	A	B	C	E	F	G	H
2	**2020 Finaincal Warranty Calculation**						
3							
4							
5	**Activity**	**Inflated or Bottom-up**	**LOM Unit**	**U. Cost $ Full Build out Cost**	**Liability Percentage**	**Pro Rated Units Or Qty**	**U. Cost $ TOTALS 2020FW**
6							
7	**Direct Costs**						
8							
9	**1.0) Roads, Railroads, Airstrips**						**$2,719,497**
10	**Reclamation Area**						
11	Road Maintenance	bottom-up	1.00	$2,719,497	100%	0	$2,719,497
12	**2.0) Drill Sites, Drill Pads, Exploration Trenches**						
13	**Reclamation Area**						
14	Exploration-Earthworks/Recontouring (unit cy)						
15	Exploration-Revegetation/Stabilization (unit acres)						
16	Exploration Roads & Drill Pads-Earthworks/Recontouring (unit cy)						
17	Exploration Roads & Drill Pads-Revegetation/Stabilization (unit acres)						
18	**3.0) Drill Hole Abandonment**		**EA**				**$132,020**
19	Exploration Hole Abandonment (unit ea.)						
20	Well Abandonment (unit ea.)	bottom-up	71.00	$1,859.44	100%	71	$132,020
21	**4.0) Pits, Borrow Areas & Trenches -**		**CY**				**$ -**
22			**Acre**				
23	Pits-Earthworks/Berm Construction (unit cy)						
24	Pits-Revegetation/Berm Construction (unit acres)						
25	Backfill Areas-Earthworks/Rip (unit acres)						
26	Backfill Areas-Revegetation/Stabilization(unit acres)						
27	Generic Material Hauling-Earthworks/Recontouring (unit cy)						
28	Generic Material Hauling-Revegetation/Stabilization (unit acres)						
29	**4.1) Portals/Adits Underground Mines**						
30							
31	**5.0) Non-Process Ponds & Reservoirs**		**CY**				**$386,129**
32	**Reclamation Area**		**Acres**				**$18,665**
33	Process Ponds-Earthworks/Recontouring (unit cy)	bottom-up	175,796.52	$2.09	100%	175,796.52	$367,464
34	Process Ponds-Revegetation/Stabilization (unit acres)	bottom-up	11.60	$1,609.05	100%	11.60	$18,665
35	**6.1) Water Treatment/Management Heap Leach Pads**						**$70,746,700**
36	**Treatment Volume**						
37	Heaps (number of)	mixed	1.00	$90,268,487	77.81%	1	$70,236,723
38	Drilling to perforate liner	inflated	1.00	$509,977.00	100%	1	$509,977
39	**6.2) Water Treatment/Management Pit Lakes**						
40	**Treatment Volume**						
41	Monitoring						
42	**6.3) Water Treatment/Management Waste Dump Seepage**						
43	**Treatment Volume**						
44							
45	**6.4) Water Treatment/Management Tails Storage Facility**						
46	**Treatment Volume**						
47							
48	**7.0) Heap Leach Pad Reclamation - Regrading Oversteep Slopes**		**CY**				**$27,867,107**
49	**Reclamation**		**Acre**				
50	Heaps-Earthwork/Recontouring (unit cy)	bottom-up	6,641,561.00	$0.57	77.81%	5,167,711.33	$2,664,164
51	Heaps- Generic Hauling	bottom-up	24,884,418.76	$1.24	77.81%	19,362,239.20	$23,941,717
52	Heaps-Revegetation/Stabilization (unit acres)	bottom-up	1,207.27	$1,572.62	77.81%	939.36	$1,261,226
53	**8.0) Waste Rock Dump, Stockpile, Landfill Reclamation**		**CY**				**$13,793,668**
54	**Reclamation Area**		**Acre**				
55	Waste Rock Dumps-Earthwork/Recontouring (unit cy) including generic hauling	bottom-up	13,290,533.00	$0.62	80.91%	10,752,787.27	$7,982,834
56	Waste Rock Dumps-Revegetation/Stabilization (acres)	bottom-up	1,679.32	$1,572.52	80.91%	1,358.66	$2,385,694
57	Landfills-Earthwork/Recontouring (unit cy)		-				
58	Landfills-Revegetation/Stabilization (acres)		-				
59	Tree Plantings (Includes Waste Dumps and Heap Leach)	inflated	2,032.80	$1,727.43	100%	2,032.80	$3,425,140
60	**9.0) Tailing Storage Facility Reclamation**						
61	**Reclamation Area**						
62	Tailings-Earthwork/Recontouring (unit cy)						
63	Tailings-Revegetation/Stabilization (acres)						
64	**10.0) Drainage/Diversion Channels**						**$12,915,100**
65	**Reclamation Area**						
66	Construct Stormwater		1	$16,274,652.00	79%		$12,915,100
67	**11.0) Facilities Demolition**						**$11,029,587**
68	Foundations & Building Areas Earthworks/Recountouring (cubic yards)- included in 8.0	bottom-up	65,252.00	$3.03	100%	65,252.00	$203,053
69	Foundations & Building Areas Revegetation/Stabilization (acres) - included in 8.0	bottom-up	11.50	$4,431	100%	11.50	$51,843
70	Foundations & Building Demolition (cubic feet)	bottom-up	17,020,302.00	$0.31	100%	17,020,302.00	$5,403,742
71	Yards, etc-Earthworks/Recontouring (unit cy) - Includes Ancillary Area Enhancement	bottom-up	1,154,340.00	$0.17	100%	1,154,340.00	$60,709
72	Yards, etc-Revegetation/Stabilization (acres)- Includes Ancillary Area Enhancement	bottom-up	1,549.80	$1,572.62	100%	1,549.80	$2,574,221
73	Other Demo -Mill Conveyor (feet) and Septic System (each)	bottom-up	1.00	$75,071.00	100%	1.00	$75,071
74	Fence Removal (feet)	bottom-up	12,285.00	$3.89	100%	12,285.00	$47,789
75	Fence Installation (feet)	bottom-up	22,542.00	$83.09	100%	22,542.00	$1,872,930
76	Pipe Removal (feet)	bottom-up	44,904.00	$8.55	100%	44,904.00	$383,970
77	Powerline and Substation Removal (miles)	bottom-up	9.13	$43,518.62	100%	9.13	$308,982
78	Tire Disposal	inflated	50.00	$945.54	100%	50.00	$47,277
79	**12.0) Facilities/Equipment Disposition and/or Salvage**						
80							
81	**13.0) Inventory Disposition**						
82							
83	**14.0) Post Closure Monitoring**						**$1,951,802**
84	Reclamation-Monitoring & Maintenance (number of)	bottom-up	1	$584,231	100%		$584,231
85	Ground & Surface Water Monitoring (number of)	bottom-up	1	$1,192,571	100%		$1,192,571
86	Weed control	bottom-up	1	$175,000	100%		$175,000
87	**Total Direct Costs**						**$141,541,611.4863**
88							
89	**Indirect Costs**						
90							
91	**15.0) Socio-Economic Costs**						
92							
93	**16.0) Consultant Services**						
94							
95	**17.0) Contractor's Overhead & Profit (if not included in direct costs)**						**$20,745,408**
96	Construction Support	bottom-up	1.00	$2,936,909.0	100%		$2,936,909
97	Contractor Profit		1	$17,808,498.00	100%		$17,808,499
98							
99	**18.0) Owners Management (post closure)**						$22,152,387
100	Viewshed Management and Safety Signs	inflated	1	$27,232	100%		$27,232
101	Engineering, Design and Construction		1	$10,239,886	100%		$10,239,887
102	Insurance		1	$1,111,127	100%		$1,111,127
103	Performance Bond		1	$1,869,892	100%		$1,869,892
104	Contractor Adminstration		1	$8,904,249	100%		$8,904,249
105	**19.0) Mobilization and Demobilization (if not included in direct costs)**						**$599,177**
106	Mob-Demob		1.0	$599,177.00	100%		$599,177
107	**Subtotal-Incremental**						**$185,038,584**
108							
109	**20.0) Contingency at 5%**						**$11,575,525**
110			1	$11,575,524.00	100%		$11,575,525
111	**Total-C&R-LOM-Incremental**						**$196,614,108**

This worksheet should be used for calculations
and/or explanations related to the facility/closure category
required to back-up unit rates or calculations.

SEE SCRE MODEL CALCULATION

FOR FASB PERCENTAGE COMPLETE (from Engineering)

	Design (Tons)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
VLF 1 (tons)	**371,890,097**	371,890,097	371,890,097	371,890,097	371,890,097	371,890,097	371,890,097	371,890,097	371,890,097	371,890,097		
% Complete		100%	100%	100%	100%	100%	100%	100%	100%	100%		
VLF 2 (tons)	**240,000,000**	85,572,387	104,213,546	122,803,774	141,394,002	159,984,230	178,625,389	196,026,154	205,974,478	208,000		
% Complete		36%	43%	51%	59%	67%	74%	82%	86%	100.0000%		
Both VLF1&2	611,890,097	**75%**	**77.81%**	**81%**	**84%**	**87%**	**90%**	**93%**	**94%**	**100%**		

This worksheet should be used for calculations
and/or explanations related to the facility/closure category
required to back-up unit rates or calculations.

SEE SCRE MODEL CALCULATION

FOR FASB CALCULATION (from Engineering)

	Design (tons)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ECOSA (tons)	**239,840,000**	131,436,447	139,250,620	155,861,029	173,399,787	185,052,381	196,616,552	206,360,143	218,451,351	230,458,045	237,617,069	
% Complete		55%	58%	65%	72%	77%	82%	86%	91%	96%	99%	
SGOSA (tons)	**199,969,736**	**199,969,736**	199,969,736	199,969,736	199,969,736	199,969,736	199,969,736	199,969,736	199,969,736	199,969,736	199,969,736	
% Complete		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Total Waste Dumps	439,809,736	**75%**	**77%**	**81%**	**85%**	**88%**	**90%**	**92%**	**95%**	**98%**	**99%**

Enter Data Below in Green and Blue Spaces

STANDARDIZED RECLAMATION COST ESTIMATOR

Version 1.4.1
Build 017b (revised to work with Excel 2016 - 24 Oct 2016)

Approved for use in Nevada, August 1, 2012

COST DATA FILE INFORMATION

File Name:	SRCE_AM13_FW_V4.xlsm
Cost Data File:	SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Data Date:	Created 9/12/2019
Cost Data Basis:	User Data
Data Cost Units:	Imperial
Author/Source:	CC&V C&R costs for bonding

PROJECT INFORMATION

Property/Mine Name:	CC&V
Property Code:	
Project Name:	AM-13 BP2020 Financial warranty calculation
Date of Submittal:	December 2019
Average Altitude:	9900 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:	CC&V Bonding
Cost Basis Description:	**Labor = 2019 Newmont CC&V rate if available; otherwise 2018 Nevada bond rate. Equipment = 2019 Newmont CC&V operating + maintenance cost + Cashman lease if available; otherwise 2018 Nevada bond rate. + DRMS reveg costs**

Closure Cost Estimate
Cost Summary

Project Name: AM-13 BP2020 Financial warranty calculation
Project Date: December 2019
Model Version: Version 1.4.1
File Name: SRCE_AM13_FW_V4.xlsm

A. Earthwork/Recontouring	Labor (1)	Equipment (2)	Materials	Total
Exploration	$0	$0	$0	$0
Exploration Roads & Drill Pads	$0	$0	$0	$0
Roads	$0	$0	$0	$0
Well Abandonment	$41,711	$87,589	$2,720	$132,020
Pits	$0	$0	N/A	$0
Quarries & Borrow Areas	$0	$0	$0	$0
Underground Openings	$0	$0	$0	$0
Process Ponds	$125,105	$242,357	$0	$367,462
Heaps	$1,111,338	$2,662,054	$0	$3,773,392
Waste Rock Dumps	$2,436,961	$5,766,426	$0	$8,203,387
Landfills	$0	$0	$0	$0
Tailings	$0	$0	$0	$0
Foundation & Buildings Areas	$56,364	$141,220	$0	$197,584
Yards, Etc.	$74,357	$124,394	$0	$198,751
Drainage & Sediment Control	$0	$0	$0	$0
Generic Material Hauling	$7,281,279	$23,489,174	$0	$30,770,453
Other User Costs (from Other User sheet)	$0	$0	$0	$0
Other** **Construct Closure Stormwater**			**$16,274,652**	$16,274,652
Subtotal	**$11,127,115**	**$32,513,214**	**$16,277,372**	**$59,917,701**
Mob/Demob if included in Other User sheet	$599,177	$0	$0	$599,177
Mob/Demob				$0
Subtotal "A"	**$11,726,292**	**$32,513,214**	**$16,277,372**	**$60,516,878**

B. Revegetation/Stabilization	Labor (1)	Equipment (2)	Materials	Total
Exploration	$0	$0	$0	$0
Exploration Roads & Drill Pads	$0	$0	$0	$0
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	$4,294	$2,273	$12,098	$18,665
Heaps	$418,079	$221,317	$1,259,183	$1,898,579
Waste Rock Dumps	$581,513	$307,828	$1,751,419	$2,640,760
Landfills	$0	$0	$0	$0
Tailings	$0	$0	$0	$0
Foundation & Buildings Areas	$25,453	$13,474	$12,030	$50,957
Yards, Etc.	$536,695	$284,109	$1,616,442	$2,437,246
Drainage & Sediment Control	$0	$0	$0	$0
Generic Material Hauling	$0	$0	$0	$0
Other User Costs (from Other User sheet)	$110,938	$0	$3,400,573	$3,511,511
Other**				$0
Subtotal "B"	**$1,676,971**	**$829,001**	**$8,051,745**	**$10,557,718**

C. Detoxification/Water Treatment/Disposal of Wastes**	Labor (1)	Equipment (2)	Materials	Total
Process Ponds/Sludge				$0
Heaps	**$32,348,305**	**$1,915,935**	**$56,004,246**	$90,268,487
Dumps (Waste & Landfill)				$0
Tailings				$0
Surplus Water Disposal				$0
Monitoring				$0
Miscellaneous				$0
Solid Waste - On Site	$0	$0	N/A	$0
Solid Waste - Off Site				$0
Hazardous Materials				$0
Hydrocarbon Contaminated Soils	$0	$0	$0	$0
Other User Costs (from Other User sheet)	$0	$0	$0	$0
Other** **Drill Liner**	**$509,977**			$509,977
Subtotal "C"	**$32,858,282**	**$1,915,935**	**$56,004,246**	**$90,778,464**

D. Structure, Equipment and Facility Removal, and Misc.	Labor (1)	Equipment (2)	Materials	Total
Foundation & Buildings Areas	$3,332,778	$2,015,814	$0	$5,348,592
Other Demolition	$51,951	$23,120	$0	$75,071
Equipment Removal	$183,176	$130,152	$110,200	$423,528
Fence Removal	$37,101	$10,688		$47,789
Fence Installation	$293,222	$46,774	$1,532,934	$1,872,930
Culvert Removal	$0	$0	N/A	$0
Pipe Removal	$336,030	$47,940	N/A	$383,970
Powerline Removal	$397,325			$397,325
Transformer Removal	$0			$0
Rip-rap, rock lining, gabions	$0	$0	$0	$0
Other Misc. Costs	$0	$0	$0	$0
Other User Costs (from Other User sheet)	$0	$0	$47,277	$47,277
Other**				$0
Subtotal "D"	**$4,631,583**	**$2,274,488**	**$1,690,411**	**$8,596,482**

E. Monitoring	Labor (1)	Equipment (2)	Materials	Total
Reclamation Monitoring and Maintenance	$285,629	$161,522	$137,080	$584,231
Ground and Surface Water Monitoring	$423,177	$113,373	$656,020	$1,192,571

Closure Cost Estimate
Cost Summary
Project Name: AM-13 BP2020 Financial warranty calculation
Project Date: December 2019
Model Version: Version 1.4.1
File Name: SRCE_AM13_FW_V4.xlsm

Other User Costs (from Other User sheet)	$0	$0	$175,000	$175,000
Subtotal "E"	**$708,806**	**$274,895**	**$968,100**	**$1,951,802**

F. Construction Management & Support	**Labor**	**Equipment [2]**	**Materials**	**Total**
Construction Management	$2,452,800	$484,109	N/A	$2,936,909
Construction Support	$0	$0	$0	$0
Road Maintenance	$945,332	$1,774,165	$0	$2,719,497
Other User Costs (from Other User sheet)	$6,210	$0	$21,021	$27,232
Other**				$0
Subtotal "F"	**$3,404,342**	**$2,258,274**	**$21,021**	**$5,683,638**

Subtotal Operational & Maintenance Costs	**Labor [1]**	**Equipment [2]**	**Materials [3]**	**Total**
Subtotal A through F	**$55,006,277**	**$40,065,808**	**$83,012,896**	**$178,084,982**

** Other Operator supplied costs - additional documentation required.

Indirect Costs			**Include?**	**Total**
1. Engineering, Design and Construction (ED&C) Plan (7)				$10,239,886
2. Contingency (8)				$11,575,524
3. Insurance (9)	$1,111,127			$1,111,127
4. Performance Bond (10)				$1,869,892
5. Contractor Profit (11)				$17,808,498
6. Contract Administration (12)				$8,904,249
7. Government Indirect Cost (13)				
Subtotal Add-On Costs				**$51,509,176**
Total Indirect Costs as % of Direct Cost				29%
GRAND TOTAL				**$229,594,158**

Administrative Cost Rates (%)

	Cost Ranges for Indirect Cost Percentages				
	<=	**<=**	**<=**	**>**	
1. Engineering, Design and Construction (ED&C) Plan (7)	$500,000	$2,500,000	$25,000,000	$25,000,000	Small Plan
Variable Rate	6%	6%	0.0575	6%	0%
	<=	**<=**	**<=**	**>**	
2. Contingency (8)	$500,000	$5,000,000	$50,000,000	$50,000,000	Small Plan
Variable Rate	7%	7%	7%	7%	15%
3. Insurance (9)	2.0%	of labor costs			
4. Bond (10)	1.1%	of the O&M costs if O&M costs are >$100,000			
5. Contractor Profit (11)	10%	of the O&M costs			
	<=	**<=**	**<=**	**>**	
6. Contract Administration (12)	$1,000,000	$15,000,000	$25,000,000	$25,000,000	
Variable Rate	5%	5%	0.05	5%	
0	5%	$0			

RECLAMATION COST ESTIMATION SUMMARY SHEET FOOTNOTES

Indirect costs match DRMS TR113 O&P costs. 18.5% indirect, 5% adminstravite, and 5% contingency, grand total of 28.5%.

Closure Cost Estimate
Other User

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Other Cost Items Calculated Elsewhere

	Description (required)	ID Code	Facility Type	Quantity	Units	Total Capital Cost $	Material Unit Cost $	Labor Unit Cost $	Equipment/ Operating Unit Cost $	Cost Type (select)	Total Cost $	Comments
1	Safety signs			111			$189.38	$55.95		F. Construction Mgmt	$27,232	material unit cost escalated 3% for BP2020
2	Tire disposal			50			$945.54			D. Facility & Equipment	$47,277	material unit cost escalated 3% for BP2020
3	Tree planting; East Cresson Wildhorse			89			$1,025.28	$55.95		B. Revegetation	$95,905	Material Costs>>>User Mix 4>>> User 16
4	Tree planting; WHEX Grassy Valley			0			$1,025.28	$55.95		B. Revegetation	$0	Material Costs>>>User Mix 4>>> User 17
5	Tree planting; N Cresson			23			$1,025.28	$55.95		B. Revegetation	$24,868	Material Costs>>>User Mix 4>>> User 18
6	Tree planting; Main Cresson			59			$1,025.28	$55.95		B. Revegetation	$63,793	Material Costs>>>User Mix 4>>> User 19
7	Tree planting; E Cresson OSA			229			$1,025.28	$55.95		B. Revegetation	$247,602	Material Costs>>>User Mix 4>>> User 20
8	Tree planting; Squaw OSA			42			$1,025.28	$55.95		B. Revegetation	$45,304	Material Costs>>>User Mix 4>>> User 21
9	Tree planting; Arequa			115			$1,025.28	$55.95		B. Revegetation	$124,342	Material Costs>>>User Mix 4>>> User 22
10	Tree planting; Squaw			85			$1,025.28	$55.95		B. Revegetation	$91,905	Material Costs>>>User Mix 4>>> User 23
11	Tree planting; mill platform			35			$1,025.28	$55.95		B. Revegetation	$37,843	Material Costs>>>User Mix 4>>> User 24
12	Tree planting; 3 4 Ajax			0			$1,025.28	$55.95		B. Revegetation	$0	Material Costs>>>User Mix 4>>> User 25
13	Tree planting;Victor & Ironclad			42			$1,025.28	$55.95		B. Revegetation	$45,304	Material Costs>>>User Mix 4>>> User 26
14	Tree planting; Building footprint			87			$1,025.28	$55.95		B. Revegetation	$94,175	Material Costs>>>User Mix 4>>> User 27
15	Tree planting; Ancillary			850			$1,025.28	$55.95		B. Revegetation	$919,155	Material Costs>>>User Mix 4>>> User 28
16	Tree planting; replant areas that fail			327			$1,025.28	$55.95		B. Revegetation	$353,671	Material Costs>>>User Mix 4>>> User 29
17	North Cresson Viewshed			1		$1,367,644				B. Revegetation	$1,367,644	
18	mob & demob			1				$599,177.01		Mob/Demob	$599,177	
19	Weed Treatment 5 years					$175,000				E. Monitoring	$175,000	User Tab 3
						$1,542,644	$2,101,228	$716,325	$0		$4,360,197	

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).
mob/demob = 1% of labor & equipment costs

Closure Cost Estimate
Reclamation Quantities

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Data Cost File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Reclamation Quantity Summary

	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 $	Unit Costs: 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	14,268,979	$ 5,283,557		$ -	1,354,516	$ 2,696,404	1679.32	$ 223,426	$ 2,640,760	$ 10,844,147	$0.37	N/A		$1.99	$133.05	$6,457.46
2	Tailings Impoundments		$ -		$ -		$ -		$ -	$ -	$ -		N/A				
3	Heap Leach Pads	9,316,085	$ 1,200,022		$ -	973,655	$ 2,416,792	1207.27	$ 156,578	$ 1,898,579	$ 5,671,971	$0.13	N/A		$2.48	$129.70	$4,698.18
5	Open Pits		$ -							$ -	$ -		N/A				
4	Quarries & Borrow Pits		$ -		$ -		$ -		$ -	$ -	$ -		N/A				
6	Roads		$ -				$ -		$ -	$ -	$ -		N/A				
7	Landfills		$ -		$ -		$ -		$ -	$ -	$ -		N/A				
8	Buildings			65,252	$ 186,634		$ -	11.5	$ 10,950	$ 50,957	$ 248,541		N/A	$2.86		$952.17	$21,612.23
9	Yards		$ -		$ -	1,154,340	$ -	1549.8	$ 198,751	$ 2,437,246	$ 2,635,997		N/A		$0.00	$128.24	$1,700.86
10	Ponds	166,414	$ 289,001			9,383	$ 17,293	11.6		$ 18,665	$ 324,959	N/A	$1.74		$1.84		$28,013.71
11	Exploration Roads		$ -				$ -		$ -	$ -	$ -		N/A				
12	Exploration Trenches		$ -							$ -	$ -		N/A				
13	Diversion Ditches		$ -							$ -	$ -		N/A				
14	Sediment Ponds		$ -				$ -		$ -	$ -	$ -						
15	Generic Haulage/Backfill	24,884,419	$ 30,770,453		$ -		$ -	5.66	$ -	$ -	$ 30,770,453	N/A	$1.24			$0.00	#########
16	Adit/Decline Backfilling1		$ -								$ -	N/A					
17	Shaft Backfilling		$ -								$ -	N/A					
	TOTALS	48,635,897	$ 37,543,033	65,252	$ 186,634	3,491,894	$ 5,130,489	4,465.15	$ 589,705	$ 7,046,207	$ 50,496,068						
	Average Costs	per CY	$0.77	per CY	$2.86	per CY	$1.47	per acre	$132.07	$11.95	$11,309	per acre					

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

Waste Rock Dumps - User Input

You must fill in ALL green cells in this section for each dump, lift or dump category

	Facility Description			Physical - MANDATORY									Cover				Growth Media			
	Description (required)	ID Code	Type	Underlying Ground Slope % Grade	Ungraded Slope _H:1V	Final Slope _H:1V	Final Top Slope % Grade	Lift (dump) Height ft	Mid-Bench Length ft	Average Flat Area Long Dimension (ripping distance) ft	Final (Regraded) Dump Footprint acres	Regrade Volume (1) (if calculated elsewhere) cy	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	Ironclad Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			5933								
2	Ironclad Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			659								
3	Ironclad Mine Area - 40 ft Lift - Mass Grading		Waste Rock Dump	0.0	1.4	5.0	1.0	40	0			21753								
4	Ironclad Mine Area - 40 ft Lift - Fine Grading		Waste Rock Dump	0.0	1.4	5.0	1.0	40	0			2417								
5	Ironclad Mine Area - Topsoil		Waste Rock Dump	0.0	10.0	10.0	1.0	5	100	300	26.30	0					6.0	6.0	3,892	-7.7
6	Ironclad Mine Area - Topsoil - Dozer Spreading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	100			21062								
7	SGOSA Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			2088								
8	SGOSA Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			232								
9	SGOSA Mine Area - 100 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	100	0			89713.8								
10	SGOSA Mine Area - 100 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	100	0			9968.2								
11	SGOSA Mine Area - 150 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	200	0			249154.2								
12	SGOSA Mine Area - 150 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	200	0			27683.8								
13	SGOSA Mine Area - 200 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	250	0			156486.6								
14	SGOSA Mine Area - 200 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	250	0			17387.4								
15	SGOSA Mine Area - 250 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	300	0			113624.1								
16	SGOSA Mine Area - 250 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	300	0			12624.9								
17	SGOSA Mine Area - 300 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	350	0			265932.9								
18	SGOSA Mine Area - 300 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	350	0			29548.1								
19	SGOSA Mine Area - Topsoil - Lift 1		Waste Rock Dump	0.0	10.0	10.0	1.0	100	1,000	245	5.76						6.0	6.0	4,897	-6.1
20	SGOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading		Waste Rock Dump	0.0	10.0	10.0	1.0	100				18610								
21	SGOSA Mine Area - Topsoil - Lift 2		Waste Rock Dump	0.0	1.4	2.5	1.0	100	1,762	245	11.23						6.0	6.0	4,250	8.7
22	SGOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	100				14415								
23	SGOSA Mine Area - Topsoil - Lift 3		Waste Rock Dump	0.0	1.4	2.5	1.0	100	2,659	245	19.16						6.0	6.0	3,125	8.6
24	SGOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	100				24337								
25	SGOSA Mine Area - Topsoil - Lift 4		Waste Rock Dump	0.0	1.4	2.5	1.0	100	6,781	245	53.98						6.0	6.0	2,000	8.5
26	SGOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	100				46311								
27	SGOSA Mine Area - Topsoil - Lift 5		Waste Rock Dump	0.0	1.4	2.5	1.0	100	5,218	245	57.65						6.0	6.0	750	9.3
28	SGOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	100				47964								
29	North Cresson Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			27350								
30	North Cresson Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			3039								
31	North Cresson Mine Area - 200 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	250	0			1202605.2								
32	North Cresson Mine Area - 200 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	250	0			133622.8								
33	North Cresson Mine Area - 250 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	350	0			369452.7								
34	North Cresson Mine Area - 250 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	350	0			41050.3								
35	North Cresson Mine Area - Topsoil		Waste Rock Dump	0.0	10.0	10.0	1.0	5	3,000	300	55.90						6.0	6.0	5,000	8.4
36	North Cresson Mine Area - Topsoil - Dozer Spreading		Waste Rock Dump	0.0	10.0	10.0	1.0	5				44722								
37	North Cresson Mine Area - Topsoil - Lift 1		Waste Rock Dump	0.0	1.4	2.5	1.0	250	300	245	2.42						6.0	6.0	4,897	-6.1
38	North Cresson Mine Area - Topsoil - Lift 1 -Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				3759								
39	North Cresson Mine Area - Topsoil - Lift 2		Waste Rock Dump	0.0	1.4	2.5	1.0	250	1,110	245	6.93						6.0	6.0	4,250	8.7
40	North Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				13915								
41	North Cresson Mine Area - Topsoil - Lift 3		Waste Rock Dump	0.0	1.4	2.5	1.0	250	2,191	245	11.01						6.0	6.0	3,125	8.6
42	North Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				27467								
43	North Cresson Mine Area - Topsoil - Lift 4		Waste Rock Dump	0.0	1.4	2.5	1.0	250	1,000	245	10.31						6.0	6.0	2,000	8.5
44	North Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				12536								
45	North Cresson Mine Area - Topsoil - Lift 5		Waste Rock Dump	0.0	1.4	2.5	1.0	250	50	245	1.42						6.0	6.0	750	9.3
46	North Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				1436								
47	North Cresson Mine Area - Topsoil - Globe Hill HR		Waste Rock Dump	0.0	10.0	10.0	1.0	5	150	300	40.45						6.0	6.0	9,380	-2.0
48	North Cresson Mine Area - Topsoil - Globe Hill HR - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	250				32404								
49	ECOSA Mine Area - 50 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			181413								
50	ECOSA Mine Area - 50 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			131268								
51	ECOSA Mine Area - 150 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			1123165								
52	ECOSA Mine Area - 150 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			124796								
53	ECOSA Mine Area - Topsoil - Lift 1		Waste Rock Dump	0.0	1.4	2.5	1.0	150	5,906	625	69.71	0					6.0	6.0	3,214	0.0
54	ECOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				59734								
55	ECOSA Mine Area - Topsoil - Lift 2		Waste Rock Dump	0.0	1.4	2.5	1.0	150	6,143	625	58.72	0					6.0	6.0	3,294	-5.2
56	ECOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				51030								
57	ECOSA Mine Area - Topsoil - Lift 3		Waste Rock Dump	0.0	1.4	2.5	1.0	150	6,655	635	62.82	0					6.0	6.0	3,698	-8.9
58	ECOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				54071								
59	ECOSA Mine Area - Topsoil - Lift 4		Waste Rock Dump	0.0	1.4	2.5	1.0	150	3,614	505	51.15	0					6.0	6.0	4,912	-9.2
60	ECOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				43302								
61	ECOSA Mine Area - Topsoil - Lift 5		Waste Rock Dump	0.0	1.4	2.5	1.0	150	7,172	315	36.46	0					6.0	6.0	6,407	-9.6

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

62	ECOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				53926								
63	ECOSA Mine Area - Topsoil - Lift 6		Waste Rock Dump	0.0	1.4	2.5	1.0	150	1,500	300	24.92	0					6.0	6.0	9,080	-8.9
64	ECOSA Mine Area - Topsoil - Lift 6 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				20957								
65	East Cresson Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			473								
66	East Cresson Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			53								
67	East Cresson Mine Area - 40 lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	40	0			12777								
68	East Cresson Mine Area - 40 lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	40	0			1420								
69	East Cresson Mine Area - 50 lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			763991								
70	East Cresson Mine Area - 50 lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			84888								
71	East Cresson Mine Area - 50 lift - Mass Grading		Waste Rock Dump	0.0	1.4	4.5	1.0	50	0			672099								
72	East Cresson Mine Area - 50 lift - Fine Grading		Waste Rock Dump	0.0	1.4	4.5	1.0	50	0			74678								
73	East Cresson Mine Area - 150 lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			231066								
74	East Cresson Mine Area - 150 lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			25674								
75	East Cresson Mine Area - 400 lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	400	0			1582312								
76	East Cresson Mine Area - 400 lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	400	0			175812								
77	East Cresson Mine Area - Topsoil - Lift 2		Waste Rock Dump	0.0	1.4	2.5	1.0	150	824	675	12.44	0					6.0	6.0	3,294	-0.1
78	East Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				10228								
79	East Cresson Mine Area - Topsoil - Lift 3		Waste Rock Dump	0.0	1.4	2.5	1.0	150	282	515	10.86	0					6.0	6.0	3,698	-0.1
80	East Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				8575								
81	East Cresson Mine Area - Topsoil - Lift 4		Waste Rock Dump	0.0	1.4	2.5	1.0	150	6,264	545	57.93	0					6.0	6.0	4,912	-0.1
82	East Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				50320								
83	East Cresson Mine Area - Topsoil - Lift 5		Waste Rock Dump	0.0	1.4	2.5	1.0	150	7,172	655	106.97	0					6.0	6.0	6,407	-0.1
84	East Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				90226								
85	East Cresson Mine Area - Topsoil - Lift 6		Waste Rock Dump	0.0	1.4	2.5	1.0	150	1,500	300	110.79	0					6.0	6.0	9,080	-0.1
86	East Cresson Mine Area - Topsoil - Lift 6 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				90330								
87	East Cresson Mine Area - Topsoil - WHEX		Waste Rock Dump	0.0	1.4	2.5	1.0	150	500	300	199.30	0					6.0	6.0	1,506	-8.6
88	East Cresson Mine Area - Topsoil - WHEX - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				161059								
89	East Cresson Mine Area - Topsoil - Ironclad		Waste Rock Dump	0.0	1.4	2.5	1.0	150	100	300	14.57	0					6.0	6.0	3,892	-7.7
90	East Cresson Mine Area - Topsoil - Ironclad - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				12043								
91	Main Cresson Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			116523								
92	Main Cresson Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	10.0	10.0	1.0	5	0			12947								
93	Main Cresson Mine Area - 50 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			103266								
94	Main Cresson Mine Area - 50 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	50	0			11474								
95	Main Cresson Mine Area - 150 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			155109								
96	Main Cresson Mine Area - 150 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	150	0			177234								
97	Main Cresson Mine Area - 400 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	400	0			272666								
98	Main Cresson Mine Area - 400 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	400	0			30296								
99	Main Cresson Mine Area - 450 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	450	0			188837								
100	Main Cresson Mine Area - 450 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	450	0			20982								
101	Main Cresson Mine Area - 650 ft lift - Mass Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	650	0			1238482								
102	Main Cresson Mine Area - 650 ft lift - Fine Grading		Waste Rock Dump	0.0	1.4	2.5	1.0	650	0			137609								
103	Main Cresson Mine Area - Topsoil - 10185		Waste Rock Dump	0.0	1.4	2.5	1.0	650	500	400	81.52	0					6.0	6.0	2,595	1.8
104	Main Cresson Mine Area - Topsoil - 10185 - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	650				67115								
105	Main Cresson Mine Area - Topsoil - Ruby Road		Waste Rock Dump	0.0	1.4	2.5	1.0	150	2,500	300	71.80	0					6.0	6.0	5,001	-3.0
106	Main Cresson Mine Area - Topsoil - Ruby Road - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	150				81481								
107	Main Cresson Mine Area - Topsoil - AJAX		Waste Rock Dump	0.0	2.0	2.5	1.0	25	1,500	100	33.00	0					6.0	6.0	2,525	5.0
108	Main Cresson Mine Area - Topsoil - AJAX - Dozer Spreading		Waste Rock Dump	0.0	2.0	2.5	1.0	25				48892								
109	Main Cresson Mine Area - Topsoil - Crusher		Waste Rock Dump	0.0	1.4	2.5	1.0	650	1,500	100	26.78	0					6.0	6.0	1,308	3.7
110	Main Cresson Mine Area - Topsoil - Crusher - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	50				48892								
111	Main Cresson Mine Area - Topsoil - Pit Bottom		Waste Rock Dump	0.0	1.4	2.5	1.0	650	2	300	68.60	0					6.0	6.0	11,669	6.6
112	Main Cresson Mine Area - Topsoil - Pit Bottom - Dozer Spreading		Waste Rock Dump	0.0	10.0	10.0	1.0	10				55725								
113	Main Cresson Mine Area - Topsoil - South Cresson HR		Waste Rock Dump	0.0	1.4	2.5	1.0	650	2	300	29.69	0					6.0	6.0	3,917	9.3
114	Main Cresson Mine Area - Topsoil - South Cresson HR - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.0	1.0	50				24265								
115	Main Cresson Mine Area - Topsoil - Cresson HR		Waste Rock Dump	0.0	1.4	2.5	1.0	650	2	300	29.73	0					6.0	6.0	9,024	7.4
116	Main Cresson Mine Area - Topsoil - Cresson HR - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.0	1.0	50				24265								
117	Crusher Mine Area - Pile Leveling - Mass Grading		Waste Rock Dump	0.0	2.0	2.5	1.0	100	0			75737								
118	Crusher Mine Area - Pile Leveling - Fine Grading		Waste Rock Dump	0.0	2.0	2.5	1.0	100	0			8415								
119	Crusher Mine Area - Topsoil		Waste Rock Dump	0.0	1.4	2.5	1.0	35	500	100	43.31	0					6.0	6.0	5,332	4.5
120	Crusher Mine Area - Topsoil - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	35				34759								
121	Crusher Mine Area - Delivery Road - Mass Grading		Waste Rock Dump	0.0	2.0	2.5	1.0	100	0			8867								
122	Crusher Mine Area - Delivery Road - Fine Grading		Waste Rock Dump	0.0	2.0	2.5	1.0	100	0			985								
123	Crusher Mine Area - Topsoil - Delivery Road		Waste Rock Dump	0.0	1.4	2.5	1.0	35	100	300	10.48	0					6.0	6.0	500	-3.6
124	Crusher Mine Area - Topsoil - Delivery Road - Dozer Spreading		Waste Rock Dump	0.0	1.4	2.5	1.0	35				8244								
125	Chicago Mine Area		Waste Rock Dump	0.0	1.0	3.0	1.0	35	0	150		3228								
126	Chicago Mine Area topsoil - Dozer Spreading		Waste Rock Dump	0.0	1.0	3.0	1.0			150	4.00	0					6.0	6.0	500	-3.6

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)

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

Waste Rock Dumps - User Input (cont.) — You must fill in ALL green cells and relevant blue cells in this section for each dump, lift or dump category

		Grading				Cover		Growth Media		Revegetation								
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	Slot/Side-by-Side (select)	Cover Material Type (select)	Cover Placement Equipment Fleet (select)	Growth Media Material Type (select)	Growth Media Equipment Fleet (select)	Seed Mix Slopes (select)	Seed Mix Flat Areas (select)	Mulch Slopes (select)	Mulch Flat Areas (select)	Fertilizer Slopes (select)	Fertilizer Flat Areas (select)	Slope Scarify/ Rip? (select)	Flat Area Scarify/ Rip? (select)	Scarify/ Ripping Fleet (select)
1	Ironclad Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
2	Ironclad Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
3	Ironclad Mine Area - 40 ft Lift - Mass Grading	1	Granite - broken	Large	Yes													
4	Ironclad Mine Area - 40 ft Lift - Fine Grading	1	Granite - broken	Small	No													
5	Ironclad Mine Area - Topsoil							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
6	Ironclad Mine Area - Topsoil - Dozer Spreading	1.2	Topsoil	Small	No													
7	SGOSA Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
8	SGOSA Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
9	SGOSA Mine Area - 100 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
10	SGOSA Mine Area - 100 ft lift - Fine Grading	1	Granite - broken	Small	No													
11	SGOSA Mine Area - 150 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
12	SGOSA Mine Area - 150 ft lift - Fine Grading	1	Granite - broken	Small	No													
13	SGOSA Mine Area - 200 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
14	SGOSA Mine Area - 200 ft lift - Fine Grading	1	Granite - broken	Small	No													
15	SGOSA Mine Area - 250 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
16	SGOSA Mine Area - 250 ft lift - Fine Grading	1	Granite - broken	Small	No													
17	SGOSA Mine Area - 300 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
18	SGOSA Mine Area - 300 ft lift - Fine Grading	1	Granite - broken	Small	No													
19	SGOSA Mine Area - Topsoil - Lift 1							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
20	SGOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading	1.2	Topsoil	Small	No													
21	SGOSA Mine Area - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
22	SGOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
23	SGOSA Mine Area - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
24	SGOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													
25	SGOSA Mine Area - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
26	SGOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
27	SGOSA Mine Area - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
28	SGOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
29	North Cresson Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
30	North Cresson Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
31	North Cresson Mine Area - 200 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
32	North Cresson Mine Area - 200 ft lift - Fine Grading	1	Granite - broken	Small	No													
33	North Cresson Mine Area - 250 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
34	North Cresson Mine Area - 250 ft lift - Fine Grading	1	Granite - broken	Small	No													
35	North Cresson Mine Area - Topsoil							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
36	North Cresson Mine Area - Topsoil - Dozer Spreading	1.2	Topsoil	Small	No													
37	North Cresson Mine Area - Topsoil - Lift 1							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
38	North Cresson Mine Area - Topsoil - Lift 1 -Dozer Spreading	1.2	Topsoil	Small	No													
39	North Cresson Mine Area - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
40	North Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
41	North Cresson Mine Area - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
42	North Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													
43	North Cresson Mine Area - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
44	North Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
45	North Cresson Mine Area - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
46	North Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
47	North Cresson Mine Area - Topsoil - Globe Hill HR							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
48	North Cresson Mine Area - Topsoil - Globe Hill HR - Dozer S	1.2	Topsoil	Small	No													
49	ECOSA Mine Area - 50 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
50	ECOSA Mine Area - 50 ft lift - Fine Grading	1	Granite - broken	Small	No													
51	ECOSA Mine Area - 150 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
52	ECOSA Mine Area - 150 ft lift - Fine Grading	1	Granite - broken	Small	No													
53	ECOSA Mine Area - Topsoil - Lift 1							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
54	ECOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading	1.2	Topsoil	Small	No													
55	ECOSA Mine Area - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
56	ECOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
57	ECOSA Mine Area - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
58	ECOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
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TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

59	ECOSA Mine Area - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
60	ECOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
61	ECOSA Mine Area - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
62	ECOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
63	ECOSA Mine Area - Topsoil - Lift 6							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
64	ECOSA Mine Area - Topsoil - Lift 6 - Dozer Spreading	1.2	Topsoil	Small	No													
65	East Cresson Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
66	East Cresson Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
67	East Cresson Mine Area - 40 lift - Mass Grading	1	Granite - broken	Large	Yes													
68	East Cresson Mine Area - 40 lift - Fine Grading	1	Granite - broken	Small	No													
69	East Cresson Mine Area - 50 lift - Mass Grading	1	Granite - broken	Large	Yes													
70	East Cresson Mine Area - 50 lift - Fine Grading	1	Granite - broken	Small	No													
71	East Cresson Mine Area - 50 lift - Mass Grading	1	Granite - broken	Large	Yes													
72	East Cresson Mine Area - 50 lift - Fine Grading	1	Granite - broken	Small	No													
73	East Cresson Mine Area - 150 lift - Mass Grading	1	Granite - broken	Large	Yes													
74	East Cresson Mine Area - 150 lift - Fine Grading	1	Granite - broken	Small	No													
75	East Cresson Mine Area - 400 lift - Mass Grading	1	Granite - broken	Large	Yes													
76	East Cresson Mine Area - 400 lift - Fine Grading	1	Granite - broken	Small	No													
77	East Cresson Mine Area - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
78	East Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
79	East Cresson Mine Area - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
80	East Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													
81	East Cresson Mine Area - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
82	East Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
83	East Cresson Mine Area - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
84	East Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
85	East Cresson Mine Area - Topsoil - Lift 6							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
86	East Cresson Mine Area - Topsoil - Lift 6 - Dozer Spreading	1.2	Topsoil	Small	No													
87	East Cresson Mine Area - Topsoil - WHEX							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
88	East Cresson Mine Area - Topsoil - WHEX - Dozer Spreadin	1.2	Topsoil	Small	No													
89	East Cresson Mine Area - Topsoil - Ironclad							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
90	East Cresson Mine Area - Topsoil - Ironclad - Dozer Spread	1.2	Topsoil	Small	No													
91	Main Cresson Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
92	Main Cresson Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
93	Main Cresson Mine Area - 50 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
94	Main Cresson Mine Area - 50 ft lift - Fine Grading	1	Granite - broken	Small	No													
95	Main Cresson Mine Area - 150 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
96	Main Cresson Mine Area - 150 ft lift - Fine Grading	1	Granite - broken	Small	No													
97	Main Cresson Mine Area - 400 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
98	Main Cresson Mine Area - 400 ft lift - Fine Grading	1	Granite - broken	Small	No													
99	Main Cresson Mine Area - 450 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
100	Main Cresson Mine Area - 450 ft lift - Fine Grading	1	Granite - broken	Small	No													
101	Main Cresson Mine Area - 650 ft lift - Mass Grading	1	Granite - broken	Large	Yes													
102	Main Cresson Mine Area - 650 ft lift - Fine Grading	1	Granite - broken	Small	No													
103	Main Cresson Mine Area - Topsoil - 10185							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
104	Main Cresson Mine Area - Topsoil - 10185 - Dozer Spreading	1.2	Topsoil	Small	No													
105	Main Cresson Mine Area - Topsoil - Ruby Road							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
106	Main Cresson Mine Area - Topsoil - Ruby Road - Dozer Spre	1.2	Topsoil	Small	No													
107	Main Cresson Mine Area - Topsoil - AJAX							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
108	Main Cresson Mine Area - Topsoil - AJAX - Dozer Spreading	1.2	Topsoil	Small	No													
109	Main Cresson Mine Area - Topsoil - Crusher							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
110	Main Cresson Mine Area - Topsoil - Crusher - Dozer Spread	1.2	Topsoil	Small	No													
111	Main Cresson Mine Area - Topsoil - Pit Bottom							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
112	Main Cresson Mine Area - Topsoil - Pit Bottom - Dozer Spre	1.2	Topsoil	Small	No													
113	Main Cresson Mine Area - Topsoil - South Cresson HR							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
114	Main Cresson Mine Area - Topsoil - South Cresson HR - Doz	1.2	Topsoil	Small	No													
115	Main Cresson Mine Area - Topsoil - Cresson HR							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
116	Main Cresson Mine Area - Topsoil - Cresson HR - Dozer Spr	1.2	Topsoil	Small	No													
117	Crusher Mine Area - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
118	Crusher Mine Area - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
119	Crusher Mine Area - Topsoil							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
120	Crusher Mine Area - Topsoil - Dozer Spreading	1.2	Topsoil	Small	No													
121	Crusher Mine Area - Delivery Road - Mass Grading	0.6	Granite - broken	Large	Yes													
122	Crusher Mine Area - Delivery Road - Fine Grading	0.6	Granite - broken	Small	No													
123	Crusher Mine Area - Topsoil - Delivery Road							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
124	Crusher Mine Area - Topsoil - Delivery Road - Dozer Spread	1.2	Topsoil	Small	No													
125	Chicago Mine Area	1	Granite - broken	Small	No													
126	Chicago Mine Area topsoil - Dozer Spreading							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
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Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

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

Waste Rock Dumps - Calculations

Regrading Volume Calculation

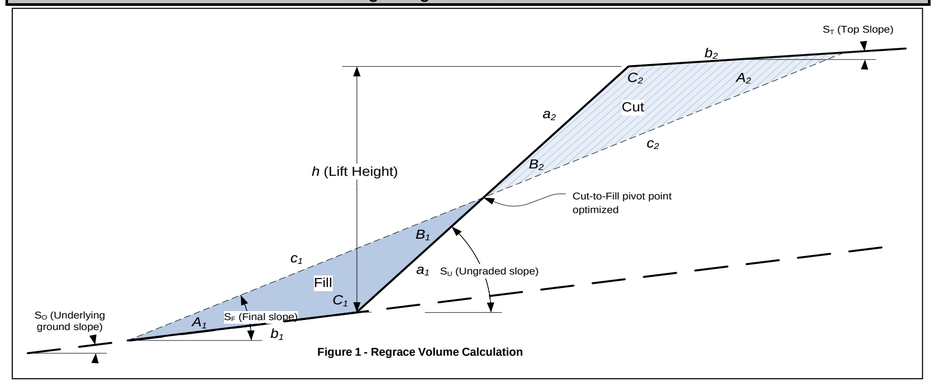

Figure 1 - Regrace Volume Calculation

Final Slope Area and Footprint Area Calculations

Final slope length = $c_1 + c_2$
Final slope area = Final slope length *x* Mid-bench Length
Final lift height (h_{final}) = ($c_1 + c_2$) *x* sin(Final slope)
Final slope width (d) = ($c_1 + c_2$) *x* cos(Final slope)
Final slope footprint = Final slope width *x* Mid-bench Length
Final flat area = Final footprint – Final slope footprint

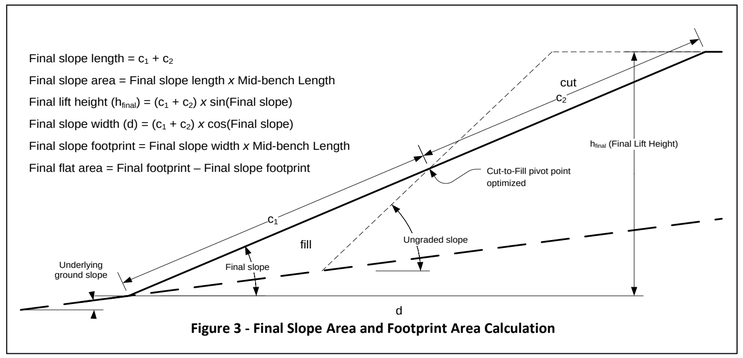

Figure 3 - Final Slope Area and Footprint Area Calculation

Regrading Push Distance Calculation

dozing distance: based on 2/3 final cut slope + 2/3 final fill slope (minimum = 50 ft)

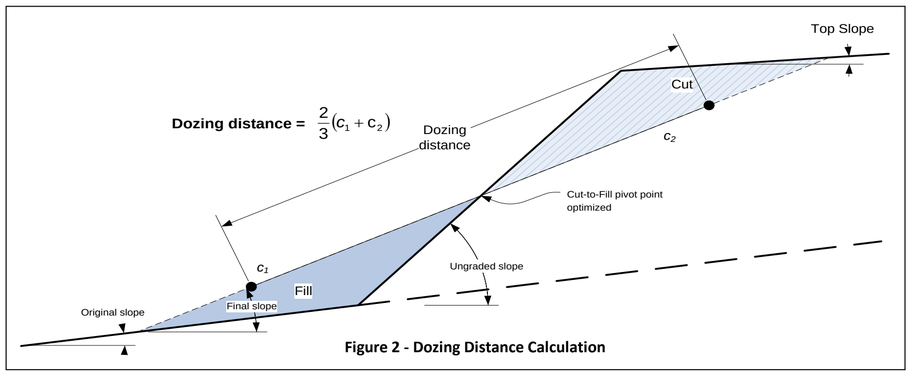

Figure 2 - Dozing Distance Calculation

Ripping/Scarifying Calculations

Minimum 1 hr ripping/scarifying time per dump

Slopes:
Number of passes = Final slope length ÷ Grader width
Travel distance = Number of passes x Mid-bench length
Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)
Minimum 1 hr

Flat Areas:
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

Waste Rock Dumps - Regrading Costs

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) x (Altitude Deration)

	Description (required)	Regrading Volume cy	Dozing Distance (see above) ft	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 hr	Total Labor Cost $	Total Equipment Cost $	Total Regrading Cost $
1	**Ironclad Mine Area - Pile Leveling - Mass Grading**	5,933	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	5	$280	$722	$1,002
2	**Ironclad Mine Area - Pile Leveling - Fine Grading**	659	50	D7R	1,076	1.2	0.6	0.82	1.0	395	2	$112	$187	$299
3	**Ironclad Mine Area - 40 ft Lift - Mass Grading**	21,753	91	D10R	1,763	1.6	1.0	0.82	1.2	1,676	13	$727	$1,877	$2,604
4	**Ironclad Mine Area - 40 ft Lift - Fine Grading**	2,417	91	D7R	675	1.6	1.0	0.82	1.0	551	4	$224	$374	$598
5	**Ironclad Mine Area - Topsoil**	0		**Select Fleet**								$0	$0	$0
6	**Ironclad Mine Area - Topsoil - Dozer Spreading**	21,062	50	D7R	1,076	1.2	1.2	1.44	1.0	1,389	15	$839	$1,404	$2,243
7	**SGOSA Mine Area - Pile Leveling - Mass Grading**	2,088	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	2	$112	$289	$401
8	**SGOSA Mine Area - Pile Leveling - Fine Grading**	232	50	D7R	1,076	1.2	0.6	0.82	1.0	395	1	$56	$94	$150
9	**SGOSA Mine Area - 100 ft lift - Mass Grading**	89,714	147	D10R	1,173	1.6	1.0	0.82	1.2	1,115	80	$4,476	$11,548	$16,024

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

10	**SGOSA Mine Area - 100 ft lift - Fine Grading**	9,968	147	D7R	464	1.6	1.0	0.82	1.0	379	26	$1,455	$2,434	$3,889
11	**SGOSA Mine Area - 150 ft lift - Mass Grading**	249,154	293	D10R	652	1.6	1.0	0.82	1.2	620	402	$22,492	$58,029	$80,521
12	**SGOSA Mine Area - 150 ft lift - Fine Grading**	27,684	293	D7R	271	1.6	1.0	0.82	1.0	221	125	$6,994	$11,700	$18,694
13	**SGOSA Mine Area - 200 ft lift - Mass Grading**	156,487	367	D10R	539	1.6	1.0	0.82	1.2	512	306	$17,121	$44,171	$61,292
14	**SGOSA Mine Area - 200 ft lift - Fine Grading**	17,387	367	D7R	227	1.6	1.0	0.82	1.0	185	94	$5,259	$8,798	$14,057
15	**SGOSA Mine Area - 250 ft lift - Mass Grading**	113,624	440	D10R	462	1.6	1.0	0.82	1.2	439	259	$14,491	$37,387	$51,878
16	**SGOSA Mine Area - 250 ft lift - Fine Grading**	12,625	440	D7R	197	1.6	1.0	0.82	1.0	161	78	$4,364	$7,301	$11,665
17	**SGOSA Mine Area - 300 ft lift - Mass Grading**	265,933	513	D10R	405	1.6	1.0	0.82	1.2	385	691	$38,661	$99,746	$138,407
18	**SGOSA Mine Area - 300 ft lift - Fine Grading**	29,548	513	D7R	175	1.6	1.0	0.82	1.0	143	207	$11,582	$19,375	$30,957
19	**SGOSA Mine Area - Topsoil - Lift 1**	0		**Select Fleet**								$0	$0	$0
20	**SGOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**	18,610	50	D7R	1,076	1.2	1.2	1.44	1.0	1,389	13	$727	$1,217	$1,944
21	**SGOSA Mine Area - Topsoil - Lift 2**	90,254	147	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
22	**SGOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**	14,415	147	D7R	464	1.6	1.2	1.44	1.0	799	18	$1,007	$1,685	$2,692
23	**SGOSA Mine Area - Topsoil - Lift 3**	136,200	147	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
24	**SGOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**	24,337	147	D7R	464	1.6	1.2	1.44	1.0	799	30	$1,679	$2,808	$4,487
25	**SGOSA Mine Area - Topsoil - Lift 4**	347,338	147	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
26	**SGOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**	46,311	147	D7R	464	1.6	1.2	1.44	1.0	799	58	$3,245	$5,429	$8,674
27	**SGOSA Mine Area - Topsoil - Lift 5**	267,278	147	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
28	**SGOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**	47,964	147	D7R	464	1.6	1.2	1.44	1.0	799	60	$3,357	$5,616	$8,973
29	**North Cresson Mine Area - Pile Leveling - Mass Grading**	27,350	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	22	$1,231	$3,176	$4,407
30	**North Cresson Mine Area - Pile Leveling - Fine Grading**	3,039	50	D7R	1,076	1.2	0.6	0.82	1.0	395	8	$448	$749	$1,197
31	**North Cresson Mine Area - 200 ft lift - Mass Grading**	1,202,605	367	D10R	539	1.6	1.0	0.82	1.2	512	2,349	$131,427	$339,078	$470,505
32	**North Cresson Mine Area - 200 ft lift - Fine Grading**	133,623	367	D7R	227	1.6	1.0	0.82	1.0	185	722	$40,396	$67,579	$107,975
33	**North Cresson Mine Area - 250 ft lift - Mass Grading**	369,453	513	D10R	405	1.6	1.0	0.82	1.2	385	960	$53,712	$138,576	$192,288
34	**North Cresson Mine Area - 250 ft lift - Fine Grading**	41,050	513	D7R	175	1.6	1.0	0.82	1.0	143	287	$16,058	$26,863	$42,921
35	**North Cresson Mine Area - Topsoil**	0		**Select Fleet**								$0	$0	$0
36	**North Cresson Mine Area - Topsoil - Dozer Spreading**	44,722	50	D7R	1,076	1.2	1.2	1.44	1.0	1,389	32	$1,790	$2,995	$4,785
37	**North Cresson Mine Area - Topsoil - Lift 1**	96,022	367	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
38	**North Cresson Mine Area - Topsoil - Lift 1 -Dozer Spreading**	3,759	367	D7R	227	1.6	1.2	1.44	1.0	391	10	$560	$936	$1,496
39	**North Cresson Mine Area - Topsoil - Lift 2**	355,282	367	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
40	**North Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**	13,915	367	D7R	227	1.6	1.2	1.44	1.0	391	36	$2,014	$3,370	$5,384
41	**North Cresson Mine Area - Topsoil - Lift 3**	701,282	367	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
42	**North Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**	27,467	367	D7R	227	1.6	1.2	1.44	1.0	391	70	$3,917	$6,552	$10,469
43	**North Cresson Mine Area - Topsoil - Lift 4**	320,074	367	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
44	**North Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**	12,536	367	D7R	227	1.6	1.2	1.44	1.0	391	32	$1,790	$2,995	$4,785
45	**North Cresson Mine Area - Topsoil - Lift 5**	16,004	367	**Select Fleet**	**Select Fleet**	1.6	**Dozing Materia**	**Material Type**	1.0	**Select Fleet**	**Select Fleet**		$0	$0
46	**North Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**	1,436	367	D7R	227	1.6	1.2	1.44	1.0	391	4	$224	$374	$598
47	**North Cresson Mine Area - Topsoil - Globe Hill HR**	0		**Select Fleet**								$0	$0	$0
48	**North Cresson Mine Area - Topsoil - Globe Hill HR - Dozer S**	32,404	367	D7R	227	1.6	1.2	1.44	1.0	391	83	$4,644	$7,769	$12,413
49	**ECOSA Mine Area - 50 ft lift - Mass Grading**	181,413	73	D10R	2,127	1.6	1.0	0.82	1.2	2,022	90	$5,036	$12,992	$18,028
50	**ECOSA Mine Area - 50 ft lift - Fine Grading**	131,268	73	D7R	801	1.6	1.0	0.82	1.0	654	201	$11,246	$18,814	$30,060
51	**ECOSA Mine Area - 150 ft lift - Mass Grading**	1,123,165	220	D10R	832	1.6	1.0	0.82	1.2	791	1,420	$79,449	$204,977	$284,426
52	**ECOSA Mine Area - 150 ft lift - Fine Grading**	124,796	220	D7R	339	1.6	1.0	0.82	1.0	277	451	$25,233	$42,214	$67,447
53	**ECOSA Mine Area - Topsoil - Lift 1**	0		**Select Fleet**								$0	$0	$0
54	**ECOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**	59,734	220	D7R	339	1.6	1.2	1.44	1.0	583	102	$5,707	$9,547	$15,254
55	**ECOSA Mine Area - Topsoil - Lift 2**	0		**Select Fleet**								$0	$0	$0
56	**ECOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**	51,030	220	D7R	339	1.6	1.2	1.44	1.0	583	88	$4,924	$8,237	$13,161
57	**ECOSA Mine Area - Topsoil - Lift 3**	0		**Select Fleet**								$0	$0	$0
58	**ECOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**	54,071	220	D7R	339	1.6	1.2	1.44	1.0	583	93	$5,203	$8,705	$13,908
59	**ECOSA Mine Area - Topsoil - Lift 4**	0		**Select Fleet**								$0	$0	$0
60	**ECOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**	43,302	220	D7R	339	1.6	1.2	1.44	1.0	583	74	$4,140	$6,926	$11,066
61	**ECOSA Mine Area - Topsoil - Lift 5**	0		**Select Fleet**								$0	$0	$0
62	**ECOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**	53,926	220	D7R	339	1.6	1.2	1.44	1.0	583	92	$5,147	$8,611	$13,758
63	**ECOSA Mine Area - Topsoil - Lift 6**	0		**Select Fleet**								$0	$0	$0
64	**ECOSA Mine Area - Topsoil - Lift 6 - Dozer Spreading**	20,957	220	D7R	339	1.6	1.2	1.44	1.0	583	36	$2,014	$3,370	$5,384
65	**East Cresson Mine Area - Pile Leveling - Mass Grading**	473	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	1	$56	$144	$200
66	**East Cresson Mine Area - Pile Leveling - Fine Grading**	53	50	D7R	1,076	1.2	0.6	0.82	1.0	395	1	$56	$94	$150
67	**East Cresson Mine Area - 40 lift - Mass Grading**	12,777	59	D10R	2,549	1.6	1.0	0.82	1.2	2,423	5	$280	$722	$1,002
68	**East Cresson Mine Area - 40 lift - Fine Grading**	1,420	59	D7R	946	1.6	1.0	0.82	1.0	773	2	$112	$187	$299
69	**East Cresson Mine Area - 50 lift - Mass Grading**	763,991	73	D10R	2,127	1.6	1.0	0.82	1.2	2,022	378	$21,149	$54,564	$75,713
70	**East Cresson Mine Area - 50 lift - Fine Grading**	84,888	73	D7R	801	1.6	1.0	0.82	1.0	654	130	$7,274	$12,168	$19,442
71	**East Cresson Mine Area - 50 lift - Mass Grading**	672,099	105	D10R	1,561	1.6	1.0	0.82	1.2	1,484	453	$25,345	$65,391	$90,736
72	**East Cresson Mine Area - 50 lift - Fine Grading**	74,678	105	D7R	603	1.6	1.0	0.82	1.0	492	152	$8,504	$14,227	$22,731
73	**East Cresson Mine Area - 150 lift - Mass Grading**	231,066	220	D10R	832	1.6	1.0	0.82	1.2	791	292	$16,337	$42,150	$58,487
74	**East Cresson Mine Area - 150 lift - Fine Grading**	25,674	220	D7R	339	1.6	1.0	0.82	1.0	277	93	$5,203	$8,705	$13,908
75	**East Cresson Mine Area - 400 lift - Mass Grading**	1,582,312	586	D10R	362	1.6	1.0	0.82	1.2	344	4,600	$257,370	$664,010	$921,380
76	**East Cresson Mine Area - 400 lift - Fine Grading**	175,812	586	D7R	158	1.6	1.0	0.82	1.0	129	1,363	$76,260	$127,577	$203,837
77	**East Cresson Mine Area - Topsoil - Lift 2**	0		**Select Fleet**								$0	$0	$0
78	**East Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**	10,228	220	D7R	339	1.6	1.2	1.44	1.0	583	18	$1,007	$1,685	$2,692
79	**East Cresson Mine Area - Topsoil - Lift 3**	0		**Select Fleet**								$0	$0	$0

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

80	**East Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**	8,575	220	D7R	339	1.6	1.2	1.44	1.0	583	15	$839	$1,404	$2,243
81	**East Cresson Mine Area - Topsoil - Lift 4**	0		**Select Fleet**								$0	$0	$0
82	**East Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**	50,320	220	D7R	339	1.6	1.2	1.44	1.0	583	86	$4,812	$8,050	$12,862
83	**East Cresson Mine Area - Topsoil - Lift 5**	0		**Select Fleet**								$0	$0	$0
84	**East Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**	90,226	220	D7R	339	1.6	1.2	1.44	1.0	583	155	$8,672	$14,508	$23,180
85	**East Cresson Mine Area - Topsoil - Lift 6**	0		**Select Fleet**								$0	$0	$0
86	**East Cresson Mine Area - Topsoil - Lift 6 - Dozer Spreading**	90,330	220	D7R	339	1.6	1.2	1.44	1.0	583	155	$8,672	$14,508	$23,180
87	**East Cresson Mine Area - Topsoil - WHEX**	0		**Select Fleet**								$0	$0	$0
88	**East Cresson Mine Area - Topsoil - WHEX - Dozer Spreadin**	161,059	220	D7R	339	1.6	1.2	1.44	1.0	583	276	$15,442	$25,834	$41,276
89	**East Cresson Mine Area - Topsoil - Ironclad**	0		**Select Fleet**								$0	$0	$0
90	**East Cresson Mine Area - Topsoil - Ironclad - Dozer Spread**	12,043	220	D7R	339	1.6	1.2	1.44	1.0	583	21	$1,175	$1,966	$3,141
91	**Main Cresson Mine Area - Pile Leveling - Mass Grading**	116,523	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	93	$5,203	$13,425	$18,628
92	**Main Cresson Mine Area - Pile Leveling - Fine Grading**	12,947	50	D7R	1,076	1.2	0.6	0.82	1.0	395	33	$1,846	$3,089	$4,935
93	**Main Cresson Mine Area - 50 ft lift - Mass Grading**	103,266	73	D10R	2,127	1.6	1.0	0.82	1.2	2,022	51	$2,853	$7,362	$10,215
94	**Main Cresson Mine Area - 50 ft lift - Fine Grading**	11,474	73	D7R	801	1.6	1.0	0.82	1.0	654	18	$1,007	$1,685	$2,692
95	**Main Cresson Mine Area - 150 ft lift - Mass Grading**	155,109	220	D10R	832	1.6	1.0	0.82	1.2	791	196	$10,966	$28,293	$39,259
96	**Main Cresson Mine Area - 150 ft lift - Fine Grading**	177,234	220	D7R	339	1.6	1.0	0.82	1.0	277	640	$35,808	$59,904	$95,712
97	**Main Cresson Mine Area - 400 ft lift - Mass Grading**	272,666	586	D10R	362	1.6	1.0	0.82	1.2	344	793	$44,368	$114,470	$158,838
98	**Main Cresson Mine Area - 400 ft lift - Fine Grading**	30,296	586	D7R	158	1.6	1.0	0.82	1.0	129	235	$13,148	$21,996	$35,144
99	**Main Cresson Mine Area - 450 ft lift - Mass Grading**	188,837	660	D10R	327	1.6	1.0	0.82	1.2	311	607	$33,962	$87,620	$121,582
100	**Main Cresson Mine Area - 450 ft lift - Fine Grading**	20,982	660	D7R	144	1.6	1.0	0.82	1.0	118	178	$9,959	$16,661	$26,620
101	**Main Cresson Mine Area - 650 ft lift - Mass Grading**	1,238,482	953	D10R	239	1.6	1.0	0.82	1.2	227	5,456	$305,263	$787,574	$1,092,837
102	**Main Cresson Mine Area - 650 ft lift - Fine Grading**	137,609	953	D7R	108	1.6	1.0	0.82	1.0	88	1,564	$87,506	$146,390	$233,896
103	**Main Cresson Mine Area - Topsoil - 10185**	0		**Select Fleet**								$0	$0	$0
104	**Main Cresson Mine Area - Topsoil - 10185 - Dozer Spreading**	67,115	953	D7R	108	1.6	1.2	1.44	1.0	186	361	$20,198	$33,790	$53,988
105	**Main Cresson Mine Area - Topsoil - Ruby Road**	0		**Select Fleet**								$0	$0	$0
106	**Main Cresson Mine Area - Topsoil - Ruby Road - Dozer Spre**	81,481	220	D7R	339	1.6	1.2	1.44	1.0	583	140	$7,833	$13,104	$20,937
107	**Main Cresson Mine Area - Topsoil - AJAX**	0		**Select Fleet**								$0	$0	$0
108	**Main Cresson Mine Area - Topsoil - AJAX - Dozer Spreading**	48,892	50	D7R	1,076	1.6	1.2	1.44	1.0	1,852	26	$1,455	$2,434	$3,889
109	**Main Cresson Mine Area - Topsoil - Crusher**	0		**Select Fleet**								$0	$0	$0
110	**Main Cresson Mine Area - Topsoil - Crusher - Dozer Spread**	48,892	73	D7R	801	1.6	1.2	1.44	1.0	1,379	35	$1,958	$3,276	$5,234
111	**Main Cresson Mine Area - Topsoil - Pit Bottom**	0		**Select Fleet**								$0	$0	$0
112	**Main Cresson Mine Area - Topsoil - Pit Bottom - Dozer Spre**	55,725	50	D7R	1,076	1.2	1.2	1.44	1.0	1,389	40	$2,238	$3,744	$5,982
113	**Main Cresson Mine Area - Topsoil - South Cresson HR**	0		**Select Fleet**								$0	$0	$0
114	**Main Cresson Mine Area - Topsoil - South Cresson HR - Doz**	24,265	66	D7R	867	1.6	1.2	1.44	1.0	1,492	16	$895	$1,498	$2,393
115	**Main Cresson Mine Area - Topsoil - Cresson HR**	0		**Select Fleet**								$0	$0	$0
116	**Main Cresson Mine Area - Topsoil - Cresson HR - Dozer Spr**	24,265	66	D7R	867	1.6	1.2	1.44	1.0	1,492	16	$895	$1,498	$2,393
117	**Crusher Mine Area - Pile Leveling - Mass Grading**	75,737	164	D10R	1,069	1.6	0.6	0.82	1.2	610	124	$6,938	$17,899	$24,837
118	**Crusher Mine Area - Pile Leveling - Fine Grading**	8,415	164	D7R	426	1.6	0.6	0.82	1.0	209	40	$2,238	$3,744	$5,982
119	**Crusher Mine Area - Topsoil**	0		**Select Fleet**								$0	$0	$0
120	**Crusher Mine Area - Topsoil - Dozer Spreading**	34,759	51	D7R	1,060	1.6	1.2	1.44	1.0	1,824	19	$1,063	$1,778	$2,841
121	**Crusher Mine Area - Delivery Road - Mass Grading**	8,867	164	D10R	1,069	1.6	0.6	0.82	1.2	610	15	$839	$2,165	$3,004
122	**Crusher Mine Area - Delivery Road - Fine Grading**	985	164	D7R	426	1.6	0.6	0.82	1.0	209	5	$280	$468	$748
123	**Crusher Mine Area - Topsoil - Delivery Road**	0		**Select Fleet**								$0	$0	$0
124	**Crusher Mine Area - Topsoil - Delivery Road - Dozer Spread**	8,244	51	D7R	1,060	1.6	1.2	1.44	1.0	1,824	5	$280	$468	$748
125	**Chicago Mine Area**	3,228	53	D7R	1,028	1.6	1.0	0.82	1.0	840	4	$224	$374	$598
126	**Chicago Mine Area topsoil - Dozer Spreading**	0		**Select Fleet**								$0	$0	$0
		14,268,979									28,657	**$1,603,358**	**$3,680,199**	**$5,283,557**

Waste Rock Dumps - Cover and Growth Media Costs

		Cover (lower layer)								Growth Media Placement							
	Description (required)	Cover Volume cy	Cover Replacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Cover Labor Cost $	Cover Equipment Cost $	Total Cover Cost $	Growth Media Volume cy	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	**Ironclad Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
2	**Ironclad Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
3	**Ironclad Mine Area - 40 ft Lift - Mass Grading**						$0	$0	$0						$0	$0	$0
4	**Ironclad Mine Area - 40 ft Lift - Fine Grading**						$0	$0	$0						$0	$0	$0
5	**Ironclad Mine Area - Topsoil**						$0	$0	$0	21,062	740/988G/D8R	695	6	30	$13,428	$34,367	$47,795
6	**Ironclad Mine Area - Topsoil - Dozer Spreading**						$0	$0	$0						$0	$0	$0
7	**SGOSA Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
8	**SGOSA Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
9	**SGOSA Mine Area - 100 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
10	**SGOSA Mine Area - 100 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
11	**SGOSA Mine Area - 150 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
12	**SGOSA Mine Area - 150 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
13	**SGOSA Mine Area - 200 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

14	**SGOSA Mine Area - 200 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
15	**SGOSA Mine Area - 250 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
16	**SGOSA Mine Area - 250 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
17	**SGOSA Mine Area - 300 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
18	**SGOSA Mine Area - 300 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
19	**SGOSA Mine Area - Topsoil - Lift 1**						$0	$0	$0	18,610	740/988G/D8R	700	6	27	$12,085	$30,930	$43,015
20	**SGOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
21	**SGOSA Mine Area - Topsoil - Lift 2**						$0	$0	$0	9,648	740/988G/D8R	694	5	14	$5,483	$14,133	$19,616
22	**SGOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
23	**SGOSA Mine Area - Topsoil - Lift 3**						$0	$0	$0	16,569	740/988G/D8R	657	4	25	$8,393	$21,838	$30,231
24	**SGOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
25	**SGOSA Mine Area - Topsoil - Lift 4**						$0	$0	$0	46,133	740/988G/D8R	609	3	76	$21,261	$56,049	$77,310
26	**SGOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
27	**SGOSA Mine Area - Topsoil - Lift 5**						$0	$0	$0	47,964	740/988G/D8R	552	2	86	$19,247	$51,726	$70,973
28	**SGOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
29	**North Cresson Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
30	**North Cresson Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
31	**North Cresson Mine Area - 200 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
32	**North Cresson Mine Area - 200 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
33	**North Cresson Mine Area - 250 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
34	**North Cresson Mine Area - 250 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
35	**North Cresson Mine Area - Topsoil**						$0	$0	$0	44,722	740/988G/D8R	629	5	71	$27,807	$71,677	$99,484
36	**North Cresson Mine Area - Topsoil - Dozer Spreading**						$0	$0	$0						$0	$0	$0
37	**North Cresson Mine Area - Topsoil - Lift 1**						$0	$0	$0	3,759	740/988G/D8R	700	6	5	$2,238	$5,728	$7,966
38	**North Cresson Mine Area - Topsoil - Lift 1 -Dozer Spreading**						$0	$0	$0						$0	$0	$0
39	**North Cresson Mine Area - Topsoil - Lift 2**						$0	$0	$0	13,915	740/988G/D8R	694	5	20	$7,833	$20,191	$28,024
40	**North Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
41	**North Cresson Mine Area - Topsoil - Lift 3**						$0	$0	$0	27,467	740/988G/D8R	657	4	42	$14,099	$36,687	$50,786
42	**North Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
43	**North Cresson Mine Area - Topsoil - Lift 4**						$0	$0	$0	12,536	740/988G/D8R	609	3	21	$5,875	$15,487	$21,362
44	**North Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
45	**North Cresson Mine Area - Topsoil - Lift 5**						$0	$0	$0	1,436	740/988G/D8R	552	2	2	$448	$1,203	$1,651
46	**North Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
47	**North Cresson Mine Area - Topsoil - Globe Hill HR**						$0	$0	$0	32,404	740/988G/D8R	641	6	50	$22,380	$57,278	$79,658
48	**North Cresson Mine Area - Topsoil - Globe Hill HR - Dozer S**						$0	$0	$0						$0	$0	$0
49	**ECOSA Mine Area - 50 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
50	**ECOSA Mine Area - 50 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
51	**ECOSA Mine Area - 150 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
52	**ECOSA Mine Area - 150 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
53	**ECOSA Mine Area - Topsoil - Lift 1**						$0	$0	$0	59,734	740/988G/D8R	651	3	92	$25,737	$67,849	$93,586
54	**ECOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
55	**ECOSA Mine Area - Topsoil - Lift 2**						$0	$0	$0	51,030	740/988G/D8R	674	4	76	$25,513	$66,387	$91,900
56	**ECOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
57	**ECOSA Mine Area - Topsoil - Lift 3**						$0	$0	$0	54,071	740/988G/D8R	600	5	90	$35,249	$90,858	$126,107
58	**ECOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
59	**ECOSA Mine Area - Topsoil - Lift 4**						$0	$0	$0	43,302	740/988G/D8R	690	7	62	$31,220	$79,457	$110,677
60	**ECOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
61	**ECOSA Mine Area - Topsoil - Lift 5**						$0	$0	$0	53,926	740/988G/D8R	644	8	84	$46,998	$119,078	$166,076
62	**ECOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
63	**ECOSA Mine Area - Topsoil - Lift 6**						$0	$0	$0	20,957	740/988G/D8R	669	11	31	$22,548	$56,595	$79,143
64	**ECOSA Mine Area - Topsoil - Lift 6 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
65	**East Cresson Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
66	**East Cresson Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
67	**East Cresson Mine Area - 40 lift - Mass Grading**						$0	$0	$0						$0	$0	$0
68	**East Cresson Mine Area - 40 lift - Fine Grading**						$0	$0	$0						$0	$0	$0
69	**East Cresson Mine Area - 50 lift - Mass Grading**						$0	$0	$0						$0	$0	$0
70	**East Cresson Mine Area - 50 lift - Fine Grading**						$0	$0	$0						$0	$0	$0
71	**East Cresson Mine Area - 50 lift - Mass Grading**						$0	$0	$0						$0	$0	$0
72	**East Cresson Mine Area - 50 lift - Fine Grading**						$0	$0	$0						$0	$0	$0
73	**East Cresson Mine Area - 150 lift - Mass Grading**						$0	$0	$0						$0	$0	$0
74	**East Cresson Mine Area - 150 lift - Fine Grading**						$0	$0	$0						$0	$0	$0
75	**East Cresson Mine Area - 400 lift - Mass Grading**						$0	$0	$0						$0	$0	$0
76	**East Cresson Mine Area - 400 lift - Fine Grading**						$0	$0	$0						$0	$0	$0
77	**East Cresson Mine Area - Topsoil - Lift 2**						$0	$0	$0	10,228	740/988G/D8R	636	3	16	$4,476	$11,800	$16,276
78	**East Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
79	**East Cresson Mine Area - Topsoil - Lift 3**						$0	$0	$0	8,575	740/988G/D8R	609	3	14	$3,917	$10,325	$14,242
80	**East Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
81	**East Cresson Mine Area - Topsoil - Lift 4**						$0	$0	$0	50,320	740/988G/D8R	545	3	92	$25,737	$67,849	$93,586
82	**East Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
83	**East Cresson Mine Area - Topsoil - Lift 5**						$0	$0	$0	90,226	740/988G/D8R	644	4	140	$46,998	$122,291	$169,289

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

84	**East Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
85	**East Cresson Mine Area - Topsoil - Lift 6**						$0	$0	$0	90,330	740/988G/D8R	674	5	134	$52,481	$135,277	$187,758
86	**East Cresson Mine Area - Topsoil - Lift 6 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
87	**East Cresson Mine Area - Topsoil - WHEX**						$0	$0	$0	161,059	740/988G/D8R	597	3	269	$75,253	$198,385	$273,638
88	**East Cresson Mine Area - Topsoil - WHEX - Dozer Spreadin**						$0	$0	$0						$0	$0	$0
89	**East Cresson Mine Area - Topsoil - Ironclad**						$0	$0	$0	12,043	740/988G/D8R	695	6	17	$7,609	$19,474	$27,083
90	**East Cresson Mine Area - Topsoil - Ironclad - Dozer Spread**						$0	$0	$0						$0	$0	$0
91	**Main Cresson Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
92	**Main Cresson Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
93	**Main Cresson Mine Area - 50 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
94	**Main Cresson Mine Area - 50 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
95	**Main Cresson Mine Area - 150 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
96	**Main Cresson Mine Area - 150 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
97	**Main Cresson Mine Area - 400 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
98	**Main Cresson Mine Area - 400 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
99	**Main Cresson Mine Area - 450 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
100	**Main Cresson Mine Area - 450 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
101	**Main Cresson Mine Area - 650 ft lift - Mass Grading**						$0	$0	$0						$0	$0	$0
102	**Main Cresson Mine Area - 650 ft lift - Fine Grading**						$0	$0	$0						$0	$0	$0
103	**Main Cresson Mine Area - Topsoil - 10185**						$0	$0	$0	67,115	740/988G/D8R	688	3	98	$27,416	$72,274	$99,690
104	**Main Cresson Mine Area - Topsoil - 10185 - Dozer Spreading**						$0	$0	$0						$0	$0	$0
105	**Main Cresson Mine Area - Topsoil - Ruby Road**						$0	$0	$0	59,128	740/988G/D8R	618	4	95	$31,892	$82,983	$114,875
106	**Main Cresson Mine Area - Topsoil - Ruby Road - Dozer Spre**						$0	$0	$0						$0	$0	$0
107	**Main Cresson Mine Area - Topsoil - AJAX**						$0	$0	$0	26,870	740/988G/D8R	668	3	40	$11,190	$29,500	$40,690
108	**Main Cresson Mine Area - Topsoil - AJAX - Dozer Spreading**						$0	$0	$0						$0	$0	$0
109	**Main Cresson Mine Area - Topsoil - Crusher**						$0	$0	$0	48,892	740/988G/D8R	536	2	91	$20,366	$54,734	$75,100
110	**Main Cresson Mine Area - Topsoil - Crusher - Dozer Spread**						$0	$0	$0						$0	$0	$0
111	**Main Cresson Mine Area - Topsoil - Pit Bottom**						$0	$0	$0	55,725	740/988G/D8R	656	7	85	$42,802	$108,933	$151,735
112	**Main Cresson Mine Area - Topsoil - Pit Bottom - Dozer Spre**						$0	$0	$0						$0	$0	$0
113	**Main Cresson Mine Area - Topsoil - South Cresson HR**						$0	$0	$0	24,265	740/988G/D8R	582	4	42	$14,099	$36,687	$50,786
114	**Main Cresson Mine Area - Topsoil - South Cresson HR - Doz**						$0	$0	$0						$0	$0	$0
115	**Main Cresson Mine Area - Topsoil - Cresson HR**						$0	$0	$0	24,265	740/988G/D8R	666	6	36	$16,114	$41,240	$57,354
116	**Main Cresson Mine Area - Topsoil - Cresson HR - Dozer Spr**						$0	$0	$0						$0	$0	$0
117	**Crusher Mine Area - Pile Leveling - Mass Grading**						$0	$0	$0						$0	$0	$0
118	**Crusher Mine Area - Pile Leveling - Fine Grading**						$0	$0	$0						$0	$0	$0
119	**Crusher Mine Area - Topsoil**						$0	$0	$0	34,759	740/988G/D8R	654	4	53	$17,792	$46,296	$64,088
120	**Crusher Mine Area - Topsoil - Dozer Spreading**						$0	$0	$0						$0	$0	$0
121	**Crusher Mine Area - Delivery Road - Mass Grading**						$0	$0	$0						$0	$0	$0
122	**Crusher Mine Area - Delivery Road - Fine Grading**						$0	$0	$0						$0	$0	$0
123	**Crusher Mine Area - Topsoil - Delivery Road**						$0	$0	$0	8,244	740/988G/D8R	610	2	13	$2,909	$7,819	$10,728
124	**Crusher Mine Area - Topsoil - Delivery Road - Dozer Spread**						$0	$0	$0						$0	$0	$0
125	**Chicago Mine Area**						$0	$0	$0						$0	$0	$0
126	**Chicago Mine Area topsoil - Dozer Spreading**						$0	$0	$0	3,227	740/988G/D8R	610	2	5	$1,119	$3,007	$4,126
							$0	**$0**	**$0**	1,354,516				2,144	**$750,012**	**$1,946,392**	**$2,696,404**

Waste Rock Dumps - Scarifying/Revegetation Costs

	Description (required)	Slope Area acres	Flat Area acres	Total Surface Area acres	Final Slope Length ft	Flat Area Long Dimension ft	Ripping/ Scarifying Fleet	Slope Scarifying/ Ripping Hours hrs	Flat Area 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	**Ironclad Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
2	**Ironclad Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
3	**Ironclad Mine Area - 40 ft Lift - Mass Grading**	0.00		0.00	208					$0	$0	$0	$0	$0	$0	$0
4	**Ironclad Mine Area - 40 ft Lift - Fine Grading**	0.00		0.00	208					$0	$0	$0	$0	$0	$0	$0
5	**Ironclad Mine Area - Topsoil**	0.11	26.00	26.11	50	300	D7R	0	24	$1,343	$2,246	$3,589	$9,042	$4,786	$27,233	$41,061
6	**Ironclad Mine Area - Topsoil - Dozer Spreading**	0.11		0.11	50					$0	$0	$0	$0	$0	$0	$0
7	**SGOSA Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
8	**SGOSA Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
9	**SGOSA Mine Area - 100 ft lift - Mass Grading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
10	**SGOSA Mine Area - 100 ft lift - Fine Grading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
11	**SGOSA Mine Area - 150 ft lift - Mass Grading**	0.00		0.00	542					$0	$0	$0	$0	$0	$0	$0
12	**SGOSA Mine Area - 150 ft lift - Fine Grading**	0.00		0.00	542					$0	$0	$0	$0	$0	$0	$0
13	**SGOSA Mine Area - 200 ft lift - Mass Grading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
14	**SGOSA Mine Area - 200 ft lift - Fine Grading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
15	**SGOSA Mine Area - 250 ft lift - Mass Grading**	0.00		0.00	812					$0	$0	$0	$0	$0	$0	$0
16	**SGOSA Mine Area - 250 ft lift - Fine Grading**	0.00		0.00	812					$0	$0	$0	$0	$0	$0	$0
17	**SGOSA Mine Area - 300 ft lift - Mass Grading**	0.00		0.00	948					$0	$0	$0	$0	$0	$0	$0

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

18	**SGOSA Mine Area - 300 ft lift - Fine Grading**	0.00		0.00	948					$0	$0	$0	$0	$0	$0	$0
19	**SGOSA Mine Area - Topsoil - Lift 1**	23.07		23.07	1,005	245	D7R	20		$1,119	$1,872	$2,991	$7,989	$4,229	$24,062	$36,280
20	**SGOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**	0.00		0.00	1,005					$0	$0	$0	$0	$0	$0	$0
21	**SGOSA Mine Area - Topsoil - Lift 2**	10.96	1.00	11.96	271	245	D7R	9	1	$560	$936	$1,496	$4,141	$2,192	$12,475	$18,808
22	**SGOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
23	**SGOSA Mine Area - Topsoil - Lift 3**	16.54	4.00	20.54	271	245	D7R	14	4	$1,007	$1,685	$2,692	$7,113	$3,765	$21,423	$32,301
24	**SGOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
25	**SGOSA Mine Area - Topsoil - Lift 4**	42.19	15.00	57.19	271	245	D7R	36	14	$2,798	$4,680	$7,478	$19,805	$10,484	$59,649	$89,938
26	**SGOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
27	**SGOSA Mine Area - Topsoil - Lift 5**	32.46	27.00	59.46	271	245	D7R	28	25	$2,965	$4,961	$7,926	$20,591	$10,901	$62,017	$93,509
28	**SGOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**	0.00		0.00	271					$0	$0	$0	$0	$0	$0	$0
29	**North Cresson Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
30	**North Cresson Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
31	**North Cresson Mine Area - 200 ft lift - Mass Grading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
32	**North Cresson Mine Area - 200 ft lift - Fine Grading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
33	**North Cresson Mine Area - 250 ft lift - Mass Grading**	0.00		0.00	948					$0	$0	$0	$0	$0	$0	$0
34	**North Cresson Mine Area - 250 ft lift - Fine Grading**	0.00		0.00	948					$0	$0	$0	$0	$0	$0	$0
35	**North Cresson Mine Area - Topsoil**	3.44	52.00	55.44	50	300	D7R	3	47	$2,798	$4,680	$7,478	$19,199	$10,164	$57,824	$87,187
36	**North Cresson Mine Area - Topsoil - Dozer Spreading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
37	**North Cresson Mine Area - Topsoil - Lift 1**	4.66		4.66	677	245	D7R	4		$224	$374	$598	$1,614	$854	$4,861	$7,329
38	**North Cresson Mine Area - Topsoil - Lift 1 -Dozer Spreading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
39	**North Cresson Mine Area - Topsoil - Lift 2**	17.25		17.25	677	245	D7R	15		$839	$1,404	$2,243	$5,974	$3,162	$17,992	$27,128
40	**North Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
41	**North Cresson Mine Area - Topsoil - Lift 3**	34.05		34.05	677	245	D7R	29		$1,623	$2,714	$4,337	$11,792	$6,242	$35,514	$53,548
42	**North Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
43	**North Cresson Mine Area - Topsoil - Lift 4**	15.54		15.54	677	245	D7R	13		$727	$1,217	$1,944	$5,382	$2,849	$16,208	$24,439
44	**North Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
45	**North Cresson Mine Area - Topsoil - Lift 5**	0.78	1.00	1.78	677	245	D7R	1	1	$112	$187	$299	$616	$326	$1,856	$2,798
46	**North Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
47	**North Cresson Mine Area - Topsoil - Globe Hill HR**	0.17	40.00	40.17	50	300	D7R	0	36	$2,014	$3,370	$5,384	$13,911	$7,364	$41,897	$63,172
48	**North Cresson Mine Area - Topsoil - Globe Hill HR - Dozer S**	0.00		0.00	677					$0	$0	$0	$0	$0	$0	$0
49	**ECOSA Mine Area - 50 ft lift - Mass Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
50	**ECOSA Mine Area - 50 ft lift - Fine Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
51	**ECOSA Mine Area - 150 ft lift - Mass Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
52	**ECOSA Mine Area - 150 ft lift - Fine Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
53	**ECOSA Mine Area - Topsoil - Lift 1**	55.05	19.00	74.05	406	625	D7R	47	17	$3,581	$5,990	$9,571	$25,644	$13,575	$77,234	$116,453
54	**ECOSA Mine Area - Topsoil - Lift 1 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
55	**ECOSA Mine Area - Topsoil - Lift 2**	57.26	6.00	63.26	406	625	D7R	49	5	$3,021	$5,054	$8,075	$21,907	$11,597	$65,980	$99,484
56	**ECOSA Mine Area - Topsoil - Lift 2 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
57	**ECOSA Mine Area - Topsoil - Lift 3**	62.03	5.00	67.03	406	635	D7R	53	4	$3,189	$5,335	$8,524	$23,213	$12,288	$69,912	$105,413
58	**ECOSA Mine Area - Topsoil - Lift 3 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
59	**ECOSA Mine Area - Topsoil - Lift 4**	33.68	20.00	53.68	406	505	D7R	29	18	$2,630	$4,399	$7,029	$18,589	$9,840	$55,988	$84,417
60	**ECOSA Mine Area - Topsoil - Lift 4 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
61	**ECOSA Mine Area - Topsoil - Lift 5**	66.85		66.85	406	315	D7R	57		$3,189	$5,335	$8,524	$23,150	$12,255	$69,725	$105,130
62	**ECOSA Mine Area - Topsoil - Lift 5 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
63	**ECOSA Mine Area - Topsoil - Lift 6**	13.98	12.00	25.98	406	300	D7R	12	11	$1,287	$2,153	$3,440	$8,997	$4,763	$27,097	$40,857
64	**ECOSA Mine Area - Topsoil - Lift 6 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
65	**East Cresson Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
66	**East Cresson Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
67	**East Cresson Mine Area - 40 lift - Mass Grading**	0.00		0.00	108					$0	$0	$0	$0	$0	$0	$0
68	**East Cresson Mine Area - 40 lift - Fine Grading**	0.00		0.00	108					$0	$0	$0	$0	$0	$0	$0
69	**East Cresson Mine Area - 50 lift - Mass Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
70	**East Cresson Mine Area - 50 lift - Fine Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
71	**East Cresson Mine Area - 50 lift - Mass Grading**	0.00		0.00	234					$0	$0	$0	$0	$0	$0	$0
72	**East Cresson Mine Area - 50 lift - Fine Grading**	0.00		0.00	234					$0	$0	$0	$0	$0	$0	$0
73	**East Cresson Mine Area - 150 lift - Mass Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
74	**East Cresson Mine Area - 150 lift - Fine Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
75	**East Cresson Mine Area - 400 lift - Mass Grading**	0.00		0.00	1,083					$0	$0	$0	$0	$0	$0	$0
76	**East Cresson Mine Area - 400 lift - Fine Grading**	0.00		0.00	1,083					$0	$0	$0	$0	$0	$0	$0
77	**East Cresson Mine Area - Topsoil - Lift 2**	7.68	5.00	12.68	406	675	D7R	7	4	$615	$1,030	$1,645	$4,392	$2,325	$13,225	$19,942
78	**East Cresson Mine Area - Topsoil - Lift 2 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
79	**East Cresson Mine Area - Topsoil - Lift 3**	2.63	8.00	10.63	406	515	D7R	2	7	$504	$842	$1,346	$3,681	$1,949	$11,087	$16,717
80	**East Cresson Mine Area - Topsoil - Lift 3 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
81	**East Cresson Mine Area - Topsoil - Lift 4**	58.38	4.00	62.38	406	545	D7R	50	4	$3,021	$5,054	$8,075	$21,602	$11,435	$65,063	$98,100
82	**East Cresson Mine Area - Topsoil - Lift 4 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
83	**East Cresson Mine Area - Topsoil - Lift 5**	66.85	45.00	111.85	406	655	D7R	57	39	$5,371	$8,986	$14,357	$38,734	$20,504	$116,660	$175,898
84	**East Cresson Mine Area - Topsoil - Lift 5 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
85	**East Cresson Mine Area - Topsoil - Lift 6**	13.98	98.00	111.98	406	300	D7R	12	89	$5,651	$9,454	$15,105	$38,778	$20,528	$116,795	$176,101
86	**East Cresson Mine Area - Topsoil - Lift 6 - Dozer Spreading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
87	**East Cresson Mine Area - Topsoil - WHEX**	4.66	195.00	199.66	406	300	D7R	4	177	$10,127	$16,942	$27,069	$69,143	$36,601	$208,246	$313,990

Closure Cost Estimate
Waste Rock Dumps

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Rock Dumps - Cost Summary

	Labor	Equipment	Materials	Totals
Grading Costs	$1,603,358	$3,680,199	N/A	$5,283,557
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$750,012	$1,946,392	N/A	$2,696,404
Ripping/Scarifying Cost	$83,591	$139,835	N/A	$223,426
Subtotal Earthworks	**$2,436,961**	**$5,766,426**	**$0**	**$8,203,387**
Revegetation Cost	$581,513	$307,828	$1,751,419	$2,640,760
TOTALS	**$3,018,474**	**$6,074,254**	**$1,751,419**	**$10,844,147**

88	**East Cresson Mine Area - Topsoil - WHEX - Dozer Spreadin**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
89	**East Cresson Mine Area - Topsoil - Ironclad**	0.93	14.00	14.93	406	300	D7R	1	13	$783	$1,310	$2,093	$5,170	$2,736	$15,572	$23,478
90	**East Cresson Mine Area - Topsoil - Ironclad - Dozer Spreadi**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
91	**Main Cresson Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
92	**Main Cresson Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	50					$0	$0	$0	$0	$0	$0	$0
93	**Main Cresson Mine Area - 50 ft lift - Mass Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
94	**Main Cresson Mine Area - 50 ft lift - Fine Grading**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
95	**Main Cresson Mine Area - 150 ft lift - Mass Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
96	**Main Cresson Mine Area - 150 ft lift - Fine Grading**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
97	**Main Cresson Mine Area - 400 ft lift - Mass Grading**	0.00		0.00	1,083					$0	$0	$0	$0	$0	$0	$0
98	**Main Cresson Mine Area - 400 ft lift - Fine Grading**	0.00		0.00	1,083					$0	$0	$0	$0	$0	$0	$0
99	**Main Cresson Mine Area - 450 ft lift - Mass Grading**	0.00		0.00	1,218					$0	$0	$0	$0	$0	$0	$0
100	**Main Cresson Mine Area - 450 ft lift - Fine Grading**	0.00		0.00	1,218					$0	$0	$0	$0	$0	$0	$0
101	**Main Cresson Mine Area - 650 ft lift - Mass Grading**	0.00		0.00	1,760					$0	$0	$0	$0	$0	$0	$0
102	**Main Cresson Mine Area - 650 ft lift - Fine Grading**	0.00		0.00	1,760					$0	$0	$0	$0	$0	$0	$0
103	**Main Cresson Mine Area - Topsoil - 10185**	20.20	63.00	83.20	1,760	400	D7R	18	56	$4,140	$6,926	$11,066	$28,812	$15,252	$86,777	$130,841
104	**Main Cresson Mine Area - Topsoil - 10185 - Dozer Spreading**	0.00		0.00	1,760					$0	$0	$0	$0	$0	$0	$0
105	**Main Cresson Mine Area - Topsoil - Ruby Road**	23.30	50.00	73.30	406	300	D7R	20	45	$3,637	$6,084	$9,721	$25,384	$13,437	$76,452	$115,273
106	**Main Cresson Mine Area - Topsoil - Ruby Road - Dozer Spre**	0.00		0.00	406					$0	$0	$0	$0	$0	$0	$0
107	**Main Cresson Mine Area - Topsoil - AJAX**	2.31	31.00	33.31	67	100	D7R	2	32	$1,902	$3,182	$5,084	$11,535	$6,106	$34,742	$52,383
108	**Main Cresson Mine Area - Topsoil - AJAX - Dozer Spreading**	0.00		0.00	67					$0	$0	$0	$0	$0	$0	$0
109	**Main Cresson Mine Area - Topsoil - Crusher**	60.61		60.61	1,760	100	D7R	52		$2,909	$4,867	$7,776	$20,989	$11,111	$63,216	$95,316
110	**Main Cresson Mine Area - Topsoil - Crusher - Dozer Spreadi**	0.00		0.00	135					$0	$0	$0	$0	$0	$0	$0
111	**Main Cresson Mine Area - Topsoil - Pit Bottom**	0.10	69.00	69.10	1,760	300	D7R	1	63	$3,581	$5,990	$9,571	$23,930	$12,667	$72,072	$108,669
112	**Main Cresson Mine Area - Topsoil - Pit Bottom - Dozer Spre**	0.00		0.00	100					$0	$0	$0	$0	$0	$0	$0
113	**Main Cresson Mine Area - Topsoil - South Cresson HR**	0.10	30.00	30.10	1,760	300	D7R	1	27	$1,567	$2,621	$4,188	$10,424	$5,518	$31,395	$47,337
114	**Main Cresson Mine Area - Topsoil - South Cresson HR - Doz**	0.00		0.00	112					$0	$0	$0	$0	$0	$0	$0
115	**Main Cresson Mine Area - Topsoil - Cresson HR**	0.10	30.00	30.10	1,760	300	D7R	1	27	$1,567	$2,621	$4,188	$10,424	$5,518	$31,395	$47,337
116	**Main Cresson Mine Area - Topsoil - Cresson HR - Dozer Spr**	0.00		0.00	112					$0	$0	$0	$0	$0	$0	$0
117	**Crusher Mine Area - Pile Leveling - Mass Grading**	0.00		0.00	270					$0	$0	$0	$0	$0	$0	$0
118	**Crusher Mine Area - Pile Leveling - Fine Grading**	0.00		0.00	270					$0	$0	$0	$0	$0	$0	$0
119	**Crusher Mine Area - Topsoil**	1.09	42.00	43.09	95	100	D7R	1	43	$2,462	$4,118	$6,580	$14,922	$7,899	$44,943	$67,764
120	**Crusher Mine Area - Topsoil - Dozer Spreading**	0.00		0.00	95					$0	$0	$0	$0	$0	$0	$0
121	**Crusher Mine Area - Delivery Road - Mass Grading**	0.00		0.00	270					$0	$0	$0	$0	$0	$0	$0
122	**Crusher Mine Area - Delivery Road - Fine Grading**	0.00		0.00	270					$0	$0	$0	$0	$0	$0	$0
123	**Crusher Mine Area - Topsoil - Delivery Road**	0.22	10.00	10.22	95	300	D7R	0	9	$504	$842	$1,346	$3,539	$1,873	$10,660	$16,072
124	**Crusher Mine Area - Topsoil - Delivery Road - Dozer Spread**	0.00		0.00	95					$0	$0	$0	$0	$0	$0	$0
125	**Chicago Mine Area**	0.00		0.00	112					$0	$0	$0	$0	$0	$0	$0
126	**Chicago Mine Area topsoil - Dozer Spreading**	0.00	4.00	4.00		150	D7R	0	4	$224	$374	$598	$1,385	$733	$4,172	$6,290
		753.32	926.00	1,679.32				648	846	**$83,591**	**$139,835**	**$223,426**	**$581,513**	**$307,828**	**$1,751,419**	**$2,640,760**

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.)

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary

	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

Heap Leach Pads - User Input

You must fill in ALL green cells and relevant blue cells in this section for each heap, lift or heap category

	Facility Description			Physical (1) - MANDATORY									Cover				Growth Media			
	Description (required)	ID Code	Type	Underlying Ground Slope % grade	Ungraded Slope _H:1V	Final Slope _H:1V	Final Top Slope % grade	Lift (heap) Height ft	Mid-Bench Length ft	Average Flat Area Long Dimension (ripping distance) ft	Final (Regraded) Heap Footprint acres	Regrade Volume (if calculated elsewhere) cy	Cover Thickness Slopes in	Cover Thickness Flat Areas in	Distance from Cover Borrow ft	Slope from Heap to Cover Borrow % grade	Slope Growth Media Thickness in	Flat Area Growth Media Thickness in	Distance from Growth Material Stockpile ft	Slope from Heap to Stockpile % grade
1	AGVLF - Pile Leveling - Mass Grading		Heap Leach	0.0	10.0	10.0	1.0	5				31764.6								
2	AGVLF - Pile Leveling - Fine Grading		Heap Leach	0.0	10.0	10.0	1.0	5				3529.4								
3	AGVLF - 20 ft face - Mass Grading		Heap Leach	0.0	1.4	2.5	1.0	100				884101.5								
4	AGVLF - 20 ft face - Fine Grading			0.0	1.4	2.5	1.0	100				98233.5								
5	AGVLF - 100 ft face - Mass Grading			0.0	1.4	2.5	1.0	100				1244119.5								
6	AGVLF - 100 ft face - Fine Grading			0.0	1.4	2.5	1.0	100				138235.5								
7	AGVLF - 200 ft face - Mass Grading			0.0	1.4	2.5	1.0	200				267529.5								
8	AGVLF - 200 ft face - Fine Grading			0.0	1.4	2.5	1.0	200				29725.5								
9	AGVLF - Topsoil			0.0	1.4	2.5	1.0	175	200	350	32.77	0					6.0	6.0	2,000	-0.6
10	AGVLF - Topsoil - Dozer Spreading			0.0	1.4	2.5	1.0	175				26557								
11	AGVLF - Topsoil - Lift 1			0.0	1.4	2.5	0.0	150	3104	175	19.57	0					6.0	6.0	3,087	3.9
12	AGVLF - Topsoil - Lift 1 - Dozer Spreading			0.0	1.4	2.5	0.0	150				23223								
13	AGVLF - Topsoil - Lift 2			0.0	1.4	2.5	0.0	141	4295	355	33.82	0					6.0	6.0	3,196	-0.7
14	AGVLF - Topsoil - Lift 2 - Dozer Spreading			0.0	1.4	2.5	0.0	141				30224								
15	AGVLF - Topsoil - Lift 3			0.0	1.4	2.5	0.0	118	5370	355	46.87	0					6.0	6.0	4,268	-3.3
16	AGVLF - Topsoil - Lift 3 - Dozer Spreading			0.0	1.4	2.5	0.0	118				40095								
17	AGVLF - Topsoil - Lift 4			0.0	1.4	2.5	0.0	207	5769	415	52.92	0					6.0	6.0	6,312	-5.5
18	AGVLF - Topsoil - Lift 4 - Dozer Spreading			0.0	1.4	2.5	0.0	207				59506								
19	AGVLF - Topsoil - Lift 5			0.0	1.4	2.5	0.0	113	7392	465	71.41	0					6.0	6.0	7,462	-6.2
20	AGVLF - Topsoil - Lift 5 - Dozer Spreading			0.0	1.4	2.5	0.0	113				60616								
21	AGVLF - Topsoil - Lift 6			0.0	1.4	2.5	0.0	133	7598	685	91.43	0					6.0	6.0	8,747	-6.8
22	AGVLF - Topsoil - Lift 6 - Dozer Spreading			0.0	1.4	2.5	0.0	133				77411								
23	AGVLF - Topsoil - Lift 7			0.0	1.4	2.5	0.0	118	1500	700	129.07	0					6.0	6.0	10,490	-6.8
24	AGVLF - Topsoil - Lift 7 - Dozer Spreading			0.0	1.4	2.5	0.0	118				104752								
25	AGVLF - Topsoil - Lift 8			0.0	1.4	2.5	0.0	200	5999	415	47.28	0					6.0	6.0	2,805	-9.1
26	AGVLF - Topsoil - Lift 8 - Dozer Spreading			0.0	1.4	2.5	0.0	200				59879								
27	AGVLF - Topsoil - Lift 9			0.0	1.4	2.5	0.0	106	4569	415	49.64	0					6.0	6.0	1,859	-8.0
28	AGVLF - Topsoil - Lift 9 - Dozer Spreading			0.0	1.4	2.5	0.0	106				41737								
29	SGVLF - 100 ft face - Mass Grading			0.0	1.4	2.5	0.0	100				1797311								
30	SGVLF - 100 ft face - Fine Grading			0.0	1.4	2.5	0.0	100				199701								
31	SGVLF - Topsoil - Lift 1			0.0	1.4	2.5	0.0	100	1333	245	16.10						6.0	6.0	6,269	7.1
32	SGVLF - Topsoil - Lift 1 - Dozer Spreading			0.0	1.4	2.5	0.0	100				13456								
33	SGVLF - Topsoil - Lift 2			0.0	1.4	2.5	0.0	100	2122	245	14.80						6.0	6.0	4,774	5.4
34	SGVLF - Topsoil - Lift 2 - Dozer Spreading			0.0	1.4	2.5	0.0	100				12686								
35	SGVLF - Topsoil - Lift 3			0.0	1.4	2.5	0.0	100	3018	245	19.50						6.0	6.0	3,710	3.9
36	SGVLF - Topsoil - Lift 3 - Dozer Spreading			0.0	1.4	2.5	0.0	100				16792								
37	SGVLF - Topsoil - Lift 4			0.0	1.4	2.5	0.0	100	3495	245	30.40						6.0	6.0	3,178	1.9
38	SGVLF - Topsoil - Lift 4 - Dozer Spreading			0.0	1.4	2.5	0.0	100				25752								
39	SGVLF - Topsoil - Lift 5			0.0	1.4	2.5	0.0	100	7354	245	47.90						6.0	6.0	2,868	-2.0
40	SGVLF - Topsoil - Lift 5 - Dozer Spreading			0.0	1.4	2.5	0.0	100				41227								
41	SGVLF - Topsoil - Lift 6			0.0	1.4	2.5	0.0	100	9098	245	83.80						6.0	6.0	3,821	-4.2
42	SGVLF - Topsoil - Lift 6 - Dozer Spreading			0.0	1.4	2.5	0.0	100				70800								
43	SGVLF - Topsoil - Lift 7			0.0	1.4	2.5	0.0	100	10110	245	63.80						6.0	6.0	2,908	-8.9
44	SGVLF - Topsoil - Lift 7 - Dozer Spreading			0.0	1.4	2.5	0.0	100				55023								
45	SGVLF - Topsoil - Lift 8			0.0	1.4	2.5	0.0	100	9370	245	55.70						6.0	6.0	4,903	-7.3
46	SGVLF - Topsoil - Lift 8 - Dozer Spreading			0.0	1.4	2.5	0.0	100				48228								
47	SGVLF - Topsoil - Lift 9			0.0	1.4	2.5	0.0	100	8446	245	49.99						6.0	6.0	5,285	-8.7
48	SGVLF - Topsoil - Lift 9 - Dozer Spreading			0.0	1.4	2.5	0.0	100				43297								
49	SGVLF - Topsoil - Lift 10			0.0	1.4	2.5	0.0	100	7206	245	44.70						6.0	6.0	7,928	-7.1
50	SGVLF - Topsoil - Lift 10 - Dozer Spreading			0.0	1.4	2.5	0.0	100				38594								
51	SGVLF - Topsoil - Lift 11			0.0	1.4	2.5	0.0	100	6573	245	44.90						6.0	6.0	7,725	-8.5
52	SGVLF - Topsoil - Lift 11 - Dozer Spreading			0.0	1.4	2.5	0.0	100				38532								
53	SGVLF - Topsoil - Lift 12			0.0	1.4	2.5	0.0	100	2012	245	33.10						6.0	6.0	8,359	-9.1
54	SGVLF - Topsoil - Lift 12 - Dozer Spreading			0.0	1.4	2.5	0.0	100				27409								
55	SGVLF - Topsoil - Lift 13			0.0	1.4	2.5	0.0	100	1500	245	21.49						6.0	6.0	9,638	-8.4
56	SGVLF - Topsoil - Lift 13 - Dozer Spreading			0.0	1.4	2.5	0.0	100				17859								

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)

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

Heap Leach Pads - User Input (cont.) — You must fill in ALL green cells and relevant blue cells in this section for each heap, lift or heap category

		Grading				Cover		Growth Media		Revegetation								
	Description (required)	Regrading Material Condition (select)	Regrading Material Type (select)	Regrading Equipment Fleet (select)	Slot/ Side-by-Side (select)	Cover Material Type (select)	Cover Placement Equipment Fleet (select)	Growth Media Material Type (select)	Growth Media Equipment Fleet (select)	Seed Mix Slopes (select)	Seed Mix Flat Areas (select)	Mulch Slopes (select)	Mulch Flat Areas (select)	Fertilizer Slopes (select)	Fertilizer Flat Areas (select)	Slope Scarify/ Rip? (select)	Flat Area Scarify/ Rip? (select)	Scarifying/ Ripping Fleet (select)
1	AGVLF - Pile Leveling - Mass Grading	0.6	Granite - broken	Large	Yes													
2	AGVLF - Pile Leveling - Fine Grading	0.6	Granite - broken	Small	No													
3	AGVLF - 20 ft face - Mass Grading	1	Granite - broken	Large	Yes													
4	AGVLF - 20 ft face - Fine Grading	1	Granite - broken	Small	No													
5	AGVLF - 100 ft face - Mass Grading	1	Granite - broken	Large	Yes													
6	AGVLF - 100 ft face - Fine Grading	1	Granite - broken	Small	No													
7	AGVLF - 200 ft face - Mass Grading	1	Granite - broken	Large	Yes													
8	AGVLF - 200 ft face - Fine Grading	1	Granite - broken	Small	No													
9	AGVLF - Topsoil							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
10	AGVLF - Topsoil - Dozer Spreading	1.2	Topsoil	Small	No													
11	AGVLF - Topsoil - Lift 1							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
12	AGVLF - Topsoil - Lift 1 - Dozer Spreading	1.2	Topsoil	Small	No													
13	AGVLF - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
14	AGVLF - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
15	AGVLF - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
16	AGVLF - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													
17	AGVLF - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
18	AGVLF - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
19	AGVLF - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
20	AGVLF - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
21	AGVLF - Topsoil - Lift 6							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
22	AGVLF - Topsoil - Lift 6 - Dozer Spreading	1.2	Topsoil	Small	No													
23	AGVLF - Topsoil - Lift 7							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
24	AGVLF - Topsoil - Lift 7 - Dozer Spreading	1.2	Topsoil	Small	No													
25	AGVLF - Topsoil - Lift 8							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
26	AGVLF - Topsoil - Lift 8 - Dozer Spreading	1.2	Topsoil	Small	No													
27	AGVLF - Topsoil - Lift 9							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
28	AGVLF - Topsoil - Lift 9 - Dozer Spreading	1.2	Topsoil	Small	No													
29	SGVLF - 100 ft face - Mass Grading	1	Granite - broken	Large	Yes													
30	SGVLF - 100 ft face - Fine Grading	1	Granite - broken	Small	No													
31	SGVLF - Topsoil - Lift 1							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
32	SGVLF - Topsoil - Lift 1 - Dozer Spreading	1.2	Topsoil	Small	No													
33	SGVLF - Topsoil - Lift 2							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
34	SGVLF - Topsoil - Lift 2 - Dozer Spreading	1.2	Topsoil	Small	No													
35	SGVLF - Topsoil - Lift 3							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
36	SGVLF - Topsoil - Lift 3 - Dozer Spreading	1.2	Topsoil	Small	No													
37	SGVLF - Topsoil - Lift 4							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
38	SGVLF - Topsoil - Lift 4 - Dozer Spreading	1.2	Topsoil	Small	No													
39	SGVLF - Topsoil - Lift 5							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
40	SGVLF - Topsoil - Lift 5 - Dozer Spreading	1.2	Topsoil	Small	No													
41	SGVLF - Topsoil - Lift 6							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
42	SGVLF - Topsoil - Lift 6 - Dozer Spreading	1.2	Topsoil	Small	No													
43	SGVLF - Topsoil - Lift 7							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
44	SGVLF - Topsoil - Lift 7 - Dozer Spreading	1.2	Topsoil	Small	No													
45	SGVLF - Topsoil - Lift 8							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
46	SGVLF - Topsoil - Lift 8 - Dozer Spreading	1.2	Topsoil	Small	No													
47	SGVLF - Topsoil - Lift 9							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
48	SGVLF - Topsoil - Lift 9 - Dozer Spreading	1.2	Topsoil	Small	No													
49	SGVLF - Topsoil - Lift 10							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
50	SGVLF - Topsoil - Lift 10 - Dozer Spreading	1.2	Topsoil	Small	No													
51	SGVLF - Topsoil - Lift 11							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
52	SGVLF - Topsoil - Lift 11 - Dozer Spreading	1.2	Topsoil	Small	No													
53	SGVLF - Topsoil - Lift 12							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
54	SGVLF - Topsoil - Lift 12 - Dozer Spreading	1.2	Topsoil	Small	No													
55	SGVLF - Topsoil - Lift 13							Topsoil	Med Truck	User Mix 1	User Mix 1	Hydro Mulch	Hydro Mulch	Chemical	Chemical	Yes	Yes	Small Dozer
56	SGVLF - Topsoil - Lift 13 - Dozer Spreading	1.2	Topsoil	Small	No													

Notes:

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary

	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

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

Heap Leach Pads - User Input (cont.)

		Solution Collection Ditch Fill							Piping			
	Description (required)	Collection Ditch Length ft	Collection Ditch Top Width ft	Collection Ditch Depth ft	Volume (if calculated elsewhere) cy	Distance from Borrow ft	Slope to Borrow % grade	Drain Rock Equipment Fleet (select)	Solid Pipe Length ft	Solid Pipe Type (select)	Drainage Pipe Length ft	Drainage Pipe Type (select)
1	**AGVLF - Pile Leveling - Mass Grading**											
2	**AGVLF - Pile Leveling - Fine Grading**											
3	**AGVLF - 20 ft face - Mass Grading**											
4	**AGVLF - 20 ft face - Fine Grading**											
5	**AGVLF - 100 ft face - Mass Grading**											
6	**AGVLF - 100 ft face - Fine Grading**											
7	**AGVLF - 200 ft face - Mass Grading**											
8	**AGVLF - 200 ft face - Fine Grading**											
9	**AGVLF - Topsoil**											
10	**AGVLF - Topsoil - Dozer Spreading**											
11	**AGVLF - Topsoil - Lift 1**											
12	**AGVLF - Topsoil - Lift 1 - Dozer Spreading**											
13	**AGVLF - Topsoil - Lift 2**											
14	**AGVLF - Topsoil - Lift 2 - Dozer Spreading**											
15	**AGVLF - Topsoil - Lift 3**											
16	**AGVLF - Topsoil - Lift 3 - Dozer Spreading**											
17	**AGVLF - Topsoil - Lift 4**											
18	**AGVLF - Topsoil - Lift 4 - Dozer Spreading**											
19	**AGVLF - Topsoil - Lift 5**											
20	**AGVLF - Topsoil - Lift 5 - Dozer Spreading**											
21	**AGVLF - Topsoil - Lift 6**											
22	**AGVLF - Topsoil - Lift 6 - Dozer Spreading**											
23	**AGVLF - Topsoil - Lift 7**											
24	**AGVLF - Topsoil - Lift 7 - Dozer Spreading**											
25	**AGVLF - Topsoil - Lift 8**											
26	**AGVLF - Topsoil - Lift 8 - Dozer Spreading**											
27	**AGVLF - Topsoil - Lift 9**											
28	**AGVLF - Topsoil - Lift 9 - Dozer Spreading**											
29	**SGVLF - 100 ft face - Mass Grading**											
30	**SGVLF - 100 ft face - Fine Grading**											
31	**SGVLF - Topsoil - Lift 1**											
32	**SGVLF - Topsoil - Lift 1 - Dozer Spreading**											
33	**SGVLF - Topsoil - Lift 2**											
34	**SGVLF - Topsoil - Lift 2 - Dozer Spreading**											
35	**SGVLF - Topsoil - Lift 3**											
36	**SGVLF - Topsoil - Lift 3 - Dozer Spreading**											
37	**SGVLF - Topsoil - Lift 4**											
38	**SGVLF - Topsoil - Lift 4 - Dozer Spreading**											
39	**SGVLF - Topsoil - Lift 5**											
40	**SGVLF - Topsoil - Lift 5 - Dozer Spreading**											
41	**SGVLF - Topsoil - Lift 6**											
42	**SGVLF - Topsoil - Lift 6 - Dozer Spreading**											
43	**SGVLF - Topsoil - Lift 7**											
44	**SGVLF - Topsoil - Lift 7 - Dozer Spreading**											
45	**SGVLF - Topsoil - Lift 8**											
46	**SGVLF - Topsoil - Lift 8 - Dozer Spreading**											
47	**SGVLF - Topsoil - Lift 9**											
48	**SGVLF - Topsoil - Lift 9 - Dozer Spreading**											
49	**SGVLF - Topsoil - Lift 10**											
50	**SGVLF - Topsoil - Lift 10 - Dozer Spreading**											
51	**SGVLF - Topsoil - Lift 11**											
52	**SGVLF - Topsoil - Lift 11 - Dozer Spreading**											
53	**SGVLF - Topsoil - Lift 12**											
54	**SGVLF - Topsoil - Lift 12 - Dozer Spreading**											
55	**SGVLF - Topsoil - Lift 13**											
56	**SGVLF - Topsoil - Lift 13 - Dozer Spreading**											

Notes:

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

Heap Leach Pads - Calculations

Regrading Volume Calculation

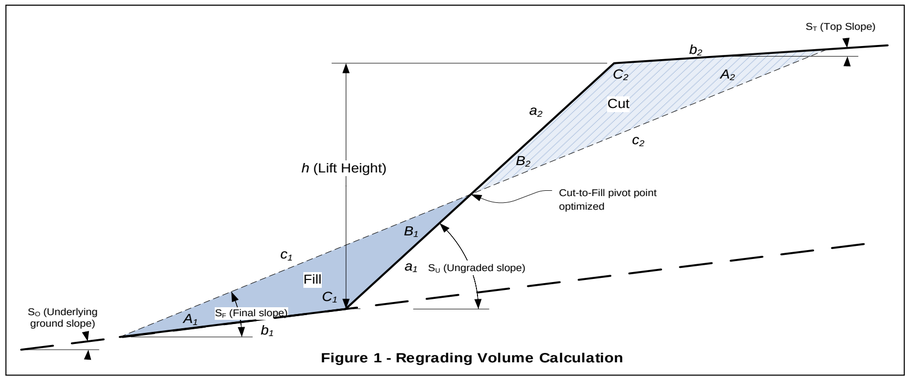

Figure 1 - Regrading Volume Calculation

Regrading Push Distance Calculation

dozing distance: based on 2/3 final cut slope + 2/3 final fill slope (minimum = 50 ft)

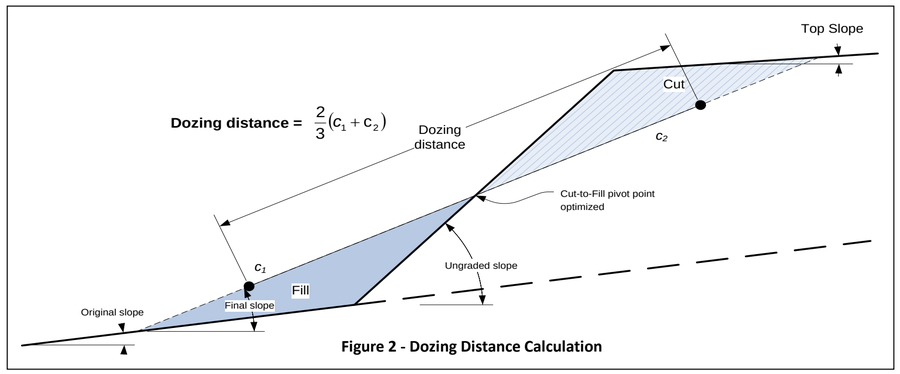

Figure 2 - Dozing Distance Calculation

Ripping/Scarifying Calculations

Minimum 1 hr ripping/scarifying per area

Slopes:
Number of passes = Final slope length ÷ Grader width
Travel distance = Number of passes x Mid-bench length
Total hours = (Travel distance ÷ Grader productivity) + (Number of passes x Grader maneuver time)

Flat Areas:
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

Final Slope Area and Footprint Area Calculations

Final slope length = $c_1 + c_2$
Final slope area = Final slope length *x* Mid-bench Length
Final lift height (h_{final}) = ($c_1 + c_2$) *x* sin(Final slope)
Final slope width (d) = ($c_1 + c_2$) *x* cos(Final slope)
Final slope footprint = Final slope width *x* Mid-bench Length
Final flat area = Final footprint – Final slope footprint

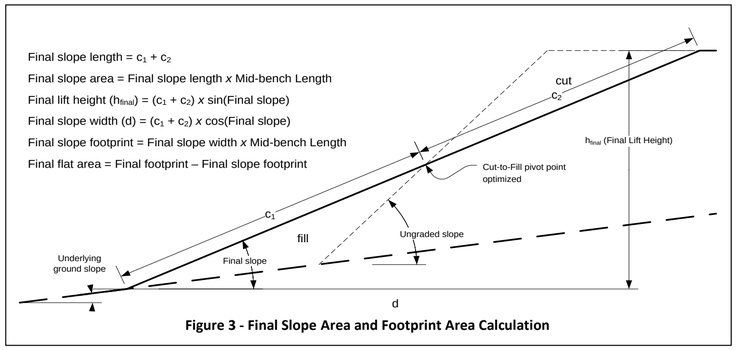

Figure 3 - Final Slope Area and Footprint Area Calculation

Solution Collection Ditch Calculations

Use when existing heap material is not suitable drain rock
Assume to be constructed in existing solution channels
Assume 2H:1V ditch sideslopes
Drain rock assumed to be Gravel - Dry at 2,550 lb/cy (1,510 kg/m3) from CAT Handbook 35th Ed.

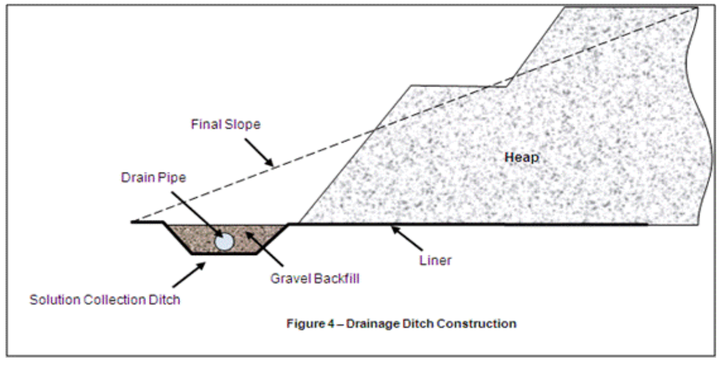

Figure 4 – Drainage Ditch Construction

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary

	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

Heap Leach Pad - Drainage Channel Fill & Drainage Pipe Installation

		Drain Rock Placement								Drainpipe Installation				
	Description (required)	Drain Rock Volume cy	Drain Rock Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours hrs	Drainage Labor Cost $	Drainage Equipment Cost $	Total Drainage Cost $	Piping Crew Hours hrs	Piping Labor Cost $	Piping Equipment Cost $	Piping Material Cost $	Total Pipe Installation Cost $
1	**AGVLF - Pile Leveling - Mass Grading**	0					$0	$0	$0		$0	$0	$0	$0
2	**AGVLF - Pile Leveling - Fine Grading**	0					$0	$0	$0		$0	$0	$0	$0
3	**AGVLF - 20 ft face - Mass Grading**	0					$0	$0	$0		$0	$0	$0	$0
4	**AGVLF - 20 ft face - Fine Grading**	0					$0	$0	$0		$0	$0	$0	$0
5	**AGVLF - 100 ft face - Mass Grading**	0					$0	$0	$0		$0	$0	$0	$0
6	**AGVLF - 100 ft face - Fine Grading**	0					$0	$0	$0		$0	$0	$0	$0
7	**AGVLF - 200 ft face - Mass Grading**	0					$0	$0	$0		$0	$0	$0	$0
8	**AGVLF - 200 ft face - Fine Grading**	0					$0	$0	$0		$0	$0	$0	$0
9	**AGVLF - Topsoil**	0					$0	$0	$0		$0	$0	$0	$0
10	**AGVLF - Topsoil - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
11	**AGVLF - Topsoil - Lift 1**	0					$0	$0	$0		$0	$0	$0	$0
12	**AGVLF - Topsoil - Lift 1 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
13	**AGVLF - Topsoil - Lift 2**	0					$0	$0	$0		$0	$0	$0	$0
14	**AGVLF - Topsoil - Lift 2 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
15	**AGVLF - Topsoil - Lift 3**	0					$0	$0	$0		$0	$0	$0	$0
16	**AGVLF - Topsoil - Lift 3 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
17	**AGVLF - Topsoil - Lift 4**	0					$0	$0	$0		$0	$0	$0	$0
18	**AGVLF - Topsoil - Lift 4 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
19	**AGVLF - Topsoil - Lift 5**	0					$0	$0	$0		$0	$0	$0	$0
20	**AGVLF - Topsoil - Lift 5 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
21	**AGVLF - Topsoil - Lift 6**	0					$0	$0	$0		$0	$0	$0	$0
22	**AGVLF - Topsoil - Lift 6 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
23	**AGVLF - Topsoil - Lift 7**	0					$0	$0	$0		$0	$0	$0	$0
24	**AGVLF - Topsoil - Lift 7 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
25	**AGVLF - Topsoil - Lift 8**	0					$0	$0	$0		$0	$0	$0	$0
26	**AGVLF - Topsoil - Lift 8 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
27	**AGVLF - Topsoil - Lift 9**	0					$0	$0	$0		$0	$0	$0	$0
28	**AGVLF - Topsoil - Lift 9 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
29	**SGVLF - 100 ft face - Mass Grading**	0					$0	$0	$0		$0	$0	$0	$0
30	**SGVLF - 100 ft face - Fine Grading**	0					$0	$0	$0		$0	$0	$0	$0
31	**SGVLF - Topsoil - Lift 1**	0					$0	$0	$0		$0	$0	$0	$0
32	**SGVLF - Topsoil - Lift 1 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
33	**SGVLF - Topsoil - Lift 2**	0					$0	$0	$0		$0	$0	$0	$0
34	**SGVLF - Topsoil - Lift 2 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
35	**SGVLF - Topsoil - Lift 3**	0					$0	$0	$0		$0	$0	$0	$0
36	**SGVLF - Topsoil - Lift 3 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
37	**SGVLF - Topsoil - Lift 4**	0					$0	$0	$0		$0	$0	$0	$0
38	**SGVLF - Topsoil - Lift 4 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
39	**SGVLF - Topsoil - Lift 5**	0					$0	$0	$0		$0	$0	$0	$0
40	**SGVLF - Topsoil - Lift 5 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
41	**SGVLF - Topsoil - Lift 6**	0					$0	$0	$0		$0	$0	$0	$0
42	**SGVLF - Topsoil - Lift 6 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
43	**SGVLF - Topsoil - Lift 7**	0					$0	$0	$0		$0	$0	$0	$0
44	**SGVLF - Topsoil - Lift 7 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
45	**SGVLF - Topsoil - Lift 8**	0					$0	$0	$0		$0	$0	$0	$0
46	**SGVLF - Topsoil - Lift 8 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
47	**SGVLF - Topsoil - Lift 9**	0					$0	$0	$0		$0	$0	$0	$0
48	**SGVLF - Topsoil - Lift 9 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
49	**SGVLF - Topsoil - Lift 10**	0					$0	$0	$0		$0	$0	$0	$0
50	**SGVLF - Topsoil - Lift 10 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
51	**SGVLF - Topsoil - Lift 11**	0					$0	$0	$0		$0	$0	$0	$0
52	**SGVLF - Topsoil - Lift 11 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
53	**SGVLF - Topsoil - Lift 12**	0					$0	$0	$0		$0	$0	$0	$0
54	**SGVLF - Topsoil - Lift 12 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
55	**SGVLF - Topsoil - Lift 13**	0					$0	$0	$0		$0	$0	$0	$0
56	**SGVLF - Topsoil - Lift 13 - Dozer Spreading**	0					$0	$0	$0		$0	$0	$0	$0
						0	**$0**	**$0**	**$0**		**$0**	**$0**	**$0**	**$0**

Heap Leach Pad - Regrading Costs

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) x (Altitude Deration)

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary

	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

	Description (required)	Regrading Volume cy	Dozing Distance (see above) ft	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 hr	Total Labor Cost $	Total Equipment Cost $	Total Regrading Cost $
1	**AGVLF - Pile Leveling - Mass Grading**	31,765	50	D10R	2,934	1.2	0.6	0.82	1.2	1,255	25	$1,399	$3,609	$5,008
2	**AGVLF - Pile Leveling - Fine Grading**	3,529	50	D7R	1,076	1.2	0.6	0.82	1.0	395	9	$504	$842	$1,346
3	**AGVLF - 20 ft face - Mass Grading**	884,102	147	D10R	1,173	1.6	1.0	0.82	1.2	1,115	793	$44,368	$114,470	$158,838
4	**AGVLF - 20 ft face - Fine Grading**	98,234	147	D7R	464	1.6	1.0	0.82	1.0	379	259	$14,491	$24,242	$38,733
5	**AGVLF - 100 ft face - Mass Grading**	1,244,120	147	D10R	1,173	1.6	1.0	0.82	1.2	1,115	1,116	$62,440	$161,095	$223,535
6	**AGVLF - 100 ft face - Fine Grading**	138,236	147	D7R	464	1.6	1.0	0.82	1.0	379	365	$20,422	$34,164	$54,586
7	**AGVLF - 200 ft face - Mass Grading**	267,530	293	D10R	652	1.6	1.0	0.82	1.2	620	431	$24,114	$62,215	$86,329
8	**AGVLF - 200 ft face - Fine Grading**	29,726	293	D7R	271	1.6	1.0	0.82	1.0	221	135	$7,553	$12,636	$20,189
9	**AGVLF - Topsoil**	0		Dozing Material!								$0	$0	$0
10	**AGVLF - Topsoil - Dozer Spreading**	26,557	257	D7R	300	1.6	1.2	1.44	1.0	516	51	$2,853	$4,774	$7,627
11	**AGVLF - Topsoil - Lift 1**	0		Dozing Material!								$0	$0	$0
12	**AGVLF - Topsoil - Lift 1 - Dozer Spreading**	23,223	219	D7R	340	1.6	1.2	1.44	1.0	585	40	$2,238	$3,744	$5,982
13	**AGVLF - Topsoil - Lift 2**	0		Dozing Material!								$0	$0	$0
14	**AGVLF - Topsoil - Lift 2 - Dozer Spreading**	30,224	206	D7R	357	1.6	1.2	1.44	1.0	614	49	$2,742	$4,586	$7,328
15	**AGVLF - Topsoil - Lift 3**	0		Dozing Material!								$0	$0	$0
16	**AGVLF - Topsoil - Lift 3 - Dozer Spreading**	40,095	172	D7R	411	1.6	1.2	1.44	1.0	707	57	$3,189	$5,335	$8,524
17	**AGVLF - Topsoil - Lift 4**	0		Dozing Material!								$0	$0	$0
18	**AGVLF - Topsoil - Lift 4 - Dozer Spreading**	59,506	302	D7R	265	1.6	1.2	1.44	1.0	456	130	$7,274	$12,168	$19,442
19	**AGVLF - Topsoil - Lift 5**	0		Dozing Material!								$0	$0	$0
20	**AGVLF - Topsoil - Lift 5 - Dozer Spreading**	60,616	165	D7R	424	1.6	1.2	1.44	1.0	730	83	$4,644	$7,769	$12,413
21	**AGVLF - Topsoil - Lift 6**	0		Dozing Material!								$0	$0	$0
22	**AGVLF - Topsoil - Lift 6 - Dozer Spreading**	77,411	194	D7R	374	1.6	1.2	1.44	1.0	644	120	$6,714	$11,232	$17,946
23	**AGVLF - Topsoil - Lift 7**	0		Dozing Material!								$0	$0	$0
24	**AGVLF - Topsoil - Lift 7 - Dozer Spreading**	104,752	172	D7R	411	1.6	1.2	1.44	1.0	707	148	$8,281	$13,853	$22,134
25	**AGVLF - Topsoil - Lift 8**	0		Dozing Material!								$0	$0	$0
26	**AGVLF - Topsoil - Lift 8 - Dozer Spreading**	59,879	292	D7R	272	1.6	1.2	1.44	1.0	468	128	$7,162	$11,981	$19,143
27	**AGVLF - Topsoil - Lift 9**	0		Dozing Material!								$0	$0	$0
28	**AGVLF - Topsoil - Lift 9 - Dozer Spreading**	41,737	155	D7R	445	1.6	1.2	1.44	1.0	766	54	$3,021	$5,054	$8,075
29	**SGVLF - 100 ft face - Mass Grading**	1,797,311	146	D10R	1,180	1.6	1.0	0.82	1.2	1,122	1,602	$89,632	$231,249	$320,881
30	**SGVLF - 100 ft face - Fine Grading**	199,701	146	D7R	467	1.6	1.0	0.82	1.0	381	524	$29,318	$49,046	$78,364
31	**SGVLF - Topsoil - Lift 1**	67,884	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
32	**SGVLF - Topsoil - Lift 1 - Dozer Spreading**	13,456	146	D7R	467	1.6	1.2	1.44	1.0	804	17	$951	$1,591	$2,542
33	**SGVLF - Topsoil - Lift 2**	108,065	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
34	**SGVLF - Topsoil - Lift 2 - Dozer Spreading**	12,686	146	D7R	467	1.6	1.2	1.44	1.0	804	16	$895	$1,498	$2,393
35	**SGVLF - Topsoil - Lift 3**	153,694	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
36	**SGVLF - Topsoil - Lift 3 - Dozer Spreading**	16,792	146	D7R	467	1.6	1.2	1.44	1.0	804	21	$1,175	$1,966	$3,141
37	**SGVLF - Topsoil - Lift 4**	177,986	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
38	**SGVLF - Topsoil - Lift 4 - Dozer Spreading**	25,752	146	D7R	467	1.6	1.2	1.44	1.0	804	32	$1,790	$2,995	$4,785
39	**SGVLF - Topsoil - Lift 5**	374,509	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
40	**SGVLF - Topsoil - Lift 5 - Dozer Spreading**	41,227	146	D7R	467	1.6	1.2	1.44	1.0	804	51	$2,853	$4,774	$7,627
41	**SGVLF - Topsoil - Lift 6**	463,324	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
42	**SGVLF - Topsoil - Lift 6 - Dozer Spreading**	70,800	146	D7R	467	1.6	1.2	1.44	1.0	804	88	$4,924	$8,237	$13,161
43	**SGVLF - Topsoil - Lift 7**	514,861	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
44	**SGVLF - Topsoil - Lift 7 - Dozer Spreading**	55,023	146	D7R	467	1.6	1.2	1.44	1.0	804	68	$3,805	$6,365	$10,170
45	**SGVLF - Topsoil - Lift 8**	477,176	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
46	**SGVLF - Topsoil - Lift 8 - Dozer Spreading**	48,228	146	D7R	467	1.6	1.2	1.44	1.0	804	60	$3,357	$5,616	$8,973
47	**SGVLF - Topsoil - Lift 9**	430,120	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
48	**SGVLF - Topsoil - Lift 9 - Dozer Spreading**	43,297	146	D7R	467	1.6	1.2	1.44	1.0	804	54	$3,021	$5,054	$8,075
49	**SGVLF - Topsoil - Lift 10**	366,972	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
50	**SGVLF - Topsoil - Lift 10 - Dozer Spreading**	38,594	146	D7R	467	1.6	1.2	1.44	1.0	804	48	$2,686	$4,493	$7,179
51	**SGVLF - Topsoil - Lift 11**	334,736	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
52	**SGVLF - Topsoil - Lift 11 - Dozer Spreading**	38,532	146	D7R	467	1.6	1.2	1.44	1.0	804	48	$2,686	$4,493	$7,179
53	**SGVLF - Topsoil - Lift 12**	102,463	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
54	**SGVLF - Topsoil - Lift 12 - Dozer Spreading**	27,409	146	D7R	467	1.6	1.2	1.44	1.0	804	34	$1,902	$3,182	$5,084
55	**SGVLF - Topsoil - Lift 13**	76,389	146	Dozing Material!	Select Fleet	1.6	Dozing Materia	ozing Materia	1.0	Select Fleet	Select Fleet	Select Fleet	Select Fleet	Select Fleet
56	**SGVLF - Topsoil - Lift 13 - Dozer Spreading**	17,859	146	D7R	467	1.6	1.2	1.44	1.0	804	22	$1,231	$2,059	$3,290
		9,316,085									6,678	**$373,635**	**$826,387**	**$1,200,022**

Heap Leach Pad - Cover and Growth Media Costs

Cover (lower layer)	Growth Media Placement

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

	Description (required)	Cover Volume cy	Cover Replacement Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Cover Labor Cost $	Cover Equipment Cost $	Total Cover Cost $	Growth Media Volume cy	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	**AGVLF - Pile Leveling - Mass Grading**	0					$0	$0	$0	0					$0	$0	$0
2	**AGVLF - Pile Leveling - Fine Grading**	0					$0	$0	$0	0					$0	$0	$0
3	**AGVLF - 20 ft face - Mass Grading**	0					$0	$0	$0	0					$0	$0	$0
4	**AGVLF - 20 ft face - Fine Grading**	0					$0	$0	$0	0					$0	$0	$0
5	**AGVLF - 100 ft face - Mass Grading**	0					$0	$0	$0	0					$0	$0	$0
6	**AGVLF - 100 ft face - Fine Grading**	0					$0	$0	$0	0					$0	$0	$0
7	**AGVLF - 200 ft face - Mass Grading**	0					$0	$0	$0	0					$0	$0	$0
8	**AGVLF - 200 ft face - Fine Grading**	0					$0	$0	$0	0					$0	$0	$0
9	**AGVLF - Topsoil**	0					$0	$0	$0	26,557	740/988G/D8R	495	2	54	$12,085	$32,479	$44,564
10	**AGVLF - Topsoil - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
11	**AGVLF - Topsoil - Lift 1**	0					$0	$0	$0	23,223	740/988G/D8R	621	3	37	$10,351	$27,287	$37,638
12	**AGVLF - Topsoil - Lift 1 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
13	**AGVLF - Topsoil - Lift 2**	0					$0	$0	$0	30,224	740/988G/D8R	643	3	47	$13,148	$34,662	$47,810
14	**AGVLF - Topsoil - Lift 2 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
15	**AGVLF - Topsoil - Lift 3**	0					$0	$0	$0	40,095	740/988G/D8R	671	4	60	$20,142	$52,411	$72,553
16	**AGVLF - Topsoil - Lift 3 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
17	**AGVLF - Topsoil - Lift 4**	0					$0	$0	$0	59,506	740/988G/D8R	690	6	86	$38,494	$98,517	$137,011
18	**AGVLF - Topsoil - Lift 4 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
19	**AGVLF - Topsoil - Lift 5**	0					$0	$0	$0	60,616	740/988G/D8R	690	8	88	$49,236	$124,748	$173,984
20	**AGVLF - Topsoil - Lift 5 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
21	**AGVLF - Topsoil - Lift 6**	0					$0	$0	$0	77,411	740/988G/D8R	688	9	112	$68,930	$174,004	$242,934
22	**AGVLF - Topsoil - Lift 6 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
23	**AGVLF - Topsoil - Lift 7**	0					$0	$0	$0	104,752	740/988G/D8R	666	10	157	$105,410	$265,272	$370,682
24	**AGVLF - Topsoil - Lift 7 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
25	**AGVLF - Topsoil - Lift 8**	0					$0	$0	$0	59,879	740/988G/D8R	572	4	105	$35,249	$91,719	$126,968
26	**AGVLF - Topsoil - Lift 8 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
27	**AGVLF - Topsoil - Lift 9**	0					$0	$0	$0	41,737	740/988G/D8R	540	3	78	$21,821	$57,524	$79,345
28	**AGVLF - Topsoil - Lift 9 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
29	**SGVLF - 100 ft face - Mass Grading**	0					$0	$0	$0	0					$0	$0	$0
30	**SGVLF - 100 ft face - Fine Grading**	0					$0	$0	$0	0					$0	$0	$0
31	**SGVLF - Topsoil - Lift 1**	0					$0	$0	$0	13,456	740/988G/D8R	694	5	20	$7,833	$20,191	$28,024
32	**SGVLF - Topsoil - Lift 1 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
33	**SGVLF - Topsoil - Lift 2**	0					$0	$0	$0	12,686	740/988G/D8R	690	4	18	$6,043	$15,723	$21,766
34	**SGVLF - Topsoil - Lift 2 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
35	**SGVLF - Topsoil - Lift 3**	0					$0	$0	$0	16,792	740/988G/D8R	577	3	29	$8,113	$21,387	$29,500
36	**SGVLF - Topsoil - Lift 3 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
37	**SGVLF - Topsoil - Lift 4**	0					$0	$0	$0	25,752	740/988G/D8R	643	3	40	$11,190	$29,500	$40,690
38	**SGVLF - Topsoil - Lift 4 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
39	**SGVLF - Topsoil - Lift 5**	0					$0	$0	$0	41,227	740/988G/D8R	601	3	69	$19,303	$50,887	$70,190
40	**SGVLF - Topsoil - Lift 5 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
41	**SGVLF - Topsoil - Lift 6**	0					$0	$0	$0	70,800	740/988G/D8R	621	4	114	$38,270	$99,580	$137,850
42	**SGVLF - Topsoil - Lift 6 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
43	**SGVLF - Topsoil - Lift 7**	0					$0	$0	$0	55,023	740/988G/D8R	698	5	79	$30,940	$79,753	$110,693
44	**SGVLF - Topsoil - Lift 7 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
45	**SGVLF - Topsoil - Lift 8**	0					$0	$0	$0	48,228	740/988G/D8R	700	6	69	$30,884	$79,043	$109,927
46	**SGVLF - Topsoil - Lift 8 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
47	**SGVLF - Topsoil - Lift 9**	0					$0	$0	$0	43,297	740/988G/D8R	650	7	67	$33,738	$85,865	$119,603
48	**SGVLF - Topsoil - Lift 9 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
49	**SGVLF - Topsoil - Lift 10**	0					$0	$0	$0	38,594	740/988G/D8R	664	8	58	$32,451	$82,220	$114,671
50	**SGVLF - Topsoil - Lift 10 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
51	**SGVLF - Topsoil - Lift 11**	0					$0	$0	$0	38,532	740/988G/D8R	690	10	55	$36,927	$92,930	$129,857
52	**SGVLF - Topsoil - Lift 11 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
53	**SGVLF - Topsoil - Lift 12**	0					$0	$0	$0	27,409	740/988G/D8R	649	10	42	$28,199	$70,964	$99,163
54	**SGVLF - Topsoil - Lift 12 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
55	**SGVLF - Topsoil - Lift 13**	0					$0	$0	$0	17,859	740/988G/D8R	690	12	26	$20,366	$51,003	$71,369
56	**SGVLF - Topsoil - Lift 13 - Dozer Spreading**	0					$0	$0	$0	0					$0	$0	$0
							$0	**$0**	**$0**	973,655				1,510	**$679,123**	**$1,737,669**	**$2,416,792**

Heap Leach Pad - Scarifying/Revegetation Costs

Closure Cost Estimate
Heap Leach

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Heap Leach Pads - Cost Summary

	Labor	Equipment	Materials	Totals
Drain Installation	$0	$0	$0	$0
Grading Costs	$373,635	$826,387	N/A	$1,200,022
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$679,123	$1,737,669	N/A	$2,416,792
Ripping/Scarifying Cost	$58,580	$97,998	N/A	$156,578
Subtotal Earthworks	**$1,111,338**	**$2,662,054**	**$0**	**$3,773,392**
Revegetation Cost	$418,079	$221,317	$1,259,183	$1,898,579
TOTALS	**$1,529,417**	**$2,883,371**	**$1,259,183**	**$5,671,971**

	Description (required)	Slope Area acres	Flat Area acres	Total Surface Area acres	Final Slope Length ft	Flat Area Long Dimension ft	Ripping/ Scarifying Fleet	Slope Scarifying/ Ripping Hours hrs	Flat Area 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	**AGVLF - Pile Leveling - Mass Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
2	**AGVLF - Pile Leveling - Fine Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
3	**AGVLF - 20 ft face - Mass Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
4	**AGVLF - 20 ft face - Fine Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
5	**AGVLF - 100 ft face - Mass Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
6	**AGVLF - 100 ft face - Fine Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
7	**AGVLF - 200 ft face - Mass Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
8	**AGVLF - 200 ft face - Fine Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
9	**AGVLF - Topsoil**	2.18	30.70	32.88	474	350	D7R	2	28	$1,679	$2,808	$4,487	$11,386	$6,028	$34,293	$51,707
10	**AGVLF - Topsoil - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
11	**AGVLF - Topsoil - Lift 1**	28.79	0.10	28.89	404	175	D7R	24	0	$1,343	$2,246	$3,589	$10,005	$5,296	$30,133	$45,434
12	**AGVLF - Topsoil - Lift 1 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
13	**AGVLF - Topsoil - Lift 2**	37.47	0.10	37.57	380	355	D7R	32	0	$1,790	$2,995	$4,785	$13,011	$6,887	$39,186	$59,084
14	**AGVLF - Topsoil - Lift 2 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
15	**AGVLF - Topsoil - Lift 3**	39.20	10.50	49.70	318	355	D7R	34	9	$2,406	$4,025	$6,431	$17,211	$9,111	$51,837	$78,159
16	**AGVLF - Topsoil - Lift 3 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
17	**AGVLF - Topsoil - Lift 4**	73.77	0.10	73.87	557	415	D7R	63	0	$3,525	$5,897	$9,422	$25,582	$13,542	$77,047	$116,171
18	**AGVLF - Topsoil - Lift 4 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
19	**AGVLF - Topsoil - Lift 5**	51.59	23.60	75.19	304	465	D7R	44	21	$3,637	$6,084	$9,721	$26,039	$13,783	$78,423	$118,245
20	**AGVLF - Topsoil - Lift 5 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
21	**AGVLF - Topsoil - Lift 6**	62.44	33.50	95.94	358	685	D7R	53	29	$4,588	$7,675	$12,263	$33,224	$17,588	$100,066	$150,878
22	**AGVLF - Topsoil - Lift 6 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
23	**AGVLF - Topsoil - Lift 7**	10.95	118.90	129.85	318	700	D7R	10	104	$6,378	$10,670	$17,048	$44,967	$23,804	$135,433	$204,204
24	**AGVLF - Topsoil - Lift 7 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
25	**AGVLF - Topsoil - Lift 8**	74.23	0.10	74.33	539	415	D7R	63	0	$3,525	$5,897	$9,422	$25,741	$13,626	$77,527	$116,894
26	**AGVLF - Topsoil - Lift 8 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
27	**AGVLF - Topsoil - Lift 9**	29.89	21.80	51.69	285	415	D7R	25	19	$2,462	$4,118	$6,580	$17,900	$9,475	$53,913	$81,288
28	**AGVLF - Topsoil - Lift 9 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
29	**SGVLF - 100 ft face - Mass Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
30	**SGVLF - 100 ft face - Fine Grading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
31	**SGVLF - Topsoil - Lift 1**	8.23	8.40	16.63	269	245	D7R	7	8	$839	$1,404	$2,243	$5,759	$3,049	$17,345	$26,153
32	**SGVLF - Topsoil - Lift 1 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
33	**SGVLF - Topsoil - Lift 2**	13.10	2.60	15.70	269	245	D7R	11	2	$727	$1,217	$1,944	$5,437	$2,878	$16,376	$24,691
34	**SGVLF - Topsoil - Lift 2 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
35	**SGVLF - Topsoil - Lift 3**	18.64	2.20	20.84	269	245	D7R	16	2	$1,007	$1,685	$2,692	$7,217	$3,820	$21,735	$32,772
36	**SGVLF - Topsoil - Lift 3 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
37	**SGVLF - Topsoil - Lift 4**	21.58	10.30	31.88	269	245	D7R	19	10	$1,623	$2,714	$4,337	$11,040	$5,844	$33,251	$50,135
38	**SGVLF - Topsoil - Lift 4 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
39	**SGVLF - Topsoil - Lift 5**	45.41	5.70	51.11	269	245	D7R	39	5	$2,462	$4,118	$6,580	$17,699	$9,370	$53,308	$80,377
40	**SGVLF - Topsoil - Lift 5 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
41	**SGVLF - Topsoil - Lift 6**	56.18	31.60	87.78	269	245	D7R	48	29	$4,308	$7,207	$11,515	$30,398	$16,092	$91,554	$138,044
42	**SGVLF - Topsoil - Lift 6 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
43	**SGVLF - Topsoil - Lift 7**	62.43	5.80	68.23	269	245	D7R	54	5	$3,301	$5,522	$8,823	$23,629	$12,508	$71,164	$107,301
44	**SGVLF - Topsoil - Lift 7 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
45	**SGVLF - Topsoil - Lift 8**	57.86	1.90	59.76	269	245	D7R	50	2	$2,909	$4,867	$7,776	$20,695	$10,955	$62,329	$93,979
46	**SGVLF - Topsoil - Lift 8 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
47	**SGVLF - Topsoil - Lift 9**	52.16	1.50	53.66	269	245	D7R	45	1	$2,574	$4,306	$6,880	$18,582	$9,837	$55,968	$84,387
48	**SGVLF - Topsoil - Lift 9 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
49	**SGVLF - Topsoil - Lift 10**	44.50	3.30	47.80	269	245	D7R	38	3	$2,294	$3,838	$6,132	$16,553	$8,763	$49,856	$75,172
50	**SGVLF - Topsoil - Lift 10 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
51	**SGVLF - Topsoil - Lift 11**	40.59	7.20	47.79	269	245	D7R	35	7	$2,350	$3,931	$6,281	$16,549	$8,761	$49,844	$75,154
52	**SGVLF - Topsoil - Lift 11 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
53	**SGVLF - Topsoil - Lift 12**	12.42	21.60	34.02	269	245	D7R	11	20	$1,734	$2,902	$4,636	$11,781	$6,237	$35,483	$53,501
54	**SGVLF - Topsoil - Lift 12 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
55	**SGVLF - Topsoil - Lift 13**	9.26	12.90	22.16	269	245	D7R	8	12	$1,119	$1,872	$2,991	$7,674	$4,063	$23,112	$34,849
56	**SGVLF - Topsoil - Lift 13 - Dozer Spreading**	Slope Input!	Slope Input!							$0	$0	$0	$0	$0	$0	$0
		852.87	354.40	1,207.27				731	316	**$58,580**	**$97,998**	**$156,578**	**$418,079**	**$221,317**	**$1,259,183**	**$1,898,579**

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.)

Closure Cost Estimate
Haul Material

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Generic Material Hauling - Cost Summary

	Labor	Equipment	Materials	Totals
Hauling/Crush/Screen/Compact	$7,281,279	$23,489,174	N/A	$30,770,453
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**
Revegetation Cost	$0	$0	$0	$0
TOTALS	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**

Generic Material Hauling - User Input

	Facility Description			Physical		Hauled Material			Crushing & Screening					Cover			Growth Media		
	Description (required)	ID Code	Type	Final Surface Area acres	Average Ripping Distance ft	Material Volume Required cy	Distance from Borrow Source (1) ft	Slope to Borrow Source % grade	Crush Material	Screen Material	Loss to Crushing/ Screening %	Distance to Placement Location (2) ft	Slope to Placement % grade	Cover Thickness in	Distance to Cover Borrow ft	Slope to Borrow % grade	Growth Media Thickness in	Distance to Growth Material Stockpile ft	Slope to Stockpile % grade
1	AGVLF - 9400					340,405	4,374	8.2											
2	AGVLF - 9500					437,763	3,782	5.8											
3	AGVLF - 9600					669,112	2,074	3.9											
4	AGVLF - 9700					924,083	1,628	-4.9											
5	AGVLF - 9800					511,553	3,194	-7.5											
6	AGVLF - 9900					291,740	4,981	-8.8											
7	AGVLF - 10000					84,553	6,981	-8.6											
8	AGVLF - 9920					6,599,307	4,606	5.2											
9	AGVLF - 10020					4,040,912	4,269	2.3											
10	AGVLF - 10100					3,919,057	1,495	-4.0											
11	AGVLF - 10190					3,562,003	3,784	-6.6											
12	AGVLF - 10280					3,477,782	6,052	-7.6											
13	Remove ROM			1.68		12,587	1,126	2.0											
14	Remove DCF and Liner			1.68	2	12,587	1,126	2.0											
15	20 Years of mucking Carlton Tunnel sediment ponds					383	835	-1.0											
16	Cresson underground portal Backfill			1.00		592	9,300	10.0											

Notes:
1. Input distance to crusher if material to be crushed
2. Input distance from crusher to placement if material to be crushed
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)

Generic Material Hauling - User Input (cont.)

		Hauling Material				Cover			Growth Media			Revegetation				
	Description (required)	Haul Material Type (select)	Material Hauling Fleet (select)	Each Fleet Size (from/to crusher) (user override)	Compact After Placement?	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 Type (select)	Fertilizer Type (select)	Scarify/ Rip? (select)	Scarifying/ Ripping Fleet (select)
1	AGVLF - 9400	Granite - brok	XLarge Truck		No											
2	AGVLF - 9500	Granite - brok	XLarge Truck		No											
3	AGVLF - 9600	Granite - brok	XLarge Truck		No											
4	AGVLF - 9700	Granite - brok	XLarge Truck		No											
5	AGVLF - 9800	Granite - brok	XLarge Truck		No											
6	AGVLF - 9900	Granite - brok	XLarge Truck		No											
7	AGVLF - 10000	Granite - brok	XLarge Truck		No											
8	AGVLF - 9920	Granite - brok	XLarge Truck		No											
9	AGVLF - 10020	Granite - brok	XLarge Truck		No											
10	AGVLF - 10100	Granite - brok	XLarge Truck		No											
11	AGVLF - 10190	Granite - brok	XLarge Truck		No											
12	AGVLF - 10280	Granite - brok	XLarge Truck		No											
13	Remove ROM	Granite - brok	XLarge Truck		No											
14	Remove DCF and Liner	Granite - brok	XLarge Truck		No											
15	20 Years of mucking Carlton Tunnel sediment ponds	Alluvium	Small Truck		No											
16	Cresson underground portal Backfill	Granite - brok	Med Truck		No											

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

Generic Material Hauling - Load, Haul, Place and Grade

	Material Haulage	Crush and/or Compact

Closure Cost Estimate
Haul Material

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Generic Material Hauling - Cost Summary

	Labor	Equipment	Materials	Totals
Hauling/Crush/Screen/Compact	$7,281,279	$23,489,174	N/A	$30,770,453
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**
Revegetation Cost	$0	$0	$0	$0
TOTALS	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**

	Description (required)	Material Volume to Crusher cy	Final Material Volume cy	Material Haulage Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Hauling Labor Cost $	Hauling Equipment Cost $	Total Crush/ Screen Cost $	Compact Labor Cost $	Compact Equipment Cost $	Total Load/Haul/ Place Cost $
1	**AGVLF - 9400**	340,405	340,405	777D/992G/D7R	1,099	4	310	$104,067	$324,809	$0	$0	$0	$428,876
2	**AGVLF - 9500**	437,763	437,763	777D/992G/D7R	783	2	559	$125,104	$411,351	$0	$0	$0	$536,455
3	**AGVLF - 9600**	669,112	669,112	777D/992G/D7R	971	2	689	$154,198	$507,014	$0	$0	$0	$661,212
4	**AGVLF - 9700**	924,083	924,083	777D/992G/D7R	956	2	967	$216,415	$711,586	$0	$0	$0	$928,001
5	**AGVLF - 9800**	511,553	511,553	777D/992G/D7R	905	3	565	$158,059	$503,878	$0	$0	$0	$661,937
6	**AGVLF - 9900**	291,740	291,740	777D/992G/D7R	923	4	316	$106,081	$331,095	$0	$0	$0	$437,176
7	**AGVLF - 10000**	84,553	84,553	777D/992G/D7R	1,093	6	77	$34,465	$104,695	$0	$0	$0	$139,160
8	**AGVLF - 9920**	6,599,307	6,599,307	777D/992G/D7R	755	2	8,741	$1,956,236	$6,432,240	$0	$0	$0	$8,388,476
9	**AGVLF - 10020**	4,040,912	4,040,912	777D/992G/D7R	798	2	5,064	$1,133,323	$3,726,446	$0	$0	$0	$4,859,769
10	**AGVLF - 10100**	3,919,057	3,919,057	777D/992G/D7R	976	2	4,015	$898,557	$2,954,518	$0	$0	$0	$3,853,075
11	**AGVLF - 10190**	3,562,003	3,562,003	777D/992G/D7R	959	3	3,714	$1,038,992	$3,312,219	$0	$0	$0	$4,351,211
12	**AGVLF - 10280**	3,477,782	3,477,782	777D/992G/D7R	1,011	5	3,440	$1,347,276	$4,140,797	$0	$0	$0	$5,488,073
13	**Remove ROM**	12,587	12,587	777D/992G/D7R	556	1	23	$3,861	$13,338	$0	$0	$0	$17,199
14	**Remove DCF and Liner**	12,587	12,587	777D/992G/D7R	556	1	23	$3,861	$13,338	$0	$0	$0	$17,199
15	**20 Years of mucking Carlton Tunnel sediment ponds**	383	383	725/966G/D7R	408	2	1	$224	$432	$0	$0	$0	$656
16	**Cresson underground portal Backfill**	592	592	740/988G/D8R	657	8	1	$560	$1,418	$0	$0	$0	$1,978
		24,884,419	24,884,419				28,505	**$7,281,279**	**$23,489,174**	**$0**	**$0**	**$0**	**$30,770,453**

Notes: Final Material Volume includes allowance for additional material hauled to crushing/screening plant based on Loss to Crushing/Screening input above.

Generic Material Hauling - Cover and Growth Media Costs

		Cover Placement								Growth Media Placement							
	Description (required)	Cover Volume cy	Cover Placement Fleet	Cover Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost $	Total Equipment Cost $	Total Cover Placement Cost $	Growth Media Volume cy	Growth Media Placement Fleet	Growth Media Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours	Total Labor Cost $	Total Equipment Cost $	Total Growth Media Cost $
1	**AGVLF - 9400**						$0	$0	$0	0					$0	$0	$0
2	**AGVLF - 9500**						$0	$0	$0	0					$0	$0	$0
3	**AGVLF - 9600**						$0	$0	$0	0					$0	$0	$0
4	**AGVLF - 9700**						$0	$0	$0	0					$0	$0	$0
5	**AGVLF - 9800**						$0	$0	$0	0					$0	$0	$0
6	**AGVLF - 9900**						$0	$0	$0	0					$0	$0	$0
7	**AGVLF - 10000**						$0	$0	$0	0					$0	$0	$0
8	**AGVLF - 9920**						$0	$0	$0	0					$0	$0	$0
9	**AGVLF - 10020**						$0	$0	$0	0					$0	$0	$0
10	**AGVLF - 10100**						$0	$0	$0	0					$0	$0	$0
11	**AGVLF - 10190**						$0	$0	$0	0					$0	$0	$0
12	**AGVLF - 10280**						$0	$0	$0	0					$0	$0	$0
13	**Remove ROM**						$0	$0	$0	0					$0	$0	$0
14	**Remove DCF and Liner**						$0	$0	$0	0					$0	$0	$0
15	**20 Years of mucking Carlton Tunnel sediment ponds**						$0	$0	$0	0					$0	$0	$0
16	**Cresson underground portal Backfill**						$0	$0	$0	0					$0	$0	$0
							$0	**$0**	**$0**						**$0**	**$0**	**$0**

Generic Material Hauling - Scarifying/Revegetation Costs

	Description (required)	Total Surface Area acres	Ripping/ Scarifying Fleet	Scarifying/ Ripping Hours hrs	Scarifying/ Ripping Labor Cost $	Scarifying/ Ripping Equipment Cost $	Total Scarifying/ Ripping Cost $	Revegetation Labor Cost $	Revegetation Equipment Cost $	Revgetation Material Cost $	Total Revegetation Cost $
1	**AGVLF - 9400**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
2	**AGVLF - 9500**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
3	**AGVLF - 9600**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
4	**AGVLF - 9700**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
5	**AGVLF - 9800**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
6	**AGVLF - 9900**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
7	**AGVLF - 10000**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
8	**AGVLF - 9920**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0

Closure Cost Estimate
Haul Material

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Generic Material Hauling - Cost Summary

	Labor	Equipment	Materials	Totals
Hauling/Crush/Screen/Compact	$7,281,279	$23,489,174	N/A	$30,770,453
Cover Placement Cost	$0	$0	N/A	$0
Topsoil Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**
Revegetation Cost	$0	$0	$0	$0
TOTALS	**$7,281,279**	**$23,489,174**	**$0**	**$30,770,453**

9	**AGVLF - 10020**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
10	**AGVLF - 10100**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
11	**AGVLF - 10190**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
12	**AGVLF - 10280**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
13	**Remove ROM**	1.68	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
14	**Remove DCF and Liner**	1.68	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
15	**20 Years of mucking Carlton Tunnel sediment ponds**	0.10	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
16	**Cresson underground portal Backfill**	1.00	**Select Fleet**		$0	$0	$0	$0	$0	$0	$0
		5.66			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Closure Cost Estimate
Foundations & Buildings

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary	Labor	Equipment	Materials	Totals
Building Demolition Cost	$2,556,952	$1,872,233	N/A	$4,429,185
Wall Demolition Cost	$750,601	$56,894	N/A	$807,495
Slab Demolition	$25,225	$86,687	N/A	$111,912
Subtotal Demolition	**$3,332,778**	**$2,015,814**	**$0**	**$5,348,592**
Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

Buildings & Foundation - User Input — You must fill in ALL green cells and relevant blue cells in this section for each building or facility

	Facility Description			Physical - MANDATORY								Foundation Cover (1)			Growth Media (1) (entire footprint)		
	Description (required)	ID Code	Type	Length ft	Width ft	Eve Height ft	Slab Thickness in	Foundation Wall Thickness in	Foundation Wall Height ft	Average Flat Area Long Dimension (ripping distance) ft	Building Area 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	Primary crushers			78	48	112	12	6	1	78	0.00	60	8,300	5.0			
2	Crane above pocket			85	33	50	12	6	1	85	0.06	60	10,300	3.0			
3	Secondary crusher MCC			53	21	15	12	6	1	53	0.03	60	10,300	3.0			
4	Secondary crushers			120	67	107	12	6	1	120	0.18	60	10,300	3.0			
5	Screen Bldg			72	32	86	12	6	1	72	0.05	60	10,300	3.0			
6	Screen MCCs			40	18	15	12	6	1	40	0.02	60	5,100	3.0			
7	Crusher Maint			40	40	17	12	6	1	40	0.04	60	5,100	3.0			
8	Security			65	40	10	12	6	1	65	0.06	60	5,100	3.0			
9	MCC for phase II pumps			21	11	12	12	6	1	21	0.01	60	5,100	3.0			
10	Laboratory			150	69	52	12	6	1	150	0.24	60	5,100	3.0			
11	Project mgr trailer			57	12	10	6			57	0.02	60	20,000	6.0			
12	Project trailer			40	53	10	6			53	0.05	60	11,400	1.0			
13	Fire trailer			20	10	10	6			20	0.00	60	10,300	3.0			
14	Process maint trailer			60	25	10	6			60	0.03	60	10,300	3.0			
15	Crusher Maint addition			25	40	17	12	6	1	40	0.02	60	10,300	3.0			
16	Crusher Maint lean to			10	40	13	12	6	1	40	0.01	60	10,300	3.0			
17	AGADR 1995			165	100	52	12	8	3	165	0.38	60	10,300	3.0			
18	Pipe access gallery			60	10	10	12	8	3	60	0.01	60	10,300	3.0			
19	carbon strip & regen			107	25	45	12	8	3	107	0.06	60	10,300	3.0			
20	Process maint trailer			60	25	12	6			60	0.03	60	10,300	3.0			
21	AGADR north			165	43	44	12	8	3	165	0.16	60	10,300	3.0			
22	AGADR south			108	70	57	12	8	3	108	0.17	60	10,300	3.0			
23	Etrain			142	42	53	12	8	3	142	0.14	60	10,300	3.0			
24	MCC fume scrubber			37	16	16	12	8	3	37	0.01	60	10,300	3.0			
25	enrichment pump station			60	30	38	12	8	3	60	0.04	60	5,100	3.0			
26	Ph V Preg pump MCC			22	22	17	12	8	3	22	0.01	60	5,100	3.0			
27	Ph V Preg enrich MCC			42	22	17	12	8	3	42	0.02	60	5,100	3.0			
28	Ph V Preg enrich LVSC			20	10	12	12	8	3	20	0.00	60	5,100	3.0			
29	Victor maint light vehicle shop			80	56	12	12	6	1	80	0.10	60	5,100	3.0			
30	truck wash			75	45	41	12	6	1	75	0.08	60	8,300	5.0			
31	truck shop			305	95	65	12	6	1	305	0.67	60	5,100	3.0			
32	Mill maint warehouse			57	200	47	12	6	1	200	0.26	60	5,100	3.0			
33	agglomerator			20	76	34	12	6	3	76	0.03	60	5,100	3.0			
34	sump pump			16	15	13	12	6	3	16	0.01	60	8,300	5.0			
35	conveyor shed			85	13	21	12	6	1	85	0.03	60	8,300	5.0			
36	process corridor			15	175	24	12	6	3	175	0.06	60	8,300	5.0			
37	Buckley main bldg			60	40	12	12	6	1	60	0.06	60	8,300	5.0			
38	AGVLF AGADR			142	42	53	12	8	3	142	0.14	60	8,300	5.0			
39	MCC & fume scrubber			37	16	16	12	8	3	37	0.01	60	5,100	3.0			
40	enrichment pump station			60	30	38	12	8	3	60	0.04	60	10,300	3.0			
41	Ph V Preg pump MCC			22	22	17	12	8	3	22	0.01	60	10,300	3.0			
42	Ph V Preg enrich MCC			42	22	17	12	8	3	42	0.02	60	10,300	3.0			
43	Ph V Preg enrich LVSC			20	10	12	12	8	3	20	0.00	60	10,300	3.0			
44	Squaw MCC			60	27	12	12	8	3	60	0.04	60	10,300	3.0			
45	warehouse			104	80	32	12	8	3	104	0.19	60	10,300	3.0			
46	LVSC pump			151	10	12	12	8	3	151	0.03	60	10,300	3.0			
47	SGADR			165	200	62	12	8	3	200	0.76	60	10,300	3.0			
48	SGADR utility			60	30	17	12	8	3	60	0.04	60	10,300	3.0			
49	security			143	20	10	12	8	3	143	0.07	60	10,300	3.0			
50	modular office 1			60	66	10	6	8	3	66	0.09	60	10,300	3.0			
51	modular office 2			60	66	10	6	8	3	66	0.09	60	10,300	3.0			
52	modular office 3			12	66	10	6	8	3	66	0.02	60	5,100	3.0			
53	substation			107	100	15	12	8	3	107	0.25	60	5,100	3.0			
54	auxiliary A			66	20	10	12	8	3	66	0.03	60	5,100	3.0			
55	auxiliary B			20	20	10	12	8	3	20	0.01	60	5,100	3.0			
56	auxiliary C			46	20	10	12	8	3	46	0.02	60	5,100	3.0			
57	High grade mill			335	200	86	12	8	3	335	1.54	60	5,100	3.0			

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary				
	Labor	**Equipment**	**Materials**	**Totals**
Building Demolition Cost	$2,556,952	$1,872,233	N/A	$4,429,185
Wall Demolition Cost	$750,601	$56,894	N/A	$807,495
Slab Demolition	$25,225	$86,687	N/A	$111,912
Subtotal Demolition	**$3,332,778**	**$2,015,814**	**$0**	**$5,348,592**
Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

58	**offices**			**96**	**80**	**10**	**12**	**6**	**1**	**96**	**0.18**	**60**	**10,300**	**3.0**			
59	**Buckley garage**			**100**	**76**	**18**	**12**	**6**	**1**	**100**	**0.17**	**60**	**10,300**	**3.0**			
60	**Ironclad office**			**100**	**48**	**13**	**12**	**6**	**1**	**100**	**0.11**	**60**	**5,100**	**3.0**			
61	**maint annex**			**75**	**25**	**65**	**12**	**6**	**1**	**75**	**0.04**	**60**	**5,100**	**3.0**			
62	**lab addition**			**30**	**15**	**10**	**12**	**6**	**1**	**30**	**0.01**	**60**	**5,100**	**3.0**			
63	**ROM Silo**			**9**	**9**	**12**	**12**	**6**	**1**	**12**	**0.00**	**60**	**5,100**	**3.0**			
64	**Converor Support**			**4**	**6**	**9**	**12**	**48**	**9**	**12**	**0.00**	**60**	**5,100**	**3.0**			
65	**Under ground contractor double wide**			**24**	**60**	**12**	**6**	**6**	**1**	**60**	**0.03**	**60**	**9,300**	**10.0**			
66	**Newmont double wide**			**24**	**60**	**12**	**6**	**6**	**1**	**60**	**0.03**	**60**	**9,300**	**10.0**			
67	**Underground Fixed Maintenance shop**			**40**	**60**	**18**	**12**	**6**	**1**	**60**	**0.06**	**60**	**9,300**	**10.0**			
68	**Mobile Maintenaince shop**			**50**	**100**	**18**	**12**	**6**	**1**	**100**	**0.11**	**60**	**9,300**	**10.0**			
69	**Lube bay and washbay**			**50**	**80**	**18**	**12**	**6**	**1**	**80**	**0.09**	**60**	**9,300**	**10.0**			
70	**Lube bay and washbay apron**			**124**	**40**	**1**	**12**	**6**	**1**	**124**	**0.11**	**60**	**9,300**	**10.0**			
71	**Compressor Housing**			**45**	**45**	**12**	**6**	**6**	**1**	**45**	**0.05**	**60**	**9,300**	**10.0**			
72	**Shotcrete plant**			**55**	**150**	**12**	**6**	**6**	**1**	**150**	**0.19**	**60**	**9,300**	**10.0**			
73	**Substation**			**135**	**80**	**12**	**6**	**6**	**1**	**135**	**0.25**	**60**	**9,300**	**10.0**			

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)

Buildings & 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)	**Slab 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	**Primary crushers**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
2	**Crane above pocket**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
3	**Secondary crusher MCC**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
4	**Secondary crushers**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
5	**Screen Bldg**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
6	**Screen MCCs**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
7	**Crusher Maint**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
8	**Security**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
9	**MCC for phase II pumps**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
10	**Laboratory**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
11	**Project mgr trailer**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
12	**Project trailer**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
13	**Fire trailer**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
14	**Process maint trailer**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
15	**Crusher Maint addition**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
16	**Crusher Maint lean to**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
17	**AGADR 1995**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
18	**Pipe access gallery**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
19	**carbon strip & regen**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
20	**Process maint trailer**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
21	**AGADR north**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
22	**AGADR south**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
23	**Etrain**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
24	**MCC fume scrubber**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
25	**enrichment pump station**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
26	**Ph V Preg pump MCC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
27	**Ph V Preg enrich MCC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
28	**Ph V Preg enrich LVSC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
29	**Victor maint light vehicle shop**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary				
	Labor	**Equipment**	**Materials**	**Totals**
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Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

30	**truck wash**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
31	**truck shop**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
32	**Mill maint warehouse**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
33	**agglomerator**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
34	**sump pump**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
35	**conveyor shed**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
36	**process corridor**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
37	**Buckley main bldg**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
38	**AGVLF AGADR**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
39	**MCC & fume scrubber**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
40	**enrichment pump station**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
41	**Ph V Preg pump MCC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
42	**Ph V Preg enrich MCC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
43	**Ph V Preg enrich LVSC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
44	**Squaw MCC**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
45	**warehouse**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
46	**LVSC pump**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
47	**SGADR**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
48	**SGADR utility**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
49	**security**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
50	**modular office 1**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
51	**modular office 2**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
52	**modular office 3**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
53	**substation**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
54	**auxiliary A**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
55	**auxiliary B**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
56	**auxiliary C**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
57	**High grade mill**	**Lg. steel**	**Conc 8 in (200 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
58	**offices**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
59	**Buckley garage**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
60	**Ironclad office**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
61	**maint annex**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
62	**lab addition**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
63	**ROM Silo**	**Lg. steel**	**Conc 12 in (300 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
64	**Converor Support**	**Lg. masonry**	**Conc 12 in (300 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
65	**Under ground contractor double wide**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
66	**Newmont double wide**	**Sm. wood**		**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
67	**Underground Fixed Maintenance shop**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
68	**Mobile Maintenaince shop**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
69	**Lube bay and washbay**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
70	**Lube bay and washbay apron**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
71	**Compressor Housing**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
72	**Shotcrete plant**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**
73	**Substation**	**Lg. steel**	**Conc 6 in (150 mm) thick**	**Break & bury**	**Med Excavator**	**Alluvium**	**Med Truck**					**User Mix 1**	**Hydro Mulch**	**Chemical**	**Yes**	**Small Dozer**

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

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

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary

	Labor	Equipment	Materials	Totals
Building Demolition Cost	$2,556,952	$1,872,233	N/A	$4,429,185
Wall Demolition Cost	$750,601	$56,894	N/A	$807,495
Slab Demolition	$25,225	$86,687	N/A	$111,912
Subtotal Demolition	**$3,332,778**	**$2,015,814**	**$0**	**$5,348,592**
Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

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

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
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Building & Foundation Demolition Costs

Uses RS Means Heavy Construction Cost Data for building and wall demolition cost calculations. Uses CAT Handbook for slab breaking production.

								Building Demolition			Wall Demolition			Slab Demolition			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	**Primary crushers**	3,744	419,328	252	252	345B	139	$62,899	$46,126	$109,025	$4,927	$375	$5,302	$257	$884	$1,141	$68,083	$47,385	$115,468
2	**Crane above pocket**	2,805	140,250	236	236	345B	104	$21,038	$15,428	$36,466	$4,614	$352	$4,966	$190	$654	$844	$25,842	$16,434	$42,276
3	**Secondary crusher MCC**	1,113	16,695	148	148	345B	41	$2,504	$1,836	$4,340	$2,893	$221	$3,114	$112	$385	$497	$5,509	$2,442	$7,951
4	**Secondary crushers**	8,040	860,280	374	374	345B	298	$129,042	$94,631	$223,673	$7,312	$557	$7,869	$560	$1,923	$2,483	$136,914	$97,111	$234,025
5	**Screen Bldg**	2,304	198,144	208	208	345B	85	$29,722	$21,796	$51,518	$4,066	$310	$4,376	$157	$538	$695	$33,945	$22,644	$56,589
6	**Screen MCCs**	720	10,800	116	116	345B	27	$1,620	$1,188	$2,808	$2,268	$173	$2,441	$112	$385	$497	$4,000	$1,746	$5,746
7	**Crusher Maint**	1,600	27,200	160	160	345B	59	$4,080	$2,992	$7,072	$3,128	$238	$3,366	$112	$385	$497	$7,320	$3,615	$10,935
8	**Security**	2,600	26,000	210	210	345B	96	$3,900	$2,860	$6,760	$4,106	$313	$4,419	$179	$615	$794	$8,185	$3,788	$11,973
9	**MCC for phase II pumps**	231	2,772	64	64	345B	9	$416	$305	$721	$1,251	$95	$1,346	$112	$385	$497	$1,779	$785	$2,564
10	**Laboratory**	10,350	538,200	438	438	345B	383	$80,730	$59,202	$139,932	$8,563	$653	$9,216	$716	$2,461	$3,177	$90,009	$62,316	$152,325
11	**Project mgr trailer**	684	6,840	138	0	345B	13	$1,300	$752	$2,052	$0	$0	$0	$112	$385	$497	$1,412	$1,137	$2,549
12	**Project trailer**	2,120	21,200	186	0	345B	39	$4,028	$2,332	$6,360	$0	$0	$0	$112	$385	$497	$4,140	$2,717	$6,857
13	**Fire trailer**	200	2,000	60	0	345B	4	$380	$220	$600	$0	$0	$0	$112	$385	$497	$492	$605	$1,097
14	**Process maint trailer**	1,500	15,000	170	0	345B	28	$2,850	$1,650	$4,500	$0	$0	$0	$112	$385	$497	$2,962	$2,035	$4,997
15	**Crusher Maint addition**	1,000	17,000	130	130	345B	37	$2,550	$1,870	$4,420	$2,542	$194	$2,736	$112	$385	$497	$5,204	$2,449	$7,653
16	**Crusher Maint lean to**	400	5,200	100	100	345B	15	$780	$572	$1,352	$1,955	$149	$2,104	$112	$385	$497	$2,847	$1,106	$3,953
17	**AGADR 1995**	16,500	858,000	530	1,590	345B	611	$128,700	$94,380	$223,080	$35,521	$2,687	$38,208	$1,141	$3,922	$5,063	$165,362	$100,989	$266,351
18	**Pipe access gallery**	600	6,000	140	420	345B	22	$900	$660	$1,560	$9,383	$710	$10,093	$112	$385	$497	$10,395	$1,755	$12,150
19	**carbon strip & regen**	2,675	120,375	264	792	345B	99	$18,056	$13,241	$31,297	$17,693	$1,338	$19,031	$190	$654	$844	$35,939	$15,233	$51,172
20	**Process maint trailer**	1,500	18,000	170	0	345B	28	$3,420	$1,980	$5,400	$0	$0	$0	$112	$385	$497	$3,532	$2,365	$5,897
21	**AGADR north**	7,095	312,180	416	1,248	345B	263	$46,827	$34,340	$81,167	$27,880	$2,109	$29,989	$492	$1,692	$2,184	$75,199	$38,141	$113,340
22	**AGADR south**	7,560	430,920	356	1,068	345B	280	$64,638	$47,401	$112,039	$23,859	$1,805	$25,664	$526	$1,807	$2,333	$89,023	$51,013	$140,036
23	**Etrain**	5,964	316,092	368	1,104	345B	221	$47,414	$34,770	$82,184	$24,663	$1,866	$26,529	$414	$1,423	$1,837	$72,491	$38,059	$110,550
24	**MCC fume scrubber**	592	9,472	106	318	345B	22	$1,421	$1,042	$2,463	$7,104	$537	$7,641	$112	$385	$497	$8,637	$1,964	$10,601
25	**enrichment pump station**	1,800	68,400	180	540	345B	67	$10,260	$7,524	$17,784	$12,064	$913	$12,977	$123	$423	$546	$22,447	$8,860	$31,307
26	**Ph V Preg pump MCC**	484	8,228	88	264	345B	18	$1,234	$905	$2,139	$5,898	$446	$6,344	$112	$385	$497	$7,244	$1,736	$8,980
27	**Ph V Preg enrich MCC**	924	15,708	128	384	345B	34	$2,356	$1,728	$4,084	$8,579	$649	$9,228	$112	$385	$497	$11,047	$2,762	$13,809
28	**Ph V Preg enrich LVSC**	200	2,400	60	180	345B	7	$360	$264	$624	$4,021	$304	$4,325	$112	$385	$497	$4,493	$953	$5,446
29	**Victor maint light vehicle shop**	4,480	53,760	272	272	345B	166	$8,064	$5,914	$13,978	$5,318	$405	$5,723	$313	$1,077	$1,390	$13,695	$7,396	$21,091
30	**truck wash**	3,375	138,375	240	240	345B	125	$20,756	$15,221	$35,977	$4,692	$358	$5,050	$235	$807	$1,042	$25,683	$16,386	$42,069
31	**truck shop**	28,975	1,883,375	800	800	345B	1,073	$282,506	$207,171	$489,677	$15,640	$1,192	$16,832	$2,003	$6,883	$8,886	$300,149	$215,246	$515,395
32	**Mill maint warehouse**	11,400	535,800	514	514	345B	422	$80,370	$58,938	$139,308	$10,049	$766	$10,815	$783	$2,692	$3,475	$91,202	$62,396	$153,598
33	**agglomerator**	1,520	51,680	192	576	345B	56	$7,752	$5,685	$13,437	$11,261	$858	$12,119	$112	$385	$497	$19,125	$6,928	$26,053
34	**sump pump**	240	3,120	62	186	345B	9	$468	$343	$811	$3,636	$277	$3,913	$112	$385	$497	$4,216	$1,005	$5,221
35	**conveyor shed**	1,105	23,205	196	196	345B	41	$3,481	$2,553	$6,034	$3,832	$292	$4,124	$112	$385	$497	$7,425	$3,230	$10,655
36	**process corridor**	2,625	63,000	380	1,140	345B	97	$9,450	$6,930	$16,380	$22,287	$1,699	$23,986	$179	$615	$794	$31,916	$9,244	$41,160
37	**Buckley main bldg**	2,400	28,800	200	200	345B	89	$4,320	$3,168	$7,488	$3,910	$298	$4,208	$168	$577	$745	$8,398	$4,043	$12,441
38	**AGVLF AGADR**	5,964	316,092	368	1,104	345B	221	$47,414	$34,770	$82,184	$24,663	$1,866	$26,529	$414	$1,423	$1,837	$72,491	$38,059	$110,550
39	**MCC & fume scrubber**	592	9,472	106	318	345B	22	$1,421	$1,042	$2,463	$7,104	$537	$7,641	$112	$385	$497	$8,637	$1,964	$10,601
40	**enrichment pump station**	1,800	68,400	180	540	345B	67	$10,260	$7,524	$17,784	$12,064	$913	$12,977	$123	$423	$546	$22,447	$8,860	$31,307
41	**Ph V Preg pump MCC**	484	8,228	88	264	345B	18	$1,234	$905	$2,139	$5,898	$446	$6,344	$112	$385	$497	$7,244	$1,736	$8,980
42	**Ph V Preg enrich MCC**	924	15,708	128	384	345B	34	$2,356	$1,728	$4,084	$8,579	$649	$9,228	$112	$385	$497	$11,047	$2,762	$13,809
43	**Ph V Preg enrich LVSC**	200	2,400	60	180	345B	7	$360	$264	$624	$4,021	$304	$4,325	$112	$385	$497	$4,493	$953	$5,446
44	**Squaw MCC**	1,620	19,440	174	522	345B	60	$2,916	$2,138	$5,054	$11,661	$882	$12,543	$112	$385	$497	$14,689	$3,405	$18,094
45	**warehouse**	8,320	266,240	368	1,104	345B	308	$39,936	$29,286	$69,222	$24,663	$1,866	$26,529	$571	$1,961	$2,532	$65,170	$33,113	$98,283
46	**LVSC pump**	1,510	18,120	322	966	345B	56	$2,718	$1,993	$4,711	$21,580	$1,633	$23,213	$112	$385	$497	$24,410	$4,011	$28,421
47	**SGADR**	33,000	2,046,000	730	2,190	345B	1,222	$306,900	$225,060	$531,960	$48,925	$3,701	$52,626	$2,283	$7,844	$10,127	$358,108	$236,605	$594,713
48	**SGADR utility**	1,800	30,600	180	540	345B	67	$4,590	$3,366	$7,956	$12,064	$913	$12,977	$123	$423	$546	$16,777	$4,702	$21,479
49	**security**	2,860	28,600	326	978	345B	106	$4,290	$3,146	$7,436	$21,849	$1,653	$23,502	$201	$692	$893	$26,340	$5,491	$31,831
50	**modular office 1**	3,960	39,600	252	756	345B	73	$5,940	$4,356	$10,296	$16,889	$1,278	$18,167	$134	$461	$595	$22,963	$6,095	$29,058
51	**modular office 2**	3,960	39,600	252	756	345B	73	$5,940	$4,356	$10,296	$16,889	$1,278	$18,167	$134	$461	$595	$22,963	$6,095	$29,058
52	**modular office 3**	792	7,920	156	468	345B	15	$1,188	$871	$2,059	$10,455	$791	$11,246	$112	$385	$497	$11,755	$2,047	$13,802
53	**substation**	10,700	160,500	414	1,242	345B	396	$24,075	$17,655	$41,730	$27,746	$2,099	$29,845	$739	$2,538	$3,277	$52,560	$22,292	$74,852
54	**auxiliary A**	1,320	13,200	172	516	345B	49	$1,980	$1,452	$3,432	$11,527	$872	$12,399	$112	$385	$497	$13,619	$2,709	$16,328
55	**auxiliary B**	400	4,000	80	240	345B	15	$600	$440	$1,040	$5,362	$406	$5,768	$112	$385	$497	$6,074	$1,231	$7,305
56	**auxiliary C**	920	9,200	132	396	345B	34	$1,380	$1,012	$2,392	$8,847	$669	$9,516	$112	$385	$497	$10,339	$2,066	$12,405
57	**High grade mill**	67,000	5,762,000	1,070	3,210	345B	2,481	$864,300	$633,820	$1,498,120	$71,711	$5,425	$77,136	$4,633	$15,919	$20,552	$940,644	$655,164	$1,595,808
58	**offices**	7,680	76,800	352	352	345B	284	$11,520	$8,448	$19,968	$6,882	$524	$7,406	$526	$1,807	$2,333	$18,928	$10,779	$29,707

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

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Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
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TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

59	**Buckley garage**	7,600	136,800	352	352	345B	281	$20,520	$15,048	$35,568	$6,882	$524	$7,406	$526	$1,807	$2,333	$27,928	$17,379	$45,307
60	**Ironclad office**	4,800	62,400	296	296	345B	178	$9,360	$6,864	$16,224	$5,787	$441	$6,228	$336	$1,154	$1,490	$15,483	$8,459	$23,942
61	**maint annex**	1,875	121,875	200	200	345B	69	$18,281	$13,406	$31,687	$3,910	$298	$4,208	$134	$461	$595	$22,325	$14,165	$36,490
62	**lab addition**	450	4,500	90	90	345B	17	$675	$495	$1,170	$1,760	$134	$1,894	$112	$385	$497	$2,547	$1,014	$3,561
63	**ROM Silo**	81	972	36	36	345B	3	$146	$107	$253	$1,126	$85	$1,211	$112	$385	$497	$1,384	$577	$1,961
64	**Converor Support**	24	216	20	180	345B	1	$35	$24	$59	$5,630	$427	$6,057	$112	$385	$497	$5,777	$836	$6,613
65	**Under ground contractor double wide**	1,440	17,280	168	168	345B	27	$3,283	$1,901	$5,184	$0	$0	$0	$112	$385	$497	$3,395	$2,286	$5,681
66	**Newmont double wide**	1,440	17,280	168	168	345B	27	$3,283	$1,901	$5,184	$0	$0	$0	$112	$385	$497	$3,395	$2,286	$5,681
67	**Underground Fixed Maintenance shop**	2,400	43,200	200	200	345B	89	$6,480	$4,752	$11,232	$3,910	$298	$4,208	$168	$577	$745	$10,558	$5,627	$16,185
68	**Mobile Maintenaince shop**	5,000	90,000	300	300	345B	185	$13,500	$9,900	$23,400	$5,865	$447	$6,312	$347	$1,192	$1,539	$19,712	$11,539	$31,251
69	**Lube bay and washbay**	4,000	72,000	260	260	345B	148	$10,800	$7,920	$18,720	$5,083	$387	$5,470	$280	$961	$1,241	$16,163	$9,268	$25,431
70	**Lube bay and washbay apron**	4,960	4,960	328	328	345B	184	$744	$546	$1,290	$6,412	$489	$6,901	$347	$1,192	$1,539	$7,503	$2,227	$9,730
71	**Compressor Housing**	2,025	24,300	180	180	345B	38	$3,645	$2,673	$6,318	$3,519	$268	$3,787	$112	$385	$497	$7,276	$3,326	$10,602
72	**Shotcrete plant**	8,250	99,000	410	410	345B	153	$14,850	$10,890	$25,740	$8,016	$611	$8,627	$291	$1,000	$1,291	$23,157	$12,501	$35,658
73	**Substation**	10,800	129,600	430	430	345B	200	$19,440	$14,256	$33,696	$8,407	$641	$9,048	$369	$1,269	$1,638	$28,216	$16,166	$44,382
			17,020,302				12,335	**$2,556,952**	**$1,872,233**	**$4,429,185**	**$750,601**	**$56,894**	**$807,495**	**$25,225**	**$86,687**	**$111,912**	**$3,332,778**	**$2,015,814**	**$5,348,592**

Building & Foundation - Foundation Cover and Growth Media Costs																			
		Foundation Cover								**Growth Media**								**Total Cover & Growth Media Costs**		
	Description (required)	**Cover Volume** cy	**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	**Primary crushers**	693	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
2	**Crane above pocket**	519	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
3	**Secondary crusher MCC**	206	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
4	**Secondary crushers**	1,489	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
5	**Screen Bldg**	427	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
6	**Screen MCCs**	133	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
7	**Crusher Maint**	296	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
8	**Security**	481	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
9	**MCC for phase II pumps**	43	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
10	**Laboratory**	1,917	740/988G/D8R	654	4	3	$1,007	$2,621	$3,628						$0	$0	$0	$1,007	$2,621	$3,628
11	**Project mgr trailer**	127	740/988G/D8R	671	12	1	$783	$1,962	$2,745						$0	$0	$0	$783	$1,962	$2,745
12	**Project trailer**	393	740/988G/D8R	631	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
13	**Fire trailer**	37	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
14	**Process maint trailer**	278	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
15	**Crusher Maint addition**	185	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
16	**Crusher Maint lean to**	74	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
17	**AGADR 1995**	3,056	740/988G/D8R	661	6	5	$2,238	$5,728	$7,966						$0	$0	$0	$2,238	$5,728	$7,966
18	**Pipe access gallery**	111	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
19	**carbon strip & regen**	495	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
20	**Process maint trailer**	278	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
21	**AGADR north**	1,314	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
22	**AGADR south**	1,400	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
23	**Etrain**	1,104	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
24	**MCC fume scrubber**	110	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
25	**enrichment pump station**	333	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
26	**Ph V Preg pump MCC**	90	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
27	**Ph V Preg enrich MCC**	171	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
28	**Ph V Preg enrich LVSC**	37	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
29	**Victor maint light vehicle shop**	830	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
30	**truck wash**	625	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
31	**truck shop**	5,366	740/988G/D8R	654	4	8	$2,686	$6,988	$9,674						$0	$0	$0	$2,686	$6,988	$9,674
32	**Mill maint warehouse**	2,111	740/988G/D8R	654	4	3	$1,007	$2,621	$3,628						$0	$0	$0	$1,007	$2,621	$3,628
33	**agglomerator**	281	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
34	**sump pump**	44	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
35	**conveyor shed**	205	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
36	**process corridor**	486	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
37	**Buckley main bldg**	444	740/988G/D8R	700	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
38	**AGVLF AGADR**	1,104	740/988G/D8R	700	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
39	**MCC & fume scrubber**	110	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
40	**enrichment pump station**	333	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
41	**Ph V Preg pump MCC**	90	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary

	Labor	Equipment	Materials	Totals
Building Demolition Cost	$2,556,952	$1,872,233	N/A	$4,429,185
Wall Demolition Cost	$750,601	$56,894	N/A	$807,495
Slab Demolition	$25,225	$86,687	N/A	$111,912
Subtotal Demolition	**$3,332,778**	**$2,015,814**	**$0**	**$5,348,592**
Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

42	**Ph V Preg enrich MCC**	171	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
43	**Ph V Preg enrich LVSC**	37	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
44	**Squaw MCC**	300	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
45	**warehouse**	1,541	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
46	**LVSC pump**	280	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
47	**SGADR**	6,111	740/988G/D8R	661	6	9	$4,028	$10,310	$14,338						$0	$0	$0	$4,028	$10,310	$14,338
48	**SGADR utility**	333	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
49	**security**	530	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
50	**modular office 1**	733	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
51	**modular office 2**	733	740/988G/D8R	661	6	1	$448	$1,146	$1,594						$0	$0	$0	$448	$1,146	$1,594
52	**modular office 3**	147	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
53	**substation**	1,981	740/988G/D8R	654	4	3	$1,007	$2,621	$3,628						$0	$0	$0	$1,007	$2,621	$3,628
54	**auxiliary A**	244	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
55	**auxiliary B**	74	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
56	**auxiliary C**	170	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
57	**High grade mill**	12,407	740/988G/D8R	654	4	19	$6,378	$16,597	$22,975						$0	$0	$0	$6,378	$16,597	$22,975
58	**offices**	1,422	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
59	**Buckley garage**	1,407	740/988G/D8R	661	6	2	$895	$2,291	$3,186						$0	$0	$0	$895	$2,291	$3,186
60	**Ironclad office**	889	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
61	**maint annex**	347	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
62	**lab addition**	83	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
63	**ROM Silo**	15	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
64	**Converor Support**	4	740/988G/D8R	654	4	1	$336	$874	$1,210						$0	$0	$0	$336	$874	$1,210
65	**Under ground contractor double wide**	267	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
66	**Newmont double wide**	267	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
67	**Underground Fixed Maintenance shop**	444	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
68	**Mobile Maintenaince shop**	926	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
69	**Lube bay and washbay**	741	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
70	**Lube bay and washbay apron**	919	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
71	**Compressor Housing**	375	740/988G/D8R	657	8	1	$560	$1,418	$1,978						$0	$0	$0	$560	$1,418	$1,978
72	**Shotcrete plant**	1,528	740/988G/D8R	657	8	2	$1,119	$2,835	$3,954						$0	$0	$0	$1,119	$2,835	$3,954
73	**Substation**	2,000	740/988G/D8R	657	8	3	$1,679	$4,253	$5,932						$0	$0	$0	$1,679	$4,253	$5,932
		65,252				127	**$52,276**	**$134,358**	**$186,634**						**$0**	**$0**	**$0**	**$52,276**	**$134,358**	**$186,634**

Building & Foundation - Scarifying/Revegetation Costs

					Scarifying/Ripping			Revegetation				Total Scarify & Revegation Costs			
	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	**Primary crushers**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
2	**Crane above pocket**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
3	**Secondary crusher MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
4	**Secondary crushers**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
5	**Screen Bldg**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
6	**Screen MCCs**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
7	**Crusher Maint**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
8	**Security**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
9	**MCC for phase II pumps**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
10	**Laboratory**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
11	**Project mgr trailer**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
12	**Project trailer**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
13	**Fire trailer**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
14	**Process maint trailer**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
15	**Crusher Maint addition**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
16	**Crusher Maint lean to**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
17	**AGADR 1995**	0.40	D7R	1	$56	$94	$150	$346	$183	$417	$947	$402	$277	$417	$1,097
18	**Pipe access gallery**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
19	**carbon strip & regen**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
20	**Process maint trailer**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
21	**AGADR north**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
22	**AGADR south**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
23	**Etrain**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
24	**MCC fume scrubber**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Buildings & Foundation Demolition Cost Summary

	Labor	Equipment	Materials	Totals
Building Demolition Cost	$2,556,952	$1,872,233	N/A	$4,429,185
Wall Demolition Cost	$750,601	$56,894	N/A	$807,495
Slab Demolition	$25,225	$86,687	N/A	$111,912
Subtotal Demolition	**$3,332,778**	**$2,015,814**	**$0**	**$5,348,592**
Cover Placement Cost	$52,276	$134,358	N/A	$186,634
Growth Media Placement Cost	$0	$0	N/A	$0
Ripping/Scarifying Cost	$4,088	$6,862	N/A	$10,950
Subtotal Earthworks	**$56,364**	**$141,220**	**$0**	**$197,584**
Revegetation Cost	$25,453	$13,474	$12,030	$50,957
TOTALS	**$3,414,595**	**$2,170,508**	**$12,030**	**$5,597,133**

25	**enrichment pump station**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
26	**Ph V Preg pump MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
27	**Ph V Preg enrich MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
28	**Ph V Preg enrich LVSC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
29	**Victor maint light vehicle shop**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
30	**truck wash**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
31	**truck shop**	0.70	D7R	1	$56	$94	$150	$346	$183	$730	$1,260	$402	$277	$730	$1,410
32	**Mill maint warehouse**	0.30	D7R	1	$56	$94	$150	$346	$183	$313	$843	$402	$277	$313	$993
33	**agglomerator**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
34	**sump pump**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
35	**conveyor shed**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
36	**process corridor**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
37	**Buckley main bldg**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
38	**AGVLF AGADR**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
39	**MCC & fume scrubber**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
40	**enrichment pump station**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
41	**Ph V Preg pump MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
42	**Ph V Preg enrich MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
43	**Ph V Preg enrich LVSC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
44	**Squaw MCC**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
45	**warehouse**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
46	**LVSC pump**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
47	**SGADR**	0.80	D7R	1	$56	$94	$150	$346	$183	$835	$1,365	$402	$277	$835	$1,515
48	**SGADR utility**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
49	**security**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
50	**modular office 1**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
51	**modular office 2**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
52	**modular office 3**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
53	**substation**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
54	**auxiliary A**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
55	**auxiliary B**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
56	**auxiliary C**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
57	**High grade mill**	1.50	D7R	1	$56	$94	$150	$519	$275	$1,565	$2,359	$575	$369	$1,565	$2,509
58	**offices**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
59	**Buckley garage**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
60	**Ironclad office**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
61	**maint annex**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
62	**lab addition**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
63	**ROM Silo**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
64	**Converor Support**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
65	**Under ground contractor double wide**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
66	**Newmont double wide**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
67	**Underground Fixed Maintenance shop**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
68	**Mobile Maintenaince shop**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
69	**Lube bay and washbay**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
70	**Lube bay and washbay apron**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
71	**Compressor Housing**	0.10	D7R	1	$56	$94	$150	$346	$183	$105	$635	$402	$277	$105	$785
72	**Shotcrete plant**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
73	**Substation**	0.20	D7R	1	$56	$94	$150	$346	$183	$208	$738	$402	$277	$208	$888
		11.50		73	**$4,088**	**$6,862**	**$10,950**	**$25,453**	**$13,474**	**$12,030**	**$50,957**	**$29,541**	**$20,336**	**$12,030**	**$61,907**

Closure Cost Estimate
Other Demo & Equip Removal

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Other Demoltion and Equipment Removal - Cost Summary				
	Labor	Equipment	Materials	Totals
Other Demolition	$51,951	$23,120	$0	$75,071
Equipment Removal	$183,176	$130,152	$110,200	$423,528
TOTALS	**$235,127**	**$153,272**	**$110,200**	**$498,599**

Other Demolition

Facility Description									
	Description (required)	ID Code	Type	Quantity	Units	Labor Unit Cost $	Equipment Unit Cost $	Material Unit Cost $
1	**mill conveyor demolition**			**1250**	**ft**	**$8.64**	**$0.00**	**$0.00**
2	**Septic systems**			**8**	**ea**	**$4,997.00**	**$2,890.00**	
3	**ROM Conveyor**			**136**	**ft**	**$8.64**	**$0.00**	**$0.00**
						$51,951	**$23,120**	**$0**

Notes:

Equipment & Material Removal

Facility Description								
	Description (required)	ID Code	Type	Quantity	Units	Labor Unit Cost ($)	Equipment Unit Cost ($)	Material Unit Cost ($)
1	**Lump sum from 2014 "11-Demolition", includes tanks & & piping & contamination**		Process - Other	**1**	**uniit**			**$110,200.00**
2	**10 Carbon columns**		Process - Other	**13499**	**C.F.**	**$0.16**	**$0.12**	
3	**intermediate**		Process - Other	**8042**	**C.F.**	**$0.16**	**$0.12**	
4	**2 1999 solution tanks**		Process - Other	**7660**	**C.F.**	**$0.16**	**$0.12**	
5	**5 1999 carbon columns**		Process - Other	**6749**	**C.F.**	**$0.16**	**$0.12**	
6	**kiln**		Process - Other	**290**	**C.F.**	**$0.16**	**$0.12**	
7	**carbon feed**		Process - Other	**1256**	**C.F.**	**$0.16**	**$0.12**	
8	**carbon quench**		Process - Other	**706**	**C.F.**	**$0.16**	**$0.12**	
9	**carbon strip**		Process - Other	**604**	**C.F.**	**$0.16**	**$0.12**	
10	**2 cyanide mix**		Process - Other	**6627**	**C.F.**	**$0.16**	**$0.12**	
11	**5 train D carbon columns**		Process - Other	**7798**	**C.F.**	**$0.16**	**$0.12**	
12	**Pregnant solution tanks**		Process - Other	**5321**	**C.F.**	**$0.16**	**$0.12**	
13	**D head**		Process - Other	**805**	**C.F.**	**$0.16**	**$0.12**	
14	**D transfer**		Process - Other	**2352**	**C.F.**	**$0.16**	**$0.12**	
15	**pre-dryer**		Process - Other	**8738**	**C.F.**	**$0.16**	**$0.12**	
16	**Victor fresh water**		Process - Other	**6842**	**C.F.**	**$0.16**	**$0.12**	
17	**detox**		Process - Other	**1413**	**C.F.**	**$0.16**	**$0.12**	
18	**4 Pregnant solution tanks**		Process - Other	**27369**	**C.F.**	**$0.16**	**$0.12**	
19	**fire water**		Process - Other	**11083**	**C.F.**	**$0.16**	**$0.12**	
20	**4 bulk storage**		Process - Other	**9236**	**C.F.**	**$0.16**	**$0.12**	
21	**2 SST solution**		Process - Other	**3392**	**C.F.**	**$0.16**	**$0.12**	
22	**fuel**		Process - Other	**785**	**C.F.**	**$0.16**	**$0.12**	
23	**fuel**		Process - Other	**502**	**C.F.**	**$0.16**	**$0.12**	
24	**fuel**		Process - Other	**785**	**C.F.**	**$0.16**	**$0.12**	
25	**prill**		Process - Other	**25132**	**C.F.**	**$0.16**	**$0.12**	
26	**20 carbon columns**		Process - Other	**26998**	**C.F.**	**$0.16**	**$0.12**	
27	**intermediate**		Process - Other	**8042**	**C.F.**	**$0.16**	**$0.12**	
28	**2 barren**		Process - Other	**29412**	**C.F.**	**$0.16**	**$0.12**	
29	**acid mix**		Process - Other	**1070**	**C.F.**	**$0.16**	**$0.12**	
30	**acid neutralization**		Process - Other	**1070**	**C.F.**	**$0.16**	**$0.12**	
31	**acid neut scrubber**		Process - Other	**1070**	**C.F.**	**$0.16**	**$0.12**	
32	**concentrated acid**		Process - Other	**936**	**C.F.**	**$0.16**	**$0.12**	
33	**sodium hydroxide**		Process - Other	**2674**	**C.F.**	**$0.16**	**$0.12**	
34	**kiln**		Process - Other	**290**	**C.F.**	**$0.16**	**$0.12**	
35	**feed**		Process - Other	**1256**	**C.F.**	**$0.16**	**$0.12**	
36	**quench**		Process - Other	**706**	**C.F.**	**$0.16**	**$0.12**	
37	**strip**		Process - Other	**604**	**C.F.**	**$0.16**	**$0.12**	
38	**2 preg**		Process - Other	**5348**	**C.F.**	**$0.16**	**$0.12**	
39	**transfer water**		Process - Other	**668**	**C.F.**	**$0.16**	**$0.12**	
40	**pretreatment**		Process - Other	**602**	**C.F.**	**$0.16**	**$0.12**	
41	**2 NaCN**		Process - Other	**6684**	**C.F.**	**$0.16**	**$0.12**	
42	**carbon attrition**		Process - Other	**134**	**C.F.**	**$0.16**	**$0.12**	
43	**E cell tanks**		Process - Other	**267**	**C.F.**	**$0.16**	**$0.12**	
44	**thickener**		Process - Other	**8556**	**C.F.**	**$0.16**	**$0.12**	
45	**thickener**		Process - Other	**8556**	**C.F.**	**$0.16**	**$0.12**	
46	**process water**		Process - Other	**55481**	**C.F.**	**$0.16**	**$0.12**	
47	**thickener**		Process - Other	**48128**	**C.F.**	**$0.16**	**$0.12**	
48	**2 NaCN**		Process - Other	**6684**	**C.F.**	**$0.16**	**$0.12**	
49	**6 leach**		Process - Other	**138770**	**C.F.**	**$0.16**	**$0.12**	
50	**PS stabilization**		Process - Other	**163029**	**C.F.**	**$0.24**	**$0.16**	
51	**8 CoMag clarifier**		Process - Other	**88514**	**C.F.**	**$0.24**	**$0.16**	
52	**coagulant**		Process - Other	**45160**	**C.F.**	**$0.16**	**$0.12**	
53	**precoat**		Process - Other	**45160**	**C.F.**	**$0.16**	**$0.12**	
54	**comag process tanks**		Process - Other	**28979**	**C.F.**	**$0.16**	**$0.12**	
55	**2 wet wells**		Process - Other	**38603**	**C.F.**	**$0.24**	**$0.16**	
56	**gravity thickener**		Process - Other	**51051**	**C.F.**	**$0.24**	**$0.16**	
						$183,176	**$130,152**	**$110,200**

Notes: **Formally User 5. RSMeans 2018 unit costs used**

Closure Cost Estimate
Sediment & Drainage Control

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Drainage Control - Cost Summary

	Labor	Equipment	Materials	Totals
Diversion Ditch Construction	$0	$0	N/A	$0
Diversion Ditch Liner	$0	$0	$0	$0
Diversion Ditch Rip-Rap	$0	$0	$0	$0
Sed Pond Construct/Regrade	$0	$0	N/A	$0
Liner Installation	$0	$0	$0	$0
Sed Pond Cover	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$0**	**$0**	**$0**	**$0**
Diversion Ditch Revegetation	$0	$0	$0	$0
Sediment Pond Revegetation	$0	$0	$0	$0
Subtotal Revegetation	**$0**	**$0**	**$0**	**$0**
TOTALS	**$0**	**$0**	**$0**	**$0**

Diversion Ditches - User Input

		Diversions Ditches							Revegetation			Liner and Rip-Rap Installation			
	Description (required)	ID Code	Diversion Length ft	Diversion Depth ft	Ditch Bottom Width ft	Ditch Sideslope Angle _H:1V	Excavate Volume (if calculated elsewhere) cy	Excavating Material Condition (select)	Excavating Equipment Fleet (select)	Seed Mix (select)	Mulch (select)	Fertilizer (select)	Liner Area S.Y.	Liner Type (select)	Rip-Rap Area S.Y.	Rip-Rap Type (select type)

Notes:

Sediment/Evaporation Pond Construction/Removal - User Input

		Sediment Ponds								Growth Media		
	Description (required)	ID Code	Pond Width ft	Pond/Berm Length ft	Berm Height ft	Crest Width ft	Sideslope Angle _H:1V	Final Area (if calculated elsewhere) acres	Regrade Volume (if calculated elsewhere) cy	Cover Volume (if calculated elsewhere) cy	Growth Media Thickness in	Distance from Growth Media Stockpile ft	Slope from Pond to Borrow % grade

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

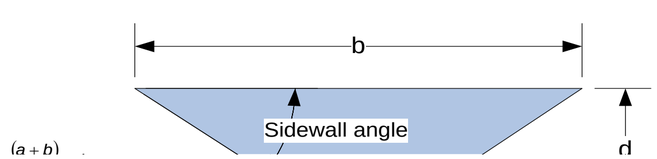
Sediment/Evaporation Pond Construction/Removal - User Input (cont.)

		Sediment Ponds				Growth Media			Revegetation			Ripping/Scarifying	
	Description (required)	Excavating Material Condition (select)	Material Type (select)	Excavating Equipment Fleet (select)	Liner Type (select)	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)	Scarify/ Ripping Fleet (select)

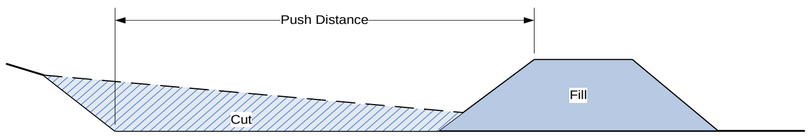
Notes:
1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table

Drainage Control - Calculations

Diversion Ditch Volume Calculation



Sediment/Evaporation Pond Construction Calculation



Closure Cost Estimate
Sediment & Drainage Control

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Drainage Control - Cost Summary

	Labor	Equipment	Materials	Totals
Diversion Ditch Construction	$0	$0	N/A	$0
Diversion Ditch Liner	$0	$0	$0	$0
Diversion Ditch Rip-Rap	$0	$0	$0	$0
Sed Pond Construct/Regrade	$0	$0	N/A	$0
Liner Installation	$0	$0	$0	$0
Sed Pond Cover	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$0**	**$0**	**$0**	**$0**
Diversion Ditch Revegetation	$0	$0	$0	$0
Sediment Pond Revegetation	$0	$0	$0	$0
Subtotal Revegetation	**$0**	**$0**	**$0**	**$0**
TOTALS	**$0**	**$0**	**$0**	**$0**

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

Ditch Volume = Ditch Length x Cross Sectional Area

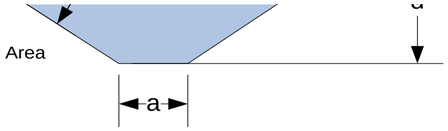


Figure 1 - Ditch Volume Calculation

1) Assume 20% swell for excavations
2) Assumes heavy duty trenching bucket is used

Cut = Fill
Push distance = pond width up to 2/3 max push distance (400 ft)

Figure 2 - Sediment Ponds

1) Assume balanced cut-to-fill for berm construction
2) Include cost for liner, if required.
3) Include line items for removal, if necessary.
4) Assume 20% swell for excavations
5) Minimum 1 hr ripping/scarifying per area
6) Minimum 1 acre revegetation crew time per area

Diversion Ditches - Excavation Costs

	Description (required)	Diversion Ditch Volume LCY	Diversion Ditch Equipment	Corrected Excavator Productivity LCY/hr	Total Hours	Diversion Ditch Labor Cost $	Diversion Ditch Equipment Cost $	Total Diversion Ditch Cost $	Liner Installation: Total Labor Cost $	Liner Installation: Total Equipment Cost $	Liner Installation: Total Material Cost $	Liner Installation: Total Liner Cost $	Rip-Rap Installation: Labor Cost $	Rip-Rap Installation: Equipment Cost $	Rip-Rap Installation: Material Cost $	Rip-Rap Installation: Total Cost $
						$0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Notes: LCM assumes 20% swell from ditch volume

Diversion Ditches - Revegetation Costs

	Description (required)	Surface Area acres	Revegetation Labor Cost $	Revegetation Equipment Cost $	Revgetation Material Cost $	Total Revegetation Cost $
			$0	**$0**	**$0**	**$0**

Sediment/Evaporation Ponds - Construction/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)	Regrading Volume cy	Sed/Evap Pond Equipment	Dozing Distance (see above) ft	Uncorrected Dozer Productivity LCY/hr	Grade Correction	Density Correction	Excavating Material	Corrected Productivity LCY/hr	Total Dozer Hours hr	Earthwork: Total Labor Cost $	Earthwork: Total Equipment Cost $	Earthwork: Total Constr/ Regrading Cost $	Liner: Total Labor Cost $	Liner: Total Equipment Cost $	Liner: Total Material Cost $
											$0	**$0**	**$0**	**$0**	**$0**	**$0**

Sediment/Evaporation Ponds - Growth Media Costs

	Description (required)	Growth Media: 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 Cover Placement Cost $
							$0	**$0**	**$0**

Closure Cost Estimate
Sediment & Drainage Control

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Drainage Control - Cost Summary

	Labor	Equipment	Materials	Totals
Diversion Ditch Construction	$0	$0	N/A	$0
Diversion Ditch Liner	$0	$0	$0	$0
Diversion Ditch Rip-Rap	$0	$0	$0	$0
Sed Pond Construct/Regrade	$0	$0	N/A	$0
Liner Installation	$0	$0	$0	$0
Sed Pond Cover	$0	$0	N/A	$0
Ripping/Scarifying Cost	$0	$0	N/A	$0
Subtotal Earthworks	**$0**	**$0**	**$0**	**$0**
Diversion Ditch Revegetation	$0	$0	$0	$0
Sediment Pond Revegetation	$0	$0	$0	$0
Subtotal Revegetation	**$0**	**$0**	**$0**	**$0**
TOTALS	**$0**	**$0**	**$0**	**$0**

Sediment/Evaporation Ponds - Revegetation Costs

	Description (required)	Surface Area acres	Long Ripping Distance 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 $
					0	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Closure Cost Estimate
Process Ponds

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Process Ponds - Cost Summary

	Labor	Equipment	Materials	Totals
Backfilling Costs	$80,232	$208,769	N/A	$289,001
Growth Media Placement Costs	$4,756	$12,537	N/A	$17,293
Liner Cutting & Folding Costs	$40,117	$21,051	N/A	$61,168
Subtotal Earthworks	**$125,105**	**$242,357**	**$0**	**$367,462**
Revegetation Costs	$4,294	$2,273	$12,098	$18,665
TOTALS	**$129,399**	**$244,630**	**$12,098**	**$386,127**

Process Ponds - User Input

You must fill in ALL green cells and relevant blue cells in this section for each pond

	Description (required)	ID Code	Pond Length ft	Pond Width ft	Pond Depth ft	Pond Sideslope Angle _H:1V	Disturbed Area (if calculated elsewhere) acres	Percent Backfill (100% if blank)	Distance from Backfill Borrow ft	Slope from Facility to Borrow Area % grade	Pond Volume (if calculated elsewhere) cy	Growth Media Thickness in	Distance from Growth Media Stockpile ft	Slope from Facility to Stockpile % grade
	Facility Description		**Pond Dimensions (1)**					**Backfill - (If trucks are used) (1)**				**Growth Media**		
1	**EMP ponds**		**1000**	**247**	**10.3**	**3.0**		**100%**	**4,600**	**3%**		**6**	**4,600**	**3%**
2	**Crusher fuel island fresh water pond**		**100**	**100**	**4.5**	**3.0**		**100%**	**4,600**	**3%**		**6**	**4,600**	**3%**
3	**Arequa external ponds**		**1000**	**250**	**11.0**	**3.0**		**100%**	**4,600**	**3%**		**6**	**4,600**	**3%**

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)

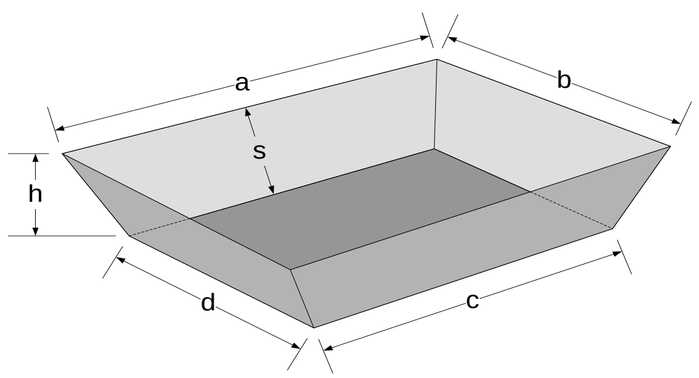
Process Ponds - User Input (cont.)

	Description (required)	Liner: Crew Cut & Fold Time (2) hrs	Backfill: Backfill Material Type (select)	Backfill: Backfill Equipment Fleet (select)	Backfill: Maximum Fleet Size (user override)	Growth Media: Growth Media Material Type (select)	Growth Media: Growth Media Placement Equipment Fleet (select)	Growth Media: Maximum Fleet Size (user override)	Revegetation: Seed Mix (select)	Revegetation: Mulch (select)	Revegetation: Fertilizer (select)
		Liner	**Backfill**			**Growth Media**			**Revegetation**		
1	**EMP ponds**	**114.0**	**Alluvium**	**Med Truck**		**Topsoil**	**Med Truck**		**User Mix 1**	**Hydro Mulch**	**Chemical**
2	**Crusher fuel island fresh water pond**	**2.0**	**Alluvium**	**Med Truck**		**Topsoil**	**Med Truck**		**User Mix 1**	**Hydro Mulch**	**Chemical**
3	**Arequa external ponds**	**123.0**	**Alluvium**	**Med Truck**		**Topsoil**	**Med Truck**		**User Mix 1**	**Hydro Mulch**	**Chemical**

Notes:
1. Material Types are used for density correction based on material densities in Caterpillar Performance Handbook material density table
(2) Pond liner removal crew (2Clab + excavator) = 2 General Laborers + 325C Excavator

Process Ponds - Calculations

Pond Volume Calculation



Closure Cost Estimate
Process Ponds

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Process Ponds - Cost Summary

	Labor	Equipment	Materials	Totals
Backfilling Costs	$80,232	$208,769	N/A	$289,001
Growth Media Placement Costs	$4,756	$12,537	N/A	$17,293
Liner Cutting & Folding Costs	$40,117	$21,051	N/A	$61,168
Subtotal Earthworks	**$125,105**	**$242,357**	**$0**	**$367,462**
Revegetation Costs	$4,294	$2,273	$12,098	$18,665
TOTALS	**$129,399**	**$244,630**	**$12,098**	**$386,127**

Area and Volume of the Frustrum of a Pyramid

$$\text{Surface Area} = ab + cd + (a+b+c+d) \times \frac{s}{2}$$

$$\text{Volume} = \frac{h\,(ab + cd + \sqrt{abcd})}{3}$$

Revegetation Calculations

Minimum 1 acre revegetation crew time per area

Process Ponds - Liner Cutting and Folding

	Description (required)	Crew Hours hrs	Total Labor Cost $	Total Equipment Cost $	Total Liner Removal Cost $
1	**EMP ponds**	114	$19,135	$10,041	$29,176
2	**Crusher fuel island fresh water pond**	2	$336	$176	$512
3	**Arequa external ponds**	123	$20,646	$10,834	$31,480
		239	**$40,117**	**$21,051**	**$61,168**

Process Ponds - Backfill and Growth Media Costs

		Pond Backfill								Growth Media							
	Description (required)	Backfill Volume cy	Backfill Fleet	Fleet Productivity LCY/hr	Number of Trucks/ Scrapers	Total Fleet Hours hrs	Total Labor Cost $	Total Equipment Cost $	Total Backfill 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	**EMP ponds**	79,719	740/988G/D8R	697	4	114	$38,270	$99,580	$137,850	4,568	740/988G/D8R	567	3	8	$2,238	$5,900	$8,138
2	**Crusher fuel island fresh water pond**	1,257	740/988G/D8R	697	4	2	$671	$1,747	$2,418	185	740/988G/D8R	567	3	1	$280	$737	$1,017
3	**Arequa external ponds**	85,438	740/988G/D8R	697	4	123	$41,291	$107,442	$148,733	4,630	740/988G/D8R	567	3	8	$2,238	$5,900	$8,138
		166,414				239	**$80,232**	**$208,769**	**$289,001**	9,383				17	**$4,756**	**$12,537**	**$17,293**

Process Ponds - Revegetation Costs

	Description (required)	Surface Area acres	Revegetation Labor Cost $	Revegetation Equipment Cost $	Revgetation Material Cost $	Total Revegetation Cost $
1	**EMP ponds**	5.70	$1,974	$1,045	$5,945	$8,964
2	**Crusher fuel island fresh water pond**	0.20	$346	$183	$208	$737
3	**Arequa external ponds**	5.70	$1,974	$1,045	$5,945	$8,964
		11.60	**$4,294**	**$2,273**	**$12,098**	**$18,665**

Closure Cost Estimate
Waste Disposal

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Disposal - Cost Summary

	Labor	Equipment	Fees	Totals
Solid Waste - On Site	$0	$0	N/A	$0
Solid Waste - Off Site				$0
Hazardous Materials				$0
Hydrocarbon Contaminated Soils	$0	$0	$0	$0
TOTALS	**$0**	**$0**	**$0**	**$0**

Waste Disposal - User Input - Solid Waste

						Landfill (Bulk) Disposal			Dumpster
	Description (required)	**ID Code**	**Waste Type** (select)	**Disposal Method** (select)	**Quantity** cy	**Distance to Landfill** ft	**Slope to Landfill** % grade	**Number of Trucks** (user override)	**Months Dumpster Rental** months

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)

Waste Disposal - User Input - Hazardous Materials

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

Notes:
1. Use Other Demo & Equip Removal Sheet for tank removal

Waste Disposal - User Input - Hydrocarbon Contaminated Soils

	Description (required)	**ID Code**	**Waste Type** (select)	**Disposal Method** (select)	**Quantity** cy	**Travel Distance to Offsite Disposal** mi

Notes:

Closure Cost Estimate
Waste Disposal

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Disposal - Cost Summary

	Labor	Equipment	Fees	Totals
Solid Waste - On Site	$0	$0	N/A	$0
Solid Waste - Off Site				$0
Hazardous Materials				$0
Hydrocarbon Contaminated Soils	$0	$0	$0	$0
TOTALS	**$0**	**$0**	**$0**	**$0**

1. Use Yards or Landfills Sheets for bioremediation facility reclamation

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)

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 $
								$0	**$0**	**$0**

Closure Cost Estimate
Waste Disposal

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Waste Disposal - Cost Summary

	Labor	Equipment	Fees	Totals
Solid Waste - On Site	$0	$0	N/A	$0
Solid Waste - Off Site				$0
Hazardous Materials				$0
Hydrocarbon Contaminated Soils	$0	$0	$0	$0
TOTALS	**$0**	**$0**	**$0**	**$0**

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**

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 $	Total Waste Disposal Cost $
					$0	**$0**	**$0**	**$0**	**$0**	**$0**

Closure Cost Estimate
Well Abandonment

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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File Name: SRCE_AM13_FW_V4.xlsm
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Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Well Abandonment

	Labor	Equipment	Materials	Totals
Production, Dewatering, Infiltration Wells	$0	$0	$0	$0
Monitoring Wells	$41,711	$87,589	$2,720	$132,020
TOTALS	**$41,711**	**$87,589**	**$2,720**	**$132,020**

Production, Dewatering and Infiltration Well Closure

	Description (required)	ID Code	Number of Holes	Casing Diam in	Average Depth[1] ft bgs	Depth to First Water ft bgs	Original Static Water Level ft bgs	Top of Slotted Casing[2] ft bgs	Blank Casing Below Top of Screen[2] ft	Type of Pump (if any) (select)	Depth to Pump ft bgs	Hole Plug Method (select)	Casing Volume per ft cf	Perforation Length[3,4] ft	Grout Volume per Hole[4,5] cy	Cement Volume per Hole[6] cy	Inert Media Volume per Hole[7] cy	Pump Removal Labor Cost $	Pump Removal Equip Cost $	Perf Labor Cost $	Perf Equip Cost[8] $	Grout + Cement Labor Cost[9] $	Grout + Cement Equip Cost[9] $	Grout + Cement Material Cost $	Inert Media Labor Cost[10] $	Inert Media Equip Cost[9] $
																		$0	$0	$0	$0	$0	$0	$0	$0	$0

(1) For previously abandoned holes enter "0" for depth
(2) Wells abandoned per Nevada Administrative Code (NAC 534.420). Hole grouted and perforated from bottom to 50 feet (15.24m) above the top of the screen, or first water encountered or original static water level, depending on vertical hydraulic gradient and well construction parameters. Inert media (cuttings or alluvium) used from top of grout to top seal.
(3) Perforation length = amount of blank casing below first water (for confined aquifers) or predicted recovered water table (unconfined aquifers) + 50 feet (15.24m) of blank casing above water table
(4) Assumes 50' (15.24m) sanitary seal at top of hole. Therefore, perforation and grouting only required to bottom of sanitary seal.
(5) Assumes 100% loss to formation for grout (abandonite) for screened and perforated sections.
(6) Assumes 20' (6m) top seal of cement in casing only. See note 4.
(7) Inert material is cuttings or alluvium sourced locally.
(8) Includes perforation tool wear cost/ft of perforation (see Productivty Sheet).
(9) See Productivity Sheet for hourly production. Minimum 1 hr per hole + fixed hours per hole for move and setup. If no perforation required, use standard drill rig.
(10) See Productivity Sheet for hourly production. Minimum 1 hr per hole.

Notes:

Closure Cost Estimate
Well Abandonment

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Well Abandonment

	Labor	Equipment	Materials	Totals
Production, Dewatering, Infiltration Wells	$0	$0	$0	$0
Monitoring Wells	$41,711	$87,589	$2,720	$132,020
TOTALS	**$41,711**	**$87,589**	**$2,720**	**$132,020**

Monitoring Well Closure

	Description (required)	ID Code	Number of Holes	Casing Diam in	Average Depth ft bgs	Top of Screen[1] ft bgs	Hole Plug Method (select)	Casing Volume per ft ft3	Grout Volume/ Well[2,3] cy	Cement Volume per Hole[4] cy	Inert Backfill Volume per Hole[5] cy	Total Grouting Hours/ Hole hr	Total Inert Media Hours/ Hole hr	Grout + Cement Labor Cost[6] $	Grout + Cement Equip Cost[6] $	Grout + Cement Material Cost $	Inert Material Labor Cost[7] $	Inert Material Equip Cost[7] $
1	**All Monitroing wells**		**71**	**4.0**	**227**	**140**	**Grout Only**	0.090	0.86	0.08		3.5		$41,711	$87,589	$2,720	$0	$0
														$41,711	**$87,589**	**$2,720**	**$0**	**$0**

Wells abandoned per NAC 534.420 with bentonite grout placed to 50 feet above the top of the screen (see note 1).
(1) Assumes top of screen is at or above the static water level (in unconfined aquifers) or the depth of first water encountered (in confined aquifers).
(2) Assumes 25% loss to formation for grouting
(3) Grouting only required to 50' (15.24m) above the top of screen because monitor wells are constructed with a seal in the annular space.
(4) Assumes top 20' (6m) plugged with cement.
(5) Assumes hole plugged with inert material (cuttings or alluvium) above grout up to cement surface plug.
(6) See Productivity Sheet for hourly production. Minimum 1 hr per hole + fixed hours per hole for move and setup (see Productivty Sheet).
(7) See Productivity Sheet for hourly production. Minimum 1 hr per hole.

Notes:

Closure Cost Estimate
Well Abandonment

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
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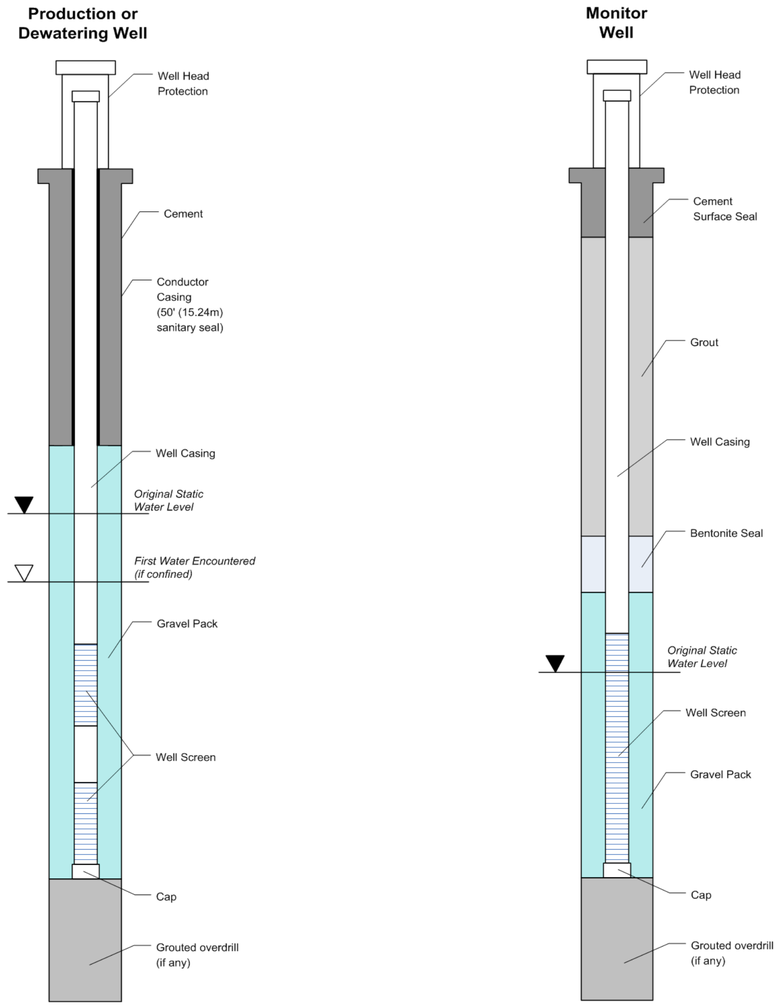
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Well Abandonment				
	Labor	Equipment	Materials	Totals
Production, Dewatering, Infiltration Wells	$0	$0	$0	$0
Monitoring Wells	$41,711	$87,589	$2,720	$132,020
TOTALS	**$41,711**	**$87,589**	**$2,720**	**$132,020**

Well Construction



Closure Cost Estimate
Misc. Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
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Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Miscellaneous Cost Summary

	Labor	Equipment	Materials	Totals
Fence Removal	$37,101	$10,688	N/A	$47,789
Fence Installation	$293,222	$46,774	$1,532,934	$1,872,930
Culvert & Buried Pipe Removal	$0	$0	N/A	$0
Surface Pipe Removal	$336,030	$47,940	N/A	$383,970
Power Lines	$397,325	N/A	N/A	$397,325
Substations/Transformers	$0	N/A	N/A	$0
Rip-rap, rock lining, gabions	$0	$0	$0	$0
Other Costs	$0	$0	$0	$0
TOTALS	**$1,063,678**	**$105,402**	**$1,532,934**	**$2,702,014**

Fence Removal

You must fill in ALL green and blue cells

	Description (required)	ID Code	Length ft	Type (select type)	Costs: Labor Cost $	Costs: Equipment Cost $	Costs: Total Cost $
1	**Arequa fence removal**		**3450**	**Chain link 8-10 ft**	$10,419	$3,002	$13,421
2	**Squaw fence removal**		**8835**	**Chain link 8-10 ft**	$26,682	$7,686	$34,368
					$37,101	**$10,688**	**$47,789**

Notes:

Fence Installation

You must fill in ALL green and blue cells

	Description (required)	ID Code	Input: Length ft	Input: Type (select type)	Costs: Labor Cost $	Costs: Equipment Cost $	Costs: Material Cost ($)
1	**Cresson Fencing**		**22542**	**Chain link 8-10ft**	$168,163	$26,825	$879,138
2	**Globe Hill Fencing**		**16764**	**Chain link 8-10ft**	$125,059	$19,949	$653,796
					$293,222	**$46,774**	**$1,532,934**

Notes:

Culvert & Buried Pipe Removal

You must fill in ALL green and blue cells

	Description (required)	ID Code	Input: Length ft	Input: Type (select type)	Input: Location (select)	Costs: Labor Cost $	Costs: Equipment Cost $
						$0	**$0**

Notes:

Surface Pipe Removal

You must fill in ALL green and blue cells

	Description (required)	ID Code	Input: Length ft	Input: Type (select type)	Input: Location (select)	Costs: Labor Cost $	Costs: Equipment Cost $
1	**Arequa Large Pipes**		**6900**	**20 in (500 mm) - 3**	**Off site**	$51,750	$7,383
2	**Arequa Small Pipes**		**21200**	**20 in (500 mm) - 3**	**Off site**	$159,000	$22,684
3	**Squaw Large Pipes**		**4082**	**20 in (500 mm) - 3**	**Off site**	$30,615	$4,368
4	**Squaw Small Pipes**		**12422**	**20 in (500 mm) - 3**	**Off site**	$93,165	$13,292
5	**TR76 barren pipe**		**300**	**10 in (250 mm) - 1**	**Off site**	$1,500	$213
						$336,030	**$47,940**

Notes:

Closure Cost Estimate
Misc. Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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Miscellaneous Cost Summary

	Labor	Equipment	Materials	Totals
Fence Removal	$37,101	$10,688	N/A	$47,789
Fence Installation	$293,222	$46,774	$1,532,934	$1,872,930
Culvert & Buried Pipe Removal	$0	$0	N/A	$0
Surface Pipe Removal	$336,030	$47,940	N/A	$383,970
Power Lines	$397,325	N/A	N/A	$397,325
Substations/Transformers	$0	N/A	N/A	$0
Rip-rap, rock lining, gabions	$0	$0	$0	$0
Other Costs	$0	$0	$0	$0
TOTALS	**$1,063,678**	**$105,402**	**$1,532,934**	**$2,702,014**

Power Line and Substation Removal

You must fill in ALL green and blue cells

	Description (required)	ID Code	Input: Power Line Length (miles)	Input: Power Line Type (select)	Input: Number of Substations (#)	Input: Location (select)	Power Line Removal ($)
1	**Powerlines**		**7.2**	**Single Pole**		**On-site**	$304,150
2	**Crusher and ADR 1 Lines**		**1.93**	**Double Pole**		**On-site**	$93,175
							$397,325

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
Assumed average spacing of 250 FT between poles

Rip-Rap & Rock Lining

You must fill in ALL green and blue cells

	Description (required)	ID Code	Input: Area (S.Y.)	Input: Type (select type)	Costs: Labor Cost ($)	Costs: Equipment Cost ($)	Costs: Material Cost ($)
					$0	**$0**	**$0**

Notes:

Closure Cost Estimate
Monitoring

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
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Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Reclamation Monitoring & Maintenance - Cost Summary

	Labor	Equipment	Lab & Materials	Totals
Revegetation Maintenance	$154,628	$81,855	$137,080	$373,563
Erosion Maintenance	$25,665	$76,996	N/A	$102,661
Reclamation Monitoring	$105,336	$2,671	N/A	$108,007
Subtotal Reclamation Monitoring	**$285,629**	**$161,522**	**$137,080**	**$584,231**
Water Quality Monitoring	$423,177	$113,373	$656,020	$1,192,571
TOTAL MONITORING	**$708,806**	**$274,895**	**$793,100**	**$1,776,802**

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	4,465	**10%**	**User Mix 1**	446.5	$307.00	$346.30	$183.32	
Labor								$154,628
Equipment								$81,855
Materials								$137,080
Cost/Acre								$837
							Subtotal	**$373,563**

Notes: 1) Surface area is NOT the same as footprint disturbance area typically used for permitting 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	3,491,894	**2%**	$1.47	69,838		$25,665.00	$76,996.00	$102,661

Notes:

Reclamation Monitoring

Description	Hrs/Day	Days/Year	Number of Years	Rate $/hr		
Field Work						
Field Geologist/Engineer				$77.31		$0
Range Scientist	**10**	**5**	**10**	$159.60		$79,800
Reporting						
Field Geologist/Engineer				$77.31		$0
Range Scientist	**8**	**2**	**10**	$159.60		$25,536
					Subtotal	**$105,336**
Travel						
	Hrs/Trip hr	**Trips/Year**	**Years**	**Truck Cost** $/hr		
Travel	**10**	**1**	**10**	$26.71		$2,671
					Subtotal	**$2,671**
					Total Reclamation Monitoring	**$108,007**

Notes:

Closure Cost Estimate
Monitoring

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Reclamation Monitoring & Maintenance - Cost Summary

	Labor	Equipment	Lab & Materials	Totals
Revegetation Maintenance	$154,628	$81,855	$137,080	$373,563
Erosion Maintenance	$25,665	$76,996	N/A	$102,661
Reclamation Monitoring	$105,336	$2,671	N/A	$108,007
Subtotal Reclamation Monitoring	**$285,629**	**$161,522**	**$137,080**	**$584,231**
Water Quality Monitoring	$423,177	$113,373	$656,020	$1,192,571
TOTAL MONITORING	**$708,806**	**$274,895**	**$793,100**	**$1,776,802**

Water 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 $
Water Analysis (Complete) (1)	**21**	**4**	**14**	**1**	**1**	**4**	**10**	$302.60	$5.68	$355,858
Water Analysis (Complete) (1)	**14**	**4**	**14**	**1**	**1**	**4**	**10**	$302.60	$5.68	$237,238
Water Analysis (Complete) (1)	**1**	**12**	**14**	**1**	**1**	**1**	**10**	$302.60	$5.68	$50,837
										$643,933.00

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

Ground & Surface Water Monitoring

Pump Costs

Description	No. of units		Years		Cost $
Pump (purchased)	**1**	Replacement period (yrs):	**14**	2431.55	$2,432
				Subtotal Field Work	**$2,432**

Notes: Replacement period = frequency of pump replacement

Reporting

Description	Hrs/Event	Rate $/hr	Cost $
Field Geologist/Engineer	**8**	$77.31	$103,905
		Subtotal Reporting	**$103,905**

Notes:

Closure Cost Estimate
Constr. Mgmt

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Construction Management & Road Maintenance - Cost Summary

	Labor	Equipment	Materials	Totals
Construction Management	$2,452,800	$484,109	N/A	$2,936,909
Construction Support		$0		$0
Road Maintenance	$945,332	$1,774,165	$0	$2,719,497
TOTAL CONSTRUCTION MANAGEMENT	**$3,398,132**	**$2,258,274**	**$0**	**$5,656,406**

Construction Management

Construction Management Staff

Description	Duration mo.	Hours/ Month hr.	Number of Supervisors	Supervisor Rate $/hr	Labor Cost $	Equipment Cost[(1)] $	Totals $
Active Reclamation	**168**	**160**	**1**	$91.25	$2,452,800	$484,109	$2,936,909
Monitoring & Maintenance					$0	$0	$0
				Total Staff	**$2,452,800**	**$484,109**	**$2,936,909**

Construction Management Support

Description	Duration mo.	Number of Units		Rental Rate $/mo	Generator Cost $/mo	Equipment Cost[(1)] $	Totals $
Temporary Office Rental						$0	$0
Temporary Toilets						$0	$0
					Total Support	**$0**	**$0**

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

Total Construction Management **$2,936,909**

Road Maintenance

Description	Fleet Size (select)	Number	Duration mo.	Hours/ Month hr.	Labor Cost $	Equipment Cost $	Totals $
Active Reclamation							
Water Truck	**Large**	**1**	**48**	**176**	$472,666	$843,026	$1,315,692
Grader	**Large**	**1**	**48**	**176**	$472,666	$931,139	$1,403,805
Monitoring & Maintenance							
Water Truck					$0	$0	$0
Grader					$0	$0	$0

Description	Gallons/ Day	Days/ Month	Duration mo.	Cost/ Gallon $			Totals $
Water Fees							
Water Fees							$0
				Total Project Maintenance	**$945,332**	**$1,774,165**	**$2,719,497**

Notes: 1) Supervisor equipment = pickup truck

Closure Cost Estimate
Labor Rates

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

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		
Cost Basis/Project Region	**CC&V Bonding**	Labor = 2019 Newmont CC&V rate if available; otherwise 2018 Nevada bond rate. Equipment = 2019 Newmont CC&V operating + maintenance co
Power Equipment Operators	**None**	$0.00
Truck Drivers	**none**	$0.00
Laborers	**none**	$0.00

INDIRECT COSTS	
Unemployment (%)	3.00%
Retirement/SS/Medicare (%)	7.65%
Workman's Compensation (%)	8.70%
Other Indirects	
State Payroll Tax (13),(15),(17),(18	
Burden Rate less govt tax (Newmo	32.65%
Total Other Indirects	**32.65%**

HOURLY LABOR RATE TABLE

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		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D6R w/ Winch		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D7R		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D8R		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D9R		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D10R		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
D11R		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Wheeled Dozers										
824G					$0.00					
834G					$0.00					
844					$0.00					
854G					$0.00					
Motor Graders										
120H		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
14G/H		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
16G/H		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
24M		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Track Excavators										
312C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
320C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
325C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
330C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
345B		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
365BL		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
385BL		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Scrapers										
631G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
637G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Wheeled Loaders										
924G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
928G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
950G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
966G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
972G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
980G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
988G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
990		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
992G		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
994D		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
L2350		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Shovels										
PC2000		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
PC3000		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
PC4000		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
PC5500		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
PC8000		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95

Closure Cost Estimate
Labor Rates

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

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		
Cost Basis/Project Region	**CC&V Bonding**	Labor = 2019 Newmont CC&V rate if available; otherwise 2018 Nevada bond rate. Equipment = 2019 Newmont CC&V operating + maintenance co
Power Equipment Operators	**None**	$0.00
Truck Drivers	**none**	$0.00
Laborers	**none**	$0.00

INDIRECT COSTS	
Unemployment (%)	3.00%
Retirement/SS/Medicare (%)	7.65%
Workman's Compensation (%)	8.70%
Other Indirects	
State Payroll Tax (13),(15),(17),(18	
Burden Rate less govt tax (Newmo	32.65%
Total Other Indirects	**32.65%**

HOURLY LABOR RATE TABLE

Hydraulic 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		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
428D 4WD Backhoe		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
CS533E Vibratory Roller		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
CS633E Vibratory Roller					$0.00					
CP533E Sheepsfoot Compactor					$0.00					
CP633E Sheepsfoot Compactor					$0.00					
Light Truck - 1.5 Ton					$0.00					
Supervisor's Truck					$0.00					
Flatbed Truck					$0.00					
Air Compressor + tools		$46.88	$0.00	$46.88	$0.00	$1.41	$3.59	$4.08	$15.31	$55.95
Welding Equipment		$46.88	$0.00	$46.88	$0.00	$1.41	$3.59	$4.08	$15.31	$55.95
Heavy Duty Drill Rig		$46.88	$0.00	$46.88	$0.00	$1.41	$3.59	$4.08	$15.31	$55.95
Pump (plugging) Drill Rig		$46.88	$0.00	$46.88	$0.00	$1.41	$3.59	$4.08	$15.31	$55.95
Concrete Pump					$0.00					
Gas Engine Vibrator		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Generator 5KW					$0.00					
HDEP Welder (pipe or liner)					$0.00					
5 Ton Crane		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
20 Ton Crane		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
50 Ton Crane					$0.00					
120 Ton Crane					$0.00					

NOTES:

(1) Equipment Type:	Catepillar model or equivalent, LeTourneau	
(2) Equipment Operator Source:		
(3) Zone Basis:		

Truck Drivers ($/hr) (4)										
725		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
730		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
735		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
740		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
769D		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
773E		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
777D		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
785C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
793C		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
797B		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
613E (5,000 gal) Water Wagon		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
621E (8,000 gal) Water Wagon		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95

Closure Cost Estimate
Labor Rates

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

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			
Cost Basis/Project Region	CC&V Bonding	Labor = 2019 Newmont CC&V rate if available; otherwise 2018 Nevada bond rate. Equipment = 2019 Newmont CC&V operating + maintenance co	
Power Equipment Operators	None	$0.00	
Truck Drivers	none	$0.00	
Laborers	none	$0.00	
INDIRECT COSTS			
Unemployment (%)	3.00%		
Retirement/SS/Medicare (%)	7.65%		
Workman's Compensation (%)	8.70%		
Other Indirects			
State Payroll Tax (13),(15),(17),(18			
Burden Rate less govt tax (Newmo	32.65%		
Total Other Indirects	**32.65%**		

HOURLY LABOR RATE TABLE											
777D Water Truck		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
785C Water Truck		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95
Dump Truck (10-12 yd3)		$36.81	$0.00	$36.81	$0.00	$1.10	$2.82	$3.20	$12.02	$55.95

NOTES:

(4) Truck Driver Source:	Mine Site Costs
(5) Zone Basis:	Mine Site Costs

Laborers ($/hr) (6,7)										
General Laborer		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95
Skilled Laborer		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95
Driller's Helper		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95
Rodmen (reinforcing concrete)		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95
Cement finisher		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95
Carpenter		$36.81	$0.00	$36.81		$1.10	$2.82	$3.20	$12.02	$55.95

NOTES:

(6) Laborer Source:	10 Apr 2019 Kim Johnson email
(7) Carpenter Source:	
(8) Zone Basis:	

Project Management and Technical Labor ($/hr) (9)										
Project Manager		$60.03		$60.03		$1.80	$4.59	$5.22	$19.60	$91.25
Foreman		$49.81		$49.81		$1.49	$3.81	$4.33	$16.26	$75.71
Field Geologist/Engineer		$50.86		$50.86		$1.53	$3.89	$4.42	$16.61	$77.31
Field Tech/Sampler		$34.10		$34.10		$1.02	$2.61	$2.97	$11.13	$51.83
Range Scientist		$105.00		$105.00		$3.15	$8.03	$9.14	$34.28	$159.60
Senior Planning Engineer										
Project Engineer										
Mechanic/Fitter		$37.80		$37.80		$1.13	$2.89	$3.29	$12.34	$57.46

NOTES:

(9) Project Manager:	NMC HR Mar 2019
(9) Foreman Source:	NMC HR Mar 2019
(9) Techical Labor Source:	10 Apr 2019 Kim Johnson email
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)	

Closure Cost Estimate
Equipment Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Monthly Rental Basis: 176 hrs month

EQUIPMENT RENTAL RATE TABLE

EQUIPMENT TYPE (1)	Monthly Owner/Rental Rate	Equipment Hourly Rate	Fuel/Lube/ Wear	Total Rate
Bulldozers				
D6R	$10,400.00	$59.09	$26.30	$85.39
D6R w/ Winch			$14.04	$14.04
D7R	$11,350.00	$64.49	$29.11	$93.60
D8R	$19,000.00	$107.95	$39.25	$147.20
D9R	$23,100.00	$131.25	$55.84	$187.09
D10R			$144.35	$144.35
D11R	$64,000.00	$363.64	$104.98	$468.61
Wheeled Dozers				
824G			$24.16	$24.16
834G			$28.31	$28.31
844			$33.71	$33.71
854G			$42.69	$42.69
Motor Graders				
120H	$9,600.00	$54.55	$27.62	$82.16
14G/H	$14,500.00	$82.39	$39.81	$122.20
16G/H			$110.22	$110.22
24M			$190.04	$190.04
Track Excavators				
312C	$5,415.00	$30.77	$12.27	$43.04
320C	$6,700.00	$38.07	$19.94	$58.01
325C	$11,100.00	$63.07	$25.01	$88.08
330C	$10,800.00	$61.36	$31.19	$92.55
345B	$14,280.00	$81.14	$37.53	$118.66
365BL			$29.66	$29.66
385BL	$22,500.00	$127.84	$58.59	$186.43
Scrapers				
631G	$18,000.00	$102.27	$58.27	$160.54
637G	$35,000.00	$198.86	$84.88	$283.74
Wheeled Loaders				
924G	$5,000.00	$28.41	$16.57	$44.98
928G	$5,200.00	$29.55	$18.98	$48.52
950G	$7,600.00	$43.18	$26.29	$69.47
966G	$10,900.00	$61.93	$34.99	$96.92
972G	$13,800.00	$78.41	$39.57	$117.98
980G	$13,800.00	$78.41	$42.72	$121.13
988G	$21,000.00	$119.32	$62.91	$182.23
990			$38.20	$38.20
992G			$330.37	$330.37
994D			$466.79	$466.79
L2350			$148.30	$148.30
Shovels				
PC2000			$83.14	$83.14
PC3000			$112.35	$112.35
PC4000			$157.29	$157.29
PC5500			$267.39	$267.39
PC8000			$334.80	$334.80
Hydraulic Hammers				
H-120 (fits 325)	$5,700.00	$32.39	$5.44	$37.83
H-160 (fits 345)	$12,000.00	$68.18	$10.58	$78.76
H-180 (fits 365/385)	$16,200.00	$92.05	$12.53	$104.58
Demolition Shears				
S340 (fits 322/325/330)				$0.00

S365 (fits 330/345)				$0.00
S390 (fits 365/385)				$0.00
Demolition Grapples				
G315 (fits 322/325)				$0.00
G320 (fits 325/330)				$0.00
G330 (fits 345/365)				$0.00
Other Equipment				
420D 4WD Backhoe	$3,200.00	$18.18	$14.98	$33.16
428D 4WD Backhoe	$4,000.00	$22.73	$14.88	$37.61
CS533E Vibratory Roller	$8,470.00	$48.13	$8.43	$56.55
CS633E Vibratory Roller			$10.67	$10.67
CP533E Sheepsfoot Compactor			$8.43	$8.43
CP633E Sheepsfoot Compactor			$10.67	$10.67
Light Truck - 1.5 Ton	$4,074.00	$23.15	$3.56	$26.71
Supervisor's Truck	$2,741.00	$15.57	$2.43	$18.01
Flatbed Truck	$4,074.00	$23.15	$11.59	$34.74
Air Compressor + tools	$4,345.00	$24.69	$2.25	$26.93
Welding Equipment	$2,123.00	$12.06	$4.49	$16.56
Heavy Duty Drill Rig	$58,080.00	$330.00	$26.96	$356.96
Pump (plugging) Drill Rig	$58,080.00	$330.00	$22.47	$352.47
Concrete Pump	$18,986.00	$107.88	$22.47	$130.35
Gas Engine Vibrator	$554.00	$3.15	$2.25	$5.39
Generator 5KW	$766.00	$4.35	$3.37	$7.72
HDEP Welder (pipe or liner)	$9,196.00	$52.25	$4.49	$56.74
5 Ton Crane	$5,610.00	$31.88	$6.74	$38.62
20 Ton Crane	$12,782.00	$72.63	$8.99	$81.61
50 Ton Crane	$12,782.00	$72.63	$10.56	$83.19
120 Ton Crane			$11.68	$11.68
Trucks				
725	$15,000.00	$85.23	$35.51	$120.74
730	$15,000.00	$85.23	$36.64	$121.87
735	$15,000.00	$85.23	$49.63	$134.86
740	$15,000.00	$85.23	$50.79	$136.02
769D	$21,000.00	$119.32	$34.45	$153.77
773E	$33,000.00	$187.50	$46.57	$234.07
777D			$155.95	$155.95
785C			$54.49	$54.49
793C			$341.09	$341.09
797B			$132.01	$132.01
613E (5,000 gal) Water Wagon	$6,000.00	$34.09	$22.87	$56.96
621E (8,000 gal) Water Wagon	$11,000.00	$62.50	$37.29	$99.79
777D Water Truck			$207.26	$207.26
785C Water Truck			$54.49	$54.49
Dump Truck (10-12 yd^3)	$11,726.00	$66.63	$12.51	$79.14

NOTES:

(1) Power Equipment Source:	
(2) Power Equipment Type:	Catepillar model or equivalent, LeTourneau loader, Komatsu shovels
(3) Drilliing Equipment Source:	Means Heavy Construction (2019, Q3)
(4) Other Equipment Source:	Means Heavy Construction (2018, Q2)
(5) Drill rig includes support (pipe) truck	

Closure Cost Estimate
Equipment Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm

FUEL, LUBE AND WEAR CALCULATIONS

EQUIPMENT TYPE	PM Cost Per Hour (1)	Under carriage or Tires (2)	G.E.T Consumption (3)	Fuel Use Rate gal/hr (4)	Cost@ 2.25/gal	Total Hourly Equipment Cost
Bulldozers						
D6R	$7.19		$5.07	6.25	$14.04	$26.30
D6R w/ Winch				6.25	$14.04	$14.04
D7R	$7.19		$5.07	7.50	$16.85	$29.11
D8R	$7.59		$9.75	9.75	$21.91	$39.25
D9R	$8.65		$15.17	14.25	$32.02	$55.84
D10R	$103.90			18.00	$40.45	$144.35
D11R	$13.87		$31.56	26.50	$59.55	$104.98
Wheeled Dozers						
824G		$0.00		10.75	$24.16	$24.16
834G		$0.00		12.60	$28.31	$28.31
844		$0.00		15.00	$33.71	$33.71
854G		$0.00		19.00	$42.69	$42.69
Motor Graders						
120H	$4.37	$3.79	$10.47	4.00	$8.99	$27.62
14G/H	$5.45	$5.19	$15.13	6.25	$14.04	$39.81
16G/H	$93.37			7.50	$16.85	$110.22
24M	$155.21			15.50	$34.83	$190.04
Track Excavators						
312C	$4.11		$3.94	1.88	$4.22	$12.27
320C	$4.38		$4.55	4.90	$11.01	$19.94
325C	$4.44		$5.74	6.60	$14.83	$25.01
330C	$6.44		$6.32	8.20	$18.43	$31.19
345B	$7.25		$6.46	10.60	$23.82	$37.53
365BL				13.20	$29.66	$29.66
385BL	$6.05		$13.22	17.50	$39.32	$58.59
Scrapers						
631G	$7.30	$8.99	$8.27	15.00	$33.71	$58.27
637G	$12.13	$8.99	$10.39	23.75	$53.37	$84.88
Wheeled Loaders						
924G	$3.33	$2.71	$4.35	2.75	$6.18	$16.57
928G	$3.90	$2.71	$4.50	3.50	$7.86	$18.98
950G	$4.85	$4.08	$8.37	4.00	$8.99	$26.29
966G	$5.06	$6.50	$10.51	5.75	$12.92	$34.99
972G	$5.72	$6.50	$13.30	6.25	$14.04	$39.57
980G	$5.72	$6.85	$13.30	7.50	$16.85	$42.72
988G	$10.72	$10.75	$14.25	12.10	$27.19	$62.91
990				17.00	$38.20	$38.20
992G	$278.69			23.00	$51.68	$330.37
994D	$385.90			36.00	$80.89	$466.79
L2350				66.00	$148.30	$148.30
Shovels						
PC2000				37.00	$83.14	$83.14
PC3000				50.00	$112.35	$112.35
PC4000				70.00	$157.29	$157.29
PC5500				119.00	$267.39	$267.39
PC8000				149.00	$334.80	$334.80
Hydraulic Hammers						
H-120 (fits 325)	N/A		$5.44			$5.44
H-160 (fits 345)	N/A		$10.58			$10.58
H-180 (fits 365/385)	N/A		$12.53			$12.53
Demolition Shears						
S340 (fits 322/325/330)	N/A					$0.00
S365 (fits 330/345)	N/A					$0.00

Closure Cost Estimate
Equipment Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm

S390 (fits 365/385)	N/A					$0.00
Demolition Grapples						
G315 (fits 322/325)	N/A					$0.00
G320 (fits 325/330)	N/A					$0.00
G330 (fits 345/365)	N/A					$0.00
Other Equipment						
420D 4WD Backhoe	$4.04	$0.70	$3.50	3.00	$6.74	$14.98
428D 4WD Backhoe	$3.83	$0.70	$3.61	3.00	$6.74	$14.88
CS533E Vibratory Roller				3.75	$8.43	$8.43
CS633E Vibratory Roller				4.75	$10.67	$10.67
CP533E Sheepsfoot Compactor				3.75	$8.43	$8.43
CP633E Sheepsfoot Compactor				4.75	$10.67	$10.67
Light Truck - 1.5 Ton		$0.19		1.50	$3.37	$3.56
Supervisor's Truck		$0.19		1.00	$2.25	$2.43
Flatbed Truck		$1.03		4.70	$10.56	$11.59
Air Compressor + tools			N/A	1.00	$2.25	$2.25
Welding Equipment			N/A	2.00	$4.49	$4.49
Heavy Duty Drill Rig				12.00	$26.96	$26.96
Pump (plugging) Drill Rig				10.00	$22.47	$22.47
Concrete Pump			N/A	10.00	$22.47	$22.47
Gas Engine Vibrator			N/A	1.00	$2.25	$2.25
Generator 5KW			N/A	1.50	$3.37	$3.37
HDEP Welder (pipe or liner)			N/A	2.00	$4.49	$4.49
5 Ton Crane				3.00	$6.74	$6.74
20 Ton Crane				4.00	$8.99	$8.99
50 Ton Crane				4.70	$10.56	$10.56
120 Ton Crane				5.20	$11.68	$11.68
Trucks						
725	$8.04	$13.78	$3.13	4.70	$10.56	$35.51
730	$8.04	$13.78	$3.13	5.20	$11.68	$36.64
735	$8.04	$21.95	$3.13	7.35	$16.52	$49.63
740	$8.04	$23.10	$3.13	7.35	$16.52	$50.79
769D	$5.96	$4.21	$3.50	9.25	$20.78	$34.45
773E	$7.37	$8.86	$3.94	11.75	$26.40	$46.57
777D	$114.37		$3.94	16.75	$37.64	$155.95
785C				24.25	$54.49	$54.49
793C	$247.28			41.75	$93.81	$341.09
797B				58.75	$132.01	$132.01
613E (5,000 gal) Water Wagon	$5.75	$3.64		6.00	$13.48	$22.87
621E (8,000 gal) Water Wagon	$6.11	$7.02		10.75	$24.16	$37.29
777D Water Truck	$169.62			16.75	$37.64	$207.26
785C Water Truck				24.25	$54.49	$54.49
Dump Truck (10-12 yd3) (5)	N/A	$0.83	N/A	5.20	$11.68	$12.51

Notes:

(1) PM Source:	July 2018 Cashman Equipment (except as noted)
(2) Undercarriage Source:	Purcell Tire Quote July 2019
(3) G.E.T. Source:	Cashman Equipment Company (July 2018) or Newmont Nevada costs unless noted
(4) Fuel Use Source:	Caterpillar Handbook, Edition 35, Ch. 20; or estimated average for smaller vehicles
(5) Dump Truck Oper. Cost Source:	Means Heavy Construction (2008)

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm

TIRE COST TABLES

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
Bulldozers						
D6R			N/A			
D6R w/ Winch			N/A			
D7R			N/A			
D8R			N/A			
D9R			N/A			
D10R			N/A			
D11R			N/A			
Wheeled Dozers						
824G	29.5R25	4		$0.00	3,500	$0.00
834G	35/65-R33	4		$0.00	3,500	$0.00
844	45/65-R39	4		$0.00	3,500	$0.00
854G	45/65-R45	4		$0.00	3,500	$0.00
Motor Graders						
120H	13PR24	6	$2,210.54	$13,263.24	3,500	$3.79
14G/H	20.5R25	6	$3,026.19	$18,157.14	3,500	$5.19
16G/H	23.5R25	6		$0.00	3,500	
24M	23.5R25	6		$0.00	3,500	
Track Excavators						
312C			N/A			
320C			N/A			
325C			N/A			
330C			N/A			
345B			N/A			
365BL			N/A			
385BL			N/A			
Scrapers						
631G	37.25R35	4	$8,991.59	$35,966.36	4,000	$8.99
637G	37.25R35	4	$8,991.59	$35,966.36	4,000	$8.99
Wheeled Loaders						
924G	17.5R25	4	$3,049.73	$12,198.92	4,500	$2.71
928G	17.5R25	4	$3,049.73	$12,198.92	4,500	$2.71
950G	26.5R25	4	$4,594.55	$18,378.20	4,500	$4.08
966G	26.5R25	4	$7,315.27	$29,261.08	4,500	$6.50
972G	26.5R25	4	$7,315.27	$29,261.08	4,500	$6.50
980G	29.5R25	4	$7,701.09	$30,804.36	4,500	$6.85
988G	35/65-33	4	$12,094.03	$48,376.12	4,500	$10.75
990	41.25/70-39	4		$0.00	4,500	
992G	45/65R45	4		$0.00	4,500	
994D	55/85R57	4		$0.00	4,500	
L2350	55/85R57	4		$0.00	4,500	
Shovels						
PC2000			N/A			
PC3000			N/A			
PC4000			N/A			
PC5500			N/A			
PC8000			N/A			
Hydraulic Hammers						
H-120 (fits 325)			N/A			
H-160 (fits 345)			N/A			
H-180 (fits 365/385)			N/A			
Demolition Shears						
S340 (fits 322/325/330)			N/A			

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm

S365 (fits 330/345)			N/A			
S390 (fits 365/385)			N/A			
Demolition Grapples						
G315 (fits 322/325)			N/A			
G320 (fits 325/330)			N/A			
G330 (fits 345/365)			N/A			
Other Equipment						
420D 4WD Backhoe	340/80R18-19.5LR24	2	$1,046.27	$2,092.54	3,000	$0.70
428D 4WD Backhoe	340/80R18-16.9R28	2	$1,046.27	$2,092.54	3,000	$0.70
CS533E Vibratory Roller			N/A			
CS633E Vibratory Roller			N/A			
CP533E Sheepsfoot Compactor			N/A			
CP633E Sheepsfoot Compactor			N/A			
Light Truck - 1.5 Ton		4	140.72	$562.88	3,000	$0.19
Supervisor's Truck		4	140.72	$562.88	3,000	$0.19
Flatbed Truck		22	140.72	$3,095.84	3,000	$1.03
Air Compressor + tools			N/A			
Welding Equipment			N/A			
Heavy Duty Drill Rig		4		$0.00	3,000	
Pump (plugging) Drill Rig		4		$0.00	3,000	
Concrete Pump			N/A			
Gas Engine Vibrator			N/A			
Generator 5KW			N/A			
HDEP Welder (pipe or liner)			N/A			
5 Ton Crane		4		$0.00	3,000	
20 Ton Crane		4		$0.00	3,000	
50 Ton Crane		6		$0.00	3,000	
120 Ton Crane		6		$0.00	3,000	
Trucks						
725	23.5R25	6	$4,594.55	$27,567.30	2,000	$13.78
730	23.5R25	6	$4,594.55	$27,567.30	2,000	$13.78
735	26.5R25	6	$7,315.27	$43,891.62	2,000	$21.95
740	29.5R25	6	$7,701.09	$46,206.54	2,000	$23.10
769D	18.00R33	6	$4,210.07	$25,260.42	6,000	$4.21
773E	24.00R35	6	$7,383.83	$44,302.98	5,000	$8.86
777D	27.00R49	6		$0.00	5,000	
785C	33.00R51	6		$0.00	4,000	
793C	40.00R57	6		$0.00	4,000	
797B	40.00R57	6		$0.00	4,000	
613E (5,000 gal) Water Wagon	23.5R25	6	$3,636.27	$21,817.62	6,000	$3.64
621E (8,000 gal) Water Wagon	33.25R29	6	$9,363.96	$56,183.76	8,000	$7.02
777D Water Truck	27.00R49	6		$0.00	5,000	
785C Water Truck	33.00R51	6		$0.00	4,000	
Dump Truck (10-12 yd3)		10	$497.89	$4,978.90	6,000	$0.83

Notes:

(1) Unit Cost Basis:	Cost per tyre each
(2) Cost Basis:	
(3) Tire Cost Source:	Purcell Tire Quote July 2019
(4) Tire Wear Source:	Caterpillar Handbook, Edition 37

Closure Cost Estimate
Material Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Revegetation Materials

Seed Mixes

Seed Mix	Description	Cost/Acre
None		
Mix 1	Basins	$307.00
Mix 2	Low Hills	$263.10
Mix 3	Uplands	$271.80
Mix 4	Riparian or Custom	$342.70
User Mix 1	**AdherenceWork Fall 2019**	**$307.00**
User Mix 2		
User Mix 3		
User Mix 4		**$1,025.28**

	Cost/lb	lbs/Acre	Cost/Acre
User Mix 5 (from Seed Mix sheet)	#DIV/0!	$0.00	$0.00
Notes:			

Mulch

Item	Cost/lb	lbs/Acre	Cost/Acre
None			
Straw Mulch	$0.16	**2000**	$320.00
Hydro Mulch	$0.25	**2000**	$500.00
Timber Mulch			
Notes:			

Amendments

Item	Cost/lb	lbs/Acre	Cost/Acre
None			
Organic Matter	$0.70	**2000**	$1,400.00
Treated Sludge			
Chemical	$0.59	**400**	$236.00

Closure Cost Estimate
Material Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Notes:			

Well Abandonment Materials

Description	Cost/50lb bag	Units	Cost/unit*
Cement	$7.57	cy	$36.05
Grout (Low Grade Bentonite)	$8.65	cy	$41.19
Inert Material/Cuttings		cy	
		cy	
		cy	

(1) Jentech Drilling Supply quote (June 2017) Type I,II Cement at $14.24 per 94# bag (1.1 cf/bag)
(2) Jentech Drilling Supply (June 2017) 3/8 Chunk Bentonite Hole Plug at $8.65 per 50# bag (5.75 cf/bag at 43 g
* 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.	$2,431.55
Sampling Supplies	ea.	$5.68
Water Analysis (Complete) (1)	ea.	$302.60
ABA + S speciation	ea.	$455.60
Cyanide - WAD	ea.	$150.00
Cyanide - Free	ea.	$56.00
Cyanide - Total soils	ea.	$336.60
Cyanide - Total water	ea.	$295.80
TPH in soils	ea.	
Humidty Cell (20 wk) (2)	ea.	
Humidty Cell (40 wk)	ea.	
NAG	ea.	
TCLP w/ full analysis	ea.	
SPLP w/ full analysis	ea.	
AS4439 Leach test w/ full analysis	ea.	
Soil Fertility	ea.	
	ea.	

Closure Cost Estimate
Material Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

SVL, 2019		

Fuel, Etc.

Description	Units	Cost/unit
Off-road Diesel - delivered (1)	$/gal	$2.247
Pickup Truck Mileage	$/mi	$0.545
Electical Power	$/kWh	$0.120
Trona (material + delivery)	$/ton	$157.740
red diesel 2019 Brandie Notestine		
electric J. Seeliger 2019		
trona 2019 Brandie Notestine		

Closure Cost Estimate
Material Costs

Revegetation Method				
Slopes				
Disturbance Type	**Seed Application Method**	**Labor** Cost/Acre	**Equipment** Cost/Acre	**Total** Cost/Acre
Waste Rock Dumps	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Heap Leach	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Tailings	**Hand Broadcast**	$267.22		$267.22
Quarries & Borrow Pits	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Flat Areas and Undifferentiated				
Disturbance Type	**Seed Application Method**	**Labor** Cost/Acre	**Equipment** Cost/Acre	**Total** Cost/Acre
Exploration Trenches	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Exploration Roads	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Waste Rock Dumps	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Heap Leach	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Tailings	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Quarries & Borrow Pits	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Roads	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Pits	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Haul Material	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Foundations & Buildings	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Sediment & Drainge Control	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Process Ponds	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Landfills	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Yards, Etc.	**Mechanical Broadcast**	$346.30	$183.32	$529.62
Revegetation Maintenance	**Mechanical Broadcast**	$346.30	$183.32	$529.62

Closure Cost Estimate
Misc. Unit Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Revegetation

	Means Number	Unit	Crew	Daily Output	Daily Output User	Materials	Labor	Equipment	Total	Notes
Seeding - Broadcast Hand (1)		acres					$267.22		$267.22	
Seeding - Broadcast Mechanical (1)		acres					$346.30	$183.32	$529.62	
Seeding - Drill (1)		acres		365					$0.00	
Seeding - Hydroseeding (1)				365			$622.91	$324.52	$947.43	
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		$6.40	$6.40		$6.40	
Cactus Planting (4)		ea.	1 Clab						$0.00	
NOTES:										
(1) Seeding Source:	2019 DRMS rate									
(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										
Lg. steel	02220-110-0012	C.F.	B-8	21500		$0.15	$0.11	8%	$0.28	Premium adjusted for 2019 RSMeans 024116130020
Lg. concrete	02220-110-0050	C.F.	B-8	15300		$0.22	$0.15	8%	$0.40	Premium adjusted for 2019 RSMeans 024116130050
Lg. masonry	02220-110-0080	C.F.	B-8	20100		$0.16	$0.11	11%	$0.30	Premium adjusted for 2019 RSMeans 024116130080
Lg. mixed	02220-110-0100	C.F.	B-8	20100		$0.16	$0.11	11%	$0.30	Premium adjusted for 2019 RSMeans 024116130100
Sm. steel	02220-110-0500	C.F.	B-3	14800		$0.19	$0.11	10%	$0.33	Premium adjusted for 2019 RSMeans 024116130500
Sm. concrete	02220-110-0600	C.F.	B-3	11300		$0.25	$0.15	5%	$0.42	Premium adjusted for 2019 RSMeans 024116130600
Sm. masonry	02220-110-0650	C.F.	B-3	14800		$0.19	$0.11	11%	$0.33	Premium adjusted for 2019 RSMeans 024116130650
Sm. wood	02220-110-0700	C.F.	B-3	14800		$0.19	$0.11	11%	$0.33	Premium adjusted for 2019 RSMeans 024116130700
Wall Demolition										
Block 4 in (100 mm) thick	02220-130-2000	S.F.	1 Clab	180		$2.49	$0.00	20%	$2.99	Premium adjusted for 2019 RSMeans 024116171220
Block 6 in (150 mm) thick	02220-130-2040	S.F.	1 Clab	170		$2.63	$0.00	20%	$3.16	Premium adjusted for 2019 RSMeans 024116171220
Block 8 in (200 mm) thick	02220-130-2080	S.F.	1 Clab	150		$2.98	$0.00	20%	$3.58	Premium adjusted for 2019 RSMeans 024116171220
Block 12 in (300 mm) thick	02220-130-2100	S.F.	1 Clab	150		$2.98	$0.00	20%	$3.58	Premium adjusted for 2019 RSMeans 024116171220
Conc 6 in (150 mm) thick	02220-130-2400	S.F.	B-9	160		$17.77	$1.35	10%	$21.03	Premium adjusted for 2019 RSMeans 024116172220
Conc 8 in (200 mm) thick	02220-130-2420	S.F.	B-9	140		$20.31	$1.54	10%	$24.04	Premium adjusted for 2019 RSMeans 024116172220
Conc 10 in (250 mm) thick	02220-130-2440	S.F.	B-9	120		$23.70	$1.80	10%	$28.05	Premium adjusted for 2019 RSMeans 024116172220
Conc 12 in (300 mm) thick	02220-130-2500	S.F.	B-9	100		$28.44	$2.15	10%	$33.65	Premium adjusted for 2019 RSMeans 024116172220

Closure Cost Estimate
Misc. Unit Costs

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Waste Disposal

Unit rates from Means Heavy Construction 2006 Edition by permission of R.S.Means/Reed Construction Data .

	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment		Total	Notes
Rubbish Handling										
Dumpster delivery (average for all sizes)	02220-350-0910	ea.			$56.00				$56.00	
Haul (average for all sizes)	02220-350-0920	ea.			$175.00				$175.00	
Rent per month (average for all sizes)	02220-350-0940	ea.			$59.50				$59.50	
Disposal fee per ton (tonne) (average for all sizes)	02220-350-0950	ton			$65.50				$65.50	
NOTES:										
Dumpster Cost Source	Means Heavy Construction (2018)									
Dumpster Disposal Fee Source:	Means Heavy Construction (2018)									
Hazardous Material Handling - Solids (+ Liquids in drums)										
Pickup fees 55 gal (200 L). drums	02110-300-1100	ea.			$259.00				$259.00	
Bulk material (average)	02110-300-1220/1230	ton			$423.00				$423.00	
Transport - truck load (80 drums, 25 cy (m3), 18 tons)	02110-300-1260/1270	mile			$5.78				$5.78	
Dump site solid disposal fee	02110-300-6000/6020	ton			$298.50				$298.50	
NOTES:										
Solid Handling Cost Source	Means Heavy Construction (2018)									
Solid Disposal Fee Source:	Means Heavy Construction (2018)									
Hazardous Material Handling - Liquids										
Vacuum Truck Pickup (2200 gal/8300 L)	02110-300-3110	hr.			$152.00				$152.00	
Vacuum Truck Pickup (5000 gal/19000 L)	02110-300-3120	hr.			$220.00				$220.00	
Dump site liquid disposal fee	02110-300-6000/6020	ton			$298.50				$298.50	
NOTES:										
Liquid Handling Cost Source	Means Heavy Construction (2018)									
Liquid Disposal Fee Source:	2018 Means Heavy Construction, ave. 02 81									
Hydrocarbon Contaminated Soils (HCS)										
Insitu Biotreatment	02115-200-2020/2021	C.Y.			$18.72				$18.72	
HCS disposal fee	02115-200-2050/2055	C.Y.			$288.50				$288.50	
NOTES:										
Insitu Treatement Cost Source	2018 Means Heavy Construction, ave. 02 65									
HCS Disposal Fee Source:	2018 Means Heavy Construction, ave. 02 65									

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 disposal site and disposal fees

	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Premium	Total	Notes
Reinforced Concrete Bulkheads and Shaft Covers										
Grade walls - 15 in (400mm) thick, 8 ft (2.5m) high	03310-240-4300	C.Y.	C-14D	80.02	$167.00	$141.82	$15.37		$324.19	includes reinforcing
Grade walls - 15 in (400mm) thick, 12 ft (3.7m) high	03310-240-4350	C.Y.	C-14D	26.2	$167.00	$433.13	$46.95		$647.08	includes reinforcing
Elevated conc, 1-way beam & slab - 15ft (4.6m) span	03310-240-2700	C.Y.	C-14B	20.59	$290.00	$572.88	$59.74		$922.62	includes reinforcing

Closure Cost Estimate
Misc. Unit Costs

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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Elevated conc, 1-way beam & slab - 25ft (7.5m) span	03310-240-2750	C.Y.	C-14B	28.36	$276.00	$415.93	$43.37		$735.30	includes reinforcing
Bat Gate/Foam Plug Installation										
Bat Gate (5)		ea.			$3,039.44					materials $/ea. Installed
Culvert Gate (5)		ea.			$6,078.87					materials $/ea. Installed
Adit Foam Plug (6)		ea./C.Y.			$303.94					materials $/cy placed
Production Opening Foam Plug (6)		ea./C.Y.			$303.94					materials $/cy placed
NOTES:										
(5) Bat Gate Source:	NV BLM, 2/2006: 8 hr + 1hr mob/demob + 1hr setup per gate (adjusted to 2018)									
(6) Foam Plug Source:	NV BLM, 2/2006: 8 hr + 1hr mob/demob + 1hr setup per adit; 16 hrs per production opening (adjusted to 2018)									

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

	Means Number	Unit	Crew	Daily Output	Materials	Labor	Equipment	Premium	Total	Notes
Fencing Installation										
Barbed 3-strand	02820-170-1650	L.F.	B-80A	760	$0.48	$1.77	$0.28		$2.53	
Barbed 4-strand	extrapolated	L.F.	B-80A	570	$0.64	$2.36	$0.37		$3.37	
Barbed 5-strand	02820-130-0920	L.F.	B-80A	456	$0.80	$2.94	$0.47		$4.21	
Chain link 8-10ft (2.5-3m) Install	02820-130-0920	L.F.	B-80C	180	$39.00	$7.46	$1.19		$47.65	
Wood stockade fence 6 ft (2 m) high - Install	02820-510-1240	L.F.	B-80C	150	$15.95	$8.95	$1.42		$26.32	
	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		$2.08	$0.50		$2.58	
Barbed 4-strand Removal	extrapolated	L.F.	2 Clab	355		$2.52	$0.60		$3.12	
Barbed 5-strand Removal	02220-220-1650	L.F.	2 Clab	280		$3.20	$0.76		$3.96	
Chain link 8-10 ft (2.5-3 m) Removal	02220-220-1700	L.F.	B-6	445		$3.02	$0.87		$3.89	
Wood, all types 4-6 ft ("1.5-2 m) high - Removal	02220-220-1775	L.F.	2 Clab	430		$2.08	$0.50		$2.58	
	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		$7.67	$2.22		$9.89	
18 in (450 mm) Diameter	02220-220-2930	L.F.	B-6	150		$8.95	$2.59		$11.54	
24 in (600 mm) Diameter	02220-220-2960	L.F.	B-6	120		$11.19	$3.23		$14.42	
36 in (1m) Diameter	02220-220-3000	L.F.	B-6	90		$14.92	$4.31		$19.23	
Pipeline Removal										
0.75 in (20mm) - 4 in (100 mm) diameter	02220-381-1600	L.F.	B-20	700		$2.14	$0.31		$2.45	

Closure Cost Estimate
Misc. Unit Costs

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6 in (150 mm) - 8 in (200 mm)	02220-381-1700	L.F.	B-20	500		$3.00	$0.43		$3.43	
10 in (250 mm) - 18 in (450 mm)	02220-381-1800	L.F.	B-20	300		$5.00	$0.71		$5.71	
20 in (500 mm) - 36 in (1 m)	02220-381-1900	L.F.	B-20	200		$7.50	$1.07		$8.57	
Pipe and Drainpipe Installation										
Water 4in (100mm) 40ft (12m) length, welded HDPE	02510-760-0100	L.F.	B-22A	400	$2.20	$5.60	$4.36		$12.16	
Water 6in (150mm) 40ft (12m) length, welded HDPE	02510-760-0200	L.F.	B-22A	380	$4.97	$5.89	$4.59		$15.45	
Water 12in (300mm) 40ft (12m) length, welded HDPE	02510-760-0500	L.F.	B-22A	260		$8.61	$6.71		$15.32	
Drain 4in (100mm) perforated PVC	02620-630-2100	L.F.	B-14	315	$1.44	$9.03	$1.52		$11.99	
Drain 6in (150mm) perforated PVC	02620-630-2110	L.F.	B-14	300	$3.07	$9.48	$1.60		$14.15	
Drain 4in (100mm) corrugated, perf or plain	02620-660-0040	L.F.	2 Clab	1200	$0.65	$0.75	$0.18		$1.58	
Drain 6in (150mm) corrugated., perf or plain	02620-660-0060	L.F.	2 Clab	900	$1.65	$0.99	$0.24		$2.88	
Drain Rock Preparation										
Crushing		C.Y.								
Screening		C.Y.								
TOTAL									$0.00	
Misc.										
Backhoe work	02210-700-0120	C.Y.	B-11M	28		$15.99	$9.47		$25.46	
Powerline and Transformer Removal										
Single Pole		mile							$42,243.00	
Double Pole		mile							$48,277.00	
Transformer (9)		ea.							$30,274.00	
NOTES:										
(7) Single Pole Source:	NVEnergy estimate (2009) Adjusted to 2018									
(8) Double Pole Source:	NVEnergy estimate (2009) Adjusted to 2018									
(9) Transformer Source:	Sierra Pacific Power Company estimate (2004) adjusted to 2018									

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	$28.50	$35.55	$8.16		$72.21	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	$8.75	$53.65	$12.32		$74.72	assumes on-site source of rip-rap
Gabions, 6 in (150 mm) deep	02370-450-0400	S.Y.	B-13	200	$8.65	$14.22	$3.26		$26.13	assumes on-site source rock fill for gabions
Gabions, 9 in (250 mm) deep	02370-450-0500	S.Y.	B-13	163	$10.70	$17.45	$4.01		$32.16	assumes on-site source rock fill for gabions
Gabions, 12 in (300 mm) deep	02370-450-0200	S.Y.	B-13	153	$14.35	$18.59	$4.27		$37.21	assumes on-site source rock fill for gabions
Gabions, 18 in (450 mm) deep	02370-450-0200	S.Y.	B-13	102	$20.50	$27.88	$6.40		$54.78	assumes on-site source rock fill for gabions
Gabions, 36 in (1m) deep	02370-450-0200	S.Y.	B-13	60	$34.50	$47.39	$10.88		$92.77	assumes on-site source rock fill for gabions
HDEP Liner Installation										
Finish grading large area	2310-100-0100	S.F.	B-11L	18000		$0.05	$0.05		$0.10	
Compaction-riding, vibrating roller - 12in (300mm) lifts	2315-310-5100	C.Y.	B-10Y	2600		$0.34	$0.17		$0.51	

Closure Cost Estimate
Misc. Unit Costs

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File Name: SRCE_AM13_FW_V4.xlsm
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	60 mil HDPE	2660-610-0010	S.F.	3 Skwk	1600	$0.43	$1.12	$0.45		$2.00	
	80 mil HDPE	user	S.F.	3 Skwk	149		$12.02	$4.83		$16.85	
	40 mil VLDPE	user	S.F.	3 Skwk	150		$11.94	$4.79		$16.73	
		user	S.F.	3 Skwk	149		$12.02	$4.83		$16.85	
		user	S.F.	3 Skwk	149		$12.02	$4.83		$16.85	
Construction Management Support											
	Office Trailer, Furnished, no hook-ups	0150-500-0250	mo.			$207.00				$207.00	
	Toilet Portable, chemical	1590-400-6410	mo.			$215.80				$215.80	
	TOTAL					$422.80				$422.80	
Pump and Casing Removal											
	Pump Type	**Measurement**	**Unit**				**Labor**	**Equipment**		**Total**	**Notes**
Pump Removal											
	Submersible	ft to pump	L.F.				$6.04	$16.25		$22.29	
	Line Shaft	ft to pump	L.F.				$6.04	$16.25		$22.29	
	NOTES:										
	(10) Pump Removal Source:	Boart Longyear quote June 2018									

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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
RIPPING					
Rip road					
Waste rock dumps, heaps, tails - rip flat surfaces					
Surface preparation					
Scarify					
Small Dozer w/ multi-shank					
D7R		1	$93.60	$55.95	$149.55
Totals			$93.60	$55.95	$149.55
Medium Dozer w/ multi-shank					
D9R		1	$187.09	$55.95	$243.04
Totals			$187.09	$55.95	$243.04
Large Dozer w/ multi-shank					
D10R		1	$144.35	$55.95	$200.30
Totals			$144.35	$55.95	$200.30
Grader w/ multi-shank					
16G/H		1	$110.22	$55.95	$166.17
Totals			$110.22	$55.95	$166.17
GRADING					
Grading storage and structure areas					
Grading waste rock dumps and heaps					
Grading landfills					
Constructing pit safety berms					
Small Dozer Fleet					
D7R		1	$93.60	$55.95	$149.55
Totals			$93.60	$55.95	$149.55
Medium Dozer Fleet					
D9R		1	$187.09	$55.95	$243.04
Totals			$187.09	$55.95	$243.04
Large Dozer Fleet					
D10R		1	$144.35	$55.95	$200.30
Totals			$144.35	$55.95	$200.30
EXPLORATION GRADING					
Backfilling and grading exploration trenches					
Grading flat exploration roads					
Small Dozer Fleet					
D6R		1	$85.39	$55.95	$141.34
Totals			$85.39	$55.95	$141.34

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EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
Medium Dozer Fleet					
D7R		1	$93.60	$55.95	$149.55
Totals			$93.60	$55.95	$149.55
Large Dozer Fleet					
D8R		1	$147.20	$55.95	$203.15
Totals			$147.20	$55.95	$203.15
EXCAVATING					
Earthen Berms					
Diversion ditch excavation and backfill					
Underground openings backfill - excavate and place					
Pit berm construction (excavator option)					
Small Excavator					
325C		1	$88.08	$55.95	$144.03
Totals			$88.08	$55.95	$144.03
Medium Excavator					
345B		1	$118.66	$55.95	$174.61
Totals			$118.66	$55.95	$174.61
Large Excavator					
385BL		1	$186.43	$55.95	$242.38
Totals			$186.43	$55.95	$242.38
EXCAVATE AND RECONTOUR					
Recontour large roads (haul roads, access roads, etc.)					
Ponds - Excavate and pull liner and bury					
Small Excavator + Dozer					
325C		1	$88.08	$55.95	$144.03
D7R		1	$93.60	$55.95	$149.55
Total Equipment			$181.68	$111.90	$293.58
Medium Excavator + Dozer					
345B		1	$118.66	$55.95	$174.61
D9R		1	$187.09	$55.95	$243.04
Totals			$305.75	$111.90	$417.65
Large Excavator + Dozer					
385BL		1	$186.43	$55.95	$242.38
D10R		1	$144.35	$55.95	$200.30
Totals			$330.78	$111.90	$442.68

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
EXPLORATION ROAD/PAD RECONTOUR					
Recontour small roads (exploration roads, service roads, etc.)					
Cut and Fill reclamation on slopes					
Drill pad recountour					
Drill sump backfill					
Small Dozer					
D6R		1	$85.39	$55.95	$141.34
Totals			$85.39	$55.95	$141.34
Large Dozer					
D8R		1	$147.20	$55.95	$203.15
Totals			$147.20	$55.95	$203.15
Grader					
14G/H		1	$122.20	$55.95	$178.15
Totals			$122.20	$55.95	$178.15
Small Excavator					
320C		1	$58.01	$55.95	$113.96
Totals			$58.01	$55.95	$113.96
Medium Excavator					
325C		1	$88.08	$55.95	$144.03
Totals			$88.08	$55.95	$144.03
LOAD, HAUL AND PLACE MATERIAL					
Rock placement					
Haul overburden for backfill					
Haul borrow for backfill					
Haul cover or growth media					
Small Truck/Loader Fleet					
725		Calculated	$120.74	$55.95	$176.69
966G	**Loader**	1	$96.92	$55.95	$152.87
D7R		1	$93.60	$55.95	$149.55
Totals			$311.26	$167.85	$479.11
Medium Truck/Loader Fleet					
740		Calculated	$136.02	$55.95	$191.97
988G	**Loader**	1	$182.23	$55.95	$238.18
D8R		1	$147.20	$55.95	$203.15
Totals			$465.45	$167.85	$633.30
Large Truck/Loader Fleet					
769D		Calculated	$153.77	$55.95	$209.72
988G	**Loader**	1	$182.23	$55.95	$238.18

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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
D7R		1	$93.60	$55.95	$149.55
Totals			$429.60	$167.85	$597.45
Extra Large Truck/Loader Fleet					
777D		Calculated	$155.95	$55.95	$211.90
992G	**Loader**	1	$330.37	$55.95	$386.32
D7R		1	$93.60	$55.95	$149.55
Totals			$579.92	$167.85	$747.77
Scraper/Dozer Fleet					
631G		Calculated	$160.54	$55.95	$216.49
D10R		1	$144.35	$55.95	$200.30
D7R		1	$93.60	$55.95	$149.55
Totals			$398.49	$167.85	$566.34
Tandem Scraper Fleet					
637G		2	$283.74	$55.95	$339.69
D7R		1	$93.60	$55.95	$149.55
Totals			$377.34	$111.90	$489.24
MISC. LOAD AND HAUL AND EARTHWORKS					
Sludge removal					
Drainage controls					
Misc. - Cat 325B Excavator / 10-12 yd3 Truck					
325C		1	$88.08	$55.95	$144.03
Dump Truck (10-12 yd3)		1	$79.14	$55.95	$135.09
Totals			$167.22	$111.90	$279.12
Misc. - Cat D9R Dozer/ Loader (5 yd3) / 10-12 yd3 Truck					
D9R		1	$187.09	$55.95	$243.04
966G		1	$96.92	$55.95	$152.87
Dump Truck (10-12 yd3)		1	$79.14	$55.95	$135.09
Totals			$363.15	$167.85	$531.00
Misc. - Cat D6 Dozer / Cat 966 Loader / 10-12 yd3 Truck					
D6R		1	$85.39	$55.95	$141.34
966G		1	$96.92	$55.95	$152.87
Dump Truck (10-12 yd3)		1	$79.14	$55.95	$135.09
Totals			$261.45	$167.85	$429.30
CONCRETE BREAKING					
Slab demolition					
Footing demolition					
Wall demolition					
Small - Cat 325B Excavator w/ H140D s Hammer					
325C		1	$88.08	$55.95	$144.03

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
H-120 (fits 325)		1	$37.83	$0.00	$37.83
D9R		1	$187.09	$55.95	$243.04
Totals			$313.00	$111.90	$424.90
Medium - Cat 345B Excavator w/ H180D s Hammer					
345B		1	$118.66	$55.95	$174.61
H-160 (fits 345)		1	$78.76	$0.00	$78.76
D9R		1	$187.09	$55.95	$243.04
Totals			$384.51	$111.90	$496.41
Large - Cat 385B Excavator w/ H180D s Hammer					
385BL		1	$186.43	$55.95	$242.38
H-180 (fits 365/385)		1	$104.58	$0.00	$104.58
D9R		1	$187.09	$55.95	$243.04
Totals			$478.10	$111.90	$590.00
DRILL HOLE ABANDONMENT					
Drill Hole - Grout or Cement					
Pump (plugging) Drill Rig		1	$352.47	$55.95	$408.42
Driller's Helper		2	$0.00	$111.90	$111.90
Totals			$352.47	$167.85	$520.32
Drill Hole - Inert Media (Means Crew B-11M+ 1 Laborer)					
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
General Laborer		1	$0.00	$55.95	$55.95
Totals			$33.16	$111.90	$145.06
Drill Hole - Casing Perforation or Removal					
Heavy Duty Drill Rig		1	$356.96	$55.95	$412.91
Driller's Helper		2	$0.00	$111.90	$111.90
Totals			$356.96	$167.85	$524.81
MAINTENANCE FLEET					
Road Grading, Dust Suppression, Clean Up					
Maintenance - Small Water Truck and Cat 14G Grader					
613E (5,000 gal) Water Wagon		1	$56.96	$55.95	$112.91
120H		1	$82.16	$55.95	$138.11
Totals			$139.12	$111.90	$251.02
Maintenance - Medium Water Truck and Cat 16G Grader					
613E (5,000 gal) Water Wagon		1	$56.96	$55.95	$112.91
14G/H		1	$122.20	$55.95	$178.15
Totals			$179.16	$111.90	$291.06
Maintenance - Large Water Truck and Cat 16G Grader					
621E (8,000 gal) Water Wagon		1	$99.79	$55.95	$155.74
16G/H		1	$110.22	$55.95	$166.17
Totals			$210.01	$111.90	$321.91

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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
PROJECT SUPERVISION					
Foreman		1	$0.00	$75.71	$75.71
Supervisor's Truck		1	$18.01	$0.00	$18.01
Totals			$18.01	$75.71	$93.72
MEANS CREW DEFINITIONS					
Crew composition from Means Heavy Construction 2005 Edition by permission of R.S.Means/Reed Construction Data . For use with misc. unit costs where Means is the source for productivity					
1 Clab - Seedling Planting/Block Wall Demolition					
General Laborer		1	$0.00	$55.95	$55.95
Totals			$0.00	$55.95	$55.95
2 Clab - Barbed Wire/Wood Fence Removal, Drainpipe Installation, Pumping, Evaporation					
General Laborer		2	$0.00	$111.90	$111.90
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$26.71	$111.90	$138.61
2 Clab + Excavator - Pond Liner Cut and Fold					
General Laborer		2	$0.00	$111.90	$111.90
325C		1	$88.08	$55.95	$144.03
Totals			$88.08	$167.85	$255.93
2 Clab + Welder - Bat Gates					
General Laborer		2	$0.00	$111.90	$111.90
Welding Equipment		1	$16.56	$55.95	$72.51
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$43.27	$167.85	$211.12
3 Clab - Foam Adit Plugs					
General Laborer		2	$0.00	$111.90	$111.90
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$59.87	$167.85	$227.72
3 Clab + Welder - Culvert Bat Gate					
General Laborer		2	$0.00	$111.90	$111.90
Welding Equipment		1	$16.56	$55.95	$72.51
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$76.43	$223.80	$300.23
3 Clab D - 3 Laborers + Foreman - Decontamination					
General Laborer		3	$0.00	$167.85	$167.85
Foreman		1	$0.00	$75.71	$75.71
Supervisor's Truck		1	$18.01	$0.00	$18.01
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
Totals			$44.72	$243.56	$288.28
3 SKWK - Liner Installation					
Skilled Laborer		3	$0.00	$167.85	$167.85
HDEP Welder (pipe or liner)		1	$56.74	$0.00	$56.74
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
			$0.00		$0.00
			$0.00		$0.00
			$0.00		$0.00
Totals			$89.90	$223.80	$313.70
B-3 - Small Building Demoltion					
LABOR					
General Laborer		2	$0.00	$111.90	$111.90
Foreman		1	$0.00	$75.71	$75.71
			$0.00		$0.00
			$0.00		$0.00
			$0.00		$0.00
EQUIPMENT					
928G		1	$48.52	$55.95	$104.47
Dump Truck (10-12 yd3)		2	$158.28	$111.90	$270.18
			$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
Totals			$206.80	$355.46	$562.26
B-6 - Chain Link Fence/Culvert Removal					
General Laborer		2	$0.00	$111.90	$111.90
928G		1	$48.52	$55.95	$104.47
Totals			$48.52	$167.85	$216.37
B-8 - Large Building Demolition					
LABOR					
General Laborer		2	$0.00	$111.90	$111.90
Foreman		1	$0.00	$75.71	$75.71
			$0.00		$0.00
			$0.00		$0.00
			$0.00		$0.00
EQUIPMENT					
928G		1	$48.52	$55.95	$104.47
20 Ton Crane		1	$81.61	$55.95	$137.56
Dump Truck (10-12 yd3)		2	$158.28	$111.90	$270.18
			$0.00		$0.00
			$0.00		$0.00
			$0.00		$0.00

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
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Cost Estimate Type: Surety Cost Basis: CC&V Bonding

EQUIPMENT FLEETS

ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
			$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
Totals			$288.41	$411.41	$699.82
B-9 - Concrete Wall Demolition					
General Laborer		4	$0.00	$223.80	$223.80
Foreman		1	$0.00	$75.71	$75.71
Air Compressor + tools			$26.93	$55.95	$82.88
Totals			$26.93	$355.46	$382.39
B-10Y - General Compaction					
General Laborer		1	$0.00	$55.95	$55.95
CS533E Vibratory Roller		1	$56.55	$55.95	$112.50
Totals			$56.55	$111.90	$168.45
B-11L - Fine Grading for Evaporation Pond Liner Base					
General Laborer		1	$0.00	$55.95	$55.95
14G/H		1	$122.20	$55.95	$178.15
Totals			$122.20	$111.90	$234.10
B-11M - Backhoe Work					
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
Totals			$33.16	$55.95	$89.11
B-12G - Rip-Rap Machine Placed (Modified)					
966G		1	$96.92	$55.95	$152.87
325C		1	$88.08	$55.95	$144.03
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$211.71	$111.90	$323.61
B-13 - Grouted Rip-Rap & Gabion Baskets					
General Laborer		4	$0.00	$223.80	$223.80
Foreman		1	$0.00	$75.71	$75.71
20 Ton Crane		1	$81.61	$55.95	$137.56
Totals			$81.61	$355.46	$437.07
B-14 PVC Drain Pipe Installation					
Foreman		1	$0.00	$75.71	$75.71
General Laborer		4	$0.00	$223.80	$223.80
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$59.87	$355.46	$415.33

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EQUIPMENT FLEETS

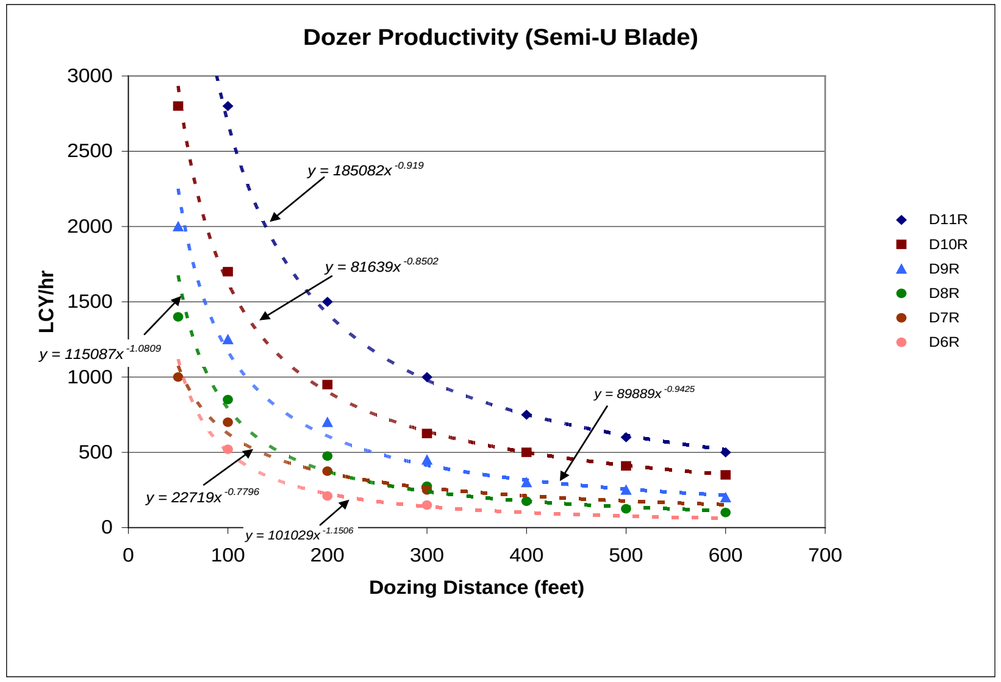
ACTIVITY AND FLEET		Standard Crew Size	EQUIPMENT UNIT COST (Hourly)	TOTAL LABOR UNIT COST (Hourly)	TOTAL COST (Hourly)
B-20 - Remove Pipelines					
Foreman		1	$0.00	$75.71	$75.71
Skilled Laborer		1	$0.00	$55.95	$55.95
General Laborer		1	$0.00	$55.95	$55.95
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$26.71	$187.61	$214.32
B-22A - HDEP Installation - Pipe or Liner					
Skilled Laborer		1	$0.00	$55.95	$55.95
General Laborer		2	$0.00	$111.90	$111.90
D7R		1	$93.60	$55.95	$149.55
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
420D 4WD Backhoe		1	$33.16	$55.95	$89.11
Generator 5KW		1	$7.72	$0.00	$7.72
HDEP Welder (pipe or liner)		1	$56.74	$0.00	$56.74
Totals			$217.93	$279.75	$497.68
B-80A - Install Barbed Wire Fence					
General Laborer		3	$0.00	$167.85	$167.85
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$26.71	$167.85	$194.56
B-80C - Install Chain Link Fence (Flatbed truck has small crane)					
General Laborer		3	$0.00	$167.85	$167.85
Light Truck - 1.5 Ton		1	$26.71	$0.00	$26.71
Totals			$26.71	$167.85	$194.56
C-14B - Elevated Concrete Slabs (Reinforced Concrete Shaft Covers)					
Foreman		1	$0.00	$75.71	$75.71
Supervisor's Truck		1	$18.01	$0.00	$18.01
Carpenter		16	$0.00	$895.20	$895.20
General Laborer		2	$0.00	$111.90	$111.90
Rodmen (reinforcing concrete)		4	$0.00	$223.80	$223.80
Cement finisher		2	$0.00	$111.90	$111.90
Gas Engine Vibrator		1	$5.39	$55.95	$61.34
Concrete Pump		1	$130.35	$0.00	$130.35
Totals			$153.75	$1,474.46	$1,628.21
C-14D - Concrete Walls Formed in Place (Reinforced Concrete Adit Bulkheads)					
Foreman		1	$0.00	$75.71	$75.71
Supervisor's Truck		1	$18.01	$0.00	$18.01
Carpenter		18	$0.00	$1,007.10	$1,007.10
General Laborer		2	$0.00	$111.90	$111.90
Rodmen (reinforcing concrete)		2	$0.00	$111.90	$111.90
Cement finisher		1	$0.00	$55.95	$55.95
Gas Engine Vibrator		1	$5.39	$55.95	$61.34
Concrete Pump		1	$130.35	$0.00	$130.35
Totals			$153.75	$1,418.51	$1,572.26

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	0.85	0.97	0.85	0.85	1	0.92
Ripping Hourly Production (excluding maneuvering time) (ft)	4,488	5,122	4,488	4,488	5,280	4,858

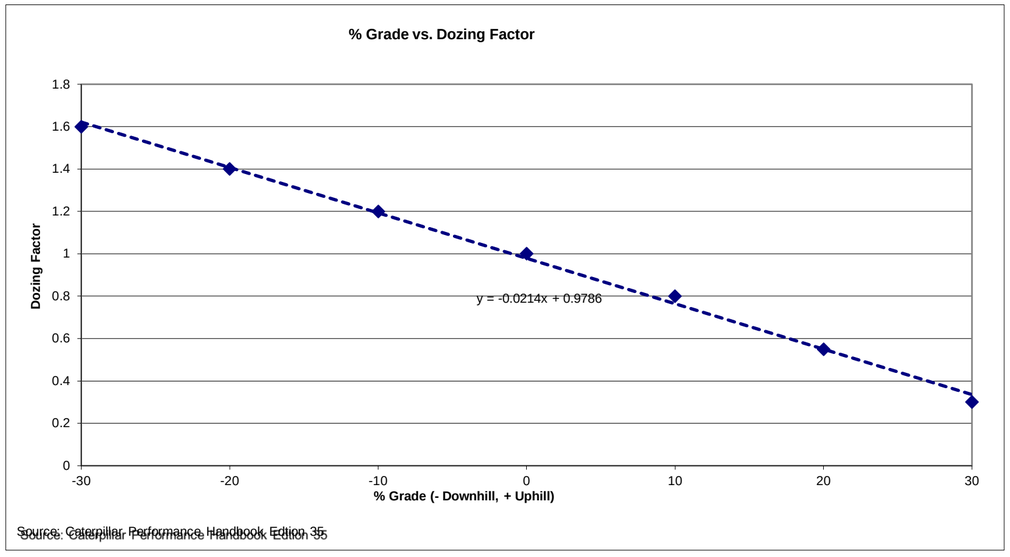
Source: Caterpillar Performance Handbook Edition 35

Dozer Productivity vs. Grading Distance						
Average Dozing Distance (feet)	**Production (LCY/hr)**					
	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 Performance Handbook Edition 35						
dozer productivity = k x Dozing Distance^{p} (see graph)						
k =	185082	81639	89889	115087	22719	101029
p =	-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 Performance Handbook Edition 35	
% Grade Dozing Factor = -0.0214x + 0.9786 (see graph)	



Job Condition Correction Factors - 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/m^3
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 Handbook Edition 35

Note: uses Sand & Gravel - Dry from Caterpillar Handbook

Productivity - Scrapers

Scraper Specifications

Description	631G	637G
Empty Weight	100,600	112,760
Payload Capacity (cy)		
Struck	24	24
Heaped	34	34
Average	29	29
Loaded by	One D10R	Self*
Load Time (min)	1	1
Maneuver and Spread (min)	1	1
Job Efficiency	1	1
Rolling Resistance**	3	3
Altitude Deration Factor	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

Weight of Materials			Downhill Scraper Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)											
			631G						637G PP					
Material	lb/cy	Scraper Load lb	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: Caterpillar Performance Handbook Edition 34

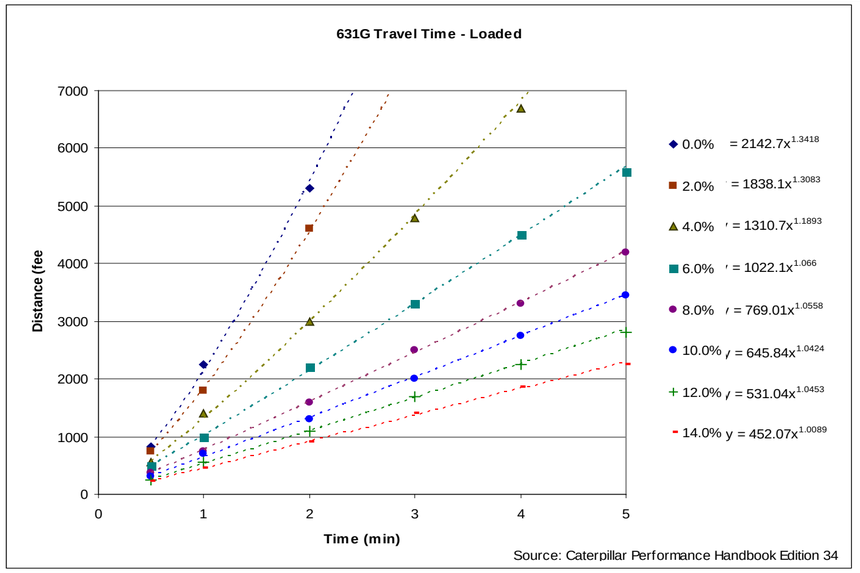
Productivity - Scrapers (cont.)

631G Scraper Travel Time - Uphill Loaded

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
0	825	2,250	5,300				2142.7	1.3418
2	750	1,800	4,600				1838.1	1.3083
4	550	1,400	3,000	4,800	6,700		1310.7	1.1893
6	490	1,000	2,200	3,300	4,500	5,600	1022.1	1.066
8	375	750	1,600	2,500	3,300	4,200	769.01	1.0558
10	300	700	1,300	2,000	2,750	3,450	645.84	1.0424
12	250	550	1,100	1,700	2,250	2,800	531.04	1.0453
14	225	450	900	1,400	1,850	2,250	452.07	1.0089

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

Source: Caterpillar Performance Handbook Edition 35



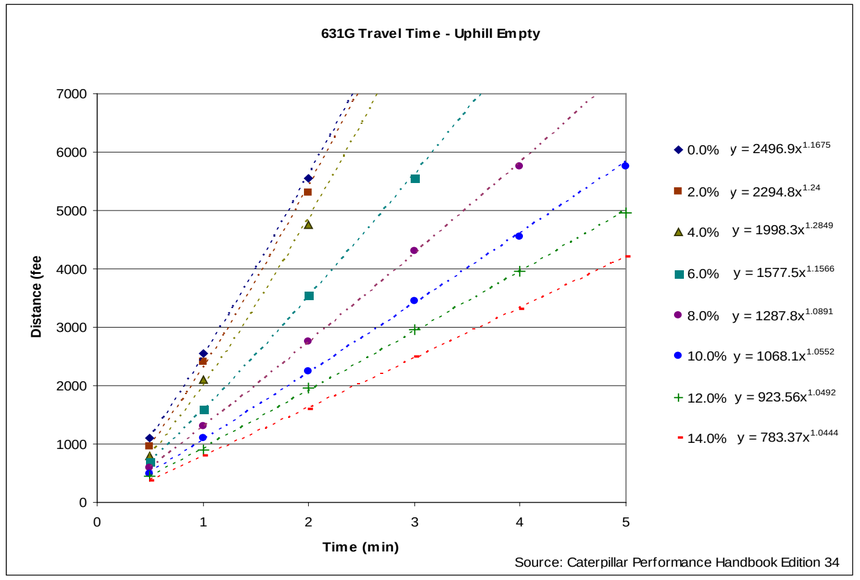
Source: Caterpillar Performance Handbook Edition 34

631G Scraper Travel Time - Uphill Empty

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
0	1,100	2,550	5,550				2496.9	1.1675
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) = $\sqrt[p]{\frac{\text{distance}}{k}}$

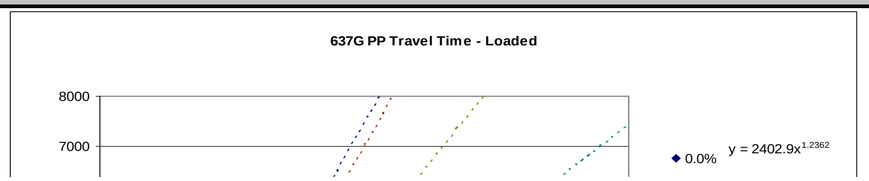
Source: Caterpillar Performance Handbook Edition 35



Source: Caterpillar Performance Handbook Edition 34

Productivity - Scrapers (cont.)

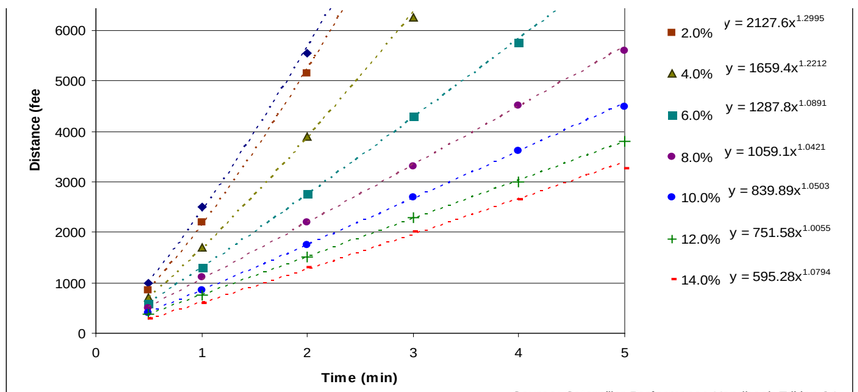
637G Push-Pull Scraper Travel Time - Uphill Loaded



Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
0	1,000	2,500	5,550				2402.9	1.2362
2	850	2,200	5,150				2127.6	1.2995
4	700	1,700	3,900	6,250			1659.4	1.2212
6	600	1,300	2,750	4,300	5,750		1287.8	1.0891
8	500	1,100	2,200	3,300	4,500	5,600	1059.1	1.0421
10	400	850	1,750	2,700	3,600	4,475	839.89	1.0503
12	375	750	1,500	2,300	3,000	3,800	751.58	1.0055
14	275	600	1,300	2,000	2,650	3,250	595.28	1.0794

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

Source: Caterpillar Performance Handbook Edition 35

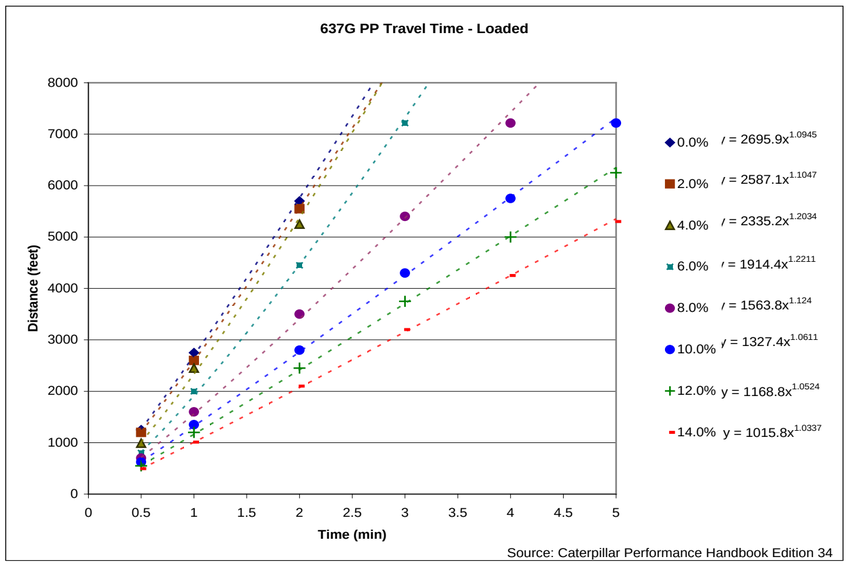


Source: Caterpillar Performance Handbook Edition 34

637G Push-Pull Scraper Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
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) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35



Source: Caterpillar Performance Handbook Edition 34

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	0.88	0.93	0.93	0.86	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

Weight of Materials					Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)														
					769D					773E					777D				
Material	lb/cy	Truck (769D) Load lb	Truck (773E) Load lb	Truck (777D) Load lb	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

Weight of Materials					Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)														
					785C					793C					797B				
Material	lb/cy	Truck (785C) Load lb	Truck (793C) Load lb	Truck (797B) Load lb	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

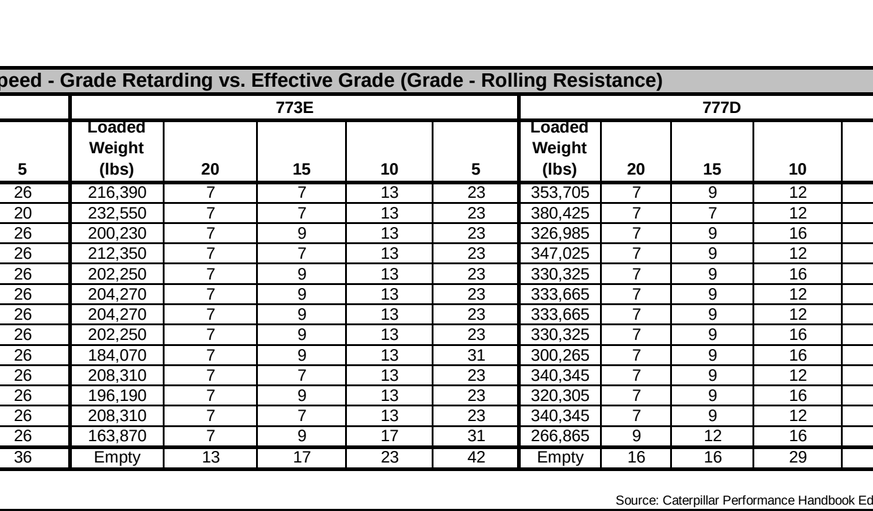
Source: Caterpillar Performance Handbook Edition 35

Productivity - Haul Trucks (cont.)

769D Haul Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
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

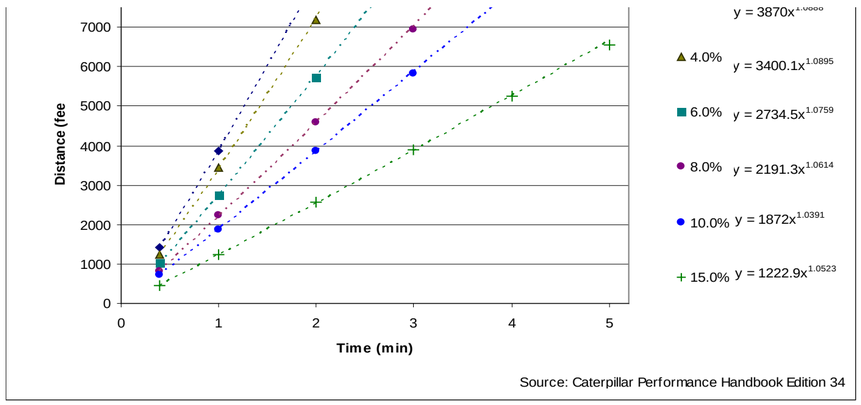


Source: Caterpillar Performance Handbook Edition 34

769D Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
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: Caterpillar Performance Handbook Edition 35



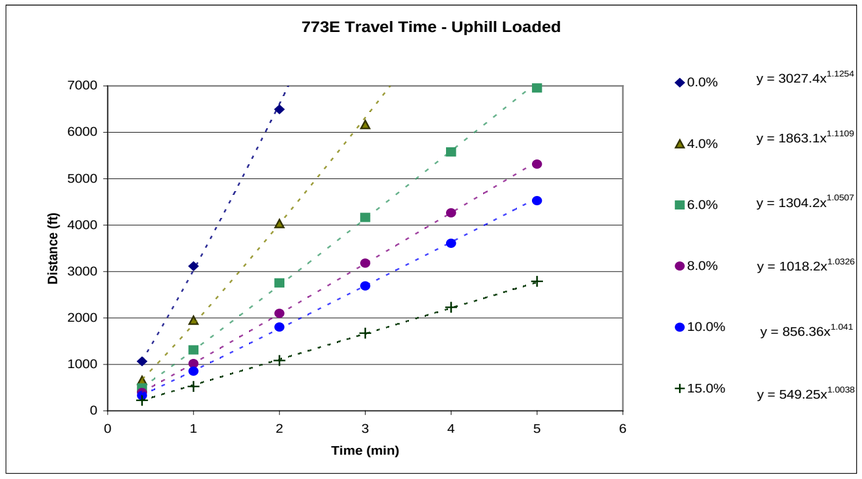
Source: Caterpillar Performance Handbook Edition 34

Productivity - Haul Trucks (cont.)

773E Haul Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
0	1,066	3,117	6,496				3027.4	1.1254
4	656	1,952	4,035	6,168			1863.1	1.1109
6	492	1,312	2,756	4,167	5,577	6,955	1304.2	1.0507
8	394	1,017	2,100	3,182	4,265	5,315	1018.2	1.0326
10	328	853	1,804	2,690	3,609	4,528	856.36	1.041
15	226	525	1,083	1,673	2,231	2,789	549.25	1.0038

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

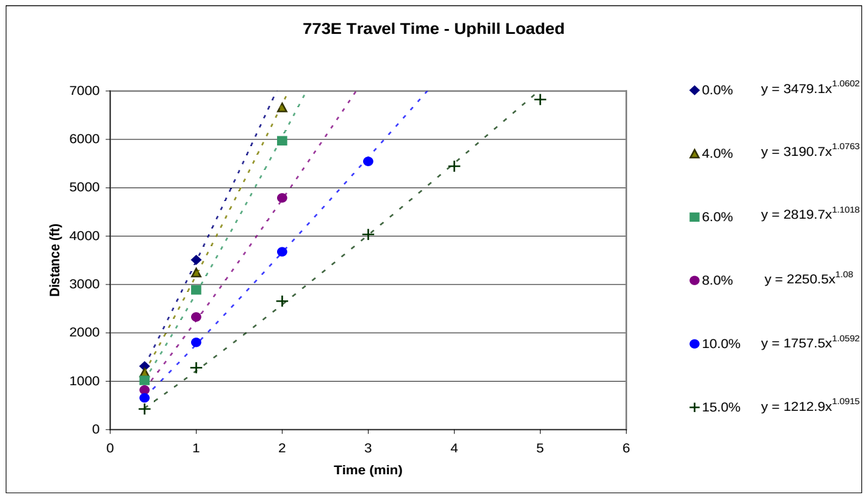
Source: Caterpillar Performance Handbook Edition 35



773E Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
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) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35

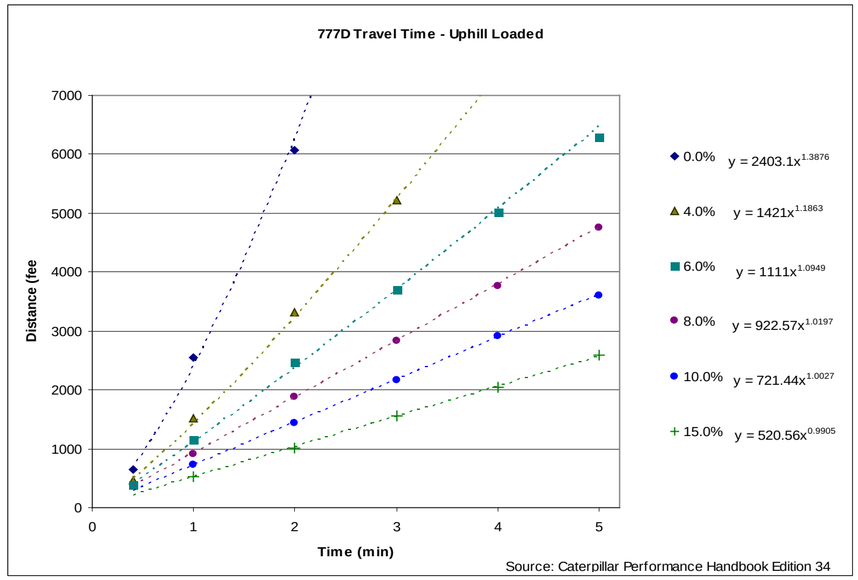


Productivity - Haul Trucks (cont.)

777D Haul Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
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

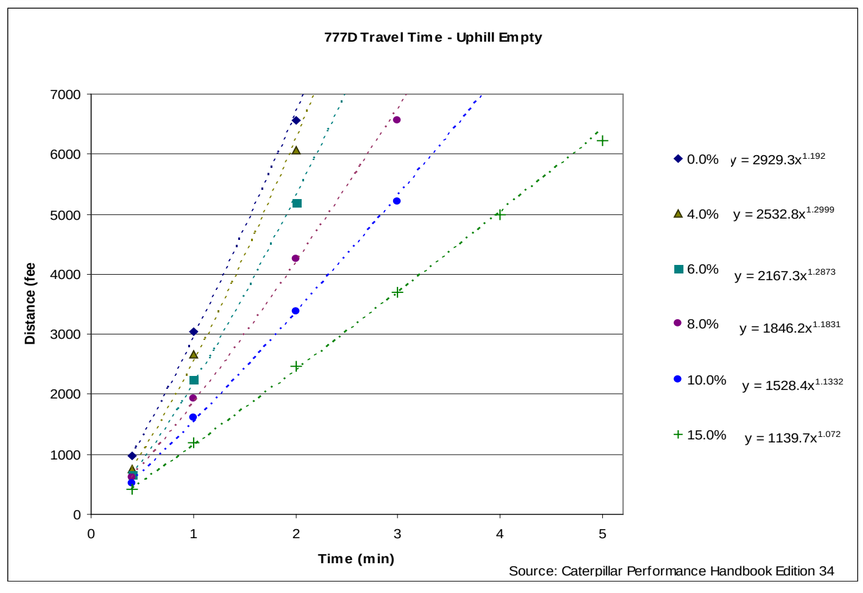


Source: Caterpillar Performance Handbook Edition 34

777D Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
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) = $\sqrt[p]{\frac{\text{distance}}{k}}$

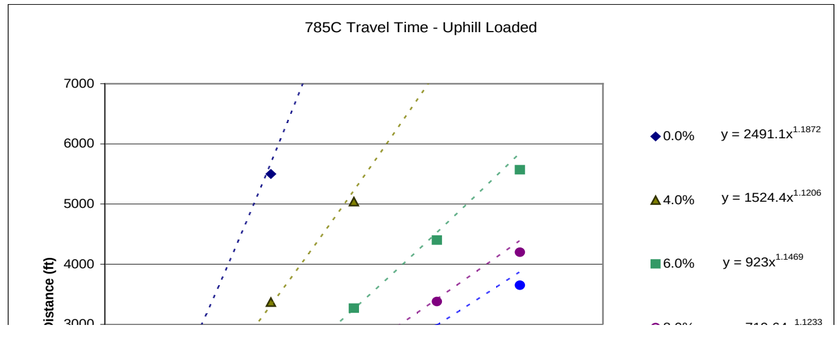
Source: Caterpillar Performance Handbook Edition 35



Source: Caterpillar Performance Handbook Edition 34

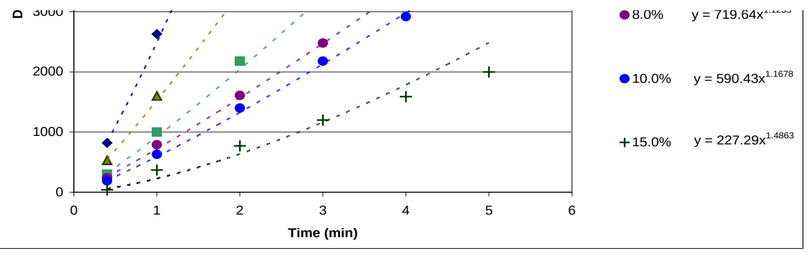
Productivity - Haul Trucks (cont.)

785C Haul Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
0	820	2,630	5,500				2491.1	1.1872
4	530	1,600	3,370	5,040			1524.4	1.1206
6	300	1,000	2,180	3,270	4,400	5,570	923	1.1469
8	240	790	1,610	2,480	3,380	4,200	719.64	1.1233
10	190	630	1,400	2,180	2,920	3,650	590.43	1.1678
15	40	370	770	1,200	1,590	2,000	227.29	1.4863



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

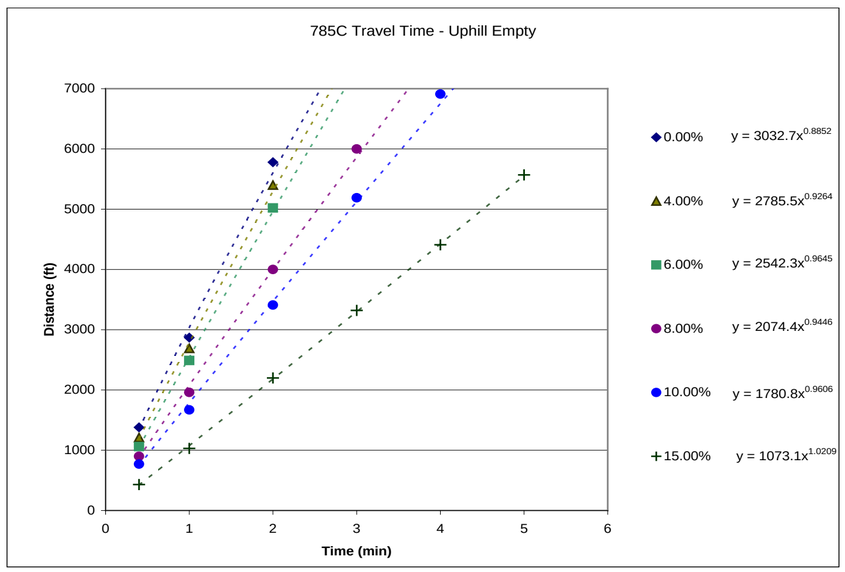
Source: Caterpillar Performance Handbook Edition 35



785C Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.4	1	2	3	4	5		
0	1,380	2,870	5,780				3032.7	0.8852
4	1,210	2,690	5,400				2785.5	0.9264
6	1,060	2,490	5,020				2542.3	0.9645
8	900	1,960	4,000	6,000			2074.4	0.9446
10	770	1,670	3,410	5,190	6,910		1780.8	0.9606
15	430	1,030	2,200	3,320	4,410	5,570	1073.1	1.0209

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

Source: Caterpillar Performance Handbook Edition 35

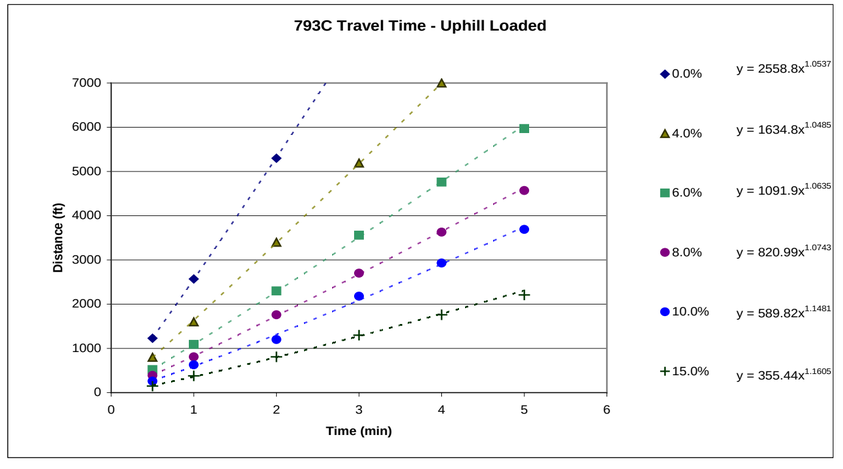


Productivity - Haul Trucks (cont.)

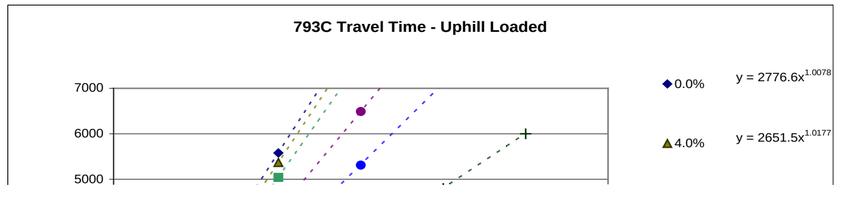
793C Haul Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	1,230	2,570	5,300				2558.8	1.0537
4	800	1,600	3,400	5,190	7,000		1634.8	1.0485
6	520	1,090	2,300	3,560	4,760	5,970	1091.9	1.0635
8	390	810	1,760	2,700	3,630	4,570	820.99	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) = $\sqrt[p]{\frac{distance}{k}}$

Source: Caterpillar Performance Handbook Edition 35



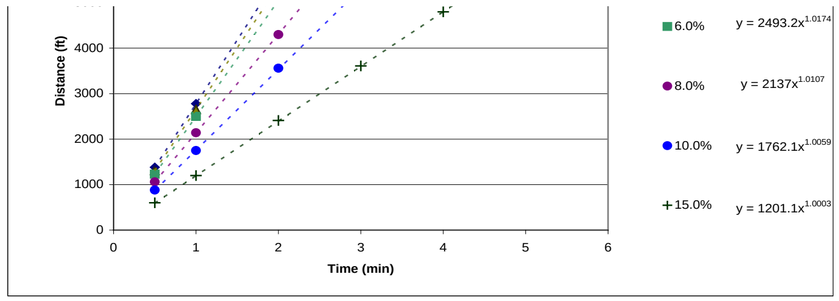
793C Haul Truck Travel Time - Uphill Empty								
Total Resistance (%)	Time (min)							



(rolling + grade)	0.5	1	2	3	4	5	k	p
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) = $\sqrt[p]{\frac{\text{distance}}{k}}$

Source: Caterpillar Performance Handbook Edition 35



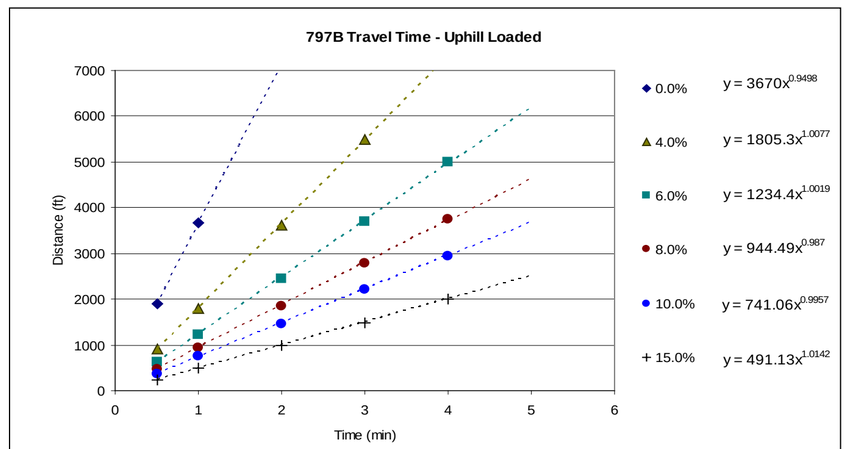
Productivity - Haul Trucks (cont.)

797B Haul Truck Travel Time - Uphill Loaded

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
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

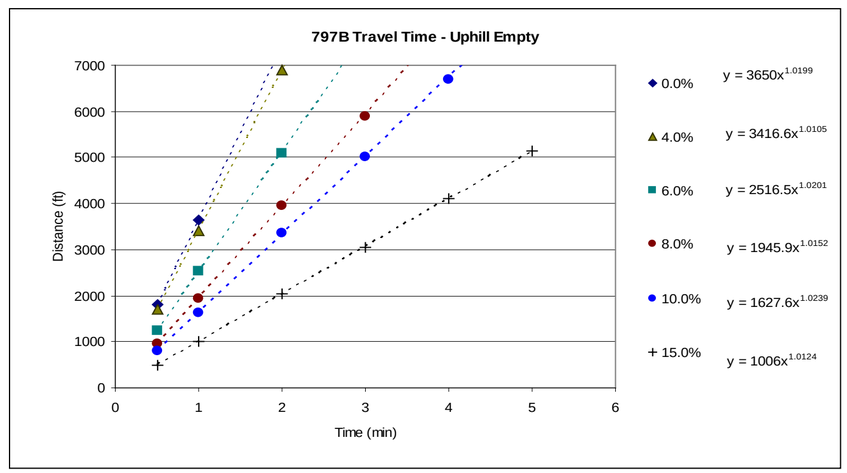


797B Haul Truck Travel Time - Uphill Empty

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
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

Articulated Truck Specifications				
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	0.99	0.99

**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

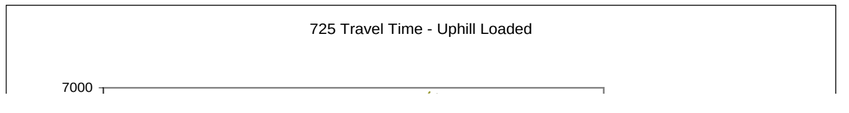
Weight of Materials				Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)									
				725					730				
Material	**lb/cy**	**Truck (725) Load lb**	**Truck (730) Load lb**	**Loaded Weight (lbs)**	**20**	**15**	**10**	**5**	**Loaded Weight (lbs)**	**20**	**15**	**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

Source: Caterpillar Performance Handbook Edition 35

Weight of Materials				Downhill Haul Truck Speed - Grade Retarding vs. Effective Grade (Grade - Rolling Resistance)									
				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 Performance Handbook Edition 35

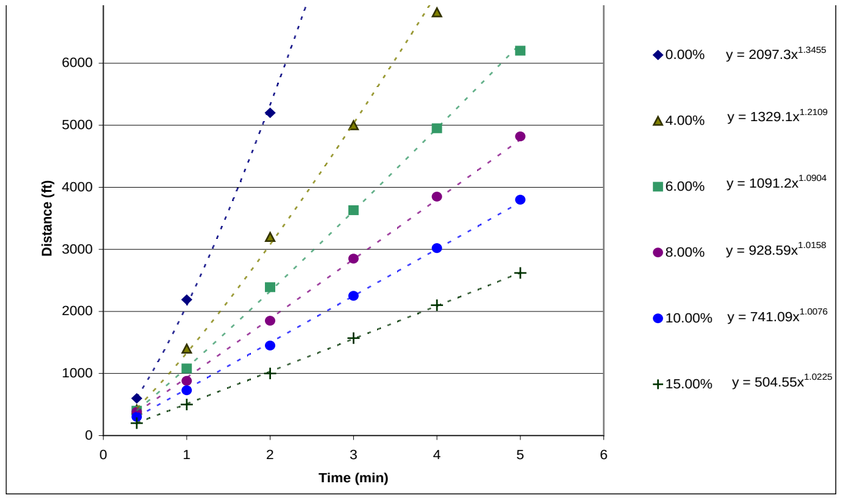
Productivity - Articulated Trucks (cont.)



725 Articulated Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	600	2,190	5,200				2097.3	1.3455
4	420	1,400	3,200	5,000	6,820		1329.1	1.2109
6	400	1,080	2,390	3,630	4,950	6,200	1091.2	1.0904
8	380	880	1,850	2,850	3,850	4,820	928.59	1.0158
10	300	729	1,450	2,250	3,020	3,800	741.09	1.0076
15	200	500	1,000	1,570	2,100	2,620	504.55	1.0225

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

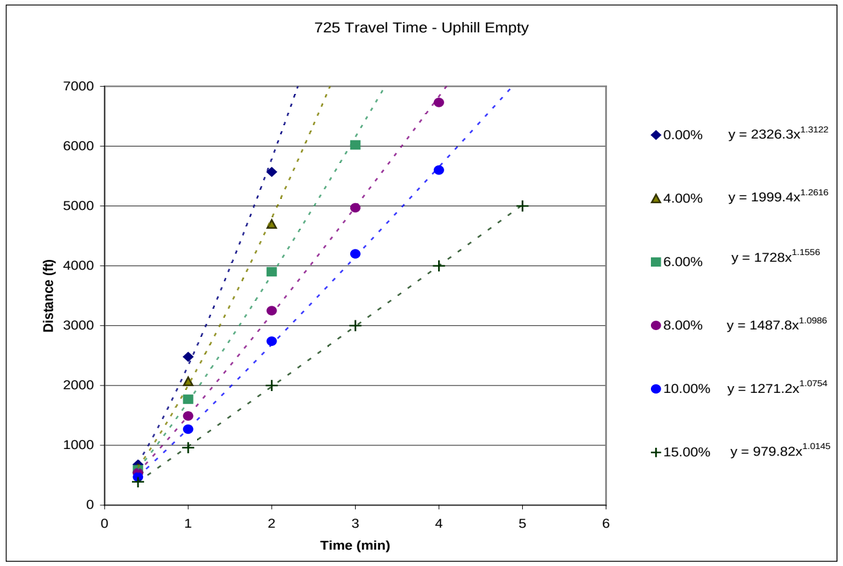
Source: Caterpillar Performance Handbook Edition 35



725 Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	680	2,480	5,570				2326.3	1.3122
4	620	2,070	4,700				1999.4	1.2616
6	590	1,770	3,900	6,020			1728	1.1556
8	540	1,490	3,250	4,970	6,730		1487.8	1.0986
10	470	1,270	2,740	4,200	5,600	7,050	1271.2	1.0754
15	390	960	2,000	3,000	4,000	5,000	979.82	1.0145

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

Source: Caterpillar Performance Handbook Edition 35

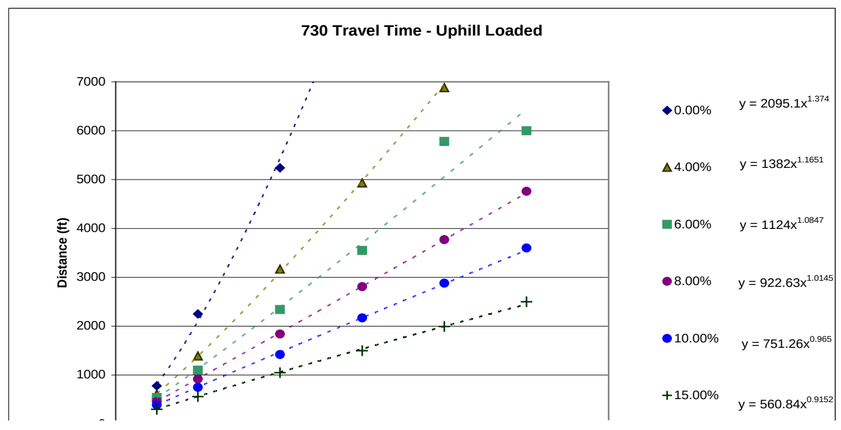


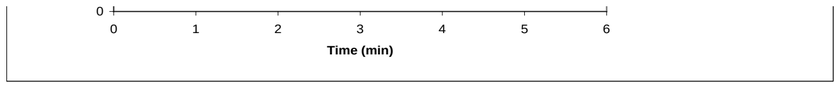
Productivity - Articulated Trucks (cont.)

730 Articulated Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
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

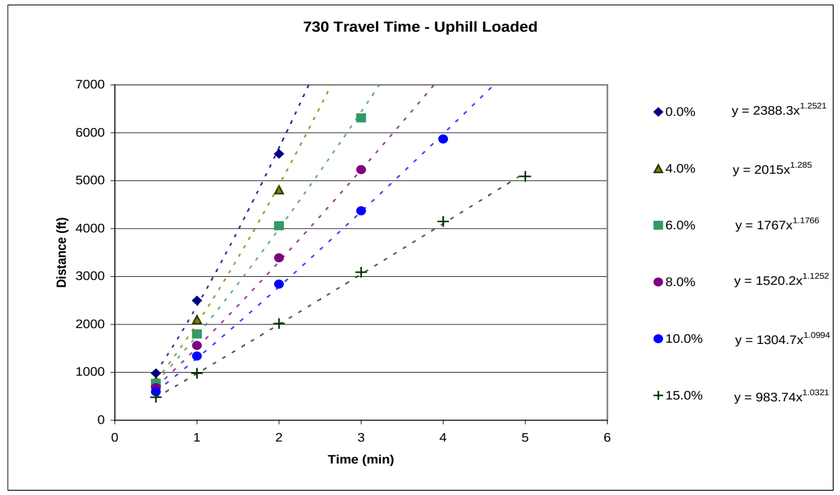




730 Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	980	2,500	5,560				2388	1.25621
4	810	2,100	4,810				2015	1.285
6	770	1,800	4,060	6,310			1767	1.1766
8	680	1,560	3,390	5,230	7,070		1520.2	1.1252
10	595	1,340	2,840	4,370	5,870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

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

Source: Caterpillar Performance Handbook Edition 35

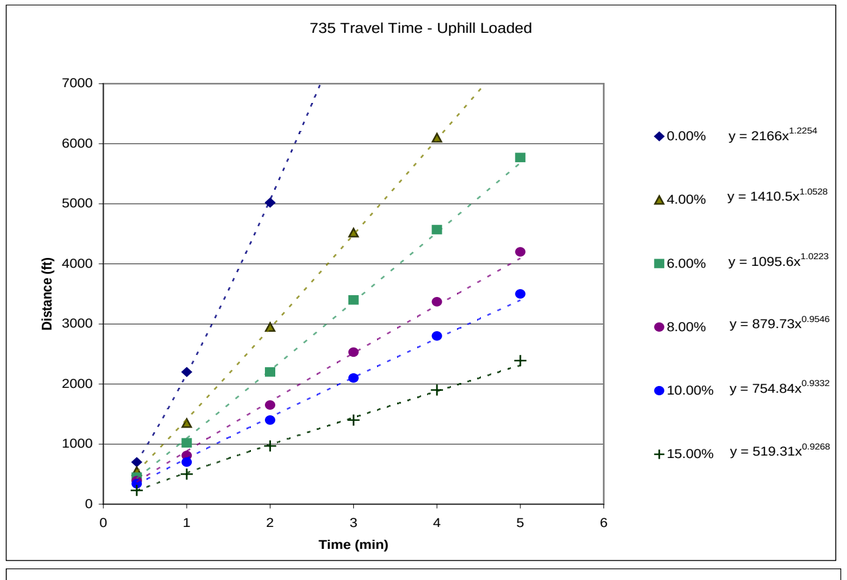


Productivity - Articulated Trucks (cont.)

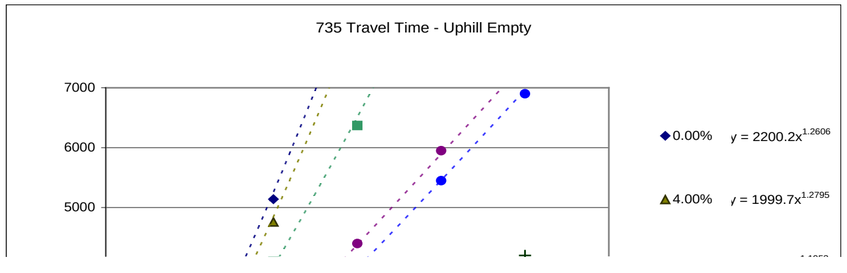
735 Articulated Truck Travel Time - Uphill Loaded								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	700	2,200	5,020				2166	1.2254
4	550	1,350	2,950	4,520	6,100		1410.5	1.0528
6	450	1,020	2,200	3,400	4,570	5,770	1095.6	1.0223
8	390	810	1,650	2,530	3,370	4,200	879.73	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

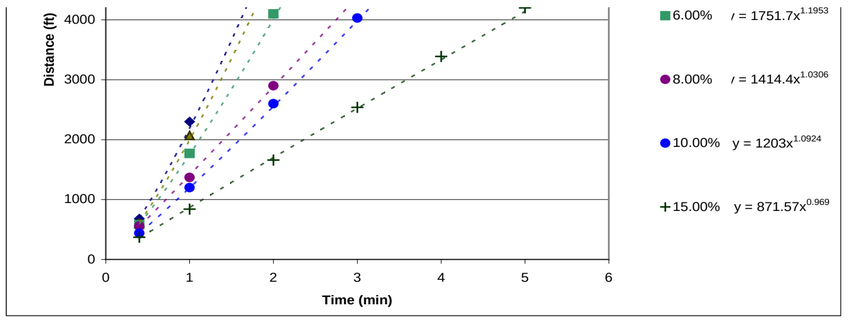


735 Haul Truck Travel Time - Uphill Empty								
Total Resistance (%) (rolling + grade)	Time (min)						k	p
	0.5	1	2	3	4	5		
0	680	2,300	5,140				2200.2	1.2606
4	610	2,070	4,760				1999.7	1.2795
6	580	1,770	4,100	6,370			1751.7	1.1953
8	560	1,370	2,900	4,400	5,950		1414.4	1.0306
10	440	1,200	2,600	4,030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



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

Source: Caterpillar Performance Handbook Edition 35



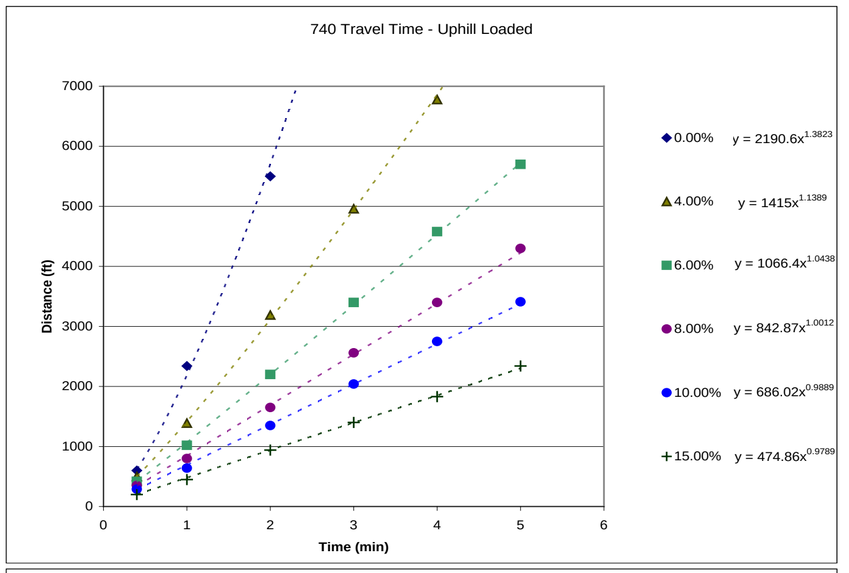
Productivity - Articulated Trucks (cont.)

740 Articulated Truck Travel Time - Uphill Loaded

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
0	600	2,340	5,500				2190.6	1.3823
4	500	1,390	3,190	4,960	6,780		1415	1.1389
6	420	1,020	2,200	3,400	4,580	5,700	1066.4	1.0438
8	350	800	1,650	2,560	3,400	4,300	842.87	1.0012
10	290	640	1,350	2,040	2,750	3,410	686.02	0.9889
15	200	450	940	1,400	1,830	2,340	474.86	0.9789

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

Source: Caterpillar Performance Handbook Edition 35

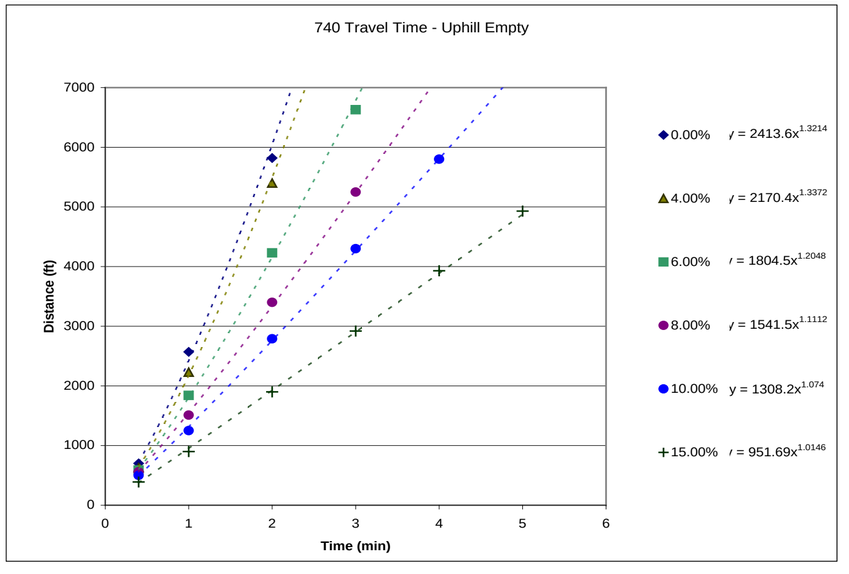


740 Haul Truck Travel Time - Uphill Empty

Total Resistance (%) (rolling + grade)	Time (min) 0.5	1	2	3	4	5	k	p
0	700	2,570	5,820				2413.6	1.3214
4	630	2,230	5,400				2170.4	1.3372
6	590	1,840	4,230	6,630			1804.5	1.2048
8	560	1,510	3,400	5,250	7,120		1541.5	1.1112
10	500	1,250	2,790	4,300	5,800		1308.2	1.074
15	390	900	1,900	2,920	3,930	4,930	951.69	1.0146

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

Source: Caterpillar Performance Handbook Edition 35



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	0.97	0.92	1	0.96	0.77	0.77	0.96	0.85	0.85	0.92	0.93	0.93	0.96	0.96
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	1.44	1.54	1.93	N/A	1.87	1.4	2.02	2.79	3.35	4.03	3.6
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, ie., shot, loose, tight bank, stockpile, rock, etc. Typical Nevada applications were used to determine above bucket capacities as related to materials & densities. Job site specifics may alter specific bucket requirements. (Cashman Equipment, Elko, 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.

Productivity - Motor Graders

Closure Cost Estimate
Productivity

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	0.96	0.98	0.98	0.98
Hourly Production (with job efficiency correction & altitude deration factors) (excluding manuever time)	6,311	6,442	6,442	6,442
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

Source: Caterpillar Performance Handbook Edition 35

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 clay	hard clay	hard clay	hard clay	hard clay
Job Condition	med-hard	med-hard	med-hard	med-hard	med-hard	med-hard	med-hard
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	0.78	0.83	1	1	0.93	0.86	0.85
Corrected Productivity (LCY/hr)	113	254	398	369	447	591	795
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	154	249	N/A	298	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)	39	52	88	82	173	233	166

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
Bucket capacity and width dictated by material weight and configuration, ie., shot, loose, tight bank, stockpile, rock, etc. Typical Nevada applications were used to determine above bucket capacities as related to materials & densities. Job site specifics may alter 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	0.93	0.85

Source: Caterpillar Performance Handbook Edition 35

Drill Hole Plugging Productivity

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

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

Sournce: WDC Exploration, Dec 2005

Cuttings Placement Productivity		
Shift productivity (Means 02210-700-0120; Crew B11M)	28	cy / shift
Shift length	8	hours
Estimated Hourly Productivity	3.5	cy / hour

Altitude Deration Table

	Elevation											
	0-760 m (0-2500')		760-1500 m (2500-5000')		1500-2300 m (5000-7000')		2300-3000 m (7500-10,000')		3000-3800 m (10,000-12,000')		3800-4600 m (12,500-15,000')	
MODEL	**CAT**	**User**	**CAT**	**User**	**CAT**	**User**	**CAT**	**User**	**CAT**	**User**	**CAT**	**User**
Bulldozers												
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		77	
D9R	100		100		100		93		85		77	
D10R	100		100		100		100		97		89	
D11R	100		100		100		93		85		77	
Wheeled Dozers												
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	
Graders												
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	
Excavators												
312C	100		100		100		83		78		73	
320C	100		100		90		87		83		76	
325C	100		100		100		100		100		100	
330C	100		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	

Closure Cost Estimate
Productivity

Scrapers												
631G	100		100		100		100		97		90	
637G	100		100		100		95		87		80	
Loaders												
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	
Shovels												
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	
Other Equipment												
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												
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												
Trucks												
725	100		100		100		100		100		95	
730	100		100		100		100		100		95	
735	100		100		100		100		99		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	
621E (8,000 gal) Water Wagon	100		100		100		100		97		90	
777D Water Truck	100		100		100		100		93		87	
785C Water Truck	100		100		100		93		86		80	
Dump Truck (10-12 yd^3) (5)												

Notes:
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: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Seed Mixture

Common Name	Scientific Name	Species Number of Seeds / lb	Species % in Mix	PLS/acre	Cost/Lb	Cost/Acre
Grasses						
Forbs						
Shrubs						
Total				**$0.00**		**$0.00**

Source:

Notes:

Closure Cost Estimate
User 2

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

DISTURBANCE SUMMARY

Description	Total Regrade or Haul Volume cy	Total Cover Volume cy	Total Growth Media Volume cy	Total Surface Area acres
Waste Rock Dumps	11,936,017		1,354,516	1,679
Tailings Impoundments				
Heap Leach Pads	5,667,906		973,655	1,207
Open Pits		0	0	
Quarries & Borrow Pits				
Roads		0		
Landfills				
Buildings		65,252		12
Yards			1,154,340	1,550
Ponds	166,414	0	9,383	12
Exploration Roads		0		
Exploration Trenches		0	0	
Diversion Ditches	0	0	0	
Sediment Ponds			0	
Generic Haulage/Backfill Waste Dumps				0
Generic Haulage/Backfill Heap Leach Pads	24,884,419	0	0	0
Adit/Decline Backfilling1		0	0	0
Shaft Backfilling		0	0	0

these cells are linked to 'reclamation quantities' tab in SRCE

		Acres
Foundations/Buildings Demo	17,020,302	cubic feet
Drainage & Sediment Control-Diversion Ditches Excavation/Revegetation		cubic yards

	Number of
mob/demob	1
Other Demolition	1
Tank Demolition	0
equipment removal	0
substations	0
surplus water disposal	1
heaps	2
tails	0

	total unit
Exploration Hole Abandonment	0
Production Well Abandonment	0
Monitor Well Abandonment	71
misc. cost- Fence removal (feet)	12285
misc. cost- Fence installation (feet)	22542
misc. cost- culvert & buried pipe removal (feet)	0
misc. cost- surface pipe removal (feet)	44904
misc. cost- powerline & substation removal (miles)	9.13
misc. cost- rip-rap & rock lining (area S.Y.)	
monitoring-reclamation monitoring & maintenance	1
monitoring-water quality monitoring	1
liquid waste disposal (gallons)	0
solid waste disposal (cuyds)	0
tire disposal (number of)	50

Tree Planting (number of)	2,033

these cells are linked to respective tabs in SRCE to get quantities

Closure Cost Estimate
User 3

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Weed Treatment

Cost Per Year	$35,000	Weed Treatment 5 Years	$175,000

Closure Cost Estimate
User 8

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Closure Cost Estimate
User 10

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Rinsing Cost Rate Update Summary - VLF1

Inputs			
Item	**Unit**		**Source**
VLF	Tons	371,890,097	BP19
water	$ Gallon	$0.00323	From Water Specialist 3/4/2019 for BP2020
KWH	$	$0.12	BP2020
Cost of H2O2	$/per gallon	$3.36	BP19 + 3%
Operator	$/hr.	$55.95	SRCE_Cost_Data_file_2020BP
Mechanic	$/hr.	$57.46	SRCE_Cost_Data_file_2020BP
Pump maintenance	$/month	$14,689	Process Maintenance 4/2019
Generator maintenance	$/month	$773	Steffens + 3%
drip irrigation supplies	$/month	$20,600	Steffens + 3%
Support vehicle	$/month	$618	Steffens + 3%

Assumptions			
Item	**Unit**		**Source**
Density	tons/cy	1.485	Process Ops/Steffens
pore volume	%	30	From Process Ops
Barren & Preg Pu	GPM	15,000	From Process Ops
Barren & Preg KV	KWH /day	123,193	From Process Ops Budget option 1B scalled to 15,000gpm
Make up water	GPM	900	from Steffens verfied by Process Ops

Outputs		
Item	**Unit**	
Cubic Yards	yards	250,431,042
Rinse Volume	Yards	75,129,313
Rinse Volume	Gallons	15,175,144,449
One Rinse Cyle Time	Day	703
One Rinse Cyle Time	30-day Month	23
All Rinse Time	Day	2108
All Rinse Time	30-day Month	70
All Rinse Time	Years	5.85
First Rinse	$	$20,843,995
Second Rinse	$	$20,843,995
Third Rinse	$	$19,603,000
All three Rinses	$	$61,290,991
Discount for 1st Operational Rinse	$	$40,446,996

							First Rinse	Second Rinse	Third Rinse
Item	**Quantity**	**Unit**	**Assumptions**	**Equipment**	**Labor**	**Materials**	**Total**	**Total**	**Total**
Make up water	**900**	**Gallons**				**$2,940,943**	**$2,940,943**	**$2,940,943**	**$0**
Barren& Preg Power Cost	123,193	KWH day				$10,385,953	$10,385,953	$10,385,953	$10,385,953
H2O2	362,000	Gallons				$1,215,524			$1,215,524
Drip Irrigation supplies	23.41843279	Month				$482,419.72	$482,420	$482,420	$482,420
Operators	12	Per 24 hour	12 hour shift		$5,660,329		$5,660,329	$5,660,329	$5,660,329
Mechanics	2	Per 24 hour	12 hour shift		$968,849		$968,849	$968,849	$968,849
H202 Mechanic	1	Per 12 hour	12 hour shift		$484,424				$484,424
Pump Maintenance	23.41843279	Month		$343,993			$343,993	$343,993	$343,993
Generator Maintenance	23.41843279	Month		$18,091			$18,091	$18,091	$18,091
Support Vehicle	3	Each		$43,418			$43,418	$43,418	$43,418

First and Second Rinse

			First Rinse	Second Rinse	Third Rinse
Equipment	**Labor**	**Materials**	**Total**	**Total**	**Total**
$811,004	$13,742,779	$25,893,212	$20,843,995	$20,843,995	$19,603,000

	Equipment	**Labor**	**Materials**
All Rinses	$1,216,506	$20,371,957	$39,702,528

Closure Cost Estimate
User 11

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Rinsing Cost Rate Update Summary - VLF2

Inputs			
Item	**Unit**		**Source**
VLF	Tons	252,000,000	BP19 + 44MT (Phase 3)
water	$ Gallon	$0.00323	From Water Specialist 3/4/2019 for BP2020
KWH	$	$0.12	BP2020
Cost of H2O2	$/per gallon	$3.36	BP19 + 3%
Operator	$/hr.	$55.95	SRCE_Cost_Data_file_2020BP
Mechanic	$/hr.	$57.46	SRCE_Cost_Data_file_2020BP
Pump maintenance	$/month	$14,689	Process Maintenance 4/2019
Generator maintenance	$/month	$773	Steffens + 3%
drip irrigation supplies	$/month	$20,600	Steffens + 3%
Support vehicle	$/month	$618	Steffens + 3%

Assumptions			
Item	**Unit**		**Source**
Density	tons/cy	1.485	Process Ops/Steffens
pore volume	%	28	From Process Ops
Barren Pump Fl	GPM	16,500	From Process Ops
Barren KWH	KWH /day	67,608	From Process Ops Budget
Preg Pump flow	GPM	16,500	From Process Ops
Preg Pump KHW	KWH /day	7159	From Process Ops Budget
Make up water	GPM	900	from Steffens verfied by Process Ops

Outputs		
Item	**Unit**	
Cubic Yards	yards	169,696,970
Rinse Volume	Yards	47,515,152
Rinse Volume	Gallons	9,597,442,909
One Rinse Cyle	Day	404
One Rinse Cyle	30-day Month	13
All Rinse Time	Day	1212
All Rinse Time	30-day Month	40
All Rinse Time	Years	3.4
First Rinse	$	$9,724,783
Second Rinse	$	$9,724,783
Third Rinse	$	$9,527,931
All three Rinses	$	$28,977,497
Discount for 1st	$	$19,252,714

							First Rinse	Second Rinse	Third Rinse
Item	**Quantity**	**Unit**	**Assumptions**	**Equipment**	**Labor**	**Materials**	**Total**	**Total**	**Total**
Make up water	900	Gallons				$1,690,895	$1,690,895	$1,690,895	$0
Barren Power Cost	67,608	KWH day				$3,277,091	$3,277,091	$3,277,091	$3,277,091
Preg Power costs	7,159	KWH day				$347,011	$347,011	$347,011	$347,011
H2O2	362,000	Gallons				$1,215,524	$0	$0	$1,215,524
Drip Irrigation supplies	13.46442608	Month				$277,367	$277,367	$277,367	$277,367
Operators	12	Per 24 hour	12 hour shift		$3,342,237		$3,342,237	$3,342,237	$3,342,237
Mechanics	2	Per 24 hour	12 hour shift		$557,039		$557,039	$557,039	$557,039
H202 Mechanic	1	Per 12 hour	12 hour shift		$278,520		$0	$0	$278,520
Pump Maintenance	13.46442608	Month		$197,779			$197,779	$197,779	$197,779
Generator Maintenance	13.46442608	Month		$10,401			$10,401	$10,401	$10,401
Support Vehicle	3	Each		$24,963			$24,963	$24,963	$24,963

First and Second Rinse			First Rinse	Second Rinse	Third Rinse
Equipment	**Labor**	**Materials**	**Total**	**Total**	**Total**
$466,287	$8,077,072	$10,709,355	$9,724,783	$9,724,783	$9,527,931

	Equipment	**Labor**	**Materials**
All Rinses	$699,430	$11,976,348	$16,301,718

Closure Cost Estimate
User 18

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Drill Cost Calcuator

- Minimum of five holes are needed to perforate each of the PSSAs liners at the base of all Phases in VLFs.
- Assuming one extra hole for contingency we plan for (six) 1,000 foot holes to be drilled, at a cost of $60/ft = *$360,000*
- Number of casing lengths needed to complete (six) 1,000 ft holes is 6,000/20 = 300 sticks of casing needed. 300*207 = *$62,100*
- **Adding casing and drilling costs = $422,100**
- **If we want contingency of 15% total equals = $485,415**

	2017	2018	BP2020
Cost of drilling VLF liner perforation =	**$485,415**	$495,123	$509,977.00
	$2,017.00	$2,018.00	$2,079
Materials =	$71,415.00	$72,843.30	$75,029
Labor =	$207,000.00	$211,140.00	$217,474
Equipment =	$207,000.00	$211,140.00	$217,474
	$485,415.00	$495,123.30	$509,977

Closure Cost Estimate
User 17

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Closure Cost Estimate
User 16

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Tree and Shrub Cost Calculator

Shrubs and Trees								2015 costs	6% adj to 2017 c	2% adj to 2018 c	adjusted 3% 2019 (BP2020)
Gooseberry Currant				$	6.78	50	per acre	**$ 338.90**	$359.23	$366.42	$377.41
Rosa Woodsii (wild rose)				$	4.11	50	per acre	**$ 205.27**	$217.59	$221.94	$228.59
Englemann Spruce				$	5.82	25	per acre	**$ 145.57**	$154.30	$157.39	$162.11
Bristlecone Pine				$	9.24	25	per acre	**$ 230.93**	$244.78	$249.68	$257.17
						Cost of Shrub/Tree Planting per acre =		**$ 920.66**	$975.90	$995.42	$1,025.28

Closure Cost Estimate
User 15

Project Name: AM-13 BP2020 Financial warranty calculation - Reclamation Plan
Date of Submittal: December 2019
File Name: SRCE_AM13_FW_V4.xlsm
Model Version: Version 1.4.1
Cost Data: User Data
Cost Data File: SRCE_Cost_data-USR_1_12_DRMS_BONDING.xlsm
Cost Estimate Type: Surety Cost Basis: CC&V Bonding

Assumptions: 50% of all tree thinning is already completed in the Globe Hill area by the end of 2017). Schist Island Area comprising of remaining 50% to be cleared.

Source: RS Means 2017

	rent/week	
Feller Buncher	2218.32	
# of weeks	2.571429	(assume 3 weeks rental)
cos/hr rent	46.22	
operating c	43.28	
Skid Steer	736.66	
cos/hr rent	15.35	
operating c	17.82	

3.1 Tree Thinning Cost Estimate

18 days for thinning (assumed) and 8 hours per day in the field
Total Time needed = 8 x 18 = 144 hours with each machine and an operator

Feller Buncher ($46.22/hr machine rental + $50.77/hr operator + $43.28/hr maintenance and fuel) = $140.27/hr * 144 hrs = $20,198 (Source:RS Means, 2017)

Skid Steer (15.35/hr machine rental + $50.77/hr operator + $17.82/hr maintenance and fuel) = $83.94/hr * 144 hrs = $12,087 (Source:RS Means, 2017)

Truck to Haul Trees = (35 Ton Haul Truck(Cat 735) @ $126.97/hr total rate + 50.77/hr operator)= $177.74/hr * 144 hrs = $25,595 (Source: Equipment Costs and Labor Rates tabs)

Road Building and Maintenance (D7 Dozer @$84.78/hr total rate + $50.77 operator)= $135.55/hr * 70 hours = $9,489 (Source: Equipment Costs and Labor Rates tabs)

Supervisor Costs = $78.92/hr for construction supervision of crew * 140 hrs = $11,049 (Source: Labor Rates tab)

Contractor's Thinning Costs = $20,198+$12,087+$25,595+$9,489+$11,049 = $78,418

Oversight and Direction of Field Activities = assume 10% of Contractor's Costs = $7,842

Contingency (assumed to be 15% of Contractor's Costs) = (0.15 x $78,418) = $11,763

Total Tree Thinning Costs = $78,418 + $7,842 + $11,763 = $ 98,023

Tree Thinning

	Equipmt	Labor	Material
	$ 20,198		
	$ 12,087		
	$ 25,595		
	$ 9,489		
	$ 11,049		
Sub-Total	$ 78,418	$ 19,605	$ -
2017 Chk =	$ 98,023		

3.2 Harvesting of Salvageable Trees and Hauling to Nursery (Source: Equipment Costs and Labor Rates tabs, except where noted)

Based on Randy Mandel's experience with similar projects:
3000 Trees Total to be harvested (3000 additional trees will be purchased or dug up elsewhere to make the total of 6000 trees needed)
Dig up trees with a mini-excavator *(not proposing to use a conventional tree spade)*
$5 per tree for containers and supplies like burlap and ties
40 trees can be harvested per day with the mini-excavator and a two man crew
Shipping offsite to a nursery in either Colorado Springs or Canon City for care until needed in reclamation
Mini-excavator (3/4 CY) at $5,616.90/month rental = $5,616.90/ 160 hrs = $35.10/hr +$33.09/hr operating cost = $68.19 total cost (RS Means, 2017)
Operator for excavator @ $50.77/hr
Total cost for mini-ex = $68.19+$50.77= $118.96/hr
3000 trees / 40 trees per day = 75 days x 8 hrs/day = 600 hours
600 hrs x $118.96/ hr = $71,376 for Mini-Ex + operator digging trees
Extra field hand at $50.77/hr for 600 hrs = $30,462 (holding tree & wrapping with burlap)
Flat bedTruck to haul trees at $9.38/hr total cost + $50.77/hr operator = $60.15/hr * 300 hrs= $18,045 (assume truck needed about half-time)
Supervisor cost = $78.92/hr x 600 hrs = $47,352
Supplies @ $5/tree for burlap and plastic containers: 3000 x $5 = $15,000
Contingency figured at 15% of contractor's costs = [$71,376 + $18,045 + $47,352 + $15,000] x 0.15 = $22,766

Therefore the total harvesting cost would be on the order of: $71,376 digging + $30,462 field hand + $18,045 hauling + $47,352
$ 205,001

Harvesting and Hauling Trees

	Equipmt	Labor	Material
	$ 71,376		$ 15,000
	$ 18,045		
	$ 22,766		
Sub-Total	$ 112,187	$ 77,814	$ 15,000
chk =	$ 205,001		

3.3 Maintenance of Trees at Nursery

Assume trees can be "cared for" at a cost of approximately $10 / yr per tree for a total of 4 yrs (arbitrary), then the cost of maintenance would be 3000 trees x $10 / yr x 4 yrs = $120,000.

Total Maint. $ for Harvested Trees at Commercial Nursery : $ 120,000

Nursery Maintenance

	Equipmt	Labor	Material
	$ 80,000	$ 25,000	$ 15,000
Sub-Total chk=	$ 120,000		

3.4 Retrieving Trees from Nursery, Hauling to Site, and Installing Gator Bags (water release), Buying 3000 additional trees from Nursery, Re-planting in Reclaimed Areas (Source: Equipment Costs and Labor Rates tabs, except where noted)

Buying 3000 nursery trees at $27.25/ tree x 3000 trees = $81,750 from Heidrich's Colorado Tree Farm Nursery at wwwcoloradotreefarmnursery.com
Planting rate for trees is 4 trees per hour for salvaged trees and 5 trees per hour for purchased trees.
Therefore, it will take (3000 trees / 4 per hour) + (3000 trees / 5 per hour) = 1350 hours with a 4 man crew and an excavator to dig holes and a truck to haul them to the site.
320C Excavator $59.53/hr total cost + $50.77/hr operator = $110.53/hr
Flat bedTruck to haul trees at $9.38/hr total cost + $50.77/hr operator = $60.15/hr for half the total hours or roughly 700 hours
2 Extra Hands on Ground to Plant and Position Trees @ $50.77/hr
Supervisor @$78.92/hr
20 gallon Gator Bag Cost ($21 each) from Sprinkler Supply Store at www.sprinklersupplystore.com.
Cost Estimate = (3000 new trees x $27.25/tree) + (1350 hrs x $110.53/hr planting) + (700 hrs x $60.15/hr trucking) + (1350 x $101.54 field hands) + (1350 x $78.92 supervisor) + ($21 each gator bags x 6000 trees) + (water truck to charge gator bags at 700 @$50.77/hr) + (cost of water is 0.00287/gal * 1,056,000 gallons) = $681,262
New Trees = $81,750
Planting = $149,216
Trucking = $42,105
Field labor = $137,079
Supervision = $106,542
Gator bags = $126,000
Water Truck = $35,539
Water cost = $3,031
Contingency @15% = ($681,262 x 0.15) = $102,189

Total Tree Planting Cost & Purchasing All Supplies & Watering = $ 783,451

Planting on Reclaimed Areas

	Equipmt	Labor	Material
	$ 149,216	$ 137,079	$ 81,750
	$ 42,105	$ 106,542	$ 126,000
		$ 35,539	$ 3,031
		$ 102,189	
Sub-Total =	$ 191,321	$ 381,349	$ 210,781
chk =	$ 783,451		

4.1 Consultation and Oversight of Tree Planting Effort

Assume a professional will need to be consulted and be in the field a total of 50 days during the required 1350 man-hours for planting to provide guidance and oversight.

Cost of consultation = (50 days x 8 hrs/day x $150/hr labor) + ($250/day x 50 days expenses) = $72,500 **$ 72,500**

Oversight of Planting Effort

	Equipmt	Labor	Material
	$ -	$ 60,000	$ 12,500
Sub-Total =	$ -	$ 60,000	$ 12,500
chk =	$ 72,500		

4.2 Re-planting at 10% of 6000 Trees

Using the above cost per tree for planting and watering for 60 trees (10% of 6000 originally planted) =
60 x $129.98 = $7,799 **$ 7,799**

Re-Planting Effort

	Equipmt	Labor	Material
	$ -	$ 3,032	$ 4,767
Sub-Total =	$ -	$ 3,032	$ 4,767
chk =	$ 7,799		

4.3 Evaluation of Tree Stands, Meetings with DRMS, and Report Preparation

Assume a professional will need 100 hours of additional work time to prepare reports and meet with DRMS in the field to evaluate and explain the tree planting exercise.
100 hours x $150/hour = $15,000 **$ 15,000**

Evaluation, Meetings, and Reports

	Equipmt	Labor	Material
	$ -	$ 15,000	
Sub-Total =	$ -	$ 15,000	$ -
chk =	$ 15,000		

	Equipment	Labor	Materials	Total	Chk Total
Grand Total Viewshed Conservation Plan =	$ 461,926	$ 581,800	$ 258,048	$ 1,301,774	$ 1,301,774
				$ 1,327,809	for 2018 with 2% escalation
				$ 1,367,643.76	3% for BP2020