




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: Una Pit	MINE/PROSPECTING ID#: M-1980-080	MINERAL: Sand and gravel	COUNTY: Garfield
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy C. Yeldell	INSP. DATE: January 17, 2019	INSP. TIME: 07:45
OPERATOR: Grand Junction Concrete Pipe Co.	OPERATOR REPRESENTATIVE: Jim Doody	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: High Priority	BOND CALCULATION TYPE: None	BOND AMOUNT: \$300,071.47	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: DRMS	JOINT INSP. AGENCY: None	
WEATHER: Foggy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: January 25, 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>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

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

OBSERVATIONS

This inspection was conducted by the Colorado Division of Reclamation, Mining and Safety (DRMS) in response to a spill notification from the Colorado Department of Public Health and Environment (CDPHE), case number 2019-0021, received on January 15, 2019. The spill was self-reported by Caerus Oil and Gas (Caerus), who is the operator at the Summit Compressor Station, the location of the origin of the spill. Activities conducted at the Summit Compressor Station are regulated by the Colorado Oil and Gas Conservation Commission (COGCC).

The gravel pit referenced in the spill notification appears to be the Una Pit, DRMS Permit No. M-1980-080, a 112c type operation approved for 162 acres affected lands for the extraction of construction materials. DRMS staff member Amy Yeldell conducted the inspection. Caerus was represented by Brett Middleton. The DRMS permit holder, Grand Junction Concrete Pipe Company (GJ Pipe), was represented by Jim Doody, Jon Muller and Tanner Brown. This inspection report is accompanied by a copy of the spill notification form, two Google Earth satellite images (Map 1 and 2), and seven photographs taken during the inspection (Photos 1 – 7).

The DRMS inspection focused on the spill path and portions of the DRMS permit area impacted by the spill. The geographic relationship of the Una Pit and the various features of the spill discussed in this report are illustrated in the enclosed Map 1 and 2.

As shown in Photos 1-3, Caerus directed DRMS to the origin of the spill (approximately 39°24'14.37"N, 108°5'58.12"W), a cellar located at the north end of the Summit Compressor Station. The cellar had over flowed. The spill was estimated at a rate of approximately 30 gallons per minute for an undisclosed period of time. The soil around the cellar exhibited discoloration and strong odor of hydrocarbons. Caerus indicated the spilt fluids migrated south through the gravel surface of the compressor station and were intercepted by the stormwater structures for compressor station and access road. Locations of soil samples were marked by survey stakes with orange paint. As of the inspection day no additional soil removal or remediation action had occurred in this area. The leak had been repaired and the line reactivated.

As shown in Photos 4-6, the spilt fluids, intercepted by the stormwater ditches and culverts, were directed to a sediment pond located south of the Summit Compressor Station and east of the OD34 pad. The spilt fluids, now augmented by seasonal snow melt, exceeded the capacity of the sediment pond. The impounded fluids discharged along the southeast corner of the sediment pond. The berms around the sediment pond have since been enlarged to enhance the pond's capacity. The sediment pond was being drained via pump truck and the fluids removed for disposal. According to Caerus, pumping was occurring around the clock. Water depth/volume remaining in the sediment pond was not determined due to snow and ice cover. The surrounding soils appeared saturated from the stormwater as well as spilt fluids. Minimal soil discoloration was observed. Little to no odor of hydrocarbons were observed at the sediment pond for the OD34 pad.

As shown in Photos 5-7, discharge from the sediment pond traveled south approximately 100 feet before entering the DRMS permit boundary (approximately 39°24'2.35"N, 108°5'58.07"W). The fluids were conveyed to a pond within the gravel pit via an armored stormwater channel. Due to pumping, inflow to the pit pond had ceased. No odor or oil sheen was observed on the water within the DRMS pit. Evidence of erosion to the rock armored pond inlet was not observed. Evidence of discharge from the DRMS sediment pond was not observed.

The spill response is being managed by COGCC and CDPHE. Caerus has collected approximately 20 samples, which have been forwarded to laboratory for analysis. Additional samples are anticipated. Initial soil samples

were limited to six inch depth. Depending on lab results of these initial samples Caerus is prepared to collect deeper samples to fully determine the extent of petroleum contaminated soils and develop a remediation plan. Water samples were generally taken from the surface. Ice had to be penetrated to obtain water samples. There is a spring in the northeast corner of the DRMS permit boundary and cross-gradient from the spill origin. A water sample was collected from the spring. Additionally, up and down gradient water samples were taken from the Colorado River, bordering the south side of the gravel pit.

One soil sample and two water samples had been collected from areas located within the DRMS permit boundary. Caerus indicated the water sample collected from the inlet to the DRMS pond show Benzene levels to be within drinking water standards. The second sample, taken from the far side of the pond and nearby the spillway, registered no Benzene. DRMS directed Caerus and GJ Pipe to provide a copy of all lab analysis to DRMS for any samples collected from locations within the DRMS permit boundary. Lab reports shall be accompanied by a map which depicts sample locations and hydrologic discussion of results compared with applicable CDPHE standards. If test results indicate any exceedance of CDPHE standards a remediation plan will be required.

On January 16, 2019, a representative from Colorado Parks and Wildlife (CPW) visited the spill site. Also on January 16, 2019, a local consulting company, LT Environmental, Inc., conducted a preliminary site assessment.

No enforcement actions were initiated during the inspection.

Responses to this inspection report should be directed to: Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Enclosures

Inspection Contact Address

Jim Doody
Grand Junction Concrete Pipe Co.
556 Struthers Ave.
Grand Junction, CO 81502

EC:

Wally Erickson, Senior EPS, Grand Junction DRMS
Russ Means, Minerals Program Director, DRMS
Ann Nedrow, CDPHE
Steven Arauza, EPS, COGCC
Ben Felt, Aquatic Biologist, CPW
Brett Middleton, Sr. Environmental Specialist, Caerus Oli & Gas

PHOTOGRAPHS





DRMS Photo 2
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019



Looking south, taken from the Cellar located at the northern portion of the Summit Compressor Station. Spill flowed south sub-surface under the Summit Compressor Station

DRMS Photo 3
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019



Looking north, at the southern portion of the Summit Compressor Station showing Culverts through which the spill flowed down-gradient towards Una Pit. Absorbent sock in place. Orange stake indicates soil sample location.

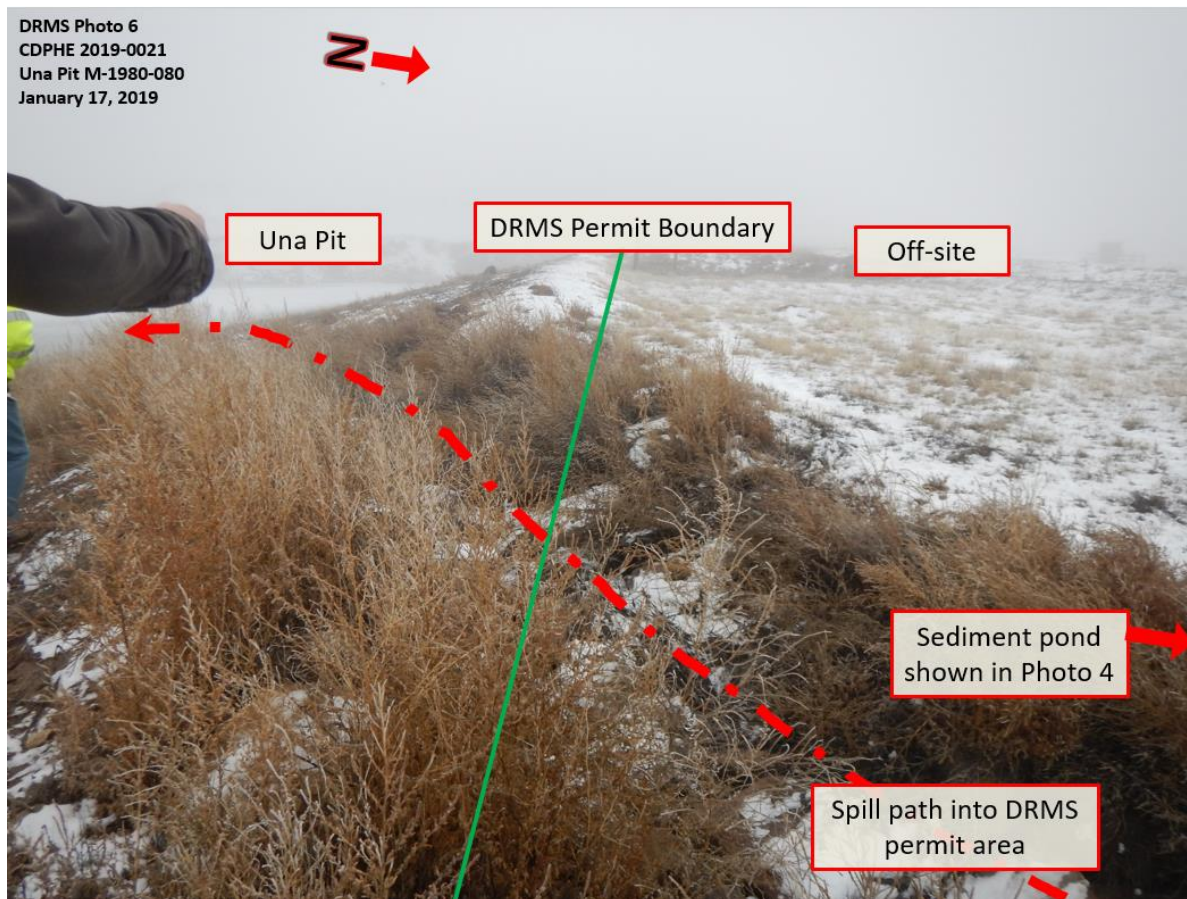
DRMS Photo 4
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019



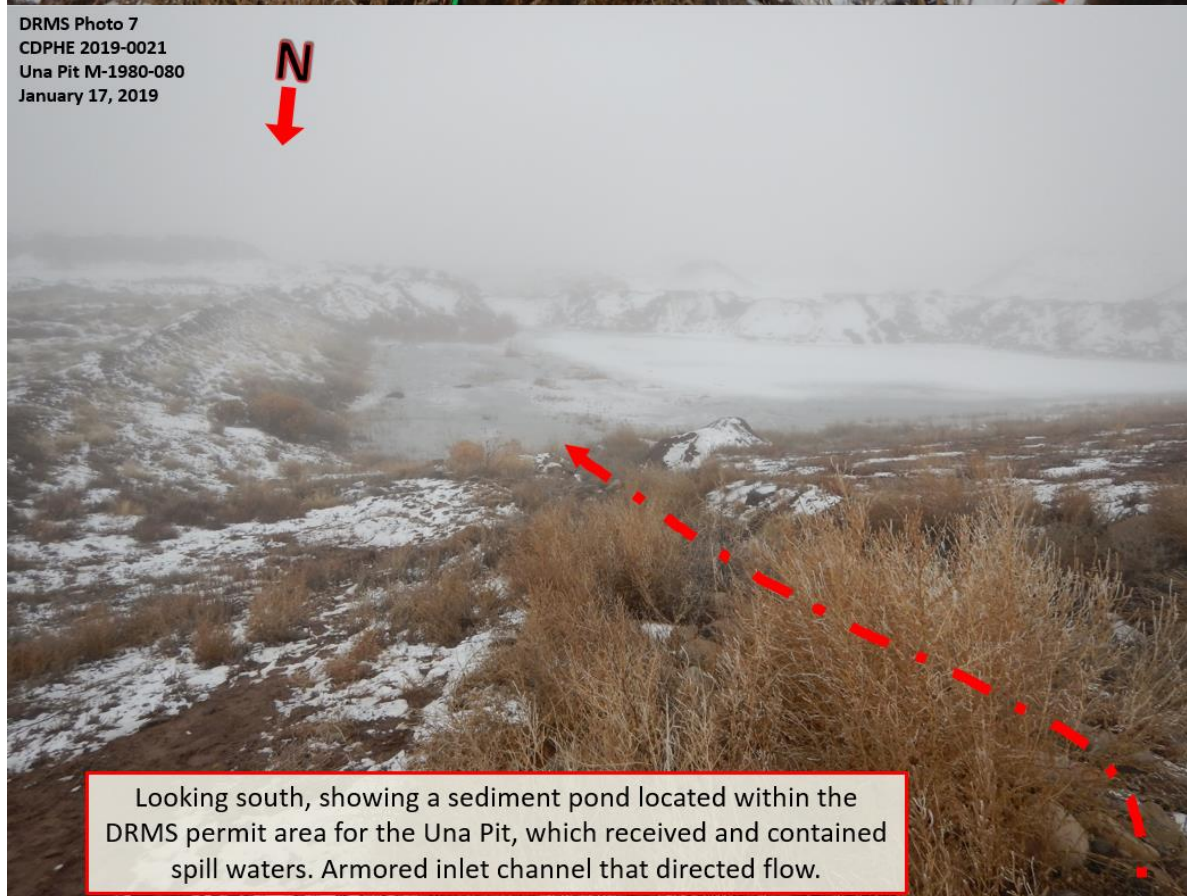
DRMS Photo 5
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019



DRMS Photo 6
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019



DRMS Photo 7
CDPHE 2019-0021
Una Pit M-1980-080
January 17, 2019





COLORADO

Office of Emergency Preparedness & Response

Department of Public Health & Environment

Print date 1/15/2019

CASE NUMBER: 2019-0021

DATE ENTERED: 1/15/2019 TIME ENTERED: 15:00

WHO TOOK REPORT: ANN NEDROW

DATE REPORTED: 1/15/2019 TIME REPORTED: 2:49:00 PM

NRC NUMBER:

CALLER: BRETT MIDDLETON

CONFIDENTIAL: N PHONE: 970-987-4650

ORGANIZATION: CAERUS OIL AND GAS

STREET: 143 DIAMOND AVE

CITY: PARACHUTE COUNTY:

STATE: CO ZIP CODE: 81635-

POTENTIALLY RESPONSIBLE PARTY: CAERUS OIL AND GAS

PRP CONTACT: BRETT MIDDLETON

PRP PHONE: 970-987-4650

ADDRESS: 143 DIAMOND AVE

EMAIL: bmiddleton@caerusoilandgas.com

CITY: PARACHUTE COUNTY:

STATE: CO ZIP CODE: 81635-

EVENT DATE: 1/14/2019 EVENT TIME: 1:00:00 PM

LOCATION: HWY 6 AND STONE QUARRY RD

MILE MARKER:

CITY: COUNTY: GARFIELD

Latitude: 39.403993

STATE: CO ZIP CODE:

Longitude: -108.089484

TYPE OF MATERIAL: E & P WASTES

MATERIAL1: PRODUCED WATER QUANTITY1: 300 UNIT1: BARRELS QTY TO WATER1: UNIT1:

MATERIAL2: QUANTITY2: UNIT2: QTY TO WATER2: UNIT2:

MATERIAL3: QUANTITY3: UNIT3: QTY TO WATER3: UNIT3:

SOURCE: X

SOURCE TYPE: OIL WELL/WELL SITE

CAUSE: FAILURE EQUIPMENT

CAUSE INFORMATION: A produced water line leaked 1000 - 3000 barrels of produced water to land and to a gravel pit called Unapit. There was a sheen on the produced water prior to getting to the gravel pit, but the sheen was gone before it reached the gravel pit. They do not have a guess as to how much produced water reached the gravel pit pond.

MEDIUM IMPACTED: WATER AND LAND

☐ Fixed Facility☒ Land☐ Air☐ Groundwater☒ Surface Water

Waterway Impacted:

WATER IN A GRAVEL PIT

NUMBER OF DEATHS:

NUMBER OF INJURIES:

EVACUATION:

NUMBER EVACUATED:

ACTION TAKEN: They have isolated the line and have had vacuum trucks cleaning up the released water. The line has been repaired and pressure tested, so it is back online and not leaking.

CDPHE NOTIFIED: WQCD: MICHELLE THIEBAUD, DAVID KURZ, KC KAY, HEATHER DRISSEL, CAROL KEEVER, NATHAN MOORE;
HMWMD, DRMS, CPW, COGCC

COMMENTS: Garfield County EH

RESPONDERS: CAERUS OIL & GAS

RESPONDER COMMENTS:

ADDITIONAL COMMENTS: