




**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> Wagner/Kauffman Pit #3	<b>MINE/PROSPECTING ID#:</b> M-1999-069	<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> July 11, 2019	<b>INSP. TIME:</b> 10:00
<b>OPERATOR:</b> Jake Kauffman & Son, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Troy 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> None	<b>BOND AMOUNT:</b> \$570,000.00	
<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> August 9, 2019	

**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>N</u>	(BG) BACKFILL & GRADING----- <u>Y</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>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</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 Wagner/Kauffman Pit #3 (Permit No. M-1999-069) was conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) at the request of the operator to discuss remaining reclamation for the site. The operator was represented by Mr. Troy Kauffman and Mr. Dan Giroux during the inspection. The site is located approximately 2 miles east of Loveland, CO in Larimer County. The site can be accessed from the west off Co Rd 9E, and passing through the operator's commercial yard and other permitted site, the Kauffman Pit (Permit No. M-1978-327). The affected lands are owned by the operator. **Photos 1-13** taken during the inspection are included with this report.

This is a 112c operation permitted for 86.7 acres to mine sand and gravel. The site is situated just north of the Big Thompson River, and is bisected by the Boyd Lake Outlet Ditch. The operation dewatered areas prior to excavation. The maximum mining depth was approximately 20 feet. The site was mined in three phases, generally from east to west. A roadway embankment was constructed along the City of Loveland right-of-way that runs generally north-south across the property, separating the East Reservoir (east of the embankment) from the other two pits (west of the embankment). The majority of the originally permitted lands have been released over the years through a series of acreage reductions, including the most recent Acreage Reduction No. 8 (approved May 24, 2018), which released the East Reservoir (a clay-lined reservoir approved by the Office of the State Engineer) from the permit area for use by the City of Loveland. At this time, all that remains in the permit area are the two pits located west of the embankment (separated by the outlet ditch), and the access road/embankment (see enclosed Google Earth Image). Mining is complete and the site is in final reclamation.

The approved post-mining land use for the remaining affected lands is industrial/commercial. The approved reclamation plan, as last revised through Technical Revision No. 5 (TR-5), calls for backfilling the pits to a minimum of two feet above the static groundwater level, then grading these areas flat for outdoor storage use by the operator's nearby commercial yard (similar to how other portions of the property are already being used). The operator demonstrated in TR-5 that the areas proposed for outdoor storage are county zoned for this industrial/commercial use. All disturbed slopes will be graded to 3H:1V or flatter. Areas not to be utilized for outdoor storage will be retopsoiled at a depth of 6 inches, and seeded with a native grass seed mixture. Existing roads will remain for reclamation for continued use in accessing the outdoor storage areas.

The Division first inspected the triangular-shaped pit located east of the outlet ditch (east pit). This pit disturbance covers approximately 22 acres. During its April 14, 2017 inspection, the Division observed the east pit to be holding approximately 5.8 acres of water at a depth of approximately 2 feet. The operator's Substitute Water Supply Plan (SWSP) covers 0.0145 acres of groundwater exposed in the temporary dewatering trench (located in the west pit), and does not cover any additional exposed groundwater for this permit. Therefore, in late 2017, the operator backfilled this pit a minimum of two feet above the static groundwater level. Since that time, the operator has continued backfilling the pit from the north to the south to create a more ideal grade for outdoor storage. The majority of this pit has been backfilled and graded to nearly flat. Technical Revision No. 4 (TR-4, approved in 2017) authorizes the operator to import inert materials to the site for backfilling the pits. During the current inspection, the Division observed some shallow puddles at the southern edge of the east pit. The operator indicated this area had been dry since it was backfilled in 2017, but some ponding was observed in this area again this spring. The operator believes the higher than average precipitation the area has been receiving this year may have raised the groundwater table to higher than normal static conditions and also created some ponding of meteoric water in low-lying areas. While the operator expects this area to dry out, the Division recommended the operator place additional backfill in this area to cover the ponded water, thus ensuring compliance with the Division of Water Resources.

Concrete rubble is currently stockpiled in the northwestern portion of the east pit, in accordance with the post-

mining land use of outdoor storage. The large topsoil stockpile that was stored at the northern edge of this pit during the Division's May 22, 2018 inspection, has been spread out across the northern portion of the pit which does not require additional backfilling. The footprint area of the old stockpile is vegetated with primarily annual weeds at this time, which is in contrast to the adjacent lands to the north which have a good establishment of native grasses. The Division recommends the operator employ methods of weed control to prevent the growth and spread of weeds on site, particularly for any state-listed noxious weed species, as required by Rule 3.1.10(6).

The Division inspected the west pit located west of the outlet ditch. This pit is approximately 15 feet deep and covers approximately 34 acres. The west pit was observed to be dry during the inspection, besides the small dewatering trench located at the southern edge of the pit (which is covered by the operator's SWSP). The operator continues to pump water from the dewatering trench and discharge the water into the adjacent unlined pond located in the Kauffman Pit permit area, as authorized under the SWSP. The operator currently pumps from the trench about once per week. The operator continues to backfill the west pit generally from the north to the south. Since the Division's last inspection of the site on May 22, 2018, the operator has placed approximately 8 feet of backfill material in the northern portion of the pit, covering approximately 2-3 acres. As mentioned above, the approved reclamation plan requires the operator to backfill the pits to a minimum of two feet above the static groundwater level. However, the static groundwater level in this pit will not be known until the dewatering operations have ceased. For final release, the operator will need to stop dewatering, and backfill the pit to cover any exposed groundwater, which will most likely occur in the lower southern portion of the pit. A few overburden stockpiles are stored in the pit, including one large stockpile along its northern edge. This material will be used in reclamation. The majority of the pit slopes have been graded to 3H:1V or flatter and revegetated with native grasses. Only portions of the southern pit wall (near the dewatering trench) have steeper slopes.

At this point in time, the Division estimates remaining reclamation at the site to include:

- Backfilling the pits to a minimum of two feet above the static groundwater level. No portion of the affected lands can be released from the permit with exposed groundwater that is not covered under a water court approved augmentation plan.
- Leveling out the backfilled areas for outdoor storage use.
- Grading/backfilling portions of the southern slope of the west pit which are steeper than the approved 3H:1V final slope configuration.

Given the length of time that has passed since mining operations ceased, the Division strongly encourages the operator to complete final reclamation of the site in accordance with Rule 3.1.3, which requires all reclamation to be carried to completion with all reasonable diligence, and each phase of reclamation be completed within 5 years from the date the operator informs the Division that such phase has commenced.

This concludes the report.

*Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at [amy.eschberger@state.co.us](mailto:amy.eschberger@state.co.us).*



## PHOTOGRAPHS



**Photo 1.** View looking south across east pit, showing majority of pit backfilled and graded nearly flat.



**Photo 2.** View looking east across east pit, showing majority of pit backfilled and graded nearly flat.





**Photo 3.** View looking south across east pit, showing ponding present at lower, southern edge of pit due to recent heavy precipitation events.



**Photo 4.** View looking southeast across east pit from its northern edge, showing majority of pit backfilled and graded nearly flat.





**Photo 5.** View looking west showing concrete rubble stockpiled in northwestern portion of east pit, in accordance with the post-mining land use of outdoor storage.



**Photo 6.** View looking east along northern edge of east pit, showing area where topsoil stockpile was spread out. This area is currently overgrown with primarily weeds.





**Photo 7.** View looking northeast across northern portion of west pit (west of outlet ditch) which has been backfilled since last inspection.



**Photo 8.** View looking north across northern portion of west pit, showing edge of backfilled portion (at right). Note large overburden stockpile stored along northern edge of pit (in background).





**Photo 9.** View looking south across northern portion of west pit which has been backfilled since last inspection.



**Photo 10.** View looking south across unbackfilled southern portion of west pit.





**Photo 11.** View of small dewatering trench present at southern edge of west pit, from which water is pumped and discharged into adjacent Kauffman Pit pond.



**Photo 12.** View looking southeast across west pit from its western edge.





**Photo 13.** View looking northeast across west pit from its western edge. Note backfilled portion in background (top, center).

**Inspection Contact Address**

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502 S County Road 9E  
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Encl: Google Earth image of site

CC: Dan Giroux  
Terramax, Inc.  
4220 Golf Vista Drive  
Loveland, CO 80537

Michael Cunningham, DRMS



**M-1999-069 / Wagner-Kauffman Pit #3 / Jake Kauffman & Son, Inc.**

Red Outline = 86.7 acres = Approved Permit Area (after AR-8 approval on 5/24/2018)  
(Image data from 10/14/2017)

