

COST SUMMARY WORK

Task description: Sandstone Lense Core Drilling

Site: Deserado Mine

Permit Action: MR179

Permit/Job#: C1981018

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 1/20/2021

County: Moffat

Filename: C018-000

User: CCW

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Seal and abandon MR-179 boreholes	BOREHOLE	1	0.00	\$852
002	Replace Topsoil on Drill Pads and Access Roads	DOZER	1	0.84	\$287
003	Reseed Drill Pads and Access Roads	REVEGE	1	10.00	\$863
<u>SUBTOTALS:</u>				10.84	\$2,002

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$40

Performance bond: 1.05

Total = \$21

Job superintendent: 5.42

Total = \$377

Profit: 10.00

Total = \$200

TOTAL O & P = \$639

CONTRACT AMOUNT (direct + O & P) = \$2,641

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 10.00

Total = \$264

Reclamation management and/or administration: 7.10

\$187

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$1,090

TOTAL BOND AMOUNT (direct + indirect) = \$3,092

BOREHOLE SEALING WORK

Task description: Seal and abandon MR-179 boreholes

Site: Deserado Mine

Permit Action: MR179

Permit/Job#: C1981018

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 1/20/2021

County: Moffat

Filename: C018-001

User: CCW

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Seal and abandon 12 Nitrogen Injection holes	Portland cement grout (Bag, material cost only...94 lb. bag)	3.5	10' X 12	9.00	bag	\$15.95	\$143.55
- Bottom Plug	PVC plug - 4 in. diameter borehole	3.5	NA	9.00	EA	\$33.29	\$299.61
- Drillhole Marker	Borehole location/identification marker (EA, material cost only)	NA	NA	9.00	EA	\$35.50	\$319.50
- Cut Casing	Exposed casing removal - Calculate Circumference in Linear Feet	3.5	NA	9.00	LF	\$3.26	\$29.34
- Truck and Labor	Flatbed Truck, 4x2, 30K GVW	NA	NA	2.00	EA	\$30.21	\$60.42

Job Hours: 0.00

Total Cost: \$852.00

BULLDOZER WORKTask description: **Replace Topsoil on Drill Pads and Access Roads**Site: **Deserado Mine**Permit Action: MR179Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 1/20/2021County: MoffatFilename: C018-002User: CCWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$156.88	NA
Operating Cost/Hour:	\$127.87	100
Ripper own.		
Cost/Hour:	\$15.59	NA
Ripper op. Cost/Hour:	\$1.02	10
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$342.66Total Fleet Cost/Hour: **\$342.66****MATERIAL QUANTITIES**Initial Volume: 1,392Swell factor: 1.000Loose volume: **1,392 LCY**Source of estimated volume: MR-171 ApplicationSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 2,110.5 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 5,700 feetMaterial weight: 1,600 lbs/LCYWeight description: Top SoilJob Condition Correction FactorSource

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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit
production: 1,662.44 LCY/hr
Adjusted fleet
production: **1662.44** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.206/LCY

Total job time: **0.84** Hours
Total job cost: **\$287**

REVEGETATION WORKTask description: Reseed Drill Pads and Access RoadsSite: Deserado MinePermit Action: MR179Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 1/20/2021County: Rio BlancoFilename: C018-003User: CCWAgency 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
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.10	3.90	\$2.85
Indian Ricegrass - Nespar	0.40	1.29	\$3.55
Beardless Wheatgrass - Whitmar	0.50	1.63	\$5.86
Bluebunch Wheatgrass - Secar	0.50	1.61	\$5.44
Canby Bluegrass - Canbar	0.20	4.25	\$2.05
Crested Wheatgrass - Nordan	4.00	18.37	\$15.60
Russian Wildrye - Bozoisky	2.00	8.03	\$12.96
Bottlebrush Squirreltail	0.20	0.88	\$3.25
Sandberg Bluegrass - VNS	0.20	4.25	\$1.68

Pubescent Wheatgrass - Greenleaf	1.00	2.07	\$3.65
Sheep Fescue - Covar	0.20	3.12	\$1.22
Slender Wheatgrass - Pryor	2.00	7.30	\$8.50
Milk Vetch, Cicer - Monarch	1.00	3.33	\$8.20
Thickspike Wheatgrass - Critana	1.00	3.54	\$6.88
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Needlegrass, Green - Lodorm	0.60	2.49	\$7.07
Sagebrush, Mountain or Big	0.10	5.28	\$1.98
Prairie Junegrass	0.20	10.63	\$5.20
Flax, Lewis Blue	0.40	2.65	\$6.60
Saltbush, Four Wing	2.00	2.75	\$25.00
Saltbush, Shadscale	0.50	0.75	\$5.00
Yarrow, White	0.10	6.36	\$4.00
Totals Seed Mix	19.20	99.54	\$149.52

Application

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
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

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: 1.38 Cost /Acre: \$416.74
 Estimated Failure Rate: 50% Cost /Acre*: \$416.74
 *Selected Replanting Work Items: SEEDING
 Initial Job Cost: **\$575.10**

Reseeding Job Cost:	\$287.55
Total Job Cost:	\$863
Job Hours:	10.00