




**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.

<b>MINE NAME:</b> Kauffman Pit	<b>MINE/PROSPECTING ID#:</b> M-1978-327	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Larimer
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> April 14, 2017	<b>INSP. TIME:</b> 10:45
<b>OPERATOR:</b> Jake Kauffman & Son, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Mary Kauffman, Troy Kauffman, Shane Kauffman, Dan Giroux	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$84,440.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> June 14, 2017	

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

## **OBSERVATIONS**

This inspection of the Kauffman Pit (Permit No. M-1978-327) was conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) at the request of the operator's consultant, Dan Giroux of Diversified Consulting Solutions, Inc. The Division had an on-site meeting with Mr. Giroux and the operator to discuss the reclamation status of the operator's two permitted sites in the area (M-1978-327 and M-1999-069). The Division was accompanied by Mr. Giroux, Mary Kauffman, Troy Kauffman, and Shane Kauffman during the inspection. The site is located approximately two miles east of Loveland, Colorado in Larimer County. The site can be accessed from the west off of S Co Rd 9E, and passing through the operator's commercial yard. The affected land is owned by Jake Kauffman & Son, Inc.

This is a 112c operation permitted for 84.2 acres to mine sand and gravel adjacent to and north of the Big Thompson River (see enclosed Google Earth image of site). The operation dewatered mining areas prior to excavation. The maximum mining depth was 14-15 feet, including removal of approximately 18 inches of topsoil and 2-3 feet of overburden. Mined material was processed on site. The operation began in the southern portion of the site and proceeded generally northward leaving a series of unlined ponds. According to the Division of Water Resources (DWR), 36.2 acres of water surface was exposed on site prior to January 1, 1981, and thus does not require replacement of depletions due to evaporation. Currently, there are two unlined ponds included within the approved permit area with a total surface area of 34.7 acres. Because this amount is less than the pre-1981 amount (by 1.5 acres), and existing pond locations are within the boundaries of the pre-1981 areas of exposure, the site is considered to be in compliance with the DWR with regard to the amount of groundwater exposed on site.

The approved reclamation plan for the site includes leaving unlined ponds with shoreline slope gradients ranging from 2.5H:1V to 5H:1V. Portions of disturbed land will be revegetated with a native grass mixture. The approved reclamation plan map (revised with TR-6 approval in 2012; see enclosed map) designates two material storage areas to remain for use by the adjacent commercial yard, including one at the south end of the north pond, and one at the east edge of the south pond. The two storage areas currently consist of approximately 12.5 acres, but may increase in area as the operation continues to backfill these portions of the ponds to gain additional storage area for the commercial operation. The reclamation plan map also designates a recycled materials operation to exist in the south-central portion of the permit area, estimated to be approximately 13.2 acres in size. The permit record indicates this area was mined and then backfilled prior to 2000. Finally, there are two dryland grass pasture areas that will remain for reclamation, one located in the far eastern portion of the permit area (9.1 acres) and the other in the area separating the two ponds (16.9 acres). The approved post-mining land use for the site was changed from pastureland to industrial/commercial with the Division's approval of Revision No. TR-2 in 1998. The operator requested this change in order to create more consistency with county zoning and permitted end use for the site.

According to the Division's last inspection report from July 24, 2015, the site was impacted by the historic flooding that occurred in the area in September of 2013. However, by the time of the inspection, the breeches in the reservoir banks and other related damage had been effectively repaired. According to the operator, the site has been in final reclamation since December of 2011. However, the September 2013 flooding washed away some of the newly seeded areas which were regraded and reseeded in 2014.

During the current inspection, activity was occurring in the recycled materials operation area (**Photos 1-4**) and the two storage areas (**Photos 5-8**). The two ponds appeared to be reclaimed in accordance with the approved reclamation plan as their shorelines have been graded to the approved final slope configuration and are stable with good vegetative cover (**Photos 9-11**). The northern pond appears to have been undisturbed for some time as much of its shoreline vegetation includes mature trees. For the southern pond, shorelines are well-vegetated

except for the eastern portion where the storage area is expanding as the operation continues to backfill this portion of the pond. Shorelines in this area are 4H:1V or flatter (**Photo 12**). Because the operator has designated this area for industrial/commercial use, it will not require revegetation for final release.

The Division inspected the 9.1 acre area located in the far eastern portion of the permit area designated to be reclaimed as dryland grass pasture. This area was graded to nearly flat and had a good mixture of native grasses and forbs established across the entire area (**Photos 13-18**). The operator has placed metal posts at the western edge of this area to separate it from the rest of the permit area. The Division considers the eastern portion of the permit area to be reclaimed in accordance with the approved reclamation plan. After the inspection, on May 23, 2017, the Division received an Acreage Reduction request (Revision No. AR-2) from the operator to release this portion of the permit area. At the same time, the operator also submitted a Surety Reduction request (Revision No. SR-2) to remove costs for reclaiming this portion of the permit area from the required financial warranty. On June 1, 2017, the Division sent notice of these requests to the landowner, Larimer County, the local Soil Conservation District, and the Division of Water Resources. The public comment period for these requests will end on June 16, 2017. So far, the Division has only received a comment from DWR (see enclosed comment received on June 8, 2017). If no objections are received within the public comment period, the Division will approve Revision No. AR-2 to release the 9.1 acre area, reducing the permit area to 75.1 acres.

The Division observed Common mullein and Canada thistle growing on site, mainly along pond shorelines. Because these weeds are considered state-listed noxious weed species, the operator shall work to control their growth and spread within the affected lands. The weed management plan for the site was modified with Revision No. TR-5 in 2006. The Division recommends the operator implement the approved weed control plan as soon as possible.

Because the site appears to have been reclaimed in accordance with the approved post-mining land use, the Division recommends the operator request a full release of the permitted area in the near future. The site lies in the floodplain of the Big Thompson River, which has experienced two 100-year flood events in the past 41 years. If a similar flood event were to occur while the site was still permitted, it would likely cause damage to areas that have been reclaimed. As long as the site remains permitted, the Division would require the operator to repair and reclaim these areas in accordance with the approved plan, and may increase the required financial warranty accordingly. Therefore, it is in the operator's best interest to release the site once the Division has determined it to be releasable. At this time, the Division may only need to retain costs for interseeding portions of the site and for weed control. The Division is currently reviewing the required financial warranty for the site, and any correspondence regarding the matter will be associated with Revision No. SR-2.

## PHOTOGRAPHS



**Photo 1.** View of recycled materials operation located in southern portion of permit area. This area was active during the inspection.



**Photo 2.** View of recycled materials operation located in southern portion of permit area. This area was active during the inspection.





**Photo 3.** View of recycled materials operation located in southern portion of permit area. This area was active during the inspection.



**Photo 4.** View of recycled materials operation located in southern portion of permit area. This area was active during the inspection.





**Photo 5.** View of storage area located east of the south pond. This area will remain after reclamation for use by the operator's adjacent commercial business.



**Photo 6.** View of storage area located east of the south pond. This area will remain after reclamation for use by the operator's adjacent commercial business.





**Photo 7.** View of storage area located south of the north pond. This area will remain after reclamation for use by the operator's adjacent commercial business.



**Photo 8.** View of storage area located south of the north pond. This area will remain after reclamation for use by the operator's adjacent commercial business.





**Photo 9.** View looking north across south pond. All shorelines have been reclaimed except for the eastern portion which is part of the storage area to remain for industrial/commercial use.



**Photo 10.** View looking north across north pond. All shorelines have been reclaimed except for a portion of the southern shoreline which is part of the storage area to remain for industrial/commercial use.





**Photo 11.** View looking northeast across north pond. All shorelines have been reclaimed except for a portion of the southern shoreline which is part of the storage area to remain for industrial/commercial use.



**Photo 12.** View looking southwest across eastern shoreline of south pond with slope gradients of 4H:1V or flatter. This portion of the south pond shoreline is part of the storage area that will remain for industrial/commercial use.





**Photo 13.** View looking northeast across 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.



**Photo 14.** View looking east across 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.





**Photo 15.** View looking south across 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.



**Photo 16.** View looking north across 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.





**Photo 17.** View looking west across 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.



**Photo 18.** Close-up view of grasses established in 9.1 acre area in eastern portion of permit area reclaimed to dryland grass pasture.



**Inspection Contact Address**

Mary Kauffman  
Jake Kauffman & Son, Inc.  
808 SCR 9E  
Loveland, CO 80537

Enclosures: Google Earth image of site  
Reclamation Plan Map, revised with TR-6 approval in 2012  
Comment from DWR on AR-2, received June 8, 2017

CC: Dan Giroux, Diversified Consulting Solutions, Inc. (via email at: [dangiroux@terramax.us](mailto:dangiroux@terramax.us))  
Wally Erickson, DRMS



# M1978-327 / Kauffman Pit / Jake Kauffman & Son, Inc.

Red Outline = 84.2 acres = Approved Permit Area

Blue Outline = 34.7 acres = Total Exposed Groundwater (25.8 acres north pond + 8.89 acres south pond)

Purple Outline = 9.1 acres = AR-2 Partial Release Request

(Image data from 9/7/2016)







Revision and Update Record	
No.	Revision / Update Notes

0 50 100 200  
Scale: 1" = 200'

Project No.	
Date	12/10/12
By	dpg/LD
Sheet	1 / 1

**JAKE KAUFFMAN and SON, INC.**  
**LARIMER COUNTY, COLORADO**  
**M-78-327**  
**TR-06**  
**EXHIBIT F - FINAL RECLAMATION PLAN**  
**WITH FINAL POST-MINING AFTER-USES**

DCS, Inc.  
433 4th Avenue West  
Craig, CO 81625  
P: (970) 866-3100  
F: (970) 866-3100  
E: daniel@dcsm.com  
W: www.dcs-inc.com

RECEIVED  
DEC 11 2012  
Division of Reclamation,  
Mining & Safety

PREPARED BY  
DANIEL P. GIBSON, P.E.  
DATE  
12/10/2012  
DCS, INC.






**COLORADO**  
Division of Water Resources  
Department of Natural Resources

1313 Sherman Street, Room 821  
Denver, CO 80203

## Response to Reclamation Permit Partial Acreage Release Request Consideration

DATE: June 8, 2017  
TO: Amy Eschberger, Environmental Protection Specialist ([amy.eschberger@state.co.us](mailto:amy.eschberger@state.co.us))  
CC: Division 1 Office, District 4 Water Commissioner  
FROM: Sarah Brucker, P.E.   
RE: Kauffman No. 1 Pit, File No. M-1978-327 - AR02  
Applicant/Operator: Jake Kauffman & Son, Inc., 970-667-1557  
Sections 20 & 21, Twp 5 North, Rng 68 West, 6<sup>th</sup> P.M., Larimer County

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**COMMENTS:** The applicant has requested a partial acreage release for 9.10 acres of the Kauffman No. 1 Pit. The Kauffman No. 1 Pit is a sand and gravel mining operation located near Loveland, Colorado. Approximately 75.1 acres will remain within the permit boundary.

All mining at the site has ceased, and reclamation of the site is complete or nearly complete. There are three unlined ponds on the site, all of which were exposed to the atmosphere through sand and gravel mining operations prior to January 1, 1981. The portion of the site requested to be released is currently dryland grass pasture.

Ongoing lagged depletions associated with past mining operations at the site are replaced under a substitute water supply plan, currently valid through December 31, 2017. Additional substitute water supply plans are required until all lagged depletions are replaced (currently projected to extend through February 2020).

Based on the above, this office has no objection to the requested partial acreage release. The applicant may contact the State Engineer's Office with any questions.

