

## COST SUMMARY WORK

Task description: DW-1R Dewatering System

Site: Deserado Mine

Permit Action: TR73

Permit/Job#: C1981018

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/8/2022

County: Moffat

Filename: C18-000

User: CCW

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Plug and Seal DW-1R Borehole	BOREHOLE	1	8.00	\$16,702
002	Regrade DW-1R Pond	DOZER	1	2.56	\$867
003	Regrade DW-1R Light Use Road	DOZER	1	0.83	\$280
004	Topsoil Replacement for the DW-1R Pond	DOZER	1	1.22	\$403
005	Topsoil Replacement for the DW-1R Light Use Road	DOZER	1	0.40	\$131
006	Reseed DW-1R Pond	REVEGE	1	10.00	\$406
007	Reseed DW-1R Light Use Road	REVEGE	1	10.00	\$131
<b><u>SUBTOTALS:</u></b>				<b>33.01</b>	<b>\$18,920</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$382

Performance bond: 1.05

Total = \$199

Job superintendent: 12.50

Total = \$900

Profit: 10.00

Total = \$1,892

TOTAL O & P = \$3,373

CONTRACT AMOUNT (direct + O & P) = \$22,293

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 8.59

Total = \$1,915

Reclamation management and/or administration: 6.20

\$1,382

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$6,670

**TOTAL BOND AMOUNT (direct + indirect) = \$25,590**

## BOREHOLE SEALING WORK

Task description: Plug and Seal DW-1R Borehole

Site: Deserado Mine

Permit Action: TR73

Permit/Job#: C1981018

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 2/8/2022

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 10" Borehole	Portland cement grout - 10 in. (labor, equip, materials)	10	1697	1,697.00	LF	\$9.75	\$16,545.75
Bottom Plug 10"	PVC plug - 10 in. diameter borehole	10	NA	1.00	EA	\$115.29	\$115.29
Cut Casing 10" diameter	Exposed casing removal - Calculate Circumference in Linear Feet	10	NA	1.00	LF	\$3.26	\$3.26
Borehole Marker	Borehole location/identification marker (EA, material cost only)	NA	NA	1.00	EA	\$37.50	\$37.50

Job Hours: 8.00

Total Cost: \$16,702.00

**BULLDOZER WORK**Task description: **Regrade DW-1R Pond**Site: **Deserado Mine**Permit Action: **TR73**Permit/Job#: **C1981018****PROJECT IDENTIFICATION**Task #: **002**State: **Colorado**Abbreviation: **None**Date: **2/8/2022**County: **Moffat**Filename: **C018-002**User: **CCW**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:	\$126.01	NA
Operating Cost/Hour:	\$141.41	100
Ripper own.		
Cost/Hour:	\$19.26	NA
Ripper op. Cost/Hour:	\$11.48	100
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$339.46**Total Fleet Cost/Hour: **\$339.46****MATERIAL QUANTITIES**Initial Volume: **1,573**Swell factor: **1.250**Loose volume: **1,966 LCY**Source of estimated volume: **Section V and Map 162**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **1,243.2 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **-10 %**Average site altitude: **5,800 feet**Material weight: **2,550 lbs/LCY**Weight description: **Earth - Dry packed**Job Condition Correction FactorSource

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:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6190

Adjusted unit  
production: 769.54 LCY/hr  
Adjusted fleet  
production: **769.54** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.441/LCY

Total job time: **2.56** Hours  
Total job cost: **\$867**

**BULLDOZER WORK**Task description: **Regrade DW-1R Light Use Road**Site: **Deserado Mine**Permit Action: **TR73**Permit/Job#: **C1981018****PROJECT IDENTIFICATION**Task #: **003**State: **Colorado**Abbreviation: **None**Date: **2/8/2022**County: **Moffat**Filename: **C018-003**User: **CCW**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:	\$126.01	NA
Operating Cost/Hour:	\$141.41	100
Ripper own.		
Cost/Hour:	\$19.26	NA
Ripper op. Cost/Hour:	\$11.48	100
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$339.46**Total Fleet Cost/Hour: **\$339.46****MATERIAL QUANTITIES**Initial Volume: **508**Swell factor: **1.250**Loose volume: **635 LCY**Source of estimated volume: **Section V and Map 162**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **1,243.2 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **-10 %**Average site altitude: **5,800 feet**Material weight: **2,550 lbs/LCY**Weight description: **Earth - Dry packed****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:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6190

Adjusted unit  
production: 769.54 LCY/hr  
Adjusted fleet  
production: **769.54** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.441/LCY

Total job time: **0.83** Hours  
Total job cost: **\$280**

**BULLDOZER WORK**Task description: Topsoil Replacement for the DW-1R PondSite: Deserado MinePermit Action: TR73Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 2/8/2022County: MoffatFilename: C018-004User: 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:	\$126.01	NA
Operating Cost/Hour:	\$141.41	100
Ripper own.	\$19.26	NA
Cost/Hour:		
Ripper op. Cost/Hour:	\$1.72	15
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$329.70Total Fleet Cost/Hour: \$329.70**MATERIAL QUANTITIES**Initial Volume: 655Swell factor: 1.000Loose volume: 655 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 1,514.3 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 5,600 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction FactorSource

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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3537

Adjusted unit  
production: 535.61 LCY/hr  
Adjusted fleet  
production: **535.61** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.616/LCY

Total job time: **1.22** Hours  
Total job cost: **\$403**



**BULLDOZER WORK**Task description: Topsoil Replacement for the DW-1R Light Use RoadSite: Deserado MinePermit Action: TR73Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 2/8/2022County: MoffatFilename: C018-005User: 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:	\$126.01	NA
Operating Cost/Hour:	\$141.41	100
Ripper own.		
Cost/Hour:	\$19.26	NA
Ripper op. Cost/Hour:	\$1.72	15
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$329.70Total Fleet Cost/Hour: \$329.70**MATERIAL QUANTITIES**Initial Volume: 212Swell factor: 1.000Loose volume: 212 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 1,514.3 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 5,600 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction FactorSource

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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3537

Adjusted unit  
production: 535.61 LCY/hr  
Adjusted fleet  
production: **535.61** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.616/LCY

Total job time: **0.40** Hours  
Total job cost: **\$131**

**REVEGETATION WORK**Task description: Reseed DW-1R PondSite: Deserado MinePermit Action: TR73Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 006State: ColoradoAbbreviation: NoneDate: 2/8/2022County: Rio BlancoFilename: C018-006User: CCWAgency 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**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
<b>Totals Seed Mix</b>	<b>19.20</b>	<b>99.54</b>	<b>\$149.52</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
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</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: 0.65                      Cost /Acre: \$416.74  
 Estimated Failure Rate: 50%                      Cost /Acre\*: \$416.74  
 \*Selected Replanting Work Items: SEEDING  
 Initial Job Cost: \$270.88

Reseeding Job Cost:	<b>\$135.44</b>
Total Job Cost:	<b>\$406</b>
Job Hours:	<b>10.00</b>

**REVEGETATION WORK**Task description: Reseed DW-1R Light Use RoadSite: Deserado MinePermit Action: TR73Permit/Job#: C1981018**PROJECT IDENTIFICATION**Task #: 007State: ColoradoAbbreviation: NoneDate: 2/8/2022County: Rio BlancoFilename: C018-007User: CCWAgency 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**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
<b>Totals Seed Mix</b>	19.20	99.54	<b>\$149.52</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
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</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: 0.21                      Cost /Acre: \$416.74  
 Estimated Failure Rate: 50%                      Cost /Acre\*: \$416.74  
 \*Selected Replanting Work Items: SEEDING  
 Initial Job Cost: **\$87.52**

Reseeding Job Cost:	<b>\$43.76</b>
Total Job Cost:	<b>\$131</b>
Job Hours:	<b>10.00</b>