


**COLORADO**Division of Reclamation,
Mining and Safety

Department of Natural Resources

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: Kirtright Pit	MINE/PROSPECTING ID#: M-1986-123	MINERAL: Sand and gravel	COUNTY: Larimer
INSPECTION TYPE: Monitoring	INSPECTOR(S): Jared L. Ebert	INSP. DATE: November 28, 2018	INSP. TIME: 10:00
OPERATOR: Coulson Excavating Company, Inc.	OPERATOR REPRESENTATIVE: Ken Coulson	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$58,400.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: December 10, 2018

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM: A permanent plan for augmentation has not been obtained for the exposed groundwater at this site. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

CORRECTIVE ACTIONS: The Operator shall submit documentation to the Division that they have applied for a permanent plan for augmentation with the Office of the State Engineer by the corrective action due date.

CORRECTIVE ACTION DUE DATE: 2/04/19

OBSERVATIONS

This was a monitoring inspection of the Kirtright Pit, Division of Reclamation, Mining and Safety ("Division" or "DRMS") permit number M-1986-123, operated by Coulson Excavating Company ("Coulson"). I, Jared Ebert with DRMS conducted the inspection. Mr. Ken Coulson accompanied me during the inspection.

This is a 79.8 acre 112c mining operation located in Larimer County. The approved post-mining land use is designated as Pasture and Wildlife Habitat. The site consists of multiple irregular shaped pit excavations. These pit excavations are depicted on the currently approved reclamation plan map that was approved with Technical Revision No. 1 ("TR01"). Two large pit excavations are located on the east side of the site, the TR01 reclamation map indicates they are 6.73 and 9.5 acres in size. A 1.51 acre pit is located near the center of the site west of a residence constructed on the west side of the eastern pit excavations. In the southwest portion of the site, several pre-1980 pits, 1.51 and 1.48 acres in size exist. In the northwest portion of the site a small .38 acre pit and a 3.37 acre pit exist.

Backfilling and Grading:

The slopes observed around the pit excavations appear to be graded at a 3H:1V ratio or less with the exception of the southwest pre-1980 pit excavation area. The pit slopes around the pre-1980 pit excavation were very steep in places likely near the angle of repose. Mr. Coulson indicated they intended to grade out these pit slopes and reclaim this area in the future.

Financial Warranty:

The Division currently holds \$58,400.00 in the form of a corporate surety for the site. This amount is adequate at this time to complete the surface reclamation activities at the site with the exception of dealing with the exposed groundwater. Previously, Coulson had dedicated water shares to cover the long-term augmentation of the exposed groundwater within the pit excavations. This was outlined in the last Substitute Water Supply Plan ("SWSP") the Division has on file for this site. At this point, mining and reclamation appears to be complete at the site, and the Operator must obtain approval of a permanent plan for augmentation. The Division must receive documentation that the dedication of water shares to cover the long term augmentation at the site is still valid. If not, then Coulson will need to post additional financial warranty to address the exposed groundwater at the site.

Hydrologic Balance:

A permanent plan for augmentation has not been obtained for the exposed groundwater at the site as discussed above. This issue is cited as a problem at the beginning of this report. According to Mr. Coulson, they intend to submit an application for a permanent augmentation plan with the Office of the State Engineer for this site and several other areas in January of 2019. The Division will require the operator to submit documentation they have applied for a permanent augmentation plan by the corrective action date noted at the beginning of the report.

Gen. Compliance With Mine Plan:

Mining is complete at the site. However, Mr. Coulson indicated that they may use a portion of the Kirtright Pit as a stockpile area for the future operations at the Stroh Pit (DRMS Permit No. M-2002-078). If this will occur, the Operator will need to revise the mining and reclamation plan for this site to account for this disturbance and will likely need to evaluate the financial warranty at this site to cover this future disturbance.

Reclamation Success:

Overall, mining appears to be complete at the site and dense vegetation has established throughout the affected land. As discussed above, the Operator will need to address the exposed groundwater at the site prior to being eligible for release.

PHOTOGRAPHS



Figure 1. From the northwest corner of the 6.73 acre east pond looking east.



Figure 2. From the northwest corner of the 6.73 acre east pond looking south.



Figure 3. From the east side of the 6.73 acre east pond looking west at pasture area.



Figure 4. From the southeast end of the 3.37 acre west excavation area looking northwest.



Figure 5. From the northeast corner of the 1.48-acre pre-1980 pit looking southwest.



Figure 6. From the south side of the 1.51-acre central pond looking west.



Figure 7. From the southeast corner of the 9.5 acre eastern most pit looking north.



Figure 8. From the southeast corner of the 9.5 acre eastern most pit looking west.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

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

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

Inspection Contact Address

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