



STATE OF
COLORADO

Girardi - DNR, Chris <chris.girardi@state.co.us>

Cat Creek Drilling Project, NOI File P2024009- Adequacy Review and Cost Estimate

1 message

Girardi - DNR, Chris <chris.girardi@state.co.us>

Mon, Sep 30, 2024 at 10:40 AM

To: Sandor AOL Account <ringhoffer@aol.com>

Cc: tchristensen@solitariocorp.com, andrea.jones@usda.gov, Jared Ebert - DNR <jared.ebert@state.co.us>, Sara Stevenson-Benn - DNR <sara.stevenson-benn@state.co.us>

Hello Sandor,

Attached to this email is a copy of the Division's Adequacy Review and Cost Estimate for the Cat Creek Drilling Project NOI File P2024009.

A hard copy will not be mailed unless requested.

Please let me know if you have any questions.

Thanks,
Chris

Chris Girardi

Environmental Protection Specialist Intern



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

P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

chris.girardi@state.us.co | <https://drms.colorado.gov/>



Cat Creek NOI Adequacy Letter and Cost Estimate.pdf
825K



September 30, 2024

Solitario Resources Corp.
Attn: Sandor Ringhoffer
4251 Kipling Street, Ste. 390
Wheat Ridge, Colorado 80033

RE: Cat Creek Drilling Project, DRMS File No. P-2024-009, Notice of Intent to Conduct Mineral Prospecting, Adequacy Review

Dear Sandor Ringhoffer,

On September 4th, 2024, the Colorado Division of Reclamation, Mining and Safety (“DRMS” or “Division”) received a Notice of Intent to Conduct Prospecting Operations for Hard Rock/Metal Mines (“NOI”) form. Our initial review of the NOI indicates that, as of September 12, 2024, you have satisfied the minimum requirements of the Act and the Rules to begin the review process. The Division has begun the technical review process. The following adequacy items in the NOI application need to be addressed before the application can be approved.

General Information:

1. Please indicate the locations of the CC-01 and CC-02 drill pads showing latitude and longitude or Universal Transverse Mercator (UTM) coordinates. Please specify coordinates of latitude and longitude in degrees, minutes, and seconds or in decimal degrees to an accuracy of at least five (5) decimal places. For UTM, the Applicant will need to specify North American Datum (NAD) 1927, NAD 1983, or WG 84, and the applicable zone, measured in meters.

Project Description:

2. Item K- The Applicant states that no water bodies will be disturbed. Is the applicant aware of any aquifer they may encounter while drilling? If so, please identify them. If an unknown water-bearing zone is encountered during drilling operations, please clarify how possible cross contamination of these zones will be prevented.
3. Item K- The Applicant states that approximately 5,000 gallons of water will be used daily for drilling operations from permitted private or public sources. Please clarify the source of the water that will be used for drilling operations and how this will be done in compliance with applicable Colorado water laws and regulation governing injury to existing water rights per Rule 3.1.6(1)(a).
4. Item 5- The Applicant states that two drill sites will have one borehole drilled on each and up to three additional boreholes if warranted. Based on this description, up to four boreholes will be drilled on each drill site for a total of eight (8) boreholes. Please clarify if this is the maximum number of boreholes that will be drilled.



5. Item 5- The Applicant states that the drill sites will be collared within the footprint of Road 237. Please clarify how there will not be significant disturbance to Road 237.
6. Item F- The Applicant states that diesel fuel will be stored in a steel tank mounted on the drill rig. Please clarify what containment measures will be used for spill prevention.

IV. Operation and Reclamation Measures:

7. Item 3- Please clarify the method of seeding and method of mulching to be used.
8. Item 7- There is a typo, 'Sadar Streambank' should read 'Sodar Streambank Wheatgrass'. Please revise.

Financial Warranty

9. Enclosed is the reclamation cost estimate for the proposed operation. Please review the estimate. If you concur with the estimate, please provide the financial warranty with all the applicable forms.

Pursuant to Rule 5.1.3(c) of the Hard Rock/Metal Mining Rules and Regulations, all adequacy items must be addressed within 60 days of this letter (by **November 29, 2024**). If this date arrives and the adequacy concerns have not been addressed and/or the additional financial warranty has not been submitted and accepted by the Division, the NOI will be denied. Please note that prospecting operations may not begin until authorized by the Division and until the Plan of Operations has been approved by the United States Forest Service.

If you have any questions, please contact me at chris.girardi@state.co.us or at (720) 793-3041.

Sincerely,



Chris Girardi
Environmental Protection Specialist Intern

EC: Sandor Ringhoffer, Solitario Resources Corp. ringhoffer@aol.com
Todd Christensen, Solitario Resources Corp. tchristensen@solitariocorp.com
Andrea Jones, USFS, andrea.jones@usda.gov
Jared Ebert, DRMS jared.ebert@state.co.us
Sara Stevenson-Benn, DRMS sara.stevenson-benn@state.co.us

COST SUMMARY WORK

Task description: Sealing of Boreholes and Reclaiming area

Site: Cat Creek Prospecting Operations Permit Action: New NOI Application Permit/Job#: P2024009

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 9/26/2024 County: Conejos Filename: P009-000
User: CMG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Sealing of Boreholes	BOREHOLE	1	234.00	\$201,190
002	Revegetation	REVEGE	1	8.00	\$186
003	Mobilization	MOBILIZE	1	3.40	\$1,296
<u>SUBTOTALS:</u>				245.4	\$202,672

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$4,094
Performance bond:	1.05	Total =	\$2,128
Job superintendent:	78.22	Total =	\$6,200
Profit:	10.00	Total =	\$20,267

TOTAL O & P = \$32,690

CONTRACT AMOUNT (direct + O & P) = \$235,362

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>2.00</u>	Total =	<u>\$4,707</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$11,768</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$49,165

TOTAL BOND AMOUNT (direct + indirect) = \$251,837

BOREHOLE SEALING WORK

Task description: Sealing of Boreholes

Cat Creek Prospecting
Site: Operations

Permit Action:

New NOI Application

Permit/Job#: P2024009

PROJECT IDENTIFICATION

Task #: 001
Date: 9/23/2024
User: CMG

State: Colorado
County: Conejos

Abbreviation: None
Filename: P009-001

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Seal 8 Boreholes with Bentonite-30%	Bentonite seal - 4 in. (labor, equip, materials)	3.76"	2800	6,720.00	LF	\$9.61	\$64,567.10
Seal 8 Boreholes with Cement-70%	Portland cement grout - 4 in. (labor, equip, materials)	3.76"	2800	15,680.00	LF	\$8.71	\$136,622.98

Job Hours: 234.00

Total Cost: \$201,190.00

REVEGETATION WORKTask description: RevegetationSite: Cat Creek Prospecting
OperationsPermit Action: New NOI ApplicationPermit/Job#: P2024009**PROJECT IDENTIFICATION**Task #: 002
Date: 9/23/2024
User: CMGState: Colorado
County: ConejosAbbreviation: None
Filename: P009-003Agency 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
Mountain Brome - Bromar	3.90	6.27	\$23.47
Slender Wheatgrass - San Luis	4.40	16.06	\$26.56
Streambank Wheatgrass - Sodar	4.60	15.00	\$38.19
Totals Seed Mix	12.90	37.32	\$88.22

Application

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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
Hay, delivered {MEANS 31 25 14.16 1200}	3.00	BALE	\$19.71	\$59.13
Tackifier, <10 acres {Materials Only}	0.80	ACRE	\$1,459.26	\$1,167.41
Total Mulch Materials Cost/Acre				\$1,226.54

Application

Description	Cost /Acre
Weed spray, hand, aquatic area, annuals [DMG]	\$151.38
Total Mulch Application Cost/Acre	\$151.38

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: 0.08 Cost /Acre: \$1,738.70
 Estimated Failure Rate: 50% Cost /Acre*: \$1,738.70
 *Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: **\$139.10**
 Reseeding Job Cost: **\$69.55**
 Total Job Cost: **\$209**
 Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilization**Site: **Cat Creek Prospecting
Operations**

Permit Action:

New NOI Application

Permit/Job#: P2024009

PROJECT IDENTIFICATIONTask #: 003
Date: 9/23/2024
User: CMGState: Colorado
County: ConejosAbbreviation: None
Filename: P009-004

Agency or organization name: DRMS

EQUIPMENT 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:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
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:

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
ATLAS COPCO ROC D7-11,4.0 in.	0.25	\$197.26	\$59.44	1	\$256.70	\$59.44	\$250.00
CAT 12M	16.01	\$69.16	\$59.44	1	\$128.60	\$59.44	\$250.00

Subtotals: **\$385.30** **\$118.88** **\$500.00****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.	\$13.77	3	\$41.31	\$41.31
Water Tanker, 3,500 Gal.	\$82.19	1	\$82.19	\$82.19

Subtotals: **\$123.50** **\$123.50**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	MONTE VISTA	
Total one-way travel distance:	27.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost *	\$1,605.02
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$148.20
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	1.20	1.20

JOB TIME AND COST

Total job time:	2.40	Hours
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Total job cost:	\$1,753
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