

1R - 417-3

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2004

## Price, Wayne

---

**From:** Cwdurrett1@aol.com  
**Sent:** Saturday, October 02, 2004 11:44 AM  
**To:** WPrice@state.nm.us; CWilliams@state.nm.us  
**Cc:** neal.goates@conocophillips.com; Joyce.M.Miley@conocophillips.com;  
cyancey@maximusa.com  
**Subject:** RE: SENM Frontier Assests - ConocoPhillips Request for Closure



100203 CavinessR  
ClosureReques...

Mr. Price:

The Caviness Ranch report incorrectly gave the site location. It should have read "The Site is located approximately 9.1 miles southeast of Maljamar, New Mexico; 0.7 miles south of State Highway 529; in the north central portion of Lea County, New Mexico (N32° 45.816', W103° 39.150'; NAD27; Figure 1)."

Attached is the corrected report.

I am apologize for any inconvenience this may have caused.

Sincerely,

In a message dated 10/1/2004 6:30:22 PM Eastern Daylight Time, "Price, Wayne" <WPrice@state.nm.us> writes:

>Dear Charlie, The cover letters for the closure reports indicate that both  
>sites are located 5.7 miles NE of Maljamar is this correct?

>

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

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

>Sent: Wednesday, July 28, 2004 11:27 AM

>To: WPrice@state.nm.us; Cwilliams@state.nm.us

>Cc: neal.goates@conocophillips.com; Joyce.M.Miley@conocophillips.com;

>cyancey@maximusa.com

>Subject: SENM Frontier Assests - ConocoPhillips Request for Closure

>

>

>

>

>

>Mr. Price, Mr. Neal Goates, ConocoPhillips, requested that I submit for your  
>review two requests for closure reports for Anderson Ranch and Caviness  
>Ranch compressor stations. The work was done in regard to the sale of  
>certain ConocoPhillips assets to Frontier Energy Services. One additional  
>report, Lusk Compressor Station, will be submitted upon Maxim's receipt of  
>laboratory data.

>

>ConocoPhillips understands that your concurrence with these requests does  
>not relieve ConocoPhillips of potential future environmental liability at  
>these locations that may pose a threat to ground water, surface water, human  
>health or the environment. In addition, ConocoPhillips understands that a  
>NMOCD approval does not relieve ConocoPhillips of responsibility for  
>compliance with any other federal, state, or local laws and/or regulations.

>

>

>

>Please acknowledge receipt of this e-mail submittal.

>

>





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

October 2, 2004

Mr. Wayne Price  
New Mexico Energy, Minerals & Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

RE: SENM Frontier Assets  
Caviness Ranch Compressor Station  
SE1/4, NW1/4, Section 10, T18S, R33E  
Request for Closure

Dear Wayne:

On behalf of ConocoPhillips, Maxim Technologies, Inc. (Maxim) is submitting this report to describe the actions taken to remediate the soils around the Caviness Ranch tank battery in Lea County, New Mexico (Site). The Site is located approximately 9.1 miles southeast of Maljamar, New Mexico; 0.7 miles south of State Highway 529; in the north central portion of Lea County, New Mexico (N32° 45.816', W103° 39.150'; NAD27; Figure 1). The State of New Mexico administers the land at the Site. This report describes the path forward for closure of the soils inside the tank battery tank dike in accordance with New Mexico Oil Conservation Division's (NMOCD) standards, Guidelines for Remediation of Leaks, Spills and Releases.

## BACKGROUND

In the year 2003 ConocoPhillips sold certain oil and gas assets located in Lea County, New Mexico to Frontier Energy Services, L.L.C (Frontier). As part of the sale, Frontier requested Cinnabar Environmental Services (Cinnabar) to perform Phase I and II environmental assessments for those assets. Localized hydrocarbon staining was noted at Caviness Ranch Compressor Station in the Cinnabar Phase II investigative report (Projects\2003\271-03 ESA) entitled "*Assessment Site: Maljamar Gas Processing Plant and Associated Gathering System Chaves County, Eddy County and Lea County, New Mexico*" (Cinnabar Report). After the sale closed, Frontier requested ConocoPhillips to perform remediation at Anderson Ranch Compressor Station. Maxim submitted a work plan to bio-remediate Caviness Ranch to the New Mexico Oil Conservation Division (NMOCD) and to Frontier. The plan, approved by NMOCD on May 17, 2004 (Attachment A) and by Frontier on June 6, 2004 called for the use of urea to stimulate aerobic biological degradation of the surface and near surface hydrocarbon at this location.

## SCOPE OF WORK

Remediation activities were conducted on the Site from July 6 through July 16, 2004 in accordance with the plan approved by the NMOCD. These activities consisted primarily of removing soil adjacent to below ground piping inside the tank battery at the Caviness Ranch Compressor Station, replacing the steel piping with new, wrapped steel pipe, backfilling the trenches and hand spreading urea over the visually stained area.

A form of enhanced in-situ bioremediation to reduce concentrations of organic constituents in the soil was performed at Caviness Ranch. Bioremediation occurs naturally in shallow soils with access to oxygen. A granular form of urea was applied, in accordance with the following procedure, to stimulate aerobic biological degradation of the surface and near surface hydrocarbon inside the tank batter:

1. Surface hydrocarbon staining was visually delineated.
2. At Caviness Ranch, approximately 100 feet of 4 and 3-inch steel piping was replaced with new, wrapped pipe before urea is applied. Also, a 20-mil polyethylene skirt was placed in a 1' x 6" ditch around one 10-foot diameter tank to protect the tank from the urea.
3. Liquid captured during pipe replacement was place in the facility's sump.
4. Five (5) pounds (lbs) of urea (40% nitrogen, 4% potassium, 5% phosphorous) per cubic yard (CY) of soil was applied. Depth of hydrocarbon affected soil was determined in the Cinnabar Report to be four (4) feet below ground surface. Therefore, approximately 45 lbs of urea was applied to 227 CYs of affected soil at Caviness Ranch.
5. A garden tiller was used to blend the urea with surface soil to increase urea contact with the hydrocarbon and increase aeration to stimulate aerobic biological activity.
6. Photographs were taken to document the before and after treatment (see Photographs).

## FINDINGS

All work at Caviness Ranch was done under the direction of Maxim and observed by Frontier's on-site representatives. This work was documented by photographs taken during various stages of soil remediation (Photographs).

## CONCLUSIONS

All steel piping inside the tank dike was replaced. 20-mil polyethylene skirt was installed around on 10 foot diameter tank and the pipe trenches were backfilled. Approximately 45 lbs of urea was applied to the visually surface stained area. This Site has been remediated.

Mr. Wayne Price  
July 28, 2004  
Page 3 of 5

## RECOMMENDATIONS

Based on the work performed at this Site, Maxim recommends no further action is required. Upon your review and approval of this report, Maxim on behalf of ConocoPhillips, requests closure for this compressor location. If you have any questions or need additional information, please call Mr. Neal Goates (ConocoPhillips, 823-379-6427) or me.

Sincerely,

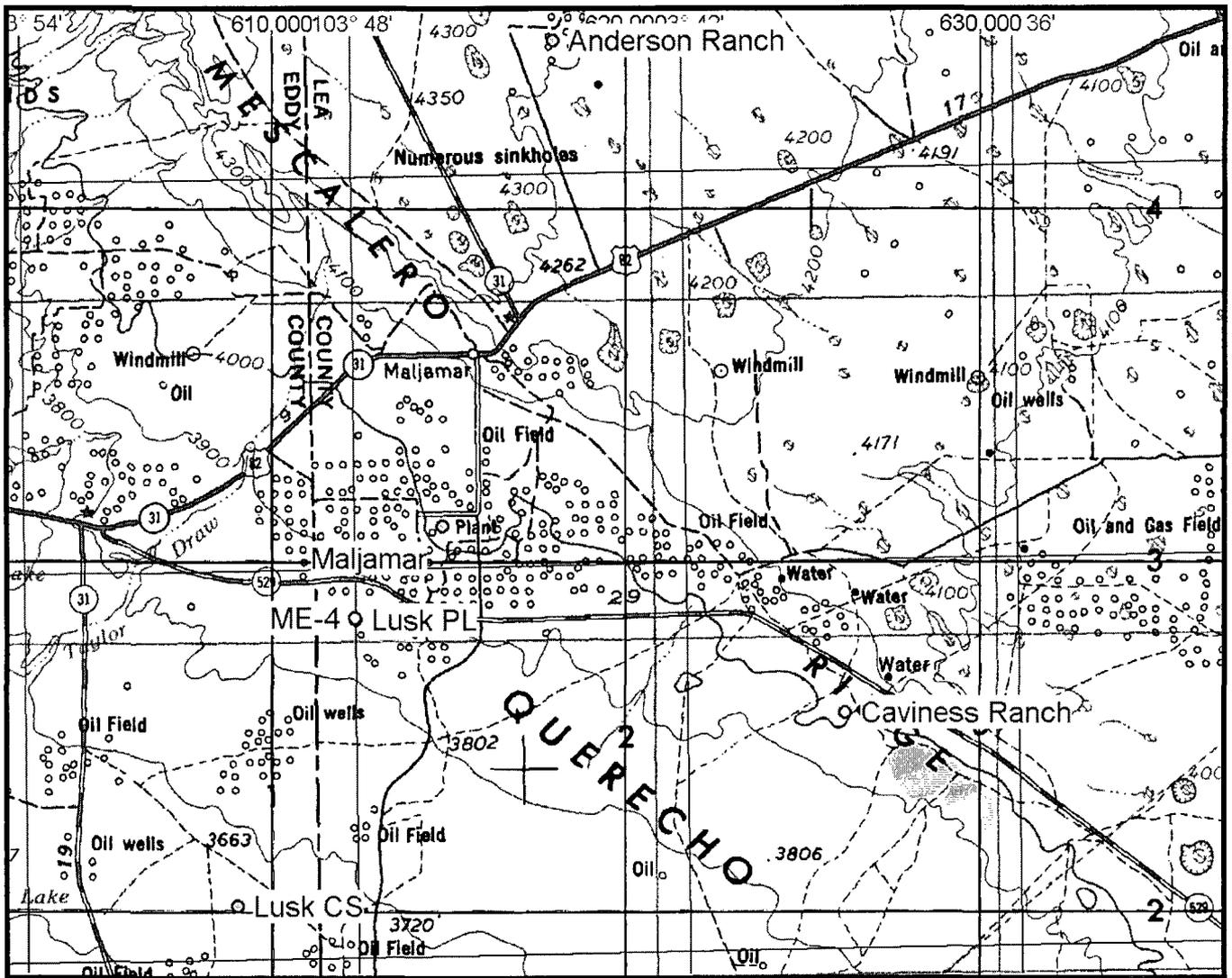
**MAXIM** TECHNOLOGIES

**Charles Durrett**

Digitally signed by Charles Durrett  
DN: CN = Charles Durrett, C = US, O =  
Maxim Technologies, Inc.  
Date: 2004.10.02 12:40:00 -05'00'

Charles Durrett  
Senior Project Manager

Cc: Mr. Chris Williams  
Mr. Neal Goates, ConocoPhillips  
Ms. Joyce Miley, ConocoPhillips

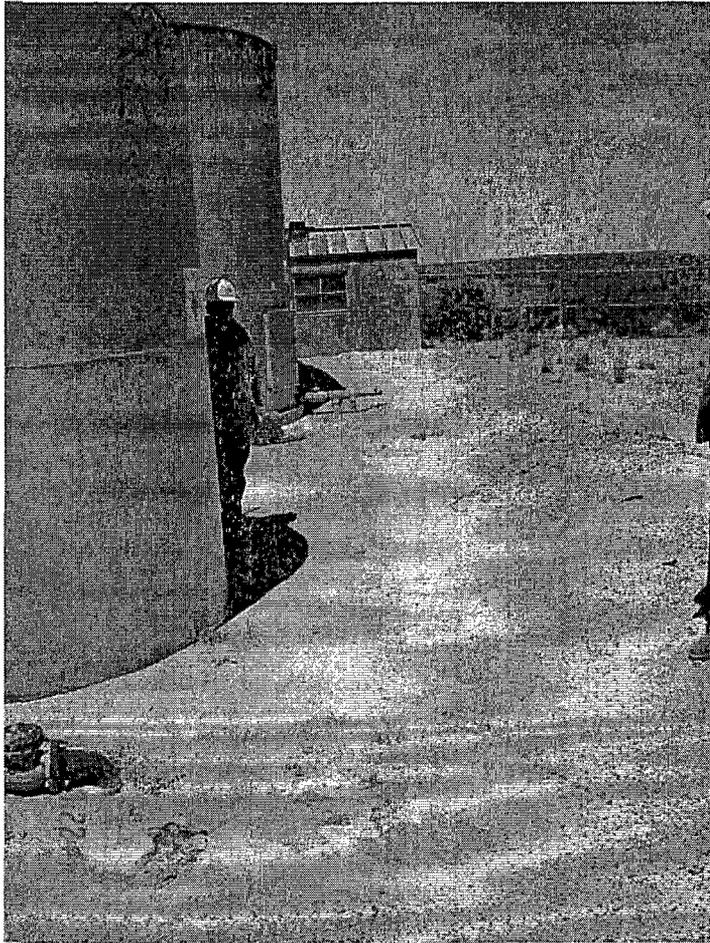


Source: USGS, 1954. Hobbs, New Mexico; Texas  
 Topographic Map. 1: 250,000 scale (reduced)

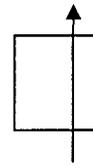
FIGURE I: Location Map

	
EDDY & LEA COUNTY NEW MEXICO	PROJECT NO. 4940033 MAP BY: CWD MAP DATE: 06/10/04

**PHOTOGRAPHS**



**Photo 1.** View to the north.  
Caviness Ranch tank battery  
before restoration.

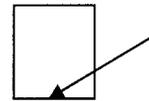


**Photo 2.** View to  
the west. Area  
immediately north  
of the Caviness  
Ranch north tank  
before restoration





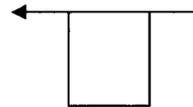
**Photo 3.** Area immediately south of the Caviness Ranch south tank.



**Photo 4.** View to the south. Example of hand excavation on east side of the Caviness Ranch storage tanks

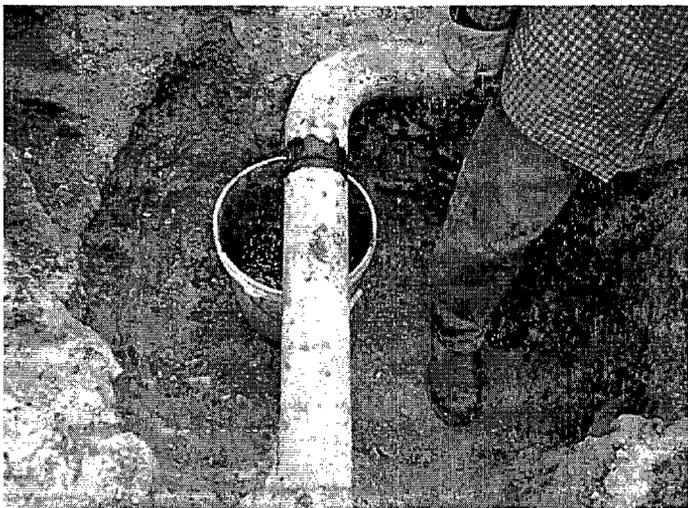
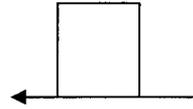


**Photo 5.** View to the west. Example of hand excavation on north side of the Caviness Ranch storage tanks

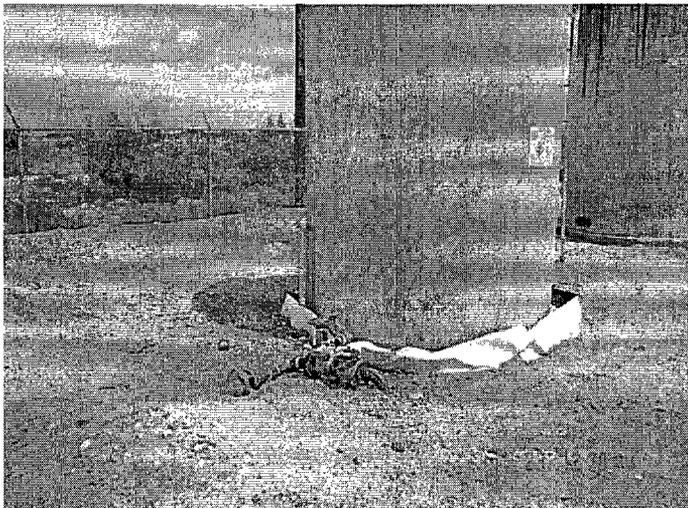




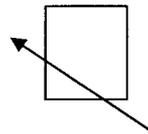
**Photo 6.** View to the west. Hand excavated trench for 20-mil polyethylene skirt around base of south tank at Caviness Ranch

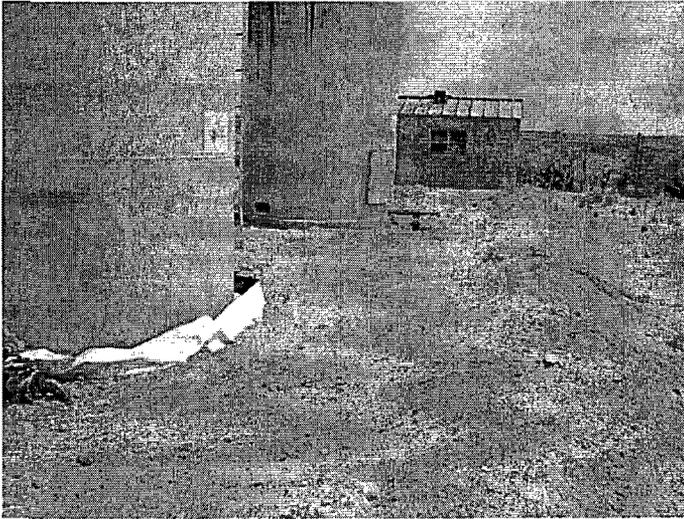


**Photo 7.** Liquids captured after pipe cut at Caviness Ranch

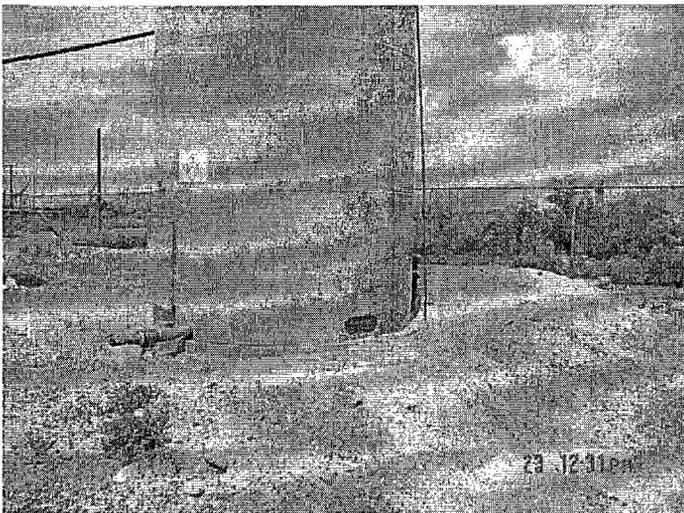
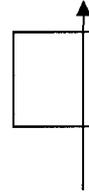


**Photo 8.** View to northwest. Protective 20-mil polyethylene skirt in-place. Work completed.

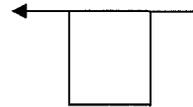




**Photo 9.** View to north. Work completed.



**Photo 10.** View to west. Work completed.



July 28, 2004

Mr. Wayne Price  
New Mexico Energy, Minerals & Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

RE: SENM Frontier Assets  
Caviness Ranch Compressor Station  
SE1/4, NW1/4, Section 10, T18S, R33E  
Request for Closure

Dear Wayne:

On behalf of ConocoPhillips, Maxim Technologies, Inc. (Maxim) is submitting this report to describe the actions taken to remediate the soils around the Caviness Ranch tank battery in Lea County, New Mexico (Site). The Site is located approximately 5.7 miles northeast of Maljamar, New Mexico; 4.2 miles north of US Highway 82; in the north central portion of Lea County, New Mexico (N32° 45.816', W103° 39.150'; NAD27; Figure 1). The State of New Mexico administers the land at the Site. This report describes the path forward for closure of the soils inside the tank battery tank dike in accordance with New Mexico Oil Conservation Division's (NMOCD) standards, Guidelines for Remediation of Leaks, Spills and Releases.

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Mr. Wayne Price  
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Sincerely,

**MAXIM TECHNOLOGIES**

Charles Durrett

Digitally signed by Charles Durrett  
DN: CN = Charles Durrett, C = US,  
O = Maxim Technologies, Inc.  
Date: 2004.07.28 11:20:08 -05'00'

Charles Durrett  
Senior Project Manager

Cc: Mr. Chris Williams  
Mr. Neal Goates, ConocoPhillips  
Ms. Joyce Miley, ConocoPhillips

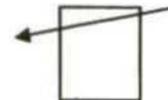
PHOTOGRAPHS



**Photo 1.** View to the north.  
Caviness Ranch tank batter  
before restoration.

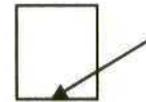


**Photo 2.** View to  
the west. Area  
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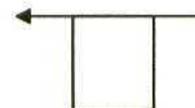
**Photo 3.** Area immediately south of the Caviness Ranch south tank.



**Photo 4.** View to the south. Example of hand excavation on east side of the Caviness Ranch storage tanks

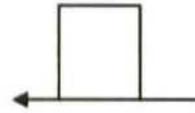


**Photo 5.** View to the west. Example of hand excavation on north side of the Caviness Ranch storage tanks





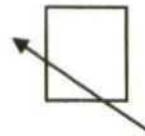
**Photo 6.** View to the west. Hand excavated trench for 20-mil polyethylene skirt around base of south tank at Caviness Ranch



**Photo 7.** Liquids captured after pipe cut at Caviness Ranch



**Photo 8.** View to northwest. Protective 20-mil polyethylene skirt in-place. Work completed.

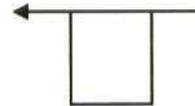




**Photo 9.** View to north. Work completed.



**Photo 10.** View to west. Work completed.



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

From: Price, Wayne [mailto:WPrice@state.nm.us]  
Sent: Monday, May 17, 2004 2:10 PM  
To: Clyde Yancey (E-mail)  
Cc: Joyce Miley (E-mail)  
Subject: Maxim Project # 4690016 Jan 23, 2004

Kemnitz, Caviness Ranch, Cedar Lake, Lusk, Skelly, Chaves, and Anderson Ranch compressor sites.

The OCD is in receipt of the work plan for the above sites and hereby approves of the plan. Please provide legal locations UL-Sec-TS-R for each site ASAP.

Please be advised that NMOCD approval of this plan does not relieve (ConocoPhillips) of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve (ConocoPhillips) of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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

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