



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

June 11, 1996

**Phillips Petroleum Company**  
**4001 Penbrook**  
**Odessa, Texas 79762**  
**Attention: Larry M. Sanders**

*Administrative Order DD-148*

Dear Mr. Sanders:

Under the provisions of **Rules 111.D and E** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995, Phillips Petroleum Company ("Phillips") made application to the New Mexico Oil Conservation Division on May 6, 1996 for authorization to directional drill its proposed State "H-35" Well No. 16, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The proposed wellbore is to be drilled to a pre-determined bottom-hole location in the Phillips Petroleum Company's (Conoco) State H-35 Vacuum Pressure Maintenance Project Area, established by Division Order No. R-7182, dated January 12, 1983, and as such the Vacuum-Grayburg-San Andres Pool is subject to the statewide rules and regulations for oil wells, as promulgated by **Rules 104.C(1) and F(1)**, which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the lease or unitized area (pressure maintenance/waterflood project area), nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
- (2) The (Conoco) State H-35 Vacuum Pressure Maintenance Project Area comprises the NE/4 and E/2 NW/4 of Section 35, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico;
- (3) The surface area of the proposed well location dictates the necessity for deviating this well in a predetermined direction. The existence of gathering lines, flow lines,

pipelines, and tank production facilities requires the well to be located 1120 feet from the North line and 660 feet from the East line (Unit A) of said Section 35;

- (4) The proposed bottom-hole location within the Vacuum-Grayburg-San Andres Pool, 1310 feet from the North line and 660 feet from the East line (Unit A) of said Section 35, is necessary to complete an effective and efficient injection/production pattern for the current secondary recovery operations and for the future tertiary recovery operation proposed by Phillips, which was the subject of Division Case 11523 heard on May 2, 1996;
- (5) The "target or project area" for said directional drilling should be within a reasonable radius of the projected bottom-hole location of 1310 feet from the North line and 660 feet from the East line; and,
- (6) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said **Rules 111.D and E and 104.C(1) and F(1)**, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of **Division General Rules 104 and 111**.

**IT IS THEREFORE ORDERED THAT:**

(1) Phillips Petroleum Company ("Phillips") is hereby authorized to drill its State "H-35" Well No. 16 from a surface location 1120 feet from the North line and 660 feet from the East line (Unit A) of Section 35, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, kick-off to the south and directionally drill into the Vacuum-Grayburg-San Andres Pool as close as is reasonably possible to the targeted bottom-hole location of 1310 feet from the North line and 660 feet from the East line (Unit A) of said Section 35.

**PROVIDED HOWEVER THAT** prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

**PROVIDED FURTHER THAT** during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottom-hole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The

applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

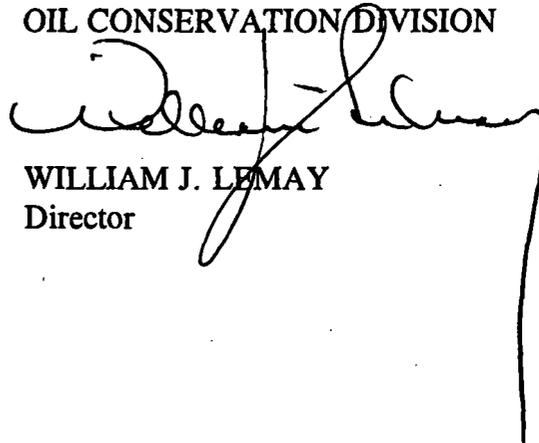
(3) The operator shall comply with all requirements and conditions set forth in **Division General Rule 111.E(2)** and any applicable requirements in **111.D** and **F** and **104.C(1)** and **104.F(2)**.

(4) Form C-105 shall be filed in accordance with **Division Rule 1105** and the operator shall indicate thereon true vertical depth in addition to measured depths.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

SEAL

cc: Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe  
File: Case 1152

DD-WF.1

Rec: 5-20-96

Susp: 6-10-96

Released: 6/10/96

June 7, 1996

**Phillips Petroleum Company  
4001 Penbrook  
Odessa, Texas 79762**

**Attention: Larry M. Sanders**

148

*Administrative Order DD-\*\*\**

Dear Mr. Sanders:

Under the provisions of **Rules 111.D and E** of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995, Phillips Petroleum Company ("Phillips") made application to the New Mexico Oil Conservation Division on May 6, 1996 for authorization to directional drill its proposed State "H-35" Well No. 16, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The proposed wellbore is to be drilled to a pre-determined bottom-hole location in the Phillips Petroleum Company's (Conoco) State H-35 Vacuum Pressure Maintenance Project Area, established by Division Order No. R-7182, dated January 12, 1983, and as such the Vacuum-Grayburg-San Andres Pool is subject to the statewide rules and regulations for oil wells, as promulgated by **Rules 104.C(1) and F(1)**, which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the lease or unitized area (pressure maintenance/waterflood project area), nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
- (2) The (Conoco) State H-35 Vacuum Pressure Maintenance Project Area comprises the NE/4 and E/2 NW/4 of Section 35, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico;



- (3) The surface area of the proposed well location dictates the necessity for deviating this well in a predetermined direction. The existence of gathering lines, flow lines, pipelines, and tank production facilities requires the well to be located 1120 feet from the North line and 660 feet from the East line (Unit A) of said Section 35;
- (4) The proposed bottom-hole location within the Vacuum-Grayburg-San Andres Pool, 1310 feet from the North line and 660 feet from the East line (Unit A) of said Section 35, is necessary to complete an effective and efficient injection/production pattern for the current secondary recovery operations and for the future tertiary recovery operation proposed by Phillips, which was the subject of Division Case 11523 heard on May 2, 1996;
- (5) The "target or project area" for said directional drilling should be within a reasonable radius of the projected bottom-hole location of 1310 feet from the North line and 660 feet from the East line; and,
- (6) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rules 111.D and E and 104.C(1) and F(1), the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rules 104 and 111.

**IT IS THEREFORE ORDERED THAT:**

(1) Phillips Petroleum Company ("Phillips") is hereby authorized to drill its State "H-35" Well No. 16 from a surface location 1120 feet from the North line and 660 feet from the East line (Unit A) of Section 35, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, kick-off to the south and directionally drill into the Vacuum-Grayburg-San Andres Pool as close as is reasonably possible to the targeted bottom-hole location of 1310 feet from the North line and 660 feet from the East line (Unit A) of said Section 35.

**PROVIDED HOWEVER THAT** prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

**PROVIDED FURTHER THAT** during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottom-hole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe

WILLIAM J. LEMAY  
Director

SEAL

and Hobbs offices of the Division upon completion.

(3) The operator shall comply with all requirements and conditions set forth in **Division General Rule 111.E(2)** and any applicable requirements in **111.D and F** and **104.C(1)** and **104.F(2)**.

(4) Form C-105 shall be filed in accordance with **Division Rule 1105** and the operator shall indicate thereon true vertical depth in addition to measured depths.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY  
Director

S E A L

cc: Oil Conservation Division - Hobbs  
New Mexico State Land Office - Santa Fe  
File: Case 1152

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*****
* User name:  MIKSTOGNER (20)           Queue:  PACHECO/OCD_LJ4SIMX_ENG  *
* File name:   Server:  OCD_LJ4SIMX_ENG  *
* Directory:   *
* Description: LPT1 Catch                *
*              January 2, 1996           2:13pm          *
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**PHILLIPS PETROLEUM COMPANY**

ODESSA, TEXAS 79762  
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP  
Permian Basin Region

OIL CONSERVATION DIVISION  
RECEIVED

MAY 17 20 08 52

May 16, 1996

Vacuum Grayburg/San  
Andres Field  
Lea County, New Mexico

State of New Mexico  
Energy, Minerals, and Natural Resources Department  
Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87504

Attention: Michael Stogner,  
Engineer

Gentlemen:

Phillips Petroleum Company respectfully requests administrative approval under the provisions of Rule 111 to intentionally deviate the State H-35 Well No. 16. The surface area of the proposed well location dictates the necessity for deviation of the well. The existence of gathering/flowlines, pipelines, and tank production facilities requires the wellpad area to be established where staked. The proposed bottom hole location is required to effectively complete the injection and production pattern for the current waterflood project. Future plans include unitization of and CO2 injection on the State H-35 Lease, the Mable Lease, and the Hale, M. E. Lease.

The proposed surface location is:  
Unit Letter A, 1120' FNL & 660' FEL of Section 35, T-17-S, R-34-E,  
Lea County.

The proposed bottom hole location is:  
Unit Letter A, 1310' FSL & 660' FEL of Section 35, T-17-S, R-34-E,  
Lea County.

Phillips Petroleum Company operates the offsetting proration units to the West & South while Mobil is to the North and Texaco to East of Unit Letter A. Mobil and Texaco have been notified by certified mail. (Copy attached) The unorthodox well location application is filed with the Hobbs district office. (Copy attached)

Sincerely,

L. M. Sanders,  
Sr. Regulation Analyst

District I  
PO Box 1960, Hobbs, NM 88241-1960  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

**OIL CONSERVATION DIVISION**  
**P.O. Box 2088**  
**Santa Fe, NM 87504-2088**

AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator name and Address <b>Phillips Petroleum Company</b> <b>4001 Penbrook Street</b> <b>Odessa, TX 797962</b>		<sup>2</sup> OGRID Number <b>017643</b>
		<sup>3</sup> API Number <b>30-0</b>
<sup>4</sup> Property Code <b>017021</b>	<sup>5</sup> Property Name <b>STATE H-35</b>	<sup>6</sup> Well Number <b>016</b>

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>A</b>	<b>35</b>	<b>17-S</b>	<b>34-E</b>		<b>1120'</b>	<b>NORTH</b>	<b>660'</b>	<b>EAST</b>	<b>LEA</b>

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>A</b>	<b>35</b>	<b>17-S</b>	<b>34-E</b>		<b>1310'</b>	<b>NORTH</b>	<b>660'</b>	<b>EAST</b>	<b>LEA</b>

<sup>9</sup> Proposed Pool 1 <b>VACUUM GRAYBURG/SAN ANDRES</b>					<sup>10</sup> Proposed Pool 2 <b>VACUUM GRAYBURG/SAN ANDRES</b>				
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<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>0</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>4010' GR</b>
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth <b>5,000'</b>	<sup>18</sup> Formations <b>GR/SA</b>	<sup>19</sup> Contractor	<sup>20</sup> Spud Date <b>UPON APPROVAL</b>

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>12-1/4"</b>	<b>8-5/8"</b>	<b>24# J-55</b>	<b>1,600'</b>	<b>600 SXS</b>	<b>SURFACE</b>
<b>7-7/8"</b>	<b>5-1/2"</b>	<b>15.5# J-55</b>	<b>5,000'</b>	<b>1000 SXS</b>	<b>SURFACE</b>

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary

**USE APPROPRIATE BOP FOR CONTROL**  
**SEE ATTACHED CASING AND CEMENTING PROGRAM**  
**SEE ATTACHED MUD PROGRAM**

**NOTE: AFTER UNITIZATION THIS WELL WILL BECOME:**  
**STATE 35 UNIT WELL NO. 8**

**NOTE: DEVIATED HOLE REQUEST SENT TO NMOCD - SANTA FE.**

**NOTE: UNORTHODOX LOCATION TO COMPLETE AN EFFICIENT PRODUCTION AND INJECTION PATTERN WITHIN A SECONDARY RECOVERY PROJECT.**

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		<b>OIL CONSERVATION DIVISION</b>	
Signature: <i>L.M. Sanders</i>	Approved by:		
Printed name: <b>Larry M. Sanders</b>	Title:	Approval Date:	
Title: <b>Senior Regulation Analyst</b>		Expiration Date:	
Date: <b>05/16/96</b>	Phone: <b>(915) 368-1488</b>	Conditions of Approval: Attached <input type="checkbox"/>	

DISTRICT I  
P.O. Box 1890, Hobbs, NM 88241-1890

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brasos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 62180	Pool Name VACUUM GRAYBURG/SAN ANDRES
Property Code 017021	Property Name STATE H-35 STATE "35" UNIT	Well Number 016 8
OGRID No. 017643	Operator Name PHILLIPS PETROLEUM CO.	Elevation 4010

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17 S	34 E		1120	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17-S	34-E		1310'	NORTH	660'	EAST	LEA

Dedicated Acres 40 Ac.	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

D	C	B	A		<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>L. M. Sanders</i> Signature</p> <p>L. M. Sanders Printed Name</p> <p>Sr. Regulation Analyst Title</p> <p>05/16/96 Date</p>
E	F	G	H		
L	K	J	I	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>APRIL 3, 1996</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Ronald J. Eidson</i> Professional Surveyor</p> <p>9611-0409</p>	
M	N	O	P		

Certificate No. JOHN W. WEST 676  
RONALD J. EIDSON 3239  
PROFESSIONAL SURVEYOR EIDSON 12641

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name	
		62180	VACUUM GRAYBURG/SAN ANDRES	
Property Code	Property Name		Well Number	
017021	STATE H-35 STATE "35" UNIT		016 8	
OGRID No.	Operator Name		Elevation	
017643	PHILLIPS PETROLEUM CO.		4010	

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17 S	34 E		1120	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17-S	34-E		1310'	NORTH	660'	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40 Ac.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

				<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>L.M. Sanders</i> Signature</p> <p>L. M. Sanders Printed Name</p> <p>Sr. Regulation Analyst Title</p> <p>05/16/96 Date</p>	
				<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>APRIL 3, 1996</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Donald J. Eidson</i> Professional Surveyor</p> <p>96-11-0499</p> <p>Certification No. JOHN W. WEST 676 DONALD J. EIDSON 3239 DONALD J. EIDSON 12641</p>	

**MUD PROGRAM**

**STATE H-35 WELL NOS. ( 16, 17)  
HALE, M.E. WELL NOS. ( 24, 25, 26, 27)**

<b>DEPTH</b>	<b>MUD WEIGHT</b>	<b>VISCOSITY</b>	<b>FLUID LOSS</b>	<b>CL PPM</b>	<b>% SOLIDS</b>	<b>ADDITIVES</b>
Surf. - 1600'	8.3 - 9.0 ppg	28 - 36 sec/1000 cc	N/C	-	-	Native Solids
1600' - 4000'	10.0 ppg	28 - 32 sec/1000 cc	N/C	Saturated	-	Native Solids
4000' - TD	10.0 - 10.2 ppg	32 - 36 sec/1000 cc	20 cc	Saturated	-	Starch/Drispac+

The Mud Engineer shall include on each test report the materials used for the previous 24 hour period. Daily fax the test reports to (915) 368-1507 Attn: J.C. Shoumaker / L.E. Robinson.

Send two copies of the Well Recap (Final Cost & Engineering Summaries) to Phillips Petroleum Company , Attn: J.C. Shoumaker / L.E. Robinson, 4001 Penbrook, Odessa, Texas 79762

## CASING & CEMENTING PROGRAM

### STATE H-35 WELL NO. 16

#### 8 5/8" 24 lb/ft J-55 Surface Casing Set at 1600' - 12 1/4" Hole:

Lead: 450 sx Class "C" + 4% Gel + 2% CaCl<sub>2</sub>.  
Desired TOC = Surface.

Slurry Weight: 13.5 ppg  
Slurry Yield: 1.72 ft<sup>3</sup>/sx  
Water Requirement: 9.06 gals/sx

Tail: 150 sx Class "C" + 2% CaCl<sub>2</sub>.  
Desired TOC = 1300'.

Slurry Weight: 14.8 ppg  
Slurry Yield: 1.32 ft<sup>3</sup>/sx  
Water Requirement: 6.3 gals/sx

#### 5 1/2" 15.5 lb/ft J-55 Production Casing Set at 5000' - 7 7/8" Hole:

Lead: 750 sx Class "C" + Econolite + 3% Salt.  
Desired TOC = Surface.

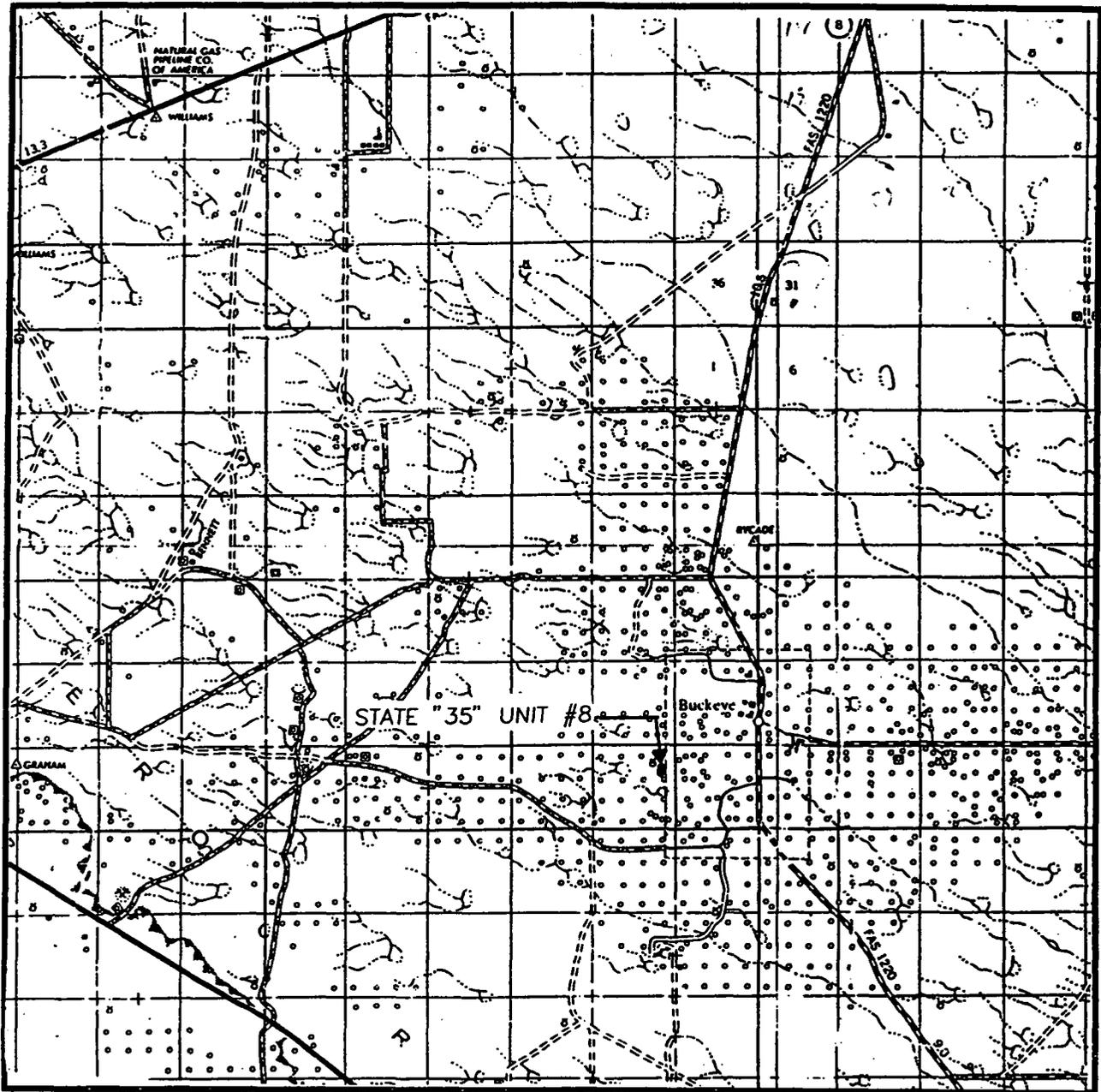
Slurry Weight: 11.80 ppg  
Slurry Yield: 2.60 ft<sup>3</sup>/sx  
Water Requirement: 15.60 gals/sx

Tail: 250 sx Class "C" + 50 lbs Pozmix + 7% CalSeal + 3% Salt +  
0.5% Diacel FL + 0.5% CFR-3 + 0.5% Econolite.

Desired TOC = 4000'.

Slurry Weight: 15.00 ppg  
Slurry Yield: 1.16 ft<sup>3</sup>/sx  
Water Requirement: 4.77 gals/sx

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 35 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1120' FNL & 660' FEL

ELEVATION 4010

OPERATOR PHILLIPS PETROLEUM CO.

LEASE STATE "35" UNIT

**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO**

**(505) 393-3117**

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BUCKEYE - 5'

SEC. 35 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1120' FNL & 660' FEL

ELEVATION 4010

OPERATOR PHILLIPS PETROLEUM CO.

LEASE STATE "35" UNIT

U.S.G.S. TOPOGRAPHIC MAP

BUCKEYE, N.M.

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

PETROLEUM COMPANY  
AND PRODUCTION  
REGION  
OK  
S 79762

right of the return address  
**CERTIFIED**  
Z 017 100 545  
**MAIL**

Texaco Exploration & Production, Inc.  
500 N. Loraine  
Midland, Texas 79702

is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

*Seprac Exploration & Production*  
*500 N. Soraine*  
*Mudland, Texas 79702*

4a. Article Number  
*2 017 100 545*

4b. Service Type

Registered     Insured  
 Certified     COD  
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7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.



**PHILLIPS PETROLEUM COMPANY**

EXPLORATION AND PRODUCTION  
PERMIAN BASIN REGION  
4001 PENBROOK  
ODESSA, TEXAS 79762

**CERTIFIED**

Z 017 100 544

**MAIL**

Mobil Exploration & Production, Inc.  
500 W. Illinois, Ste. 100  
Midland, Texas 79701

is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete Items 1 and/or 2 for additional services.
- Complete Items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
*Mobil Exploration + Production*  
*500 W. Illinois, Ste. 100*  
*Midland, Texas 79701*

4a. Article Number  
*Z 017 100 544*

4b. Service Type  
 Registered     Insured  
 Certified     COD  
 Express Mail     Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.



**PHILLIPS PETROLEUM COMPANY**

ODESSA, TEXAS 79762  
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP  
Permian Basin Region

OIL CONSERVATION DIVISION  
RECEIVED  
96 MAR 20 AM 8 52

May 16, 1996

Vacuum Grayburg/San  
Andres Field  
Lea County, New Mexico

State of New Mexico  
Energy, Minerals, and Natural Resources Department  
Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87504

Attention: Michael Stogner,  
Engineer

Gentlemen:

Phillips Petroleum Company respectfully requests administrative approval under the provisions of Rule 111 to intentionally deviate the State H-35 Well No. 16. The surface area of the proposed well location dictates the necessity for deviation of the well. The existence of gathering/flowlines, pipelines, and tank production facilities requires the wellpad area to be established where staked. The proposed bottom hole location is required to effectively complete the injection and production pattern for the current waterflood project. Future plans include unitization of and CO2 injection on the State H-35 Lease, the Mable Lease, and the Hale, M. E. Lease.

The proposed surface location is:  
Unit Letter A, 1120' FNL & 660' FEL of Section 35, T-17-S, R-34-E,  
Lea County.

The proposed bottom hole location is:  
Unit Letter A, 1310' FSL & 660' FEL of Section 35, T-17-S, R-34-E,  
Lea County.

Phillips Petroleum Company operates the offsetting proration units to the West & South while Mobil is to the North and Texaco to East of Unit Letter A. Mobil and Texaco have been notified by certified mail. (Copy attached) The unorthodox well location application is filed with the Hobbs district office. (Copy attached)

Sincerely,

L. M. Sanders,  
Sr. Regulation Analyst

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

**OIL CONSERVATION DIVISION**  
**P.O. Box 2088**  
**Santa Fe, NM 87504-2088**

AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator name and Address <b>Phillips Petroleum Company 4001 Penbrook Street Odessa, TX 797962</b>		<sup>2</sup> OGRID Number <b>017643</b>
		<sup>3</sup> API Number <b>30-0</b>
<sup>4</sup> Property Code <b>017021</b>	<sup>5</sup> Property Name <b>STATE H-35</b>	<sup>6</sup> Well Number <b>016</b>

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>A</b>	<b>35</b>	<b>17-S</b>	<b>34-E</b>		<b>1120'</b>	<b>NORTH</b>	<b>660'</b>	<b>EAST</b>	<b>LEA</b>

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>A</b>	<b>35</b>	<b>17-S</b>	<b>34-E</b>		<b>1310'</b>	<b>NORTH</b>	<b>660'</b>	<b>EAST</b>	<b>LEA</b>

<sup>9</sup> Proposed Pool 1

<sup>10</sup> Proposed Pool 2

<b>VACUUM GRAYBURG/SAN ANDRES</b>	<b>VACUUM GRAYBURG/SAN ANDRES</b>
-----------------------------------	-----------------------------------

<sup>11</sup> Work Type Code <b>N</b>	<sup>12</sup> Well Type Code <b>0</b>	<sup>13</sup> Cable/Rotary <b>R</b>	<sup>14</sup> Lease Type Code <b>S</b>	<sup>15</sup> Ground Level Elevation <b>4010' GR.</b>
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth <b>5,000'</b>	<sup>18</sup> Formations <b>GR/SA</b>	<sup>19</sup> Contractor	<sup>20</sup> Spud Date <b>UPON APPROVAL</b>

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>12-1/4"</b>	<b>8-5/8"</b>	<b>24# J-55</b>	<b>1,600'</b>	<b>600 SXS</b>	<b>SURFACE</b>
<b>7-7/8"</b>	<b>5-1/2"</b>	<b>15.5# J-55</b>	<b>5,000'</b>	<b>1000 SXS</b>	<b>SURFACE</b>

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary

**USE APPROPRIATE BOP FOR CONTROL  
SEE ATTACHED CASING AND CEMENTING PROGRAM  
SEE ATTACHED MUD PROGRAM**

**NOTE: AFTER UNITIZATION THIS WELL WILL BECOME:  
STATE 35 UNIT WELL NO. 8**

**NOTE: DEVIATED HOLE REQUEST SENT TO NMOCD - SANTA FE.**

**NOTE: UNORTHODOX LOCATION TO COMPLETE AN EFFICIENT PRODUCTION AND INJECTION PATTERN  
WITHIN A SECONDARY RECOVERY PROJECT.**

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *L.M. Sanders*

Printed name: **Larry M. Sanders**

Title: **Senior Regulation Analyst**

Date: **05/16/96**

Phone: **(915) 368-1488**

**OIL CONSERVATION DIVISION**

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 62180	Pool Name VACUUM GRAYBURG/SAN ANDRES
Property Code 017021	Property Name STATE H-35 STATE "35" UNIT	Well Number 016 8
OGRID No. 017643	Operator Name PHILLIPS PETROLEUM CO.	Elevation 4010

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17 S	34 E		1120	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17-S	34-E		1310'	NORTH	660'	EAST	LEA

Dedicated Acres 40 Ac.	Joint or Infill	Consolidation Code	Order No.
---------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

D	C	B	A		<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>L.M. Sanders</i> Signature</p> <p>L. M. Sanders Printed Name</p> <p>Sr. Regulation Analyst Title</p> <p>05/16/96 Date</p>
E	F	G	H		
L	K	J	I	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>APRIL 3, 1996</p> <p>Date Surveyed</p> <p>Signature of Seal of Professional Surveyor</p> <p><i>Ronald J. Eidson</i> 4-0496</p> <p>96-11-0499</p> <p>Certificate No. JOHN W. WEST 676 RONALD J. EIDSON 3239 EIDSON 12641</p>	
M	N	O	P		

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
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1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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Property Code 017021	Property Name STATE H-35	Well Number 016 8
OGRID No. 017643	Operator Name PHILLIPS PETROLEUM CO.	Elevation 4010

Surface Location

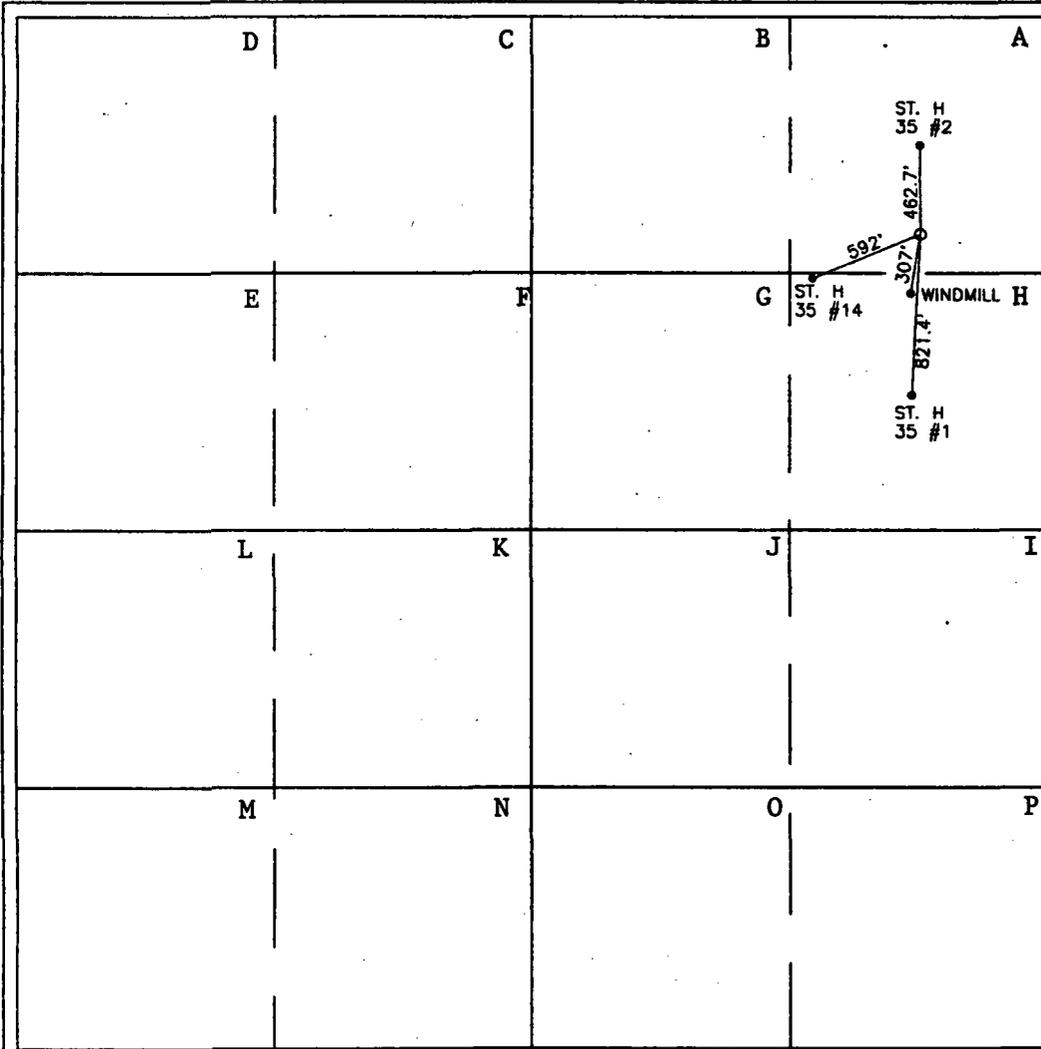
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17 S	34 E		1120	NORTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	17-S	34-E		1310'	NORTH	660'	EAST	LEA

Dedicated Acres 40 Ac.	Joint or Infill	Consolidation Code	Order No.
---------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief.

*L. M. Sanders*  
Signature

L. M. Sanders  
Printed Name

Sr. Regulation Analyst  
Title

05/16/96  
Date

---

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 3, 1996  
Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

*Ronald J. Eidson*  
Professional Surveyor

3246  
96-11-0489

Certificate No. JOHN W. WEST 676  
RONALD J. EIDSON 3239  
KERRY EIDSON 12641

**MUD PROGRAM****STATE H-35 WELL NOS. ( 16, 17)  
HALE, M.E. WELL NOS. ( 24, 25, 26, 27)**

<b>DEPTH</b>	<b>MUD WEIGHT</b>	<b>VISCOSITY</b>	<b>FLUID LOSS</b>	<b>CL PPM</b>	<b>% SOLIDS</b>	<b>ADDITIVES</b>
Surf. - 1600'	8.3 - 9.0 ppg	28 - 36 sec/1000 cc	N/C	-	-	Native Solids
1600' - 4000'	10.0 ppg	28 - 32 sec/1000 cc	N/C	Saturated	-	Native Solids
4000' - TD	10.0 - 10.2 ppg	32 - 36 sec/1000 cc	20 cc	Saturated	-	Starch/Drispact+

The Mud Engineer shall include on each test report the materials used for the previous 24 hour period. Daily fax the test reports to (915) 368-1507 Attn: J.C. Shoumaker / L.E. Robinson.

Send two copies of the Well Recap (Final Cost & Engineering Summaries) to Phillips Petroleum Company , Attn: J.C. Shoumaker / L.E. Robinson, 4001 Penbrook, Odessa, Texas 79762

## CASING & CEMENTING PROGRAM

### STATE H-35 WELL NO. 16

#### 8 5/8" 24 lb/ft J-55 Surface Casing Set at 1600' - 12 1/4" Hole:

Lead: 450 sx Class "C" + 4% Gel + 2% CaCl<sub>2</sub>.  
Desired TOC = Surface.

Slurry Weight: 13.5 ppg  
Slurry Yield: 1.72 ft<sup>3</sup>/sx  
Water Requirement: 9.06 gals/sx

Tail: 150 sx Class "C" + 2% CaCl<sub>2</sub>.  
Desired TOC = 1300'.

Slurry Weight: 14.8 ppg  
Slurry Yield: 1.32 ft<sup>3</sup>/sx  
Water Requirement: 6.3 gals/sx

#### 5 1/2" 15.5 lb/ft J-55 Production Casing Set at 5000' - 7 7/8" Hole:

Lead: 750 sx Class "C" + Econolite + 3% Salt.  
Desired TOC = Surface.

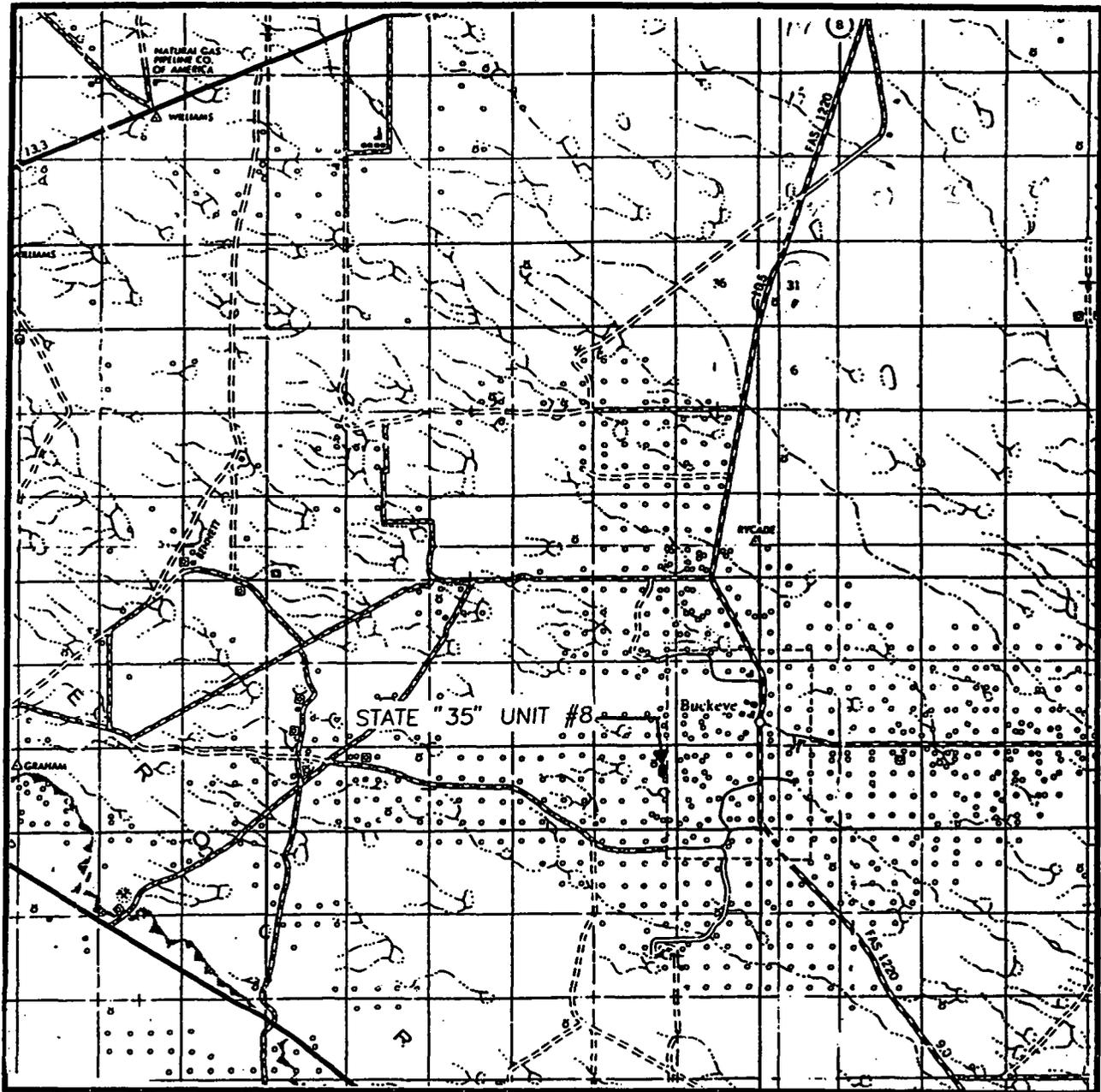
Slurry Weight: 11.80 ppg  
Slurry Yield: 2.60 ft<sup>3</sup>/sx  
Water Requirement: 15.60 gals/sx

Tail: 250 sx Class "C" + 50 lbs Pozmix + 7% CalSeal + 3% Salt +  
0.5% Diacel FL + 0.5% CFR-3 + 0.5% Econolite.

Desired TOC = 4000'.

Slurry Weight: 15.00 ppg  
Slurry Yield: 1.16 ft<sup>3</sup>/sx  
Water Requirement: 4.77 gals/sx

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 35 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1120' FNL & 660' FEL

ELEVATION 4010

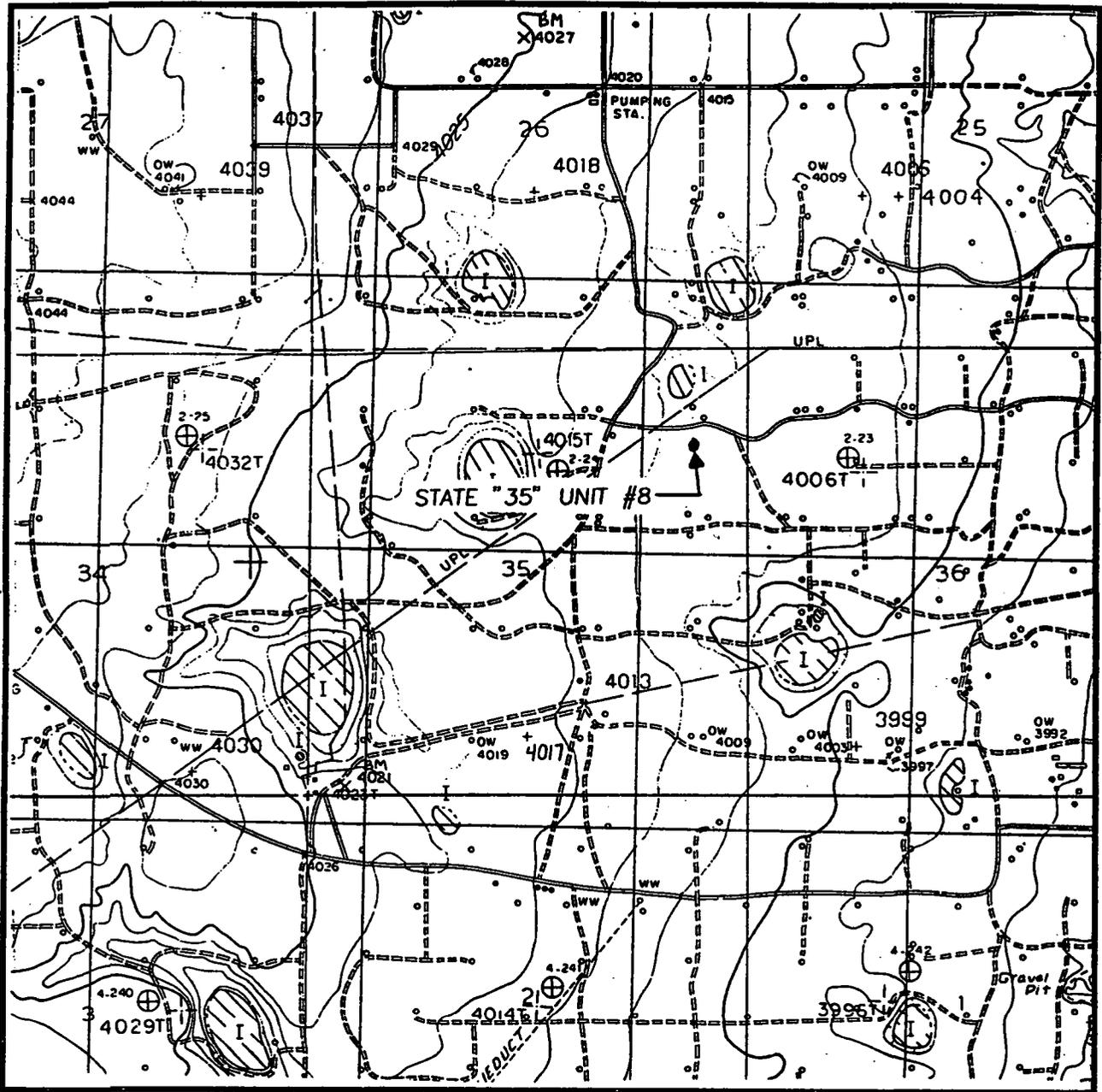
OPERATOR PHILLIPS PETROLEUM CO.

LEASE STATE "35" UNIT

**JOHN WEST ENGINEERING  
HOBBS, NEW MEXICO**

**(505) 393-3117**

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BUCKEYE - 5'

SEC. 35 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1120' FNL & 660' FEL

ELEVATION 4010

OPERATOR PHILLIPS PETROLEUM CO.

LEASE STATE "35" UNIT

U.S.G.S. TOPOGRAPHIC MAP

BUCKEYE, N.M.

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

TEXACO PETROLEUM COMPANY  
EXPLORATION AND PRODUCTION  
BASIN REGION  
PO BOX 79762  
DALLAS TEXAS 75276

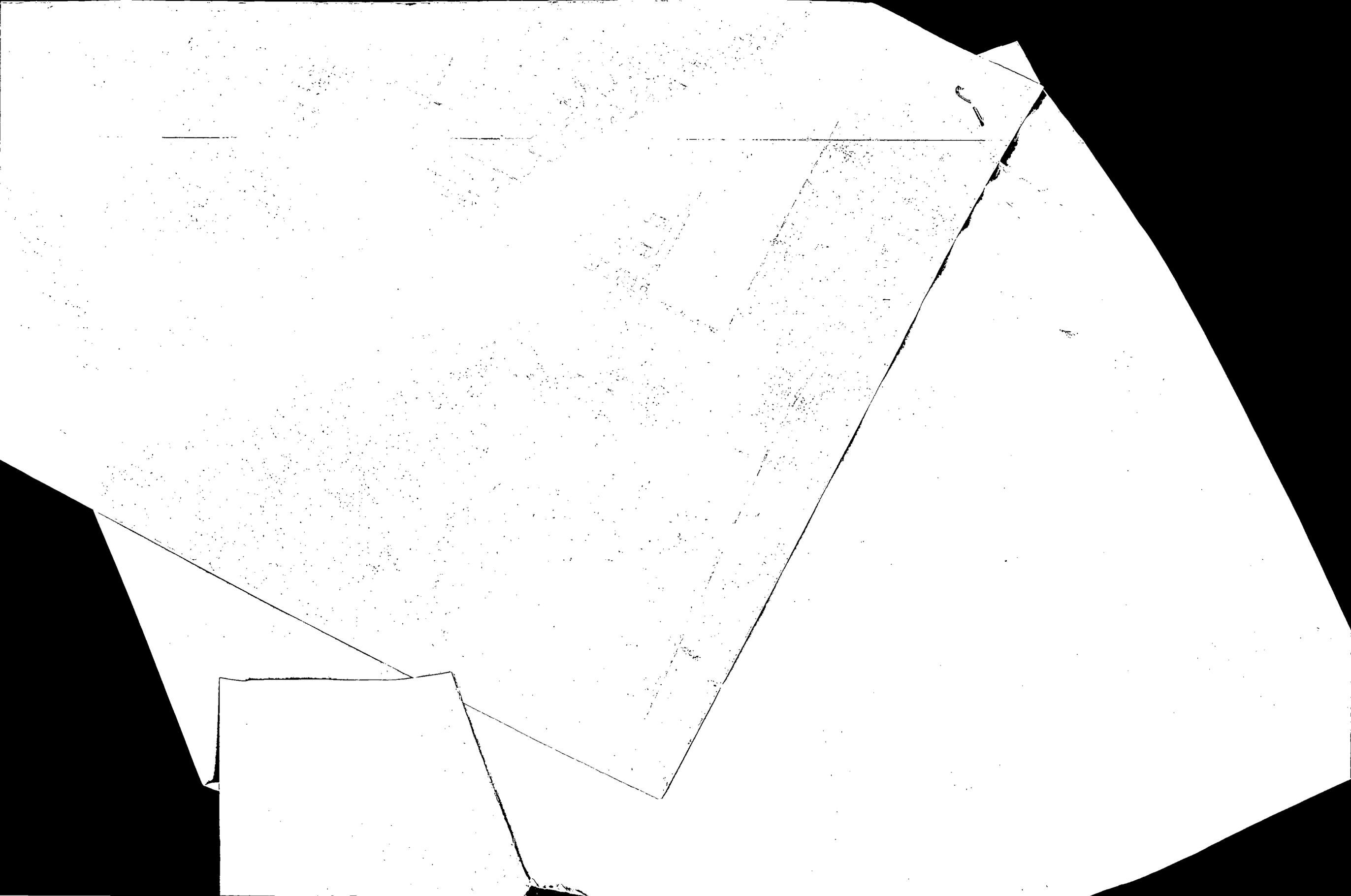
**CERTIFIED**  
7 017 100 545  
**MAIL**

Texaco Exploration & Production, Inc.  
500 N. Loraine  
Midland, Texas 79702

... does  
... The Re  
... delivered  
... Article  
... completed on the return

*Texaco 500 N. Loraine Midland*

Signature (Addressee)  
Signature (Agent)  
11, December 1991



TEXACO PETROLEUM COMPANY

EXPLORATION AND PRODUCTION  
PLAINS REGION  
PO BOX 100  
MIDLAND, TEXAS 79702

Right of the return address

**CERTIFIED**

Z 017 100 545

**MAIL**

Texaco Exploration & Production, Inc.  
500 N. Loraine  
Midland, Texas 79702

Is your RETURN ADDRESS completed on the reverse side?

- SENDER:**
- Complete items 1 and/or 2 for additional services.
  - Complete items 3, and 4a & b.
  - Print your name and address on the reverse of this form so that we can return this card to you.
  - Attach this form to the front of the mailpiece, or on the back if space does not permit.
  - Write "Return Receipt Requested" on the mailpiece below the article number.
  - The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
*Seprac Exploration & Production*  
*500 N. Soraine*  
*Mudland, Texas 79702*

4a. Article Number  
*2 017 100 545*

4b. Service Type  
 Registered     Insured  
 Certified     COD  
 Express Mail     Return Receipt for Merchandise

7. Date of Delivery

6. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.



**PHILLIPS PETROLEUM COMPANY**

EXPLORATION AND PRODUCTION  
PERMIAN BASIN REGION  
4001 PENBROOK  
ODESSA, TEXAS 79762

**CERTIFIED**

Z 017 100 544

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*500 W. Illinois, Ste. 100*  
*Midland, Texas 79701*

4a. Article Number  
*2 017 100 5-44*

4b. Service Type  
 Registered     Insured  
 Certified     COD  
 Express Mail     Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.