

COST SUMMARY WORK

Task description: DRMS NOI Bond Estimate

Site: Henderson Mine Exploration
Drilling - Puzzler Target

Permit Action: NOI Estimate

Permit/Job#: P2022006

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 6/1/2022 County: Clear Creek Filename: P006-000
User: PSH

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Borehole Closure	BOREHOLE	1	16.00	\$1,213
002	Backfill and Grade Access Road and Drill Pad	DOZER	1	29.87	\$6,023
003	Replace Topsoil	DOZER	1	0.19	\$39
004	Revegetation	REVEGE	1	16.00	\$1,971
005	Mob / Demob	MOBILIZE	1	8.00	\$2,072
<u>SUBTOTALS:</u>				70.06	\$11,318

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$229
Performance bond:	1.05	Total =	\$119
Job superintendent:	35.03	Total =	\$2,523
Profit:	10.00	Total =	\$1,132
		TOTAL O & P =	\$4,002
		CONTRACT AMOUNT (direct + O & P) =	\$15,320

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$651
Reclamation management and/or administration:	5.00		\$766

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$5,920

TOTAL BOND AMOUNT (direct + indirect) = \$17,000 (Rounded)

BOREHOLE SEALING WORK

Task description: Borehole Closure

Site: Henderson Mine Exploration
Drilling - Puzzler Target

Permit Action: NOI Estimate

Permit/Job#: P2022006

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 6/1/2022 County: Clear Creek Filename: P006-001
User: PSH

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Exploration Boreholes	SCHRAMM T450WS	4.5	3300	2.00	EA	\$606.54	\$1,213.08

Job Hours: 16.00

Total Cost: \$1,213.00

BULLDOZER WORKTask description: **Backfill and Grade Access Road and Drill Pad**Site: **Henderson Mine Exploration**
Drilling - Puzzler TargetPermit Action:
NOI Estimate

Permit/Job#: P2022006

PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 6/1/2022

County: Clear Creek

Filename: P006-002

User: PSH

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II

Horsepower: 240

Blade Type: Semi-Universal

Attachment: NA

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.02	NA
Operating Cost/Hour:	\$79.33	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$201.65	
Total Fleet Cost/Hour:	\$201.65	

MATERIAL QUANTITIES

Initial Volume: 17,735

Swell factor: 1.000

Loose volume: **17,735 LCY**

Source of estimated volume: Division of Reclamation, Mining & Safety

Source of estimated swell
factor: Cat Handbook**HOURLY PRODUCTION**

Average push distance: 50 feet

Unadjusted hourly
production: 1,022.9 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push
gradient: -5 %

Average site altitude: 10,300 feet

Material weight: 3,300 lbs/LCY

Weight description: Decomposed rock - 75% Rock, 25% 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:	1.000	(DOZ-OC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5805

Adjusted unit
production: 593.79 LCY/hr
Adjusted fleet
production: **593.79** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.340/LCY

Total job time: **29.87** Hours
Total job cost: **\$6,023**

BULLDOZER WORKTask description: **Replace Topsoil**Site: **Henderson Mine Exploration
Drilling - Puzzler Target**Permit Action: **NOI Estimate**Permit/Job#: **P2022006****PROJECT IDENTIFICATION**Task #: **003**
Date: **6/1/2022**
User: **PSH**State: **Colorado**
County: **Clear Creek**Abbreviation: **None**
Filename: **P006-003**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D7R DS XR Series II**
Horsepower: **240**
Blade Type: **Semi-Universal**
Attachment: **NA**
Shift Basis: **1 per day**
Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$81.02	NA
Operating Cost/Hour:	\$79.33	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$201.65	
Total Fleet Cost/Hour:	\$201.65	

MATERIAL QUANTITIESInitial Volume: **236**
Swell factor: **1.000**
Loose volume: **236 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**
Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**
Unadjusted hourly production: **1,022.9 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **-5 %**
Average site altitude: **10,300 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****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:	1.000	(DOZ-OC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.1977

Adjusted unit
production: 1,225.13 LCY/hr
Adjusted fleet
production: **1225.13** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.165/LCY

Total job time: **0.19** Hours
Total job cost: **\$39**

REVEGETATION WORKTask description: **Revegetation**Site: **Henderson Mine Exploration**
Drilling - Puzzler TargetPermit Action:
NOI EstimatePermit/Job#: P2022006**PROJECT IDENTIFICATION**Task #: 004
Date: 6/1/2022
User: PSHState: Colorado
County: Clear CreekAbbreviation: None
Filename: P006-004Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-20-20, 4-8-12, 10-10-10	2.00	pound	\$0.22	\$0.44
			Total Fertilizer Materials Cost/Acre	\$0.44

Application

Description	Cost /Acre
Hand spread (MEANS 32 01 90.13 0100)	\$644.69
Total Fertilizer Application Cost/Acre	\$644.69

TILLING

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$290.40

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alpine Bluegrass	0.22	5.05	\$3.14
Arizona Fescue - Redondo	0.90	10.33	\$8.33
Mountain Brome - Bromar	3.40	5.46	\$12.92
Cinquefoil, Slender	0.08	7.80	\$33.56
Currant, Wax	0.32	1.10	\$18.98
Rocky Mountain Fescue	0.34	5.46	\$2.47
Lupine, Silver	3.48	2.04	\$243.51
Slender Wheatgrass - Native	1.36	4.96	\$6.29
Vetch, American	2.66	1.20	\$265.80
Flax, Lewis Blue	0.90	5.97	\$14.85

Spike Muhly	0.18	6.61	\$1.75
Timothy, Alpine - Native	0.50	14.92	\$12.13
Tufted Hairgrass	0.34	19.51	\$3.75
Penstemon, Rocky Mountain	0.54	8.46	\$15.93
Yarrow, Western	0.10	6.08	\$4.18
Totals Seed Mix	15.32	104.98	\$647.57

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: 0.88 Cost /Acre: \$1,850.32
 Estimated Failure Rate: 25% Cost /Acre*: \$1,559.92
 *Selected Replanting Work Items: FERTILIZING,SEEDING

Initial Job Cost: **\$1,628.28**
 Reseeding Job Cost: **\$343.18**
 Total Job Cost: **\$1,971**
 Job Hours: **16.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob / Demob**Site: **Henderson Mine Exploration
Drilling - Puzzler Target**Permit Action: **NOI Estimate**Permit/Job#: **P2022006****PROJECT IDENTIFICATION**

Task #: **005** State: **Colorado** Abbreviation: **None**
 Date: **6/1/2022** County: **Clear Creek** Filename: **P006-005**
 User: **PSH**

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:	\$21.28	\$37.94	\$47.67
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95

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 D7R DS XR Series II	32.01	\$81.02	\$132.49	1	\$213.51	\$132.49	\$250.00

Subtotals: **\$213.51** **\$132.49** **\$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.	\$12.93	1	\$12.93	\$12.93

Subtotals: **\$12.93** **\$12.93**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>DENVER, CO</u>	
Total one-way travel distance:	<u>45.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,046.04</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$25.86</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.00	1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	4.00	2.00

JOB TIME AND COST

Total job time:	<u>8.00</u>	Hours
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Total job cost:	<u>\$2,072</u>
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