

COST SUMMARY WORK

Task description: Initial Estimate

Site: Good Shepherd Ranch Test Cores

Permit Action: 2024-11-01 Estimate

Permit/Job#: P2024013

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 11/1/2024 County: Montrose Filename: P013-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Seal two boreholes	BOREHOLE	1	8.00	\$187
02a	Grade drill pads and office trailer pad	EXCAVATE	1	4.88	\$2,427
03a	Revegetate disturbed areas	REVEGE	1	4.00	\$201
04a	Mobilize reclamation crew and equipment	MOBILIZE	1	6.00	\$1,861
<u>SUBTOTALS:</u>				22.88	\$4,676

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	<u>\$94</u>
Performance bond:	1.05	Total =	<u>\$49</u>
Job superintendent:	0.00	Total =	<u>\$0</u>
Profit:	10.00	Total =	<u>\$468</u>
		TOTAL O & P =	<u>\$611</u>
		CONTRACT AMOUNT (direct + O & P) =	<u>\$5,287</u>

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>\$0</u>	Total =	<u>\$0</u>
Engineering work and/or contract/bid preparation:	<u>0.00</u>	Total =	<u>\$0</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$264</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$876

TOTAL BOND AMOUNT (direct + indirect) = \$5,552

BOREHOLE SEALING WORK

Task description: Seal two boreholes

Good Shepherd Ranch Test
Site: Cores

Permit Action:
2024-11-01 Estimate

Permit/Job#: P2024013

PROJECT IDENTIFICATION

Task #: 01A
Date: 11/1/2024
User: DMC

State: Colorado
County: Montrose

Abbreviation: None
Filename: P013-01a

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
SWA Core Drill	Stainless steel plug - 4 in. diameter borehole	4	5000	1.00	EA	\$93.74	\$93.74
SWB Core Drill	Stainless steel plug - 4 in. diameter borehole	4	5000	1.00	EA	\$93.74	\$93.74

Job Hours: 8.00

Total Cost: \$187.00

HYDRAULIC EXCAVATOR WORK

Task description: Grade drill pads and office trailer pad

Site: Good Shepherd Ranch Test Cores Permit Action: 2024-11-01 Estimate Permit/Job#: P2024013

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 11/1/2024 County: Montrose Filename: P013-02a
User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 311D LRR 8'-6"Stick Horsepower: 80
Attachment 1: ROPS Cab Weight (MT): 12.74
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$244.29</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$218.49</u>	<u>100</u>
Operator Cost/Hour:	<u>\$33.87</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$496.65</u>	
Total Fleet Cost/Hour:	<u>\$496.65</u>	

MATERIAL QUANTITIES

Initial volume: 600 CCY Swell factor: 1.000
Loose volume: 600 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.242 minutes

Load Bucket Capacity

Rated Capacity: 0.68 LCY (heaped) Bucket Size Class: Medium
Bucket Fill Factor: 0.975 Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity: 0.66 LCY

Job Condition Correction Factors

Site Altitude: 8900 feet

		Source
Altitude Adj:	<u>0.90</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.75</u>	<u>multiplier</u>

Unadjusted Hourly Unit Production: 164.38 LCY/Hour
Adjusted Hourly Unit Production: 122.79 LCY/Hour
Adjusted Hourly Fleet Production: 122.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: 4.89 Hours
Unit cost: \$4.045 /LCY Total job cost: \$2,427

REVEGETATION WORK

Task description: Revegetate disturbed areas

Site: Good Shepherd Ranch Test Cores Permit Action: 2024-11-01 Estimate Permit/Job#: P2024013

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
 Date: 11/1/2024 County: Montrose Filename: P013-03a
 User: DMC

Agency 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
Bluebunch Wheatgrass - Secar	7.42	23.85	\$78.01
Mountain Brome - Bromar	3.86	6.20	\$23.23
Sandberg Bluegrass - VNS	0.74	15.71	\$10.69
Idaho Fescue	1.58	19.95	\$22.51
Prairie Junegrass	0.30	15.95	\$14.62
Yarrow, Western	0.50	30.40	\$24.12
Totals Seed Mix	14.40	112.06	\$173.18

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$272.56
Total Seed Application Cost/Acre	\$272.56

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: 0.36 Cost /Acre: \$445.74
 Estimated Failure Rate: 25% Cost /Acre*: \$445.74
 *Selected Replanting Work Items: SEEDING

Initial Job Cost: \$160.47
 Reseeding Job Cost: \$40.12
 Total Job Cost: \$201
 Job Hours: 4.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Mobilize reclamation crew and equipmentSite: Good Shepherd Ranch Test
CoresPermit Action: 2024-11-01 EstimatePermit/Job#: P2024013PROJECT IDENTIFICATIONTask #: 04A State: Colorado Abbreviation: None
Date: 11/1/2024 County: Montrose Filename: P013-04a
User: DMCAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift basis: 1 per day
Cost Data Source: CRG DataTruck 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:

<u>Available Rig Capacities</u>	<u>0-25 Tons</u>	<u>26-50 Tons</u>	<u>51+ Tons</u>
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

NON ROADABLE EQUIPMENT:

<u>Machine Description</u>	<u>Weight/ Unit (TONS)</u>	<u>Owner ship Cost/hr/ unit</u>	<u>Haul Rig Cost/hr/unit</u>	<u>Fleet Size</u>	<u>Haul Trip Cost/hr/ fleet</u>	<u>Return Trip Cost/hr/ fleet</u>	<u>DOT Permit Cost/ fleet</u>
Cat 311D LRR 8'-6"Stick	14.01	\$244.29	\$59.44	1	\$303.73	\$59.44	\$250.00

Subtotals: **\$303.73** **\$59.44** **\$250.00**ROADABLE EQUIPMENT:

<u>Machine Description</u>	<u>Total Cost/hr/ unit</u>	<u>Fleet Size</u>	<u>Haul Trip Cost/hr/ fleet</u>	<u>Return Trip Cost/hr/ fleet</u>
Light Duty Pickup, 4x4, 3/4 T.	\$13.77	1	\$13.77	\$13.77

Subtotals: **\$13.77** **\$13.77**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: MONTROSE
 Total one-way travel distance: 30.00 miles
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,833.80
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$27.54
 ** 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):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.00	2.00

JOB TIME AND COST

Total job time: 6.00 Hours

Total job cost: \$1,861