

# Presidio Oil Company

3131 Turtle Creek Blvd • Suite 400 • Dallas, Texas 75219-5415 • (214) 528-5898 • Facsimile (214) 528-2160

## SUBSIDIARIES

Peake Operating Company  
Presidio Energy, Inc.  
Presidio Exploration, Inc.  
The Desana Corporation  
The Petroleum Corporation of Delaware

August 15, 1989

Downhole Commingling  
Superior Federal No.6  
Unit N, Sec. 6, T20S, R29E  
Eddy County, New Mexico

New Mexico Oil Conservation Division  
P. O. Box 2088 Room 206  
Sante Fe, NM 87504

Attention: Mr. David R. Catanach

The Petroleum Corporation of Delaware requests an exception to New Mexico Oil Conservation Division Rule 303-A to permit downhole commingling of production from the East Burton Flat-Morrow gas pool and the East Burton Flat-Atoka gas pool in the above captioned wellbore. This matter has been set for consideration at the August 23, 1989 examiner hearing.

Superior Federal Well No. 6 is currently classified a dually producing well from the Strawn and Morrow gas pools of the East Burton Flat Field in Eddy County, New Mexico. The Morrow has produced up the tubing since initially being completed in March of 1982 through Morrow perforations from 11,177' to 11,314'. Additional Morrow perforations were made in 3 zones during a workover in May of 1987. The casing was perforated with a through tubing gun while the downhole production equipment remained in place. At that time the geologist had interpreted all three sets of perforations to be Morrow pay. Recently we have been informed that the upper most set of perforations (10,951'-56') added during that May 1987 workover are actually in the Atoka Horizon as recognized by the State of New Mexico. Since the new zones were all perforated at the same time. Separate production tests and isolated reservoir pressures are not available. Also, separate testing of the zones now would be expensive and could potentially result in the loss of production by damaging the Morrow reservoir or partial loss of the wellbore. Therefore, we ask that no such requirement be imposed.

The completed NMOCD forms C-107 and C-115 for the Atoka are attached, as is the data described in Rule 303 (c) (2). All offset operators have been notified by copy of this letter and its attachments.

Sincerely,



Ronald P. Henderson

RPH/jlw

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### ATTACHMENT NO. 1 SUPERIOR FEDERAL WELL NO. 6 DOWNHOLE COMMINGLING - DATA REQUIRED

To obtain approval for downhole commingling, we have enclosed the following data pursuant to Rule 303 (c) (2) (a through j):

1. Company's Name and Address:

The Petroleum Corporation of Delaware  
3131 Turtle Creek Blvd. Ste. #400  
Dallas, Texas 75219-5415

2. Lease Name, Well Number, Well Location and Name of Pools to be commingled:

Superior Federal Well No. 6, Unit N, Section 6, T20S, R29E, Eddy County, New Mexico. Pools to be commingled: East Burton Flat Atoka Gas Pool and East Burton Flat Morrow Gas Pool.

3. A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases:

Attached.

4. A 24-hour productivity test of Division Form C-116 showing the amount of oil, gas and water produced from each zone:

Test is on total stream from combined Atoka and Morrow production. Division of production based on allocation formula from production before and after perforations were added in May of 1987.

5. The new perforations were added in May of 1987 and produced commingled with Morrow production until the present. Separate production curves therefore do not exist. A production curve for the Superior Federal No. 6 Morrow from initial completion to present is attached. The allocation formula for Atoka production is attached and shows the Atoka interval to be producing 25 MCFGPD and all other Morrow perforations producing 510 MCFGPD. A complete description of the production tests before and after the May, 1987 workover and the description and results of the June, 1987 acid treatment are also attached.

6. Current bottomhole pressures are not available due to the history of the zones being produced together. We are requesting relief from the requirement to provide separate production and pressure data on each

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individual zone. Testing each zone is economically prohibitive due to the small volume of Atoka production (approximately 25 MCFGPD). Testing could also result in the loss of production from the Morrow zones.

A history of the stabilized shut in tubing pressures is attached. This graph indicates a 170 psi increase in shut in pressure after the workover. If the Lower pressure zone had been left to decline alone until August of 1989 the SITP would be 680 psi. The combined SITP of the zones together extrapolates to 750 psi in August of 1989. There is not a 50% difference in pressures.

This is significant in that the well produces through a compressor and this will prevent crossflow from occurring because the flowing tubing pressure is pulled down to about 230 psi.

7. Descriptions of the gas analysis before and after the workover are attached. The gas samples are almost identical comparing gas just before the work and gas now.

The streams have also been commingled downhole and at the surface and have produced no compatibility problems.

8. The 62 MCFGPD increase in production that resulted from the additional perforations is the only link to estimating Atoka gas production. Using the method described in the allocation formula showed an estimated production of 25 MCFGPD from the Atoka interval.

The sum of the value of the individual streams is the commingled production that has been producing since the May, 1987 workover.

9. A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such a formula:

The following allocation percentages are suggested based upon the ratio of production from each zone:

	Expected Production	
	Gas	
Atoka	25 MCF/D	(4.7%)
<u>Morrow</u>	<u>510 MCF/D</u>	<u>(95.3%)</u>
Commingled	535 MCF/D	(100.0%)

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10. A statement that all offset operators and in the case of a well on Federal Land, the United States Geological Survey, has been notified in writing of the proposed commingling:

By copy of this letter, we are notifying the offset operators of this proposed commingling.

11. in addition, working interest and royalty interest ownership in all zones are the same.
12. Also attached is a stratigraphic cross section of the Atoka Formation through the immediate area. The section illustrates the stratigraphic nature of the locally-developed Atoka sand. The neutron-density "cross-over" gas/effect is only evident in the subject well. Additionally, the offsetting wells exhibit less than 4% effective porosity for the correlative sand.
13. The structure map , on the top of this Atoka sand depicts a nosing or flattening of the regional dip at the Superior Federal No. 6 well, indicative of a stratigraphic trap.

HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

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ROY C. SNODGRASS, JR. (1914-1987)

\*NOT LICENSED IN NEW MEXICO

January 25, 1988

*Case 9663*

Mr. Michael E. Stogner  
New Mexico Oil Conservation  
Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Re: Case No. 9342, The Application of Petroleum Corporation  
of Delaware for Simultaneous Dedication

Dear Mike:

Enclosed is a copy of the latest letter I sent to my client,  
and a copy of the Second Amended Application which I have  
prepared. Please review the Application and see if it  
includes all items necessary to satisfy your concerns. If  
so, I will be filing it shortly. Thank you for your  
attention to this matter.

Very truly yours,

*James Bruce*  
JAMES BRUCE  
JB:le  
Enclosures

RECEIVED  
JAN 26 1988  
DIVISION

# HINKLE, COX, EATON, COFFIELD & HENSLEY

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January 19, 1989

Mr. Larry Shannon  
Presidio Oil Company  
3131 Turtle Creek Boulevard  
Suite 400  
Dallas, Texas 75219

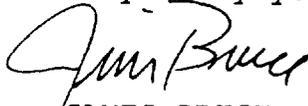
Re: OCD Case No. 9342, Simultaneous Dedication of Superior  
Fed. No. 6 and Superior Fed. No. 7 Wells

Dear Larry:

I wrote you on November 30, 1988 regarding bringing the above case to a conclusion. The OCD has again asked me the status of this matter. If we do not respond promptly, the case could be dismissed. In addition, the Superior Fed. Well No. 6 is currently producing from the Atoka formation although there is no OCD order authorizing Atoka production. If we do not get this matter cleared up promptly, the OCD might shut the well in until the proper authority is obtained.

Please contact me about this matter.

Very truly yours,

  
JAMES BRUCE  
JB:le

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF THE PETROLEUM )  
CORPORATION OF DELAWARE FOR )  
SIMULTANEOUS DEDICATION, THE )  
AMENDMENT OF ADMINISTRATIVE )  
ORDER NO. NSP-1290, AND THE )  
AMENDMENT OF ORDER NO. R-7269, )  
EDDY COUNTY, NEW MEXICO. )

Case No. <sup>9663</sup> 9342

SECOND AMENDED APPLICATION

The Petroleum Corporation of Delaware files this Second Amended Application requesting simultaneous dedication, the amendment of Administrative Order NSP-1290, and the amendment of Division Order No. R-7269, and in support thereof states:

Amendment of Division Order No. R-7269:

1. Applicant is the operator of the Superior Federal Well No. 6 located in the SW $\frac{1}{4}$  of Section 6, which is completed in and is producing from the East Burton Flat-Morrow Gas Pool, East Burton Flat-Atoka Gas Pool, and the East Burton Flat-Strawn Gas Pool.

2. The S $\frac{1}{2}$  of Section 6, Township 20 South, Range 29 East, N.M.P.M. (Eddy County, New Mexico), containing 299.84 acres, is dedicated to the Superior Federal Well No. 6.

3. By Order No. R-7269, entered April 25, 1983, The Division approved the dual completion of the Superior Federal Well No. 6 to produce from the Strawn and Morrow formations.

4. In May 1987 the Superior Federal Well No. 6 was recompleted, and one of the producing zones is in the Atoka formation.

WHEREFORE, Applicant requests the Division to enter its order amending Order No. R-7269 to permit production from the Atoka formation, retroactive to May 1987.

Amendment of Administrative Order NSP-1290:

5. The Superior Federal Well No. 6 is the subject of Administrative Order No. NSP-1290 as to the Morrow pool.

6. Applicant seeks the amendment of NSP-1290 to include the Strawn pool and the Atoka pool.

WHEREFORE, Applicant requests the Division to enter its order amending Administrative Order NSP-1290 to include the Strawn and Atoka pools.

Simultaneous Dedication:

7. Applicant proposes to drill its Superior Federal Well No. 7 in the SE $\frac{1}{4}$  of Section 6, at a standard location, to test the Strawn, Atoka, and Morrow formations.

8. The primary target of the Superior Federal Well No. 7 is the Strawn formation, but the well may be completed in the Morrow and Atoka formations.

9. The drilling of the Superior Federal Well No. 7 is necessary to adequately produce the reserves underlying the S $\frac{1}{2}$  of Section 6.

10. Applicant seeks authority to simultaneously dedicate production from the subject Morrow, Atoka and Strawn

pools in the S½ of said Section 6 to the Superior Federal Well Nos. 6 and 7.

WHEREFORE, Applicant requests the Division to enter its order permitting the simultaneous dedication of production from the Superior Federal Well Nos. 6 and 7 in the S½ of said Section 6.

11. The granting of this Application is in the interests of conservation, the prevention of waste, and the protection of correlative rights.

Dated this \_\_\_ day of January, 1989.

HINKLE, COX, EATON, COFFIELD &  
HENSLEY

By \_\_\_\_\_

James Bruce  
500 Marquette, N.W.  
Suite 740  
Albuquerque, New Mexico 87102  
(505) 768-1500

Attorneys for The Petroleum  
Corporation of Delaware



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

LARRY KEHOE  
SECRETARY

April 28, 1982

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

The Petroleum Corporation  
of Delaware  
One Marienfeld Place  
Suite 555  
Midland, Texas 79701

Attention: Don Cox

Administrative Order NSP-1290

Gentlemen:

Reference is made to your application for a 300-acre non-standard proration unit consisting of the following acreage in the East Burton Flat Morrow Pool:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM  
Section 6: S/2

It is my understanding that this unit is to be dedicated to your Superior Federal Well No. 6 located 660 feet from the South line and 1980 feet from the West line of said Section 6.

By authority granted me under the provisions of Rule 104 D II, the above non-standard proration unit is hereby approved.

Sincerely,

JOE D. RAMEY,  
Director

JDR/RLS/dr

cc: Oil Conservation Division - Artesia  
Oil & Gas Engineering Committee - Hobbs  
Minerals Management Service - Artesia

Lot 6  29.91 acres			
Lot 7  29.93 acres			

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MID-BELL LAKE-MORROW GAS POOL  
Lea County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-23-S, R-34-E W/2 Sec. 19.

HORSESHOE BEND-MORROW GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-23-S, R-25-E W/2 Sec. 34.

 EAST BURTON FLAT-MORROW GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-5456, July 1, 1977; Order No. R-5667, April 1, 1978; Order No. R-5838, November 1, 1978; Order No. R-7009, July 1, 1982; Order No. R-7875, May 1, 1985; Order No. R-8065, November 1, 1985.

T-20-S, R-28-E E/2 Sec. 12.  
T-20-S, R-29-E S/2 Sec. 2; S/2 Sec. 3; Sec. 4; E/2 Sec. 5;  
S/2 Sec. 6; Secs. 7, 8, 9; S/2 Sec. 10; Secs. 16, 17, 18; N/2 Sec. 20.

INDIAN FLATS-DELAWARE POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-5334, December 1, 1976; Order No. R-5456, July 1, 1977; Order No. R-5754, July 1, 1978; Order No. R-5838, November 1, 1978; Order No. R-6368, July 1, 1980; Order No. R-6499, November 1, 1980; Order No. R-6657, May 1, 1981.

T-21-S, R-28-E SE/4 SE/4 Sec. 27; NE/4 NE/4 Sec. 34; W/2, SW/4 SE/4 Sec. 35.  
T-22-S, R-28-E N/2 N/2, S/2 NE/4 Sec. 2.

 EAST BURTON FLAT-STRAWN GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-5511, September 1, 1977; Order No. R-7158, January 1, 1983; Order No. R-7307, July 1, 1983.

T-20-S, R-29-E W/2 Sec. 4; Secs. 5, 6, 8 through 11.

LAGUNA GRANDE-MORROW GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-23-S, R-29-E E/2 Sec. 28.

EAST BURTON FLAT-WOLFCAMP GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-20-S, R-29-E W/2 Sec. 21.

LEAMEX-PADDOCK POOL  
Lea County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-6169, November 1, 1979.  
T-17-S, R-33-E S/2 Sec. 22.

BYRNES TANK-DELAWARE POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-7502, May 1, 1984.

T-23-S, R-26-E S/2 Sec. 5; SE/4 Sec. 7; W/2 Sec. 8.

NASH DRAW-ATOKA GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool, as Amended by Order No. R-5361, March 1, 1977.

T-23-S, R-29-E S/2 Sec. 12; E/2 Sec. 13.  
T-23-S, R-30-E N/2 Sec. 18.

CATCLAW DRAW-WOLFCAMP GAS POOL  
Eddy County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-22-S, R-25-E N/2 Sec. 2.

ROCK LAKE-BONE SPRINGS POOL  
Lea County, New Mexico

Order No. R-5252, September 1, 1976, Establishing Pool.  
T-22-S, R-35-E SW/4 Sec. 28.

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

RECEIVED BY  
**SEP 13 1985**

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
 The Petroleum Corporation of Delaware ARTESIA, OFFICE

3. ADDRESS OF OPERATOR  
 1-214-928-5461  
 3811 Turtle Creek Blvd., Suite 350, Dallas, Texas 75219

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface Unit Letter O, 660' ESL 8-1980 FEL  
 At proposed prod. zone SAME 760' SEP 23 1985

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE  
 13 Miles Northeast of Carlsbad, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'

16. NO. OF ACRES IN LEASE 1743.54

17. NO. OF ACRES ASSIGNED TO THIS WELL 320

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320

19. PROPOSED DEPTH 11,800

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GB, etc.) GR-3279.8'

22. APPROX. DATE WORK WILL START\*

5. LEASE DESIGNATION AND SERIAL NO.  
 NM-0144698

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Superior Federal

9. WELL NO.  
 7

10. FIELD AND POOL, OR WILDCAT  
 East Burton Flat (Strawn)

11. SEC., T., R. M., OR BLK. AND SURVEY OR AREA  
 Sec. 6, T20S, R29E

12. COUNTY OR PARISH  
 Eddy

13. STATE  
 NM

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	42#	350'	cir to surface
7 7/8"	8 5/8"	24# & 32#	3100'	cir to surface
7 7/8"	4 1/2"	11.6# & 13.5#	11,800'	Approx. 500 sx. to be determined by Caliper

Adequate BOP's to be installed @ 350' to TD. See sketch.

Mud Program: See Exhibit F (Page 3)

Note: This well being drilled as a replacement well for our Superior Federal #6 Strawn gas completion. **WILL PLUG BEFORE PROD.**

**#6 DUAL. DOES NOT DRAIN THE ACREAGE.**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED J. Thomas TITLE Engineer DATE August 25, 1985

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY Orig. Sgd: Charles TITLE \_\_\_\_\_ DATE 9-12-85

APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-4-83

All distances must be from the outer boundaries of the Section.

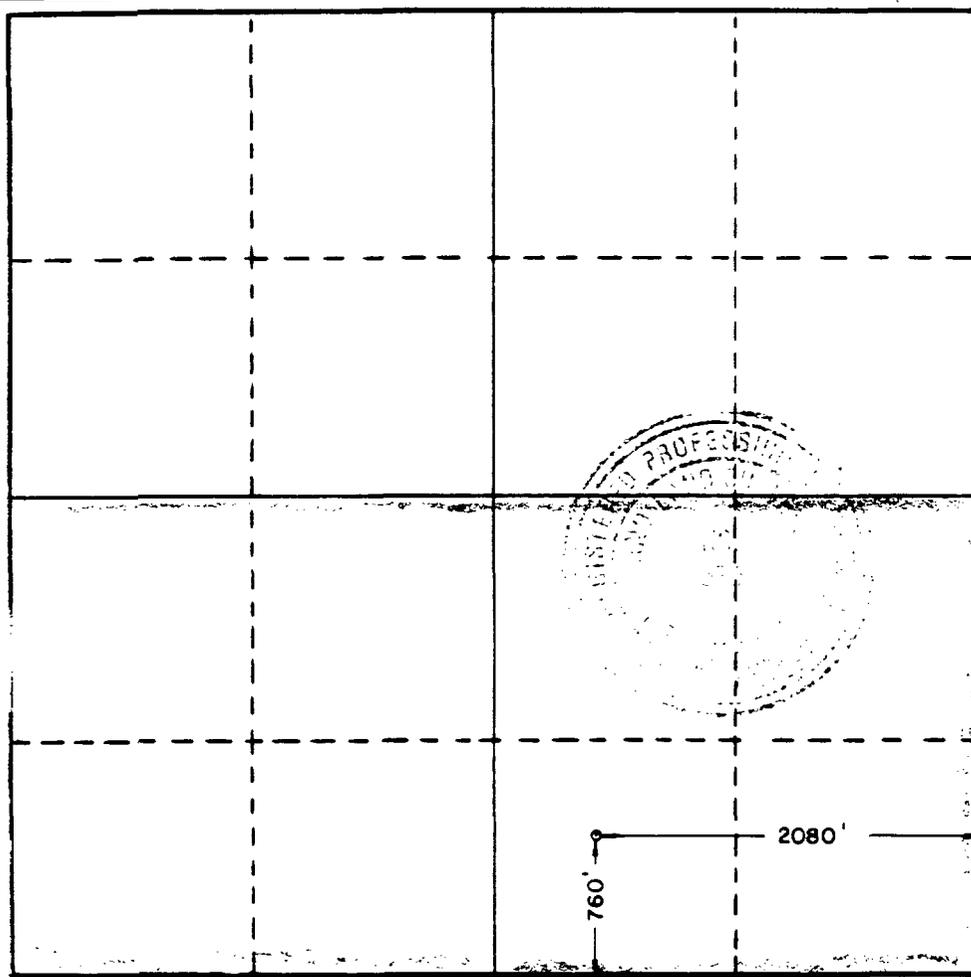
Operator <b>THE PETROLEUM CORP. OF DELAWARE</b>			Lease <b>SUPERIOR FEDERAL</b>			Well No. <b>7</b>
Unit Letter <b>0</b>	Section <b>6</b>	Township <b>20S</b>	Range <b>29E</b>	County <b>EDDY</b>		
Actual Footage Location of Well: <b>760</b> feet from the <b>SOUTH</b> line and <b>2080</b> feet from the <b>EAST</b> line						
Ground Level Elev. <b>3279.8</b>	Producing Formation <b>STRAWN</b>		Pool <i>E. Barton Flat Strawn</i>	Dedicated Acreage: <b>320</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes    No   If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

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

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

*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 knowledge and belief.*

Date Surveyed

**SEPT. 4, 1985**

Registered Professional Engineer  
and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST, 676**

**RONALD J. EIDSON, 3239**

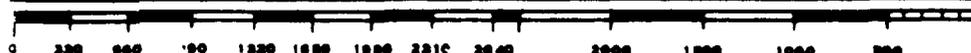
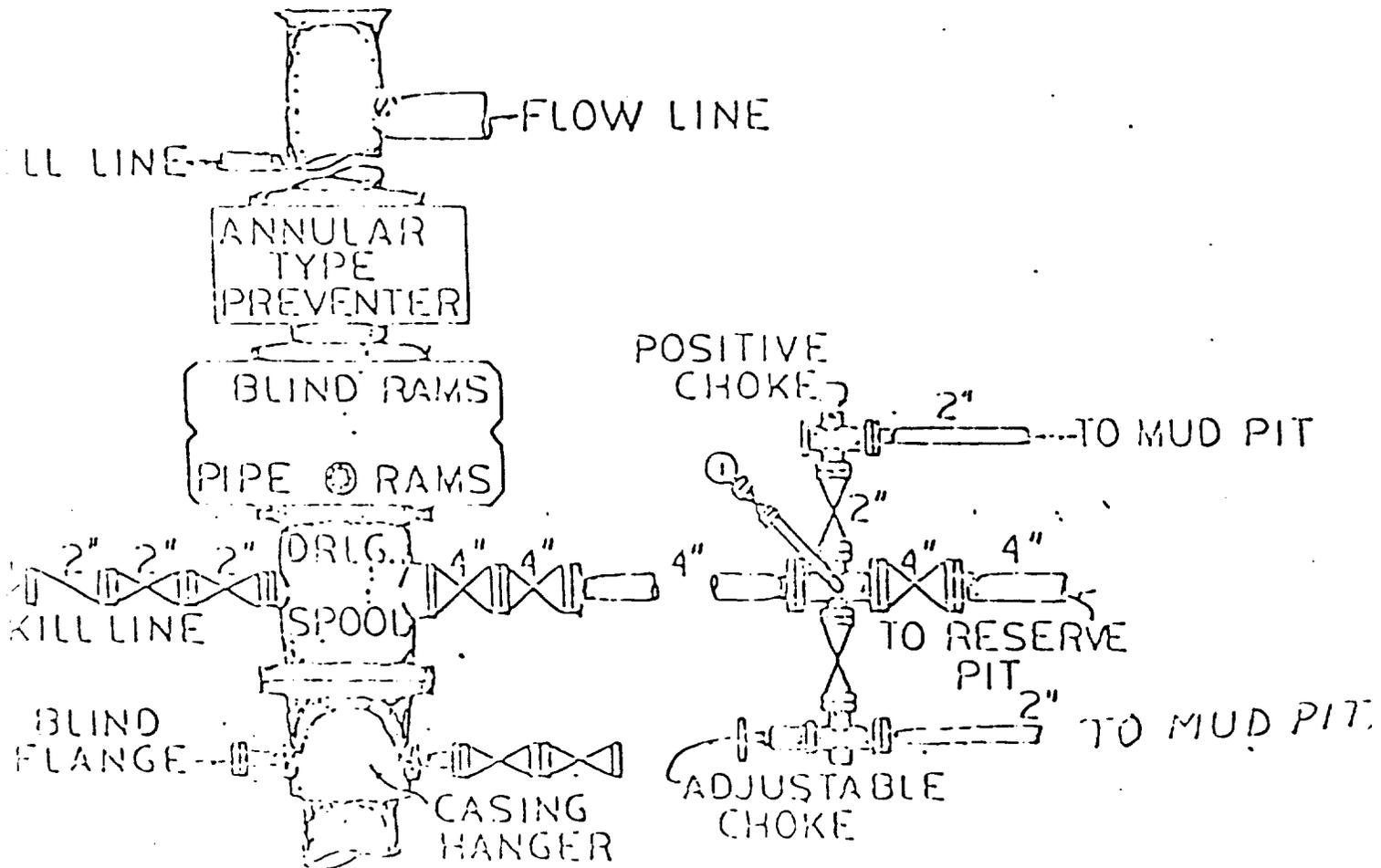


EXHIBIT E

The Petroleum Corporation of Delaware  
Superior Federal Well No. 7  
660' FSL and 1980 FEL  
Section 6-T20S-R29E  
Eddy County, New Mexico

B.O.P. ARRANGEMENT RIG NO. 3  
3000 LB. W.P. B.O.P.  
10" CAMERON TYPE-SS HYDRAULIC B.O.P. 3000 P.S.I.  
12" G.K. HYDRILL 3000 W.P.  
80 GALLON- STATION KOOMEY ACCUMULATOR  
3000 LB. W.P. CHOKE MANIFOLD



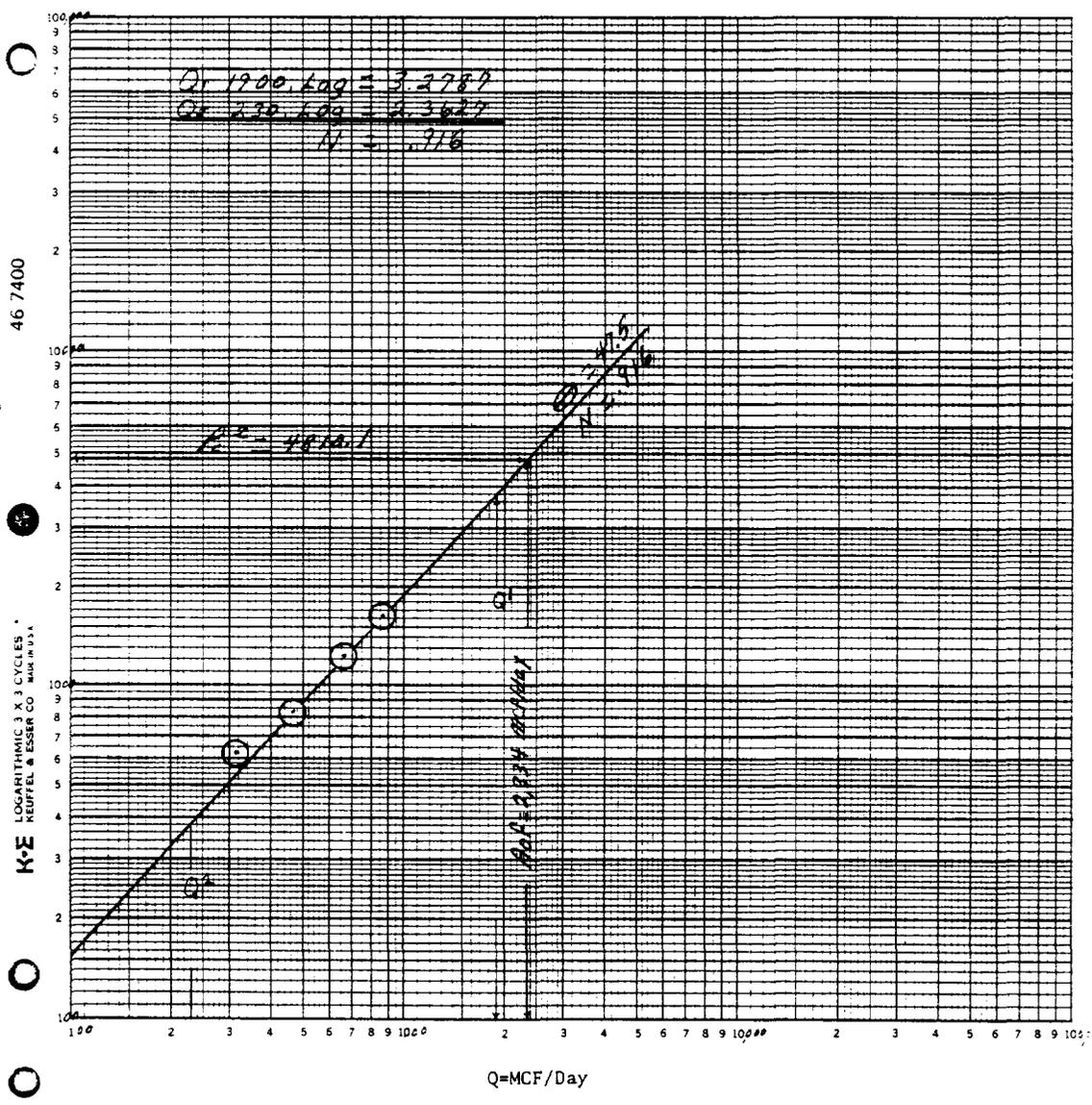
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED SF.

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Final <input type="checkbox"/> Special	Test Date 6-23-82	AUG 4 1982						
Company THE PETROLEUM CORP. OF DELAWARE	Connection EL PASO NATURAL GAS COMPANY	O. C. D.						
Pool East Burton Flat	Formation Morrow	Unit ARTESIA, OFFICE 1						
Completion Date 4-1-82	Total Length 11,600	Plug Back TD 11,559	Elevation 3274.4 GR					
Flow Rate 4 12.70 3.958 10,600	Set At 10,600	Perforations: From 11,177 To 11,314	Well No. 6					
Flow Rate 2 3/8 4.70 1.995 10,753	Set At 10,753	Perforations: From To	Unit Sec. Temp. No. 6 20S 29E					
Type well - Single - Inflow - G.C. or G.C. Multiple Dual	Packet Set At 10,710	County Eddy						
Producing Test Tbg.	Reservoir Temp. °F 186 @ 11,246	Mean Annual Temp. °F	State New Mexico					
L 11,246	H 11,246	CO <sub>2</sub> .626	N <sub>2</sub> .38					
		H <sub>2</sub> S .08	Proves Meter Run 4" Taps Fig.					
FLOW DATA								
NO.	Filter Size	Pressure	Duration of Flow					
1.	4 X 1.250	371	1 hr.					
2.	4 X 1.250	378	1 hr.					
3.	4 X 1.250	383	1 hr.					
4.	4 X 1.250	393	1 hr.					
TUBING DATA								
NO.	Filter Size	Pressure	Temp. °F					
1.	4 X 1.250	2180	90					
2.	4 X 1.250	2032	97					
3.	4 X 1.250	1978	87					
4.	4 X 1.250	1875	83					
Casing Data								
NO.	Filter Size	Pressure	Temp. °F					
1.	4 X 1.250	2180	90					
2.	4 X 1.250	2032	97					
3.	4 X 1.250	1978	87					
4.	4 X 1.250	1875	83					
RATE OF FLOW CALCULATIONS								
NO.	Coefficient (24 Hour)	$\sqrt{h_p P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super. Comp. Factor, f <sub>ov</sub>	Rate of Flow Q, Mgd	
1.	7.469	33.32	384.2	.9723	1.264	1.030	315	
2.	7.469	49.45	391.2	.9662	1.264	1.029	464	
3.	7.469	69.67	396.2	.9750	1.264	1.031	661	
4.	7.469	90.69	406.2	.9786	1.264	1.035	867	
Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mc/bbl.				A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.				
NO.	R	Temp. °R	T <sub>c</sub>	Z	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.57	550	1.51	.943	.626	XXXXXX	671	365
2.	.58	557	1.53	.945				
3.	.59	547	1.50	.940				
4.	.61	543	1.49	.933				
P <sub>c</sub> 2193.2 P <sub>c</sub> <sup>2</sup> 4810.1				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.948}{1.692} \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.692$				
NO.	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>w</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	$AQ^2 \cdot O \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.948}{1.692} \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n$				
1	4182.8	2045.9	4185.9	AUG 08 1982				
2	3964.9	1992.9	3971.5	CIL CO. INC.				
3	3565.3	1891.8	3578.8					
4	3154.9	1782.8	3178.2					
Absolute Open Flow 2,334				Field # 15,025	Angle of Slope 47.5°	Slope, n .916		
Remarks: Made no fluid during test.								
Approved by Division				EL PASO EXPLORATION CO. Reston & McGowen		Checked by: EL PASO EXPLORATION CO. Roy McGowen		

THE PETROLEUM CORPORATION OF DELAWARE  
 Superior No. 6  
 N-6-20-29, Eddy County, New Mexico  
 June 23, 1982

*h<sub>e</sub><sup>2</sup> - h<sub>w</sub><sup>2</sup> in Thousands*





RECEIVED

OIL CONSERVATION DIVISION  
P. O. DRAWER DD  
ARTESIA, NM 88210

JUN 22 1982

SF

O. C. D.

ARTESIA OFFICE

June 11, 1982

NOTICE OF GAS CONNECTION

DATE

JUN 3 4 1982

This is to notify the Oil Conservation Division that connection for the purchase of gas from the The Petroleum Corporation OPERATOR

Superior Federal #6 - Strawn	Eddy	N6-20S-29E
LEASE & WELL	COUNTY	UNIT S-T-R
East Burton Flat Strawn	El Paso Natural Gas Co.	
POOL	NAME OF PURCHASER	
was made on	June 10, 1982	36013
DATE		SITE CODE
		01
		SITE WELL NO.

El Paso Natural Gas Co.

PURCHASER

*R. Smith*

REPRESENTATIVE

Assistant Chief Division Dispatcher

TITLE

TRE:bl

cc: Operator

Oil Conservation Division - Santa Fe, NM

H. L. McEuen  
Proration  
Measurement - Jal  
R. L. Tabb  
Earl Smith  
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special			Test Date 7-2-83								
Company PETROLEUM CORP. OF DELAWARE			Connection El Paso Natural Gas Company								
Pool East Burton Flat			Formation Strawn		Unit O. C. D. ARTESIA, OFFICE						
Comp. No. & Date 4-1-82		Total Depth 11,600	Plug Back TD 11,559	Elevation 3224.4 GR							
Case Size 4 1/2	Wt. 12.70	Set At 3.958	10,600	Perforations: From 10,282 To 10,294	Well No. 6						
Thg. Size 2 3/8	Wt. 4.70	Set At 1.995	10,753	Perforations: From To	Unit Sec. Twp. Rye. N 6 20 29						
Type of Well - Single - Blindhead - G.C. or G.O. Multiple Dual				Perfor Set At 10,710	County Eddy						
Producing thru Casing		Reservoir Temp. °F 176 @ 10,282	Mean Annual Temp. °F 60 <sup>D</sup>	Baro. Press. - P <sub>a</sub> 13.2	State New Mexico						
L 10,282	H 10,282	C <sub>g</sub> .626	% CO <sub>2</sub> .80	% N <sub>2</sub> .38	% H <sub>2</sub> S Prover Meter Run 4.027 Taps Flg.						
FLOW DATA			TUBING DATA			CASING DATA			Duration of Flow		
NO.	Flow Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
1	4	x	.750	498	2.56	85			1690		1 hr
2	4	x	.750	493	6.76	86			1640		1/2 hr.
3	4	x	.750	494	17.64	86			1600		1 hr.
4	4	x	.750	497	35.40	90			1527		1 hr.
5	4	x	.750	498	90.25	84			1415		1 hr.
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{K P_a}$	Pressure P <sub>a</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super. Compress. Factor, F <sub>0V</sub>	Rate of Flow Q, Mcfd				
1	2.661	36.18	511.2	.9768	1.264	1.041	123				
2	2.661	58.50	506.2	.9759	1.264	1.040	199				
3	2.661	94.59	507.2	.9759	1.264	1.040	323				
4	2.661	134.39	510.2	.9723	1.264	1.039	456				
5	2.661	214.79	511.2	.9777	1.264	1.041	735				
NO.	r	Temp. °R	T <sub>g</sub>	Z	Gas Liquid Hydrocarbon Ratio			dry	Mcft/bbl.		
1	.76	545	1.49	.922	A.P.I. Gravity of Liquid Hydrocarbons				Deq.		
2	.75	546	1.50	.925	Specific Gravity Separator Gas			.626	XXXXXXXXXX		
3	.76	546	1.50	.924	Specific Gravity Flowing Fluid			XXXXX			
4	.76	550	1.51	.926	Critical Pressure			671	P.S.I.A.		
5	.76	544	1.49	.922	Critical Temperature			365	R		
P <sub>a</sub> 1703.2		P <sub>c</sub> 2900.9									
NO.	P <sub>a</sub>	P <sub>c</sub>	P <sub>a</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup>	P <sub>a</sub> <sup>2</sup> - P <sub>c</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_a^2 - P_c^2} = 3.381$		(2) $\frac{P_c^2}{P_a^2 - P_c^2} = 21.612$			
1	1671.2	2792.9	2792.9	108							
2	1653.3	2733.3	2733.3	167.6							
3	1613.4	2603.0	2603.0	297.9							
4	1540.6	2372.4	2372.4	527.5							
5	1429.3	2043.0	2043.0	857.9							
Absolute Open Flow					1,920	Mcfd @ 15.025	Angle of Slope α		51.75	Slope, m	.788
Remarks:											
Approved by Division			Conducted By: Reston & McGowen			Calculated by: Roy McGowen			Checked by: Reggie Reston		

PETROLEUM CORP. OF DELAWARE

Superior No. 6

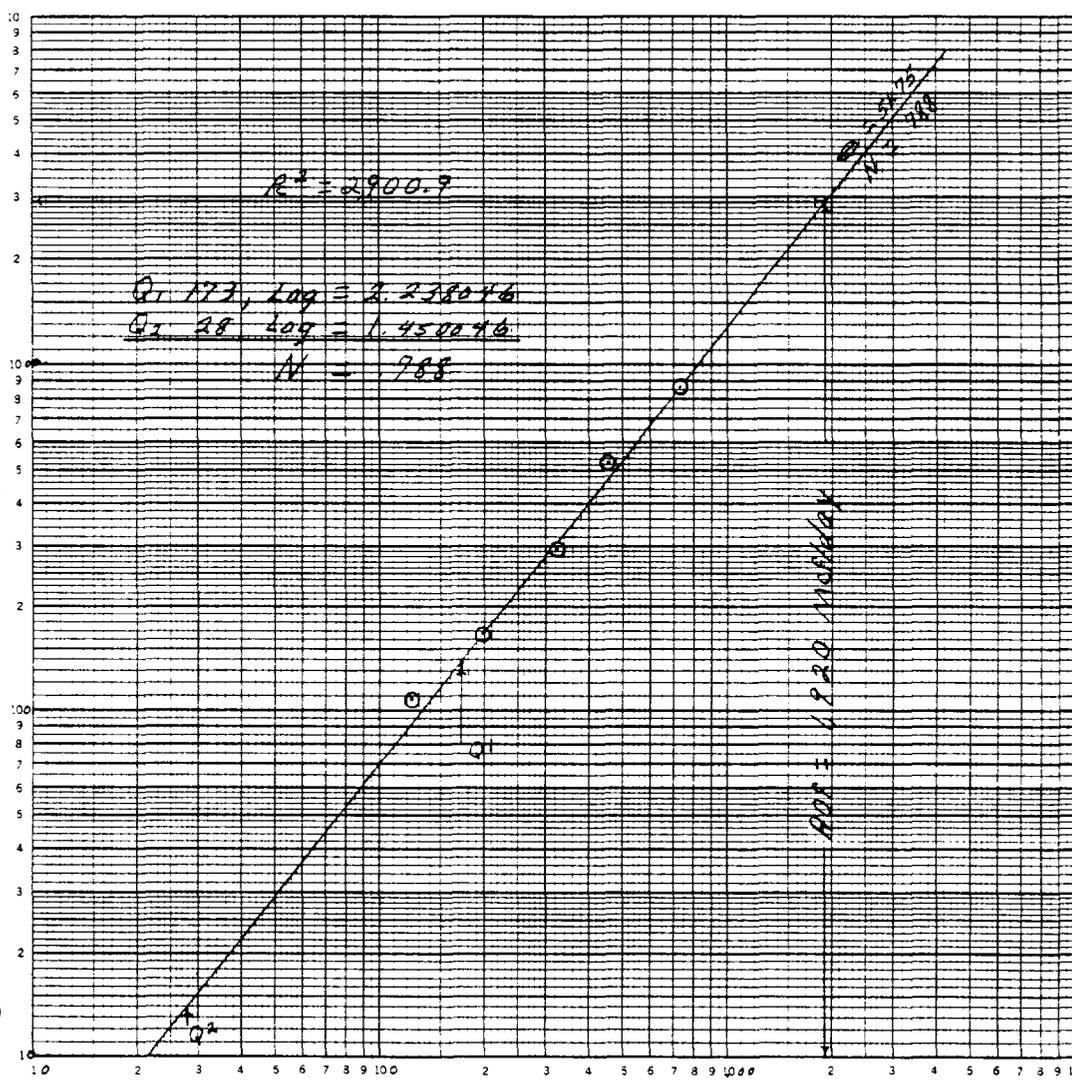
N 6-20-29

July 2, 1982

Eddy Co., NM



K-E LOGARITHMIC 3 X 3 CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.  
 $R^2 - P^2$  in (0005) 467400



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NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form O-104  
Supersedes Old O-104 and O-105  
Effective 1-1-65

73400  
73320  
APR 8 1982  
O. C. D.  
ARTESIA, OFFICE

Operator  
**THE PETROLEUM CORPORATION /**

Address  
**One Marienfeld Place, Suite 555 Midland, Texas 79701**

Reason(s) for filing (Check proper box)  
 New Well  Change in Transporter of:  
 Recompletion  Oil  Dry Gas   
 Change in Ownership  Casinghead Gas  Condensate

If change of ownership give name and address of previous owner

**II. DESCRIPTION OF WELL AND LEASE**

Lease Name <b>Superior Federal</b>	Well No. <b>6</b>	Pool Name, including Formation <b>East Burton Flat (Strawn)</b>	Kind of Lease State, Federal or Fee <b>Federal</b>	Lease No. <b>NM-0144698</b>
Location Unit Letter <b>N</b> ; <b>660</b> Feet From The <b>south</b> Line and <b>1980</b> Feet From The <b>west</b> Line of Section <b>6</b> Township <b>20S</b> Range <b>29E</b> , NMPM, <b>Eddy</b> County				

**III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> <b>Koch Oil Company</b>	Address (Give address to which approved copy of this form is to be sent) <b>P.O. Box 1558 Breckenridge, Tx. 76024</b>
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> <b>El Paso Natural Gas Company</b>	Address (Give address to which approved copy of this form is to be sent) <b>P.O. Box 1492 El Paso, Tx. 79999</b>
If well produces oil or liquids, give location of tanks. Unit : <b>N</b> ; Sec. : <b>6</b> ; Twp. : <b>20S</b> ; Rge. : <b>29E</b>	Is gas actually connected? <b>No</b> When <b>6-10-82</b>

If this production is commingled with that from any other lease or pool, give commingling order number:

**COMPLETION DATA**

Designate Type of Completion - (X)	Oil Well <input type="checkbox"/>	Gas Well <input checked="" type="checkbox"/>	New Well <input checked="" type="checkbox"/>	Workover <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same (as) <input type="checkbox"/>	Diff. Revis. <input type="checkbox"/>
Date Spudded <b>12-19-81</b>	Date Compl. Ready to Prod. <b>4-1-82</b>	Total Depth <b>11,600'</b>	P.B.T.D. <b>11,559'</b>					
Elevations (DF, RKB, RT, CR, etc.) <b>3274.4 GR</b>	Name of Producing Formation <b>Strawn</b>	Top Oil/Gas Pay <b>10219 10.222</b>	Tubing Depth <b>10,710'</b>					
Perforations <b>10282'-10294' (25 holes)</b>			Depth Casing Shoe <b>11,600'</b>					

**TUBING, CASING, AND CEMENTING RECORD**

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
15"	11 3/4	350	350 sacks
11"	8 5/8	3105	2550 sacks
7 7/8"	4 1/2	11600	1775 sacks
	2 3/8	10710	--

**TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

**GAS WELL**

Actual Prod. Test-MCF/D <b>2175</b>	Length of Test <b>6 hours</b>	Bbls. Condensate/MMCF <b>88</b>	Gravity of Condensate <b>52</b>
Testing Method (prod. back pr.) <b>choke coefficient</b>	Tubing Pressure (initial-final) <b>3090</b>	Casing Pressure (2nd-1st) <b>packer set</b>	Choke Size <b>3/4"</b>

**IV. CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

**Mike Rayford** (Signature)  
District Superintendent  
4-2-82 (Date)

**90 day test period ends 9-10-82**  
APPROVED **6-22-82**, 19  
BY **W.A. Bussett**  
TITLE **SUPERVISOR, DISTRICT II**

This form is to be filed in compliance with Rule 6.1104.  
If this is a request for allowable for a newly drilled or reworked well, this form must be accompanied by a two-inch by three-inch photo taken on the well in accordance with Rule 6.111.  
All sections of this form must be filled out completely for situations on new and reworked wells.  
Fill out only Sections I, II, III, and VI for the case of an existing well name or number, or transporter or other such change of condition.

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OPERATOR	
PROBATION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION  
 REQUEST FOR ALLOWABLE  
 AND RECEIVED  
 AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form O-104  
 Supersedes O.C.D. Form 104  
 Effective 1-1-85

APR 8 1982  
 O. C. D.  
 ARTESIA OFFICE

THE PETROLEUM CORPORATION  
 Address  
 One Marienfeld Place, Suite 555 Midland, Texas 79701

Reason(s) for listing (Check proper box)  
 New Well  Change in Transporter of: Oil  Dry Gas   
 Recombination  Casinghead Gas  Condensate   
 Change in Ownership  Other (Please explain)

If change of ownership give name and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, including Formation	Kind of Lease	Lease No.
Superior Federal	6	East Burton Flat (Morrow)	State, Federal or Fee Federal	NM-014469

Location  
 Unit Letter N ; 660 Feet From The South Line and 1980 Feet From The West  
 Line of Section 6 Township 20S Range 29E , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Koch Oil Company	P.O. Box 1558 Breckenridge, Tx. 76024
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
El Paso Natural Gas Company	P.O. Box 1492 El Paso, Tx. 79999

If well produces oil or liquids, give location of tanks. Unit N Sec. 6 Twp. 20S Rge. 29E Is gas actually connected? yes When 6-10-82

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same as Prev. Dist. Recvd.
		X	X				

Date Spudded 12-19-81 Date Compl. Ready to Prod. 4-1-82 Total Depth 11,600' P.B.T.D. 11,559'  
 Elevations (DF, RKB, RT, CR, etc.) 3274.4 GR Name of Producing Formation MORROW Top Oil/Gas Pay 10,732 11,127 Tubing Depth 10,710'  
 Perforations 11177'-11314' (19 holes) Depth Casing Shoe 11,600'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
15"	11 3/4	350	350 sacks
11"	8 5/8	3105	2550 sacks
7 7/8"	4 1/2	11600	1775 sacks
	2 3/8	10710	--

TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Text must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Units	Water-Units	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Units Condensate/MCF	Gravity of Condensate
2540	6 hours	TSTM	--
Testing Method (spiral, back pr.)	Tubing Pressure (in-Hg-in)	Casing Pressure (in-Hg-in)	Choke Size
choke coefficient	3150	packer set	16/64"

IV. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Mike Langford (Signature)  
 District Superintendent (Title)  
 4-2-82 (Date)

OIL CONSERVATION COMMISSION  
 90 day test period ends 9-10-82  
 APPROVED 6-22 19 82  
 BY W. A. Aresault  
 TITLE SUPERVISOR, DISTRICT II

This form is to be filed in compliance with RULE 1104.  
 If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of tests and tests taken on the well in accordance with RULE 111.  
 All sections of this form must be filled out completely for either oil or gas and recording intervals.  
 Fill out only Sections I, II, III, and VI for the test of a well. Well name or number, or other points not other such change of name.

MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

RECEIVED

9 F  
From [unclear]  
Supersedes [unclear]  
Effective [unclear]

APR 8 1982

All distances must be from the outer boundaries of the Section

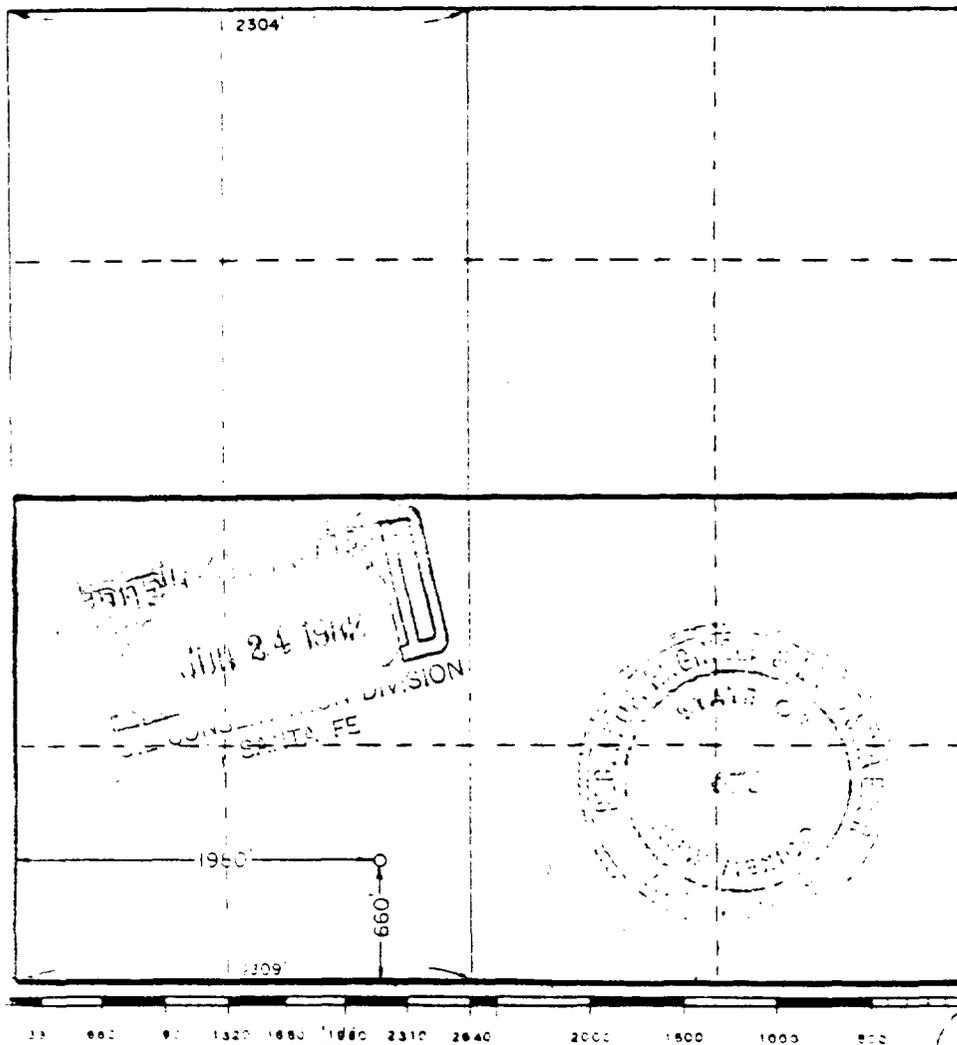
The Petroleum Corp.		Superior Federal		O. C. D.	6
Section	6	Township	20 South	Range	29 East
Producing Formation			Eddy		
Lease			1980		
Producing Formation			East Burton Flat		
Dedicated Acreage			29.98%		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes" type of consolidation \_\_\_\_\_

If answer is "no" list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

*L. E. Thomas*

L. E. Thomas

Manager of Operations

The Petroleum Corp.

October 15, 1981

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 knowledge and belief.

Date Surveyed: 10-10-81

Registered Professional Engineer and Oil and Gas Surveyor

*John W. West*

Certificate No. JOHN W. WEST 676  
PATRICK A. ROMERO 6863  
Ronald J. Eidson 3239

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved, Budget Bureau No. 42-R355.8.

5. LEASE DESIGNATION AND SERIAL NO.

NM-0144698

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other [ ]
b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. REVER. [ ] Other [ ]

2. NAME OF OPERATOR THE PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR One Marienfeld Place, Suite 555 Midland, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\* At surface 660' FSL and 1980' FWL
At top prod. interval reported below same
At total depth same

14. PERMIT NO. 81-NM-306 DATE ISSUED 11-19-81 OFFICE ARTESIAN

15. DATE SPUDDED 12-19-81 16. DATE T.D. REACHED 1-26-82 17. DATE COMPL. (Ready to prod.) 4-1-82 18. ELEVATIONS (DF, HEB, ET, GR, ETC.)\* 3274.4 GR 19. ELEV. CASINGHEAD 3274.4 GR

20. TOTAL DEPTH, MD & TVD 11,600' 21. PLUG, BACK T.D., MD & TVD 11,559' 22. IF MULTIPLE COMPL., HOW MANY\* 2 23. INTERVALS DRILLED BY 11,600' ROTARY TOOLS 11,600' CABLE TOOLS --

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 11,177'-11,314' Morrow 25. WAS DIRECTIONAL SURVEY MADE yes

26. TYPE ELECTRIC AND OTHER LOGS RUN DLL, DNL, GR with caliper, CBL 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well) Table with columns: CASING SIZE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, CEMENTING RECORD, AMOUNT PULLED

29. LINER RECORD Table with columns: SIZE, TOP (MD), BOTTOM (MD), BAGS CEMENT\*, SCREEN (MD)
30. TUBING RECORD Table with columns: SIZE, DEPTH SET (MD), PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) 11,177'-11,314' (19-0.25" holes)
ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. Table with columns: DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED

33.\* DATE FIRST PRODUCTION 3-20-82 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) shut in

DATE OF TEST 3-20-82 HOURS TESTED 6 CHOKE SIZE 16/64" PROD'N. FOR TEST PERIOD -- OIL—BBL. -- GAS—MCF. 635 WATER—BBL. -- GAS-OIL RATIO --

FLOW. TUBING PRESS. 1725 CASING PRESSURE pkr set CALCULATED 24-HOUR RATE -- OIL—BBL. -- GAS—MCF. 2540 WATER—BBL. -- OIL GRAVITY-API (CORR.) --

34. DISPOSITION OF CEMENT, PACKING, ETC. (If not listed, etc.) Vented TEST WITNESSED BY Mike Langford

35. LIST OF ATTACHMENTS Electric logs, G-103, G-104, Deviation Survey, G-104, Wellbore Sketch

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED: Mike Langford TITLE District Superintendent DATE 4-2-82

(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevations is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)



**37. SUMMARY OF POROUS ZONES, SHOW ALL IMPORTANT ZONES OF PERMEABILITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION LOGS, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES**

FORMATION	TOP		BOTTOM	DESCRIPTION, CONTENTS, ETC.
	DEPTH	PERCENTAGE		
Red Bed	0		470	
Anhydrite	470		500	
Salt	500		785	
Anhy. & Dolomite	785		995	
Anhy. & Sand	995		1260	
Dolomite	1260		3520	
Sand & Shale	3520		5594	
Lime	5594		6835	
Lime & Sand	6835		7900	
Lime	7900		8710	
Sand & Lime	8710		9120	
Lime & Shale	9120		9695	
Shale	9695		10219	
Lime & Shale	10219		11120	
Sand	11120		11454	
Shale	11454		11600	

**38. GEOLOGIC MARKERS**

NAME	TOP	
	MEAS. DEPTH	TRUE VERT DEPTH
Anhydrite	470	
Salt	500	
Salt	785	
Yates	995	
7 Rivers	1330	
San Andres	2362	
Wolfcamp	9092	
Penn.	9667	
Cisco	9884	
Canyon	10030	
Strawn	10219	
Atoka	10488	
Delaware Sand	3520	
Bone Springs	5594	
Morrow	10732	
Morrow Clastics	11150	
Barnett	11454	

FIELD \_\_\_\_\_ COUNTY Eddy OCC NUMBER \_\_\_\_\_  
 OPERATOR The Petroleum Corp. of Delaware ADDRESS 3303 Lee Parkway, Ste. 505  
Dallas, Texas 75219  
 LEASE Superior Federal / WELL NO. RECEIVED  
 SURVEY 660' FSL & 1980' FWL of Sec. 6, T-20-S, R-29-E

APR 8 1982

RECORD OF INCLINATION

O. C. D.  
ARTESIA OFFICE

<u>DEPTH (FEET)</u>	<u>ANGLE OF INCLINATION (DEGREES)</u>
350	1/2
868	1 1/2
1,380	1 1/2
1,712	1
2,142	1
2,476	1
3,093	2
3,607	1
4,100	3/4
4,556	1
5,090	1 3/4
5,588	1 3/4
6,146	3
6,553	2
6,863	1
7,110	1
7,602	1/4
8,062	1/4
8,531	1/4
9,087	1/4
9,613	1/4
10,231	1 1/2
10,657	1 1/4
10,799	1 1/2
11,470	1
11,600	1

Certification of personal knowledge inclination data:

I hereby certify that I have personally assembled the data and facts placed on this form, and such information given above is true and complete to the best of my knowledge.

APR 14 1982  
 CONSERVATION DIVISION  
 SANTA FE

HONDO DRILLING COMPANY  
 BY: [Signature]  
 Walter Frederickson  
 Vice President

Sworn and subscribed to before me the undersigned authority, on this the  
17 day of February, 1982.  
[Signature] Notary Public in and for Midland County, Texas  
 Margaret B. Anderson

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

Form Approved **RECEIVED**  
Budget Bureau No. 42-R-333.6

LEASE DESIGNATION AND SERIAL NO.

NM-0144698 **APR 19 1982**

8. IF INDIAN, ALLOTTEE OR TRIBE NAME

O. C. D.

7. UNIT AGREEMENT NAME

Superior Federal

8. FARM OR LEASE NAME

Superior Federal

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

Buckhorn Flat  
(Strawn)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 6 - T20S - R29E

12. COUNTY OR PARISH

Eddy

13. STATE

New Mexico

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. CENVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
**THE PETROLEUM CORPORATION**

3. ADDRESS OF OPERATOR  
**One Marienfeld Place, Suite 555 Midland, Texas 79701**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface **660' FSL and 1980' FWL**  
At top prod. interval reported below **same**  
At total depth **same**

14. PERMIT NO. **81-NM-306** DATE ISSUED **11-19-81**

15. DATE SPUNDED **12-19-81** 16. DATE T.D. REACHED **1-26-82** 17. DATE COMPL. (Ready to prod.) **4-1-82** 18. ELEVATIONS (DF, RKB, RT, CR, ETC.)\* **3274.4 GR** 19. ELEV. CASINGHEAD **3274.4 GR**

20. TOTAL DEPTH, MD & TVD **11600'** 21. PLUG, BACK T.D., MD & TVD **11559'** 22. IF MULTIPLE COMPL., HOW MANY\* **2** 23. INTERVALS DRILLED BY **→** ROTARY TOOLS **11,600'** CABLE TOOLS **--**

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
**10282'-10294' Strawn**

25. WAS DIRECTIONAL SURVEY MADE  
**yes**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**DLL, DNL, GR with caliper, CBL**

27. WAS WELL CORED  
**No**

29. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4	42	350	15"	350 sacks	None
8 5/8	24 & 32	3105	11"	2550 sacks	None
4 1/2	11.6&13.5	11600	7 7/8"	1775 sacks	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	10753	10710

31. PERFORATION RECORD (Interval, size and number)

**10282'-10294'**  
**(25 - 0.25" holes)**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<b>10282'-10294'</b>	<b>2500 gal. 15% HCl acid</b>

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
<b>3-26-82</b>	<b>Flowing</b>	<b>Shut in</b>

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
<b>4-1-82</b>	<b>6</b>	<b>3/4"</b>	<b>→</b>	<b>48</b>	<b>544</b>	<b>TSTM</b>	<b>11333</b>

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
<b>150</b>	<b>pkc set record</b>	<b>→</b>	<b>192</b>	<b>2175</b>	<b>TSTM</b>	<b>52</b>

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **Vented** TEST WITNESSED BY **Mike Langford**

35. LIST OF ATTACHMENTS  
**6-104, 6-105, 6-107, 1082 Electric logs, Deviation survey, Wellbore Sketch**

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED **Mike Langford** TITLE **District Superintendent** DATE **4-2-82**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

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Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)



37. SUMMARY OF POROUS ZONES, POSITIVITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CURVED-LOG USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	DEPTH INTERVAL TESTED, CURVED-LOG USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS	
	TOP	BOTTOM		NAME	MEAS. DEPTH
Red Bed	0	470		Anhydrite	470
Anhydrite	470	500		Salt	500
Salt	500	785		Salt	785
Anhy. & Dolo.	785	995		Yates	995
Anhy. & Sand	995	1260		7 Rivers	1330
Dolomite	1260	3520		San Andres	2362
Sand & Sahle	3520	5594		Wolfcamp	9092
Lime	5594	6835		Penn.	9667
Lime & Sand	6835	7900		Cisco	9884
Lime	7900	8710		Canyon	10030
Sand & Lime	8710	9120		Strawn	10219
Lime & Sahle	9120	9695		Atoka	10488
Shale	9695	10219		Delaware Sand	3520
Lime & Shale	10219	11120		Bone Springs	5594
Sand	11120	11454		Morrow	10732
Shale	11454	11600		Morrow Clastics	11150
				Barnett	11454

38.

GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Anhydrite	470	
Salt	500	
Salt	785	
Yates	995	
7 Rivers	1330	
San Andres	2362	
Wolfcamp	9092	
Penn.	9667	
Cisco	9884	
Canyon	10030	
Strawn	10219	
Atoka	10488	
Delaware Sand	3520	
Bone Springs	5594	
Morrow	10732	
Morrow Clastics	11150	
Barnett	11454	

FIELD \_\_\_\_\_ COUNTY Eddy OCC NUMBER \_\_\_\_\_  
 OPERATOR The Petroleum Corp. of Delaware ADDRESS 3303 Lee Parkway, Ste. 505  
Dallas, Texas 75219  
 LEASE Superior Federal WELL NO. 6  
 SURVEY 660' FSL & 1980' FWL of Sec. 6, T-20-S, R-29-E

RECORD OF INCLINATION

<u>DEPTH (FEET)</u>	<u>ANGLE OF INCLINATION (DEGREES)</u>
350	1/2
868	1 1/2
1,380	1 1/2
1,712	1
2,142	1
2,476	1
3,093	2
3,607	1
4,100	3/4
4,556	1
5,090	1 3/4
5,588	1 3/4
6,146	3
6,553	2
6,863	1
7,110	1
7,602	1/4
8,062	1/4
8,531	1/4
9,087	1/4
9,613	1/4
10,231	1 1/2
10,657	1 1/4
10,799	1 1/2
11,470	1
11,600	1

RECEIVED  
 APR 19 1982  
 O. C. D.  
 ARTESIA, OFFICE

Certification of personal knowledge inclination data:

I hereby certify that I have personally assembled the data and facts placed on this form, and such information given above is true and complete to the best of my knowledge.

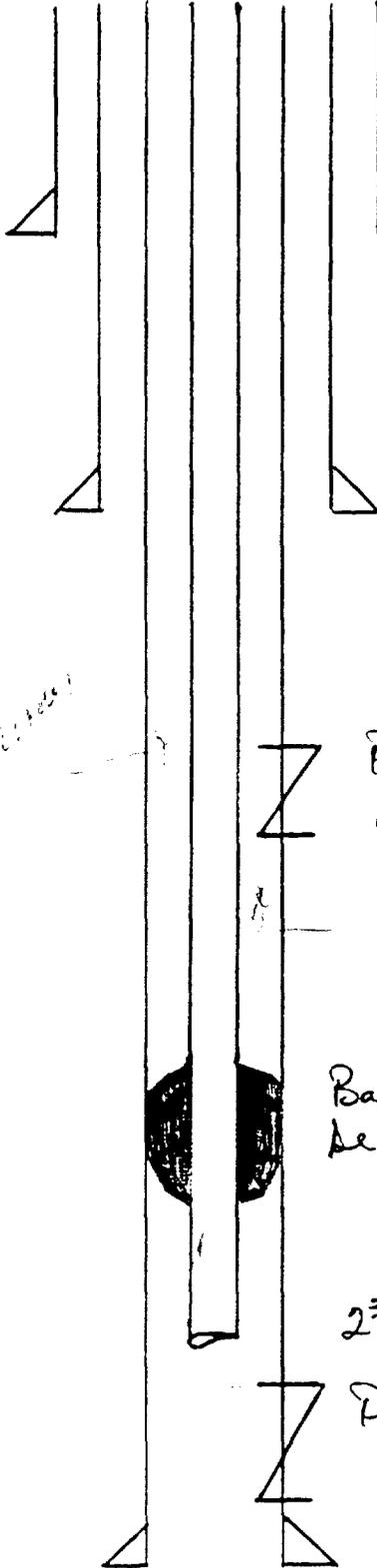
HONDO DRILLING COMPANY  
 BY: [Signature]  
 Walter Frederickson  
 Vice President

Sworn and subscribed to before me the undersigned authority, on this the 17th day of February, 1982.  
[Signature] Notary Public in and for Midland County, Texas  
 Margaret B. Anderson

SUBJECT: Superior Federal Well No. 6  
6660 ESL and 1980 FWL  
Sec. 6, T-19S, R-29E Eddy Co.

PREPARED BY	Mike Langford
DATE	4-2-82
SHEET	1 OF 1

East Burton Flat Field



11<sup>3</sup>/<sub>4</sub> casing set at 350'

8<sup>5</sup>/<sub>8</sub> casing set at 3105'

Producing through casing/tubing  
annulus: Drawn  
10,282 - 10,294 (25 Holes)

Baker Model DB Production packer  
set @ 10,710'

2<sup>3</sup>/<sub>8</sub> tubing set @ 10,753'

Producing through tubing: Morrow  
11,177 - 11,314 (19 Holes)

4<sup>1</sup>/<sub>2</sub> casing set at 11,600'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SF

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well  gas well  other

2. NAME OF OPERATOR  
THE PETROLEUM CORPORATION ✓

3. ADDRESS OF OPERATOR Midland,  
One Marienfeld Place, Suite 555 Tx. 79701

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 660' FSL and 1980' FWL  
AT TOP PROD. INTERVAL: same  
AT TOTAL DEPTH: same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input checked="" type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) <input type="checkbox"/>	<input type="checkbox"/>

5. LEASE NM-1044698

6. IF INDIAN, ALLOTTEE OR TRIBE NAME RECEIVED

7. UNIT AGREEMENT NAME Superior Federal APR 19 1982

8. FARM OR LEASE NAME Superior Federal O. C. D.

9. WELL NO. 6 ARTESIA, OFFICE

10. FIELD OR WILDCAT NAME East Burton Flat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 6 - T20S - R29E

12. COUNTY OR PARISH Eddy 13. STATE New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD) 3274.4 GR

APR 23 1982

(NOTES: Report results of multiple completion or zone completion on Form 9-330.)

OIL CONSERVATION DIVISION

SANTA FE 251 22 8 1982

U.S. GEOLOGICAL SURVEY

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1. Ran 4 1/2" 13.5# and 11.6#, set at 11,600'. Cemented in 2 stages with 700 sacks and 1075 sacks. DV Tool at 8900'. (1-30-82)
2. 3-17-82 Ran 4 1/2" production packer and set at 10710'.
3. 3-18-82 Perf. Morrow 11267'-11314' (8 holes)
4. 3-20-82 Perf. Morrow 11177'-11236' (11 holes)
5. 3-26-82 Perf. Strawn 10282'-10294' (25 holes)
6. 3-28-82 Acidize Strawn 10282'-10294' with 2500 gallons 15% HCl acid.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Mike [Signature] TITLE District Supt. DATE 4-2-82

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY:

U.S. GEOLOGICAL SURVEY  
POST OFFICE BOX 960  
DALLAS, TEXAS 75201

\*See Instructions on Reverse Side

APPLICATION FOR DRILLING  
The Petroleum Corporation  
Superior Federal Well No. 6  
660' FSL and 1979' FWL  
Section 6-T20S-R29E  
Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill, subject well in Section 6, Township 20 South, Range 29 East, Eddy County, New Mexico, The Petroleum Corporation submits the following ten items of pertinent information in accordance with U.S.G.S. requirements:

1. The geologic surface formation is Alliumium and Bolson deposits.
2. The estimated tops of geologic markers are as follows:

Yates	1,200'
Seven Rivers	1,425'
Delaware	3,225'
Bone Springs	5,025'
Wolfcamp	9,100'
Strawn	10,200'
Atoka	10,500'
Morrow	10,800'
Barnett Shale	11,450'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered are:

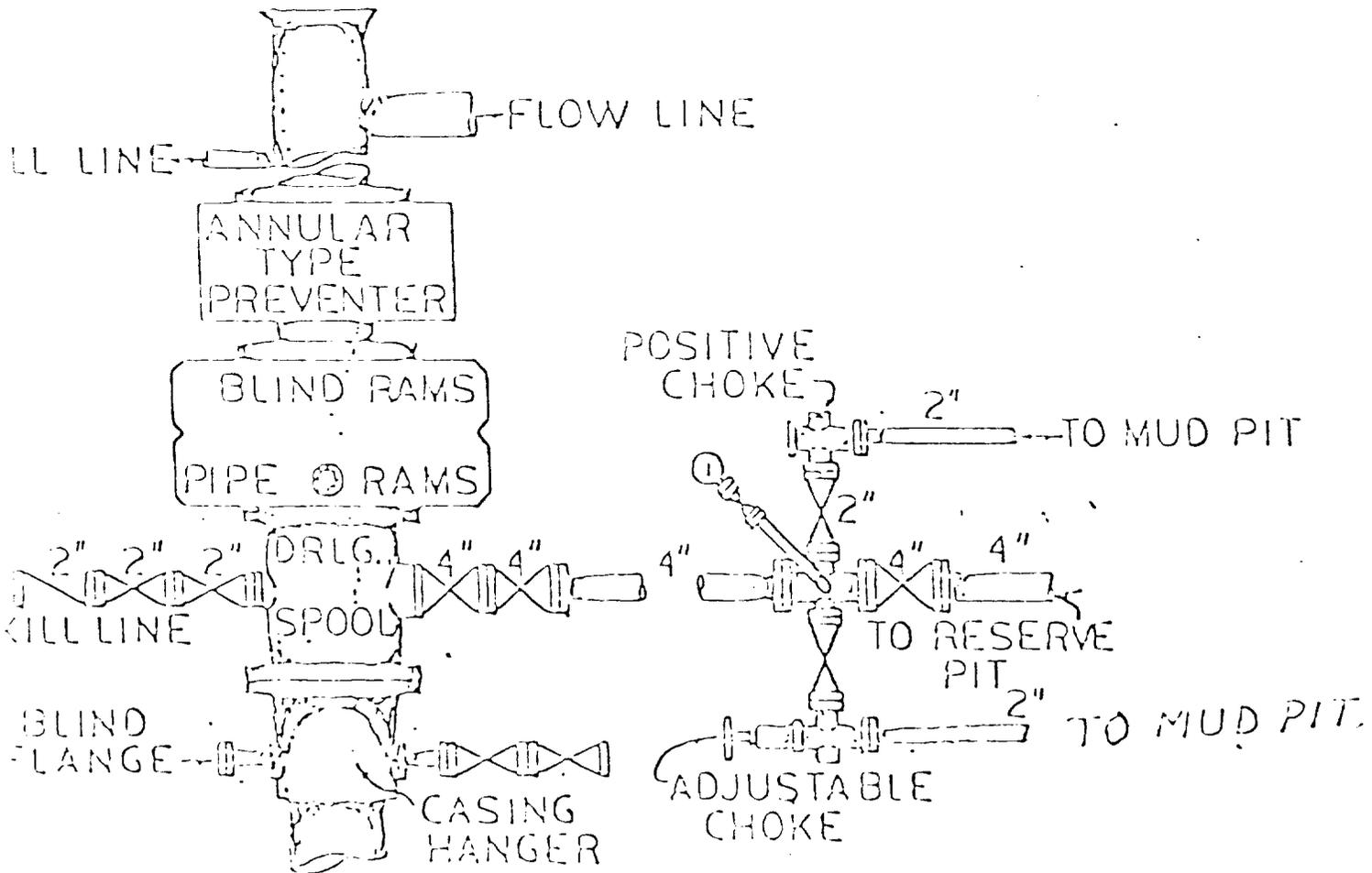
Water:	At approximately 240 feet
Oil or Gas:	Wolfcamp at approximately 9,100'
	Strawn at approximately 10,200'
	Atoka at approximately 10,500'
	Morrow at approximately 10,800'

4. Proposed casing program: See Form 9-331C and Exhibit F (Page 2)
5. Pressure control equipment: See Form 9-331C and Exhibit E
6. Mud Program: See Exhibit F (Page 3)
7. Testing, logging and coring programs: See Exhibit F (Page 2)
8. No abnormal pressures or temperatures are anticipated.
9. Anticipated starting date: As soon as possible.

EXHIBIT E

The Petroleum Corporation  
Superior Federal Well No. 6  
660' FSL and 1979' FWL  
Section 6-T20S-R29E  
Eddy County, New Mexico

B.O.P. ARRANGEMENT RIG NO. 3  
3000 LB. W.P. B.O.P.  
10" CAMERON TYPE-SS HYDRAULIC B.O.P. 3000 P.S.I.  
12" G.K. HYDRILL 3000 W.P.  
80 GALLON- STATION KOOMEY ACCUMULATOR  
3000 LB. W.P. CHOKE MANIFOLD



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well  gas well  other

2. NAME OF OPERATOR  
The Petroleum Corporation

3. ADDRESS OF OPERATOR  
One Marienfeld Place, Suite 555, Midland, Tx.

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 350'  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

5. LEASE NM 0144678  
~~Superior Federal~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
No

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Superior Federal

9. WELL NO. 6 **O. C. D. ARTESIA, OFFICE**

10. FIELD OR WILDCAT NAME  
East Burton Flat (Morrow)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 6, T20S, R29E

12. COUNTY OR PARISH | 13. STATE  
Eddy | New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
3274.4 GL

RECEIVED

JAN 4 1982

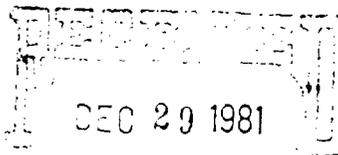
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) Surface Casing	<input type="checkbox"/>		<input type="checkbox"/>

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1. Set 20" conductor at 35', cemented with Redimix.
2. Drilled 15" hole to 350'
3. Ran 10 jts. 350', 11 3/4" O.D. 42#/ft. K-55 ST&C
4. Cemented with 350 sacks Class C + 2% CaCl<sub>2</sub>. Cement circulated.



Subsurface Safety Valve: Manu. and Type 10" 3000# BOP's Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Robert A. Chapman **ACCEPTED FOR RECORD** DATE 12-28-81

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY:

DEC 31 1981  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

30-015-23979

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

NM-0144698

SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER   
SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
The Petroleum Corporation / Delaware

3. ADDRESS OF OPERATOR  
3303 Lee Parkway Dallas, Texas 75219

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At Surface 1980'  
660' FSL and 1979' FWL  
At proposed prod. zone Same  
RECEIVED NOV 09 1981 O. C. D. ARTESIA, OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
16 miles NE from Carlsbad, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
660'

16. NO. OF ACRES IN LEASE  
1743.54

17. NO. OF ACRES ASSIGNED TO THIS WELL  
300

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
5350'

19. PROPOSED DEPTH  
11,800

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
GL 3274.4

22. APPROX. DATE WORK WILL START\*  
Depends on rig availability

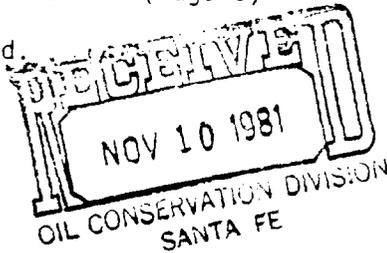
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	42#	350'	Circ. to surface
11"	8 5/8"	24# & 32#	3100'	Circ. to surface
7 7/8"	4 1/2"	11.6# & 13.5#	11,800'	500 sx, Vol to be determined by caliper.

Adequate BOP's to be installed from 350' to total depth. See attached sketch.

Mud Program: See Exhibit F (Page 3)

Gas is not dedicated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED [Signature] TITLE Manager of Operations DATE October 13, 1981

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE

APPROVED BY [Signature] TITLE DATE

NOV 6 1981

JAMES A. GILLMAN

\*See Instructions: On Reverse Side

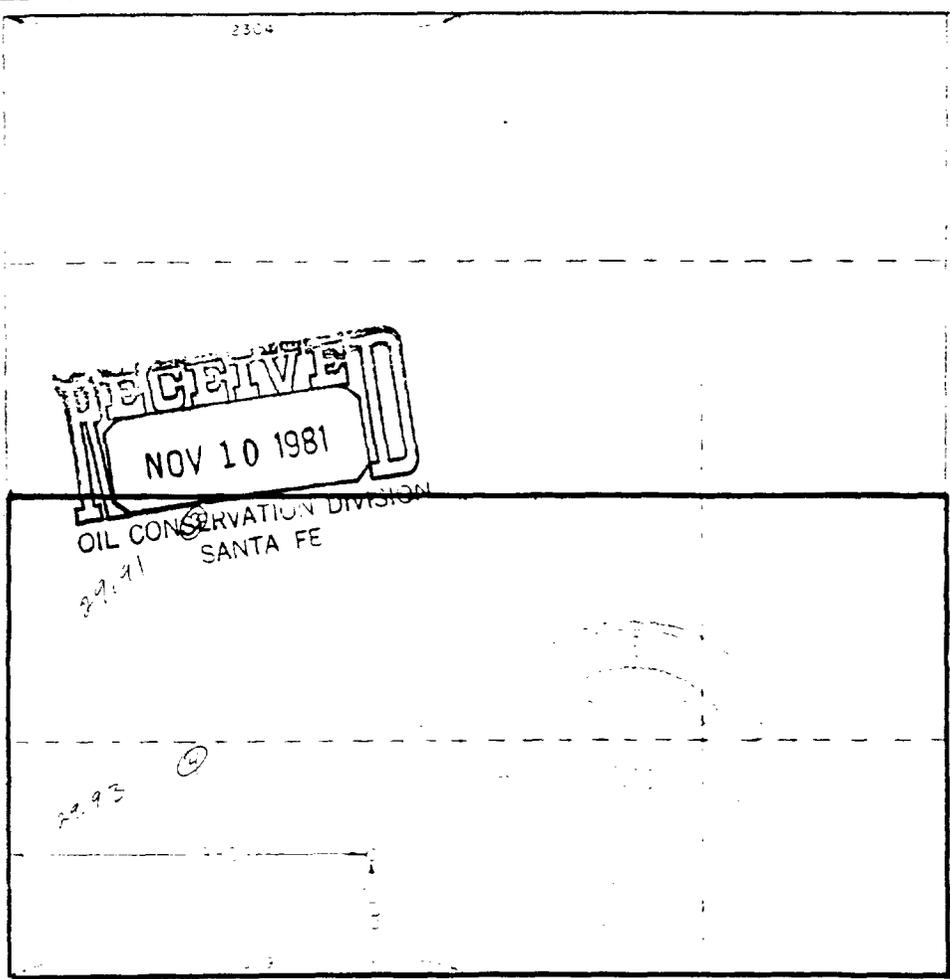
NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form No. 1  
10-27-77

All distances must be from the outer boundaries of the Section.

The Petroleum Corp. of Delaware		Superior Federal		6
20 South	20 East	Eddy		
660	South	1980	West	
3203.2	Morrow	East Burton Flat (Morrow)		299,84 300-

- Outline the acreage dedicated to the subject well by colored pencil or machine marks on the plat above.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereon as to its own interest and priority.
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners thereon as to their interest in the well, by communitization, unitization, force-pooling, etc.?
- If yes, \_\_\_\_\_ If answer is "No", type of consolidation \_\_\_\_\_
- If answer is "No", list the owners and tract descriptions which have actually been consolidated in this form if necessary \_\_\_\_\_
- Is the well to be assigned to the well until all interests have been consolidated by communitization, unitization, force-pooling, or otherwise, until a non-standard unit, eliminating such interests, has been approved by the Commission?



**RECEIVED**  
NOV 10 1981  
OIL CONSERVATION DIVISION  
SANTA FE

CERTIFICATION

I hereby certify that the information furnished hereon is true and complete to the best of my knowledge and belief.

*L. E. Thomas*

L. E. Thomas  
Manager of Operations  
The Petroleum Corp.  
October 15, 1981

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 knowledge and belief.

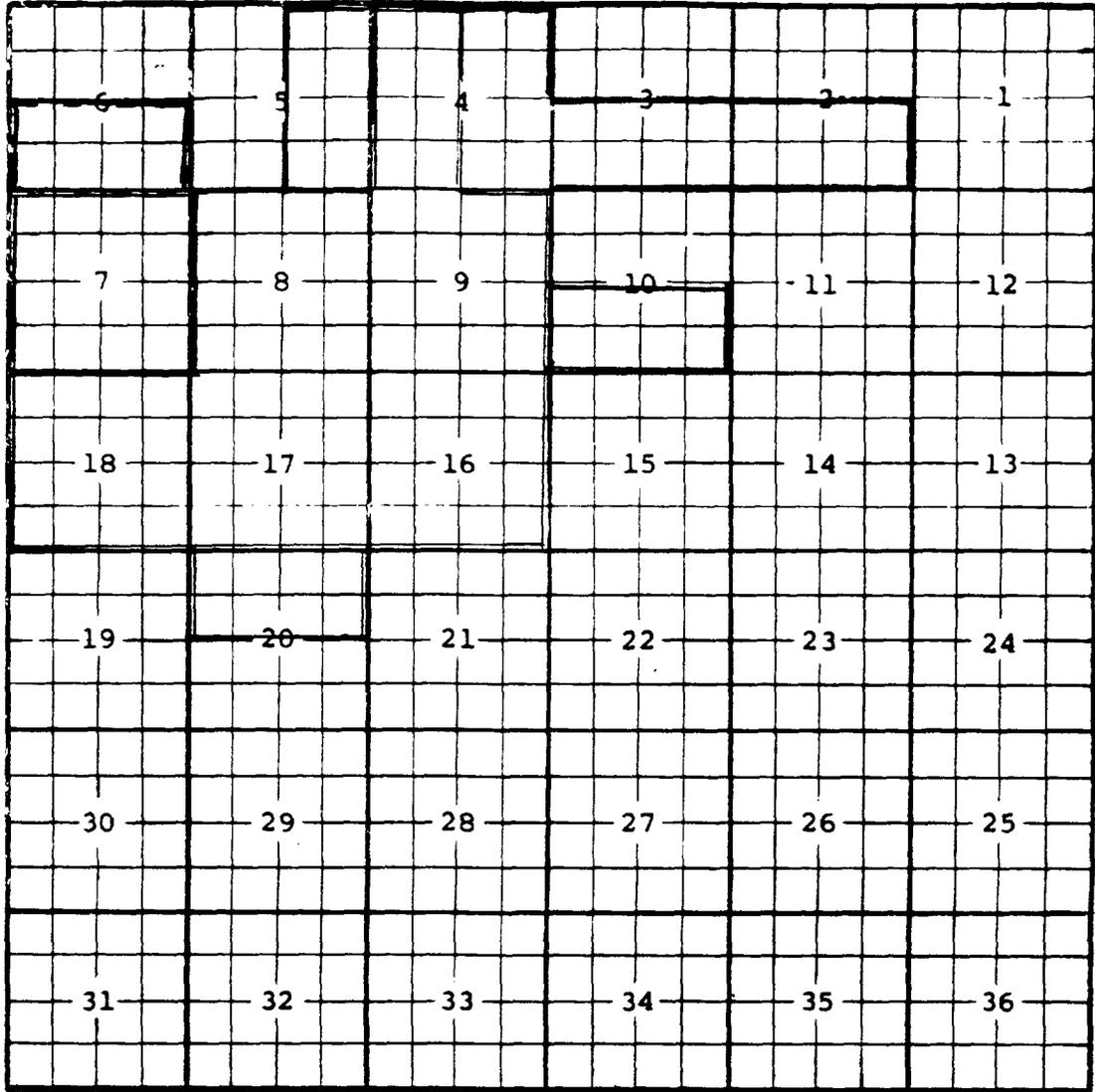
10-15-81

*[Signature]*

1981

COUNTY Eddy POOL East Burton Flat - Morrow Gas

TOWNSHIP 20 South RANGE 29 East NMPM



Description:  $\frac{1}{2}$  Sec 4, All sec 8, 9, 16, 17 & 18 (R-5282, 9-1-76)

Ext:  $\frac{1}{2}$  Sec 20 (R-5456, 7-1-77) Ext: All Sec 7 (R-5667, 4-1-78)

Ext:  $\frac{1}{2}$  Sec 5 (R-5838, 11-1-78) EXT:  $\frac{1}{2}$  sec 6 (R-7009, 6-19-82)

Ext:  $\frac{1}{2}$  Sec 2,  $\frac{1}{2}$  Sec 3,  $\frac{1}{2}$  Sec 4 (R-7875, 4-16-85)

Ext:  $\frac{1}{2}$  Sec 10 (R-8065, 10-31-85)

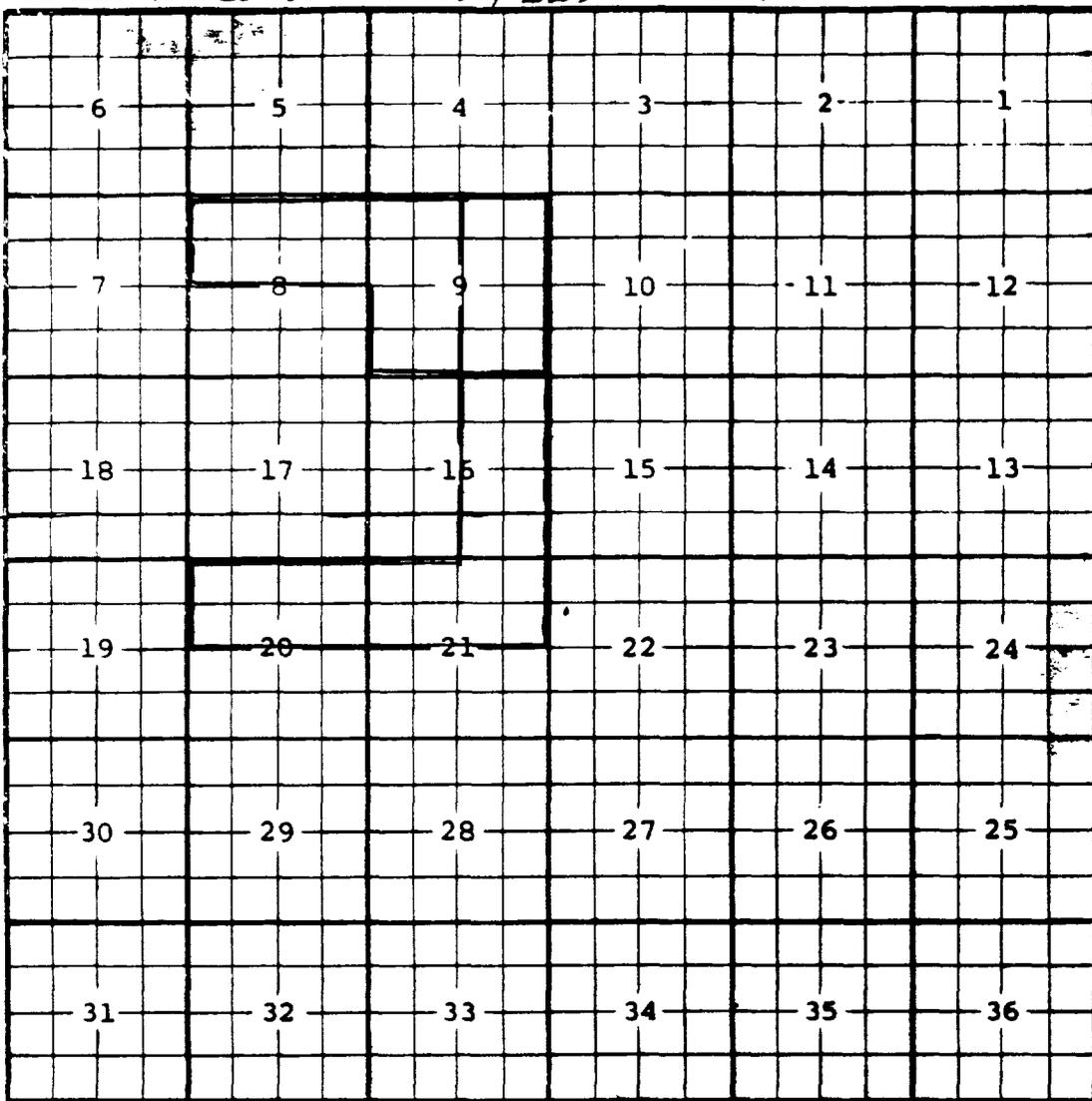
COUNTY *Eddy*

POOL *East Burton Flat - Atoka Gas*

TOWNSHIP *20 South*

RANGE *29 East*

NMPM



*Describe: Fl Sec 9 (R-5417, 4-1-77)*

*Ex 20421 (R-5781, 9-1-78)*

*Ex 6576, 2-10-81)*

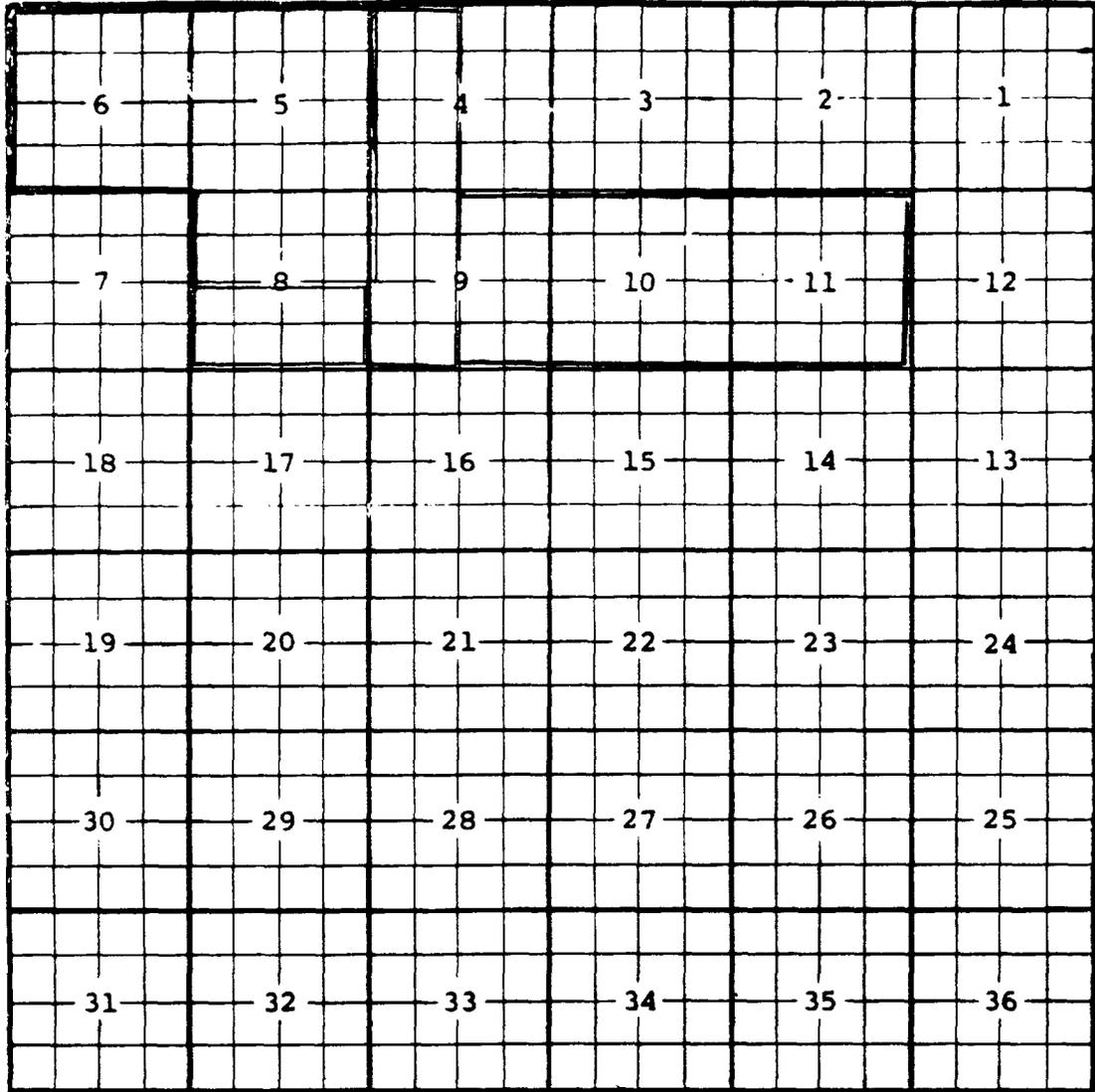
COUNTY Eddy

POOL East Burton Flat - Strawn Gas

TOWNSHIP 20 South

RANGE 29 East

NMPM



Description:  $\frac{5}{2}$  Sec 8 (R-5252, 9-1-76)

Ext:  $\frac{w}{2}$  Sec 4,  $\frac{w}{2}$  Sec 9 (R-5511, 9-1-77)

Ext:  $\frac{w}{2}$  Sec 9, All Sec 10, All Sec 11 (R-7158, 12-8-82)

Ext: All Sec. 6, All Sec. 6,  $\frac{w}{2}$  Sec. 8 (A-7307, 6-14-83)