

1R - 186

**GENERAL
CORRESPONDENCE**

YEAR(S):

1997-98

NORTHLAND OPERATING COMPANY

July 10, 1998

RECEIVED

JUL 20 1998

Mr. William C. Olson, Hydrogeologist
Environmental Bureau – Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Northland Operating Playa Spill
SE/4 NW/4, Section 30, T13S, R32E

Dear Mr. Olson:

Northland has reviewed the events surrounding the referenced playa and your request for an investigation plan to determine the vertical extent (if any) of elevated salt concentrations in the subsurface soil near this playa. It is Northland's proposal to drill a core hole above the high water mark at the closest point practicable to the southeast edge of the playa. Soil chlorides will be measured at intervals of 5 feet. Drilling will cease once chloride levels in two successive samples indicate similar chloride levels. In our opinion, such a stabilization of chloride concentrations would indicate the lack of any significant migration of salts from surface releases by Northland or earlier oil operators. We would propose a minimum depth of 50 feet below the ground surface for this core hole. The hole will be grouted in the bottom, back-filled, and grouted at the top after the vertical extent measurements have been taken. A location for this test hole will be selected and submitted for your approval before drilling.

Northland would also appreciate your written approval to our proposal from last January to withdraw water from this playa when total dissolved solids (TDS) concentrations exceed 6,000 ppm. We strongly believe that this will minimize any possibility of impact to the underground aquifer caused by excessive TDS levels due to recent saltwater releases.

Respectfully,



John E. Rhoads
Agent

Cc: Mr. Wayne Price, OCD, Hobbs
Mr. Ed Butler, Northland Operating

Price, Wayne

From: Price, Wayne
Sent: Monday, May 18, 1998 4:16 PM
To: Bill Olson
Subject: Playa lakes

Dear Bill:

Per your request I have researched my files and found where Ed Seay & I had performed some field test on some playa lakes in the Northland Oilfield Production area. Please have Mark, Roger, or Martyne pull the file called Playa1.tif file. It is Imageware program called imaging. These are two color pictures. The first shows a good fauna/flora with fresh rain water.

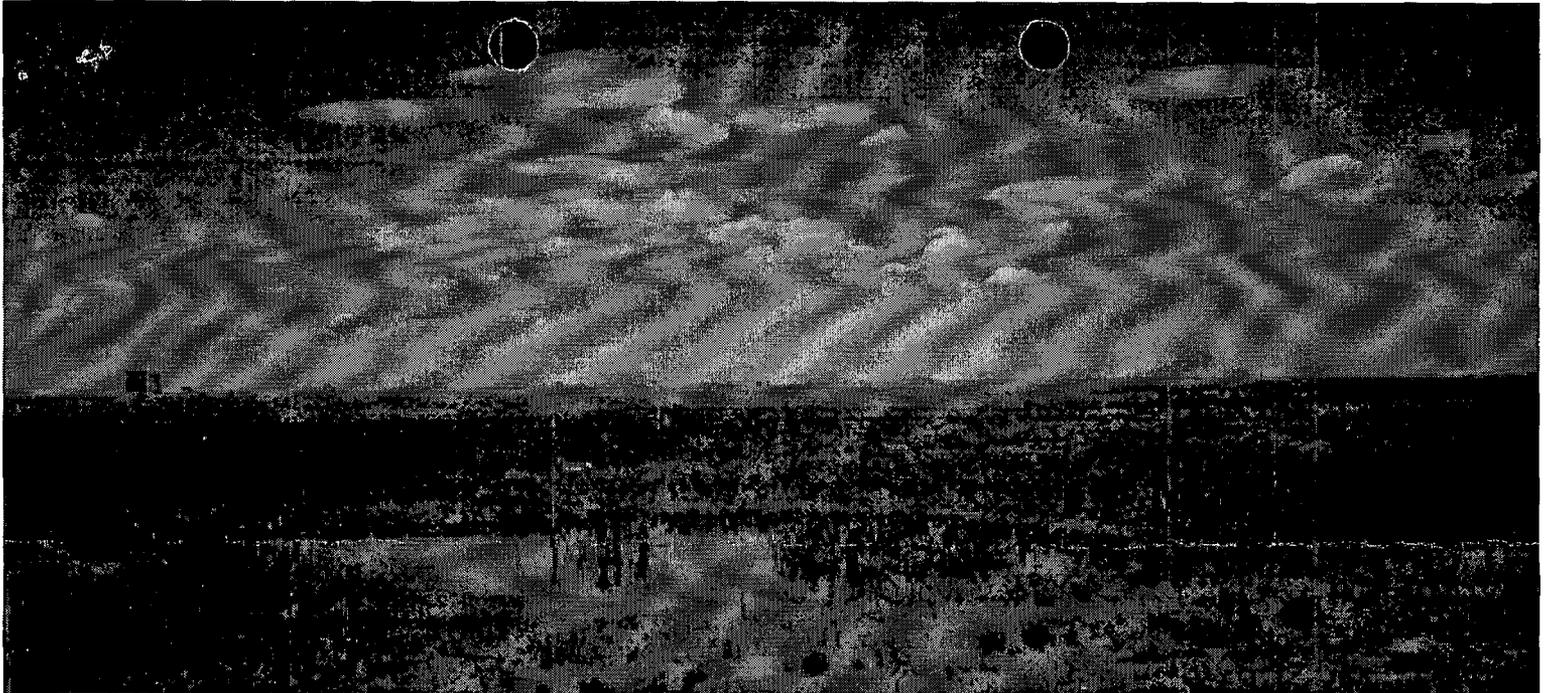
The second picture has a history of produced water being discharged. It is void of any fauna and has stress flora.

Each picture has the results of my field test on it.



playa1.tif.tif

The first playa has low TDS = 800 umhos Cl=42 ppm
The Second playa has elevated TDS=2660 umhos Cl = 750 ppm



Fresh Water Playa NW of Northland's operation
Picture shows Antelope watering
Sampled Playa with field Cl kit - min is 500 ppm
TDS = 800 umhos - Cl < 500 ppm - Cl hobbs lab = 42 ppm

Playa North of Northlands office, this playa has a history of
produced water being discharged into.
TDS = 2660 umhos field Cl = 750 ppm





STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 13, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-266

Mr. Ed Butler
Northland Operating Co.
3500 Oak Lawn, Suite 380, LB#31
Dallas, Texas 75219-4398

**RE: NORTHLAND PLAYA SPILL
SE/4 NW/4, SECTION 30, T13S, R31E**

Dear Mr. Butler:

The New Mexico Oil Conservation Division (OCD) has reviewed Northland Operating Co.'s (NOC) January 30, 1998 "NORTHLAND OPERATING PLAYA SPILL, SE/4 OF NW/4, SECTION 30, T13S, R32E" and February 27, 1998 "PIT CLOSURES - SE/4 NE/4 SECTION 25, T13S, R31E, NMPM, CHAVES COUNTY, NEW MEXICO". These documents contain information on NOC's sampling and remedial actions regarding a spill of produced water into a fresh water playa.

The OCD defers comment on the proposed remedial actions contained in the above referenced documents since the vertical extent of contamination at the playa has not been determined. The OCD requires that NOC submit an investigation work plan to determine the vertical extent of contamination at the playa. The work plan will be submitted to the OCD Santa Fe Office by July 13, 1998 with a copy provided to the OCD Hobbs District Office.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

A handwritten signature in black ink, appearing to read "Will Olson".

William C. Olson
Hydrogeologist
Environmental Bureau

xc: Wayne Price, OCD Hobbs District Office



STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time approx. 1420	Date 1/26/98
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<u>Originating Party</u>	<u>Other Parties</u>
John Rhodes - Consultant for (940) 723-8511 Northland Operating	Bill Olson - Envir. Bureau

Subject
 Northland Playa Spill

Discussion
 He will be consulting for Northland
 Called to clarify types of metals and cations/anions required
 for analyses
 He expects to be sampling in following weeks

Conclusions or Agreements
 List of WQCC metals and general cations/anions for him
 He will contact Wayne Price - OCD Hobbs prior to sampling

Distribution
 File
 Wayne Price - OCD Hobbs

Signed *Bill Olson*

NORTHLAND OPERATING CO.

3500 Oak Lawn, Suite 380, LB #31
Dallas, Texas 75219-4398
214-521-9959; 214-521-9960 Fax

NOV 11 1997

November 10, 1997

Ms. Martyne J. Kieling, Environmental Geologist
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Unauthorized Waste Disposal Pits
SE/4 of NW/4, Section 30, T13S, R31E
Lea County, New Mexico

Dear Ms. Kieling:

We are in receipt of your letter dated October 29, 1997 regarding the inspection at the referenced site on September 22 and 25, 1997 by yourself and other employees of the OCD, representatives of the U. S. Environmental Protection Agency and the U. S. Fish & Wildlife Commission. This letter is to inform you of the steps we have taken to address the issues raised as a result of that inspection, to respond to your request for information, and to outline our plans for closing the two pits at this location.

The large lined pit southwest of the tank battery at this location has been used as an emergency overflow pit by Northland and previous operators. It was used to capture overflows at the tank battery. In addition there is down-dip secondary containment to the west of the tank battery. This secondary containment was built to provide additional protection against spills reaching the fresh water playa to the west. Given your directive to cease discharges into this pit, Northland Operating is in the process of setting two (2) additional above ground 500 barrel tanks (complete with liners) specifically for emergency overflows. This change will allow us to divert all emergency fluid overflows to tanks, and will allow us to proceed with closure of the pit. Please be advised that we have already added additional secondary containment around the tank battery itself and will provide enhancements to the secondary containment that was already in place west of the tank battery. We have also ordered an alarm system for this tank battery to provide our field personnel with an early warning system for reporting abnormal operational conditions. This system is scheduled to be in place within ten days.

The second pit referenced in your correspondence (the small pit south of the tank battery) has never been used by Northland Operating. There are no operational problems associated with the closure of this small pit that appears to have been used for tank bottoms in the past. We request the opportunity to determine the contents of the buckets in this pit before classifying the waste in this pit as non-exempt. We certainly appreciate the reasons for the "mixture rule", but we expect that these buckets were emptied prior to disposal in this pit.

In response to your request for four pieces of information, the following is submitted:

- 1) "the names and addresses of all waste generators who are utilizing the pits" -
Northland Operating is the only known current user of the large lined pit, whose address is that noted in the above letterhead. As noted above, Northland has never utilized the small pit. Also, please note that Northland has utilized the large pit only for emergency saltwater overflows.
- 2) "the names and addresses of all waste transporters;" -
It is our belief that no waste has been placed in either pit by anyone other than operators of this property.
- 3) "the location of all waste generation (exact well locations);" -
Attached please find a plat (showing the well spots within the section, township and range) of the currently producing wells that produce saltwater into this facility.
- 4) "the total volume of waste from each location that has gone into the unauthorized pits." -
Northland Operating Company has no records that would allow us to answer this question even for the short period of time we have operated this property. Prior operators likewise did not keep such records.

On March 6, 1997, Northland had a break in a fiberglass pipeline that transported saltwater through the playa lake area. A report detailing this release was filed with the OCD in Hobbs on August 8, 1997. We regret that it was not filed in a timely manner and that we failed to convey this information to the Santa Fe office. Please note that immediately after the release Northland replaced and rerouted this line out of the area of the playa to minimize any impact that may occur as the result of a future release. We cannot quantify the magnitude of the impact of this release against an unknown history of prior releases in this basin by other operators or the natural occurrence of salts in the soil in the basin. During prolonged periods of drought, water in a closed basin will reflect higher levels of salinity than they will during periods of significant rainfall. At the request of OCD, Northland set a pump to remove water from this playa lake when chloride levels reached 13,000 ppm during the dry season. The effort continued until

Ms. Martyne Kieling
November 10, 1997

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rains brought chloride content down. Northland respectfully requests that continued monitoring of the chloride level in this lake should dictate if water is to be pumped from the playa for disposal, thus minimizing the volume of water removed from the playa.

An outline of our pit closure plan is also enclosed. Please advise if our plan is deficient in any way or lacks essential elements.

Sincerely,



Robert E. McKnight
Engineer

cc: Mr. Wayne Price, OCD, Hobbs

Bill Olson

From: Price, Wayne
Sent: Saturday, January 24, 1998 4:01 PM
To: Martyne Kieling; Bill Olson
Cc: Chris Williams; Roger Anderson
Subject: Northland Operating

Dear Martyne!

Northland operating personnel requested a Meeting with District I. This meeting was held this past Friday. Northland gave us a progress report on their operations and submitted to us two comprehensive pit closure reports for the projects you are working on.

We informed Northland to submit these to you as you are handling the closure on these two pits. Rock queen se/4 nw/4 30-13s-32e and the SWD plant #2 se/4 ne/4 25-13s-31e.

They mentioned the letter from Bill Olson concerning the Playa lake, we informed them to respond to Mr. Olson concerning that issue and cc the District.

We informed them not to close pits until they receive permission for you.



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

January 12, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-216

Mr. Robert E. McKnight
Northland Operating Co.
3500 Oak Lawn, Suite 380, LB#31
Dallas, Texas 75219-4398

RE: NORTHLAND PLAYA SPILL
SE/4 NW/4, SECTION 30, T13S, R31E

Dear Mr. McKnight:

The New Mexico Oil Conservation Division (OCD) has reviewed the Northland Operating Co.'s (NOC) November 10, 1997 "UNAUTHORIZED WASTE DISPOSAL PITS, SE/4 OF NW/4, SECTION 30, T13S, R31E, LEA COUNTY, NEW MEXICO". This document contains information on use of unlined pits at the above referenced site and a March 6, 1997 spill of produced water into an adjacent fresh water playa.

The OCD has the following requirements regarding the March 6, 1997 spill:

1. NOC will obtain samples of the water contained in the fresh water playa lake and the produced water from NOC's facility. These waters will be sampled and analyzed for benzene, toluene, ethylbenzene, xylene (BTEX), total dissolved solids (TDS), New Mexico Water Quality Control Commission (WQCC) metals and major cations and anions using EPA approved methods and quality assurance/quality control (QA/QC) procedures.
2. NOC will notify the OCD at least 48 hours in advance of the above required sampling event such that the OCD has the opportunity to witness the event and split samples.
3. By February 13, 1998, NOC will provide to the OCD a report on the investigative and remedial actions regarding the spill and the above required water quality sampling. The report will be provided to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office and will contain:
 - a. A summary description of the spill and all remedial actions taken after the spill.

Mr. Robert E. McKnight
January 12, 1998
Page 2

- b. A summary of all recent and prior water quality sampling of the playa and soil quality sampling in the spill area including copies of the laboratory analytical results and associated QA/QC data.
- c. The volume of water removed from the playa and the disposition of the water.
- d. Conclusions and recommendations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,



William C. Olson
Hydrogeologist
Environmental Bureau

xc: Wayne Price, OCD Hobbs District Office

Z 235 437 216

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PS Form 3800 April 1995



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

Attn: Roger Anderson

June 25, 1997

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

Northland Operating Co. (NOC)
3500 Oak Lawn #380 LB 31
Dallas, Texas 75219-4398
214-521-9959

Re: Line leak and unauthorized release of contaminants into fresh water playa located near the Northland battery B-30-13-32 Lea Co. NM.

Attention: Mr. Bob McKnight:

The New Mexico Oil Conservation Division (NMOCD) District I Hobbs, NM office was notified on March 13, 1997 that Northland Operations Co. (NOC) had experienced a line leak associated with oilfield production operations near your oil/water storage battery referenced above. The NMOCD's resultant investigation revealed that NOC had a line leak on or about March 06, 1997 in which crude oil and produced water was discharged into a nearby fresh water playa lake.

Please note the NMOCD has monitored the water quality in the playa lake and determined NOC has impacted the surface water contained in the lake. Please note this lake is utilized for stock and wildlife watering and is located over the Ogallala formation which is a declared fresh water basin in the state of New Mexico.

Pursuant to NMOCD 19 NMAC 15.C rule 116.C (2) (attached for reference) requires that NOC submit a written notification within 15 days to the Divisions District Office on form C-141 attached for your use. In addition, NOC must also notify the NMOCD Environmental Bureau Chief in writing that surface/ground water has been impacted. You may send this notification to Mr. Roger Anderson, NMOCD Environmental Bureau Chief located at NMOCD 2040 South Pacheco, Santa Fe, NM 87505.

Please note the NMOCD District Field office can approve of any immediate prudent removal of source contamination such as pumping out the playa lake and using the water in your secondary recovery operations. Please contact the District office in Hobbs, NM 505-393-6161 for approval of such operations. As required by the New Mexico Water Quality Regulations (WQCC) the overall and final abatement plan will be handled out of our Santa Fe office referenced above including the final approval for closure of this site. Also please copy the NMOCD District office on all correspondence concerning this matter.

Please be advised that notification, approval of abatement activities required by the NMOCD does not relieve NOC of responsibility for compliance with other federal, state or local laws and regulations.

If this office can be of further assistance on this matter please do not hesitate to write or call.

Sincerely yours,



Chris Williams-NMOCD District I Supervisor

~~cc: Roger Anderson-NMOCD Environmental Bureau Chief~~

CW/lwp:northpls.wpd

Attachments: Rule 116, 19, C-141,