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: NCCI Pit #1	**MINE/PROSPECTING ID#:** M-2001-107	**MINERAL:** Sand and gravel	**COUNTY:** Weld
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** September 14, 2023	**INSP. TIME:** 12:00
OPERATOR: Northern Colorado Constructors, Inc. Aggregate Div	**OPERATOR REPRESENTATIVE:** Chris Zadel and JC York	**TYPE OF OPERATION:** 112c - Construction Regular Operation	
REASON FOR INSPECTION: Citizen Complaint	**BOND CALCULATION TYPE:** None	**BOND AMOUNT:** $486,745.00	
DATE OF COMPLAINT: 8/26/23	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None	
INSPECTOR(S): Hunter Ridley Michael Cunningham	**INSPECTOR'S SIGNATURE:** Hunter Ridley	**SIGNATURE DATE:** October 3, 2023	

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/POSSIBLE VIOLATION: Problem: The current mine plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116 (4)(h). The operator must provide sufficient information to describe or identify how the operator intends to minimize disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quality and quantity of water in surface and groundwater systems, both during and after the mining operation and during reclamation.

CORRECTIVE ACTIONS: By the corrective action date, the operator shall submit a Technical Revision, with the required $216 revision fee, to update the current approved mine plan materials to include a copy of the groundwater impact analysis done for the City of Thornton which models groundwater impacts to areas surrounding the NCCI Pit #1.

CORRECTIVE ACTION DUE DATE: 10/18/23

OBSERVATIONS

On August 26, 2023 the Colorado Division of Reclamation Mining, and Safety (Division) received a citizen's complaint (CT-02) from a Mr. Patrick Hladky. For the past four years, Mr. Patrick Hladky has leased and farmed approximately 14 acres of land owned by Richard Hein located directly adjacent to the NCCI Pit #1 boundary line to the west. The complaint alleged that NCCI Pit #1 site was blocking return flows to the South Platte, causing groundwater levels in the western adjacent fields where Mr. Hladky farms (Photo 3), to become unusually high. In consequence, raised water levels have damaged crops, caused machinery to become stranded in the mud, and restricted access to stock animals. Mr. Hladky submitted several photos of these conditions as part of the complaint.

Both the citizen and Operator were contacted on August 28, 2023 regarding CT-02. In response to this complaint the Division conducted a site inspection on September 14, 2023. Hunter Ridley and Michael Cunningham of the Division met with Chris Zadel and JC York, who represent the Operator on site (NCCI). After the inspection of the NCCI Pit #1, the Division met with Patrick Hladky for an inspection of his property. Photographs from both inspections are included within this report.

The NCCI Pit #1 site is an 112c regular construction materials operation permitted for 175.63 acres. The site is in final reclamation. The approved post-mining land use for the site is developed water resources. Construction of a clay liner around the perimeter of the southern pit has been completed, dewatering activities have ceased, and the liner is undergoing the standard State Engineers Office 90 day leak test. City of Thornton is the landowner of this site.

The mine identification sign is in place and in compliance with Rule 3.1.12. The sign is attached to the western fence line along CR 25. The turnoff for site entrance is also west off of CR 25, though slightly further north than where the sign is posted.

Citizen Complaint: Once on site, the Division discussed the details leading up to the citizen's complaint. NCCI has been dewatering the pit for approximately 13 years and has only recently reduced pumping activity as installation of the clay liner has progressed and eventually been completed. Dewatering activities have not occurred at the site for about 12 months. Groundwater levels at the site were originally measured by a set of fifteen monitoring wells. Throughout the life of the mine, these wells were either destroyed or removed as mining progressed. Since then, groundwater conditions at the site have been monitored using seven wells owned by the City of Thornton. An updated map of these monitoring wells has been included with this report. Wells MW-Z1 and MW-Z2 are located directly on Mr. Hladky's farmlands. Pre-mine baseline data is available and shows groundwater levels in monitoring wells Z1-Z2 beginning in August 2010. Data for wells Z3 through Z7 are available beginning in August 2019. At the time of inspection, the Division did not have monitoring well data from 2023. Since the date of inspection, however, this information has been provided to the Division for review. NCCI and the Division also discussed the importance of reviewing any groundwater impact reports which had been completed for the site. NCCI stated that this information would be made available to the Division. **Thus, the Division has cited a problem pursuant to C.R.S. 34-32.5-112 (1)(c)(VI).** The permit file will need to be updated with proof of a groundwater impact analysis at the NCCI Pit #1. Please submit this information to the Division through a Technical Revision by the corrective action due date.

NCCI representatives showed the Division the western boundary line which separates the pit from Mr. Hladky's croplands (Figure 1). Little Dry Creek runs along this property line and through a culvert located on the NCCI pit's side (Photos 1 and 2). NCCI representatives stated that groundwater has likely been rebounding to pre-mine levels since the cessation of dewatering activities and completion of the clay liner at the NCCI pit, causing a relative rise in adjacent groundwater levels. Additionally, NCCI stated that Little Dry Creek used to be

maintained and cleaned out on a regular basis by a previous landowner. When regular cleanouts ended, the creek began to overgrow with cattails and other aquatic vegetation. The Division did note an abundance of aquatic vegetation present adjacent to the site's western boundary (Photo 4). Over the years, the regular flow path of Little Dry Creek to the north has backed up and rerouted to the west as a result of this phreatophyte growth (Photos 5 and 6). Google imagery shows a steady increase in aquatic vegetation growth in Little Dry Creek since approximately 2010. NCCI asserts that three factors have caused Mr. Hladky's property to become flooded: a natural rebounding of water, lack of ditch cleanout, and a year of unusually high rainfall events.

The Division then headed to the northern portion of the NCCI Pit #1 site to view Little Dry Creek in its natural drainage, upstream of the majority of aquatic vegetation overgrowth. NCCI stated that the algae filled channel in Photo 6 used to be the natural channel for Little Dry Creek. Vegetative overgrowth has caused the creek to reroute to the west and wind back towards the natural channel in order to bypass the overgrowth.

Finally, the Division inspected a culvert at the southern edge of the NCCI permit boundary which Little Dry Creek flows through (Photo 7). The culvert pictured is a horizontal 60" culvert equivalent. Little Dry Creek was flowing and the culvert was at full capacity at the time of inspection. Minor flows were noted in the Sandhill Reservoir discharge overflow which runs perpendicular to Little Dry Creek on the southern end of the NCCI Pit.

After inspection of the NCCI Pit #1, the Division met Mr. Hladkey to inspect his property which was the subject of the complaint. Mr. Hladkey and the Division walked along the field's access road and out to see where a semi, which could not be driven out due to muddy conditions, was located (Photos 8 and 9). The water table in this area was visibly elevated and muddy conditions persisted across the site, intensifying to the northwest. Mr. Hladky believes that the cessation of dewatering at NCCI Pit #1 and installation of a clay liner, combined with the lack of ditch cleanout, has caused his crops and agricultural land to become flooded to an extent that harvest and access to stock is not viable.

As of the date of this inspection report, the Division is still currently in progress of its review of this complaint and will follow up at a future date with final resolution for Citizen Complaint CT-02.

Photographs taken during the inspection have been included below. Responses to this inspection report should be directed to: Hunter Ridley at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 720-868-7757 or via email at hunter.ridley@state.co.us.

PHOTOGRAPHS AND FIGURES

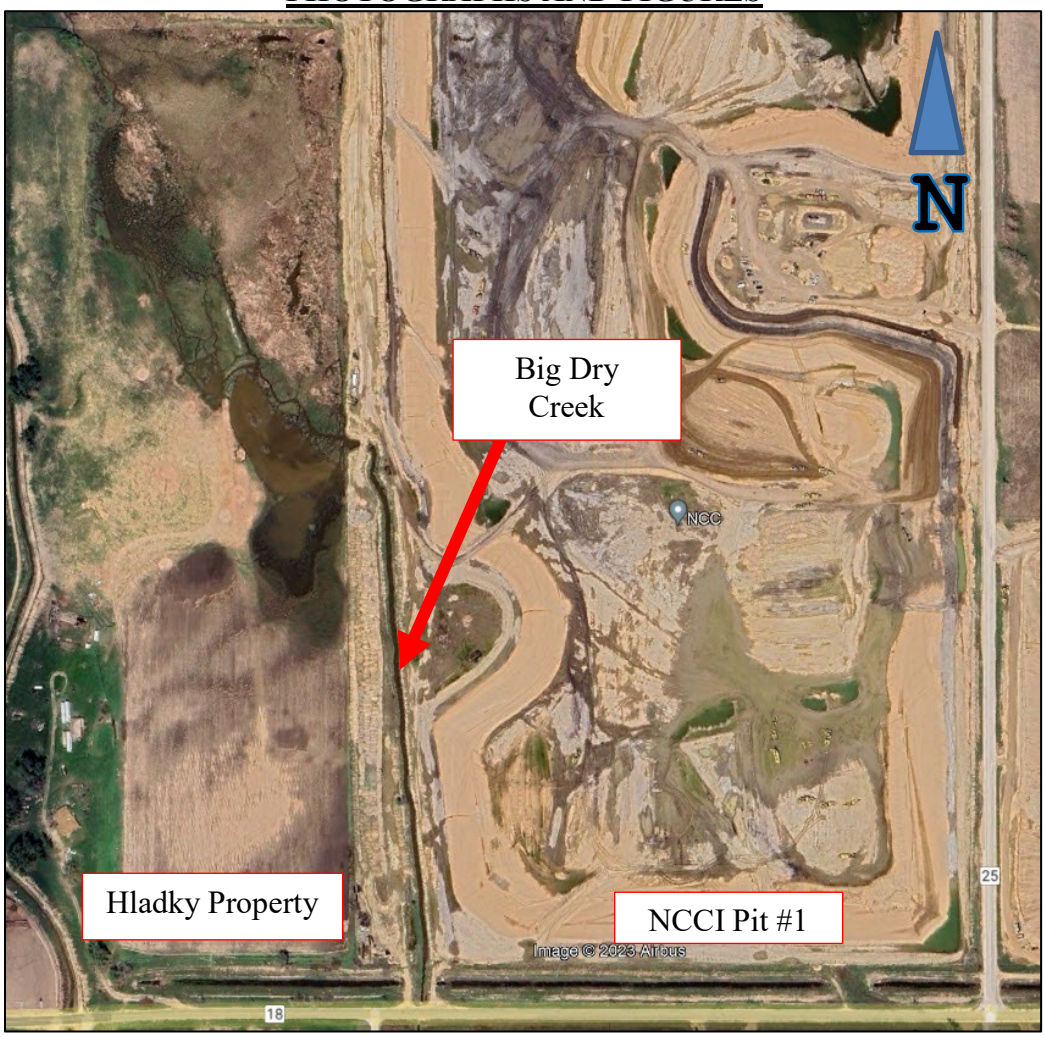

Figure 1: Google Earth Imagery (2023) which shows the southern portion of the NCCI Pit #1 and Mr. Hladky's cropland to the west.

Photo 1: View northwest, standing atop the culvert which directs Little Dry Creek through the NCCI site and to the west.

Photo 2: An approximately 60" culvert allows Little Dry Creek to flow west across NCCI site property.

Photo 3: View southwest onto Mr. Hladkey's cropland. The semi in this photo is the above referenced machinery which is stuck in mud on the property.

Photo 4: View northwest of cattails and vegetative overgrowth.

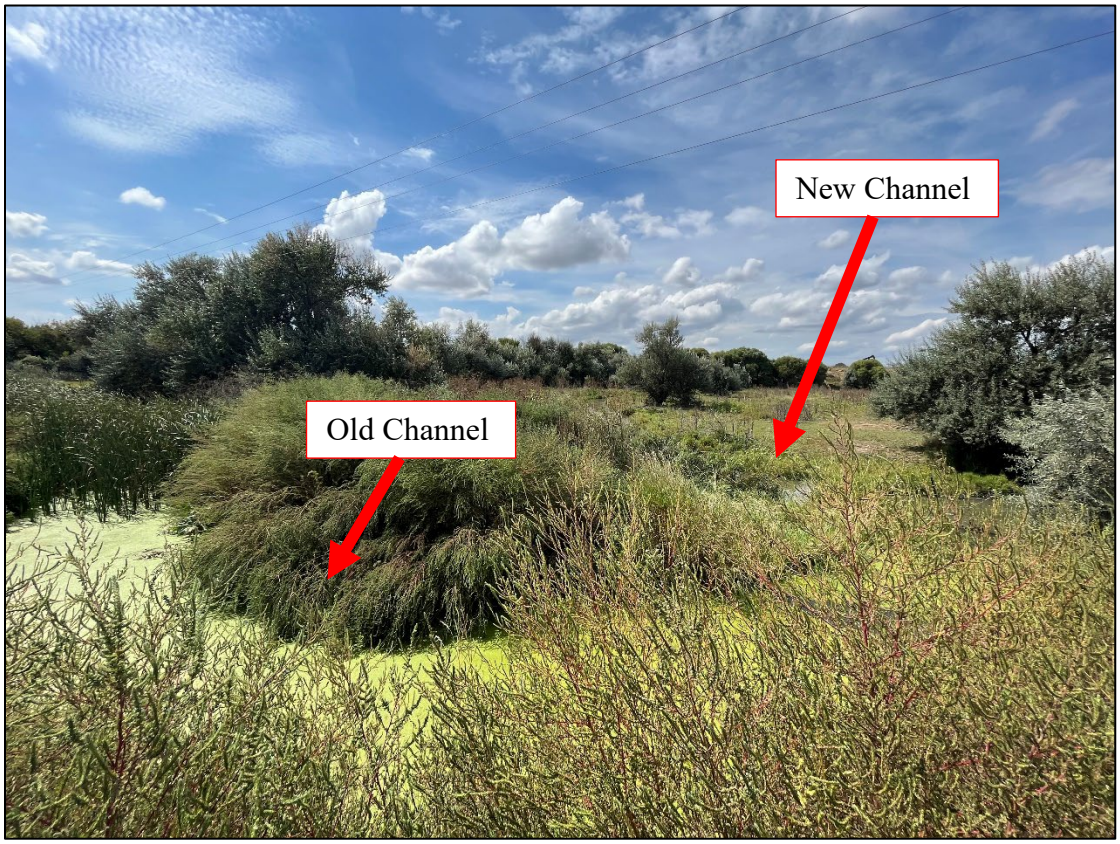

Photo 5: View northwest of Little Dry Creek's old and new channels.

Photo 6: View southwest of the old Little Dry Creek channel.

Photo 7: View north of the Little Dry Creek culvert at the southern end of the permit boundary.

Photo 8: View north of Mr. Hladky's access road and corn crop.

Figure 9: View northwest of the stranded semi. Cows are also roaming this fenced in area.

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

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

Inspection Contact Address
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Ft. Lupton, CO 80621

Enclosure: Monitoring Well Locations Map

CC: Michael Cunningham, DRMS

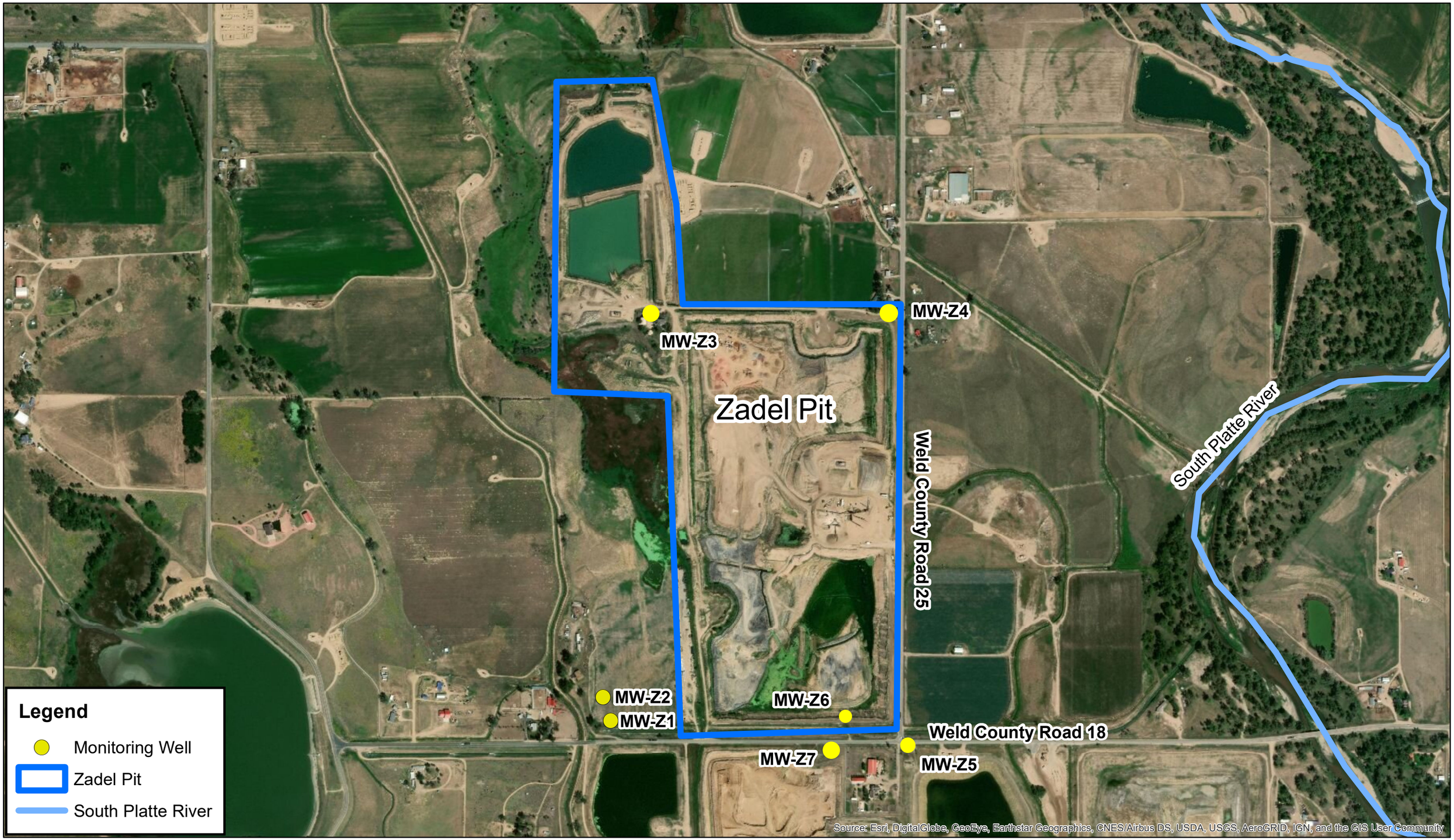
Figure 1.1

Thornton 2019 Gravel Pit Monitoring
Map of Monitoring Wells at Zadel Pit

DRCOG 2012 DRAPP AERIAL PHOTOGRAPHY
Map Created 9/19/19

0 295 590 1,180 1,770 2,360 Feet

NORTH



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