

MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Parkdale Quarry	M-1997-054	Sandstone (silica, stone,	Fremont
		quartzite), gravel and	
		granite, granite gneiss	
INSPECTION TYPE:	WEATHER:	INSP. DATE:	INSP. TIME:
Monitoring	Clear	January 29, 2025	12:50
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Front Range Aggregates, LLC	Mr. Philip Courtney &	112c - Construction Regular Operation	
	Mr. Chris Scheeley		

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	Complete Bond	\$7,156,889.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
INSPECTOR(S):	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Jocelyn Carter	Jonetto	March 13, 2025

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Financial Warranty

PROBLEM: The financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) of the Act.

CORRECTIVE ACTIONS: The operator shall submit comments to the Division regarding the attached reclamation cost estimate by the corrective action date. If the Division does not receive a response by the corrective action date, the Division will be sending a separate surety increase notice to the operator regarding the increase of the financial warranty. The operator will have 60 days from the date on the surety increase notice to post the additional financial warranty.

CORRECTIVE ACTION DUE DATE: 3/28/25

OBSERVATIONS

The Parkdale Quarry, Permit No. M-1997-054, inspection was conducted by me, Jocelyn Carter, on behalf of the Division of Reclamation, Mining, and Safety (Division/DRMS). Front Range Aggregates, LLC is the permittee for the permit and is a subsidiary of Martin Marietta Materials. Messrs. Philip Courtney and Chris Scheeley were present during the inspection on behalf of the permittee. The weather was clear, and the temperatures were cool.

Parkdale Quarry is located approximately ten miles west of Canon City, Colorado in Fremont County on the north side of U.S. Hwy 50 and just upstream from confluence of the Arkansas River with Tallahassee Creek. The operation mines sand, gravel, and granite for the purposes of construction aggregate. There is a Union Pacific railroad that runs along the south perimeter of the permitted area. There are a couple of spurs of rail that go onto the permitted area for the purposes of loading and transporting material. Several different pieces and types of equipment were on site at the time of the site visit and processing plant was in operation.

As part of this inspection, a complete bond calculation was done to verify the adequacy of the financial warranty. The results of the calculation showed that the currently held bond is inadequate, and a problem is being cited in this report for the financial warranty. Details of the calculation are given below, and details of the corrective action are provided above.

Photos taken during the site visit are included in this report. Questions regarding this inspection report should be directed to me by email at Jocelyn.carter@state.co.us or by phone at (720) 666-1065.

Records

There are no open infractions or enforcement items with this permit. The surface and mineral rights are privately and federally owned. The last inspection was performed August 9, 2021, during the Amendment application (AM-2) that was submitted to the Division May 10, 2021. The approval of AM-2 on December 29, 2021, increased the permitted area by 1,400 acres and the disturbed area by 700 acres. Since the approval of AM-2, the MMM has submitted two Technical Revisions, TR-7 and TR-8. The TR-7 application moved monitoring points of Currant Creek and Tallahassee Creek and was approved on December 16, 2022. The TR-8 application modified the surface and groundwater monitoring plan and was approved on March 1, 2024.

Hydrological Balance

There did not appear to be a disturbance with the hydrologic balance in the area.

General Mine Plan Compliance

The mining operation appeared to be following the approved mining plan.

Signs and Markers

The mine sign at the time of the inspection was not in compliance with Rule 3.1.12(1); the sign did not display the MLRB permit number, see Photo #1. The issue was brought to the attention of Messrs. Courtney and Scheeley during the inspection. Mr. Courtney posted a sign in compliance with Rule 3.1.12(1), to include the permit number and the operator's name, see Photo #2. The monument used to mark the southern permit boundary is a fence and it appeared to be in good condition.

Overburden/Developed Waste

The overburden that is stored on the northwestern portion of the alluvial area appeared stable and in good condition, see Photo #3. Stockpiles are vegetated and situated on the west end of the alluvial pit area.

Acid or Toxic Materials

Fuel is kept on site in a large tank on a concrete pad with fencing surrounding the fuel storage. Spill kits were observed around the mine facilities, and there was no evidence of spills on site, see Photo #9.

Financial Warranty

The current bond held by the Division for this permit is \$7,156,889. An updated reclamation cost estimate (RCE) was calculated as part of this inspection. The calculation was done using the approved current RCE, the currently disturbed areas, and the reclamation activities that have been completed according to the 2025 annual report. According to the calculation, the required financial warranty for this permit is \$8,855,791, an increase of \$1,698,902; the currently held amount is no longer adequate. A problem is being cited in this report regarding the financial warranty and the calculated RCE is attached to this report.

Backfill & Grading

According to the annual map, some areas of the granite pit have been backfilled and graded, the slopes appear stable, with no erosional issues, and vegetation has started to become established, see Photo #6.

Processing Facilities

The process facility was in good condition and running at the time of inspection, see Photo #10.

Fish & Wildlife

There did not appear to be a negative impact on the wildlife in the area.

Stormwater Management Plan

The drainage ditches along the road and berms appeared to be in good condition, see Photo #5.

Erosion/Sedimentation

There were no areas of sedimentation or erosion occurring.

Off-site Damage

No off-site damages were observed to be occurring or were at risk of occurring.

<u>Roads</u>

The roads appeared to be in good condition, see Photos #3, #5, and #6.

Explosives

A blast plan is approved with the permit. Blasting is done by a third party, Buckley Powder Company, so explosives and blasting equipment are not stored on site. The next planned blast was for the week after the site inspection was conducted.

<u>Topsoil</u>

Topsoil is stockpiled and stored in two areas of the permit. One stockpile is located to the west of the Alluvial Reservoir area and another on the southwest side of the Alluvial Reservoir area. The stockpiles appeared to be stable, well vegetated, undisturbed, and adequate for reclamation activities, see Photo #3.

Revegetation

There did not appear to be any noxious weeds growing on the permit site. Fremont County does spray the area for noxious weeds.

PERMIT #: M-1997-054 INSPECTOR'S INITIALS: JLC INSPECTION DATE: January 29, 2025

PHOTOGRAPHS



Photo #1: Mine sign showing the operation name.



Photo #2: A corrected mine sign posted after the site visit on a fence along the entrance road for the site with the remaining required information required by Rule 3.1.12(1), photo provided by the operator.



Photo #3: Fence marking the permit boundary along the south perimeter, the Union Pacific railroad line can be seen on the other side of the fence. An overburden and topsoil stockpile can be seen on the left side of the internal road.



Photo #4: A view of the alluvial pit reservoir area, looking southwest.



Photo #5: A view of the road north of the alluvial pit reservoir, a drainage ditch can be seen between the road and the berm; looking west.



Photo #6: A view of the granite pit area, looking to the north-northeast. The upper potions are the areas than have been backfilled, graded, and seeded; the lower benches will be blasted and then backfilled and graded as the operator progresses.



Photo #7: A view of the recent remanence of the last blast and the next highwall that will be backfilled; looking to the south.



Photo #8: View of the office structure.



Photo #9: View of facility structures and conex storage containers, an example of a spill kit barrel can be seen between storage containers.



Photo #10: View of the alluvial pit reservoir, looking to the southeast. The active processing area can be seen in the background, a flag is posted on the top of the most recently processed material stockpile and the conveyor.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY PB	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES Y
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>Y</u>	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN <u>NA</u>	(RS) RECL PLAN/COMP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>N</u>	(ST) STIPULATIONS <u>NA</u>
(AT) ACID OR TOXIC MATERIALS <u>Y</u>	(OD) OFF-SITE DAMAGE <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Inspection Contact Address

Mr. Philip Courtney & Mr. Chris Scheeley Front Range Aggregates, LLC C/o MartinMarietta Materials, Inc. Lakewood, CO 80401

Enclosure: Division of Reclamation, Mining, and Safety's Reclamation Cost Estimate

CC: Amy Eschberger, DRMS

COST SUMMARY WORK

Т	ask descrip	otion:						
Site:	Parkdale	Quarry	Pe	rmit Action:	2025 Inspection	Permit/Jol	o#: <u>M1997054</u>	
PF	ROJECT	IDENTIFIC	ATION					
	Task #:	000	State:	Colorado		Abbreviation:	None	
	Date:	2/27/2025	County:	Fremont		Filename:	M054-000	
	User:	JLC						

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
A010	Backfill alluvial pit (Source A: overburden/waste)	SCRAPER1	1	818.79	\$2,236,622
A011	Backfill alluvial pit (Source B: blasted from private granit	TRUCK1	1	1,127.85	\$2,721,160
A012	Place topsoil on 131 acres @ 9" depth	TRUCK1	1	414.02	\$487,939
A013	Reveg 131-Ac Alluvial Pit Area	REVEGE	1	268.00	\$118,438
AR10	Rip pit floor for 90% of liner	RIPPER	1	160.53	\$77,413
AR15	Recompact ripped reservoir floor	COMPACT	1	23.27	\$11,128
AR20	Transport/place 90% reservoir liner from alluvial pit floor	SCRAPER1	1	189.09	\$395,093
AR22	Transport/place 10% reservoir liner from onsite stockpile	SCRAPER1	1	12.96	\$22,559
E100	Backfill 4,000 ft of benches not concurrently reclaimed	TRUCK1	1	138.65	\$162,684
E105	Hydroseed 4,000 ft of benches not concurrently reclaimed	REVEGE	1	8.00	\$8,979
E110	Rip pit floor of Phase 1	RIPPER	1	34.32	\$16,628
E112	Construct drainage channels - Remove blasted material	TRUCK1	1	24.82	\$30,842
E115	Topsoil pit floor of Phase 1 (9 inches)	TRUCK1	1	70.97	\$83,637
E120	Reveg pit floor of Phase 1	REVEGE	1	50.00	\$46,535
G100	Backfill 1,000 ft of benches not concurrently reclaimed	TRUCK1	1	25.68	\$34,528
G105	Hydroseed 1,000 ft of benches not concurrently reclaimed	REVEGE	1	4.00	\$2,362
G110	Rip existing granite pit floor	RIPPER	1	26.28	\$12,734
G115	Topsoil existing pit floor (9 inches x 23.14 Ac)	TRUCK1	1	61.42	\$85,469
G120	Reveg existing granite pit floor	REVEGE	1	40.00	\$35,637
SW01	Sitewide cleanup - 151 hrs of Compactor work	COMPACT	1	151.18	\$14,370
SW02	Sitewide cleanup ~\$215/hr grader	GRADER	1	150.31	\$32,275
SW03	Sitewide cleanup D7 dozer	DOZERGRA DER	1	151.00	\$31,375
SW04	Sitewide cleanup Water Truck	MISCTRUK	1	151.00	\$26,840
SW99	Mob/Demob equipment	MOBILIZE	1	14.38	\$85,753
WG0	Demo plant concrete support structures &	DEMOLISH	1	12.00	\$12,593
2	conveyor				
WG0 4	Scarify compacted ground	RIPPER	1	36.16	\$17,517
WG0 5	Replace topsoil (6 in x 26 Ac)	TRUCK1	1	42.95	\$57,992

WG0 6	Seed and Mulch plant area	REVEG	iE 1	50.00	\$49,024
A014	Soil Testing for Fertilizer Assessment (LS)	NA	1	2.00	\$1,500
AR21	Purchase, deliver FOB offsite 6,600 CY clay (\$7/ton @1.8T/C)	NA	1	0.00	\$83,160
E111	Construct drainage channels - Blasting (LS: 9,778 CY @ \$1.40	NA	1	80.00	\$13,689
		3	<u>SUBTOTALS:</u>	4339.63	\$7,016,475

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02		Total =	\$141,733
Performance bond:	1.05		Total =	\$73,673
Job superintendent:	2,169.82		Total =	\$172,001
Profit:	10.00		Total =	\$701,648
			TOTAL O & P =	\$1,089,055
	CONT	RACT AMOUNT	(direct + O & P) =	\$8,105,530
LEGAL - ENGINEERING - PROJECT MANAGEMENT: Financial warranty processing (legal/related costs): \$500 Total = Engineering work and/or contract/bid preparation: 4.25 Total = Reclamation management and/or administration: 5.00 Total =				\$500 \$344,485 \$405,276

CONTINGENCY: 0.00

Total =	\$0	
---------	-----	--

TOTAL INDIRECT COST = \$1,839,316

<u>Task Outline</u>		
Axxx	Alluvial Pit Area	5 tasks
ARxx	Alluvial Pit Reservoir	5 tasks
E1xx	Expansion Area	7 tasks
Gxxx	Granite Pit Area	5 tasks
SWxx	Sitewide Cleanup	5 tasks
WGxx	Wash Plant Removal	4 tasks

Scraper Worksheet Cont'd

Task # A010

Page 1 of 2

SCRAPER TEAM WORK

Site: Parkdale Quarry		Permit	Action:	2025 Inspection	Peri	mit/Job#: <u>M199</u>	7054
PROJECT IDEN			~ 1 1			• .• • • •	
Task #: <u>A010</u> Date: <u>2/27/20</u>			Colorado Fremont			viation: <u>None</u> ename: A010	
User: JLC		unty. <u>1</u>	Temont		111		
Agency or o	organization name:	DRM	S				
HOURLY EQUIP	'MENT			COSTSI	hift basis: <u>1 per d</u>	ay	
			Equipm	ent Description			
		Scraper:	Cat 63'	7G			
Sunna	rt Equipment -Loa	-Dozer:	Cat D9 NA	T - 9SU			
Suppo	1 1	p Area:		T - 9SU			
Road Ma	intenance – Motor	Grader:	CAT 1	4M			
	-Water	Truck:	Water '	Tanker, 7,000 Gal			
Cost Breakdown:	Scraper Wor	rk Team		Support Equip	oment	Maintenance	Equipm
<u></u> .	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Wate
%Utilization-machine:	100		100	NA	100	100	
Ownership cost/hour:	\$329.66	\$2	253.16	NA	\$253.16	\$129.81	
Operating cost/hour:	\$347.48	\$	164.35	NA	\$164.35	\$89.13	
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Ripper op. cost/hour:	NA		\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour:	\$30.90		\$38.59	NA	\$38.59	\$27.76	
Unit Subtotals:	\$708.04	\$	456.10	NA	\$456.10	\$246.70	
Number of Units:	2		1	0	1	1	
Group Subtotals:	Work:	\$1,87	2.18	Support:	\$456.10	Maint:	\$4
Total work team cost	/hour: <u>\$2,731.61</u>						
MATERIAL QUA	ANTITIES						
Initial volume:	550,000		CCY	Swell fact	or: 1.250		
Loose volume:	687,500		LCY				
Sou	rce of estimated vo	olume:	AM-2, E	Exh L, p. 7			
	of estimated swell f		Cat Han				
HOURLY PROD	<u>UCTION</u>						
				Scraper Bo	owl (volume) Bas	is:	
Material weight:	2,650 lbs/LCY			Struck	Volume: 24.00	L	CY
Material description:	Decomposed roc	k - 25% F	Rock,	Heaped '		L	CY
1							
Rated Payload:	75% Earth 81,600 pounds			Average	Volume: 29.00	т.	CY

<u>0.60</u> Minutes

0.60 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5800 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	-5.00	5.00	0.00	2965	0.84

Haul Time: **0.84** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	5.00	5.00	10.00	1476	1.40

Return Time:	1.40	minutes
Total Scraper team cycle time:	3.44	minutes
Adjusted for job conditions:	419.83	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	839.65	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	839.65	LCY/Hour

Unadjusted unit production/hour: 505.81 LCY/Hour Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	818.79	Hours
Unit cost:	\$3.253	_ /LCY	Total job cost:	\$2,236,622	

TRUCK/LOADER TEAM WORK

PROJECT IDENTIFICATION Task #: A011 State: Colorado Date: 227/2025 County: Fremont User: ILC Filename: A011 User: ILC Support organization name: DRMS HOURLY FOUPMENT COST Shift basis: 1 per day Support Equipment Coad Area: NA Support Equipment Coad Area: NA Norther Maintenance (CAT 990H) Support Equipment Coad Area: NA Support Equipment Coad Area: NA NA -Dump Area: Cat 975 - StU Road Maintenance -Motor Grader Cat 160M -Water Truck: Outer Tanker, 7,000 Gal. Water Tanker, 7,000 Gal. Maintenance Equipment Motor Grader Maintenance Equipment Water Truck/Loader Team Support Equipment Water Tanker, 7,000 Gal. On Support Equipment Na (A NA NA 0 Na (A NA NA Support Sup	Task description: Site: Parkdale Quart			on: 2025 Inspec		Permit/Job#: M	1997054
Task #: <u>A011</u> State: <u>County:</u> <u>Fremont</u> Abbreviation: <u>None</u> User: <u>JLC</u> County: <u>Fremont</u> Filename: <u>A011</u> Agency or organization name: <u>DRMS</u> HOURLY EQUIPMENT COST Shift basis: <u>Lper day</u> <u>Equipment Description</u> Truck Loader Team -Truck: Cat 775H <u>Cat 790H</u> Support Equipment Load Area: NA	one. <u>I arkuan Quari</u>	J	i ennit i teti	on. <u>2023 mspee</u>			1777054
Date: 227/2025 County: Fremont Filename: A011 User: ILC	PROJECT IDEN	NTIFICATION	<u>[</u>				
User: ILC				ado	Ab		
Agency or organization name: DRMS Shift basis: 1 per day Guipment Description Truck Loader Team Truck: Cat 775F -Loader: CAT 790H		2025	County: Fremo	ont		Filename: A0	11
HOURLY EQUIPMENT COST Equipment Description Truck Loader Team -Truck: Cat 775F Loader: CAT 990H Support Equipment - Load Area: NA -Dump Area: Cat DDT - 9SU Road Maintenance -Motor Grader: CAT 160M							
Equipment Description Equipment Description Cat 775F Cat 757F Cat 7590H Support Equipment -Load Area: Name Cat DST - 9SU Road Maintenance -Motor Grader: Cat T160M Water Truck: Water Truck: Water Truck: Water Truck: Water Truck Water Truck: Water Truck: Water Truck: Water Truck: <	Agency of	r organization nar	me: DRMS				
Truck Loader Team -Truck: Cat 775 fr -Loader: Support Equipment - Load Area: NA -Dump Area: Cat D97 - 9SU Road Maintenance -Motor Grader: CAT 160M	HOURLY EQU	IPMENT COST	Γ		Shift bas	is: <u>1 per day</u>	
Image: Support Equipment -Load Area NA -Dump Area: Cat D97 - 9SU Road Maintenance - Motor Grader: CAT 160M -Water Truck: Water Tanker, 7,000 Gal. Cost Breakdown: Truck/Loader Team Truck Load Area Dump Area Motor Grader Truck/Loader Team Support Equipment Maintenance Equipment %Utilization-machine: 100 100 NA 100 100 Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA \$30.00 \$000 \$00 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA \$0.00 NA \$0.00 \$0.00 \$00 Operating cost/hour: NA \$0.00 NA \$20.00 \$00 \$10 \$10 <td< td=""><td></td><td>T 1 T 1 T</td><td></td><td></td><td>ption</td><td></td><td></td></td<>		T 1 T 1 T			ption		
Support Equipment -Load Area: -Dump Area: NA Cat D9T - 9SU Road Maintenance -Motor Grader: CAT 160M		Truck Loader Tea					
Road MaintenanceMotor Grader: Water Truck: CAT 160M Water Tanker, 7,000 Gal. Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipmer %Utilization-machine: 100 100 NA 100 100 Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$253.16 \$104.47 \$73 Operating cost/hour: NA 0 NA NA NA \$82.9 %Utilization-riper: NA 0 NA \$80.00 \$80 \$83.9 %utri Subtotals: \$24.75 \$22.24 \$36.85 NA \$38.59 \$27.76 \$00 Unit Subtotals: \$24.775 \$22.291 NA \$456.10 Maint: \$371.34 Total work team cost/hour: \$1.605.85	Supp	oort Equipment -I					
-Water Truck: Water Tanker, 7,000 Gal. Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipmer %Utilization-machine: 100 100 NA 100 100 %Utilization-machine: 100 100 NA 100 100 %Utilization-machine: 101 100 NA 100 100 0wnership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA \$73 Ripper op. cost/hour: NA \$0.00 NA \$80.00 \$0.00 \$00 Operator cost/hour: \$25.24 \$36.85 NA \$38.59 \$27.76 \$00 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td>			1				
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment Wotor Grader Truck Load Area Dump Area Motor Grader Water Truck %Utilization-machine: 100 100 NA 100 100 Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 Operator cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 Operator cost/hour: \$25.24 \$36.85 NA \$38.59 \$27.76 \$00 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 1 1 Group Subtota	Road M				C -1		
Truck Loader Load Area Dump Area Motor Grader Water Truck %Utilization-machine: 100 100 NA 100 100 100 Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA \$101.43 \$100.00 \$80.00 \$80.00 \$80.00 \$0.00 \$80.00 \$0.00 \$80.00 \$00.00 \$80.00 \$00.00 \$8115.73 \$8247.75 \$828.91 \$8456.10 \$214.71 \$156 \$80.00 \$80.00 \$80.00 \$80.00		- W 2	tter Truck: wa	tter Tanker, 7,000	Gal.		
Motion Description Description Description Description %Utilization-machine: 100 100 NA 100 100 Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA \$164.35 \$82.48 \$83 %Utilization-riper: NA \$0.00 NA NA NA \$164.35 \$82.48 \$83 %Utilization-riper: NA \$0.00 NA \$0.00	Cost Breakdown:	Truck/Lo	ader Team	Support l	Equipment	Maintenan	ce Equipment
Ownership cost/hour: \$121.08 \$115.73 NA \$253.16 \$104.47 \$73 Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA NA \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA NA \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA NA \$82.48 \$83 %Utilization-riper: NA 0 NA NA NA \$80.00 \$80 Ripper own. cost/hour: NA \$0.00 NA \$80.00 \$80 \$90.00 \$80 Operator cost/hour: \$25.24 \$36.85 NA \$38.59 \$27.76 \$80 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 1 1		Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
Operating cost/hour: \$101.43 \$130.33 NA \$164.35 \$82.48 \$833 %Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 \$0.00 Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 \$0.00 Operator cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 \$0.00 Operator cost/hour: \$25.24 \$36.85 NA \$385.99 \$27.76 \$0.00 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 1 1 Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: \$1.605.85 LCY Sucre of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Cat Handbook	%Utilization-machine:	100	100	NA	100	100	100
%Utilization-riper: NA 0 NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 NA \$0.00 \$0.00 \$0.00 Operator cost/hour: \$25.24 \$36.85 NA \$38.59 \$27.76 \$00 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 1 Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: \$1,605.85	Ownership cost/hour:	\$121.08	\$115.73	NA	\$253.16	\$104.47	\$73.42
Ripper own. cost/hour: NA \$0.00 NA \$0.00	Operating cost/hour:	\$101.43	\$130.33	NA	\$164.35	\$82.48	\$83.21
Initial volume: 650,000 CCY Swell factor: 1.000 \$371.34 MATERIAL QUANTITIES Americal work Americal work Americal work Americal work Sign (\$1.40/CY) Material work 5370.00 Source of estimated volume: Americal work Sign (\$1.40/CY) Cat Handbook Mutrical work Source of estimated swell factor: 1.000 Source of estimated volume: Americal work Sign (\$1.40/CY) Cose volume: 650,000 CCY Swell factor: 1.000 CCY Material volume: 650,000 LCY CCY Swell factor: 1.000 Material work team cost/hour: \$1,605.85 Material cost is for blasting (\$1.40/CY) CCY Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Cat Handbook Source Material Purchase Cost: 51.40 Source Sou	%Utilization-riper:	NA	0	NA	NA	NA	NA
Operator cost/hour: \$25.24 \$36.85 NA \$38.59 \$27.76 \$00 Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: <u>\$1.605.85</u> MATERIAL QUANTITIES Initial volume: <u>650,000</u> CCY Swell factor: 1.000	Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Unit Subtotals: \$247.75 \$282.91 NA \$456.10 \$214.71 \$156 Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: \$1,605.85							\$0.00
Number of Units: 2 1 0 1 1 Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: \$1,605.85	-						\$0.00
Group Subtotals: Work: \$778.41 Support: \$456.10 Maint: \$371.34 Total work team cost/hour: \$1,605.85 Maint: \$371.34 MATERIAL QUANTITIES Initial volume: 650,000 CCY Swell factor: 1.000 Loose volume: 650,000 LCY Swell factor: 1.000 Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Cat Handbook \$1.40 Material Purchase Cost: \$910,000.00 HOURLY PRODUCTION \$910,000.00 Hour Production: A.250 Pounds/LCY Description: Gravel - Pitrun Pounds/LCY Rated Payload: 141,220 Pounds			\$282.91				\$156.63
Total work team cost/hour: \$1,605.85 MATERIAL QUANTITIES Initial volume: 650,000 Loose volume: 650,000 LCY Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: CCY Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds				-			1
MATERIAL QUANTITIES Initial volume: 650,000 CCY Swell factor: 1.000 Loose volume: 650,000 LCY Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Material weight: 3,250 Material weight: 3,250 Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220	Group Subtotals:	Work:	\$778.41	Support:	\$456.10	Maint:	\$371.34
Initial volume: 650,000 CCY Swell factor: 1.000 Loose volume: 650,000 LCY AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Cat Handbook Source of estimated swell factor: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Cat Handbook Material Purchase Cost: \$1.40 \$910,000.00 HOURLY PRODUCTION Hours Payload (weight) Basis: Truck Capacity: 3,250 Pounds/LCY Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Pounds Rated Payload: 141,220 Pounds	Total work team co	ost/hour: <u>\$1,605.</u>	85				
Initial volume: 650,000 CCY Swell factor: 1.000 Loose volume: 650,000 LCY Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Material Purchase Cost: 51.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds							
Loose volume: 650,000 LCY Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION \$910,000.00 Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Pounds Rated Payload: 141,220	<u>MATERIAL QU</u>	JANTITIES					
Source of estimated volume: AM-2, Exh L, p. 7/ Material cost is for blasting (\$1.40/CY) Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds					factor: <u>1.000</u>		
Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds	Loose volume	e: <u>650,0</u>	00 LCY	7			
Material Purchase Cost: \$1.40 Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis:					aterial cost is for b	lasting (\$1.40/CY	<u>()</u>
Total Cost: \$910,000.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds	Source						
HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 3,250 Pounds/LCY Description: Gravel - Pitrun Rated Payload: 141,220 Pounds							
Truck Capacity:Truck Payload (weight) Basis:Material weight:3,250Description:Gravel - PitrunRated Payload:141,220Pounds		1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Truck Payload (weight) Basis:Material weight:3,250Description:Gravel - PitrunRated Payload:141,220Pounds	HOURLY PRO	DDUCTION					
Truck Payload (weight) Basis:Material weight:3,250Description:Gravel - PitrunRated Payload:141,220Pounds							
Description:Gravel - PitrunRated Payload:141,220Pounds		ight) Basis:					
Rated Payload: 141,220 Pounds				Pounds/LCY			
		1		Davind			
Payload Capacity: 43.45 LCY		•	U	LCY			

Struck Volume:						
TT 1 T 7 1		LCY				
Heaped Volume:		LCY				
Average Volume:	49.45 I	LCY				
Adjusted Volume:	43.45 I	LCY				
F' 1	T 1 1 7 1 1			27.12	LOV	
	Truck Volume	Based on Number o	f Loader Passes:	37.13	LCY	
Loading Tool Capacity			Buc	ket Size Class: N	١٨	
Rated Capacity:	11.250	LCY (heaped)	Bue		Λ	
Bucket Fill Factor:	0.825		vg. blasted (75	- 90%) 0.825		-
Adjusted Capacity:	9.281	LCY	<u> </u>	,		_
Job Condition Corrections:		Si	te Altitude (ft.):	5800 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE			
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Number	of Loading Tool Pa	sses Required to	Fill Truck:	4 1	passes
Excavators and Front Shove	<u>ls:</u>					
Machine Cycle Time v	s. Job Condition	Rating: NA				
Selected Value v						
Track Loaders –	Material Descrij	ption:				
Cycle Time Elements (min.):						
-						
Load: NA		aneuver: NA		Dump: 0.100)	
Load: NA	Ma			·		utec
Load: NA Wheel and Track Loaders -	Ma		me (load, dump, 1	maneuver): 0	.600 min	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors	 Unadjusted Bas	sic Loader Cycle Tin	me (load, dump, 1	maneuver):0 Factor (min.)	.600 min Source	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	Unadjusted Bas Bank or broke	sic Loader Cycle Tin n material 0.04		maneuver):0 Factor (min.) 0.040	.600 min Source (Cat HB)	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	Unadjusted Bas Bank or broke No adjustment	sic Loader Cycle Tin n material 0.04 t - factor not applica	ble 0.00	maneuver):0 Factor (min.) 0.040 0.000	.600 min Source (Cat HB) (Cat HB)	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	Unadjusted Bas Bank or broke No adjustment Common own	sic Loader Cycle Tir n material 0.04 t - factor not applica ership of trucks and	ble 0.00	maneuver):0 Factor (min.) 0.040 0.000 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB)	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04	ble 0.00	maneuver):0 Factor (min.) 0.040 0.000 -0.040 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	Unadjusted Bas Bank or broke No adjustment Common own	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00	ble 0.00 loaders -0.04	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 -0.040 0.000	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin	ble 0.00 loaders -0.04 ne Adjustment:	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 -0.040 0.000 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 0.000 -0.040 0.000 0.000 0.560	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment:	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 -0.040 0.000 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 0.000 -0.040 0.000 0.000 0.560	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera Nominal targe	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck:	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 0.000 -0.040 0.000 0.000 0.560	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Unadjusted Bas Bank or broke No adjustment Common own Constant opera Nominal targe	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load Net Load T	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted	maneuver): 0 Factor (min.) 0.040 0.000 -0.040 0.000 -0.040 0.000 0.000 1.780	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time	Unadjusted Bas Bank or broke No adjustment Common own Constant opera Nominal targe	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load Net Load T Minutes	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted	maneuver):0 Factor (min.) 0.040 0.000 -0.040 -0.040 0.000 -0.040 0.560 1.780	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.800	utes — — — — Minute: — — Minute:
Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time	Unadjusted Bas Bank or broke No adjustment Common own Constant opera Nominal targe	sic Loader Cycle Tin n material 0.04 t - factor not applica ership of trucks and ation -0.04 t 0.00 Net Cycle Tin Adjusted Load Net Load T Minutes Minutes Minutes	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted Adjusted	maneuver):0 Factor (min.) 0.040 0.000 -0.040 -0.040 0.000 -0.040 0.560 1.780 for site altitude: for site altitude:	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.800 1.780 1.200	 Minute:

Haul Rou	ite:							
Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	3000.	00	-3.00	4.00	1.00	3550	1.284	
D to D					Haul Time:	1.284	minutes	
Return Re	1	D:	$C_{\rm res} d_{\rm r} (0/)$	Roll. Res	Total Res	Valasitas	Travel	
Seg #	(Ft)	Distance	Grade (%)	(%)	(%)	Velocity (fpm)	Time (min)	
1	3000.	00	3.00	4.00	7.00	2453	1.352	
				Total Tru	Return Time: ck Cycle Time:	<u> </u>	minutes	
Loading Too Produ Truck Unit Produ	uction	863.37	LCY/Hour			ob efficiency:	716.60	_ LCY/Hour
		347.18	LCY/Hour		Adjusted for j	ob efficiency:	288.16	LCY/Hour
Optimal No. of T	rucks:	2	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
				le truck/loade	k team productio er team productio er team productio	on: 576.	.32 LCY/H	Iour
JOB TI	ME AN	ND COST						
Fleet	size:	1	Team(s)		Fotal job time:	1,127.	85 Hour	rs
Unit	cost: _	\$2.786	/LCY		Total job cost:	\$2,721,	160	

TRUCK/LOADER TEAM WORK

Site: Parkdale Quarry	ý –	Permit Action	on: 2025 Inspec	tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	TIFICATION					
Task #: A012		State: Colora	ado	Ab	breviation: No	ne
Date: 2/27/2	025	County: Freme	ont		Filename: A0	12
User: JLC						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>[</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
Т	ruck Loader Tea		740 T 980H			
Supp	ort Equipment -L					
	-Dı	imp Area: CA	T 160M			
Road Ma	aintenance – Mote		T 160M ter Tanker, 7,000	Cal		
	- w a	ter Truck: wa	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa	ider Team	Support 1	Equipment	Maintenar	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	100	100
Ownership cost/hour:	\$108.25	\$69.00	NA	\$104.47	\$104.47	\$73.42
Operating cost/hour:	\$79.54	\$60.57	NA	\$82.48	\$82.48	\$83.2
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$36.85	NA	\$27.76	\$27.76	\$0.00
Unit Subtotals: Number of Units:	\$213.03	\$166.42	NA 0	\$214.71	\$214.71	\$156.63
Group Subtotals:	2 Work:	1		\$214.71	1 Maint:	\$371.34
*			Support:	\$214.71	Maint:	\$3/1.34
Total work team cos	st/hour: <u>\$1,178.5</u>	53				
MATERIAL QU	ANTITIES					
Initial volume:	158,510	CCY	Swell	factor: 1.429		
Loose volume:						
So	urce of estimated	volume: AM-	2, Exh L, pp. 3 &	9		
	of estimated swe	ll factor: Cat H	Handbook	-		
	Material Purcha	4				
	10	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (weight	<u>ght) Basis:</u>					
Material w	· ·		Pounds/LCY	-		
Descri		11				
Rated Pa	yload: 87,000		Pounds			

Truck Bed (volume) Basis:						
Struck Volume:	24.20	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
Final	Truck Volume	Based on Number o	f Loader Passes:	30.75	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: <u>N</u>	IA	_
Rated Capacity:	7.500	LCY (heaped)				_
Bucket Fill Factor:	1.025	Rock - Earth M	ixture (100%-10:	5%) 1.025		_
Adjusted Capacity:	7.688	LCY				
Job Condition Corrections:	_	Si	te Altitude (ft.):	<u>5800</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	·		
			(
Net Correction:	0.797	0.830				
Loading Tool Cycle Time:	Number	of Loading Tool Pa	sses Required to	Fill Truck	4 r	asses
Excavators and Front Shove		of Louding Tool I a	sses required to		ł	
Machine Cycle Time v Selected Value v						
Track Loaders –	Material Descri	ption:				
Cycle Time Elements (min.):						
Load: NA	M	aneuver: NA		Dump: 0.100)	
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Ti	me (load, dump, 1	maneuver):0	.550 minu	ites
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed materia	al 0.02		0.020	(Cat HB)	_
Stockpile:		t - factor not applica	ble 0.00	0.000	(Cat HB)	_
		ership of trucks and		-0.040	(Cat HB)	_
Operation:	Constant oper	•		-0.040	(Cat HB)	
Dump Target:	Nominal targe			0.000	(Cat HB)	-
			ne Adjustment:	-0.060	minutes	_
		Adjusted Load	er Cycle Time:	0.490	minutes	
			ime per Truck:	1.570	minutes	
Truck Cycle Time:						
Truck Exchange Time	: 0.60	Minutes	Adjusted	for site altitude:	0.625	Minute
Truck Load Time		Minutes	Adjusted	for site altitude:	1.570	Minute
ck Maneuver and Dump Time	1.00	Minutes	Adjusted	for site altitude:	1.042	Minute
<u>Truck Travel (Haul & Return</u> penetration 4.0	<u>) Time:</u>	Road Condition:	Rutted dirt, little	maintenance, no wa	iter, 1" tire	-

Haul Ro	ute:							
Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
2	2000	.00	-1.00	4.00	3.00	3005	1.458	
					Haul Time:	1.458	minutes	
Return F	1	D ! .				TT 1 •	T	
Seg #	(Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	2000	.00	1.00	4.00	5.00	3005	0.905	
				Total Tru	Return Time: ck Cycle Time:	0.905	minutes	
Loading To Proc Truck Unit Proc	luction	840.55	LCY/Hour		Adjusted for j	ob efficiency:	697.65	_ LCY/Hour
		329.48	LCY/Hour		Adjusted for j	ob efficiency:	273.47	LCY/Hour
Optimal No. of T	Trucks:	3	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
				le truck/loade	k team production er team production er team production	on: 546.	.94 LCY/H	lour
JOB T	IME AI	ND COST						
Flee	t size:	1	Team(s)	- -	Fotal job time:	414.0	Hour	rs
Unit	t cost:	\$2.155	/LCY		Total job cost:	\$487,9	39	

REVEGETATION WORK

Task descrip	otion:	Reveg 131-Ac A	lluvial Pit Aı	rea		
Site: Parkdale Quarry		Permit Action: 2025 Inspection		Permit/Job#: <u>M1997054</u>		
	IDENTIFIC	ATION				
Task #:	A013	State:	Colorado		Abbreviation:	None
Date: User:	2/27/2025 JLC	County:	Fremont		Filename:	A013
Age	ency or organiz	zation name: DR	MS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	Total Fertilizer Application Cost/Acre	\$43.12

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.20	0.96	\$0.80
Blue Grama - Native	1.10	17.95	\$23.46
Indian Ricegrass - Native	2.10	6.80	\$36.31
Canby Bluegrass - Canbar	0.20	4.25	\$3.00
Sand Dropseed	0.05	5.97	\$0.65
Sideoats Grama - Vaughn	1.80	5.91	\$44.26
Sheep Fescue - Bighorn	0.40	6.24	\$1.98
Thickspike Wheatgrass - Critana	1.60	5.66	\$13.04
Western Wheatgrass - Native	2.00	5.05	\$18.01
Sage, Fringed	0.03	2.51	\$2.98

Sagebrush, Louisiana or Prairie	0.03	3.02	\$5.55
Saltbush, Four Wing	0.10	0.14	\$1.99
Spike Muhly	0.20	7.35	\$2.27
Sumac, Skunkbrush	0.10	0.05	\$4.51
Purple Three-Awn	0.10	1.15	\$8.54
Totals Seed Mix	10.01	73.01	\$167.35

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Total Mulch Materials Cost/Acre				\$4.13

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

No. of Acres:	131	Cost /Acre:	\$823.31
Estimated Failure Rate:	20%	Cost /Acre*:	\$403.99
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$107,853.61
Reseeding Job Cost:	\$10,584.54
Total Job Cost:	\$118,438
Job Hours:	268.00

BULLDOZER RIPPING WORK

	Task description:	Rip	pit floor for 90% of liner				
Site	: Parkdale Qua	rry	Permit Action:	2025 Inspection	n Permit/	Job#: <u>M19</u>	997054
	PROJECT IDE	ENTIFICAT	ION				
	Task #: AR	10	State: Colorado		Abbreviat	ion: None	2
		7/2025	County: Fremont		Filena		
	User: JLC	2					
	Agency	or organizatio	n name: DRMS				
	HOURLY EQU	•					
			at D9T - 9SU		Horsepower:	405	
	Ripper Atta		Shank Ripper		Shift Basis:	1 per day	
	Tupper Au				Data Source:	(CRG)	
	Cost Breakdown:						
	<u>eost Broundo min</u>			1	Utilization %		
		Ownership (\$253.16	NA		
		Operating C		\$164.35	100		
		r Ownership (\$15.77	NA		
	Rıpp	er Operating (\$10.35 \$38.59	<u>100</u>		
		Operator (Total Unit (\$38.39	NA		
				\$402.22			
		Total Fleet C	Cost/Hour: \$482	.22			
	MATERIAL Q	UANTITIE	<u>S</u> Sele	cted estimating 1	method: Seismic		
	Alternate Method	s:		0			
smic:	59,400	BCY	Bank Volume:	59,400	BCY	Adverse	
Area:	NA	acres	Rip Depth (ft):	NA	Volume: NA	Auverse	BCY or (
			imated quantity: <u>AM-2 I</u>	Exh L - 90% of c	bo,000 C Y req a volu	me	
	HOURLY PRO	<u>DUCTION</u>					
	Seismic:						
			Seismic Velocity:	5,000	feet/second		
	Area:						
		Avera	ge Ripping Depth:	NA	feet/pass		
			ge Ripping Width:	NA	feet/pass		
			ge Ripping Length:	NA	feet/pass		
			rage Dozer Speed:	NA	feet/minute		
			e Maneuver Time: ction per unit area:	NA NA	minutes/pass acres/hour		
				NA			
	Job Condition Co						
	Una	adjusted Hourl	y Unit Production:	445.80	Cu. yds./hr		
			Site Altitude:	6,800	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day)		
			Net Correction:	0.83	multiplier		
		Adjuste	d Hourly Unit Production:	370.01	Cu. yds./hr		
		Adjusted	Hourly Fleet Production:	370.01	Cu. yds./hr		
	JOB TIME AN	D COST					
	Fleet size:	1	Grader(s)	Total job time	: 160.53		Hours
	Unit cost:	\$1.303	Per cu. yd.	Total ich acet	: \$77,413	2	
	Onit cost:	φ1.303	rer cu. yu.	Total job cost		,	

COMPACTION WORK

Task description:	Recompact ripped 1	reservoir flo	or			
e: Parkdale Quarry	Permit	Action: 20)25 Inspecti	on Po	ermit/Job#:]	M1997054
PROJECT IDENTIF	ICATION					
Task #: AR15	State: C	Colorado		Abb	reviation: N	lone
Date: 2/27/2025	County: F	remont		I	Filename: A	R15
User: JLC						
Agency or orga	nization name: <u>DRM</u>	S				
HOURLY EQUIPME	ENT COST					
Basic Machine	e: CAT 836H			Horsepower:	499)
Compactor Type		er foot		Shift Basis:	1 per	day
				Data Source:	(CR	G)
Cost Breakdown:						
				Utilization %		
	ership Cost/Hour:	\$211.62		NA		
	rating Cost/Hour:	\$240.9		100		
1	erator Cost/Hour:	\$25.60		NA		
Total	Unit Cost/Hour:	\$478.12	2			
Total	Fleet Cost/Hour:	\$478.12	2			
MATERIAL QUANT	TTIES					
Loose volun	ne: 7,911		LCY	Shi	rinkage factor:	0.875
Compacted volun			CCY		8	
	urce of estimated volume stimated shrinkage factor			or x 6" depth		
HOURLY PRODUC	<u>FION</u>		Unadjust	ed hourly product	$ion = (W \times S \times S)$	<u>x L x C) / P</u>
Cor	npacted width per pass (W):	9.16	feet		
	erage Compactor Speed		2.00	mph		
Compact	ed thickness of each lift		6.00	inches		
D 1	Conversion Constant	· · ·	16.3		./12in./27cu.ft	.)
	mber of machine passes		5 358.34	passes CCY/ho		
Job Condition Correction	ted Hourly Unit Product 1 Factors	1011:		ude: 6,800 feet	Jur	
		Source				
Altitude Adj:	1.00	(CAT HB)				
Job Efficiency:		(1 shift/day)				
Net Correction:	0.8300 1	multiplier				
Δ	djusted Hourly Unit Pro	oduction:	297.42	CCY/Hour		
	djusted Hourly Fleet Pro		297.42	CCY/Hour		
JOB TIME AND CO	<u>ST</u>					
Fleet size:	Compactor(s))	Тс	otal job time:	23.27	Hours
Unit cost: \$1.	608 per CCY		Te	otal job cost:	\$11,128	

Scraper Worksheet Cont'd

Task # AR20

Page 1 of 2

SCRAPER TEAM WORK

Site: Parkdale Qua	rry	Permi	t Action:	2025 Inspection	Perr	nit/Job#: <u>M199</u>	7054
<u>PROJECT IDI</u>	ENTIFICATION						
Task #: AR	20	State:	Colorado		Abbrev	viation: None	
		County:	Fremont		Fil	ename: AR20	
User: JLC	2						
Agency	or organization nan	ne: DRM	IS				
HOURLY EQU	UIPMENT			COSTS	nift basis: <u>1 per d</u>	<u>ay</u>	
			Equipme	ent Description			
		-Scraper:	Cat 627	7G			
	4 E	-Dozer:	Cat D9	T - 9SU			
Support Equipment -Load Area: NA -Dump Area: CAT 815F							
Road	Maintenance – Moto		CAT 16				
	-Wa	ter Truck:	Water 7	Fanker, 7,000 Gal.			
<u>Cost Breakdown</u>	Sarar an V	Vork Team		Support Equir		Maintenance	Equinment
Cost Dreakdown	Scraper V	Do	zer	Load Area	Dump Area	Motor Grader	Water T
%Utilization-machin	ne: 100)	100	NA	100	100	
Ownership cost/hou			5253.16	NA	\$107.16	\$104.47	\$
Operating cost/hou			5164.35	NA	\$117.19	\$82.48	\$
%Utilization-rippe			NA	NA	NA	NA	
Ripper own. cost/hou			\$0.00	NA	\$0.00	\$0.00	5
Ripper op. cost/hou	ır: NA		\$0.00	NA	\$0.00	\$0.00	1
Operator cost/hou	ır: \$30.90)	\$38.59	NA	\$25.60	\$27.76	
Unit Subtota	ls: \$506.05	5 \$	6456.10	NA	\$249.95	\$214.71	\$1:
Number of Uni	ts: 2	2	1	0	1	1	
Group Subtota	ls: Work:	: \$1,46	58.20	Support:	\$249.95	Maint:	\$371.3
Total work team	cost/hour: <u>\$2,089.49</u> DUANTITIES)					
Initial volur	ne: <u>59,400</u>		CCY	Swell fact	or: <u>1.165</u>		
Loose volur	me: 69,20	1	LCY				
	Source of estimated			Exh L, p. 4			
Sour	ce of estimated swe	ll factor:	Cat Hand	dbook			
	DUCTION						
HOURLY PRO	<u>DUCTION</u>						
HOURLY PRO	<u>JUCTION</u>			Scraper Bo	owl (volume) Bas	<u>is:</u>	
		<i>,</i>		- -			СҮ
HOURLY PRO Material weig Material descriptio Rated Payloa	ht: <u>2,100 lbs/LCY</u> on: Shale			- -	Volume: <u>15.70</u> Volume: <u>22.00</u>	L	CY CY CY

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time: 0.40 Minutes 0.60 Minutes

Job Condition Correction:

Site Altitude: 5800 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Soft, rutted dirt, no maintenance or water, 8" tire penetration 14

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1800.00	5.00	14.00	19.00	578	3.12

Haul Time: **3.12** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1800.00	-5.00	14.00	9.00	1930	1.01
				Return Time:	1.01	minutes
			Total Scrape	er team cycle time:	5.13	minutes
			Adjusted	for job conditions:	182.99	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	er team (unit)	hourly production:	365.98	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet)	hourly production:	365.98	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe			_ LCY/Hour		
	IME AND COST	Toom(s)	-	Total ich timo:	190.00	Hours

Fleet size:	1	Team(s)	Total job time:	189.09	Hours
Unit cost:	\$5.709	/LCY	Total job cost:	\$395,093	

Scraper Worksheet Cont'd

Task # AR22

Page 1 of 2

SCRAPER TEAM WORK

Site: Parkdale Quarry		Permit Act	tion: 2025 Inspec	etion Per	mit/Job#: <u>M199</u>	7054
PROJECT IDENT	TFICATION					
Task #: AR22	S	tate: Colo	rado	Abbre	viation: None	
Date: $2/27/20$	25 Cou	inty: Frem	iont	Fi	lename: AR22	
User: JLC						
Agency or o	rganization name:	DRMS				
HOURLY EQUIP	MENT_		COS	STShift basis: <u>1 per c</u>	lay	
			ipment Descriptio	n		
		1	ut 627G ut D8T - 8SU			
Suppor	- t Equipment -Load					
	-Dump	Area: CA	AT 815F			
Road Mai	ntenance –Motor (-Water		A ater Tanker, 7,000	Cal		
	- water	TTUCK. W	ater Taliker, 7,000	Gai.		
Cost Breakdown:	Scraper Wor	k Team		Equipment	Maintenance	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Tr
%Utilization-machine:	100	1	00 N	A 100	NA	
Ownership cost/hour:	\$217.39	\$173.	32 N	A \$107.16	NA	\$7
Operating cost/hour:	\$257.76	\$109.	71 N	A \$117.19	NA	\$8
%Utilization-ripper:	NA	Ν	NA N	A NA	NA	
Ripper own. cost/hour:	NA	\$0.	00 N	A \$0.00	NA	\$
Ripper op. cost/hour:	NA	\$0.		A \$0.00	NA	\$
Operator cost/hour:	\$30.90	\$38.		A \$25.60	NA	\$
Unit Subtotals:	\$506.05	\$321.	62 N	A \$249.95	NA	\$15
Number of Units:	2		1	0 1	0	
Group Subtotals:	Work:	\$1,333.72	2 Suppo	rt: \$249.95	Maint:	\$156.6
Total work team cost/	'hour: <u>\$1,740.30</u>					
MATERIAL QUA	NTITIES					
Initial volume:	6,600	CC		factor: 1.250		
Loose volume:	8,250	LC	Y			
	ce of estimated vo		MS (place material	from Task AR21)		
Source o	f estimated swell f	actor: <u>Cat</u>	Handbook			
HOURLY PRODU	JCTION					
			Scrape	er Bowl (volume) Bas	sis:	
Material weight:	2,800 lbs/LCY		Stru	uck Volume: 15.70	L	CY
Material description:	Clay - Wet		Неар	ped Volume: 22.00	L	CY
Rated Payload:	52,800 pounds			age Volume: 18.85	T.	CY

 $\frac{0.50}{0.60}$ Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5800 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	-3.00	8.00	5.00	2218	0.85

Haul Time: **0.85** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	3.00	8.00	11.00	1584	1.00
				Return Time:	1.00	minutes
			Total Scrape	er team cycle time:	2.95	minutes
			Adjusted	for job conditions:	318.21	LCY/Hour
			Selected Nu	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	oer team (unit) l	nourly production:	636.43	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet) l	hourly production:	636.43	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe			LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)	Т	otal job time:	12.96	Hours

 Unit cost:
 \$2.734
 /LCY
 Total job cost:
 \$22,559



Task # E100.1 Highwall Backfill Volume Estimate

TRUCK/LOADER TEAM WORK

Task description:	Backfill	4,000 ft of bencl	hes not concurren	ntly reclaimed		
Site: Parkdale Quarry	y	Permit Acti	on: <u>2025 Inspec</u>	tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	TIFICATION					
Task #: E100		State: Colora	ado	Ab	breviation: Not	ne
Date: 2/27/2	2025	County: Fremo	ont		Filename: E10)0
User: JLC						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>[</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
Т	ruck Loader Tea		740			
Supp	ort Equipment -L		Т 980Н			
Supp			D6T LGP			
Road M	aintenance – Mot		T 160M			
	-Wa	ter Truck: Wa	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa	ider Team	Support]	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	100	100
Ownership cost/hour:	\$108.25	\$69.00	NA	\$99.72	\$104.47	\$73.42
Operating cost/hour:	\$79.54	\$60.57	NA	\$71.22	\$82.48	\$83.21
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$36.85	NA	\$38.59	\$27.76	\$0.00
Unit Subtotals:	\$213.03	\$166.42	NA	\$209.53	\$214.71	\$156.63
Number of Units:	2	1	0	1	1	1
Group Subtotals:	Work:	\$592.48	Support:	\$209.53	Maint:	\$371.34
Total work team cos	st/hour: <u>\$1,173.</u>	35				
MATERIAL QU	ANTITIES					
Initial volume: Loose volume:		CCY 0 LCY		factor: <u>1.250</u>		
So	urce of estimated	volume: AM2	2, Exh L, p. 2 - PA	R resp.: Tsk E100).1	
Source	of estimated swe	ell factor: Cat I	Handbook	1 /		
	Material Purcha	4 1 1				
	10	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
Truck Capacity:						
<u>Truck Payload (wei</u> Material w			Pounds/LCY			
Descr		posed rock - 25%	Rock, 75% Earth			
Rated Pa	yload: 87,000		Pounds			
Payload Cap	pacity: <u>32.83</u>		LCY			

Truck Bed (volume) Basis:						
Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Final	Truck Volume	Based on Number of	Loader Passes	30.75	LCY	
	Truck volume	Dased on Number of	Louder 1 dises.	00.75	Ler	
Loading Tool Capacity						
			Bucl	ket Size Class: <u>N</u>	A	_
Rated Capacity:	7.500	LCY (heaped)				_
Bucket Fill Factor:	1.025	Rock - Earth Mix	xture (100%-105	5%) 1.025		_
Adjusted Capacity:	7.688	LCY				
Job Condition Corrections:		Site	e Altitude (ft.): <u>4</u>	<u>5800</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.797	0.830				
Track Loaders – Cycle Time Elements (min.):	Material Descri	ption:				
Load: NA	М	aneuver: NA		Dump: 0.100	1	
	_			·		
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Tim	e (load, dump, r	maneuver): 0	.550 min	ıtes
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed materia	al 0.02		0.020	(Cat HB)	_
Stockpile:	No adjustmen	t - factor not applicab	ole 0.00	0.000	(Cat HB)	
Truck Ownership:		ership of trucks and l	oaders -0.04	-0.040	(Cat HB)	_
Operation:	Constant oper			-0.040	(Cat HB)	_
Dump Target:	Nominal targe			0.000	(Cat HB)	_
		Net Cycle Time	-	-0.060	minutes	
		Adjusted Loade		0.490	minutes	
		Net Load 11	me per Truck:	1.570	minutes	
<u>Truck Cycle Time:</u>						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.625	Minute
Truck Load Time:	1.570	Minutes	Adjusted	for site altitude:	1.570	Minute
ck Maneuver and Dump Time:		Minutes	c .	for site altitude:	1.042	Minute
in maneu, er und Dump Time.			7 Tajastea		1.012	
Truck Travel (Haul & Return penetration 4.0) Time:	Road Condition: <u>R</u>	utted dirt, little	maintenance, no wa	ter, 1" tire	

Haul Rou Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
8	(Ft)		()	(%)	(%)	(fpm)	Time (min)	
1	1500.0)0	2.00	4.00	6.00	1566	1.213	
					Haul Time:	1.213	minutes	
Return R								
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.0	00	-2.00	4.00	2.00	3005	0.645	
					Return Time:	0.645	minutes	
				Total Tru	ck Cycle Time:	5.095	minutes	
Loading To	ol unit							
	luction	840.55	LCY/Hour		Adjusted for j	ob efficiency:	697.65	LCY/Hour
ek Unit Prod	luction							
	-	362.14	LCY/Hour		Adjusted for j	ob efficiency:	300.58	LCY/Hour
mal No. of T	rucks:	2	Truck(s)		Selected Numl	per of Trucks:	2	Truck(s)
			Adjuste	ed hourly true	k team production	on: 601.	16 LCY/H	Iour
			Adjusted sing	le truck/loade	er team production	on: 601.	16 LCY/H	Iour
			Adjusted multip	le truck/loade	er team production	on: 601 .	16 LCY/H	Iour
			i lajastea manip		1			
JOB TI	ME AN	D COST	n najabien manap		1			
	ME AN t size:	D COST 1	Team(s)		Fotal job time:	138.6	5 Hou	ſS

REVEGETATION WORK

Task description: Hydrose		Hydroseed 4,000	oseed 4,000 ft of benches not concurrently reclaimed						
Site: Parkdale	ite: Parkdale Quarry		Permit Action: 20		Permit/Job	o#:M1997054			
<u>PROJECT</u> Task #:	IDENTIFIC E105	ATION State:	Colorado		Abbreviation:	None			
Date:	2/27/2025 JLC	County:	Fremont		Filename:	E105			
Ag	ency or organiz	zation name: DR	RMS						

FERTILIZING

Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	Total Fertilizer Application Cost/Acre	\$43.12

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.40	1.93	\$1.60
Blue Grama - Native	2.20	35.91	\$46.92
Indian Ricegrass - Native	4.20	13.60	\$72.63
Canby Bluegrass - Canbar	0.40	8.50	\$6.00
Sand Dropseed	0.10	11.94	\$1.30
Sideoats Grama - Vaughn	3.60	11.82	\$88.53
Sheep Fescue - Bighorn	0.80	12.49	\$3.97
Thickspike Wheatgrass - Critana	3.20	11.31	\$26.07
Western Wheatgrass - Native	4.00	10.10	\$36.02

Sage, Fringed	0.06	5.01	\$5.95
Sagebrush, Louisiana or Prairie	0.06	6.05	\$11.09
Saltbush, Four Wing	0.20	0.28	\$3.97
Spike Muhly	0.40	14.69	\$4.54
Sumac, Skunkbrush	0.20	0.09	\$9.03
Purple Three-Awn	0.20	2.30	\$17.08
Totals Seed Mix	20.02	146.01	\$334.69

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,359.07
	Total Seed Application Cost/Acre	\$1,359.07

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00
	Total Mulch Application Cost/Acre

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	\$0.00				

JOB TIME AND COST

Estimate *Selected Replanti	No. of Acres: ed Failure Rate: ng Work Items:	20%	Cost /Acre: Cost /Acre*:	
Initial Job Cost:	\$7,623.88			
Reseeding Job Cost:	\$1,355.01			
Total Job Cost:	\$8,979			
Job Hours:	8.00			

BULLDOZER RIPPING WORK

	Task description:	Rip	pit floor of Phase 1				
Site	: Parkdale Qua	rry	Permit Action:	2025 Inspection	Permit	/Job#: <u>M19</u>	997054
	PROJECT ID	ENTIFICATI	<u>ION</u>				
	Task #: E1	10	State: Colorado		Abbreviat	tion: None	
		7/2025	County: Fremont		Filena		
	User: JLC	C	·				
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT C	<u>OST</u>				
	Basic	Machine: Ca	t D9T - 9SU		Horsepower:	405	
	Ripper Att	achment: 3-S	Shank Ripper		Shift Basis:	1 per day	
					Data Source:	(CRG)	
	Cost Breakdown:						
					Utilization %		
		Ownership C		\$253.16	NA		
	D:	Operating C		\$164.35	100 NIA		
		er Ownership C ber Operating C		\$18.79 \$9.48	<u>NA</u> 100		
	Kipj	Operator C		\$38.59	NA		
		Total Unit C		\$484.37			
		Total Fleet C	ost/Hour: \$484	.37			
	MATEDIAL C						
	MATERIAL Q		2 Sele	cted estimating n	nethod: Area		
	Alternate Method	<u>ls:</u>					
Seismic:	NA			NA	BCY	NA	
Area:	24.68	acres	Rip Depth (ft):	1.00	Volume: <u>39,81</u>	7	BCY or CCY
		Source of esti	mated quantity: <u>AM-2</u> ,	Exh D2 Map			
	HOURLY PRO	DUCTION					
	Seismic:						
	<u>Seisinie.</u>		Seismic Velocity:	NA	feet/second		
	<u>Area:</u>	Avero	ge Ripping Depth:	2.63	feet/pass		
			ge Ripping Width:	7.67	feet/pass		
			e Ripping Length:	300.00	feet/pass		
			rage Dozer Speed:	88.00	feet/minute		
			e Maneuver Time:	0.25	minutes/pass		
		Produc	ction per unit area:	0.866	acres/hour		
	Job Condition Co	prrection Factor	<u>s</u>				
	Un	adjusted Hourly	y Unit Production:	0.866	Acres/hr		
			Site Altitude:	6,800	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day)		
			Net Correction:	0.83	multiplier		
	Adjusted Hourly Unit Production:			0.72	Acres/hr		
		Adjusted	Hourly Fleet Production:	0.72	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	_ Grader(s)	Total job time:	34.33		Hours
	Unit cost:	\$673.740	Per acre	Total job cost:	\$16,62	8	

TRUCK/LOADER TEAM WORK

Task description: Construct drainage channels - Remove blasted material						
Site: Parkdale Quarr	У	Permit Action	on: 2025 Inspec	tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	JTIFICATION	[
Task #: E112 Date: 2/27/2 User: JLC		State: <u>Colora</u> County: <u>Fremo</u>		Ab	breviation: <u>Nor</u> Filename: <u>E1</u>	
	C					
HOURLY EQUI	PMENT COS				sis: <u>1 per day</u>	
	Fruck Loader Tea		Equipment Descri 740	ption		
Supp	oort Equipment -L -Du laintenance –Mot	-Loader: CA' Load Area: Cat ump Area: CA' or Grader: CA'	T 980H D7R DS XR Seri T 928Hz T 160M ter Tanker, 7,000			
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	75	100	100	100
Ownership cost/hour:	\$108.25	\$69.00	\$90.24	\$27.62	\$104.47	\$73.42
Operating cost/hour:	\$79.54	\$60.57	\$59.21	\$26.31	\$82.48	\$83.21
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$36.85	\$38.59	\$36.85	\$27.76	\$0.00
Unit Subtotals:	\$213.03	\$166.42	\$188.04	\$90.78	\$214.71	\$156.63
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$592.48	Support:	\$278.82	Maint:	\$371.34
Total work team co MATERIAL QU		64				
Initial volume Loose volume		CCY 17 LCY		factor: <u>1.320</u>		
Source of estimated volume:AM2, Exh L, p. 2 - PAR resp. (assume trucked to conveyor)Source of estimated swell factor:Cat HandbookMaterial Purchase Cost:\$0.00Total Cost:\$0.00						
HOURLY PRO	DUCTION					
<u>Truck Capacity:</u> <u>Truck Payload (wei</u> Material y Descr	weight: 2,800	e - Broken	Pounds/LCY			
Rated Pa	ayload: 87,000		Pounds			
Payload Ca	pacity: <u>31.07</u>		LCY			

Truck Bed (volume) Basis:								
Struck Volume:		CY						
Heaped Volume:		CY						
Average Volume:		CY						
Adjusted Volume:	<u>31.07</u> LO	CY						
Final	Truck Volume B	ased on Number o	f Loader Passes:	26.25	LCY			
Loading Tool Capacity			5					
Detail Careaiter	7.500	LCV (harred)	Bucl	ket Size Class: <u>N</u>	Α	_		
Rated Capacity:	7.500	LCY (heaped)		050/) 0.975		-		
Bucket Fill Factor: _ Adjusted Capacity:	0.875 6.563	LCY	vell blasted (80	- 95%) 0.875		-		
	0.000							
Job Condition Corrections	<u>.</u>	Si	te Altitude (ft.): <u></u>	5800 feet				
	Truck	Loader	Source					
Altitude Adj:	0.960	1.000	(CAT HE	·				
Job Efficiency:	0.830	0.830	(CAT HE	<u>s)</u>				
Net Correction:	0.797	0.830						
Loading Tool Cycle Time:	Number o	f Loading Tool Pa	sses Required to	Fill Truck	4 r	asses		
Excavators and Front Shove			sses Required to		_ ł	143303		
Excavators and Front Shove	<u>15.</u>							
Machine Cycle Time v Selected Value	s. Job Condition I within this Basic I							
Track Loaders –	Material Descript	ion:						
Cycle Time Elements (min.)	:							
Load: NA	Mar	neuver: NA		Dump: 0.100)			
Wheel and Track Loaders -	Unadjusted Basic	e Loader Cycle Tii	ne (load, dump, r	naneuver): 0	.550 minu	ites		
Cycle Time Factors				Factor (min.)	Source	_		
Material:	Bank or broken			0.040	(Cat HB)	_		
Stockpile:	No adjustment - factor not applicable 0.00			0.000	(Cat HB)	_		
Truck Ownership:	Common ownership of trucks and loaders -0.04			-0.040	(Cat HB)	_		
Operation:	Constant operation -0.04			-0.040	(Cat HB)	_		
Dump Target:	Nominal target 0.00			0.000	(Cat HB)	_		
	Net Cycle Time Adjustment: Adjusted Loader Cycle Time:			-0.040 0.510	_ minutes			
	Net Load Time per Truck:			1.630	_ minutes minutes			
		The Loud I		1.000				
<u>Truck Cycle Time:</u>								
Truck Exchange Time	: 0.60	Minutes	Adjusted	for site altitude:	0.625	Minute		
Truck Load Time	: 1.630	Minutes	Adjusted	for site altitude:	1.630	Minute		
ck Maneuver and Dump Time	: 1.00	Minutes	Adjusted	for site altitude:	1.042	Minute		
<u>Truck Travel (Haul & Return</u> penetration 4.0	n <u>) Time:</u>	Road Condition:]	Rutted dirt, little	maintenance, no wa	ter, 1" tire			
Haul Rout	te:							
-------------------	---------	----------	-----------------	----------------	------------------	----------------	---------------	------------
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.	00	-2.00	4.00	2.00	3005	0.962	
					Haul Time:	0.962	minutes	
Return Ro	oute:				-			
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1500.	00	2.00	4.00	6.00	2742	0.769	
					Return Time:	0.769	minutes	
				Total Tru	ck Cycle Time:	5.028	minutes	
Loading Too	ol unit							
Produ		698.45	LCY/Hour		Adjusted for j	ob efficiency:	579.71	LCY/Hour
Truck Unit Produ	uction							
		313.27	LCY/Hour		Adjusted for j	ob efficiency:	260.01	LCY/Hour
Optimal No. of Tr	ucks:	2	Truck(s)		Selected Num	ber of Trucks:	2	_ Truck(s)
			Adjuste	ed hourly true	k team producti	on: 520	.02 LCY/I	Hour
					er team producti		.02 LCY/I	Hour
			Adjusted multip	le truck/loade	er team producti	on: 520	.02 LCY/I	Hour
JOB TIM	ME AN	ND COST						
Fleet	size:	1	Team(s)	5	Total job time:	24.8	2 Hou	rs
Unit	cost:	\$2.390	/LCY		Total job cost:	\$30,8	42	

TRUCK/LOADER TEAM WORK

Site: Parkdale Quarr	у	Permit Action	on: 2025 Inspec	tion	Permit/Job#: M	1997054
			.			
<u>PROJECT IDEN</u>	TIFICATION	-				
Task #: E115 State: Colorado Abbreviation: None						
Date: $\frac{2/27/2}{\text{User:}}$	2025	County: Freme	ont		Filename: E1	15
	·					
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>Γ</u>		Shift bas	sis: <u>1 per day</u>	
			Equipment Descri	iption		
Ĩ	Truck Loader Tea		740 Т 980Н			
Supp	ort Equipment -L					
	-Di	ump Area: CA	Т 160М			
Road M	aintenance – Mot		T 160M ter Tanker, 7,000	Gal		
	- ** a	tter Truck. wa	ter Taliker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa	ader Team		Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	100	100
Ownership cost/hour:	\$108.25	\$69.00	NA	\$104.47	\$104.47	\$73.42
Operating cost/hour:	\$79.54	\$60.57	NA	\$82.48	\$82.48	\$83.21
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour: Unit Subtotals:	\$25.24	\$36.85 \$166.42	NA	\$27.76	\$27.76	\$0.00 \$156.63
Number of Units:	\$213.03	\$100.42	NA 0	\$214.71	\$214.71	\$130.03
Group Subtotals:	Work:	\$592.48	Support:	\$214.71	Maint:	\$371.34
.			Support.	Ψ214.71	Ivianit.	ψ5/1.54
Total work team cos	st/hour: <u>\$1,178.</u>	53				
MATERIAL QU	ANTITIES					
Initial volume		CCY	Swell	factor: 1.429		
Loose volume	(1actor. <u>1.429</u>		
So	urce of estimated	volume: AM-	2, Exh L, p. 3			
	of estimated swe		Handbook			
	Material Purch					
	Тс	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
	20011011					
<u>Truck Capacity:</u> Truck Payload (wei	ght) Basis:					
Material v	Pounds/LCY	-				
	iption: <u>Top Sc</u>		Pounds			
Rated Pa	yload: 87,000					

Truck Bed (volume) Basis: Struck Volume:						
Shuck volume.	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Fina	l Truck Volume	Based on Number of	of Loader Passes:	30.75	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: <u>N</u>	A	
Rated Capacity:	7.500	LCY (heaped)				
Bucket Fill Factor:	1.025	Rock - Earth N	/lixture (100%-105	5%) 1.025		_
Adjusted Capacity:	7.688	LCY		/		_
Job Condition Corrections	:	S	Site Altitude (ft.):	5800 feet		
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	,		
Net Correction:	0.797	0.830				
Loading Tool Cycle Time:	Number	r of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
	_	T Of Loading 10011	asses Required to	1 III 11uck.		passes
Excavators and Front Shove	<u>els:</u>					
Machine Cycle Time v	vs. Job Condition	n Rating: <u>NA</u>				
	vs. Job Condition within this Basi					
	within this Basi	c Rating: NA				
Selected Value Track Loaders –	within this Basi - Material Descr	c Rating: NA				
Selected Value Track Loaders – Cycle Time Elements (min.)	within this Basi - Material Descr ::	c Rating: NA				
Selected Value Track Loaders –	within this Basi - Material Descr ::	c Rating: NA		 Dump:0.100)	
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA	within this Basi - Material Descr :: M	c Rating: <u>NA</u> iption: faneuver: <u>NA</u>		Dump:0.100		utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: <u>NA</u> Wheel and Track Loaders	within this Basi - Material Descr :: M	c Rating: <u>NA</u> iption: faneuver: <u>NA</u>		Dump: 0.100	. <u>550</u> min	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: <u>NA</u> Wheel and Track Loaders Cycle Time Factors	within this Basi - Material Descr): - Unadjusted Ba	c Rating: <u>NA</u> iption: faneuver: <u>NA</u> asic Loader Cycle Ti		Dump: 0.100 naneuver): 0 Factor (min.)	.550 min Source	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material:	within this Basi - Material Descr :: - Unadjusted Ba Mixed materi	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02	ime (load, dump, 1	Dump: 0.100 naneuver): 0 Factor (min.) 0.020	.550 min Source (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	within this Basi - Material Descr :: 	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic	ime (load, dump, r	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000	.550 min Source (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	within this Basi - Material Descr :: - Unadjusted Ba Mixed materi No adjustmer Common own	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and	ime (load, dump, r	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040	.550 min Source (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basi - Material Descr : - Unadjusted Ba - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04	ime (load, dump, r	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	within this Basi - Material Descr :: - Unadjusted Ba Mixed materi No adjustmer Common own	c Rating: NA iption: faneuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00	ime (load, dump, r able 0.00 d loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basi - Material Descr : - Unadjusted Ba - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper	c Rating: NA iption: faneuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tin	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basi - Material Descr : - Unadjusted Ba - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tin Adjusted Load	ime (load, dump, r able 0.00 d loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	within this Basi - Material Descr : - Unadjusted Ba - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tin Adjusted Load	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.490	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	within this Basi - Material Descr : - Unadjusted Ba - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tin Adjusted Load	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.490	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	within this Basi Material Descr M - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper Nominal targ	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tin Adjusted Load	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.490	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	within this Basi - Material Descr - Material Descr - Unadjusted Ba Mixed materi No adjustmer Common own Constant oper Nominal targ e:0.60	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Ti Adjusted Load Net Load T	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490 1.570	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	e: 0.60 e: 1.570	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Ti ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude:	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.625	utes — — — — — — — Minutes — Minutes
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time	e: 0.60 e: 1.570	c Rating: NA iption: Ianeuver: NA asic Loader Cycle Tri ial 0.02 nt - factor not applic nership of trucks and ration -0.04 et 0.00 Net Cycle Tri Adjusted Load Net Load T Minutes Minutes	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490 1.570 for site altitude: for site altitude:	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.625 1.570	
Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time	e: 0.60 e: 1.570 e: 1.00	c Rating: NA iption:	ime (load, dump, r able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490 1.570 for site altitude: for site altitude:	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.625 1.570 1.042	 Minutes

Ha	ul Route	e:							
Se	g #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time	
		(Ft)			(%)	(%)	(fpm)	(min)	
2		1500.0	0	2.00	4.00	6.00	1566	1.213	
						Haul Time:	1.213	minutes	
Re	eturn Rou	ite:							
Se	g #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time (min)	
1		1500.0	0	-2.00	4.00	2.00	3005	0.645	
						Return Time:	0.645	minutes	
					Total Tru	ick Cycle Time:	5.095	minutes	
Loadi	ing Tool	unit							
	Produc		840.55	LCY/Hour		Adjusted for j	job efficiency:	697.65	LCY/Hour
Truck Uni	it Produc	ction	262.14			A 1'	1 60	200 59	
		_	362.14	LCY/Hour		Adjusted for j	job efficiency:	300.58	LCY/Hour
Optimal No	o. of Tru	icks:	2	Truck(s)		Selected Num	ber of Trucks:	2	Truck(s)
				Adjuste	ed hourly truc	k team producti	on: 601	.16 LCY/	Hour
						er team producti			
				Adjusted multip	le truck/loade	er team producti	on: 601	.16 LCY/	Hour
JC)B TIM	IE AN	D COST						
	Fleet si	ize:	1	Team(s)	,	Total job time:	70.9	7 <u>H</u> ou	ırs
	Unit co	ost:	\$1.960	/LCY		Total job cost:	\$83,6	37	

REVEGETATION WORK

Task description:		Reveg pit floor of Phase 1					
Site:	Parkdale	Quarry	Per	rmit Action:	2025 Inspection	Permit/Jo	o#: M1997054
<u>P</u>]		IDENTIFIC		~			
	Task #: Date:	E120 2/27/2025	State: County:	Colorado Fremont		Abbreviation: Filename:	None E120
	User:	JLC	County.	Tremont		i nename.	2120
	Age	ency or organiz	zation name:	RMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	Total Fertilizer Application Cost/Acre	\$43.12

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.20	0.96	\$0.80
Blue Grama - Native	1.10	17.95	\$23.46
Indian Ricegrass - Native	2.10	6.80	\$36.31
Canby Bluegrass - Canbar	0.20	4.25	\$3.00
Sand Dropseed	0.05	5.97	\$0.65
Sideoats Grama - Vaughn	1.80	5.91	\$44.26
Sheep Fescue - Bighorn	0.40	6.24	\$1.98
Thickspike Wheatgrass - Critana	1.60	5.66	\$13.04
Western Wheatgrass - Native	2.00	5.05	\$18.01
Sage, Fringed	0.03	2.51	\$2.98

Sagebrush, Louisiana or Prairie	0.03	3.02	\$5.55
Saltbush, Four Wing	0.10	0.14	\$1.99
Spike Muhly	0.20	7.35	\$2.27
Sumac, Skunkbrush	0.10	0.05	\$4.51
Purple Three-Awn	0.10	1.15	\$8.54
Totals Seed Mix	10.01	73.01	\$167.35

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	\$0.00				

JOB TIME AND COST

	No. of Acres:	24.68	Cost /Acre:	\$1,804.74
Estimate	ed Failure Rate:	20%	Cost /Acre*:	\$403.99
*Selected Replanti	ng Work Items:	SEEDING		
Initial Job Cost:	\$44,540.98			
Reseeding Job Cost	\$1 994 09			

Reseeding Job Cost:	\$1,994.09
Total Job Cost:	\$46,535
Job Hours:	50.00



TRUCK/LOADER TEAM WORK

Task description:Backfill 1,000 ft of benches not concurrently reclaimed							
Site: Parkdale Quarry	7	Permit	Actio	on: 2025 Inspect	tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	TIFICATION						
Task #: G100 Date: 2/27/2 User: JLC	025	State: <u>C</u> County: <u>F</u>	Colora Tremo		Ab	breviation: <u>Nor</u> Filename: <u>G10</u>	
Agency or	organization nar	ne: DRM	S				
HOURLY EQUI	PMENT COST	<u>r</u>			Shift bas	sis: <u>1 per day</u>	
				Equipment Descri	ption		
Т	ruck Loader Tea	m -Truck: -Loader:	Cat	<u>740</u> Г 980Н			
Suppo	ort Equipment -L		NA				
		ump Area:		D6T LGP			
Road Ma	aintenance –Mot -Wa	or Grader: iter Truck:		<u>Γ 160Μ</u> er Tanker, 7,000 (Gal.		
			,, at	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u></u>		
<u>Cost Breakdown</u> :		ader Team			Equipment		ce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	NA	100	100	50
Ownership cost/hour:	\$108.25	\$69	0.00	NA	\$99.72	\$104.47	\$73.42
Operating cost/hour:	\$79.54	\$60		NA	\$71.22	\$82.48	\$41.61
%Utilization-riper:	NA	ф.с	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA		0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	NA \$25.24	\$36	0.00	NA NA	\$0.00 \$38.59	\$0.00 \$27.76	\$0.00 \$0.00
Unit Subtotals:	\$23.24	\$166		NA	\$209.53	\$214.71	\$115.03
Number of Units:	3	\$100	1	0	\$207.55	φ214./1	1
Group Subtotals:	Work:	\$805.51	-	Support:	\$209.53	Maint:	\$329.74
Total work team cos				- IFF			
Total work team cos	5/110u1. <u>\$1,544.</u>	/0					
MATERIAL QU	ANTITIES						
Initial volume:	12,003		CCY	Swell	factor: 1.250		
Loose volume:			LCY				
Sou	urce of estimated	volume:	Assu	me 1,000 ft bench	es; Tsk E100.1		
Source	of estimated swe	ell factor:	Cat H	Iandbook			
	Material Purch		\$0.00 \$0.00				
	10		\$0.0 0)			
HOURLY PRO	DUCTION						
Truck Capacity:							
Truck Payload (weig				.			
Material w Descri		nosed rock	. 25%	Pounds/LCY Rock, 75% Earth			
Rated Pa			20/0	Pounds			
Payload Cap				LCY			

C 1 1 1 1						
Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Final	l Truck Volum	e Based on Number	of Loader Passes:	30.75	LCY	
Loading Tool Capacity			D	ket Size Class: N	ТА	
Dated Canazity	7.500	LCY (heaped)		ket Size Class:	A	
Rated Capacity: Bucket Fill Factor:	1.025		/ Mixture (100%-105	50/) 1 025		-
			viixture (100%-103	5%) 1.025		_
Adjusted Capacity:	7.688	LCY				
Job Condition Corrections	:	S	Site Altitude (ft.): <u>4</u>	<u>5800</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE	<i>,</i>		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.797	0.830				
Looding Tool Coult T	۸.۲.۱		Denne Denne' 17	E:11 T	4	
Loading Tool Cycle Time:	_	er of Loading Tool P	asses Required to	F111 I fuck :	4	passes
Excavators and Front Shove	els:					
Machine Cycle Time v		on Rating: NA				
	vs. Job Conditio					
Machine Cycle Time v	vs. Job Condition within this Bas	sic Rating: NA				
Machine Cycle Time v Selected Value	vs. Job Condition within this Bas Material Desc	sic Rating: NA				
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.)	vs. Job Conditio within this Bas Material Desc	sic Rating: NA)	
Machine Cycle Time v Selected Value Track Loaders –	vs. Job Conditio within this Bas Material Desc	sic Rating: NA		 Dump:0.100)	
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.)	vs. Job Conditio within this Bas Material Desc : 	sic Rating: NA ription: Maneuver: NA		Dump: 0.100) . <u>.550</u> min	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors	vs. Job Condition within this Bas Material Desc : : Unadjusted B	sic Rating: NA ription: Maneuver: NA Basic Loader Cycle T		Dump: 0.100 naneuver): 0 Factor (min.)	.550 min Source	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vs. Job Condition within this Bas Material Desc :	sic Rating: NA ription: Maneuver: NA Basic Loader Cycle T rial 0.02	ime (load, dump, r	Dump: 0.100 maneuver):0 Factor (min.) 0.020	.550 min	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile:	vs. Job Condition within this Bas Material Desc :	sic Rating: NA ription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000	.550 min Source (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Bas Material Desc : : - Unadjusted B Mixed mater No adjustme Common ow	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an	ime (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	550 min Source (Cat HB) (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04	ime (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Bas Material Desc : : - Unadjusted B Mixed mater No adjustme Common ow	sic Rating: NA ription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00	Time (load, dump, r cable 0.00 id loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	.550minSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490	.550minSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	.550minSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490	.550minSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Bas Material Desc Material Desc Unadjusted B Mixed mater No adjustme Common ow Constant op Nominal tar	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490	.550minSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Bas Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant op Nominal tary	sic Rating: NA rription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa Net Load	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.040 0.000 -0.060 0.490 1.570	.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time	vs. Job Condition within this Bas Material Desc Material Desc Unadjusted B Mixed mater No adjustme Common ow Constant op Nominal tar e: 0.60 e: 1.570	sic Rating: NA rription:	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude:	0.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.625	utes — — — — Minute: — Minute:
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	e: 0.60 e: 1.570 e: 1.00	sic Rating: NA ription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa Net Load Minutes Minutes Minutes	Time (load, dump, r cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.490 1.570 for site altitude: for site altitude:	0.550 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.625 1.570 1.042	

Haul Rout							T 1	
Seg #	Haul Dis (Ft)	tance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	3500.00		5.00	4.00	9.00	983	3.651	
					Haul Time:	3.651	minutes	
Return Ro	ute:							
Seg #	Haul Dis	tance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	3500.00		-5.00	4.00	-1.00	3706	0.974	
					Return Time:	0.974	minute	s
				Total True	ck Cycle Time:		minute	s
Loading Tool	l unit							
Produ	ction	840.55	LCY/Hour		Adjusted for j	ob efficiency:	697.65	LCY/Hour
Fruck Unit Produ	ction							
		234.68	LCY/Hour		Adjusted for j	ob efficiency:	194.79	LCY/Hour
ptimal No. of Tru	ucks:	4	Truck(s)		Selected Num	ber of Trucks:	3	Truck(s)
			Adjuste	ed hourly true	k team production	on: 584.	.36 LCY	/Hour
			Adjusted sing	le truck/loade	er team production	on: 584.	.36 LCY	/Hour
			Adjusted multip	le truck/loade	er team production	on: 584.	.36 LCY	/Hour
JOB TIN	IE AND	<u>COST</u>						
Fleet s	size:	1	Team(s)	7	Total job time:	25.68	8 Ho	ours
Unit c	ost:	\$2.301	/LCY	-	Total job cost:	\$34,52	28	

REVEGETATION WORK

Task description: Hydroseed 1,000 ft of benches not concurrently reclaimed						
Site: Parkdale	Quarry	Per	mit Action:	2025 Inspection	Permit/Job	o#: <u>M1997054</u>
<u>PROJECT</u> Task #:	IDENTIFIC G105		Colorado		Abbreviation:	None
Date: User:	2/27/2025 JLC	State: County:	Fremont		Filename:	G105
Age	ency or organiz	zation name: DR	RMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	Total Fertilizer Application Cost/Acre	\$43.12

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.40	1.93	\$1.60
Blue Grama - Native	2.20	35.91	\$46.92
Indian Ricegrass - Native	4.20	13.60	\$72.63
Canby Bluegrass - Canbar	0.40	8.50	\$6.00
Sand Dropseed	0.10	11.94	\$1.30
Sideoats Grama - Vaughn	3.60	11.82	\$88.53
Sheep Fescue - Bighorn	0.80	12.49	\$3.97
Thickspike Wheatgrass - Critana	3.20	11.31	\$26.07
Western Wheatgrass - Native	4.00	10.10	\$36.02
Sage, Fringed	0.06	5.01	\$5.95

Sagebrush, Louisiana or Prairie	0.06	6.05	\$11.09
Saltbush, Four Wing	0.20	0.28	\$3.97
Spike Muhly	0.40	14.69	\$4.54
Sumac, Skunkbrush	0.20	0.09	\$9.03
Purple Three-Awn	0.20	2.30	\$17.08
Totals Seed Mix	20.02	146.01	\$334.69

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,359.07
	Total Seed Application Cost/Acre	\$1,359.07

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
Total I	Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nurserv Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

No. of Acres: Estimated Failure Rate:			Cost /Acre: Cost /Acre*:	
*Selected Replanti	ng Work Items:	SEEDING		
Initial Job Cost:	\$2,023.58			
Reseeding Job Cost:	\$338.75			
Total Job Cost:	\$2,362			
Job Hours:	4.00			

BULLDOZER RIPPING WORK

Task description:	Rip existing granite pit floor	r			
Site: Parkdale Quarry	Permit Action:	2025 Inspecti	on Permi	t/Job#: <u>M199</u>	97054
PROJECT IDENTIF	ICATION				
Task #:G110	State: Colorado		Abbrevia	ation: None	
Date: 2/27/2025	County: Fremont		Filen	name: G110	
User: JLC					
Agency or orga	nization name: DRMS				
HOURLY EQUIPME	ENT COST				
Basic Machine	e: Cat D9T - 9SU		Horsepower:	405	
Ripper Attachmen	t: 3-Shank Ripper		Shift Basis:	1 per day	
			Data Source:	(CRG)	
Cost Breakdown:		1			
Owne	ership Cost/Hour:	\$253.16	Utilization % NA		
	rating Cost/Hour:	\$164.35	100		
Ripper Owne	ership Cost/Hour:	\$18.79	NA		
	cating Cost/Hour:	\$9.48	100		
-	erator Cost/Hour:	\$38.59 \$484.37	NA		
I otal					
Total	Fleet Cost/Hour: \$48	4.37			
MATERIAL QUANT	TITIES Sel	ected estimating	g method: Area		
Alternate Methods:		·			
ismic: NA	Bank Volume:	NA	BCY	NA	
10.00	res Rip Depth (ft):	1.00	Volume: 30,49		BCY or
Source	e of estimated quantity: AM-2	, Exh D2 Map &	& 2024 Annual Map w	v/ Reclamation	
	Areas	· 1	1		
HOURLY PRODUC	ΓΙΟΝ				
Seismic:					
	Seismic Velocity:	NA	feet/second		
Area:					
<u>11100.</u>	Average Ripping Depth:	2.63	feet/pass		
	Average Ripping Width:	7.67	feet/pass		
	Average Ripping Length:	300.00	feet/pass		
	Average Dozer Speed: Average Maneuver Time:	<u>88.00</u> 0.25	feet/minute minutes/pas	10	
	Production per unit area:	0.25	acres/hour	5	
Job Condition Correction	•				
	Hourly Unit Production:	0.866	Acres/hr		
Onaujustet	•				
	Site Altitude: Altitude Adj:	5,800	feet (CAT HB)		
	Job Efficiency:	0.83	(1 shift/day))	
	Net Correction:	0.83	(1 sinit day)	,	
Δ	djusted Hourly Unit Production:	0.72	Acres/hr		
	djusted Hourly Fleet Production:		Acres/hr		
JOB TIME AND CO	<u>ST</u>				
Fleet size: 1	Grader(s)	Total job tin	ne: 26.29	9	Hours
Unit cost: \$673	.740 Per acre				

TRUCK/LOADER TEAM WORK

Site: Parkdale Quarr	ite: Parkdale Quarry Permit Action: 2025 Inspection			tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	TIFICATION					
Task #:G115		State: Colora	ado	Ab	breviation: No	ne
Date: $2/27/2$ User: JLC	2025	County: Fremo	ont		Filename: G1	15
	organization nar	ne: DRMS				
Agency of	organization nai	lie. DRIVIS				
HOURLY EQUI	PMENT COST	<u>[</u>		Shift bas	sis: <u>1 per day</u>	
			Equipment Descri	ption		
]	Fruck Loader Tea		<u>740</u> Г 980Н			
Supp	ort Equipment -L		1 98011			
			Г 160М			
Road M	aintenance –Mot -Wa		Г 160M ter Tanker, 7,000	Gal		
		ter fruek. Wu	ier runker, 7,000	Gui.		
<u>Cost Breakdown</u> :		ader Team		Equipment	1	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	100	10
Ownership cost/hour:	\$108.25	\$69.00	NA	\$104.47	\$104.47	\$73.4
Operating cost/hour:	\$79.54	\$60.57	NA	\$82.48	\$82.48	\$83.2
%Utilization-riper: Ripper own. cost/hour:	NA NA	0 \$0.00	NA NA	NA \$0.00	NA \$0.00	N/ \$0.0
Ripper op. cost/hour:	NA NA	\$0.00	NA	\$0.00	\$0.00	\$0.0
Operator cost/hour:	\$25.24	\$36.85	NA	\$27.76	\$27.76	\$0.0
Unit Subtotals:	\$213.03	\$166.42	NA	\$214.71	\$214.71	\$156.6
Number of Units:	3	1	0	1	1	
Group Subtotals:	Work:	\$805.51	Support:	\$214.71	Maint:	\$371.34
Total work team co	st/hour: <u>\$1,391.</u>	56				
MATEDIAL OU	ANTITIES					
MATERIAL QU						
Initial volume Loose volume		CCY LCY		factor: <u>1.429</u>		
	urce of estimated of estimated swe		2, Exh D2 Map Iandbook			
	Material Purch	ase Cost: \$0.00)			
	То	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
<u>Truck Capacity:</u> Truck Payload (wei	oht) Basis					
Material v			Pounds/LCY			

Truck Bed (volume) Basis:						
Struck Volume:	24.20 L	.CY				
Heaped Volume:	31.40 L	.CY				
Average Volume:	27.80 L	.CY				
Adjusted Volume:	31.40 L	.CY				
·						
Final	Truck Volume H	Based on Number of	f Loader Passes:	30.75	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class: <u>N</u>	A	_
Rated Capacity:	7.500	LCY (heaped)				
Bucket Fill Factor:	1.025	Rock - Earth M	ixture (100%-105	5%) 1.025		-
Adjusted Capacity:	7.688	LCY				=
Job Condition Corrections:	-	Si	te Altitude (ft.): <u>4</u>	5800 feet		
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE	8)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.797	0.830				
	0	0.000				
Loading Tool Cycle Time:	Number	of Loading Tool Pa	sses Required to	Fill Truck:	p	asses
Excavators and Front Shovel	<u>s:</u>					
Machine Cycle Time vs	Job Condition	Dating: NA				
Selected Value v						
Track Loaders –	Material Descrip	otion:				
Cycle Time Elements (min.):						
Load: NA	Ma	neuver: NA		Dump: 0.100)	
	_					
Wheel and Track Loaders -	Unadjusted Bas	ic Loader Cycle Tir	ne (load, dump, r	maneuver): 0	.550 minu	ites
Cycle Time Factors				Factor (min.)	Source	_
Material:	Mixed materia			0.020	(Cat HB)	_
Stockpile:		- factor not applica		0.000	(Cat HB)	_
Truck Ownership:		ership of trucks and	loaders -0.04	-0.040	(Cat HB)	_
Operation:	Constant opera			-0.040	(Cat HB)	_
Dump Target:	Nominal target			0.000	(Cat HB)	_
			ne Adjustment:	-0.060	minutes	
		Adjusted Load		0.490	minutes	
		Net Load T	ime per Truck:	1.570	minutes	
<u>Truck Cycle Time:</u>						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.625	Minute
Truck Load Time:	1.570	Minutes	Adjusted	for site altitude:	1.570	Minute
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.042	Minute
Truck Travel (Haul & Return penetration 4.0) Time:	Road Condition: <u>I</u>	Rutted dirt, little	maintenance, no wa	ter, 1" tire	

Haul Rout	te:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time	
	(Ft)			(%)	(%)	(fpm)	(min)	
2	4800.	.00	3.00	4.00	7.00	1281	3.901	
					Haul Time:	3.901	minutes	
Return Ro	oute:							
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	4800	.00	-3.00	4.00	1.00	3706	1.499	
					Return Time:	1.499	minutes	
				Total Tru	ck Cycle Time:	8.637	minutes	
Loading Too	l unit							
Produ		840.55	LCY/Hour		Adjusted for j	ob efficiency:	697.65	LCY/Hour
Truck Unit Produ	ction							
		213.62	LCY/Hour		Adjusted for j	ob efficiency:	177.31	LCY/Hour
Optimal No. of Tr	ucks:	4	Truck(s)		Selected Num	ber of Trucks:	3	Truck(s)
			Adjuste	ed hourly true	k team producti	on: 531	.92 LCY/	Hour
					er team producti		.92 LCY/	Hour
			Adjusted multip	le truck/loade	er team producti	on: 531	.92 LCY/	Hour
JOB TIN	ME AN	ND COST						
Fleet	size:	1	Team(s)	-	Fotal job time:	61.42	2 Hou	ırs
Unit c	cost: _	\$2.616	/LCY		Total job cost:	\$85,4	69	

REVEGETATION WORK

Task descri	ption:	Reveg existing granite pit flo	oor		
Site: Parkdale	e Quarry	Permit Action:	2025 Inspection	Permit/Job	#: <u>M1997054</u>
<u>PROJECT</u> Task #: Date:	<u>IDENTIFIC</u> <u>G120</u> 2/27/2025	ATION State: <u>Colorado</u> County: Fremont		Abbreviation: Filename:	None G120
User:	JLC ency or organized			Thename.	0120

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	Total Fertilizer Application Cost/Acre	\$43.12

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.20	0.96	\$0.80
Blue Grama - Native	1.10	17.95	\$23.46
Indian Ricegrass - Native	2.10	6.80	\$36.31
Canby Bluegrass - Canbar	0.20	4.25	\$3.00
Sand Dropseed	0.05	5.97	\$0.65
Sideoats Grama - Vaughn	1.80	5.91	\$44.26
Sheep Fescue - Bighorn	0.40	6.24	\$1.98
Thickspike Wheatgrass - Critana	1.60	5.66	\$13.04
Western Wheatgrass - Native	2.00	5.05	\$18.01
Sage, Fringed	0.03	2.51	\$2.98

Sagebrush, Louisiana or Prairie	0.03	3.02	\$5.55
Saltbush, Four Wing	0.10	0.14	\$1.99
Spike Muhly	0.20	7.35	\$2.27
Sumac, Skunkbrush	0.10	0.05	\$4.51
Purple Three-Awn	0.10	1.15	\$8.54
Totals Seed Mix	10.01	73.01	\$167.35

Application

Descript	on	Cost /Acre
Drill See	ling (DRMS Survey Cost)	\$236.64
	Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

No. of Acres:	18.9	Cost /Acre:	\$1,804.74
Estimated Failure Rate:	20%	Cost /Acre*:	\$403.99
*Selected Replanting Work Items:	SEEDING		
Luiti-1 L-1 Ct. \$24,100,50			

Initial Job Cost:	\$34,109.59
Reseeding Job Cost:	\$1,527.08
Total Job Cost:	\$35,637
Job Hours:	40.00

COMPACTION WORK

Task description:	Sitewide cleanup - 15	<u>1 hrs of Comp</u>	actor work			
: <u>Parkdale Quarry</u>	Permit A	ction: 2025 I	Inspection	Per	mit/Job#: _	M1997054
PROJECT IDENTIF	ICATION					
Task #: SW01 Date: 2/27/2025 User: JLC		lorado emont				None SW01
Agency or orga	nization name: DRMS					
HOURLY EQUIPME	ENT COST					
Basic Machine Compactor Type		/	Sh	sepower: _ ift Basis: _ Source: _		6 • day &G)
Cost Breakdown:			T Telle	ation %		
Oper Ope	ership Cost/Hour: rating Cost/Hour: erator Cost/Hour: l Unit Cost/Hour:	\$33.65 \$35.80 \$25.60 \$95.05]	NA 100 NA		
Total	Fleet Cost/Hour:	\$95.05				
MATEDIAI OHANT						
MATERIAL QUANT		L	CY	Shri	nkage factoi	:: 0.900
Compacted volum			CY			
	urce of estimated volume: stimated shrinkage factor:	-	l. adjusted to g ook	et 151 hrs (1	/hr per acre)
HOURLY PRODUC	<u>TION</u>	U	nadjusted <u>hour</u>	ly production	$n = (W \times S)$	<u>x L x C) / P</u>
	npacted width per pass (W		5.67	feet		
	erage Compactor Speed (S					
Compact	ed thickness of each lift (I		4.00	_ mph inches		
Compact	ed thickness of each lift (L Conversion Constant (C	L):	4.00 8.00 16.3	inches	/12in./27cu.1	ft.)
Required num	Conversion Constant (C mber of machine passes (F	L):	4.00 8.00 16.3 2	inches (5,280ft./ passes		ft.)
Required nur Unadjus	Conversion Constant (C mber of machine passes (F ted Hourly Unit Productio	L):	4.00 8.00 16.3 2 478.74	inches (5,280ft./ passes CCY/hou		ît.)
Required num	Conversion Constant (C mber of machine passes (F ted Hourly Unit Production <u>n Factors</u>	.): :): :): n:, Si	4.00 8.00 16.3 2	inches (5,280ft./ passes CCY/hou		ft.)
Required nur Unadjus Job Condition Correction	Conversion Constant (C mber of machine passes (F ted Hourly Unit Productio <u>n Factors</u>	L):	4.00 8.00 16.3 2 478.74	inches (5,280ft./ passes CCY/hou		ft.)
Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency:	Conversion Constant (C mber of machine passes (F ted Hourly Unit Production <u>n Factors</u> 0.81 (C	.): :): p): n:1,4 Si Source	4.00 8.00 16.3 2 478.74	inches (5,280ft./ passes CCY/hou		ft.)
Required num Unadjus Job Condition Correction Altitude Adj:	Conversion Constant (Comber of machine passes (Four passes) (Four passes) In Factors 0.81 (Compared to the passes) 0.83 (1)	.): :): n:1,4 Si Source CAT HB)	4.00 8.00 16.3 2 478.74	inches (5,280ft./ passes CCY/hou		ft.)
Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction:	Conversion Constant (Comber of machine passes (Four passes) (Four passes) In Factors 0.81 (Compared to the passes) 0.83 (1)	.):	4.00 8.00 16.3 2 478.74 ite Altitude: <u>5.8</u> 994.15	inches (5,280ft./ passes CCY/hou		ît.)
Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A A	Conversion Constant (C mber of machine passes (F ted Hourly Unit Production <u>n Factors</u> 0.81 (C 0.83 (1 0.6723 mt Adjusted Hourly Unit Production Main Production	.):	4.00 8.00 16.3 2 478.74 ite Altitude: <u>5.8</u> 994.15	inches 		ît.)
Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A A A JOB TIME AND CO	Conversion Constant (C mber of machine passes (F ted Hourly Unit Production <u>n Factors</u> 0.81 (C 0.83 (1 0.6723 mt Adjusted Hourly Unit Production Main Production	.):	4.00 8.00 16.3 2 478.74 ite Altitude: <u>5.8</u> 994.15	inches (5,280ft./ passes CCY/hou 300 feet		ft.) Hours

MOTOR GRADER WORK

Task description:	Sitewide cleanup ~\$215/h	r grader		
Parkdale Quarry	Permit Action	n: 2025 Inspectio	n Perm	nit/Job#: <u>M1997054</u>
PROJECT IDENTIF	TICATION			
Task #: SW02	State: Colorad	lo	Abbrev	iation: None
Date: $2/27/2025$				ename: SW02
User: JLC		-		
Agency or orga	nization name: DRMS			
HOURLY EQUIPM	ENT COST			
Basic Machin	e: <u>CAT 160M</u>		Horsepower:	213
	it:		Shift Basis:	1 per day
11			Data Source:	(CRG)
Cast Durals damme				, <i>i</i>
Cost Breakdown:		1	Utilization %	
Own	ership Cost/Hour:	\$104.47	NA	
	rating Cost/Hour:	#02 10	100	
	ership Cost/Hour:	\$0.00	NA	
	rating Cost/Hour:	\$0.00		
	erator Cost/Hour:	\$27.76	NA	
1	l Unit Cost/Hour:	\$214.71		
	Fleet Cost/Hour: \$	214.71		
	to be graded or ripped: <u>151</u> ce of estimated acreage: AM			acres
HOURLY PRODUC	- <u> </u>	<u>2 E.m. E</u> , p. 0		
	Average Grader Speed:	1.50	mph	
	Selected Application:		grading (0-2.5 mph)) - 1.5
	Selected Blade Angle:	45		
	Effective Blade Length:	8.50	feet	
	of blade overlap per pass:	2.00	feet	
	or ripping width per pass:	6.50	feet	
Unadjuste	d Hourly Unit Production:	1.1818	acres/hour	
Job Condition Correction	n Factors	Sit	e Altitude: <u>5800</u> fee	et
	Sour	rce		
Altitude Adj:	1.00 (CAT			
Job Efficiency:	0.85 (1sh/d,			
Net Correction:	0.8500 multipl	ier		
	Adjusted Hourly Unit Production	on: 1.0045	acres/Hour	
	djusted Hourly Fleet Production		acres/Hour	
Γ		1.0010	uorob/11001	
JOB TIME AND CO	<u>ST</u>			
Fleet size:	1 Grader(s)	Total job time:	150.32	Hours
Unit cost: \$21	371 per core	Total ich aget	©20 075	
521 Juli Cost: \$21	3.74 per acre	Total job cost:	\$32,275	

DOZERGRADER WORK

Task description:		Sitewide cleanu	p D7 dozer			
: _ Parkdale Quarry	у	Per	rmit Action:	2025 Inspection	Permit/Job#:	M1997054
PROJECT IDEN	TIFIC	CATION				
Task #: SW03	3	State:	Colorado		Abbreviation:	None
Date: 2/27/2 User: JLC	2025	County:	Fremont		Filename:	SW03
Agency or	organi	zation name: D	RMS			
HOURLY EQUI	PMEN	NT COST				
Basic Machine:	Cat I	D7R DS Series II I	.GP			
Horsepower:						
Blade Type:						
Attachment:	NA					
Shift Basis: Data Source:	l pei	: day				
Cost Breakdown:						
				Utilization %		
Ownership Cost/H	our:		\$90.24	NA		
Operating Cost/H			\$78.95	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H			\$0.00	0		
Operator Cost/H	our:		\$38.59	NA		
	r:	\$207.78				
Total unit Cost/Hou						

Fleet size:1 Dozer(s)Unit cost:\$207.78/LCY

Total job time:	151.00 Hours
Total job cost:	\$31,375

MISCELLANEOUS TRUCK WORK

I ask ucs	scription:	Sitewide cleanu	p Water Tru	ıck		
e: <u>Parkd</u>	lale Quarry	Pe	ermit Action:	2025 Inspection	Permit/Job#:	M1997054
<u>PROJE</u>	<u>CT IDENTIFI</u>	ICATION				
Task Dat Use	te: 2/27/2025 er: JLC	State: County:			Abbreviation: Filename:	None SW04
	Agency or organ	nization name:	ORMS			
HOUR	LY EQUIPME	NT COST				
Ma	Attachment 1:		000 Gal.		Horsepow Shift Bas Weig	sis: 1 per day
Attachment 2: Labor Unit 1: Tar Labor Unit 2:		Tanker Driver - 1	er Driver - 1 rear axle			(US Tons)
						(03 1013)
Cost Bre						(03 1013)
Cost Bre	Labor Unit 2:			Utilization %		(03 1003)
(Labor Unit 2: <u>cakdown:</u> Dwnership Cost/F		.42	Utilization % NA		(03 1005)
(Labor Unit 2: <u>eakdown:</u> Ownership Cost/F Operating Cost/F	Hour:\$73 Hour:\$83	.42	Utilization % NA 100		(03 1005)
(Labor Unit 2: <u>cakdown:</u> Ownership Cost/H Operating Cost/H Operator Cost/H	Hour:\$73 Hour:\$83 Hour:\$21	.42 .21 .12	Utilization % NA		(03 1013)
(Labor Unit 2: <u>eakdown:</u> Ownership Cost/F Operating Cost/F	Hour:\$73 Hour:\$83 Hour:\$21	.42 .21 .12	Utilization % NA 100		(03 1005)
	Labor Unit 2: <u>cakdown:</u> Ownership Cost/H Operating Cost/H Operator Cost/H	Hour: \$73 Hour: \$83 Hour: \$21 Hour: \$17	.42 .21 .12	Utilization % NA 100		(03 1013)
(Labor Unit 2: eakdown: Ownership Cost/F Operating Cost/F Operator Cost/F Total Unit Cost/F	Hour: \$73 Hour: \$83 Hour: \$21 Hour: \$17 Hour: \$17	.42 .21 .12 7.75	Utilization % NA 100		(03 1013)
(JOB T	Labor Unit 2: eakdown: Ownership Cost/F Operating Cost/F Operator Cost/F Total Unit Cost/F Total Fleet Cost/F	Hour: \$73 Hour: \$83 Hour: \$21 Hour: \$17 Hour: \$17 DST	.42 .21 .12 7.75 7.75	Utilization % NA 100		Hours

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Мо	Mob/Demob equipment							
e: <u>Parkdale Qua</u>	rry	Permit	Action: <u>2025</u>	Inspection	<u>n</u>	Permit/Job#: <u>M</u>	1997054		
PROJECT IDE	NTIFICATI	<u>ON</u>							
Task #: SW	799	State: Co	olorado		Abbro	eviation: None			
Date: $2/2^{2}$	7/2025	County: Fr	emont		Fi	ilename: SW99)		
User: JLC	2								
Agency of	or organization	name: DRMS							
EQUIPMENT 1	RANSPOR	<u>T RIG COST</u>							
					Shift ba	sis: 1 per da	V		
					Cost Data Sou				
T 1	T (D								
Iruck	Tractor Desc	ription: GENE	RIC ON-HIGH		P (2ND HALF,	OR, 6X4, DIESEI	L POWERED,		
True	k Trailer Desc	rintion:	ENERIC FOUR			Z000) ROP DECK EQU	IPMENT		
1 ruci	K Hanel Desc	upuon. G			CSENECK, DE (25T, 50T, A)		11 1V1L/1N I		
			-		(201, 301, Al	1001)			
Cost Breakdown:									
Available Rig C	apacities	0-25 Tons	26-50 Tons	51	+ Tons				
	Cost/Hour:	\$10.44	\$22.18		23.94				
4	Cost/Hour:	\$26.48	\$54.55		55.65				
Operator	Cost/Hour:	\$22.52	\$22.52	\$	22.52				
Helper	Cost/Hour:	\$0.00	\$23.53	\$	23.53				
Total Unit	t Cost/Hour:	\$59.44	\$122.78	\$125.64					
NON ROADAB Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet		
Cat 627G	(TONS) 41.80	\$217.39	t \$122.78	2	fleet \$680.34	\$245.56	\$500.00		
Cat 627G	57.28	\$329.66	\$125.64	2 2	\$910.60	\$245.50	\$500.00		
Cat D6T LGP	26.87	\$99.72	\$122.78	1	\$222.50	\$122.78	\$250.00		
Cat D7R DS Series II LGP	34.57	\$90.24	\$122.78	1	\$213.02	\$122.78	\$250.00		
Cat D8T - 8SU	47.71	\$173.32	\$122.78	1	\$296.10	\$122.78	\$250.00		
Cat D9T - 9SU	60.01	\$253.16	\$125.64	1	\$378.80	\$125.64	\$250.00		
Cat 740	36.49	\$108.25	\$122.78	3	\$693.09	\$368.34	\$750.00		
Cat 775F	50.39	\$121.08	\$122.78 \$59.44	2 2	\$487.72 \$327.82	\$245.56 \$118.88	\$500.00 \$500.00		
CAT 160M Water Tanker,	29.65	\$104.47 \$73.42	\$59.44 \$122.78	2	\$327.82 \$196.20	\$118.88 \$122.78	\$250.00		
7,000 Gal.	27.05	φ/3.τ2	φ122./O	1	φ170.20	$\varphi_1 \angle \angle \cdot / 0$	φ250.00		
CAT 928Hz	13.91	\$27.62	\$59.44	1	\$87.06	\$59.44	\$250.00		
CAT 980H	33.12	\$69.00	\$122.78	1	\$191.78	\$122.78	\$250.00		
CAT 990H	83.34	\$115.73	\$125.64	1	\$241.37	\$125.64	\$250.00		
Drill/Broadcast	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$250.00		
Seeder with						1	1		
Seeder with Tractor									
	5.39	\$33.65	\$59.44	1	\$93.09	\$59.44	\$250.00		

Subtotals: \$5,557.67 \$2,458.20 \$5,500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Hydroseeder with Tractor	\$89.08	2	\$178.16	\$178.16
Light Duty Pickup, 4x4, 1 T.	\$108.47	1	\$108.47	\$108.47
Crew				
		Subtotals:	\$286.63	\$286.63

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	PUEBLO 51.00 55.00	miles
Total Non-Roadable Mob/Demob Cost *	\$85,221.71	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$531.57	

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.93	0.93
Return Time (Hours):	0.93	0.93
Loading Time (Hours):	2.67	NA
Unloading Time (Hours):	2.67	NA
Subtotals:	7.19	1.85

JOB TIME AND COST

Total job time: 14.39 Hours

Total job cost: **\$85,753**

DEMOLITION WORK

Т	ask description:	Demo plan	Demo plant concrete support structures & conveyor					
Site:	Parkdale Quarry		Permit Action:	2025 Inspection	Permit/	Job#: <u>M1997054</u>		
<u>ROJEC</u>	CT IDENTIFICATION	<u>N</u>						
Task #:	WG02	State:	Colorado		Abbreviation:	None		
Date:	2/27/2025	County:	Fremont		Filename:	WG02		
User:	JLC	-						

UNIT COSTS

Location adjustment: 88.00 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Concrete support structures	2' x 3'	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 50 ft. push	90.00	LF	\$14.21	\$1,278.84
Conveyor	232'	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	3.75	EA	\$3,475.00	\$13,031.25

		Subtotal		Total Cost (adjusted for	
Job Hours:	12.00	(unadjusted):	\$14,310.09	location):	\$12,592.88

BULLDOZER RIPPING WORK

	Task description	Scar	ify compacted ground				
Site	:Parkdale Qua	nrry	Permit Action:	2025 Inspection	n Perr	mit/Job#: <u>M19</u>	97054
	PROJECT ID	ENTIFICATI	<u>ON</u>				
		G04	State: Colorado			viation: <u>None</u>	
	Date: 2/2 User: JL	27/2025 C	County: Fremont		Fil	ename: WG0	4
		or organization	name: DRMS				
	HOURLY EQ	e					
			: D9T - 9SU		Horsepower:	405	
			hank Ripper		Shift Basis:	1 per day	
					Data Source:	(CRG)	
	Cost Breakdown	<u>:</u>			Utilization %		
		Ownership Co		\$253.16	NA		
	р.	Operating Co		\$164.35	100		
		er Ownership Co per Operating Co		\$18.79 \$9.48	<u>NA</u> 100		
	Kipj	Operating Co		\$9.48	NA		
		Total Unit Co		\$484.37	1111		
		Total Fleet Co	ost/Hour: \$484	.37			
	MATERIAL (.1 1 4		
			Sele	cted estimating	method: Area		
a · ·	Alternate Method	<u>as:</u>	D 1 U 1	2.1	DOL		
Seismic: Area:	NA 26.00	acres	Bank Volume:	NA 1.00	BCY Volume: 41	.947	BCY or CC
incu.	20.00		nated quantity: AM-1,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
				Exil E, Aspeet C	J		
	HOURLY PRO	<u>UDUCTION</u>					
	Seismic:		Seismic Velocity:	NA	feet/secon	d	
				INA		lu	
	<u>Area:</u>	Averag	e Ripping Depth:	2.63	feet/pass		
			e Ripping Width:	7.67	feet/pass		
			Ripping Length:	300.00	feet/pass		
			age Dozer Speed:	88.00	feet/minut	te	
			Maneuver Time:	0.25	minutes/p		
		Produc	tion per unit area:	0.866	acres/hour	r	
	Job Condition Co	orrection Factors					
	Un	adjusted Hourly	Unit Production:	0.866	Acres/hr		
			Site Altitude:	5,800	feet		
			Altitude Adj:	1.00	(CAT HB	/	
			Job Efficiency:	0.83	(1 shift/da	• /	
			Net Correction:	0.83	multiplier		
			Hourly Unit Production:	0.72	Acres/hr		
		Adjusted	Hourly Fleet Production:	0.72	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job time	e: <u>36</u> .	.16	Hours
	Unit cost:	\$673.740	Per acre	Total job cost	t:\$17,	517	

TRUCK/LOADER TEAM WORK

Task description:	Replace	topsoil (6 in	x 26	Ac)			
Site: Parkdale Quarr	y	Permit	Action	n: 2025 Inspec	tion	Permit/Job#: <u>M</u>	1997054
PROJECT IDEN	TIFICATION						
Task #: WG0:	5	State: C	olorac	lo	Ab	breviation: No	ne
Date: 2/27/2	2025	County: F	remon	ıt		Filename: WC	305
User: JLC							
Agency or	organization nar	ne: DRMS	5				
HOURLY EQUI	PMENT COST	<u>ר</u>			Shift bas	sis: <u>1 per day</u>	
			E	quipment Descri	ption		
Т	Fruck Loader Tea	-	Cat 7				
		-Loader:	CAT NA	980H			
Supp	ort Equipment -L Dı-	ump Area:		160M			
Road M	aintenance – Mot			160M			
	-Wa	ter Truck:	Wate	er Tanker, 7,000	Gal.		
	T 1-/T	1		C		M	E
<u>Cost Breakdown</u> :	Truck/Loa	ader Team Loader		Load Area	Equipment Dump Area	Maintenan Motor Grader	ce Equipment Water Truck
0/11/11 / 1			100		-		
%Utilization-machine:	100		100	NA	\$104.47	100	100
Ownership cost/hour:	\$108.25	\$69		NA	\$104.47	\$104.47	\$73.42
Operating cost/hour: %Utilization-riper:	\$79.54 NA	\$60	.57	NA NA	\$41.24 NA	\$82.48 NA	\$83.21 NA
Ripper own. cost/hour:	NA	\$0	.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA		.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$36		NA	\$27.76	\$27.76	\$0.00
Unit Subtotals:	\$213.03	\$166		NA	\$173.47	\$214.71	\$156.63
Number of Units:	3	φ100	1	0	1	φ211.71 1	1
Group Subtotals:	Work:	\$805.51	-	Support:	\$173.47	Maint:	\$371.34
•				Support.	\$17 5. 77	Want.	φ371.3τ
Total work team cos	st/hour: <u>\$1,350</u>	32					
MATERIAL QU	ANTITIES						
Initial volume			CCY	Swall	factor: 1.429		
Loose volume			LCY	Swell	1actor. 1.429		
	urce of estimated			, Exh L, Aspect (G		
	of estimated swe			andbook	0		
	Material Purch		\$0.00				
	To	otal Cost:	\$0.00				
HOURLY PRO	DUCTION						
Truck Capacity:							
Truck Payload (wei							
Material v		'1		Pounds/LCY			
Descr Rated Pa	iption: <u>Top Sc</u> vyload: 87,000			Pounds			
Payload Ca	•			LCY			
i ayibau Caj	<u></u>						

Truck Bed (volume) Basis:						
Struck Volume:	24.20 I	LCY				
Heaped Volume:	31.40 I	LCY				
Average Volume:	27.80 I	LCY				
Adjusted Volume:	31.40 I	LCY				
5						
Final	Truck Volume	Based on Number o	f Loader Passes:	30.75	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	A	
Rated Capacity:	7.500	LCY (heaped)				-
Bucket Fill Factor:	1.025		lixture (100%-105	5%) 1 025		
Adjusted Capacity:	7.688	LCY	(10070-10			
Leh Condition Connections			:	5000 £4		
Job Condition Corrections:			ite Altitude (ft.): <u></u>			
	Truck	Loader	Source			
Altitude Adj:	0.960	1.000	(CAT HE	·		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.797	0.830				
Loading Tool Cycle Time:	Number	of Loading Tool Pa	assas Dequired to	Fill Truck:	4 pa	
		of Loading 1001 Pa	isses Required to	F111 I fuck:	pa	asses
Excavators and Front Shove	<u>ls:</u>					
Machine Cycle Time v Selected Value v						
Track Loaders –		U				
Cycle Time Elements (min.):	-	· · · · · ·				
Load: NA	Ma	aneuver: NA		Dump: 0.100)	
				·		
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Ti	me (load, dump, r	naneuver): 0	.550 minu	tes
Cycle Time Factors				Factor (min.)	Source	_
Material:	Mixed materia			0.020	(Cat HB)	-
Stockpile:	No adjustment	t - factor not applica	$h_{10} 0.00$	0.000	(Cat IID)	
					(Cat HB)	-
Truck Ownership:	Common own	ership of trucks and		-0.040	(Cat HB)	-
Truck Ownership: Operation:	Common own Constant opera	ership of trucks and ation -0.04		-0.040 -0.040	(Cat HB) (Cat HB)	-
Truck Ownership:	Common own	ership of trucks and ation -0.04 et 0.00	l loaders -0.04	-0.040 -0.040 0.000	(Cat HB) (Cat HB) (Cat HB)	- - -
Truck Ownership: Operation:	Common own Constant opera	ership of trucks and ation -0.04 <u>et 0.00</u> Net Cycle Tir	l loaders -0.04 ne Adjustment:	-0.040 -0.040 0.000 -0.060	(Cat HB) (Cat HB) (Cat HB) minutes	-
Truck Ownership: Operation:	Common own Constant opera	ership of trucks and ation -0.04 et 0.00 Net Cycle Tir Adjusted Load	l loaders -0.04 ne Adjustment: ler Cycle Time:	-0.040 -0.040 0.000 -0.060 0.490	(Cat HB) (Cat HB) (Cat HB) minutes minutes	-
Truck Ownership: Operation:	Common own Constant opera	ership of trucks and ation -0.04 et 0.00 Net Cycle Tir Adjusted Load	l loaders -0.04 ne Adjustment:	-0.040 -0.040 0.000 -0.060	(Cat HB) (Cat HB) (Cat HB) minutes	-
Truck Ownership: Operation:	Common own Constant opera	ership of trucks and ation -0.04 et 0.00 Net Cycle Tir Adjusted Load	l loaders -0.04 ne Adjustment: ler Cycle Time:	-0.040 -0.040 0.000 -0.060 0.490	(Cat HB) (Cat HB) (Cat HB) minutes minutes	-
Truck Ownership: Operation: Dump Target:	Common own Constant opera Nominal targe	ership of trucks and ation -0.04 et 0.00 Net Cycle Tir Adjusted Load	l loaders -0.04 ne Adjustment: ler Cycle Time: Time per Truck:	-0.040 -0.040 0.000 -0.060 0.490	(Cat HB) (Cat HB) (Cat HB) minutes minutes	Minute
Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Common own Constant opera Nominal targe : 0.60	ership of trucks and ation -0.04 et 0.00 Net Cycle Tir Adjusted Load Net Load T	l loaders -0.04 ne Adjustment: ler Cycle Time: Time per Truck: Adjusted	-0.040 -0.040 0.000 -0.060 0.490 1.570	(Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time	Common own Constant opera Nominal targe : 0.60 : 1.570	ership of trucks and ation -0.04 tt 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes	l loaders -0.04 ne Adjustment: ler Cycle Time: Time per Truck: Adjusted Adjusted	-0.040 -0.040 0.000 -0.060 0.490 1.570	(Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.625	Minute: Minute: Minute:
Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time Truck Load Time	Common own Constant opera Nominal targe : 0.60 : 1.570 : 1.00	ership of trucks and ation -0.04 t 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes Minutes Minutes	l loaders -0.04 ne Adjustment: ler Cycle Time: Time per Truck: Adjusted Adjusted	-0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude:	(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutesminutes0.6251.5701.042	Minute

	Haul Rou							T 1	
	Seg #	Haul I (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
	2	3000.	00	0.00	4.00	4.00	2421	1.865	
1	Return Ro	uite.				Haul Time:	1.865	minutes	
	Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	~~~~	(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	3000.	00	0.00	4.00	4.00	3005	1.195	
					Total Tru	Return Time: ck Cycle Time:	1.195 6.297	minutes	
Loa	ading Too								
Tmale I	Produ Jnit Produ	-	840.55	LCY/Hour		Adjusted for j	ob efficiency:	697.65	LCY/Hour
	Jiiit I Iout	-	293.01	LCY/Hour		Adjusted for j	ob efficiency:	243.20	LCY/Hour
Optimal	No. of Tr	ucks:	3	Truck(s)		Selected Num	ber of Trucks:	3	Truck(s)
				Adjuste	d hourly truc	k team production	on: <u>729</u> .	.60 LCY/H	Iour
						er team production			
				Adjusted multip	le truck/loade	er team production	on: <u>697</u> .	.65 LCY/H	Iour
<u>-</u>	JOB TIM	ME AN	D COST						
	Fleet	size:	1	Team(s)	- -	Fotal job time:	42.95	5 Hour	S
	Unit	cost:	\$1.936	/LCY		Total job cost:	\$57,99	97	

# **REVEGETATION WORK**

-	Task descrip	otion:	Seed and Mulch	plant area			
Site:	Parkdale	Quarry	Per	rmit Action:	2025 Inspection	Permit/Jol	o#: <u>M1997054</u>
<u>P</u>	ROJECT Task #:	IDENTIFIC WG06	CATION State:	Colorado		Abbreviation:	None
	Date: User:	2/27/2025 JLC	County:	Fremont		Filename:	WG06
	Age	ency or organi	zation name: DF	RMS			

## **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	125.00	pound	\$0.64	\$80.25
Superphosphate, 0-20-0 with 12% S	125.00	pound	\$0.71	\$88.84
			Total Fertilizer Materials Cost/Acre	\$169.09

## Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$43.12
	<b>Total Fertilizer Application Cost/Acre</b>	\$43.12

# **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Total Tilling Cost/Acre	\$117.61

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.20	0.96	\$0.80
Blue Grama - Native	1.10	17.95	\$23.46
Indian Ricegrass - Native	2.10	6.80	\$36.31
Canby Bluegrass - Canbar	0.20	4.25	\$3.00
Sand Dropseed	0.05	5.97	\$0.65
Sideoats Grama - Vaughn	1.80	5.91	\$44.26
Sheep Fescue - Bighorn	0.40	6.24	\$1.98
Thickspike Wheatgrass - Critana	1.60	5.66	\$13.04
Western Wheatgrass - Native	2.00	5.05	\$18.01
Sage, Fringed	0.03	2.51	\$2.98

Sagebrush, Louisiana or Prairie	0.03	3.02	\$5.55
Saltbush, Four Wing	0.10	0.14	\$1.99
Spike Muhly	0.20	7.35	\$2.27
Sumac, Skunkbrush	0.10	0.05	\$4.51
Purple Three-Awn	0.10	1.15	\$8.54
Totals Seed Mix	10.01	73.01	\$167.35

## Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	<b>Total Seed Application Cost/Acre</b>	\$236.64

## **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

## Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

## **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

#### JOB TIME AND COST

No. of Acres:	26	Cost /Acre:	\$1,804.74
Estimated Failure Rate:	20%	Cost /Acre*:	\$403.99
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$46,923.24
Reseeding Job Cost:	\$2,100.75
Total Job Cost:	\$49,024
Job Hours:	50.00