

Department of Natural Resources

1313 Sherman St. Room 215 Denver, CO 80203

November 19, 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 November 19, 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

Gabriel R. Benvenuti, DRMS Bonding Specialist cc:

Travis Marshall, Senior Environmental Protection Specialist



## **COST SUMMARY WORK**

T 1			
Task	desc	ПП	tion

May Day Idaho Mine

Permit Action:

Site: Complex

**SR-02** 

Permit/Job#: M1981185

#### **PROJECT IDENTIFICATION**

Task #:

000

State:

Colorado

Abbreviation:

None

Date: User:

10/4/2019 LJW

County: La Plata

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	TRUCKI	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
800	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
		SUBTO	TALS:	428.56	\$88,899

#### INDIRECT COSTS

#### **OVERHEAD AND PROFIT:**

Liability insurance: 2.02 Performance bond: 1.05 Job superintendent: 166.03 Total =

\$1,796 Total = \$933

Profit: 10.00 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

Total = \$0

Engineering work and/or contract/bid preparation: Reclamation management and/or administration:

0.00 5.00 Total = \$0 \$5,602

CONTINGENCY:

0.00

Total = \$0

Cost Summary	W	orksheet	Cont'	d
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Task # 000

Page 2 of 2

TOTAL INDIRECT COST =	\$28,742
TOTAL BOND AMOUNT (direct + indirect) =	\$117,641

# SAFEGUARDING UNDERGROUND OPENINGS

•	Task description:	May Day 1	protal closure			
Site:	May Day Idaho Mine Complex		Permit Action:	SR-02	Permit	/Job#: <u>M1981185</u>
PROJE	CT IDENTIFICATIO	N				
Task #		State:	Colorado		_ Abbreviation:	None
Date Use		County:	La Plata		Filename:	185-001
	Agency or organiza	tion 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
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# **DEMOLITION WORK**

N	Iay Day Idaho Mine		Permit Action:			
Site: C	omplex			SR-02	Permit	/Job#: <u>M1981185</u>
ROJECT	TIDENTIFICATIO	<u>DN</u> State:	Colorado		Allhandada	Mana
Date:	10/4/2019	County:	La Plata		_ Abbreviation: Filename:	None
User:	LJW	County.	La I lata		_ rnename:	M185-002

# **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 с. у.	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

				1 otal Cost	
		Subtotal		(adjusted for	
Job Hours:	80.00	(unadjusted):	\$17,685.04	location):	\$16,199.50

# **BULLDOZER WORK**

Task description:	Backfill Highwall to appx.2	H: 1V slope and regra	de May Day 1	
May Day Idaho Min Site: Complex	e Permit Action:	SR-02	Permit/Jo	b#: <u>M1981185</u>
PROJECT IDENTIFI	<u>ICATION</u>			
Task #: 003	State: Colorado	w- 000-11	Abbreviation:	None
Date: 10/4/2019	County: La Plata		Filename:	M185-003
User: LJW				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	NT COST			
	t D7R DS XR Series II			
Horsepower: 24				
	mi-Universal			
	hank ripper	_		
	per day	=		
	RG)	-		
Cost Breakdown:	2			
0 1: 0		<b>Utilization %</b>		
Ownership Cost/Hour:	\$71.52	NA		
Operating Cost/Hour: Ripper own.	\$64.34	100		
Cost/Hour:	\$6.80	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$41.24	NA NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUANT	\$183.90 \$183.90 TTIES			
Initial Volume: 7,50	0			
Swell factor: 1.43				
Loose volume: 10,7	25 LCY			
Source of estimated volu	me: Division of Reclamatic	on, Mining & Safety		
Source of estimated swe				
factor:				
HOURLY PRODUCT	ION			
• • • • • • • • • • • • • • • • • • • •				
Average push distance: Unadjusted hourly production:	50 feet 1,022.9 LCY/hr			
Materials consistency de	scription: Compacted fill or en	nbankment 0.9		
Average push	0 %			
gradient:				
Average site altitude:	8,740 feet			
Material weight:	3,300 lbs/LCY		_	
Weight description:	Decomposed rock - 75% Rock,	25% Earth		

	Source
0.750	(AVG.)
0.900	(CAT HB))
1.000	(GEN.)
0.800	(POOR)
0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.000	(CAT HB)
1.000	(CAT HB)
0.697	(CAT HB)
1.000	(PAT)
	0.900 1.000 0.800 0.830 0.800 1.000 1.000

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 WORK

Task de	scription:
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Haul material from May Day 2 to May Day 1 for Backfill

May Day Idaho Mine

Permit Action:

Site: Complex

SR-02

Permit/Job#: \_M1981185

#### **PROJECT IDENTIFICATION**

Task #: Date:

003A

State:

Colorado

Abbreviation:

None

User:

10/4/2019 LJW

County:

La Plata

Filename:

M185-003a

Agency 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/Loa	der Team	Support	Equipment	Maintena	nce 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-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:	\$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:

**CCY** 

Swell factor: 1.430

Loose volume:

5,363

LCY

Source of estimated volume:

1/2 needed volume for backfill at May Day 1

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:

3,300

Pounds/LCY

Description: Decomposed rock - 75% Rock, 25% Earth

Rated Payload:	52,000	Pounds	3			
Payload Capacity: _	15.76	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	15.76	LCY				
Final T	ruck Volume B	ased on Number of I	oader Passes:	15.59	LCY	
<b>Loading Tool Capacity</b>						
TW.			Buck	tet Size Class:]	Large	_
Rated Capacity:	1.350	LCY (heaped)				_
Bucket Fill Factor:	0.825	Blasted rock - av	g. blasted (75	5 - 90%) 0.825		<b>4</b> )
Adjusted Capacity:	1.114	LCY				
Job Condition Corrections:		Site	Altitude (ft.):	<u>8850</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.830	(CAT H	3)		
Job Efficiency:	0.830	0.830	(CAT H	3)		
Net Correction:	0.830	0.689				
Loading Tool Cycle Time:	N	umber of Loading To	ool Passes Requ	uired to Fill	14	passes
Excavators and Front Shovels	<u>i.</u>			Truck:	14	
Machine Cycle Time vs.						
Selected Value w			3E	-		
Track Loaders – N Cycle Time Elements (min.):	Material Descri	otion:				
	3	374		-		
Load: NA	_ Ma	ineuver: NA		Dump: 0.10	00	
Wheel and Track	Loaders - Unac	ljusted Basic Loader	•	oad, dump, naneuver):	NA min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	NA			NA	(Cat HB)	-
Stockpile:	NA			NA	(Cat HB)	
Truck Ownership:	NA			NA	(Cat HB)	_
Operation: Dump Target:	NA NA			NA NA	(Cat HB)	
Dump Target.	INA	Net Cycle Time	Adiustment	NA NA	(Cat HB) minutes	
		Adjusted Loader		0.282	minutes	
		Net Load Tim		3.766	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.50	Minutes	Adjusted	for site altitude:	0.500	Minutes
Truck Load Time:	3.766	Minutes	Adjusted	for site altitude:	4.537	Minutes
Truck Maneuver and Dump Time:		Minutes	Adjusted	for site altitude:	0.900	Minutes
				-		

Truck Travel (Haul & Return) Time: penetration 4.0

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

** 4	-	
Haul	R O	nito.
IIaui	T/U	ulc.

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

Return Route: Haul Time: 6.196 minutes

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 minutes
Total Truck Cycle Time: 13.971 minutes

Loading Tool unit
Production

185.72

LCY/Hour

Adjusted for job efficiency: 154.15

LCY/Hour

Truck Unit Production

66.96

LCY/Hour

Adjusted for job efficiency: 55.58

LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 1 Tr

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 COST**

Fleet size: 1 Team(s) Total job time: 96.49 Hours

Unit cost: \$5.555 /LCY Total job cost: \$29,788

# **REVEGETATION WORK**

May Day Idaho Mine Complex	Per	rmit Action:	SR-02		Permit/Job#	#: <u>M1981185</u>
ROJECT IDENTIFICAT	TION					
Task #: 004	State:	Colorado		A	bbreviation:	None
Date: 10/4/2019	County:	La Plata			Filename:	M185-004
User: LJW  Agency or organization	on name: DR	UMS .				
ERTILIZING			11 12 - 2 - 2			
[aterials						
Description	, , , , ,	Unit Acre		Co	st / Unit	Cost /Acre
				\$	10000	\$
					tal Fertilizer Materials Cost/Acre	\$0.00
pplication  Description						Cost /Acre
		7	Fotal Fertilize	r Applicatio	on Cost/Acre	Cost /Acre \$
		7	Γotal Fertilize	r Applicatio	on Cost/Acre	\$
Description  ILLING		7	Γotal Fertilize	r Applicatio	on Cost/Acre	\$ \$0.00
Description		7	Fotal Fertilize	r Applicatio	on Cost/Acre	\$
Description  ILLING  Description		7			on Cost/Acre	\$ \$0.00 Cost /Acre
Description  ILLING  Description		7				\$0.00 Cost /Acre \$94.63
Description  ILLING  Description Chisel plowing {DMG}  EEDING  Seed Mix		7		Rate - PLS LBS / Acre		\$0.00 Cost /Acre \$94.63
Description  ILLING  Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native		7		Rate - PLS LBS / Acre 2.00	Seeds per SQ. FT	\$0.00 Cost /Acre \$94.63 \$94.63 Cost /Acre
Description  ILLING  Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native Mountain Brome - Bromar		7		Rate - PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	\$0.00 Cost /Acre \$94.63 \$94.63 Cost /Acre \$23.63 \$76.00
Description  ILLING  Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native				Rate - PLS LBS / Acre 2.00	Seeds per SQ. FT	\$0.00 Cost /Acre \$94.63 \$94.63 Cost /Acre

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
					\$
		Tot	als Nursery Stoo	k 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 WORK**

Task description:	Regrading at May Day 2			
May Day Idaho Min Site: Complex	e Permit Action:	SR-02	Permit/Jol	b#: <u>M1981185</u>
PROJECT IDENTIF	<u>ICATION</u>			
Task #: 005	State: Colorado		Abbreviation:	None
Date: 10/4/2019	County: La Plata		Filename:	M185-005
User: LJW				
Agency or orga	nization name: DRMS			
HOURLY EQUIPME	ENT COST			
Basic Machine: Ca	at D7R DS XR Series II			
Horsepower: 24		_		
	mi-Universal			
	shank ripper			
	per day			
Data Source: (C	RG)	_		
Cost Breakdown:				
	1	<b>Utilization</b> %		
Ownership Cost/Hour:	\$71.52	NA		
Operating Cost/Hour:	\$64.34	100		
Ripper own.	£6.90	NA		
Cost/Hour:	\$6.80	NA		
Ripper op. Cost/Hour:	\$4.69	100		
Operator Cost/Hour:	\$41.24	NA		
Total unit Cost/Hour:	\$188.58			
Total Fleet Cost/Hour:	\$188.58			
100111001	<b>#100.56</b>			
MATERIAL QUANT	<u>ITIES</u>			
Initial Volume: 1,96	00			
Swell factor: 1.43	30			
Loose volume: 2,7	17 LCY			
Source of estimated vol	ume: Division of Reclamate	ion Mining & Safata		
Source of estimated swe		ion, winning & Salety		
factor:	Cat Handbook			
HOURLY PRODUCT	CION			
Average push distance:	50 feet			
Unadjusted hourly	1,022.9 LCY/hr			
production:				
Materials consistency de	escription: Compacted fill or e	mbankment 0.9		
Average push	0 %			
gradient:				
Average site altitude:	8,740 feet			
Material weight:	3,300 lbs/LCY			
Weight description:	Decomposed rock - 75% Rock	, 25% Earth	2	

Job Condition Correction Factor		Source
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 WORK**

- 1	Wiay Hay Idaha Missa	n.	rmit Acti					
	May Day Idaho Mine Complex		ami Acti	on: SR-0	)2		Permit/Job#	: M1981185
R	OJECT IDENTIFICATI	<u>ON</u>						
	Task #:006	State:	Colora	do		A1	breviation:	None
	Date: 10/4/2019	County:	La Plat	a			Filename:	M185-006
	User: LJW  Agency or organization	name: DF	RMS					
'IA'.	RTILIZING							
	erials							
Lau	CI IAIS			Units /	T		and the same of th	
1	Description			Acre	Unit	Co	st / Unit	Cost /Acre
	1					\$		\$
						То	tal Fertilizer Materials Cost/Acre	\$0.00
								s
	Description							Cost /Acre
1								
L				Total	Fertilizer	Application	on Cost/Acre	\$0.00
П	LING			Total	Fertilizer	Application	on Cost/Acre	\$0.00
Г	Name of the latest of the late			Total	Fertilizer	Application	on Cost/Acre	
	LING  Description Chisel plowing {DMG}			Total	Fertilizer	Application	on Cost/Acre	\$0.00 Cost /Acre \$94.63
	Description			Total			on Cost/Acre	Cost /Acre
I	Description			Total				Cost /Acre \$94.63
EF	Description Chisel plowing {DMG} CDING Geed Mix			Total				Cost /Acre \$94.63
EF	Description Chisel plowing {DMG} CDING Geed Mix Big Bluestem - Native			Total		Rate – PLS LBS / Acre 2.00	Seeds per SQ. FT	Cost /Acre \$94.63 \$94.63 Cost /Acre
ER	Description Chisel plowing {DMG} CDING Geed Mix Big Bluestem - Native Mountain Brome - Bromar			Total		Rate – PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	Cost /Acre \$94.63 \$94.63 Cost /Acre \$23.63 \$76.00
EF S	Description Chisel plowing {DMG} CDING Geed Mix Big Bluestem - Native Mountain Brome - Bromar daho Fescue			Total		Rate – PLS LBS / Acre 2.00 20.00 4.00	Seeds per SQ. FT 5.97 32.14 50.51	Cost /Acre \$94.63 \$94.63 Cost /Acre \$23.63 \$76.00 \$37.90
EF S	Description Chisel plowing {DMG} CDING Geed Mix Big Bluestem - Native Mountain Brome - Bromar			Total		Rate – PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	Cost /Acre \$94.63 \$94.63 Cost /Acre \$23.63 \$76.00

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	
	rotat been 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
					\$
		Tot	als Nursery Stoo	k 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

	sk description:	Seal Chief To				
	Iay Day Idaho Mine Complex		Permit Action:	SR-02	Permi	/Job#: <u>M1981185</u>
OJEC'	<u> IDENTIFICATIO</u>	N				
Γask #:	007	State:	Colorado		Abbreviation:	None
	10/4/2019	County:	La Plata		Filename:	M185-007
Date:	10/1/2017				Horizo	

# **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
	Total Cost.	Ψ4 <sub>9</sub> 103,30

## **REVEGETATION WORK**

May Day Idaho Mine Complex	Permit A	Action: SR-0	2	·	Permit/Job#	: <u>M1981185</u>
ROJECT IDENTIFICAT	<u> TION</u>					
Task #: 008		lorado		_ Ab		None
Date: 10/4/2019 User: LJW	County: La	Plata		_	Filename:	M185-008
Agency or organizati	on name: DRMS					
ERTILIZING						
[aterials						
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
				\$		S
					tal Fertilizer Materials Cost/Acre	\$0.00
						\$
Description						\$
		Total	Fertilizer A	Application	on Cost/Acre	\$0.00
<u>ILLING</u>						
Description						Cost /Acre
Description				V 100		\$94.63
Chisel plowing {DMG}						
			Т	otal Tillin	g Cost/Acre	\$94.63
			Т	otal Tillin	ig Cost/Acre	\$94.63
Chisel plowing {DMG}			T	Rate – PLS LBS / Acre	Seeds per SQ. FT	\$94.63  Cost /Acre
Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native			T	Rate – PLS LBS / Acre	Seeds per SQ. FT 5.97	Cost /Acre
Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native Mountain Brome - Bromar			T	Rate – PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	Cost /Acre \$23.63 \$76.00
Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native	ρ		T	Rate – PLS LBS / Acre	Seeds per SQ. FT 5.97	Cost /Acre

Description	7 (15-1/65)	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
						\$
Totale Name			To	tals Nursery Stoo	de Clook / A sus	\$0.00

## **JOB TIME AND COST**

No. of Acres: 0.1

Estimated Failure Rate: 35%

Cost / Acre: \$2,418.97 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**

T	ask description:	Dispose of equipm	ent and debris at Idaho	o area		
	May Day Idaho Mine Complex	Permit	Action: SR-02	Permit	/Job#: M1981185	
PROJEC	T IDENTIFICATIO	<u>N</u>				
Task #:	009	State: Colo	rado	Abbreviation:	None	
Date:	10/4/2019	County: La P	lata	Filename:	M185-009	
Date.						

## **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

Subtotal Cost
Subtotal (adjusted for
Job Hours: 20.00 (unadjusted): \$1,074.25 location): \$984.01

# **BULLDOZER WORK**

Task description:	Regrade	and Rip Idaho ar	rea		
May Day Idaho N te: Complex	Mine	Permit Action	n: SR-02	Permit/Job#	: M1981185
PROJECT IDENT	IFICATION				
Task #: 010		State: Colorado	0	Abbreviation:	None
Date: 10/4/2	019 C	County: La Plata			M185-010
User: LJW				_	
Agency or o	organization nam	e: DRMS		- Peril	
HOURLY EQUIP	MENT COST				
Basic Machine:	Cat D7R DS X	R Series II			
Horsepower:	240				
Blade Type:	Semi-Universa				
Attachment:	3-shank ripper	7,310,525			
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:			Utilization %		
Ownership Cost/Ho	ur:	\$71.52	NA NA		
Operating Cost/Ho		\$64.34			
Ripper ov	vn.	\$6.80	ALCOHOL STATE OF THE STATE OF T		
Cost/Ho			NA		
Ripper op. Cost/Ho		\$4.69	100		
Operator Cost/Ho	ur:	\$41.24	NA		
Total unit Cost/Hour	r: \$188.58			<del></del>	
Total Fleet Cost/Hor					
MATERIAL QUA	NTITIES				
Initial Volume:	2,100				
	1.430				
	3,003 LCY				
_					
Source of estimated			ation, Mining & Safety		
Source of estimated factor:	swell (	Cat Handbook			
Idelei,	_				
HOURLY PRODU	CTION				
Average push distan		feet			
Unadjusted hourly	714	1.3 LCY/hr			
production:			•		
Materials consistence	y description:	Consolidated stoc	kpile 1.0		
Average push	0 %				
gradient:					
Average site altitude	: 8,740 feet				
Material weight:	_3,300 lbs/	LCY		Ministra	
Weight description:	Decompo	sed rock - 75% Roc	ck. 25% Earth		

	Source
0.750	(AVG.)
1.000	(CAT HB)
1.000	(GEN.)
1.000	(AVG.)
0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.000	(CAT HB)
1.000	(CAT HB)
0.697	(CAT HB)
1.000	(PAT)
	1.000 1.000 1.000 0.830 0.800 1.000 1.000

Net correction: 0.3471

Adjusted unit production:

247.93 LCY/hr

Adjusted fleet

247.93 LCY/hr

production:

## **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

Man Dan II.t. DC	Reveg Idaho	*				
May Day Idaho Mine Complex	Pen	mit Action: SR-02	2		Permit/Job#	: M1981185
ROJECT IDENTIFICA	TION	-				
Task #: 011	State:	Colorado		Δ1	obreviation:	None
Date: 10/4/2019	County:	La Plata			_	M185-011
User: LJW					-	
Agency or organizat	tion name: _DR	MS				
ERTILIZING						
aterials						
Description		Units /		G.	-4 / 87. 44	
Description		Acre	Unit	-   0	st / Unit	Cost /Acre
				\$		\$
				To	tal Fertilizer Materials Cost/Acre	\$0.00
pplication						
	The state of the s					
Description						Cost /Acre
Description						Cost /Acre
Description						Cost /Acre
Description		Total 1	Fertilizer	Application	on Cost/Acre	
Description  LLING		Total	Fertilizer	Application	on Cost/Acre	\$
LLING		Total 1	Fertilizer	Application	on Cost/Acre	\$0.00
		Total	Fertilizer	Application	on Cost/Acre	\$ \$0.00 Cost /Acre
LLING  Description		Total			on Cost/Acre	\$0.00
LLING  Description		Total				\$0.00 Cost /Acre \$94.63
Description Chisel plowing {DMG}		Total		Fotal Tillin Rate – PLS	ng Cost/Acre	\$0.00 Cost /Acre \$94.63
Description Chisel plowing {DMG}		Total		Fotal Tillin Rate – PLS LBS /	ng Cost/Acre	\$0.00 Cost /Acre \$94.63
Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native		Total		Fotal Tillin Rate – PLS	ng Cost/Acre Seeds per SQ.	\$0.00  Cost /Acre \$94.63  \$94.63
Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native Mountain Brome - Broman		Total		Rate – PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	\$0.00  Cost /Acre \$94.63  \$94.63  Cost /Acre \$23.63 \$76.00
Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native Mountain Brome - Broman Idaho Fescue		Total		Rate – PLS LBS / Acre 2.00 20.00 4.00	Seeds per SQ. FT 5.97 32.14 50.51	\$0.00  Cost /Acre \$94.63  \$94.63  Cost /Acre  \$23.63 \$76.00 \$37.90
Description Chisel plowing {DMG}  EEDING  Seed Mix  Big Bluestem - Native Mountain Brome - Broman		Total		Rate – PLS LBS / Acre 2.00 20.00	Seeds per SQ. FT 5.97 32.14	\$0.00  Cost /Acre \$94.63  \$94.63  Cost /Acre \$23.63 \$76.00

	Cost /Acre
	\$267.22
Total Seed Application Cost/Acre	\$267.22
	Total Seed Application Cost/Acre

## 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
					\$
		То	tals Nursery Stoo	k 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 monitor	ring wells (4 v	vells)		
Site:	May Day Idaho Mine Complex		Permit Action	SR-02	Permit	/Job#: <u>M1981185</u>
<u>PROJE</u>	CT IDENTIFICATIO	<u>N</u>				
Task	#: 012	State:	Colorado		Abbreviation:	None
Dat		County:	La Plata		Filename:	M185-012

# **UNIT COSTS**

Agency or organization name: DRMS

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	Job Hours:	40.00		Total Cost:	\$5,982.00	
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## **EQUIPMENT MOBILIZATION/DEMOBILIZATION**

Task description: Mobilization

May Day Idaho Mine Permit Action:

Site: Complex 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	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit (TONS)	Cost/hr/ unit	Cost/hr/uni t	Size	Cost/hr/ fleet	Cost/hr/ fleet	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

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

DURANGO
miles
40.00
mph

Total Non-Roadable Mob/Demob Cost \*
'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

\*\* one round trip, no haul rig:

\$13,911.94 \$80.53

### 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: 17.50 Hours

Total job cost: \$13,992