators from \$14.03/hour to \$28.02/hour, (2) backhoe operators from \$14.03/hour to \$28.02/hour, (3) vibratory roller operators from \$14.03/hour to \$28.02/hour, (4) compressor + tools operators from \$14.03/hour to \$27.69/hour, (5) welding equipment operators from \$27.12/hour to \$27.88/hour, (6) heavy

duty drill rig and pump (plugging) drill rig operators from \$14.03/hour to \$27.88/hour, (7) dump truck (10 to 12 cubic yard) from \$11.90/hour to \$24.92/hour, (8) general laborer from \$12.37/hour to \$23.88/hour, (9) skilled laborer from \$17.97/hour to \$26.14/hour, (10) driller's helper from \$17.83/hour to \$26.14/hour, (11) rodmen (reinforcing concrete) from \$17.74/hour to \$23.88/hour, (12) cement finisher from \$17.83/hour to \$26.14/hour, and (13) carpenter from \$22.26/hour to \$36.47/hour. Labor groups and base pay rate fringe benefits have been included.

4. Cost Estimate for Reclamation After Exploration: The cost in tab "Exploration" for plugging the boreholes is not calculated and included in the overall total. Please fix this error in the excel file so it is added to the total cost.

SRCE for reclamation after exploration has been updated to include plugging and abandonment of the exploration boreholes.

5. The cost for the access road in the "Roads" tab can be removed because the exact same cost is in the Cost Estimate for Reclamation at End of Mining and since section 2.16 of the PoO states "improvement of the BLM road and final construction of the mine site access road will occur within 6 months of completion of verification drilling".

The cost for the access road in the "Roads" tab has been removed.

6. Cost Estimate for Reclamation at End of Mining: Please include the costs to reclaim the improvements to the BLM road in the "Roads" tab in the SRCE. Unless the BLM approves that the improvements to the BLM road can stay after mining has ceased, the costs must be included in the cost estimate.

SRCE for reclamation at end of mining has been updated to include costs to reclaim improvements to the unnamed BLM road. Reclamation of the road will consist of ripping and revegetating approximately 3 feet on each side of the road to bring the road back to its original width. The revision was made in the "Roads" tab.

7. The ungraded slope in the tab "Quarries & Borrow Pits" should be 2:1 not 3:1 to reflect section 2.4.6 of the PoO. Please correct this in the SRCE.

The ungraded slope in the "Quarries & Borrow Pits" tab has been changed from 3:1 to 2:1.

8. Section 2.4.1 of the PoO states "a cattle guard will be installed at the swing gate currently located in the upper portion of the BLM road". Please include the cost to remove this cattle guard at the end of operations in the SRCE.

Removal and disposal of the cattle guard has been added to the "Waste Disposal" tab.

9. Section 2.4.2 of the PoO states "the proposed alignment will require the installation of single culverts to cross two or three narrow, steep-sided gullies". Please provide culvert removal costs in SRCE.

Removal and disposal of three culverts has been added to the "Misc. Costs" tab.

10. Section 2.4.3 of the PoO mentions that portable sanitation facilities will be on site but is not included in tab "Other Demo & Equip Removal". Please provide these costs in the SRCE.

The "Other Demo & Equip Removal" tab has been revised to include the cost to remove portable sanitation facilities (two units).

11. Section 2.4.6 state that the maximum amount of staged ore will be 15 cubic yards. Please provide costs to remove this pile in the cost estimate.

The "Waste Disposal" tab has been revised to include disposal of 15 cubic yards of unprocessed ore.

12. Tab "Foundations & Buildings" does not include the cost for the demolition of the concrete slab ford across the arroyo. Please fix the excel file to include this cost.

The "Foundations & Buildings" tab has been revised to include the cost to demolish and remove the concrete slab ford.

13. Section 3.3 states that "seed will be planted along contour using a rangeland drill or similar equipment. When drill seeding cannot be accomplished, broadcast seeding will be employed". Please include the costs for drill seeding in the SRCE.

The seed application method has been revised to include drill seeding for all disturbance types. This change was also made to the Exploration SRCE so that the two SRCEs are consistent.

14. Both Cost Estimates: The Monitoring & Maintenance table in tab "Constr. Mgmt" has one water truck and one grader for a duration of 36 months but there is no value provided for the Hours/Month. Please clarify the number of hours/month the water truck and grader are needed for Monitoring & Maintenance and include it in the excel file.

The anticipated rate for both pieces of equipment is 1 hour per month for monitoring and maintenance. Both SRCEs have been updated.

Closing

DBS&A revised the financial assurance cost estimates for AmMg's Foothill Dolomite Mine. Revisions to estimated costs for reclamation following (1) completion of the resource verification drilling program and (2) at the end of mine life are provided as Attachments 1 and 2, respectively. The estimated cost for reclamation of disturbances related to resource verification

activities is \$518,589 (Attachment 1). The estimated cost for reclamation of disturbances related to mining operations at is \$892,483 (Attachment 2).

If you have any questions or comments regarding our approach, please contact us at (505) 822-9400.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Bill Casadevall, C.P.G.

Senior Geologist

John Ayarbe, P.G.

Senior Hydrologist

BC/JA/rpf Attachments

cc: Carol Ness Brewka, AmMg (cnbrewka@msn.com)

Attachment 1

Cost Estimate for Reclamation of Disturbance from Resource Verification Program Enter Data Below in Green and Blue Spaces

STANDARDIZED RECLAMATION COST ESTIMATOR

Version 1.4.1 Build 017b (Revised 16 May 2019)

Approved for use in Nevada, August 1, 2012

COST DATA FILE INFORMATIO	N .
File Name:	Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Cost Data File:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Data Date:	January 6, 2021
Cost Data Basis:	User Data Cost Units: Imperial
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H
PROJECT INFORMATION	
Property/Mine Name:	Foothill Dolomite Mine Property Code: N/A
Project Name:	Foothill Dolomite Mine
Date of Submittal:	01/18/2021 Average Altitude: 4865 ft.
Select One:	○ Notice or Sm Exploration Plan ○ Lg Exploration Plan ○ Mine Operation
Select One:	Private Land Public or Public/Private
Cost Estimate Type:	Surety
Cost Basis Category:	American Magnesium - Option 1 Revised
Cost Basis Description:	American Magnesium - Foothill Dolomite Mine - Northern Nevada Equipment

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Closure Cost Estimate Cost Summary

Project Name: Foothill Dolomite Mine Project Date: 01/18/2021 Model Version: Version 1.4.1 File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

		(8)		
A. Earthwork/Recontouring	Labor (1)	Equipment (2)	Materials	Total
Exploration	\$29,627	\$191,491	\$844	\$221,962
Exploration Roads & Drill Pads Roads	\$3,716 \$0	\$12,009 \$0	\$0 \$0	\$15,725 \$0
Well Abandonment	\$0	\$0	\$0	\$0
Pits	\$0	\$0	N/A	\$0
Quarries & Borrow Areas	\$0	\$0	\$0	\$0
Underground Openings	\$0	\$0	\$0	\$0
Process Ponds Heaps	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Waste Rock Dumps	\$0	\$0 \$0	\$0	\$0
Landfills	\$0	\$0	\$0	\$0
Tailings	\$0	\$0	\$0	\$0
Foundation & Buildings Areas	\$0	\$0	\$0	\$0
Yards, Etc.	\$172	\$532	\$0	\$704
Drainage & Sediment Control	\$0	\$0	\$0	\$0
Generic Material Hauling	\$0	\$0	\$0	\$0
Other User Costs (from Other User sheet) Other**	\$0	\$0	\$59,427	\$59,427 \$0
Subtotal	\$33,515	\$204.032	\$60,271	\$297,818
- Subtotal	\$00,010	\$201,002	\$00,2. .	\$201,010
Mob/Demob if included in Other User sheet	\$0	\$0	\$0	\$0
Mob/Demob				\$0
Subtotal "A"	\$33,515	\$204,032	\$60,271	\$297,818
B. Revegetation/Stabilization	Labor (1)	Equipment (2)	Materials	Total
Exploration	\$0	\$0	\$0	\$0
Exploration Exploration Roads & Drill Pads	\$410	\$352	\$18,755	\$19,517
Roads	\$0	\$0	\$0	\$0
Well Abandonment				N/A
Pits	\$0	\$0	\$0	\$0
Quarries & Borrow Areas	\$0	\$0	\$0	\$0
Underground Openings				N/A
Process Ponds Heaps	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Waste Rock Dumps	\$0 \$0	\$0 \$0	\$0 \$0	\$0
Landfills	\$0	\$0	\$0	\$0
Tailings	\$0	\$0	\$0	\$0
Foundation & Buildings Areas	\$0	\$0	\$0	\$0
Yards, Etc.	\$140	\$120	\$1,601	\$1,861
Drainage & Sediment Control	\$0	\$0	\$0	\$0
Generic Material Hauling	\$0	\$0	\$0	\$0
Other User Costs (from Other User sheet)	\$0	\$0	\$0	\$0
Other**	* FF0	6.470	*00.0F0	\$0
Subtotal "B"	\$550	\$472	\$20,356	\$21,378
C Deterification (Mater Treatment/Discussed of Mater **	(1)	_ (2)	Matariala	Tatal
C. Detoxification/Water Treatment/Disposal of Wastes**	Labor (1)	Equipment (2)	Materials	Total
Process Ponds/Sludge				
				\$0
Heaps				\$0
Heaps Dumps (Waste & Landfill)				\$0 \$0
Heaps				\$0 \$0
Heaps Dumps (Waste & Landfill) Tallings				\$0 \$0
Heaps Dumps (Waste & Landfill) Tailings Surplus Water Disposal Monitoring Miscellaneous				\$0 \$0 \$0 \$0 \$0 \$0
Heaps Dumps (Waste & Landfill) Tailings Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site	\$0	\$0	N/A	\$0 \$0 \$0 \$0 \$0 \$0 \$0
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Heaps Dumps (Waste & Landfill) Tailings Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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Heaps Dumps (Waste & Landfill) Tailings Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other* D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Pipe Removal Pipe Removal Rip-rap, rock lining, gabions Other User Costs (from Other User sheet) Other* Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other'' Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other'' Road Maintenance Other User Costs (from Other User sheet)	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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Heaps Dumps (Waste & Landfill) Tailings Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other'* Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Rip-rap, rock linling, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other'* Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other'* Road Maintenance Other User Costs (from Other User sheet) Other' Road Maintenance Other User Costs (from Other User sheet) Other'* Subtotal "F"	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$0 \$0 \$0 Equipment (2) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 Materials \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$

 $[\]ensuremath{^{**}}$ Other Operator supplied costs - additional documentation required.

Closure Cost Estimate Cost Summary

Project Name: Foothill Dolomite Mine Project Date: 01/18/2021 Model Version: Version 1.4.1

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

ndirect Costs				Include?	Total
1. Engineering, Design and Construction (ED&C) Plan (7)					\$28,94
2. Contingency (8)					\$36,17
3. Insurance (9)		\$872			\$87
4. Performance Bond (10)					\$10,85
Contractor Profit (11)					\$36,17
Contract Administration (12)					\$36,17
7. Government Indirect Cost (13)					\$7,59
Subtotal Add-On Costs					\$156,80
Total Indirect Costs as % of Direct Cost					439
				-	\$540.50
GRAND TOTAL					\$518,589
GRAND TOTAL Administrative Cost Rates (%)					\$518,589
		Cost Rang	es for Indirect Cos	at Percentages	\$518,58
	<=	Cost Rang	es for Indirect Cos	et Percentages	\$518,58
	<= \$1,000,000				
Administrative Cost Rates (%)		<=		>	\$518,589 Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7)	\$1,000,000 8%	<= \$25,000,000 6% <=	<= <=	\$25,000,000 4%	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7)	\$1,000,000 8%	<= \$25,000,000 6% <=	<=	\$25,000,000 4%	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate	\$1,000,000 8%	<= \$25,000,000 6% <=	<= <=	\$25,000,000 4%	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9)	\$1,000,000 8% <= \$500,000 10% 1.5%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs	<= <= \$50,000,000 6%	\$25,000,000 4% > \$50,000,000	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) 3. Insurance (9) 4. Bond (10)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if	<= <= \$50,000,000	\$25,000,000 4% > \$50,000,000	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs	<= <= \$50,000,000 6%	\$25,000,000 4% > \$50,000,000	Small Pla
1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9) 4. Bond (10) 5. Contractor Profit (11)	\$1,000,000 8% <= \$500,000 10% 3.0% 10%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if of the O&M costs	<= <= \$50,000,000 6%	\$25,000,000 4% \$50,000,000 4%	Small Pla
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) 3. Insurance (9) 4. Bond (10)	\$1,000,000 8% <= \$500,000 1.5% 3.0% 10%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if of the O&M costs	<= \$50,000,000 6% D&M costs are >\$100,000	> \$25,000,000 4% > \$50,000,000 4%	Small Pla

RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

- RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

 1. Federal construction contracts require Davis-Bacon wage rates for contracts over \$2,000. Wage rate estimates may include base pay, payroll loading,
 2. The reclamation cost estimate must include the estimated plugging cost of at least one drill hole for each active drill rig in the project area. Where the
 3. Miscellaneous items should be itemized on accompanying worksheets.
 4. Fluid management represents the costs of maintaining proper
 5. Handling of hazardous materials includes the cost of decontaminating, neutralizing, disposing, treating and/or isolating all hazardous materials used, produced,
 6. Any mitigation measures required in the Plan of Operations must be included in the reclamation cost estimate. Mitigation may include measures to avoid,
 7. Engineering, design and construction (ED&C) plans are often necessary to provide details on the reclamation needed to contract for the required work. To
 8. A contingency cost is included in the reclamation cost estimation to cover unforeseen cost elements. Calculate the contingency cost as a percentage of the
 9. Insurance premiums are calculated at 1.5% of the total labor costs. Enter the premium amount if liability insurance is not included in the itemized unit costs.
 10. Federal construction contracts exceeding \$100,000 require both a performance and a payment bond (Miller Act, 40 USC 270et seq.). Each bond premium is
 11. For Federal construction contracts, use 10% of estimated 0&M cost for the contractor's promium (D&M) cost. Calculate the contract administration cost as a

- 12. To estimate the contract administration cost, use 6 to 10% of the operational and maintenance (O&M) cost. Calculate the contract administration cost as a 13. Government indirect cost rate is 21% of the contract administration costs.

Closure Cost Estimate Other User

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Eatimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Oth	Other Cost Items Calculated Elsewhere											
						Total	Material	Labor	Equipment/ Operating			
	Description					Capital	Unit	Unit	Unit		Total	
	(required)	ID Code	Facility Type	Quantity	Units	Cost	Cost	Cost	Cost	Cost Type	Cost	Comments
						\$	\$	\$	\$	(select)	\$	
1	Topdressing Purchase and Hauling		Off Site - Other Load Out	4,055	1	\$15,503.60	\$10.83			A. Earthwork	\$59,427	
						\$15 504	\$43 924	\$0	so.		\$59 427	

Notes: Capital cost is lump sum (i.e. not multiplied by the quantity).

Material, Labor and Equipment/Operating costs are unit costs (i.e. multiplied by the quantity).

Note: Assumes 20% discount on purchased soil for bulk discount at \$13.54/cy original Cost

Note: Assumes Capitol Cost as Delivery cost at \$3.50 per mile using an 18 cy dump truck at 19.6 miles for delivery.

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Closure Cost Estimate Reclamation Quantities

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Data Cost File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm

Cost Data: User Data

Cost Data Data
Cost Data File: SRCE Cost _data-Am _Mg _Foothill _Dolomite _ Mine _1 _12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Reclamation Quantity Sum	mary															
		Unit Costs														
Description	Total Regrade or Haul Volume cy	Total Regrade or Haul Cost \$	Total Cover Volume cy	Cover Placement Cost \$	Total Growth Media Volume cy	Growth Media Placement Cost \$	Total Surface Area acres	Total Scarify Cost \$	Total Revetation Cost \$	TOTALS \$	Regrade Unit Cost \$/CY	Material Haul or Backfill Unit Cost \$/CY	Cover Unit Cost \$/CY	Growth Media Unit Cost \$/CY	Scarify Unit Cost \$/CY	Area Unit Cost \$/acre
1 Waste Rock Dumps		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				
2 Tailings Impoundments		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				
3 Heap Leach Pads		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				i
5 Open Pits		\$ -							\$ -	\$ -		N/A				
4 Quarries & Borrow Pits		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				
6 Roads		\$ -				\$ -		\$ -	\$ -	\$ -		N/A				
7 Landfills		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				i
8 Buildings				\$ -		\$ -		\$ -	\$ -	\$ -		N/A				
9 Yards		\$ -		\$ -	484	\$ 582	0.25	\$ 122	\$ 1,861	\$ 2,565		N/A		\$1.20	\$488.00	\$10,260.00
10 Ponds		\$ -				\$ -			\$ -	\$ -	N/A					
11 Exploration Roads	1,653	\$ 5,218			4,722	\$ 10,261	2.93	\$ 246	\$ 19,517	\$ 35,242	\$3.16	N/A		\$2.17	\$83.96	\$12,027.99
12 Exploration Trenches		\$ -							\$ -	\$ -		N/A				
13 Diversion Ditches		\$ -							\$ -	\$ -		N/A				
14 Sediment Ponds		\$ -				\$ -		\$ -	\$ -	\$ -						
15 Generic Haulage/Backfill		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -	N/A					
16 Adit/Decline Backfilling1		\$ -								\$ -	N/A					
17 Shaft Backfilling		\$ -								\$ -	N/A					
TOTALS	1,653			\$ -	5,206		3.18									· · · · · · · · · · · · · · · · · · ·
Average Costs	per CY	\$3.16	per CY		per CY	\$2.08	per acre	\$115.72	\$58.09	\$11,889	per acre	1				

1 of 1 Reclamation Quantities

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Basis: American Magnesium - Option 1 Revised Cost Estimate Type: Surety

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

Exp	Exploration Drillhole Abandonment - User Input												
	Facility Description Hole Plugging												
	Description (required)	ID Code	Hole Type (select)	Diameter in	Total Number of Holes	Max Holes Open at One Time	Casing to Remove ft	Average Depth of Hole ⁽¹⁾ ft bgs	Depth to Water ft bgs	Hole Plug Method (select)			
1	Exploration Boreholes	N/A	Rotary Pre-drill	3.0	86.0	86.0	100.0	100.0	250.0	Grout Only			

1. If core holes are pre-drilled, use length of hole below pre-drilled length

1. If total flotes are pre-united, use length or flote beginning for the beginning for the property of the pro

1/14/2021

Page 1 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Basis: American Magnesium - Option 1 Revised Cost Estimate Type: Surety

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

Ī	Exploration Trenches - User Input												
Г	Facility Description			Tre	nch Paramet	ers			Backfill			Revegetation	
	Description (required)	ID Code	Trench Length ft	Trench Depth ft	Trench Bottom Width ft	Trench Sideslope Angle degrees	Additional Hrs for Walk-in ⁽¹⁾ hr	Backfill Material (select)	Cut Material Type (select)	Backfilling Fleet (select)	Seed Mix (select)	Mulch (select)	Fertilizer (select)

- Notes:

 1. Include <u>one-way</u> hours necessary to walk equipment in from drop-off point to work area
- 2. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

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Page 2 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

Exp	oloration Drillhole Abandonment													
	Description (required)	Vol/foot of depth ft3	Hole Plugging Material ⁽¹⁾	Total Grout Volume ⁽²⁾ cy	Total Cuttings Volume cy	Total Top Seal Volume ^(3,4) Cy	Total Drillhole Abandon. Hours ^(6,7) hrs	Casing Removal Labor Cost ⁽⁵⁾ \$	Casing Removal Equipment Cost \$	Plugging Labor Cost \$	Plugging Equipment Cost \$	Plugging Material Cost \$	Top Seal Material Cost ^(2,3)	Total Cost ^(6,7)
1	Exploration Boreholes	0.050	Cuttings	0.19		0.05	4	\$4,232	\$27,517	\$25,395	\$163,974	\$689	\$155	\$221,962
				0.19		0.05	4	\$4,232	\$27,517	\$25,395	\$163,974	\$689	\$155	\$221,962

Notes:

- 1. Assumes grout backfill from bottom of hole to 50' (15.24m) above static water level, up to 10' (3m) from top of hole
- 2. Assumes 25% loss to formation for grout backfill
- 3. If "Top Plug" hole plug method is used, assumes physical plug installed without backfill, grout or cement. Not available option for Nevada projects
 4. Assumes top 20' (6 m) of hole is plugged with cement if "Grout Only", "Backfill + Grout", or "Cement Plug" hole plug method are chosen.
- 5. Assumes that a) casing is not cemented entire length, b) does not include temporary surface casing
- 6. Assumes minimum 1 hr per hole for abandonment (excluding move-to and casing removal)
- 7. Assumes fixed hours per hole for setup & tear-down and moving between holes (see Productivty Sheet) per drill hole (includes rig time if grouting required, labor crew only if cuttings backfill only)

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Page 3 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

Page 4 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

 Exploration Trenches - Backfill/Regrading Costs Productivity = Dozer Productivity x Grade Correction x Density Correction x Operator (0.75) x Material x Visibility x Job Efficiency (0.83)												
Description (required)	Trench Backfill Volume LCY (BCY+30%)	Dozer Push Distance ft	Equipment Productivity yd3/hr	Dozing Material	Density Correction	Backfilling Fleet	Corrected Hourly Productivity yd3/hr	Total Dozer Hours hr	Trench Backfill Labor Cost \$	Trench Backfill Equipment Cost \$	Total Trench Backfill Cost \$	
									\$0	\$0	\$0	

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Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$29,627	\$191,491	\$844	\$221,962
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$29,627	\$191,491	\$844	\$221,962
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$29,627	\$191,491	\$844	\$221,962

Ехр	Ioration Trenches - Revegetation Costs					
			Revegetation	Revegetation	Revgetation	Total
	Description	Surface	Labor	Equipment	Material	Revegetation
	(required)	Area	Cost	Cost	Cost	Cost
		acres	\$	\$	\$	\$
			\$0	\$0	\$0	\$0

Page 6 of 6 Exploration

Closure Cost Estimate Expl. Roads & Pads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,261
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$3,716	\$12,009		\$15,725
Revegetation Cost	\$410	\$352	\$18,755	\$19,517
TOTALS	\$4,126	\$12,361	\$18,755	\$35,242

Ī	Exploration Roads & Pads - User Input You must fill in ALL green cells and relevant blue cells in this section for each road																	
П		Facility Description			Physical (1) - MANDATORY							User O	User Overrides		Growth Media			
ſ	Description (required) ID Code			Underlying Ground Slope % grade	Ungraded Slope _H:1V	Cut Slope degrees	Road + Drill Pad Length ft	Road Width ft	Number of Drill Pads	Individual Sump Volume cy	Drill Pad Width ft	Drill Pad Length ft	Slope Replacement Percent %	Regrade Volume (if calculated elsewhere) Cy	Disturbed Area (if calculated elsewhere) acres	Growth Media Thickness in	Distance to Growth Media Stockpile ft	Slope from Road to Stockpile % grade
	1	Exploration Roads		15.0	2.0	66.7	10,626	12.0	86	0	12.0	10	115%		2.93	12	1,379	15.0

- Notes:

 1. All Physical parameters must be input even if manual overrides for volume or area are used.

 2. Slope replacement refers to the percentage of cut volumn replaced during regrading.

 3. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

 4. Sump volume will be applied to all roads on slopes <20%. On slopes >20% pad width (i.e. cut volume) should be adequate to account for sump volume.

Closure Cost Estimate Expl. Roads & Pads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

xploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,261
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$3,716	\$12,009		\$15,725
Revegetation Cost	\$410	\$352	\$18,755	\$19,517
TOTALS	\$4,126	\$12,361	\$18,755	\$35,242

Exp	Exploration Roads & Pads - User Input (cont.) You must fill in ALL green cells and relevant blue cells in this section for each road													
			Grading				Growth Media				Revegetation			
	Description (required)	Regrade Material Condition (select)	Cut Material Type (select)	Recontouring Equipment Fleet (select)	Additional Hrs for Walk-in ⁽¹⁾	Growth Media Material Type (select)	Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Additional Hrs for Walk-in ⁽¹⁾	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarifying/ Ripping? (select)	Ripping Fleet (select)
1	Exploration Roads	0.8	LS - broken	Small Dozer	1.0	Alluvium	Small Truck		1.0	User Mix 1	Straw Mulch	None	Yes	Small Dozer

Notes:

1. Inclue one-way hours necessary to walk equipment in from drop-off point to work area

2. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

Project Name: Foothill Dolomite Mine - Reclamation Plan

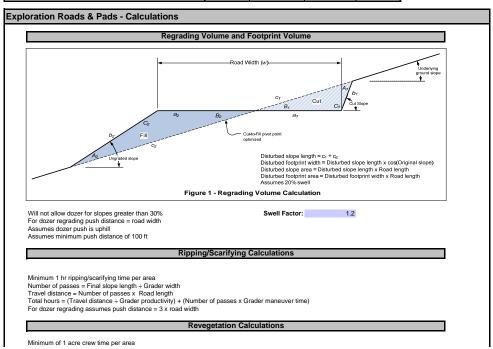
Date of Submittal: 01/18/2021

File Name: Att 1 Cost 20200820 SRCE Version 1 4 1 017b NV 2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

xploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,261
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$3,716	\$12,009		\$15,725
Revegetation Cost	\$410	\$352	\$18,755	\$19,517
TOTALS	\$4,126	\$12,361	\$18,755	\$35,242



Project Name: Foothill Dolomite Mine - Reclamation Plan

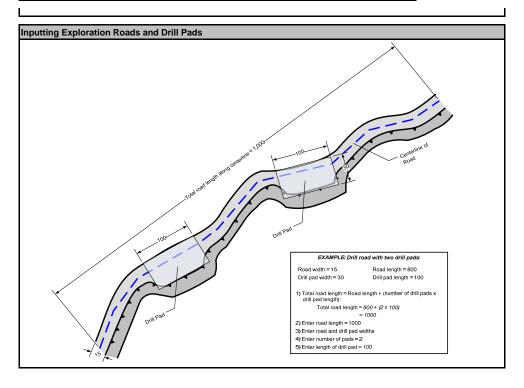
Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,261
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$3,716	\$12,009		\$15,725
Revegetation Cost	\$410	\$352	\$18,755	\$19,517
TOTALS	\$4,126	\$12,361	\$18,755	\$35,242



Closure Cost Estimate Expl. Roads & Pads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

xploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,261
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$3,716	\$12,009		\$15,725
Revegetation Cost	\$410	\$352	\$18,755	\$19,517
TOTALS	\$4,126	\$12,361	\$18,755	\$35,242

Expl	oration Roads & Pads - Regrading Costs									
	Description (required)	Total Road Length ft	Total Drill Pad Length ft	Regrading Volume cy	Recontouring Fleet	Equipment Productivity cy/hr	Total Equipment Hours ⁽¹⁾ hr	Total Labor Cost \$	Total Equipment Cost \$	Total Regrading Cost \$
1	Exploration Roads	9,766	860	1,653	D6R	43	40	\$1,376	\$3,842	\$5,218
		9,766	860	1,653			40	\$1,376	\$3,842	\$5,218

⁽¹⁾ Includes walk-in time based on distance and travel speed (see Productivity sheet for speeds)

Closure Cost Estimate Expl. Roads & Pads

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

oloration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,21
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,26
Ripping/Scarifying Cost	\$69	\$177	N/A	\$24
Subtotal Earthworks	\$3,716	\$12,009		\$15,72
Revegetation Cost	\$410	\$352	\$18,755	\$19,51
TOTALS	\$4,126	\$12,361	\$18,755	\$35,24

Expl	Exploration Roads & Pads - Growth Media Costs												
	Description (required)	Growth Media Volume Cy	Growth Media Replacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$				
1	Exploration Roads	4,722	725/966G/D7R	515	4	11	\$2,271	\$7,990	\$10,261				
		4,722				11	\$2,271	\$7,990	\$10,261				

Closure Cost Estimate Expl. Roads & Pads

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

oloration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$1,376	\$3,842	N/A	\$5,218
Cover Placement Cost	\$2,271	\$7,990	N/A	\$10,26
Ripping/Scarifying Cost	\$69	\$177	N/A	\$24
Subtotal Earthworks	\$3,716	\$12,009		\$15,72
Revegetation Cost	\$410	\$352	\$18,755	\$19,51
TOTALS	\$4,126	\$12,361	\$18,755	\$35,24

Expl	oration Roads & Pads - Scarifying/Reveget	ation Cost	s									
	Description (required)	Surface Area	Ripping/ Scarifying Fleet	Ripping Hours	Ripping Labor Costs	Ripping Equipment Cost	Total Ripping Costs	Revegetation Labor Cost	Revegetation Equipment Cost	Revgetation Material Cost	Total Revegetation Cost	
		acres		hrs	\$	\$	\$	\$	\$	\$	\$	
1	Exploration Roads	2.93	D7R	2	\$69	\$177	\$246		\$352	\$18,755		
		2.93		2	\$69	\$177	\$246	\$410	\$352	\$18,755	\$19,517	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Color Code Key									
User Input - Direct Input	Direct Input								
User Input - Pull Down List	Pull Down Selection								
Program Constant (can override)	Alternate Input								
Program Calculated Value	Locked Cell - Formula or Reference								

Maximum slope grade allowed for dozer: 20 % (max 40%)

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Page 1 of 8 Roads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$(
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Roads - User Input				You must fill in ALL green cells and relevant blue cells in this section for each road									
Facility Description	Physical (1) - MANDATORY						User Overrides		Growth Media				
Description (required)	ID Code	Туре	Underlying Ground Slope % grade	Ungraded Slope _H:1V	Cut Slope degrees	Road Width	Road Length	Slope Replacement Percent %	Regrade Volume (if calculated elsewhere)	Disturbed Area (if calculated elsewhere) acres	Growth Media Thickness in	Haul Distance from Growth Media Stockpile	Slope from Road to Stockpile % grade

- All Physical parameters must be input even if manual overrides for volume or area are used.
 If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)
- 3. Because the work required for building roads with a dozer is similar to that required to regrade a road with a dozer, this sheet could be used to provide a rough estimate of road construction costs if a dozer is selected as the grading fleet.

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Page 2 of 8 Roads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

ads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$(
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Road	Roads - User Input (cont.)												
Haul Road Safety Berms													
	Description (required)	Berm Length ft	Berm Height ft	Berm Base Width ft	Berm Sideslope Angle _H:1V	Number of Berms (2) (1 or 2 sides)							

⁽²⁾ Enter 1 if berm on only one side of road, 2 if both sides of road are bermed.

Page 3 of 8

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Roads - User Input (cont.) You must fill in ALL green cells and relevant blue							cells in this section for each road						
		Grading			Growth Media			Revegetation					
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	No. of Excavators if grade >30% (select)		Cover Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarifying/ Ripping? (select)	Ripping Fleet (select)

Notes:

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

2. If original slope >30% only excavators are allowed.

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Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

oads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$(
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Roads - Calculations

Regrading Volume and Footprint Volume Road Width (w) Road Width (w) B1 Cut Cut Stope Disturbed slope length = C1 + C2 Disturbed slope length × cos(Original slope) Disturbed footprint area = Disturbed footprint width × Road length Disturbed footprint area = Disturbed footprint width × Road length Assumes 20% swell Figure 1 - Regrading Volume Calculation

Will not allow dozer for slopes greater than 30% For dozer regrading push distance = road width Assumes dozer push is uphill Assumes minimum push distance of 100 ft

Ripping/Scarifying Calculations

Minimum 1 hr ripping/scarifying time per area Number of passes = Final slope length ÷ Grader width Travel distance = Number of passes x Road length

Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)

For dozer regrading assumes push distance = 3 x road width

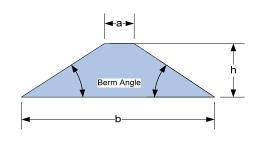
Revegetation Calculations

Minimum of 1 acre crew time per area

Safety Berm Volume Calculation

Cross Sectional Area = $\frac{(a+b)}{2} \times h$

Berm Volume = Berm Length x Cross Sectional Area x No. Sides



Total berm volume doubled if both sides of road are bermed.

If length of berm on each side of road is different, input total length of both berms and input 1 for number of sides

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Road	ls - Regrading Costs							
						Total	Total	
	Description	Regrading	Recontouring	Fleet		Labor	Equipment	Total Regrading
	(required)	Volume	Fleet	Productivity	Total Fleet Hours	Cost	Cost	Cost
		су		cy/hr	hr	\$	\$	\$
						\$0	\$0	\$0

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Page 6 of 8

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Road	Roads - Growth Media Costs													
	Description	Growth Media	Growth Media Replacement		Number of		Total Labor	Total Equipment	Total Growth Media					
	(required)	Volume	Fleet	Fleet Productivity	Trucks/ Scrapers	Total Fleet Hours	Cost	Cost	Cost					
		су		LCY/hr			\$	\$	\$					
							\$0	\$0	\$					

Page 7 of 8 Roads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Road	ls - Scarifying/Revegetation Costs											
	Description (required)	Total Surface Area acres	Final Slope Length ft	Ripping/ Scarifying Fleet	Ripping Hours hrs	Ripping Labor Costs \$	Ripping Equipment Cost \$	Total Ripping Costs \$	Revegetation Labor Cost \$	Revegetation Equipment Cost \$	Revgetation Material Cost \$	Total Revegetation Cost \$
	·					\$0	\$0	\$0	\$0	\$0	\$0	\$0

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Closure Cost Estimate Yards, Etc.

1 of 6

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	\$1,861
TOTALS	\$312	\$652	\$1,601	\$2,565

Color Code Key	
User Input - Direct Input	Direct Input
User Input - Pull Down List	Pull Down Selection
Program Constant (can override)	Alternate Input
Program Calculated Value	Locked Cell - Formula or Reference

Ya	rds, Etc User Input			You must fill in ALL green cells and relevant blue cells in this section for each building or facility									
	Facility Description				Physical		Cover				Growth Media		
	Description (required) ID Code Type			Area acres	Average Flat Area Long Dimension (ripping distance) ft	Regrade Volume (calculated elsewhere)	Cover Thickness in	Distance from Cover Borrow Area ft	Slope from Facility to Borrow Area % grade	Growth Media Thickness in	Distance from Growth Media Stockpile ft	Slope from Facility to Stockpile % grade	
1	Laydown Yard		Other Facilities	0.25	100		0	100	0.1	12	100	0.1	

Notes:

1. All Physical parameters must be input even if manual overrides for volume or area are used.

2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

Note: A portion of the Laydown Yard will be used during reclamation as a temporary staging area for equipment and topdressing.

Yards, Etc.

Closure Cost Estimate Yards, Etc.

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	\$1,861
TOTALS	\$312	\$652	\$1,601	\$2,565

١	Yards, Etc User Input (cont.)		You must fill in A	ALL green cells	and relevant b	lue cells in this	section for each	ch building or	facility						
Grading						Cover Growth Media				Revegetation					
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	Cover Material Type (select)	Cover Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Growth Media Material Type (select)	Growth Media Equipment Fleet (select)	Maximum Fleet Size (user override)	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarify/ Rip?	Ripping Fleet (select)
H	1 Laydown Yard	1	Alluvium	Small	Alluvium	Small Truck	(Alluvium	Small Truck	(user override)		Straw Mulch		Yes	Small Dozer

2 of 6

Yards, Etc.

Notes:

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

3 of 6

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data: User Data
Cost Data File: SRCE Cost _data-Am _Mg _Foothill _Dolomite _ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	
TOTALS	\$312	\$652	\$1,601	\$2,565

Yards, Etc. - Calculations

Grading Calculations

Average push distance assumed to be 2/3 of the 600 feet maximum from Catepillar Handbook or 400 feet Material assumed to be loose stockile (1.2 productivity factor)

Slope assumed to be 0 to 5% (1.0 productivity factor)

Cover Volume Calculation

Yard area x cover thickness

Ripping/Scarifying Calculations

Flat area width = Final flat area ÷ Average long dimensions

Number of passes = Flat area width + Grader width
Travel distance = Number of passes x Average long dimensions
Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)
Minimum 1 hr ripping/scarifying per area

Revegetation

Minimum 1 acre revegetation crew time per area

Closure Cost Estimate Yards, Etc.

4 of 6

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

ards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	\$1,861
TOTALS	\$312	\$652	\$1,601	\$2,565

	'ards, Etc Regrading Costs roductivity = Dozer Productivity x Grade Correction x Density Correction x Operator (0.75) x Material x Visibility x Job Efficiency (0.83) x (Slot/Side-by-Side)												
1100	Description (required)	Regrading Volume	Dozing Distance (see above)	Regrading Fleet	Uncorrected Dozer Productivity cy/hr	Grade Correction	Dozing Material	Density Correction	Total Hourly Productivity cy/hr	Total Dozer Hours hr	Total Labor Cost \$	Total Equipment Cost	Total Regrading Cost \$
1	Laydown Yard			D7R							\$0	\$0	\$0 \$0

Yards, Etc.

Closure Cost Estimate Yards, Etc.

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	\$1,861
TOTALS	\$312	\$652	\$1,601	\$2,565

Yar	Yards, Etc Cover and Growth Media Costs																
	Cover Growth Media																
	Description (required)	Cover Volume cy	Topsoil Repacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Cover Cost \$	Growth Media Volume cy	Growth Media Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$
1	Laydown Yard						\$0	\$0	\$0	484	725/966G/D7R	483	2	1	\$138	\$444	
							\$0	\$0	\$0	484				1	\$138	\$444	\$582

5 of 6

Yards, Etc.

Closure Cost Estimate Yards, Etc.

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Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$138	\$444	N/A	\$582
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$172	\$532		\$704
Revegetation Cost	\$140	\$120	\$1,601	\$1,861
TOTALS	\$312	\$652	\$1,601	\$2,565

Ya	rds, Etc Scarifying/Revegetation Costs											
Γ	Description (required)	Surface Area acres	Area Long Dimension ft	Ripping/ Scarifying Fleet	Scarifying/ Ripping Hours hrs	Scarifying/ Ripping Labor Costs \$	Scarifying/ Ripping Equipment Cost \$	Total Scarifying/ Ripping Costs \$	Revegetation Labor Cost \$	Revegetation Equipment Cost \$	Revgetation Material Cost	Total Revegetation Cost \$
1	Laydown Yard	0.25	100	D7R	1	\$34	\$88	\$122	\$140	\$120	\$1,601	\$1,861
		0.25			1	\$34	\$88	\$122	\$140	\$120	\$1,601	\$1,861

Yards, Etc.

1 of 2

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Eats File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_01 Revised

Reclamation Monitoring & Maintenance - Cost	Summary			
	Labor	Equipment	Lab & Materials	Totals
Revegetation Maintenance	\$111	\$95	\$199	\$405
Erosion Maintenance	\$541	\$1,624	N/A	\$2,165
Reclamation Monitoring	\$8,910	\$374	N/A	\$9,284
Subtotal Reclamation Monitoring	\$9,562	\$2,093	\$199	\$11,854
Water Quality Monitoring	\$0	\$0	\$0	\$0
TOTAL MONITORING	\$9,562	\$2,093	\$199	\$11,854

Description	Total Revegetation Surface Area (1,2) acres	% Area Requiring Reseeding	Seed Mix (select)	Area Requiring Reseeding acres	Seed \$/acres	Labor \$/acres	Equipment \$/acres	Totals \$
Revegetation Maintenance	3	25%	User Mix 1	0.8	\$250.00	\$140.00	\$120.00	
Labor Equipment Materials Cost/Acre							Subtotal	\$11 \$9 \$19 \$51 \$40
Notes:	1) Surface area is	NOT the same as	footprint disturba	nce area typical	ly used for permi	tting purposes.		
	Total Volume Growth Media cy	% Volume Requiring Maintenance	Average Growth Media Placement Cost \$/CY	Volume Requiring Replacement cy		Labor (assume: 25%) \$/acres	Equipment (assume: 75%) \$/acres	Total \$
Erosion Maintenance	Volume Growth Media	Requiring	Growth Media Placement Cost	Requiring Replacement		(assume: 25%)	(assume: 75%) \$/acres	

Reclamation Monitoring												
Description	Hrs/Day	Days/Year	Number of Years	Rate \$/hr								
Field Work												
Field Geologist/Engineer Range Scientist	8	1	3	\$134.99 \$119.42		\$3,240 \$0						
Reporting												
Field Geologist/Engineer Range Scientist	14	1	3	\$134.99 \$119.42	Subtotal	\$5,670 \$0 \$8,910						
Travel	l				Subtotal	\$6,910						
	Hrs/Trip hr	Trips/Year	Years	Truck Cost \$/hr								
Travel	4	1	3	\$31.13		\$374						
					Subtotal	\$374						
					Total Reclamation Monitoring	\$9,284						
	Assumes Engine Assumes 10 hou				demobilization							

Closure Cost Estimate Monitoring

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

File Name: Att 1_Cost 20/20/82/0 SKCE_Version_1_4_1_01/b_NV_20/20 Exploration Rev Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Reclamation Monitoring & Maintenance - Cost	Summary			
	Labor	Equipment	Lab & Materials	Totals
Revegetation Maintenance	\$111	\$95	\$199	\$405
Erosion Maintenance	\$541	\$1,624	N/A	\$2,165
Reclamation Monitoring	\$8,910	\$374	N/A	\$9,284
Subtotal Reclamation Monitoring	\$9,562	\$2,093	\$199	\$11,854
Water Quality Monitoring	\$0	\$0	\$0	\$0
TOTAL MONITORING	\$9,562	\$2,093	\$199	\$11,854

Water and Rock Sample Ar	and Rock Sample Analysis														
Description	Samples	Events/Year	No. Years	First Sample Year closure year (1-100)	No. of Samplers	Days/Event	Hrs/Day	Analysis Cost \$/sample	Supplies \$/sample	Lab Cost	Material Cost	Equipment Cost	Labor Cost	Cost \$	Comments
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
										\$0.00	\$0.00	\$0.00	\$0.00	Φ0	
	Subtral Sample Costs												\$0		

Notes: Sampling labor cost = No. Samplers x Years x Events/year x Days/event x Hour/Day x Labor Rate Sampling equipment costs include 1 pickup truck for every two samplers

ump Costs					
Description	No. of units		Years		Cost \$
Pump (purchased)		Replacement period (yrs):			
ипр (риклазеи)		period (yro).	Subtotal	Field Work	
eporting	quency of pump replacen				
	,, ,,	none -			
eporting Description	Hrs/Event	Rate	Cost		
Description			Cost \$		
Description	Hrs/Event	Rate \$/hr			
Description Field Geologist/Engineer	Hrs/Event	Rate			
Description Field Geologist/Engineer	Hrs/Event	Rate \$/hr			
Description Field Geologist/Engineer	Hrs/Event	Rate \$/hr			
Description Field Geologist/Engineer	Hrs/Event	Rate \$/hr			
Field Geologist/Engineer	Hrs/Event	Rate \$/hr			

2 of 2 Monitoring

Closure Cost Estimate Constr. Mgmt

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Construction Management & Road Maintenance - Cost Summary									
	Labor	Equipment	Materials	Totals					
Construction Management	\$9,979	\$1,436	N/A	\$11,415					
Construction Support		\$214		\$214					
Road Maintenance	\$4,545	\$13,835	\$726	\$19,106					
TOTAL CONSTRUCTION MANAGEMENT	\$14,524	\$15,485	\$726	\$30,735					

		Constr	uction Manager	nent Staff			
Description	Duration mo.	Hours/ Month hr.	Number of Supervisors	Supervisor Rate \$/hr	Labor Cost \$	Equipment Cost ⁽¹⁾ \$	Totals \$
Active Reclamation Monitoring & Maintenance	0.5 36	80 2	1	\$89.10 \$89.10	\$3,564 \$6,415	\$513 \$923	\$4,07 \$7,33
		-		Total Staff	\$9,979	\$1,436	644 441
Construction Manageme	nt Support	Number of			. ,	. ,	\$11,41
Construction Manageme	ent Support Duration mo.	Number of Units		Rental Rate \$/mo	Generator Cost \$/mo	Equipment Cost ⁽¹⁾ \$	Totals
Description Temporary Office Rental	Duration			Rental Rate \$/mo	Generator Cost	Equipment Cost ⁽¹⁾ \$	Totals \$
<u> </u>	Duration			Rental Rate	Generator Cost	Equipment Cost ⁽¹⁾ \$	

Description	Fleet Size (select)	Number	Duration mo.	Hours/ Month hr.	Labor Cost \$	Equipment Cost \$	Totals \$
Active Reclamation							
Water Truck	Small	1	1	40	\$1,376	\$5,273	\$6,649
Grader	Small	1	1	16	\$594	\$1,174	\$1,768
Monitoring & Maintena	ince						
Water Truck	Small	1	36	1	\$1,239	\$4,746	\$5,985
Grader	Small	1	36	1	\$1,336	\$2,642	\$3,978
Description	Gallons/ Day	Days/ Month	Duration mo.	Cost/ Gallon \$			Totals \$
Water Fees				·			•
Water Fees	6000	14	1	0.01			\$726
		•	Total Pro	ject Maintenance	\$4,545	\$13,835	\$19,106

Notes: 1) Supervisor equipment = pickup truck
Note: Assumes water from City of Demning at \$8.64 per 1,000 gallons.

1 of 1 Constr. Mgmt

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Color Code Key					
User Input - Direct Input	Direct Input				
User Input - Pull Down List	Pull Down Selection				
Program Constant (can override)	Alternate Input				
Program Calculated Value	Locked Cell - Formula or Reference				

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Ma	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
Total Other Indirects	0.00%		

HOURI VI AROR RATE	OURLY LABOR RATE TABLE									
	IADLE	1				1			1	
EQUIPMENT TYPE (1) OR JOB DESCRIPTION	Labor Group	Base Rate (\$/hr)	Zone Adjustment (\$/hr)	Hourly Wage (\$/hr)	Fringe (\$/hr)	Retirement/ Medicare (\$/hr)	Unemployment Insurance (\$/hr)	Workman's Compensation (\$/hr)	Other Indirect Costs (\$/hr)	Total (\$/hr)
Equipment Operators (hr) (2)									
Bulldozers										
D6R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
D6R w/ Winch		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
D7R D8R		\$28.02	\$0.00 \$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14	\$3.73		\$34.4
D8R D9R		\$28.02 \$28.02	\$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14 \$2.14	\$3.73 \$3.73		\$34.4 \$34.4
D10R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
D11R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
Wheeled Dozers										
824G										
834G										
844 854G										
						l.				
Motor Graders 120H		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.1
120H 14G/H		\$30.23 \$30.23	\$0.00	\$30.23 \$30.23		\$0.56	\$2.31 \$2.31	\$4.02 \$4.02	\$0.00	\$37.1
16G/H		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.1
24M		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
Track Excavators		•								
312C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
320C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
325C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
330C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
345B		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
365BL 385BL		\$30.23 \$30.23	\$0.00 \$0.00	\$30.23 \$30.23		\$0.56 \$0.56	\$2.31 \$2.31	\$4.02 \$4.02	\$0.00 \$0.00	\$37.12 \$37.12
		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	φ31.12
Scrapers 631G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
637G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
Wheeled Loaders		, , , , , , , , , , , , , , , , , , , ,	******	4		40.0-	*=	*****	40.00	***
924G	1	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
928G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
950G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
966G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
972G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
980G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
988G 990		\$28.02 \$28.02	\$0.00 \$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14 \$2.14	\$3.73 \$3.73	\$0.00 \$0.00	\$34.4 \$34.4
992G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
994D		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
L2350		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
Shovels										
PC2000										
PC3000										
PC4000										
PC5500 PC8000										
Hydraulic Hammers	T									
H-120 (fits 325) H-160 (fits 345)										
H-180 (fits 365/385)	1									
Demolition Shears										
\$340 (fits 322/325/330)										
S365 (fits 330/345)	1									
S390 (fits 365/385)	1									
Demolition Grapples										
G315 (fits 322/325)										
G320 (fits 325/330)										
G330 (fits 345/365)										

1 of 3

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Color Code Key					
User Input - Direct Input	Direct Input				
User Input - Pull Down List	Pull Down Selection				
Program Constant (can override)	Alternate Input				
Program Calculated Value	Locked Cell - Formula or Reference				

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Mag	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
•			
Total Other Indirects	0.00%		

Total Other Indirects	0.00%									
									•	
HOURLY LABOR RAT	E TABLE									
Other Equipment										
420D 4WD Backhoe		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
428D 4WD Backhoe		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
CS533E Vibratory Roller		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
CS633E Vibratory Roller		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
CP533E Sheepsfoot Compacto	r	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
CP633E Sheepsfoot Compacto	r	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.
Light Truck - 1.5 Ton		\$0.00		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.
Supervisor's Truck		\$0.00		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.
Flatbed Truck										
Air Compressor + tools		\$27.69	\$0.00	\$27.69		\$0.51	\$2.12	\$3.68	\$0.00	\$34.
Welding Equipment		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.
Heavy Duty Drill Rig		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.
Pump (plugging) Drill Rig		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.
Concrete Pump										
Gas Engine Vibrator		\$14.03	\$0.00	\$14.03		\$0.26	\$1.07	\$1.87	\$0.00	\$17.
Generator 5KW										
HDEP Welder (pipe or liner)										
5 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.
20 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.
50 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.
120 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.
IOTES: (1) Equipment Type			Dublic Works Drov	unilina Wasa Batas	Tune H					
(2) Equipment Operator Source (3) Zone Basi	***	WORKIOICE SOLUTIONS	Fublic Works Flex	railing wage Kates	туре п -					
(1)										
「ruck Drivers (\$/hr) (4										
725	ruck Driver > 25 yds -	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
730	ruck Driver > 25 yds -	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
735	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
740	ruck Driver > 25 yds -	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
769D	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
773E		\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
777D	ruck Driver > 60 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
785C					\$0.00					
793C					\$0.00					
797B					\$0.00					
613E (5,000 gal) Water Wagon	ter Truck > 2,500 gall	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
621E (8,000 gal) Water Wagon	ter Truck > 2,500 gall	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.
777D Water Truck					\$0.00					
785C Water Truck					\$0.00					
Dump Truck (10-12 yd3)	ruck Driver > 8 yds <	\$24.92	\$0.00	\$24.92	\$0.00	\$0.46	\$1.91	\$3.31	\$0.00	\$30.
IOTES:										
(4) Truck Driver Source		Workforce Solutions	Public Works Prev	vailing Wage Rates	Type H -					
(5) Zone Basi	s: From Deming									

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2 of 3 Labor Rates

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Color Code Key					
User Input - Direct Input	Direct Input				
User Input - Pull Down List	Pull Down Selection				
Program Constant (can override)	Alternate Input				
Program Calculated Value	Locked Cell - Formula or Reference				

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Mag	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
Total Other Indirects	0.00%		

State Payroll Tax (13),(15),(17),	(1									
otal Other Indirects	0.00%									
IOUDI VI ADOD DAT	TABLE								•	
HOURLY LABOR RATE	IABLE									
.aborers (\$/hr) (6,7)										
General Laborer	Group 1	\$23.88	\$0.00	\$23.88	\$0.00	\$0.44	\$1.83	\$3.18	\$0.00	\$29.
Skilled Laborer	Group 4	\$26.14	\$0.00	\$26.14	\$0.00	\$0.48	\$2.00	\$3.48	\$0.00	\$32.
Driller's Helper	Group 3	\$26.14	\$0.00	\$26.14	\$0.00	\$0.48	\$2.00	\$3.48	\$0.00	\$32.
Rodmen (reinforcing concrete)	Group 1	\$23.88	\$0.00	\$23.88	\$0.00	\$0.44	\$1.83	\$3.18	\$0.00	\$29.
Cement finisher	Group 3	\$26.14	\$0.00	\$26.14	\$0.00	\$0.48	\$2.00	\$3.48	\$0.00	\$32.
Carpenter		\$36.47	\$0.00	\$36.47	\$0.00	\$0.67	\$2.79	\$4.85	\$0.00	\$44.
IOTES:										
(6) Laborer Source										
(7) Carpenter Source		of Workforce Solutions F	Public Works Preva	ailing Wage Rate	es Type H -					
(8) Zone Basis	From Deming									
Project Management a	nd Technical La	abor (\$/hr) (9))							
Project Manager		\$72.56		\$72.56	\$0.00	\$1.34	\$5.55	\$9.65	\$0.00	\$89.
Foreman		\$67.50		\$67.50	\$0.00	\$1.24	\$5.16	\$8.98	\$0.00	\$82.
Field Geologist/Engineer		\$109.94		\$109.94	\$0.00	\$2.02	\$8.41	\$14.62	\$0.00	\$134.
Field Tech/Sampler		\$76.11		\$76.11	\$0.00	\$1.40	\$5.82	\$10.12	\$0.00	\$93.
Range Scientist		\$97.25		\$97.25	\$0.00	\$1.79	\$7.44	\$12.93	\$0.00	\$119.
Senior Planning Engineer					\$0.00					
Project Engineer					\$0.00					
Mechanic/Fitter					\$0.00					
					\$0.00					
					\$0.00					
					\$0.00					
					\$0.00					
	•					•		•	-	
IOTES:										
(9) Project Manager:	R.S.Means 2020 Q2 (01									
(9) Foreman Source			U&P-10%) Adjuste	ed for Elko, NV						
(9) Techical Labor Source		for Zone, Lax and Ins.								
Other Labor Source										
Other Labor Source	A									
†Additional User Markup										
(These are added by the user to the										
base rate to account for site-specifi										
conditions or corporate requirements	s)									

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3 of 3 Labor Rates

Closure Cost Estimate Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm
Monthly Rental Basis:

EQUIPMENT TYPE (1)	Monthly Owner/Rental Rate	Equipment Hourly Rate	Fuel/Lube/ Wear	Total Rate
Bulldozers	Rate	Rate	Fuer/Lube/ Wear	Total Rate
D6R	\$7,222.35	\$45.14	\$50.90	\$96.0
D6R w/ Winch	\$7,222.35	\$45.14	\$50.90	\$96.0
D7R D8R	\$10,466.40 \$20,180.00	\$65.42 \$126.13	\$22.95 \$29.70	\$88.3 \$155.8
D9R	\$30,100.00	\$188.13	\$41.41	\$229.5
D10R	\$44,500.00	\$278.13	\$51.43	\$329.5
D11R	\$56,234.00	\$351.46	\$235.44	\$586.9
Nheeled Dozers 824G	640.040.00	6404.00	6440.00	6007.0
834G	\$19,849.00 \$24,929.00	\$124.06 \$155.81	\$113.00 \$138.70	\$237.0 \$294.5
844	\$33,734.00	\$210.84	\$184.06	\$394.9
854G	\$33,802.00	\$211.26	\$221.85	\$433.1
Motor Graders				
120H 14G/H	\$3,964.95	\$24.78 \$92.44	\$48.60 \$94.28	\$73.3 \$186.7
16G/H	\$14,790.00 \$18,806.00	\$92.44 \$117.54	\$129.63	\$186.7
24M	\$20,686.00	\$129.29	\$158.47	\$287.7
rack Excavators				
312C	\$5,610.00	\$35.06	\$7.59	\$42.6
320C 325C	\$7,750.00 \$10,047.96	\$48.44 \$62.80	\$15.05 \$18.57	\$63.4 \$81.3
330C	\$10,047.96	\$71.88	\$23.64	\$95.5
345B	\$16,730.00	\$104.56	\$29.42	\$133.9
365BL	\$23,119.00	\$144.49	\$113.51	\$258.0
385BL	\$28,472.00	\$177.95	\$134.75	\$312.7
Scrapers 631G	\$27.700.00	\$479.40	\$70.04	£040.7
631G 637G	\$27,700.00 \$36,819.00	\$173.13 \$230.12	\$70.61 \$200.40	\$243.7 \$430.5
Vheeled Loaders	ψου,010.00	Ψ230.12	Ψ200.40	\$400.C
924G	\$5,610.00	\$35.06	\$19.78	\$54.8
928G	\$6,530.00	\$40.81	\$36.90	\$77.7
950G	\$9,520.00	\$59.50	\$32.45	\$91.9
966G 972G	\$5,856.20 \$13,480.00	\$36.60 \$84.25	\$37.28 \$43.86	\$73.8 \$128.1
980G	\$15,690.00	\$98.06	\$61.05	\$159.1
988G	\$19,589.00	\$122.43	\$151.77	\$274.2
990	\$28,299.00	\$176.87	\$233.36	\$410.2
992G	\$47,500.00	\$296.88	\$225.73	\$522.6
994D L2350	\$45,175.00 \$82,607.00	\$282.34 \$516.29	\$350.03 \$625.53	\$632.3 \$1,141.8
Shovels	ψ02,007.00	\$010:E0	ψ020.00	ψ1,141.0
PC2000	\$70,917.00	\$443.23	\$278.28	\$721.5
PC3000	\$72,526.00	\$453.29	\$345.19	\$798.4
PC4000	\$74,135.00	\$463.34	\$427.42	\$890.7
PC5500 PC8000	\$81,548.00 \$89,703.00	\$509.68 \$560.64	\$562.14 \$658.00	\$1,071.8 \$1,218.6
Hydraulic Hammers	φου, του.υυ	\$000.04	φοσο.σσ	ψ1,210.0
H-120 (fits 325)	\$3,420.00	\$21.38	\$11.57	\$32.9
H-160 (fits 345)	\$7,028.00	\$43.93	\$23.24	\$67.1
H-180 (fits 365/385)	\$8,168.00	\$51.05	\$24.96	\$76.0
Demolition Shears	20 504.00	200.00	200 50	210.5
S340 (fits 322/325/330) S365 (fits 330/345)	\$3,524.00 \$4,131.00	\$22.03 \$25.82	\$20.50 \$25.23	\$42.5 \$51.0
S390 (fits 365/385)	\$6,593.00	\$41.21	\$31.61	\$72.8
Demolition Grapples				
G315 (fits 322/325)				\$0.0
G320 (fits 325/330) G330 (fits 345/365)				\$0.0 \$0.0
Other Equipment				\$ 0.0
420D 4WD Backhoe	\$3,240.00	\$20.25	\$22.10	\$42.3
428D 4WD Backhoe	\$3,870.00	\$24.19	\$22.59	\$46.7
CS533E Vibratory Roller	\$4,402.00	\$27.51	\$27.54	\$55.0
CS633E Vibratory Roller CP533E Sheepsfoot Compactor	\$4,291.00 \$4,085.00	\$26.82 \$25.53	\$31.05 \$33.08	\$57.8 \$58.6
CP633E Sheepsfoot Compactor	\$6,588.00	\$41.18	\$40.18	\$81.3
Light Truck - 1.5 Ton	\$2,184.00	\$13.65	\$17.48	\$31.1
Supervisor's Truck	\$834.00	\$5.21	\$7.61	\$12.8
Flatbed Truck	\$621.00	\$3.88	\$21.62	\$25.5
Air Compressor + tools Welding Equipment	\$597.00 \$405.00	\$3.73 \$2.53	\$5.57 \$6.30	\$9.3 \$8.6
Heavy Duty Drill Rig	\$405.00 \$52,018.00	\$2.53 \$325.11	\$6.30 \$314.83	\$8.8 \$639.9
Pump (plugging) Drill Rig	\$52,018.00	\$325.11	\$310.45	\$635.5
Concrete Pump	\$14,864.20	\$92.90	\$21.90	\$114.8
Gas Engine Vibrator	\$357.00	\$2.23	\$3.65	\$5.8
Generator 5KW HDEP Welder (pipe or liner)	\$938.00 \$7,022.96	\$5.86 \$43.89	\$6.87 \$4.38	\$12.7 \$48.2
5 Ton Crane	\$7,022.96	\$43.89 \$44.75	\$42.14	\$46.2
20 Ton Crane	\$7,955.00	\$49.72	\$48.28	\$98.0
50 Ton Crane	\$15,154.00	\$94.71	\$88.82	\$183.5
120 Ton Crane	\$28,943.00	\$180.89	\$177.03	\$357.9
725	¢0 300 0e	\$58.13	\$82.89	\$141.0
730	\$9,300.06 \$14,640.00	\$91.50	\$62.31	\$141.0
735	\$16,730.00	\$104.56	\$70.00	\$174.5
740	\$18,820.00	\$117.63	\$74.01	\$191.6
769D			\$23.86	\$23.8
773E 777D	\$18,267.00 \$37,750.00	\$114.17 \$235.94	\$160.85 \$325.91	\$275.0 \$561.8
777D 785C	\$40,948.00	\$235.94 \$255.93	\$325.91 \$366.30	\$561.8 \$622.2
793C	\$49,547.00	\$309.67	\$470.39	\$780.0
797B	\$89,160.00	\$557.25	\$817.64	\$1,374.8
613E (5,000 gal) Water Wagon	\$8,726.00	\$54.54	\$77.29	\$131.8
621E (8,000 gal) Water Wagon	\$10,006.00	\$62.54	\$103.42	\$165.9
777D Water Truck 785C Water Truck	\$37,226.00 \$40,948.00	\$232.66 \$255.93	\$321.40 \$366.30	\$554.0 \$622.2
Dump Truck (10-12 yd ³)	\$3,752.00	\$23.45	\$32.89	\$56.3
IOTES:	ψο,1 02.00	\$20.40	402.00	400.0
(1) Power Equipment Source				
(2) Power Equipment Typ	e: Catepillar model or equ		loader, Komatsu sho	/els
(3) Drilliing Equipment Source	e: RS Means Heavy Con: e: RS Means Heavy Con:			

Closure Cost Estimate Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data

EQUIPMENT TYPE iuildozers DBR DBR w Winch D7R DBR DBR	Per Hour ⁽¹⁾	Tires (2)	(3)	gal/hr (4)	Cost@	Equipment Cost
D6R D6R w/ Winch D7R D8R D9R					2.19/gal	
D6R w/ Winch D7R D8R D9R	\$34.60		\$2.61	6.25	\$13.69	\$50.9
D8R D9R	\$34.60		\$2.61	6.25	\$13.69	\$50.9
D9R	\$2.69 \$3.49		\$3.84 \$4.86	7.50 9.75	\$16.43 \$21.35	\$22.9 \$29.7
D.10D	\$3.49		\$6.59	14.25	\$31.21	\$29.7 \$41.4
D10R	\$3.79		\$8.22	18.00	\$39.42	\$51.4
D11R Vheeled Dozers	\$160.74		\$16.66	26.50	\$58.04	\$235.4
824G	\$49.58	\$38.56	\$1.32	10.75	\$23.54	\$113.0
834G	\$59.69	\$49.72	\$1.70	12.60	\$27.59	\$138.7
844 854G	\$77.91 \$90.20	\$70.88 \$87.64	\$2.42 \$2.40	15.00 19.00	\$32.85 \$41.61	\$184.0 \$221.8
lotor Graders			, ,			
120H	\$20.32	\$18.90	\$0.62	4.00	\$8.76	\$48.6
14G/H 16G/H	\$37.21 \$50.42	\$42.00 \$60.78	\$1.38 \$2.00	6.25 7.50	\$13.69 \$16.43	\$94.2 \$129.6
24M	\$55.46	\$66.86	\$2.20	15.50	\$33.95	\$158.4
rack Excavators						
312C 320C	\$2.14 \$2.38		\$1.33 \$1.94	1.88 4.90	\$4.12 \$10.73	\$7.5 \$15.0
325C	\$2.64		\$1.48	6.60	\$14.45	\$18.5
330C	\$3.01		\$2.67	8.20	\$17.96	\$23.6
345B 365BL	\$3.36 \$80.63		\$2.85 \$3.97	10.60 13.20	\$23.21 \$28.91	\$29.4 \$113.5
385BL	\$91.31		\$5.11	17.50	\$38.33	\$134.7
crapers						
631G 637G	\$3.22 \$116.00	\$32.68 \$30.28	\$1.86 \$2.11	15.00 23.75	\$32.85 \$52.01	\$70.6 \$200.4
/heeled Loaders	\$110.00	φ30.28	φε.11	23.13	φυ2.01	φ200.4
924G	\$9.33	\$4.24	\$0.19	2.75	\$6.02	\$19.7
928G	\$16.35	\$12.28	\$0.60	3.50	\$7.67	\$36.9
950G 966G	\$2.30 \$2.42	\$20.52 \$21.40	\$0.87 \$0.87	4.00 5.75	\$8.76 \$12.59	\$32.4 \$37.2
972G	\$2.53	\$26.56	\$1.08	6.25	\$13.69	\$43.8
980G	\$2.57	\$40.64	\$1.41	7.50	\$16.43	\$61.0
988G 990	\$57.81 \$85.58	\$65.20 \$106.84	\$2.26 \$3.71	12.10 17.00	\$26.50 \$37.23	\$151.7 \$233.3
992G	\$11.87	\$130.76	\$32.73	23.00	\$50.37	\$225.7
994D L2350	\$122.36 \$203.53	\$143.84 \$268.16	\$4.99 \$9.30	36.00 66.00	\$78.84 \$144.54	\$350.0 \$625.5
hovels	\$203.33	\$200.10	φ9.30	66.00	\$144.54	\$023.5
PC2000	\$183.38		\$13.87	37.00	\$81.03	\$278.2
PC3000	\$218.80		\$16.89	50.00	\$109.50	\$345.1
PC4000 PC5500	\$254.21 \$279.63		\$19.91 \$21.90	70.00 119.00	\$153.30 \$260.61	\$427.4 \$562.1
PC8000	\$307.59		\$24.09	149.00	\$326.31	\$658.0
ydraulic Hammers						
H-120 (fits 325) H-160 (fits 345)	N/A N/A		\$11.57 \$23.24			\$11.5 \$23.2
H-180 (fits 365/385)	N/A		\$24.96			\$24.9
emolition Shears						
S340 (fits 322/325/330) S365 (fits 330/345)	N/A N/A		\$20.50 \$25.23			\$20.5 \$25.2
S390 (fits 365/385)	N/A		\$31.61			\$31.6
emolition Grapples						
G315 (fits 322/325) G320 (fits 325/330)	N/A N/A					\$0.0 \$0.0
G330 (fits 345/365)	N/A					\$0.0
ther Equipment						
420D 4WD Backhoe	\$11.81	\$3.18	\$0.54	3.00	\$6.57	\$22.1
428D 4WD Backhoe CS533E Vibratory Roller	\$12.20 \$19.33	\$3.22	\$0.60	3.00 3.75	\$6.57 \$8.21	\$22.5 \$27.5
CS633E Vibratory Roller	\$20.65			4.75	\$10.40	\$31.0
CP533E Sheepsfoot Compactor	\$24.87			3.75	\$8.21	\$33.0
CP633E Sheepsfoot Compactor Light Truck - 1.5 Ton	\$29.78 \$8.67	\$5.52		4.75 1.50	\$10.40 \$3.29	\$40.1 \$17.4
Supervisor's Truck	\$3.62	\$1.80		1.00	\$2.19	\$7.6
Flatbed Truck	\$3.85	\$7.48		4.70	\$10.29	\$21.6
Air Compressor + tools Welding Equipment	\$3.38 \$1.92		N/A N/A	1.00 2.00	\$2.19 \$4.38	\$5.5 \$6.3
Heavy Duty Drill Rig	\$278.95		\$9.60	12.00	\$26.28	\$314.8
Pump (plugging) Drill Rig	\$278.95		\$9.60	10.00	\$21.90 \$21.90	\$310.4
Concrete Pump Gas Engine Vibrator	\$1.46		N/A N/A	10.00	\$21.90 \$2.19	\$21.9 \$3.6
Generator 5KW	\$3.58		N/A	1.50	\$3.29	\$6.8
HDEP Welder (pipe or liner)	600.00	640.05	N/A	2.00	\$4.38 \$6.57	\$4.3
5 Ton Crane 20 Ton Crane	\$23.22 \$25.80	\$12.35 \$13.72		3.00 4.00	\$6.57 \$8.76	\$42.1 \$48.2
50 Ton Crane	\$45.47	\$33.06		4.70	\$10.29	\$88.8
120 Ton Crane	\$80.14	\$85.50		5.20	\$11.39	\$177.0
rucks 725	\$28.22	\$41.16	\$3.22	4.70	\$10.29	\$82.8
730	\$2.76	\$44.94	\$3.22	5.20	\$11.39	\$62.3
735 740	\$2.86 \$2.97	\$47.82 \$51.72	\$3.22 \$3.22	7.35 7.35	\$16.10 \$16.10	\$70.0 \$74.0
769D	\$2.97	\$51.72	\$3.22 \$3.60	9.25	\$16.10 \$20.26	\$74.U \$23.8
773E	\$47.92	\$83.16	\$4.04	11.75	\$25.73	\$160.8
777D 785C	\$95.60 \$105.16	\$189.12 \$208.03	\$4.51	16.75	\$36.68 \$53.11	\$325.9
793C	\$105.16 \$127.24	\$208.03 \$251.72		24.25 41.75	\$53.11 \$91.43	\$366.3 \$470.3
797B	\$204.78	\$484.20		58.75	\$128.66	\$817.6
613E (5,000 gal) Water Wagon	\$45.31 \$50.66	\$18.84 \$20.22		6.00	\$13.14 \$23.54	\$77.2
621E (8,000 gal) Water Wagon 777D Water Truck	\$50.66 \$95.60	\$29.22 \$189.12		10.75 16.75	\$23.54 \$36.68	\$103.4 \$321.4
785C Water Truck	\$105.16	\$208.03		24.25	\$53.11	\$366.3
Dump Truck (10-12 yd3) (5) otes:	N/A	\$21.50	N/A	5.20	\$11.39	\$32.8
otes: (1) PM Source:					1	
(2) Undercarriage Source:						
(3) G.E.T. Source: (4) Fuel Use Source:	Caterpillar Handbook, E	idition 2E OF OC	entimoted	or amallar hi-l		

Closure Cost Estimate Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 1.xlsm

Buildocers	Equipment	Tire Size	# of Tires Per Piece of Equipment	Cost Per Tire	Tire Cost (1)(2)	Life Expectency Hours (Low/Zone A) (3)	Tire Cost per Hour
DR							
DPR							
DER							
DRN							
The color							
DITE NA							
Seption							
29.58/16 3.05.08/18 4 \$33,74.00 3.50							
Self	824G	29.5R25	4	\$33,740.00	\$134,960.00	3,500	\$38.5
				\$43,505.00			\$49.7
1000 1000							\$70.8
139PEQ		40/00-K40	4	\$70,085.00	\$306,740.00	3,500	\$87.6
1404H		400004		644 005 00	\$00.4F0.00	2.500	640.6
1969H							\$18.9 \$42.0
23,982.00 3,900.00 3,200.00 3,500 3,							\$60.7
Table				\$39,000.50			\$66.8
NNA	rack Excavators						
NA	312C			N/A			
NNA							
MAGE NA							
Section Sect							
STATE STAT							
STATE STAT							
831G							
Marcheled Loaders		37.25R35	4	\$32,680.00	\$130.720.00	4,000	\$32.0
Total Content							\$30.
928G							
989G		17.5R25	4	\$4,770.00	\$19,080.00	4,500	\$4.:
989G		17.5R25		\$13,815.00	\$55,260.00	4,500	\$12.
9726							\$20.
2896							\$21.4
\$3886 \$386-33							\$26.9 \$40.0
990							\$65.3
992G							\$106.8
9940 \$5698157 4 \$3161815.05 \$47.20.00 4.500 Novels							\$130.7
N/A			4	\$161,815.50			\$143.8
PC2000	L2350	55/85R57	4	\$301,680.00	\$1,206,720.00	4,500	\$268.
PC3000 N/A PC5500	hovels						
PC4000							
PC5500 N/A PC6000 N/A PC60000 N/A PC6000 N/A PC6000 N/A PC6000 N/A PC6000 N/A PC6000 N/A PC6000 N/A PC60000 N/A PC600000 N/A PC600000 N/A PC6000000000000000000000000000000000000							
Miles Mile							
National							
H-120 (Rts 345)				IN/A			
H-160 (His 345)				N/A			
MA							
\$340 (fits 322/325/330) \$350 (fits 386/385) \$300 (fits 486/385) \$3	H-180 (fits 365/385)			N/A			
\$385 (fils 330/345)	emolition Shears						
S300 (fits 365/365) N/A							
N/A S15,550,00 S20,205 S20,000 S20,0							
S315 (fits 322/325)				N/A			
SA20 (fits 326/330)		T		NI/A			
MA							
## A200 AWD Backhoe 340/80R18-19.5LR24 2							
4200 AVIVD Backhoe							
August A		340/80R18-19.5LR24	2	\$4,770.00	\$9,540.00	3,000	\$3.
CSB33E Vibratory Roller			2				\$3.2
CP53SE Sheepsfoot Compactor N/A Light Truck - 1.5 Ton Supervisor's Truck							
CP63SE Sheepsfoot Compactor N/A 14140 \$16,560.00 3,000 120 171.5 Ton 4 4140 \$16,560.00 3,000 3,000 120 171.5 1	CS633E Vibratory Roller						
Light Truck - 1.5 Ton	CP533E Sheepsfoot Compactor						
Supervisor's Truck 4							
Flatbed Truck							\$5.5
Air Compressor + tools Air Compressor + tools N/A Welding Equipment Heavy Duty Drill Rig 4 S0.00 3.000 Concrete Pump N/A S0.00 3.000 Concrete Pump N/A S0.00 3.000 Concrete Pump N/A S0.00 3.000 S0.000 S0.00		†					\$1.i
Welding Equipment WIA		1			Ţ==, 1 10.00	-,	47.
Pump (plugging) Drill Rig 4 \$0.00 3,000 Concrete Pump N/A N/A SCO.00 3,000 Concrete Pump N/A N/A SCO.00 N/A N/A SCO.00 N/A						_	
Concrete Pump N/A Sas Engine Vibrator N/A N/A M/A Generator SKW N/A N/A M/A DEP Welder (pipe or liner) N/A S10,290.00 \$37,044.00 3,000 5 Ton Crane 4 \$9,261.00 \$37,044.00 3,000 5 Ton Crane 4 \$10,290.00 \$41,160.00 3,000 50 Ton Crane 6 \$16,530.00 \$99,180.00 3,000 120 Ton Crane 6 \$42,750.00 \$256,500.00 3,000 120 Ton Crane 6 \$42,750.00 \$82,320.00 2,000 120 Ton Crane 6 \$13,720.00 \$82,320.00 2,000 120 Ton Crane 6 \$13,720.00 \$82,320.00 2,000 120 Ton Crane 7330 23,5825 6 \$11,720.00 \$82,320.00 2,000 1735 26,5825 6 \$11,720.00 \$82,320.00 2,000 1736 26,5825 6 \$15,940.00 \$98,640.00 2,000 1740 29,5825 6 \$15,940.00 \$98,640.00 2,000 180,0673 6 \$10,940.00 \$91,640.00 5,000 1773E 24,00635 6 \$69,300.00 \$941,600.00 5,000 1775E 27,00849 6 \$157,600.00 \$945,600.00 5,000 1785C 33,00851 6 \$138,688.00 \$832,128.00 4,000 1797B 40,00857 6 \$16,781.48 \$1,006,874.8 4,000 1777B 40,00857 6 \$132,800.00 \$11,308.00 6,000 180 \$112,600.00 \$945,600.00 \$1,308.00 180 \$112,600.00 \$345,600.00 \$1,308.00 180 \$112,600.00 \$345,600.00 \$345,600.00 5,000 1777D \$17,00849 6 \$157,600.00 \$345,600.00 5,000 17							
Sas Engine Vibrator	Pump (plugging) Drill Rig		4		\$0.00	3,000	
Generator SKW		1					
HDEP Welder (pipe or liner)		1					
\$ 5 no. Crane		1					
20 Ton Crane			Δ		\$37 044 00	3,000	\$12.3
50 Ton Crane		1					\$13.
120 Ton Crane 6					\$99,180.00		\$33.0
725 23.5R25 6 \$13.720.00 \$82.320.00 2.000 730 23.5R25 6 \$14.880.00 \$89.880.00 2.000 735 26.5R25 6 \$15.940.00 \$95.640.00 2.000 740 29.5R25 6 \$17.240.00 \$103.440.00 2.000 769D 18.00R33 6 \$80.00.00 \$15.800.00 5.000 773E 24.00R35 6 \$89.300.00 \$415.800.00 5.000 777D 27.00R49 6 \$157.600.00 \$94.560.00 5.000 785C 33.00R51 6 \$138.688.00 \$832.128.00 4.000 797B 40.00R57 6 \$167.812.48 \$1.006.874.8 4.000 787B 40.00R57 6 \$322.800.00 \$113.040.00 6.000 621E (6.000 gal) Water Wagon 33.25R29 6 \$33.960.00 \$23.760.00 8.000 777D Water Truck 27.00R49 6 \$157.600.00 \$945.600.00 5.000 Dump			6		\$256,500.00	3,000	\$85.
730							
735							\$41.
740							\$44.9
769D 18.00R33 6 \$0.00 6.000 773E 24.00R35 6 \$89,300.00 \$415,800.00 5.000 777D 27.00R49 6 \$157,600.00 \$945,600.00 5.000 785C 33.00R51 6 \$138,688.00 \$832,128.00 4.000 797B 40.00R57 6 \$167,812.48 \$1,008,278.86 4.000 797B 40.00R57 6 \$322,800.00 \$1,388.800.00 4.000 618 (6,000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6.000 621E (8,000 gal) Water Wagon 33.25R29 6 \$38,860.00 \$233,760.00 8.000 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5.000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6.000 otes: **** ***** ***** ***** ***** ***** ***** ***** ***** **** ***** ***** ***** ****							\$47.1
773E 24.00R35 6 \$89,300.00 \$415,800.00 5,000 7777D 27.00R49 6 \$157,600.00 \$945,600.00 5,000 785C 33,00R51 6 \$136,688.00 \$832,128.00 4,000 9376C 40.00R57 6 \$167,812.48 \$1,008,874.88 4,000 793C 40.00R57 6 \$167,812.48 \$1,008,874.88 4,000 793C 40.00R57 6 \$167,812.48 \$1,008,874.88 4,000 793C 40.00R57 6 \$322,800.00 \$1,396,800.00 \$4,000 615E (5,000 gal) Water Wagon 23,3R25 6 \$18,840.00 \$113,040.00 6,000 621E (8,000 gal) Water Wagon 33,2SR29 6 \$38,980.00 \$233,780.00 8,000 777D Water Truck 27,00R49 6 \$157,600.00 \$945,600.00 5,000 785C Water Truck 33,00R51 6 \$138,688.00 \$832,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 tests:				\$17,240.00	\$103,440.00		\$51.7
777D 27,00R49 6 \$157,600.00 \$945,600.00 5,000 785C 33,00R51 6 \$138,888.00 \$382,128.00 4,000 793C 40,00R57 6 \$167,812.48 \$1,008,674.88 4,000 797B 40,00R57 6 \$322,800.00 \$139,800.00 4,000 613E (5,000 gal) Water Wagon 23,872.5 6 \$138,800.00 \$113,040.00 6,000 621E (6,000 gal) Water Wagon 33,25R29 6 \$38,980.00 \$233,760.00 8,000 777D Water Truck 27,00R49 6 \$157,800.00 \$945,600.00 5,000 785C Water Truck 33,00R51 6 \$138,688.00 \$322,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 otes:				\$69,300,00			\$83.1
785C 33.00R51 6 \$138,688.00 \$32,128.00 4,000 793C 40.00657 6 \$167,812.48 \$1.008,674.88 4,000 797B 40.00657 6 \$322,800.00 \$1,936,800.00 4,000 613E (5,000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6,000 621E (8,000 gal) Water Wagon 32.5R29 6 \$39,960.00 \$233,760.00 8,000 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5,000 828C Water Truck 33.00R51 6 \$138,688.00 \$832,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 otes: 10 \$12,900.00 \$129,000.00 6,000							\$189.1
793C 40.00857 6 \$167.812.48 \$1.008.874.88 4.000 797B 40.00857 6 \$322.800.00 \$1,936.800.00 4,000 613E (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6,000 621E (8.000 gal) Water Wagon 33.25R29 6 \$38,980.00 \$233,780.00 8,000 777D Water Truck 27.00849 6 \$157,600.00 \$945,600.00 5,000 785C Water Truck 33.00R51 6 \$138,688.00 \$832,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 otes:							\$208.0
797B 40.00F57 6 \$322,800.00 \$1,398,800.00 4,000 613E (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6,000 621E (8.000 gal) Water Wagon 33.25R29 6 \$38,980.00 \$233,760.00 8,000 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5,000 785C Water Truck 33.00R51 6 \$138,688.00 \$382,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,990.00 \$129,000.00 6,000 otes:							\$208.
613E (5.000 gal) Water Wagon 23.5R25 6 \$18.840.00 \$113,040.00 6,000 621E (8.000 gal) Water Wagon 33.25R29 6 \$38,960.00 \$233,760.00 8,000 777D Water Truck 27.00R49 6 \$157,600.00 \$946,600.00 5,000 785C Water Truck 33.00R51 6 \$138,688.00 \$832,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 5,000 6,000 tots:					\$1,936,800.00		\$484.
777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5,000 785C Water Truck 33.00R51 6 \$138,688.00 \$332,128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 otes:		23.5R25	6				\$18.
785C Water Truck 33.00R51 6 \$136.688.00 \$33.2128.00 4,000 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 totes:							\$29.3
Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 otes:							\$189.
otes:		33.00R51			\$832,128.00		\$208.
UNITED AND PORTED TO THE PORTE		1	10	\$12,900.00	\$129,000.00	6,000	\$21.
LI UNIT COST BASIS!	otes: (1) Unit Cost Basis					1	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

	Seed Mixes				
Seed Mix	Descrip	tion	Cost/Acre		
None					
Mix 1	Basins		\$302.50		
lix 2	Low Hills		\$332.75		
1ix 3	Uplands		\$363.00		
1ix 4	Riparian or Custom		\$393.25		
User Mix 1	Site Specific Seed Mi	X	\$250.00		
User Mix 2					
User Mix 3					
User Mix 4	Cost/lb	lbs/Acre	Cost/Acre		
User Mix 5 (from Seed Mix sheet)		\$9.18	\$0.00		
Notes:	Ψ0.00	ψ9.10	ψ0.00		
140103.					
	Mulch				
Item	Mulch Cost/lb	Ibs/Acre	Cost/Acre		
Item		lbs/Acre	Cost/Acre		
one	Cost/lb				
lone Straw Mulch	Cost/lb \$0.17	Ibs/Acre	Cost/Acre \$6,150.83		
lone straw Mulch lydro Mulch	Cost/lb				
one traw Mulch ydro Mulch	Cost/lb \$0.17				
lone	Cost/lb \$0.17				
lone traw Mulch lydro Mulch	Cost/lb \$0.17				
one traw Mulch ydro Mulch	Cost/lb \$0.17				
one traw Mulch ydro Mulch	Cost/lb \$0.17				
one Fraw Mulch ydro Mulch nber Mulch	\$0.17 \$0.25				
one traw Mulch ydro Mulch	\$0.17 \$0.25	36300	\$6,150.83		
one traw Mulch lydro Mulch mber Mulch	\$0.17 \$0.25	36300	\$6,150.83		
one traw Mulch ydro Mulch mber Mulch	\$0.17 \$0.25	36300	\$6,150.83		
one traw Mulch ydro Mulch mber Mulch	\$0.17 \$0.25	36300	\$6,150.83		

1 of 5 Material Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

	Amendment	S	
Item	Cost/lb	lbs/Acre	Cost/Acre
None			
Organic Matter	\$0.70		\$0.00
Treated Sludge			
Chemical	\$0.59		\$0.00
Notes:	Western Nevada Sur	oply \$29.34 per 50 lb.	bag 15-15-15 (June 20

2 of 5

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Well Abandonment Materials										
Description Cost/50lb bag Units Cost/un										
Cement	\$7.57	су	\$36.07							
Grout (Low Grade Bentonite)	\$8.85	су	\$42.14							
Inert Material/Cuttings		су								
		су								
		су								

(1) Jentech Drilling Supply quote (June 2020) Type I,II Cement at \$14.24 per 94 lb. bag

(2) Jentech Drilling Supply (June 2020) 3/8 in. Chunk Bentonite Hole Plug at \$8.85 per 50 lb. bag (5.75 cf/bag at 4

Assumes 1 bag mixes with water to make 0.21 y3 or 0.16 m3 of grout/cement slurry.

Monitoring Costs		
Description	Units	Cost/unit
Monitor Well Pump	ea.	\$2,788.41
Sampling Supplies	ea.	\$6.51
		-
Water Analysis (Profile I) (1)	ea.	\$411.00
Leach Test (MWMP) w/ analysis	ea.	\$483.40
ABA + S speciation	ea.	\$150.00
WAD Cyanide in water	ea.	\$56.00
Water Analysis (Profile II) (1)	ea.	\$461.00
	ea.	
(1) WET Lab, Reno, Nevada (July 2		
Well pump and Sample supply cost	ts adjusted to 2020.	
Original source unknown.		

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev

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Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Fuel, Etc.								
Description	Units	Cost/unit						
Off-road Diesel - delivered (1)	\$/gal	\$2.190						
Pickup Truck Mileage	\$/mi	\$0.575						
Electical Power	\$/kWh	\$0.079						
(1) Source: Oil Price Infomration Se	rvice average annua	al cost including freigh						

(1) Source: Oil Price Infomration Service, average annual cost including freight to Nevada (July 2020).

Source: Federal Government Vehicle Allowance Rate 2020
Source: NV Energy (July 2020) \$0.07872

4 of 5 Material Costs

Revegetation Method	evegetation Method									
Slopes										
Disturbance Type	Seed Application Method	Labor Cost/Acre	Equipment Cost/Acre	Total Cost/Acre						
Waste Rock Dumps	Drill	\$140.00	\$120.00	\$260.0						
Heap Leach	Drill	\$140.00	\$120.00	\$260.0						
Tailings	Drill	\$140.00	\$120.00	\$260.0						
Quarries & Borrow Pits	Drill	\$140.00	\$120.00	\$260.0						
	Flat Areas and Und	ifferentiated								
Disturbance Type	Seed Application Method	Labor Cost/Acre	Equipment Cost/Acre	Total Cost/Acre						
Exploration Trenches	Drill	\$140.00	\$120.00	\$260.0						
Exploration Roads	Drill	\$140.00	\$120.00	\$260.0						
Waste Rock Dumps	Drill	\$140.00	\$120.00	\$260.0						
Heap Leach	Drill	\$140.00	\$120.00	\$260.0						
Tailings	Drill	\$140.00	\$120.00	\$260.0						
Quarries & Borrow Pits	Drill	\$140.00	\$120.00	\$260.0						
Roads	Drill	\$140.00	\$120.00	\$260.0						
Pits	Drill	\$140.00	\$120.00	\$260.0						
Haul Material	Drill	\$140.00	\$120.00	\$260.0						
Foundations & Buildings	Drill	\$140.00	\$120.00	\$260.0						
Sediment & Drainge Control	Drill	\$140.00	\$120.00	\$260.0						
Process Ponds	Drill	\$140.00	\$120.00	\$260.0						
Landfills	Drill	\$140.00	\$120.00	\$260.0						
Yards, Etc.	Drill	\$140.00	\$120.00	\$260.0						
Revegetation Maintenance	Drill	\$140.00	\$120.00	\$260.0						

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Revegetation	vegetation										
	Means Number	Unit	Crew	Daily Output	Daily Output User	Materials	Labor	Equipment	Total	Notes	
Seeding - Broadcast Hand (1)		acres					\$140.00		\$190.00		
Seeding - Broadcast Mechanical (1)		acres					\$140.00	\$50.00	\$190.00		
Seeding - Drill (1)		acres		365			\$140.00	\$120.00	\$260.00		
Seeding - Hydroseeding (1)				365			\$250.00	\$150.00	\$400.00		
Shrub Planting - bare root 6-10 in (150- 250mm) (2)	02910-400-0561	ea.	1 Clab	365					\$0.00		
Tree Planting - bare root 11-16 in (270- 400mm) (3)	02910-400-0562	ea.	1 Clab	260					\$0.00		
Cactus Planting (4)		ea.	1 Clab						\$0.00		
NOTES:											
(1) Seeding Source:	Source: Kelley Erosion	Control (Ju	ıly 2020).								
(2) Shrub Source:											
(3) Tree Source:											
(4) Cactus Source:											

Building and Wall Demolition

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data . All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

	Means Number	Unit	Crew	Daily Output	Daily Output User	Labor	Equipment	Premium	Total	Notes
Building Demolition		<u>'</u>	<u>'</u>							
Lg. steel	02220-110-0012	C.F.	B-8	21500		\$0.10	\$0.11		\$0.21	
Lg. concrete	02220-110-0050	C.F.	B-8	15300		\$0.14	\$0.15		\$0.29	
Lg. masonry	02220-110-0080	C.F.	B-8	20100		\$0.11	\$0.11		\$0.22	
Lg. mixed	02220-110-0100	C.F.	B-8	20100		\$0.11	\$0.11		\$0.22	
Sm. steel	02220-110-0500	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Sm. concrete	02220-110-0600	C.F.	B-3	11300		\$0.17	\$0.13		\$0.30	
Sm. masonry	02220-110-0650	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Sm. wood	02220-110-0700	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Wall Demolition										
Block 4 in (100 mm) thick	02220-130-2000	S.F.	1 Clab	180		\$1.30	\$0.00	20%	\$1.56	
Block 6 in (150 mm) thick	02220-130-2040	S.F.	1 Clab	170		\$1.38	\$0.00	20%	\$1.66	
Block 8 in (200 mm) thick	02220-130-2080	S.F.	1 Clab	150		\$1.56	\$0.00	20%	\$1.87	
Block 12 in (300 mm) thick	02220-130-2100	S.F.	1 Clab	150		\$1.56	\$0.00	20%	\$1.87	
Conc 6 in (150 mm) thick	02220-130-2400	S.F.	B-9	160		\$11.71	\$0.47	10%	\$13.40	
Conc 8 in (200 mm) thick	02220-130-2420	S.F.	B-9	140		\$13.38	\$0.53	10%	\$15.30	
Conc 10 in (250 mm) thick	02220-130-2440	S.F.	B-9	120		\$15.61	\$0.62	10%	\$17.85	
Conc 12 in (300 mm) thick	02220-130-2500	S.F.	B-9	100		\$18.73	\$0.74	10%	\$21.42	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal									
Unit rates from Means Heavy Construction 2006 Edition	by permission of R.S.Me	ans/Reed	Construct	ion Data .					
<u> </u>				Daily					
	Means Number	Unit	Crew	Output	Materials	Labor	Equipment	Total	Notes
Rubbish Handling									
Dumpster delivery (average for all sizes)		ea.			\$51.50			\$51	
Haul (average for all sizes)		ea.			\$161.00			\$161	
Rent per month (average for all sizes)		ea.			\$55.00			\$55	
Disposal fee per ton (tonne) (average for all sizes)	02220-350-0950	ton			\$60.50			\$60	.50
NOTES:									_
	R.S. Means Heavy Cons								
Dumpster Disposal Fee Source:		struction (2020 Q2).						
Hazardous Material Handling - Solids (+ Liqui	•								
Pickup fees 55 gal (200 L). drums		ea.			\$251.00			\$251	
Bulk material (average)		ton			\$409.50			\$409	
Transport - truck load (80 drums, 25 cy (m3), 18 tons)		mile			\$5.88			\$5	
Dump site solid disposal fee	02110-300-6000/6020	ton			\$288.50			\$288	.50
NOTES:									
Solid Handling Cost Source	R.S. Means Heavy Cons	truction (2019 Q2).						
Solid Disposal Fee Source:	2019 Q2 R.S. Means He	avy Cons	t. ave. 02	81					
Hazardous Material Handling - Liquids									
Vacuum Truck Pickup (2200 gal/8300 L)		hr.			\$147.00			\$147	
Vacuum Truck Pickup (5000 gal/19000 L)		hr.			\$213.00			\$213	
Dump site liquid disposal fee	02110-300-6000/6020	ton			\$288.50			\$288	.50
NOTES:									
Liquid Handling Cost Source	R.S. Means Heavy Cons	struction (2020 Q2).						
Liquid Disposal Fee Source:	2020 Q2 R.S. Means He	avy Cons	t. ave. 02	81					
Hydrocarbon Contaminated Soils (HCS)									
	02115-200-2020/2021	C.Y.			\$17.64			\$17	
	02115-200-2050/2055	C.Y.			\$278.50			\$278	.50
NOTES:									_
Insitu Treatement Cost Source	2020 Q2 R.S. Means He	avy Cons	t., ave. 02	65					
HCS Disposal Fee Source:	2020 Q2 R.S. Means He	avy Cons	t., ave. 02	65					

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

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Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Concrete Structure Installation

Weekly dumpster rental rates from Means Heavy Construction 2005 Edition with permission by R.S.Means/Reed Construction Data

Weekly dumpster rental rates include haul to off-site dispos	sal site and disposal fee	es								
	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Premium	Total	Notes
Reinforced Concrete Bulkheads and Shaft Co	vers									
Grade walls - 15 in (400mm) thick, 8 ft (2.5m) high	03310-240-4300	C.Y.	C-14D	80.02	\$163.00	\$105.53	\$13.35		\$281.88	includes reinforcing
Grade walls - 15 in (400mm) thick, 12 ft (3.7m) high	03310-240-4350	C.Y.	C-14D	26.2	\$163.00	\$322.30	\$40.76		\$526.06	includes reinforcing
Elevated conc, 1-way beam & slab - 15ft (4.6m) span		C.Y.	C-14B	20.59	\$278.00	\$410.57	\$51.87		\$740.44	
Elevated conc, 1-way beam & slab - 25ft (7.5m) span	03310-240-2750	C.Y.	C-14B	28.36	\$265.00	\$298.08	\$37.66		\$600.74	includes reinforcing
Bat Gate/Foam Plug Installation										
Bat Gate (5)		ea.			\$3,367.61					materials \$/ea. Installed
Culvert Gate (5)		ea.			\$6,735.21					materials \$/ea. Installed
Adit Foam Plug (6)		ea./C.Y.			\$336.76					materials \$/cy placed
Production Opening Foam Plug (6)		ea./C.Y.			\$336.76					materials \$/cy placed
NOTES:										
(5) Bat Gate Source: I	NV BLM, 2/2006: 8 hr +	1hr mob/c	demob + 11	nr setup per	gate (adjusted to	2020)				
(6) Foam Plug Source: I	NV BLM, 2/2006: 8 hr+	1hr mob/d	emob + 1h	r setup per a	adit; 16 hrs per p	roduction ope	ning (adjusted to	2020)		
· · · · · · · · · · · · · · · · · · ·										•

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Misc. Linear Projects

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data

All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

All equipment, labor and material unit costs are nom Labo	o Coolo, Equipment Co	l and w	atoriai 000	Daily	1				1	
	Means Number	Unit	Crew	Output	Materials	Labor	Equipment	Premium	Total	Notes
Fencing Installation		•								
Barbed 3-strand	02820-170-1650	L.F.	B-80A	760	\$0.51	\$0.93	\$0.33		\$1.77	
Barbed 4-strand	extrapolated	L.F.	B-80A	570	\$0.68	\$1.23	\$0.44		\$2.35	
Barbed 5-strand	02820-130-0920	L.F.	B-80A	456	\$0.85	\$1.54	\$0.55		\$2.94	
Chain link 8-10ft (2.5-3m) Install	02820-130-0920	L.F.	B-80C	180	\$38.00	\$3.91	\$1.38		\$43.29	
Wood stockade fence 6 ft (2 m) high - Install	02820-510-1240	L.F.	B-80C	150	\$16.00	\$4.69	\$1.66		\$22.35	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
Fencing Removal										
Barbed 3-strand Removal	02220-220-1600	L.F.	2 Clab	430		\$1.09	\$0.58		\$1.67	
Barbed 4-strand Removal	extrapolated	L.F.	2 Clab	355		\$1.32	\$0.70		\$2.02	
Barbed 5-strand Removal	02220-220-1650	L.F.	2 Clab	280		\$1.68	\$0.89		\$2.57	
Chain link 8-10 ft (2.5-3 m) Removal	02220-220-1700	L.F.	B-6	445		\$1.67	\$1.40		\$3.07	
Wood, all types 4-6 ft ("1.5-2 m) high - Removal	02220-220-1775	L.F.	2 Clab	430		\$1.09	\$0.58		\$1.67	
	user	L.F.								
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
Culvert Removal										
12 in (300 mm) Diameter	02220-220-2900	L.F.	B-6	175		\$4.25	\$3.55		\$7.80	
18 in (450 mm) Diameter	02220-220-2930	L.F.	B-6	150		\$4.96	\$4.14		\$9.10	
24 in (600 mm) Diameter	02220-220-2960	L.F.	B-6	120		\$6.20	\$5.18		\$11.38	
36 in (1m) Diameter	02220-220-3000	L.F.	B-6	90		\$8.27	\$6.91		\$15.18	
Pipeline Removal										
0.75 in (20mm) - 4 in (100 mm) diameter	02220-381-1600	L.F.	B-20	700		\$1.65	\$0.36		\$2.01	
6 in (150 mm) - 8 in (200 mm)	02220-381-1700	L.F.	B-20	500		\$2.31	\$0.50		\$2.81	
10 in (250 mm) - 18 in (450 mm)	02220-381-1800	L.F.	B-20	300		\$3.85	\$0.83		\$4.68	
20 in (500 mm) - 36 in (1 m)	02220-381-1900	L.F.	B-20	200		\$5.77	\$1.25		\$7.02	
Pipe and Drainpipe Installation										
Water 4in (100mm) 40ft (12m) length, welded HDPE	02510-760-0100	L.F.	B-22A	400	\$2.70	\$3.19	\$4.46		\$10.35	
Water 6in (150mm) 40ft (12m) length, welded HDPE	02510-760-0200	L.F.	B-22A	380	\$5.85	\$3.36	\$4.69		\$13.90	
Water 12in (300mm) 40ft (12m) length, welded HDPE	02510-760-0500	L.F.	B-22A	260		\$4.91	\$6.86		\$11.77	
Drain 4in (100mm) perforated PVC	02620-630-2100	L.F.	B-14	315	\$1.74	\$5.96	\$1.87		\$9.57	
Drain 6in (150mm) perforated PVC	02620-630-2110	L.F.	B-14	300	\$4.22	\$6.26	\$1.96		\$12.44	
Drain 4in (100mm) corrugated, perf or plain	02620-660-0040	L.F.	2 Clab	1200	\$0.78	\$0.39	\$0.21		\$1.38	
Drain 6in (150mm) corrugated., perf or plain	02620-660-0060	L.F.	2 Clab	900	\$2.18	\$0.52	\$0.28		\$2.98	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

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Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Drain Rock Preparation							
Crushing	C.Y.					\$0.50	
Screening	C.Y.					\$0.50	
TOTAL	•			•		\$1.00	
Misc.							
Backhoe work	02210-700-0120 C.Y.	B-11M	28	\$9.83	\$12.10	\$21.93	
Powerline and Transformer Removal							
Single Pole	mile					\$46,803.69	
Double Pole	mile					\$53,489.93	
Transformer (9)	ea.					\$58,997.31	
NOTES:							
(7) Single Pole Source:	NV Energy estimate (2009) Adjus	sted to 2020					
(8) Double Pole Source:	NV Energy estimate (2009) Adjus NV Energy estimate (2018) adjus	sted to 2020					
(9) Transformer Source:	NV Energy estimate (2018) adjus	sted to 2020					
F : 10 " (" 0 ()	·					·	

Erosion and Sedimentation Control

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data .

All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

			_	Daily						
	Means Number	Unit	Crew	Output	Materials	Labor	Equipment	Premium	Total	Notes
Rip-Rap & Rock Lining										
Rip-Rap 3/8 to 1/4 CY (m3) pieces, grouted	02370-450-0110	S.Y.	B-13	80	\$25.00	\$23.35	\$9.80		\$58.15	assumes on-site source of rip-rap
Rip-Rap 18 in (450 mm) min thick, no grout	02370-450-0200	S.Y.	B-13	53	\$7.65	\$35.24	\$14.79		\$57.68	assumes on-site source of rip-rap
Gabions, 6 in (150 mm) deep	02370-450-0400	S.Y.	B-13	200	\$7.05	\$9.34	\$3.92		\$20.31	assumes on-site source rock fill for gabions
Gabions, 9 in (250 mm) deep	02370-450-0500	S.Y.	B-13	163	\$9.85	\$11.46	\$4.81		\$26.12	assumes on-site source rock fill for gabions
Gabions, 12 in (300 mm) deep	02370-450-0200	S.Y.	B-13	153	\$14.30		\$5.12		\$31.63	
Gabions, 18 in (450 mm) deep	02370-450-0200	S.Y.	B-13	102	\$18.35		\$7.69		\$44.35	
Gabions, 36 in (1m) deep	02370-450-0200	S.Y.	B-13	60	\$31.00	\$31.13	\$13.07		\$75.20	assumes on-site source rock fill for gabions
HDEP Liner Installation										
Finish grading large area	2310-100-0100	S.F.	B-11L	18000		\$0.03	\$0.08		\$0.11	
Compaction-riding, vibrating roller - 12in (300mm) lifts	2315-310-5100	C.Y.	B-10Y	2600		\$0.20	\$0.17		\$0.37	
60 mil HDPE	2660-610-0010	S.F.	3 Skwk	1600	\$0.57	\$0.65	\$0.45		\$1.67	
80 mil HDPE	user	S.F.	3 Skwk	149		\$7.02	\$4.87		\$11.89	
40 mil VLDPE	user	S.F.	3 Skwk	150		\$6.97	\$4.83		\$11.80	
	user	S.F.	3 Skwk	149	•	\$7.02	\$4.87	•	\$11.89	
	user	S.F.	3 Skwk	149	•	\$7.02	\$4.87	•	\$11.89	
					·			·		<u> </u>

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Construction Manag	ement Support									
Office Trail	er, Furnished, no hook-ups	0150-500-0250	mo.		\$198.00				\$198.00	
	Toilet Portable, chemical	1590-400-6410	mo.		\$214.20				\$214.20	
	TOTAL	•			\$412.20			•	\$412.20	
Pump and Casing Remo	oval									
	Pump Type	Measurement	Unit			Labor	Equipment		Total	Notes
Pump Removal										
	Submersible	ft to pump	L.F.			\$7.65	\$18.86		\$26.51	
	Line Shaft	ft to pump	L.F.			\$7.65	\$18.86		\$26.51	
	NOTES:									
(1)	0) Pump Removal Source:	Boart Longyear Quote:	June 2020)						
	•							·		

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

			Standard	EQUIPMENT UNIT COST	TOTAL LABOR UNIT COST	TOTAL
ACTIVITY AND FLEET			Crew Size	(Hourly)	(Hourly)	(Hourly)
Rip road						
Waste rock dumps, heaps, tails - rip flat surface: Surface preparation Scarify	S					
	Sma	ill Dozer w	/ multi-sha	nk		
D7R	T-4-1-		1	\$88.37	\$34.41	\$122. ⁻ \$122. ⁻
	Totals			\$88.37	\$34.41	\$122.
	Mediu	ım Dozer w				
D9R	Totals		1	\$229.54 \$229.54	\$34.41 \$34.41	\$263.9 \$263.9
			l		φ04.41	Ψ200.
D40D	Larg	e Dozer w/			004.4:1	4000
D10R	Totals		1	\$329.55 \$329.55	\$34.41 \$34.41	\$363.9 \$363.9
		Į.		\$020.00	φοιιτή	φοσοι
100/11	G	rader w/ m		0047.40	007.40	Ф0044
16G/H	Totals		1	\$247.16 \$247.16	\$37.12 \$37.12	\$284.2 \$284.2
						•
GRADING Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms						
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills		Small Doz	zer Fleet			
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills		Small Doz	zer Fleet	\$88.37	\$34.41	
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms	Totals	Small Doz		\$88.37 \$88.37	\$34.41 \$34.41	
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms		Small Doz	1			
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms			1	\$88.37 \$229.54	\$34.41 \$34.41	\$122. \$122. \$263.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R			ozer Fleet	\$88.37	\$34.41	\$122.7
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R			ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R	Totals	Medium Do	ozer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R		Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54	\$34.41 \$34.41 \$34.41	\$122.7 \$263.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING	Totals	Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R	Totals	Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches	Totals	Medium Do	ozer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41	\$122.3 \$263.4 \$263.4 \$363.4 \$363.5
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363. \$130. \$130.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals	Medium Doz	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R D7R	Totals Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363. \$130. \$122.
Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals Totals	Medium Doz	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$12 \$26 \$26 \$36 \$36 \$31

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

		FOURMENT	T0T41 1 4 D0 D	
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
CAVATING				
Earthen Berms Diversion ditch excavation and backfill Underground openings backfill - excavate and place Pit berm construction (excavator option)				
	all Excavator			
325C Totals	1	\$81.37 \$81.37	\$37.12 \$37.12	\$118 \$118
Modi	ium Excavator		·	
345B	1	\$133.99	\$37.12	\$171
Totals		\$133.99	\$37.12	\$171
Lare	ge Excavator			
385BL Totals	1	\$312.70 \$312.70	\$37.12 \$37.12	\$349 \$340
	I	\$312.70	\$37.12	\$349
CAVATE AND RECONTOUR				
Recontour large roads (haul roads, access roads, etc.) Ponds - Excavate and pull liner and bury				
1 olids - Excavate and pull liner and bury				
Small F	xcavator + Doze	r		
325C	1	\$81.37	\$37.12	\$118
D7R	1	\$88.37	\$34.41	\$122
Total Equipment		\$169.74	\$71.53	\$241
Medium !	Excavator + Doz	er		
345B	1	\$133.99	\$37.12	\$171
D9R Totals	1	\$229.54 \$363.53	\$34.41 \$71.53	\$263 \$435
l arge F	xcavator + Doze	r		
385BL	1	\$312.70	\$37.12	\$349
D10R	1	\$329.55	\$34.41	\$363
Totals		\$642.25	\$71.53	\$713
(PLORATION ROAD/PAD RECONTOUR				
Recontour small roads (exploration roads, service roads, etc.) Cut and Fill reclamation on slopes				
Drill pad recountour				
Drill sump backfill				
S	mall Dozer			£420
D6R	mall Dozer	\$96.04	\$34.41	\$130
		\$96.04 \$96.04	\$34.41 \$34.41	
D6R Totals				
D6R Totals La	1	\$96.04 \$155.83	\$34.41 \$34.41	\$130 \$190
D6R Totals	arge Dozer	\$96.04	\$34.41	\$130 \$190
D8R Totals Totals Totals	arge Dozer	\$96.04 \$155.83	\$34.41 \$34.41	\$130 \$130 \$190 \$190
D8R Totals Li D8R Totals	arge Dozer	\$155.83 \$155.83 \$155.83	\$34.41 \$34.41 \$34.41	\$130 \$190 \$190 \$223
D8R Totals Totals Totals	arge Dozer	\$96.04 \$155.83 \$155.83	\$34.41 \$34.41 \$34.41	\$130 \$190 \$190
D6R Totals La D8R Totals 14G/H Totals	arge Dozer	\$155.83 \$155.83 \$155.83	\$34.41 \$34.41 \$34.41	\$130 \$190 \$190 \$223
D6R Totals Li D8R Totals 14G/H Totals Small	arge Dozer 1 Grader	\$96.04 \$155.83 \$155.83 \$186.72 \$186.72 \$186.72	\$34.41 \$34.41 \$37.12 \$37.12	\$130 \$190 \$190 \$223 \$223
D6R Totals La D8R Totals 14G/H Totals Small	arge Dozer 1 Grader 1 all Excavator	\$96.04 \$155.83 \$155.83 \$186.72 \$186.72	\$34.41 \$34.41 \$34.41 \$37.12 \$37.12	\$130 \$190 \$190 \$223 \$223
D6R Totals Li D8R Totals 14G/H Totals Sm: 320C Totals	arge Dozer 1 Grader 1 all Excavator	\$96.04 \$155.83 \$155.83 \$186.72 \$186.72 \$186.72	\$34.41 \$34.41 \$37.12 \$37.12	\$130 \$190 \$190 \$223 \$223
D6R Totals Li D8R Totals 14G/H Totals Sm: 320C Totals	arge Dozer 1 Grader 1 all Excavator	\$96.04 \$155.83 \$155.83 \$186.72 \$186.72 \$186.72	\$34.41 \$34.41 \$37.12 \$37.12	\$130 \$190 \$190 \$223 \$223

Project Name: Foothill Dolomite Mine - Reclamation Plan

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Model Version: Version 1.4.1

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EQUIPMENT FLEETS					
ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
LOAD, HAUL AND PLACE MATERIAL					
Rock placement Haul overburden for backfill Haul borrow for backfill Haul cover or growth media					
Sm	all Truck/L	₋oader Flee	t		
725		Calculated	\$141.02	\$34.41	\$175.43
966G D7R	Loader	1	\$73.88 \$88.37	\$34.41 \$34.41	\$108.29 \$122.78
Totals		ı	\$303.27	\$103.23	\$406.50
Mad	ium Truck	/Loader Fle	ot		
740	ium muck	Calculated	\$191.63	\$34.41	\$226.04
988G	Loader	1	\$274.20	\$34.41	\$308.61
D8R		1	\$155.83	\$34.41	\$190.24
Totals			\$621.66	\$103.23	\$724.89
Lar	ge Truck/l	oader Flee	t		
769D		Calculated	\$23.86	\$34.41	\$58.27
988G	Loader	1	\$274.20	\$34.41	\$308.61
D7R		1	\$88.37	\$34.41	\$122.78
Totals			\$386.43	\$103.23	\$489.66
Extra	Large Truc	k/Loader F	leet		
777D		Calculated	\$561.85	\$34.41	\$596.26
992G	Loader	1	\$522.61	\$34.41	\$557.02
D7R Totals		1	\$88.37 \$1,172.83	\$34.41 \$103.23	\$122.78 \$1,276.06
			Ų 1, 17 Z.100 J	ψ.co.zo	ψ1,210.00
	Scraper/Do			*****	0.000
631G D10R		Calculated 1	\$243.74 \$329.55	\$34.41 \$34.41	\$278.15 \$363.96
D7R		1	\$88.37	\$34.41	\$122.78
Totals			\$661.66	\$103.23	\$764.89
T	andom Sci	aper Fleet			
637G	andem Sci	2 2	\$430.52	\$34.41	\$464.93
D7R		1	\$88.37	\$34.41	\$122.78
Totals			\$518.89	\$68.82	\$587.71
MISC. LOAD AND HAUL AND EARTHWORKS					
Sludge removal					
Drainage controls					
Misc Cat 32	25B Excav	ator / 10-12	vd3 Truck		
325C	LACO LACOV	1	\$81.37	\$37.12	\$118.49
Dump Truck (10-12 yd3)		1	\$56.34	\$30.60	\$86.94
Totals			\$137.71	\$67.72	\$205.43
Misc Cat D9R Do	zer/ Load	er (5 yd3) /	10-12 yd3 Truck		
D9R		1	\$229.54	\$34.41	\$263.95
966G		1	\$73.88	\$34.41	\$108.29
Dump Truck (10-12 yd3) Totals		1	\$56.34 \$359.76	\$30.60 \$99.42	\$86.94 \$459.18
•		1	•	•	Ψ-00.10
Misc Cat D6 Doz	er / Cat 96	6 Loader /			****
D6R 966G		1	\$96.04 \$73.88	\$34.41 \$34.41	\$130.45 \$108.29
Dump Truck (10-12 yd3)		1	\$73.88 \$56.34	\$34.41	\$108.29
Totals			\$226.26	\$99.42	\$325.68
'	_				

Project Name: Foothill Dolomite Mine - Reclamation Plan

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Model Version: Version 1.4.1

Cost Data: User Data

EQUIPMENT FLEETS				
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
CONCRETE BREAKING			, ,,	<u> </u>
Slab demolition				
Footing demolition Wall demolition				
Small - Cat 325B Exc	cavator w/ H140	D s Hammer		
325C	1	\$81.37	\$37.12	\$118.49
H-120 (fits 325) D9R	1	\$32.95 \$229.54	\$0.00 \$34.41	\$32.9 \$263.9
Totals	'	\$343.86	\$71.53	\$415.3
Medium - Cat 345B Ex	cavator w/ H18	OD's Hammer		
345B	1	\$133.99	\$37.12	\$171.1
H-160 (fits 345)	1	\$67.17	\$0.00	\$67.1
D9R Totals	1	\$229.54 \$430.70	\$34.41 \$71.53	\$263.95 \$502.23
		·	ţ. 1.00	\$002.2
Large - Cat 385B Exc	avator w/ H180	S Hammer \$312.70	\$37.12	\$349.8
H-180 (fits 365/385)	1	\$76.01	\$0.00	\$76.0
D9R	1	\$229.54	\$34.41	\$263.9
Totals		\$618.25	\$71.53	\$689.78
DRILL HOLE ABANDONMENT				
Pump (plugging) Drill Rig	- Grout or Ceme	ent \$635.56	£24.22I	\$660.7t
Driller's Helper	1 2	\$0.00	\$34.23 \$64.20	\$669.79 \$64.20
Totals		\$635.56	\$98.43	\$733.99
Drill Hole - Inert Media (I	Means Crew B.	11M± 1 Laborer		
420D 4WD Backhoe	1	\$42.35	\$34.41	\$76.76
General Laborer	1	\$0.00	\$29.32	\$29.3
Totals		\$42.35	\$63.73	\$106.08
Drill Hole - Casing	Perforation or	Removal		
Heavy Duty Drill Rig	1	\$639.94	\$34.23	\$674.17
Driller's Helper Totals	2	\$0.00 \$639.94	\$64.20 \$98.43	\$64.20 \$738.3
Totals		\$039.94	\$96.43	\$130.31
MAINTENANCE FLEET				
Road Grading, Dust Suppression, Clean Up Maintenance - Small Wa	ater Truck and (Cat 14G Grader		
613E (5,000 gal) Water Wagon	1	\$131.83	\$34.41	\$166.2
120H	1	\$73.38	\$37.12	\$110.5
Totals		\$205.21	\$71.53	\$276.7
Maintenance - Medium V	Vater Truck and			
613E (5,000 gal) Water Wagon	1	\$131.83	\$34.41	\$166.2
14G/H Totals	1	\$186.72 \$318.55	\$37.12 \$71.53	\$223.8 \$390.0
			ψ11.00	φοσο.σ
	ater Truck and (Cat 16G Grader \$165.96	\$34.41	# 000 0:
Maintenance - Large Wa	4			\$200.3
621E (8,000 gal) Water Wagon	1			\$284 2
	1	\$247.16 \$413.12	\$37.12 \$71.53	
621E (8,000 gal) Water Wagon 16G/H Totals	1	\$247.16	\$37.12	
621E (8,000 gal) Water Wagon 16G/H Totals PROJECT SUPERVISION	1 1	\$247.16 \$413.12	\$37.12 \$71.53	\$484.6
621E (8,000 gal) Water Wagon 16G/H Totals		\$247.16	\$37.12	\$284.2i \$484.6i \$82.8i \$12.8i

Project Name: Foothill Dolomite Mine - Reclamation Plan

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EQUIPMENT FLEETS				
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
MEANS CREW DEFINITIONS		, ,,	, ,,	, ,,
Crew composition from Means Heavy Construction 2005 Edition	by permission of R.S	.Means/Reed Cons	truction Data .	
For use with misc. unit costs where Means is the source for prod	uctivity			
4 Olak Ozadka D		II D I'ii'		
1 Clab - Seedling Pla	anting/Block wa	\$0.00	\$29.32	620.22
Totals	'	\$0.00	\$29.32	\$29.32 \$29.32
1.014.10	I	ψ0.00	\$20.0E	\$20.02
2 Clab - Barbed Wire/Wood Fence Remo	val, Drainpipe In	stallation, Pum	ping, Evaporatior	1
General Laborer	2	\$0.00	\$58.64	\$58.64
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31.13
Totals		\$31.13	\$58.64	\$89.77
2 Clab + Excavato	r - Pond Liner Cu	ut and Fold		
General Laborer	2	\$0.00	\$58.64	\$58.64
325C	1	\$81.37	\$37.12	\$118.49
Totals		\$81.37	\$95.76	\$177.13
	Welder - Bat Gate		050.04	050.04
General Laborer Welding Equipment	2	\$0.00 \$8.83	\$58.64 \$34.23	\$58.64 \$43.06
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31.13
Totals	·	\$39.96	\$92.87	\$132.83
			•	
	Foam Adit Plugs			
General Laborer	2	\$0.00	\$58.64	\$58.64
420D 4WD Backhoe Light Truck - 1.5 Ton	1 1	\$42.35 \$31.13	\$34.41 \$0.00	\$76.76 \$31.13
Totals	'	\$73.48	\$93.05	\$166.53
1 State	l l	ψ. σ. το	\$00.00	ψ.00.00
3 Clab + Wel	der - Culvert Bat	Gate		
General Laborer	2	\$0.00	\$58.64	\$58.64
Welding Equipment	1	\$8.83	\$34.23	\$43.06
420D 4WD Backhoe Light Truck - 1.5 Ton	1 1	\$42.35 \$31.13	\$34.41 \$0.00	\$76.76 \$31.13
Totals	'	\$82.31	\$127.28	\$209.59
	I	¥0=.0.	¥.==v	V =11111
3 Clab D - 3 Laborers	+ Foreman - Dec	contamination		
General Laborer	3	\$0.00	\$87.96	\$87.96
Foreman Supervisor's Truck	1	\$0.00	\$82.88 \$0.00	\$82.88
Light Truck - 1.5 Ton	1	\$12.82 \$31.13	\$0.00	\$12.82 \$31.13
Totals	'	\$43.95	\$170.84	\$214.79
	- Liner Installatio			
Skilled Laborer	3	\$0.00	\$96.30	\$96.30
HDEP Welder (pipe or liner) 420D 4WD Backhoe	1 1	\$48.27 \$42.35	\$0.00 \$34.41	\$48.27 \$76.76
TEOD TITO DISCRIDE	'	\$0.00	Ψ04.41	\$0.00
		\$0.00		\$0.00
* ***		\$0.00	0100.71	\$0.00
Totals		\$90.62	\$130.71	\$221.33

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

		EQUIPMENT.	T0T41 1 4 D0 =	T0T4:
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
-	Building Demol		(110211)	(********)
200	LABOR			
General Laborer	2	\$0.00	\$58.64	\$58
Foreman	1	\$0.00	\$82.88	\$82
		\$0.00		\$(
		\$0.00		\$(
F	QUIPMENT	\$0.00		\$(
928G	1 1	\$77.71	\$34.41	\$112
Dump Truck (10-12 yd3)	2	\$112.68	\$61.20	\$173
·		\$0.00		\$(
		\$0.00		\$0
		\$0.00		\$(
		\$0.00 \$0.00		\$(\$(
		\$0.00		\$(
		\$0.00		\$(
Totals		\$190.39	\$237.13	\$427
B-6 - Chain Link				
General Laborer	2	\$0.00	\$58.64	\$58
928G Totals	1	\$77.71 \$77.71	\$34.41 \$93.05	\$112 \$170
l otals		\$11.11	\$93.03	\$170
B-8 - Large I	Building Demoli	tion		
	LABOR			
General Laborer	2	\$0.00	\$58.64	\$58
Foreman	1	\$0.00	\$82.88	\$82
		\$0.00		\$(\$(
		\$0.00 \$0.00		\$(
E(QUIPMENT	ψ0.00		Ψ
928G	1	\$77.71	\$34.41	\$112
20 Ton Crane	1	\$98.00	\$33.30	\$13
Dump Truck (10-12 yd3)	2	\$112.68	\$61.20	\$173
		\$0.00 \$0.00		\$(\$(
		\$0.00		\$(
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Totals		\$288.39	\$270.43	\$558
		•	<u>'</u>	
R-9 - Concre	ete Wall Demoli			
			A447.00	\$117
General Laborer	4	\$0.00	\$117.28	
	1	\$0.00 \$0.00 \$9.30	\$117.28 \$82.88 \$34.00	\$82 \$43

6 of 8

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

EQUIPMENT FLEETS					
		Standard	EQUIPMENT UNIT COST	TOTAL LABOR UNIT COST	TOTAL COST
ACTIVITY AND FLEET		Crew Size	(Hourly)	(Hourly)	(Hourly)
B-10\	r - General	Compacti	on		
General Laborer		1	\$0.00	\$29.32	\$29.32
CS533E Vibratory Roller		1	\$55.06	\$34.41	\$89.47
Totals			\$55.06	\$63.73	\$118.79
B-11L - Fine Gradi	ng for Eva	poration P	ond Liner Base		
General Laborer		1	\$0.00	\$29.32	\$29.3
14G/H		1	\$186.72	\$37.12	\$223.8
Totals			\$186.72	\$66.44	\$253.1
D.	11M - Back	rhaa Wark			
420D 4WD Backhoe	I IIVI - Dack	1	\$42.35	\$34.41	\$76.7
Totals		-	\$42.35	\$34.41	\$76.7
			¥ :=:•••	**	*
B-12G - Rip-F	Rap Machii	ne Placed	(Modified)		
966G		1	\$73.88	\$34.41	\$108.2
325C		1	\$81.37	\$37.12	\$118.4
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.1
Totals			\$186.38	\$71.53	\$257.9
B-13 - Grout	od Rin-Rai	n & Gahior	n Rackote		
General Laborer	eu Nip-Na	4	\$0.00	\$117.28	\$117.2
Foreman		1	\$0.00	\$82.88	\$82.8
20 Ton Crane		1	\$98.00	\$33.30	\$131.3
Totals			\$98.00	\$233.46	\$331.46
R-14 P\	VC Drain P	ino Installa	ation		
Foreman	JO DIAMITI	1	\$0.00	\$82.88	\$82.88
General Laborer		4	\$0.00	\$117.28	\$117.2
420D 4WD Backhoe		1	\$42.35	\$34.41	\$76.7
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.13
Totals			\$73.48	\$234.57	\$308.0
D.O.	Δ	. Di			
Foreman B-2	0 - Remov	e Pipelines	\$0.00	\$82.88	\$82.8
Skilled Laborer		1	\$0.00	\$32.10	\$32.1
General Laborer		1	\$0.00	\$29.32	\$29.3
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.1
Totals			\$31.13	\$144.30	\$175.43
	II	B:			
B-22A - HD	EP Installa			000.40	000.44
Skilled Laborer General Laborer		2	\$0.00 \$0.00	\$32.10 \$58.64	\$32.10 \$58.64
D7R		1	\$88.37	\$34.41	\$122.73
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.1
420D 4WD Backhoe		1	\$42.35	\$34.41	\$76.76
Generator 5KW		1	\$12.73	\$0.00	\$12.7
HDEP Welder (pipe or liner)		1	\$48.27	\$0.00	\$48.27
Totals			\$222.85	\$159.56	\$382.4
D 00A	Install Bar	had Wire F	oneo		
General Laborer	mstall Bar	3	-ence \$0.00	\$87.96	\$87.9
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.13
Totals		•	\$31.13	\$87.96	\$119.0
iotais			Ψ01.10	ψ07.50	Ψ110.0

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021
File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

EQUIPMENT FLEETS					
ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
B-80C - Install Chain Li	nk Fence (Flatbed tru	ıck has small cr	ane)	
General Laborer		3	\$0.00	\$87.96	\$87.9
Light Truck - 1.5 Ton		1	\$31.13	\$0.00	\$31.1
Totals			\$31.13	\$87.96	\$119.0
<u>-</u>					
C-14B - Elevated Concrete	e Slabs (R	einforced (Concrete Shaft (Covers)	
Foreman		1	\$0.00	\$82.88	\$82.8
Supervisor's Truck		1	\$12.82	\$0.00	\$12.8
Carpenter		16	\$0.00	\$716.48	\$716.4
General Laborer		2	\$0.00	\$58.64	\$58.6
Rodmen (reinforcing concrete)		4	\$0.00	\$117.28	\$117.2
Cement finisher		2	\$0.00	\$64.20	\$64.2
Gas Engine Vibrator		1	\$5.88	\$17.23	\$23.1
Concrete Pump		1	\$114.80	\$0.00	\$114.8
Totals			\$133.50	\$1,056.71	\$1,190.2
C-14D - Concrete Walls Forme	dia Diasa	/Dainfausa	d Camanata Adit	Dullah a a da\	
	d in Place	`			*
Foreman		1	\$0.00	\$82.88	\$82.8
Supervisor's Truck			\$12.82	\$0.00	\$12.8
Carpenter General Laborer		18 2	\$0.00 \$0.00	\$806.04 \$58.64	\$806.0 \$58.6
		2	\$0.00	\$58.64 \$58.64	\$58.6 \$58.6
Rodmen (reinforcing concrete) Cement finisher		1	\$0.00	\$58.64 \$32.10	\$32.1
		1	\$0.00 \$5.88	\$32.10 \$17.23	\$32.1 \$23.1
Gas Engine Vibrator Concrete Pump		1	\$5.88 \$114.80	\$17.23	\$23.1
7 7 7 7 7 F		- 1	\$114.80 \$133.50	\$1.055.53	\$1,189.0
Totals			\$133.50	\$1,055.53	\$1,189.0

8 of 8

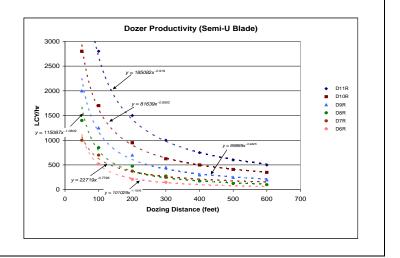
Closure Cost Estimate Productivity

Productivity - Bulldozers

Dozer Specifications								
Description	D11R	D10R	D9R	D8R	D7R	D6R		
Blade Width (SU) (ft)	18.33	15.92	14.17	12.92	12.08	10.67		
Shank Guage (3 shanks) (ft)	9.83	8.67	7.67	7.08	6.5	6.5		
Pocket Spacing (ft)	4.75	4.33	3.87	3.58	3.25	3.25		
Ripping Width (Ripper + 1 Pocket) (ft)	14.58	13	11.54	10.66	9.75	9.75		
Ripping Speed (mph)	1	1	1	1	1	1		
Ripping Maneuver (turn) Time (min)	0.25	0.25	0.25	0.25	0.25	0.25		
Altitude Deration Factor	1	1	1	1	1	1		
Ripping Hourly Production (excluding								
maneuvering time) (ft)	5,280	5,280	5,280	5,280	5,280	5,280		

Source: Caterpillar Performance Handbook Edition 35

_	Production (LCY/hr)									
Average Dozing Distance (feet)	D11R	D10R	D9R	D8R	D7R	D6R				
50	4,800	2,800	2,000	1,400	1,000					
100	2,800	1,700	1,250	850	700	520				
200	1,500	950	700	475	375	210				
300	1,000	625	450	275	250	150				
400	750	500	300	175						
500	600	410	250	125						
600	500	350	200	100						
	= k x Dozing Distance ^p		Source:	Caterpillar Perfor	rmance Handbook	Edition 35				
(see grap										
	c = 185082	81639	89889	115087	22719	101029				
	-0.919	-0.8502	-0.9425	-1.0809	-0.7796	-1.1506				



Closure Cost Estimate Productivity

Productivity - Bulldozers (cont.)

% Grade vs. Dozing Factor							
% Grade	Dozing Factor						
-30	1.6						
-20	1.4						
-10	1.2						
0	1						
10	0.8						
20	0.55						
30	0.3						
Source: Caterpillar Performs	nce Handbook Edition 35						
% Grade Dozing Factor =	-0.0214x + 0.9786						
(see graph)							

Job Condition Correction Factor	rs - Bulldozers
OPERATOR	
Average	0.75
MATERIAL (1)	
Loose stockpile	1.2
Normal	1
Hard to cut; frozen —	
with tilt cylinder	0.8
Hard to drift; "dead" (dry,non-cohesive	
material) or very sticky material	0.8
Rock, ripped or blasted	0.6
SLOT DOZING OR SIDE BY SIDE (1)	1.2
VISIBILITY	
Good conditions	1
JOB EFFICIENCY	
50 min/hr	0.83

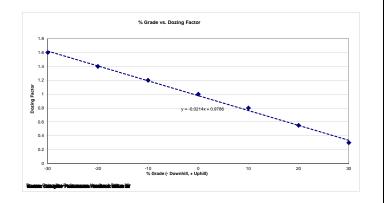
(1) Selected in facility worksheets.

Other factors included as standard factors.

Source: Caterpillar Performance Handbook Edition 35

Material Densities(1)						
Material	lb/cy	kg/m³				
Alluvium	2,900	1,720				
Basalt	3,300	1,960				
Clay - Dry	2,500	1,480				
Granite - broken	2,800	1,660				
Gravel	2,550	1,510				
LS - broken	2,600	1,540				
LS - crushed	2,600	1,540				
Sandstone	2,550	1,510				
Shale	2,100	1,250				
Stone - crushed	2,700	1,600				
Tailings - Coarse (dry, loose sand)	2,400	1,420				
Tailings - Slimes (loose sand & clay)	2,700	1,600				
Topsoil	1,600	950				
(1) Source	: Caterpillar Performance	e Handbook Edition 35				

Note: uses Sand & Gravel - Dry from Caterpillar Handbook



Closure Cost Estimate Productivity

Productivity - Scrapers

fications	
631G	637G
100,600	112,760
24	24
34	34
29	29
One D10R	Self*
1	1
1	1
1	1
3	3
1	1
	24 34 29 One D10R 1 1

* Requires pair

**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

Source: Caterpillar Performance Handbook Edition 35

				Dov	vnhill Scrape	r Speed - Gr	ade Retardin	g vs. Effect	ive Grade	(Grade - R	olling Res	istance)		
Weight of M	Materials		631G					637G PP						
Material	lb/cy	Scraper Load	Loaded Weight (lbs)	22	16	10	5	1	Loaded Weight (lbs)	25	15	10	5	1
Alluvium	2,900	84,100	184,700	7.5	10	13	33	33	196,860	7	10	18.5	34	34
Basalt	3,300	95,700	196,300	7.5	10	13	24.5	33	208,460	7	10	18.5	25	34
Clay - Dry	2,500	72,500	173,100	7.5	10	13	33	33	185,260	7	10	18.5	34	34
Granite - broken	2,800	81,200	181,800	7.5	10	13	33	33	193,960	7	10	18.5	34	34
Gravel	2,550	73,950	174,550	7.5	10	13	33	33	186,710	7	10	18.5	34	34
LS - broken	2,600	75,400	176,000	7.5	10	13	33	33	188,160	7	10	18.5	34	34
LS - crushed	2,600	75,400	176,000	7.5	10	13	33	33	188,160	7	10	18.5	34	34
Sandstone	2,550	73,950	174,550	7.5	10	13	33	33	186,710	7	10	18.5	34	34
Shale	2,100	60,900	161,500	7.5	10	18	33	33	173,660	10	13.5	18.5	34	34
Stone - crushed	2,700	78,300	178,900	7.5	10	13	33	33	191,060	7	10	18.5	34	34
Tailings - Coarse (dry, loose sand)	2,400	69,600	170,200	7.5	10	13	33	33	182,360	7	10	18.5	34	34
Tailings - Slimes (loose sand & clay)	2,700	78,300	178,900	7.5	10	13	33	33	191,060	7	10	18.5	34	34
Topsoil	1,600	46,400	147,000	7.5	10	18	33	33	159,160	10	13.5	18.5	34	34
	•	•	Empty	10	18	24.5	33	33	Empty	10	13.5	18.5	34	34
											Source: C	aterpillar Perfor	mance Handbo	ook Edition 34

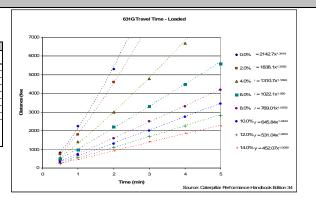
Closure Cost Estimate Productivity

Productivity - Scrapers (cont.)

Total Resistance (%)			Time (mi	n)				
(rolling + grade)	0.5	1	2	3	4	5	k	
0	825	2,250	5,300				2142.7	
2	750	1,800	4,600				1838.1	1
4	550	1,400	3,000	4,800	6,700		1310.7	1
6	490	1,000	2,200	3,300	4,500	5,600	1022.1	
8	375	750	1,600	2,500	3,300	4,200	769.01	1
10	300	700	1,300	2,000	2,750	3,450	645.84	1
12	250	550	1,100	1,700	2,250	2,800	531.04	1
14	225	450	900	1.400	1,850	2,250	452.07	1

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

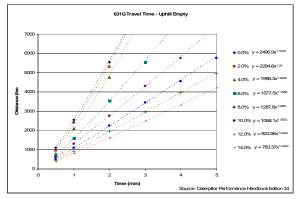
Source: Caterpillar Performance Handbook Edition 35



Total Resistance (%)			Time (mi	n)				
(rolling + grade)	0.5	1	2	3	4	5	k	
0	1,100	2,550	5,550				2496.9	1
2	950	2,400	5,300				2294.8	
4	800	2,100	4,750				1998.3	- 1
6	700	1,600	3,550	5,550			1557.5	1
8	600	1,300	2,750	4,300	5,750		1287.8	1
10	500	1,100	2,250	3,450	4,550	5,750	1068.1	1
12	450	900	1,950	2,950	3,950	4,950	923.56	1
14	375	800	1,600	2,500	3,300	4,200	783.37	1

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{t}}$

Source: Caterpillar Performance Handbook Edition 35



Productivity - Scrapers (cont.)

637G Push-Pull Scraper Travel Time - Uphill Loaded										
Total Resistance (%)			Time (mi	n)						
(rolling + grade)	0.5	1	2	3	4	5	k	р		
0	1,000	2,500	5,550				2402.9	1.23		
2	850	2,200	5,150				2127.6	1.29		
4	700	1,700	3,900	6,250			1659.4	1.23		
6	600	1,300	2,750	4,300	5,750		1287.8	1.0		
8	500	1,100	2,200	3,300	4,500	5,600	1059.1	1.0		
10	400	850	1,750	2,700	3,600	4,475	839.89	1.0		
12	375	750	1,500	2,300	3,000	3,800	751.58	1.0		
14	275	600	1,300	2,000	2,650	3,250	595.28	1.0		

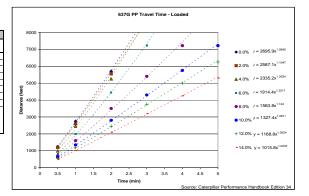
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

		637G PP Travel Time - Loaded
	8000 T	
	7000	◆0.0% y =2402.9x ^{1,2002}
	6000	■ 2.0% y = 2127.6x1.2006
	5000	△ 4.0% y = 1659.4x12212
Distance (fee	4000	■6.0% y = 1287.8x1.com
ds	3000	• 8.0% Y = 1059.1x1.0x1 • 10.0% Y = 898.8x1.0xx
	2000	10.0% + 12.0% y = 751.58x ^{1,000}
	1000	- 14.0% y = 595.28x ^{1,0794}
	0	1217 ·
	0	1 2 3 4 5 Time (min) Source: Caterpillar Performance Handbook Edition 34

Total Resistance (%)			Time (mi	n)				
(rolling + grade)	0.5	1	2	3	4	5	k	р
0	1,250	2,750	5,700				2695.9	1.0945
2	1,200	2,600	5,550				2587.1	1.1047
4	990	2,450	5,250				2335.2	1.0234
6	800	2,000	4,450	7,216			1914.4	1.2211
8	700	1,600	3,500	5,400	7,216		1563.8	1.124
10	625	1,350	2,800	4,300	5,750	7,216	1327.4	1.0611
12	550	1,200	2,450	3,750	5,000	6,250	1168.8	1.0524
14	495	1,010	2,100	3,200	4,250	5,300	1015.8	1.0337

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Productivity - Haul Trucks

Haul Truck Specifications												
Description	769D	773E	777D	785C	793C	797B						
Chassis Weight (lb)	53,506	70,330	113,160	170,000	259,500	473,600						
Body Weight (lb)	17,350	20,300	34,785	36,788	70,785	104,200						
Standard Liner Weight (lb)	7,000	8,600	12,040	16,846	24,418	8,800						
Total Truck Weight (lb)	77,856	99,230	159,985	223,634	354,703	586,600						
Payload Capacity (cy)												
Struck	21.6	34.8	55	78.5	126	228						
Heaped	31.7	46	78.6	102	169	290						
Average	26.65	40.4	66.8	90.25	147.5	259						
Maneuver to Load Time (min)	0.7	0.7	0.7	0.7	0.7	0.7						
Maneuver and Dump Time (min)	1.1	1.1	1.1	1.1	1.1	1.1						
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83						
Rolling Resistance**	2.5	2.5	2.5	2.5	2.5	2.5						
Altitude Deration Factor	1	1	1	1	1	1						

"A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

Source: Caterpillar Performance Handbook Edition 35

		Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)																	
	Weight of Mate	rials					769D					773E					777D		
Material					Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	77,285	117,160	193,720	155,141	11	11	15	26	216,390	7	7	13	23	353,705	7	9	12	29
Basalt	3,300	87,945	133,320	220,440	165,801	11	11	11	20	232,550	7	7	13	23	380,425	7	7	12	21
Clay - Dry	2,500	66,625	101,000	167,000	144,481	11	11	15	26	200,230	7	9	13	23	326,985	7	9	16	29
Granite - broken	2,800	74,620	113,120	187,040	152,476	11	11	15	26	212,350	7	7	13	23	347,025	7	9	12	29
Gravel	2,550	67,958	103,020	170,340	145,814	11	11	15	26	202,250	7	9	13	23	330,325	7	9	16	29
LS - broken	2,600	69,290	105,040	173,680	147,146	11	11	15	26	204,270	7	9	13	23	333,665	7	9	12	29
LS - crushed	2,600	69,290	105,040	173,680	147,146	11	11	15	26	204,270	7	9	13	23	333,665	7	9	12	29
Sandstone	2,550	67,958	103,020	170,340	145,814	11	11	15	26	202,250	7	9	13	23	330,325	7	9	16	29
Shale	2,100	55,965	84,840	140,280	133,821	11	11	15	26	184,070	7	9	13	31	300,265	7	9	16	29
Stone - crushed	2,700	71,955	109,080	180,360	149,811	11	11	15	26	208,310	7	7	13	23	340,345	7	9	12	29
Tailings - Coarse (dry, loose sand)	2,400	63,960	96,960	160,320	141,816	11	11	15	26	196,190	7	9	13	23	320,305	7	9	16	29
Tailings - Slimes (loose sand & clay)	2,700	71,955	109,080	180,360	149,811	11	11	15	26	208,310	7	7	13	23	340,345	7	9	12	29
Topsoil	1,600	42,640	64,640	106,880	120,496	11	11	15	26	163,870	7	9	17	31	266,865	9	12	16	29
			•	Empty	15	15	26	36	Empty	13	17	23	42	Empty	16	16	29	39	

Source: Caterpillar Performance Handbook Edition 35

				Downhil	Haul Truck	Speed - C	Grade Retai	rding vs. I	Effective (Grade (Gra	de - Roll	ing Resista	ance)						
	Weight of Mater	rials					785C					793C			797B				
Material							15	10	5	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	261,725	427,750	751,100	485,359	8	8	14	27	782,453	7	7	10	17	1,337,700	7	7	9	17
Basalt	3,300	297,825	486,750	854,700	521,459	8	8	14	27	841,453	7	7	10	17	1,441,300	7	7	9	17
Clay - Dry	2,500	225,625	368,750	647,500	449,259	8	11	14	36	723,453	7	7	10	25	1,234,100	7	7	9	23
Granite - broken	2,800	252,700	413,000	725,200	476,334	8	8	14	27	767,703	7	7	10	17	1,311,800	7	7	9	17
Gravel	2,550	230,138	376,125	660,450	453,772	8	8	14	36	730,828	7	7	10	25	1,247,050	7	7	9	23
LS - broken	2,600	234,650	383,500	673,400	458,284	8	8	14	27	738,203	7	7	10	25	1,260,000	7	7	9	23
LS - crushed	2,600	234,650	383,500	673,400	458,284	8	8	14	27	738,203	7	7	10	25	1,260,000	7	7	9	23
Sandstone	2,550	230,138	376,125	660,450	453,772	8	8	14	36	730,828	7	7	10	25	1,247,050	7	7	9	23
Shale	2,100	189,525	309,750	543,900	413,159	8	11	14	36	664,453	7	7	10	25	1,130,500	7	7	13	23
Stone - crushed	2,700	243,675	398,250	699,300	467,309	8	8	14	27	752,953	7	7	10	17	1,285,900	7	7	9	23
Tailings - Coarse (dry, loose sand)	2,400	216,600	354,000	621,600	440,234	8	11	14	36	708,703	7	7	10	25	1,208,200	7	7	9	23
Tailings - Slimes (loose sand & clay)	2,700	243,675	398,250	699,300	467,309	8	8	14	27	752,953	7	7	10	17	1,285,900	7	7	9	23
Topsoil	1,600	144,400	236,000	414,400	368,034	8	11	19	36	590,703	7	10	13	25	1,001,000	7	9	13	23
					Empty	14	19	36	36	Empty	10	13	17	33	Empty	13	17	23	42
										•					s	ource: Cater	pillar Perforr	nance Handboo	ok Edition 35

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2000

Productivity - Haul Trucks (cont.)

769D Haul Truck Travel Time - Uphill Loaded												
Total Resistance (%)			Time (mi	n)								
(rolling + grade)	0.4	1	2	3	4	5	k	р				
0	1,148	3,428	7,183				3316.3	1.1422				
4	689	1,984	4,198	6,330			1928.3	1.1033				
6	508	1,427	2,952	4,510	6,002		1386.4	1.0725				
8	394	1,082	2,263	3,411	4,592	5,740	1061.8	1.06				
10	328	869	1,771	2,690	3,608	4,510	857.82	1.0373				
15	213	574	1,181	1,804	2,394	3,018	565	1.0482				
	•	•										

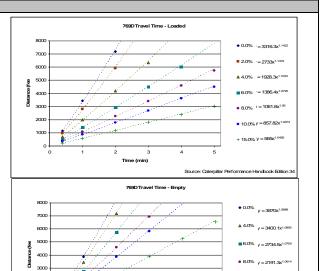
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

Ш									
Г	Total Resistance (%)			Time (mi	in)				
	(rolling + grade)	0.4	1	2	3	4	5	k	р
Г	0	1,427	3,870					3870	1.0888
Г	4	1,246	3,444	7,183				3400.1	1.0895
Г	6	1,017	2,755	5,740				2734.5	1.0759
Г	8	820	2,230	4,592	6,954			2191.3	1.0614
Г	10	722	1,870	3,870	5,838			1872	1.0391
	15	459	1,246	2,558	3,903	5,248	6,560	1222.9	1.0523

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Catemillar Performance Handbook Edition



Time (min)

• 10.0% y = 1872x1.0391

+ 15.0% y = 1222.9x1.0523

Productivity - Haul Trucks (cont.)

773E Haul Truck Travel Time - Uphill Loaded										
Total Resistance (%)			Time (mi	n)						
(rolling + grade)	0.4	1	2	3	4	5	k	р		
0	1,066	3,117	6,496				3027.4	1.12		
4	656	1,952	4,035	6,168			1863.1	1.11		
6	492	1,312	2,756	4,167	5,577	6,955	1304.2	1.05		
8	394	1,017	2,100	3,182	4,265	5,315	1018.2	1.03		
10	328	853	1,804	2,690	3,609	4,528	856.36	1.0		
15	226	525	1,083	1,673	2,231	2,789	549.25	1.00		

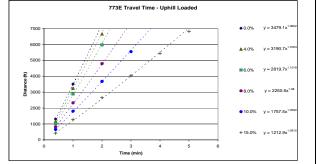
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

		77	3E Travel T	ime - Uphi	I Loaded			
7000							♦0.0%	y = 3027.4x ^{1.125}
6000		7					▲4.0%	y = 1863.1x ^{1.110}
5000 € 4000	7	1 /	•				■6.0%	y = 1304.2x ^{1.050}
3000 Distance (t)	<u> </u>			in The	j.+		●8.0%	y = 1018.2x ^{1.03}
2000				+ *	• •		•10.0%	y = 856.36x ^{1.0}
1000							+15.0%	y = 549.25x ^{1.00}
0	i	2	3 Time (min)	4	5	6		

773E Haul Truck Travel Time - Uphill Empty											
Total Resistance (%)			Time (mi	n)							
(rolling + grade)	0.4	1	2	3	4	5	k	р			
0	1,312	3,510	7,218				3479.1	1.0602			
4	1,181	3,248	6,660				3190.7	1.0763			
6	1,017	2,887	5,971				2819.7	1.1018			
8	820	2,329	4,790	7,218			2250.5	1.08			
10	656	1,804	3,675	5,545			1757.5	1.0592			
15	427	1,280	2,657	4,035	5,446	6,824	1212.9	1.0915			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{r}}$



Productivity - Haul Trucks (cont.)

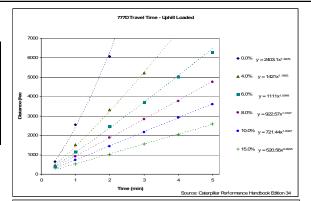
Total Resistance (%)			Time (mi	in)				
(rolling + grade)	0.4	1	2	3	4	5	k	р
0	656	2,558	6,068				2403.1	1.3876
4	459	1,509	3,313	5,215	7,085		1412	1.1863
6	394	1,148	2,460	3,706	5,018	6,298	1111	1.0949
8		918	1,886	2,837	3,772	4,756	922.57	1.0197
10		722	1,443	2,165	2,919	3,608	721.44	1.0027
15		525	1.017	1.558	2.034	2.591	520.56	0.9905

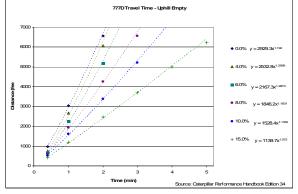
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

777D Haul Truck Travel Time - Uphill Empty										
Total Resistance (%)		Time (min)								
(rolling + grade)	0.4	1	2	3	4	5	k	р		
0	968	3,034	6,560				2929.3	1.192		
4	754	2,657	6,068				2532.8	1.2999		
6	656	2,247	5,182				2167.3	1.2873		
8	607	1,935	4,248	6,560			1846.2	1.1831		
10	525	1,607	3,378	5,215	7,282		1528.4	1.1332		
15	410	1,197	2,460	3,706	4,986	6,232	1139.7	1.072		

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$





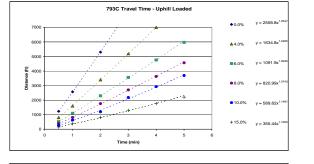
Productivity - Haul Trucks (cont.) 785C Travel Time - Uphill Loaded 785C Haul Truck Travel Time - Uphill Loaded El Time - C, Time (min) 2 5,500 3,370 2,180 1,610 4 400 Total Resistance (%) ♦0.0% y = 2491.1x^{1.1872} (rolling + grade) 2491.1 1524.4 923 719.64 820 530 300 240 2,630 1,600 1,000 790 ./i 5,040 3,270 2,480 1.1206 1.1469 1.1233 ▲ 4.0% y = 1524.4x^{1.120} 4,400 3,380 5,570 4,200 500 630 370 1,400 770 2,180 1,200 2,920 1,590 3,650 2,000 590.43 227.29 1.1678 1.4863 190 40 ■6.0% y = 923x^{1.1409} ● 8.0% y = 719.64x^{1.12} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 2000 ●10.0% y = 590.43x^{1.16} Source: Caterpillar Performance Handbook Edition 35 + 15.0% y = 227.29x^{1.46} 785C Travel Time - Uphill Empty 785C Haul Truck Travel Time - Uphill Empty rotal Resistance (%) (rolling + grade) 7000 Time (min) 0.4 k 8 p 3032.7 0.8852 2785.5 0.9264 2542.3 0.9645 2074.4 0.9446 1780.8 0.9606 1073.1 1.0209 5,780 5,400 5,020 4,000 1,380 1,210 1,060 900 2,870 2,690 2,490 1,960 ◆0.00% y = 3032.7x^{0.885} 6,000 ▲4.00% y = 2785.5x^{0.92} 1,670 1,030 3,410 2,200 5,190 3,320 6,910 4,410 ■6.00% y = 2542.3x^{0.96} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{\nu}}$ 8.00% y = 2074.4x^{0.9} Source: Caterpillar Performance Handbook Edition 35 • 10.00% y = 1780.8x^{0.960} +15.00% y = 1073.1x^{1.020} Time (min)

Productivity

Productivity - Haul Trucks (cont.)

	7930	C Haul Truck T	ravel Time -	Uphill Loade	ed						
Total Resistance (%)		Time (min)									
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	1,230	2,570	5,300				2558.8	1.0537			
4	800	1,600	3,400	5,190	7,000		1634.8	1.0485			
6	520	1,090	2,300	3,560	4,760	5,970	1091.9	1.0635			
8	390	810	1,760	2,700	3,630	4,570	820.99	1.0743			
10	260	630	1,200	2,180	2,930	3,690	589.82	1.1481			
15	150	380	810	1,300	1,760	2,210	355.44	1.1605			

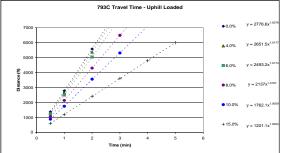
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Total Resistance (%)		Time (min)								
(rolling + grade)	0.5	1	2	3	4	5	k	р		
0	1,380	2,780	5,580				2776.6	1.0078		
4	1,310	2,650	5,370				2651.5	1.0177		
6	1,230	2,500	5,040				2493.2	1.0174		
8	1,060	2,140	4,300	6,490			2137	1.0107		
10	880	1,750	3,560	5,310			1762.1	1.0059		
15	600	1,200	2,410	3,610	4,800	6,000	1201.1	1.0003		

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{\iota}}$

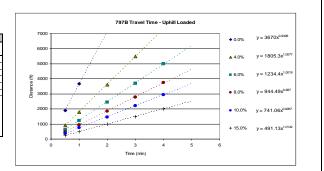
Source: Caterpillar Performance Handbook Edition 35



Productivity - Haul Trucks (cont.)

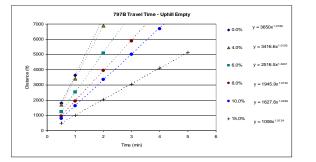
797	B Haul Truck T	ravel Time -	Uphill Loade	ed						
	Time (min)									
0.5	1	2	3	4	5	k	р			
1,900	3,670					3670	0.9498			
900	1,800	3,620	5,480			1805.3	1.0077			
620	1,230	2,450	3,700	5,000		1234.4	1.0019			
480	940	1,850	2,790	3,750		944.49	0.987			
370	750	1,460	2,220	2,950		741.06	0.9957			
240	500	1,000	1,480	2,000		491.13	1.0142			
	0.5 1,900 900 620 480 370	0.5 1 1,900 3,670 900 1,800 620 1,230 480 940 370 750	0.5 1 2 1,900 3,670 900 1,800 3,620 620 1,230 2,450 480 940 1,850 370 750 1,460	Time (min) 3.670 1.900 3.670 3.670 3.620 5.480 620 1.230 2.450 3.700 480 940 1.850 2.790 370 750 1.460 2.220	0.5 1 2 3 4 1.900 3.670	Time (min) 3.670 3.670 3.620 5.480 5.000 480 9.40 1.850 2.790 3.750 3.	Time (min) 3 4 5 k 1,900 3,670 3,620 5,480 3670 1,900 3,620 5,480 1,905 3,620 1,233 2,450 3,700 5,000 1,234 4,490 940 1,850 2,790 3,750 944 4,90 370 750 1,460 2,220 2,950 7,41,06			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35



Total Resistance (%)		Time (min)								
(rolling + grade)	0.5	1	2	3	4	5	k	р		
0	1,800	3,650					3650	1.0199		
4	1,700	3,400	6,900				3416.6	1.0105		
6	1,240	2,520	5,100				2516.5	1.0201		
8	960	1,950	3,960	5,900			1945.9	1.0152		
10	800	1,620	3,350	5,000	6,700		1627.6	1.0239		
15	500	1,000	2,040	3,050	4,100	5,130	1006	1.0124		

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35



Productivity - Articulated Trucks

Description	725	730	735	740
Chassis Weight (lb)				
Body Weight (lb)				
Standard Liner Weight (lb)				
Operating Weight (Empty) (lb)	50,120	51,220	65,830	72,070
Payload Capacity (cy)				
Struck	14.5	17.1	19.3	23.3
Heaped	18.8	22.1	31.8	30.2
Average	16.65	19.6	25.55	26.75
Maneuver to Load Time (min)	0.7	0.7	0.7	0.7
Maneuver and Dump Time (min)	1.1	1.1	1.1	1.1
Job Efficiency	0.83	0.83	0.83	0.83
Rolling Resistance**	2.5	2.5	2.5	2.5
Altitude Deration Factor	1	1	1	1

**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

Source: Caterpillar Performance Handbook Edition 35

					Downhill Hau	I Truck Speed	I - Grade Reta	rding vs. Eff	ective Grad	e (Grade - F	Rolling Res	istance)	
Weig	ht of Materials					725				730			
Material	lb/cy	Truck (725) Load lb	Truck (730) Load Ib	Loaded Weight (lbs)	20	15	10	5	Weight (lbs)	20	15	10	5
Alluvium	2,900	48,285	56,840	98,405	9	9	13	30	108,060	5	8	13	29
Basalt	3,300	54,945	64,680	105,065	5	9	13	22	115,900	5	8	13	29
Clay - Dry	2,500	41,625	49,000	91,745	9	13	13	30	100,220	8	8	13	29
Granite - broken	2,800	46,620	54,880	96,740	9	13	13	30	106,100	5	8	13	29
Gravel	2,550	42,458	49,980	92,578	9	13	13	30	101,200	8	8	13	29
LS - broken	2,600	43,290	50,960	93,410	9	13	13	30	102,180	8	8	13	29
LS - crushed	2,600	43,290	50,960	93,410	9	13	13	30	102,180	8	8	13	29
Sandstone	2,550	42,458	49,980	92,578	9	13	13	30	101,200	8	8	13	29
Shale	2,100	34,965	41,160	85,085	9	13	22	30	92,380	8	13	13	29
Stone - crushed	2,700	44,955	52,920	95,075	9	13	13	30	104,140	8	8	13	29
Tailings - Coarse (dry, loose sand)	2,400	39,960	47,040	90,080	9	13	13	30	98,260	8	8	13	29
Tailings - Slimes (loose sand & clay)	2,700	44,955	52,920	95,075	9	13	13	30	104,140	8	8	13	29
Topsoil	1,600	26,640	31,360	76,760	9	13	22	30	82,580	8	13	22	35
				Empty	13	13	22	30	Empty	13	13	22	35

		Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)											
Weig	ht of Materials					735					740		
Material	lb/cy	Truck (735) Load lb	Truck (740) Load lb	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	74,095	77,575	139,925	7	9	13	27	149,645	7	9	17	23
Basalt	3,300	84,315	88,275	150,145	7	9	13	27	160,345	7	9	13	23
Clay - Dry	2,500	63,875	66,875	129,705	7	9	13	27	138,945	9	13	17	31
Granite - broken	2,800	71,540	74,900	137,370	7	9	13	27	146,970	7	9	17	23
Gravel	2,550	65,153	68,213	130,983	7	9	13	27	140,283	7	9	17	31
LS - broken	2,600	66,430	69,550	132,260	7	9	13	27	141,620	7	9	17	31
LS - crushed	2,600	66,430	69,550	132,260	7	9	13	27	141,620	7	9	17	31
Sandstone	2,550	65,153	68,213	130,983	7	9	13	27	140,283	7	9	17	31
Shale	2,100	53,655	56,175	119,485	9	9	18	27	128,245	7	13	17	31
Stone - crushed	2,700	68,985	72,225	134,815	7	9	13	27	144,295	7	9	17	23
Tailings - Coarse (dry, loose sand)	2,400	61,320	64,200	127,150	7	9	13	27	136,270	9	13	17	31
Tailings - Slimes (loose sand & clay)	2,700	68,985	72,225	134,815	7	9	13	27	144,295	7	9	17	23
Topsoil	1,600	40,880	42,800	106,710	9	13	18	36	114,870	9	13	17	31
				Empty	13	18	27	42	Empty	17	17	23	31
									•	Source:	Caterpillar Perfo	rmance Handb	ook Edition 35

Productivity - Articulated Trucks (cont.) 725 Travel Time - Uphill Loaded 7000 725 Articulated Truck Travel Time - Uphill Loaded Total Resistance (%) ♦ 0.00% y = 2097.3x^{1.3455} Time (min) (rolling + grade) 5,200 3,200 2,390 2097.3 1329.1 1091.2 1.3455 1.2109 1.0904 2,190 1,400 1,080 ▲ 4.00% y = 1329.1x^{1.2109} 5,000 3,630 6,200 2,850 2,250 1,570 3,850 3,020 2,100 4,820 3,800 2,620 928.59 1.0158 741.09 1.0076 504.55 1.0225 880 729 500 1,850 1,450 380 300 200 ■6.00% y = 1091.2x^{1.0904} ●8.00% y = 928.59x^{1.0158} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ ● 10.00% y = 741.09x^{1.0070} Source: Caterpillar Performance Handbook Edition 35 +15.00% y = 504.55x^{1.02} 725 Travel Time - Uphill Empty 725 Haul Truck Travel Time - Uphill Empty otal Resistance (%) 0.5 (rolling + grade) 5,570 4,700 3,900 3,250 2,740 2,000 2326.3 1999.4 1728 1487.8 2,480 2,070 1,770 1,490 1.3122 1.2616 1.1556 1.0986 680 620 ◆0.00% y = 2326.3x^{1.3122} 6,020 4,970 590 540 6,730 ▲4.00% y = 1999.4x^{1.2616} 1271.2 1.0754 979.82 1.0145 1,270 960 4,200 3,000 5,600 4,000 7,050 5,000 ■6.00% y = 1728x^{1.1556} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ ●8.00% y = 1487.8x^{1.098} Source: Caterpillar Performance Handbook Edition 35 • 10.00% y = 1271.2x1.075 +15.00% y = 979.82x^{1.014} 3 Time (min)

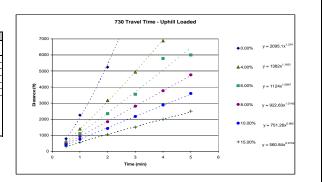
Productivity

Productivity - Articulated Trucks (cont.)

	730 Aı	ticulated Truc	k Travel Time	e - Uphill Loa	aded						
Total Resistance (%)		Time (min)									
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	780	2,250	5,240				2095	1.374			
4	610	1,390	3,170	4,930	6,880		1382	1.1651			
6	540	1,100	2,340	3,550	5,780	6,000	112	1.0847			
8	460	920	1,840	2,810	3,770	4,760	922.63	1.0145			
10	390	750	1,420	2,170	2,880	3,600	751.26	0.965			
15	300	560	1,050	1,500	1,995	2,500	560.84	0.9152			

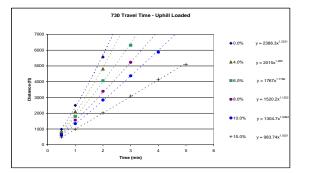
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35



Total Resistance (%)		Time (min)									
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	980	2,500	5,560				2388	1.25621			
4	810	2,100	4,810				2015	1.285			
6	770	1,800	4,060	6,310			1767	1.1766			
8	680	1,560	3,390	5,230	7,070		1520.2	1.1252			
10	595	1,340	2,840	4,370	5,870		1304.7	1.0994			
15	480	980	2,020	3,090	4,150	5,090	983.74	1.0321			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Productivity - Articulated Trucks (cont.)

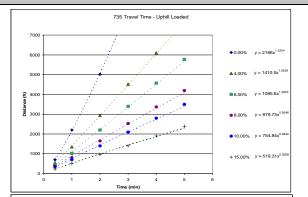
	735 Articulated Truck Travel Time - Uphill Loaded											
Total Resistance (%)		Time (min)										
(rolling + grade)	0.5	1	2	3	4	5	k	р				
0	700	2,200	5,020				2166	1.2254				
4	550	1,350	2,950	4,520	6,100		1410.5	1.0528				
6	450	1,020	2,200	3,400	4,570	5,770	1095.6	1.0223				
8	390	810	1,650	2,530	3,370	4,200	879.73	0.9546				
10	340	700	1,400	2,100	2,800	3,500	754.84	0.9332				
15	230	500	970	1,400	1,900	2,390	519.31	0.9268				

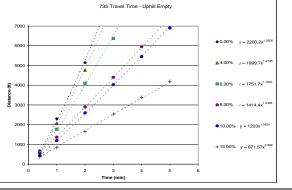
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

1		73	5 Haul Truck T	ravel Time -	Uphill Empty	/					
ſ	Total Resistance (%)		Time (min)								
١	(rolling + grade)	0.5	1	2	3	4	5	k	p		
ı	0	680	2,300	5,140				2200.2	1.2606		
ı	4	610	2,070	4,760				1999.7	1.2795		
ı	6	580	1,770	4,100	6,370			1751.7	1.1953		
ı	8	560	1,370	2,900	4,400	5,950		1414.4	1.0306		
ı	10	440	1,200	2,600	4,030	5,450	6,900	1203	1.0924		
ı	15	370	840	1,660	2,540	3,390	4,200	871.57	0.969		

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35





Productivity - Articulated Trucks (cont.) 740 Travel Time - Uphill Loaded 740 Articulated Truck Travel Time - Uphill Loaded avel Time Time (min) 2 5,500 3,190 2,200 1,650 Total Resistance (%) ◆0.00% y = 2190.6x^{1.3823} 6000 (rolling + grade) 2190.6 1415 1066.4 842.87 2,340 1,390 1,020 800 4,960 3,400 2,560 6,780 4,580 3,400 1.3823 1.1389 1.0438 1.0012 5,700 4,300 ▲4.00% y = 1415x^{1.1385} 500 640 450 1,350 940 2,040 1,400 2,750 1,830 3,410 2,340 686.02 474.86 0.9889 0.9789 290 200 ■6.00% y = 1066.4x^{1.0} ●8.00% y = 842.87x^{1.0} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 2000 • 10.00% y = 686.02x⁰ Source: Caterpillar Performance Handbook Edition 35 740 Travel Time - Uphill Empty 740 Haul Truck Travel Time - Uphill Empty Time (min) (rolling + grade) 2413.6 5,820 ♦ 0.00% / = 2413.6x^{1.3214} 5,820 5,400 4,230 3,400 2,790 1,900 590 560 500 390 2,230 1,840 1,510 1,250 2170.4 1804.5 1541.5 1308.2 1.3372 1.2048 1.1112 1.074 6,630 7,120 5,800 5,250 4,300 ▲4.00% /=2170.4x^{1.337} 900 2,920 3,930 4.930 951.69 1.0146 ■6.00% /= 1804.5x^{1.2048} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 3000 ●8.00% /=1541.5x^{1.1} Source: Caterpillar Performance Handbook Edition 35 +15.00% /=951.69x1.014 Time (min)

Productivity

Productivity - Wheel Loaders

	Wheel Loader Specifications													
Description	924G	928G	950G	966G	972G	972G (2)	980G	988G	988G(2)	990	992G	992G(2)	994D	L2350
Payload Capacity (cy)														
Struck	2.2	2.5	3.46	4.46	4.71	4.71	6.34	6.9	6.9	9.5	13.2	13.2	18	
Heaped	2.7	3.25	4	5.25	5.5	5.5	7.25	8.33	8.33	11.25	16	16	22.5	
Average	2.45	2.875	3.73	4.855	5.105	5.105	6.795	7.615	7.615	10.375	14.6	14.6	20.25	53
Matched Truck	N/A	N/A	N/A	725	730	735	N/A	740	769D	773D	777D	785C	793C	797B
Average Cycle Time (min)	0.45	0.45	0.5	0.5	0.5	0.5	0.55	0.55	0.55	0.55	0.6	0.6	0.6	0.75
Passes to Fill Truck	N/A	N/A	N/A	3	4	5	N/A	4	3	4	5	6	7	5
Altitude Deration Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Operator Efficiency	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Time to Fill Truck	N/A	N/A	N/A	1.5	2	2.5	N/A	2.2	1.65	2.2	3	3.6	4.2	3.75
Rolling Resistance**	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Loader matched to small truck fleet Loader matched to medium truck fleet Loader matched to large truck fleet Loader matched to extra large truck fleet

"A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered 992G (2) - can be used to load 785 with 6 passes

Source: Caterpillar Performance Handbook Edition 35; LeTourneau/actual Chilean mine operating data for L2350.

Wheeled Loaders	General Purpose	Spade Nose- Rock
928G	3.25 cubic yard	not available
966G	5.0 cubic yard	not available
972G	5.5 cubic yard	not available
988G	not available	8.3 cubic yard
992G	not available	16.0 cubic yard

note: capacities are 2:1 heaped, SAE standards

NOTES: Buckets for both Track Excavators and Wheel Loaders are offered by CECo & available for the rental rates quoted. Bucket sizes and capacities obtained from CATERPILLAR PERFORMANCE HANDBOOK, ED 34; Section 12, Wheel Loader and Section 4, Excavators

Bucket capacity and width dictated by material weight and configuration, i.e., shot, loose, tight bank, stockpile, rock, etc. Typical Nevrada applications were used to determine above bucket capacities as related to materials & densities. Job site specific may after specific bucket requirements. (Cashman Equipment, Eko, Nevada - February 21, 2005)

Productivity - Shovels

Shovel Specifications (Komatsu equivalent)								
Description	PC2000	PC3000	PC4000	PC5500	PC8000			
Payload Capacity (cy)								
Struck	10.46	18.84	26.16	33.48	47.09			
Heaped	14.39	25.9	35.97	46.04	64.75			
Average	12.43	22.37	31.07	39.76	55.92			
Matched Truck	740	777D	785C	793C	797B			
Average Cycle Time (min)	0.49	0.49	0.59	0.59	0.69			
Passes to Fill Truck	2.05	2.84	3.38	4.69	5.11			
Altitude Deration Factor	1	1	0.9	1	1			
Operator Efficiency	1	1	1	1	1			
Job Efficiency	0.83	0.83	0.83	0.83	0.83			
Time to Fill Truck	1.68	2.33	3.32	4.61	5.86			
Rolling Resistance**	2.5	2.5	2.5	2.5	2.5			

Shovel matched to small truck fleet Shovel matched to medium truck fleet Shovel matched to large truck fleet



**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered 992G (2) - can be used to load 785 with 6 passes
Source: Caterpillar Performance Handbook Edition 35; Komatsu actual Peruvian mine (Lagunas Norte) operating data for PC4000.

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Productivity - Motor Graders

14G/H 9.25 14 8.5 3 9.5 6.25 33,000 1 0 3 1.5	10.08 16 9.75 3 9.5 6.25	14.04 16 12.83 3 9.5 6.25
14 8.5 3 9.5 6.25 33,000 1 0 3 1.5	16 9.75 3 9.5 6.25 0 33,000 1 0	16 12.83 3 9.5 6.25 33,000 1 0 3
8.5 3 9.5 6.25 33,000 1 0 3 1.5	9.75 3 9.5 6.25 0 33,000 1 0 3	3 9.5 6.25 33,000 1 0
3 9.5 6.25 33,000 1 0 3	3 9.5 6.25 0 33,000 1 0	3 9.5 6.25 33,000 1 0
9.5 6.25 33,000 1 0 3 1.5	9.5 6.25 0 33,000 1 0	9.5 6.25 33,000 1 0
9.5 6.25 33,000 1 0 3 1.5	9.5 6.25 0 33,000 1 0	9.5 6.25 33,000 1 0
6.25 33,000 1 0 3 1.5	6.25 0 33,000 1 0 3	6.25 33,000 1 0 3
33,000 1 0 3 1.5	0 33,000 1 0 3	33,000 1 0 3
1 0 3 1.5	1 0 3	1 0 3
3 1.5	3	3
3 1.5	3	3
1.5		
	1.5	1.5
- 1		
	1	1
6,574	4 6,574	6,574
0.5	0.5	0.5
1	1	1
0.83	0.83	0.83
	0.5	0.5 0.5 1 1

Productivity - Excavators

Track Excavator Specifications								
Description	312C	320C	325C	330C	345B	365BL	385BL	
Bucket Capacity (cy)	0.68	1.57	2.22	2.22	3	4.6	7.3	
Fill Factor	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
Average Bucket Load (cy)	0.612	1.413	1.998	1.998	2.7	4.14	6.57	
Soil Type	packed earth	hard clay	hard cla					
Job Condition	med-hard	med-hard	med-hard	med-hard	med-hard	med-hard	med-hai	
Cycle Times (minutes) - based on hard clay	/							
Load Bucket	0.07	0.09	0.09	0.09	0.13	0.1	0.19	
Swing Loaded	0.06	0.06	0.06	0.07	0.07	0.09	0.06	
Dump Bucket	0.03	0.03	0.04	0.04	0.02	0.04	0.03	
Swing Empty	0.05	0.05	0.06	0.07	0.06	0.07	0.07	
Total Cycle Time	0.21	0.23	0.25	0.27	0.28	0.3	0.35	
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83	0.83	
Operator Efficiency	1	1	1	1	1	1	1	
Altitude Deration Factor	1	1	1	1	1	1	1	
Corrected Productivity (LCY/hr)	145	306	398	369	480	687	935	
Exploration Road Cycle Time (1) (min)	N/A	0.38	0.4	N/A	0.42	N/A	N/A	
Exploration Road Corr Prod (LCY/hr)	N/A	185	249	N/A	320	N/A	N/A	
Track Width (ft)	8.17	9.17	9.83	10.5	11.42	11.5	11.5	
Ditch/Trench Excavation								
Bucket Capacity (cy)	0.42	0.58	0.88	0.89	2.09	3.27	2.75	
Fill Factor	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Corrected Productivity (LCY/hr)	50	63	88	82	186	271	196	

Source: Caterpillar Performance Handbook Edition 35

Track Excavators	Hvy Duty Rock	Extreme Service Exc (e.g. haulroad recontour)	Hvy Duty Trench
312C	30", 0.68 cubic yd	47", 0.94 cubic yd	22", .42 cubic yd
320C	30", 0.90 cubic yd	55.1", 1.57 cubic yd	23.6", .58 cubic yd
325C	36", 1.25 cubic yd	60", 2.22 cubic yd	30", .88 cubic yd
330C	36", 1.25 cubic yd	60", 2.22 cubic yd	30", .89 cubic yd
345B	43.2", 1.69 cubic yd	65", 3.0 cubic yd	48*, 2.09 cubic yd
365BL	60", 3.25 cubic yd	82", 4.6 cubic yd	59", 3.27 cubic yd
385BL	85", 6.30 cubic yd.	96.0, 7.30 cubic yd	57*, 2.75 cubic yd

Note: capacities are 2:1 heaped, SAE standards NOTES: Buckets for both Track Excavators and Wheel Loaders are offered by CECo &

available for the rental rates quoted. Bucket sizes and capacities obtained from CATERPILLAR PERFORMANCE HANDBOOK, ED 54, Section 12, Wheel Loader and Section 4, Excavators Sucket capacity and with distated by material weight and conjugration, ie, shot, loose, sight bank, stodople, rock, etc. "Typical Nevada applications were used to determine above bucket capacities are latefact or materials of certains." So the specifics may after specific bucket requirements (Cashman Equipment, Elko, Nevada - February 21, 2005)

1) Exploration cycle time assumes feathering/smoothing performed by excavator

Concrete Breaking Production

Track Excavator w/Hammer Specifications							
Description	325C	345B	385BL				
Hydraulic Hammer	H120D s	H160D s	H180D s				
Material	reinforced concrete						
Min Shift Production (yd3/8hr)	160	300	350				
Max Shift Production (yd3/8hr)	300	850	1,550				
Avg Shift Production (8hr)	230	575	950				
Job Efficiency	0.83	0.83	0.83				
Altitude Deration Factor	1	1	1				

Source: Caterpillar Performance Handbook Edition 35

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Drill Hole Plugging Productivity

Description	Drill Rig	Pump Rig	
Move-to-hole, set-up, tear-down (1)	2	2	
Trip in tremmie pipe (1)	500		
Pulling casing (threaded, not cemented)	200		
Single-pass perforating (water wells)	Productivity(all p	Passes	
4	60	4	
6	60	4	
8	50	4	
12	45	6	
18	40	9	
24	28	12	
Perforation setup,trip in/out,tear-down	2		
Perforation tool cost (wear cost) ⁽³⁾	2.5		
Inert Material Placement (backfill)			
Grouting/Cement (4) (cy/hr)		5.33	
Cuttings (see below) (cy/hr)		3.5	

Drillers daily logs from Newmont, Barrick, New West Gold, Agnico Eagle, iss:
 Idaho General Mines Inc.
 Drillers daily logs from Newmont, Barrick, Target Minerals
 Drillers daily logs from Newmont, 4. WDC Exploration, Dec 2005

Source: WDC Exploration, Dec 2005

Cuttings Placement Productivity
Shift productivity (Means 02210-7000120; Crew B11M)
Shift length
Estimated Hourly Productivity 28 cy / shift hours cy / hour

Productivity

			Elevation			
	0-760 m	760-1500 m	1500-2300 m	2300-3000 m	3000-3800 m	3800-4600 m
	(0-2500')	(2500-5000')	(5000-7000')	(7500-10,000')	(10,000-12,000')	(12,500-15,000')
MODEL	CAT Us	ser CAT User	CAT User	CAT User	CAT User	CAT User
ulldozers D6R	100	100	100	100	92	84
D6R w/ Winch	100	100	100	100	92	84
D7R	100	100	100	100	100	96
D8R	100	100	100	93	85	96 77
D9R	100	100	100	93	85	77
D10R	100	100	100	100	97	89
D11R	100	100	100	93	85	77
/heeled Dozers	100	100	100	93	85	11
824G	100	100	100	100	92	84
834G	100	100	100	100	92	84
844	100	100	100	100	100	96
854G	100	100	100	93	85	77
raders	100	100	100	93	83	"
120H	100	100	100	100	96	93
14G/H	100	100	100	100	98	96
16G/H	100	100	100	100	98	96
24M	100	100	100	100	98	96
	100	100	100	100	96	96
xcavators	100	100	100	83	78	73
312C 320C						
325C	100	100	90	87	83	76
	100	100	100	100	100	100
330C	100	100	100		100	100
345B	100	100	100	100	93	93
365BL	100	100	100	86	86	86
385BL	100	100	100	93	85	78
crapers 631G						
	100	100	100	100	97	90
637G	100	100	100	95	87	80
oaders						
924G	100	100	100	100	97	89
928G	100	100	100	100	92	85
950G	100	100	100	100	100	100
966G	100	100	100	100	96	88
972G	100	100	92	84	77	70
980G	100	100	100	100	96	88
988G	100	100	100	95	85	75
990	100	100	100	100	92	85
992G	100	100	100	100	93	87
994D	100	100	100	100	96	88
L2350	100	100	100	100	96	90
hovels						
PC2000	100	100	100	100	96	90
PC3000	100	100	100	100	96	90
PC4000	100	100	100	100	96	90
PC5500	100	100	100	100	96	90
PC8000	100	100	100	100	96	90
ther Equipment			<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u> </u>
420D 4WD Backhoe	99	97	95	91	91	91
428D 4WD Backhoe	99	97	95	91	91	91
CS533E Vibratory Roller	100	100	98	95	91	86
CS633E Vibratory Roller	100	100	100	100	91	86
CP533E Sheepsfoot Compactor	100	100	98	95	91	100
CP633E Sheepsfoot Compactor	100	100	100	100	91	86
Light Truck - 1.5 Ton	100	100	100		Ü.	50
Supervisor's Truck						
Flatbed Truck						
Air Compressor + tools						
Welding Equipment						
Heavy Duty Drill Rig						
Pump (plugging) Drill Rig						
Concrete Pump						
Gas Engine Vibrator						
Generator 5KW						
HDEP Welder (pipe or liner)						
5 Ton Crane						
20 Ton Crane						
50 Ton Crane						
120 Ton Crane						
rucks						
725	100	100	100	100	100	95
730	100	100		100	100	95 95
730 735	100	100	100	100	100	95 91
740	100	100	100	100	99	91
769D	100	100	100	93	88	82
773E	100	100	100	100	93	85
777D	100	100	100	100	93	87
785C	100	100	100	93	86	80
793C	100	100	100	100	100	93
797B	100	100	100	100	100	93
613E (5,000 gal) Water Wagon	100	100	100	100	95	87
	100	100	100	100	97	90
621E (8,000 gal) Water Wagon						
621E (8,000 gal) Water Wagon 777D Water Truck	100	100	100	100		
621E (8,000 gal) Water Wagon 777D Water Truck 785C Water Truck	100 100	100 100	100	100 93	93 86	87 80

tes:
User entered deration value will override values from CAT Performance Handbook, except L2350 Loader: data from actual mine performance in Chile.
Komatsu altitude deration assumed from LeTourneau L2350

Closure Cost Estimate Seed Mixture

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1 Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

eed Mixture		ISnaciae Number of	Charles 0/ : 1			
Common Nama	Colontific Name	Species Number of	Species % in Mix	DI C/aana	C	C
Common Name	Scientific Name	Seeds / Ib	IVIIX	PLS/acre	Cost/Lb	Cost/Acre
		Grasses				
Indian ricegrass	Achnatherum hymenoides		14.16	1.30		
Plains lovegrass	Eragrostis intermedia		0.44	0.04		
NM feathergrass	Hesperostipa newmexicana		5.45	0.50		
Sideoats grama	Bouteloua curtipendula		11.98	1.10		
Blue grama	Bouteloua gracilis		2.72	0.25		
Cane beardgrass	Bothriochloa barbinodis		2.18	0.20		
Galleta	Pleuraphis jamesii		11.98	1.10		
Green sprangletop	Leptochloa dubia		2.18	0.20		
Plains bristlegrass	Seteria vulpiseta		3.27	0.30		
Sand dropseed	Sporobolus cryptandrus		0.44	0.04		
		Forbs				
White prairie clover	Dale candida c		4.36	0.40		
Blue flax	Linum lewisii c		3.81	0.35		
Prairie coneflower	Ratibida colomnifera c		1.09	0.10		
Desert globemallow	Sphaeralcea ambugua c		4.36	0.40		
		Shrubs				
Four-wing saltbush	Atriplex canescens	Siliubs	19.06	1.75		
Rubber rabbitbrush	Ericamerica intermedia c		3.81	0.35		
Apache plume	Fallugia paradoxa c		1.09	0.35		
Winterfat	Krascheninnikovia lanata		7.63			
vvinterfat	rascneninnikovia ianata		7.03	0.70		
	Total			\$9.18		\$0

			•
Total		\$9.18	\$0.00
Source:			
Notes:			

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2021

File Name: Att 1_Cost 20200820_SRCE_Version_1_4_1_017b_NV_2020 Exploration Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 1.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Seed Mix Cost Quotes



TO: Feliz Toprak, Mining Consultant, SRK Consulting, Inc.

CC: Jeff Smith, Chief Operating Officer, NMCC

FROM: Katie Emmer, Permitting & Environmental Compliance Manager, NMCC

DATE: 20 March 2018

SUBJECT: Seed Mix Quotes – Average cost \$175.00/acre PLS

The purpose of this memorandum is to summarize research into seed mix costs for seed mixes identified in the Copper Flat Mine Operation & Reclamation Plan (MORP) and to present the estimated cost of pure live seed (PLS) per acre.

The MORP calls for a specific seed mix and rate of application for interim and final reclamation:

Table E7: Interim and Final Reclamation Seed Mixes

		PL	PLS/ac1		
Scientific Name	Common Name	Interim	Final		
Grasses – Warm Season					
Bothriochloa barbinodis	Cane bluestem	0.15	0.20		
Bouteloua curtipendula	Sideoats grama	1.00	1.10		
Bouteloua gracilis	Blue grama	0.20	0.25		
Pleuraphis jamesii	Galleta	0.75	1.10		
Leptochloa dubia	Green sprangletop	0.15	0.20		
Seteria vulpiseta	Plains bristlegrass	0.20	0.30		
Sporobolus cryptandrus	Sand dropseed	0.03	0.04		
Grasses – Cool, Intermediate	Season				
Achnatherum hymenoides	Indian ricegrass	0.60	1.30		
Eragrostis intermedia	Plains lovegrass	0.05	0.04		
Hesperostipa newmexicana	NM feathergrass	0.70	0.50		
Shrubs	•		- -		
Atriplex canescens	Four-wing saltbush	0.30	1.75		
Ericamerica nauseosus	Rubber rabbitbrush	0.10	0.35		
Fallugia paradoxa	Apache plume		0.10		
Krascheninnikovia lanata	Winterfat	0.15	0.70		
Forbs		*	·		
Dalea candida	White prairie clover	0.10	0.40		
Linum lewisii	Blue flax	0.15	0.35		
Ratibida colomnifera	Prairie coneflower		0.10		
Sphaeralcea ambigua	Desert globemallow	0.10	0.40		
	Total	4.73	9.18		

Notes:

1-Rate is in pounds of pure live seed (PLS) per acre; Substitutions may change seeding rates.

In the week of 12 March 2018, I requested recommendations for seed mix suppliers from knowledgeable personnel at the Bureau of Land Management (BLM) Las Cruces office and Golder & Associates.

Emily Clark, Soil Scientist at Golder, indicated that they commonly work with Granite Seed. Shannon Gentry, Rangeland Management Specialist, suggested Bamert Seed, Granite Seed, and Curtis & Curtis Seed companies. Based on these recommendations, I contacted all three companies and provided MORP Table E7 and requested quotes on PLS/acre that would be certified weed free at the final reclamation rate. I instructed each company that comparable seed substitutions could be made based on availability. Quotes for PLS/acre were received from each company and are presented in the table below.

Seed Mix Quotes for MORP Table E7, Final Rate, March 2018

Company	Date	Price quote PLS/acre	Notes
Curtis & Curtis, Inc.	15 March 2018	\$174.72	Low acreage Quote attached
Curtis & Curtis, Inc.	15 March 2018	\$163.79	100 acres+ Quote attached
Granite Seed	15 March 2018	\$186.50	Quote attached
Bamert Seed	16 March 2018	\$750.00	Quote via email, attached.

In further correspondence with Bamert, the supplier speculated the quote could be decreased "as much as 2/3rds" if strategic substitutions of similar seeds were made based on availability. If the Bamert quote was decreased by 67%, it would be about \$247.50/acre. Based on the difference in price from the other two suppliers, I conclude this quote is an outlier that is based on differing assumptions from those communicated in the quote request and have not included it in our estimated average seed mix cost.

Based on these quotes, attached, I conclude the average cost of PLS that would meet MORP requirements for final seed rates shown in Table E7 would be \$175.00 per acre.

Attachements:

Curtis & Curtis, Inc. Quote Granite Seed Quote Bamert Seed Quote (via email)

CURTIS & CURTIS, INC.

4500 North Prince, Clovis, New Mexico 88101 PH: 575-762-4759 FAX: 575-763-4213

Irrigated Pasture Grasses Mountain Pasture Grasses Native Pasture Grasses

Yard and Playground Grasses Golf Course Grasses Alfalfa/Clovers

PRICE QUOTATION

TO: Themac Resources DATE: March 15, 2018 ATTENTION: Katie Emmer SALESPERSON: Tyler Stuemky PHONE: 505-400-7925 SHIPPING DATE: As Directed EMAIL: kemmer@themacresourcesgroup.com FOB: Clovis PROJECT: Sierra County Mine Reclamation TERMS: 30 Days Net

DESCRIPTION PRICE AMOUNT

\$174.72/Acre (Low Acreage) Custom Seed Mix:

\$163.79/Acre (100 Acres+)

COMMON NAME	BOTANICAL NAME	PLS/ACRE
Cane Bluestem	Bouteloua dactyloides	0.20
Sub. Buffalograss		
Sideoats Grama	Bouteloua curtipendula	1.10
Blue Grama	Bouteloua gracilis	0.25
Galleta Grass	Pleuraphis jamesii	1.10
Green Sprangletop	Leptochloa dubia	0.20
Plains Bristlegrass	Setaria vulpiseta	0.30
Sand Dropseed	Sporobolus cryptandrus	0.04
Indian Ricegrass	Oryzopsis hymenoides	1.30
Plains Lovegrass	Eragrostis trichodes	0.04
Sand Lovegrass		
NM Feathergrass	Hesperostipa comata	0.50
Needle and Thread		
Four-Wing Saltbush	Atriplex canescens	1.75
Rubber Rabbitbrush	Ericameria nauseosa	0.35
Apache Plume	Rhus trilobata	0.10
Sub. Three-Leaf Sumac		
Winterfat	Krascheninnikovia lanata	0.70
White Prairie Clover	Dalea purpurea	0.40
Sub. Purple Prairie Clover		
Blue Flax	Linum lewisii	0.35
Prairie Coneflower	Ratibida columnifera	0.10
Desert Globemallow	Sphaeralcea ambigua	0.40

***THIS QUOTE IS GOOD FOR 10 DAYS**

ALL PRICES SUBJECT TO AVAILABILITY**SUBJECT TO BEING UNSOLD

Here is our quotation on the goods named, subject to the conditions noted:

The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors are subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for prorata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production. Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein, which may appear on Purchaser's formal order will not be binding on the Seller.

QUOTE

tren@graniteseed.com Phone: (801) 768-4422 Fax: (801) 701-9413



Tren Hagman 1697 West 2100 North Lehi, UT 84043

Date: March 15, 2018

To: Katie Emmer

Company: Themac Resources

From: Tren Hagman

Re: Seed Quote

Katie,

We can provide the mix below for \$186.50/acre

Species	PLS lbs./acre
Cane beardgrass (Bothriochloa barbinodis)	0.20
Sideoats grama (Bouteloua curtipendula)	1.10
Blue grama (Bouteloua gracilis)	0.25
Galleta grass (Pleuraphis jamesii)	1.10
Green sprangletop (Leptochloa dubia)	0.20
Plains bristlegrass (Setaria vulpiseta)	0.30
Sand dropseed (Sporobolus cryptandrus)	0.04
Indian ricegrass (Achnatherum hymenoides)	1.30
Fourwing saltbush (Atriplex canescens)	1.75
Rubber rabbitbrush (Ericameria nauseosa)	0.35
Apache plume (Fallugia paradoxa)	0.10
Winterfat (Krascheninnikovia lanata)	0.70
White prairie clover (Dalea candida)	0.40
Blue flax (Linum perenne)	0.35
Prairie coneflower (Ratibida columnifera)	0.10
Desert globemallow (Sphaeralcea ambigua)	0.40
Toal:	8.64

If you have any questions, please contact me at the number above or by email $\underline{\text{tren}@\text{qraniteseed.com}}$.

Thanks

Katie Emmer

From: Colby Scroggins <cscroggins@bamertseed.com>

Sent: Friday, March 16, 2018 12:18 PM

To: Katie Emmer
Subject: RE: Seed mix quote

Katie,

I would estimate that the attached blend may be near \$750 per acre.

Please let me know if I may be of help in the future!

Have a great day,

Colby F. Scroggins

Reclamation Specialist

cscroagins@BarnertSeed.com

Office | 800.262.9892 Fax | 888.378.0419 www.BamertSeed.com





Sign Up for Our Newsletter!

From: Katie Emmer [mailto:kemmer@themacresourcesgroup.com]

Sent: Wednesday, March 14, 2018 4:25 PM

To: Colby Scroggins cscroggins@bamertseed.com>

Subject: Seed mix quote

Here's the seed mix I'm looking at, see attached.

Katie Emmer | Permitting & Environmental Compliance Manager

M: +1 505.400.7925| F: +1 505.881.4616

A: 4253 Montgomery Blvd. NE, Suite 130, Albuquerque, NM 87109

W: themacresourcesgroup.com | E: kemmer@themacresourcesgroup.com



Attachment 2

Cost Estimate for Reclamation of Disturbance at the End of Mine Operations

Enter Data Below in Green and Blue Spaces

STANDARDIZED RECLAMATION COST ESTIMATOR

Version 1.4.1 Build 017b (Revised 16 May 2019)

Approved for use in Nevada, August 1, 2012

COST DATA FILE INFORMATIO	N .
File Name:	Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Cost Data File:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Data Date:	January 6, 2021
Cost Data Basis:	User Data Cost Units: Imperial
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H
PROJECT INFORMATION	
Property/Mine Name:	Foothill Dolomite Mine Property Code: N/A
Project Name:	Foothill Dolomite Mine
Date of Submittal:	01/18/2020 Average Altitude: 4865 ft.
Select One:	○ Notice or Sm Exploration Plan ○ Lg Exploration Plan ○ Mine Operation
Select One:	Private Land Public or Public/Private
Cost Estimate Type:	Surety
Cost Basis Category:	American Magnesium - Option 1 Revised
Cost Basis Description:	American Magnesium - Foothill Dolomite Mine - Northern Nevada Equipment

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Closure Cost Estimate Cost Summary

Project Name: Foothill Dolomite Mine Project Date: 01/18/2020 Model Version: Version 1.4.1 File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

A. Earthwork/Recontouring	Labor (1)	Equipment (2)	Materials	Total
Exploration	\$0	\$0	\$0	\$0 \$0
Exploration Roads & Drill Pads Roads	\$0 \$1,757	\$0 \$5,791	\$0 \$0	\$0 \$7,548
Well Abandonment	\$0	\$0	\$0	\$0
Pits Quarries & Borrow Areas	\$0 \$13,455	\$0 \$44,595	N/A \$0	\$0 \$58,050
Underground Openings	\$0	\$0	\$0	\$0
Process Ponds Heaps	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Waste Rock Dumps	\$0	\$0	\$0	\$0
Landfills Tailings	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Foundation & Buildings Areas	\$34	\$88	\$0	\$122
Yards, Etc. Drainage & Sediment Control	\$1,032	\$3,287	\$0 \$0	\$4,319
Generic Material Hauling	\$0 \$0	\$0 \$0	\$0	\$0 \$0
Other User Costs (from Other User sheet)	\$0	\$0	\$271,364	\$271,364
Other*** Subtotal	\$16,278	\$53,761	\$271,364	\$0 \$341,403
Mob/Demob if included in Other User sheet	\$0	\$0	\$0	\$0
Mob/Demob Mob/Demob	φ0	4 0	\$0	\$0
Subtotal "A"	\$16,278	\$53,761	\$271,364	\$341,403
D. D	(1)	(2)	B4 - 4 2 - 1 -	T.4.1
B. Revegetation/Stabilization	Labor (1)	Equipment (2)	Materials	Total
Exploration Exploration Roads & Drill Pads	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Roads	\$437	\$374	\$19,970	\$20,781
Well Abandonment Pits	\$0	\$0	\$0	N/A \$0
Quarries & Borrow Areas	\$3,266	\$2,800	\$142,942	\$149,008
Underground Openings				N/A
Process Ponds Heaps	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Waste Rock Dumps	\$0	\$0	\$0	\$0
Landfills Tailings	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Foundation & Buildings Areas	\$140	\$120	\$640	\$900
Yards, Etc.	\$280	\$240	\$12,802	\$13,322
Drainage & Sediment Control Generic Material Hauling	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Other User Costs (from Other User sheet)	\$0	\$0	\$0	\$0
Other**	£4.400	\$0.504	\$470.0E4	\$0
Subtotal "B"	\$4,123	\$3,534	\$176,354	\$184,011
C. Detoxification/Water Treatment/Disposal of Wastes**	Labor (1)	Equipment (2)	Materials	Total
Process Ponds/Sludge Heaps				\$0 \$0
Dumps (Waste & Landfill)				\$0
Tailings				\$0 \$0
Surplus Water Disposal				\$0
Surplus Water Disposal Monitoring Miscellaneous				\$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site	\$595	\$1,829	N/A	\$0 \$0 \$0 \$2,424
Surplus Water Disposal Monitoring Miscellaneous	\$595	\$1,829		\$0 \$0 \$0 \$2,424 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0 \$0 \$2,424 \$0 \$2,424 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials				\$0 \$0 \$0 \$2,424 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet)	\$0	\$0	\$0	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C"	\$0 \$0 \$595	\$0 \$0 \$1,829	\$0 \$0	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc.	\$0 \$0 \$595 Labor ⁽¹⁾	\$0 \$0 \$1,829 Equipment ⁽²⁾	\$0 \$0 \$0 Materials	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C"	\$0 \$0 \$595	\$0 \$0 \$1,829	\$0 \$0	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other'* Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal	\$0 \$0 \$595 Labor (1) \$86 \$0 \$4,150	\$1,829 Equipment (2) \$413 \$50 \$7,100	\$0 \$0 Materials	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition	\$0 \$0 \$595 Labor (1) \$86 \$0 \$0 \$41,150	\$0 \$0 \$1,829 Equipment (2) \$413 \$0 \$7,100	\$0 \$0 \$0 Materials \$0 \$0 \$100	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal	\$0 \$0 \$595 Labor (1) \$86 \$0 \$4,150 \$11,116 \$20	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0	\$0 \$0 \$0 \$0 \$0 Materials \$0 \$100 \$100	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$17,314 \$0 \$375
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Installation Culvert Removal Fipe Removal	\$0 \$0 \$595 Labor (1) \$86 \$4,150 \$11,116 \$0 \$204	\$1,829 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0	\$0 \$0 \$0 Materials \$0 \$100	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 \$1,350 \$11,350 \$17,314 \$0 \$375
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal	\$0 \$0 \$595 Labor (1) \$86 \$0 \$4,150 \$11,116 \$204	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0	\$0 \$0 \$0 \$0 \$0 Materials \$0 \$100 \$100	\$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$17,314 \$0 \$375
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other'* Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demotition Equipment Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Powerline Removal Transformer Removal Transformer Removal Tarnsformer Removal Tip-race, Irosk Ininig, gabions	\$0 \$0 \$595 Labor (1) \$86 \$0 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$0 \$0	\$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$1771 \$0	\$0 \$0 \$0 Materials \$0 \$100 \$100 N/A N/A	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,350 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs	\$0 \$595 Labor (1) \$86 \$90 \$4,150 \$11,116 \$204 \$90 \$0 \$0 \$0	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$171 \$0	\$0 \$0 \$0 \$0 \$0 \$100 \$100 \$100 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,1350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other'* Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demotition Equipment Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Powerline Removal Transformer Removal Transformer Removal Tarnsformer Removal Tip-race, Irosk Ininig, gabions	\$0 \$0 \$595 Labor (1) \$86 \$0 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$171 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 Materials \$0 \$100 \$100 N/A N/A	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,350 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Pipe Removal Pipe Removal Powerline Removal Rip-rap, rock liming, gabions Other Misc. Costs Other User Costs (from Other User sheet)	\$0 \$595 Labor (1) \$86 \$90 \$4,150 \$11,116 \$204 \$90 \$0 \$0 \$0	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$171 \$0	\$0 \$0 \$0 \$0 \$0 \$100 \$100 \$100 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,350 \$11,350 \$11,350 \$375 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D"	\$0 \$0 \$595 Labor (1) \$36 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$0 \$15,556	\$1,829 Equipment (2) \$413 \$413 \$0 \$7,100 \$6,198 \$0 \$1771 \$0 \$0 \$13,882	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Sets Other User Sets Other User Sets Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring	\$0 \$0 \$595 Labor (1) \$366 \$0 \$4,150 \$11,116 \$0 \$0 \$0 \$0 \$0 \$0 \$15,556	\$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$1771 \$0 \$0 \$13,882 Equipment (2)	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 N/A N/A N/A \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1 \$1,350 \$11,350 \$117,314 \$0 \$375 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Pipe Removal Transformer Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring	\$0 \$0 \$595 Labor (1) \$86 \$0 \$41,150 \$11,116 \$204 \$0 \$0 \$0 \$0 \$0 \$4,50 \$0 \$0 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$0 \$0 \$0 \$171 \$171 \$171 \$171 \$171 \$1	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Sests Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Sheet) Other User Costs (from Other User sheet)	\$0 \$595 \$595 Labor (1) \$30 \$4,150 \$11,116 \$0 \$0 \$0 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$0 \$12,368 \$0 \$12,368	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$171 \$0 \$0 \$13,882 Equipment (2) \$8,462 \$0 \$0 \$8,462 \$0 \$8,462 \$0 \$0 \$13,882	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Installation Culvert Removal Pipe Removal Pipe Removal Transformer Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring	\$0 \$0 \$595 Labor (1) \$86 \$0 \$41,150 \$11,116 \$204 \$0 \$0 \$0 \$0 \$0 \$4,50 \$0 \$0 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$0 \$0 \$0 \$171 \$171 \$171 \$171 \$171 \$1	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Sests Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Sheet) Other User Costs (from Other User sheet)	\$0 \$595 \$595 Labor (1) \$30 \$4,150 \$11,116 \$0 \$0 \$0 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$0 \$12,368 \$0 \$12,368	\$0 \$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$1717 \$0 \$0 \$0 \$0 \$0 \$13,882 Equipment (2) \$8,462 \$9 \$0 \$0 \$1,462	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$100	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demotition Equipment Removal Fence Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Tip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management	\$0 \$0 \$595 Labor (1) \$366 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$12,368	\$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$7,100 \$0 \$1771 \$0 \$0 \$13,882 Equipment (2) \$8,462 \$0 \$8,462 Equipment (2) \$2,974	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$100 \$100 \$100 \$1,905 \$0 \$1,905	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0 \$10 \$10 \$10 \$10 \$10 \$10 \$10
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Transformer Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management Construction Management	\$0 \$0 \$595 Labor (1) \$86 \$90 \$4,150 \$11,116 \$10 \$204 \$0 \$0 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$12,368	\$1,829 Equipment (2) \$413 \$413 \$0 \$7,100 \$6,198 \$0 \$1717 \$0 \$0 \$1717 \$0 \$1717 \$0 \$13,482 Equipment (2) \$8,462 Equipment (2) \$2,274 \$428	\$0 \$0 \$0 \$0 Materials \$0 \$0 \$100 \$0 N/A N/A \$0 \$0 \$100 Materials \$1,905 Materials \$1,905	\$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demotition Equipment Removal Fence Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Tip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management	\$0 \$0 \$595 Labor (1) \$366 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$12,368	\$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$7,100 \$0 \$1771 \$0 \$0 \$13,882 Equipment (2) \$8,462 \$0 \$8,462 Equipment (2) \$2,974	\$0 \$0 \$0 \$0 \$0 \$0 \$100 \$0 \$0 \$0 \$100 \$100 \$100 \$1,905 \$0 \$1,905	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$2,424 Total \$499 \$0 \$11,350 \$11,350 \$17,314 \$0 \$375 \$0 \$0 \$0 \$0 \$10 \$22,735 \$0 \$0 \$22,735 Total \$23,645
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other" Other User Costs (from Other User sheet) Other User Costs (from Other User sheet) Other User Costs (from Other User sheet)	\$0 \$0 \$595 Labor (1) \$866 \$0 \$4,150 \$11,116 \$1,116 \$204 \$0 \$0 \$0 \$0 \$10 \$10 \$12,368 \$12,368 Labor \$20,671 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30	\$1,829 Equipment (2) \$413 \$413 \$00 \$5,198 \$00 \$1717 \$171 \$171 \$171 \$172 \$13,882 Equipment (2) \$8,462 \$9,974 \$8,462 Equipment (2) \$2,974 \$428 \$20,282 \$0 \$0	\$0 \$0 \$0 \$0 Materials \$0 \$0 \$100 \$0 N/A N/A \$0 \$0 \$100 Materials \$1,905 Materials \$1,905 Materials \$1,905 \$0 \$0 \$1,905	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Pence Installation Culvert Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Tiper Sot kining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other User Costs (from Other User sheet)	\$0 \$0 \$595 \$595 Labor (1) \$366 \$30 \$41,116 \$0 \$204 \$0 \$0 \$0 \$15,556 Labor (1) \$12,368 \$0 \$12,368 \$0 \$12,368	\$1,829 Equipment (2) \$413 \$413 \$50 \$7,100 \$6,198 \$0 \$7,100 \$171 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50	\$0 \$0 \$0 \$0 \$0 Materials \$0 \$0 \$0 \$100 N/A N/A \$1,905 Materials \$1,905 \$0 \$1,905 Materials \$1,905 \$0 \$1,905	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Solis Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demoition Equipment Removal Fence Removal Fence Removal Pence Installation Culvert Removal Pipe Removal Pipe Removal Powerline Removal Transformer Removal Transformer Removal Tip-rap, rock lining, gabions Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management Construction Management Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other" Subtotal "F"	\$0 \$0 \$595 Labor (1) \$86 \$90 \$4,150 \$11,116 \$0 \$204 \$0 \$0 \$0 \$0 \$12,368 Labor (1) \$12,368 Labor (2) \$12,368	\$1,829 Equipment (2) \$413 \$0 \$7,100 \$6,198 \$0 \$0 \$171 \$0 \$0 \$13,882 Equipment (2) \$8,462 \$0 \$8,462 \$23,684 \$23,684	\$0 \$0 \$0 \$0 \$100 \$100 \$0 \$0 \$0 \$100 \$10	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Surplus Water Disposal Monitoring Miscellaneous Solid Waste - On Site Solid Waste - Off Site Hazardous Materials Hydrocarbon Contaminated Soils Other User Costs (from Other User sheet) Other" Subtotal "C" D. Structure, Equipment and Facility Removal, and Misc. Foundation & Buildings Areas Other Demolition Equipment Removal Fence Removal Fence Removal Fence Removal Pipe Removal Pipe Removal Transformer Removal Transformer Removal Rip-rap, rock lining, gabions Other Misc. Costs Other User Costs (from Other User sheet) Other" Subtotal "D" E. Monitoring Reclamation Monitoring and Maintenance Ground and Surface Water Monitoring Other User Costs (from Other User sheet) Subtotal "E" F. Construction Management & Support Construction Management Construction Management Construction Management Construction Support Road Maintenance Other User Costs (from Other User sheet) Other" Other User Costs (from Other User sheet) Other User Costs (from Other User sheet) Other User Costs (from Other User sheet)	\$0 \$0 \$595 Labor (1) \$866 \$0 \$4,150 \$11,116 \$1,116 \$204 \$0 \$0 \$0 \$0 \$10 \$10 \$12,368 \$12,368 Labor \$20,671 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30	\$1,829 Equipment (2) \$413 \$413 \$00 \$5,198 \$00 \$1717 \$171 \$171 \$171 \$172 \$13,882 Equipment (2) \$8,462 \$9,974 \$8,462 Equipment (2) \$2,974 \$428 \$20,282 \$0 \$0	\$0 \$0 \$0 \$0 Materials \$0 \$0 \$100 \$0 N/A N/A \$0 \$0 \$100 Materials \$1,905 Materials \$1,905 Materials \$1,905 \$0 \$0 \$1,905	\$0 \$0 \$0 \$0 \$2,424 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0

 $[\]ensuremath{^{**}}$ Other Operator supplied costs - additional documentation required.

Closure Cost Estimate Cost Summary

Project Name: Foothill Dolomite Mine Project Date: 01/18/2020 Model Version: Version 1.4.1

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Indirect Costs				Include?	Total
Engineering, Design and Construction (ED&C) Plan (7)					\$50,53
2. Contingency (8)					\$50,53
3. Insurance (9)		\$1,142			\$1,14
4. Performance Bond (10)					\$18,95
Contractor Profit (11)					\$63,17
Contract Administration (12)					\$63,17
7. Government Indirect Cost (13)					\$13,26
Subtotal Add-On Costs					\$260,77
Total Indirect Costs as % of Direct Cost					419
GRAND TOTAL					\$892,483
Administrative Cost Rates (%)					
Administrative Cost Rates (%)		Cost Rang	ges for Indirect Co	st Percentages	
Administrative Cost Rates (%)	<=	Cost Rang	ges for Indirect Co	st Percentages	
Administrative Cost Rates (%) 1. Engineering, Design and Construction (ED&C) Plan (7)	<= \$1,000,000	<=			
		<=		>	Small Pla
Engineering, Design and Construction (ED&C) Plan (7)	\$1,000,000	<= \$25,000,000	<= <=	> \$25,000,000	Small Pla
Engineering, Design and Construction (ED&C) Plan (7) Variable Rate Contingency (8)	\$1,000,000 8%	\$25,000,000 6%	<=	\$25,000,000 4%	Small Pla
Engineering, Design and Construction (ED&C) Plan (7) Variable Rate	\$1,000,000 8% <=	\$25,000,000 6% <= \$5,000,000	<= <=	\$25,000,000 4%	Small Pla 09 Small Pla
Engineering, Design and Construction (ED&C) Plan (7) Variable Rate Contingency (8)	\$1,000,000 8% <= \$500,000 10% 1.5%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs	<= <= \$50,000,000 6%	> \$25,000,000 4% > \$50,000,000	Small Pla
Engineering, Design and Construction (ED&C) Plan (7) Variable Rate Contingency (8) Variable Rate Variable Rate Alsond (10)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if	<= <= \$50,000,000	> \$25,000,000 4% > \$50,000,000	Small Pla 09 Small Pla
Engineering, Design and Construction (ED&C) Plan (7) Variable Rate Contingency (8) Variable Rate Insurance (9)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs	<= <= \$50,000,000 6%	> \$25,000,000 4% > \$50,000,000	Small Pla 09 Small Pla
1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9) 4. Bond (10) 5. Contractor Profit (11)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0% 10% <=	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if of the O&M costs	<= <= \$50,000,000 6%	> \$25,000,000 4% > \$50,000,000 4%	Small Pla 09 Small Pla
1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9) 4. Bond (10) 5. Contractor Profit (11) 6. Contract Administration (12)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0% 100 <= \$1,000,000	<pre><= \$25,000,000 6% <= \$5,000,000 85,000,000 of labor costs of the O&M costs if of the O&M costs <= \$25,000,000</pre>	<= <= \$50,000,000 6% O&M costs are >\$100,000	\$25,000,000 4% \$50,000,000 4% \$50,000,000 50,000,000	Small Pla 0% Small Pla
1. Engineering, Design and Construction (ED&C) Plan (7) Variable Rate 2. Contingency (8) Variable Rate 3. Insurance (9) 4. Bond (10) 5. Contractor Profit (11)	\$1,000,000 8% <= \$500,000 10% 1.5% 3.0% 10% <= \$1,000,000 10%	<= \$25,000,000 6% <= \$5,000,000 8% of labor costs of the O&M costs if of the O&M costs	<= \$50,000,000 6% O&M costs are >\$100,000	> \$25,000,000 4% > \$50,000,000 4%	Small I

RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

- RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

 1. Federal construction contracts require Davis-Bacon wage rates for contracts over \$2,000. Wage rate estimates may include base pay, payroll loading,
 2. The reclamation cost estimate must include the estimated plugging cost of at least one drill hole for each active drill rig in the project area. Where the
 3. Miscellaneous items should be itemized on accompanying worksheets.
 4. Fluid management represents the costs of maintaining proper
 5. Handling of hazardous materials includes the cost of decontaminating, neutralizing, disposing, treating and/or isolating all hazardous materials used, produced,
 6. Any mitigation measures required in the Plan of Operations must be included in the reclamation cost estimate. Mitigation may include measures to avoid,
 7. Engineering, design and construction (ED&C) plans are often necessary to provide details on the reclamation needed to contract for the required work. To
 8. A contingency cost is included in the reclamation cost estimation to cover unforeseen cost elements. Calculate the contingency cost as a percentage of the
 9. Insurance premiums are calculated at 1.5% of the total labor costs. Enter the premium amount if liability insurance is not included in the itemized unit costs.
 10. Federal construction contracts exceeding \$100,000 require both a performance and a payment bond (Miller Act, 40 USC 270et seq.). Each bond premium is
 11. For Federal construction contracts, use 10% of estimated 0&M cost for the contractor's promium (D&M) cost. Calculate the contract administration cost as a

- 12. To estimate the contract administration cost, use 6 to 10% of the operational and maintenance (O&M) cost. Calculate the contract administration cost as a 13. Government indirect cost rate is 21% of the contract administration costs.

Closure Cost Estimate Other User

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xism Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xism
Cost Eatimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Ot	Other Cost Items Calculated Elsewhere											
						Total	Material	Labor	Equipment/ Operating			
	Description					Capital	Unit	Unit	Unit		Total	
	(required)	ID Code	Facility Type	Quantity	Units	Cost	Cost	Cost	Cost	Cost Type	Cost	Comments
						\$	\$	\$	\$	(select)	\$	
_ 1	Topdressing Purchase and Hauling		Off Site - Other Load Out I	18,529	1	\$70,658.00				A. Earthwork	\$271,364	
						\$70,658	\$200 706	\$0	sn.		\$271 364	

Notes: Capital cost is lump sum (i.e. not multiplied by the quantity).

Material, Labor and Equipment/Operating costs are unit costs (i.e. multiplied by the quantity).

Note: Assumes 20% discount on purchased soil for bulk discount at \$13.54/cy original Cost

Note: Assumes Capitol Cost as Delivery cost at \$3.50 per mile using an 18 cy dump truck at 19.6 miles for delivery.

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Other User

Closure Cost Estimate Reclamation Quantities

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Data Cost File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Data: User Data

Cost Data Data
Cost Data File: SRCE Cost _data-Am _Mg _Foothill _Dolomite _ Mine _1 _12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Reclamation Quantity Sum	clamation Quantity Summary																
											Unit Costs						
Description	Total Regrade or Haul Volume cy	Total Regrade or Haul Cost \$	Total Cover Volume cy	Cover Placement Cost	Total Growth Media Volume cy	Growth Media Placement Cost \$	Total Surface Area acres	Total Scarify Cost \$	Total Revetation Cost \$	TOTALS \$	Regrade Unit Cost \$/CY	Material Haul or Backfill Unit Cost \$/CY	Cover Unit Cost \$/CY	Growth Media Unit Cost \$/CY	Scarify Unit Cost \$/CY	Area Unit Cost \$/acre	
1 Waste Rock Dumps		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A					
2 Tailings Impoundments		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				i	
3 Heap Leach Pads		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A					
5 Open Pits		\$ -							\$ -	\$ -		N/A					
4 Quarries & Borrow Pits	15,887			\$ -	36,029	\$ 53,016	22.33179063	\$ 2,455			\$0.16	N/A		\$1.47	\$109.93		
6 Roads	88	\$ 364			5,033	\$ 6,816	3.12	\$ 368	\$ 20,781	\$ 28,329	\$4.14	N/A		\$1.35	\$117.95	\$9,079.81	
7 Landfills		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -		N/A				1	
8 Buildings				\$ -		\$ -	0.1					N/A					
9 Yards		\$ -		\$ -	3,227	\$ 4,073	2	\$ 246	\$ 13,322	\$ 17,641		N/A		\$1.26	\$123.00	\$8,820.50	
10 Ponds		\$ -				\$ -			\$ -	\$ -	N/A						
11 Exploration Roads		\$ -				\$ -	2.93	\$ -	\$ -	\$ -		N/A			\$0.00	\$0.00	
12 Exploration Trenches		\$ -							\$ -	\$ -		N/A				1	
13 Diversion Ditches		\$ -							\$ -	\$ -		N/A				1	
14 Sediment Ponds		\$ -				\$ -		\$ -	\$ -	\$ -						1	
15 Generic Haulage/Backfill		\$ -		\$ -		\$ -		\$ -	\$ -	\$ -	N/A						
16 Adit/Decline Backfilling1		\$ -								\$ -	N/A					!	
17 Shaft Backfilling	45.075	\$ -			44.000	A 00.00F	00.40		400 754	\$ -	N/A						
TOTALS	- ,		-	\$ -	44,289		30.48					1					
Average Costs	per CY	\$0.18	per CY		per CY	\$1.44	per acre	\$104.69	\$57.58	\$8,326	per acre						

1 of 1 Reclamation Quantities

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Basis: American Magnesium - Option 1 Revised Cost Estimate Type: Surety

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	\$0
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$0	\$0	\$0	\$0
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Exp	Exploration Drillhole Abandonment - User Input											
	Facility Description		Hole Plugging									
	Description (required)	ID Code	Hole Type (select)	Diameter in	Total Number of Holes	Max Holes Open at One Time	Casing to Remove ft	Average Depth of Hole ⁽¹⁾ ft bgs	Depth to Water ft bgs	(select)		
1	Exploration Boreholes	N/A	Rotary Pre-drill	3.0	86.0	0.0	0.0	100.0	250.0	Grout Only		

1. If core holes are pre-drilled, use length of hole below pre-drilled length
2. If Top Plug is selected, assumes maximum 1/2hr laborer time to place plug and backfill with cuttings/soil (including move-to/set up time).

Note: Exploration Boreholes will be mined out during life of mine and not be present for final reclamation.

1/14/2021

Page 1 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Basis: American Magnesium - Option 1 Revised Cost Estimate Type: Surety

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	\$0
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$0	\$0	\$0	\$0
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Ex	Exploration Trenches - User Input												
Facility Description				Tre	nch Paramet	ers		Backfill			Revegetation		
	Description (required)	ID Code	Trench Length ft	Trench Depth ft	Trench Bottom Width ft	Trench Sideslope Angle degrees	Additional Hrs for Walk-in ⁽¹⁾ hr	Backfill Material (select)	Cut Material Type (select)	Backfilling Fleet (select)	Seed Mix (select)	Mulch (select)	Fertilizer (select)

- Notes:

 1. Include <u>one-way</u> hours necessary to walk equipment in from drop-off point to work area
- 2. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

1/14/2021

Page 2 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	\$0
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$0	\$0	\$0	\$0
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Exp	Exploration Drillhole Abandonment													
	Description (required)	Vol/foot of depth ft3	Hole Plugging Material ⁽¹⁾	Total Grout Volume ⁽²⁾ cy	Total Cuttings Volume	Total Top Seal Volume ^(3,4) Cy	Total Drillhole Abandon. Hours ^(6,7) hrs	Casing Removal Labor Cost ⁽⁵⁾ \$	Casing Removal Equipment Cost \$	Plugging Labor Cost \$	Plugging Equipment Cost \$	Plugging Material Cost \$	Top Seal Material Cost ^(2,3)	Total Cost ^(6,7)
1	Exploration Boreholes	0.050	Cuttings	0.19			3	\$0	\$0	\$0	\$0	\$0	\$0	
				0.19			3	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Notes:

- 1. Assumes grout backfill from bottom of hole to 50' (15.24m) above static water level, up to 10' (3m) from top of hole
- 2. Assumes 25% loss to formation for grout backfill
- 3. If "Top Plug" hole plug method is used, assumes physical plug installed without backfill, grout or cement. Not available option for Nevada projects
 4. Assumes top 20' (6 m) of hole is plugged with cement if "Grout Only", "Backfill + Grout", or "Cement Plug" hole plug method are chosen.
- 5. Assumes that a) casing is not cemented entire length, b) does not include temporary surface casing
- 6. Assumes minimum 1 hr per hole for abandonment (excluding move-to and casing removal)
- 7. Assumes fixed hours per hole for setup & tear-down and moving between holes (see Productivty Sheet) per drill hole (includes rig time if grouting required, labor crew only if cuttings backfill only)

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Page 3 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	
Trench Backfilling Costs	\$0	\$0		
Subtotal Earthworks	\$0	\$0	\$0	
Trench Revegetation Costs	\$0	\$0	\$0	
TOTALS	\$0	\$0	\$0	

Page 4 of 6 Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	\$0
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$0	\$0	\$0	\$0
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

 Exploration Trenches - Backfill/Regrading Costs Productivity = Dozer Productivity x Grade Correction x Density Correction x Operator (0.75) x Material x Visibility x Job Efficiency (0.83)											
Description (required)	Trench Backfill Volume LCY (BCY+30%)	Dozer Push Distance ft	Equipment Productivity yd3/hr	Dozing Material	Density Correction	Backfilling Fleet	Corrected Hourly Productivity yd3/hr	Total Dozer Hours hr	Trench Backfill Labor Cost \$	Trench Backfill Equipment Cost \$	Total Trench Backfill Cost \$
									\$0	\$0	\$0

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Cappraight 2020-1-2009
Page 5 of 6
Exploration

Closure Cost Estimate Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Exploration - Cost Summary				
	Labor	Equipment	Materials	Totals
Hole Abandonment Costs	\$0	\$0	\$0	\$0
Trench Backfilling Costs	\$0	\$0		\$0
Subtotal Earthworks	\$0	\$0	\$0	\$0
Trench Revegetation Costs	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Ехр	Exploration Trenches - Revegetation Costs										
			Revegetation	Revegetation	Revgetation	Total					
	Description	Surface	Labor	Equipment	Material	Revegetation					
	(required)	Area	Cost	Cost	Cost	Cost					
		acres	\$	\$	\$	\$					
			\$0	\$0	\$0	\$0					

Page 6 of 6 Exploration

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

E	Exploration Roads & Pads - User Input You must fill in ALL green cells and relevant blue cells in this section for each road																
	Facility Description					Ph	ysical (1) - N	MANDATORY					User O	verrides		Growth Media	a
	Description (required)	ID Code	Underlying Ground Slope % grade	Ungraded Slope _H:1V	Cut Slope degrees	Road + Drill Pad Length ft	Road Width ft	Number of Drill Pads	Individual Sump Volume cy	Drill Pad Width ft	Drill Pad Length ft	Slope Replacement Percent %	Regrade Volume (if calculated elsewhere) Cy	Disturbed Area (if calculated elsewhere) acres	Growth Media Thickness in	Distance to Growth Media Stockpile ft	Slope from Road to Stockpile % grade
	1 Exploration Roads	N/A	15.0	2.0	66.7	0	12.0	86	0	12.0	10	115%		2.93	12	1,379	15.0

- Notes:

 1. All Physical parameters must be input even if manual overrides for volume or area are used.

 2. Slope replacement refers to the percentage of cut volumn replaced during regrading.

 3. If Slope from facility to borrow source is >20, downfull travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

 4. Sump volume will be applied to all roads on slopes <20%. On slopes >20% pad width (i.e. cut volume) should be adequate to account for sump volume.

 Note: Exploration Roads will be mined out during life of mine and not be present for final reclamation.

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

E	Exploration Roads & Pads - User Input (cont.) You must fill in ALL green cells and relevant blue cells in this section for each road														
			ding	Growth Media						Revegetation					
		Description (required)	Regrade Material Condition (select)	Cut Material Type (select)	Recontouring Equipment Fleet (select)	Additional Hrs for Walk-in ⁽¹⁾	Growth Media Material Type (select)	Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Additional Hrs for Walk-in ⁽¹⁾	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarifying/ Ripping? (select)	Ripping Fleet (select)
	1	Exploration Roads													

- Notes:

 1. Inclue one-way hours necessary to walk equipment in from drop-off point to work area

 2. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

Project Name: Foothill Dolomite Mine - Reclamation Plan

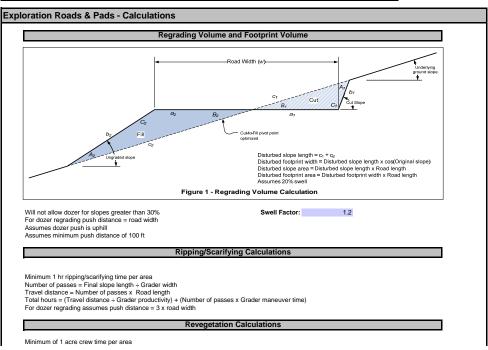
Date of Submittal: 01/18/2020

File Name: Att 2 Cost 20200820 SRCE Version 1 4 1 017b NV 20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0



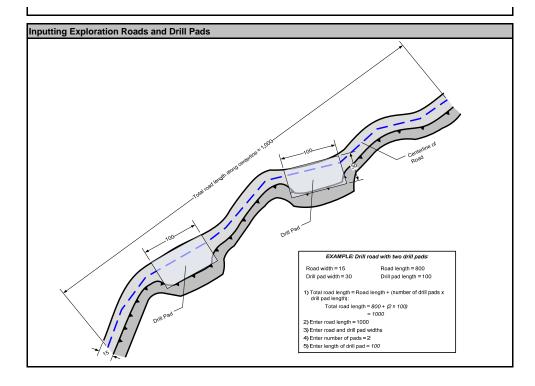
Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0



Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm Model Version: Version 1.4.1

Cost Data: User Data

xploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Expl	oration Roads & Pads - Regrading Costs									
					1	1	Tatal			
	Description	Total Road	Total Drill Pad	Regrading	Recontouring	Equipment	Total Equipment	Total Labor	Total Equipment	Total Regrading
	(required)	Length	Length	Volume	Fleet	Productivity	Hours (1)	Cost	Cost	Cost
		ft	ft	су		cy/hr	hr	\$	\$	\$
1	Exploration Roads	Excess Pads!		0		Material Type!		\$0	\$0	\$0
			860					\$0	\$0	\$0

⁽¹⁾ Includes walk-in time based on distance and travel speed (see Productivity sheet for speeds)

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$0
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Expl	Exploration Roads & Pads - Growth Media Costs												
	Description (required)	Growth Media Volume Cy	Growth Media Replacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$				
1	Exploration Roads	0					\$0	\$0	\$0				
							\$0	\$0	\$0				

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm Model Version: Version 1.4.1

Cost Data: User Data

Exploration Roads & Pads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$0	\$0	N/A	\$1
Subtotal Earthworks	\$0	\$0		\$0
Revegetation Cost	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0

Expl	oration Roads & Pads - Scarifying/Reveget	Exploration Roads & Pads - Scarifying/Revegetation Costs											
			ı										
	Description	Surface	Ripping/ Scarifying	Ripping	Ripping Labor	Ripping Equipment	Total Ripping	Revegetation Labor	Revegetation Equipment	Revgetation Material	Total Revegetation		
	(required)	Area acres	Fleet	Hours hrs	Costs \$	Cost \$	Costs \$	Cost \$	Cost \$	Cost \$	Cost \$		
1	Exploration Roads	2.93						\$0	\$0	\$0	\$0		
		2.93			\$0	\$0	\$0	\$0	\$0	\$0	\$0		

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Roa	ds - User Input				You must fill in A	ALL green cells a	nd relevant blue	cells in this section	on for each road					
	Facility Description				Physical (1) - MANDATORY					User Overrides		Growth Media		
	Description (required)	ID Code	Туре	Underlying Ground Slope % grade	Ungraded Slope _H:1V	Cut Slope degrees	Road Width	Road Length ft	Slope Replacement Percent %	Regrade Volume (if calculated elsewhere) cy	Disturbed Area (if calculated elsewhere) acres	Growth Media Thickness in	Haul Distance from Growth Media Stockpile ft	Slope from Road to Stockpile % grade
1	Access Roads		Haul Road	2.0	3.0	50.0	16.0	1,350	115%		1.50	12.0	1,379	-2%
2	BLM Road Improvements		Access Road	2.0	3.0	50.0	6.0	10,560	115%		1.62	12.0	1,379	-2%

Notes

- 1. All Physical parameters must be input even if manual overrides for volume or area are used.
- 2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)
- 3. Because the work required for building roads with a dozer is similar to that required to regrade a road with a dozer, this sheet could be used to provide a rough estimate of road construction costs if a dozer is selected as the grading fleet.

Note: BLM Road Improvements area override accounts for additional disturbance of road turnouts.

Page 1 of 7

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Road	Roads - User Input (cont.)											
		Haul Road Safety Berms										
	Description (required)	Berm Length ft	Berm Height ft	Berm Base Width ft	Berm Sideslope Angle _H:1V	Number of Berms (2) (1 or 2 sides)						
1	Access Roads	0.0	2.0	6.0	1.3	2						
2	BLM Road Improvements	0.0	2.0	6.0	1.3	2						

⁽²⁾ Enter 1 if berm on only one side of road, 2 if both sides of road are bermed.

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Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Roa	Roads - User Input (cont.) You must fill in ALL green cells and relevant blue cells in this section for each road												
Gra			ding	ding Growth Media			Revegetation						
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	No. of Excavators if grade >30% (select)		Cover Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarifying/ Ripping? (select)	Ripping Fleet (select)
1	Access Roads	1	Alluvium	Sm Dozer		Alluvium	Small Truck		User Mix 1	Straw Mulch	None	Yes	Small Dozer
2	BLM Road Improvements	1	Alluvium	Sm Excavator		Alluvium	Small Truck		User Mix 1	Straw Mulch	None	Yes	Small Dozer

Notes

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

2. If original slope >30% only excavators are allowed.

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Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

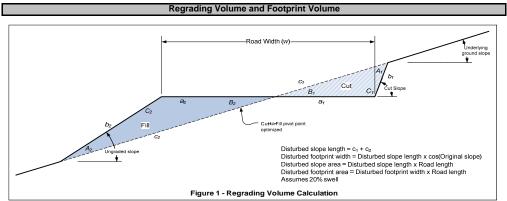
Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

ads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,810
Ripping/Scarifying Cost	\$103	\$265	N/A	\$36
Subtotal Earthworks	\$1,757	\$5,791		\$7,54
Revegetation Cost	\$437	\$374	\$19,970	\$20,78
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Roads - Calculations



Will not allow dozer for slopes greater than 30% For dozer regrading push distance = road width Assumes dozer push is uphill

Assumes dozer push is upnili
Assumes minimum push distance of 100 ft

Ripping/Scarifying Calculations

Minimum 1 hr ripping/scarifying time per area Number of passes = Final slope length + Grader width Travel distance = Number of passes x Road length

Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)

For dozer regrading assumes push distance = 3 x road width

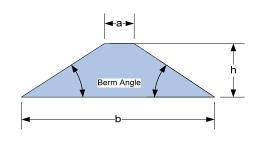
Revegetation Calculations

Minimum of 1 acre crew time per area

Safety Berm Volume Calculation

Cross Sectional Area = $\frac{(a+b)}{2} \times h$

Berm Volume = Berm Length x Cross Sectional Area x No. Sides



Total berm volume doubled if both sides of road are bermed.

If length of berm on each side of road is different, input total length of both berms and input 1 for number of sides

Roads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Road	ds - Regrading Costs							
	Description (required)	Regrading Volume cy	Recontouring Fleet	Fleet Productivity cy/hr	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Regrading Cost \$
	Access Roads	42	D7R	296	1	\$34		\$122
2	BLM Road Improvements	46	325C	398	1	\$72	\$170	\$242
		88			2	\$106	\$258	\$364

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Roads

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Road	ls - Growth Media Costs								
			Growth Media				Total	Total	Total
	Description	Growth Media	Replacement		Number of		Labor	Equipment	Growth Media
	(required)	Volume	Fleet	Fleet Productivity	Trucks/ Scrapers	Total Fleet Hours	Cost	Cost	Cost
		су		LCY/hr			\$	\$	\$
	Access Roads	2,420	725/966G/D7R	548	3	4	\$688	\$2,341	\$3,029
2	BLM Road Improvements	2,613	725/966G/D7R	548	3	5	\$860	\$2,927	\$3,787
		5,033				9	\$1,548	\$5,268	\$6,816

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Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Roads - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$106	\$258	N/A	\$364
Cover Placement Cost	\$1,548	\$5,268	N/A	\$6,816
Ripping/Scarifying Cost	\$103	\$265	N/A	\$368
Subtotal Earthworks	\$1,757	\$5,791		\$7,548
Revegetation Cost	\$437	\$374	\$19,970	\$20,781
TOTALS	\$2,194	\$6,165	\$19,970	\$28,329

Road	ls - Scarifying/Revegetation Costs											
	Description (required)	Total Surface Area acres	Final Slope Length ft	Ripping/ Scarifying Fleet	Ripping Hours hrs	Ripping Labor Costs \$	Ripping Equipment Cost \$	Total Ripping Costs \$	Revegetation Labor Cost \$	Revegetation Equipment Cost \$	Revgetation Material Cost \$	Total Revegetation Cost \$
	Access Roads	1.50	48.0	D7R	1	\$34	\$88	\$122	\$210	\$180		\$9,991
2	BLM Road Improvements	1.62	7.0	D7R	2	\$69	\$177	\$246	\$227	\$194		\$10,790
		3.12			3	\$103	\$265	\$368	\$437	\$374	\$19,970	\$20,781

Page 7 of 7

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47,395	\$142,942	\$207.058

Qua	arries & Borrow Pits - User Input				You must fill in	ALL green o	ells in this sec	ction for each	dump, lift or dun	np category										
	Facility Description														Growth	Media				
	Description (required)	ID Code	Туре	Underlying Ground Slope % Grade	Ungraded Slope _H:1V	Final Slope _H:1V	Final Top Slope % Grade	Bench or Highwall Height ft	Mid-Bench Length ft	Average Flat Area Long Dimension (ripping distance)	Final (Regraded) Footprint acres	Regrade Volume (1) (if calculated elsewhere)	Cover Thickness Slopes in	Cover Thickness Flat Areas in	Distance from Cover Borrow ft	Slope from Dump to Cover Borrow % grade	Slope Growth Media Thickness in	Flat Area Growth Media Thickness in	Distance from Growth Media Stockpile ft	Slope from Dump to Stockpile % grade
1	Main Quarry		Quarry	1.0	2.0	3.0	1.0	20	8,411	1,089	21.75		0.0	0.0	1,379	-2.0	12.0	12.0	1,379	-2.0

- Notes:

 1. All Physical parameters must be input even if manual overrides for volume or area are used.

 2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

Page 1 of 7 Quarries & Borrow Pits

Project Name: Foothill Dolomite Mine - Reclamation Plan

Tole of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data Flie: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm

Cost Bata Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Rock Dumps - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47.395	\$142,942	\$207.058

						_												
Q	uarries & Borrow Pits - User Input (cont.)				You must fill in	n ALL green o	ells and releva	int blue cells i	n this section fo	or each dump,	lift or dump catego	ry						
		Grading Cover Growth Media Revegetation																
	Description	Regrading Material	Regrading Material	Regrading	Slot/Side-by-	Cover Material	Placement Equipment	Growth Media Material	Growth Media Equipment	Seed Mix	Seed Mix Flat	Mulch	Mulch	Fertilizer	Fertilizer	Slope Scarify/	Flat Area Scarify/	Scarify/ Ripping
	(required)	Condition (select)	Type (select)	Equipment Fleet (select)	Side (select)	Type (select)	Fleet (select)	Type (select)	Fleet (select)	Slopes (select)	Areas (select)	Slopes (select)	Flat Areas (select)	Slopes (select)	Flat Areas (select)	Rip? (select)	Rip? (select)	Fleet (select)
	1 Main Quarry	0.8	LS - broken	Small		Alluvium	Small Truck	Alluvium	Small Truck	User Mix 1	User Mix 1	Straw Mulch	Straw Mulch	None	None	Yes	Yes	Small Dozer

Notes:

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

Page 2 of 7 Quarries & Borrow Pits Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

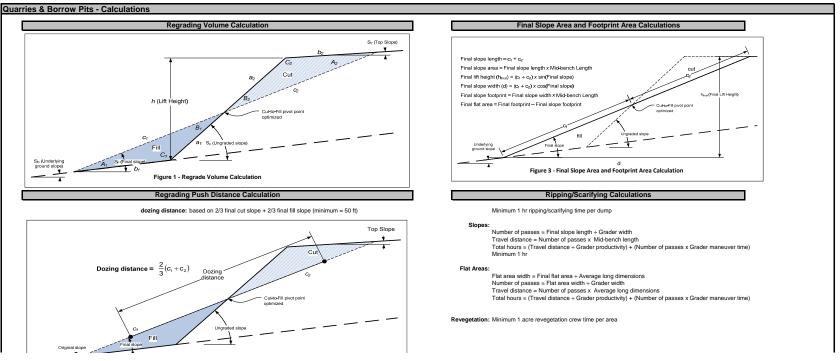
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

aste Rock Dumps - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47,395	\$142,942	\$207.058

Qua	rries & Borrow Pits - User Input (cont.)															
	Facility Description		Hi	ghwall Berms			Berm Coi		Excavate or Doze		Hauling (if selec	ted method	1)		Revegetatio	n
	Description (required)	Berm (or Highwall) Length ft	Berm Height ft	Berm Base Width ft	Berm Sideslope Angle _H:1V	Volume (if calculated elsewhere)	Construction Method (select)		Berm Construction Equipment Fleet (select)	Berm Hauling Fleet (select)	to Borrow Source ft	to Borrow Source % grade	Maximum Fleet Size (user override)	Seed Mix (select)	Mulch (select)	Fertilizer (select)
1	Main Quarry	3.917.0	0.0	0.0	2.0		Haul & Place	Alluvium	Small	Small Truck	1.379	-5.0		User Mix 1	Straw Mulch	None

1. All Physical parameters must be input even if manual overrides for volume or area are used.
2. It Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)
3. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table
Note: Assumes no berm will be required due to regraded 3:1 slopes.



Page 3 of 7 Quarries & Borrow Pits Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

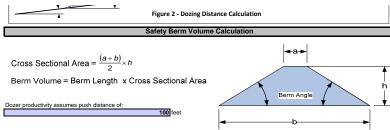
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Waste Rock Dumps - Cost Summary				
Waste Nock Bumps - Cost Gummary	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47,395	\$142,942	\$207,058



Dozer:

Length x (Berm Base Width + Dozer Push Distance) - accounts for disturbance created in borrow area

Excavator

Length x (Berm Base Width + (2 x Excavator Track Width) - accounts for disturbance created in borrow area

Haul & Place

Length x Berm Base Width - if necessary use Yards sheet to account for disturbance created in borrow area

Project Name: Foothill Dolomite Mine - Reclamation Plan

Froject Name: Footning Botoning mine Footning State of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data Flie: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Rock Dumps - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47,395	\$142,942	\$207,058

	uarries & Borrow Pits - Regrading Costs roductivity = Dozer Productivity x Grade Correction x Density Correction x Operator (0.75) x Material x Visibility x Job Efficiency (0.83) x (Slot/Side-by-Side) x (Altitude Deration)														
	Description (required)	Regrading Volume cy	Dozing Distance (see above)	Regrading Fleet	Uncorrected Dozer Productivity cy/hr	Grade Correction	Dozing Material	Density Correction	Side-by-Side or Slot Dozing	Total Hourly Productivity cy/hr	Total Dozer Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Regrading Cost \$	
1	Main Quarry	15,887	50	D7R	1,076	1.6	0.8	0.88	1.0	754	21	\$723	\$1,856	\$2,579	
		15,887									21	\$723	\$1,856	\$2,579	

Page 5 of 7 Quarries & Borrow Pits

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data Flie: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Rock Dumps - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47,395	\$142,942	\$207,058

Quar	rries & Borrow Pits - Cover and Growth Me	dia Costs															
				C	over (lower	layer)							Growth Med	dia Placemer	nt		
Description Cover Cover Replacement Fleet Productivity Scrapers Hours Cost S S S S S S S S S S S S S S S S S S S											Growth Media Replacement Fleet	Fleet Productivity BCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$
1	Main Quarry	0					\$0	\$0	\$0	36,029	725/966G/D7R	513	3	70	\$12,044		\$53,016
							\$0	\$0	\$0	36,029				70	\$12,044	\$40,972	\$53,016

Project Name: Foothill Dolomite Mine - Reclamation Plan

Tole of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data Flie: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Rock Dumps - Cost Summary				
	Labor	Equipment	Materials	Totals
Grading Costs	\$723	\$1,856	N/A	\$2,579
Cover Placement Cost	\$0	\$0	N/A	\$0
Topsoil Placement Cost	\$12,044	\$40,972	N/A	\$53,016
Ripping/Scarifying Cost	\$688	\$1,767	N/A	\$2,455
Safety Berm Construction Cost	\$0	\$0	N/A	\$0
Subtotal Earthwork	\$13,455	\$44,595	\$0	\$58,050
Revegetation Cost	\$3,126	\$2,680	\$142,942	\$148,748
Safety Berm Revegetation Cost	\$140	\$120	\$0	\$260
	\$3,266	\$2,800	\$142,942	\$149,008
TOTALS	\$16,721	\$47.395	\$142,942	\$207.058

Qua	rries & Borrow Pits - Scarifying/Revegetation	on Costs	, ,,,,,	, ,		•										
	Description (required)	Slope Area	Flat Area	Total Surface Area	Final Slope Length	Flat Area Long Dimension	Ripping/ Scarifying Fleet	Slope Scarifying/ Ripping Hours	Flat Area Scarifying/ Ripping Hours	Scarifying/ Ripping Labor Costs	Scarifying/ Ripping Equipment Cost	Total Scarifying/ Ripping Costs	Labor	Revegetation Equipment Cost	Revgetation Material Cost	Total Revegetation Cost
1	Main Quarry	acres 12.36	acres 9.97	acres 22.33	ft 64	ft 1,089	D7R	hrs 11	hrs 9	\$ \$688	\$ \$1,767	\$	\$	\$ \$2,680	\$ \$142,942	\$ \$148,748
		12.36	9.97	22.33	Ì	•	•	11	9	\$688	\$1,767	\$2,455	\$3,126	\$2,680	\$142,942	\$148,748

Notes: 1) Minimum total ripping hours = 1 (i.e. If total ripping hrs (slope + flat) < 1, then one hour of fleet time is assumed, regardless of acres shown in in scarifying table.)

Page 7 of 7 Quarries & Borrow Pits

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: versio

dings & Foundation Demolition Cost Summary				
	Labor	Equipment	Materials	Totals
Building Demolition Cost	\$0	\$0	N/A	\$0
Wall Demolition Cost	\$0	\$0	N/A	\$0
Slab Demolition	\$86	\$413	N/A	\$499
Subtotal Demolition	\$86	\$413	\$0	\$499
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$34	\$88	\$0	\$122
Revegetation Cost	\$140	\$120	\$640	\$900
TOTALS	\$260	\$621	\$640	\$1,521

Buildings & Foundation - User Input					You must fill in	n ALL green cells	and relevant bl	ue cells in this s	section for each	building or facility	,					
Facility Description					Physical -	MANDATORY				Fou	ndation Cove	r (1)	Growth M	Growth Media (1) (entire footprint)		
Description (required)	ID Code	Туре	Length ft	Width ft	Eve Height ft	Slab Thickness	Foundation Wall Thickness in	Foundation Wall Height ft	Average Flat Area Long Dimension (ripping distance) ft	Footprint (including surrounding facilities) acres	Foundation Cover Thickness in	Distance from Foundation Cover Borrow Area ft	Slope from Facility to Borrow Area % grade	Growth Media Thickness in	Distance from Growth Media Stockpile ft	Slope from Facility to Stockpile % grade
1 Concrete slab ford across the arroyo		Other Site Facilities - Sub-Stat	70	16	0	8	0	0	70	0.00	0	1	1.0	12	35	1.0

Notes:

1. Foundation cover only calculated to cover slab. Growth media estimated over entire footprint area

2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

NOTE: Arroy'c concrete slab ford crossing will be broken in place and concrete will be removed and disposed off site.

NOTE: All on site facilities will be mobile equipment and only require demobilization.

Page 1 of 6 Foundations & Buildings

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2020 File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm Model Version: Version 1.4.1

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Buildings & Foundation Demolition Cost Summary				
	Labor	Equipment	Materials	Totals
Building Demolition Cost	\$0	\$0	N/A	\$0
Wall Demolition Cost	\$0	\$0	N/A	\$0
Slab Demolition	\$86		N/A	\$499
Subtotal Demolition	\$86	\$413	\$0	\$499
Cover Placement Cost	\$0	\$0		\$0
Growth Media Placement Cost	\$0	\$0		\$0
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$34	\$88	\$0	\$122
Revegetation Cost	\$140	\$120	\$640	\$900
TOTALS	\$260	\$621	\$640	\$1,521

Вι	uildings & Foundation - User Input (cont.) You must fill in ALL green cells and relevant blue cells in this section for each building or facility															
	Construction Materials Slab Demolition Foundation Cover Growth Media Revegetation															
	Description (required)	Building Type (select)	Foundation Wall Type (select)	Slab Demo Method (select)	Breaking Equipment Fleet (select)	Cover Material Type (select)	Cover Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Growth Media Material Type (select)	Growth Media Placement Equipment Fleet (select)	Maximum Fleet Size (user override)	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Scarify/ Rip? (select)	Ripping Fleet (select)
	1 Concrete slab ford across the arroyo	Sm. concrete	Conc 8 in (200 mm) thick	Break & bury	Sm Excavator	Alluvium	Small Truck		Alluvium	Small Truck		User Mix 1	Straw Mulch	None	Yes	Small Dozer

Notes:

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

Page 2 of 6 Foundations & Buildings

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Buildings & Foundation Demolition Cost Summary				
	Labor	Equipment	Materials	Totals
Building Demolition Cost	\$0	\$0	N/A	\$0
Wall Demolition Cost	\$0	\$0	N/A	\$0
Slab Demolition	\$86	\$413	N/A	\$499
Subtotal Demolition	\$86	\$413	\$0	\$499
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$0	\$0	N/A	\$0
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$34	\$88	\$0	\$122
Revegetation Cost	\$140	\$120	\$640	\$900
TOTALS	\$260	\$621	\$640	\$1 521

Buildings & Foundation - Calculations

Building Volume Calculations

Using Means Heavy Construction Cost Data (2004) calculates cubic feet from building dimensions Estimage slab thickness and wall thickness if not known

Assumes that all concrete slabs are reinforced
Productivity for crew from Means Heavy Construction Cost Data (2004) adjusted for supervision

(addressed in Misc. Costs) and Davis-Bacon Wage Rates

Demolition costs do not include hauling or disposing if debris - Use Waste Disposal module

Slab Demolition Calculations

Minimum 1 hr excavator time for slab demolition

Cover Volume Calculation

Foundation area x cover thickness

If "Bury in Place" is selected as slab demolition method, cover thickness is adjusted such that total cover (cover + growth media) equals value entered in "Minimum thickness of cover over unbroken slab" cell above

Ripping/Scarifying Calculations

Flat area width = Final flat area + Average long dimensions
Number of passes = Flat area width + Grader width
Travel distance = Number of passes x Average long dimensions
Total hours = (Travel distance + Grader productivity) + (Number of passes x Grader maneuver time)

Revegetation

Minimum 1 acre revegetation crew time per area

Page 3 of 6 Foundations & Buildings

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surrety
Cost Basis: American Magnesium - Option 1 Revised

Buildings & Foundation Demolition Cost Summary				
	Labor	Equipment	Materials	Totals
Building Demolition Cost	\$0	\$0	N/A	\$0
Wall Demolition Cost	\$0	\$0	N/A	\$0
Slab Demolition	\$86		N/A	\$499
Subtotal Demolition	\$86	\$413	\$0	\$499
Cover Placement Cost	\$0	\$0		\$0
Growth Media Placement Cost	\$0	\$0		\$0
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$34	\$88	\$0	\$122
Revegetation Cost	\$140	\$120	\$640	\$900
TOTALS	\$260	\$621	\$640	\$1,521

Bui	ilding & Foundation Demolition Costs Uses RS Means Heavy Construction Cost Data for building and wall demolition cost calculations. Uses CAT Handbook for stab breaking production.																		
								Bui	Iding Demo	lition	W	all Demolitio	n	8	Slab Demolition	n		Total Costs	
	Description (required)	Building Footprint (slab area) sqft	Building Volume cu ft	Wall Length ft	Wall Area sq ft	Slab Demolition Fleet	Slab Volume cy	Total Labor Cost \$	Total Equipment Cost \$	Total Building Demolition Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Wall Demolition Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Slab Breaking Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Demolition Costs \$
1	Concrete slab ford across the arroyo	1,120	0	172	0	325C	28	\$0	\$	0 \$0	\$0	\$0	\$0	\$86	\$413	\$499	\$86	\$413	\$499
28 \$0 \$0 \$0 \$0 \$0											\$0	\$86	\$413	\$499	\$86	\$413	\$499		

Page 4 of 6 Foundations & Buildings

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surrety
Cost Basis: American Magnesium - Option 1 Revised

uildings & Foundation Demolition Cost	Summary			
	Labor	Equipment	Materials	Totals
Building Demolition Cost	9	0 \$0	N/A	\$0
Wall Demolition Cost	S	0 \$0	N/A	\$0
Slab Demolition	\$8			\$499
S	ubtotal Demolition \$8	6 \$413	\$0	\$499
Cover Placement Cost	9	0 \$0	N/A	\$0
Growth Media Placement Cost	\$	0 \$0	N/A	\$0
Ripping/Scarifying Cost	\$3	4 \$88	N/A	\$122
Si	ubtotal Earthworks \$3	4 \$88	\$0	\$122
Revegetation Cost	\$14	0 \$120	\$640	\$900
	TOTALS \$26	0 \$621	\$640	\$1.521

Building & Foundation - Foundation Cover and	silding & Foundation - Foundation Cover and Growth Media Costs																		
Foundation Cover Growth Media Total Cover & Growth Media Total Cover & Growth Media Costs																			
Description (required)	Cover Volume	Cover Repacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Cover Cost \$	Growth Media Volume cy	Growth Media Repacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Costs
1 Concrete slab ford across the arroyo						\$	0 \$0	\$(0					\$	50 \$	\$0	\$0	\$0	\$0
·						\$	0 \$0	\$0	0					\$	50 \$	\$0	\$0	\$0	\$0

Closure Cost Estimate Foundations & Buildings

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surrety
Cost Basis: American Magnesium - Option 1 Revised

Buildings & Foundation Demolition Cost Summary				
	Labor	Equipment	Materials	Totals
Building Demolition Cost	\$0	\$0	N/A	\$0
Wall Demolition Cost	\$0	\$0	N/A	\$0
Slab Demolition	\$86		N/A	\$499
Subtotal Demolition	\$86	\$413	\$0	\$499
Cover Placement Cost	\$0	\$0		\$0
Growth Media Placement Cost	\$0	\$0		\$0
Ripping/Scarifying Cost	\$34	\$88	N/A	\$122
Subtotal Earthworks	\$34	\$88	\$0	\$122
Revegetation Cost	\$140	\$120	\$640	\$900
TOTALS	\$260	\$621	\$640	\$1,521

В	Building & Foundation - Scarifying/Revegetation Costs														
		Sca	arifying/Rippi	ng	Revegetation Total Scarify & Re			evegation Co	sts						
	Description (required)	Flat Area acres	Ripping/ Scarifying Fleet	Scarifying/ Ripping Hours hrs	Scarifying/ Ripping Labor Costs \$	Scarifying/ Ripping Equipment Cost \$	Total Scarifying/ Ripping Costs \$	Revegetation Labor Cost \$	Revegetation Equipment Cost \$	Revgetation Material Cost \$	Total Revegetation Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Material Cost \$	Total Costs
	1 Concrete slab ford across the arroyo	0.10	D7R	1	\$34	\$88			\$120	\$640	\$900	\$174	\$208		\$1,022
		0.10		1	\$34	\$88	\$122	\$140	\$120	\$640	\$900	\$174	\$208	\$640	\$1,022

Page 6 of 6 Foundations & Buildings

Closure Cost Estimate Other Demo & Equip Removal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Other Demoltion and Equipment Removal - Cost Summary												
	Labor	Equipment	Materials	Totals								
Other Demolition	\$0	\$0	\$0	\$0								
Equipment Removal	\$4,150	\$7,100	\$100	\$11,350								
TOTALS	\$4,150	\$7,100	\$100	\$11,350								

Othe	Other Demolition											
	Facility Description											
	Description (required)	ID Code	Туре	Quantity	Units	Labor Unit Cost \$	Equipment Unit Cost \$	Material Unit Cost \$	Total Cost \$			
						\$0	\$0	\$0				

Notes:

Closure Cost Estimate Other Demo & Equip Removal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Other Demoltion and Equipment Removal - Cost Summary												
	Labor	Equipment	Materials	Totals								
Other Demolition	\$0	\$0	\$0	\$0								
Equipment Removal	\$4,150	\$7,100	\$100	\$11,350								
TOTALS	\$4,150	\$7,100	\$100	\$11,350								

Equi	Equipment & Material Removal												
	Facility Description												
	Description (required)	ID Code	Туре	Quantity	Units	Labor Unit Cost (\$)	Equipment Unit Cost (\$)	Material Unit Cost (\$)	Total Cost (\$)				
1	Portable 5000 Gallon Mobile Water Tank		Site Facilities - Mobile/Fixed Equips	1	1	\$1,000.00	\$1,000.00	\$0.00	\$2,000				
2	Portable Office Trailer		Site Facilities - Mobile/Fixed Equips	1	1	\$1,000.00	\$1,000.00	\$0.00	\$2,000				
3	Mobile Tracked Crusher		Site Facilities - Mobile/Fixed Equips	1	1	\$2,000.00	\$5,000.00	\$0.00	\$7,000				
4	Portable Sanitation Facilities		Site Facilities - Mobile/Fixed Equips	1	2	\$150.00	\$100.00	\$100.00	\$350				
	<u> </u>			<u> </u>		\$4,150	\$7,100	\$100	\$11,350				

Notes:

1 of 6

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: version: 1.-...

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

ards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$1,032	\$3,287		\$4,319
Revegetation Cost	\$280	\$240	\$12,802	\$13,322
TOTALS	\$1,312	\$3,527	\$12,802	\$17,641

Yar	ds, Etc User Input			You must fill in ALL green cells and relevant blue cells in this section for each building or facility									
	Facility Description	Physical			Cover			Growth Media					
	Description (required)	Туре	Area acres	Average Flat Area Long Dimension (ripping distance)	Regrade Volume (calculated elsewhere)	Cover Thickness in	Distance from Cover Borrow Area ft	Slope from Facility to Borrow Area % grade	Growth Media Thickness in	Distance from Slope from Growth Media Stockpile Stockpile % grade			
1	Laydown Yard		Other Facilities	2.00	400		0	100	1.0	12	100	1.0	

Notes:
1. All Physical parameters must be input even if manual overrides for volume or area are used.
2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

Yards, Etc.

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthw	orks \$1,032	\$3,287		\$4,319
Revegetation Cost	\$280	\$240	\$12,802	\$13,322
TOT	ALS \$1,312	\$3,527	\$12,802	\$17,641

Ya	Yards, Etc User Input (cont.) You must fill in ALL green cells and relevant blue cells in this section for each building or facility														
			Grading			Cover			Growth Medi	а		R	evegetation		
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	Cover Material Type (select)		Maximum Fleet Size (user override)			Maximum Fleet Size (user override)		Mulch (select)	(select)	Scarify/ Rip? (select)	(select)
1	Laydown Yard	1	Alluvium	Small	Alluvium	Small Truck		Alluvium	Small Truck		User Mix 1	Straw Mulch	None	Yes	Small Dozer

2 of 6

Yards, Etc.

Notes:

1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

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Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

ards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$1,032	\$3,287		\$4,319
Revegetation Cost	\$280	\$240	\$12,802	\$13,322
TOTALS	\$1,312	\$3,527	\$12,802	\$17,641

Yards, Etc. - Calculations

Grading Calculations

Average push distance assumed to be 2/3 of the 600 feet maximum from Catepillar Handbook or 400 feet Material assumed to be loose stockile (1.2 productivity factor)

Slope assumed to be 0 to 5% (1.0 productivity factor)

Cover Volume Calculation

Yard area x cover thickness

Ripping/Scarifying Calculations

Flat area width = Final flat area ÷ Average long dimensions

Number of passes = Flat area width + Grader width
Travel distance = Number of passes x Average long dimensions
Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)
Minimum 1 hr ripping/scarifying per area

Revegetation

Minimum 1 acre revegetation crew time per area

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Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary				
	Labor	Equipment	Materials	Totals
Regrading Cost	\$0	\$0	N/A	\$0
Cover Placement Cost	\$0	\$0	N/A	\$0
Growth Media Placement Cost	\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost	\$69	\$177	N/A	\$246
Subtotal Earthworks	\$1,032	\$3,287		\$4,319
Revegetation Cost	\$280	\$240	\$12,802	\$13,322
TOTALS	\$1,312	\$3,527	\$12,802	\$17,641

Yard	Yards, Etc Regrading Costs												
Prod	Productivity = Dozer Productivity x Grade Correction x Density Correction x Operator (0.75) x Material x Visibility x Job Efficiency (0.83) x (Slot/Side-by-Side)												
	Description (required)	Regrading Volume cy	Dozing Distance (see above)	Regrading Fleet	Uncorrected Dozer Productivity cy/hr	Grade Correction	Dozing Material	Density Correction	Total Hourly Productivity cy/hr	Total Dozer Hours hr	Total Labor Cost \$	Total Equipment Cost \$	Total Regrading Cost \$
1	Laydown Yard			D7R							\$0	\$0	\$0
											\$0	\$0	\$0

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

ards, Etc Cost Summary					
		Labor	Equipment	Materials	Totals
Regrading Cost		\$0	\$0	N/A	\$0
Cover Placement Cost		\$0	\$0	N/A	\$0
Growth Media Placement Cost		\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost		\$69	\$177	N/A	\$246
Sul	ototal Earthworks	\$1,032	\$3,287		\$4,319
Revegetation Cost		\$280	\$240	\$12,802	\$13,322
	TOTALS	\$1,312	\$3,527	\$12,802	\$17,641

Yar	Yards, Etc Cover and Growth Media Costs																
	Cover Growth Media																
	Description (required)	Cover Volume cy	Topsoil Repacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Cover Cost \$	Growth Media Volume cy	Growth Media Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost \$	Total Equipment Cost \$	Total Growth Media Cost \$
1	Laydown Yard						\$0	\$0	\$0	3,227	725/966G/D7R	483	2	7	\$963	\$3,110	
							\$0	\$0	\$0	3,227				7	\$963	\$3,110	\$4,073

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Yards, Etc.

6 of 6

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Model Version: Version: 1.4..

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm

Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Yards, Etc Cost Summary					
		Labor	Equipment	Materials	Totals
Regrading Cost		\$0	\$0	N/A	\$0
Cover Placement Cost		\$0	\$0	N/A	\$0
Growth Media Placement Cost		\$963	\$3,110	N/A	\$4,073
Ripping/Scarifying Cost		\$69	\$177	N/A	\$246
	Subtotal Earthworks	\$1,032	\$3,287		\$4,319
Revegetation Cost		\$280	\$240	\$12,802	\$13,322
	TOTALS	\$1,312	\$3,527	\$12,802	\$17,641

Yaı	Yards, Etc Scarifying/Revegetation Costs											
	Description (required)	Surface Area acres	Area Long Dimension ft	Ripping/ Scarifying Fleet	Scarifying/ Ripping Hours hrs	Scarifying/ Ripping Labor Costs \$	Scarifying/ Ripping Equipment Cost \$	Total Scarifying/ Ripping Costs \$	Revegetation Labor Cost \$	\$	Revgetation Material Cost \$	Total Revegetation Cost \$
1	Laydown Yard	2.00	400	D7R	2	\$69	\$177	\$246	\$280	\$240	\$12,802	
		2.00			2	\$69	\$177	\$246	\$280	\$240	\$12,802	\$13,322

Yards, Etc.

Closure Cost Estimate Waste Disposal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary											
	Labor	Equipment	Fees	Totals							
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424							
Solid Waste - Off Site				\$0							
Hazardous Materials				\$0							
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0							
TOTALS	\$595	\$1,829	\$0	\$2,424							

Waste Disposal - User Input - Solid Waste											
		Land	Dumpster								
	Description (required) ID Code Type Method Quantity (select) (select) cy					Distance to Landfill ft	Slope to Landfill % grade	Number of Trucks (user override)	Months Dumpster Rental months		
1	Concrete slab ford across the arroyo		Waste Mgmt & Disposal	Landfill (bulk)	28	210000	0.0	2	0		
2	Cattle Guard		Waste Mgmt & Disposal	Landfill (bulk)	2	210000	0.0	1	0		
3	15 cy of Staged Ore		Waste Mgmt & Disposal	Landfill (bulk)	15	210000	0.0	1	0		

Notes

1. All Physical parameters must be input even if manual overrides for volume or area are used.

2. If Slope from facility to borrow source is >20, downhill travel time may be underestimated due to limitation of uphill travel time curves and downhill speed tables from CAT Handbook (see Productivty Sheet)

Note: SW Solid Waste Authority cost to dispose concrete = \$22.00 per ton. Assumes 56 Tons to dispose of off site.

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Page 1 of 7 Waste Disposal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary										
	Labor	Equipment	Fees	Totals						
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424						
Solid Waste - Off Site				\$0						
Hazardous Materials				\$0						
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0						
TOTALS	\$595	\$1,829	\$0	\$2,424						

	Waste Disposal - User Input - Hazardous Materials											
ŀ						Vacuum			One Way Travel	One Way		
		Description (required)	ID Code	Waste Type (select)	Container Type (select)	Truck Size (select)	Liquid Quantity gallons	Soild Quantity cy	Distance to Disposal Site mi	Travel Time to Disposal Site hr		

Notes:

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Page 2 of 7 Waste Disposal

^{1.} Use Other Demo & Equip Removal Sheet for tank removal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary				
	Labor	Equipment	Fees	Totals
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424
Solid Waste - Off Site				\$0
Hazardous Materials				\$0
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0
TOTALS	\$595	\$1,829	\$0	\$2,424

Waste Disposal - User Input - Hydrocarbon Contaminated Soils										
		1			Travel					
Description		Waste	Disposal		Distance to Offsite					
(required)	ID Code	Type (select)	Method (select)	Quantity	Disposal mi					

Notes:

Page 3 of 7 Waste Disposal

^{1.} Use Yards or Landfills Sheets for bioremediation facility reclamation

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary										
	Labor	Equipment	Fees	Totals						
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424						
Solid Waste - Off Site				\$0						
Hazardous Materials				\$0						
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0						
TOTALS	\$595	\$1,829	\$0	\$2,424						

Waste Disposal - Assumptions & Calculations

Solid Waste Disposal

Off site disposal assumes use of average rolloff dumpster [30 cy (m3), 10 ton (tonne)]

On site disposal assumes use of small loader/truck fleet for haulage

Average density for on site disposal = 2,600 lb/cy (1,540 kg/m3)

For on site disposal only 1 truck is required unless total truck hours > 8, only 2 trucks unless total truck hours are > 16

Hazardous Materials Disposal

Assumes all hazardous materials are known

Enter EITHER solid or liquid quantity each line.

If container type = 55 gallon (200 liter) drum then solid waste hauling costs apply

Average density for solids assumed to be 2,600 lb/cy (1,540 kg/m3)

Vacuum truck sizes: small = 2,200 gal (~8,300 litres), large = 5,000 gal (~19,000 litres)

Vacuum truck on site for 4 hours for each load

Hydrocarbon Contaminated Soils Disposal

Assumes all hazardous materials are known

On site disposal assumes biopad treatment

Exavation productivity =45 cy./hr (35 m3/hr) (Means Heavy Construction, 2006: 02315-424-0360)

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Page 4 of 7 Waste Disposal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary				
	Labor	Equipment	Fees	Totals
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424
Solid Waste - Off Site				\$0
Hazardous Materials				\$0
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0
TOTALS	\$595	\$1,829	\$0	\$2,424

Waste D	Waste Disposal - Solid Waste Disposal											
	Description (required)	Waste Volume cy	Number of Off Site Dumpster Loads	Landfill Fleet Equipment	Landfill Fleet Productivity LCY/hr	Number of Trucks	Total Fleet Hours	Total Dumpster Cost \$	Total Labor Cost \$	Total Equipment Cost \$	Total Waste Disposal Cost \$	
1	Concrete slab ford across the arroyo	28		725/966G/D7R	14	2	2	\$0	\$275	\$889	\$1,164	
	Cattle Guard	2		725/966G/D7R	7	1	1	\$0	\$103	\$303	\$406	
3	15 cy of Staged Ore	15		725/966G/D7R	7	1	2	\$0	\$217	\$637	\$854	
	_	45		•			5	\$0	\$595	\$1,829	\$2,424	

Page 5 of 7 Waste Disposal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary											
	Labor	Equipment	Fees	Totals							
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424							
Solid Waste - Off Site				\$0							
Hazardous Materials				\$0							
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0							
TOTALS	\$595	\$1,829	\$0	\$2,424							

Waste I	Waste Disposal - Hazardous Materials Disposal								
	Description (required)	Liquid Waste Volume gallons	Solid Waste Volume cy	Number of Truck Loads	Tons of Waste Tons	Pick-up Fees \$	Transport Fees \$	Disposal Fees \$	Total Hazardous Material Cost \$
						\$0	\$0	\$0	\$0

Page 6 of 7 Waste Disposal

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal - Cost Summary										
	Labor	Equipment	Fees	Totals						
Solid Waste - On Site	\$595	\$1,829	N/A	\$2,424						
Solid Waste - Off Site				\$0						
Hazardous Materials				\$0						
Hydrocarbon Contaminated Soils	\$0	\$0	\$0	\$0						
TOTALS	\$595	\$1,829	\$0	\$2,424						

Waste I	Waste Disposal - Hydrocarbon Contaminated Soils									
	Description (required)	Quantity cy	Disposal Equipment Fleet	Total Fleet Hours	Treatment Cost \$	Transport Fees \$	Disposal Fees \$	Total Labor Cost \$	Total Equipment Cost \$	Waste Disposal Cost \$
					\$0	\$0	\$0	\$0	\$0	\$0

Page 7 of 7 Waste Disposal

1 of 5

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Miscellaneous Cost Summary				
	Labor	Equipment	Materials	Totals
Fence Removal	\$11,116	\$6,198	N/A	\$17,314
Fence Installation	\$0	\$0	\$0	\$0
Culvert & Buried Pipe Removal	\$204	\$171	N/A	\$375
Surface Pipe Removal	\$0	\$0	N/A	\$0
Power Lines	\$0	N/A	N/A	\$0
Substations/Transformers	\$0	N/A	N/A	\$0
Rip-rap, rock lining, gabions	\$0	\$0	\$0	\$0
Other Costs	\$0	\$0	\$0	\$0
TOTALS	\$11,320	\$6,369	\$0	\$17,689

Fenc	e Removal	You must fill in Al	ALL green and blue cells						
Costs									
	Description Labor Equipment								
	(required)	ID Code	Length	Type	Cost	Cost	Cost		
			ft	(select type)	\$	\$	\$		
1	Main Gate		400	Barbed 5-strand I	\$672	\$356	\$1,028		
2	Main Quarry Perimeter		3920	Barbed 5-strand I	\$6,586	\$3,489	\$10,075		
3	Laydown Yard		600	Chain link 8-10 ft	\$1,002	\$840	\$1,842		
4	Vegetation Reference Area Perimeter	\$2,856	\$1,513	\$4,369					
			<u> </u>		\$11,116	\$6,198	\$17,314		

Notes: Note: Main gate assumes 200 linear feet of fencing on each side of the main gate.

Note: Main Quarry Perimeter assumes the external perimeter of mining phases will be fenced.

Note: Laydown yard assumes 150 feet by 150 feet.

Fenc	e Installation		You must fill in ALL green and blue cells						
		Input		Costs					
	Description (required)	ID Code	Length ft	Type (select type)	Labor Cost \$	Equipment Cost \$	Material Cost (\$)	Total Cost \$	
					\$0	\$0	\$0	\$0	

Notes:

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Miscellaneous Cost Summary				
	Labor	Equipment	Materials	Totals
Fence Removal	\$11,116	\$6,198	N/A	\$17,314
Fence Installation	\$0	\$0	\$0	\$0
Culvert & Buried Pipe Removal	\$204	\$171	N/A	\$375
Surface Pipe Removal	\$0	\$0	N/A	\$0
Power Lines	\$0	N/A	N/A	\$0
Substations/Transformers	\$0	N/A	N/A	\$0
Rip-rap, rock lining, gabions	\$0	\$0	\$0	\$0
Other Costs	\$0	\$0	\$0	\$0
TOTALS	\$11,320	\$6,369	\$0	\$17,689

Culve	ert & Buried Pipe Removal	LL green and blue	cells					
			Costs					
	Description (required)	ID Code	Length ft	Type (select type)	Location (select)	Labor Cost \$	Equipment Cost \$	Total Cost \$
1	Single Culvert Removal #1		16	12 in (300 mm) D	On site	\$68	\$57	\$125
2	Single Culvert Removal #2		16	12 in (300 mm) D	On site	\$68	\$57	\$125
3	Single Culvert Removal #3		16	12 in (300 mm) D	On site	\$68	\$57	\$125
			₹			\$204	\$171	\$375

Notes:

Surfa	ace Pipe Removal	You must fill in ALL green and blue cells						
			Costs					
	Description (required)	ID Code	Length ft	Type (select type)	Location (select)	Labor Cost \$	Equipment Cost \$	Total Cost \$
			·			\$0	\$0	\$0

Notes:

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Miscellaneous Cost Summary					
		Labor	Equipment	Materials	Totals
Fence Removal		\$11,116	\$6,198	N/A	\$17,314
Fence Installation		\$0	\$0	\$0	\$0
Culvert & Buried Pipe Removal		\$204	\$171	N/A	\$375
Surface Pipe Removal		\$0	\$0	N/A	\$0
Power Lines		\$0	N/A	N/A	\$0
Substations/Transformers		\$0	N/A	N/A	\$0
Rip-rap, rock lining, gabions		\$0	\$0	\$0	\$0
Other Costs		\$0	\$0	\$0	\$0
	TOTALS	\$11,320	\$6,369	\$0	\$17,689

Pow	er Line and Substation Removal	You must fill in ALL green and blue cells									
			Input				Costs			Cost Breakdown	
	Description (required)	ID Code	Power Line Length miles	Power Line Type (select)	Number of Substations #	Location (select)	Power Line Removal \$	Substation Removal \$	Total Cost	Labor Cost \$	Equipment Cost \$
							\$0	\$0	\$0	\$0	\$0

Notes: If substation owned by operator, use Other Demo & Equipment Removal sheet
User may need to add line items in Foundations & Buildings for substation slab demolition and fence removal
Labor/Equipment costs assume approximately 80% of cost are equipment and 20% are labor related costs

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3 of 5 Misc. Costs

4 of 5

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Miscellaneous Cost Summary					
		Labor	Equipment	Materials	Totals
Fence Removal		\$11,116	\$6,198	N/A	\$17,314
Fence Installation		\$0	\$0	\$0	\$0
Culvert & Buried Pipe Removal		\$204	\$171	N/A	\$375
Surface Pipe Removal		\$0	\$0	N/A	\$0
Power Lines		\$0	N/A	N/A	\$0
Substations/Transformers		\$0	N/A	N/A	\$0
Rip-rap, rock lining, gabions		\$0	\$0	\$0	\$0
Other Costs		\$0	\$0	\$0	\$0
	TOTALS	\$11,320	\$6,369	\$0	\$17,689

Rip-F	Rap & Rock Lining	LL green and blue	cells					
					Costs			
	Description				Labor	Equipment	Material	Total
	(required)	ID Code	Area	Type	Cost	Cost	Cost	Cost
			S.Y.	(select type)	\$	\$	\$	\$
					\$0	\$0	\$0	\$0

Notes:

5 of 5

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Miscellaneous Cost Summary					
		Labor	Equipment	Materials	Totals
Fence Removal		\$11,116	\$6,198	N/A	\$17,314
Fence Installation		\$0	\$0	\$0	\$0
Culvert & Buried Pipe Removal		\$204	\$171	N/A	\$375
Surface Pipe Removal		\$0	\$0	N/A	\$0
Power Lines		\$0	N/A	N/A	\$0
Substations/Transformers		\$0	N/A	N/A	\$0
Rip-rap, rock lining, gabions		\$0	\$0	\$0	\$0
Other Costs		\$0	\$0	\$0	\$0
	TOTALS	\$11,320	\$6,369	\$0	\$17,689

Misc. Costs

Closure Cost Estimate Monitoring

1 of 2

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: Flie: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Data Tipe: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Reclamation Monitoring & Maintenance - Cost Summary										
	Labor	Equipment	Materials	Totals						
Revegetation Maintenance	\$1,067	\$914	\$1,905	\$3,886						
Erosion Maintenance	\$2,391	\$7,174	N/A	\$9,56						
Reclamation Monitoring	\$8,910	\$374	N/A	\$9,28						
Subtotal Reclamation Monitoring	\$12,368	\$8,462	\$1,905	\$22,73						
Water Quality Monitoring	\$0	\$0	\$0	\$0						
TOTAL MONITORING	\$12,368	\$8,462	\$1,905	\$22,73						

101	TAL WONTORING	\$12,300	\$0,402	\$1,905	\$22,735	i		
Reclamation Maintenance								
Description	Total Revegetation Surface Area (1,2) acres	% Area Requiring Reseeding	Seed Mix (select)	Area Requiring Reseeding acres	Seed \$/acres	Labor \$/acres	Equipment \$/acres	Totals \$
Revegetation Maintenance	30	25%	User Mix 1	7.6	\$250.00	\$140.00	\$120.00	
Labor Equipment Materials Cost/Acre	t						Subtotal	\$1,067 \$914 \$1,905 \$510 \$3,886
 							Jubiotai	Ψ3,000
Notes:	1) Surface area is I	NOT the same as f	rootprint disturbar	nce area typically	y used for permit	ting purposes.		
	Total Volume Growth Media Cy	% Volume Requiring Maintenance	Average Growth Media Placement Cost \$/CY	Volume Requiring Replacement cy		Labor (assume: 25%) \$/acres	Equipment (assume: 75%) \$/acres	Total \$
Erosion Maintenance	44,289	15%	\$1.44	6,643		\$2,391.00	\$7,174.00	\$9,565
Notes:								

Reclamation Monitoring						
Description	Hrs/Day	Days/Year	Number of Years	Rate \$/hr		
Field Work						
Field Geologist/Engineer Range Scientist	8	1	3	\$134.99 \$119.42		\$3,240 \$0
Reporting						
Field Geologist/Engineer Range Scientist	14	1	3	\$134.99 \$119.42	Subtotal	\$5,670 \$0 \$8,91 0
Travel						45,51
	Hrs/Trip hr	Trips/Year	Years	Truck Cost \$/hr		
Travel	4	1	3	\$31.13		\$374
					Subtotal	\$374
					Total Reclamation Monitoring	\$9,284
Notes:		er will travel from rs for reporting an		obilization and	demobilization	

Monitoring

Closure Cost Estimate Monitoring

Project Name: Foothill Dolomite Mine - Reclamation Plan Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Reclamation Monitoring & Maintenance - Cost	Summary			
	Labor	Equipment	Lab & Materials	Totals
Revegetation Maintenance	\$1,067	\$914	\$1,905	\$3,886
Erosion Maintenance	\$2,391	\$7,174	N/A	\$9,565
Reclamation Monitoring	\$8,910	\$374	N/A	\$9,284
Subtotal Reclamation Monitoring	\$12,368	\$8,462	\$1,905	\$22,735
Water Quality Monitoring	\$0	\$0	\$0	\$0
TOTAL MONITORING	\$12,368	\$8,462	\$1,905	\$22,735

Water and Rock Sample A	nalysis														
Description	Samples	Events/Year	No. Years	First Sample Year closure year (1-100)	No. of Samplers	Days/Event	Hrs/Day	Analysis Cost \$/sample	Supplies \$/sample	Lab Cost	Material Cost	Equipment Cost	Labor Cost	Cost \$	Comments
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$0	
														\$U	
														\$0	
														\$0	
														\$0	
														\$0	
										\$0.00	\$0.00	\$0.00	\$0.00		
												Subtotal Sa	mpling Costs	\$0	

2 of 2

Notes: Sampling labor cost = No. Samplers x Years x Events/year x Days/event x Hour/Day x Labor Rate Sampling equipment costs include 1 pickup truck for every two samplers

mp Costs				
Description	No. of units		Years	Cost \$
		Replacement		
ump (purchased)		period (yrs):		
			Subtotal Field	Work
Description	Hrs/Event	Rate	Cost	
		\$/hr	\$	
ield Geologist/Engineer				
ield Geologist/Engineer	Su	ubtotal Reporting		
	Subtes:	ubtotal Reporting		
* *		ubtotal Reporting		
		ubtotal Reporting		
ield Geologist/Engineer		ubtotal Reporting		
		ubtotal Reporting		

Monitoring

Closure Cost Estimate Constr. Mgmt

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Construction Management & Road Maintenance - Cost Summary									
Labor Equipment Materials Totals									
Construction Management	\$20,671	\$2,974	N/A	\$23,645					
Construction Support		\$428		\$428					
Road Maintenance	\$6,516	\$20,282	\$726	\$27,524					
TOTAL CONSTRUCTION MANAGEMENT	\$27,187	\$23,684	\$726	\$51,597					

Construction Manage	ement						
		Constr	uction Manage	ment Staff			
Description	Duration mo.	Hours/ Month hr.	Number of Supervisors	Supervisor Rate \$/hr	Labor Cost \$	Equipment Cost ⁽¹⁾ \$	Totals \$
Active Reclamation Monitoring & Maintenance	1 36	160 2	1	\$89.10 \$89.10	\$14,256 \$6,415	\$2,051 \$923	\$16,307 \$7,338
				Total Staff	\$20,671	\$2,974	\$23,645
Construction Manageme	nt Support						
Description	Duration mo.	Number of Units		Rental Rate \$/mo	Generator Cost \$/mo	Equipment Cost ⁽¹⁾ \$	Totals \$
Temporary Office Rental Temporary Toilets	1	2		\$214		\$0 \$428	\$0 \$428
•	-	•		-	Total Support	\$428	\$428

Notes: Office rental assumes only 1 generator required for every 4 trailers

Total (Construction	Management	9	24,07
i Otai y	CONSTRUCTION	wanayement	•	9 2 4,U1.

Description	Fleet Size (select)	Number	Duration mo.	Hours/ Month hr.	Labor Cost \$	Equipment Cost \$	Totals \$
Active Reclamation							
Water Truck	Small	1	1	80	\$2,753	\$10,546	\$13,299
Grader	Small	1	1	32	\$1,188	\$2,348	\$3,536
Monitoring & Maintena	ance						
Water Truck	Small	1	36	1	\$1,239	\$4,746	\$5,985
Grader	Small	1	36	1	\$1,336	\$2,642	\$3,978
	Gallons/	Days/		Cost/			
Description	Day	Month	Duration	Gallon			Totals
			mo.	\$			\$
Water Fees							
Water Fees	6000	14	1	0.01			\$726
			Total Pro	ject Maintenance	\$6,516	\$20,282	\$27,524

Notes: 1) Supervisor equipment = pickup truck
Note: Assumes water from City of Demning at \$8.64 per 1,000 gallons.

1 of 1 Constr. Mgmt

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Fstimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Cost Estimate Type: Surety	Cost Basis: American Magnesium - Option 1 Revised

Color Code Key	
User Input - Direct Input	Direct Input
User Input - Pull Down List	Pull Down Selection
Program Constant (can override)	Alternate Input
Program Calculated Value	Locked Cell - Formula or Reference

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Ma	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
Total Other Indirects	0.00%		

HOURLY LABOR RATE	TABLE								•	
	IADLE	1				1			1	
EQUIPMENT TYPE (1) OR JOB DESCRIPTION	Labor Group	Base Rate (\$/hr)	Zone Adjustment (\$/hr)	Hourly Wage (\$/hr)	Fringe (\$/hr)	Retirement/ Medicare (\$/hr)	Unemployment Insurance (\$/hr)	Workman's Compensation (\$/hr)	Other Indirect Costs (\$/hr)	Total (\$/hr)
Equipment Operators (hr) (2)									
Bulldozers										
D6R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
D6R w/ Winch		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
D7R D8R		\$28.02	\$0.00 \$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14	\$3.73		\$34.4
D8R D9R		\$28.02 \$28.02	\$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14 \$2.14	\$3.73 \$3.73		\$34.4 \$34.4
D10R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
D11R		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
Wheeled Dozers										
824G										
834G										
844 854G										
						l.				
Motor Graders 120H		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.1
120H 14G/H		\$30.23 \$30.23	\$0.00	\$30.23 \$30.23		\$0.56	\$2.31 \$2.31	\$4.02 \$4.02	\$0.00	\$37.1
16G/H		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.1
24M		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
Track Excavators		•								
312C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
320C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
325C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	\$37.12
330C		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
345B		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02		\$37.12
365BL 385BL		\$30.23 \$30.23	\$0.00 \$0.00	\$30.23 \$30.23		\$0.56 \$0.56	\$2.31 \$2.31	\$4.02 \$4.02	\$0.00 \$0.00	\$37.12 \$37.12
		\$30.23	\$0.00	\$30.23		\$0.56	\$2.31	\$4.02	\$0.00	φ31.12
Scrapers 631G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
637G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
Wheeled Loaders		, , , , , , , , , , , , , , , , , , , ,	******	4		40.0-	*=	*****	40.00	***
924G	1	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
928G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
950G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
966G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
972G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
980G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
988G 990		\$28.02 \$28.02	\$0.00 \$0.00	\$28.02 \$28.02		\$0.52 \$0.52	\$2.14 \$2.14	\$3.73 \$3.73	\$0.00 \$0.00	\$34.4 \$34.4
992G		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
994D		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
L2350		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73		\$34.4
Shovels										
PC2000										
PC3000										
PC4000										
PC5500 PC8000										
Hydraulic Hammers	T									
H-120 (fits 325) H-160 (fits 345)										
H-180 (fits 365/385)	1									
Demolition Shears										
\$340 (fits 322/325/330)										
S365 (fits 330/345)	1									
S390 (fits 365/385)	1									
Demolition Grapples										
G315 (fits 322/325)										
G320 (fits 325/330)										
G330 (fits 345/365)										

1 of 3

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Color Code Key					
User Input - Direct Input	Direct Input				
User Input - Pull Down List	Pull Down Selection				
Program Constant (can override)	Alternate Input				
Program Calculated Value	Locked Cell - Formula or Reference				

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Ma	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
·			
Total Other Indirects	0.00%		

Total Other Indirects	0.00%									
									•	
HOURLY LABOR RAT	E TABLE									
Other Equipment										
420D 4WD Backhoe		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
428D 4WD Backhoe		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
CS533E Vibratory Roller		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
CS633E Vibratory Roller		\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
CP533E Sheepsfoot Compacto	or	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
CP633E Sheepsfoot Compacto	or	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
Light Truck - 1.5 Ton		\$0.00		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.0
Supervisor's Truck		\$0.00		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.0
Flatbed Truck										
Air Compressor + tools		\$27.69	\$0.00	\$27.69		\$0.51	\$2.12	\$3.68	\$0.00	\$34.0
Welding Equipment		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.23
Heavy Duty Drill Rig		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.23
Pump (plugging) Drill Rig		\$27.88	\$0.00	\$27.88		\$0.51	\$2.13	\$3.71	\$0.00	\$34.23
Concrete Pump										
Gas Engine Vibrator		\$14.03	\$0.00	\$14.03		\$0.26	\$1.07	\$1.87	\$0.00	\$17.23
Generator 5KW										
HDEP Welder (pipe or liner)										
5 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.30
20 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.30
50 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.30
120 Ton Crane		\$27.12	\$0.00	\$27.12		\$0.50	\$2.07	\$3.61	\$0.00	\$33.30
(1) Equipment Typ (2) Equipment Operator Source	New Mexico Department of		Public Works Prev	ailing Wage Rates	Type H -					
(1)	is: From Deming									
Truck Drivers (\$/hr) (4			**!		** **	A1	4	AI		
725	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
730	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52 \$0.52	\$2.14	\$3.73	\$0.00 \$0.00	\$34.4
735	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00		\$2.14	\$3.73		\$34.4
740	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
769D	ruck Driver > 25 yds	\$28.02	\$0.00	\$28.02	\$0.00 \$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
773E	1 D : 00 1	\$28.02	\$0.00	\$28.02		\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
777D 785C	ruck Driver > 60 yds	\$28.02	\$0.00	\$28.02	\$0.00 \$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
785C 793C					\$0.00					
797B	T 1 0.500 H	000.00	00.00	800.00	\$0.00	00.50	00.44	80.70	00.00	0011
613E (5,000 gal) Water Wagon		\$28.02 \$28.02	\$0.00 \$0.00	\$28.02	\$0.00	\$0.52 \$0.52	\$2.14 \$2.14	\$3.73	\$0.00 \$0.00	\$34.4
621E (8,000 gal) Water Wagon 777D Water Truck	ter Truck > 2,500 gall	\$28.02	\$0.00	\$28.02	\$0.00	\$0.52	\$2.14	\$3.73	\$0.00	\$34.4
					\$0.00					
785C Water Truck	and Driver 0	004.00	60.00	604.00	\$0.00	CO 40	64.04	60.04	fo.oc	foc o
Dump Truck (10-12 yd3)	ruck Driver > 8 yds <	\$24.92	\$0.00	\$24.92	\$0.00	\$0.46	\$1.91	\$3.31	\$0.00	\$30.6
NOTES:										
(4) Truck Driver Source	e: New Mexico Department of	Workforce Solutions	Public Works Prev	ailing Wage Rates	Type H -					

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2 of 3 Labor Rates

Closure Cost Estimate Labor Rates

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Color Code Key					
User Input - Direct Input	Direct Input				
User Input - Pull Down List	Pull Down Selection				
Program Constant (can override)	Alternate Input				
Program Calculated Value	Locked Cell - Formula or Reference				

ZONE ADJUSTMENTS			
	American		
	Magnesium -		
Cost Basis/Project Region	Option 1 Revised	American Ma	gnesium - Foothill Dolomite Mine - Northern Nevada Equipment
Power Equipment Operators	0-50 miles	\$0.00	
Truck Drivers	0-50 miles	\$0.00	
Laborers	0-50 miles	\$0.00	
INDIRECT COSTS			
Unemployment (%)	1.84%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	13.30%		
Other Indirects			
State Payroll Tax (13),(15),(17),(1			
·			
Total Other Indirects	0.00%		

State Payroll Tax (13),(15),(17),(1										
Total Other Indirects	0.00%									
Total Other maneets	0.00 /8									
HOURLY LABOR RATE	TABLE									
Laborers (\$/hr) (6,7)										
General Laborer	Group 1	\$23.88	\$0.00	\$23.88	\$0.00	\$0.44	\$1.83	\$3.18	\$0.00	\$29.3
Skilled Laborer	Group 4	\$26.14	\$0.00	\$26.14	\$0.00	\$0.48	\$2.00	\$3.48	\$0.00	\$32.1
Driller's Helper	Group 3	\$26.14	\$0.00	\$26.14	\$0.00	\$0.48	\$2.00	\$3.48	\$0.00	\$32.1
Rodmen (reinforcing concrete)	Group 1	\$23.88	\$0.00	\$23.88	\$0.00	\$0.44	\$1.83	\$3.18	\$0.00	\$29.3
Cement finisher	Group 3	\$26.14	\$0.00	\$26,14	\$0.00	\$0.48	\$2.00	\$3,48	\$0.00	\$32.1
Carpenter		\$36.47	\$0.00	\$36.47	\$0.00	\$0.67	\$2.79	\$4.85	\$0.00	\$44.78
NOTES:										
(6) Laborer Source:	New Mexico Department									
(7) Carpenter Source:	New Mexico Department	of Workforce Solutions F	Public Works Preva	ailing Wage Rates T	ype H -					
(8) Zone Basis:	From Deming									
Project Management ar	nd Technical La	abor (\$/hr) (9))							
Project Manager		\$72.56		\$72.56	\$0.00	\$1.34	\$5.55	\$9.65	\$0.00	\$89.10
Foreman		\$67.50		\$67.50	\$0.00	\$1.24	\$5.16	\$8.98	\$0.00	\$82.8
Field Geologist/Engineer		\$109.94		\$109.94	\$0.00	\$2.02	\$8.41	\$14.62	\$0.00	\$134.9
Field Tech/Sampler		\$76.11		\$76.11	\$0.00	\$1.40	\$5.82	\$10.12	\$0.00	\$93.4
Range Scientist		\$97.25		\$97.25	\$0.00	\$1.79	\$7.44	\$12.93	\$0.00	\$119.4
Senior Planning Engineer					\$0.00			•		
Project Engineer					\$0.00					
Mechanic/Fitter					\$0.00					
					\$0.00					
					\$0.00					
					\$0.00					
					\$0.00					
					40.00					
			L						-	
NOTES:										
(9) Project Manager:	R.S.Means 2020 Q2 (01 3									
(9) Foreman Source:	R.S.Means 2020 Q2 (01 3		O&P-10%) Adjuste	ed for Elko, NV						
(9) Techical Labor Source:	Wood plc 2020 Adjusted f	or Zone,Tax and Ins.								
Other Labor Source:										
Other Labor Source:										
†Additional User Markups										
(These are added by the user to the										
base rate to account for site-specific		·		·						
conditions or corporate requirements)										

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Closure Cost Estimate Equipment Costs

Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm
Monthly Rental Basis:

160| hrs month

EQUIPMENT TYPE (1)	Monthly Owner/Rental Rate	Equipment Hourly Rate	Fuel/Lube/ Wear	Total Rate
Bulldozers	ruce	nate	r developer recar	Total Hate
D6R	\$7,222.35	\$45.14	\$50.90	\$96.0
D6R w/ Winch D7R	\$7,222.35 \$10,466.40	\$45.14 \$65.42	\$50.90 \$22.95	\$96.0 \$88.3
D8R	\$20,180.00	\$126.13	\$29.70	\$155.8
D9R	\$30,100.00	\$188.13	\$41.41	\$229.5
D10R	\$44,500.00	\$278.13	\$51.43	\$329.5
D11R Wheeled Dozers	\$56,234.00	\$351.46	\$235.44	\$586.9
824G	\$19,849.00	\$124.06	\$113.00	\$237.0
834G	\$24,929.00	\$155.81	\$138.70	\$294.5
844	\$33,734.00	\$210.84	\$184.06	\$394.9
854G Motor Graders	\$33,802.00	\$211.26	\$221.85	\$433.1
120H	\$3,964.95	\$24.78	\$48.60	\$73.3
14G/H	\$14,790.00	\$92.44	\$94.28	\$186.7
16G/H	\$18,806.00	\$117.54	\$129.63	\$247.1
24M Frack Excavators	\$20,686.00	\$129.29	\$158.47	\$287.7
312C	\$5,610.00	\$35.06	\$7.59	\$42.6
320C	\$7,750.00	\$48.44	\$15.05	\$63.4
325C	\$10,047.96	\$62.80	\$18.57	\$81.3
330C	\$11,500.00	\$71.88	\$23.64	\$95.5
345B 365BL	\$16,730.00 \$23,119.00	\$104.56 \$144.49	\$29.42 \$113.51	\$133.9 \$258.0
385BL	\$28,472.00	\$177.95	\$134.75	\$312.7
Scrapers				
631G	\$27,700.00	\$173.13	\$70.61	\$243.7
637G Wheeled Loaders	\$36,819.00	\$230.12	\$200.40	\$430.5
Wheeled Loaders 924G	\$5,610.00	\$35.0c	\$19.78	\$54.8
924G 928G	\$5,610.00	\$35.06 \$40.81	\$19.78 \$36.90	\$54.8 \$77.7
950G	\$9,520.00	\$59.50	\$32.45	\$91.9
966G	\$5,856.20	\$36.60	\$37.28	\$73.8
972G 980G	\$13,480.00 \$15,690.00	\$84.25 \$98.06	\$43.86 \$61.05	\$128.1 \$159.1
988G	\$19,589.00	\$122.43	\$151.77	\$159.1
990	\$28,299.00	\$176.87	\$233.36	\$410.2
992G	\$47,500.00	\$296.88	\$225.73	\$522.6
994D L2350	\$45,175.00 \$82,607.00	\$282.34 \$516.29	\$350.03 \$625.53	\$632.3 \$1,141.8
Shovels	ψ02,007.00	ψ510.23	ψ023.33	\$1,141.0
PC2000	\$70,917.00	\$443.23	\$278.28	\$721.5
PC3000	\$72,526.00	\$453.29	\$345.19	\$798.4
PC4000 PC5500	\$74,135.00 \$81,548.00	\$463.34 \$509.68	\$427.42 \$562.14	\$890.7 \$1,071.8
PC8000	\$89,703.00	\$560.64	\$658.00	\$1,071.6
Hydraulic Hammers				
H-120 (fits 325)	\$3,420.00	\$21.38	\$11.57	\$32.9
H-160 (fits 345) H-180 (fits 365/385)	\$7,028.00 \$8,168.00	\$43.93 \$51.05	\$23.24 \$24.96	\$67.1 \$76.0
Demolition Shears	ψο, του.ου	\$01.00	ψ <u>2</u> -1.00	\$10.0
S340 (fits 322/325/330)	\$3,524.00	\$22.03	\$20.50	\$42.5
S365 (fits 330/345)	\$4,131.00	\$25.82	\$25.23 \$31.61	\$51.0
S390 (fits 365/385) Demolition Grapples	\$6,593.00	\$41.21	\$31.01	\$72.8
G315 (fits 322/325)				\$0.0
G320 (fits 325/330)				\$0.0
G330 (fits 345/365)				\$0.0
Other Equipment	*******	200.05	200.40	010.0
420D 4WD Backhoe 428D 4WD Backhoe	\$3,240.00 \$3,870.00	\$20.25 \$24.19	\$22.10 \$22.59	\$42.3 \$46.7
CS533E Vibratory Roller	\$4,402.00	\$27.51	\$27.54	\$55.0
CS633E Vibratory Roller	\$4,291.00	\$26.82	\$31.05	\$57.8
CP533E Sheepsfoot Compactor	\$4,085.00	\$25.53	\$33.08	\$58.6
CP633E Sheepsfoot Compactor Light Truck - 1.5 Ton	\$6,588.00 \$2,184.00	\$41.18 \$13.65	\$40.18 \$17.48	\$81.3 \$31.1
Supervisor's Truck	\$834.00	\$5.21	\$7.61	\$12.8
Flatbed Truck	\$621.00	\$3.88	\$21.62	\$25.5
Air Compressor + tools	\$597.00	\$3.73	\$5.57	\$9.3
Welding Equipment Heavy Duty Drill Rig	\$405.00 \$52,018.00	\$2.53 \$325.11	\$6.30 \$314.83	\$8.8 \$639.9
Pump (plugging) Drill Rig	\$52,018.00	\$325.11	\$310.45	\$635.5
Concrete Pump	\$14,864.20	\$92.90	\$21.90	\$114.8
Gas Engine Vibrator	\$357.00	\$2.23	\$3.65	\$5.8
Generator 5KW HDEP Welder (pipe or liner)	\$938.00 \$7,022.96	\$5.86 \$43.89	\$6.87 \$4.38	\$12.7 \$48.2
5 Ton Crane	\$7,022.90	\$44.75	\$42.14	\$86.8
20 Ton Crane	\$7,955.00	\$49.72	\$48.28	\$98.0
50 Ton Crane 120 Ton Crane	\$15,154.00 \$28,943.00	\$94.71 \$180.89	\$88.82 \$177.03	\$183.5 \$357.9
Trucks	\$28,943.00	\$180.89	\$177.03	\$357.9
725	\$9,300.06	\$58.13	\$82.89	\$141.0
730	\$14,640.00	\$91.50	\$62.31	\$153.8
735	\$16,730.00	\$104.56	\$70.00	\$174.5
740 769D	\$18,820.00	\$117.63	\$74.01 \$23.86	\$191.6 \$23.8
773E	\$18,267.00	\$114.17	\$160.85	\$275.0
777D	\$37,750.00	\$235.94	\$325.91	\$561.8
785C	\$40,948.00	\$255.93	\$366.30	\$622.2
793C 797B	\$49,547.00 \$89,160.00	\$309.67 \$557.25	\$470.39 \$817.64	\$780.0 \$1,374.8
613E (5,000 gal) Water Wagon	\$8,726.00	\$557.25 \$54.54	\$77.29	\$1,374.8
621E (8,000 gal) Water Wagon	\$10,006.00	\$62.54	\$103.42	\$165.9
777D Water Truck	\$37,226.00	\$232.66	\$321.40	\$554.0
785C Water Truck	\$40,948.00 \$3,752.00	\$255.93 \$23.45	\$366.30 \$32.89	\$622.2 \$56.3
	\$3,752.00	\$23.45	\$32.89	\$30.3
Dump Truck (10-12 yd ³)				
Dump Truck (10-12 yd ³)				
Dump Truck (10-12 yd³) NOTES: (1) Power Equipment Sourc (2) Power Equipment Typ	e: e: Catepillar model or equ		loader, Komatsu sho	vels
Dump Truck (10-12 yd³) NOTES: (1) Power Equipment Sourc (2) Power Equipment Typ (3) Drillling Equipment Sourc	e:	struction (2020 Q2)	loader, Komatsu sho	vels

Closure Cost Estimate Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data

EQUIPMENT TYPE	PM Cost Per Hour ⁽¹⁾	Under carriage or Tires (2)	G.E.T Consumption (3)	Fuel Use Rate gal/hr (4)	Cost@	Total Hourly Equipment Cost
	rei noui	riies		gaimi (4)	2.19/gal	Equipment Cost
Bulldozers D6R	\$34.60		\$2.61	6.25	\$13.69	\$50.9
D6R w/ Winch	\$34.60		\$2.61	6.25	\$13.69	\$50.9
D7R D8R	\$2.69 \$3.49		\$3.84 \$4.86	7.50 9.75	\$16.43 \$21.35	\$22.9 \$29.7
D9R	\$3.61		\$6.59	14.25	\$31.21	\$41.4
D10R D11R	\$3.79 \$160.74		\$8.22 \$16.66	18.00 26.50	\$39.42 \$58.04	\$51.4 \$235.4
Wheeled Dozers	ψ100.74		ψ10.00	20.00	φ00.0 1	\$200.4
824G 834G	\$49.58 \$59.69	\$38.56 \$49.72	\$1.32 \$1.70	10.75 12.60	\$23.54 \$27.59	\$113.0 \$138.7
844	\$59.69 \$77.91	\$49.72 \$70.88	\$2.42	15.00	\$32.85	\$184.0
854G	\$90.20	\$87.64	\$2.40	19.00	\$41.61	\$221.8
Motor Graders 120H	\$20.32	\$18.90	\$0.62	4.00	\$8.76	\$48.6
14G/H	\$37.21	\$42.00	\$1.38	6.25	\$13.69	\$94.2
16G/H 24M	\$50.42 \$55.46	\$60.78 \$66.86	\$2.00 \$2.20	7.50 15.50	\$16.43 \$33.95	\$129.6 \$158.4
Track Excavators	\$33.40	\$00.80	\$2.20	15.50	\$33.93	\$136.4
312C	\$2.14		\$1.33	1.88	\$4.12	\$7.5
320C 325C	\$2.38 \$2.64		\$1.94 \$1.48	4.90 6.60	\$10.73 \$14.45	\$15.0 \$18.5
330C	\$3.01		\$2.67	8.20	\$17.96	\$23.6
345B 365BL	\$3.36 \$80.63		\$2.85 \$3.97	10.60 13.20	\$23.21 \$28.91	\$29.4 \$113.5
385BL	\$91.31		\$5.11	17.50	\$38.33	\$134.7
Scrapers						
631G 637G	\$3.22 \$116.00	\$32.68 \$30.28	\$1.86 \$2.11	15.00 23.75	\$32.85 \$52.01	\$70.6 \$200.4
Wheeled Loaders	\$1.0.00	ψ00.20	Ψ	20.10	Ψ02.01	
924G	\$9.33	\$4.24	\$0.19	2.75	\$6.02	\$19.7
928G 950G	\$16.35 \$2.30	\$12.28 \$20.52	\$0.60 \$0.87	3.50 4.00	\$7.67 \$8.76	\$36.9 \$32.4
966G	\$2.42	\$21.40	\$0.87	5.75	\$12.59	\$37.2
972G 980G	\$2.53 \$2.57	\$26.56 \$40.64	\$1.08 \$1.41	6.25 7.50	\$13.69 \$16.43	\$43.8 \$61.0
988G	\$57.81	\$65.20	\$2.26	12.10	\$26.50	\$151.7
990	\$85.58	\$106.84	\$3.71	17.00	\$37.23	\$233.3
992G 994D	\$11.87 \$122.36	\$130.76 \$143.84	\$32.73 \$4.99	23.00 36.00	\$50.37 \$78.84	\$225.7 \$350.0
L2350	\$203.53	\$268.16	\$9.30	66.00	\$144.54	\$625.5
Shovels	\$183.38		640.07	27.00	\$81.03	6070.0
PC2000 PC3000	\$218.80		\$13.87 \$16.89	37.00 50.00	\$109.50	\$278.2 \$345.1
PC4000	\$254.21		\$19.91	70.00	\$153.30	\$427.4
PC5500 PC8000	\$279.63 \$307.59		\$21.90 \$24.09	119.00 149.00	\$260.61 \$326.31	\$562.1 \$658.0
Hydraulic Hammers	ψοστ.σσ		Ψ24.00	140.00	φ020.01	Ψ000.0
H-120 (fits 325)	N/A		\$11.57			\$11.5
H-160 (fits 345) H-180 (fits 365/385)	N/A N/A		\$23.24 \$24.96			\$23.2 \$24.9
Demolition Shears			,			
S340 (fits 322/325/330)	N/A N/A		\$20.50 \$25.23			\$20.5 \$25.2
S365 (fits 330/345) S390 (fits 365/385)	N/A		\$31.61			\$31.6
Demolition Grapples						
G315 (fits 322/325) G320 (fits 325/330)	N/A N/A					\$0.0 \$0.0
G330 (fits 345/365)	N/A					\$0.0
Other Equipment 420D 4WD Backhoe	644.04	60.40	50.54	2.00	CC 57	\$22.1
428D 4WD Backhoe	\$11.81 \$12.20	\$3.18 \$3.22	\$0.54 \$0.60	3.00	\$6.57 \$6.57	\$22.1
CS533E Vibratory Roller	\$19.33			3.75	\$8.21	\$27.5
CS633E Vibratory Roller CP533E Sheepsfoot Compactor	\$20.65 \$24.87			4.75 3.75	\$10.40 \$8.21	\$31.0 \$33.0
CP633E Sheepsfoot Compactor	\$29.78			4.75	\$10.40	\$40.1
Light Truck - 1.5 Ton	\$8.67	\$5.52		1.50	\$3.29	\$17.4
Supervisor's Truck Flatbed Truck	\$3.62 \$3.85	\$1.80 \$7.48		1.00 4.70	\$2.19 \$10.29	\$7.6 \$21.6
Air Compressor + tools	\$3.38		N/A	1.00	\$2.19	\$5.5
Welding Equipment Heavy Duty Drill Rig	\$1.92 \$278.95		N/A \$9.60	2.00 12.00	\$4.38 \$26.28	\$6.3 \$314.8
Pump (plugging) Drill Rig	\$278.95		\$9.60	10.00	\$21.90	\$310.4
Concrete Pump Gas Engine Vibrator	\$1.46		N/A N/A	10.00	\$21.90 \$2.19	\$21.9 \$3.6
Generator 5KW	\$3.58		N/A N/A	1.50	\$3.29	\$3.0 \$6.8
HDEP Welder (pipe or liner)			N/A	2.00	\$4.38	\$4.3
5 Ton Crane 20 Ton Crane	\$23.22 \$25.80	\$12.35 \$13.72		3.00 4.00	\$6.57 \$8.76	\$42.1 \$48.2
50 Ton Crane	\$45.47	\$33.06		4.70	\$10.29	\$88.8
120 Ton Crane Frucks	\$80.14	\$85.50		5.20	\$11.39	\$177.0
725	\$28.22	\$41.16	\$3.22	4.70	\$10.29	\$82.8
730	\$2.76	\$44.94	\$3.22	5.20	\$11.39	\$62.3
735 740	\$2.86 \$2.97	\$47.82 \$51.72	\$3.22 \$3.22	7.35 7.35	\$16.10 \$16.10	\$70.0 \$74.0
769D			\$3.60	9.25	\$20.26	\$23.8
773E 777D	\$47.92 \$95.60	\$83.16 \$189.12	\$4.04 \$4.51	11.75 16.75	\$25.73 \$36.68	\$160.8 \$325.9
785C	\$95.60 \$105.16	\$189.12 \$208.03	\$4.51	24.25	\$36.68	\$325.9 \$366.3
793C	\$127.24	\$251.72		41.75	\$91.43	\$470.3
797B 613E (5,000 gal) Water Wagon	\$204.78 \$45.31	\$484.20 \$18.84		58.75 6.00	\$128.66 \$13.14	\$817.6 \$77.2
621E (8,000 gal) Water Wagon	\$50.66	\$29.22		10.75	\$23.54	\$103.4
777D Water Truck 785C Water Truck	\$95.60 \$105.16	\$189.12 \$208.03		16.75 24.25	\$36.68 \$53.11	\$321.4 \$366.3
785C Water Truck Dump Truck (10-12 yd3) (5)	\$105.16 N/A	\$208.03 \$21.50	N/A	24.25 5.20	\$53.11 \$11.39	\$366.3 \$32.8
Notes:						
(1) PM Source: (2) Undercarriage Source:						
(3) G.E.T. Source:						
(4) Fuel Use Source:	Cotornillor Hondbook E	dition 35 Ch 20: or	estimated average for	or smaller vehicles		

Closure Cost Estimate Equipment Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan
Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_Mine_1_12 Rev 2.xlsm

Name	Equipment	Tire Size	# of Tires Per Piece of Equipment	Cost Per Tire	Tire Cost (1)(2)	Life Expectency Hours (Low/Zone A) (3)	Tire Cost per Hour
DR							
DTR							
Description No. No		+					
DRIES		-					
1908							
Description		_					
294 294							
SASO							
944	824G	29.5R25	4	\$33,740.00	\$134,960.00	3,500	\$38.5
SAGE SAGE A				\$43,505.00			\$49.7
13991		45/05-K45	4	\$70,085.00	\$306,740.00	3,500	\$67.0
140H		400004		644.005.00	\$00.4F0.00	2.500	640.6
1969 23.9526 6							
230							
Table Tabl				\$39,000.50	\$234,003.00		\$66.8
1372C	rack Excavators						
NA	312C			N/A			
NA							
NA							
Section							
Section Sect		+					
STORY STATES STA		-					
\$316							
## STATE		37.25R35	4	\$32,680.00	\$130.720.00	4,000	\$32.0
The left Loaders							\$30.
928G							
989G		17.5R25	4	\$4,770.00	\$19,080.00	4,500	\$4.:
989G		17.5R25		\$13,815.00	\$55,260.00	4,500	\$12.
9726							\$20.
980G							\$21.4
1886							
990							
992G							
9940 55686877 4 \$301.6500 \$1.050.00 \$1.050.00 \$1.050.00							
No.			4	\$161,815.50			\$143.8
PC2000	L2350	55/85R57	4	\$301,680.00	\$1,206,720.00	4,500	\$268.1
PC3000 N/A PC4000 N/A PC5500 N/A PC5500 N/A PC5500 N/A PC5500 N/A PC6000							
PC4000 N/A PC5500							
PC5500 N/A PC6000							
March Marc		+					
National		-					
H-120 (IRS 326)							
Main	H-120 (fits 325)			N/A			
Semolation Shears Sabd (files 320/35530)				N/A			
\$340 (fits 322/325/330) \$356 (fits 330/345) \$390 (fits 365/385) \$N/A \$390 (fits 365/385) \$N/A \$390 (fits 365/385) \$N/A \$390 (fits 365/385) \$N/A \$390 (fits 3265/330) \$N/A \$330 (fits 345/350) \$N/A \$N/A \$330 (fits 345/350) \$N/A \$N/A \$330 (fits 345/356) \$N/A \$N/A \$390 (fits 326/330) \$3,000 \$3,				N/A			
\$385 (file \$309/45)							
S390 (fits 362/365) N/A							
Semolation Grapples Sat September Sat Se							
S315 (fits 322/325)				19/2			
SA20 (fits 329/330)		T		N/A		1	
Mate		1					
4200 4WD Backhoe 340/80R18-19.5LR24 2 \$4,770.00 \$9,540.00 3,000 \$3				N/A			
428D 4VID Backhoe 340/80R18-16.9R28 2 \$4,830.00 \$9,660.00 3,000 \$52,000	ther Equipment						
CSS33E Vibratory Roller	420D 4WD Backhoe		2		\$9,540.00	3,000	\$3.
CSB33E Vibratory Roller		340/80R18-16.9R28	2		\$9,660.00	3,000	\$3.3
CPS3SE Sheepsfoot Compactor Light Truck: -1.5 Ton A							
CP633E Sheepsfoot Compactor N/A	CS633E Vibratory Roller						
Light Truck - 1.5 Ton	CP533E Sheepstoot Compactor						
Supervisor's Truck		-	4		\$16.560.00	3 000	\$ 5.1
Flatbed Truck		1					\$1.8
Air Compressor + tools Air Compressor + tools N/A Welding Equipment Heavy Duty Drill Rig 4 S0.00 3.000 Pump (plugging) Drill Rig 4 N/A S0.00 3.000 Concrete Pump N/A S0.00 S0.0	Flatbed Truck						\$7.4
Welding Equipment N/A S0.00 3.000 Well Rig 4 S0.00 3.000 S0.000 S0.0000 S0.000 S0.000 S0.000 S0.000 S0.000 S0.000 S0.0000 S0.000 S0.000 S0.000 S0.000 S0.000 S0.000 S0.0000 S0.00000 S0.0000 S0.00000 S0.0000 S0.00000 S0.00000 S0.00000 S0.0000 S0.	Air Compressor + tools			N/A			
Pump (plugging) Drill Rig 4	Welding Equipment			N/A			
Concrete Pump Sas Engine Wbrator Generator 5KW N/A HDEP Welder (pipe or liner) To Crane 4 \$9,261.00 \$37,044.00 3,000 \$12 20 Ton Crane 4 \$10,290.00 \$41,160.00 3,000 \$13 50 Ton Crane 6 \$15,530.00 \$99,180.00 3,000 \$33 120 Ton Crane 6 \$42,750.00 \$256,500.00 3,000 \$33 120 Ton Crane 725 23.5R25 6 \$13,720.00 \$82,320.00 2,000 \$41 730 23.5R25 6 \$13,720.00 \$88,320.00 2,000 \$41 730 23.5R25 6 \$13,720.00 \$88,380.00 2,000 \$41 735 26,5R25 6 \$11,980.00 \$89,880.00 2,000 \$41 740 29,5R25 6 \$11,240.00 \$103,440.00 2,000 \$47 740 29,5R25 6 \$17,240.00 \$103,440.00 2,000 \$51 773E 24,00R35 6 \$59,300.00 \$415,800.00 \$0,000 773E 27,00R49 6 \$157,600.00 \$94,600.00 5,000 \$189 779C 33,00R51 6 \$139,688.00 \$83,212.00 \$0,000 \$189 783C \$40,00R57 6 \$16,7812.48 \$1,006,874.88 4,000 \$200 787B 40,00R57 6 \$167,812.48 \$1,006,874.88 4,000 \$250 787B 40,00R57 6 \$187,812.48 \$1,006,874.88 4,000 \$250 777B 40,00R57 6 \$167,812.48 \$1,006,874.88 4,000 \$250 787B 40,00R57 6 \$167,812.48 \$1,006,874.88 4,000 \$251 787B 500.00 gal) Water Wagon \$2,5R25 6 \$13,840.00 \$113,040.00 6,000 \$188 613E (5,000 gal) Water Wagon \$2,5R25 6 \$18,840.00 \$113,040.00 6,000 \$188 613E (5,000 gal) Water Wagon \$2,5R25 6 \$18,840.00 \$113,040.00 6,000 \$188 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$188 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$188 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$188 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 \$0,000 \$229 777D Water Truck \$27,00R49 6 \$157,							
Sas Engine Vibrator		+	4		\$0.00	3,000	
March Marc		+					
HDEP Welder (pipe or liner)		+					
\$ 75 no. Crane		+					
20 Ton Crane		1	4		\$37,044.00	3,000	\$12.3
50 Ton Crane 6 \$16,530,00 \$99,180,00 3,000 \$33 120 Ton Crane 6 \$42,750,00 \$26,500,00 \$3,000 \$585 TUCKS 725 23,5R25 6 \$13,720,00 \$82,320,00 2,000 \$441 735 26,5R25 6 \$11,980,00 \$99,640,00 2,000 \$441 735 26,5R25 6 \$15,940,00 \$99,640,00 2,000 \$447 740 29,5R25 6 \$15,940,00 \$99,640,00 2,000 \$47 740 29,5R25 6 \$17,240,00 \$103,440,00 2,000 \$517 7690 18,00R33 6 \$90,00 \$103,440,00 \$00,00 \$13,600,00 \$173,600,00 \$103,400,	20 Ton Crane	1	4	\$10,290.00	\$41,160.00	3,000	\$13.
	50 Ton Crane			\$16,530.00	\$99,180.00		\$33.0
725 23.5R25 6 \$13.720.00 \$82.320.00 2.000 \$41 730 23.5R25 6 \$14,990.00 \$98,800.00 2.000 \$44 735 26.5R25 6 \$14,990.00 \$98,640.00 2.000 \$44 736 29.5R25 6 \$17,240.00 \$103,440.00 2.000 \$47 740 29.5R25 6 \$17,240.00 \$103,440.00 2.000 \$47 740 29.5R25 6 \$17,240.00 \$103,440.00 2.000 \$51 769D 18.00R33 6 \$0.00 \$100,000 \$150,000 \$150 773E 24.00R35 6 \$69,300.00 \$415,800.00 5.000 \$83 777D 27.00R49 6 \$157,600.00 \$945,600.00 5.000 \$188 785C 33.00R51 6 \$138,688.00 \$832,128.00 4.000 \$206 793C 40.00R57 6 \$167,812.48 \$1,006,874.88 4.000 \$206 793C 40.00R57 6 \$167,812.48 \$1,006,874.88 4.000 \$256 813E (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6.000 \$484 813E (5.000 gal) Water Wagon 33.5R25 6 \$18,840.00 \$113,040.00 6.000 \$188 785C Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5.000 \$188 785C Water Truck 33.00R51 6 \$338,688.00 \$232,728.00 4.000 \$206 777D Water Truck 33.00R51 6 \$338,688.00 \$332,128.00 4.000 \$206 777D Water Truck 33.00R51 6 \$157,600.00 \$945,600.00 5.000 \$188 785C Water Truck 33.00R51 6 \$138,688.00 \$332,128.00 4.000 \$226 77D Water Truck 33.00R51 6 \$138,688.00 \$332,128.00 4.000 \$226 77D Water Truck 33.00R51 6 \$138,688.00 \$322,128.00 4.000 \$226 77D Water Truck 33.00R51 6 \$138,688.00 \$322,128.00 4.000 \$226 77D Water Truck 33.00R51 6 \$138,688.00 \$322,128.00 4.000 \$226 77D Water Truck 33.00R51 6 \$138,688.00 \$322,128.00 4.000 \$226			6	\$42,750.00	\$256,500.00	3,000	\$85.
730 23.5R25 6 \$14,980.00 \$89,80.00 2.000 \$44 735 26.5R25 6 \$15,940.00 \$56,640.00 \$50,00 \$47 740 29.5R25 6 \$15,7240.00 \$103,440.00 2.000 \$57 779E 18.00R33 6 \$50,000 \$415,800.00 \$0,000 \$57 7779E 24.00R35 6 \$60,300.00 \$415,800.00 \$0,000 \$583 7777D 27.00R49 6 \$157,600.00 \$45,600.00 \$500 \$189 785C 33.00R51 6 \$138,688.00 \$832,128.00 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.88 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.88 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.88 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.89 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.89 \$4,000 \$250 793C \$40,00R57 6 \$167,812.48 \$1,006,874.89 \$4,000 \$250 793C \$40,00R57 6 \$168,800.00 \$1,308,600.00 \$4,000 \$250 793C \$40,00R57 6 \$168,800.00 \$1,308,600.00 \$4,000 \$250 777D Water Wagon \$23,5R25 6 \$18,840.00 \$113,040.00 6,000 \$18 613E (5,000 gal) Water Wagon \$23,5R25 6 \$18,840.00 \$113,040.00 6,000 \$18 777D Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$188 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$189 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$189 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$189 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$189 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$189 785C Water Truck \$27,00R49 6 \$157,600.00 \$345,600.00 5,000 \$345,600.00 \$345							
735							\$41.
740 29.5R25 6 \$17,240.00 \$103,440.00 2,000 \$51 769D 18.00R33 6 \$0.00 0 \$0.00 0 \$773E 24.00R35 6 \$50.00 0 \$0.00 0 \$0.00 0 \$773E 24.00R35 6 \$50.00 \$515,000 \$189 777D 27.00R49 6 \$157,600.00 \$3415,800.00 5,000 \$189 785C 33.00R51 6 \$133,688.00 \$832,128.00 4,000 \$208 793C 40.00R57 6 \$167,812.48 \$1,006,874.88 4,000 \$250 793C 40.00R57 6 \$167,812.48 \$1,006,874.88 4,000 \$251 797B 40.00R57 6 \$322,800.00 \$1,398.600.00 4,000 \$448 613E (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6,000 \$18 613E (5.000 gal) Water Wagon 33.25R29 6 \$38,980.00 \$233,780.00 \$208 777D Water Truck 27.00R49 6 \$157,600.00 \$345,600.00 5,000 \$188 785C Water Truck 33.00R51 6 \$136,680.00 \$323,128.00 4,000 \$208 Dump Truck (10-12 yd3) 10 \$12,900.00 6,000 \$212 totes:							\$44.9 \$47.9
769D 18.00R33 6 \$0.00 6.00 773E 24.00R35 6 \$69,300.00 \$415,800.00 5.000 \$818 777D 27.00R49 6 \$157,600.00 \$415,600.00 5.000 \$189 785C 33.00R51 6 \$138,688.00 \$832,128.00 4.000 \$208 793C 40.00R57 6 \$167,812.48 \$1.006,874.84 4.000 \$258 797B 40.00R57 6 \$322,800.00 \$1,306,800.00 4.000 \$484 61SE (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$133,6800.00 8.00 \$18 27 (DR49 6 \$33,960.00 \$23,760.00 \$0.00 \$18 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5.00 \$18 785C Water Truck 33.00R51 6 \$138,688.00 \$832,128.00 4.000 \$208 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6.000 \$21							
773E				\$17,240.00	\$0.00		φυ1.
777D 27 00R49 6 \$157,600.00 \$945,600.00 \$0.00 \$188 785C \$0.00 \$0.00 \$188 785C \$0.00 \$15.00 \$188 785C \$0.00 \$15.00				\$69,300.00			\$83.1
785C 33.00E51 6 \$138,688.00 \$832,128.00 4.000 \$208 793C 40.00E57 6 \$167,812.48 \$1,006,874.88 4.000 \$251 793E 40.00E57 6 \$322,800.00 \$1,393,600.00 4.000 \$454 613E (5,000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6.000 \$18 613E (2,000 gal) Water Wagon 33.25R25 6 \$18,840.00 \$113,040.00 6.000 \$18 613E (2,000 gal) Water Wagon 32.5R25 6 \$33,960.00 \$233,760.00 \$300 \$237,700 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$	769D						\$189.
793C 40.0R57 6 \$167.812.48 \$1.006.874.88 4.000 \$251 797B 40.00R57 6 \$322.800.00 \$1.393.60.00 4.000 \$	769D 773E	27.00R49					\$208.0
797B 40.00R57 6 \$322,800.00 \$1,996,800.00 4,000 \$484 613E (5.000 gal) Water Wagon 23.5R25 6 \$18,840.00 \$113,040.00 6.000 \$18 621E (8,000 gal) Water Wagon 33.25R29 6 \$39,960.00 \$23,760.00 8,000 \$27 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5,000 \$189 785C Water Truck 33.00R51 6 \$136,680.00 \$323,760.00 4,000 \$200.00 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 \$21 (1) Unit Cost Basis:	769D 773E 777D		6				\$251.
621E (8,000 gal) Water Wagon 33.25R29 6 \$38,960.00 \$233,760.00 8,000 \$29 777D Water Truck 27.00R49 6 \$157,600.00 \$945,600.00 5,000 \$189 785C Water Truck 33.00R51 6 \$138,688.00 \$332,188.00 \$320,000 \$100 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 \$21 tes:	769D 773E 777D 785C 793C	33.00R51					\$484.2
777D Water Truck 27 00R49 6 \$157,600.00 \$945,600.00 5.000 \$188 785C Water Truck 33.00R51 6 \$138,688.00 \$382,128.00 4.000 \$208 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6.000 \$21 otes: (1) Unit Cost Basis:	769D 773E 777D 785C 793C	33.00R51 40.00R57 40.00R57	6	\$322,800.00	\$1,936,800.00		
785C Water Truck 33.00R51 6 \$138,688.00 \$832,128.00 4,000 \$208 Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6,000 \$210 otes: (1) Unit Cost Basis:	769D 773E 777D 785C 793C 797B 613E (5,000 gal) Water Wagon	33.00R51 40.00R57 40.00R57 23.5R25	6 6 6	\$322,800.00 \$18,840.00	\$1,936,800.00 \$113,040.00	6,000	\$18.
Dump Truck (10-12 yd3) 10 \$12,900.00 \$129,000.00 6.000 \$21 titles: (1) Unit Cost Basis:	769D 773E 777D 785C 793C 797B 613E (5,000 gal) Water Wagon 621E (8,000 gal) Water Wagon	33.00R51 40.00R57 40.00R57 23.5R25 33.25R29	6 6 6	\$322,800.00 \$18,840.00 \$38,960.00	\$1,936,800.00 \$113,040.00 \$233,760.00	6,000 8,000	\$29.
otes: (1) Unit Cost Basis:	769D 7773E 7770 785C 793C 7997B 613E (5,000 gal) Water Wagon 621E (8,000 gal) Water Wagon 777D Water Truck	33.00R51 40.00R57 40.00R57 23.5R25 33.25R29 27.00R49	6 6 6 6	\$322,800.00 \$18,840.00 \$38,960.00 \$157,600.00	\$1,936,800.00 \$113,040.00 \$233,760.00 \$945,600.00	6,000 8,000 5,000	\$29. \$189.
(1) Unit Cost Basis:	7690 773E 777D 786C 797B 615E 797B 615E 615E 6300 gal) Water Wagon 621E 63.000 gal) Water Wagon 777D Water Truck 785C Water Truck	33.00R51 40.00R57 40.00R57 23.5R25 33.25R29 27.00R49	6 6 6 6 6	\$322,800.00 \$18,840.00 \$38,960.00 \$157,600.00 \$138,688.00	\$1,936,800.00 \$113,040.00 \$233,760.00 \$945,600.00 \$832,128.00	6,000 8,000 5,000 4,000	\$29. \$189. \$208.
	7690 7773E 7777B 7778E 7777D 785C 7978 613E (5,000 gal) Water Wagon 613E (5,000 gal) Water Wagon 777D Water Truck 785C Water Truck Dump Truck (10-12 yd3)	33.00R51 40.00R57 40.00R57 23.5R25 33.25R29 27.00R49	6 6 6 6 6	\$322,800.00 \$18,840.00 \$38,960.00 \$157,600.00 \$138,688.00	\$1,936,800.00 \$113,040.00 \$233,760.00 \$945,600.00 \$832,128.00	6,000 8,000 5,000 4,000	\$29. \$189.

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Revegetation Materials			
	Seed Mixes		
Seed Mix	Descrip	otion	Cost/Acre
		•	
None			
Mix 1	Basins		\$302.50
Mix 2	Low Hills		\$332.75
Mix 3	Uplands		\$363.00
Mix 4	Riparian or Custom		\$393.25
User Mix 1	Site Specific Seed Mi	ix	\$250.00
User Mix 2			
User Mix 3			
User Mix 4			
	Cost/lb	lbs/Acre	Cost/Acre
User Mix 5 (from Seed Mix sheet)	\$0.00	\$9.18	\$0.00
Notes:			
	Mulch		
Itom	Mulch	lho/Aoro	Contlagra
ltem	Mulch Cost/lb	lbs/Acre	Cost/Acre
		lbs/Acre	Cost/Acre
None	Cost/lb		
None Straw Mulch	Cost/lb \$0.17	Ibs/Acre 36300	Cost/Acre \$6,150.83
None Straw Mulch Hydro Mulch	Cost/lb		
None Straw Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch Timber Mulch	Cost/lb \$0.17		
None Straw Mulch Hydro Mulch	\$0.17 \$0.25	36300	\$6,150.83
None Straw Mulch Hydro Mulch Fimber Mulch	Cost/lb \$0.17	36300	\$6,150.83
None Straw Mulch Hydro Mulch Fimber Mulch	\$0.17 \$0.25	36300	\$6,150.83
None Straw Mulch Hydro Mulch Fimber Mulch	\$0.17 \$0.25	36300	\$6,150.83

1 of 5

Material Costs

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Amendments							
Cost/lb	lbs/Acre	Cost/Acre					
\$0.70		\$0.00					
\$0.59		\$0.00					
Western Nevada Sur	ply \$29.34 per 50 lb	. bag 15-15-15 (June 20					
	1 / .	,					
	\$0.70 \$0.59	Amendments Cost/lb Ibs/Acre \$0.70 \$0.59 Western Nevada Supply \$29.34 per 50 lb					

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Well Abandonment Materials								
Description	Cost/50lb bag	Units	Cost/unit*					
Cement	\$7.57	су	\$36.07					
Grout (Low Grade Bentonite)	\$8.85	су	\$42.14					
Inert Material/Cuttings		су						
		су						
		су						

(1) Jentech Drilling Supply quote (June 2020) Type I,II Cement at \$14.24 per 94 lb. bag

(2) Jentech Drilling Supply (June 2020) 3/8 in. Chunk Bentonite Hole Plug at \$8.85 per 50 lb. bag (5.75 cf/bag at 4

Assumes 1 bag mixes with water to make 0.21 y3 or 0.16 m3 of grout/cement slurry.

Monitoring Costs		
Description	Units	Cost/unit
Monitor Well Pump	ea.	\$2,788.41
Sampling Supplies	ea.	\$6.51
Water Analysis (Profile I) (1)	ea.	\$411.00
Leach Test (MWMP) w/ analysis	ea.	\$483.40
ABA + S speciation	ea.	\$150.00
WAD Cyanide in water	ea.	\$56.00
Water Analysis (Profile II) (1)	ea.	\$461.00
Trater / traing to (1 Terms 11) (1)	ea.	Ψ101.00
	ea.	
(1) WET Lob Bono Novada (July)	2020)	
(1) WET Lab, Reno, Nevada (July 2 Well pump and Sample supply cos		
Original source unknown.	is aujusieu io 2020.	
Original source driknown.		

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm **Cost Estimate Type: Surety** Cost Basis: American Magnesium - Option 1 Revised

Fuel, Etc.		
Description	Units	Cost/unit
Off-road Diesel - delivered (1)	\$/gal	\$2.190
Pickup Truck Mileage	\$/mi	\$0.575
Electical Power	\$/kWh	\$0.079
(1) Source: Oil Price Infomration Se	ervice, average annua	al cost including freigh

nt to Nevada (July 2020).

Source: Federal Government Vehicle Allowance Rate 2020 Source: NV Energy (July 2020) \$0.07872

4 of 5 Material Costs

Revegetation Method				
	Slopes			
Disturbance Type	Seed Application Method	Labor Cost/Acre	Equipment Cost/Acre	Total Cost/Acre
Waste Rock Dumps	Drill	\$140.00	\$120.00	\$260.0
Heap Leach	Drill	\$140.00	\$120.00	\$260.0
Tailings	Drill	\$140.00	\$120.00	\$260.0
Quarries & Borrow Pits	Drill	\$140.00	\$120.00	\$260.0
	Flat Areas and Und	ifferentiated		
Disturbance Type	Seed Application Method	Labor Cost/Acre	Equipment Cost/Acre	Total Cost/Acre
Exploration Trenches	Drill	\$140.00	\$120.00	\$260.0
Exploration Roads	Drill	\$140.00	\$120.00	\$260.0
Waste Rock Dumps	Drill	\$140.00	\$120.00	\$260.0
Heap Leach	Drill	\$140.00	\$120.00	\$260.0
Tailings	Drill	\$140.00	\$120.00	\$260.0
Quarries & Borrow Pits	Drill	\$140.00	\$120.00	\$260.0
Roads	Drill	\$140.00	\$120.00	\$260.0
Pits	Drill	\$140.00	\$120.00	\$260.0
Haul Material	Drill	\$140.00	\$120.00	\$260.0
Foundations & Buildings	Drill	\$140.00	\$120.00	\$260.0
Sediment & Drainge Control	Drill	\$140.00	\$120.00	\$260.0
Process Ponds	Drill	\$140.00	\$120.00	\$260.0
Landfills	Drill	\$140.00	\$120.00	\$260.0
Yards, Etc.	Drill	\$140.00	\$120.00	\$260.0
Revegetation Maintenance	Drill	\$140.00	\$120.00	\$260.0

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Revegetation										
	Means Number	Unit	Crew	Daily Output	Daily Output User	Materials	Labor	Equipment	Total	Notes
Seeding - Broadcast Hand (1)		acres					\$140.00		\$190.00	
Seeding - Broadcast Mechanical (1)		acres					\$140.00	\$50.00	\$190.00	
Seeding - Drill (1)		acres		365			\$140.00	\$120.00	\$260.00	
Seeding - Hydroseeding (1)				365			\$250.00	\$150.00	\$400.00	
Shrub Planting - bare root 6-10 in (150- 250mm) (2)	02910-400-0561	ea.	1 Clab	365					\$0.00	
Tree Planting - bare root 11-16 in (270- 400mm) (3)	02910-400-0562	ea.	1 Clab	260					\$0.00	
Cactus Planting (4)		ea.	1 Clab						\$0.00	
NOTES:										
(1) Seeding Source:	Source: Kelley Erosion	Control (Ju	ıly 2020).							
(2) Shrub Source:										
(3) Tree Source:										
(4) Cactus Source:										

Building and Wall Demolition

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data . All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

	Means Number	Unit	Crew	Daily Output	Daily Output User	Labor	Equipment	Premium	Total	Notes
Building Demolition		<u>'</u>	<u>'</u>							
Lg. steel	02220-110-0012	C.F.	B-8	21500		\$0.10	\$0.11		\$0.21	
Lg. concrete	02220-110-0050	C.F.	B-8	15300		\$0.14	\$0.15		\$0.29	
Lg. masonry	02220-110-0080	C.F.	B-8	20100		\$0.11	\$0.11		\$0.22	
Lg. mixed	02220-110-0100	C.F.	B-8	20100		\$0.11	\$0.11		\$0.22	
Sm. steel	02220-110-0500	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Sm. concrete	02220-110-0600	C.F.	B-3	11300		\$0.17	\$0.13		\$0.30	
Sm. masonry	02220-110-0650	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Sm. wood	02220-110-0700	C.F.	B-3	14800		\$0.13	\$0.10		\$0.23	
Wall Demolition										
Block 4 in (100 mm) thick	02220-130-2000	S.F.	1 Clab	180		\$1.30	\$0.00	20%	\$1.56	
Block 6 in (150 mm) thick	02220-130-2040	S.F.	1 Clab	170		\$1.38	\$0.00	20%	\$1.66	
Block 8 in (200 mm) thick	02220-130-2080	S.F.	1 Clab	150		\$1.56	\$0.00	20%	\$1.87	
Block 12 in (300 mm) thick	02220-130-2100	S.F.	1 Clab	150		\$1.56	\$0.00	20%	\$1.87	
Conc 6 in (150 mm) thick	02220-130-2400	S.F.	B-9	160		\$11.71	\$0.47	10%	\$13.40	
Conc 8 in (200 mm) thick	02220-130-2420	S.F.	B-9	140		\$13.38	\$0.53	10%	\$15.30	
Conc 10 in (250 mm) thick	02220-130-2440	S.F.	B-9	120		\$15.61	\$0.62	10%	\$17.85	
Conc 12 in (300 mm) thick	02220-130-2500	S.F.	B-9	100		\$18.73	\$0.74	10%	\$21.42	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Waste Disposal									
Unit rates from Means Heavy Construction 2006 Edition I	by permission of R.S.Me	ans/Reed	Construct	ion Data .					
	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Total	Notes
Rubbish Handling									
Dumpster delivery (average for all sizes)	02220-350-0910	ea.			\$51.50			\$51	.50
Haul (average for all sizes)	02220-350-0920	ea.			\$161.00			\$161	.00
Rent per month (average for all sizes)	02220-350-0940	ea.			\$55.00			\$55	.00
Disposal fee per ton (tonne) (average for all sizes)	02220-350-0950	ton			\$60.50			\$60	.50
NOTES:									<u></u>
	R.S. Means Heavy Cons								
Dumpster Disposal Fee Source:		struction (2020 Q2).						
Hazardous Material Handling - Solids (+ Liqui	ids in drums)								
Pickup fees 55 gal (200 L). drums		ea.			\$251.00			\$251	.00
Bulk material (average)		ton			\$409.50			\$409	.50
Transport - truck load (80 drums, 25 cy (m3), 18 tons)		mile			\$5.88			\$5	.88
Dump site solid disposal fee	02110-300-6000/6020	ton			\$288.50			\$288	.50
NOTES:									<u> </u>
Solid Handling Cost Source	R.S. Means Heavy Cons	struction (2019 Q2).						
Solid Disposal Fee Source:	2019 Q2 R.S. Means He	eavy Cons	st. ave. 02	81					
Hazardous Material Handling - Liquids									
Vacuum Truck Pickup (2200 gal/8300 L)	02110-300-3110	hr.			\$147.00			\$147	.00
Vacuum Truck Pickup (5000 gal/19000 L)		hr.			\$213.00			\$213	
Dump site liquid disposal fee	02110-300-6000/6020	ton			\$288.50			\$288	.50
NOTES:									
Liquid Handling Cost Source									
Liquid Disposal Fee Source:	2020 Q2 R.S. Means He	eavy Cons	st. ave. 02	81					
Hydrocarbon Contaminated Soils (HCS)									
	02115-200-2020/2021	C.Y.			\$17.64			\$17	
	02115-200-2050/2055	C.Y.			\$278.50			\$278	.50
NOTES:	<u>'</u>								<u> </u>
Insitu Treatement Cost Source									
HCS Disposal Fee Source:	2020 Q2 R.S. Means He	eavy Cons	st., ave. 02	65					

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

Concrete Structure Installation

Weekly dumpster rental rates from Means Heavy Construction 2005 Edition with permission by R.S.Means/Reed Construction Data

Weekly dumpster rental rates include haul to off-site dispos	sal site and disposal fee	es	1			1			1	
	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Premium	Total	Notes
Reinforced Concrete Bulkheads and Shaft Co	vers									
Grade walls - 15 in (400mm) thick, 8 ft (2.5m) high	03310-240-4300	C.Y.	C-14D	80.02	\$163.00	\$105.53	\$13.35		\$281.88	includes reinforcing
Grade walls - 15 in (400mm) thick, 12 ft (3.7m) high	03310-240-4350	C.Y.	C-14D	26.2	\$163.00	\$322.30	\$40.76		\$526.06	includes reinforcing
Elevated conc, 1-way beam & slab - 15ft (4.6m) span	03310-240-2700	C.Y.	C-14B	20.59	\$278.00	\$410.57	\$51.87		\$740.44	
Elevated conc, 1-way beam & slab - 25ft (7.5m) span	03310-240-2750	C.Y.	C-14B	28.36	\$265.00	\$298.08	\$37.66		\$600.74	includes reinforcing
Bat Gate/Foam Plug Installation										
Bat Gate (5)		ea.			\$3,367.61					materials \$/ea. Installed
Culvert Gate (5)		ea.			\$6,735.21					materials \$/ea. Installed
Adit Foam Plug (6)		ea./C.Y.			\$336.76					materials \$/cy placed
Production Opening Foam Plug (6)		ea./C.Y.			\$336.76					materials \$/cy placed
NOTES:										
(5) Bat Gate Source:	NV BLM, 2/2006: 8 hr +	- 1hr mob/o	demob + 1	hr setup per	gate (adjusted to	2020)				
(6) Foam Plug Source: N	NV BLM, 2/2006: 8 hr+	1hr mob/d	emob + 1h	r setup per a	adit; 16 hrs per p	roduction ope	ning (adjusted to	2020)		

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Misc. Linear Projects

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data

All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

All equipment, labor and material unit costs are nom Labo	o Coolo, Equipment Co	l and w	atoriai 000	Daily	1				1	
	Means Number	Unit	Crew	Output	Materials	Labor	Equipment	Premium	Total	Notes
Fencing Installation		•								
Barbed 3-strand	02820-170-1650	L.F.	B-80A	760	\$0.51	\$0.93	\$0.33		\$1.77	
Barbed 4-strand	extrapolated	L.F.	B-80A	570	\$0.68	\$1.23	\$0.44		\$2.35	
Barbed 5-strand	02820-130-0920	L.F.	B-80A	456	\$0.85	\$1.54	\$0.55		\$2.94	
Chain link 8-10ft (2.5-3m) Install	02820-130-0920	L.F.	B-80C	180	\$38.00	\$3.91	\$1.38		\$43.29	
Wood stockade fence 6 ft (2 m) high - Install	02820-510-1240	L.F.	B-80C	150	\$16.00	\$4.69	\$1.66		\$22.35	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
Fencing Removal										
Barbed 3-strand Removal	02220-220-1600	L.F.	2 Clab	430		\$1.09	\$0.58		\$1.67	
Barbed 4-strand Removal	extrapolated	L.F.	2 Clab	355		\$1.32	\$0.70		\$2.02	
Barbed 5-strand Removal	02220-220-1650	L.F.	2 Clab	280		\$1.68	\$0.89		\$2.57	
Chain link 8-10 ft (2.5-3 m) Removal	02220-220-1700	L.F.	B-6	445		\$1.67	\$1.40		\$3.07	
Wood, all types 4-6 ft ("1.5-2 m) high - Removal	02220-220-1775	L.F.	2 Clab	430		\$1.09	\$0.58		\$1.67	
	user	L.F.								
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
	user	L.F.							\$0.00	
Culvert Removal										
12 in (300 mm) Diameter	02220-220-2900	L.F.	B-6	175		\$4.25	\$3.55		\$7.80	
18 in (450 mm) Diameter	02220-220-2930	L.F.	B-6	150		\$4.96	\$4.14		\$9.10	
24 in (600 mm) Diameter	02220-220-2960	L.F.	B-6	120		\$6.20	\$5.18		\$11.38	
36 in (1m) Diameter	02220-220-3000	L.F.	B-6	90		\$8.27	\$6.91		\$15.18	
Pipeline Removal										
0.75 in (20mm) - 4 in (100 mm) diameter	02220-381-1600	L.F.	B-20	700		\$1.65	\$0.36		\$2.01	
6 in (150 mm) - 8 in (200 mm)	02220-381-1700	L.F.	B-20	500		\$2.31	\$0.50		\$2.81	
10 in (250 mm) - 18 in (450 mm)	02220-381-1800	L.F.	B-20	300		\$3.85	\$0.83		\$4.68	
20 in (500 mm) - 36 in (1 m)	02220-381-1900	L.F.	B-20	200		\$5.77	\$1.25		\$7.02	
Pipe and Drainpipe Installation										
Water 4in (100mm) 40ft (12m) length, welded HDPE	02510-760-0100	L.F.	B-22A	400	\$2.70	\$3.19	\$4.46		\$10.35	
Water 6in (150mm) 40ft (12m) length, welded HDPE	02510-760-0200	L.F.	B-22A	380	\$5.85	\$3.36	\$4.69		\$13.90	
Water 12in (300mm) 40ft (12m) length, welded HDPE	02510-760-0500	L.F.	B-22A	260		\$4.91	\$6.86		\$11.77	
Drain 4in (100mm) perforated PVC	02620-630-2100	L.F.	B-14	315	\$1.74	\$5.96	\$1.87		\$9.57	
Drain 6in (150mm) perforated PVC	02620-630-2110	L.F.	B-14	300	\$4.22	\$6.26	\$1.96		\$12.44	
Drain 4in (100mm) corrugated, perf or plain	02620-660-0040	L.F.	2 Clab	1200	\$0.78	\$0.39	\$0.21		\$1.38	
Drain 6in (150mm) corrugated., perf or plain	02620-660-0060	L.F.	2 Clab	900	\$2.18	\$0.52	\$0.28		\$2.98	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

C.Y.	1	1	T I		\$0.50	
C.Y.					\$0.50	
-		*	•		\$1.00	
02210-700-0120 C.Y.	B-11M	28	\$9.83	\$12.10	\$21.93	
mile					\$46,803.69	
mile					\$53,489.93	
ea.					\$58,997.31	
Energy estimate (2009) Adjus	ted to 2020					
Energy estimate (2009) Adjus	ted to 2020					
Energy estimate (2018) adjus	ted to 2020					
	02210-700-0120 C.Y. mile mile ea. Energy estimate (2009) Adjus	02210-700-0120 C.Y. B-11M mile mile	C.Y.	C.Y.	C.Y.	C.Y. \$0.50 \$1.00 02210-700-0120 C.Y. B-11M 28 \$9.83 \$12.10 \$21.93 mile \$46,803.69 mile \$53,489.93 ea. \$53,489.93 Energy estimate (2009) Adjusted to 2020

Erosion and Sedimentation Control

Hourly productivity rates and crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data .

All equipment, labor and material unit costs are from Labor Costs, Equipment Costs and Material Costs spreadsheets

	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Premium	Total	Notes
rip-Rap & Rock Lining										
Rip-Rap 3/8 to 1/4 CY (m3) pieces, grouted	02370-450-0110	S.Y.	B-13	80	\$25.00	\$23.35	\$9.80		\$58.15	assumes on-site source of rip-rap
Rip-Rap 18 in (450 mm) min thick, no grout	02370-450-0200	S.Y.	B-13	53	\$7.65	\$35.24	\$14.79		\$57.68	
Gabions, 6 in (150 mm) deep	02370-450-0400	S.Y.	B-13	200	\$7.05	\$9.34	\$3.92		\$20.31	assumes on-site source rock fill for gabions
Gabions, 9 in (250 mm) deep	02370-450-0500	S.Y.	B-13	163	\$9.85	\$11.46	\$4.81		\$26.12	
Gabions, 12 in (300 mm) deep	02370-450-0200	S.Y.	B-13	153	\$14.30		\$5.12		\$31.63	
Gabions, 18 in (450 mm) deep	02370-450-0200	S.Y.	B-13	102	\$18.35		\$7.69		\$44.35	
Gabions, 36 in (1m) deep	02370-450-0200	S.Y.	B-13	60	\$31.00	\$31.13	\$13.07		\$75.20	assumes on-site source rock fill for gabions
DEP Liner Installation										
Finish grading large area	2310-100-0100	S.F.	B-11L	18000		\$0.03	\$0.08		\$0.11	
Compaction-riding, vibrating roller - 12in (300mm) lifts	2315-310-5100	C.Y.	B-10Y	2600		\$0.20	\$0.17		\$0.37	
60 mil HDPE	2660-610-0010	S.F.	3 Skwk	1600	\$0.57	\$0.65	\$0.45		\$1.67	
80 mil HDPE	user	S.F.	3 Skwk	149		\$7.02	\$4.87		\$11.89	
40 mil VLDPE	user	S.F.	3 Skwk	150		\$6.97	\$4.83		\$11.80	
	user	S.F.	3 Skwk	149		\$7.02	\$4.87		\$11.89	
	user	S.F.	3 Skwk	149		\$7.02	\$4.87		\$11.89	

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety

Cost Basis: American Magnesium - Option 1 Revised

Construction Management Support									
Office Trailer, Furnished, no hook-ups	0150-500-0250	mo.		\$198.00			\$1	98.00	
Toilet Portable, chemical 1	1590-400-6410	mo.		\$214.20			\$2	14.20	
TOTAL		*	•	\$412.20			\$4	12.20	
Pump and Casing Removal									
Pump Type	Measurement	Unit			Labor	Equipment	Tot	al	Notes
Pump Removal									
Submersible ft to p	pump	L.F.			\$7.65	\$18.86	\$	26.51	
Line Shaft ft to p	pump	L.F.			\$7.65	\$18.86	\$	26.51	
NOTES:					•				
(10) Pump Removal Source: Board	t Longyear Quote: J	une 2020							

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

			Standard	EQUIPMENT UNIT COST	TOTAL LABOR UNIT COST	TOTAL
ACTIVITY AND FLEET			Crew Size	(Hourly)	(Hourly)	(Hourly)
Rip road						
Waste rock dumps, heaps, tails - rip flat surface: Surface preparation Scarify	S					
	Sma	ill Dozer w	/ multi-sha	nk		
D7R	T-4-1-		1	\$88.37	\$34.41	\$122. ⁻ \$122. ⁻
	Totals			\$88.37	\$34.41	\$122.
	Mediu	ım Dozer w				
D9R	Totals		1	\$229.54 \$229.54	\$34.41 \$34.41	\$263.9 \$263.9
			l		ψ04.41	Ψ200.
D40D	Larg	e Dozer w/			004.4:1	4000
D10R	Totals		1	\$329.55 \$329.55	\$34.41 \$34.41	\$363.9 \$363.9
		Į.		\$020.00	φοιιτή	φοσοι
100/11	G	rader w/ m			007.40	Ф0044
16G/H	Totals		1	\$247.16 \$247.16	\$37.12 \$37.12	\$284.2 \$284.2
						•
GRADING Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms						
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills		Small Doz	zer Fleet			
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills		Small Doz	zer Fleet	\$88.37	\$34.41	
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms	Totals	Small Doz		\$88.37 \$88.37	\$34.41 \$34.41	
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms		Small Doz	1			
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms			1	\$88.37 \$229.54	\$34.41 \$34.41	\$122. \$122. \$263.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R			ozer Fleet	\$88.37	\$34.41	\$122.7
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R			ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R	Totals	Medium Do	ozer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R		Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54	\$34.41 \$34.41 \$34.41	\$122.7 \$263.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING	Totals	Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R	Totals	Medium Do	ozer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55	\$34.41 \$34.41 \$34.41	\$122.1 \$263.9 \$263.9 \$363.9
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches	Totals	Medium Do	ozer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41	\$122.3 \$263.4 \$263.4 \$363.4 \$363.5
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads	Totals Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363. \$130. \$130.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals	Medium Doz	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363.
Grading storage and structure areas Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R D7R	Totals Totals Totals	Medium Do	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$122. \$263. \$263. \$363. \$363. \$130. \$122.
Grading waste rock dumps and heaps Grading landfills Constructing pit safety berms D7R D9R D10R EXPLORATION GRADING Backfilling and grading exploration trenches Grading flat exploration roads D6R	Totals Totals Totals	Medium Doz	zer Fleet 1 zer Fleet 1 zer Fleet 1 zer Fleet 1	\$88.37 \$229.54 \$229.54 \$329.55 \$329.55 \$329.55 \$96.04 \$96.04	\$34.41 \$34.41 \$34.41 \$34.41 \$34.41 \$34.41	\$12 \$26 \$26 \$36 \$36 \$31 \$13

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

		FOLUBATA	T0T41 1 4 D0 D	
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
CAVATING				
Earthen Berms Diversion ditch excavation and backfill Underground openings backfill - excavate and place Pit berm construction (excavator option)				
	all Excavator			
325C Totals	1	\$81.37 \$81.37	\$37.12 \$37.12	\$118 \$118
Mod	ium Excavator		·	
345B	1 1	\$133.99	\$37.12	\$171
Totals		\$133.99	\$37.12	\$171
Lar	ge Excavator			
385BL Totals	1	\$312.70 \$312.70	\$37.12 \$37.12	\$349 \$340
		\$312.70	\$37.12	\$349
CAVATE AND RECONTOUR				
Recontour large roads (haul roads, access roads, etc.) Ponds - Excavate and pull liner and bury				
1 onus - Excavate and pull liner and bury				
Small F	xcavator + Doze	r		
325C	1	\$81.37	\$37.12	\$118
D7R	1	\$88.37	\$34.41	\$122
Total Equipment		\$169.74	\$71.53	\$241
Medium	Excavator + Doze	er		
345B	1	\$133.99	\$37.12	\$171
D9R Totals	1	\$229.54 \$363.53	\$34.41 \$71.53	\$263 \$435
l arge F	xcavator + Doze	•		
385BL	1	\$312.70	\$37.12	\$349
D10R	1	\$329.55	\$34.41	\$363
Totals		\$642.25	\$71.53	\$713
(PLORATION ROAD/PAD RECONTOUR				
Recontour small roads (exploration roads, service roads, etc.) Cut and Fill reclamation on slopes				
Drill pad recountour				
Drill sump backfill				
	mall Dozer			
S	1	\$96.04	\$34.41	\$130
D6R		\$96.04	\$34.41	\$130
D6R Totals	arge Dozer			
D6R Totals L	arge Dozer	\$155.83	\$34.41	
D6R Totals		\$155.83 \$155.83	\$34.41 \$34.41	
D8R Totals L D8R				\$190 \$190
D8R Totals L D8R Totals	1	\$155.83 \$186.72	\$34.41 \$37.12	\$190 \$223
D6R Totals L D8R Totals	Grader	\$155.83	\$34.41	\$190
D6R Totals L D8R Totals 14G/H Totals	Grader	\$155.83 \$186.72	\$34.41 \$37.12	\$190 \$223
D6R Totals L D8R Totals 14G/H Totals Sm 320C	Grader 1	\$155.83 \$186.72 \$186.72 \$63.49	\$34.41 \$37.12 \$37.12	\$190 \$223 \$223 \$100
D6R Totals L D8R Totals 14G/H Totals	Grader 1 1 all Excavator	\$155.83 \$186.72 \$186.72	\$34.41 \$37.12 \$37.12	\$190 \$223 \$223 \$100
D6R Totals L D8R Totals 14G/H Totals Sm 320C Totals	Grader 1 1 all Excavator	\$155.83 \$186.72 \$186.72 \$63.49	\$34.41 \$37.12 \$37.12	\$190 \$223
D6R Totals L D8R Totals 14G/H Totals Sm 320C Totals	Grader 1 all Excavator 1	\$155.83 \$186.72 \$186.72 \$63.49	\$34.41 \$37.12 \$37.12	\$190 \$223 \$223 \$100

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EQUIPMENT FLEETS					
ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
LOAD, HAUL AND PLACE MATERIAL				<u> </u>	<u> </u>
Rock placement Haul overburden for backfill Haul borrow for backfill Haul cover or growth media					
Sm	all Truck/l	Loader Flee	t		
725		Calculated	\$141.02	\$34.41	\$175.4
966G	Loader	1	\$73.88	\$34.41	\$108.2
D7R Totals		1	\$88.37 \$303.27	\$34.41 \$103.23	\$122.7 \$406.5
Mod	ium Truck	/Loader Fle	ot		
740 Wed	um muck	Calculated	\$191.63	\$34.41	\$226.0
988G	Loader	1	\$274.20	\$34.41	\$308.6
D8R		1	\$155.83	\$34.41	\$190.2
Totals		<u> </u>	\$621.66	\$103.23	\$724.8
	ge Truck/L	Loader Flee	t		
769D		Calculated	\$23.86	\$34.41	\$58.2
988G D7R	Loader	1	\$274.20 \$88.37	\$34.41 \$34.41	\$308.6 \$122.7
Totals			\$386.43	\$103.23	\$489.6
Fytra I	arge Truc	ck/Loader F	leet		
777D	Large Truc	Calculated	\$561.85	\$34.41	\$596.2
992G	Loader	1	\$522.61	\$34.41	\$557.0
D7R		1	\$88.37	\$34.41	\$122.7
Totals			\$1,172.83	\$103.23	\$1,276.0
	Scraper/Do				
631G		Calculated	\$243.74	\$34.41	\$278.1
D10R D7R		1	\$329.55 \$88.37	\$34.41 \$34.41	\$363.9 \$122.7
Totals			\$661.66	\$103.23	\$764.8
T	andem Sci	raper Fleet			
637G	andom oo	2	\$430.52	\$34.41	\$464.9
D7R		1	\$88.37	\$34.41	\$122.7
Totals			\$518.89	\$68.82	\$587.7
MISC. LOAD AND HAUL AND EARTHWORKS					
Sludge removal					
Drainage controls					
Misc Cat 32	25B Excav		,		
325C Dump Truck (10-12 yd3)		1	\$81.37 \$56.34	\$37.12 \$30.60	\$118.4 \$86.9
Totals		'	\$137.71	\$67.72	\$205.4
Misc Cat D9R Do	20r/ 1 00 d	or (5):43\ (10 12 vd2 Tu1		
D9R	izeri Luadi	ei (5 yus) /	\$229.54	\$34.41	\$263.9
966G		1	\$73.88	\$34.41	\$108.2
Dump Truck (10-12 yd3) Totals	_	1	\$56.34 \$359.76	\$30.60 \$99.42	\$86.9 \$459.1
•		.1	•		\$459.T
Misc Cat D6 Doz	er / Cat 96	6 Loader /			****
D6R 966G		1	\$96.04 \$73.88	\$34.41 \$34.41	\$130.4 \$108.2
			Ψ13.00		
Dump Truck (10-12 yd3)		1	\$56.34	\$30.60	\$86.9

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EQUIPMENT FLEETS				
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
CONCRETE BREAKING	1 2 2 2 2 2	(**************************************	(1.5 2.1.)	(,
Slab demolition				
Footing demolition Wall demolition				
Small - Cat 325B Exc				
325C	1	\$81.37	\$37.12	\$118.4
H-120 (fits 325)	1	\$32.95 \$229.54	\$0.00 \$34.41	\$32.9 \$263.9
Totals	'	\$343.86	\$71.53	\$415.3
Medium - Cat 345B Ex	cavator w/ H18	OD's Hammer		
345B	1	\$133.99	\$37.12	\$171.1
H-160 (fits 345)	1	\$67.17	\$0.00	\$67.1
D9R Totals	1	\$229.54 \$430.70	\$34.41 \$71.53	\$263.9 \$502.2
			\$71.55	ψ302.2
Large - Cat 385B Exc	cavator w/ H180	D s Hammer \$312.70	\$37.12	\$349.8
H-180 (fits 365/385)	1	\$76.01	\$0.00	\$76.0
D9R	1	\$229.54	\$34.41	\$263.9
Totals		\$618.25	\$71.53	\$689.7
DRILL HOLE ABANDONMENT				
	Grout or Ceme			
Pump (plugging) Drill Rig	1	\$635.56	\$34.23	\$669.7
Driller's Helper Totals	2	\$0.00 \$635.56	\$64.20 \$98.43	\$64.2 \$733.9
		•	\$96.43	Φ133.9
Drill Hole - Inert Media (00444	070
420D 4WD Backhoe General Laborer	1	\$42.35 \$0.00	\$34.41 \$29.32	\$76.7 \$29.3
Totals	·	\$42.35	\$63.73	\$106.0
Drill Hole - Casing	n Perforation or	Removal		
Heavy Duty Drill Rig	1	\$639.94	\$34.23	\$674.1
Driller's Helper	2	\$0.00	\$64.20	\$64.2
Totals	ļ	\$639.94	\$98.43	\$738.3
MAINTENANCE FLEET				
Road Grading, Dust Suppression, Clean Up		0-1440 0		
Maintenance - Small W. 613E (5,000 gal) Water Wagon		\$131.83	\$34.41	\$166.7
120H	1	\$73.38	\$37.12	\$166.2 \$110.5
Totals		\$205.21	\$71.53	\$276.7
Maintenance - Medium V	Vater Truck and	Cat 16G Grade	_	
613E (5,000 gal) Water Wagon	1	\$131.83	\$34.41	\$166.2
14G/H	1	\$186.72	\$37.12	\$223.8
Totals		\$318.55	\$71.53	\$390.0
Maintenance - Large W	ater Truck and	Cat 16G Grader		
621E (8,000 gal) Water Wagon	1	\$165.96	\$34.41	\$200.3
16G/H	1	\$247.16	\$37.12	\$284.2
Totals	Į	\$413.12	\$71.53	\$484.6
PROJECT SUPERVISION				
Foreman	1	\$0.00	\$82.88	\$82.8
				\$12.8
Supervisor's Truck Totals	1	\$12.82 \$12.82	\$0.00 \$82.88	\$95.7

Project Name: Foothill Dolomite Mine - Reclamation Plan

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Model Version: Version 1.4.1

Cost Data: User Data

EQUIPMENT FLEETS				
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
MEANS CREW DEFINITIONS		()	, ,,,	, ,,
Crew composition from Means Heavy Construction 2005 Edition I	by permission of R.S	S.Means/Reed Cons	truction Data .	
For use with misc. unit costs where Means is the source for produ				
1 Clab - Seedling Pla	anting/Block Wa	II Demolition		
General Laborer	1	\$0.00	\$29.32	\$29.3
Totals		\$0.00	\$29.32	\$29.3
2 Clab - Barbed Wire/Wood Fence Remov	val Drainnine In	stallation Pum	ning Evanoration	1
General Laborer	2	\$0.00	\$58.64	\$58.64
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31.13
Totals		\$31.13	\$58.64	\$89.7
2 Clab + Excavator	r - Pond Liner Co	ut and Fold		
General Laborer	2	\$0.00	\$58.64	\$58.64
325C	1	\$81.37	\$37.12	\$118.49
Totals		\$81.37	\$95.76	\$177.13
2 Clab + V	Velder - Bat Gat	26		
General Laborer	2	\$0.00	\$58.64	\$58.6
Welding Equipment	1	\$8.83	\$34.23	\$43.06
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31.1
Totals		\$39.96	\$92.87	\$132.83
3 Clab -	Foam Adit Plug	s		
General Laborer	2	\$0.00	\$58.64	\$58.64
420D 4WD Backhoe	1	\$42.35	\$34.41	\$76.70
Light Truck - 1.5 Ton Totals	1	\$31.13 \$73.48	\$0.00 \$93.05	\$31.13 \$166.53
Totals		\$73.46	\$93.05	\$100.5
3 Clab + Weld	der - Culvert Bat	Gate		
General Laborer	2	\$0.00	\$58.64	\$58.64
Welding Equipment 420D 4WD Backhoe	1	\$8.83	\$34.23	\$43.0
Light Truck - 1.5 Ton	1	\$42.35 \$31.13	\$34.41 \$0.00	\$76.70 \$31.13
Totals		\$82.31	\$127.28	\$209.5
3 Clab D - 3 Laborers	· Faraman Da			
General Laborer	+ Foreman - De	\$0.00	\$87.96	\$87.9
Foreman	1	\$0.00	\$82.88	\$82.8
Supervisor's Truck	1	\$12.82	\$0.00	\$12.8
Light Truck - 1.5 Ton	1	\$31.13	\$0.00 \$170.84	\$31.10
Totals	<u> </u>	\$43.95	\$170.84	\$214.79
	Liner Installation			
Skilled Laborer	3	\$0.00	\$96.30	\$96.3
HDEP Welder (pipe or liner) 420D 4WD Backhoe	1 1	\$48.27 \$42.35	\$0.00 \$34.41	\$48.2 \$76.7
.20210 0000000	<u>'</u>	\$0.00	Ψ04.41	\$0.0
		\$0.00		\$0.0
Teacle		\$0.00	\$130.71	\$0.00 \$221.33
Totals	1	\$90.62	\$130.71	\$221.3

Closure Cost Estimate Fleets (Crews)

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

		EQUIPMENT.	T0T41 1 4 D0 =	T0T4:
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
-	Building Demol		(1.52.1.)	(********)
200	LABOR			
General Laborer	2	\$0.00	\$58.64	\$58
Foreman	1	\$0.00	\$82.88	\$82
		\$0.00		\$(
		\$0.00		\$(
F	QUIPMENT	\$0.00		\$(
928G	1 1	\$77.71	\$34.41	\$112
Dump Truck (10-12 yd3)	2	\$112.68	\$61.20	\$173
·		\$0.00		\$(
		\$0.00		\$0
		\$0.00		\$(
		\$0.00 \$0.00		\$(\$(
		\$0.00		\$(
		\$0.00		\$(
Totals		\$190.39	\$237.13	\$427
B-6 - Chain Link				
General Laborer	2	\$0.00	\$58.64	\$58
928G Totals	1	\$77.71 \$77.71	\$34.41 \$93.05	\$112 \$170
l otals		\$11.11	\$93.03	φ170
B-8 - Large I	Building Demoli	tion		
	LABOR			
General Laborer	2	\$0.00	\$58.64	\$58
Foreman	1	\$0.00	\$82.88	\$82
		\$0.00		\$(\$(
		\$0.00 \$0.00		\$(
E(QUIPMENT	ψ0.00		Ψ
928G	1	\$77.71	\$34.41	\$112
20 Ton Crane	1	\$98.00	\$33.30	\$13
Dump Truck (10-12 yd3)	2	\$112.68	\$61.20	\$173
		\$0.00 \$0.00		\$(\$(
		\$0.00		\$(
		\$0.00		\$(
		\$0.00		\$0
		\$0.00		\$(
		\$0.00		\$0
		\$0.00 \$0.00		\$(\$(
		\$0.00		\$(
		\$0.00		\$(
Totals		\$288.39	\$270.43	\$558
		•	<u>'</u>	
R-9 - Concre	ete Wall Demoli			
			A447.00	\$117
General Laborer	4	\$0.00	\$117.28	
	1	\$0.00 \$0.00 \$9.30	\$117.28 \$82.88 \$34.00	\$82 \$43

Closure Cost Estimate Fleets (Crews)

Project Name: Foothill Dolomite Mine - Reclamation Plan

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Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

		EQUIPMENT	TOTAL LABOR	TOTAL
ACTIVITY AND ELEFT	Standard	UNIT COST	UNIT COST	COST
ACTIVITY AND FLEET	Crew Size	(Hourly)	(Hourly)	(Hourly)
	neral Compaction		000.001	000
General Laborer CS533E Vibratory Roller	1 1	\$0.00 \$55.06	\$29.32 \$34.41	\$29 \$89
Totals	'	\$55.06 \$55.06	\$63.73	\$118
· olate	I	\$00.00	\$00.1.0	\$1.10
B-11L - Fine Grading fo	r Evaporation P	ond Liner Base		
General Laborer	1	\$0.00	\$29.32	\$29
14G/H	1	\$186.72	\$37.12	\$223
Totals		\$186.72	\$66.44	\$253
B-11M -	Backhoe Work			
420D 4WD Backhoe	1	\$42.35	\$34.41	\$76
Totals		\$42.35	\$34.41	\$76
B-12G - Rip-Rap N	lachine Discard	(Modified)		
966G	achine Placed (\$73.88	\$34.41	\$108
325C	1	\$73.88 \$81.37	\$34.41 \$37.12	\$108
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31
Totals		\$186.38	\$71.53	\$257
		•		
B-13 - Grouted Ri				
General Laborer	4	\$0.00	\$117.28	\$117
Foreman	1	\$0.00	\$82.88	\$82
20 Ton Crane Totals	1	\$98.00 \$98.00	\$33.30 \$233.46	\$131 \$331
		•	7	700.
	ain Pipe Installa			
Foreman	1	\$0.00	\$82.88	\$82
General Laborer 420D 4WD Backhoe	1	\$0.00 \$42.35	\$117.28 \$34.41	\$117
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$76 \$31
Totals	'	\$73.48	\$234.57	\$308
	l l	ψ. oo	Q201101	φοσο
	emove Pipelines			
Foreman	1	\$0.00	\$82.88	\$82
Skilled Laborer	1	\$0.00	\$32.10	\$32
General Laborer	1 1	\$0.00 \$31.13	\$29.32 \$0.00	\$29 \$31
Light Truck - 1.5 Ton Totals	1	\$31.13	\$144.30	\$175
Totals		ψ31.13	ψ144.50	ψ175
B-22A - HDEP In	stallation - Pipe	or Liner		
Skilled Laborer	1	\$0.00	\$32.10	\$32
General Laborer	2	\$0.00	\$58.64	\$58
D7R Light Truck - 1.5 Ton	1 1	\$88.37	\$34.41 \$0.00	\$122
420D 4WD Backhoe	1	\$31.13 \$42.35	\$34.41	\$31 \$76
Generator 5KW	1	\$12.73	\$0.00	\$12
HDEP Welder (pipe or liner)	1	\$48.27	\$0.00	\$48
Totals		\$222.85	\$159.56	\$382
	II Barbed Wire F	ence		
B-80A - Insta			007.00	^
General Laborer Light Truck - 1.5 Ton	3	\$0.00 \$31.13	\$87.96 \$0.00	\$87 \$31

Closure Cost Estimate Fleets (Crews)

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020
File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety Cost Basis: American Magnesium - Option 1 Revised

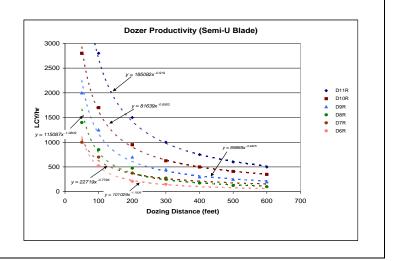
EQUIPMENT FLEETS				
ACTIVITY AND FLEET	Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
B-80C - Install Chain Link F	ence (Flatbed tru	ıck has small cı	rane)	
General Laborer	3	\$0.00	\$87.96	\$87.9
Light Truck - 1.5 Ton	1	\$31.13	\$0.00	\$31.1
Totals		\$31.13	\$87.96	\$119.0
C-14B - Elevated Concrete Sla	bs (Reinforced (Concrete Shaft (Covers)	
Foreman	1 1	\$0.00	\$82.88	\$82.8
Supervisor's Truck	1	\$12.82	\$0.00	\$12.8
Carpenter	16	\$0.00	\$716.48	\$716.4
General Laborer	2	\$0.00	\$58.64	\$58.6
Rodmen (reinforcing concrete)	4	\$0.00	\$117.28	\$117.2
Cement finisher	2	\$0.00	\$64.20	\$64.2
Gas Engine Vibrator	1	\$5.88	\$17.23	\$23.1
Concrete Pump	1	\$114.80	\$0.00	\$114.8
Totals		\$133.50	\$1,056.71	\$1,190.2
C-14D - Concrete Walls Formed in	Place (Reinforce	d Concrete Adit	Bulkheads)	
Foreman	1	\$0.00	\$82.88	\$82.8
Supervisor's Truck	1	\$12.82	\$0.00	\$12.8
Carpenter	18	\$0.00	\$806.04	\$806.0
General Laborer	2	\$0.00	\$58.64	\$58.6
Rodmen (reinforcing concrete)	2	\$0.00	\$58.64	\$58.6
Cement finisher	1	\$0.00	\$32.10	\$32.1
Gas Engine Vibrator	1	\$5.88	\$17.23	\$23.1
Concrete Pump	1	\$114.80	\$0.00	\$114.8
Totals		\$133.50	\$1.055.53	\$1,189.0

8 of 8

Productivity - Bulldozers

	Dozer Specifications											
Description	D11R	D10R	D9R	D8R	D7R	D6R						
Blade Width (SU) (ft)	18.33	15.92	14.17	12.92	12.08	10.67						
Shank Guage (3 shanks) (ft)	9.83	8.67	7.67	7.08	6.5	6.5						
Pocket Spacing (ft)	4.75	4.33	3.87	3.58	3.25	3.25						
Ripping Width (Ripper + 1 Pocket) (ft)	14.58	13	11.54	10.66	9.75	9.75						
Ripping Speed (mph)	1	1	1	1	1	1						
Ripping Maneuver (turn) Time (min)	0.25	0.25	0.25	0.25	0.25	0.25						
Altitude Deration Factor	1	1	1	1	1	1						
Ripping Hourly Production (excluding												
maneuvering time) (ft)	5,280	5,280	5,280	5,280	5,280	5,280						

	Dozer Productiv										
A		Production (LCY/hr)									
Average Dozing Distance (feet)	D11R	D10R	D9R	D8R	D7R	D6R					
50	4,800	2,800	2,000	1,400	1,000						
100	2,800	1,700	1,250	850	700	520					
200	1,500	950	700	475	375	210					
300	1,000	625	450	275	250	150					
400	750	500	300	175							
500	600	410	250	125							
600	500	350	200	100							
			Source:	Caterpillar Perfor	mance Handboo	k Edition 35					
dozer productivity	= k x Dozing Distance ^p										
(see grap											
k	= 185082	81639	89889	115087	22719	101029					
Р	= -0.919	-0.8502	-0.9425	-1.0809	-0.7796	-1.1506					



Productivity - Bulldozers (cont.)

% Grade vs. Dozing Factor							
% Grade	Dozing Factor						
-30	1.6						
-20	1.4						
-10	1.2						
0	1						
10	0.8						
20	0.55						
30	0.3						
Source: Caterpillar Per	formance Handbook Edition 35						
% Grade Dozing Fa	ctor = -0.0214x + 0.9786						
(see g	raph)						

Job Condition Correction Factor	ors - Bulldozers
OPERATOR	
Average	0.75
MATERIAL (1)	
Loose stockpile	1.2
Normal	1
Hard to cut; frozen —	
with tilt cylinder	0.8
Hard to drift; "dead" (dry,non-cohesive	
material) or very sticky material	0.8
Rock, ripped or blasted	0.6
SLOT DOZING OR SIDE BY SIDE (1)	1.2
VISIBILITY	
Good conditions	1
JOB EFFICIENCY	
50 min/hr	0.83
 Selected in facility worksheets. 	
Other factors included as standard factors.	
Source: Caterpillar Perform	ance Handbook Edition 35

Material	lb/cy	kg/m³
Alluvium	2,900	1,720
Basalt	3,300	1,960
Clay - Dry	2,500	1,480
Granite - broken	2,800	1,660
Gravel	2,550	1,510
LS - broken	2,600	1,540
LS - crushed	2,600	1,540
Sandstone	2,550	1,510
Shale	2,100	1,250
Stone - crushed	2,700	1,600
Tailings - Coarse (dry, loose sand)	2,400	1,420
Tailings - Slimes (loose sand & clay)	2,700	1,600
Topsoil	1,600	950

Note: uses Sand & Gravel - Dry from Caterpillar Handbook

Productivity - Scrapers

Scraper Specifications Description 631G 637G								
631G	637G							
100,600	112,760							
24	24							
34	34							
29	29							
One D10R	Self*							
1	1							
1	1							
1	1							
3	3							
1	1							
	631G 100,600 24 34 29 One D10R 1 1							

* Requires pair

**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

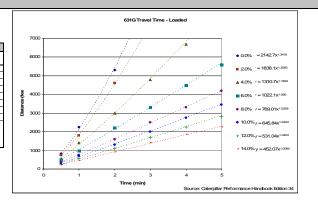
			Downhill Scraper Speed - Grade Retarding vs. Effect							Retarding vs. Effective Grade (Grade - Rolling Resistance)						
Weight of M	Materials		631G 637G PP													
Material	lb/cy	Scraper Load	Loaded Weight (lbs)	22	16	10	5	1	Loaded Weight (lbs)	25	15	10	5	1		
Alluvium	2,900	84,100	184,700	7.5	10	13	33	33	196,860	7	10	18.5	34	34		
Basalt	3,300	95,700	196,300	7.5	10	13	24.5	33	208,460	7	10	18.5	25	34		
Clay - Dry	2,500	72,500	173,100	7.5	10	13	33	33	185,260	7	10	18.5	34	34		
Granite - broken	2,800	81,200	181,800	7.5	10	13	33	33	193,960	7	10	18.5	34	34		
Gravel	2,550	73,950	174,550	7.5	10	13	33	33	186,710	7	10	18.5	34	34		
LS - broken	2,600	75,400	176,000	7.5	10	13	33	33	188,160	7	10	18.5	34	34		
LS - crushed	2,600	75,400	176,000	7.5	10	13	33	33	188,160	7	10	18.5	34	34		
Sandstone	2,550	73,950	174,550	7.5	10	13	33	33	186,710	7	10	18.5	34	34		
Shale	2,100	60,900	161,500	7.5	10	18	33	33	173,660	10	13.5	18.5	34	34		
Stone - crushed	2,700	78,300	178,900	7.5	10	13	33	33	191,060	7	10	18.5	34	34		
Tailings - Coarse (dry, loose sand)	2,400	69,600	170,200	7.5	10	13	33	33	182,360	7	10	18.5	34	34		
Tailings - Slimes (loose sand & clay)	2,700	78,300	178,900	7.5	10	13	33	33	191,060	7	10	18.5	34	34		
Topsoil	1,600	46,400	147,000	7.5	10	18	33	33	159,160	10	13.5	18.5	34	34		
			Empty	10	18	24.5	33	33	Empty	10	13.5	18.5	34	34		
											Source: C	aterpillar Perfor	mance Handbo	ook Edition 34		

Productivity - Scrapers (cont.)

Total Resistance (%)			Time (mi	n)				
(rolling + grade)	0.5	1	2	3	4	5	k	
0	825	2,250	5,300				2142.7	1
2	750	1,800	4,600				1838.1	1
4	550	1,400	3,000	4,800	6,700		1310.7	1
6	490	1,000	2,200	3,300	4,500	5,600	1022.1	
8	375	750	1,600	2,500	3,300	4,200	769.01	1
10	300	700	1,300	2,000	2,750	3,450	645.84	1
12	250	550	1,100	1,700	2,250	2,800	531.04	- 1
14	225	450	900	1,400	1,850	2,250	452.07	1

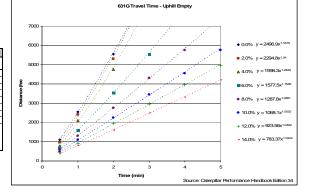
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35



	6	31G Scraper Ti	ravel Time - I	Jphill Empty				
Total Resistance (%)								
(rolling + grade)	0.5	1	2	3	4	5	k	р
0	1,100	2,550	5,550				2496.9	1.167
2	950	2,400	5,300				2294.8	1.24
4	800	2,100	4,750				1998.3	1.2849
6	700	1,600	3,550	5,550			1557.5	1.1566
8	600	1,300	2,750	4,300	5,750		1287.8	1.0891
10	500	1,100	2,250	3,450	4,550	5,750	1068.1	1.0552
12	450	900	1,950	2,950	3,950	4,950	923.56	1.0492
14	375	800	1,600	2,500	3,300	4,200	783.37	1.0444

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35



Productivity - Scrapers (cont.)

1 2,500 2,200 1,700	7ime (mi 2 5,550 5,150	n) 3	4	5	k 2402.9	p 1.2362
2,200	5,150	3	4	5	2402.9	1.2362
2,200	5,150					
4 700					2127.6	1.2995
1,700	3,900	6,250			1659.4	1.2212
1,300	2,750	4,300	5,750		1287.8	1.0891
1,100	2,200	3,300	4,500	5,600	1059.1	1.0421
850	1,750	2,700	3,600	4,475	839.89	1.0503
750	1,500	2,300	3,000	3,800	751.58	1.0055
600	1,300	2,000	2,650	3,250	595.28	1.0794
	1,100 850 750	1,100 2,200 850 1,750 750 1,500	1,100 2,200 3,300 850 1,750 2,700 750 1,500 2,300	1,100 2,200 3,300 4,500 850 1,750 2,700 3,600 750 1,500 2,300 3,000	1,100 2,200 3,300 4,500 5,600 850 1,750 2,700 3,600 4,475 750 1,500 2,300 3,000 3,800	1,100 2,200 3,300 4,500 5,600 1059.1 850 1,750 2,700 3,600 4,475 839.89 750 1,500 2,300 3,000 3,800 751.58

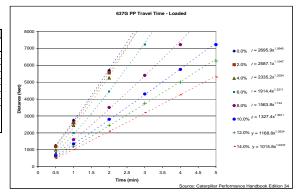
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

			637G	PP Travel Tin	e - Loaded		
	8000			77	7		
	7000		1	<u>/ /</u>		and the second	
	6000			_			■ 2.0% y = 2127.6x1.2905
.8	5000		11 /	<u>1900</u> 1900	- 1995 - 1995		▲ 4.0% y = 1659.4x1.2212
Distance (fee	4000	4	/ / 	گ∎ر مرز معمد	- Japan	santa da	■ 6.0% y = 1287.8x1.0891 ■ 8.0% y = 1059.1x1.0421
_	3000	- <u> </u>	<u>1000 - 1000</u> 1000 - 1000 - 1000	**************************************	المردور المتعمود المتعمود والمتعمود		• 10.0% y = 839.89x1.0003
	2000			<u> </u>	241	$\overline{}$	+ 12.0% y=751.58x1.0005
	1000		<u> </u>				- 14.0% y = 595.28x ^{1.0794}
	∘	1	2	3	4	5	
			Time	(min)	Source	Caternillar Ber	ormance Handbook Edition 34

	637G Push-Pull Scraper Travel Time - Uphill Empty											
Total Resistance (%)			Time (mi	n)								
(rolling + grade)	0.5	1	2	3	4	5	k	р				
0	1,250	2,750	5,700				2695.9	1.0945				
2	1,200	2,600	5,550				2587.1	1.1047				
4	990	2,450	5,250				2335.2	1.0234				
6	800	2,000	4,450	7,216			1914.4	1.2211				
8	700	1,600	3,500	5,400	7,216		1563.8	1.124				
10	625	1,350	2,800	4,300	5,750	7,216	1327.4	1.0611				
12	550	1,200	2,450	3,750	5,000	6,250	1168.8	1.0524				
14	495	1,010	2,100	3,200	4,250	5,300	1015.8	1.0337				

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Productivity - Haul Trucks

Haul Truck Specifications													
Description	769D	773E	777D	785C	793C	797B							
Chassis Weight (lb)	53,506	70,330	113,160	170,000	259,500	473,600							
Body Weight (lb)	17,350	20,300	34,785	36,788	70,785	104,200							
Standard Liner Weight (lb)	7,000	8,600	12,040	16,846	24,418	8,800							
Total Truck Weight (lb)	77,856	99,230	159,985	223,634	354,703	586,600							
Payload Capacity (cy)													
Struck	21.6	34.8	55	78.5	126	228							
Heaped	31.7	46	78.6	102	169	290							
Average	26.65	40.4	66.8	90.25	147.5	259							
Maneuver to Load Time (min)	0.7	0.7	0.7	0.7	0.7	0.7							
Maneuver and Dump Time (min)	1.1	1.1	1.1	1.1	1.1	1.1							
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83							
Rolling Resistance**	2.5	2.5	2.5	2.5	2.5	2.5							
Altitude Deration Factor	1	1	1	1	1	1							

"A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

Source: Caterpillar Performance Handbook Edition 35

					Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)														
	Weight of Mater	rials					769D					773E			777D				
Material	lb/cy	Truck (769D) Load lb	Truck (773E) Load lb	Truck (777D) Load Ib	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5	Weight (lbs)	20	15	10	5
Alluvium	2,900	77,285	117,160	193,720	155,141	11	11	15	26	216,390	7	7	13	23	353,705	7	9	12	29
Basalt	3,300	87,945	133,320	220,440	165,801	11	11	11	20	232,550	7	7	13	23	380,425	7	7	12	21
Clay - Dry	2,500	66,625	101,000	167,000	144,481	11	11	15	26	200,230	7	9	13	23	326,985	7	9	16	29
Granite - broken	2,800	74,620	113,120	187,040	152,476	11	11	15	26	212,350	7	7	13	23	347,025	7	9	12	29
Gravel	2,550	67,958	103,020	170,340	145,814	11	11	15	26	202,250	7	9	13	23	330,325	7	9	16	29
LS - broken	2,600	69,290	105,040	173,680	147,146	11	11	15	26	204,270	7	9	13	23	333,665	7	9	12	29
LS - crushed	2,600	69,290	105,040	173,680	147,146	11	11	15	26	204,270	7	9	13	23	333,665	7	9	12	29
Sandstone	2,550	67,958	103,020	170,340	145,814	11	11	15	26	202,250	7	9	13	23	330,325	7	9	16	29
Shale	2,100	55,965	84,840	140,280	133,821	11	11	15	26	184,070	7	9	13	31	300,265	7	9	16	29
Stone - crushed	2,700	71,955	109,080	180,360	149,811	11	11	15	26	208,310	7	7	13	23	340,345	7	9	12	29
Tailings - Coarse (dry, loose sand)	2,400	63,960	96,960	160,320	141,816	11	11	15	26	196,190	7	9	13	23	320,305	7	9	16	29
Tailings - Slimes (loose sand & clay)	2,700	71,955	109,080	180,360	149,811	11	11	15	26	208,310	7	7	13	23	340,345	7	9	12	29
Topsoil	1,600	42,640	64,640	106,880	120,496	11	11	15	26	163,870	7	9	17	31	266,865	9	12	16	29
			•		Empty	15	15	26	36	Empty	13	17	23	42	Empty	16	16	29	39

							Downhil	l Haul Truck	Speed - C	Grade Retar	ding vs. E	Effective C	Grade (Gra	ide - Rolli	ing Resist	ance)			
	Weight of Mater	rials					785C					793C					797B		
Material	lb/cy	Truck (785C) Load lb	Truck (793C) Load lb	Truck (797B) Load Ib	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	261,725	427,750	751,100	485,359	8	8	14	27	782,453	7	7	10	17	1,337,700	7	7	9	17
Basalt	3,300	297,825	486,750	854,700	521,459	8	8	14	27	841,453	7	7	10	17	1,441,300	7	7	9	17
Clay - Dry	2,500	225,625	368,750	647,500	449,259	8	11	14	36	723,453	7	7	10	25	1,234,100	7	7	9	23
Granite - broken	2,800	252,700	413,000	725,200	476,334	8	8	14	27	767,703	7	7	10	17	1,311,800	7	7	9	17
Gravel	2,550	230,138	376,125	660,450	453,772	8	8	14	36	730,828	7	7	10	25	1,247,050	7	7	9	23
LS - broken	2,600	234,650	383,500	673,400	458,284	8	8	14	27	738,203	7	7	10	25	1,260,000	7	7	9	23
LS - crushed	2,600	234,650	383,500	673,400	458,284	8	8	14	27	738,203	7	7	10	25	1,260,000	7	7	9	23
Sandstone	2,550	230,138	376,125	660,450	453,772	8	8	14	36	730,828	7	7	10	25	1,247,050	7	7	9	23
Shale	2,100	189,525	309,750	543,900	413,159	8	11	14	36	664,453	7	7	10	25	1,130,500	7	7	13	23
Stone - crushed	2,700	243,675	398,250	699,300	467,309	8	8	14	27	752,953	7	7	10	17	1,285,900	7	7	9	23
Tailings - Coarse (dry, loose sand)	2,400	216,600	354,000	621,600	440,234	8	11	14	36	708,703	7	7	10	25	1,208,200	7	7	9	23
Tailings - Slimes (loose sand & clay)	2,700	243,675	398,250	699,300	467,309	8	8	14	27	752,953	7	7	10	17	1,285,900	7	7	9	23
Topsoil	1,600	144,400	236,000	414,400	368,034	8	11	19	36	590,703	7	10	13	25	1,001,000	7	9	13	23
					Empty	14	19	36	36	Empty	10	13	17	33	Empty	13	17	23	42
															s	ource: Cate	rpillar Perfori	mance Handboo	ok Edition 35

Productivity - Haul Trucks (cont.)

769D Haul Truck Travel Time - Uphill Loaded												
Total Resistance (%)		Time (min)										
(rolling + grade)	0.4	1	2	3	4	5	k	р				
0	1,148	3,428	7,183				3316.3	1.1422				
4	689	1,984	4,198	6,330			1928.3	1.1033				
6	508	1,427	2,952	4,510	6,002		1386.4	1.0725				
8	394	1,082	2,263	3,411	4,592	5,740	1061.8	1.06				
10	328	869	1,771	2,690	3,608	4,510	857.82	1.0373				
15	213	574	1,181	1,804	2,394	3,018	565	1.0482				

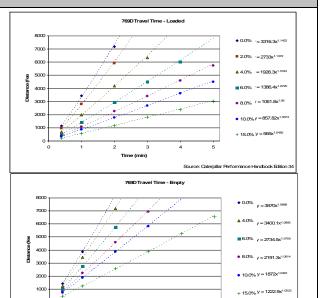
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

	769D Haul Truck Travel Time - Uphill Empty												
Total Resistance (%)			Time (mi	in)									
(rolling + grade)	0.4	1	2	3	4	5	k	р					
0	1,427	3,870					3870	1.0888					
4	1,246	3,444	7,183				3400.1	1.0895					
6	1,017	2,755	5,740				2734.5	1.0759					
8	820	2,230	4,592	6,954			2191.3	1.0614					
10	722	1,870	3,870	5,838			1872	1.0391					
15	459	1,246	2,558	3,903	5,248	6,560	1222.9	1.0523					

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Catemillar Performance Handbook Edition



Time (min)

Productivity - Haul Trucks (cont.)

773E Haul Truck Travel Time - Uphill Loaded												
Total Resistance (%)			Time (mi	n)								
(rolling + grade)	0.4	1	2	3	4	5	k	р				
0	1,066	3,117	6,496				3027.4	1.12				
4	656	1,952	4,035	6,168			1863.1	1.11				
6	492	1,312	2,756	4,167	5,577	6,955	1304.2	1.05				
8	394	1,017	2,100	3,182	4,265	5,315	1018.2	1.03				
10	328	853	1,804	2,690	3,609	4,528	856.36	1.0				
15	226	525	1,083	1,673	2,231	2,789	549.25	1.00				

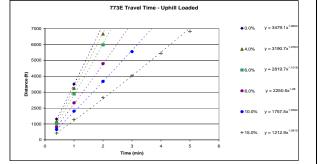
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

		77	3E Travel T	ime - Uphi	I Loaded			
7000		1					♦0.0%	y = 3027.4x ^{1.125}
6000		7	&		•		▲4.0%	y = 1863.1x ^{1.110}
5000 € 4000	1						■6.0%	y = 1304.2x ^{1.056}
\$ 4000	- / -	<u>/ </u>		•	+		●8.0%	y = 1018.2x ^{1.03}
2000			+	+			•10.0%	y = 856.36x ^{1.04}
1000		+					+15.0%	y = 549.25x ^{1.00}
0	1	2	3	4	5	6		

773E Haul Truck Travel Time - Uphill Empty Total Resistance (%) Time (min)													
		Time (mi	n)										
0.4	1	2	3	4	5	k	р						
1,312	3,510	7,218				3479.1	1.0602						
1,181	3,248	6,660				3190.7	1.0763						
1,017	2,887	5,971				2819.7	1.1018						
820	2,329	4,790	7,218			2250.5	1.08						
656	1,804	3,675	5,545			1757.5	1.0592						
427	1,280	2,657	4,035	5,446	6,824	1212.9	1.0915						
	1,181 1,017 820 656	1,181 3,248 1,017 2,887 820 2,329 656 1,804	0.4 1 2 1,312 3,510 7,218 1,181 3,248 6,660 1,017 2,887 5,971 820 2,329 4,790 656 1,804 3,675	1,181 3,248 6,660 1,017 2,887 5,971 820 2,329 4,790 7,218 656 1,804 3,675 5,545	0.4 1 2 3 4 1,312 3,510 7,218 <t< td=""><td>0.4 1 2 3 4 5 1,312 3,510 7,218 7,</td><td>0.4 1 2 3 4 5 k 1,312 3,510 7,218 3479.1 3479.1 1,181 3.248 6,660 3190.7 3190.7 1,017 2,887 5,971 2819.7 2819.7 2819.7 260.5 2,329 4,790 7,218 2250.5 55.45 1757.5</td></t<>	0.4 1 2 3 4 5 1,312 3,510 7,218 7,	0.4 1 2 3 4 5 k 1,312 3,510 7,218 3479.1 3479.1 1,181 3.248 6,660 3190.7 3190.7 1,017 2,887 5,971 2819.7 2819.7 2819.7 260.5 2,329 4,790 7,218 2250.5 55.45 1757.5						

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{\nu}}$



Productivity - Haul Trucks (cont.)

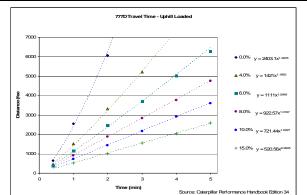
Total Resistance (%)			Time (mi	n)				
(rolling + grade)	0.4	1	2	3	4	5	k	р
0	656	2,558	6,068				2403.1	1.3876
4	459	1,509	3,313	5,215	7,085		1412	1.1863
6	394	1,148	2,460	3,706	5,018	6,298	1111	1.0949
8		918	1,886	2,837	3,772	4,756	922.57	1.0197
10		722	1,443	2,165	2,919	3,608	721.44	1.0027
15		525	1.017	1.558	2.034	2.591	520.56	0.9905

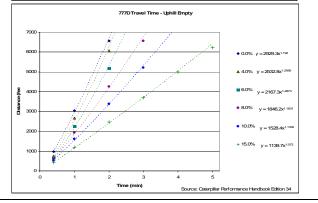
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

777D Haul Truck Travel Time - Uphill Empty Total Resistance (%) Time (min)											
Total Resistance (%)											
(rolling + grade)	0.4	1	2	3	4	5	k	р			
0	968	3,034	6,560				2929.3	1.192			
4	754	2,657	6,068				2532.8	1.2999			
6	656	2,247	5,182				2167.3	1.2873			
8	607	1,935	4,248	6,560			1846.2	1.1831			
10	525	1,607	3,378	5,215	7,282		1528.4	1.1332			
15	410	1,197	2,460	3,706	4,986	6,232	1139.7	1.072			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



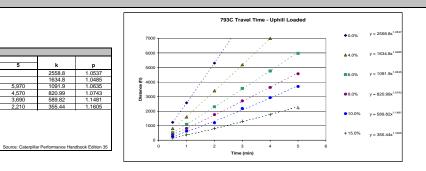


Productivity - Haul Trucks (cont.) 785C Travel Time - Uphill Loaded 785C Haul Truck Travel Time - Uphill Loaded El Time - C, Time (min) 2 5,500 3,370 2,180 1,610 4 400 Total Resistance (%) ♦0.0% y = 2491.1x^{1.1872} (rolling + grade) 2491.1 1524.4 923 719.64 820 530 300 240 2,630 1,600 1,000 790 ./i 5,040 3,270 2,480 1.1206 1.1469 1.1233 ▲ 4.0% y = 1524.4x^{1.120} 4,400 3,380 5,570 4,200 500 630 370 1,400 770 2,180 1,200 2,920 1,590 3,650 2,000 590.43 227.29 1.1678 1.4863 190 40 ■6.0% y = 923x^{1.1409} ● 8.0% y = 719.64x^{1.12} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 2000 ●10.0% y = 590.43x^{1.16} Source: Caterpillar Performance Handbook Edition 35 + 15.0% y = 227.29x1.46 785C Travel Time - Uphill Empty 785C Haul Truck Travel Time - Uphill Empty rotal Resistance (%) (rolling + grade) 7000 Time (min) 0.4 k 8 P 3032.7 0.8852 2785.5 0.9264 2542.3 0.9645 2074.4 0.9446 1780.8 0.9606 1073.1 1.0209 5,780 5,400 5,020 4,000 1,380 1,210 1,060 900 2,870 2,690 2,490 1,960 ◆0.00% y = 3032.7x^{0.885} 6,000 ▲4.00% y = 2785.5x^{0.92} 1,670 1,030 3,410 2,200 5,190 3,320 6,910 4,410 ■6.00% y = 2542.3x^{0.96} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{\nu}}$ 8.00% y = 2074.4x^{0.9} Source: Caterpillar Performance Handbook Edition 35 • 10.00% y = 1780.8x^{0.960} +15.00% y = 1073.1x^{1.020} Time (min)

Productivity - Haul Trucks (cont.)

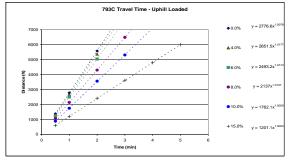
793C Haul Truck Travel Time - Uphill Loaded											
Total Resistance (%)			Time (mi	n)							
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	1,230	2,570	5,300				2558.8	1.0537			
4	800	1,600	3,400	5,190	7,000		1634.8	1.0485			
6	520	1,090	2,300	3,560	4,760	5,970	1091.9	1.0635			
8	390	810	1,760	2,700	3,630	4,570	820.99	1.0743			
10	260	630	1,200	2,180	2,930	3,690	589.82	1.1481			
15	150	380	810	1,300	1,760	2,210	355.44	1.1605			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



	793C Haul Truck Travel Time - Uphill Empty									
Total Resistance (%)										
(rolling + grade)	0.5	1	2	3	4	5	k	р		
0	1,380	2,780	5,580				2776.6	1.0078		
4	1,310	2,650	5,370				2651.5	1.0177		
6	1,230	2,500	5,040				2493.2	1.0174		
8	1,060	2,140	4,300	6,490			2137	1.0107		
10	880	1,750	3,560	5,310			1762.1	1.0059		
15	600	1,200	2,410	3,610	4,800	6,000	1201.1	1.0003		

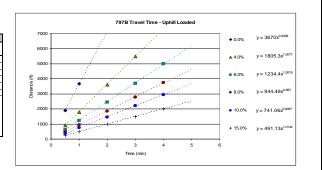
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{\nu}}$



Productivity - Haul Trucks (cont.)

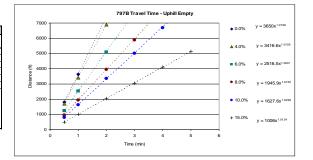
	797B Haul Truck Travel Time - Uphill Loaded										
Total Resistance (%)		Time (min)									
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	1,900	3,670					3670	0.9498			
4	900	1,800	3,620	5,480			1805.3	1.0077			
6	620	1,230	2,450	3,700	5,000		1234.4	1.0019			
8	480	940	1,850	2,790	3,750		944.49	0.987			
10	370	750	1,460	2,220	2,950		741.06	0.9957			
15	240	500	1,000	1,480	2,000		491.13	1.0142			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35



	797B Haul Truck Travel Time - Uphill Empty												
Total Resistance (%)		Time (min)											
(rolling + grade)	0.5	1	2	3	4	5	k	р					
0	1,800	3,650					3650	1.0199					
4	1,700	3,400	6,900				3416.6	1.0105					
6	1,240	2,520	5,100				2516.5	1.0201					
8	960	1,950	3,960	5,900			1945.9	1.0152					
10	800	1,620	3,350	5,000	6,700		1627.6	1.0239					
15	500	1,000	2,040	3,050	4,100	5,130	1006	1.0124					

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Productivity - Articulated Trucks

Description	725	730	735	740
Chassis Weight (lb)				
Body Weight (lb)				
Standard Liner Weight (lb)				
Operating Weight (Empty) (lb)	50,120	51,220	65,830	72,070
Payload Capacity (cy)				
Struck	14.5	17.1	19.3	23.3
Heaped	18.8	22.1	31.8	30.2
Average	16.65	19.6	25.55	26.75
Maneuver to Load Time (min)	0.7	0.7	0.7	0.7
Maneuver and Dump Time (min)	1.1	1.1	1.1	1.1
Job Efficiency	0.83	0.83	0.83	0.83
Rolling Resistance**	2.5	2.5	2.5	2.5
Altitude Deration Factor	1	1	1	1

**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

Source: Caterpillar Performance Handbook Edition 35

					ownhill Hau	I Truck Speed	l - Grade Reta	rding vs. Effe	ective Grade	(Grade - F	Rolling Res	istance)	
Weig	ht of Materials					725	730						
Material	lb/cy	Truck (725) Load lb	Truck (730) Load Ib	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	48,285	56,840	98,405	9	9	13	30	108,060	5	8	13	29
Basalt	3,300	54,945	64,680	105,065	5	9	13	22	115,900	5	8	13	29
Clay - Dry	2,500	41,625	49,000	91,745	9	13	13	30	100,220	8	8	13	29
Granite - broken	2,800	46,620	54,880	96,740	9	13	13	30	106,100	5	8	13	29
Gravel	2,550	42,458	49,980	92,578	9	13	13	30	101,200	8	8	13	29
LS - broken	2,600	43,290	50,960	93,410	9	13	13	30	102,180	8	8	13	29
LS - crushed	2,600	43,290	50,960	93,410	9	13	13	30	102,180	8	8	13	29
Sandstone	2,550	42,458	49,980	92,578	9	13	13	30	101,200	8	8	13	29
Shale	2,100	34,965	41,160	85,085	9	13	22	30	92,380	8	13	13	29
Stone - crushed	2,700	44,955	52,920	95,075	9	13	13	30	104,140	8	8	13	29
Tailings - Coarse (dry, loose sand)	2,400	39,960	47,040	90,080	9	13	13	30	98,260	8	8	13	29
Tailings - Slimes (loose sand & clay)	2,700	44,955	52,920	95,075	9	13	13	30	104,140	8	8	13	29
Topsoil	1,600	26,640	31,360	76,760	9	13	22	30	82,580	8	13	22	35
				Empty	13	13	22	30	Empty	13	13	22	35

		Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)											
Weig	ht of Materials					735				740			
Material	lb/cy	Truck (735) Load lb	Truck (740) Load lb	Loaded Weight (lbs)	20	15	10	5	Loaded Weight (lbs)	20	15	10	5
Alluvium	2,900	74,095	77,575	139,925	7	9	13	27	149,645	7	9	17	23
Basalt	3,300	84,315	88,275	150,145	7	9	13	27	160,345	7	9	13	23
Clay - Dry	2,500	63,875	66,875	129,705	7	9	13	27	138,945	9	13	17	31
Granite - broken	2,800	71,540	74,900	137,370	7	9	13	27	146,970	7	9	17	23
Gravel	2,550	65,153	68,213	130,983	7	9	13	27	140,283	7	9	17	31
LS - broken	2,600	66,430	69,550	132,260	7	9	13	27	141,620	7	9	17	31
LS - crushed	2,600	66,430	69,550	132,260	7	9	13	27	141,620	7	9	17	31
Sandstone	2,550	65,153	68,213	130,983	7	9	13	27	140,283	7	9	17	31
Shale	2,100	53,655	56,175	119,485	9	9	18	27	128,245	7	13	17	31
Stone - crushed	2,700	68,985	72,225	134,815	7	9	13	27	144,295	7	9	17	23
Tailings - Coarse (dry, loose sand)	2,400	61,320	64,200	127,150	7	9	13	27	136,270	9	13	17	31
Tailings - Slimes (loose sand & clay)	2,700	68,985	72,225	134,815	7	9	13	27	144,295	7	9	17	23
Topsoil	1,600	40,880	42,800	106,710	9	13	18	36	114,870	9	13	17	31
				Empty	13	18	27	42	Empty	17	17	23	31
									•	Source:	Caterpillar Perfo	rmance Handb	ook Edition 35

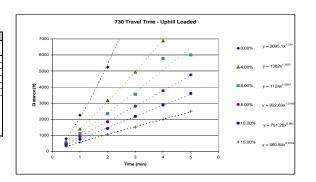
Productivity - Articulated Trucks (cont.) 725 Travel Time - Uphill Loaded 7000 725 Articulated Truck Travel Time - Uphill Loaded Total Resistance (%) ♦ 0.00% y = 2097.3x^{1.3455} Time (min) (rolling + grade) 5,200 3,200 2,390 2097.3 1329.1 1091.2 1.3455 1.2109 1.0904 2,190 1,400 1,080 ▲ 4.00% y = 1329.1x^{1.2109} 5,000 3,630 6,200 2,850 2,250 1,570 3,850 3,020 2,100 4,820 3,800 2,620 928.59 1.0158 741.09 1.0076 504.55 1.0225 880 729 500 1,850 1,450 380 300 200 ■6.00% y = 1091.2x^{1.0904} ●8.00% y = 928.59x^{1.0158} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ ● 10.00% y = 741.09x^{1.0070} Source: Caterpillar Performance Handbook Edition 35 +15.00% y = 504.55x^{1.02} 725 Travel Time - Uphill Empty 725 Haul Truck Travel Time - Uphill Empty otal Resistance (%) 0.5 (rolling + grade) 5,570 4,700 3,900 3,250 2,740 2,000 2326.3 1999.4 1728 1487.8 2,480 2,070 1,770 1,490 1.3122 1.2616 1.1556 1.0986 680 620 ◆0.00% y = 2326.3x^{1.3122} 6,020 4,970 590 540 6,730 ▲4.00% y = 1999.4x^{1.2616} 1271.2 1.0754 979.82 1.0145 1,270 960 4,200 3,000 5,600 4,000 7,050 5,000 ■6.00% y = 1728x^{1.1556} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ ●8.00% y = 1487.8x^{1.098} Source: Caterpillar Performance Handbook Edition 35 • 10.00% y = 1271.2x1.075 +15.00% y = 979.82x^{1.014} 3 Time (min)

Productivity - Articulated Trucks (cont.)

	730 Articulated Truck Travel Time - Uphill Loaded											
Total Resistance (%)		1										
(rolling + grade)	0.5	1	2	3	4	5	k	р				
0	780	2,250	5,240				2095	1.374				
4	610	1,390	3,170	4,930	6,880		1382	1.1651				
6	540	1,100	2,340	3,550	5,780	6,000	112	1.0847				
8	460	920	1,840	2,810	3,770	4,760	922.63	1.0145				
10	390	750	1,420	2,170	2,880	3,600	751.26	0.965				
15	300	560	1,050	1,500	1,995	2,500	560.84	0.9152				

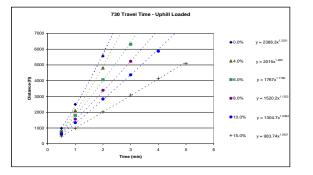
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35



	730 Haul Truck Travel Time - Uphill Empty										
Total Resistance (%)		Time (min)									
(rolling + grade)	0.5	1	2	3	4	5	k	р			
0	980	2,500	5,560				2388	1.25621			
4	810	2,100	4,810				2015	1.285			
6	770	1,800	4,060	6,310			1767	1.1766			
8	680	1,560	3,390	5,230	7,070		1520.2	1.1252			
10	595	1,340	2,840	4,370	5,870		1304.7	1.0994			
15	480	980	2,020	3,090	4,150	5,090	983.74	1.0321			

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$



Productivity

Productivity - Articulated Trucks (cont.)

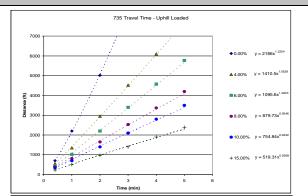
	735 Articulated Truck Travel Time - Uphill Loaded												
Total Resistance (%)		Time (min)											
(rolling + grade)	0.5	1	2	3	4	5	k	р					
0	700	2,200	5,020				2166	1.2254					
4	550	1,350	2,950	4,520	6,100		1410.5	1.0528					
6	450	1,020	2,200	3,400	4,570	5,770	1095.6	1.0223					
8	390	810	1,650	2,530	3,370	4,200	879.73	0.9546					
10	340	700	1,400	2,100	2,800	3,500	754.84	0.9332					
15	230	500	970	1,400	1,900	2,390	519.31	0.9268					

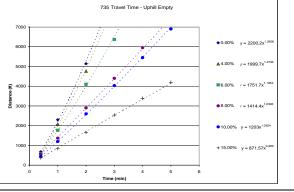
Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

1		73	5 Haul Truck T	ravel Time -	Uphill Empty	/					
ſ	Total Resistance (%)		Time (min)								
١	(rolling + grade)	0.5	1	2	3	4	5	k	p		
ı	0	680	2,300	5,140				2200.2	1.2606		
ı	4	610	2,070	4,760				1999.7	1.2795		
ı	6	580	1,770	4,100	6,370			1751.7	1.1953		
ı	8	560	1,370	2,900	4,400	5,950		1414.4	1.0306		
ı	10	440	1,200	2,600	4,030	5,450	6,900	1203	1.0924		
ı	15	370	840	1,660	2,540	3,390	4,200	871.57	0.969		

Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ Source: Caterpillar Performance Handbook Edition 35





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Productivity - Articulated Trucks (cont.) 740 Travel Time - Uphill Loaded 740 Articulated Truck Travel Time - Uphill Loaded avel Time Time (min) 2 5,500 3,190 2,200 1,650 Total Resistance (%) ◆0.00% y = 2190.6x^{1.3823} 6000 (rolling + grade) 2190.6 1415 1066.4 842.87 2,340 1,390 1,020 800 4,960 3,400 2,560 6,780 4,580 3,400 1.3823 1.1389 1.0438 1.0012 5,700 4,300 ▲4.00% y = 1415x^{1.1385} 500 640 450 1,350 940 2,040 1,400 2,750 1,830 3,410 2,340 686.02 474.86 0.9889 0.9789 290 200 ■6.00% y = 1066.4x^{1.0} ●8.00% y = 842.87x^{1.0} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 2000 • 10.00% y = 686.02x⁰ Source: Caterpillar Performance Handbook Edition 35 740 Travel Time - Uphill Empty 740 Haul Truck Travel Time - Uphill Empty Time (min) (rolling + grade) 2413.6 5,820 ♦ 0.00% / = 2413.6x^{1.3214} 5,820 5,400 4,230 3,400 2,790 1,900 590 560 500 390 2,230 1,840 1,510 1,250 2170.4 1804.5 1541.5 1308.2 1.3372 1.2048 1.1112 1.074 6,630 7,120 5,800 5,250 4,300 ▲4.00% /=2170.4x^{1.337} 900 2,920 3,930 4.930 951.69 1.0146 ■6.00% /= 1804.5x^{1.2048} Travel Time (min) = $\sqrt[p]{\frac{\text{distance}}{k}}$ 3000 ●8.00% /=1541.5x^{1.1} Source: Caterpillar Performance Handbook Edition 35 +15.00% /=951.69x1.014 Time (min)

Productivity - Wheel Loaders

	Wheel Loader Specifications													
Description	924G	928G	950G	966G	972G	972G (2)	980G	988G	988G(2)	990	992G	992G(2)	994D	L2350
Payload Capacity (cy)														
Struck	2.2	2.5	3.46	4.46	4.71	4.71	6.34	6.9	6.9	9.5	13.2	13.2	18	
Heaped	2.7	3.25	4	5.25	5.5	5.5	7.25	8.33	8.33	11.25	16	16	22.5	
Average	2.45	2.875	3.73	4.855	5.105	5.105	6.795	7.615	7.615	10.375	14.6	14.6	20.25	53
Matched Truck	N/A	N/A	N/A	725	730	735	N/A	740	769D	773D	777D	785C	793C	797B
Average Cycle Time (min)	0.45	0.45	0.5	0.5	0.5	0.5	0.55	0.55	0.55	0.55	0.6	0.6	0.6	0.75
Passes to Fill Truck	N/A	N/A	N/A	3	4	5	N/A	4	3	4	5	6	7	5
Altitude Deration Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Operator Efficiency	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Time to Fill Truck	N/A	N/A	N/A	1.5	2	2.5	N/A	2.2	1.65	2.2	3	3.6	4.2	3.75
Rolling Resistance**	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Loader matched to small truck fleet Loader matched to medium truck fleet Loader matched to large truck fleet Loader matched to extra large truck fleet

"A firm, smooth, rolling readway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered 992G (2) - can be used to load 785 with 6 passes

Source: Caterpillar Performance Handbook Edition 35; LeTourneau/actual Chilean mine operating data for L2350.

Wheeled Loaders	General Purpose	Spade Nose- Rock
928G	3.25 cubic yard	not available
966G	5.0 cubic yard	not available
972G	5.5 cubic yard	not available
988G	not available	8.3 cubic yard
992G	not available	16.0 cubic yard

note: capacities are 2:1 heaped, SAE standards

NOTES: Buckets for both Track Excavators and Wheel Loaders are offered by CECo & available for the rental rates quoted. Bucket sizes and capacities obtained from CATERPILLAR PERFORMANCE HANDBOOK, ED 34; Section 12, Wheel Loader and Section 4, Excavators

Bucket capacity and width dictated by material weight and configuration, i.e., shot, loose, tight bank, stockpile, rock, etc. Typical Nevrada applications were used to determine above bucket capacities as related to materials & densities. Job site specific may after specific bucket requirements. (Cashman Equipment, Eko, Nevada - February 21, 2005)

Productivity - Shovels

Shovel Specifications (Komatsu equivalent)								
Description		PC2000	PC3000	PC4000	PC5500	PC8000		
Payload Capacity (cy)								
	Struck	10.46	18.84	26.16	33.48	47.09		
	Heaped	14.39	25.9	35.97	46.04	64.75		
	Average	12.43	22.37	31.07	39.76	55.92		
Matched Truck		740	777D	785C	793C	797B		
Average Cycle Time (min)		0.49	0.49	0.59	0.59	0.69		
Passes to Fill Truck		2.05	2.84	3.38	4.69	5.11		
Altitude Deration Factor		1	1	0.9	1	1		
Operator Efficiency		1	1	1	1	1		
Job Efficiency		0.83	0.83	0.83	0.83	0.83		
Time to Fill Truck		1.68	2.33	3.32	4.61	5.86		
Rolling Resistance**		2.5	2.5	2.5	2.5	2.5		

Shovel matched to small truck fleet Shovel matched to medium truck fleet Shovel matched to large truck fleet

Shovel matched to extra large truck fleet

**A firm, smooth, rolling roadway with dirt or light surfacing, flexing slightly under load or undulating, maintained fairly regularly, watered

992G (2) - can be used to load 785 with 6 passes
Source: Caterpillar Performance Handbook Edition 35; Komatsu actual Peruvian mine (Lagunas Norte) operating data for PC4000.

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Productivity - Motor Graders

		Motor Grader Specifications							
Description	120H	14G/H	16G/H	24M					
Grader Width (ft)	8	9.25	10.08	14.04					
Blade Width (ft)	12	14	16	16					
Ripper Width (7 shanks) (ft)	7.6	8.5	9.75	12.83					
Road Maintence Speed (mph)									
Minimum	3	3	3	3					
Maximum	9.5	9.5	9.5	9.5					
Average	6.25	6.25	6.25	6.25					
Hourly Production	33,000	33,000	33,000	33,000					
Ripping Speed (mph)	1	1	1	1					
Minimum	0	0	0	0					
Maximum	3	3	3	3					
Average	1.5	1.5	1.5	1.5					
Altitude Deration Factor	1	1	1	1					
Hourly Production (with job efficiency correction & altitude deration factors)									
(excluding manuever time)	6,574	6,574	6,574	6,574					
Maneuver time per pass (min)	0.5	0.5	0.5	0.5					
Operator Efficiency	1	1	1	1					
Job Efficiency	0.83	0.83	0.83	0.83					

Productivity - Excavators

Track Excavator Specifications										
Description	312C	320C	325C	330C	345B	365BL	385BL			
Bucket Capacity (cy)	0.68	1.57	2.22	2.22	3	4.6	7.3			
Fill Factor	0.9	0.9	0.9	0.9	0.9	0.9	0.9			
Average Bucket Load (cy)	0.612	1.413	1.998	1.998	2.7	4.14	6.57			
Soil Type	packed earth	hard clay	hard cla							
Job Condition	med-hard	med-hard	med-hard	med-hard	med-hard	med-hard	med-har			
Cycle Times (minutes) - based on hard clay	1									
Load Bucket	0.07	0.09	0.09	0.09	0.13	0.1	0.19			
Swing Loaded	0.06	0.06	0.06	0.07	0.07	0.09	0.06			
Dump Bucket	0.03	0.03	0.04	0.04	0.02	0.04	0.03			
Swing Empty	0.05	0.05	0.06	0.07	0.06	0.07	0.07			
Total Cycle Time	0.21	0.23	0.25	0.27	0.28	0.3	0.35			
Job Efficiency	0.83	0.83	0.83	0.83	0.83	0.83	0.83			
Operator Efficiency	1	1	1	1	1	1	1			
Altitude Deration Factor	1	1	1	1	1	1	1			
Corrected Productivity (LCY/hr)	145	306	398	369	480	687	935			
Exploration Road Cycle Time (1) (min)	N/A	0.38	0.4	N/A	0.42	N/A	N/A			
Exploration Road Corr Prod (LCY/hr)	N/A	185	249	N/A	320	N/A	N/A			
Track Width (ft)	8.17	9.17	9.83	10.5	11.42	11.5	11.5			
Ditch/Trench Excavation										
Bucket Capacity (cy)	0.42	0.58	0.88	0.89	2.09	3.27	2.75			
Fill Factor	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
Corrected Productivity (LCY/hr)	50	63	88	82	186	271	196			

Source: Caterpillar Performance Handbook Edition 35

Track Excavators	Hvy Duty Rock	Extreme Service Exc (e.g. haulroad recontour)	Hvy Duty Trench
312C	30", 0.68 cubic yd	47", 0.94 cubic yd	22", .42 cubic yd
320C	30", 0.90 cubic yd	55.1", 1.57 cubic yd	23.6", .58 cubic yd
325C	36", 1.25 cubic yd	60", 2.22 cubic yd	30", .88 cubic yd
330C	36", 1.25 cubic yd	60", 2.22 cubic yd	30", .89 cubic yd
345B	43.2", 1.69 cubic yd	65", 3.0 cubic yd	48", 2.09 cubic yd
365BL	60", 3.25 cubic yd	82", 4.6 cubic yd	59", 3.27 cubic yd
385BL	85", 6.30 cubic yd.	96.0, 7.30 cubic yd	57", 2.75 cubic yd

Note: capacities are 2:1 heaped, SAE standards NOTES: Buckets for both Track Excavators and Wheel Loaders are offered by CECo &

available for the rental rates quoted. Bucket sizes and capacities obtained from CATERPILLAR PERFORMANCE HANDBOOK, ED 34; Section 12, Wheel Loader and Section 4, Excavators Sueket capacity and with dictated by maretial weight and configuration, ie, shot (Loose, tight bank, stockyle, not., etc. "Typical Nevada applications were used to determine above bucket capacities as related to materials densities." Job less peofics may alter specific bucket requirements (Cashman Equipment, Elko, Nevada - February 21, 2005)

) Exploration cycle time assumes feathering/smoothing performed by excavator

Concrete Breaking Production

Description	325C	345B	385BL
Hydraulic Hammer	H120D s	H160D s	H180D s
Material	reinforced concrete		
Min Shift Production (yd3/8hr)	160	300	350
Max Shift Production (yd3/8hr)	300	850	1,550
Avg Shift Production (8hr)	230	575	950
Job Efficiency	0.83	0.83	0.83
Altitude Deration Factor	1	1	1

Source: Caterpillar Performance Handbook Edition 35

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Drill Hole Plugging Productivity

Description	Drill Rig	Pump Rig	
Move-to-hole, set-up, tear-down (1)	2	2	
Trip in tremmie pipe (1)	500		
Pulling casing (threaded, not cemented)	200		
Single-pass perforating (water wells)	Productivity(all p	Passes	
4	60	4	
6	60	4	
8	50	4	
12	45	6	
18	40	9	
24	28	12	
Perforation setup,trip in/out,tear-down	2		
Perforation tool cost (wear cost) ⁽³⁾	2.5		
Inert Material Placement (backfill)			
Grouting/Cement (4) (cy/hr)		5.33	
Cuttings (see below) (cy/hr)		3.5	

Drillers daily logs from Newmont, Barrick, New West Gold, Agnico Eagle, iss:
 Idaho General Mines Inc.
 Drillers daily logs from Newmont, Barrick, Target Minerals
 Drillers daily logs from Newmont, 4. WDC Exploration, Dec 2005

Source: WDC Exploration, Dec 2005

Cuttings Placement Productivity
Shift productivity (Means 02210-7000120; Crew B11M)
Shift length
Estimated Hourly Productivity 28 cy / shift hours cy / hour

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	0-760 m	760-1500 m	Elevation 1500-2300 m	2300-3000 m	3000-3800 m	3800-4600 m
	(0-2500')	(2500-5000')	(5000-7000')	(7500-10,000')	(10,000-12,000')	(12,500-15,000')
MODEL	CAT User	CAT Úser	CAT User	CAT User	CAT User	CAT User
Ildozers 06R	100	100	100	100	92	84
DGR w/ Winch	100	100	100	100	92	84
OTR	100	100	100	100	100	96
D8R	100	100	100	93	85	77
9R	100	100	100	93	85	77
010R	100	100	100	100	97	89
011R	100	100	100	93	85	77
neeled Dozers						
324G	100	100	100	100	92	84
334G	100	100	100	100	92	84
844	100	100	100	100	100	96
854G	100	100	100	93	85	77
aders						
20H	100	100	100	100	96	93
4G/H	100	100	100	100	98	96
6G/H	100	100	100	100	98	96
24M	100	100	100	100	98	96
cavators B12C	100	100	100	83	78	73
312C 320C	100	100	90	83	83	73
325C	100	100	100	100	100	100
330C	100	100	100	100	100	100
845B	100	100	100	100	93	93
865BL	100	100	100	86	86	86
885BL	100	100	100	93	85	78
rapers		122	1 77			
31G	100	100	100	100	97	90
337G	100	100	100	95	87	80
aders						
924G	100	100	100	100	97	89
928G	100	100	100	100	92	85
950G	100	100	100	100	100	100
966G	100	100	100	100	96	88
72G	100	100	92	84	77	70
980G	100	100	100	100	96	88
988G	100	100	100	95	85	75
990 992G	100	100	100	100	92	85 87
992G 994D	100	100	100	100	93	88
.2350						
ovels	100	100	100	100	96	90
PC2000	100	100	100	100	96	90
PC3000	100	100	100	100	96	90
PC4000	100	100	100	100	96	90
PC5500	100	100	100	100	96	90
PC8000	100	100	100	100	96	90
her Equipment						
20D 4WD Backhoe	99	97	95	91	91	91
28D 4WD Backhoe	99	97	95	91	91	91
CS533E Vibratory Roller	100	100	98	95	91	86
CS633E Vibratory Roller	100	100	100	100	91	86
CP533E Sheepsfoot Compactor	100	100	98	95	91	100
CP633E Sheepsfoot Compactor	100	100	100	100	91	86
ight Truck - 1.5 Ton						
Supervisor's Truck						
Flatbed Truck						
Air Compressor + tools Velding Equipment	1					
rveiding Equipment Heavy Duty Drill Rig						
Pump (plugging) Drill Rig						
Concrete Pump						
Sas Engine Vibrator						
Generator 5KW						
HDEP Welder (pipe or liner)						
Ton Crane						
20 Ton Crane						
0 Ton Crane						
20 Ton Crane						
ucks				-		
25	100	100	100	100	100	95
730	100	100	100	100	100	95
35	100	100	100	100	99	91
740	100	100	100	100	99	91
769D 773E	100	100	100	93	88	82
	100	100	100	100	93	85
777D 785C	100	100	100	100	93	87
'85C	100	100	100	93	86 100	93
						93
'97B	100	100	100	100	100 95	93
613E (5,000 gal) Water Wagon	100	100	100	100	95	90
21E (8,000 gal) Water Wagon 77D Water Truck	100	100	100			87
77D Water Truck 785C Water Truck	100	100	100	100 93	93 86	80
	100	100	100	93	00	UU
Dump Truck (10-12 yd3) (5)						

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Closure Cost Estimate Seed Mixture

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1 Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Seed Mixture						
		Species Number of				
Common Name	Scientific Name	Seeds / Ib	Mix	PLS/acre	Cost/Lb	Cost/Acre
		Grasses				
Indian ricegrass	Achnatherum hymenoides		14.16	1.30		
Plains lovegrass	Eragrostis intermedia		0.44	0.04		
NM feathergrass	Hesperostipa newmexicana		5.45	0.50		
Sideoats grama	Bouteloua curtipendula		11.98	1.10		
Blue grama	Bouteloua gracilis		2.72	0.25		
Cane beardgrass	Bothriochloa barbinodis		2.18	0.20		
Galleta	Pleuraphis jamesii		11.98	1.10		
Green sprangletop	Leptochloa dubia		2.18	0.20		
Plains bristlegrass	Seteria vulpiseta		3.27	0.30		
Sand dropseed	Sporobolus cryptandrus		0.44	0.04		
		Forbs				
White prairie clover	Dale candida c		4.36	0.40		
Blue flax	Linum lewisii c		3.81	0.35		
Prairie coneflower	Ratibida colomnifera c		1.09	0.10		
Desert globemallow	Sphaeralcea ambugua c		4.36	0.40		
_						
		Shrubs				
Four-wing saltbush	Atriplex canescens		19.06	1.75		
Rubber rabbitbrush	Ericamerica intermedia c		3.81	0.35		
Apache plume	Fallugia paradoxa c		1.09	0.10		
Winterfat	Krascheninnikovia lanata		7.63	0.70		
	Total			\$9.18	i	\$0.0

Total		\$9.18	\$0.00
Source:			
Notes:			

Project Name: Foothill Dolomite Mine - Reclamation Plan

Date of Submittal: 01/18/2020

File Name: Att 2_Cost 20200820_SRCE_Version_1_4_1_017b_NV_20 Year Rev 2.xlsm

Model Version: Version 1.4.1

Cost Data: User Data

Cost Data File: SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Cost Estimate Type: Surety
Cost Basis: American Magnesium - Option 1 Revised

Seed Mix Cost Quotes



TO: Feliz Toprak, Mining Consultant, SRK Consulting, Inc.

CC: Jeff Smith, Chief Operating Officer, NMCC

FROM: Katie Emmer, Permitting & Environmental Compliance Manager, NMCC

DATE: 20 March 2018

SUBJECT: Seed Mix Quotes – Average cost \$175.00/acre PLS

The purpose of this memorandum is to summarize research into seed mix costs for seed mixes identified in the Copper Flat Mine Operation & Reclamation Plan (MORP) and to present the estimated cost of pure live seed (PLS) per acre.

The MORP calls for a specific seed mix and rate of application for interim and final reclamation:

Table E7: Interim and Final Reclamation Seed Mixes

		PL	.S/ac1
Scientific Name	Common Name	Interim	Final
Grasses – Warm Season			
Bothriochloa barbinodis	Cane bluestem	0.15	0.20
Bouteloua curtipendula	Sideoats grama	1.00	1.10
Bouteloua gracilis	Blue grama	0.20	0.25
Pleuraphis jamesii	Galleta	0.75	1.10
Leptochloa dubia	Green sprangletop	0.15	0.20
Seteria vulpiseta	Plains bristlegrass	0.20	0.30
Sporobolus cryptandrus	Sand dropseed	0.03	0.04
Grasses - Cool, Intermediate	Season		
Achnatherum hymenoides	Indian ricegrass	0.60	1.30
Eragrostis intermedia	Plains lovegrass	0.05	0.04
Hesperostipa newmexicana	NM feathergrass	0.70	0.50
Shrubs	•		**
Atriplex canescens	Four-wing saltbush	0.30	1.75
Ericamerica nauseosus	Rubber rabbitbrush	0.10	0.35
Fallugia paradoxa	Apache plume		0.10
Krascheninnikovia lanata	Winterfat	0.15	0.70
Forbs			.5
Dalea candida	White prairie clover	0.10	0.40
Linum lewisii	Blue flax	0.15	0.35
Ratibida colomnifera	Prairie coneflower		0.10
Sphaeralcea ambigua	Desert globemallow	0.10	0.40
	Total	4.73	9.18

Notes

1-Rate is in pounds of pure live seed (PLS) per acre; Substitutions may change seeding rates.

In the week of 12 March 2018, I requested recommendations for seed mix suppliers from knowledgeable personnel at the Bureau of Land Management (BLM) Las Cruces office and Golder & Associates.

Emily Clark, Soil Scientist at Golder, indicated that they commonly work with Granite Seed. Shannon Gentry, Rangeland Management Specialist, suggested Bamert Seed, Granite Seed, and Curtis & Curtis Seed companies. Based on these recommendations, I contacted all three companies and provided MORP Table E7 and requested quotes on PLS/acre that would be certified weed free at the final reclamation rate. I instructed each company that comparable seed substitutions could be made based on availability. Quotes for PLS/acre were received from each company and are presented in the table below.

Seed Mix Quotes for MORP Table E7, Final Rate, March 2018

Company	Date	Price quote PLS/acre	Notes
Curtis & Curtis, Inc.	15 March 2018	\$174.72	Low acreage Quote attached
Curtis & Curtis, Inc.	15 March 2018	\$163.79	100 acres+ Quote attached
Granite Seed	15 March 2018	\$186.50	Quote attached
Bamert Seed	16 March 2018	\$750.00	Quote via email, attached.

In further correspondence with Bamert, the supplier speculated the quote could be decreased "as much as 2/3rds" if strategic substitutions of similar seeds were made based on availability. If the Bamert quote was decreased by 67%, it would be about \$247.50/acre. Based on the difference in price from the other two suppliers, I conclude this quote is an outlier that is based on differing assumptions from those communicated in the quote request and have not included it in our estimated average seed mix cost.

Based on these quotes, attached, I conclude the average cost of PLS that would meet MORP requirements for final seed rates shown in Table E7 would be \$175.00 per acre.

Attachements:

Curtis & Curtis, Inc. Quote Granite Seed Quote Bamert Seed Quote (via email)

CURTIS & CURTIS, INC.

4500 North Prince, Clovis, New Mexico 88101 PH: 575-762-4759 FAX: 575-763-4213

Irrigated Pasture Grasses Mountain Pasture Grasses Native Pasture Grasses

Yard and Playground Grasses Golf Course Grasses Alfalfa/Clovers

PRICE QUOTATION

TO: Themac Resources DATE: March 15, 2018 ATTENTION: Katie Emmer SALESPERSON: Tyler Stuemky As Directed PHONE: 505-400-7925 SHIPPING DATE: EMAIL: kemmer@themacresourcesgroup.com FOB: Clovis PROJECT: Sierra County Mine Reclamation TERMS: 30 Days Net

DESCRIPTION PRICE AMOUNT

\$174.72/Acre (Low Acreage) Custom Seed Mix:

\$163.79/Acre (100 Acres+)

COMMON NAME BOTANICAL NAME PLS/ACRE Cane Bluestem Bouteloua dactyloides 0.20 Sub. Buffalograss Sideoats Grama Bouteloua curtipendula 1.10 Blue Grama Bouteloua gracilis 0.25 Galleta Grass Pleuraphis jamesii 1.10 Leptochloa dubia 0.20 Green Sprangletop Plains Bristlegrass Setaria vulpiseta 0.30 Sand Dropseed Sporobolus cryptandrus 0.04 Indian Ricegrass Oryzopsis hymenoides 1.30 Plains Lovegrass Eragrostis trichodes 0.04 Sand Lovegrass Hesperostipa comata 0.50 NM Feathergrass Needle and Thread Four-Wing Saltbush Atriplex canescens 1.75 Rubber Rabbitbrush Ericameria nauseosa 0.35 Apache Plume 0.10 Rhus trilobata Sub. Three-Leaf Sumac Krascheninnikovia lanata 0.70 Winterfat White Prairie Clover 0.40 Dalea purpurea Sub. Purple Prairie Clover Blue Flax Linum lewisii 0.35 Prairie Coneflower Ratibida columnifera 0.10 Desert Globemallow Sphaeralcea ambigua 0.40

***THIS QUOTE IS GOOD FOR 10 DAYS**

ALL PRICES SUBJECT TO AVAILABILITY **SUBJECT TO BEING UNSOLD

Here is our quotation on the goods named, subject to the conditions noted:

The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and

quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors are subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for prorata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production. Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein, which may appear on Purchaser's formal order will not be binding on the Seller.

QUOTE

tren@graniteseed.com Phone: (801) 768-4422 Fax: (801) 701-9413



Tren Hagman 1697 West 2100 North Lehi, UT 84043

Date: March 15, 2018

To: Katie Emmer

Company: Themac Resources

From: Tren Hagman

Re: Seed Quote

Katie,

We can provide the mix below for \$186.50/acre

Species	PLS lbs./acre
Cane beardgrass (Bothriochloa barbinodis)	0.20
Sideoats grama (Bouteloua curtipendula)	1.10
Blue grama (Bouteloua gracilis)	0.25
Galleta grass (Pleuraphis jamesii)	1.10
Green sprangletop (Leptochloa dubia)	0.20
Plains bristlegrass (Setaria vulpiseta)	0.30
Sand dropseed (Sporobolus cryptandrus)	0.04
Indian ricegrass (Achnatherum hymenoides)	1.30
Fourwing saltbush (Atriplex canescens)	1.75
Rubber rabbitbrush (Ericameria nauseosa)	0.35
Apache plume (Fallugia paradoxa)	0.10
Winterfat (Krascheninnikovia lanata)	0.70
White prairie clover (Dalea candida)	0.40
Blue flax (Linum perenne)	0.35
Prairie coneflower (Ratibida columnifera)	0.10
Desert globemallow (Sphaeralcea ambigua)	0.40
Toal:	8.64

If you have any questions, please contact me at the number above or by email $\underline{\text{tren}@\text{qraniteseed.com}}$.

Thanks

Katie Emmer

From: Colby Scroggins <cscroggins@bamertseed.com>

Sent: Friday, March 16, 2018 12:18 PM

To: Katie Emmer
Subject: RE: Seed mix quote

Katie,

I would estimate that the attached blend may be near \$750 per acre.

Please let me know if I may be of help in the future!

Have a great day,

Colby F. Scroggins

Reclamation Specialist

cscroagins@BarnertSeed.com

Office | 800.262.9892 Fax | 888.378.0419 www.BamertSeed.com





Sign Up for Our Newsletter!

From: Katie Emmer [mailto:kemmer@themacresourcesgroup.com]

Sent: Wednesday, March 14, 2018 4:25 PM

To: Colby Scroggins cscroggins@bamertseed.com>

Subject: Seed mix quote

Here's the seed mix I'm looking at, see attached.

Katie Emmer | Permitting & Environmental Compliance Manager

M: +1 505.400.7925| F: +1 505.881.4616

A: 4253 Montgomery Blvd. NE, Suite 130, Albuquerque, NM 87109

W: themacresourcesgroup.com | E: kemmer@themacresourcesgroup.com



Attachment 3

Cost Data

Format Version:	SRCE Data File v1.12	
File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite	_ Mine_1_12 Rev 2.xlsm
Date:	January 6, 2021	
Cost Type:	User Data	
Author/Source:	New Mexico Department of Workforce Solution	ions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & Equip

Units of Measure:	Imperial

No. of Bases/Regions: 1

Basis/Region	Basis/Region Name	Basis/Region Description
Basis 1	American Magnesium - Option 1 Revised	American Magnesium - Foothill Dolomite Mine - Northern Nevada Equipme
Basis 2		
Basis 3		
Basis 4		
Basis 5		
Basis 6		
Basis 7		
Basis 8		
Basis 9		
Basis 10		
Basis 11		
Basis 12		
Basis 13		
Basis 14		
Basis 15		

nentWatch & Nevada Division of Environmental Protection (NDEP) & NV BLM & 20200801_SRCE_Coost_Data_File_1_12_Std_2020

Equipment Costs

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolom
Date:	January 6, 2021
Cost Basis:	User Data
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Eng

Monthly Rental Basis	460		
(operating hrs/ period)	160		

EQUIPMENT TYPE (2)	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
	American Magnesium -				
	Ontion 1 Povised				
ulldozers	A7.000				
6R	\$7,222				
6R w/ Winch	\$7,222				
7R	\$10,466				
8R	\$20,180				
9R	\$30,100				
10R	\$44,500				
11R	\$56,234				
heeled Dozers					
24G	\$19,849				
34G	\$24,929				
44	\$33,734				
54G	\$33,802				
Notor Graders					
20H	\$3,965				
4G/H	\$14,790				
6G/H	\$18,806				
4M	\$20,686				
rack Excavators					
12C	\$5,610				
20C	\$7,750				
25C	\$10,048				
30C	\$11,500				
45B	\$16,730				
65BL	\$23,119				
85BL	\$28,472				
Scrapers					
31G	\$27,700				
37G PP	\$36,819				
Vheeled Loaders					
24G	\$5,610				
28G	\$6,530				
50G	\$9,520				
66G	\$5,856				
72G	\$13,480				
30G	\$15,690				
38G	\$19,589				
90	\$28,299				
92G	\$47,500				
94D	\$45,175				
-2350	\$82,607				

Equipment Costs

	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	American Magnesium -				
Shovels	Ontion 1 Povisod				
OM PC2000	\$70,917				
(OM PC3000	\$72,526				
(OM PC4000	\$74,135				
(OM PC5500	\$81,548				
OM PC8000	\$89,703				
lydraulic Hammers	ψου, ι συ				
I-120 (fits 325)	\$3,420				
I-160 (fits 345)	\$7,028				
H-180 (fits 365/385)	\$8,168				
Demolition Shears					
3340 (fits 322/325/330)	\$3,524				
3365 (fits 330/345)	\$4,131				
3390 (fits 365/385)	\$6,593				
Demolition Grapples	70,000				•
6315 (fits 322/325)					
3320 (fits 325/330)					
G330 (fits 345/365)					
Other Equipment					
20D 4WD Backhoe	\$3,240				
28D 4WD Backhoe	\$3,870				
CS533E Vibratory Roller	\$4,402				
CS663E Vibratory Roller	\$4,291				
CP533E Sheepsfoot Compactor	\$4,085				
CP663E Sheepsfoot Compactor	\$6,588				
ight Truck - 1.5 Ton	\$2,184				
Supervisor's Truck	\$834				
Flatbed Truck	\$621				
Air Compressor + tools	\$597				
Welding Equipment	\$405				
Heavy Duty Drill Rig	\$52,018				
Pump (plugging) Drill Rig	\$52,018				
Concrete Pump	\$14,864				
Gas Engine Vibrator	\$357				
Generator 5KW	\$938				
HDEP Welder (pipe or liner)	\$7,023				
Ton Crane	\$7,160				
20 Ton Crane	\$7,955				
50 Ton Crane	\$15,154				
20 Ton Crane	\$28,943				
Trucks					
25 (articulated)	\$9,300				
(30 (articulated)	\$14,640				
35 (articulated)	\$16,730				
(40 (articulated)	\$18,820				
769D	0.40.007				
73E	\$18,267				
77D	\$37,750				
785C	\$40,948 \$40,547				
793C	\$49,547 \$80,160				
97B	\$89,160				
13E (5,000 gal) Water Wagon	\$8,726				
221E (8,000 gal) Water Wagon	\$10,006 \$37,226				
777D Water Truck 785C Water Truck	\$40,948				
Dump Truck (10-12 yd°) (5)	\$3,752				
·	ψυ,1 υΖ				

(0)	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	American				
	Magnesium -				
	Ontion 1 Poviced				
NOTES:					
(1) Power Equipment Source:	Catepillar model or				
	equivalent, LeTourneau				
	loader, Komatsu shovels				
(2) Power Equipment Type:	Catepillar model or	Catepillar model or	Catepillar model or	Catepillar model or	Catepillar model or
	equivalent, LeTourneau	equivalent, LeTourneau	equivalent, LeTourneau	equivalent, LeTourneau	equivalent, LeTourneau
	loader, Komatsu	loader, Komatsu	loader, Komatsu	loader, Komatsu	loader, Komatsu
	shovels	shovels	shovels	shovels	shovels
(3) Drilliing Equipment Source:	RS Means Heavy				
	Construction (2020 Q2)				
(4) Other Equipment Source:	RS Means Heavy				
	Construction (2020 Q2)				
		_		_	

(2)	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	Magnesium -				
PREVENTATIVE N	AINTENANC	E COST [C	ost Per Hou	ır] ⁽¹⁾	
EQUIPMENT TYPE	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
	Magnesium -				
Bulldozers					
D6R	\$34.60				
D6R w/ Winch	\$34.60				
D7R	\$2.69				
D8R	\$3.49				
D9R	\$3.61				
D10R	\$3.79				
D11R	\$160.74				
Wheeled Dozers					
824G	\$49.58				
834G	\$59.69				
844	\$77.91				
854G	\$90.20				
Motor Graders					
120H	\$20.32				
14G/H	\$37.21				
16G/H	\$50.42				
24M	\$55.46				
Track Excavators					
312C	\$2.14				
320C	\$2.38				
325C	\$2.64				
330C	\$3.01				
345B	\$3.36				
365BL	\$80.63				
385BL	\$91.31				
Scrapers					
631G	\$3.22				
637G PP	\$116.00				
Wheeled Loaders					
924G	\$9.33				
928G	\$16.35				
950G	\$2.30				
966G	\$2.42				
972G	\$2.53				
980G	\$2.57				
988G	\$57.81				
990	\$85.58				
992G	\$11.87				
994D	\$122.36				
L-2350	\$203.53				

	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	American Magnesium -				
Shovels	Ontion 1 Povised				
KOM PC2000	\$400.00				
KOM PC3000	\$183.38 \$218.80				
KOM PC4000	\$254.21				
KOM PC5500	\$279.63				
KOM PC8000	\$307.59				
Hydraulic Hammers	ψ001.00				
H-120 (fits 325)	N/A	NI/A	NI/A	NI/A	NI/A
H-160 (fits 345)	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
H-180 (fits 365/385)	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Demolition Shears	IN/A	IN/A	11/7	IN/A	IN/A
	1 1/41	N1/A	A1/A	A1/A	N1/A
S340 (fits 322/325/330)	N/A	N/A	N/A	N/A	N/A
S365 (fits 330/345) S390 (fits 365/385)	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
,	IN/A	IN/A	IN/A	IN/A	IN/A
Demolition Grapples	1	1	.,1	1	
G315 (fits 322/325)	N/A	N/A	N/A	N/A	N/A
G320 (fits 325/330)	N/A	N/A	N/A	N/A	N/A
G330 (fits 345/365)	N/A	N/A	N/A	N/A	N/A
Other Equipment					
420D 4WD Backhoe	\$11.81				
428D 4WD Backhoe	\$12.20				
CS533E Vibratory Roller	\$19.33				
CS663E Vibratory Roller	\$20.65				
CP533E Sheepsfoot Compactor	\$24.87				
CP663E Sheepsfoot Compactor	\$29.78				
Light Truck - 1.5 Ton	\$8.67				
Supervisor's Truck	\$3.62				
Flatbed Truck	\$3.85				
Air Compressor + tools	\$3.38				
Welding Equipment	\$1.92				
Heavy Duty Drill Rig	\$278.95				
Pump (plugging) Drill Rig	\$278.95				
Concrete Pump Gas Engine Vibrator	¢1.46				
Gas Engine vibrator Generator 5KW	\$1.46 \$3.58				
HDEP Welder (pipe or liner)	φ3.30				
5 Ton Crane	\$23.22				
20 Ton Crane	\$25.80				
50 Ton Crane	\$45.47				
120 Ton Crane	\$80.14				
Trucks	400.1.1				
725 (articulated)	\$28.22				
730 (articulated)	\$2.76				
735 (articulated)	\$2.86				
740 (articulated)	\$2.97				
769D	ΨΖ.31				
773E	\$47.92				
777D	\$95.60				
785C	\$105.16				
793C	\$127.24				
797B	\$204.78				
613E (5,000 gal) Water Wagon	\$45.31				
621E (8,000 gal) Water Wagon	\$50.66				
777D Water Truck	\$95.60				
785C Water Truck	\$105.16				
Dump Truck (10-12 yd3) (5)	N/A				
(1) PM Source:					
(.)					

	Pagin 4	Decis 2	Decis 2	Decis 4	Decis F
EQUIPMENT TYPE (2)	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE	Magnesium -				
	Ontion 1 Poviced				
		(1) (Moor Itoms)		
G.E.T CONSUMPT	TION [Cost Pe	er Hour] 🗥	vvear items)		
	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE	American	Dasis 2	Dasis 3	Dasis 4	Dasis 5
Bulldozers					
D6R	\$2.61				
D6R w/ Winch	\$2.61				
D7R	\$3.84				
D8R	\$4.86				
D9R	\$6.59				
D10R	\$8.22				
D11R	\$16.66				
Wheeled Dozers					
824G	\$1.32				
834G	\$1.70				
844	\$2.42				
854G	\$2.40				
Motor Graders					
120H	\$0.62				
14G/H	\$1.38				
16G/H	\$2.00				
24M	\$2.20				
Track Excavators					
312C	\$1.33				
320C	\$1.94				
325C	\$1.48				
330C	\$2.67				
345B	\$2.85				
365BL 385BL	\$3.97				
	\$5.11				
Scrapers			_		_
631G 637G PP	\$1.86 \$2.11				
Wheeled Loaders	φ2.11				
	0.40				
924G	\$0.19 \$0.60				
928G 950G	\$0.87				
966G	\$0.87				
972G	\$1.08				
980G	\$1.41				
988G	\$2.26				
990	\$3.71				
992G	\$32.73				
994D	\$4.99				
L-2350	\$9.30				
Shovels					
KOM PC2000	\$13.87				
KOM PC3000	\$16.89				
KOM PC4000	\$19.91				
KOM PC5500	\$21.90				
KOM PC8000	\$24.09				
Hydraulic Hammers					
H-120 (fits 325)	\$11.57				
H-160 (fits 345)	\$23.24				
H-180 (fits 365/385)	\$24.96				
Demolition Shears					

	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	American Magnesium -				
S340 (fits 322/325/330)	Option 1 Povisod \$20.50				
S365 (fits 330/345)	\$25.23				
S390 (fits 365/385)	\$31.61				
Demolition Grapples	ψο				
G315 (fits 322/325)					
G320 (fits 325/330)					
G330 (fits 345/365)					
Other Equipment					
420D 4WD Backhoe	CO E 4				
420D 4WD Backhoe 428D 4WD Backhoe	\$0.54 \$0.60				
CS533E Vibratory Roller	\$0.00				
CS663E Vibratory Roller					
CP533E Sheepsfoot Compactor					
CP663E Sheepsfoot Compactor					
Light Truck - 1.5 Ton					
Supervisor's Truck					
Flatbed Truck					
Air Compressor + tools	N/A	N/A	N/A	N/A	N/A
Welding Equipment	N/A	N/A	N/A	N/A	N/A
Heavy Duty Drill Rig	\$9.60				. 47 .
Pump (plugging) Drill Rig	\$9.60				
Concrete Pump	N/A	N/A	N/A	N/A	N/A
Gas Engine Vibrator	N/A	N/A	N/A	N/A	N/A
Generator 5KW	N/A	N/A	N/A	N/A	N/A
HDEP Welder (pipe or liner)	N/A	N/A	N/A	N/A	N/A
5 Ton Crane					
20 Ton Crane					
50 Ton Crane					
120 Ton Crane					
Trucks					
725 (articulated)	\$3.22				
730 (articulated)	\$3.22				
735 (articulated)	\$3.22				
740 (articulated)	\$3.22				
769D	\$3.60				
773E	\$4.04				
777D	\$4.51				
785C					
793C					
797В					
613E (5,000 gal) Water Wagon					
621E (8,000 gal) Water Wagon					
777D Water Truck					
785C Water Truck	# 0.00				
Dump Truck (10-12 yd3) (5)	\$3.22				
Notes:					
(1) G.E.T. Source:					

(0)	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5	
EQUIPMENT TYPE (2) American Magnesium - Option 1 Povised						
TIRE COST TABL	E [Cost Per Ti	re ^(1,2,3)]				
EQUIPMENT TYPE	Basis 1 American	Basis 2	Basis 3	Basis 4	Basis 5	
Bulldozers						
D6R	N/A	N/A	N/A	N/A	N/A	
D6R w/ Winch	N/A	N/A	N/A	N/A	N/A	
D7R	N/A	N/A	N/A	N/A	N/A	
D8R	N/A	N/A	N/A	N/A	N/A	
D9R	N/A	N/A	N/A	N/A	N/A	
D10R	N/A	N/A	N/A	N/A	N/A	
D11R	N/A	N/A	N/A	N/A	N/A	
Wheeled Dozers						
824G	\$33,740.00					
834G	\$43,505.00					
844	\$62,020.00					
854G	\$76,685.00					
Motor Graders						
120H	\$11,025.00					
14G/H	\$24,500.00					
16G/H	\$35,455.00					
24M	\$39,000.50					
Track Excavators						
312C	N/A	N/A	N/A	N/A	N/A	
320C	N/A	N/A	N/A	N/A	N/A	
325C	N/A	N/A	N/A	N/A	N/A	
330C	N/A	N/A	N/A	N/A	N/A	
345B	N/A	N/A	N/A	N/A	N/A	
365BL	N/A	N/A	N/A	N/A	N/A	
385BL	N/A	N/A	N/A	N/A	N/A	
Scrapers						
631G	\$32,680.00					
637G PP	\$30,280.00					
Wheeled Loaders						
924G	\$4,770.00					
928G	\$13,815.00					
950G	\$23,085.00					
966G	\$24,075.00					
972G	\$29,880.00					
980G	\$45,720.00					
988G	\$73,350.00					
990	\$120,195.00					
992G	\$147,105.00					
994D	\$161,815.50					
L-2350	\$301,680.00					
Shovels						
KOM PC2000	N/A	N/A	N/A	N/A	N/A	
KOM PC3000	N/A	N/A	N/A	N/A	N/A	
KOM PC4000	N/A	N/A	N/A	N/A	N/A	
KOM PC5500	N/A	N/A	N/A	N/A	N/A	
KOM PC8000	N/A	N/A	N/A	N/A	N/A	
Hydraulic Hammers						
H-120 (fits 325)	N/A	N/A	N/A	N/A	N/A	
H-160 (fits 345)	N/A	N/A	N/A	N/A	N/A	
H-180 (fits 365/385)	N/A	N/A	N/A	N/A	N/A	

	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5
EQUIPMENT TYPE (2)	American Magnesium -				
Demolition Shears	Ontion 1 Povisod				
S340 (fits 322/325/330)	N/A	N/A	N/A	N/A	N/A
S365 (fits 330/345)	N/A	N/A	N/A	N/A	N/A
S390 (fits 365/385)	N/A	N/A	N/A	N/A	N/A
Demolition Grapples					
G315 (fits 322/325)	N/A	N/A	N/A	N/A	N/A
G320 (fits 325/330)	N/A	N/A	N/A	N/A	N/A
G330 (fits 345/365)	N/A	N/A	N/A	N/A	N/A
Other Equipment					
420D 4WD Backhoe	\$4,770.00				
428D 4WD Backhoe	\$4,830.00				
CS533E Vibratory Roller	Ψ4,830.00 N/A	N/A	N/A	N/A	N/A
CS663E Vibratory Roller	N/A	N/A	N/A	N/A	N/A
CP533E Sheepsfoot Compactor	N/A	N/A	N/A	N/A	N/A
CP663E Sheepsfoot Compactor	N/A	N/A	N/A	N/A	N/A
Light Truck - 1.5 Ton	\$4,140.00	IN/A	IN/A	19/7	11/74
Supervisor's Truck	\$1,350.00				
Flatbed Truck	\$1,020.00				
Air Compressor + tools	Ψ1,020.00 N/A	N/A	N/A	N/A	N/A
Welding Equipment	N/A	N/A	N/A	N/A	N/A
Heavy Duty Drill Rig	14/71	14// (14/71	14/71	14/71
Pump (plugging) Drill Rig					
Concrete Pump	N/A	N/A	N/A	N/A	N/A
Gas Engine Vibrator	N/A	N/A	N/A	N/A	N/A
Generator 5KW	N/A	N/A	N/A	N/A	N/A
HDEP Welder (pipe or liner)	N/A	N/A	N/A	N/A	N/A
5 Ton Crane	\$9,261.00	, .		.,,.	. 4
20 Ton Crane	\$10,290.00				
50 Ton Crane	\$16,530.00				
120 Ton Crane	\$42,750.00				
Trucks					
725 (articulated)	\$13,720.00				
730 (articulated)	\$14,980.00				
735 (articulated)	\$15,940.00				
740 (articulated)	\$17,240.00				
769D	¥ 11 ,= 10100				
773E	\$69,300.00				
777D	\$157,600.00				
785C	\$138,688.00				
793C	\$167,812.48				
797B	\$322,800.00				
613E (5,000 gal) Water Wagon	\$18,840.00				
621E (8,000 gal) Water Wagon	\$38,960.00				
777D Water Truck	\$157,600.00				
785C Water Truck	\$138,688.00				
Dump Truck (10-12 yd3) (5)	\$12,900.00				
Notes:					
(1) Unit Cost Basis:					
(2) Cost Basis:					
(3) Tire Cost Source:					
(4) Tire Wear Source					
(defined in model):					

Labor Rates

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolon
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & EquipmentWatch & Neva

	New Mexico Department (J			, , <u> </u>
HOURLY LABOR						
EQUIPMENT TYPE (1) OR	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5	Basis 6
JOB DESCRIPTION	American Magnesium - Option 1 Revised					
EQUIPMENT OPERATORS	- Labor Groups and B	ase Pay Rate (\$/hr) (2)				
Bulldozers						
D6R	\$28.02					
D6R w/ Winch D7R	\$28.02 \$28.02					
D8R	\$28.02					
D9R D10R	\$28.02 \$28.02					
D11R	\$28.02					
Wheeled Dozers						
824G 834G						
844						
854G						
Motor Graders 120H	\$30.23					
14G/H	\$30.23					
16G/H	\$30.23					
24M Track Excavators	\$30.23					
312C	\$30.23					
320C	\$30.23					
325C 330C	\$30.23 \$30.23					
345B	\$30.23					
365BL 385BL	\$30.23					
Scrapers	\$30.23					
631G	\$28.02					
637G PP	\$28.02					
Wheeled Loaders	200.00					
924G 928G	\$28.02 \$28.02					
950G	\$28.02					
966G 972G	\$28.02 \$28.02					
980G	\$28.02					
988G	\$28.02					
990 992G	\$28.02 \$28.02					
994D	\$28.02					
L-2350	\$28.02					
Shovels KOM PC2000						
KOM PC3000						
KOM PC4000						
KOM PC5500 KOM PC8000						
Hydrauilc Hammers						
H-120 (fits 325)						
H-160 (fits 345) H-180 (fits 365/385)						
Demolition Shears						
S340 (fits 322/325/330)						
S365 (fits 330/345) S390 (fits 365/385)				 		
Demolition Grapples						
G315 (fits 322/325)						
G320 (fits 325/330) G330 (fits 345/365)						
Other Equipment						
420D 4WD Backhoe	\$28.02					
428D 4WD Backhoe	\$28.02					
CS533E Vibratory Roller CS663E Vibratory Roller	\$28.02 \$28.02					
CP533E Sheepsfoot Compactor	\$28.02					
CP663E Sheepsfoot Compactor Light Truck - 1.5 Ton	\$28.02 \$0.00					
Supervisor's Truck	\$0.00					
Flatbed Truck						
Air Compressor + tools Welding Equipment	\$27.69 \$27.88					
Heavy Duty Drill Rig	\$27.88					
Pump (plugging) Drill Rig	\$27.88					
Concrete Pump Gas Engine Vibrator	\$14.03					
Generator 5KW	,					

Labor Rates

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolon
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & EquipmentWatch & Neva

20 Contract	Author/Source:	New Mexico De	epartment	of Workforce Sc	Diutions P	ublic Works Pre	valling wa	ge Rates Type r	1 - Heavy E	Ingineering Con	struction	& Equipmentwa	itch & Ne
Basis 1	HOURLY LABOR	RATE TA	BLE										
Compared pages of triangle Compared Co				Basis	2	l Basis	3	Basis	4	Basis	5	Basis	6
### ### ### ### ### ### ### ### ### ##		American Mag	nesium -	240.0		Buois		24010	•	240.0		<u> </u>	<u> </u>
22 To Case		-											
\$2 (70 (1996) \$2 (72	5 Ton Crane												
120 Tan Creams													
English Section Sect													
Source S			* =:::=										
Enjoyment 7-mon 1	Equip Op Fringe Benefits (\$/hr)						\$0.00		\$0.00		\$0.00		
Equipment Zone 2 18-54 (First 19-12) 1	· ·		•	nr) ⁽³⁾									
Excipance A				none	\$0.00	none	\$0.00	none	\$0.00	none	\$0.00		
Experience 200													
Sequence	Equipment Zone 4												
### MOTES: Chapter Ch	Equipment Zone 5												
NOTES: (1) Fighward Type (calculation model) or equivalent or complete or com													
Cappliar mode Cappliar mod	Equipment Zone 7												
Cappliar mode Cappliar mod	NOTES:												
Pipelyawar Oparens Source See Bedata Department of	(1) Equipment Type	Catepillar model											
TRUCK DRIVERS - Labor Groups and Base Pay Rete (s/hry)		or equivalent	who are to a	or equivalent		or equivalent		or equivalent		or equivalent		or equivalent	
TRUCK DRIVERS - Labor Groups and Base Pay Rate (\$\frac{\shrip}{\shrip}\$)			irtment of										
Damp Track Damp Track School Damp Track School			ase Pay	Rate (\$/hr) (4)									
Other 20 year 1	THOUSE DISTRIBUTION	<u> </u>											
200 (ant-culated)	725 (articulated)	Driver > 25 yds < 60 vds											
Double Truck Double Truck Double State Double State Double Truck Double Truck Double Truck Double State Double Truck Double State Double Truck Double Truck Double State Doub	730 (articulated)	Driver > 25 yds <	\$28.02	2									
236 (articulated)	, ,	Dump Truck	\$28.02	2									
Add Carticulated)	735 (articulated)	60 vds	\$28.02										
Divide 1 25 yights	740 (articulated)	Driver > 25 yds < 60 yds											
773E	769D	Driver > 25 yds <		2									
7978C	773E	00 yus	\$28.02)									
1936	777D	Dump Truck	\$28.02)									
Mater Truck	785C												
## State Sta													
### ### ### #### #####################		Water Truck >	\$28.02										
621E (8,000 gal) Water Wagon 2,000 callone	613E (5,000 gal) Water Wagon		#20.00										
	621E (8,000 gal) Water Wagon		\$20.02	4									
Dump Truck (10-12 yd3) 18 yds 24.92 18 yds 18 y	777D Water Truck												
Dump Truck (10-12 yd3) Triver > 8 yds <	785C Water Truck		20100										
Fringe Benefits	Dump Truck (10-12 vd3)	Driver > 8 yds <	\$24.92	2									
Truck Driver Fringe Benefits (\$/hr)		18 yas											
Truck Zone 1)	\$0.00				\$0.00		\$0.00		\$0.00		
Truck Zone 1									_				
Truck Zone 3			\$0.00	none	\$0.00	none	\$0.00	none	\$0.00	none	\$0.00		
Truck Zone 4	Truck Zone 2	50-150 miles	\$0.00										
Truck Zone 5 Truck Zone 6 Truck Zone 7 NOTES: (4) Truck Driver Source: New Mexico Department of (5) Zone Basis: From Deming LABORERS - Labor Groups and Base Pay Rate (\$/hr) (6/7) General Laborer Group 4 \$26.14													
Truck Zone 6 Truck Zone 7 NOTES: (4) Truck Driver Source: New Mexico Department of (5) Zone Basis: From Demining LABORERS - Labor Groups and Base Pay Rate (\$/hr) (5/) General Laborer Group 1 \$23.88 Skilled Laborer Group 4 \$26.14 Driller's Helper Group 3 \$26.14 Cement finisher Group 3 \$26.14 Cement finisher Group 3 \$26.14 Carpenter Fringe Benefits (\$/hr) Fringe Benefits (\$/hr) \$0.00 Carpenter Fringe B		>300 miles	\$0.00										
Note													
A Truck Driver Source: New Mexico Department of S Zone Basis: From Deming S S S S S S S S S													
A Truck Driver Source: New Mexico Department of S Zone Basis: From Deming S S S S S S S S S													
Capenter Fringe Benefits (\$/hr) So.00 So	(4) Truck Driver Source		ertment of										
Separable Sepa			ov Dete	(¢/br) (6,7)									
Skilled Laborer Group 4 \$26.14													
Driller's Helper Group 3 \$26.14				1									
Rodmen (reinforcing concrete) Group 1 \$23.88				1									
Carpenter \$36.47 Sac.47 Sac.47 <td>Rodmen (reinforcing concrete)</td> <td>Group 1</td> <td>\$23.88</td> <td></td>	Rodmen (reinforcing concrete)	Group 1	\$23.88										
Fringe Benefits \$0.00	Cement finisher												
Laborer Fringe Benefits (\$/hr) \$0.00	-		\$36.47										
Carpenter Fringe Benefits (\$/hr) \$0.00 South and Area Adjustments Laborer Zone 1 0-50 miles \$0.00 none \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Zone and Area Adjustments (8) Laborer Zone 1 0-50 miles \$0.00 none \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <td< td=""><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		1											
Laborer Zone 1 0-50 miles \$0.00 none \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0		ts ⁽⁸⁾	φυ.υυ										
Laborer Zone 2 50-150 miles \$0.00			#0.00	***	Ф0.00		#0.00		Ф0.00		CO. CC		
Laborer Zone 3 150-300 miles \$0.00				none	\$0.00	none	\$0.00	none	\$0.00	none	φυ.00		

Labor Rates

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolon
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & EquipmentWatch & Neva

(1)	Basis	1	Basis	2	Basis	s 3	Basis 3 Basis 4		Basis	5	Basis	6
EQUIPMENT TYPE (1) OR JOB DESCRIPTION	American Mag Option 1 Re	nesium -		<u>-</u>								
aborer Zone 5												
aborer Zone 6												
aborer Zone 7												
OTES:												
(6) Laborer Source:	New Mexico Depa	rtment of										
(7) Carpenter Source:	New Mexico Depa	rtment of										
(8) Zone Basis:	From Deming											
PROJECT MANAGEMENT		CAL LAB	OR - Base Pa	ay Rate (\$/hr) ⁽⁹⁾							
Project Manager		\$72.56			l i							
oreman		\$67.50			1							
Field Geologist/Engineer		\$109.94			1							
Field Tech/Sampler		\$76.11										
Range Scientist		\$97.25										
Senior Planning Engineer												
Project Engineer												
Mechanic/Fitter												
						1						
NOTES:												
(9) Project Manager:	R.S.Means 2020 C	Q2 (01 31										
(9) Foreman Source:	R.S.Means 2020 0	Q2 (01 31										
(9) Techical Labor Source:	Wood plc 2020 Ad	justed for										
NDIRECT COSTS												
SOCIAL SECURITY, WORK	MAN'S COMP	, INSUR	ANCE, ETC.									
Jnemployment (%)		1.84%										
Retirement/SS/Medicare (%)		7.65%										
Vorkman's Compensation (%)		13.30%										
State Payroll Tax (13),(15),(17),(18	3)											
	ĺ											
NOTES:												
(10) Workman's Comp Source:	RS Means R0131	13-60 NV										
Inemployment Tax	NRS 612.540, NR	S 612.606										

File Name:	SRCE_Cost_data-Am_Mg_Footh
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction

NECESIMATION M	AIERIA	L COST TA	ABLE				
MATERIAL TYPE	-	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5	Basis 6
WATERIAL ITPE	•	Magnesium -					
Revegetation Materials		Ontion 1 Povisod					
Seed Mixes							
Seed Mix	Units						
None		•	•				
Mix 1	Cost/Acre	\$302.50					
Mix 2 Mix 3	Cost/Acre Cost/Acre	\$332.75 \$363.00					
Mix 4	Cost/Acre	\$393.25					
Jser Mix 1	Cost/Acre	φ030.20	ψ000.20				
Jser Mix 2	Cost/Acre						
Jser Mix 3	Cost/Acre						
User Mix 4	Cost/Acre						
Jser Mix 5 (see Seed Mix sheet)	Cost/Acre						
Madala	Notes:						
Mulch	11.5	ī	1		•	•	1
tem None	Units						
None Straw Mulch	Cost/lb	\$0.17	\$0.17				
Hydro Mulch	Cost/lb	\$0.17	•				
Timber Mulch	Cost/lb	ψ0.20	ψ0.20				
	Cost/lb						
	Cost/lb						
	Notes:	Straw Spec 60 lb. bale, Cert. weed	Straw Spec 60 lb. bale, Cert. weed				
		free, (June 2019)100					
		bales per load	bales per load				
		Granite Seed \$500	Granite Seed \$500				
			per Ton in 50 lb bag				
		Wood (Hydro) Mulch	Wood (Hydro) Mulch				
		(June 2020)	(June 2020)				
Amendments							
Item	Units						
None	0	00.70	00.70				
Organic Matter	Cost/lb	\$0.70	\$0.70				
Treated Sludge Chemical	Cost/lb Cost/lb	\$0.59	\$0.59				
Chemical	Cost/lb	φ0.59	φ0.59				
	Cost/lb						
	Cost/lb						
	Notes:	per lb. in 50 lb. bag,	per lb. in 50 lb. bag,				
		1 Ton min order	1 Ton min order				
		Sustain 4-6-4 (June	Sustain 4-6-4 (June				
		2020)	2020)				
		Western Nevada	western Nevada Supply \$29.34 per 50				
		lb. bag 15-15-15	lb. bag 15-15-15				
		(June 2020)	(June 2020)				
Well Abandonment Mat	erials						
Description	Units						
2	FOUL	*	*-				
Cement	50lb bag	\$7.57					
Grout (Low Grade Bentonite) Inert Material/Cuttings	50lb bag cy	\$8.85	\$8.85				
mert waterial/Outlings	Су						
	Notes:		(1) Jentech Drilling				
		Supply quote (June 2020) Type I,II	Supply quote (June 2020) Type I,II				
		Cement at \$14.24	Cement at \$14.24				
		per 94 lb. bag	per 94 lb. bag				
			Supply (June 2020)				
		3/8 in. Chunk	3/8 in. Chunk				
			Bentonite Hole Plug				
			at \$8.85 per 50 lb. bag (5.75 cf/bag at				
			43 gallons slurry and				
		12.1% solids)+ 10%	12.1% solids)+ 10%				
		for bentonite chips	for bentonite chips				
		· ·	a al al a al				
		added.	added.				
Monitoring Coats		· ·	added.				
Monitoring Costs Description	Units	· ·	added. Cost/unit	Cost/unit	Cost/unit	Cost/unit	Cost/unit

File Name:	SRCE_Cost_data-Am_Mg_Footh
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Constructic

	Basis 1	Basis 2	Basis 3	Basis 4	Basis 5	Basis 6
=	American Magnesium -					
1	Ontion 1 Povisod	* = = 0 //				
		·				
ea.	\$6.51	\$6.51				
ea	\$411.00	\$411.00				
	-	· · · · · · · · · · · · · · · · · · ·				
	-					
	V.0.1.00	ψ.ισ.ι.σσ				
ea.						
ea.						
Notes:	(1) WET Lab, Reno,	(1) WET Lab, Reno,				
	Nevada (July 2020)	Nevada (July 2020)				
		Sample supply costs				
	adjusted to 2020.	adjusted to 2020.				
	unknown.	unknown.				
Unite	Coet/unit	Coet/unit	Coet/unit	Cost/unit	Cost/unit	Cost/unit
Office	Cost/uriit	COSt/UTIIL	Cost/uriit	Costraint	Cost/uriit	Costanii
len\2	\$2.10	\$2.10				
Ψ/ΚΥΥΠ	ψ0.0707	ψ0.0707				
Notes:	(1) Source: Oil Price	(1) Source. Oil Price				
140103.	Infomration Service,	The state of the s				
	including freight to	including freight to				
	Nevada (July 2020).	Nevada (July 2020).				
	(0)0_0					
		Source: Federal				
	Source: Federal	Source: Federal Government Vehicle				
	Source: Federal Government Vehicle	Source: Federal Government Vehicle Allowance Rate 2020				
	Source: Federal Government Vehicle Allowance Rate 2020	Government Vehicle				
	ea.	Basis 1 American Magnesium - Ontion 1 Povisod ea. \$2,788.41 ea. \$6.51 ea. \$411.00 ea. \$483.40 ea. \$150.00 ea. \$56.00 ea. \$56.00 ea. \$461.00 ea. Value 1 WET Lab, Reno, Nevada (July 2020) Well pump and Sample supply costs adjusted to 2020. Original source unknown. Units Cost/unit \$/gal \$2.19 \$/mi \$0.58 \$/kWh \$0.0787	American Magnesium - Ontion 1 Povisor September Septembe	Basis 1	Basis 1	Basis 1

Nevada Standardized Bond Calculation Misc. Unit Costs

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Date:	January 6, 2021
Cost Basis:	User Data

Author/Source: New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & EquipmentWatch & Nevada

Author/Source.	New Mexico Depa							7,	, =::g:::e	J			
MISCELLANEOUS COST TAB	LE												
JOB DESCRIPTION		Bas American N		Bas	sis 2	Bas	sis 3	Bas	sis 4	Bas	sis 5	Bas	is 6
JOB DESCRIPTION		- Option 1	nagnesium Revised										
REVEGETATION													
ltem (4)	Units	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip
Seeding - Broadcast Manual (1)	\$/acres	\$140.00	\$50.00	\$140.00	\$50.00								
Seeding - Broadcast Mechanical (1) Seeding - Drill (1)	\$/acres \$/acres	\$140.00 \$140.00	\$50.00 \$120.00	\$140.00 \$140.00	\$50.00 \$120.00								
Seeding - Hydroseeding ⁽¹⁾	\$/acres	\$250.00	\$120.00		\$120.00								
Item	Units	Materials	ψ100.00	Materials	ψ100.00	Materials		Materials		Materials		Materials	
Shrub Planting - bare root 6-10 in (150- 250mm) (2)	ea.												
Tree Planting - bare root 11-16 in (270- 400mm) (3)	ea.												
Cactus Planting (4)	ea.												
NOTES:													
NO1E3.	(1) Seeding Source:	Source: Kelley	Erosion	Source: Kelley	Erosion								
		Control (July 20	020).	Control (July 20	020).								
	(2) Shrub Source:												
	(3) Tree Source:												
	(A) D = -												
	(4) Cactus Source:												
BUILDING and WALL DEMOLITION													
Item	Units		Premium		Premium		Premium		Premium		Premium		Premium
Building Demolition													
Lg. steel Lg. concrete	C.F.					<u> </u>		<u> </u>		<u> </u>			
Lg. masonry	C.F.					<u> </u>		1					
Lg. mixed	C.F.												
Sm. steel	C.F.												
Sm. concrete Sm. masonry	C.F.												
Sm. wood	C.F.												
Wall Demolition													
Block 4 in thick	S.F.		20%		20%		20%		20%		20%		
Block 6 in thick	S.F.		20%		20%		20%		20%		20%		
Block 8 in thick Block 12 in thick	S.F.		20% 20%		20% 20%		20% 20%		20% 20%		20% 20%		
Conc 6 in thick	S.F.		10%		10%		10%		10%		10%		
Conc 8 in thick	S.F.		10%		10%		10%		10%		10%		
Conc 10 in thick	S.F.		10%		10%		10%		10%		10%		
Conc 12 in thick WASTE DISPOSAL	S.F.		10%		10%		10%		10%		10%		
Item	Units	Materials		Materials		Materials		Materials		Materials		Materials	
Rubbish and Waste Handling													
Dumpster delivery (average for all sizes)	ea.	\$51.50		\$51.50									
Haul (average for all sizes) Rent per month (average for all sizes)	ea.	\$161.00 \$55.00		\$161.00 \$55.00									
Disposal fee per ton (tonne) (average for all sizes)	ton	\$60.50		\$60.50									
	•				•		•		•				
NOTES:	D												
	Dumpster Cost Source	R.S. Means F Construction		R.S. Means I Construction	leavy (2020 Q2).								
	Disposal Fee Source:	R.S. Means F	leavy	R.S. Means F	Heavy								
Hazardous Material Handling - Solids		Construction	(2020 Q2).	Construction	(2020 Q2).								
Pickup fees 55 gal. drums	ea.	\$251.00		\$251.00	l e		I		l e				
Bulk material (average)	ton	\$409.50		\$409.50									
Transport - truck load (80 drums, 25 cy (m3), 18 tons)	mile	\$5.88		\$5.88									
Dump site disposal fee	ton	\$288.50		\$288.50	<u> </u>				<u> </u>				
NOTES:													
	lid Handling Cost Source			R.S. Means H									
9,	olid Disposal Fee Source:	Construction 2019 Q2 R.S.		Construction 2019 Q2 R.S.									
	Dioposai i ee souice.	Heavy Const.		Heavy Const.									
Hazardous Material Handling - Liquids													
Vacuum Truck Pickup (2200 gal or 9,700 litres)	hr.	\$147.00		\$147.00									
Vacuum Truck Pickup (5000 gal or 19,000 litres) Dump site disposal fee	hr. ton	\$213.00 \$288.50		\$213.00 \$288.50									
- surp one disposal for	1 1011	Ψ200.00		Ψ200.00	I				I		<u> </u>		
NOTES:						<u> </u>							
Liqu	id Handling Cost Source	R.S. Means F Construction		R.S. Means I Construction									
Liq	uid Disposal Fee Source:		Means	2020 Q2 R.S	. Means								
		Heavy Const.		Heavy Const.	. ave. 02 81								
Hydrocarbon Contaminated Soils (HCS)	1 6	.											
Insitu Biotreatment HCS disposal fee	C.Y C.Y	\$17.64 \$278.50		\$17.64 \$278.50									
	<u>. </u>	Ψ210.00	I	Ψ=10.00									
NOTES:	_												
Insitu	Treatement Cost Source	2020 Q2 R.S. Heavy Const.		2020 Q2 R.S. Heavy Const.									
H	CS Disposal Fee Source:	2020 Q2 R.S.	Means	2020 Q2 R.S	. Means								
		Heavy Const.	, ave. 02 65	Heavy Const.	., ave. 02 65								

Nevada Standardized Bond Calculation Misc. Unit Costs

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Date:	January 6, 2021
Cost Basis:	User Data
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing Wage

New Mexico Department of Workforce Solutions Public Works Prevailing Wage Rates Type H - Heavy Engineering Construction & EquipmentWatch & Nevada MISCELLANEOUS COST TABLE Basis 1 Basis 2 Basis 3 Basis 4 Basis 5 Basis 6 JOB DESCRIPTION American Magnesium - Option 1 Revised UNDERGROUND OPENING CLOSURE Materials Premium Materials Premium Materials Premium Materials Premium Materials Premium Materials Premium Units Item Reinforced Concrete Bulkheads and Shaft Covers Grade walls - 15 in thick, 8 ft high \$163.00 \$163.00 C.Y Grade walls - 15 in thick, 12 ft high \$163.00 \$163.00 Elevated conc, 1-way beam & slab - 15ft span \$278.00 \$278.00 C.Y Elevated conc, 1-way beam & slab - 25ft span C.Y \$265.00 \$265.00 Materials Units Materials Materials Materials Item Materials Materials Small Adit Plugging Bat Gate (5) \$3,367.61 \$3,367.61 ea. Culvert Gate C.Y \$6,735.21 \$6,735.21 Adit Foam Plug C.Y \$336.76 \$336.76 Production Opening Foam Plug C.Y \$336.76 \$336.76 NOTES: (5) Bat Gate Source: NV BLM, 2/2006: 8 hr + 1hr NV BLM, 2/2006: 8 hr + 1hr nob/demob + 1hr setup per mob/demob + 1hr setup per gate (adjusted to 2020) gate (adjusted to 2020) (6) Foam Plug Source: NV BLM, 2/2006: 8 hr+ 1hr NV BLM, 2/2006: 8 hr+ 1hr nob/demob + 1hr setup per nob/demob + 1hr setup per adit: 16 hrs per production dit; 16 hrs per production MISC. LINEAR PROJECTS Units Materials Premium Materials | Premium | Premium | Materials | Premium | Prem Fencing Installation ft \$0.51 \$0.51 Barbed 3-strand ft \$0.68 Barbed 4-strand \$0.68 \$0.85 \$0.85 Barbed 5-strand ft Chain link 8 ft -10 ft Install ft \$38.00 \$38.00 Wood stockade fence 6 ft high - Install ft \$16.00 \$16.00 ft ft Fencing Removal Barbed 3-strand Removal ft Barbed 4-strand Removal ft Barbed 5-strand Removal ft Chain link 8 ft -10 ft Removal ft Wood, all types 4 ft -6 ft high Removal ft ft ft **Culvert Removal** 12 in (300 mm) Diameter ft 18 in (450 mm) Diameter ft 24 in (600 mm) Diameter ft 36 in (1m) Diameter ft Pipeline Removal Plastic Pipe 3/4 in (mm) - 4 in (100 mm) diameter ft 6 in (150 mm) - 8 in (200 mm) ft 10 in (250 mm) - 18 in (450 mm) ft 20 in (500 mm) - 36 in (1 m) ft Pipe and Drainpipe Installation Water 4in (100mm) 40ft (12m) length, welded HDPE ft \$2.70 \$2.70 Water 6in (150mm) 40ft (12m) length, welded HDPE \$5.85 \$5.85 ft Nater 12in (300mm) 40ft (12m) length, welded HDPE ft \$1.74 Drain 4in (100mm) perforated PVC ft \$1.74 Drain 6in (150mm) perforated PVC ft \$4.22 \$4.22 Drain 4in (100mm) corrugated, perf or plain \$0.78 \$0.78 Orain 6in (150mm) corrugated., perf or plain ft **Drain Rock Preparation** Units Total Total Total Total Total Total C.Y \$0.50 \$0.50 Screening Misc. Units Premium ltem Premium Premium Premium Premium Premium Backhoe work **Powerline and Transformer Removal** Total Total Total **Total** Total Total Single Pole Powerlines (\$46,80 \$46,804 mile Double Pole Powerlines (8 \$53,490 \$53,490 mile Substation ' unit \$58,997 \$58,997 NOTES: NV Energy estimate (2009) Adjusted to 2020 (7) Single Pole Source: NV Energy estimate (2009 Adjusted to 2020 (8) Double Pole Source V Energy estimate (2009) V Energy estimate (2009) Adjusted to 2020 Adjusted to 2020 (9) Transformer Source NV Energy estimate (2018) NV Energy estimate (2018)

adjusted to 2020

djusted to 2020

Nevada Standardized Bond Calculation Misc. Unit Costs

File Name:	SRCE_Cost_data-Am_Mg_Foothill_Dolomite_ Mine_1_12 Rev 2.xlsm
Date:	January 6, 2021
Cost Basis:	User Data
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing W

		Bas	sis 1	Bas	sis 2	Basis 3		Bas	sis 4	Basis 5		Basis 6	
JOB DESCRI	PTION		American Magnesium - Option 1 Revised										
OSION, EVAPORATION and SE	DIMENTATION CONTR												
ltem	Units	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium
Rip-Rap & Rock Lining													
-Rap 3/8 to 1/4 C.Y. pieces, grouted	S.Y.	\$25.00)	\$25.00									
-Rap 18 in min thick, no grout	S.Y.	\$7.65		\$7.65									
bions, 6 in deep	S.Y.	\$7.05		\$7.05									
bions, 9 in deep	S.Y.	\$9.85		\$9.85									
bions, 12 in deep	S.Y.	\$14.30)	\$14.30									
bions, 18 in deep	S.Y.	\$18.35		\$18.35									
bions, 36 in deep	S.Y.	\$31.00)	\$31.00									
iner Installation													
ltem	Units	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium	Materials	Premium
e grading	S.F.												
mpaction	S.F.												
Item	Units		Materials		Materials		Materials		Materials		Materials		Materials
mil HDPE Liner	S.F.		\$0.57		\$0.57								
Construction Management Supp	ort												
Item	Units		Materials		Materials		Materials		Materials		Materials		Materials
ice Trailer, Furnished, no hook-ups	month		\$198.00		\$198.00								
let Portable, chemical	month		\$214.20		\$214.20								
ODUCTION OR DEWATERING	WELL PUMP REMOVAL												
Item	Units	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip	Labor	Equip
Pump Type													
omersible ⁽¹⁰⁾	ft to pump	\$7.65	\$18.86	\$7.65	\$18.86								
e Shaft ⁽¹⁰⁾	ft to pump	\$7.65	\$18.86	\$7.65	\$18.86								
TES:													
TES:	(10) Pump Removal Sou	rce: Boart Longve	ar Quote: June	Boart Longyea	r Quote: June								

File Name:	CostData STD 3.xls	
Date:	December 1, 2005	
Cost Basis:	Standardized Data	
Author/Source:	New Mexico Department of Workforce Solutions Public Works Prevailing	ng Wage Rates Type H - Heavy Engineering Cons

Administrative Cost Rates (%)										
	Cost Ranges for Indirect Cost Percentages									
	<=	<=	<=	>						
Engineering, Design and Construction (ED&C) Plan (7)	\$1,000,000	\$25,000,000		\$25,000,000	Small Plan					
Variable Rate	8%	6%		4%						
	<=	<=	<=	>						
2. Contingency (8)	\$500,000	\$5,000,000	\$50,000,000	\$50,000,000	Small Plan					
Variable Rate	10%	8%	6%	4%						
3. Insurance (9)	1.5%	of labor costs								
4. Bond (10)	3.0%	of the O&M costs it	f O&M costs are >\$	100,000						
5. Contractor Profit (11)	10.0%	of the O&M costs								
• •	<=	<=	<=	>						
Contract Administration (12)	\$1,000,000	\$25,000,000		\$25,000,000						
Variable Rate	10%	8%		6%						
	21%	of contract adminis	stration							

RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

contracts over \$2,000. Wage rate estimates may include base pay, payroll loading, overhead and profit. To avoid doubte counting of any of the identified administrative costs the operator must itemize the components of their labor cost estimates or provide BLM with a signed statement, under penalty of USC 1001, that identifies what specific administrative costs are included in the quoted hourly rate.

cost of at least one drill hole for each active drill rig in the project area. Where the submitted Notice or approved Plan of Operations calls for drill holes to be plugged, but doesn't specifically require the drill holes be plugged before the drill rig has been moved from the drill pad, the reclamation cost estimate must include the plugging cost for those drill holes. For all drill holes and wells scheduled to be left open, the estimated plugging cost must be included in the reclamation cost estimate. Where the approved Plan of Operations proposes immediate mining through an area where the drilling is to occur, and the cost of the post-mining reclamation is included in the reclamation cost estimate, the cost estimate, the cost estimate, the drill reclamation cost estimate the drilling is to occur, and the cost of the post-mining reclamation is included in the reclamation cost estimate, the

3. Miscellaneous items should be itemized on accompanying worksheets.