



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

December 12, 1997

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, Texas 79702

Attention: Ms. Shirley Houchins

Re: Injectivity Test
North Vacuum Abo Unit PM Project
Lea County, New Mexico

Dear Ms. Houchins:

Reference is made to your request dated December 11, 1997, for authorization to commence injection into the following described horizontal injection wells within the North Vacuum Abo Unit Pressure Maintenance Project:

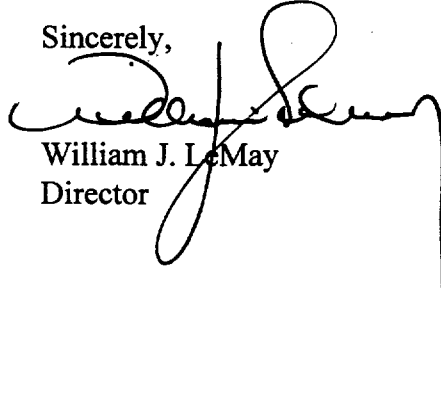
<u>WELL NAME</u>	<u>WELL LOCATION</u>
NVAU No. 136 (API No. 30-025-23462)	Unit D, Section 26, T-17S, R-34E
NVAU No. 156 (API No. 30-025-23696)	Unit J, Section 23, T-17S, R-34E
NVAU No. 213 (API No. 30-025-23982)	Unit N, Section 23, T-17S, R-34E

It is our understanding that these wells, which were originally drilled and permitted as conventional vertical injection wells, have recently been horizontally drilled within the Abo formation in order to increase the sweep efficiency of the pressure maintenance operations. It is further our understanding that Mobil Exploration & Producing, U.S. Inc., will request a Division hearing in January, 1998, to amend the injection permits for these wells, to establish an administrative procedure whereby additional injection wells within the North Vacuum Abo Unit may be drilled and completed as horizontal injection wells, and to qualify this project as an EOR Project pursuant to the "New Mexico Enhanced Oil Recovery Act".

Mobil Exploration & Producing U.S. Inc., is hereby authorized to commence a 90-day injectivity test on the above-described wells, provided however that the operator shall be subject to all applicable Division Rules and Regulations during this test injection period.

If you should have any questions, please contact Mr. David Catanach at (505) 827-8184.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay". The signature is stylized with a large loop at the end and a vertical line extending downwards from the right side.

William J. LeMay
Director

xc: OCD-Hobbs
 File-PMX-138
 Case File-4831

Mobil Exploration & Producing U.S. Inc.

P.O. BOX 633

MIDLAND, TEXAS 79702-0633

MIDLAND SITE

ENVIRONMENTAL, REGULATORY &
LOSS PREVENTION

December 10, 1997

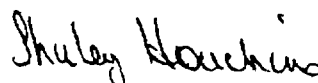
TEXACO Exploration & Production Inc.
Heritage Center
Midland, Texas 79002**Notification of Injection Intent
North Vacuum Abo Unit
#136, #156, #213, & #220
North Vacuum Abo
Lea County, New Mexico**

Dear Sir:

Mobil Exploration & Producing U.S. Inc. as agent for Mobil Producing TX & NM Inc., is requesting a waiver from offset operator to inject for active injection in horizontal wells. Well #136 is located in Unit D, 660 feet from the north line and 860 feet from the west line of Section 26, T17-S, R34-E. Well #156 is located in Unit J, 1893 from south line and 1800 feet from east line of Section 23, T 17-S, R34-E. Well #213 is located in Unit N, 460 feet from the south line and 1980 feet from the west line of Section 23, T 17-S, R 34-E. Well # 220 is located in Unit P, 660 from south line and 860 feet from east line of Section 22, T 17-S, R 34-E, Lea County, New Mexico.

If there is any questions, please contact me at 915-688-2585.

Sincerely,

Shirley Houchins
Environmental & Regulatory Technician**WAIVER**

Texaco agrees there is no objection to commence injection in horizontal wells.


TexacoDate: 12/11/97Environmental
Awareness

December 11, 1997

HAND-DELIVERED

Mr. David Catanach
Engineering Bureau
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Horizontal Injection Wells in Mobil's North Vacuum Abo Unit

Dear Mr. Catanach:

I am writing to follow up on the December 9 meeting attended by you and Ben Stone of the Oil Conservation Division, Debbie Markley and Chris Cuyler of Mobil and Ned Kendrick of Montgomery & Andrews. The purpose of the meeting was to reach a common understanding of the process for obtaining OCD approval of Mobil's planned operation of horizontal injection wells in our North Vacuum Abo Unit.

As described by Mobil at the meeting, the company proposes active injection into the following three horizontal injection wells in Lea County:

1. #136, S26-D, 17S, 34E (30-025-23462);
2. #156, S23-J, 17S, 34E (30-025-23696);
3. #213, S23-N, 17S, 34E (30-025-23982);

We committed to obtaining a waiver of objection from Texaco for N.V.A.U. #220, because that well is within one-half mile of the unit boundary, and Texaco is the operator of the neighboring unit. Upon further review, we have determined that it will not be necessary to utilize N.V.A.U. #220 during the testing phase of our horizontal injection program. Consequently, it will not be necessary to obtain a waiver from Texaco concerning N.V.A.U. #220 at this point, but we will provide it nonetheless. We understand that, because of the location and the nature of the three remaining horizontal injection wells, no notice to neighboring operators or surface owners is required prior to operation of the test phase of the project.

Upon your authorization, Mobil will immediately begin injecting water into N.V.A.U. #136. Our plan is to begin injecting water into N.V.A.U. #156 during the week of December 15 and into N.V.A.U. #213 shortly thereafter. We understand that your

Mr. David Catanach
December 11, 1997
Page 2

authorization will be effective until an OCD Examiner hearing is held and OCD issues an order approving our entire North Vacuum Abo Unit injection project.

Mobil intends to request OCD approval of our entire North Vacuum Abo Unit injection project at an Examiner hearing docketed in late January 1998, but no later than the second hearing date in February 1998. In addition to seeking approval of the project as a whole, Mobil will seek administrative approval of a process for adding injection wells within the project area during the life of the project that would not involve further public notice or hearings. Because Mobil understands that the information to be presented to the Examiner is also relevant to approval of the project as an Enhanced Oil Recovery Project under the Enhanced Oil Recovery Act, NMSA 1978, § 7-29A-1, et seq., we will request that approval from OCD as well.

Mobil appreciates your willingness to meet with company representatives on short notice and your guidance in identifying a process for OCD consideration of this important project.

Sincerely,

Shirley Houchins
Environmental and Regulatory Technician
Mobil Exploration & Producing U.S. Inc.

SH:dlo

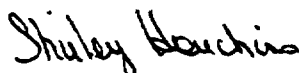
Mr. David Catanach
December 11, 1997
Page 2

authorization will be effective until an OCD Examiner hearing is held and OCD issues an order approving our entire North Vacuum Abo Unit injection project.

Mobil intends to request OCD approval of our entire North Vacuum Abo Unit injection project at an Examiner hearing docketed in late January 1998, but no later than the second hearing date in February 1998. In addition to seeking approval of the project as a whole, Mobil will seek administrative approval of a process for adding injection wells within the project area during the life of the project that would not involve further public notice or hearings. Because Mobil understands that the information to be presented to the Examiner is also relevant to approval of the project as an Enhanced Oil Recovery Project under the Enhanced Oil Recovery Act, NMSA 1978, § 7-29A-1, et seq., we will request that approval from OCD as well.

Mobil appreciates your willingness to meet with company representatives on short notice and your guidance in identifying a process for OCD consideration of this important project.

Sincerely,



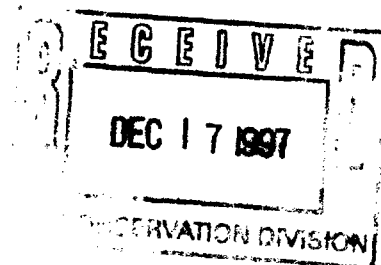
Shirley Houchins
Environmental and Regulatory Technician
Mobil Exploration & Producing U.S. Inc.

SH:dlo

December 11, 1997

HAND-DELIVERED

Mr. David Catanach
Engineering Bureau
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505



Re: Horizontal Injection Wells in Mobil's North Vacuum Abo Unit

Dear Mr. Catanach:

I am writing to follow up on the December 9 meeting attended by you and Ben Stone of the Oil Conservation Division, Debbie Markley and Chris Cuyler of Mobil and Ned Kendrick of Montgomery & Andrews. The purpose of the meeting was to reach a common understanding of the process for obtaining OCD approval of Mobil's planned operation of horizontal injection wells in our North Vacuum Abo Unit.

As described by Mobil at the meeting, the company proposes active injection into the following three horizontal injection wells in Lea County:

1. #136, S26-D, 17S, 34E (30-025-23462);
2. #156, S23-J, 17S, 34E (30-025-23696);
3. #213, S23-N, 17S, 34E (30-025-23982);

We committed to obtaining a waiver of objection from Texaco for N.V.A.U. #220, because that well is within one-half mile of the unit boundary, and Texaco is the operator of the neighboring unit. Upon further review, we have determined that it will not be necessary to utilize N.V.A.U. #220 during the testing phase of our horizontal injection program. Consequently, it will not be necessary to obtain a waiver from Texaco concerning N.V.A.U. #220 at this point, but we will provide it nonetheless. We understand that, because of the location and the nature of the three remaining horizontal injection wells, no notice to neighboring operators or surface owners is required prior to operation of the test phase of the project.

Upon your authorization, Mobil will immediately begin injecting water into N.V.A.U. #136. Our plan is to begin injecting water into N.V.A.U. #156 during the week of December 15 and into N.V.A.U. #213 shortly thereafter. We understand that your

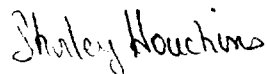
Mr. David Catanach
December 11, 1997
Page 2

authorization will be effective until an OCD Examiner hearing is held and OCD issues an order approving our entire North Vacuum Abo Unit injection project.

Mobil intends to request OCD approval of our entire North Vacuum Abo Unit injection project at an Examiner hearing docketed in late January 1998, but no later than the second hearing date in February 1998. In addition to seeking approval of the project as a whole, Mobil will seek administrative approval of a process for adding injection wells within the project area during the life of the project that would not involve further public notice or hearings. Because Mobil understands that the information to be presented to the Examiner is also relevant to approval of the project as an Enhanced Oil Recovery Project under the Enhanced Oil Recovery Act, NMSA 1978, § 7-29A-1, et seq., we will request that approval from OCD as well.

Mobil appreciates your willingness to meet with company representatives on short notice and your guidance in identifying a process for OCD consideration of this important project.

Sincerely,



Shirley Houchins
Environmental and Regulatory Technician
Mobil Exploration & Producing U.S. Inc.

SH:dlo

4831



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

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

ANITA LOCKWOOD
CABINET SECRETARY

November 10, 1994

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, Texas 79702-0633

Attn: Kay Pollock-Lyon

DEC 05 '94

**RE: Injection Pressure Increase North Vacuum Abo Pressure
Maintenance Project Lea County, New Mexico**

Dear Ms. Pollock-Lyon:

Reference is made to your request dated October 24, 1994 to increase the surface injection pressure on 13 wells. This request is based on step rate tests conducted on these wells between September 20 and October 5, 1994. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

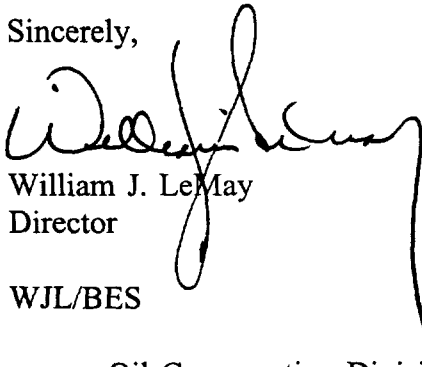
Well and Location	Maximum Injection Surface Pressure
North Vacuum Abo Unit Well No.121 Unit L, Section 13,	4452 PSIG
North Vacuum Abo Unit Well No.131 Unit B, Section 10,	4029 PSIG
North Vacuum Abo Unit Well No.142 Unit J, Section 14,	4380 PSIG

Well and Location	Maximum Injection Surface Pressure
North Vacuum Abo Unit Well No.146 Unit B, Section 14,	4290 PSIG
North Vacuum Abo Unit Well No.152 Unit B, Section 13,	4438 PSIG
North Vacuum Abo Unit Well No.160 Unit B, Section 12,	4270 PSIG
North Vacuum Abo Unit Well No.163 Unit J, Section 15,	4421 PSIG
North Vacuum Abo Unit Well No.164 Unit B, Section 15,	4476 PSIG
North Vacuum Abo Unit Well No.200 Unit L, Section 2,	4487 PSIG
North Vacuum Abo Unit Well No.201 Unit J, Section 10,	4165 PSIG
North Vacuum Abo Unit Well No.210 Unit L, Section 23,	4282 PSIG
North Vacuum Abo Unit Well No.229 Unit L, Section 10,	4590 PSIG
North Vacuum Abo Unit Well No.230 Unit J, Section 13,	4445 PSIG
All wells located in Township 17 South, Range 34 East, Lea County, New Mexico.	

Injection Pressure Increase
Mobil Exploration & Producing U.S., Inc.
November 10, 1994
Page 3

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long, sweeping vertical line extending downwards from the end of the signature.

William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
File: 4th Quarter PSI-X; Case File No.4831
PMX-138, PMX-140, WFX-557