




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: Barton Pit	MINE/PROSPECTING ID#: M-2000-149	MINERAL: Gravel	COUNTY: Logan
INSPECTION TYPE: Monitoring	INSPECTOR(S): Jared L. Ebert	INSP. DATE: October 17, 2018	INSP. TIME: 11:15
OPERATOR: Dumb and Dumber Trucking, LLC	OPERATOR REPRESENTATIVE: None	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$49,700.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: October 30, 2018	

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>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(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>NA</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>NA</u>	(RV) REVEGETATION---- <u>NA</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>NA</u>	(RS) RECL PLAN/COMP-- <u>NA</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

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

OBSERVATIONS

This was an inspection of the Barton Pit, Division of Reclamation, Mining and Safety ("DRMS") permit number M-2000-149, operated by Dumb and Dumber Trucking, LLC. ("DDT"). I, Jared Ebert and Patrick Lennberg with DRMS conducted the inspection. Mr. Brian Barton with DDT was aware of the inspection but was unable to attend.

This is a 65.29 acre 112c mining operation in Logan County. The approved post mining land use is designated as pastureland. Using the ArcCollector application, we collected a polygon of the affected area and found that about 14 acres has been affected at the site. Also collected was the location of the top of the highwalls observed. A map of the Division's findings is enclosed.

Backfilling and Grading:

It appears the operator has conducted some grading work in the southwest corner of the affected land. The area has been graded to a near 3H:1V slope. Annual vegetation has begun to grow in this area, however a number a large rills and gullies have formed. The Operator will need to monitor and repair this area as necessary.

Financial Warranty:

The Division currently holds a cash bond in the amount of \$49,700.00. The Division has estimated the cost to reclaim the site in accordance with the approved reclamation plan to be about \$35,000.00. This amount should cover the cost to reclaim the 14 acres of affected land observed at the site. The Operator is only permitted to affect 14.58 acres of land without first notifying the Division and adjusting the financial warranty accordingly. At this time the Operator could request a surety reduction in accordance with Rule 4.17, however if DDT would like to affect additional acreage at this time the Financial warranty would need to account for this area.

Gen. Compliance With Mine Plan:

DDT has affected about 14 acres of land within the Area 1, 2 and 3 mining phases. DDT committed to only affecting 14.58 acres at a time without first notifying the Division and adjusting the financial warranty accordingly. The site consists of a pit excavation with multiple highwalls. A highwall about 30 to 35 feet in height is located in the northwest portion of the affected area, this highwall daylights to the north and east. On the southeast side of the affected land multiple highwalls were observed in a benched configuration. The lowest mine bench was about 35 feet in height with a near vertical face. Three subsequent benches were observed above the first bench each with a near vertical highwall about five to ten feet in height.

Topsoil:

Topsoil stockpiles were observed above the highwalls.

PHOTOGRAPHS



Figure 1. From the center of the affected land looking northwest at highwall.



Figure 2. From the center of the affected land looking southeast at highwall benches.



Figure 3. From the top of the 2nd Highwall bench looking southwest.



Figure 4. From the top of the second bench looking south.



Figure 5. From the east side of the affected land looking west.

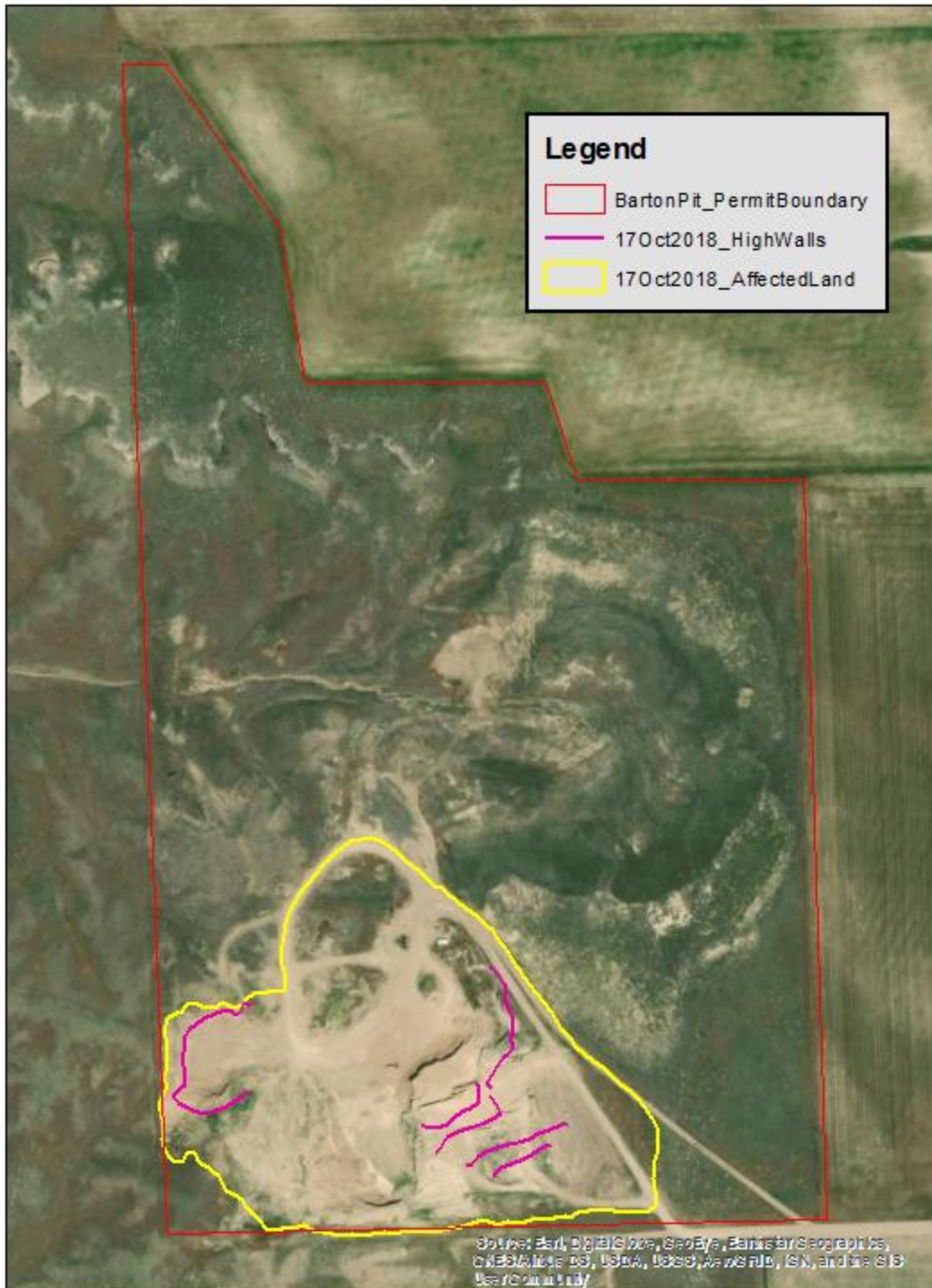


Figure 6. From the west side of the affected land looking southeast.



Figure 7. Backfilled and graded area on the southwest side of the affected land.

Barton Pit, M-2000-149, October 17, 2018 Inspection



Jared Ebert, DRMS
October 30, 2018

Inspection Contact Address

Brian Barton
Dumb and Dumber Trucking, LLC
16653 Hwy. 14
Sterling, CO 80751

Enclosure: *1.) October 29, 2018, CIRCES, Cost Estimate*

COST SUMMARY WORK

Task description: Cost Summary

Site: Barton Pit Permit Action: 2018 Cost Estimate Permit/Job#: M2000149

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 10/29/2018 County: Logan Filename: M149-000
User: JLE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill and Grade Highwalls	DOZER	1	9.56	\$2,504.00
002	Spread Topsoil Over the Affected Land	SCRAPER1	1	5.81	\$6,643.00
003	Revegetation	REVEGE	1	7.00	\$12,937.00
004	Mob/Demob Reclamation Equipment	MOBILIZE	1	3.04	\$5,379.00
<u>SUBTOTALS:</u>				25.41	\$27,463

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$554.75
Performance bond:	1.05	Total =	\$288.36
Job superintendent:	12.71	Total =	\$928.10
Profit:	10.00	Total =	\$2,746.30
		TOTAL O & P =	\$4,517.51
		CONTRACT AMOUNT (direct + O & P) =	\$31,980.51

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	0.00	Total =	0.00
Engineering work and/or contract/bid preparation:	4.25	Total =	\$1,359.17
Reclamation management and/or administration:	5.00		\$1,599.03

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$7,475.71

TOTAL BOND AMOUNT (direct + indirect) = \$34,938.71

BULLDOZER WORK

Task description: Backfill and Grade Highwalls

Site: Barton Pit

Permit Action: 2018 Cost Estimate

Permit/Job#: M2000149

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 10/29/2018

County: Logan

Filename: NA

User: JLE

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9SU

Horsepower: 405

Blade Type: Semi-Universal

Attachment: 3-shank ripper

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$110.70	NA
Operating Cost/Hour:	\$95.46	100
Ripper own. Cost/Hour:	\$12.36	NA
Ripper op. Cost/Hour:	\$1.97	25
Operator Cost/Hour:	\$41.52	NA
Total unit Cost/Hour:	\$262.02	
Total Fleet Cost/Hour:	\$262.02	

MATERIAL QUANTITIES

Initial Volume: 12,514

Swell factor: 1.250

Loose volume: **15,643 LCY**

Source of estimated volume: Division of Reclamation, Mining & Safety

Source of estimated swell
factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet

Unadjusted hourly
production: 2,110.5 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push
gradient: -15 %

Average site altitude: 4,550 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

Job Condition Correction Factor

Source

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7755

Adjusted unit
production: 1,636.69 LCY/hr

Adjusted fleet
production: **1636.69** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.160/LCY

Total job time: **9.56** Hours

Total job cost: **\$2,504**

SCRAPER TEAM WORK

Task description: Spread Topsoil Over the Affected Land

Site: Barton Pit

Permit Action: 2018 Cost Estimate

Permit/Job#: M2000149

PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 10/29/2018

County: Logan

Filename: M149-002

User: JLE

Agency or organization name: DRMS

HOURLY EQUIPMENT

COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G w/push-pull
-Dozer:	NA
Support Equipment -Load Area:	Cat D9T - 9SU
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 5,000 Gal.

Cost Breakdown:

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	NA	25	25
Ownership cost/hour:	\$165.84	NA	\$110.70	NA	\$60.13	\$25.30
Operating cost/hour:	\$172.14	NA	\$95.46	NA	\$12.72	\$9.15
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$31.05	NA	\$41.52	NA	\$28.69	\$21.23
Unit Subtotals:	\$369.02	NA	\$247.68	NA	\$101.54	\$55.68
Number of Units:	2	0	1	0	1	1
Group Subtotals:	Work:	\$738.04	Support:	\$247.68	Maint:	\$157.22

Total work team cost/hour: \$1,142.94

MATERIAL QUANTITIES

Initial volume: 7,528

CCY

Swell factor: 1.000

Loose volume: 7,528

LCY

Source of estimated volume: Division of Reclamation, Mining & Safety

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<u>29.00</u>	LCY

Cycle Time:

Scraper Loading Time: 1.00 Minutes
 Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction:

Site Altitude: 4550 feet

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

Travel Time:Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0**Haul Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	3.00	3.00	2800	0.35

Haul Time: 0.35 minutes**Return Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	3.00	3.00	2949	0.28

Return Time: 0.28 minutes

Total Scraper team cycle time: 2.23 minutes
 Adjusted for job conditions: 1,295.25 LCY/Hour
 Selected Number of Scrapers: 2 Scraper(s)
 Adjusted single scraper team (unit) hourly production: 1,295.25 LCY/Hour
 Adjusted multiple scraper team (fleet) hourly production: 1,295.25 LCY/Hour

Unadjusted unit production/hour: 1,560.54 LCY/Hour
 Optimal Number of Scrapers per push
 dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: 5.81 HoursUnit cost: \$0.882 /LCY Total job cost: \$6,643

REVEGETATION WORK

Task description: Revegetation

Site: Barton Pit

Permit Action: 2018 Cost Estimate

Permit/Job#: M2000149

PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 10/29/2018

County: Logan

Filename: M149-003

User: JLE

Agency or organization name: DRMS

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
Chisel plowing {DMG}	\$92.77
Total Tilling Cost/Acre	\$92.77

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Blackwell	0.90	8.04	\$8.83
Little Bluestem - Native	1.40	8.36	\$22.58
Sideoats Grama - Butte	1.80	5.91	\$17.82
Western Wheatgrass - Native	3.20	8.08	\$22.94
Prairie Sandreed - Goshen	1.30	8.15	\$13.95
Totals Seed Mix	8.60	38.53	\$86.12

Application

Description	Cost /Acre
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Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost / Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$288.00	\$288.00
Total Mulch Materials Cost/Acre				\$288.00

Application

Description	Cost / Acre
Crimping, with tractor {DMG survey data}	\$68.78
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Total Mulch Application Cost/Acre	\$161.56

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:	14	Cost /Acre:	\$860.45
Estimated Failure Rate:	20%	Cost /Acre*:	\$318.12
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$12,046.30
Reseeding Job Cost:	\$890.74
Total Job Cost:	\$12,937
Job Hours:	7.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mob/Demob Reclamation Equipment

Site: Barton Pit

Permit Action: 2018 Cost Estimate

Permit/Job#: M2000149

PROJECT IDENTIFICATION

Task #: 004

State: Colorado

Abbreviation: None

Date: 10/29/2018

County: Logan

Filename: NA

User: JLE

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:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

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 D9T - 9SU	66.13	\$123.06	\$125.45	1	\$248.51	\$125.45	\$250.00
Cat 637G w/push-pull	59.59	\$165.84	\$125.45	2	\$582.58	\$250.90	\$250.00
CAT 14M	23.57	\$60.13	\$88.67	1	\$148.80	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	2	\$208.42	\$177.34	\$250.00

Subtotals: **\$1,188.31** **\$642.36** **\$1,000.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 5,000 Gal.	\$83.13	1	\$83.13	\$83.13

Subtotals: **\$83.13** **\$83.13**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>STERLING</u>	
Total one-way travel distance:	<u>14.40</u>	miles
Average Travel Speed:	<u>55.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$5,335.23</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$43.53</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.26	0.26
Return Time (Hours):	0.26	0.26
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.52	0.52

JOB TIME AND COST

Total job time:	<u>3.05</u>	Hours
Total job cost:	<u>\$5,379</u>	