

COST SUMMARY WORK

Task description: Reclamation Cost Estimate 2019-10-07

Site: Carter - Raymond Exploration Permit Action: 2019-10-07 Permit/Job#: P2019011

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 10/7/2019 County: Gunnison Filename: P011-000
User: DMC

Agency or organization name: _____

TASK LIST (DIRECT COSTS)

| Task | Description | Form Used | Fleet Size | Task Hours | Cost |
|--------------------------|--|-----------|------------|--------------|-----------------|
| 01a | Seal re-opened portals | MINESEAL | 1 | 40.00 | \$19,494 |
| 02a | Seal boreholes | BOREHOLE | 1 | 24.00 | \$8,996 |
| 03a | Final grading-portal and drill pads, backfill trenches | LOADER | 1 | 49.75 | \$5,055 |
| 04a | Revegetate disturbed areas | REVEGE | 1 | 8.00 | \$4,223 |
| 05a | Mobilize reclamation crew/equipment | MOBILIZE | 1 | 4.85 | \$959 |
| <u>SUBTOTALS:</u> | | | | 126.6 | \$38,727 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

| | | | |
|----------------------|-------|---------|---------|
| Liability insurance: | 2.02 | Total = | \$782 |
| Performance bond: | 1.05 | Total = | \$407 |
| Job superintendent: | 63.30 | Total = | \$4,392 |
| Profit: | 10.00 | Total = | \$3,873 |

TOTAL O & P = \$9,454

CONTRACT AMOUNT (direct + O & P) = \$48,181

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>\$2,409</u> |

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$11,863

TOTAL BOND AMOUNT (direct + indirect) = \$50,590

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Seal re-opened portals

Carter - Raymond
Site: Exploration

Permit Action: 2019-10-07

Permit/Job#: P2019011

PROJECT IDENTIFICATION

Task #: 01A
Date: 10/7/2019
User: DMC

State: Colorado
County: Gunnison

Abbreviation: None
Filename: P011-01a

Agency or organization name: _____

UNIT COSTS

| Opening Description | Dimensions | Closure Method | Quantity | Unit | Unit Cost | Total Cost |
|---------------------|--------------|--|----------|------|------------|-------------|
| Portal | 8' x 8' x 8' | Adit closure - grated door (per opening) | 5.00 | EA | \$3,898.80 | \$19,494.00 |

Job Hours: 40.00

Total Cost: \$19,494.00

BOREHOLE SEALING WORK

Task description: Seal boreholes

Carter - Raymond
Site: Exploration

Permit Action:
2019-10-07

Permit/Job#: P2019011

PROJECT IDENTIFICATION

Task #: 02A
Date: 10/7/2019
User: DMC

State: Colorado
County: Gunnison

Abbreviation: None
Filename: P011-02a

Agency or organization name: Deep End Solutions

UNIT COSTS

| Borehole Description | Sealing/Item Method | Diameter | Length | Quantity | Unit | Unit Cost | Total Cost |
|----------------------|---|----------|--------|----------|------|-----------|------------|
| Boreholes (3) | Portland cement grout - 4 in. (labor, equip, materials) | 4 | 600 | 1,800.00 | LF | \$5.00 | \$8,996.40 |

Job Hours: 24.00

Total Cost: \$8,996.00

WHEEL LOADER – LOAD AND CARRY WORKTask description: **Final grading-portal and drill pads, backfill trenches**

Site: **Carter - Raymond Exploration** Permit Action: **2019-10-07** Permit/Job#: **P2019011**

PROJECT IDENTIFICATION

Task #: **03A** State: **Colorado** Abbreviation: **None**
 Date: **10/7/2019** County: **Gunnison** Filename: **P011-03a**
 User: **DMC**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **CAT 450E** Horsepower: **101**
 Attachment 1: **ROPS Cab** Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

| | | Utilization % |
|------------------------|----------|---------------|
| Ownership Cost/Hour: | \$29.73 | NA |
| Operating Cost/Hour: | \$31.22 | 100 |
| Operator Cost/Hour: | \$40.65 | NA |
| Total Unit Cost/Hour: | \$101.60 | |
| Total Fleet Cost/Hour: | \$101.60 | |

MATERIAL QUANTITIES

Initial volume: **5,000** CCY Swell factor: **1.000**
 Loose volume: **5,000** LCY

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

HOURLY PRODUCTION

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): **0.475** minutes

| Cycle Time Factors | | Factor (min.) | Source |
|----------------------------|--|---------------|----------|
| Material: | Mixed material 0.02 | 0.020 | (Cat HB) |
| Stockpile: | No adjustment - factor not applicable 0.00 | 0.000 | (Cat HB) |
| Truck Ownership: | No adjustment - factor not applicable 0.00 | 0.000 | (Cat HB) |
| Operation: | Inconsistent operation 0.04 | 0.040 | (Cat HB) |
| Dump Target: | Nominal target 0.00 | 0.000 | (Cat HB) |
| Net Cycle Time Adjustment: | | 0.060 | minutes |
| Adjusted Basic Cycle Time: | | 0.535 | minutes |

Rolling Resistance – Road Conditions

Haul: **Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0**
 Return: **Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0**

Haul and Return Time

| | Length (feet) | Grade Res. (%) | Rolling Res. (%) | Total Res. (%) | Travel Time (minutes) | Source |
|--|---------------|----------------|------------------|----------------|-----------------------|--------|
|--|---------------|----------------|------------------|----------------|-----------------------|--------|

| | | | | | | |
|---------------|----|------|------|------|--------|----------|
| Haul Route: | 25 | 0.00 | 8.00 | 8.00 | 0.0238 | (Cat HB) |
| Return Route: | 25 | 0.00 | 8.00 | 8.00 | 0.0238 | (Cat HB) |

Total Travel Time: 0.0476 minutesTotal Cycle Time: **0.5826** minutesLoad Bucket Capacity

| | | |
|---------------------|--------------------|--|
| Rated Capacity: | <u>1.50</u> | LCY (heaped) |
| Bucket Fill Factor: | <u>0.825</u> | Blasted rock - avg. blasted (75 - 90%) 0.825 |
| Adjusted Capacity: | <u>1.24</u> | LCY |

Job Condition Correction FactorsSite Altitude: 10000 feet

| | | |
|-----------------|-------------|--------------------|
| Altitude Adj: | <u>0.95</u> | Source (CAT HB) |
| Job Efficiency: | <u>0.83</u> | (1 shift/day) |
| Net Correction: | <u>0.79</u> | multiplier |

| | | |
|------------------------------------|----------------------|----------|
| Unadjusted Hourly Unit Production: | <u>127.46</u> | LCY/Hour |
| Adjusted Hourly Unit Production: | <u>100.50</u> | LCY/Hour |
| Adjusted Hourly Fleet Production: | <u>100.50</u> | LCY/Hour |

JOB TIME AND COSTFleet size: 1 Loader(s) Total job time: **49.75** HoursUnit cost: \$1.011 /LCY Total job cost: **\$5,055**

REVEGETATION WORKTask description: Revegetate disturbed areasSite: Carter - Raymond
ExplorationPermit Action: 2019-10-07Permit/Job#: P2019011**PROJECT IDENTIFICATION**Task #: 04A
Date: 10/7/2019
User: DMCState: Colorado
County: GunnisonAbbreviation: None
Filename: P011-04aAgency or organization name: Deep End Solutions**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 |
|---------------------------|--------------------------------|------------------------|-----------------|
| Alpine Fescue | 6.00 | 179.06 | \$108.60 |
| Canby Bluegrass - Canbar | 5.00 | 106.29 | \$51.25 |
| Sainfoin - Remont | 3.00 | 1.31 | \$9.48 |
| Penstemon, Rocky Mountain | 1.00 | 15.67 | \$29.50 |
| Totals Seed Mix | 15.00 | 302.34 | \$198.83 |

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 |
|---|-----------------|------|-------------|-----------------|
| Straw, delivered {MEANS 31 25 14.16 1200} | 2.00 | TON | \$295.00 | \$590.00 |
| Total Mulch Materials Cost/Acre | | | | \$590.00 |

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 |
|---|--------------|---------------|------------------|---------------------------|---------------|
| | | | | | \$ |
| Totals Nursery Stock Cost / Acre | | | | | \$0.00 |

JOB TIME AND COST

No. of Acres: 3 Cost /Acre: \$1,126.22
 Estimated Failure Rate: 25% Cost /Acre*: \$1,126.22
 *Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: \$3,378.66
 Reseeding Job Cost: \$844.67
 Total Job Cost: \$4,223
 Job Hours: 8.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation crew/equipment**Site: **Carter - Raymond
Exploration**

Permit Action:

2019-10-07

Permit/Job#: P2019011

PROJECT IDENTIFICATION

Task #: 05A

State: Colorado

Abbreviation: None

Date: 10/7/2019

County: Gunnison

Filename: P011-05a

User: DMC

Agency or organization name: Deep End Solutions

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 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 450E | 9.80 | \$29.73 | \$67.39 | 1 | \$97.12 | \$67.39 | \$250.00 |

Subtotals: **\$97.12** **\$67.39** **\$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, 1 T. Crew | \$20.93 | 1 | \$20.93 | \$20.93 |

Subtotals: **\$20.93** **\$20.93**

EQUIPMENT HAUL DISTANCE and Time

| | | |
|--|-----------------|-------|
| Nearest Major City or Town within project area region: | <u>GUNNISON</u> | |
| Total one-way travel distance: | <u>25.00</u> | miles |
| Average Travel Speed: | <u>35.00</u> | mph |

| | |
|-------------------------------------|-----------------|
| Total Non-Roadable Mob/Demob Cost * | <u>\$929.25</u> |
| '* two round trips with haul rig: | |
| Total Roadable Mob/Demob Cost ** | <u>\$29.90</u> |
| ** one round trip, no haul rig: | |

Transportation Cycle Time:

| | Non-Roadable Equipment | Roadable Equipment |
|-------------------------|------------------------|--------------------|
| Haul Time (Hours): | <u>0.71</u> | <u>0.71</u> |
| Return Time (Hours): | <u>0.71</u> | <u>0.71</u> |
| Loading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Unloading Time (Hours): | <u>0.50</u> | <u>NA</u> |
| Subtotals: | <u>2.43</u> | <u>1.43</u> |

JOB TIME AND COST

| | | |
|-----------------|-------------|-------|
| Total job time: | <u>4.86</u> | Hours |
|-----------------|-------------|-------|

| | |
|-----------------|--------------|
| Total job cost: | <u>\$959</u> |
|-----------------|--------------|