



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

January 10, 1997

Shell Western E & P Inc.  
P. O. Box 576  
Houston, Texas 77001  
Attention: Jeff A. Dethrow

*Corrected Administrative Order DD-162(H)*  
High Angle/Horizontal

Dear Mr. Dethrow:

Reference is made to Shell Western E & P Inc.'s ("Shell") application dated December 11, 1996 for authorization to recomplete its State "A" Well No. 10 (API No. 30-025-32844) by side tracking off of the vertical wellbore and drill horizontally in order to further develop the Vacuum-Middle Pennsylvanian Pool underlying the 80 acres comprising the N/2 NE/4 of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The subject application has been duly filed under the provisions of Rule 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;
- (2) The Vacuum-Middle Pennsylvanian Pool in Lea County, New Mexico currently comprises all or portions of Sections 11, 13, 14, 24, and 25, Township 17 South, Range 34 East, NMPM and in Township 17 South, Range 35 East, NMPM, includes the W/2 equivalent of Section 30 and the N/2 equivalent of Section 31.
- (3) The Vacuum-Middle Pennsylvanian Pool is subject to the statewide rules and regulations, as promulgated by Rule 104.C(1)(a), 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 a single 40-acre oil spacing and proration unit;
- (4) The State "A" Well No. 10, located at a standard surface oil well location 940 feet

from the North and East lines (Unit A) of said Section 31, was drilled in early 1996 to a total depth of 10,700 feet and is currently completed in both the Vacuum-Wolfcamp and Vacuum-Middle Pennsylvanian Pools;

- (5) The "project area" proposed by Shell would consist of an over-sized spacing unit comprising 80 acres (two standard 40-acre tracts) underlying the N/2 NE/4 of said Section 31;
- (6) The applicant/operator proposes to kick-off from vertical at a depth of approximately 10,365 feet by milling a window in the production casing, drill in a west-northwesterly direction with a medium radius curve, and drill horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit; and,
- (8) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, 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 Rule 111.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Shell Western E & P Inc. ("Shell"), is hereby authorized to recomplete its **State "A" Well No. 10 (API No. 30-025-32844)**, from a standard surface location 940 feet from the North and East lines (Unit A) of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, by milling a window in the production casing at a depth of approximately 10,365 feet, kick-off from vertical in a west-northwesterly direction with a medium radius curve, and continue drilling horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet.

**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 bottomhole 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 "project area" for said horizontal well shall consist of an oversized 80-acre non-standard oil spacing and proration unit for said pool comprising the N/2 NE/4 of said Section 31.

(4) The applicable drilling window or "producing area" for said wellbore shall include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit.

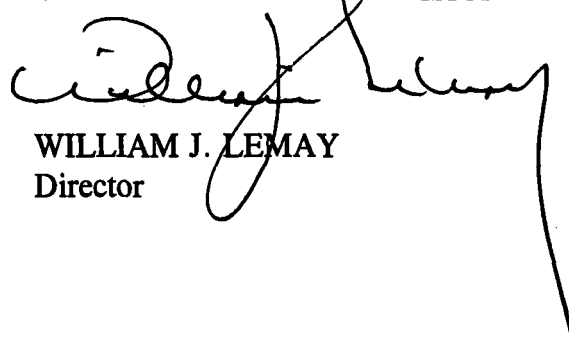
(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

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

(7) 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



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

January 2, 1997

Shell Western E & P Inc.  
P. O. Box 576  
Houston, Texas 77001  
Attention: Jeff A. Dethrow

*Administrative Order DD-162(H)*  
High Angle/Horizontal

Dear Mr. Dethrow:

Reference is made to Shell Western E & P Inc.'s ("Shell") application dated December 11, 1996 for authorization to recomplete its State "A" Well No. 1 (API No. 30-025-32844) by side tracking off of the vertical wellbore and drill horizontally in order to further develop the Vacuum-Middle Pennsylvanian Pool underlying the 80 acres comprising the N/2 NE/4 of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The subject application has been duly filed under the provisions of Rule 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;
- (2) The Vacuum-Middle Pennsylvanian Pool in Lea County, New Mexico currently comprises all or portions of Sections 11, 13, 14, 24, and 25, Township 17 South, Range 34 East, NMPM and in Township 17 South, Range 35 East, NMPM, includes the W/2 equivalent of Section 30 and the N/2 equivalent of Section 31.
- (3) The Vacuum-Middle Pennsylvanian Pool is subject to the statewide rules and regulations, as promulgated by Rule 104.C(1)(a), 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 a single 40-acre oil spacing and proration unit;
- (4) The State "A" Well No. 1, located at a standard surface oil well location 940 feet

from the North and East lines (Unit A) of said Section 31, was drilled in early 1996 to a total depth of 10,700 feet and is currently completed in both the Vacuum-Wolfcamp and Vacuum-Middle Pennsylvanian Pools;

- (5) The "project area" proposed by Shell would consist of an over-sized spacing unit comprising 80 acres (two standard 40-acre tracts) underlying the N/2 NE/4 of said Section 31;
- (6) The applicant/operator proposes to kick-off from vertical at a depth of approximately 10,365 feet by milling a window in the production casing, drill in a west-northwesterly direction with a medium radius curve, and drill horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit; and,
- (8) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, 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 Rule 111.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Shell Western E & P Inc. ("Shell"), is hereby authorized to recomplete its State "A" Well No. 1 (API No. 30-025-32844), from a standard surface location 940 feet from the North and East lines (Unit A) of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, by milling a window in the production casing at a depth of approximately 10,365 feet, kick-off from vertical in a west-northwesterly direction with a medium radius curve, and continue drilling horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet.

**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 bottomhole 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 "project area" for said horizontal well shall consist of an oversized 80-acre non-standard oil spacing and proration unit for said pool comprising the N/2 NE/4 of said Section 31.

(4) The applicable drilling window or "producing area" for said wellbore shall include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit.

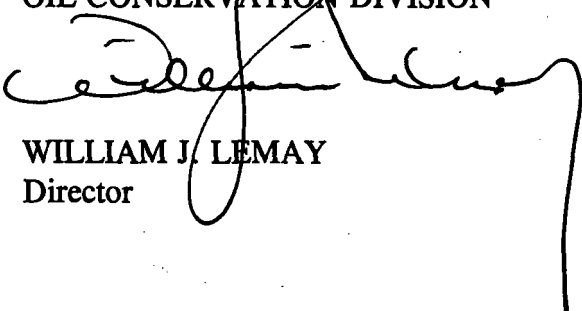
(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

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

(7) 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

DD-SHELL.1

1/2/97

December 23, 1996

Re: 12-12-96

Susp: 1-2-96

Released 1-2-97

Shell Western E & P Inc.  
P. O. Box 576  
Houston, Texas 77001

Attention: Jeff A. Dethrow

162

Administrative Order DD-\*(H)  
High Angle/Horizontal

Dear Mr. Dethrow:

Reference is made to Shell Western E & P Inc.'s ("Shell") application dated December 11, 1996 for authorization to recompleate its State "A" Well No. 1 (API No. 30-025-32844) by side tracking off of the vertical wellbore and drill horizontally in order to further develop the Vacuum-Middle Pennsylvanian Pool underlying the 80 acres comprising the N/2 NE/4 of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.

**The Division Director Finds That:**

- (1) The subject application has been duly filed under the provisions of Rule 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;
- (2) The Vacuum-Middle Pennsylvanian Pool in Lea County, New Mexico currently comprises all or portions of Sections 11, 13, 14, 24, and 25, Township 17 South, Range 34 East, NMPM and in Township 17 South, Range 35 East, NMPM, includes the W/2 equivalent of Section 30 and the N/2 equivalent of Section 31.
- (3) The Vacuum-Middle Pennsylvanian Pool is subject to the statewide rules and regulations, as promulgated by Rule 104.C(1)(a), 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 a single 40-acre oil spacing and proration unit;
- (4) The State "A" Well No. 1, located at a standard surface oil well location 940 feet from the North and East lines (Unit A) of said Section 31, was drilled in early 1996 to a total depth of 10,700 feet and is currently completed in both the

Vacuum-Wolfcamp and Vacuum-Middle Pennsylvanian Pools;

- (5) The "project area" proposed by Shell would consist of an over-sized spacing unit comprising 80 acres (two standard 40-acre tracts) underlying the N/2 NE/4 of said Section 31;
- (6) The applicant/operator proposes to kick-off from vertical at a depth of approximately 10,365 feet by milling a window in the production casing, drill in a west-northwesterly direction with a medium radius curve, and drill horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet;
- (7) The applicable drilling window or "producing area" for said wellbore should include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit; and,
- (8) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, 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 Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Shell Western E & P Inc. ("Shell"), is hereby authorized to recomplete its State "A" Well No. 1 (API No. 30-025-32844), from a standard surface location 940 feet from the North and East lines (Unit A) of Section 31, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, by milling a window in the production casing at a depth of approximately 10,365 feet, kick-off from vertical in a west-northwesterly direction with a medium radius curve, and continue drilling horizontally within the Vacuum-Middle Pennsylvanian Pool a lateral distance of approximately 1,500 feet.

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 bottomhole 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 "project area" for said horizontal well shall consist of an oversized 80-acre non-standard oil spacing and proration unit for said pool comprising the N/2 NE/4 of said Section 31.

(4) The applicable drilling window or "producing area" for said wellbore shall include that area within the N/2 NE/4 of said Section 31 that is no closer than 330 feet to the outer boundary of the subject 80-acre non-standard oil spacing and proration unit.

(5) 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.

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

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

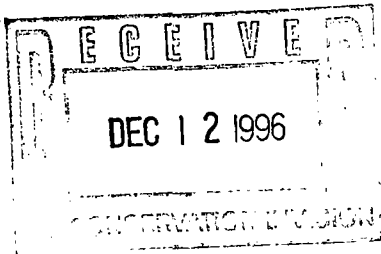
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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



**Shell Western E&P Inc.**

An affiliate of Shell Oil Company



P. O. Box 576  
Houston, TX 77001

December 11, 1996

12-12

Mr. Michael E. Stogner  
State of New Mexico  
Energy, Minerals & Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe NM 87505

RE: Application for administrative approval of a horizontal well project  
Vacuum - Middle Pennsylvanian Pool, Section 31, T17S-R35E  
Lea County, New Mexico  
State "A" #10 Well

Dear Mr. Stogner:

On January 31, 1995, Shell Western E&P Inc. (SWEPI) obtained approval to drill the subject well. A number of orders have been issued for this well ranging from granting approval of unorthodox locations to production from a number of different pools both shallower and deeper than the original objective formation. In the event SWEPI's evaluations of these other zones is unfavorable, SWEPI desires to further test the Middle Pennsylvanian Pool by utilizing a horizontal wellbore.

Therefore, SWEPI requests administrative approval to drill a horizontal lateral penetrating the Vacuum - Middle Penn Pool from a previously approved unorthodox surface location according to the plat and horizontal schematic enclosed. The horizontal wellbore will increase the productivity and profitability of this project.

The project area for this horizontal venture is 80-acres being the N/2 NE/4 of Section 31-T17N-R35E. The surface location and entire horizontal lateral are within the confines of this project area. Likewise, the producing interval in the wellbore is totally confined within the producing area; such producing area being defined as being within the boundary of the N/2 NE/4 of Section 31 and no nearer than 330' from the outside boundary of such 80-acres. Please note that there are no existing wells in the Vacuum-Middle Penn Pool within the project area and likewise, there are no offsetting drilling units or wells in the Vacuum - Middle Penn Pool. The nearest Vacuum - Middle Penn Pool producer is the Mobil Producing Texas & New Mexico - Bridges State #513 located in the SW/4 NE/4 of Section 13-T17N-34E, Lea County, New Mexico.

Page 2

Mr. Michael E. Stogner

December 11, 1996

Enclosed please find the following to support SWEPI's request:

- .Forms C-101 and C-102
- .Vertical and horizontal schematic of the proposed horizontal wellbore
- .Type log section
- .Plat
- .List of offset Operators

A copy of this application, along with a waiver of objection form, has been forwarded by certified mail, return receipt requested, this date to the offset operators shown on the attached list.

It is our understanding from the regulations (111.D.3) that as long as the entire horizontal lateral is not closer than 330' (field rules for the Middle Penn Pool) to the outer boundary of any legal subdivision, all such legal subdivisions which are penetrated by the horizontal lateral shall be considered the well's proration unit. As the proration units for the Middle Penn are 40-acres and the State "A" #10 horizontal lateral will traverse across two 40-acre tracts, SWEPI requests your approval to form an 80-acre proration unit being the N/2 NE/4 of Section 31-T17S-R35E. Likewise, we understand that by combining two 40-acre tracts into a producing unit for this horizontal well, such well will be granted a double (or two times the normal 40-acre) allowable.

Should you need additional information, do not hesitate to contact the undersigned at 713-544-3226. We appreciate your consideration in this matter.

Yours very truly,



Jeff A. Dethrow CPL  
Contract Landman  
Western Asset Administration  
Continental Division

attach

cc w/ attach: Mr. Jerry Sexton  
State of New Mexico  
Oil Conservation Division  
P.O. Box 1980  
Hobbs NM 88240

ALL OFFSET OPERATORS AS SHOWN ON THE ATTACHED LIST

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

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

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-32844	Pool Code 62300	Pool Name VACUUM - MIDDLE PENN
Property Code 10120	Property Name STATE "A"	Well Number 10
GRID No. 020676	Operator Name SHELL WESTERN E & P INC.	Elevation 3973

Surface Location

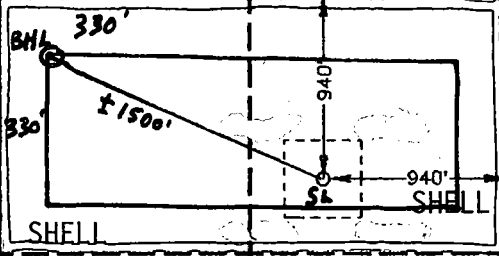
UL or lot No. A	Section 31	Township 17 S	Range 35 E	Lot Idn	Feet from the 940	North/South line NORTH	Feet from the 940	East/West line EAST	County LEA
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Bottom Hole Location If Different From Surface

UL or lot No. B	Section 31	Township 17S	Range 35E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 2310	East/West line EAST	County LEA
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Dedicated Acres	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

LOT 1 37.50 ACRES	TEXACO		
LOT 2 37.51 ACRES	MARATHON/SHELL	SHELL	SHELL
LOT 3 37.42 ACRES			
LOT 4 37.42 ACRES			

**OPERATOR CERTIFICATION**

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

  
Signature  
JEFF A DETHROW CPL  
Printed Name  
CONTRACT LANDMAN  
Title  
12/11/96  
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.

JANUARY 19, 1995  
Date Surveyed  
Signature  
Professional Surveyor  
No. 339  
1-24-95  
V.O. 94-0-2288  
Certificate No. 676  
JL P

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

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

☐ AMENDED REPORT

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

<sup>1</sup> Operator name and Address <b>Shell Western E&amp;P Inc.</b> <b>P.O. Box 576</b> <b>Houston, TX 77001</b>		<sup>2</sup> OGRID Number <b>020676</b>
		<sup>3</sup> API Number <b>30-0 30-025-32844</b>
<sup>4</sup> Property Code <b>10120</b>	<sup>5</sup> Property Name <b>STATE "A"</b>	<sup>6</sup> Well Number <b>10</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>31</b>	<b>17S</b>	<b>35E</b>		<b>940</b>	<b>NORTH</b>	<b>940</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>B</b>	<b>31</b>	<b>17S</b>	<b>35E</b>		<b>330</b>	<b>NORTH</b>	<b>2310</b>	<b>EAST</b>	<b>LEA</b>
<sup>9</sup> Proposed Pool 1 <b>VACUUM - MIDDLE PENN</b>					<sup>10</sup> Proposed Pool 2				

<sup>11</sup> Work Type Code <b>E</b>	<sup>12</sup> Well Type Code <b>G</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>3973'GR</b>
<sup>16</sup> Multiple <b>NO</b>	<sup>17</sup> Proposed Depth <b>11,850'</b>	<sup>18</sup> Formations <b>MIDDLE PENN</b>	<sup>19</sup> Contractor <b>NORTON DRLG. CO.</b>	<sup>20</sup> Spud Date <b>01/15/97</b>

<sup>21</sup> Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
<b>24"</b>	<b>20"</b>	<b>CONDUCTOR</b>	<b>40'</b>	<b>60 SX</b>	<b>SURFACE</b>
<b>17-1/2"</b>	<b>13-3/8"</b>	<b>54.50#</b>	<b>1478'</b>	<b>1350 SX</b>	<b>SURFACE</b>
<b>12-1/4"</b>	<b>9-5/8"</b>	<b>36#</b>	<b>3706'</b>	<b>1250 SX</b>	<b>SURFACE</b>
<b>8-3/4"</b>	<b>7"</b>	<b>23# &amp; 26#</b>	<b>10,700'</b>	<b>2880 SX</b>	<b>4230' (CBL)</b>
<b>6 1/8"</b>	<b>5" LINER</b>	<b>15#</b>	<b>10,450-11,850</b>	<b>550 SX</b>	<b>TOC 10,450'</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

**THIS IS THE PROPOSED CASING AND CEMENT PROGRAM FOR THE 11,850' MORROW TEST.**  
**AT THE PRESENT TIME, THE PROPOSAL PLAN IS TO CUT A WINDOW AND KICK HORIZONTALLY 1500'**  
**IN THE MIDDLE PENNSYLVANIAN ZONE. A PROPOSED HORIZONTAL CASING AND CEMENT PROGRAM HAS**  
**NOT BEEN FORMULATED TO DATE.**  
**BOP PROGRAM: 2000# RAM PREVENTER**

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

Signature:

Printed name: **JEFF A DETHROW CPL**

Title: **CONTRACT LANDMAN**

Date:  
**12/11/96**

Phone:  
**(713) 544-3226**

**OIL CONSERVATION DIVISION**

Approved by:

Title:

Approval Date:

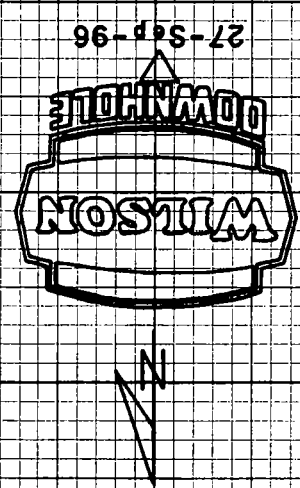
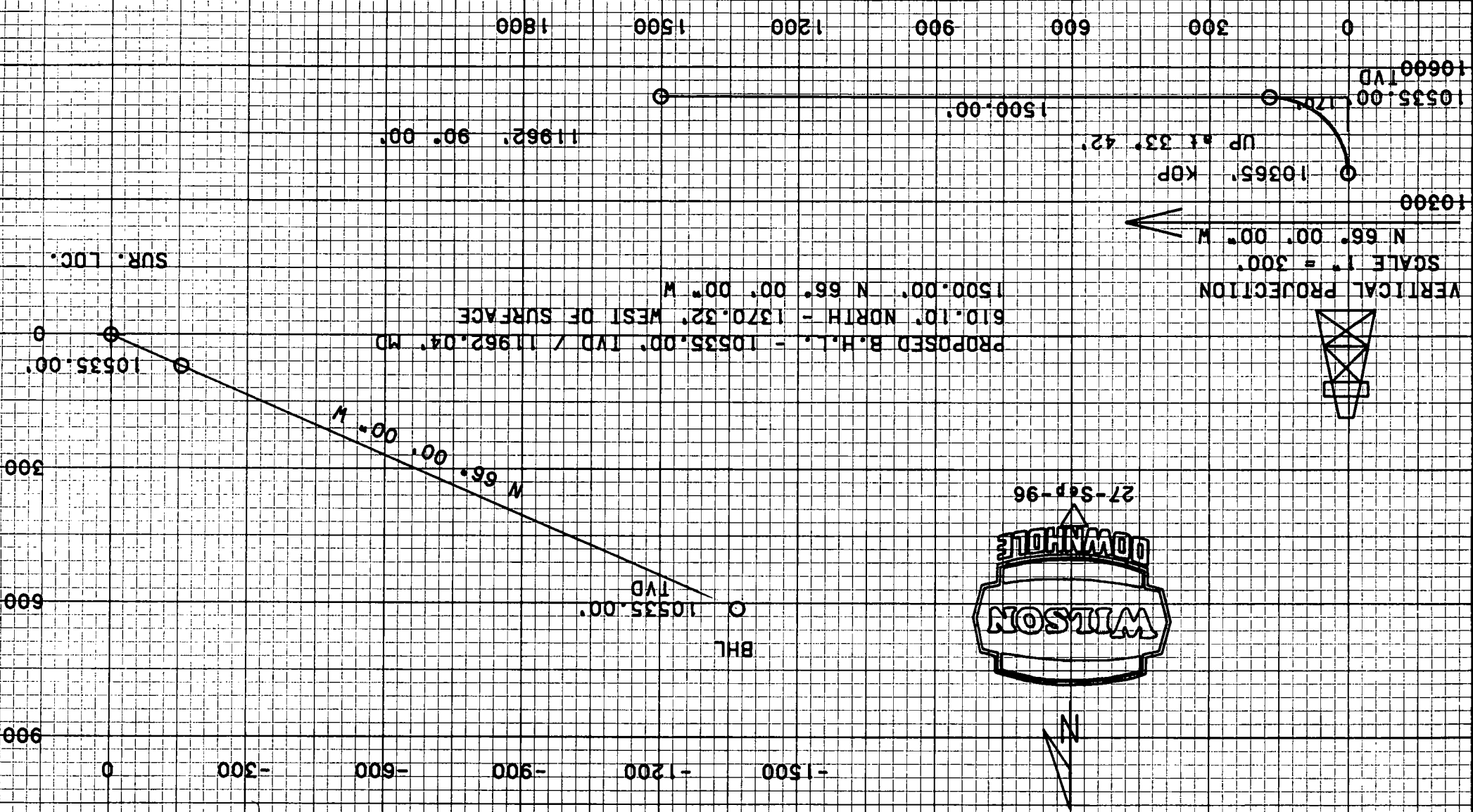
Expiration Date:

Conditions of Approval:

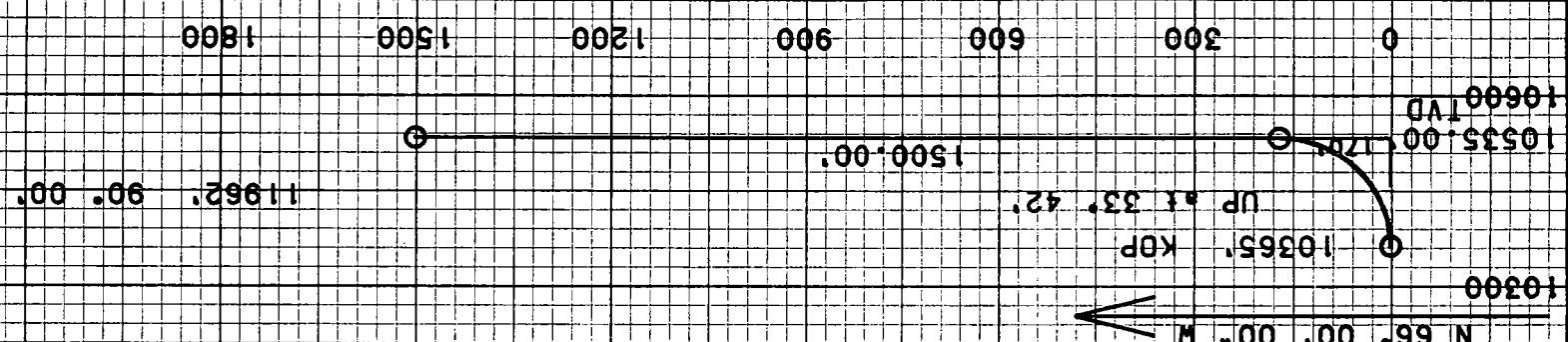
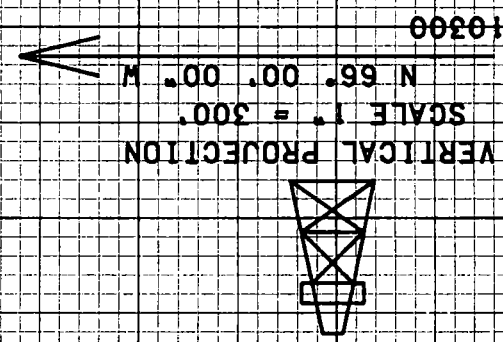
Attached ☐

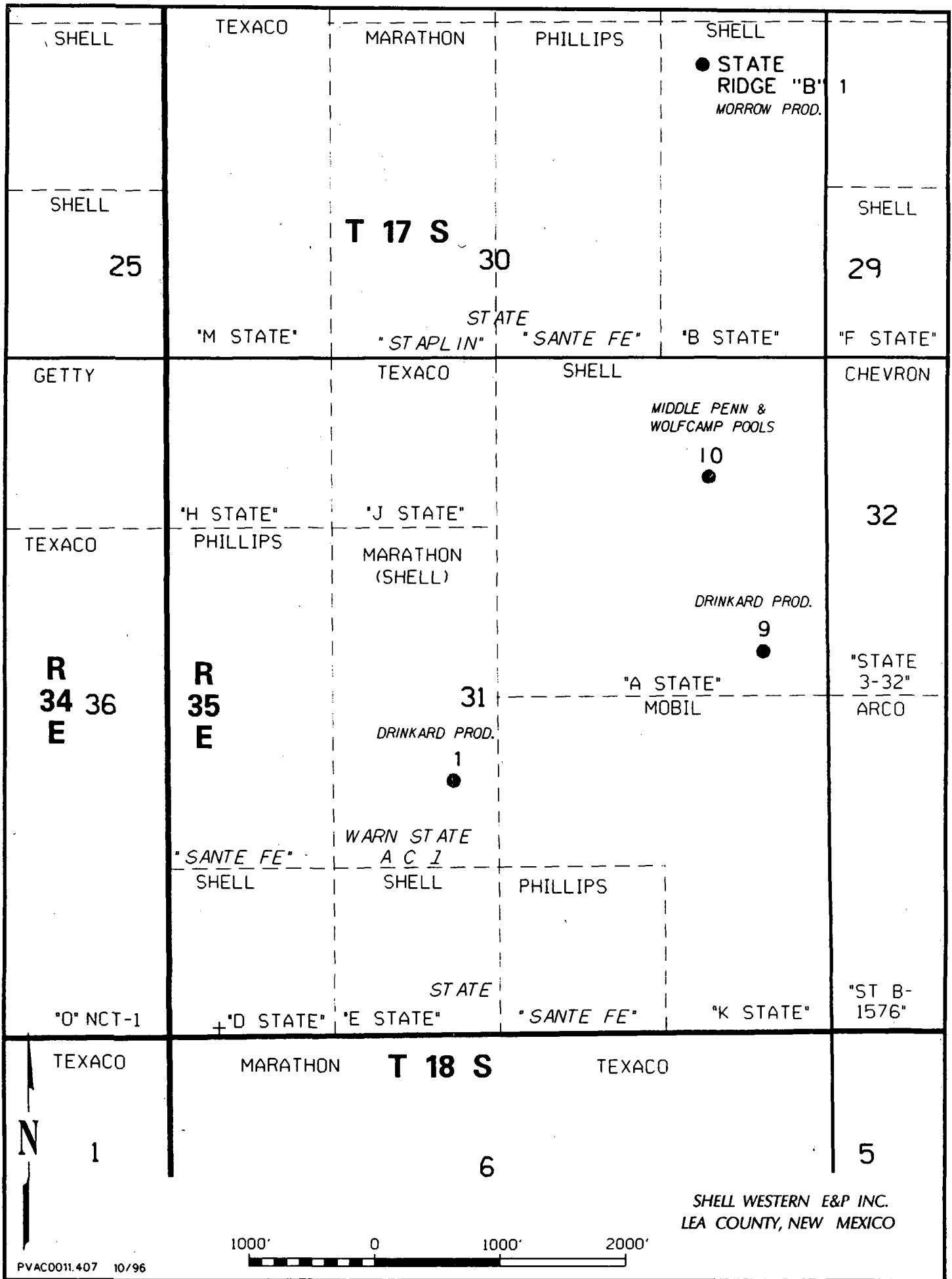
SHELL WESTERN E & P  
STATE "A" WELL NO. 10  
HOBBBS, NEW MEXICO

HORIZONTAL PROJECTION  
SCALE 1" = 300'

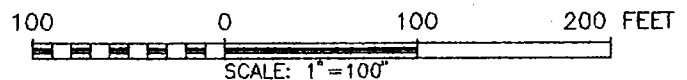
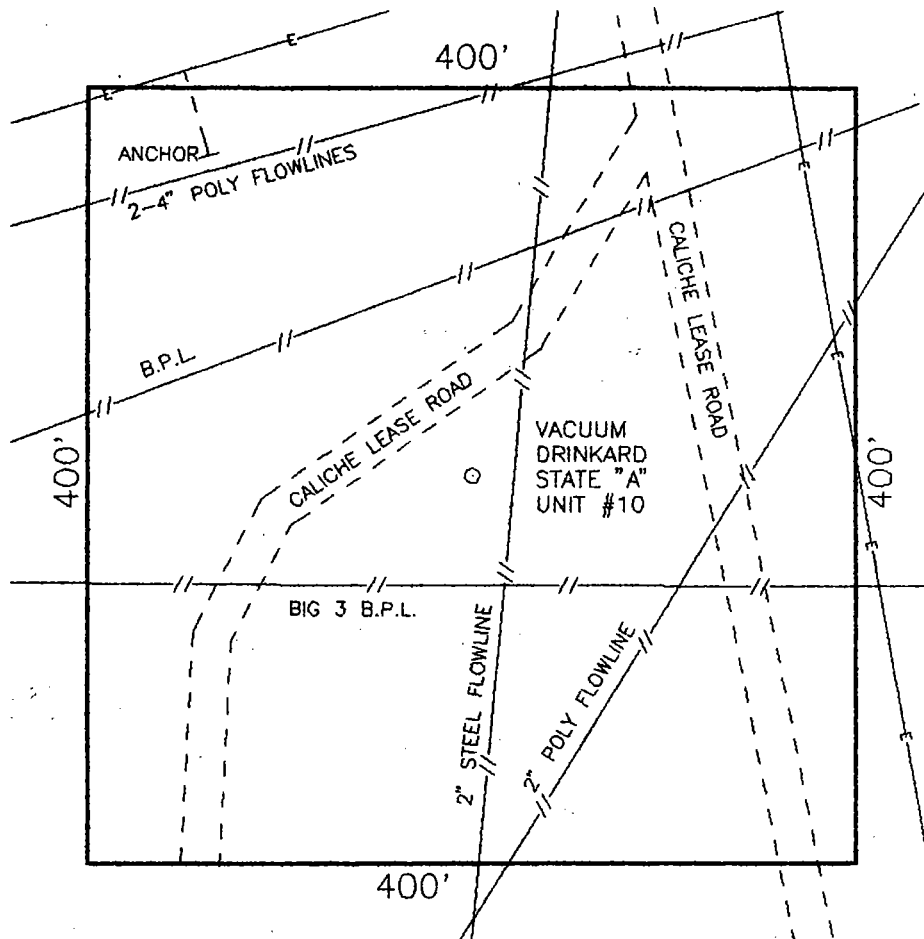


VERTICAL PROJECTION  
SCALE 1" = 300'





**SECTION 31, TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.,**  
LEA COUNTY, NEW MEXICO.



**SHELL WESTERN E & P, INC.**

THE VACUUM DRINKARD STATE "A", #10, LOCATED 940 FEET FROM THE NORTH LINE AND 940 FEET FROM THE EAST LINE OF SECTION 31, TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

**JOHN W. WEST ENGINEERING COMPANY**  
CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO

Survey Date: 1/19/95	Sheet 1 of 1 Sheets
W.O. Number: 94-11-2258	Drawn By: JAMES L. PRESLEY
Date: 1/24/95	DISK: JLP#117 SHE2258



## **LIST OF OFFSET OPERATORS**

**State "A" #10  
Section 31, T17S-R35E  
Lea County, New Mexico**

Arco Permian  
P. O. Box 1610  
Midland, TX 70702

Chevron U.S.A. Inc.  
Box 1635  
Houston, TX 77251

Marathon Oil Company  
Box 552  
Midland, TX 79702-0552

Mobil Exploration & Production U.S., Inc.  
Box 633  
Midland, TX 79702-0633

Phillips Petroleum Company  
4001 Penbrook  
Odessa, TX 79762

Texaco, Inc.  
Box 3109  
Midland, TX 79702-3109



**Shell Western E&P Inc.**

An affiliate of Shell Oil Company.

P. O. Box 576  
Houston, TX 77001

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 11, 1996

**TO THE OFFSET OPERATORS:**

Please indicate your approval for our request as detailed in the attached package by signing the waiver form below. Please return the executed copy in the enclosed business reply envelope. Any objections to this request must be filed in writing within twenty days of the date of this notice.

Thank you for your attention to this matter.

**WAIVER OF OBJECTION**

**SHELL WESTERN E&P INC.**

**APPLICATION FOR ADMINISTRATIVE APPROVAL FOR A  
HORIZONTAL WELL PROJECT  
VACUUM - MIDDLE PENN POOL  
STATE "A" #10 WELL  
SECTION 31, T17S-R35E  
LEA COUNTY, NEW MEXICO**

I/We do hereby waive any objection to Shell Western E&P Inc.'s request for Administrative Approval to drill a horizontal lateral penetrating the Vacuum - Middle Penn Pool in the N/2 NE/4 of Section 31, T17S-R35E, Lea County, New Mexico

**WAIVER APPROVAL**

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

COMPANY: Shell Western E&P

WELL: State "A" #10

FIELD: Wildcat

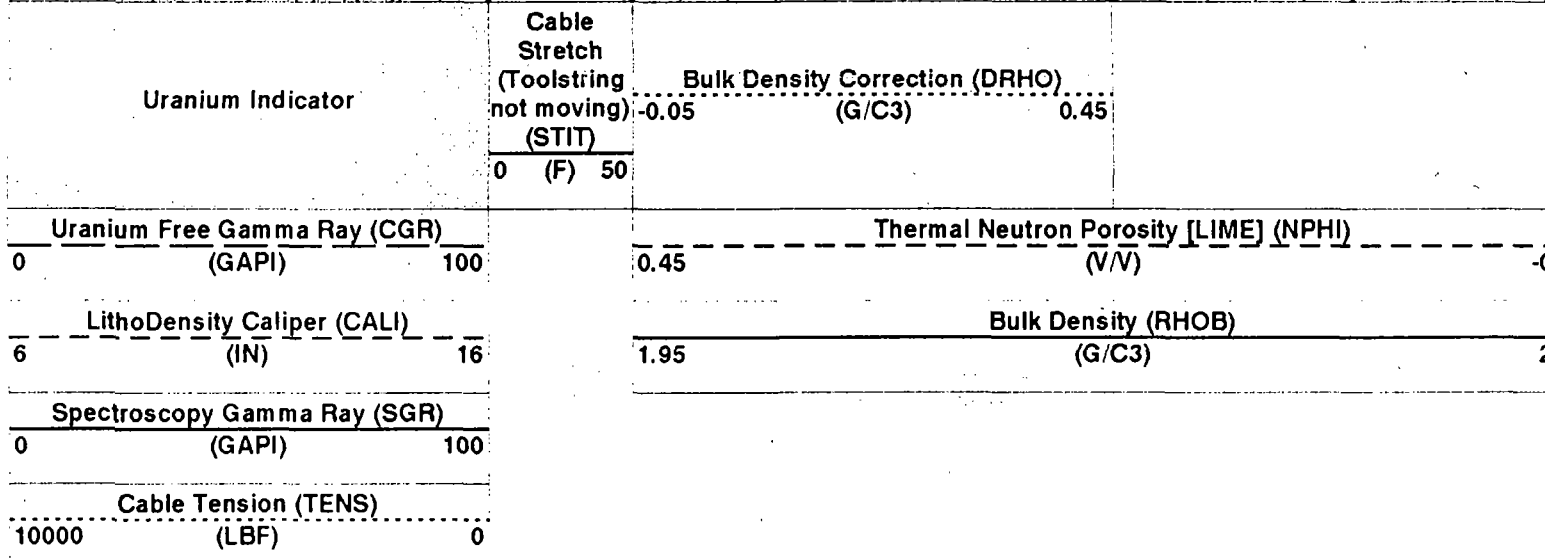
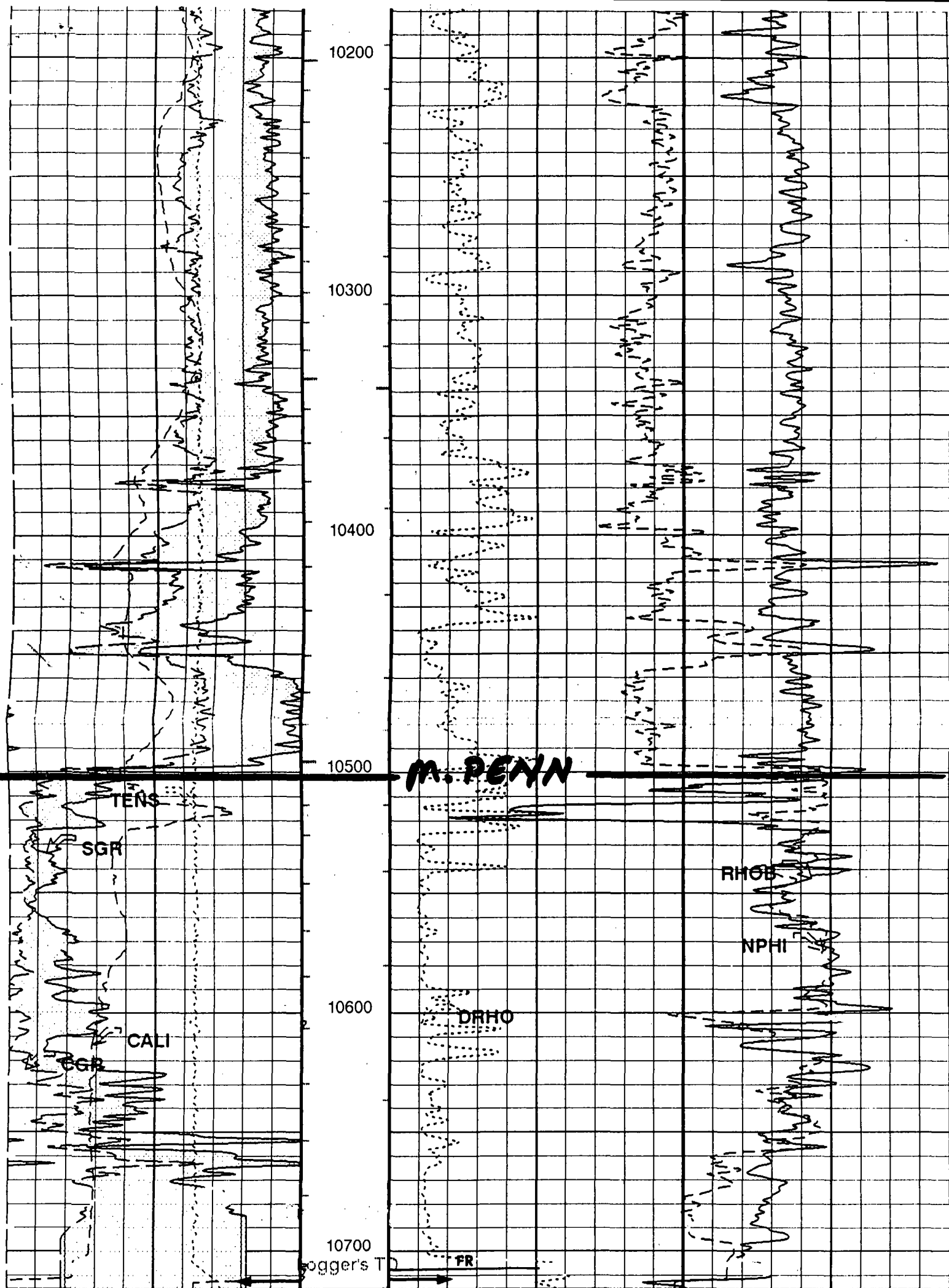
COUNTY: Lea STATE: New Mexico

COUNTY: Lea Field: Wildcat Location: 940 FNL & 940 FEL Well: State "A" #10 Company: Shell Western E&P	<div>Schlumberger</div>		Compensated Neutron Litho-Density Natural Gamma Ray		
	940 FNL & 940 FEL S31 T17S R35E		Elev.: K.B. 3989 F G.L. 3973 F D.F. 3988 F		
	Permanent Datum: GROUND LEVEL Log Measured From: kb Drilling Measured From: kb		Elev.: 3973 F 16.0 F above Perm. Datum		
	API Serial No. 30-025-32844		SECTION 31	TOWNSHIP 17S	RANGE 35E
MUD	Logging Date Run Number Depth Driller Schlumberger Depth Bottom Log Interval Top Log Interval Casing Driller Size @ Depth Casing Schlumberger Bit Size Type Fluid In Hole Density Viscosity Fluid Loss PH Source Of Sample		8-March-1995 1 10700 F 10712 F 10708 F 3710 F 9.625 IN @ 3706 F 3710 F 8.750 IN Brine 8.9 LB/G 32 S 4 C3 7 Circ		FINAL PRINT
	RM @ Measured Temperature RMF @ Measured Temperature RMC @ Measured Temperature Source RMF RMC RM @ MRT RMF @ MRT Maximum Recorded Temperatures Circulation Stopped Time Logger On Bottom Time Unit Number Location Recorded By Witnessed By		0.160 OHMM @ 65 DEGF 0.135 OHMM @ 65 DEGF @ Meas. none 0.081 @ 135 0.068 @ 135 @ 135 DEGF 135 135 7-March-1995 8-March-1995 Hobbs 3402 Bill Billingsley T. Reed		
MUD	Logging Date Run Number Depth Driller Schlumberger Depth Bottom Log Interval Top Log Interval Casing Driller Size @ Depth Casing Schlumberger Bit Size Type Fluid In Hole Density Viscosity Fluid Loss PH Source Of Sample				
	RM @ Measured Temperature RMF @ Measured Temperature RMC @ Measured Temperature Source RMF RMC RM @ MRT RMF @ MRT Maximum Recorded Temperatures Circulation Stopped Time Logger On Bottom Time Unit Number Location Recorded By Witnessed By				

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO CLAUSE 4 OF OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

OTHER SERVICES1

OTHER SERVICES2



POOL Vacuum - Middle Pennsylvanian

TOWNSHIP 17 South

RANGE 34 East

**NMIPM**

Description: SW  $\frac{1}{4}$  Sec. 13 Special vertical limits: Top pool: 10.325  
bottom pool: 10.883 Type log: Mobil Oil Corporation's State Bridges # 96  
N-26-175-34E (R-3329, 11-1-67)  
Ext: SE  $\frac{1}{4}$  Sec. 13 (R-341, 6-1-68) - SE  $\frac{1}{4}$  Sec. 11, E  $\frac{1}{2}$  Sec. 14 (R-3505, 10-1-68)  
NW  $\frac{1}{4}$  Sec. 13 (R-4086, 2-1-71) EXT: NE  $\frac{1}{4}$  sec 13 (R-9194, 6-1-90)  
Ext: E  $\frac{1}{2}$  Sec. 24, NE  $\frac{1}{4}$  sec. 25 (R-10419, 7-12-95)

County Lea Pool Vacuum-Middle Pennsylvanian

TOWNSHIP 17 South Range 35 East NMPM

6	5	4	3	2	1	
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

Ext:  $\frac{1}{2}$  Sec. 30,  $\frac{1}{2}$  Sec. 31 (R-18419, 7-17-95)

API Well No : 30 25 32844 Eff Date : 05-19-1995 WC Status : A  
 Pool Idn : 62300 VACUUM;MIDDLE PENN  
 OGRID Idn : 20676 SHELL WESTERN E & P INC  
 Prop Idn : 10120 STATE A

Well No : 010  
 GL Elevation: 3973

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: A	31	17S	35E	FTG 940 F N	FTG 940 F E	A

Lot Identifier:

Dedicated Acre: 40.00

Lease Type : S

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC