



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

1313 Sherman Street, Room 215  
Denver, CO 80203

April 24, 2014

Jason Burkey  
United Companies of Mesa County  
P.O. Box 3609  
Grand Junction, CO 81502

**RE: Spring Creek Pit, Permit No. M-1994-097, Reclamation Costs Update and Notice of Surety Increase (SI-2)**

Dear Mr. Burkey:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). **Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.** The additional amount needs to be accepted prior to **Tuesday, June 24, 2014**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$192,460.00. This is an increase of \$100,230.00 over the \$92,230.00 currently held by the Division. This estimate is based on conditions observed during the April 17, 2014 inspection.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,



**Dustin Ezapla**

Environmental Protection Specialist  
Department of Natural Resources  
Division of Reclamation, Mining and Safety  
101 South 3<sup>rd</sup>, Suite 301



United Companies of Mesa County  
April 24, 2014  
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Grand Junction, CO 81501  
Phone: (970) 243-6299  
Fax: (970) 241-1516

Enc: Financial Warranty Cost Estimate



## COST SUMMARY WORK

Task description: Estimate reclamation costs based on observed conditions

Site: Spring Creek Pit Permit Action: 2014-04-17  
Inspection Permit/Job#: M1994097

### PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None  
Date: 4/23/2014 County: Montrose Filename: M097-000  
User: DMC  
Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Push cured asphalt into highwall backfill	DOZER	1	1.33	\$332.88
02a	Cut highwall slopes to 3H:1V	DOZER	1	10.47	\$2,610.88
03a	Rip compacted pit floor and haul roads	RIPPER	1	64.94	\$17,264.00
04a	Distribute topsoil throughout site	SCRAPER1	1	47.28	\$41,399.11
05a	Grade topsoil	GRADER	1	30.55	\$2,470.00
06a	Vegetate affected area	REVEGE	1	55.00	\$84,219.44
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	2.28	\$5,292.08
<b><u>SUBTOTALS:</u></b>				<b>211.85</b>	<b>\$153,588.39</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	\$3,102.49
Performance bond:	1.05%	Total =	\$1,612.68
Job superintendent:	140.01 hrs	Total =	\$9,158.05
Profit:	10.00%	Total =	\$15,358.84
		TOTAL O & P =	\$29,232.06
		CONTRACT AMOUNT (direct + O & P) =	\$182,820.45

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	0.00%	Total =	\$0.00
Reclamation management and/or administration:	5.00%		\$9,141.02

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$38,873.08

**TOTAL BOND AMOUNT (direct + indirect) = \$192,461.47**

**BULLDOZER WORK**Task description: Push cured asphalt into highwall backfillSite: Spring Creek PitPermit Action: 2014-04-17 InspectionPermit/Job#: M1994097**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 4/23/2014County: MontroseFilename: M097-01aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$69.88	NA
Operating Cost/Hour:	\$142.13	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$249.42Total Fleet Cost/Hour: \$249.42**MATERIAL QUANTITIES**Initial Volume: 1,000Swell factor: 1.000Loose volume: 1,000 LCYSource of estimated volume: Onsite estimateSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 1,308.1 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 5,700 feetMaterial weight: 2,700 lbs/LCYWeight description: Stone - crushed**Job Condition Correction Factor**

		<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:	0.900	(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: 0.5728

Adjusted unit production: 749.28 LCY/hr

Adjusted fleet production: 749.28 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.333/LCY

Total job time: 1.33 Hours

Total job cost: \$332.88

**BULLDOZER WORK**Task description: Cut highwall slopes to 3H:1VSite: Spring Creek PitPermit Action: 2014-04-17 InspectionPermit/Job#: M1994097**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 4/23/2014County: MontroseFilename: M097-02aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9UHorsepower: 405Blade Type: UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$69.88	NA
Operating Cost/Hour:	\$142.13	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$249.42Total Fleet Cost/Hour: \$249.42**MATERIAL QUANTITIES**Initial Volume: 10,370Swell factor: 1.060Loose volume: 10,992 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 2,222.9 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %Average site altitude: 5,700 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4724

Adjusted unit production: 1,050.10 LCY/hr

Adjusted fleet production: **1050.1** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.238/LCY

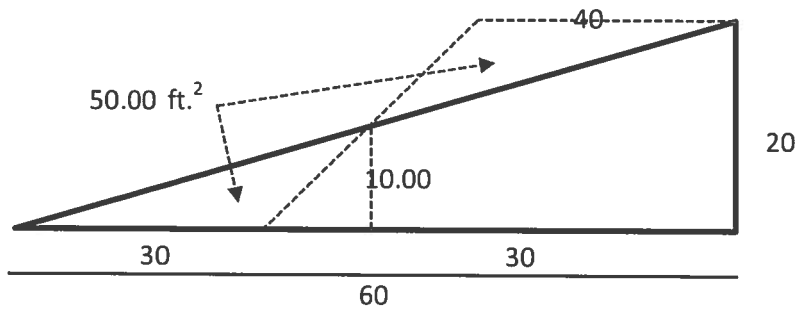
Total job time: **10.47** Hours

Total job cost: **\$2,610.88**

### Highwall reduction - cut and fill

Highwall Height (ft.)	20.0	
Length of Highwall (lft.)	5600	
----- Initial Slope	2.0	H:1V
———— Desired Slope	3	H:1V
Volume of material to be moved (ft. <sup>3</sup> )	<b>280,000</b>	
Volume of material to be moved (yd. <sup>3</sup> )	<b>10,370</b>	

All dimensions measured in feet  
Drawing not to scale



## BULLDOZER RIPPING WORK

Task description: Rip compacted pit floor and haul roads

Site: Spring Creek Pit Permit Action: 2014-04-17 Inspection Permit/Job#: M1994097

### PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None  
Date: 4/23/2014 County: Montrose Filename: M097-03a  
User: DMC

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9U Horsepower: 405  
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$78.33</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$142.13</u>	<u>100</u>
Ripper Operating Cost/Hour:	<u>\$7.96</u>	<u>100</u>
Operator Cost/Hour:	<u>\$37.41</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$265.84</u>	
Total Fleet Cost/Hour:	<u>\$265.84</u>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 48.00 acres Rip Depth (ft): 2.00 Volume: 154,880 BCY or CCY

Source of estimated quantity: Estimate based on current conditions

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>2.63</u>	<u>mph</u>
Average Ripping Width:	<u>7.67</u>	<u>degrees</u>
Average Ripping Length:	<u>500.00</u>	<u>feet</u>
Average Dozer Speed:	<u>88.00</u>	<u>feet</u>
Average Maneuver Time:	<u>0.25</u>	<u>feet</u>
Production per unit area:	<u>0.891</u>	<u>acres/hour</u>

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production:	<u>0.891</u>	<u>Acres/hr</u>
Site Altitude:	<u>5,700</u>	<u>feet</u>
Altitude Adj:	<u>1.00</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.83</u>	<u>multiplier</u>
Adjusted Hourly Unit Production:	<u>0.74</u>	<u>Acres/hr</u>
Adjusted Hourly Fleet Production:	<u>0.74</u>	<u>Acres/hr</u>

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 64.94 Hours  
Unit cost: \$359.668 Per acre Total job cost: \$17,264.00

**SCRAPER TEAM WORK**Task description: Distribute topsoil throughout siteSite: Spring Creek PitPermit Action: 2014-04-17 InspectionPermit/Job#: M1994097**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 4/23/2014County: MontroseFilename: M097-04aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 657G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

<b><u>Cost Breakdown:</u></b>	<b>Scraper Work Team</b>		<b>Support Equipment</b>		<b>Maintenance Equipment</b>	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	NA	NA
Ownership cost/hour:	\$121.28	NA	NA	NA	NA	NA
Operating cost/hour:	\$286.51	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$30.02	NA	NA	NA	NA	NA
Unit Subtotals:	\$437.81	NA	NA	NA	NA	NA
Number of Units:	2	0	0	0	0	0
Group Subtotals:	Work:	\$875.62	Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: **\$875.62****MATERIAL QUANTITIES**Initial volume: 73,944

CCY

Swell factor: 1.000Loose volume: 73,944

LCY

Source of estimated volume: Approximately 55 acres with 11 inch depthSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight: 1,600 lbs/LCY  
 Material description: Top Soil  
 Rated Payload: 104,000 pounds  
 Payload Capacity: 65.00 LCY

Struck Volume: 32.00 LCY  
 Heaped Volume: 44.00 LCY  
 Average Volume: 38.00 LCY  
 Adjusted Capacity: 38.00 LCY

Cycle Time:

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

Job Condition Correction:

Site Altitude: 5700 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: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	2335	0.43

Haul Time: 0.43 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	2888	0.39

Return Time: 0.39 minutesTotal Scraper team cycle time: 2.42 minutesAdjusted for job conditions: 781.98 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,563.97 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,563.97 LCY/HourUnadjusted unit production/hour: 942.15 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 47.28 HoursUnit cost: \$0.560 /LCYTotal job cost: \$41,399.11

## MOTOR GRADER WORK

Task description: Grade topsoil

Site: Spring Creek Pit

Permit Action: 2014-04-17 Inspection

Permit/Job#: M1994097

### PROJECT IDENTIFICATION

Task #: 05A

State: Colorado

Abbreviation: None

Date: 4/23/2014

County: Montrose

Filename: M097-05a

User: DMC

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: CAT 135H

Horsepower: 135

Ripper Attachment: \_\_\_\_\_

Shift Basis: 1 per day

Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$15.91	NA
Operating Cost/Hour:	\$37.37	100
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$27.55	NA
Total Unit Cost/Hour:	\$80.82	
Total Fleet Cost/Hour:	<b>\$80.82</b>	

### MATERIAL QUANTITIES

Total Area to be graded or ripped: 50.00 acres

Source of estimated acreage: Estimate based on observed conditions

### HOURLY PRODUCTION

Average Grader Speed:	<u>1.50</u>	mph
Selected Application:	<u>Finish grading (0-2.5 mph) - 1.5</u>	
Selected Blade Angle:	<u>0</u>	degrees
Effective Blade Length:	<u>12.00</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>10.00</u>	feet
Unadjusted Hourly Unit Production:	<u>1.8182</u>	acres/hour

#### Job Condition Correction Factors

Site Altitude: 5700 feet

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

Adjusted Hourly Unit Production: 1.6364 acres/Hour

Adjusted Hourly Fleet Production: 1.6364 acres/Hour

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 30.56 Hours

Unit cost: \$49.39 per acre Total job cost: \$2,470.00

**REVEGETATION WORK**Task description: Vegetate affected areaSite: Spring Creek PitPermit Action: 2014-04-17 InspectionPermit/Job#: M1994097**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 4/23/2014County: MontroseFilename: M097-06aUser: DMCAgency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
<b>Total Tilling Cost/Acre</b>	<b>\$243.21</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	4.00	12.95	\$26.96
Sand Dropseed	0.30	35.81	\$2.09
Bottlebrush Squirreltail	4.50	19.83	\$111.87
Galleta	2.00	7.30	\$50.40
Sheep Fescue - Covar	1.50	23.42	\$5.03
Siberian Wheatgrass	5.50	13.89	\$14.69
<b>Totals Seed Mix</b>	<b>17.80</b>	<b>113.20</b>	<b>\$211.03</b>

**Application**

Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20

<b>Total Seed Application Cost/Acre</b>	<b>\$88.20</b>
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**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$530.00</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
<b>Total Mulch Application Cost/Acre</b>	<b>\$152.57</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	55	Cost /Acre:	\$1,225.01
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,225.01
*Selected Replanting Work Items:	TILLING, SEEDING, MULCHING		
Initial Job Cost:	\$67,375.55		
Reseeding Job Cost:	\$16,843.89		
Total Job Cost:	\$84,219.44		
Job Hours:	55.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilize reclamation crew and equipment**Site: **Spring Creek Pit**Permit Action: **2014-04-17 Inspection**Permit/Job#: **M1994097****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **4/23/2014**County: **Montrose**Filename: **M097-07a**User: **DMC**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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 - 9U	66.78	\$78.33	\$125.45	1	\$203.78	\$125.45	\$250.00
CAT 135H	13.00	\$15.91	\$88.67	1	\$104.58	\$88.67	\$250.00
Cat 657G	78.88	\$121.28	\$125.45	2	\$493.47	\$250.90	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals: **\$1,025.79** **\$642.36** **\$1,500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$15.34	1	\$15.34	\$15.34

Subtotals: **\$15.34** **\$15.34**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>MONTROSE</u>	
Total one-way travel distance:	<u>2.50</u>	miles
Average Travel Speed:	<u>35.00</u>	mph
Total Non-Roadable Mob/Demob Cost *		
** two round trips with haul rig:	<u>\$5,289.89</u>	
Total Roadable Mob/Demob Cost **		
** one round trip, no haul rig:	<u>\$2.19</u>	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.07</u>	<u>0.07</u>
Return Time (Hours):	<u>0.07</u>	<u>0.07</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.14</u>	<u>0.14</u>

**JOB TIME AND COST**

Total job time:	<u>2.29</u>	Hours
Total job cost:	<u>\$5,292.08</u>	