

## COST SUMMARY WORK

Task description: AM-3 Update

Site: Willow Creek Mine

Permit Action: AM-3

Permit/Job#: M1983011

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 10/12/2018

County: Lake

Filename: M011-000

User: DMC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Backfill boxcut mine area and ponds	TRUCK1	1	151.63	\$60,389.00
02a	Rip processing area	RIPPER	1	7.79	\$1,755.00
03a	Final Grading	DOZER	1	45.60	\$9,508.00
04a	Distribute topsoil	TRUCK1	1	40.68	\$24,680.00
05a	Revegetate USFS disturbed area	REVEGE	1	10.00	\$21,283.00
05b	Revegetate private land (rangeland)	REVEGE	1	15.00	\$24,931.00
06a	Mobilize reclamation crew and equipment	MOBILIZE	1	3.30	\$6,600.00
<b><u>SUBTOTALS:</u></b>				<b>274</b>	<b>\$149,146</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$3,012.75

Performance bond: 1.05

Total = \$1,566.03

Job superintendent: 137.00

Total = \$10,007.85

Profit: 10.00

Total = \$14,914.60

TOTAL O & P = \$29,501.23

CONTRACT AMOUNT (direct + O & P) = \$178,647.23

#### 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

\$8,932.36

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$38,933.59

**TOTAL BOND AMOUNT (direct + indirect) = \$188,079.59**

**Rounded to \$190,000**

**TRUCK/LOADER TEAM WORK**Task description: **Backfill boxcut mine area and ponds**Site: **Willow Creek Mine**Permit Action: AM-3Permit/Job#: M1983011**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 10/12/2018County: LakeFilename: M011-01aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 950H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	Water Tanker, 5,000 Gal.

**Cost Breakdown:**

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	25
Ownership cost/hour:	\$57.82	\$26.14	NA	NA	NA	\$25.30
Operating cost/hour:	\$44.78	\$30.84	NA	NA	NA	\$9.15
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$30.37	\$40.90	NA	NA	NA	\$0.00
Unit Subtotals:	\$132.96	\$97.89	NA	NA	NA	\$34.45
Number of Units:	2	1	0	0	0	1
Group Subtotals:	Work: \$363.81		Support: \$0.00		Maint: \$34.45	

Total work team cost/hour: **\$398.26****MATERIAL QUANTITIES**Initial volume: 59,355

CCY

Swell factor: 1.000Loose volume: **59,355**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 2,650 Pounds/LCYDescription: Decomposed rock - 25% Rock, 75% EarthRated Payload: 62,000 Pounds

Payload Capacity: 23.40 LCY

**Truck Bed (volume) Basis:**

Struck Volume: 17.10 LCY  
 Heaped Volume: 22.10 LCY  
 Average Volume: 19.60 LCY  
 Adjusted Volume: 22.10 LCY

Final Truck Volume Based on Number of Loader Passes: 20.96 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	<u>4.300</u>	LCY (heaped)
Bucket Fill Factor:	<u>0.975</u>	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	<u>4.193</u>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 9600 feet

	Truck	Loader	Source
Altitude Adj:	0.900	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<b>0.747</b>	<b>0.830</b>	

**Loading Tool Cycle Time:**

Number of Loading Tool Passes Required to Fill 5 passes  
 Truck: \_\_\_\_\_

**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): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(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:		-0.060	minutes
Adjusted Loader Cycle Time:		<b>0.440</b>	minutes
Net Load Time per Truck:		<b>1.860</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	<u>0.60</u>	Minutes	Adjusted for site altitude:	<u>0.667</u>	Minutes
Truck Load Time:	<u>1.860</u>	Minutes	Adjusted for site altitude:	<u>1.860</u>	Minutes
Truck Maneuver and Dump Time:	<u>1.00</u>	Minutes	Adjusted for site altitude:	<u>1.111</u>	Minutes

Truck Travel (Haul & Return) Time:  
maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1600.00	0.00	3.00	3.00	2183	0.996

Haul Time: **0.996** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1600.00	0.00	3.00	3.00	2936	0.700

Return Time: **0.700** minutesTotal Truck Cycle Time: **5.334** minutes

Loading Tool unit Production 497.79 LCY/Hour      Adjusted for job efficiency: 413.17 LCY/Hour  
 Truck Unit Production 235.81 LCY/Hour      Adjusted for job efficiency: 195.72 LCY/Hour  
 Optimal No. of Trucks: 2 Truck(s)      Selected Number of Trucks: 2 Truck(s)  
                                  Adjusted hourly truck team production: 391.44 LCY/Hour  
                                  Adjusted single truck/loader team production: 391.44 LCY/Hour  
                                  Adjusted multiple truck/loader team production: **391.44** LCY/Hour

**JOB TIME AND COST**Fleet size: 1 Team(s)      Total job time: **151.63** HoursUnit cost: \$1.017 /LCY      Total job cost: **\$60,389**

## BULLDOZER RIPPING WORK

Task description: Rip processing area

Site: Willow Creek Mine

Permit Action: AM-3

Permit/Job#: M1983011

### PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 10/12/2018

County: Lake

Filename: M011-02a

User: DMC

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:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper Ownership Cost/Hour:	\$8.93	NA
Ripper Operating Cost/Hour:	\$7.78	100
Operator Cost/Hour:	\$41.52	NA
Total Unit Cost/Hour:	\$225.20	
Total Fleet Cost/Hour:	<b>\$225.20</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA

Bank Volume: NA

BCY NA

Area: 5.00 acres

Rip Depth (ft): 1.00

Volume: 8,067

BCY or CCY

Source of estimated quantity: Exhibit L

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth:	<u>2.56</u>	mph
Average Ripping Width:	<u>7.08</u>	degrees
Average Ripping Length:	<u>200.00</u>	feet
Average Dozer Speed:	<u>88.00</u>	feet
Average Maneuver Time:	<u>0.25</u>	feet
Production per unit area:	<u>0.773</u>	acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr

Site Altitude: 9,600 feet

Altitude Adj: 1.00 (CAT HB)

Job Efficiency: 0.83 (1 shift/day)

Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.64 Acres/hr

Adjusted Hourly Fleet Production: 0.64 Acres/hr

### JOB TIME AND COST

Fleet size: 1

Grader(s)

Total job time: 7.79

Hours

Unit cost: \$350.941

Per acre

Total job cost: \$1,755



**BULLDOZER WORK**Task description: **Final Grading**Site: **Willow Creek Mine**Permit Action: **AM-3**Permit/Job#: **M1983011****PROJECT IDENTIFICATION**Task #: **03A**State: **Colorado**Abbreviation: **None**Date: **10/12/2018**County: **Lake**Filename: **M011-03a**User: **DMC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own.		
Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.52	NA

Total unit Cost/Hour: **\$208.49**Total Fleet Cost/Hour: **\$208.49****MATERIAL QUANTITIES**Initial Volume: **20,167**Swell factor: **1.000**Loose volume: **20,167 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**

Source of estimated swell

factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**

Unadjusted hourly

production: **852.6 LCY/hr**Materials consistency description: **Loose stockpile 1.2**

Average push

gradient: **0 %**Average site altitude: **9,600 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth****Job Condition Correction Factor****Source**



Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5187

Adjusted unit  
production: 442.24 LCY/hr  
Adjusted fleet  
production: **442.24** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.471/LCY

Total job time: **45.60** Hours  
Total job cost: **\$9,508**

**TRUCK/LOADER TEAM WORK**Task description: **Distribute topsoil**Site: **Willow Creek Mine**Permit Action: **AM-3**Permit/Job#: **M1983011****PROJECT IDENTIFICATION**Task #: **04A**State: **Colorado**Abbreviation: **None**Date: **10/12/2018**County: **Lake**Filename: **M011-04a**User: **DMC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Shift basis: **1 per day**

	Equipment Description
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 950H
Support Equipment -Load Area:	NA
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	Water Tanker, 5,000 Gal.

**Cost Breakdown:**

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	NA	25
Ownership cost/hour:	\$57.82	\$26.14	NA	\$93.62	NA	\$25.30
Operating cost/hour:	\$44.78	\$30.84	NA	\$73.35	NA	\$9.15
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	NA	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	NA	\$0.00
Operator cost/hour:	\$30.37	\$40.90	NA	\$41.52	NA	\$0.00
Unit Subtotals:	\$132.96	\$97.89	NA	\$208.49	NA	\$34.45
Number of Units:	2	1	0	1	0	1
Group Subtotals:	Work: \$363.81		Support: \$208.49		Maint: \$34.45	

Total work team cost/hour: **\$606.75****MATERIAL QUANTITIES**Initial volume: **16,806**

CCY

Swell factor: **1.000**Loose volume: **16,806**

LCY

Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook**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: **62,000**

Pounds

Payload Capacity: 38.75 LCY

**Truck Bed (volume) Basis:**

Struck Volume: 17.10 LCY  
 Heaped Volume: 22.10 LCY  
 Average Volume: 19.60 LCY  
 Adjusted Volume: 22.10 LCY

Final Truck Volume Based on Number of Loader Passes: 20.96 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	<u>4.300</u>	LCY (heaped)
Bucket Fill Factor:	<u>0.975</u>	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	<u>4.193</u>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 9600 feet

	Truck	Loader	Source
Altitude Adj:	0.900	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<b>0.747</b>	<b>0.830</b>	

**Loading Tool Cycle Time:**

Number of Loading Tool Passes Required to Fill 5 passes  
 Truck: \_\_\_\_\_

**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): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(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:		-0.060	minutes
Adjusted Loader Cycle Time:		<b>0.440</b>	minutes
Net Load Time per Truck:		<b>1.860</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	<u>0.60</u>	Minutes	Adjusted for site altitude:	<u>0.667</u>	Minutes
Truck Load Time:	<u>1.860</u>	Minutes	Adjusted for site altitude:	<u>1.860</u>	Minutes
Truck Maneuver and Dump Time:	<u>1.00</u>	Minutes	Adjusted for site altitude:	<u>1.111</u>	Minutes

Truck Travel (Haul & Return) Time:  
maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1200.00	0.00	3.00	3.00	2183	0.813

Haul Time: **0.813** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1200.00	0.00	3.00	3.00	2936	0.563

Return Time: **0.563** minutesTotal Truck Cycle Time: **5.014** minutes

Loading Tool unit  
 Production 497.79 LCY/Hour      Adjusted for job efficiency: 413.17 LCY/Hour  
 Truck Unit Production  
250.86 LCY/Hour      Adjusted for job efficiency: 208.21 LCY/Hour  
 Optimal No. of Trucks: 2 Truck(s)      Selected Number of Trucks: 2 Truck(s)  
                                  Adjusted hourly truck team production: 416.43 LCY/Hour  
                                  Adjusted single truck/loader team production: 413.17 LCY/Hour  
                                  Adjusted multiple truck/loader team production: **413.17** LCY/Hour

**JOB TIME AND COST**Fleet size: 1 Team(s)      Total job time: **40.68** HoursUnit cost: \$1.469 /LCY      Total job cost: **\$24,680**

**REVEGETATION WORK**Task description: Revegetate USFS disturbed areaSite: Willow Creek MinePermit Action: AM-3Permit/Job#: M1983011**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 10/12/2018County: LakeFilename: M011-05aUser: 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
Chisel plowing {DMG}	\$92.77
Weed control spraying (MEANS 31 31 16.13 3100)	\$193.60
<b>Total Tilling Cost/Acre</b>	<b>\$286.37</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	1.00	11.48	\$12.12
Mountain Brome - Bromar	12.00	19.28	\$53.40
Bottlebrush Squirreltail	3.00	13.22	\$72.18
Slender Wheatgrass - Native	10.00	36.50	\$28.80
Thickspike Wheatgrass - Critana	8.00	28.28	\$46.96
<b>Totals Seed Mix</b>	<b>34.00</b>	<b>108.77</b>	<b>\$213.46</b>

**Application**

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
<b>Total Seed Application Cost/Acre</b>	<b>\$267.22</b>

## **MULCHING and MISCELLANEOUS**

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$576.00</b>

## Application

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

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Pine, Lodgepole	100	Tubling, 10 cu. in. container {(MEANS)	\$1.98	\$0.00	\$198.00
Totals Nursery Stock Cost / Acre					\$198.00

## JOB TIME AND COST

No. of Acres:	10	Cost /Acre:	\$1,702.61
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,702.61
*Selected Replanting Work Items:	TILLING,SEEDING,NURSERY,MULC HING		
Initial Job Cost:	<b>\$17,026.10</b>		
Reseeding Job Cost:	<b>\$4,256.53</b>		
Total Job Cost:	<b>\$21,283</b>		
Job Hours:	<b>10.00</b>		

**REVEGETATION WORK**Task description: Revegetate private land (rangeland)Site: Willow Creek MinePermit Action: AM-3Permit/Job#: M1983011**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 10/12/2018County: LakeFilename: M011-05bUser: 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
Chisel plowing {DMG}	\$92.77
Weed control spraying (MEANS 31 31 16.13 3100)	\$193.60
<b>Total Tilling Cost/Acre</b>	<b>\$286.37</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	6.00	68.87	\$72.72
Mountain Brome - Bromar	8.00	12.86	\$35.60
Great Basin Wildrye - Magnar	7.20	29.26	\$83.16
Sandberg Bluegrass - VNS	2.00	42.47	\$16.50
Slender Wheatgrass - Native	8.00	29.20	\$23.04
Streambank Wheatgrass - Sodar	8.00	26.08	\$49.84
Prairie Junegrass	0.80	42.52	\$24.85
		251.26	<b>\$305.71</b>



<b>Totals Seed Mix</b>	40.00		
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**Application**

Description	Cost /Acre
	\$0.00
<b>Total Seed Application Cost/Acre</b>	<b>\$0.00</b>

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
	1.00		\$0.00	\$0.00
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$576.00</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
<b>Total Mulch Application Cost/Acre</b>	<b>\$161.56</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:	15	Cost /Acre:	\$1,329.64
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,329.64
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	<b>\$19,944.60</b>		
Reseeding Job Cost:	<b>\$4,986.15</b>		
Total Job Cost:	<b>\$24,931</b>		
Job Hours:	<b>15.00</b>		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilize reclamation crew and equipment**Site: **Willow Creek Mine**Permit Action: **AM-3**Permit/Job#: **M1983011****PROJECT IDENTIFICATION**Task #: **06A**State: **Colorado**Abbreviation: **None**Date: **10/12/2018**County: **Lake**Filename: **M011-06a**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 730	25.19	\$57.82	\$88.67	2	\$292.98	\$177.34	\$500.00
CAT 972H	28.00	\$44.67	\$117.55	1	\$162.22	\$117.55	\$250.00
Cat D8T - 8SU	53.08	\$102.55	\$125.45	1	\$228.00	\$125.45	\$250.00
Water Tanker, 5,000 Gal.	15.00	\$25.30	\$88.67	1	\$113.97	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00

Subtotals: **\$998.38** **\$686.35** **\$1,750.00****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.	\$12.23	1	\$12.23	\$12.23

Subtotals: **\$12.23** **\$12.23**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>LEADVILLE</u>	
Total one-way travel distance:	<u>13.00</u>	miles
Average Travel Speed:	<u>40.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$6,591.83</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$7.95</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>1.65</u>	<u>0.65</u>

**JOB TIME AND COST**

Total job time:	<u>3.30</u>	Hours
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Total job cost:	<u>\$6,600</u>
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