

AP - 39

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

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1703 W. Industrial Ave.  
Midland, Texas 79701  
(432) 686-8081

June 1, 2005

Mr. Roger Anderson  
Environmental Bureau Chief  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Certified Mail  
7003 1680 0006 6284 0535

Re: East Vacuum Glorietta, East Tank Battery Playa  
SW $\frac{1}{4}$  & SE  $\frac{1}{4}$ , Sec 27, T17S, R35E  
Stage I & II Abatement Plan


1R0413-POW AP-39

Dear Mr. Anderson:

On behalf of ConocoPhillips, Maxim Technologies (Maxim) is submitted the attached Stage I and II Abatement Plan (2 copies) for your review. The Plan proposes a path forward for mitigating the petroleum hydrocarbon and chloride impaired soil found in a playa (Site) located east of ConocoPhillips' East Vacuum Glorietta, East Tank Battery. The Site is located on State owned land, within Lea County, New Mexico (32° 47.932' N, 103° 26.726' W).

The proposed abatement option includes the deployment of a geo-membrane barrier to confine existing petroleum hydrocarbons and chloride below the caliche (caprock) zone to minimize their further migration to groundwater. Approval of the Stage II Abatement Plan would re-direct water flow away from the lower aquifer sands located immediately below the barrier. The water would flow over the geo-membrane, into adjacent sub-soils, and then percolate downward through the unaffected sands to the aquifer.

If this Plan is acceptable to the New Mexico Oil Conservation Division and it receives favorable public comment, ConocoPhillips is prepared to charge Maxim with the task of executing the proposed Plan. If you have any questions concerning this Plan, please contact Mr. Neal Goates (832-379-6427) or me.

Sincerely,  
  
Charles Durrett  
Office Manager

CDURRETT@AOL.COM

432 686-8081

MEETING 6/14/05  
CONTINUE BYCANTON

Cc: Mr. Chris Williams, NMOCD District I  
Mr. Neal Goates, ConocoPhillips  
Mr. Steve Wilson, ConocoPhillips



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Mark Fesmire**  
Director  
Oil Conservation Division

May 09, 2005

Mr. Neal Goates  
ConocoPhillips  
Threadneedle Office  
PO Box 2197  
Houston, TX 77252-2197

Re: East Vacuum Glorietta Tank Battery Playa OCD # 1R0413

Dear Mr. Goates:

Pursuant to the New Mexico Oil Conservation Division rule 19.15.1.19 (Rule 19) Prevention and Abatement of Water Pollution requires all responsible persons who are abating water pollution in excess of the standards shall do so pursuant to an abatement plan approved by the director.

Therefore, ConocoPhillips is hereby required to submit an abatement plan for OCD approval by July 15, 2005 for the above referenced site.

After OCD receives the plan the site will be assigned a new Abatement Plan number (AP#) for tracking purposes. If you have any questions please do not hesitate to contact me at 505-476-3493 or E-mail [DJSanchez@state.nm.us](mailto:DJSanchez@state.nm.us); or contact Wayne Price of my staff at 505-476-3487 or e-mail [WPRICE@state.nm.us](mailto:WPRICE@state.nm.us).

Sincerely;

A handwritten signature in black ink, appearing to read "Daniel Sanchez", followed by a long horizontal line extending to the right.

Daniel Sanchez  
Enforcement and Compliance Manager  
DS/wp

Cc: OCD Hobbs office

## Price, Wayne

---

**From:** Price, Wayne  
**Sent:** Friday, May 06, 2005 4:39 PM  
**To:** Neal Goates (E-mail)  
**Cc:** Sanchez, Daniel; Anderson, Roger  
**Subject:** Conoco Buckeye East Vac Glorietta Playa Lake 1RO413

Dear Neal,

I finally was able to review the last submittal. Since groundwater is impacted the OCD will have to require that Conoco submit an Abatement plan pursuant to Rule 19. unless Conoco can demonstrate that this contamination will be cleaned up within one year of the notice. Therefore, please submit an abatement plan for OCD approval.

I know this is not good news on a Friday but we are in the process of reviewing all of the Remediation projects and where we find groundwater has been impacted and there is a low probability of clean-up within one year we are requiring abatement plans pursuant to the Rule 19.

Sincerely:

Wayne Price  
New Mexico Oil Conservation Division  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505  
505-476-3487  
fax: 505-476-3462  
E-mail: WPRICE@state.nm.us

## Price, Wayne

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**From:** cwdurrett1@aol.com  
**Sent:** Friday, April 15, 2005 11:01 AM  
**To:** WPrice@state.nm.us  
**Subject:** Fwd: ConocoPhillips East Vacuum Glorietta Tank Battery Playa (1 of 2)

Wayne, I'm just checking to see if you received everything in readable form. Also, is there any questions I can answer for you?

Charlie Durrett  
Maxim Technologies  
1703 W. Industrial Ave.  
Midland, TX 79701  
P 432-686-8081  
F 432-686-8085

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-----Original Message-----

**From:** Cwdurrett1  
**To:** WPrice@state.nm.us; Cwilliams@state.nm.us  
**Cc:** neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com; cyancey@maximusa.com  
**Sent:** Tue, 5 Apr 2005 7:57:24 AM Eastern Daylight Time  
**Subject:** ConocoPhillips East Vacuum Glorietta Tank Battery Playa (1 of 2)

SW1/4 & SE1/4, Sec 27, T17S, R35E  
Lea County, New Mexico

Wayne, attached is up date and proposed work plan for remediation of the playa located east of ConocoPhillips East Vacuum Glorietta Tank Battery. ConocoPhillips' proposed plan is to install a membrane barrier in the playa excavation to channel precipitation away from the affected area and prevent further downward migration of hydrocarbons and chlorides in this area.

Also, monitoring well VG-I would be re-established (removed during excavation). A quarterly groundwater sampling program would be established to monitor water levels, BTEX, PAH and chloride concentration levels in the 3 monitoring wells. If the aquifer does not show evidence of self attenuation within one year, then Maxim would propose alternatives for NMOCD approval.

If this program is acceptable to NMOCD, ConocoPhillips is prepared to charge Maxim with the task of executing the above proposed plan. If you have any questions concerning this program, please contact Mr. Neal Goates (832-379-6427) or me.

Please acknowledge receipt of this e-mail.

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5/6/2005

## Price, Wayne

---

**From:** Cwdurrett1@aol.com  
**Sent:** Tuesday, April 05, 2005 5:57 AM  
**To:** WPrice@state.nm.us; Cwilliams@state.nm.us  
**Cc:** neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com; cyancey@maximusa.com  
**Subject:** ConocoPhillips East Vacuum Glorietta Tank Battery Playa (1 of 2)

SW1/4 & SE1/4, Sec 27, T17S, R35E  
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April 5, 2005

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: **East Vacuum Glorietta, East Tank Battery Playa**  
**SW $\frac{1}{4}$  & SE  $\frac{1}{4}$ , Sec 27, T17S, R35E**  
**Project Update**

Dear Mr. Price:

As a follow up to our discussion at Maljamar on March 23, 2005, I prepared this letter to document ConocoPhillips proposed path forward plan for mitigating the petroleum hydrocarbon affected soil found in a playa (Site) located east of ConocoPhillips' East Vacuum Glorietta, East Tank Battery. The Site is located on State owned land, within Lea County, New Mexico (32° 47.932' N, 103° 26.726' W).

In accordance with ConocoPhillips' remediation plan presented to you on August 9, 2004, Maxim Technologies (Maxim) initiated the excavation of affected soils in the East Vacuum Glorietta, East Tank Battery playa on August 11, 2004. Figure 1 illustrates the footprint in which the excavation of the petroleum hydrocarbon/produced water affected soil has occurred. This clean up was in response to a spill into a playa located east of ConocoPhillips East Vacuum Glorietta, East Tank Battery that occurred on October 28, 2002.

Maxim began excavation of the affected soil [approximately 8 feet below ground surface (fbgs)] and hauling this material to a State-approved disposal facility. As the excavation developed, samples were taken from the sidewalls and bottom and field screened with a photo-ionization detector [PID; < 100 parts per million (ppm) volatile organic compounds (VOC)] and a chloride test kit to define the clean boundaries [< 250 ppm chloride]. As the excavation advanced, a historic petroleum hydrocarbon zone was encountered, forcing the excavation to deepen to approximately 20 fbgs. In reviewing aerial photographs, this historic petroleum hydrocarbon zone was shown to be from historic production pits existing on or before year 1949 (Appendix A – Photographs collected in February 2005).

Because the unexpected historic petroleum hydrocarbon zone was encountered, Maxim halted excavation and proposed a six boring exploratory program to better define the area inside the spill footprint not yet excavated (Figure 1). A mobile air rotary boring unit was used to delineate the vertical and horizontal extent of vadose zone. Split spoon soil samples were collected at 10 foot intervals, and the sample with the highest PID reading from each boring was kept for laboratory analysis. One sample from each boring was also collected from the bottom of each boring when PID readings were < 100 ppm for two consecutive readings and

submitted to the laboratory for analyses. Soil samples collected for analysis were placed into glass sample jars, sealed with Teflon-lined lids, and placed on ice for transportation under a chain-of-custody to an analytical laboratory where they were analyzed for total petroleum hydrocarbons (TPH- GRO and -DRO; Method 8015), and benzene, ethylbenzene, toluene, total xylenes (BTEX) and chloride, using EPA's Method 1312 Synthetic Precipitation Leaching Procedure (SPLP<sub>west</sub>),

Data from this boring program are presented in Table I. Laboratory analysis reported either non-detection or low migration concentrations for SPLP BTEX in all sample borings at all sampling depths. All samples containing BTEX concentrations were below NMOCD remediation standards (10 ppm benzene, 50 ppm BTEX).

The gasoline (GRO) and diesel (DRO) range concentrations for TPH are presented in Table I. TPH concentrations were above the NMOCD remediation standard (100 ppm) in the northwest (VG-21, VG-22, VG-23) portion of the spill footprint (Figure I). In boring VG-21, residual TPH >100 ppm was found from 0-50 fbs [10,180 – 2,048 milligrams/kilogram (mg/kg), respectively]. Residual TPH in VG-23 was also found above the remediation standard from 0-50 fbs (674 to 731 mg/kg, respectively), with the highest concentration found in the 20-30 fbs sampling interval (6,610 mg/kg). Boring VG-22 was positioned approximately 40 feet south of VG-21, and this boring exhibited residual TPH above the remediation standard in the 0-10 fbs (721 mg/kg) and the 40-50 fbs (281 mg/kg) sampling intervals. Near the southern edge of the excavation (Figure I), boring VG-20 had residual TPH >100 ppm from 10-50 fbs (2,000 to 1,800 mg/kg, respectively), with the highest TPH concentration in the 20-30 fbs sampling interval (11,000 mg/kg). All sampling intervals for borings VG-18 and VG-19 exhibited <100 ppm TPH, with the exception of the 0-10 fbs sampling interval at VG-19 (110 mg/kg).

Chloride laboratory analysis of soils collected from the playa is presented in Table I. SPLP chloride concentrations in all borings and at all depths were found to be below NMOCD's stated chloride cleanup level (250 ppm) in NMOCD's guidance e-mail dated July 7, 2004 (Attachment B).

Monitoring well VG-1 was also tested for chlorides in groundwater (Table 2). Chloride concentrations increased from 1,040 mg/l in February 2004 to 1,140 mg/ in September 2004. Benzene was the only other constituent found in the groundwater sample having a concentration above laboratory detection limits. However, benzene was below the regulatory action level.

After the investigative drilling program was completed, the area experienced greater than normal rainfall. According to the National Weather Service (NOAA, 2004), rainfall in the Hobbs area was 4.78 inches in September 2004 (153% above normal), and 3.44 inches in November 2004 (395% above normal). During these storm events, the playa filled with water and the water migrated to groundwater through the open excavation.

Maxim returned to the Site in December, 2004, and January, February and March 2005 to collect additional information. The December 2004 excursion provided data on the condition



of the excavation floor and side walls (Table 3). Composite soil samples, collected using a trachoe, indicated the south and west walls and the floor were above NMOCD's July 12, 2004 e-mail guidance for TPH (<100 mg/kg). The north wall TPH was also above the guidance level concentration but it was very close to compliance. BTEX and chloride concentrations were below regulatory action levels.

In January 2005, the three groundwater monitoring wells were sampled (Table 4). Groundwater conditions changed from September 2004 to January 2005. Chloride concentrations at VG-1 increased from 1,140 mg/l in September 2004 to 2,880 mg/l in January 2005. Benzene increased from 0.005 mg/ml in September 2004 to 0.725 mg/l in January 2005. Other constituents not detected in September 2004 were present at VG-1 in the January 2005 sampling (ethylbenzene, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, and 1-methylnaphthalene). During this period, benzene and naphthalene concentrations were above regulatory action levels. Groundwater conditions in VG-2 and -3 remained essentially the same from September 2004 to January 2005.

In February and March 2005, a backhoe was used to further delineate the lateral extent of hydrocarbon south and west of the existing excavation. The south boundary was found but the presence of crude oil flowlines to the west prevented the finding of the western boundary. Based on the information collected to date a new excavation design was created (Figure 2).

#### Plan Forward

Based on laboratory findings and backhoe investigations, the excavation configuration has been altered to include only the area immediately west of the present excavation and the southern boundary will be expanded to include VG-20 (Figure 2). It is ConocoPhillips' objective to remove historical production pit material from the playa, minimize disturbance to the playa's natural soil structure and limit impact to groundwater below the playa. Maxim recommends that:

- hydrocarbon affected material west and south of the excavation be removed down to the top of the caliche zone (7-8 fbgs),
- the present excavation be backfilled to the top of the caliche zone,
- backfill the excavation with clean sand, free of rocks to a depth of one foot on the sides and 1.5 ft in the center to slightly dome the surface,
- place a 40-mil medium density polyethylene geo-membrane (liner) directly above the sand base (the slight doming of the sand beneath the liner will promote lateral drainage off of the liner after placement),
- backfill an additional one foot of sand, with no rocks or debris, over the liner for surface protection,
- backfill clean caliche/soil up to 3 fbgs in the excavation,
- backfill with "good, clean" soil of a similar nature to that which was excavated, and;
- prepare soil for re-seeding (a seed drill will be used to plant the appropriate seed mix).

Mr. Wayne Price  
April 5, 2005  
Page 4

Vacuum Glorietta Play Up Date

ConocoPhillips' plan is to install a membrane barrier in the playa excavation to channel precipitation away from the affected area and prevent further downward migration of hydrocarbons and chlorides in this area.

Also, monitoring well VG-I would be re-established (removed during excavation). A quarterly groundwater sampling program would be established to monitor water levels, BTEX, PAH and chloride concentration levels in the 3 monitoring wells. If the aquifer does not show evidence of self attenuation within one year, then Maxim would propose alternatives for NMOCD approval.

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Sincerely,

Charles Durrett

Digitally signed by Charles Durrett  
DN: CN = Charles Durrett, C = US,  
O = Maxim Technologies, Inc.  
Date: 2005.04.05 06:48:14 -05'00'

Charles Durrett  
Senior Project Manager

Cc: Mr. Chris Williams, NMOCD District I  
Mr. Neal Goates, ConocoPhillips  
Mr. Steve Wilson, ConocoPhillips

April 5, 2005

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: East Vacuum Glorietta, East Tank Battery Playa  
SW $\frac{1}{4}$  & SE  $\frac{1}{4}$ , Sec 27, T17S, R35E  
Project Update

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Mr. Wayne Price  
April 5, 2005  
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Vacuum Glorietta Play Up Date

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Charles Durrett

Digitally signed by Charles Durrett  
DN: CN = Charles Durrett, C = US,  
O = Maxim Technologies, Inc.  
Date: 2005.04.05 06:48:14 -05'00'

Charles Durrett  
Senior Project Manager

Cc: Mr. Chris Williams, NMOCD District I  
Mr. Neal Goates, ConocoPhillips  
Mr. Steve Wilson, ConocoPhillips

## Price, Wayne

---

**From:** Price, Wayne  
**Sent:** Friday, October 01, 2004 3:46 PM  
**To:** 'Cwdurrett1@aol.com'; Price, Wayne; Sheeley, Paul; Williams, Chris  
**Cc:** Stephen.R.Wilson@ConocoPhillips.com; neal.goates@conocophillips.com; cyancey@maximusa.com  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Work Plan

Dear Charlie, pursuant to our telephone conversation today OCD understands that your waiting on results of the additional delineation from the site. Once you receive that information please notify this office with your recommendations. Please request OCD permission before backfilling the excavated area.

-----Original Message-----

**From:** Cwdurrett1@aol.com [mailto:Cwdurrett1@aol.com]  
**Sent:** Monday, August 09, 2004 7:55 AM  
**To:** WPrice@state.nm.us; psheeley@state.nm.us; Cwilliams@state.nm.us  
**Cc:** Stephen.R.Wilson@ConocoPhillips.com; neal.goates@conocophillips.com; cyancey@maximusa.com  
**Subject:** ConocoPhillips Vacuum Glorieta Work Plan

Mr. Price:

In response to your July 12, 2004 electronic mail communication, Mr. Neal Goates requested that I forward the attached work plan for your review and approval. If you have any questions concerning the plan, please call me or Mr. Goates (832-379-6427).

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Charlie Durrett  
Maxim Technologies  
1703 W. Industrial Ave.  
Midland, TX 79701  
P 432-686-8081  
F 432-686-8085

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Environmental Facility Inspection				
Facility Name	ConocoPhillips East Vacuum Playa		Time Out	12:30
Inspector	Wayne Price	Dt Mod	8/24/2004	Time In
Inspection Date	08/19/2004	Inspect No.	8LWIP0423747649	
Purpose		Status Check		
Type		Field Inspection		
<b>Violations / Documentation</b>				Additional Violation Notes
List Violations or Indicate Compliance	<b>Specific Violation</b>			
	No Violations Identified - All O.K.			
Documentation Acquired: <input type="checkbox"/> Samples <input type="checkbox"/> Statements <input type="checkbox"/> Sketch <input type="checkbox"/> Video <input checked="" type="checkbox"/> Photos				
<b>Compliance Items</b> (Checked Items Denote Non-Compliance)				Write Compliance Based on this Inspection
<input type="checkbox"/> Drums <input type="checkbox"/> Process <input type="checkbox"/> AG Tanks <input type="checkbox"/> AG Saddle Tk <input type="checkbox"/> Labeling <input type="checkbox"/> Tanks/Sumps <input checked="" type="checkbox"/> Permits				
<input type="checkbox"/> UG Lines <input type="checkbox"/> WD Practice <input type="checkbox"/> Class V <input type="checkbox"/> Housekeepin <input type="checkbox"/> Spill Rpt <input type="checkbox"/> Potential ENV <input type="checkbox"/> Wtr Wells				
Describe Remedial Action Required	Inspection of site			
Use [SHIFT] + [F2] to Expand any Notes or Comment Field				





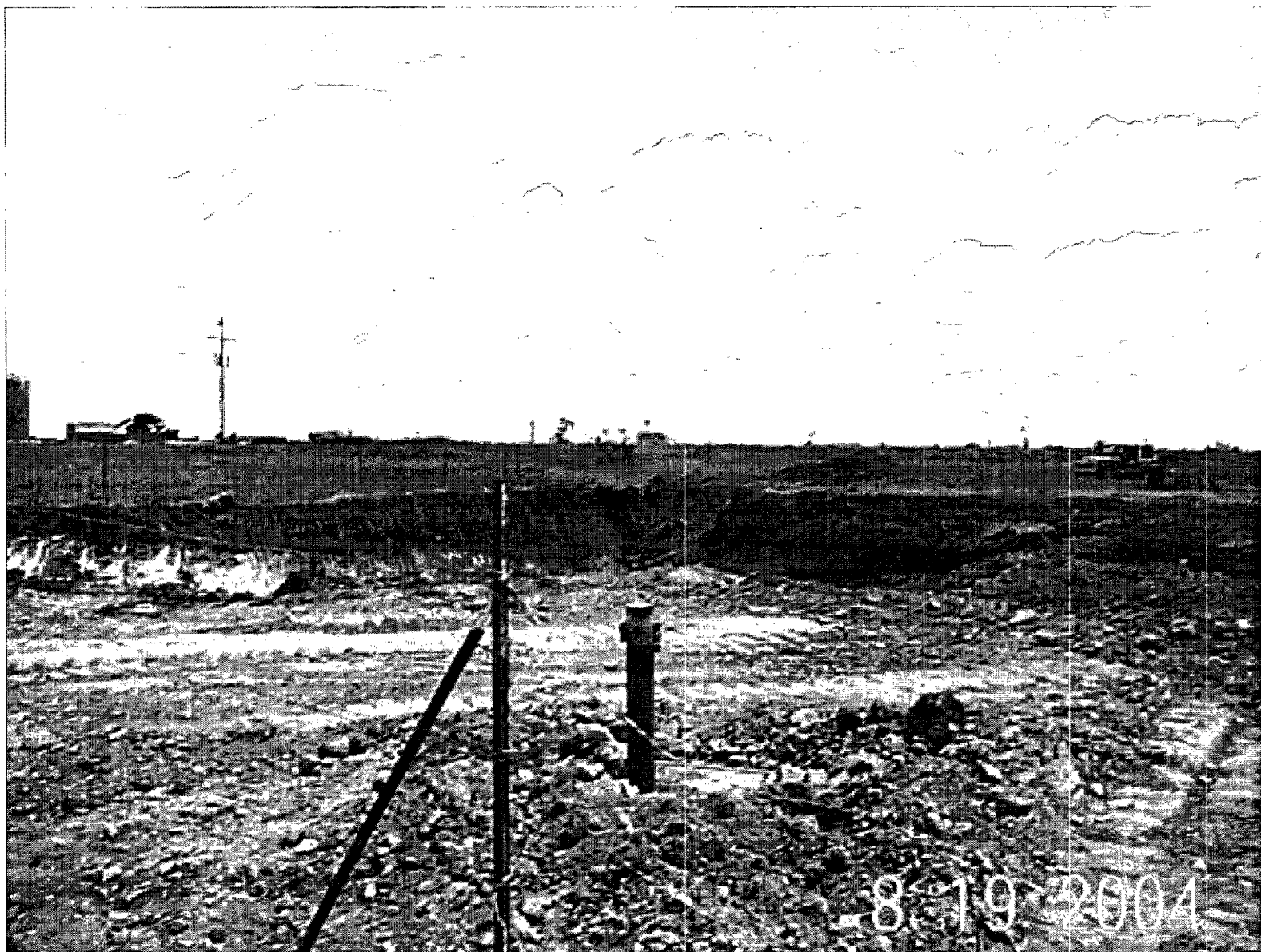


8.19.2004











## Price, Wayne

---

**From:** Cwdurrett1@aol.com  
**Sent:** Monday, August 09, 2004 7:55 AM  
**To:** WPrice@state.nm.us; psheeley@state.nm.us; Cwilliams@state.nm.us  
**Cc:** Stephen.R.Wilson@ConocoPhillips.com; neal.goates@conocophillips.com; cyancey@maximusa.com  
**Subject:** ConocoPhillips Vacuum Glorieta Work Plan



8092004

ConocoPhillips Vacuum

Mr. Price:

In response to your July 12, 2004 electronic mail communication, Mr. Neal Goates requested that I forward the attached work plan for your review and approval. If you have any questions concerning the plan, please call me or Mr. Goates (832-379-6427).

--

Charlie Durrett  
Maxim Technologies  
1703 W. Industrial Ave.  
Midland, TX 79701  
P 432-686-8081  
F 432-686-8085

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Neal Goates  
Site Manager  
Risk Management & Remediation  
Threadneedle 5022  
600 North Dairy Ashford  
Houston, TX 77079-1175  
phone 832.379.6427  
fax 801-382-1674  
Neal.Goates@conocophillips.com

August 9, 2004

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: **East Vacuum Glorieta, East Tank Battery Playa**  
NE $\frac{1}{4}$ , Sec 27, T17S, R35E  
Work Plan

Dear Mr. Price:

In response to your July 12, 2004 e-mail to me denying ConocoPhillips' remediation plan, I requested Maxim Technologies to propose a work plan to address your instructions. This plan is presented below.

Maxim described the area of soil impact to be approximately 0.25 acres in size or about 12.5 percent of the northern 2-acre half of the playa. Approximately 4,280 cubic yards (CY) of soil above and in hard caliche zone has been determined to be economically recoverable (local excavation contractors indicate the caliche lenses is extremely difficult to dig and would require chiseling tools to extract the rock). Maxim proposes to excavate these soils (approximately 8 feet below ground surface) and haul this material to a State approved disposal facility. Maxim will field screen samples of the excavation sidewalls and bottom with a photo-ionization detector (PID) and a chloride test kit to define the clean boundaries (< 100 ppm TPH and < 250 ppm chloride). Confirmation samples will be taken from the above locations and analyzed for benzene, ethylbenzene, toluene, total xylenes and chloride, using EPA's Method 1312 Synthetic Precipitation Leaching Procedure (west).

The excavated area will be backfilled with "good clean" soil of a similar nature to that which was excavated and prepared for re-seeding. A seed drill will be used to plant the appropriate seed mix and a temporary water irrigation system will be installed to apply three watering events. Two inches of water (28,000 gallons) will be applied during the first event. At two week intervals, 1-inch of water (14,000 gallons) will be applied for two additional events.

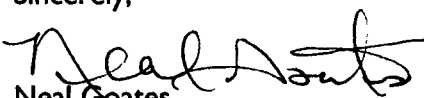
Maxim also proposes to sample monthly the three existing monitoring wells to monitor chloride concentration levels. If the aquifer does not show evidence of self cleaning within one year, then Maxim will propose alternatives for the New Mexico Oil Conservation Division's (NMOCD) approval.

Maxim will complete a report describing all activities, analytical results, photos, and a groundwater monitoring and remediation actions for NMOCD's review.

Mr. Wayne Price  
August 9, 2004  
Page 2 of 2

If this program is acceptable to NMOCD, ConocoPhillips is prepared to charge Maxim with the task of performing the above proposed plan. If you have any questions concerning this program, please contact Mr. Charles Durrett (432-686-8081) or me.

Sincerely,

 8-9-04  
Neal Goates

Cc: Mr. Paul Sheeley, NMOCD  
Mr. Steve Wilson, ConocoPhillips  
Mr. Charles Durrett, Maxim



## Price, Wayne

---

**From:** Cwdurrett1@aol.com  
**Sent:** Wednesday, July 07, 2004 12:22 PM  
**To:** WPrice@state.nm.us  
**Cc:** CWilliams@state.nm.us; PSheeley@state.nm.us; neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

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>Please send Photos

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>-----Original Message-----

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>Sent: Wednesday, July 07, 2004 10:15 AM

>To: WPrice@state.nm.us

>Cc: CWilliams@state.nm.us; psheeley@state.nm.us;

>neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com

>Subject: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

>

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Charlie Durrett  
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**Price, Wayne**

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**From:** Cwdurrett1@aol.com  
**Sent:** Thursday, July 08, 2004 6:05 AM  
**To:** WPrice@state.nm.us  
**Cc:** neal.goates@conocophillips.com; Stephen.R.Wilson@ConocoPhillips.com;  
cyancey@maximusa.com  
**Subject:** ConocoPhillips Vacuum Glorieta Photos

Attached are photos take in August 2003 for Vacuum Glorieta East Unit, East Tank Battery playa.

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7/13/2004

## Price, Wayne

---

**From:** Wilson, Steve R. [Stephen.R.Wilson@conocophillips.com]  
**Sent:** Thursday, July 08, 2004 9:20 AM  
**To:** Price, Wayne; Cwdurrett1@aol.com  
**Cc:** Williams, Chris; Sheeley, Paul; Goates, R. Neal  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations



100\_0377.JPG



100\_0379.JPG



100\_0381.JPG



100\_0384.JPG

These Pics were taken this morning .....

-----Original Message-----

**From:** Price, Wayne [mailto:WPrice@state.nm.us]  
**Sent:** Wednesday, July 07, 2004 1:59 PM  
**To:** 'Cwdurrett1@aol.com'; Price, Wayne  
**Cc:** Williams, Chris; Sheeley, Paul; Goates, R. Neal; Wilson, Steve R.  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

Send photos of site and playa lake!

-----Original Message-----

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Charlie Durrett  
Maxim Technologies  
1703 W. Industrial Ave.  
Midland, TX 79701  
P 432-686-8081  
F 432-686-8085

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**Price, Wayne**

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**From:** Price, Wayne  
**Sent:** Monday, July 12, 2004 4:40 PM  
**To:** 'Cwdurrett1@aol.com'; Price, Wayne  
**Cc:** Williams, Chris; Sheeley, Paul; neal.goates@conocophillips.com;  
 Stephen.R.Wilson@ConocoPhillips.com; Johnson, Larry  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

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In addition, ConocoPhillips shall perform an internal investigation to determine why the spill report did not reflect that a watercourse was impacted and why ConocoPhillips did not report the spill or perform clean-up actions in a timely manner. The delay in clean-up actions may have caused groundwater contamination. The spill was found by OCD approximately 30 hours after the initial occurrence. Please provide to OCD by **August 20, 2004** your findings in this manner and what actions, if necessary will be taken to remedy this problem in the future.

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**Price, Wayne**

---

**From:** Goates, R. Neal [Neal.Goates@conocophillips.com]  
**Sent:** Tuesday, July 13, 2004 5:45 AM  
**To:** Price, Wayne  
**Cc:** Charlie Durrett  
**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

Wayne,

Thank you for your review. I will get moving on this immediately. The project was transferred to RMR late and while the hPhillips field was still in transitions with numerous personnel. Excuses are cheap but I wanted to let you know I will complete the internal investigation and communicate with operations to ensure this will not reoccur by the deadline below.

-----Original Message-----

**From:** Price, Wayne [mailto:WPrice@state.nm.us]  
**Sent:** Monday, July 12, 2004 5:40 PM  
**To:** 'Cwdurrett1@aol.com'; Price, Wayne  
**Cc:** Williams, Chris; Sheeley, Paul; Goates, R. Neal; Wilson, Steve R.; Johnson, Larry  
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If requested, Maxim will send a hard copy of the subject report. Please acknowledge receipt of this e-mail.

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**Price, Wayne**


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**From:** Goates, R. Neal [Neal.Goates@conocophillips.com]  
**Sent:** Tuesday, July 13, 2004 7:58 AM  
**To:** Price, Wayne  
**Cc:** Williams, Chris; Sheeley, Paul; Wilson, Steve R.; Johnson, Larry; Cwdurrett1@aol.com; Wilson, Steve R.; Brooks, Tommy E.; Goates, R. Neal  
**Subject:** Internal investigation and Recommended Path Forward for playa adjacent to East Glorieta, East Tank Battery Lea County, New Mexico Sec 27, T35S, R35E  
**Importance:** High

Wayne,

Listed below are the details in the internal investigation and path forward to improve the response, reporting, and restoration for spill incidents.

**History:**

10/28/02 spill occurred at heritage Phillips location at Sec 33-T17S-R35E indicating 80 bbls into the playa. 100 bbls recovered consisting of spill and rainwater.

10/29/02 a fax sheet indicated from field that spill was called in to Larry Johnson and Bill Pritchard. C 141 was sent to Kent Oberle.

11/05/02 letter written from ConocoPhillips field personnel to Larry Johnson describing delineation planned.

11/20/02 partial delineation performed by B&H and COP personnel.

1/03 quotes to complete additional delineation was requested by COP field personnel.

5/23/03 Project communicated to Neal Goates from field operations.

5/30/03 Neal forwarded all information via email to Larry Johnson in order to get a path forward.

6/24/03 Neal sent follow up email to Larry on establishing path forward.

8/01/03 Steve Wilson transferred to Buckeye Operations (SHEAR)

8/11/03 Neal sent follow up email to Larry on establishing path forward.

10/03 Neal sent paper copy via request by Larry for orientation

11/03 Neal sent follow up email to Larry on establishing path forward.

12/11/03 Maxim sent an email to Larry on path forward on establishing.

7/15/03 Maxim submitted work order

8/15/03 Neal approved work order

Between 12/03 and early January Maxim and Larry talked and COP via Maxim sent Larry and Paul a work plan.

1/29/04 SLO permit granted

1/26/04 NMOCD approved revised work plan

1/30/04 wells staked and work notification given to Larry and Paul.

2/4/04 work started with 3 monitor wells develop to 70 fbg.

3/12/04 draft report forwarded to Neal

3/23/04 Neal reviewed findings with field personnel

3/24/04 Neal left message for Paul to call me back.

3/25/04 Neal left message with Bill Olson on preliminary findings of elevated chlorides below spill site in Playa.

7/1/04 Clyde Yansey with Maxim Technology received confirmation that Wayne Price would be the NMOCD contact for project.

7/7/04 Charlie forwarded the assessment and recommendation to Wayne Price for review.

7/13/04 Wayne review report and recommendation. Edits to recommendation are attached below.

**Path forward:**

All spills will implement full delineation after emergency response has been employed. Delineation will include measurement of horizontal and vertical extent of impact for all constituents of concern. The initial spill information will be reported on the C 141 report with follow up attachment if extended assessment is required after emergency response. All final reports will be attached to final C 141 report at the completion of the job. The project will be considered open until the agency has signed to bottom portion of the C 141 report. I trust this

7/13/2004

process is satisfactory with NMOCD team members and upon your confirmation these processes will be reviewed immediately with personnel and periodically with operations to ensure that all COP personnel and their contractors follow this process.

Thanks again for your patience in this matter.

Neal Goates, Site Manager Risk Management and Remediation

-----Original Message-----

**From:** Price, Wayne [mailto:WPrice@state.nm.us]

**Sent:** Monday, July 12, 2004 5:40 PM

**To:** 'Cwdurrett1@aol.com'; Price, Wayne

**Cc:** Williams, Chris; Sheeley, Paul; Goates, R. Neal; Wilson, Steve R.; Johnson, Larry

**Subject:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

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In addition, ConocoPhillips shall perform an internal investigation to determine why the spill report did not reflect that a watercourse was impacted and why ConocoPhillips did not report the spill or perform clean-up actions in a timely manner. The delay in clean-up actions may have caused groundwater contamination. The spill was found by OCD approximately 30 hours after the initial occurrence. Please provide to OCD by **August 20, 2004** your findings in this manner and what actions, if necessary will be taken to remedy this problem in the future.

-----Original Message-----

**From:** Cwdurrett1@aol.com [mailto:Cwdurrett1@aol.com]

**Sent:** Wednesday, July 07, 2004 10:15 AM

**To:** WPrice@state.nm.us

**Cc:** Cwilliams@state.nm.us; psheelley@state.nm.us; neal.goates@conocophillips.com;

Stephen.R.Wilson@ConocoPhillips.com

**Subject:** ConocoPhillips Vacuum Glorieta Findings Report and Recommendations

Attach is Mr. Neal Goates, ConocoPhillips, transmittal letter and Maxim Technologies' findings report for a playa adjacent to East Glorieta, East Tank Battery located in Lea County, New Mexico (Sec 27, T35S, R35E).

If you concur with the approach as presented in Mr. Goates letter, ConocoPhillips will authorize Maxim to proceed with the proposed program. Please contact Mr. Goates (832-379-6427) or me if you have any questions or require additional information.

If requested, Maxim will send a hard copy of the subject report. Please acknowledge receipt of this e-mail.

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7/13/2004

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NW View: From road ditch, across playa to battery. East Tank Battery with playa on east side. 08/2003



N view: From road ditch to across playa. Area to right is location of spill. Water present from recent rain. 08/2003













**Subj:** RE: ConocoPhillips Vacuum Glorieta Findings Report and Recommendations  
**Date:** 7/12/2004 6:40:01 PM Eastern Daylight Time  
**From:** "Price, Wayne" <WPrice@state.nm.us>  
**To:** "Cwdurrett1@aol.com" <Cwdurrett1@aol.com>, "Price, Wayne" <WPrice@state.nm.us>  
**Cc:** "Williams, Chris" <CWilliams@state.nm.us>, "Sheeley, Paul" <PSheeley@state.nm.us>, neal.goates@conocophillips.com, Stephen.R.Wilson@ConocoPhillips.com, "Johnson, Larry" <LWJohnson@state.nm.us>

*Sent from the Internet (Details)*

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180413

217817



Neal Goates  
Site Manager  
Risk Management & Remediation  
Threadneedle 5022  
600 North Dairy Ashford  
Houston, TX 77079-1175  
phone 832.379.6427  
fax 801-382-1674  
Neal.Goates@conocophillips.com

July 7, 2004

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: East Vacuum Glorieta, East Tank Battery Playa**  
NE $\frac{1}{4}$ , Sec 27, T17S, R35E  
Report of Findings, Subsurface Assessment

Dear Wayne:

As a follow up to your discussion with Mr. Clyde Yancey, Maxim Technologies, on June 30, 2004, I prepared this letter to document ConocoPhillips path forward plan for mitigating the petroleum hydrocarbon/produced water spill into a playa located east of our East Vacuum Glorieta, East Tank Battery (Site) that occurred on October 28, 2002 and to submit Maxim's findings report (enclosed). The Site is located on State owned land, within Lea County, New Mexico (32° 47.932' N, 103° 26.726' W).

The findings report documents the subsurface vadose zone and groundwater conditions below the playa affected by a hydrocarbon and produced water release reported to the New Mexico Oil Conservation Division (NMOCD) by telephone on October 29, 2002 (Attachment). This report incorporates the May 18-20, 2004 activities with results of Maxim's March 12, 2004 findings report entitled "Groundwater Assessment ConocoPhillips East Vacuum Glorieta East Tank Battery Lea County, New Mexico."


ConocoPhillips objective in remediating the spill in the playa is to minimize disturbance to the playa's natural soil structure and limit impact to groundwater below the playa. The area of soil impact is approximately 0.25 acres in size or about 12.5 percent of the northern 2-acre half of the playa. ConocoPhillips' plan is to install a membrane barrier in the playa to channel precipitation away from the affected area and prevent further downward migration of hydrocarbons and chlorides in this area. Also, one additional monitoring well would be developed inside the area of impact within the playa, down gradient of monitoring well VG-1 and establish a quarterly sampling program to monitor chloride concentration levels in three existing wells and the new monitoring well.

Mr. Wayne Price  
July 7, 2004  
Page 2

ConocoPhillips is prepared to authorize Maxim to go forward with the above program and prepare a brief annual findings report. The first report would be submitted to the NMOCD in January 2005 for the sampling year 2004. Maxim will continue to collect groundwater levels and chloride concentration data for an additional three consecutive years (2005 – 2007) and submit a brief findings report for each year. During the fifth year (2008), Maxim will collect one round of groundwater quality samples along with the quarterly groundwater levels and chloride concentrations. Once these data are collected, a final report will be prepared for submittal to the NMOCD.

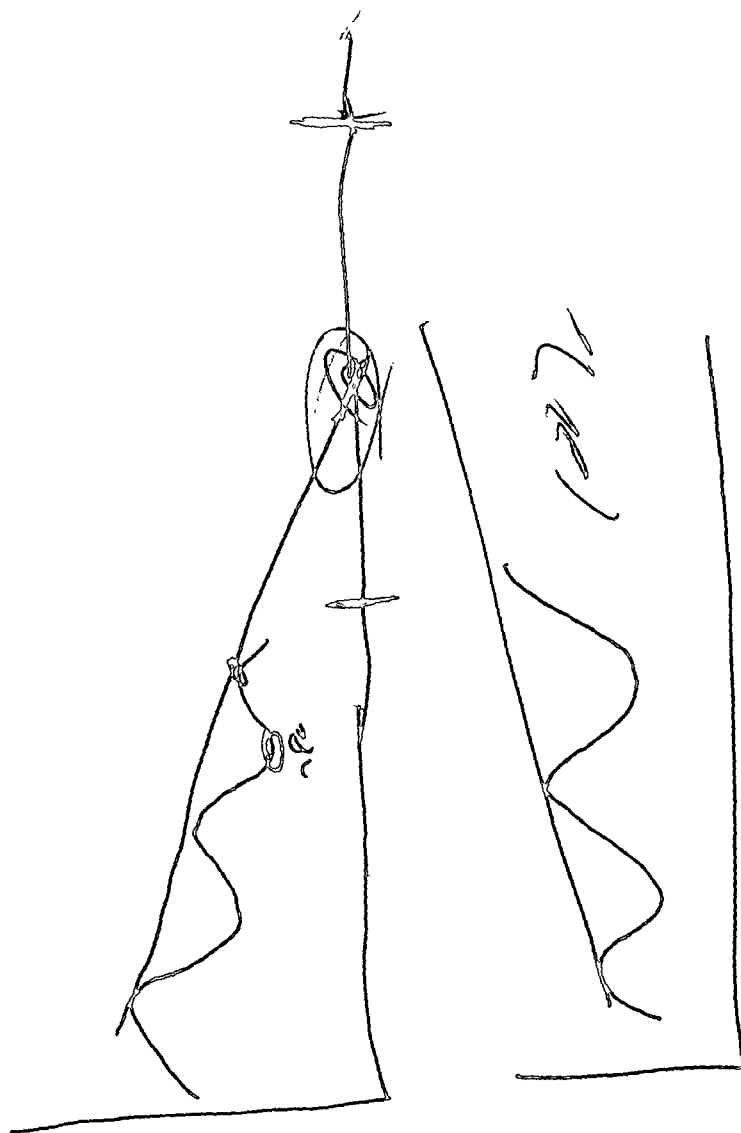
If you concur with this approach, ConocoPhillips will authorize Maxim to proceed. Please contact me or Mr. Charles Durrett (Maxim, 432-686-8081) if you have any questions or require additional information.

Sincerely,

 7-7-04  
Neal Goates  
ConocoPhillips

Attachment / Enclosure

CC: Mr. Chris Williams, NMOCD District 1  
Mr. Steve Wilson, ConocoPhillips



District I - (505) 393-6161  
P.O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 South First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

STATE OF NEW MEXICO  
Energy Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

Form C-141  
Originated 2/13/97

Submit 2 copies to  
Appropriate District  
Office in accordance  
with Rule 116 on  
back side of form

ATTACHMENT

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name <i>CONOCOPhillips</i>	Contact <i>Mike Aranda</i>	
Address <i>HC 60 Box 66 Lovington NM</i>	Telephone No. <i>505-396-7962</i>	
Facility Name <i>Vacuum Glocietta East Unit</i>	Facility Type <i>Oil</i>	
Surface Owner <i>State of New Mexico</i>	Mineral Owner <i>State of New Mexico</i>	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	<i>27</i>	<i>17S</i>	<i>35E</i>	<i>333'</i>	<i>South</i>	<i>2315'</i>	<i>West</i>	<i>Lea</i>

NATURE OF RELEASE

Type of Release <i>Oil &amp; Water</i>	Volume of Release <i>80 BBLS</i>	Volume Recovered <i>100 BBLS</i>
Source of Release <i>Free water knockout</i>	Date and Hour of Occurrence <i>10/28/02 5:00AM</i>	Date and Hour of Discovery <i>10/28/02 7:00AM</i>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>Larry Johnson &amp; Bill Pritchard</i>	
By Whom? <i>Mike Aranda</i>	Date and Hour <i>10/29/02 1:00 PM</i>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.

Describe Cause of Problem and Remedial Action Taken.

*Air compressor down @ battery. Lost air pressure to FWKO, causing vessel to go out of balance. Oil went out thru vent pipe appx 80' from Battery.*

Describe Area Affected and Cleanup Action Taken.

*Appx area affected 30'x 150'. Appx 80 BBL spill. Recovered 80 BBLS oil & 20 BBLS rain water. Dily dirt will be dug out, replaced, and soil remediated as soon as possible. Spill appx 120' SE of well # VAC ABO 6-80.*

Describe General Conditions Prevailing (Temperature, Precipitation, etc.).

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
Signature: *M.O. Aranda*

Printed Name: *Mike Aranda*

Title: *Operations Tech*

Date: *10/28/02*

Phone: *505-396-7962*

OIL CONSERVATION DIVISION

Approved by  
District Supervisor:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

**Price, Wayne**

---

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