

May 2, 2016

Sean Mello
Western Slope Aggregates, Inc.
P.O. Box 1319
Carbondale, CO 81623



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Blue Pit, Permit No. M-1981-207, Reclamation Costs Update and Notice of Surety Increase (SI-2)

Dear Mr. Mello:

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).

Division calculations estimate the cost to reclaim the above referenced site to be \$2,181,971 rounded down from \$2,181,971.05. This is an increase of \$1,292,365 over the \$889,606 currently held by the Division. This estimate is based on conditions observed during the October 28, 2015 inspection and subsequent discussions and document submittals from Western Slope Aggregates. ***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 **Friday, July 08, 2016**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

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, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Yeldell
Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
Phone: (970) 254-8511



Ec:

Russ Means, Senior EPS / Field Office Supervisor, Grand Junction DRMS

Barbra Coria, Financial Assurance Specialist, Denver DRMS

Enc: Financial Warranty Cost Estimate

COST SUMMARY WORK

Task description: 2016 Update

Site: Blue Pit

Permit Action: 2016 SI-2

Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 5/2/2016

County: Garfield

Filename: M207-000

User: ACY

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	\$45,195.15
02a	Transport backfill material to mining area 1	TRUCK1	2	239.85	\$537,359.00
03a	Placement of backfill material in mining area 1	DOZER	4	561.25	\$584,249.00
04a	Rip pit floor/compacted areas	RIPPER	1	30.28	\$6,729.00
05a	install grouted channels	POSTMINING	1	159.96	\$41,285.00
05b	Catchment benches	GRADER	1	4.44	\$674.00
05c	Energy Dissipation Rocks	TRUCK1	2	0.07	\$105.00
06a	Transport topsoil to pit floor	TRUCK1	2	95.88	\$205,486.00
07a	Placement of topsoil on sloped areas	DOZER	4	128.69	\$128,370.00
07b	Placement of topsoil on open pit areas	DOZER	4	21.56	\$21,507.00
08a	Reveg Rangeland	REVEGE	1	100.00	\$98,909.00
08b	Reveg Irrigated Pastureland	REVEGE	1	25.00	\$21,513.00
08c	Hay Mulch for \$150 a ton @ 2 tons/acre over 100 acres	NA	1	0.00	\$30,000.00
09a	Initial mobilize reclamation crew/equipment	MOBILIZE	1	3.33	\$11,869.00
09b	Secondary mobilize reclamation crew/equipment	MOBILIZE	1	0.66	\$97.00
<u>SUBTOTALS:</u>				1450.97	\$1,733,347

INDIRECT COSTS**OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$35,013.61
Performance bond:	1.05	Total =	\$18,200.14
Job superintendent:	500.00	Total =	\$37,240.00
Profit:	10.00	Total =	\$173,334.70
		TOTAL O & P =	\$263,788.45
		CONTRACT AMOUNT (direct + O & P) =	\$1,997,135.45

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	5.23	Total =	\$104,450.18
Reclamation management and/or administration:	4.00		\$79,885.42
CONTINGENCY: 0.00		Total =	\$0.00

TOTAL INDIRECT COST = \$448,624.05

TOTAL BOND AMOUNT (direct + indirect) = \$2,181,971.05

DEMOLITION WORK

Task description: Demo on-site structures

Site: Blue Pit

Permit Action: 2016 SI-2

Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 1/11/2016

County: Garfield

Filename: M207-01a

User: ACY

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	\$1.49	\$3,047.76
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	\$2.34	\$2,056.56
Power line and poles	800'	Powerline or telephone line, overhead, wood - Single pole	800.00	LF	\$2.68	\$2,144.00
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	\$0.22	\$10,512.00
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	\$0.19	\$5,790.00
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	\$1.87	\$17,064.38
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	\$0.18	\$2,278.40
Scale	12'W x 70'L	Loading and 5 mile haul, salvage allowed - Steel frame structures	15.50	CY	\$10.57	\$163.84
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	\$1.08	\$1,165.32

Job Hours: 80.00

Subtotal
(unadjusted): \$44,222.26

Total Cost
(adjusted for location): \$45,195.15

TRUCK/LOADER TEAM WORKTask description: Transport backfill material to mining area 1Site: Blue Pit Permit Action: 2016 SI-2 Permit/Job#: M1981207**PROJECT IDENTIFICATION**

Task #: 02A State: Colorado Abbreviation: None
 Date: 1/11/2016 County: Garfield Filename: M207-02a
 User: ACY

Agency 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 D8T - 8SU
-Dump Area:	Cat D8T - 8SU
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	50	50
Ownership cost/hour:	\$82.18	\$160.37	\$66.85	\$66.85	\$46.96	\$33.25
Operating cost/hour:	\$117.80	\$159.76	\$102.51	\$102.51	\$34.47	\$38.23
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$22.10	\$38.60	\$38.89	\$38.89	\$35.83	\$29.42
Unit Subtotals:	\$222.08	\$358.72	\$208.25	\$208.25	\$117.27	\$100.90
Number of Units:	4	2	1	1	1	1
Group Subtotals:	Work: \$1,605.76		Support: \$416.50		Maint: \$218.17	

Total work team cost/hour: \$2,240.43**MATERIAL QUANTITIES**

Initial volume: 359,647 CCY Swell factor: 1.060
 Loose volume: 381,226 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
 Source of estimated swell factor: Exhibit E & L
 Material Purchase Cost: \$0.00
 Total Cost: \$0.00

HOURLY PRODUCTION**Truck Capacity:****Truck Payload (weight) Basis:**

Material weight: 2,900 Pounds/LCY
 Description: Sand and gravel - Dry
 Rated 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: \$1.410 /LCY Total job cost: \$537,359

BULLDOZER WORKTask description: **Placement of backfill material in mining area 1**Site: **Blue Pit** Permit Action: **2016 SI-2** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #: **03A** State: **Colorado** Abbreviation: **None**
 Date: **1/11/2016** County: **Garfield** Filename: **M207-03a**
 User: **ACY**

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:	\$83.77	NA
Operating Cost/Hour:	\$135.36	100
Ripper op. Cost/Hour:	\$2.23	25
Operator Cost/Hour:	\$38.89	NA

Total unit Cost/Hour: **\$260.25**
 Total Fleet Cost/Hour: **\$1,040.98**

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: **Sand and gravel - Dry****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: \$1.625/LCY

Total job time: **561.25** Hours

Total job cost: **\$584,249**

BULLDOZER RIPPING WORK

Task description: Rip pit floor/compacted areas

Site: Blue Pit Permit Action: 2016 SI-2 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 1/11/2016 County: Garfield Filename: M207-04a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$73.32	NA
Operating Cost/Hour:	\$102.51	100
Ripper Operating Cost/Hour:	\$7.46	100
Operator Cost/Hour:	\$38.89	NA
Total Unit Cost/Hour:	\$222.18	
Total Fleet Cost/Hour:	\$222.18	

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: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 300.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.800 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.800 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: 0.66 Acres/hr
Adjusted Hourly Fleet Production: **0.66** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **30.29** Hours

Unit cost: \$334.797 Per acre Total job cost: **\$6,729**

Post-Mining Drainage Channel Construction (Ditches)

Task description: Install grouted channels

Site: Blue Pit Permit Action: 2016 SI-2 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 1/11/2016 County: Garfield Filename: M207-05a
User: ACY

Agency or organization name: DRMS

Channel	L (ft)	D (ft)	W (bot) (ft)	Slopes (X:1)	W (top) (ft)	V/LF (CY)	V tot (CY)
Grouted Channel	3,417	1.50	2.00	2.00	8.00	0.2778	949
BCPD-S:	CBCSLf	CBCSD	CBCSW	CBCSSx	CBCSTO	CBCSVL	CBCSVT
Totals:	3,417						949

Riprap	Slope L (ft)	Surface Area (ft)	Riprap V (ft)
BCPD-M:	36,028.86	36,029	667
BCPD-S:	CBCSLS	CBCSSA	CBCSRV
Totals:		36,029	667

Materials Needed:

Geotextile (SY): 4,003
Riprap (CY): 667
Excavation (CY): 949

Material Costs:

Geotextile (SY): \$2.25
Means Reference 02340 300 1500
Riprap (CY): \$43.10
Means Reference 02370 450 0100
Excavation (CY): \$3.71
Means Reference 02315 610 0062

Totals:

Geotextile (SY): \$9,007.22
Riprap (CY): \$28,756.37
Excavation (CY): \$3,521.41

Hours:

Geotextile (SY): 45.75
87.5 SY/HR
Riprap (CY): 86.09
7.75 CY/HR
Excavation (CY): 33.75
CY/HR 28.12

Total Post-Mining Channel Reconstruction hours: 159.96 Hours
Total Post-Mining Channel Reconstruction Cost: \$41,285

MOTOR GRADER WORK

Task description: Catchment benches

Site: Blue Pit Permit Action: 2016 SI-2 Permit/Job#: M1981207

PROJECT IDENTIFICATION

Task #: 05B State: Colorado Abbreviation: None
Date: 1/11/2016 County: Garfield Filename: M207-05b
User: ACY

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>\$46.96</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$68.95</u>	<u>100</u>
Ripper Operating Cost/Hour:	<u>\$0.00</u>	
Operator Cost/Hour:	<u>\$35.83</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$151.74</u>	
Total Fleet Cost/Hour:	<u>\$151.74</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

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: 1.5082 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: \$100.61 per acre Total job cost: \$674

TRUCK/LOADER TEAM WORKTask description: **Energy Dissipation Rocks**Site: **Blue Pit** Permit Action: **2016 SI-2** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #: **05C** State: **Colorado** Abbreviation: **None**
 Date: **1/11/2016** County: **Garfield** Filename: **M207-05c**
 User: **ACY**

Agency 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 D8T - 8SU
-Dump Area:	Cat D8T - 8SU
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	0	0	0	0
Ownership cost/hour:	\$82.18	\$160.37	\$66.85	\$66.85	\$46.96	\$33.25
Operating cost/hour:	\$117.80	\$159.76	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$22.10	\$38.60	\$38.89	\$38.89	\$35.83	\$29.42
Unit Subtotals:	\$222.08	\$358.72	\$105.74	\$105.74	\$82.79	\$62.67
Number of Units:	2	2	1	1	1	1
Group Subtotals:	Work: \$1,161.60		Support: \$211.48		Maint: \$145.46	

Total work team cost/hour: **\$1,518.54****MATERIAL QUANTITIES**

Initial volume: **40** CCY Swell factor: **1.000**
 Loose volume: **40** LCY

Source of estimated volume: **Division of Reclamation, Mining & Safety**
 Source of estimated swell factor: **Exhibit E & L**
 Material Purchase Cost: **\$0.00**
 Total Cost: **\$0.00**

HOURLY PRODUCTION**Truck Capacity:****Truck Payload (weight) Basis:**

Material weight: **3,000** Pounds/LCY
 Description: **User Provided**
 Rated Payload: **122,520** Pounds
 Payload Capacity: **40.84** LCY

Truck Bed (volume) Basis:

Struck Volume:	35.00	LCY
Heaped Volume:	46.50	LCY
Average Volume:	40.75	LCY
Adjusted Volume:	40.84	LCY

Final Truck Volume Based on Number of Loader Passes: 40.50 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: 8 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:		<u>-0.090</u>	minutes
Adjusted Loader Cycle Time:		<u>0.510</u>	minutes
Net Load Time per Truck:		<u>3.670</u>	minutes

Truck Cycle Time:

Truck Exchange Time:	<u>0.70</u>	Minutes	Adjusted for site altitude:	<u>0.700</u>	Minutes
Truck Load Time:	<u>3.670</u>	Minutes	Adjusted for site altitude:	<u>3.670</u>	Minutes
Truck Maneuver and Dump Time:	<u>1.10</u>	Minutes	Adjusted for site altitude:	<u>1.100</u>	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: 6.968 minutes

Loading Tool unit

Production 556.06 LCY/Hour Adjusted for job efficiency: 461.53 LCY/Hour
Truck Unit Production 348.74 LCY/Hour Adjusted for job efficiency: 289.45 LCY/Hour

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

Adjusted hourly truck team production: 289.45 LCY/Hour
Adjusted single truck/loader team production: 289.45 LCY/Hour
Adjusted multiple truck/loader team production: 578.90 LCY/Hour

JOB TIME AND COSTFleet size: 2 Team(s) Total job time: 0.07 HoursUnit cost: \$2.623 /LCY Total job cost: \$105

TRUCK/LOADER TEAM WORKTask description: Transport topsoil to pit floorSite: Blue Pit Permit Action: 2016 SI-2 Permit/Job#: M1981207**PROJECT IDENTIFICATION**

Task #: 06A State: Colorado Abbreviation: None
 Date: 1/11/2016 County: Garfield Filename: M207-06a
 User: ACY

Agency 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 D8T - 8SU
-Dump Area:	Cat D8T - 8SU
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	5	50	50
Ownership cost/hour:	\$82.18	\$160.37	\$66.85	\$66.85	\$46.96	\$33.25
Operating cost/hour:	\$117.80	\$159.76	\$102.51	\$5.13	\$34.47	\$38.23
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$22.10	\$38.60	\$38.89	\$38.89	\$35.83	\$29.42
Unit Subtotals:	\$222.08	\$358.72	\$208.25	\$110.87	\$117.27	\$100.90
Number of Units:	4	2	1	1	1	1
Group Subtotals:	Work: \$1,605.76		Support: \$319.12		Maint: \$218.17	

Total work team cost/hour: \$2,143.05**MATERIAL QUANTITIES**

Initial volume: 161,333 CCY Swell factor: 1.000
 Loose volume: 161,333 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
 Source of estimated swell factor: Exhibit E & L
 Material Purchase Cost: \$0.00
 Total Cost: \$0.00

HOURLY PRODUCTION**Truck Capacity:****Truck Payload (weight) Basis:**

Material weight: 1,600 Pounds/LCY
 Description: Top Soil
 Rated 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: \$1.274 /LCY Total job cost: \$205,486

BULLDOZER WORKTask description: **Placement of topsoil on sloped areas**Site: **Blue Pit** Permit Action: **2016 SI-2** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #: **07A** State: **Colorado** Abbreviation: **None**
 Date: **1/11/2016** County: **Garfield** Filename: **M207-07a**
 User: **ACY**

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:	\$75.12	NA
Operating Cost/Hour:	\$135.36	100
Ripper op. Cost/Hour:	\$0.00	25
Operator Cost/Hour:	\$38.89	NA

Total unit Cost/Hour: **\$249.37**
 Total Fleet Cost/Hour: **\$997.48**

MATERIAL QUANTITIES

Initial Volume: **128,905**
 Swell factor: **1.000**
 Loose volume: **128,905 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: **15 %**
 Average site altitude: **7,000 feet**

Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****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:	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: \$0.996/LCY

Total job time: **128.69** Hours

Total job cost: **\$128,370**

BULLDOZER WORKTask description: **Placement of topsoil on open pit areas**Site: **Blue Pit** Permit Action: **2016 SI-2** Permit/Job#: **M1981207****PROJECT IDENTIFICATION**

Task #: **07B** State: **Colorado** Abbreviation: **None**
 Date: **1/11/2016** County: **Garfield** Filename: **M207-07b**
 User: **ACY**

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:	\$75.12	NA
Operating Cost/Hour:	\$135.36	100
Ripper op. Cost/Hour:	\$0.00	25
Operator Cost/Hour:	\$38.89	NA

Total unit Cost/Hour: **\$249.37**
 Total Fleet Cost/Hour: **\$997.48**

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****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:	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: \$0.663/LCY

Total job time: **21.56** Hours

Total job cost: **\$21,507**

REVEGETATION WORKTask description: Reveg RangelandSite: Blue PitPermit Action: 2016 SI-2Permit/Job#: M1981207PROJECT IDENTIFICATIONTask #: 08AState: ColoradoAbbreviation: NoneDate: 1/11/2016County: GarfieldFilename: M207-08aUser: ACYAgency or organization name: DRMSFERTILIZING**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)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	2.50	8.09	\$16.88
Mountain Brome - Bromar	3.75	6.03	\$12.79
Slender Wheatgrass - Pryor	5.00	18.25	\$15.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$25.90
Rabbitbrush, Rubber	2.00	29.80	\$74.66
Western Wheatgrass - Barton	5.00	12.63	\$18.45
Needlegrass, Green - Lodorm	3.75	15.58	\$20.25
Saltbush, Four Wing	2.00	2.75	\$21.88
		110.81	\$206.30

Totals Seed Mix	29.00		
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Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$434.00
Total Seed Application Cost/Acre	\$434.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.56	\$16.56
Total Mulch Materials Cost/Acre				\$16.56

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$97.14
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$225.88

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:	\$990.33
Estimated Failure Rate:	25%	Cost /Acre*:	\$990.33
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$79,127.37		
Reseeding Job Cost:	\$19,781.84		
Total Job Cost:	\$98,909		
Job Hours:	100.00		

REVEGETATION WORKTask description: Reveg Irrigated PasturelandSite: Blue PitPermit Action: 2016 SI-2Permit/Job#: M1981207PROJECT IDENTIFICATIONTask #: 08BState: ColoradoAbbreviation: NoneDate: 1/11/2016County: GarfieldFilename: M207-08bUser: ACYAgency or organization name: DRMSFERTILIZING**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)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Meadow Brome - Fleet	7.00	6.43	\$18.48
Orchardgrass - Potomac	8.00	99.17	\$16.16
Alfalfa - Ladak (inoculated)	12.00	57.85	\$37.56
Totals Seed Mix	27.00	163.45	\$72.20

Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$434.00

Total Seed Application Cost/Acre	\$434.00
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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	\$16.56	\$16.56
Total Mulch Materials Cost/Acre				\$16.56

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$97.14
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$225.88

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: \$856.23
 Estimated Failure Rate: 25% Cost /Acre*: \$856.23
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$17,210.22
 Reseeding Job Cost: \$4,302.56
 Total Job Cost: \$21,513
 Job Hours: 25.00

March 15, 2016

Permit Number :M-1981-207
Permit Action: 2016 SI-2
Task 08c

Division of Reclamation Mining and Safety
Attn: Amy Yeldell
1313 Sherman St, Room 215
Denver, CO 80203

RE: Blue Pit, Permit No M1981.207
Estimated Reclamation costs update.

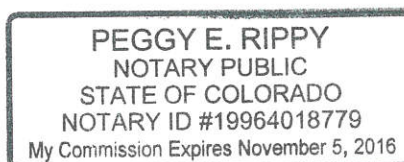
As owner of the Blue Pit and Adjacent ranch, the Dolores (Dee B. Blue Revocable Trust, will provide the division with hay for reclamation upon the forfeiture of the bond at a rate of \$150.00 per ton for the 200 tons necessary to reclaim the estimated 100 acre site.

Dolores (Dee) B. Blue

Dolores (Dee) B. Blue Revocable
Trust and Dee Blue

*Dolores Blue appeared in person on March 15, 2016.
In Garfield County, State of Colorado.*

*Peggy E. Rippy
11/5/2016*



EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Initial mobilize reclamation crew/equipmentSite: Blue PitPermit Action: 2016 SI-2Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 09AState: ColoradoAbbreviation: NoneDate: 1/11/2016County: GarfieldFilename: M207-09aUser: ACYAgency 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:	\$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	\$81.10	\$125.45	4	\$826.18	\$501.80	\$500.00
Cat 773F	49.74	\$65.23	\$117.55	4	\$731.12	\$470.20	\$500.00
CAT 990H	83.34	\$129.39	\$125.45	2	\$509.67	\$250.90	\$250.00
CAT 14M	23.57	\$42.03	\$88.67	1	\$130.70	\$88.67	\$250.00
Water Tanker, 7,000 Gal.	29.65	\$32.60	\$117.55	1	\$150.15	\$117.55	\$250.00
Cat D8T - 8SU	47.71	\$62.67	\$117.55	1	\$180.22	\$117.55	\$250.00

Subtotals: **\$2,528.04** **\$1,546.67** **\$2,000.00****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	\$20.91	1	\$20.91	\$20.91
Drill/Broadcast Seeder with Tractor	\$75.35	1	\$75.35	\$75.35
Power Mulcher (Reinco M90)	\$48.76	1	\$48.76	\$48.76

Subtotals: **\$145.02** **\$145.02**

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>\$11,772.55</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$96.68</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:	<u>3.33</u>	Hours
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Total job cost:	<u>\$11,869</u>
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EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary mobilize reclamation crew/equipmentSite: Blue PitPermit Action: 2016 SI-2Permit/Job#: M1981207**PROJECT IDENTIFICATION**Task #: 09BState: ColoradoAbbreviation: NoneDate: 1/11/2016County: GarfieldFilename: M207-09bUser: ACYAgency 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:	\$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
Subtotals:					\$0.00	\$0.00	\$0.00

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	\$20.91	1	\$20.91	\$20.91
Drill/Broadcast Seeder with Tractor	\$75.35	1	\$75.35	\$75.35
Power Mulcher (Reinco M90)	\$48.76	1	\$48.76	\$48.76

Subtotals: **\$145.02** **\$145.02**

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>\$0.00</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$96.68</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:	<u>0.67</u>	Hours
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Total job cost:	<u>\$97</u>
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Updated changes based on meeting / General Notes
 * Does not capture CIRCES cost changes, only input values

- 22a - Transport backfill to Area 1
 ↳ haul distance no greater than 750' per Lewicki
 Changed + updated to 750' from 1000'
- 22b Removed for now Transport backfill to Area 2
 ↳ Figures calculated correctly, progress is really slow, incremental update based on progress - self report (slope length, depth mined, slope grade)
 * Received Commitment to self report via annual report. Compliance requirement created.
- 23a - Placement of backfill in Area 1
 ↳ Swell value of 12%, Lewicki suggests 6% more accurate
 Once transported no longer CCY now LCY so 0% swell
- 23b Removed for now Placement of backfill in Area 2
 ↳ Based on AM exhibits accurate input values, will not occur for some time
 * self report progress in annual report
- 24a - Transport of topsoil
 ↳ Correct volume (12" over 100ac), swell volume of 21%, Lewicki suggests 6-12% more accurate
 LCY transported, no swell
- 27^a Placement of Topsoil
 ↳ 325' Dozer push would be more accurate
 ↳ Swell is 43%, that's unrealistic
 Changed push distances 375' → 325', once transported soil is already loose LCY 0% swell
- 28 - Reveg. Mulch
 ↳ Landowner will provide bales (cheap)
 Commitment received for \$150 per bale for 2 ton/ac of the 100 ac necessary

* Remove Area 2 until self report shows reclamation needed
 refer to 2015-10 inspection for potential cost of removed tasks