



September 26, 2023

Phillip Courtney  
Martin Marietta Materials, Inc.  
1627 Cole Boulevard, Suite 200  
Lakewood, CO  
80401

**Re: Rich Pit, No. M-1985-218, Enforcement Hearing Meeting Follow-Up Correspondence Regarding the Operator's Request to Re-evaluate the Bond, and Abate the Substitute Water Supply Plan Problem Citation**

Phillip Courtney,

On Tuesday, September 12, 2023, the Division received your request (via phone conversation) to meet in person to discuss the reasoning behind the possible violation citation, the reclamation cost estimate, and the substitute water supply plan (SWSP) for the Rich Pit, M-1985-218. On September 14, 2023, you had sent the Division items to consider when reviewing the reclamation cost estimate. After the meeting between the Division and the Operators on Monday, September 18, 2023, a new reclamation cost estimate was conducted, and is enclosed with this letter. The Operator will have 14 days from the issuance of this letter, (October 10, 2023) to review the cost estimate, and to submit any questions or comments to the Division. If no comments 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 from the Division in accordance with Rule 4.2.1(2).

Additionally, the meeting clarified that the SWSP for the Rich Pit is current and accurately accounts for the exposed groundwater on-site. The inspection problem cited for the SWSP in the Division's Inspection Report for the July 13, 2023 inspection is considered **resolved**.

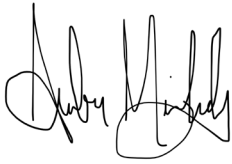
On September 26, 2023, the Division received your request for a continuance to the November 15-16, 2023 MLRB hearing, for the possible violation for failure to comply with the conditions of an order, permit or regulation pursuant to C.R.S. 34-32.5-124 for mining in an area encompassing approximately 29 acres without an approved mining and reclamation plan, cited in the Division's inspection report and Reason to Believe a Violation Exists letters. The Operator stated that this will allow them time to conduct corrective actions prior to the meeting. The Division **approves** your request, and will continue this matter to the November 15-16, 2023 MLRB meeting. In order to be considered at the hearing, all exhibits, materials and witness testimony you wish for the Board to consider must be submitted by 5:00 PM on November



3, 2023 via email to the MLRB Administrator, Camille M. Mojar at: [Dnr\\_drms\\_mlrbsubmittals@state.co.us](mailto:Dnr_drms_mlrbsubmittals@state.co.us).

If you have any questions, please send me an email at [amber.michels@state.co.us](mailto:amber.michels@state.co.us), or call me at 720-836-0967.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amber Michels', with a stylized, cursive script.

Amber Michels  
Environmental Protection Specialist

Cc: Jared Ebert, DRMS  
Brock Bowles, DRMS

## COST SUMMARY WORK

Task description: 2023 Cost Reclamation Cost Estimate for the Rich Pit

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 8/31/2023

County: Pueblo

Filename: M218-000

User: ANM

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill silt and freshwater ponds	DOZER	2	25.69	\$21,855
002	Backfill active pit	DOZER	3	784.71	\$1,001,298
003	Import backfill, \$10/CY to fill 1.23 CY pit minus 156,000CY	SITEMAINT ENANCE	1	0.00	\$11,072,400
004	Backslope Lake 2 Pit w/ Overburden	DOZER	2	7.92	\$6,734
005	Slurry Wall Install from Applegate Estimate	SITEMAINT ENANCE	1	0.00	\$223,125
006	Road Reclamation	GRADER	1	8.06	\$1,474
007A	Spread Topsoil over 84.19 acres	SCRAPER1	1	27.45	\$110,371
007B	Revegetation	REVEGE	1	84.00	\$147,967
008	Mob/Demob	MOBILIZE	1	8.04	\$33,344
<b><u>SUBTOTALS:</u></b>				<b>945.87</b>	<b>\$12,618,568</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 472.94  
Profit: 10.00

Total = \$254,895

Total = \$132,495

Total = \$30,779

Total = \$1,261,857

TOTAL O & P = \$1,680,025

CONTRACT AMOUNT (direct + O & P) = \$14,298,593

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$607,690

Reclamation management and/or administration: 5.00

\$714,930

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$3,003,145

**TOTAL BOND AMOUNT (direct + indirect) = \$15,621,713**

## BULLDOZER WORK

Task description: Backfill silt and freshwater ponds

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 8/30/2023

County: Pueblo

Filename: M218-001

User: ANM

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU

Horsepower: 310

Blade Type: Semi-Universal

Attachment: NA

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34

Total Fleet Cost/Hour: \$850.67

### MATERIAL QUANTITIES

Initial Volume: 29,040

Swell factor: 1.135

Loose volume: 32,960 LCY

Source of estimated volume: 98,010 sqft ponds x 8 ft deep = 784,080  
ft or 29040 CY

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Average push distance: 50 feet

Unadjusted hourly production: 1,400.0 LCY/hr

Materials consistency description: Wet, highly cohesive 0.8

Average push gradient: 0 %

Average site altitude: 4,550 feet

Material weight: 2,700 lbs/LCY

Weight description: Earth - Wet excavated

#### Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.800	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.852	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4582

Adjusted unit production: 641.48 LCY/hr  
Adjusted fleet production: **1282.96** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)  
Unit cost: \$0.663/LCY

Total job time: **25.69** Hours  
Total job cost: **\$21,855**

## BULLDOZER WORK

Task description: Backfill active pit

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 8/31/2023

County: Pueblo

Filename: M218-002

User: ANM

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU

Horsepower: 310

Blade Type: Semi-Universal

Attachment: NA

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34

Total Fleet Cost/Hour: **\$1,276.01**

### MATERIAL QUANTITIES

Initial Volume: 1,263,240

Swell factor: 1.125

Loose volume: **1,421,145** LCY

Source of estimated volume: 1.26 mil sqft pit x 27' deep = 34.12mil ft^3 or 1,263,240 CY

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Average push distance: 50 feet

Unadjusted hourly production: 1,400.0 LCY/hr

Materials consistency description: Wet, highly cohesive 0.8

Average push gradient: 0 %

Average site altitude: 4,550 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

#### Job Condition Correction Factor

#### Source

Operator Skill:	0.750	(AVG.)
Material consistency:	0.800	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)

Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4312

Adjusted unit production: 603.68 LCY/hr

Adjusted fleet production: **1811.04** LCY/hr

### **JOB TIME AND COST**

Fleet size: 3 Dozer(s)

Unit cost: \$0.705/LCY

Total job time: **784.71** Hours

Total job cost: **\$1,001,298**

## SITE MAINTENANCE

Task description: Import backfill, \$10/CY to fill 1.23 CY pit (minus 156,000 CY of backfill available on-site)

Site: Rich Pit Permit Action: 2023 Inspection Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None  
Date: 8/31/2023 County: Pueblo Filename: M218-003  
User: ANM

Agency or organization name: DRMS

### UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Bring in backfill	1.00	USER PROVIDED ITEM	1,107,240.00	1	\$10.00	\$11,072,400.00

Job Hours: 0.00

Total Cost: \$11,072,400.00



## BULLDOZER WORK

Task description: Backslope Lake 2 Pit w/ Overburden

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 004

State: Colorado

Abbreviation: None

Date: 8/31/2023

County: Pueblo

Filename: M218-004

User: ANM

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU

Horsepower: 310

Blade Type: Semi-Universal

Attachment: NA

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34

Total Fleet Cost/Hour: \$850.67

### MATERIAL QUANTITIES

Initial Volume: 17,500

Swell factor: 1.000

Loose volume: 17,500 LCY

Source of estimated volume: 2:1 until 5' from surface, 3:1 after. 17'deep, 3750'perm

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Average push distance: 60 feet

Unadjusted hourly production: 1,246.9 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: -15 %

Average site altitude: 4,550 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

#### Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)

Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8865

Adjusted unit production: 1,105.38 LCY/hr

Adjusted fleet production: **2210.76** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.385/LCY

Total job time: **7.92** Hours

Total job cost: **\$6,734**

## SITE MAINTENANCE

Task description: Slurry Wall Install from Applegate Estimate

Site: Rich Pit Permit Action: 2023 Inspection Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None  
Date: 8/31/2023 County: Pueblo Filename: M218-005  
User: ANM

Agency or organization name: DRMS

### UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Construct Active Pit Slurry Wall (3750LFx17ftD)	1.00	USER PROVIDED ITEM	63,750.00	1	\$3.50	\$223,125.00

Job Hours: 0.00

Total Cost: \$223,125.00

## MOTOR GRADER WORK

Task description: Road Reclamation

Site: Rich Pit Permit Action: 2023 Inspection Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 006 State: Colorado Abbreviation: None  
Date: 8/31/2023 County: Pueblo Filename: M218-006  
User: ANM

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: CAT 12M Horsepower: 158  
Ripper Attachment: Multi-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$74.98	NA
Operating Cost/Hour:	\$55.26	100
Ripper Ownership Cost/Hour:	\$3.09	NA
Ripper Operating Cost/Hour:	\$2.57	100
Operator Cost/Hour:	\$46.87	NA
Total Unit Cost/Hour:	\$182.77	
Total Fleet Cost/Hour:	\$182.77	

### MATERIAL QUANTITIES

Total Area to be graded or ripped: 10.00 acres

Source of estimated acreage: Google Earth Estimate 2023 image

### HOURLY PRODUCTION

Average Grader Speed: 1.50 mph  
Selected Application: Ripping (0-3 mph) - 1.50  
Selected Blade Angle: -1 degrees  
Effective Blade Length: 0.00 feet  
Width of blade overlap per pass: 2.00 feet  
Net grading or ripping width per pass: 7.58 feet  
Unadjusted Hourly Unit Production: 1.3782 acres/hour

#### Job Condition Correction Factors

Site Altitude: 4550 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.90</u>	(1sh/d, fav.)
Net Correction:	<u>0.9000</u>	multiplier

Adjusted Hourly Unit Production: 1.2404 acres/Hour  
Adjusted Hourly Fleet Production: 1.2404 acres/Hour

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 8.06 Hours

Unit cost: \$147.35 per acre Total job cost: \$1,474

## SCRAPER TEAM WORK

Task description: Spread Topsoil over 84.19 acres

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 007A

State: Colorado

Abbreviation: None

Date: 8/31/2023

County: Pueblo

Filename: M218-007A

User: ANM

Agency or organization name: DRMS

### HOURLY EQUIPMENT

COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 657G w/push-pull
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	CAT 12M
-Water Truck:	Water Tanker, 2,500 Gal.

#### Cost Breakdown:

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	50	50	50	50
Ownership cost/hour:	\$379.25	NA	\$241.38	\$241.38	\$74.98	\$11.35
Operating cost/hour:	\$358.77	NA	\$71.96	\$71.96	\$27.63	\$11.46
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$47.28	NA	\$40.04	\$40.04	\$46.87	\$0.00
Unit Subtotals:	\$785.30	NA	\$353.38	\$353.38	\$149.48	\$22.81
Number of Units:	4	0	1	1	1	1
Group Subtotals:	Work:	\$3,141.20	Support:	\$706.76	Maint:	\$172.29

Total work team cost/hour: \$4,020.25

### MATERIAL QUANTITIES

Initial volume: 67,913

CCY

Swell factor: 1.000

Loose volume: 67,913

LCY

Source of estimated volume: Google Earth dist acreage est from 2023 image and .5' TS AM1

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

#### Scraper Bowl (volume) Basis:

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>32.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>44.00</u>	LCY
Rated Payload:	<u>104,000 pounds</u>	Average Volume:	<u>38.00</u>	LCY
Payload Capacity:	<u>65.00 LCY</u>	Adjusted Capacity:	<u>38.00</u>	LCY

**Cycle Time:**

Scraper Loading Time: 1.10 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: 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	1500.00	-1.00	2.00	1.00	3004	0.69

Haul Time: 0.69 minutes**Return Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	1.00	2.00	3.00	2958	0.67

Return Time: 0.67 minutes

Total Scraper team cycle time: 3.06 minutes  
 Adjusted for job conditions: 1,236.86 LCY/Hour  
 Selected Number of Scrapers: 4 Scraper(s)  
 Adjusted single scraper team (unit) hourly production: 2,473.73 LCY/Hour  
 Adjusted multiple scraper team (fleet) hourly production: 2,473.73 LCY/Hour

Unadjusted unit production/hour: 1,490.20 LCY/Hour  
 Optimal Number of Scrapers per push  
 dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s) Total job time: 27.45 HoursUnit cost: \$1.625 /LCY Total job cost: \$110,371

## REVEGETATION WORK

Task description: Revegetation

Site: Rich Pit

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 007B

State: Colorado

Abbreviation: None

Date: 8/31/2023

County: Pueblo

Filename: M218-007

User: ANM

Agency or organization name: DRMS

### FERTILIZING

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	120.00	pound	\$0.62	\$74.80
Triple superphosphate, 0-46-0	90.00	pound	\$0.89	\$80.10
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$154.90</b>

#### Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$41.82
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$41.82</b>

### TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
<b>Total Tilling Cost/Acre</b>	<b>\$112.82</b>

### SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.30	11.71	\$8.54
Sand Dropseed	0.10	11.94	\$0.98
Sideoats Grama - Butte	2.70	8.86	\$24.30
Yellow Sweet Clover - Madrid	0.70	4.18	\$1.98
Western Wheatgrass - Arriba	4.80	12.12	\$31.20
Saltbush, Four Wing	0.50	0.69	\$6.25
<b>Totals Seed Mix</b>	<b>9.10</b>	<b>49.50</b>	<b>\$73.25</b>

#### Application

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

### **MULCHING and MISCELLANEOUS**

#### **Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
<b>Total Mulch Materials Cost/Acre</b>				<b>\$859.57</b>

#### **Application**

<b>Description</b>	<b>Cost /Acre</b>
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
<b>Total Mulch Application Cost/Acre</b>	<b>\$222.13</b>

### **JOB TIME AND COST**

No. of Acres:	84.19	Cost /Acre:	\$1,696.49
Estimated Failure Rate:	20%	Cost /Acre*:	\$305.25
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$142,827.49</b>
Reseeding Job Cost:	<b>\$5,139.80</b>
Total Job Cost:	<b>\$147,967</b>
Job Hours:	<b>84.00</b>



## EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mob/Demob**

Site: **Rich Pit**

Permit Action: 2023 Inspection

Permit/Job#: M1985218

### PROJECT IDENTIFICATION

Task #: 008  
Date: 8/31/2023  
User: ANM

State: Colorado  
County: Pueblo

Abbreviation: None  
Filename: M218-008

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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

### 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 D8T - 8SU	47.71	\$241.38	\$158.17	3	\$1,198.65	\$474.51	\$250.00
CAT 12M	16.01	\$74.98	\$82.29	1	\$157.27	\$82.29	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	2	\$178.04	\$164.58	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
Cat 657G w/push- pull	80.25	\$379.25	\$175.95	4	\$2,220.80	\$703.80	\$500.00

Subtotals: **\$3,862.99** **\$1,507.47** **\$1,500.00**

### ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$73.18	1	\$73.18	\$73.18
Light Duty Pickup, 4x2, 1/2 T.	\$87.62	1	\$87.62	\$87.62
Fuel Tanker, 4x2, 170 HP	\$73.18	1	\$73.18	\$73.18
Lube Truck, 4x2, 190 HP	\$80.73	1	\$80.73	\$80.73

Subtotals: **\$314.71** **\$314.71**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>PUEBLO</u>	
Total one-way travel distance:	<u>10.00</u>	miles
Average Travel Speed:	<u>55.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$33,229.98</u>
* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$114.44</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.18</u>	<u>0.18</u>
Return Time (Hours):	<u>0.18</u>	<u>0.18</u>
Loading Time (Hours):	<u>1.83</u>	<u>NA</u>
Unloading Time (Hours):	<u>1.83</u>	<u>NA</u>
Subtotals:	<u>4.02</u>	<u>0.36</u>

**JOB TIME AND COST**

Total job time:	<u>8.05</u>	Hours
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Total job cost:	<u>\$33,344</u>
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