

# 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:
Spotted Burro Pit	M-1979-192	Sand and gravel	Fremont
INSPECTION TYPE:	WEATHER:	INSP. DATE:	<b>INSP. TIME:</b> 09:00
Monitoring	Clear	January 9, 2025	
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	<b>TYPE OF OPERA</b>	
Rockbottom, LLC	Beckie Kagan	112c - Construction	

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	Complete Bond	\$112,405.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
INSPECTOR(S):	<b>INSPECTOR'S SIGNATURE:</b>	SIGNATURE DATE:
Jocelyn Carter	Jon Rate	February 18, 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 #1:** 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. The calculated financial warranty based on the observed disturbances and the approved reclamation plan is \$194,593.00; \$82,188.00 more than the current financial warranty or \$112,405.00.

**CORRECTIVE ACTIONS:** The operator shall review the attached reclamation cost estimate and provide the Division with any comments and/or any additional documents regarding the calculations or any reclamation works that have been completed. If the operator does not have comments, the operator shall submit adequate financial warranty, as determined by the Division. 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: 3/11/25** 

## **OBSERVATIONS**

The Spotted Burro Pit, Permit No. M-1979-192, was inspected by me, Jocelyn Carter, on behalf of the Division of Reclamation, Mining, and Safety (Division/DRMS). The permittee of the mining operation is Rockbottom, LLC, which was represented by Beckie Kagan during the inspection. The weather was clear with cold temperatures at the time of the inspection and there was about 6 inches of snow on the ground.

Spotted Burro Pit is a 112c construction regular surface mining operation permitted for 87.5 acres, extracting sand and gravel. The surface and mineral rights are privately owned with most of the permitted area owned by Rockbottom, LLC. The site is located about 5.6 miles east of Canon City in Fremont County. To access the site from the intersection of U.S. Highway 50 and Colorado Highway 115, travel west on U.S. Highway 50 for 4.1 miles, then travel north on Phantom Canyon Rd for 1.6 miles, and then east on County Road 123 for 0.8 miles. The mine sign is posted on the south side of the road, near the permit entrance.

Mining activity was not occurring at the time of the inspection. The target layer is 15 feet thick with three to five feet of overburden above. The permit was accessible, but with the snow on the ground and out of abundant precaution, some portions of the operation were not inspected during the site visit. The permit boundary markers were not verified, and the settling pond were not visually inspected. Ms. Kagan did confirm that permit boundary markers were in place and that there have not been any issues with the settling pond.

A problem is being cited for the financial warranty in this report. Details about the problem are given below under the Financial Warranty section below, see Problem #1 above for information about the corrective action.

Photos taken during the inspection are included in this report along with a map that was created for reference purposes. Any questions about this inspection report should be directed to me by email at Jocelyn.carter@state.co.us or by phone at (720) 666-1065.

A hardcopy of this report is available by request only.

#### **Records**

There are no open infractions or enforcement issues with the permit. The annual report, map, and fee were received October 13, 2024. Both the mineral rights and the surface rights are privately owned. The post mine land use is wildlife habitat.

#### **Hydrological Balance**

There did not appear to be any effect on the hydrologic balance at the time of the site visit.

#### **Processing Waste/Tailings**

There is no processing waste associated with this operation.

#### **General Mine Plan Compliance**

The mining operation appeared to be in compliance with the approved mining plan. At the time of the inspection, the working highwall had reached the furthest north on the Osborn property. According to Ms. Kegan, the operation will be progressing to the east, finishing extraction of materials from the Osborn property. Operations will then progress south while also reclaiming the Osborn property with 4H:1V slopes. There is a 10' high berm of topsoil along the northern permit boundary of the Osborn property. The berm slopes appeared stable with plant litter, implying that they are well vegetated. There are several material stockpiles on the pit floor that all appear to be stable, see Photo #5. Processing equipment were observed on the pit floor near the

working highwall.

Using Google Earth satellite imagery from June 28, 2024, the length of the highwall was measured to be approximately 965 feet. The height of the highwall appeared to be between 18 and 20 feet during the site visit, in accordance with the mining plan, see Photo #6. Ms. Kegan stated that crushed fines sold well over the past year.

The operator has a logging business, and some logs were observed south of the scale and office.

## Signs and Markers

The mine sign was posted at the entrance of the site, in accordance with Rule 3.1.12(1), see Photos #1 and #2. The boundary markers were not verified during the inspection due to ground conditions. It was observed that the western side of the entrance road and northwest portion of the permitted area and the northern permit boundary were marked by fencing.

## **Overburden/Developed Waste**

Several stockpiles of overburden were observed on the west side of the pit floor, and they appeared to be stable. There appeared to be plant litter on the slopes indicating that they are well vegetated, see Photo #7.

## Acid or Toxic Materials

There are no acid or toxic materials associated with this operation.

#### **Financial Warranty**

The current financial warranty held by the Division is \$112,405.00. The reclamation cost estimate was recalculated based on the disturbances observed during the site visit, see Figure #1 below for disturbance details. The updated cost estimate is calculated at \$194,593.00; a copy of the Division's reclamation cost estimate (RCE) is attached with this report. The current bond is \$82,188.00 below the calculated reclamation costs and is cited as a problem in this report. See Problem #1 above for information about the corrective action necessary to abate the problem.

# **Backfill & Grading**

There is about 450 feet of the north portion of the disturbance on the Osborn property that had been backfilled and graded, see Photo #8. The graded slope appeared to be 4H:1V and stable.

# **Processing Facilities**

There is a 20-foot Conex on site used as an office and a scale, both located in the southeast portion of the permit area, see Photo #4.

# Fish & Wildlife

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

#### **Stormwater Management Plan**

The stormwater management plan is designed to collect all surface runoff and direct it to a settling pond located in the southwest of the permit before discharging into Eight Mile Creek. Due to ground conditions, the settling pond was not inspected during the inspection.

#### **Erosion/Sedimentation**

There did not appear to be a sedimentation or erosion issue.

#### **Off-site Damage**

There was no off-site damage observed during the inspection.

### <u>Roads</u>

The roads appear to be in good condition and stable with no erosion issues, see Photos #2 and #3.

## **Explosives**

Explosives are not used for this operation.

## <u>Topsoil</u>

The topsoil stockpiles appeared to be stable and in good condition, see Photo #7. There was plant litter observed on the slopes of the topsoil stockpiles indicating that they are well vegetated.

#### **Revegetation**

There did not appear to be any noxious weeds on the permit area.

## **Reclamation Plan/ Compliance**

The backfilled and graded slopes appeared to be graded to a 4H:1V, in accordance with the approved reclamation plan.

#### **Stipulations**

There are no stipulations associated with this permit.

## **PHOTOGRAPHS**



Photo #1: Mine sign in accordance with Rule 3.1.12(1).



Photo #2: Mine entrance, mine sign viewed on the right side of the access road; looking to the south from the mine entrance.



Photo #3: View of the access road, on the left side of the photo, and the parking area for equipment, looking northeast.



Photo #4: View of the scale, looking southwest. Logs brought on the property can be seen in the background.



Photo #5: Product stockpiles stored on the pit floor, looking southwest from the topsoil berm along the north permit boundary.



Photo #6: View of the highwall along the east side of the permitted area, looking to the northeast from the pit floor.



Photo #7: View of an overburden stockpile and the topsoil berm along the northern permit boundary, looking to the east from the top of the topsoil berm.



Photo #8: View of the backfilled and graded area along the northwest portion of the northern permit boundary, adjacent to the highwall; looking to the south – southwest from the top of the topsoil berm.



Figure 1: Map created from inspection observations and used to create the RCE. The red polygon is the permit boundary, the purple polygon is the area that needs to be topsoiled (18.2 acres), the pink polygon is the road that needs to be ripped (1.5 acres), both areas need to be seeded (19.7 acres), and the green line represents the highwall.

#### **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 <u>NA</u>
(PW) PROCESSING WASTE/TAILING <u>Y</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 <u>Y</u>
(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>Y</u>	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS <u>NA</u>
(AT) ACID OR TOXIC MATERIALS <u>NA</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** 

Beckie Kagan Rockbottom, LLC 555 Ernest Ave Westcliffe, CO 81252

Enclosure: Division's Reclamation Cost Estimate

CC: Amy Eschberger, DRMS Andy Kagan, Rockbottom, LLC

# COST SUMMARY WORK

Spotted 1	Burro Pit	Per	rmit Action:	2025 Inspection	Permit/Jol	o#: <u>M1979192</u>
ROJECT	IDENTIFICAT	<u>FION</u>				
Task #:	000	State:	Colorado		Abbreviation:	None
Date:	2/14/2025	County:	Fremont		Filename:	M192-000
User:	JLC					

#### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfilling Highwalls (965' L, 18' H)	DOZER	2	18.10	\$17,194
002	Ripping Access Road	RIPPER	2	3.65	\$2,940
003	Spreading Topsoil (19.8 acres)	SCRAPER1	1	25.82	\$82,613
004	Seeding 19.8 acres	REVEGE	1	10.00	\$43,389
005	Mob/Demob	MOBILIZE 1		5.82	\$19,384
		<u>SUBTC</u>	DTALS:	63.39	\$165,520

## **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$3,344
Performance bond:	1.05	Total =	\$1,738
Job superintendent:	31.70	Total =	\$2,512
Profit:	0.00	Total =	\$0
		TOTAL O & P =	\$7,594
		CONTRACT AMOUNT (direct + O & P) =	\$173,114

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 4.25 5.00	Total = Total =	\$500 \$7,357 \$8,656
CONTINGENCY:	3.00	Total =	\$4,966
	TOTAL I	NDIRECT COST =	\$29,073
TOTAL BO	ND AMOUNT (d	lirect + indirect) =	\$194,593

# BULLDOZER WORK

Task description:	Backfilling Highwalls (965)	L, 10 H)		
Spotted Burro Pit	Permit Action:	2025 Inspection	Permit/Job#:	M1979192
PROJECT IDENTIF	ICATION			
Task #:         001           Date:         2/14/2025           User:         JLC	State: Colorado County: Fremont		Abbreviation: Filename:	None M192-001
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	<u>ENT COST</u>			
	D9T - 9SU			
Horsepower: 405				
	ni-Universal			
	hank ripper			
	er day RG)			
Data Source: (Cr	(0)			
Cost Breakdown:		1		
		Utilization %		
Ownership Cost/Hour:	\$253.16	NA		
Operating Cost/Hour:	\$164.35	100		
Ripper own. Cost/Hour:	<u>\$18.79</u> \$0.00	NA		
Ripper op. Cost/Hour:		0		
Operator Cost/Hour:	\$38.59	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$474.89 <b>\$949.77</b>			
Total Fleet Cost/Hour: MATERIAL QUANT	\$949.77 <u>ITIES</u>			
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>14,4</u> Swell factor: <u>1.00</u>	<b>\$949.77 ITIES</b> 75 0			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>14,4</u> Swell factor: <u>1.00</u>	\$949.77 TTIES 75 0 75 LCY	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4	\$949.77 TTIES 75 0 75 LCY ne:Division of Reclama	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volume	\$949.77 TTIES 75 0 75 LCY ne: Division of Reclama factor: Cat Handbook	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volu       14,4         Source of estimated volu       Source of estimated volu         Source of estimated swell       44         HOURLY PRODUCT       44         Average push distance:       44	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         FION         150 feet	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum       14,4         Source of estimated volum       14,4         Matter of estimated vol	\$949.77           ITIES           75           0           75 LCY           ne:         Division of Reclama           1 factor:         Cat Handbook           CION           150 feet           ction:         910.5 LCY/hr			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volu       14,4         Source of estimated volu       14,4         Source of estimated volu       14,4         Materials consistency destinated volu       14,4	\$949.77 TTIES 75 0 75 LCY ne: Division of Reclama 1 factor: Cat Handbook TION 150 feet ction: 910.5 LCY/hr scription: Consolidated stocl			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product	\$949.77           ITIES           75           0           75 LCY           ne:         Division of Reclama           1 factor:         Cat Handbook           CION           150 feet           ction:         910.5 LCY/hr			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency des         Average push gradient:         Average site altitude:	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         FION         ction:       150 feet         ction:       910.5 LCY/hr         ccription:       Consolidated stock         5 %			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency des         Average push gradient:         Average site altitude:	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         FION         ction:       910.5 LCY/hr         acription:       Consolidated stock         5 %         5,500 feet	cpile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum       14,4         Source of estimated volum       Source of estimated volum         Source of estimated swell       14,4         Materials consistency       14,4         Average push distance:       14,4         Materials consistency des       Average push gradient:         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Job Condition Correction       100	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         If factor:       Cat Handbook         If factor:       910.5 LCY/hr         acription:       910.5 LCY/hr         acription:       Consolidated stocl         5 %       5,500 feet         2,650 lbs/LCY       Decomposed rock - 25% Roc         Factor       Factor	cpile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       14,4         Swell factor:       1.00         Loose volume:       14,4         Source of estimated volum       14,4         Source of estimated volum       Source of estimated volum         Source of estimated swell       14,4         MOURLY PRODUCT       Average push distance:         Unadjusted hourly product       Materials consistency destance:         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Job Condition Correction       Operator	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         ITION         ISO feet         ction:       910.5 LCY/hr         Generation: $5\%$ 5,500 feet         2,650 lbs/LCY       Decomposed rock - 25% Roc         Factor         Skill:       0.750	cpile 1.0 k, 75% Earth <u>Source</u> (AVG.)		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 14,4 Swell factor: 1.00 Loose volume: 14,4 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator of Material consistency	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         If factor:       Cat Handbook         If factor:       910.5 LCY/hr         ction:       910.5 LCY/hr         scription:       Consolidated stocl $5 \%$ 5,500 feet         2,650 lbs/LCY       Decomposed rock - 25% Roc         Factor       Skill:       0.750         ency:       1.000	cpile 1.0 k, 75% Earth <u>Source</u> (AVG.) (CAT HB)		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 14,4 Swell factor: 1.00 Loose volume: 14,4 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing me	\$949.77         ITIES         75         0         75 LCY         ne:       Division of Reclama         1 factor:       Cat Handbook         If factor:       Cat Handbook         If factor:       910.5 LCY/hr         ction:       910.5 LCY/hr         scription:       Consolidated stocl $5 \%$ 5,500 feet         2,650 lbs/LCY       Decomposed rock - 25% Roc         Factor       Skill:       0.750         ency:       1.000	cpile 1.0 k, 75% Earth <u>Source</u> (AVG.)		

_		
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:		
Adjusted unit production: 399	.80 LCY/hr	
Adjusted fleet production: <b>799</b>	.6 LCY/hr	
Adjusted unit production: 399		

## JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$1.188/LCY

Total job time:	18.10 Hours
Total job cost:	\$17,194

## BULLDOZER RIPPING WORK

	Task description:	Ripp	ing Access Road					
Site	: Spotted Burro	o Pit	Permit Action:	2025 Inspection	n Permit/Job#	: <u>M197919</u>	2	
	PROJECT ID	ENTIFICATI	<u>ON</u>					
	Task #: 002	2	State: Colorado		Abbreviation:	None		
		4/2025	County: Fremont		Filename:	M192-002		
	User: JLC	C						
	Agency	or organization	name: DRMS					
	HOURLY EQ	UIPMENT CO	<u>DST</u>					
	Basic	Machine: Cat	D9T - 9SU		Horsepower:	405		
	Ripper Att	achment: 3-S	hank Ripper			per day		
					Data Source: (	(CRG)		
	Cost Breakdown:	:						
		_			Utilization %			
		Ownership Co		\$253.16	NA			
		Operating Co		\$82.18	50			
		er Ownership Co		\$18.79	NA			
	Ripp	per Operating Co Operator Co		\$9.48 \$38.59	<u>100</u> NA			
		Total Unit Co		\$402.19	NA			
				· · · · ·				
		Total Fleet Co	ost/Hour: \$968	3.73				
	MATERIAL C	<u>DUANTITIES</u>	Sele	ected estimating 1	method: Area			
	Alternate Method	<u>ls:</u>						
Seismic:	NA		Bank Volume:	NA	BCY	NA		
Area:	1.50	acres	Rip Depth (ft):	0.75	Volume: 1,815		BCY or CCY	
		Source of estir	nated quantity: AM-1	Reclamation Plar	1. Area measured by Satel	lite Imagery		
	Source of estimated quantity: <u>AM-1 Reclamation Plan, Area measured by Satellite Imagery</u>							
	HOURLY PRO	<u>DUCTION</u>						
	Seismic:							
			Seismic Velocity:	NA	feet/second			
	Area:							
			e Ripping Depth:	2.63	feet/pass			
			e Ripping Width:	7.67	feet/pass			
			Ripping Length:	25.00	feet/pass			
			age Dozer Speed:	88.00	feet/minute			
			Maneuver Time: ion per unit area:	0.25 0.495	minutes/pass acres/hour			
			- <u> </u>	0.493				
	Job Condition Co	orrection Factors						
	Un	adjusted Hourly	Unit Production:	0.495	Acres/hr			
			Site Altitude:	5,500	feet			
			Altitude Adj:	1.00	(CAT HB)			
			Job Efficiency:	0.83	(1 shift/day)			
			Net Correction:	0.83	multiplier			
		Adjusted	Hourly Unit Production:	0.41	Acres/hr			
			Hourly Fleet Production:	0.82	Acres/hr			
	JOB TIME AN	ND COST						
	Fleet size:	2	Grader(s)	Total job time	: 3.65	Hou	re	
		<u> </u>		i otai joo tille		11001	10	
	Unit cost:	\$979.873	Per acre	Total job cost	: \$2,940			

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# SCRAPER TEAM WORK

Site: Spotted Burro Pit		Permit	Action:	2025 Inspection	Perr	nit/Job#:	M1979	192
PROJECT IDENTTask #:003Date:2/14/20User:JLCAgency or colspan="2">Agency or colspan="2">Agency or colspan="2">Agency or colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"	S	unty: F	Colorado Fremont		Abbrev		<u>Jone</u> 1192-00	03
HOURLY EQUIP	MENT_			COSTS	hift basis: <u>1 per d</u>	<u>ay</u>		
			Equipm	ent Description				
	-S	Scraper:		G w/push-pull				
		-Dozer:		T - 9SU				
Suppor	rt Equipment -Loa	F	NA					
Dood Ma	-Dum Intenance –Motor	p Area:	NA NA					
Koad Ma		Truck:		Fanker, 14,000 Ga	ıl.			
				, ,	· ·			
<u>Cost Breakdown</u> :	Scraper Wor			Support Equi				Equipment
	Scraper	Doz	zer	Load Area	Dump Area	Motor Gra	ader	Water Truc
%Utilization-machine:	100		100	NA	NA		NA	
Ownership cost/hour:	\$563.96	\$2	253.16	NA	NA		NA	\$130.
Operating cost/hour:	\$416.27	\$	164.35	NA	NA		NA	\$70.
%Utilization-ripper:	NA		25	NA	NA		NA	N
Ripper own. cost/hour:	NA	S	\$18.79	NA	NA		NA	\$0.
Ripper op. cost/hour:	NA		\$2.37	NA	NA		NA	\$0.
Operator cost/hour:	\$30.90	(	\$38.59	NA	NA		NA	\$22.
Unit Subtotals:	\$1,011.13	\$4	477.26	NA	NA		NA	\$223.
Number of Units:	2		2	0	0		0	
Group Subtotals:	Work:	\$2,97	6.78	Support:	\$0.00	Μ	aint:	\$223.27
Total work team cost								
Initial volume: Loose volume:	27,427 		CCY LCY	Swell fact	tor: <u>1.250</u>			
	rce of estimated vo of estimated swell f		Division Cat Han	of Reclamation, I	Mining & Safety			
HOURLY PRODU	UCTION							
				Scraper Be	owl (volume) Basi	is:		
Material weight:	2,650 lbs/LCY			Struck	Volume: 32.00		LC	Y
Material description:	Decomposed roc 75% Earth	k - 25% F	Rock,	Heaped	Volume: 44.00		LC	Y
Rated Payload:	104,000 pounds			Average	Volume: 38.00		LC	Y

<u>1.10</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5500 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: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	5.00	2.00	7.00	1677	0.43
2	300.00	0.00	2.00	2.00	2940	0.22
3	100.00	0.00	2.00	2.00	2940	0.03

Haul Time: **0.68** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	100.00	0.00	2.00	2.00	3023	0.18
2	300.00	0.00	2.00	2.00	3023	0.10
3	400.00	-5.00	2.00	-3.00	2987	0.19

Return Time:	0.47	minutes
Total Scraper team cycle time:	2.85	minutes
Adjusted for job conditions:	1,328.00	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,328.00	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,328.00	LCY/Hour
Unadjusted unit production/hours 1 600 00 I CV/Hour		

Unadjusted unit production/hour: <u>1,600.00</u> LCY/Hour Optimal Number of Scrapers per push dozer:

#### JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	25.82	Hours
Unit cost:	\$2.410	/LCY	Total job cost:	\$82,613	_

# **REVEGETATION WORK**

-	Fask descrip	otion:	Seeding 19.8 acr	es			
Site:	Spotted E	Burro Pit	Per	mit Action:	2025 Inspection	Permit/Job	o#: M1979192
<u>P</u>	ROJECT	IDENTIFIC	CATION				
	Task #: Date: User:	004 2/14/2025 JLC	State: County:	Colorado Fremont		Abbreviation: Filename:	None M192-004
	Age	ency or organi	zation name:	RMS			

# **FERTILIZING**

#### Materials

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

# Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

## **TILLING**

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

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Lovington	2.50	40.81	\$69.39
Sand Dropseed	0.12	14.33	\$1.56
Sideoats Grama - Vaughn	5.00	16.41	\$122.95
Thickspike Wheatgrass - Critana	8.00	28.28	\$65.19
Totals Seed Mix	15.62	99.83	\$259.09

Application

Description		Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)		\$485.00
	Total Seed Application Cost/Acre	\$485.00

## **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Wood Cellulose Fiber Mulch	2,000.00	Pound	\$0.43	\$856.20
<b>Total Mulch Materials Cost/Acre</b>				\$856.20

#### 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:	19.8		Cost /Acre:	\$1,685.66
Estimate	ed Failure Rate:	30%		Cost /Acre*:	\$1,685.66
*Selected Replanti	ng Work Items:	SEEDING,MUI	LCHING		
Initial Job Cost:	\$33.376.07				
Reseeding Job Cost:	,				
Total Job Cost:	\$43,389				
Job Hours:	10.00				

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	b/Demob					
e: <u>Spotted Burro I</u>	Pit	Permit	Action: 2025	Inspection	]	Permit/Job#: <u>M</u>	1979192
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 005		State: Co	olorado		Abbre	eviation: None	
	/2025		emont			lename: M192	-005
User: JLC		-					
Agency or	organization	n name: DRMS					
EQUIPMENT TH	RANSPOR	<u>T RIG COST</u>					
					Shift ba	sis: 1 per da	V
				C	Cost Data Sour		
	_						
Truck	Tractor Desc	ription: GENE	RIC ON-HIGH			DR, 6X4, DIESEL	POWERED,
					(2ND HALF,		
Truck	Trailer Desc	ription: G				ROP DECK EQU	IPMENT
				FRAILER (	(25T, 50T, AN	ND 100T)	
Cost Breakdown:							
Available Rig Caj		0-25 Tons	26-50 Tons		Tons		
Ownership O		\$10.44	\$22.18		3.94		
Operating C		\$26.48	\$54.55		5.65		
Operator (		\$22.52	\$22.52		2.52		
Helper (	Cost/Hour:	\$0.00	\$23.53	\$2	3.53		
Total Unit C	Cost/Hour:	\$59.44	\$122.78	\$12	25.64		
<u>NON ROADABL</u>	<u>E EQUIPN</u>	<u>MENT:</u>					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
1	(TONS)		t		fleet		
Cat D9T - 9SU	66.13	\$271.95	\$125.64	2	\$795.18	\$251.28	\$500.00
Cat 657G w/push-	80.25	\$563.96	\$125.64	2	\$1,379.20	\$251.28	\$500.00
pull							
Water Tanker, 14,000 Gal.	58.50	\$130.32	\$125.64	1	\$255.96	\$125.64	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00
Power Mulcher (Bowie LD-90)	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
				Subtotals:	\$2,717.91	\$806.52	\$2,000.00
				Subiolais.	\$ <b>4</b> ,111.91	\$0 <b>00.</b> 5⊿	φ <b>∠,</b> 000.00

#### **ROADABLE EQUIPMENT:**

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

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: Total one-way travel distance:	CANON CITY 7.00	miles
Average Travel Speed:	55.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$19,356.41	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$27.61	_

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.13	0.13
Return Time (Hours):	0.13	0.13
Loading Time (Hours):	1.33	NA
Unloading Time (Hours):	1.33	NA
Subtotals:	2.91	0.25

#### JOB TIME AND COST

Total job time: **5.83** Hours

Total job cost: **\$19,384**