

**STATE OF  
COLORADO****Girardi - DNR, Chris** <chris.girardi@state.co.us>

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## Rio Grande Bentonite- June 2025 Inspection Report and Cost Estimate

1 message

**Girardi - DNR, Chris** <chris.girardi@state.co.us>

Wed, Jul 23, 2025 at 1:10 PM

To: Larry Mondragon &lt;riograndebentonite@gmail.com&gt;

Cc: Jared Ebert - DNR &lt;jared.ebert@state.co.us&gt;

Good afternoon,

Attached to this email is the Division's Inspection Report and Reclamation Cost Estimate based on the inspection conducted on June 16, 2025 for the Rio Grande Bentonite, permit number M-2002-106.

A hard copy will also be delivered. Regarding the Cost Estimate, please provide any feedback within two weeks of this email. Otherwise, a Surety Increase will be issued for the permit.

Please feel free to contact me if you have any questions.

Thanks,

Chris Girardi

Environmental Protection Specialist

**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

[chris.girardi@state.co.us](mailto:chris.girardi@state.co.us) | <https://drms.colorado.gov/>

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### 2 attachments

**RioGrandeBentonite\_InspectionReport\_June2025.pdf**  
2218K**RioGrandeBentonite\_2025CostEstimate\_M2002106.pdf**  
230K



**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.

<b>MINE NAME:</b> Rio Grande Bentonite	<b>MINE/PROSPECTING ID#:</b> M-2002-106	<b>MINERAL:</b> Bentonite	<b>COUNTY:</b> Conejos
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Clear	<b>INSP. DATE:</b> June 16, 2025	<b>INSP. TIME:</b> 13:30
<b>OPERATOR:</b> Larry Mondragon,	<b>OPERATOR REPRESENTATIVE:</b> Larry Mondragon	<b>TYPE OF OPERATION:</b> 110c - Construction Limited Impact	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$7,345	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>INSPECTOR(S):</b> Chris Girardi	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> July 23, 2025	

**GENERAL INSPECTION TOPICS**

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

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

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

## **OBSERVATIONS**

The Rio Grande Bentonite permit was inspected on June 16, 2025 at by Chris Girardi with the Division of Reclamation, Mining, and Safety (DRMS). The inspection was completed as part of the DRMS's routine monitoring inspection program. The site was last inspected on May 15, 2017. Larry Mondragon (Operator) was present during the inspection. The weather sunny and hot.

The Rio Grande Bentonite permit is a 110c bentonite mining operation that is permitted for 3 acres and is located approximately 14 miles east of Antonito, CO. The approved post-mining land use is developed water resources. The surrounding land use is rangeland.

The site is accessed using Punche Valley Road, then turning east using an access road. The site is then accessed using a gate. A mine identification sign was located at the entrance to the site in compliance with Rule 3.1.12 (see Photo 1). The permit boundary is enclosed with a fence on the south and west sides and delineated using metal barrels on the north side.

### **General Compliance With Mine Plan:**

The site is located within Punche Valley and located approximately a half mile west of the Rio Grande River. At the time of the inspection, the Operator was actively mining the pit slope. The site consists of a small pit less than one acre in size and approximately 8-10 feet in depth, with material stockpiles located on the pit floor (see Photo 2). Overburden material is stockpiled north of the pit. The pit maintains an almost vertical highwall at 1:1 horizontal/vertical configuration, although the toe of the pit slope is more relaxed. No erosion of the pit was observed. Topsoil is stockpiled along the eastern permit boundary. The undisturbed portion of the permit area contains dense vegetative cover, consisting of Indian ricegrass, Bottlebrush squirreltail, Sagebrush, and Kochia (see Photos 5-7). Kochia is an invasive species, but not a noxious weed and not considered a problem at this time. No fuel is being stored within the permit area.

Historical Google Earth Imagery indicates the Operator had previously been mining a pit to the east and has been mining to the west since 2019. Previous inspection reports have indicated the presence of pre-permit and historic disturbances directly to the north and southwest of the permit area. However, this area exhibits significant vegetative cover and is not easily discernable from unaffected lands outside the permit area (see Photo 5 and Figure 1).

A pair of wheel loaders were located near the pit (see Photo 3). The Operator has also begun reclaiming a former pit along the southeast portion of the permit area, which has been graded and seeded (see Photo 4). Revegetation has moderately established on the former pit floor, but the slope has struggled to regrow vegetation. In addition, minor rilling erosion of the reclaimed pit slope was observed. The DRMS noted that if increased erosion of the south pit slopes occurs, then stabilization measures will be necessary to remain in compliance with Rule 3.1.6(3) of the Construction Materials Rules and Regulations governing erosion of affected land.

According to the Operator, they intend to submit an amendment application to increase the permit acreage from 4 acres to around 9 acres. They are in the process of hiring a consultant to conduct a survey of the expansion area, which would expand the permit area to the east and northeast, where overburden thickness is only one (1) to three (3) feet, as opposed to the current permit area where overburden thickness is

approximately six (6) feet in thickness. An amendment application should also consider a change of the reclamation plan and post-mine land use, which is currently developed water resources.

Financial Warranty:

The Division currently holds a reclamation bond in the amount of \$4,462. for this operation. The Division has estimated the reclamation liability at the site, and found it to be \$7,345. This is an increase of \$2,883 from the bond currently held. The Operator will have 14 days (August 6, 2025), from the issuance of this report to submit any questions regarding the updated cost estimate. If no questions are received, the Division may issue a Surety Increase notice for the difference. The Operator will have 60 days from the date of the notice to submit and obtain acceptance of the increase in financial warranty from the Division in accordance with Rule 4.2.1(2).

**PHOTOGRAPHS**



Photo 1: Mine entrance sign, facing east.



Photo 2: Active pit area with material stockpiles on the pit floor, facing west.





Photo 3: View of mining equipment.



Photo 4: View of reclaimed pit slope in the southeast portion of the permit, facing south.



Photo 5: View of undisturbed portion of parcel and potential amendment expansion area, facing north.



Photo 6: View of undisturbed portion of permit containing vegetation, as well as the disturbed portion of the permit area, facing southeast.





Photo 7: Kochia weed within the undisturbed portion of the permit area.

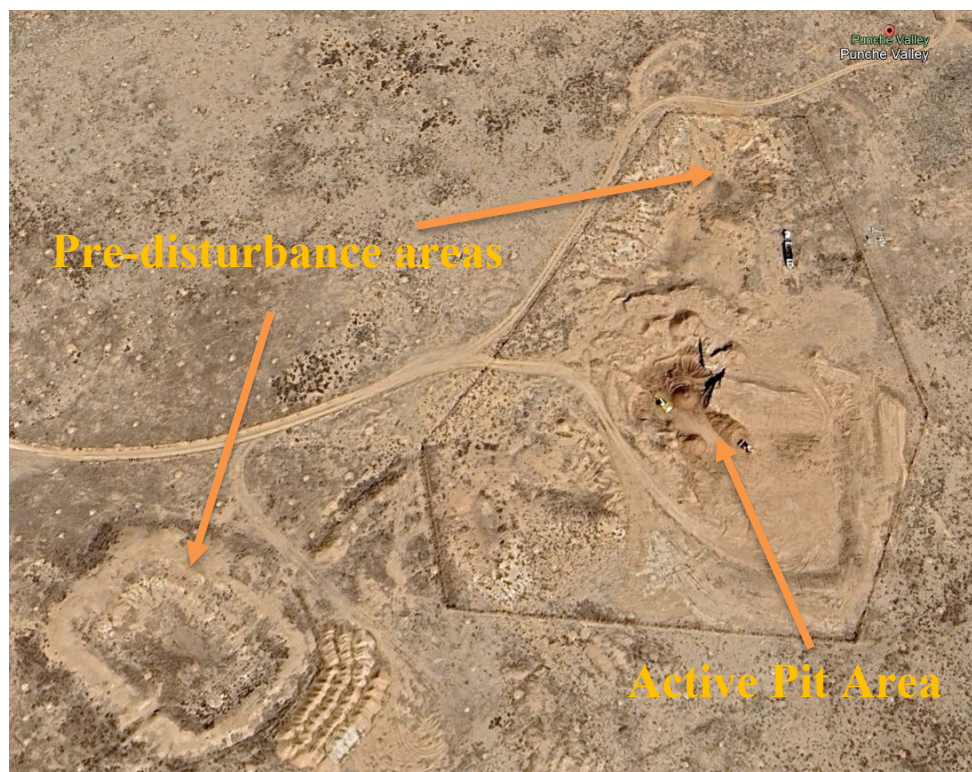


Figure 1: This map was generated using Google Earth to show areas of pre-disturbance unrelated to the current mining plan.



**Inspection Contact Address**

Larry Mondragon, Son  
Larry Mondragon  
9451 U.S. Hwy. 285 S  
Alamosa, CO 81101

Enclosure- 2025 Reclamation Cost Estimate

CC:  
Jared Ebert, DRMS

## COST SUMMARY WORK

Task description: Reclamation of the permit

Site: Rio Grande Bentonite

Permit Action: 2025 Update

Permit/Job#: M2002106

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/26/2025

County: Conejos

Filename: M106-000

User: CMG

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	General site grading	DOZER	1	2.72	\$325
002	Spread topsoil	DOZER	1	3.22	\$385
003	Revegetate affected lands	REVEGE	1	1.00	\$2,958
004	Haul reclamation equipment to and from job site	MOBILIZE	1	3.33	\$1,937
<b><u>SUBTOTALS:</u></b>				<b>10.27</b>	<b>\$5,605</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$113

Performance bond: 1.05

Total = \$59

Job superintendent: 5.14

Total = \$386

Profit: 10.00

Total = \$560

TOTAL O & P = \$1,118

CONTRACT AMOUNT (direct + O & P) = \$6,723

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$286

Reclamation management and/or administration: 5.00

\$336

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$1,740

**TOTAL BOND AMOUNT (direct + indirect) = \$7,345**

## BULLDOZER WORK

Task description: General site grading

Site: Rio Grande Bentonite Permit Action: 2025 Update Permit/Job#: M2002106

### PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None  
Date: 6/26/2025 County: Conejos Filename: 000  
User: CMG

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D5N LGP - 5P  
Horsepower: 96  
Blade Type: Power Angle Tilt  
Attachment: 3-shank ripper  
Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$44.09</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$33.12</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$4.01</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.31</u>	<u>10</u>
Operator Cost/Hour:	<u>\$38.02</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$119.54</u>	
Total Fleet Cost/Hour:	<u><b>\$119.54</b></u>	

### MATERIAL QUANTITIES

Initial Volume: 806  
Swell factor: 1.000  
Loose volume: **806** LCY

Source of estimated volume: (1ac)(43560sq.ft./ac)(0.5'D) / 27 = 806 cy  
Source of estimated swell  
factor: Cat Handbook

### HOURLY PRODUCTION

Average push distance: 50 feet  
Unadjusted hourly  
production: 464.3 LCY/hr

Materials consistency  
description: Loose stockpile 1.2

Average push  
gradient: -5 %  
Average site altitude: 7,600 feet

Material weight: 2,400 lbs/LCY



Weight description:      Sand - Dry, loose

<u>Job Condition</u>	<u>Correction Factor</u>	<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction:                      0.6383

Adjusted unit  
production:                      296.36 LCY/hr

Adjusted fleet  
production:                      **296.36** LCY/hr

#### **JOB TIME AND COST**

Fleet size:                      1 Dozer(s)

Unit cost:                      \$0.403/LCY

Total job time:                      **2.72** Hours

Total job cost:                      **\$325**

## BULLDOZER WORK

Task description: Spread topsoil

Site: Rio Grande Bentonite Permit Action: 2025 Update Permit/Job#: M2002106

### PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None  
Date: 6/26/2025 County: Conejos Filename: 000  
User: CMG

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D5N LGP - 5P  
Horsepower: 96  
Blade Type: Power Angle Tilt  
Attachment: 3-shank ripper  
Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$44.09</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$33.12</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$4.01</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.31</u>	<u>10</u>
Operator Cost/Hour:	<u>\$38.02</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$119.54</u>	
Total Fleet Cost/Hour:	<u>\$119.54</u>	

### MATERIAL QUANTITIES

Initial Volume: 806  
Swell factor: 1.000  
Loose volume: 806 LCY

Source of estimated volume: (1ac)(43560sq.ft./ac)(0.5'D) / 27 = 806 cy  
Source of estimated swell  
factor: Cat Handbook

### HOURLY PRODUCTION

Average push distance: 50 feet  
Unadjusted hourly  
production: 464.3 LCY/hr

Materials consistency  
description: Loose stockpile 1.2

Average push  
gradient: 0 %  
Average site altitude: 7,600 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

<u>Job Condition</u>	<u>Correction Factor</u>	<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5390

Adjusted unit  
production: 250.26 LCY/hr

Adjusted fleet  
production: **250.26** LCY/hr

#### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.478/LCY

Total job time: **3.22** Hours  
Total job cost: **\$385**



REVEGETATION WORK

Task description: Revegetate affected lands

Site: Rio Grande Bentonite Permit Action: 2025 Update Permit/Job#: M2002106

**PROJECT IDENTIFICATION**

Task #: 003 State: Colorado Abbreviation: None  
Date: 6/26/2025 County: Conejos Filename: 000  
User: CMG

Agency or organization name: DRMS

**FERTILIZING**

**Materials**

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

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Sand Dropseed	0.12	14.33	\$1.60
Crested Wheatgrass - Standard	2.80	12.86	\$15.44
Russian Wildrye - VNS	3.00	12.05	\$35.61
<b>Totals Seed Mix</b>	<b>5.92</b>	<b>39.23</b>	<b>\$52.65</b>

**Application**

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<b>Description</b>	<b>Cost /Acre</b>
Drill Seeding (DRMS Survey Cost)	\$242.30
<b>Total Seed Application Cost/Acre</b>	<b>\$242.30</b>

### **MULCHING and MISCELLANEOUS**

#### **Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
Hay, delivered	2.00	TON	\$504.56	\$1,009.12
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$38.14	\$38.14
<b>Total Mulch Materials Cost/Acre</b>				<b>\$1,047.25</b>

#### **Application**

<b>Description</b>	<b>Cost /Acre</b>
Crimping, with tractor {DMG survey data}	\$239.35
Power mulcher (MEANS 32 91 13.16 0350)	\$141.57
Weed spray, truck, non-aquatic area, nox. [DMG]	\$249.08
<b>Total Mulch Application Cost/Acre</b>	<b>\$630.00</b>

### **NURSERY STOCK PLANTING**

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

### **JOB TIME AND COST**

No. of Acres:	1	Cost /Acre:	\$1,972.20
Estimated Failure Rate:	50%	Cost /Acre*:	\$1,972.20
*Selected Replanting Work Items:	SEEDING, MULCHING		

Initial Job Cost:	<b>\$1,972.20</b>
Reseeding Job Cost:	<b>\$986.10</b>
Total Job Cost:	<b>\$2,958</b>
Job Hours:	<b>1.00</b>

## EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Haul reclamation equipment to and from job site

Site: Rio Grande Bentonite

Permit Action: 2025 Update

Permit/Job#: M2002106

### PROJECT IDENTIFICATION

Task #: 004  
Date: 6/26/2025  
User: CMG

State: Colorado  
County: Conejos

Abbreviation: None  
Filename: M106-004

Agency or organization name: DRMS

### EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day  
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,  
400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT  
TRAILER (25T, 50T, AND 100T)

#### Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$21.47	\$38.32	\$48.96
Operating Cost/Hour:	\$31.47	\$60.11	\$65.86
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$22.25	\$22.25
Total Unit Cost/Hour:	\$75.46	\$143.20	\$159.59

### NON-ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D5N LGP - 5P	12.10	\$48.10	\$75.46	1	\$123.56	\$75.46	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$5.99	\$75.46	2	\$162.90	\$150.92	\$250.00

Subtotals: **\$286.46** **\$226.38** **\$500.00**

### ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x2, 1/2 T.	\$20.11	1	\$20.11	\$20.11

Subtotals: **\$20.11** **\$20.11**

### EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: ANTONITO  
Total one-way travel distance: 15.00 miles  
Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost \* \$1,914.81  
\*\* two round trips with haul rig:  
Total Roadable Mob/Demob Cost \*\* \$13.41



\*\* one round trip, no haul rig: \_\_\_\_\_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.33	0.33
Return Time (Hours):	0.33	0.33
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.67	0.67

**JOB TIME AND COST**

Total job time: 3.33 Hours

Total job cost: \$1,928