



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

May 14, 2021

Patrick Moran
US Forest Service
Rio Grande National Forest
1803 West HWY 160
Monte Vista, CO

**Re: Miller Midwest, File No. P-2021-004, Notice of Intent to Conduct Prospecting Operations (NOI),
Request for Concurrence**

Dear Mr. Moran,

On March 22, 2021 the Division of Reclamation, Mining and Safety received the above listed application for the Miller Midwest Notice of Intent to Conduct Prospecting Operations (NOI) located on US Forest Service Lands (USFS) within Mineral County. During the Division's technical Adequacy Review period a Reclamation Cost Estimate was performed. Based on the details of the project, Division Staff has estimated the total Reclamation Cost to ensure reclamation of all affected lands at \$6,073.00. The Reclamation Cost Estimate Worksheets are enclosed. Per the Memorandum of Understanding, please review these calculations and provide documentation of concurrence for the Financial Warranty amount.

Upon receiving concurrence, the calculation will be provided to the applicant so they may submit the appropriate Financial Warranty for the site. Please note the application will not be granted the final Authorization to Proceed from our office until all necessary permits are also obtained from the USFS and copies are provided to the Division. If you have any questions please feel free to contact me at the Division's Grand Junction Field Office, by phone at 303-866-3567 Ext. 8187 or by email at lucas.west@state.co.us.

Sincerely,

Lucas West
Environmental Protection Specialist
Division of Reclamation, Mining and Safety

Encl: Reclamation Cost Estimate Worksheets

Cc: Tyler Miller, GRE Inc.



COST SUMMARY WORK

Task description: Cost Summary

Site: Miller Midwest

Permit Action: New App

Permit/Job#: P2021004

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 5/12/2021

County: Mineral

Filename: P004-000

User: LJW

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Install closure on adit	MINESEAL	1	0.00	\$3,898
002	Replace earthen backfill	EXCAVATE	1	16.59	\$1,260
003	Mobilization	MOBILIZE	1	4.85	\$915
<u>SUBTOTALS:</u>				21.44	\$6,073

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Install closure on adit

Site: Miller Midwest

Permit Action: New App

Permit/Job#: P2021004

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 5/12/2021

County: Mineral

Filename: P004-001

User: LJW

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Midwest Adit	10 x 10	Adit closure - grate only, no door (per opening)	1.00	EA	\$3,898.00	\$3,898.00

Job Hours: 0.00

Total Cost: \$3,898.00

HYDRAULIC EXCAVATOR WORK

Task description: Replace earthen backfill

Site: Miller Midwest

Permit Action: New App

Permit/Job#: P2021004

PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 5/12/2021

County: Mineral

Filename: P004-002

User: LJW

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 307D 7'-3" Stick

Attachment 1: ROPS Cab

Horsepower: 56

Weight (MT): 7.23

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$19.99	NA
Operating Cost/Hour:	\$18.64	100
Operator Cost/Hour:	\$37.32	NA
Total Unit Cost/Hour:	\$75.95	
Total Fleet Cost/Hour:	\$75.95	

MATERIAL QUANTITIES

Initial volume: 1,714

CCY

Swell factor: 1.000

Loose volume: 1,714

LCY

Source of estimated volume: 150 tons @ 11.4 CY/Ton

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

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

Basic Job Condition Description:	<u>AVERAGE</u>
Secondary Job Condition within Basic Description:	<u>AVERAGE</u>
Cycle Time Value:	<u>0.242</u> minutes

Load Bucket Capacity

Rated Capacity:	<u>0.59</u>	LCY (heaped)
Bucket Fill Factor:	<u>1.025</u>	Rock - Earth Mixture (100%-105%) <u>1.025</u>
Adjusted Capacity:	<u>0.60</u>	LCY

Bucket Size Class: Large

Job Condition Correction Factors

Site Altitude: 10200 feet

Altitude Adj:	<u>0.83</u>	Source (CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.69</u>	multiplier

Unadjusted Hourly Unit Production:	<u>149.94</u>	LCY/Hour
Adjusted Hourly Unit Production:	<u>103.29</u>	LCY/Hour
Adjusted Hourly Fleet Production:	<u>103.29</u>	LCY/Hour

JOB TIME AND COST

Fleet size:	<u>1</u>	Excavator	Total job time:	<u>16.59</u>	Hours
Unit cost:	<u>\$0.735</u>	/LCY	Total job cost:	<u>\$1,260</u>	

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilization**Site: **Miller Midwest**Permit Action: **New App**Permit/Job#: **P2021004****PROJECT IDENTIFICATION**Task #: **003**State: **Colorado**Abbreviation: **None**Date: **5/12/2021**County: **Mineral**Filename: **P004-003**User: **LJW**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:	\$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 307D 7'-3" Stick	7.95	\$19.99	\$67.39	1	\$87.38	\$67.39	\$250.00

Subtotals: **\$87.38** **\$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, 3/4 T.	\$13.23	1	\$13.23	\$13.23

Subtotals: **\$13.23** **\$13.23**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: SOUTH FORK
 Total one-way travel distance: 25.00 miles
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost * \$895.86
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$18.90
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.71	0.71
Return Time (Hours):	0.71	0.71
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.43	1.43

JOB TIME AND COST

Total job time: 4.86 Hours

Total job cost: \$915