



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman St. Room 215
Denver, CO 80203

October 4, 2019

Sara A. Glinatsis
Sunrise Mining LLC
P.O. Box 2134
Monument, CO 80132

Re: May Day Idaho Mine Complex, Permit No. M-1981-185, Financial Warranty Reduction Approval, Revision No. SR-2

Mrs. Glinatsis:

On October 4, 2019 the Division of Reclamation, Mining and Safety approved your request for a Financial Warranty Reduction to **\$117,641.00**. This is a reduction of \$86,921.00. This decision reduces the amount of the financial warranty, and does not approve any release of reclamation responsibility for the tasks associated with this request.

Please provide a rider to the current Financial Warranty, or submit a new Financial Warranty reflecting this reduction. If you wish to submit a different type of Financial Warranty, please contact our office for the applicable form. If you have any questions, please feel free to contact me at the Division's Grand Junction Field Office, by phone at (970)243-6368 or by email at lucas.west@state.co.us. For all bonding related questions please contact Gabriel Benvenuti at 303-866-3567 Extension 8148 or by email at Gabriel.benvenuti@state.co.us.

Sincerely,

Lucas J. West
Environmental Protection Specialist
Division of Reclamation, Mining and Safety

cc: Gabriel R. Benvenuti, DRMS Bonding Specialist
Travis Marshall, Senior Environmental Protection Specialist

M-FW-13



COST SUMMARY WORK

Task description: _____

May Day Idaho Mine
Site: Complex

Permit Action:
SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 000
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: M185-000

Agency or organization name: Deep End Solutions

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	May Day 1 protal closure	MINESEAL	1	40.00	\$4,211
002	Demo and disposal of structures and equipment at May Day 1	DEMOLISH	1	80.00	\$16,200
003	Backfill Highwall to appx.2H: 1V slope and regrade May Day 1	DOZER	1	41.96	\$7,716
003a	Haul material from May Day 2 to May Day 1 for Backfill	TRUCK1	1	96.49	\$29,788
004	Reveg May Day 1	REVEGE	1	16.00	\$1,015
005	Regrading at May Day 2	DOZER	1	8.50	\$1,603
006	Reveg May Day 2	REVEGE	1	16.00	\$966
007	Seal Chief Tunnel	MINESEAL	1	8.00	\$2,105
008	Reveg Cheif Area	REVEGE	1	16.00	\$327
009	Dispose of equipment and debris at Idaho area	DEMOLISH	1	20.00	\$984
010	Regrade and Rip Idaho area	DOZER	1	12.11	\$2,284
011	Reveg Idaho	REVEGE	1	16.00	\$1,726
012	Seal monitoring wells (4 wells)	BOREHOLE	1	40.00	\$5,982
013	Mobilizatiion	MOBILIZE	1	17.50	\$13,992
<u>SUBTOTALS:</u>				428.56	\$88,899

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 166.03
Profit: 10.00

Total = \$1,796
Total = \$933
Total = \$11,521
Total = \$8,890

TOTAL O & P = \$23,140

CONTRACT AMOUNT (direct + O & P) = \$112,039

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0
Engineering work and/or contract/bid preparation: 0.00
Reclamation management and/or administration: 5.00

Total = \$0
Total = \$0
Total = \$5,602

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$28,742

TOTAL BOND AMOUNT (direct + indirect) = \$117,641

SAFEGUARDING UNDERGROUND OPENINGS

Task description: May Day 1 protal closure

May Day Idaho Mine
Site: Complex

Permit Action:
SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 001
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: 185-001

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Access portal	8' x 7'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30
Illegal mill portal	15' x 20' x 50' deep	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30

Job Hours: 40.00

Total Cost: \$4,210.60

DEMOLITION WORK

Task description: Demo and disposal of structures and equipment at May Day 1

Site: May Day Idaho Mine
Complex

Permit Action: SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 002
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: M185-002

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.60 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Storage containers (4)	20' x 8' x 8' (4)	Loading only, open areas (unconfined) - Track loader	190.00	CY	\$0.52	\$98.04
Water Storage Tanks (2)	25' x 6' x 6'	Loading only, open areas (unconfined) - Track loader	67.00	CY	\$0.52	\$34.57
Milling equipment and misc. debris	100 c. y.	Loading only, open areas (unconfined) - Track loader	100.00	CY	\$0.52	\$51.60
Haul to landfill (20 full trucks)	16 mi.	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	768.00	MI	\$3.17	\$2,436.63
Quonset Hut Removal (old Mill)	15 x 40 x 15	Bldg. (SC) demo./off-site disposal in approved landfill - Max. 60 mile haul	9,000.00	CF	\$0.82	\$7,405.20
Dump Fees	690 CY	Dump fees - Building construction materials.	690.00	CY	\$11.10	\$7,659.00

Job Hours: 80.00

Subtotal
(unadjusted): \$17,685.04

Total Cost
(adjusted for location): \$16,199.50

BULLDOZER WORKTask description: Backfill Highwall to appx.2H: 1V slope and regrade May Day 1Site: May Day Idaho Mine
Complex

Permit Action:

SR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-003User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS XR Series IIHorsepower: 240Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$71.52</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$64.34</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$6.80</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$41.24</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$183.90</u>	
Total Fleet Cost/Hour:	<u>\$183.90</u>	

MATERIAL QUANTITIESInitial Volume: 7,500Swell factor: 1.430Loose volume: 10,725 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly
production: 1,022.9 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push
gradient: 0 %Average site altitude: 8,740 feetMaterial weight: 3,300 lbs/LCYWeight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	0.800	(POOR)
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:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2499

Adjusted unit
production: 255.62 LCY/hr

Adjusted fleet
production: **255.62** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.719/LCY

Total job time: **41.96** Hours

Total job cost: **\$7,716**

TRUCK/LOADER TEAM WORKTask description: Haul material from May Day 2 to May Day 1 for Backfill

May Day Idaho Mine

Permit Action:

Site: ComplexSR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 003AState: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-003aUser: LJWAgency or organization name: Deep End Solutions**HOURLY EQUIPMENT COST**Shift basis: 1 per day

Equipment Description	
Truck Loader Team -Truck:	Cat 725
-Loader:	Cat 319D L 8'-10" Stick
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	Excavator	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	100
Ownership cost/hour:	\$56.57	\$34.75	NA	NA	NA	\$27.40
Operating cost/hour:	\$43.83	\$36.44	NA	NA	NA	\$39.99
%Utilization-ripper:	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:	\$32.50	\$37.27	NA	NA	NA	\$0.00
Unit Subtotals:	\$132.89	\$108.45	NA	NA	NA	\$67.39
Number of Units:	1	1	0	0	0	1
Group Subtotals:	Work: \$241.34		Support: \$0.00		Maint: \$67.39	

Total work team cost/hour: \$308.73**MATERIAL QUANTITIES**Initial volume: 3,750

CCY

Swell factor: 1.430Loose volume: 5,363

LCY

Source of estimated volume: 1/2 needed volume for backfill at May Day 1Source of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: 3,300 Pounds/LCYDescription: Decomposed rock - 75% Rock, 25% Earth

Rated Payload: 52,000 Pounds
 Payload Capacity: 15.76 LCY

Truck Bed (volume) Basis:

Struck Volume: 14.50 LCY
 Heaped Volume: 18.70 LCY
 Average Volume: 16.60 LCY
 Adjusted Volume: 15.76 LCY

Final Truck Volume Based on Number of Loader Passes: 15.59 LCY

Loading Tool Capacity

Bucket Size Class: Large

Rated Capacity: 1.350 LCY (heaped)
 Bucket Fill Factor: 0.825 Blasted rock - avg. blasted (75 - 90%) 0.825
 Adjusted Capacity: 1.114 LCY

Job Condition Corrections:

Site Altitude (ft.): 8850 feet

	Truck	Loader	Source
Altitude Adj:	1.000	0.830	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.689	

Loading Tool Cycle Time:

Number of Loading Tool Passes Required to Fill
 Truck: 14 passes

Excavators and Front Shovels:

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

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): NA minutes

Cycle Time Factors		Factor (min.)	Source
Material:	NA	NA	(Cat HB)
Stockpile:	NA	NA	(Cat HB)
Truck Ownership:	NA	NA	(Cat HB)
Operation:	NA	NA	(Cat HB)
Dump Target:	NA	NA	(Cat HB)
Net Cycle Time Adjustment:		NA	minutes
Adjusted Loader Cycle Time:		0.282	minutes
Net Load Time per Truck:		3.766	minutes

Truck Cycle Time:

Truck Exchange Time:	<u>0.50</u>	Minutes	Adjusted for site altitude:	<u>0.500</u>	Minutes
Truck Load Time:	<u>3.766</u>	Minutes	Adjusted for site altitude:	<u>4.537</u>	Minutes
Truck Maneuver and Dump Time:	<u>0.90</u>	Minutes	Adjusted for site altitude:	<u>0.900</u>	Minutes

Truck Travel (Haul & Return) Time:
penetration 4.0

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	20.00	4.00	24.00	323	6.196

Haul Time: 6.196 minutes**Return Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	-20.00	4.00	-16.00	1170	1.838

Return Time: 1.838 minutesTotal Truck Cycle Time: 13.971 minutes

Loading Tool unit Production 185.72 LCY/Hour
 Truck Unit Production 66.96 LCY/Hour
 Optimal No. of Trucks: 3 Truck(s)

Adjusted for job efficiency: 154.15 LCY/Hour
 Adjusted for job efficiency: 55.58 LCY/Hour
 Selected Number of Trucks: 1 Truck(s)

Adjusted hourly truck team production: 55.58 LCY/Hour
 Adjusted single truck/loader team production: 55.58 LCY/Hour
 Adjusted multiple truck/loader team production: 55.58 LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 96.49 HoursUnit cost: \$5.555 /LCYTotal job cost: \$29,788

REVEGETATION WORKTask description: Reveg May Day 1Site: May Day Idaho Mine
ComplexPermit Action: SR-02Permit/Job#: M1981185PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-004User: LJWAgency or organization name: DRMSFERTILIZINGMaterials

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
Chisel plowing {DMG}	\$94.63
Total Tilling Cost/Acre	\$94.63

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Native	2.00	5.97	\$23.63
Mountain Brome - Bromar	20.00	32.14	\$76.00
Idaho Fescue	4.00	50.51	\$37.90
Slender Wheatgrass - Native	11.00	40.15	\$50.88
Totals Seed Mix	37.00	128.76	\$188.41

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Silt fence, Materials (MEANS 31 25 14.16 1000)	600.00	LINEAR FOOT	\$0.49	\$294.00
Total Mulch Materials Cost/Acre				\$884.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Total Mulch Application Cost/Acre	\$70.17

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: 0.5 Cost /Acre: \$1,504.43
 Estimated Failure Rate: 35% Cost /Acre*: \$1,504.43
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING
 Initial Job Cost: **\$752.22**
 Reseeding Job Cost: **\$263.28**
 Total Job Cost: **\$1,015**
 Job Hours: **16.00**

BULLDOZER WORKTask description: Regrading at May Day 2Site: May Day Idaho Mine
ComplexPermit Action: SR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-005User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS XR Series IIHorsepower: 240Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$71.52</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$64.34</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$6.80</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$4.69</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.24</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$188.58</u>	
Total Fleet Cost/Hour:	<u>\$188.58</u>	

MATERIAL QUANTITIESInitial Volume: 1,900Swell factor: 1.430Loose volume: 2,717 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly
production: 1,022.9 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push
gradient: 0 %Average site altitude: 8,740 feetMaterial weight: 3,300 lbs/LCYWeight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3124

Adjusted unit
production: 319.55 LCY/hr

Adjusted fleet
production: 319.55 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.590/LCY

Total job time: 8.50 Hours

Total job cost: \$1,603

REVEGETATION WORKTask description: Reveg May Day 2Site: May Day Idaho Mine
ComplexPermit Action: SR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-006User: LJWAgency 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
Chisel plowing {DMG}	\$94.63
Total Tilling Cost/Acre	\$94.63

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Native	2.00	5.97	\$23.63
Mountain Brome - Bromar	20.00	32.14	\$76.00
Idaho Fescue	4.00	50.51	\$37.90
Slender Wheatgrass - Native	11.00	40.15	\$50.88
Totals Seed Mix	37.00	128.76	\$188.41

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Silt fence, Materials (MEANS 31 25 14.16 1000)	450.00	LINEAR FOOT	\$0.49	\$220.50
Total Mulch Materials Cost/Acre				\$810.50

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Total Mulch Application Cost/Acre	\$70.17

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: 0.5 Cost /Acre: \$1,430.93
 Estimated Failure Rate: 35% Cost /Acre*: \$1,430.93
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **\$715.47**
 Reseeding Job Cost: **\$250.41**
 Total Job Cost: **\$966**
 Job Hours: **16.00**

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Seal Chief Tunnel

Site: May Day Idaho Mine
Complex

Permit Action:

SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 007
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: M185-007

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Chief Tunnel	10' x 10'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30

Job Hours: 8.00

Total Cost: \$2,105.30

REVEGETATION WORKTask description: Reveg Cheif AreaSite: May Day Idaho Mine
ComplexPermit Action: SR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 008State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-008User: LJWAgency 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
Chisel plowing {DMG}	\$94.63
Total Tilling Cost/Acre	\$94.63

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Native	2.00	5.97	\$23.63
Mountain Brome - Bromar	20.00	32.14	\$76.00
Idaho Fescue	4.00	50.51	\$37.90
Slender Wheatgrass - Native	11.00	40.15	\$50.88
Totals Seed Mix	37.00	128.76	\$188.41

Application

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Description	Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)	\$947.43
Total Seed Application Cost/Acre	\$947.43

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Silt fence, Materials (MEANS 31 25 14.16 1000)	450.00	LINEAR FOOT	\$0.49	\$220.50
Total Mulch Materials Cost/Acre				\$220.50

Application

Description	Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)	\$968.00
Total Mulch Application Cost/Acre	\$968.00

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:	0.1	Cost /Acre:	\$2,418.97
Estimated Failure Rate:	35%	Cost /Acre*:	\$2,418.97
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$241.90		
Reseeding Job Cost:	\$84.66		
Total Job Cost:	\$327		
Job Hours:	16.00		

DEMOLITION WORK

Task description: Dispose of equipment and debris at Idaho area

Site: May Day Idaho Mine
Complex

Permit Action: SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 009
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: M185-009

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.60 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Equipment and debris	75 C.Y.	Loading only, open areas (unconfined) - Track loader	75.00	CY	\$0.52	\$38.70
Haul to landfill (4 full trucks)	16 mi	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	64.00	MI	\$3.17	\$203.05
Dump fees	75 CY	Dump fees - Building construction materials.	75.00	CY	\$11.10	\$832.50

Job Hours: 20.00

Subtotal
(unadjusted): \$1,074.25

Total Cost
(adjusted for location): \$984.01

BULLDOZER WORKTask description: Regrade and Rip Idaho areaSite: May Day Idaho Mine
ComplexPermit Action: SR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**

Task #: 010 State: Colorado Abbreviation: None
 Date: 10/4/2019 County: La Plata Filename: M185-010
 User: LJW

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

Basic Machine: Cat D7R DS XR Series II
 Horsepower: 240
 Blade Type: Semi-Universal
 Attachment: 3-shank ripper
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$71.52</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$64.34</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$6.80</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$4.69</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.24</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$188.58</u>	
Total Fleet Cost/Hour:	<u>\$188.58</u>	

MATERIAL QUANTITIES

Initial Volume: 2,100
 Swell factor: 1.430
 Loose volume: 3,003 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: 714.3 LCY/hr

Materials consistency description: Consolidated stockpile 1.0

Average push
 gradient: 0 %
 Average site altitude: 8,740 feet

Material weight: 3,300 lbs/LCYWeight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(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:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3471

Adjusted unit
production: 247.93 LCY/hr

Adjusted fleet
production: 247.93 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.761/LCY

Total job time: 12.11 Hours

Total job cost: \$2,284

REVEGETATION WORKTask description: Reveg Idaho

May Day Idaho Mine

Permit Action:

Site: ComplexSR-02Permit/Job#: M1981185**PROJECT IDENTIFICATION**Task #: 011State: ColoradoAbbreviation: NoneDate: 10/4/2019County: La PlataFilename: M185-011User: LJWAgency 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
Chisel plowing {DMG}	\$94.63
Total Tilling Cost/Acre	\$94.63

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Native	2.00	5.97	\$23.63
Mountain Brome - Bromar	20.00	32.14	\$76.00
Idaho Fescue	4.00	50.51	\$37.90
Slender Wheatgrass - Native	11.00	40.15	\$50.88
Totals Seed Mix	37.00	128.76	\$188.41

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Silt fence, Materials (MEANS 31 25 14.16 1000)	600.00	LINEAR FOOT	\$0.49	\$294.00
Total Mulch Materials Cost/Acre				\$884.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Total Mulch Application Cost/Acre	\$70.17

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: 0.85 Cost /Acre: \$1,504.43
 Estimated Failure Rate: 35% Cost /Acre*: \$1,504.43
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING
 Initial Job Cost: \$1,278.77
 Reseeding Job Cost: \$447.57
 Total Job Cost: \$1,726
 Job Hours: 16.00

BOREHOLE SEALING WORK

Task description: Seal monitoring wells (4 wells)

Site: May Day Idaho Mine
Complex

Permit Action: SR-02

Permit/Job#: M1981185

PROJECT IDENTIFICATION

Task #: 012
Date: 10/4/2019
User: LJW

State: Colorado
County: La Plata

Abbreviation: None
Filename: M185-012

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Monitoring well MD1	Portland cement grout - 6 in. (labor, equip, materials)	4	650	650.00	LF	\$5.67	\$3,685.50
Monitoring well MD2	Portland cement grout - 6 in. (labor, equip, materials)	4	200	200.00	LF	\$5.67	\$1,134.00
Monitoring well Idaho	Portland cement grout - 6 in. (labor, equip, materials)	4	180	180.00	LF	\$5.67	\$1,020.60
Monitoring well La Plata River	Portland cement grout - 6 in. (labor, equip, materials)	4	25	25.00	LF	\$5.67	\$141.75

Job Hours: 40.00

Total Cost: \$5,982.00

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: **Mobilization**Site: **May Day Idaho Mine
Complex**Permit Action: **SR-02**Permit/Job#: **M1981185****PROJECT IDENTIFICATION**Task #: **013**State: **Colorado**Abbreviation: **None**Date: **10/4/2019**County: **La Plata**Filename: **M185-013**User: **LJW**Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**Shift basis: **1 per day**
Cost Data Source: **CRG Data**Truck Tractor Description: **GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,
400 HP (2ND HALF, 2006)**Truck Trailer Description: **GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT
TRAILER (25T, 50T, AND 100T)****Cost Breakdown:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

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 319D L 8'-10" Stick	21.50	\$34.75	\$67.39	1	\$102.14	\$67.39	\$250.00
Cat D7R DS XR Series II	35.93	\$78.32	\$123.81	1	\$202.13	\$123.81	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$18.15	\$67.39	1	\$85.54	\$67.39	\$250.00
Hydroseeder with Tractor	28.00	\$23.59	\$123.81	1	\$147.40	\$123.81	\$250.00
Cat 725	24.54	\$56.57	\$67.39	1	\$123.96	\$67.39	\$250.00

Subtotals: **\$661.17** **\$449.79** **\$1,250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$12.96	1	\$12.96	\$12.96
Fuel Tanker, 4x2, 170 HP	\$27.02	1	\$27.02	\$27.02
Water Tanker, 5,000 Gal.	\$67.39	1	\$67.39	\$67.39

Subtotals:	\$107.37	\$107.37
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EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>DURANGO</u>	
Total one-way travel distance:	<u>15.00</u>	miles
Average Travel Speed:	<u>40.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$13,911.94</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$80.53</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.38	0.38
Return Time (Hours):	0.38	0.38
Loading Time (Hours):	4.00	NA
Unloading Time (Hours):	4.00	NA
Subtotals:	8.75	0.75

JOB TIME AND COST

Total job time:	<u>17.50</u>	Hours
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Total job cost:	<u>\$13,992</u>
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