



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

July 17, 2024

Sean Mello
Western Slope Materials, LLC
P O Box 1319
Carbondale, CO 81623

Re: Blue Pit - File No. M-1981-207
Western Slope Materials, LLC
Surety Increase (SI-3)
Surety Increase to \$3,345,651

Dear Sean Mello:

On July 17, 2024 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$3,345,651.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$1,163,680.00.

The increase in the Financial Warranty is due to the increase in the cost of fuel, equipment, and labor since the last update.

Please see the April 23, 2024 inspection report for details regarding why this surety increase is required.

On July 17, 2024, the Division ordered amendment of the current Financial Warranty or submittal of a new Financial Warranty reflecting the increase, within 60 days.

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567 (8148), or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit if the amount of any increased Financial Warranty has not been provided by September 15, 2024.

Bond Held:	\$2,181,971.00
Prior Liability:	\$2,181,971.00



Change in Liability:	\$1,163,680.00
Revised Liability:	\$3,345,651.00
Prior Permit Acreage:	146.87
Change in Permit Acreage:	0.00
Revised Permit Acreage:	146.87
Prior Affected Acreage:	146.87
Change in Affected Acreage:	0.00
Revised Affected Acreage:	146.87

If you have any questions, please contact me by telephone at (303) 866-3567 x , or by email at Todd.jesse@state.co.us.

Sincerely,



Todd Jesse
Environmental Protection Specialist

COST SUMMARY WORK

Task description: Cost Summary

Site: Blue Pit

Permit Action: 2024 SI-3

Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 5/21/2024

County: Garfield

Filename: M207-000

User: TJI

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo on-site structures	DEMOLISH	1	80.00	\$54,449
02a	Transport backfill material to mining area 1	TRUCK1	2	239.85	\$734,352
03a	Placement of backfill material in mining area 1	DOZER	4	561.25	\$1,039,243
04a	Rip pit floor/compacted areas	RIPPER	1	27.95	\$13,131
05a	install grouted channels	POSTMINING	1	67.18	\$18,728
05b	Catchment benches	GRADER	1	4.44	\$1,202
05c	Energy Dissipation Rocks	TRUCK1	2	0.07	\$163
06a	Transport topsoil to pit floor	TRUCK1	2	95.88	\$293,577
07a	Placement of topsoil on sloped areas	DOZER	4	128.69	\$227,712
07b	Placement of topsoil on open pit areas	DOZER	4	21.56	\$38,152
08a	Reveg Rangeland	REVEGE	1	100.00	\$121,811
08b	Reveg Irrigated Pastureland	REVEGE	1	25.00	\$24,957
08c	Hay Mulch for \$150 a ton @ 2 ton/ac over 100 acres	NA	1	0.00	\$30,000
09a	Initial mobilize reclamation crew/equipment	MOBILIZE	1	3.33	\$17,010
09b	Secondary mobilize reclamation crew/equipment	MOBILIZE	1	3.33	\$1,672
<u>SUBTOTALS:</u>				1358.53	\$2,616,159

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 500.00
Profit: 10.00

Total = \$52,846
Total = \$27,470
Total = \$32,540
Total = \$261,616

TOTAL O & P = \$374,472

CONTRACT AMOUNT (direct + O & P) = \$2,990,631

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500
Engineering work and/or contract/bid preparation: 5.23
Reclamation management and/or administration: 4.00

Total = \$500
Total = \$156,410
Total = \$119,625

CONTINGENCY: 3.00

Total = \$78,485

TOTAL INDIRECT COST = \$729,492

TOTAL BOND AMOUNT (direct + indirect) = \$3,345,651

DEMOLITION WORK

Task description: Demo on-site structures

Site: Blue Pit

Permit Action: 2024 SI-3

Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 5/21/2024

County: Garfield

Filename: M207-01a

User: TJ1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 102.20 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Fuel containment	40'W x 30'L x 6'H	Demo. and on-site disposal in excavated pit, 8 in. thick - Max. 200 ft. push	2,040.00	SF	\$1.74	\$3,542.05
Retaining wall	110'L x 8'H	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 50 ft. push	880.00	SF	\$2.64	\$2,326.54
Power line and poles	800'	Disposal of utility pole and hardware surplus material	800.00	LF	\$0.02	\$16.00
Mechanic Shop building	40'W x 60'L x 20'H	Bldg. (MN) demo./on-site disposal in excavated pit - Max. 200 ft. push	48,000.00	CF	\$0.34	\$16,180.80
Office/scale house	30'W x 100'L x 10'H	Bldg. (SN) demo./on-site disposal in excavated pit - Max. 200 ft. push	30,000.00	CF	\$0.24	\$7,059.00
Shop/office/apron slab(s)	9140 sq. ft.	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	9,140.00	SF	\$2.17	\$19,837.46
Misc shed/outbuildings	1600 sf x 8' H	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	12,800.00	CF	\$0.22	\$2,769.92
Scale	12'W x 70'L	Loading and 5 mile haul, salvage allowed - Steel frame structures	15.50	CY	\$12.50	\$193.75
Scale foundation	12'W x 90'L	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 200 ft. push	1,080.00	SF	\$1.25	\$1,351.19

Job Hours: 80.00

Subtotal
(unadjusted): \$53,276.71

Total Cost
(adjusted for location): \$54,448.80

TRUCK/LOADER TEAM WORKTask description: Transport backfill material to mining area 1Site: Blue PitPermit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-02aUser: TJ1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 773F
-Loader:	CAT 990H
Support Equipment -Load Area:	Cat D9T - 9SU
-Dump Area:	Cat D9T - 9SU
Road Maintenance –Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 7,000 Gal.

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	100	100
Ownership cost/hour:	\$150.99	\$77.20	\$238.76	\$238.76	\$149.33	\$86.29
Operating cost/hour:	\$113.66	\$120.94	\$162.29	\$162.29	\$92.79	\$113.77
%Utilization-riper:	NA	0	100	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$18.32	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$8.98	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$33.34	\$40.71	\$41.30	\$41.30	\$28.56	\$27.68
Unit Subtotals:	\$297.99	\$238.85	\$451.33	\$442.35	\$270.68	\$227.74
Number of Units:	4	2	1	1	1	1
Group Subtotals:	Work: \$1,669.66		Support: \$893.68		Maint: \$498.42	

Total work team cost/hour: **\$3,061.76****MATERIAL QUANTITIES**Initial volume: 359,647

CCY

Swell factor: 1.060Loose volume: **381,226**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Exhibit E & LMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 2,900

Pounds/LCY

Description: Sand and gravel - DryRated Payload: 122,520

Pounds

Payload Capacity: 42.25

LCY

Truck Bed (volume) Basis:

Struck Volume:	35.00	LCY
Heaped Volume:	46.50	LCY
Average Volume:	40.75	LCY
Adjusted Volume:	42.25	LCY

Final Truck Volume Based on Number of Loader Passes: **32.91** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	11.250	LCY (heaped)
Bucket Fill Factor:	0.975	Sand and gravel (95% - 100%) 0.975
Adjusted Capacity:	10.969	LCY

Job Condition Corrections:

Site Altitude (ft.): 7000 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 3 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.600 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.080	minutes
Adjusted Loader Cycle Time:		0.520	minutes
Net Load Time per Truck:		1.140	minutes

Truck Cycle Time:

Truck Exchange Time:	0.70	Minutes	Adjusted for site altitude:	0.700	Minutes
Truck Load Time:	1.140	Minutes	Adjusted for site altitude:	1.140	Minutes
Truck Maneuver and Dump Time:	1.10	Minutes	Adjusted for site altitude:	1.100	Minutes

Truck Travel (Haul & Return) Time:
penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	3.00	5.00	8.00	1023	0.790

Haul Time: **0.790** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	-3.00	5.00	2.00	3569	0.394

Return Time: **0.394** minutesTotal Truck Cycle Time: **4.124** minutes

Loading Tool unit

Production 1,073.03 LCY/Hour Adjusted for job efficiency: 890.61 LCY/Hour
Truck Unit Production 478.75 LCY/Hour Adjusted for job efficiency: 397.36 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 794.73 LCY/Hour
Adjusted single truck/loader team production: 794.73 LCY/Hour
Adjusted multiple truck/loader team production: **1,589.46** LCY/Hour

JOB TIME AND COSTFleet size: 2 Team(s) Total job time: **239.85** HoursUnit cost: \$1.926 /LCY Total job cost: **\$734,352**

BULLDOZER WORKTask description: **Placement of backfill material in mining area 1**Site: **Blue Pit** Permit Action: **2024 SI-3** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #: **03A** State: **Colorado** Abbreviation: **None**
 Date: **5/21/2024** County: **Garfield** Filename: **M207-03a**
 User: **TJ1**

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:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own. Cost/Hour:	\$18.32	NA
Ripper op. Cost/Hour:	\$2.25	25
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$462.92**
 Total Fleet Cost/Hour: **\$1,851.67**

MATERIAL QUANTITIES

Initial Volume: **359,647**
 Swell factor: **1.000**
 Loose volume: **359,647 LCY**

Source of estimated volume: **Exhibit E & L**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **375 feet**
 Unadjusted hourly production: **327.8 LCY/hr**

Materials consistency description: **Partly consolidated stockpile 1.1**

Average push gradient: **0 %**
 Average site altitude: **7,000 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4887

Adjusted unit production: 160.20 LCY/hr

Adjusted fleet production: **640.8** LCY/hr

JOB TIME AND COST

Fleet size: 4 Dozer(s)

Unit cost: \$2.890/LCY

Total job time: **561.25** Hours

Total job cost: **\$1,039,243**

BULLDOZER RIPPING WORK

Task description: Rip pit floor/compacted areas

Site: Blue Pit Permit Action: 2024 SI-3 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 5/21/2024 County: Garfield Filename: M207-04a
User: TJ1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper Ownership Cost/Hour:	\$18.32	NA
Ripper Operating Cost/Hour:	\$8.98	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$469.65	
Total Fleet Cost/Hour:	\$469.65	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 20.10 acres Rip Depth (ft): 2.50 Volume: 81,070 BCY or CCY

Source of estimated quantity: Exhibit E & L

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.63 feet/pass
Average Ripping Width: 7.67 feet/pass
Average Ripping Length: 300.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.866 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.866 Acres/hr
Site Altitude: 7,000 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.72 Acres/hr
Adjusted Hourly Fleet Production: **0.72** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **27.96** Hours

Unit cost: \$653.265 Per acre Total job cost: **\$13,131**

Post-Mining Drainage Channel Construction (Ditches)

Task description: Install grouted channels

Site: Blue Pit Permit Action: 2024 SI-3 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 5/21/2024 County: Garfield Filename: M207-05a
User: TJ1

Agency or organization name: DRMS

Channel	Length (ft)	Depth (ft)	Width (bottom) (ft)	Side Slopes (XH:1V)	Width (top) (ft)	Excavated Vol./LF (CY)	Excavated Vol. (total) (CY)
Grouted Channel	3,417	1.50	2.00	2.00	8.00	0.2778	949
Totals:	3,417						949

Riprap	Riprap Thickness (2xD50) (ft)	Perimeter, P (ft)	Area for Geotextile (excl. anchor trenches) (sf)	Riprap Vol. (CY)
	0.00	8.71	29,756	0
Totals:			29,756	0

Materials Needed:

Geotextile (SY incl. 15% wastage): 3,802
Riprap (CY): 0
Excavation (CY): 949

Costs:

Material Costs:	Geotextile (SY):	<u>\$3.30</u>	Riprap (CY):	<u>\$34.50</u>	Excavation (CY):	<u>\$0.00</u>
Labor Cost:		<u>\$0.32</u>		<u>\$14.65</u>		<u>\$2.84</u>
Equipment Cost:		<u>\$0.00</u>		<u>\$15.10</u>		<u>\$2.39</u>
Means Reference	31 32 1916 1510		31 37 1310 0100		31 23 1642 0310	

Totals:

Geotextile (SY): \$13,763.77
Riprap (CY): \$0.00
Excavation (CY): \$4,964.14

Hours:

Geotextile (SY): 43.45
87.50 SY/HR
Riprap (CY): 0.00
7.75 CY/HR
Excavation (CY): 23.73
40.00 CY/HR

Total Post-Mining Channel Reconstruction hours: 67.18 Hours

Total Post-Mining Channel Reconstruction Cost:	<u>\$18,728</u>
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MOTOR GRADER WORK

Task description: Catchment benches

Site: Blue Pit Permit Action: 2024 SI-3 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 05B State: Colorado Abbreviation: None
Date: 5/21/2024 County: Garfield Filename: M207-05b
User: TJ1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 14M Horsepower: 259
Ripper Attachment: Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$149.33</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$92.79</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$0.00</u>	
Operator Cost/Hour:	<u>\$28.56</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$270.68</u>	
Total Fleet Cost/Hour:	<u>\$270.68</u>	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 6.70 acres

Source of estimated acreage: 8.25' W x 35,399' L

HOURLY PRODUCTION

Average Grader Speed: 1.75 mph
Selected Application: Ditch building/cleaning (0-3 mph) - 1.75
Selected Blade Angle: 45 degrees
Effective Blade Length: 9.90 feet
Width of blade overlap per pass: 2.00 feet
Net grading or ripping width per pass: 7.90 feet
Unadjusted Hourly Unit Production: 1.6758 acres/hour

Job Condition Correction Factors

Site Altitude: 7000 feet

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

Adjusted Hourly Unit Production: 1.5082 acres/Hour
Adjusted Hourly Fleet Production: 1.5082 acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 4.44 Hours

Unit cost: \$179.47 per acre Total job cost: \$1,202

TRUCK/LOADER TEAM WORKTask description: Energy Dissipation RocksSite: Blue PitPermit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 05CState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-05cUser: TJ1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 773F
-Loader:	CAT 990H
Support Equipment -Load Area:	Cat D9T - 9SU
-Dump Area:	Cat D9T - 9SU
Road Maintenance –Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 7,000 Gal.

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	100	100
Ownership cost/hour:	\$150.99	\$77.20	\$238.76	\$238.76	\$149.33	\$86.29
Operating cost/hour:	\$113.66	\$120.94	\$162.29	\$162.29	\$92.79	\$113.77
%Utilization-riper:	NA	0	100	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$18.32	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$8.98	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$33.34	\$40.71	\$41.30	\$41.30	\$28.56	\$27.68
Unit Subtotals:	\$297.99	\$238.85	\$451.33	\$442.35	\$270.68	\$227.74
Number of Units:	2	2	1	1	1	1
Group Subtotals:	Work: \$1,073.68		Support: \$893.68		Maint: \$498.42	

Total work team cost/hour: \$2,465.78**MATERIAL QUANTITIES**Initial volume: 40

CCY

Swell factor: 1.000Loose volume: 40

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Exhibit E & LMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 1

Pounds/LCY

Description: User ProvidedRated Payload: 122,520

Pounds

Payload Capacity: 122,520.00

LCY

Truck Bed (volume) Basis:

Struck Volume:	35.00	LCY
Heaped Volume:	46.50	LCY
Average Volume:	40.75	LCY
Adjusted Volume:	46.50	LCY

Final Truck Volume Based on Number of Loader Passes: **45.56** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	11.250	LCY (heaped)
Bucket Fill Factor:	0.450	Rock - Poorly blasted (40% - 50%) 0.450
Adjusted Capacity:	5.063	LCY

Job Condition Corrections:

Site Altitude (ft.): 7000 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 9 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.600 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.090	minutes
Adjusted Loader Cycle Time:		0.510	minutes
Net Load Time per Truck:		4.180	minutes

Truck Cycle Time:

Truck Exchange Time:	0.70	Minutes	Adjusted for site altitude:	0.700	Minutes
Truck Load Time:	4.180	Minutes	Adjusted for site altitude:	4.180	Minutes
Truck Maneuver and Dump Time:	1.10	Minutes	Adjusted for site altitude:	1.100	Minutes

Truck Travel (Haul & Return) Time:
penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	3.00	5.00	8.00	1023	1.034

Haul Time: **1.034** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	-3.00	5.00	2.00	3569	0.464

Return Time: **0.464** minutesTotal Truck Cycle Time: **7.478** minutes

Loading Tool unit

Production 560.19 LCY/Hour Adjusted for job efficiency: 464.96 LCY/Hour
Truck Unit Production 365.57 LCY/Hour Adjusted for job efficiency: 303.43 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 1 Truck(s)

Adjusted hourly truck team production: 303.43 LCY/Hour
Adjusted single truck/loader team production: 303.43 LCY/Hour
Adjusted multiple truck/loader team production: **606.85** LCY/Hour

JOB TIME AND COSTFleet size: 2 Team(s) Total job time: **0.07** HoursUnit cost: \$4.063 /LCY Total job cost: **\$163**

TRUCK/LOADER TEAM WORKTask description: Transport topsoil to pit floorSite: Blue PitPermit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-06aUser: TJ1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 773F
-Loader:	CAT 990H
Support Equipment -Load Area:	Cat D9T - 9SU
-Dump Area:	Cat D9T - 9SU
Road Maintenance –Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 7,000 Gal.

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	100	100
Ownership cost/hour:	\$150.99	\$77.20	\$238.76	\$238.76	\$149.33	\$86.29
Operating cost/hour:	\$113.66	\$120.94	\$162.29	\$162.29	\$92.79	\$113.77
%Utilization-riper:	NA	0	100	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$18.32	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$8.98	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$33.34	\$40.71	\$41.30	\$41.30	\$28.56	\$27.68
Unit Subtotals:	\$297.99	\$238.85	\$451.33	\$442.35	\$270.68	\$227.74
Number of Units:	4	2	1	1	1	1
Group Subtotals:	Work: \$1,669.66		Support: \$893.68		Maint: \$498.42	

Total work team cost/hour: **\$3,061.76****MATERIAL QUANTITIES**Initial volume: 161,333

CCY

Swell factor: 1.000Loose volume: **161,333**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Exhibit E & LMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 1,600

Pounds/LCY

Description: Top SoilRated Payload: 122,520

Pounds

Payload Capacity: 76.58

LCY

Truck Bed (volume) Basis:

Struck Volume:	35.00	LCY
Heaped Volume:	46.50	LCY
Average Volume:	40.75	LCY
Adjusted Volume:	46.50	LCY

Final Truck Volume Based on Number of Loader Passes: **41.63** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	11.250	LCY (heaped)
Bucket Fill Factor:	0.925	Loose material - 1/8" to 3/8" (90 - 95%) 0.925
Adjusted Capacity:	10.406	LCY

Job Condition Corrections:

Site Altitude (ft.): 7000 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.600 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.090	minutes
Adjusted Loader Cycle Time:		0.510	minutes
Net Load Time per Truck:		1.630	minutes

Truck Cycle Time:

Truck Exchange Time:	0.70	Minutes	Adjusted for site altitude:	0.700	Minutes
Truck Load Time:	1.630	Minutes	Adjusted for site altitude:	1.630	Minutes
Truck Maneuver and Dump Time:	1.10	Minutes	Adjusted for site altitude:	1.100	Minutes

Truck Travel (Haul & Return) Time:
penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	3.00	5.00	8.00	1023	1.034

Haul Time: **1.034** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	-3.00	5.00	2.00	3569	0.464

Return Time: **0.464** minutesTotal Truck Cycle Time: **4.928** minutes

Loading Tool unit

Production 1,071.89 LCY/Hour Adjusted for job efficiency: 889.67 LCY/Hour
Truck Unit Production 506.80 LCY/Hour Adjusted for job efficiency: 420.64 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 841.28 LCY/Hour
Adjusted single truck/loader team production: 841.28 LCY/Hour
Adjusted multiple truck/loader team production: **1,682.57** LCY/Hour

JOB TIME AND COSTFleet size: 2 Team(s) Total job time: **95.88** HoursUnit cost: \$1.820 /LCY Total job cost: **\$293,577**

BULLDOZER WORKTask description: **Placement of topsoil on sloped areas**Site: **Blue Pit** Permit Action: **2024 SI-3** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #:	<u>07A</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>5/21/2024</u>	County:	<u>Garfield</u>	Filename:	<u>M207-07a</u>
User:	<u>TJ1</u>				

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine:	<u>Cat D9T - 9SU</u>
Horsepower:	<u>405</u>
Blade Type:	<u>Semi-Universal</u>
Attachment:	<u>NA</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$238.76</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$162.29</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>25</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour:	<u>\$442.35</u>
Total Fleet Cost/Hour:	<u>\$1,769.41</u>

MATERIAL QUANTITIES

Initial Volume:	<u>128,905</u>
Swell factor:	<u>1.000</u>
Loose volume:	<u>128,905 LCY</u>

Source of estimated volume:	<u>Exhibit E & L</u>
Source of estimated swell factor:	<u>Cat Handbook</u>

HOURLY PRODUCTION

Average push distance:	<u>325 feet</u>
Unadjusted hourly production:	<u>388.9 LCY/hr</u>

Materials consistency description: Loose stockpile 1.2

Average push gradient:	<u>15 %</u>
Average site altitude:	<u>7,000 feet</u>

Material weight: 1,600 lbs/LCYWeight description: Top Soil

<u>Job Condition Correction Factor</u>	<u>Source</u>
Operator Skill:	<u>0.750</u>
Material consistency:	<u>1.200</u>
Dozing method:	<u>1.000</u>
Visibility:	<u>1.000</u>

	<u>(AVG.)</u>
	<u>(CAT HB)</u>
	<u>(GEN.)</u>
	<u>(AVG.)</u>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6439

Adjusted unit production: 250.41 LCY/hr

Adjusted fleet production: **1001.64** LCY/hr

JOB TIME AND COST

Fleet size: 4 Dozer(s)

Unit cost: \$1.767/LCY

Total job time: **128.69** Hours

Total job cost: **\$227,712**

BULLDOZER WORKTask description: **Placement of topsoil on open pit areas**Site: **Blue Pit** Permit Action: **2024 SI-3** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #:	07B	State:	Colorado	Abbreviation:	None
Date:	5/21/2024	County:	Garfield	Filename:	M207-07b
User:	TJ1				

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine:	Cat D9T - 9SU
Horsepower:	405
Blade Type:	Semi-Universal
Attachment:	NA
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	25
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour:	\$442.35
Total Fleet Cost/Hour:	\$1,769.41

MATERIAL QUANTITIES

Initial Volume:	32,428
Swell factor:	1.000
Loose volume:	32,428 LCY

Source of estimated volume:	Exhibit E & L
Source of estimated swell factor:	Cat Handbook

HOURLY PRODUCTION

Average push distance:	325 feet
Unadjusted hourly production:	388.9 LCY/hr

Materials consistency description: **Loose stockpile 1.2**

Average push gradient:	0 %
Average site altitude:	7,000 feet

Material weight: **1,600 lbs/LCY**Weight description: **Top Soil**

<u>Job Condition 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:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.9668

Adjusted unit production: 375.99 LCY/hr

Adjusted fleet production: **1503.96** LCY/hr

JOB TIME AND COST

Fleet size: 4 Dozer(s)

Unit cost: \$1.176/LCY

Total job time: **21.56** Hours

Total job cost: **\$38,152**

REVEGETATION WORKTask description: **Reveg Rangeland**Site: **Blue Pit**Permit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 08AState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-08aUser: TJ1Agency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	2.50	8.09	\$16.25
Mountain Brome - Bromar	3.75	6.03	\$14.25
Slender Wheatgrass - Pryor	5.00	18.25	\$21.25
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38
Rabbitbrush, Rubber	2.00	29.80	\$128.59
Western Wheatgrass - Barton	5.00	12.63	\$35.00
Needlegrass, Green - Lodorm	3.75	15.58	\$44.16
Saltbush, Four Wing	2.00	2.75	\$25.00
		110.81	\$318.87

Totals Seed Mix	29.00		
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Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$468.00
Total Seed Application Cost/Acre	\$468.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$35.09	\$35.09
Total Mulch Materials Cost/Acre				\$35.09

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$284.85

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:	79.9	Cost /Acre:	\$1,219.63
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,219.63
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$97,448.44		
Reseeding Job Cost:	\$24,362.11		
Total Job Cost:	\$121,811		
Job Hours:	100.00		

REVEGETATION WORKTask description: **Reveg Irrigated Pastureland**Site: **Blue Pit**Permit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 08BState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-08bUser: TJ1Agency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Meadow Brome - Fleet	7.00	6.43	\$27.83
Orchardgrass - Potomac	8.00	99.17	\$34.12
Alfalfa - Ladak (inoculated)	12.00	57.85	\$30.60
Totals Seed Mix	27.00	163.45	\$92.55

Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$468.00

Total Seed Application Cost/Acre	\$468.00
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MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$35.09	\$35.09
Total Mulch Materials Cost/Acre				\$35.09

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$284.85

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: 20.1 Cost /Acre: \$993.31
 Estimated Failure Rate: 25% Cost /Acre*: \$993.31
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$19,965.53
 Reseeding Job Cost: \$4,991.38
 Total Job Cost: \$24,957
 Job Hours: 25.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Initial mobilize reclamation crew/equipmentSite: Blue PitPermit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 09AState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-09aUser: TJ1Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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 D9T - 9SU	66.13	\$257.08	\$175.95	4	\$1,732.12	\$703.80	\$500.00
Cat 773F	49.74	\$150.99	\$158.17	4	\$1,236.64	\$632.68	\$500.00
CAT 990H	83.34	\$77.20	\$175.95	2	\$506.30	\$351.90	\$250.00
CAT 14M	23.57	\$155.16	\$82.29	1	\$237.45	\$82.29	\$250.00
Water Tanker, 7,000 Gal.	29.65	\$86.29	\$158.17	1	\$244.46	\$158.17	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00

Subtotals: **\$4,154.22** **\$2,093.42** **\$2,250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$55.12	1	\$55.12	\$55.12

Subtotals: **\$55.12** **\$55.12**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>GLENWOOD SPRINGS</u>	
Total one-way travel distance:	<u>15.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$16,973.53</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$36.75</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

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

JOB TIME AND COST

Total job time: 3.33 Hours

Total job cost: \$17,010

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary mobilize reclamation crew/equipmentSite: Blue PitPermit Action: 2024 SI-3Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 09BState: ColoradoAbbreviation: NoneDate: 5/21/2024County: GarfieldFilename: M207-09bUser: TJ1Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00

Subtotals: **\$197.25** **\$164.58** **\$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, 1 T. Crew	\$55.12	1	\$55.12	\$55.12

Subtotals: **\$55.12** **\$55.12**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>GLENWOOD SPRINGS</u>	
Total one-way travel distance:	<u>15.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$1,635.72</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$36.75</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

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

JOB TIME AND COST

Total job time: 3.33 Hours

Total job cost: \$1,672