




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Thornburg Pit	MINE/PROSPECTING ID#: M-1983-060	MINERAL: Sand and gravel	COUNTY: Adams
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: October 26, 2022	INSP. TIME: 10:00
OPERATOR: Thornburg Family Limited Partnership	OPERATOR REPRESENTATIVE: John Wakeham and Stanley Thornburg	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE:	BOND AMOUNT: No Bond Held	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Nikie Gagnon	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 9, 2022	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION-- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This inspection was conducted by Nikie Gagnon of the Division of Reclamation, Mining and Safety (Division). This was a routine succession of operator inspection for the Thornburg Pit. John Wakeham of Bennett Creek Ranch (successor) and Stanley Thornburg (Operator) were present for the inspection.

The Thornburg Pit located 3 miles northeast of the town of Bennett. The site is a 112c operation with 77.94 acres permitted and a maximum allowed disturbance of 53.0 acres. The post-mining land use is general agriculture.

No problems or violations were observed during the inspection. The ground was dry. The site was not active during the inspection. One inactive piece of mining equipment was observed in the M1 pit.

Backfilling and Grading:

The affected area of the mine is estimated to be about six acres in size. Mining has been conducted in the M1, M2 and M3 phased areas and the operator appears to be conducting concurrent reclamation. Two un-reclaimed excavated areas exist at the site. One is a small pit within the M2/M3 area with a highwall that is 18 feet high and approximately 300 feet in length. This area appears to be inactive. The second pit is located in the M1/M2 area and daylight to the north. The highwall in this area is nearly vertical, approximately 20 feet in height and about 350 feet in length. John Wakeham indicated this M2 pit will be the area of mining after the transfer. The reclaimed areas within M1, M2, and M3 have gentle slopes that are at a 3H:1V angle or less.

Hydrologic Balance:

Portions of the permit boundary are within the floodplain of Kiowa Creek. No evidence of active mining within the floodplain was evident during this inspection. All stockpiles are outside of the 100-year floodplain as required by the permit.

Reclamation Success:

Vegetation has established in previously reclaimed areas. No evidence of excessive erosion was observed during this inspection.

Signs and Markers:

The permit identification sign was in place at the entrance to the site. The permit boundary markers were observed in place around the perimeter.

Topsoil:

The topsoil stockpile is located on the north side of the affected land. This pile is stable and vegetated and appears to have been in place for a while.

Financial Warranty:

The Division holds a financial warranty in the amount of \$14, 500. The reclamation cost estimate was reviewed during for the succession application and is attached to this report. The new reclamation bond estimate is \$19,716.

Photographs taken during the inspection are attached. Please contact Nikie Gagnon (303)866-3567 ext. 8126 or email at nikie.gagnon@state.co.us if you have any questions regarding this report.

PHOTOGRAPHS



Mine sign at the entrance to site. Gravel access road leads to active mining area.



Looking north at the topsoil pile (red arrow). Trees along Kiowa Creek in the background.



Looking northeast across reclamation area 2. Red arrow points to small pit excavation in M2/M3 area.



Looking southeast at the highwall in the M2 area. Successor indicates this will be the area of active mining.



Looking south at highwall in the M2 area. Successor indicates this will be the area of active mining.



Looking east from M2 pit floor. Reclaimed M3 area in the distance.

Inspection Contact Address

John Wakeham and Stanley Thornburg
Thornburg Family Limited Partnership
50747 E. 38 Avenue
Bennett, CO 80102

Enclosure

CC: John Wakeman, Bennett Creek Ranch
Jason Music, Senior EPS, DRMS

COST SUMMARY WORK

Task description: _____

Site: Thornburg Pit Permit Action: 2022 SO Cost Estimate Permit/Job#: M1983060

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 11/9/2022 County: Adams Filename: M060-001
User: NCG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfill and grade M2/M3 Pit	DOZER	1	1.38	\$476
002	Backfill and grade M1/M2 Pit	DOZER	1	1.98	\$685
003	Spread topsoil over affected area	SCRAPER1	1	5.83	\$7,665
004	revegetation on 1.5 acres of native grass on slope	REVEGE	1	0.75	\$813
005	revegetation on pit floor to alfalfa	REVEGE	1	2.25	\$1,659
006	Mobilization/demobilization	MOBILIZE	1	2.24	\$5,279
<u>SUBTOTALS:</u>				14.43	\$16,577

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	0.00	Total =	\$0
Performance bond:	0.00	Total =	\$0
Job superintendent:	7.21	Total =	\$542
Profit:	10.00	Total =	\$1,658

TOTAL O & P = \$2,199

CONTRACT AMOUNT (direct + O & P) = \$18,776

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>\$939</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$3,138

TOTAL BOND AMOUNT (direct + indirect) = \$19,715