

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:
Robins Rock Pit	M-2009-053	Basalt	Conejos
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Wallace H. Erickson	Nov 20, 2013	09:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATIO	DN:
Robins Construction, LLLP	Randy Robins, Scott Johnson	110c - Construction	n Limited Impact
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program	Complete Bond	\$31,647.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGEN	CY:
NA	None	None	
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	01 Z
Cloudy	Wallane N. S	April 3, 2014	

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.

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

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

## **INSPECTION TOPIC:** Financial Warranty

**PROBLEM:** The Division has reviewed the current cost of reclamation totaling \$33,192.09. Therefore, the existing financial warranty, in the amount of \$31,647, 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 section 34-32.5-117(4)(b) C.R.S.

**CORRECTIVE ACTIONS:** Pursuant to Rule 4.2.1(2), the Operator has 60 days from the signature date of this inspection report, due June 2, 2014, to post \$1,545.09 additional surety to ensure a total financial warranty not less than \$33,192.09, or advance the reclamation and thereby render the existing financial warranty adequate. **CORRECTIVE ACTION DUE DATE:** June 2, 2014

## **INSPECTION TOPIC:** Off-Site Damage

**POSSIBLE VIOLATION:** Land has been affected outside of the approved permit boundary. This is a possible violation pursuant to section 34-32.5-109(1) C.R.S., for failure to first obtain from the Mined Land Reclamation Board or Office a reclamation permit prior to engaging in a new operation, and/or section 34-32.5-116(4)(i) C.R.S., for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation.

**CORRECTIVE ACTIONS:** This possible violation will be scheduled for consideration by the Mined Land Reclamation Board during the May 21 - 22, 2014, Board meeting. The May 21 – 22, 2014, Board meeting will occur at 1313 Sherman Street, Room 318, Denver, Colorado, beginning at 9:00 am. If you have evidence such violation does not exist please submit it to the Division or bring it to the Board hearing. Official notice of the possible violation and Board hearing will be forthcoming and signed by the Division Director. **CORRECTIVE ACTION DUE DATE:** May 21, 2014

INSPECTION TOPIC: Compliance with Reclamation Plan

**PROBLEM:** The Operator is not following the approved reclamation plan. Additionally, there appears contradictory language and/or conflicting permit conditions within the approved reclamation plan, which must be clarified. Therefore, the reclamation plan must be updated, through the Technical Revision process described under Rule 1.9 or the Amendment process described under Rule 1.10, to clarify the intended reclamation activities, pursuant to section 34-32.5-116(1) C.R.S.

**CORRECTIVE ACTIONS:** Within 60 days from the signature date of this report, due June 2, 2014, the Operator shall file with the Division a Technical Revision or Amendment to the permit, providing a comprehensive update of the approved reclamation plan.

**CORRECTIVE ACTION DUE DATE:** June 2, 2014

## **OBSERVATIONS**

This inspection occurred in accordance with the Division routine monitoring of permitted operations. The Robins Rock Pit is approved for 9.7 acres affected lands for the extraction of basalt rock. Affected lands will be reclaimed to support rangeland post-mining land use. The Division holds \$31,647 financial warranty. This report is accompanied by two images from Google Earth, imagery dates June 30, 2011, and September 28, 2013, which have been modified to illustrate the various issues discussed within this report; three photographs taken during the inspection; and an updated reclamation cost estimation totaling \$33,192.09.

As shown in the enclosed images from Google Earth and the three photographs, the Operator has affected approximately four acres area beyond the permit boundary. The off-site disturbance includes the processing

and stockpiling of mined materials, processing equipment (mobile crusher, screens and conveyors), the construction of an access road, and the backfilling of an irrigation pond.

The off-site disturbance is a result of the adjacent mining operation, is a work and storage area for processing equipment, is a storage area for mined and processed materials, and is a storage area for reclamation materials (crusher fines) to be utilized during final reclamation of the affected lands. Pursuant to section 34-32.5-103(1) C.R.S., the off-site disturbances are affected lands. Pursuant to section 34-32.5-103(13) C.R.S., the activities which resulted in the off-site affected lands are defined as a mining operation.

The Division considers four acres of off-site affected lands to be a substantial area. Pursuant to section 34-32.5-123(2) C.R.S., an Operator who mines substantial acreage beyond the approved permit boundary may be found to be operating without a permit. Therefore, the off-site affected lands constitute a possible violation of permit conditions and section 34-32.5-109(1) C.R.S., for failure to first obtain a reclamation permit prior to engaging in a new operation; and/or section 34-32.5-116(4)(i) C.R.S., for failure to protect areas outside of the permit boundary from slides or damages occurring during the mining operation. Pursuant to Rule 3.2(3), the Division shall schedule the possible violation for consideration by the Board. Additional details of the possible violation and Board hearing are provided on page 2 of this inspection report.

As noted above, the Operator has recently backfilled the irrigation pond located at the southeast corner of the permit area. According to the approved reclamation plan the irrigation pond was a permanent structure, not to be removed during the mining and reclamation operation. Water from the irrigation pond was to be utilized to support revegetation efforts during final reclamation. The act of backfilling the irrigation pond is in conflict with the conditions of the approved reclamation plan. If the Operator desires to remove the irrigation pond, the Operator must revise the existing plan to reflect the current intent of the Operator.

There appears contradictory language and/or conflicting permit conditions within the approved reclamation plan, which must be clarified. Examples of contradictions within the permit documents include, but are not limited to, the following:

- The Operator has committed to salvaging 6-12 inches of topsoil for reclamation purposes, but alleges
  there will be no topsoil stockpiles for periods exceeding one year. According to the approved
  reclamation plan, revegetation efforts will be supported by replacement of crusher fines, as opposed to
  salvaged topsoil. The reclamation plan must clarify why topsoil, salvaged from the mining operation
  and available for reclamation purposes, will not be utilized to support reclamation.
- The text of the approved reclamation plan indicates the pit will be approximately 20 feet deep and the highwalls will be benched, each bench at approximately 4 feet high and 8 feet wide, resulting in an overall slope not steeper than 2H:1V. However, the approved reclamation map indicates the pit will be approximately 120 feet deep and the highwalls will be reduced to slopes not steeper than 1H:1V. The benches, discussed in the text, are not illustrated on the map of the approved reclamation plan. The text and map of the reclamation plan must be in agreement and not conflict one another.

The Division has noted a problem for not following the approved reclamation plan and for conflicting permit conditions within the approved reclamation plan. The Division has imposed corrective actions to address the issue and a deadline whereby the issue must be resolved. Details of the corrective action and deadline are provided on page 2 of this inspection report.

## Notice to Increase the Financial Warranty

Based on observations made during the inspection and recorded in this report, and on conditions of the approved reclamation plan, and applicable requirements of the Act and Rules, the Division has reviewed the current cost of reclamation totaling \$33,192.09. Please find enclosed 11 pages of summary and task sheets utilized by the Division to calculate the current cost of reclamation. Therefore, the existing \$31,647 financial warranty is not adequate to ensure the completion of reclamation. The Division has noted a problem with the financial warranty and has imposed corrective actions and a deadline whereby the problem must be resolved. Details of the corrective action and associated deadline are provided on page 2 of this report.

Attachment: Certificate of Service

Enclosures:

- 1) Two Google Earth images, dated June 30, 2011, and September 28, 2013;
- 2) Three photographs taken during the inspection; and
- 3) Reclamation cost estimation totaling \$33,192.09

### **Certificate of Service**

I, Wallace H. Erickson, hereby certify that on this 2<sup>nd</sup> day of April, 2014, placed a true copy of the foregoing inspection report generated from the November 20, 2013, inspection of the Robins Rock Pit, Permit No. M-2009-053, signed April 2, 2014, with enclosures, in the US Mail, first class postage affixed, and addressed to the following:

Randy Robins Robins Construction, LLLP P.O. Box 212 Antonito, CO 81120

And an electronic copy of the same by email to the following:

Randy Robins, Robins Construction at <u>info@robinsconstruction.com</u> Scott Johnson, Summit Engineering at <u>scott4622@gmail.com</u> Russ Means, DRMS GJFO at <u>russ.means@state.co.us</u>

Waller N. St 4/3/14



Robins Rock Pit M-2009-053 Google Earth Image <u>September 28, 2013</u>

Permit boundary

Google Earth image, dated September 28, 2013, showing the approximate 9.7 acre permit boundary, the irrigation pond (recently removed), the affected lands located beyond the permit boundary, and locations of photos 1, 2 and 3.

< •>

(î))

Irrigation pond (removed)

Affected lands located beyond the permit boundary

Imagery Date: 9/28/2013 37°05'55.17" N 106°04'46.90" W elev 8023 ft 🛛 eye alt 9336 ft 🔘

Google earth



View north-northwest, showing affected lands located beyond the southeast quadrant of the approved permit boundary. The area of disturbance resulting from the off-site processing and stockpiling activity was estimated at four acres.





## COST SUMMARY WORK

te: <u>Robins F</u>	lock Pit		Permit Action:	Routine bond update Permi	t/Job#: <u>M2009053</u>
PROJEC:	<u>IDENTIFICA</u>		Colorado	Abbreviation	
Teals #	- ANNA				
Task #:	000	State:			
Task #: Date:	3/31/2014	County:	Conejos	Filename	

# TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Rip and grade affected lands, ensure slopes at 2H:1V	DOZER	1	56.19	\$7,261.56
002	Transport topsoil to pit area for redistribution	LOADER	1	38.12	\$3,959.00
003	Spread topsoil 9 inches depth over 5 acres pit area	DOZER	1	19.74	\$2,550.82
004	Revegetate 5 acres affected land	REVEGE	1	40.00	\$7,575.19
005	Haul reclamation equipment to and from job site	MOBILIZE	1	5.00	\$6,189.76
		SUBT	OTALS:	159.05	\$27,536.33

## **INDIRECT COSTS**

## OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	\$556.23
Performance bond:	1.05%	Total =	\$289.13
Job superintendent:	0.00 hrs	Total =	\$0.00
Profit:	10.00%	Total =	\$2,753.63
		TOTAL O & P =	\$3,598.99
		CONTRACT AMOUNT (direct + O & P) = $($	\$31,135,32

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	500.00 0.00% 5.00%	Total = Total =	500.00 \$0.00 \$1,556.77
CONTINGENCY:	0.00	Total =	\$0.00
	TOTAL IN	DIRECT COST =	\$5,655.76
TOTAL BO	OND AMOUNT (di	rect + indirect) =	\$33,192.09

## BULLDOZER WORK

Task description:	Rip and grad	e affected land	s, ensure slopes at 2H:1	V	
te: Robins Rock Pit		Permit Action:	Routine bond update	Permit/Job#:	M2009053
PROJECT IDENTIF	FICATION				
Task #: 001	Stat	e: Colorado		Abbreviation:	None
Date: 3/31/2014	Count	y: Conejos		Filename:	M053-001
User: WHE				•••••••	
Agency or orga	inization name:	DRMS	·····		- -
HOURLY EQUIPMI	ENT COST				
	t D6T				
Horsepower: 18:					
	mi-Universal				
	shank ripper				
	ber day				
h	RG)	<u></u>			
Cost Breakdown:					
	<b></b>		Utilization %		
Ownership Cost/Hour:	\$33.		NA		
Operating Cost/Hour:	\$57.		100		
Ripper op. Cost/Hour:	\$0.7		25		
0.0.77					
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$37. <u>\$129.23</u> <b>\$129.23</b>	41	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL OUANT</u> Initial Volume: <u>8,06</u> Swell factor: <u>1.00</u>	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0	<u>41</u>	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL OUANT</u> Initial Volume: <u>8,06</u> Swell factor: <u>1.00</u>	\$129.23 \$129.23 TITIES 7	<u>41</u>	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OUANT Initial Volume: 8,06 Swell factor: 1.00 Loose volume: 8,06 Source of estimated volum	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0 7 LCY me: (5ac)(4	 	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OUANT Initial Volume: 8,06 Swell factor: 1.00 Loose volume: 8,06	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0 7 LCY me: (5ac)(4	L	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba	 	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:	\$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba TION 50 feet	3560sf/ac)(1'D salt rock blaste	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba <b>TION</b> 50 feet ction: 444.6 LC	3560sf/ac)(1'D salt rock blaste Y/hr	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volu         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency destributed	\$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba TION CTION ction: 50 feet 444.6 LC cription: Rock	3560sf/ac)(1'D salt rock blaste	) / 27 = 8,066.67 cy		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volu       8,06         Source of estimated swell       9,06         HOURLY PRODUCT       Average push distance:         Unadjusted hourly product       100	\$129.23 <b>\$129.23</b> <b>TITIES</b> 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba <b>TION</b> 50 feet ction: 444.6 LC	3560sf/ac)(1'D salt rock blaste Y/hr	) / 27 = 8,066.67 cy		·
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volu         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency des         Average push gradient:	\$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba FION ction: 50 feet ction: 444.6 LC cription: Rock -15 %	3560sf/ac)(1'D salt rock blaste Y/hr	) / 27 = 8,066.67 cy		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:	\$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba TION ction: 444.6 LC cription: Rock -15 % 8,100 feet	3560sf/ac)(1'D salt rock blaste Y/hr	) / 27 = 8,066.67 cy		•
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba CION ction: 444.6 LC cription: Rock -15 % 8,100 feet 3,300 lbs/LCY Basalt Factor	3560sf/ac)(1'D salt rock blaster Y/hr , avg. ripped or	) / 27 = 8,066.67 cy 1 blasted 0.7 <u>Source</u>		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator S	\$129.23 \$129.23 TTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba TION ction: 50 feet 444.6 LC cription: Rock -15 % 8,100 feet 3,300 lbs/LCY Basalt Factor Skill:	3560sf/ac)(1'D salt rock blaste Y/hr , avg. ripped or 	) / 27 = 8,066.67 cy d blasted 0.7 <u>Source</u> (AVG.)		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL OUANT         Initial Volume:       8,06         Swell factor:       1.00         Loose volume:       8,06         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$129.23 \$129.23 \$129.23 TTTIES 7 0 7 LCY me: (5ac)(4 1 factor: NA, ba TION ction: 50 feet ction: 444.6 LC cription: Rock -15 % 8,100 feet 3,300 lbs/LCY Basalt Factor Skill:	3560sf/ac)(1'D salt rock blaster Y/hr , avg. ripped or	) / 27 = 8,066.67 cy 1 blasted 0.7 <u>Source</u>		· · ·

Visibili	Visibility:		(AVG.)
Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pile:		0.800	(FND-RF)
Push gradie	nt:	1.329	(CAT HB)
Altitud	ie:	1.000	(CAT HB)
Material Weig	ht:	0.697	(CAT HB)
Blade typ	be:	1.000	(PAT)
Net correction	on:	0.3229	
Adjusted unit production:	143	.56 LCY/hr	
Adjusted fleet production:	143	.56 LCY/hr	

# JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.900/LCY

Total job time:	56,19 Hours
Total job cost:	\$7,261.56

...

# WHEEL LOADER - LOAD AND CARRY WORK

Robins Rock Pit			for redistribution		
	Per	rmit Action:	Routine bond update	Permit/Job#:	M2009053
PROJECT IDENTIFI	CATION				
Task #: 002	State:	<u>Colorado</u>		Abbreviation:	None
Date: <u>3/31/2014</u> User: WHE	County:	Conejos		Filename:	M053-002
User: WHE					
Agency or organ	ization name: DI	RMS			
HOURLY EQUIPME	NT COST				
Basic Machine:	CAT 950H		Horse	epower:	197
	ROPS Cab			····	er day
					RG)
Cost Preskdower					
Cost Breakdown:		I	Utilization %		
Ownership Cost/H	our: \$24.	98	NA		
Operating Cost/H			100		
Operator Cost/H			NA		
Total Unit Cost/He		······			
and a second to the					
Total Fleet Cost/H	Iour: \$103	.83			
	TIES				
<u>MATERIAL QUANTI</u>	Marganini a secondar a				
		CCY	Swell factor	1 000	
Initial volume:6,0	)50		Swell factor:	1.000	
Initial volume:6,0 Loose volume:	050 <b>6,050</b>	LCY	_		
Initial volume: Loose volume: Source of	050 6,050 estimated volume:	LCY (5ac)(435	Swell factor:		
Initial volume: Loose volume: Source of	050 <b>6,050</b>	_ LCY _(5ac)(435	_		
Initial volume:6,0 Loose volume: Source of Source of estin	6,050 6,050 estimated volume: mated swell factor:	LCY (5ac)(435	_		
Initial volume: Loose volume: Source of	6,050 6,050 estimated volume: mated swell factor:	LCY (5ac)(435	_		
Initial volume:6,0 Loose volume: Source of Source of estin	6,050 6,050 estimated volume: mated swell factor:	_ LCY _(5ac)(435 NA	_	6050 cy	minutes
Initial volume:6,0 Loose volume: Source of Source of estin	50 6,050 Cestimated volume: mated swell factor: ION Unadjusted Basic of s	LCY (5ac)(435 NA 		6050 cy	
Initial volume:6,0 Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material:	50 6,050 Sestimated volume: mated swell factor: ION Unadjusted Basic s Mixed material	LCY (5ac)(435 NA Cycle Time ( 0.02	60sf/ac)(0.75'D) / 27 = 	6050 cy :0.500	minutes Source (Cat HB)
Initial volume:6,0 Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material: Stockpile:	6,050         6,050         Sestimated volume:         mated swell factor:         ION         Unadjusted Basic         S         Mixed material         No adjustment	LCY (5ac)(435 NA Cycle Time ( 0.02 - factor not a	60sf/ac)(0.75'D) / 27 = load, dump, maneuver)	6050 cy : 0.500 Factor (min.)	Source
Initial volume: Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership:	6,050         estimated volume:         mated swell factor:         ION         Unadjusted Basic         S         Mixed material         No adjustment	LCY (5ac)(435 NA Cycle Time ( 0.02 - factor not a factor not a	60sf/ac)(0.75'D) / 27 = load, dump, maneuver)	6050 cy : 0.500 Factor (min.) 0.020 0.000 0.000	Source (Cat HB) (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	6,050         estimated volume:         mated swell factor:         ION         Unadjusted Basic         S         Mixed material         No adjustment         No adjustment         Constant operat	LCY (5ac)(435 NA Cycle Time ( 0.02 - factor not a - factor not a ion -0.04	60sf/ac)(0.75'D) / 27 = load, dump, maneuver)	6050 cy : 0.500 Factor (min.) 0.020 0.000 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership:	6,050         estimated volume:         mated swell factor:         ION         Unadjusted Basic         S         Mixed material         No adjustment         No adjustment         Constant operat	LCY (5ac)(435 	60sf/ac)(0.75°D) / 27 = (load, dump, maneuver) pplicable 0.00 pplicable 0.00	6050 cy : 0.500 Factor (min.) 0.020 0.000 0.000 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of estin HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	6,050         estimated volume:         mated swell factor:         ION         Unadjusted Basic         S         Mixed material         No adjustment         No adjustment         Constant operat	LCY (5ac)(435 NA Cycle Time ( 0.02 - factor not a ion -0.04 0.00 Net Cyc.	60sf/ac)(0.75'D) / 27 = load, dump, maneuver)	6050 cy : 0.500 Factor (min.) 0.020 0.000 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)

Rolling Resistance - Road Conditions

Haul:	Rutted dirt, little maintenance, no water, 2" tire penetration 5.0
Return:	Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

٨

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	5.00	5.00	10.00	0.6748	(Cat HB)
Return Route:	500	-5.00	5.00	0.00	0.3296	(Cat HB)

		Total Trav Total Cyc		minutes
Load Bucket Capacity				
Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	4.30 1.100 4.73	LCY (heaped) Other - rock/dirt mixtu LCY	res (100-120%) 1.100	
Job Condition Correction F Site Altitude: <u>8100</u> feet	actors			
Altitude Adj: Job Efficiency:	1.00	Source (CAT HB) (1 shift/day)		
Net Correction:	0.83	multiplier		
Adj	usted Hourly Unit usted Hourly Unit 1sted Hourly Fleet	Production: 158.69	LCY/Hour	
JOB TIME AND COST	-			
Fleet size: 1	Loader(s)	Total job tin	ne: 38.13	Hours
Unit cost:\$0.654	4 /LCY	Total job co	st: \$3,959.00	

#### BULLDOZER WORK

Robins Rock Pit	Perm	it Action:	Routine bond update	Permit/Job#:	M2009053
PROJECT IDENTIFI	ICATION				
Task #:003	State:	Colorado		Abbreviation:	None
Date: <u>3/31/2014</u>	County:	Conejos		Filename:	M053-003
User: WHE	-				
Agency or organ	ization name: DRI	MS			
					·······
HOURLY EQUIPME	<u>NT COST</u>				
	D6T	······			
Horsepower: 185					
	ni-Universal				
	ank ripper				
A	er day				
Data Source: (CR	<u>G)</u>		_		
Cost Breakdown:					
,			Utilization %		
Ownership Cost/Hour:	\$33.12		NA		
Operating Cost/Hour:	\$57.97		100		
Ripper op. Cost/Hour:	\$0.72		25		
Operator Cost/Hour:	\$37.41		NA		i.
Total unit Cost/Hour:	\$129.23	<u></u>			
Total Fleet Cost/Hour:	\$129.23 <b>\$129.23</b>		······································		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050	\$129.23 [TIES				
Total Fleet Cost/Hour: MATERIAL QUANTI	\$129.23 (TIES		······································		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050	\$129.23 THES		······································		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050	\$129.23 THES LCY		· · ·		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volume	\$129.23 [TIES LCY le:(5ac)(4356)	- - - - 0sf/ac)(0.75	;'D) / 27 = 6050 cy		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050	\$129.23 THES LCY le:(5ac)(4356)	- - - Osf/ac)(0.75	· · ·	· ·	
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volum         Source of estimated swell for the stimated swell for stimated swell for the stimated swell for the	\$129.23 (TIES LCY le: (5ac)(4356) factor: NA	- - - Osf/ac)(0.75	· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated swell f	\$129.23 [TIES] LCY le: (5ac)(4356) factor: NA ION	- - - Osf/ac)(0.75	· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated swell f HOURLY PRODUCT Average push distance:	\$129.23 (TIES LCY te: (5ac)(4356) factor: NA ION 50 feet		· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated swell f	\$129.23 (TIES LCY te: (5ac)(4356) factor: NA ION 50 feet		· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated swell f HOURLY PRODUCT Average push distance:	\$129.23 THES LCY te: (5ac)(4356) factor: NA ION ion: 50 feet 444.6 LCY/hn		· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated swell f HOURLY PRODUCTI Average push distance: Unadjusted hourly product Materials consistency descri-	\$129.23 (TIES LCY te: (5ac)(4356) factor: NA ION ion: 50 feet ion: 444.6 LCY/hn ription: Loose sto -15 %		· · ·		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volum         Source of estimated volum         Source of estimated swell f         HOURLY PRODUCTI         Average push distance:         Unadjusted hourly product         Materials consistency description	\$129.23 (TIES LCY te:(5ac)(4356) factor:NA ION ion:50 feet ion:50 feet ion:444.6 LCY/hn ription:Loose sto		· · ·		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volum         Source of estimated volum         Source of estimated swell f         HOURLY PRODUCTI         Average push distance:         Unadjusted hourly product         Materials consistency descr         Average push gradient:         Average site altitude:	\$129.23 (TIES LCY te: (5ac)(4356) factor: NA ION ion: 50 feet ion: 444.6 LCY/hn ription: Loose sto -15 %		· · ·		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell f HOURLY PRODUCTI Average push distance: Unadjusted hourly product: Materials consistency descr Average push gradient: Average site altitude: Material weight:	\$129.23 (TIES LCY te:(5ac)(4356) factor:NA ION ion:50 feet ion:444.6 LCY/hn ription:Loose sto -15 % 8,100 feet	ockpile 1.2	('D) / 27 = 6050 cy		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 6,050 Swell factor: 1.000 Loose volume: 6,050 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell f HOURLY PRODUCTI Average push distance: Unadjusted hourly product: Materials consistency descr Average push gradient: Average site altitude: Material weight:	\$129.23 (TIES LCY te: (5ac)(4356) factor: NA ION ion: 50 feet ion: 444.6 LCY/hr ription: Loose sto -15 % 8,100 feet 2,650 lbs/LCY Decomposed rock - 2	ockpile 1.2	('D) / 27 = 6050 cy	······································	
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volum         Source of estimated volum         Source of estimated swell f         HOURLY PRODUCTI         Average push distance:         Unadjusted hourly product         Vaterials consistency description:         Average site altitude:         Average site altitude:	\$129.23 (TIES LCY te:(5ac)(4356) factor:NA ION ion:	25% Rock,	3'D) / 27 = 6050 cy 		
Total Fleet Cost/Hour:         MATERIAL QUANTI         Initial Volume:       6,050         Swell factor:       1.000         Loose volume:       6,050         Source of estimated volum         Source of estimated volum         Source of estimated swell f         HOURLY PRODUCTI         Average push distance:         Unadjusted hourly product         Average push gradient:         Average site altitude:         Material weight:         Weight description:         ob Condition Correction F	\$129.23 (TIES LCY te:(5ac)(4356) factor:NA ION ion:50 feet ion:444.6 LCY/hn ription:Loose sto -15 % 8,100 feet 2,650 lbs/LCY Decomposed rock - 2 <u>Sactor</u> cill:0.75	25% Rock,	3'D) / 27 = 6050 cy 	· · · · · · · · · · · · · · · · · · ·	

Visibility:		1.000	(AVG.)
Job efficien	Job efficiency:		(1 SHIFT/DAY)
Spoil p	ile:	0.800	(FND-RF)
Push gradient:		1.329	(CAT HB)
Altitude:		1.000	(CAT HB)
Material Weight:		0.868	(CAT HB)
Blade type:		1.000	(PAT)
Net correction	on:	0.6894	
Adjusted unit production:	30	6.51 LCY/hr	
Adjusted fleet production:	30	6.51 LCY/hr	

## JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.422/LCY

Total job time:	19.74 Hours
Total job cost:	\$2,550.82

# **REVEGETATION WORK**

Task description:		5 acres affected				
<b>Robins Rock Pit</b>		Permit Action:	Rou	tine bond update	Permit/Job#	*: <u>M2009053</u>
PROJECT IDEN	TIFICATION					
Task #: 004		ate: Colorado			Abbreviation:	None
Date: 3/31/20					Filename:	 
User: WHE	000		······································		i nomanne.	
Agency or o	organization name:	DRMS				
FERTILIZING						
Materials						
Description		Un Ac	nits / re	Unit	Cost / Unit	Cost /Acre
					\$	\$
					Total Fertilizer Materials Cost/Acre	\$0.00
Application	Man	<u></u>		11		
Description						Cost /Acre
						·
	····					\$
			Total	Fertilizer Appli	cation Cost/Acre	\$ \$0.00
TILLING	*****		Total	Fertilizer Appli	cation Cost/Acre	
eren annahmele raken danake adat teletik di teletik danake adat teletik di teletik di teletik di teletik di te			Total	Fertilizer Appli	cation Cost/Acre	\$0.00
TILLING Description Chisel plowing {DN	//G}		Total	Fertilizer Appli	cation Cost/Acre	
Description	//G}		Total			\$0.00 Cost /Acre \$88.58
Description	//G}		Total		Cation Cost/Acre	\$0.00 Cost /Acre
Description	<u>4</u> G}		Total			\$0.00 Cost /Acre \$88.58
Description Chisel plowing {DN	<u>1</u> G}		Total	Total 7 Rate PLS LBS	Filling Cost/Acre Seeds J per SQ.	\$0.00 Cost /Acre \$88.58
Description Chisel plowing {DN EEDING Seed Mix			Total	Total 7 Rate PLS LBS Acre	Filling Cost/Acre Seeds per SQ. FT	\$0.00 Cost /Acre \$88.58 \$88.58 Cost /Acre
Description Chisel plowing {DN EEDING Seed Mix Blue Grama - Hachi	ta		Total	Total 7 Rate PLS LBS Acre 1.60	Filling Cost/Acre Seeds FT 26.12	\$0.00 Cost /Acre \$88.58 \$88.58 Cost /Acre \$17.04
Description Chisel plowing {DN EEDING Seed Mix Blue Grama - Hachi Indian Ricegrass - N	ta		Total	Total 7 Rate PLS LBS Acre 1.60 6.00	Filling Cost/Acre Seeds FT 26.12 19.42	\$0.00 Cost /Acre \$88.58 \$88.58 Cost /Acre \$17.04 \$42.48
Description Chisel plowing {DN EEDING Seed Mix Blue Grama - Hachi Indian Ricegrass - N Sand Dropseed	ta (espar		Total	Total 7 Rate PLS LBS Acre 1.60 6.00 0.20	Filling Cost/Acre Seeds FT 26.12 19.42 23.88	\$0.00 Cost /Acre \$88.58 \$88.58 \$88.58 Cost /Acre \$17.04 \$42.48 \$1.40
Description Chisel plowing {DN EEDING Seed Mix Blue Grama - Hachi Indian Ricegrass - N	ta lespar tail		Total	Total 7 Rate PLS LBS Acre 1.60 6.00	Seeds per SQ. FT           26.12           19.42           23.88           20.28	\$0.00 Cost /Acre \$88.58 \$88.58 Cost /Acre \$17.04 \$42.48

Totals Seed Mix 22.40

Application

Description

Cost /Acre

\$366.87

105.76

 Broadcast seeding [DMG]
 \$261.28

 Total Seed Application Cost/Acre
 \$261.28

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$265.00	\$265.00
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.24	\$16.24
Total Mulch Materials Cost/Acre				\$281.24

## Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$65.89
Power mulcher (MEANS 32 91 13.16 0250)		\$86.68
Weed spray, truck, non-aquatic area, nox. [DMG]		\$61.49
	Total Mulch Application Cost/Acre	\$214.06

## NURSERY STOCK PLANTING

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

#### JOB TIME AND COST

	No. of Acres:	5	Cost /Acre:	\$1,212.03	
Estimated Failure Rate:		25%	Cost /Acre*:	\$1,212.03	
*Selected Replanti	ng Work Items:	TILLING,SEEDI	NG,MULCHING		
Initial Job Cost:	\$6,060.15				
Percending Job Cost	\$1 515 QA				

Reseeding Job Cost:	\$1,515.04
Total Job Cost:	
Job Hours:	40.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Г	Fask descripti	on: Ha	ul reclamation eq	apprint to and	n om jop	SILC			
ite:	e: Robins Rock Pit		Permit .	Action: <u>Routir</u>	e bond up	date Pe	ermit/Job#:	M200	9053
P	PROJECT J	IDENTIFICA1	TION						
	Task #: _005		State: Colorado			Abbi	Abbreviation:	None	
		3/31/2014 WHE	County: Co	onejos		F	Filename:	M053-	005
	Agency or organization name: DRMS								
E	EQUIPMEN	NT TRANSPO	RT RIG COST						
						Shift ba Cost Data Sou		l per day CRG Dat	
	T	ruck Tractor Des	cription: GEN	ERIC ON-HIGH				DIESEL	POWERED,
					400 HF	P (2ND HALF,	2006)		
	T	ruck Trailer Des	cription: GENE	RIC FOLDING	GOOSEN		DECK EQU	ЛРМEN	T TRAILER
<u>C</u>	T tost Breakdoy		cription: GENE	ERIC FOLDING	GOOSEN	ECK, DROP I	DECK EQU	JIPMEN	T TRAILER
	ost Breakdov	vn: Capacities	cription: GENE	ERIC FOLDING	GOOSEN (25T	ECK, DROP I	DECK EQU	ЛРМEN	IT TRAILER
	ost Breakdov	<u>vn:</u>			GOOSEN (25T	IECK, DROP I ', 50T, AND 10	DECK EQU	ЛРМEN	IT TRAILER
	ost Breakdov vailable Rig Owners	vn: Capacities	0-25 Tons	26-50 Tons	GOOSEN (25T 51- \$	ECK, DROP I , 50T, AND 10 + Tons	DECK EQU	ЛРМEN	IT TRAILER
	ost Breakdov vailable Rig Owners Operat	vn: Capacities ship Cost/Hour:	<b>0-25 Tons</b> \$16.63	<b>26-50 Tons</b> \$18.37	GOOSEN (25T 51- \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07	DECK EQU	ЛРМEN	IT TRAILER
	ost Breakdov vailable Rig Owners Operat Operat	vn: Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66	GOOSEN (25T 51- \$ \$ \$ \$ \$	ECK, DROP I 5, 50T, AND 10 + Tons 22.33 50.07 27.66	DECK EQU	ЛРМEN	T TRAILER
	ost Breakdov vailable Rig Owners Operat Opera Hel	vn: Capacities ship Cost/Hour: ting Cost/Hour:	<b>0-25 Tons</b> \$16.63 \$44.38	<b>26-50 Tons</b> \$18.37 \$46.13	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07	DECK EQU	ЛРМEN -	T TRAILER
	Cost Breakdov vailable Rig Owners Operat Opera Hel Total U	vn: Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour:	<b>0-25 Tons</b> \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$	ECK, DROP I 5, 50T, AND 10 + Tons 22.33 50.07 27.66 25.39	DECK EQU	ЛРМEN 	T TRAILER
	Cost Breakdov vailable Rig Owners Operat Opera Hel Total U ON ROAD	Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: per Cost/Hour: Jnit Cost/Hour: ABLE EQUIP	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT:	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45	DECK EQU		
A	Cost Breakdov vailable Rig Owners Operat Operat Hel Total U ON ROAD	Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: per Cost/Hour: Jnit Cost/Hour: ABLE EQUIP Weight/	0-25 Tons           \$16.63           \$44.38           \$27.66           \$0.00           \$88.67           MENT:           Owner ship	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 125.45 Haul Trip	DECK EQU DOT)	- `ríp	DOT Permit
A	Cost Breakdov vailable Rig Owners Operat Opera Hel Total U ON ROAD	Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Jnit Cost/Hour: ABLE EQUIP Weight/ Unit	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT:	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/	DECK EQU	- `ríp	
	Cost Breakdov vailable Rig Owners Operat Operat Hel Total U ON ROAD fachine escription	Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: Iper Cost/Hour: Jnit Cost/Hour: ABLE EQUIP Weight/ Unit (TONS)	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/ fleet	DECK EQU DOT) Return T Cost/hr/	- `ríp	DOT Permit Cost/ fleet
	Cost Breakdov vailable Rig Owners Operat Operat Total U Total U ON ROAD fachine escription	Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: Iper Cost/Hour: Jnit Cost/Hour: ABLE EQUIP Weight/ Unit (TONS) 25.01	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit \$33.12	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit \$88.67	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/ fleet \$121.79	DECK EQU DOT) Return T Cost/hr/ \$88.67	- `ríp	DOT Permit Cost/ fleet \$250.00
	Cost Breakdov vailable Rig Owners Operat Operat Hel Total U ON ROAD fachine escription at D6T AT 950H	Capacities         ship Cost/Hour:         ting Cost/Hour:         ator Cost/Hour:         Iper Cost/Hour:         Jnit Cost/Hour:         ABLE EQUIP         Weight/ Unit (TONS)         25.01         20.13	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit \$33.12 \$24.98	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit \$88.67 \$88.67	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I 5, 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/ fleet \$121.79 \$113.65	DECK EQU 00T) Return T Cost/hr/ \$88.67 \$88.67	- `ríp	DOT Permit Cost/ fleet \$250.00 \$250.00
	Cost Breakdov vailable Rig Owners Operat Operat Total U Total U ON ROAD fachine escription	Capacities         ship Cost/Hour:         ting Cost/Hour:         ator Cost/Hour:         Iper Cost/Hour:         Jnit Cost/Hour:         ABLE EQUIP         Weight/ Unit (TONS)         25.01         20.13         25.00	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit \$33.12	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit \$88.67	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/ fleet \$121.79	DECK EQU DOT) Return T Cost/hr/ \$88.67	- `ríp	DOT Permit Cost/ fleet \$250.00

Subtotals: \$683.35 \$532.02 \$1,500.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	ALAMOSA	
Total one-way travel distance:	30.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *	\$6,189.76	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.75	0.75
Return Time (Hours):	0.75	0.75
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.50	1.50

# JOB TIME AND COST

Total job time: **5.00** Hours

Total job cost: \$6,189.76