

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY 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:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Rocky Ford East Pit	M-1977-560	Sand and gravel	Otero
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Partial Release Inspection	Amy Eschberger, Wally Erickson	May 13, 2016	10:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
VALCO, INC.	Tom Brubaker and Steve O'Brian	112c - Construction Regular Operation	

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Partial Release Requested	Complete Bond	\$193,678.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	any Eschlerager	February 21, 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 NA	(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>	(SW) STORM WATER MGT PLAN <u>Y</u>	(CI) COMPLETE INSP N
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP <u>Y</u>
(AT) ACID OR TOXIC MATERIALS NA	(OD) OFF-SITE DAMAGE <u>Y</u>	(ST) STIPULATIONS <u>NA</u>

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

OBSERVATIONS

This inspection of the Rocky Ford East Pit (Permit No. M-1977-560) was conducted by Amy Eschberger and Wally Erickson of the Division of Reclamation, Mining and Safety (Division) in response to an Acreage Reduction request (Revision No. AR-01) submitted by the operator on April 29, 2016. Mr. Tom Brubaker represented the operator, Valco, Inc. during the inspection. Mr. Steven O'Brian of Environment, Inc. was also present for the inspection. The site is located approximately 1.5 miles east of Rocky Ford, Colorado, just north of and adjacent to Hwy 50. The permit area is divided into two parcels by Co Rd 22, giving a western parcel comprised of 71.83 acres where mining activities first occurred on site, and a larger eastern parcel comprised of 107.33 acres which was added to the permit area with approval of permit amendment no. 1 (Revision No. AM-01) in 1995. This inspection focused on the western parcel for which the acreage reduction was requested. Access to the western parcel is from the southwest off of Hwy 50. The affected land for the requested release is owned by Valco, Inc. and the City of Aurora.

This is a 112c operation that was permitted for 179.16 acres to mine sand and gravel via dragline or dredge (wet mining). It should be noted, the Division corrected the permitted acreage amount from 189.20 acres to 179.16 acres with Revision No. AD-01, issued on 5/3/2016. This was not an acreage reduction, but a correction to the acreage amount that was entered into the Division's permit system after approval of Revision No. AM-01 in 1995. The actual permitted acreage on the ground did not change with this revision. Revision No. AR-01 requested a release of 31.86 acres from the western parcel, including 4.48 acres of land along the northern edge and 27.38 acres of land and pond along the southern edge (see enclosed revised maps submitted with AR-01). The northern release area was part of the plant site area in 1997 and was never redisturbed. The southern release area includes two sections that were disturbed prior to 1977 that were never redisturbed, a section of shoreline that was reclaimed, and approximately 17.4 acres of pond surface area that was exposed prior to 1981. According to the operator's Substitute Water Supply Plan (SWSP) held with the Division of Water Resources, the site is covered for a total groundwater exposure of 47.3 acres, including 17.4 acres of pre-1981 exposure and 29.9 acres of post-1981 exposure. Revision No. AR-01 proposed to release the pre-1981 exposed 17.4 acres of pond from the permit area. This would leave 29.9 acres of exposed groundwater allowed for the site under the SWSP. The Division estimates there is approximately 45.15 acres of exposed groundwater on site (see enclosed Google Earth image of site). Therefore, with the release of the pre-1981 exposed 17.4 acres of pond, there would be 27.75 acres of exposed groundwater remaining, which is in compliance with the maximum of 29.9 acres allowed by the SWSP.

The Division observed the northern release area of 4.48 acres. This area appeared to have never been disturbed by the operation, with vegetative cover consisting of mature trees and well-established native grasses and forbs (**Photos 1 and 2**). A two-string wire fence separates the northern release area from the rest of the permit area until it reaches the corner posts at the western edge of the Crystal Drainage Ditch. At this point, the southern boundary of the northern release area follows the southern edge of the Crystal Drainage Ditch (**Photo 3**). The Division observed a few small cuts and old waste rock stockpiles present in the northern portion of the site (**Photo 4**) which will remain in the permit area to be reclaimed.

The Division observed the southern release area of 27.38 acres, including the pre-law disturbed southern shoreline of the small pond and eastern shoreline of the larger pond, the pre-law disturbed southwestern edge of the permit area, and the reclaimed southern shoreline of the larger pond. The southern shoreline of the small pond has slope gradients of approximately 1H:1V to 2H:1V, with mature trees growing along the pond edge (**Photo 5**). According to the approved permit materials, this shoreline of the smaller pond was disturbed before the site was permitted, and would not be redisturbed by the operation. The approved reclamation plan calls for leaving this portion of the pond as-is as long as it was not redisturbed.

The Division observed the sliver of land connecting the small pond to the larger pond, the southern edge of which was proposed for release. This area was also disturbed prior to the site being permitted and was not redisturbed by the operation. This area appeared to be stable with vegetative cover consisting of native grasses, forbs, and cottonwood trees (**Photo 6**). The portion of pre-law disturbed land located west of the small pond was also covered with native grasses and forbs, with mature trees growing along the southern fenceline (**Photos 7 and 8**).

The Division observed the reclaimed southern shoreline of the larger pond. The slopes along this shoreline appeared to be graded to flatter than 3H:1V, with various grasses, shrubs, and trees established across the slopes (**Photos 9 and 10**). This area appears to have been reclaimed many years ago. The pre-law disturbed eastern shoreline had slope gradients of approximately 2H:1V to 3H:1V, and also exhibited a well-established stand of grasses, shrubs, and several trees (**Photos 11 and 12**). The southern release area includes 17.4 acres of exposed groundwater, so the revised permit boundary will cut across the ponds. The Division discussed with the operator the possibilities for adequately delineating the revised southern permit boundary, including placing a buoy at the boundary corner located near the center of the larger pond. The other boundary corners are on land, and could be easily marked with stakes.

The Division received no comments or objections to the partial release before the public comment period closed on 5/18/16. Therefore, on 6/2/2016, the Division approved Revision No. AR-01, reducing the total permit area to 107.30 acres, including 39.97 acres in the western parcel, and 107.33 acres in the eastern parcel.

PHOTOGRAPHS



Photo 1. View looking north, showing northern release area for AR-01.



Photo 2. View looking northeast, showing northern release area for AR-01.



Photo 3. View looking northeast, showing Crystal Drainage Ditch (green area at center). Northern permit boundary follows southern edge of ditch (at right).



Photo 4. View looking northwest, showing disturbed area at northern edge of site to remain in permit area.



Photo 5. View looking southwest, showing pre-law disturbed southern shoreline of small pond released in AR-01.



Photo 6. View looking south, showing pre-law disturbed portion of land connecting two ponds released in AR-01.



Photo 7. View looking south, showing pre-law disturbed portion of land west of small pond released in AR-01.



Photo 8. View looking southeast, showing pre-law disturbed portion of land west of small pond released in AR-01.



Photo 9. View looking south from northern edge of larger pond, showing reclaimed southern shoreline released in AR-01.



Photo 10. View looking southwest from eastern edge of larger pond, showing reclaimed southern shoreline released in AR-01.



Photo 11. View looking north across pre-law disturbed eastern shoreline of larger pond released in AR-01.



Photo 12. View looking south across pre-law disturbed eastern shoreline of larger pond released in AR-01.

PERMIT #: M-1977-560 INSPECTOR'S INITIALS: AME INSPECTION DATE: May 13, 2016

Inspection Contact Address

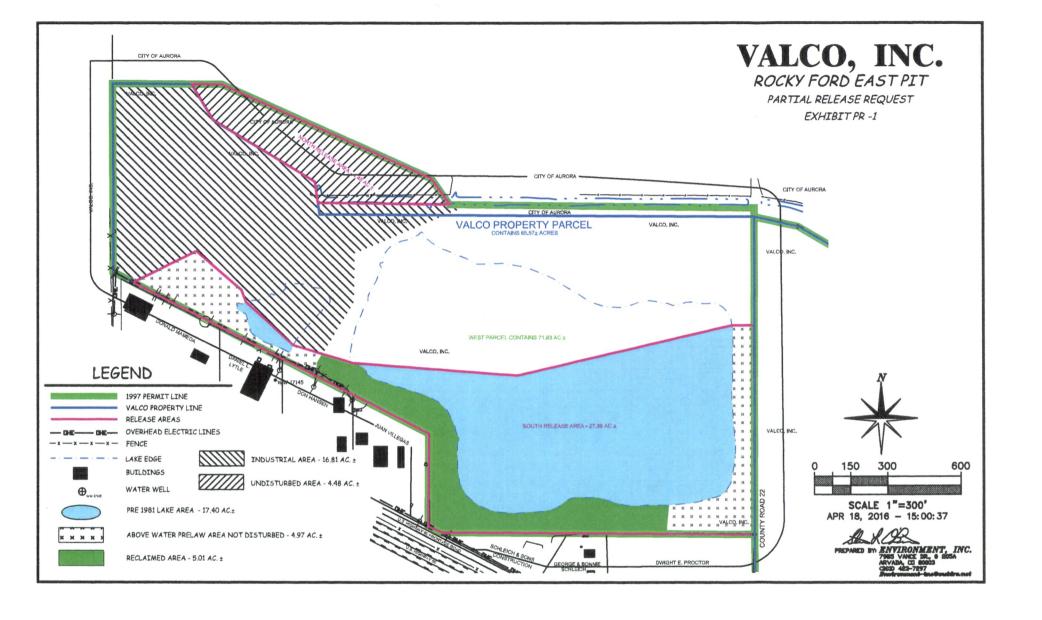
Tom Brubaker VALCO, INC. 9296 Windhaven Dr. Parker, CO 80134

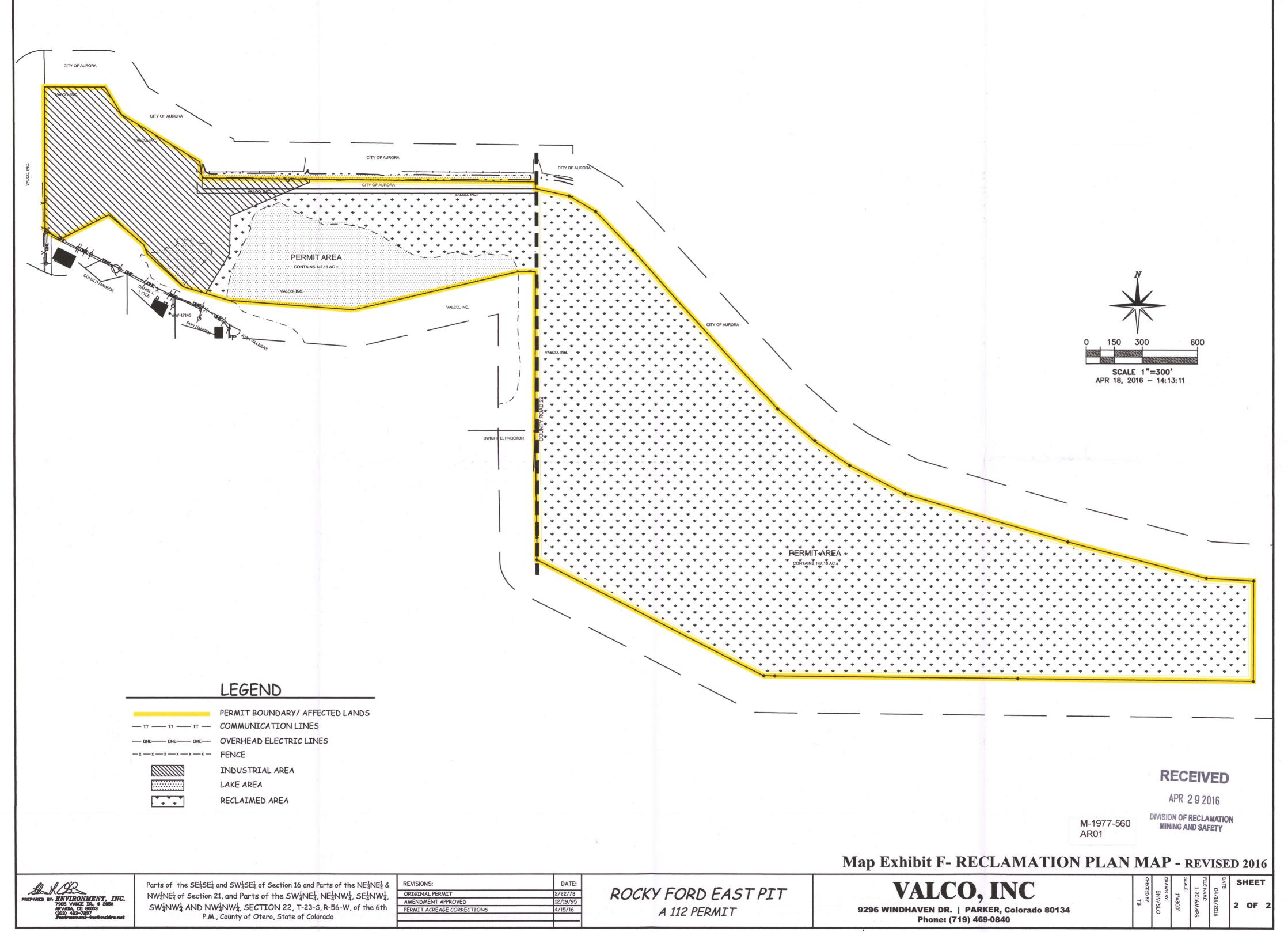
Enclosure(s): Revised maps submitted with AR-01

Google Earth image of site

EC: Steven O'Brian, Environment, Inc. (Environment-inc@outdrs.net)

Wally Erickson, DRMS (Wally. erickson@state.co.us)





 $SW_4^1NW_4^1$ AND $NW_4^1NW_4^1$, SECTION 22, T-23-S, R-56-W, of the 6th P.M., County of Otero, State of Colorado

ORIGINAL PERMIT

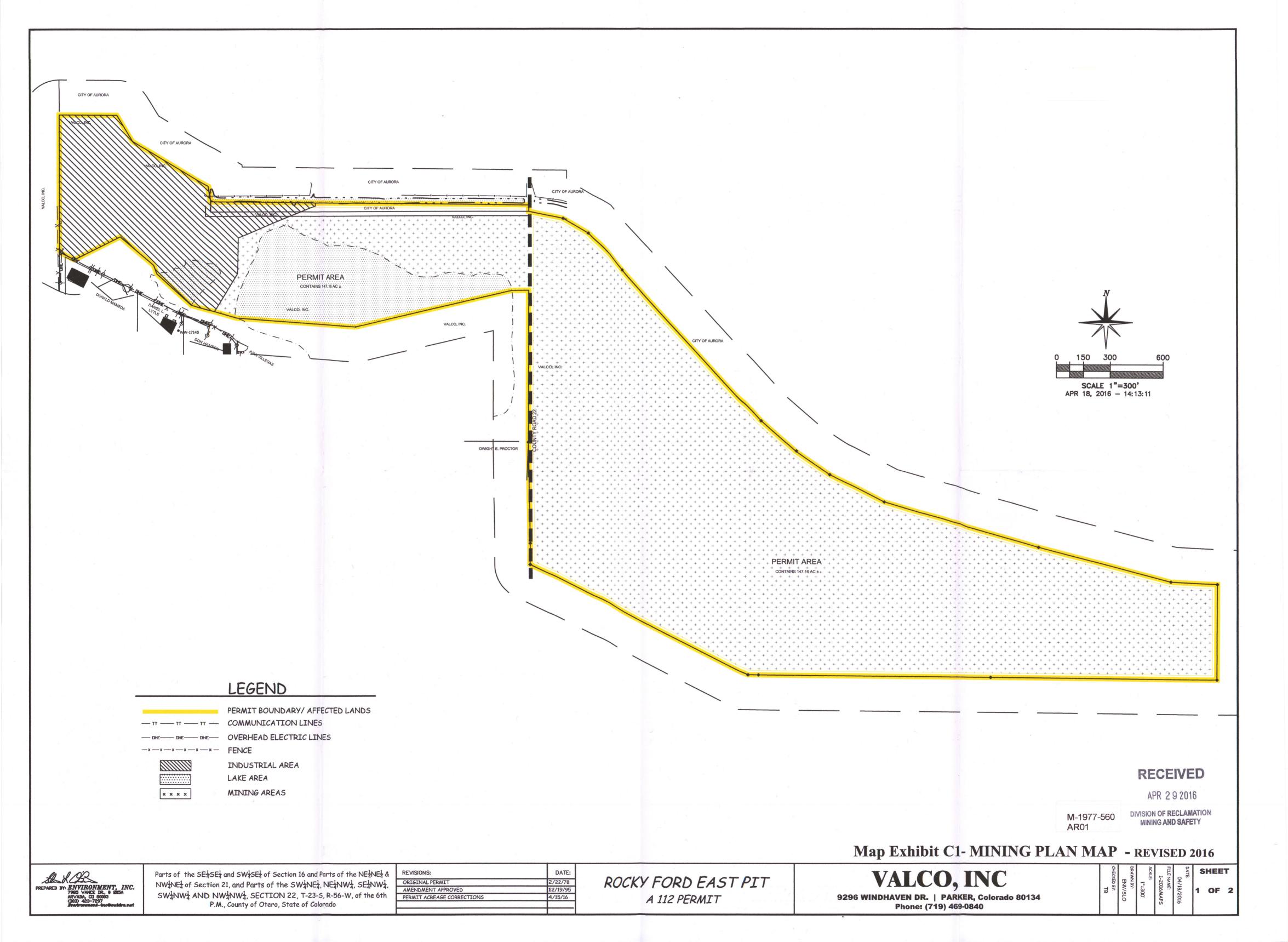
AMENDMENT APPROVED

PERMIT ACREAGE CORRECTIONS 4/15/16

A 112 PERMIT

9296 WINDHAVEN DR. | PARKER, Colorado 80134 Phone: (719) 469-0840

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M-1977-560 / Rocky Ford East Pit / Valco, Inc. Purple Outline = 71.83 acres = Old permit area in western parcel Red Outline = 147.30 acres - New permit area with AR-01 approval (39.97 acres western parcel + 107.33 acres eastern parcel) Blue Outline = 45.15 acres = Total exposed groundwater on site; 27.75 acres within permit area after AR-01 approval (17.4 acres released) (Image data from 3/19/2016) M1977-560 Google earth © 2016 Google