

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 21 '87

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK **ARTESIA, OFFICE**

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

2. NAME OF OPERATOR
 Petrus Oil Company, L. P.

3. ADDRESS OF OPERATOR
 12377 Merit Drive, Suite 1600; Dallas, Texas 75251

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 2310' FSL and 660' FEL, Unit letter I **NESE**
 At proposed prod. zone
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 6-1/2 air miles North of Loco Hills, New Mexico

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

16. NO. OF ACRES IN LEASE 320

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. N/A

19. PROPOSED DEPTH 10,700'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3816' GR

22. APPROX. DATE WORK WILL START* October 31, 1987

5. LEASE DESIGNATION AND SERIAL NO. NM-0560378

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME Henshaw Federal

9. WELL NO. 2

10. FIELD AND POOL, OR WILDCAT Wildcat - Atoka

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T16S, R30E

12. COUNTY OR PARISH Eddy

13. STATE NM

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.50#	±500 450' sjs	300 sx (Circulated)
12-1/4"	8-5/8"	24 & 32#	±3000	1100 sx (Circulated)
7-7/8"	5-1/2"	17 & 20#	T.D.	Cement to isolate all oil, gas and water zones

Proposed plans are to drill to the Atoka formation and test for possible commercial production of oil and gas.

Selectively perforate and treat pay sections of interest.

B.O.P. sketch is attached.

RECEIVED
 OCT 13 8 17 AM '87
 CARLSBAD RESOURCE AREA HEADQUARTERS

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 Suzann Jourdan Suzann Jourdan TITLE Regulatory Coordinator DATE 10-06-87

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 10-19-87

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

Form C-102
Supersedes C-128
Effective 1-1-65

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

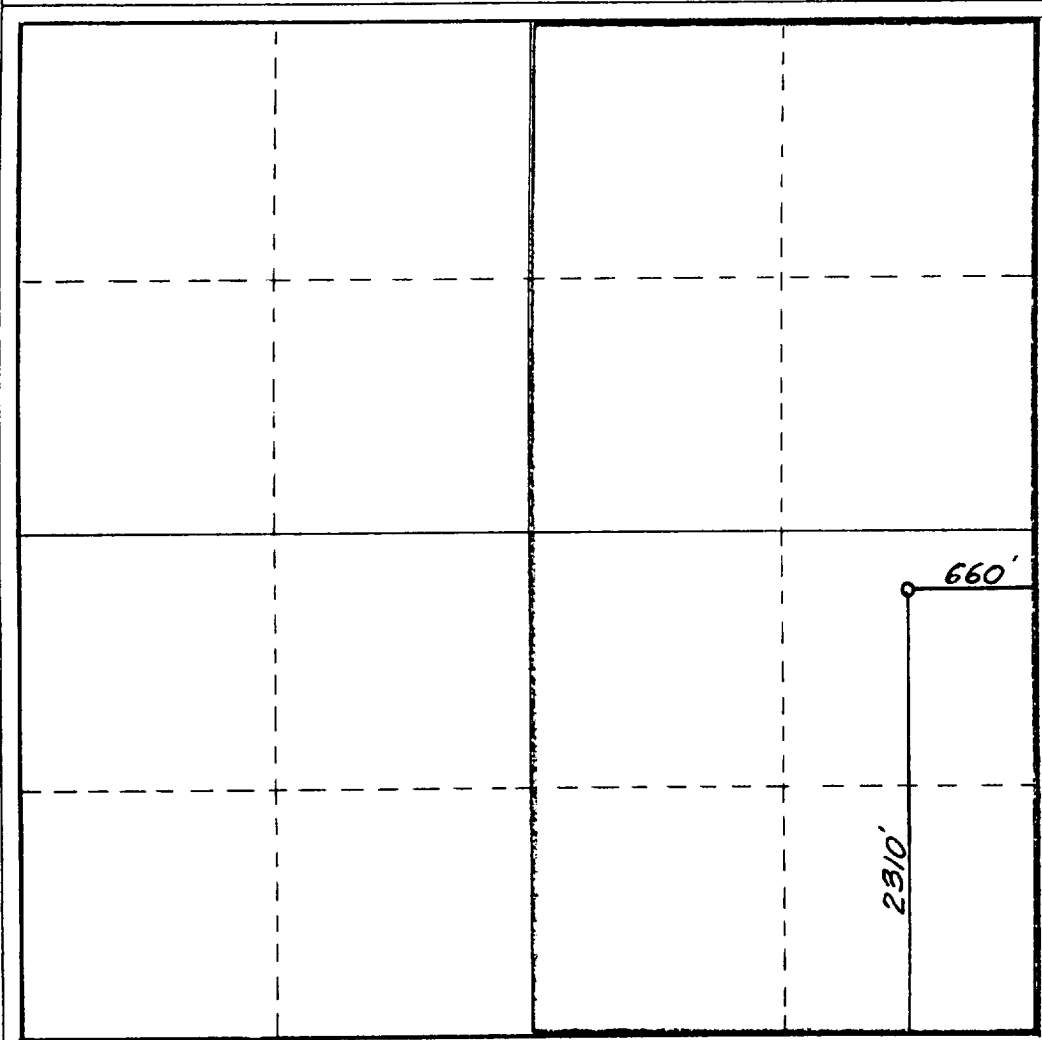
Operator PETRUS OIL COMPANY L. P.		Lease Henshaw Federal			Well No. 2
Unit Letter I	Section 15	Township 16 South	Range 30 East	County Eddy	
Actual Footage Location of Well: 2310 feet from the South line and 660 feet from the East line					
Ground Level Elev. 3816.	Producing Formation Atoka		Pool Wildcat - Atoka		Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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). **N/A**
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
Suzann Jourdan **Suzann Jourdan**
Position
Regulatory Coordinator

Company
Petrus Oil Company, L.P.

Date
10-06-87

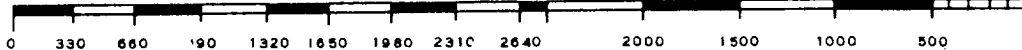
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

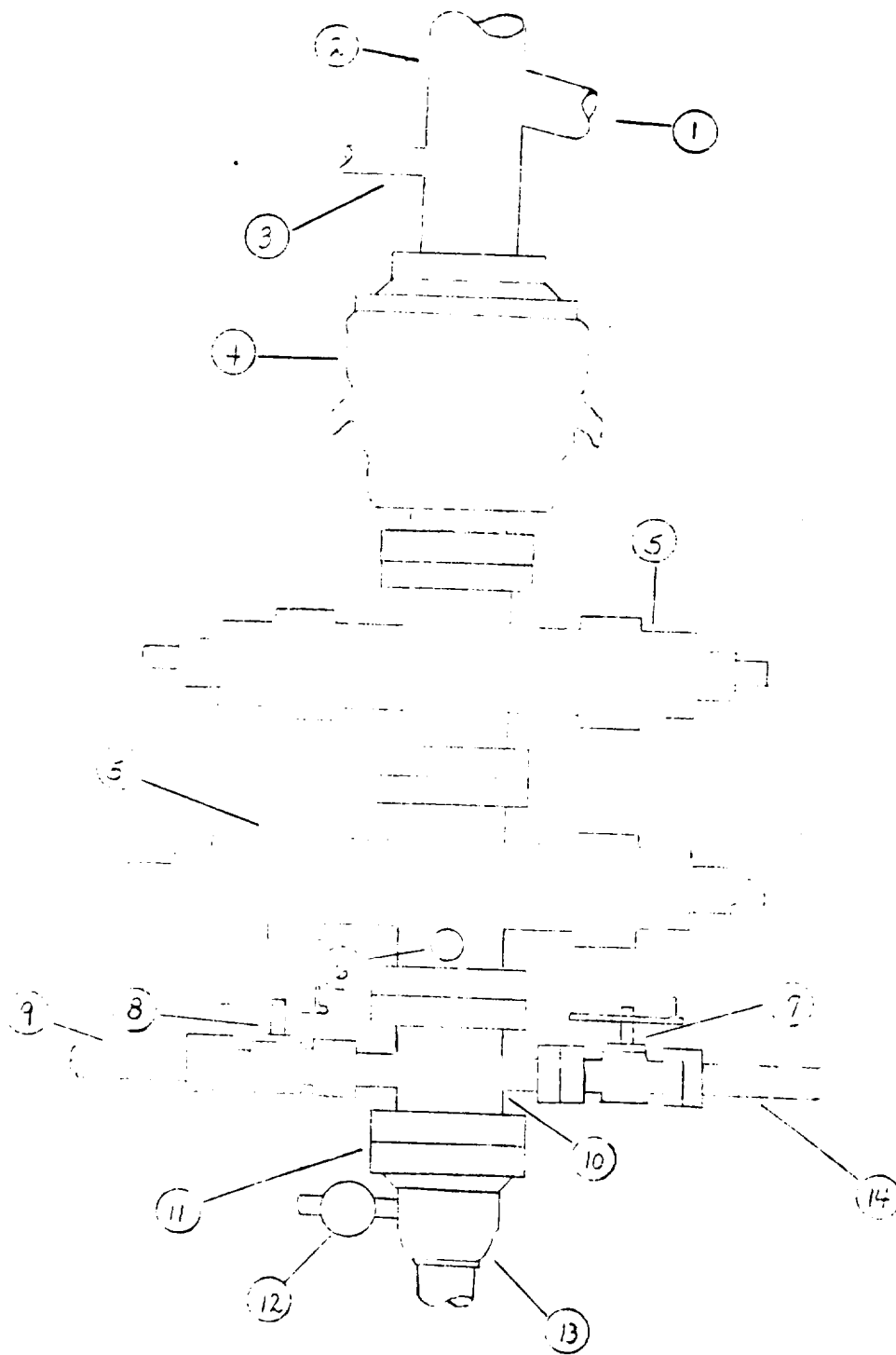
Date Surveyed
September 23, 1987

Registered Professional Engineer and/or Land Surveyor

Dan R. Reddy
Certificate No.

NM PE&LS NO. 5412





- | | |
|-----------------------------|----------------------------|
| 1. Flowline | 8. Gate Valve |
| 2. Bell Nipple | 9. Kill Line |
| 3. Fill Up Line | 10. Drilling Vessel |
| 4. Bag Preventer | 11. Flange |
| 5. Hydraulic Bag Preventers | 12. Gate Valve |
| 6. Side Outlets | 13. Casing Head |
| 7. Gate Valve | 14. Line to Cable Manifold |

SUPPLEMENTAL DRILLING DATA

Petrus Oil Company, L. P.
Henshaw Federal No. 2
2310' FSL & 660' FEL
Sec. 15, T16S, R30E
Eddy County, New Mexico
NM-11327

The following information is in accordance with "Onshore Oil and Gas Order" No. 1:

1. Geologic Name of Surface Formation: Recent

2. Estimated Geological Marker Tops:

San Andres	2,950'	Strawn	9,480'
Glorietta		Atoka	10,020'
Tubb	5,700'	Morrow	10,440'
Abo	6,450'	Chester	10,650'
Wolfcamp	7,650'	T.D.	10,700'
Cisco	8,800'		

3. Estimated Depths to Water, Oil and Gas:

Water: Above 320'
Oil & Gas: Morrow below 10,440'

4. Proposed Casing and Cement Program:

Surface: Set approximately 500'^{450'}, 13-3/8", 54.5#, J-55, ST&C casing. Cement to surface with 300 sx Class "C" cement, 2% CaCl.

Intermediate: Set approximately 3,000' (Top S.A.), 8-5/8", 24 & 32# K-55, ST&C casing. Cement to surface with 1100 sx Class "C" cement.

Production: Set to total depth, 5-1/2", 17 & 20.0#, N-80, LT&C casing. Cement with Class "H" cement to isolate all oil, gas and water zones.

5. Proposed Mud Program:

0 - 375'	Native mud system
375 - 3,100'	Native mud system converting to brine cut mud
3,100 - 6,000'	Brine cut mud system
6,000 - T.D.	Brine cut mud system, mud weight 9.4#/gal, viscosity 33-38, water loss 10cc or less

6. Proposed Testing, Logging and Coring Programs:

Testing: Possibly four (4) DST's as follows:

1. Wolfcamp 8,500'
2. Cisco 9,300'
3. Atoka 10,400'
4. Morrow 10,600'

Logging: CNL-FDC from surface to total depth
DLL from 3000 to total depth
Mini-log from 3000 to total depth

Coring: None anticipated

7. Auxiliary Equipment: A kelly cock will be located on the rig floor while drilling operations are in progress.

8. Abnormal Pressures or Temperature Zones: No abnormal pressures or temperature zones are anticipated.

9. Pressure Control Equipment:

13-3/8" Casing - An annular type B.O.P. will be installed on the 13-3/8" casing.

8-5/8" Casing - A Two Ram type B.O.P. with a Hydril will be installed on the Intermediate casing string. B.O.P. is rated to 5000 psi working pressure.

10. Anticipated Starting Date: Drilling will commence October 31, 1987.

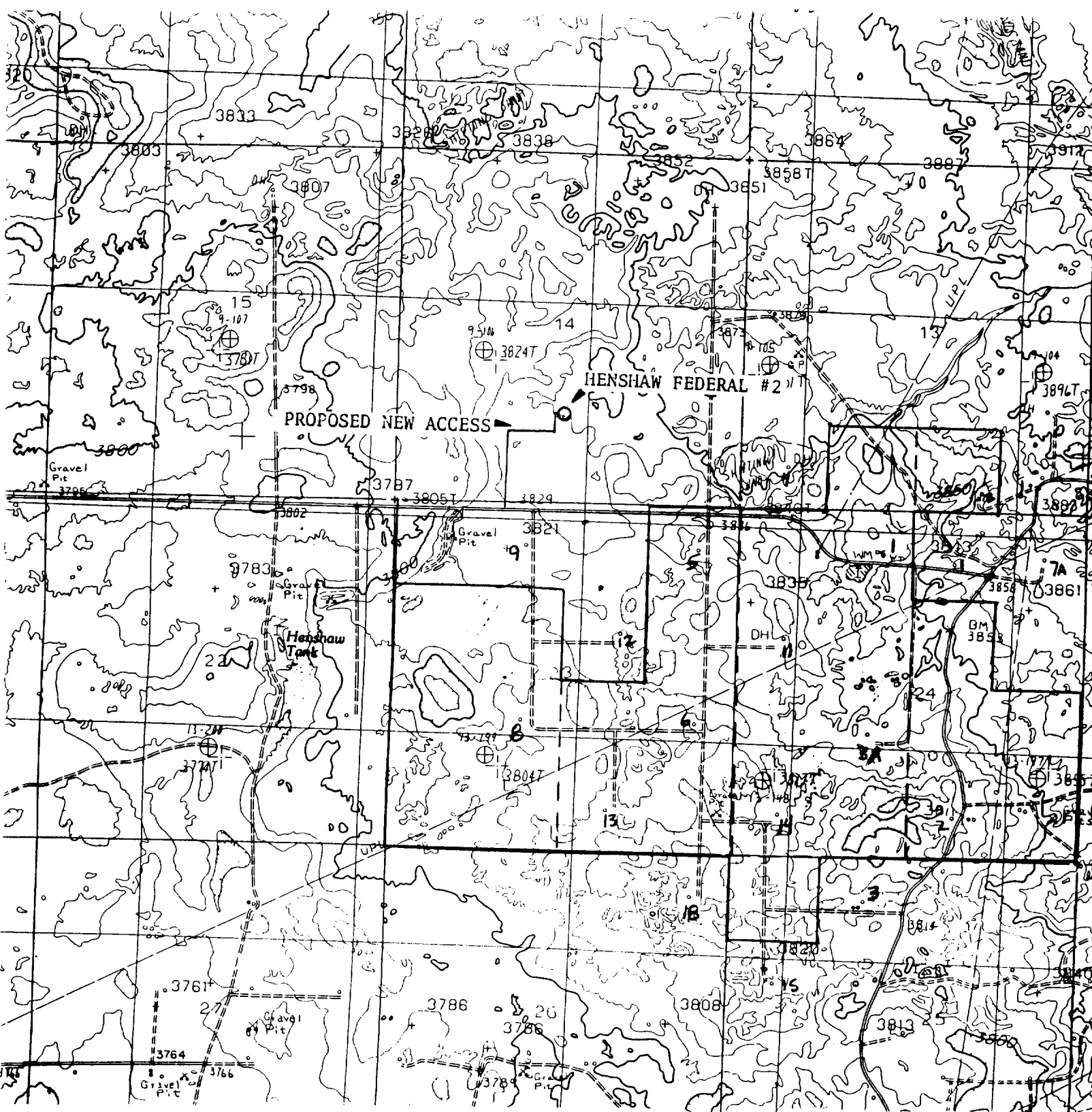


EXHIBIT 'B'
 Petrus Oil Company, L. P.
 Henshaw Federal No. 2
 2310' FSL & 660' FWL
 Sec. 15, T16S, R30E
 Eddy County, N.M.

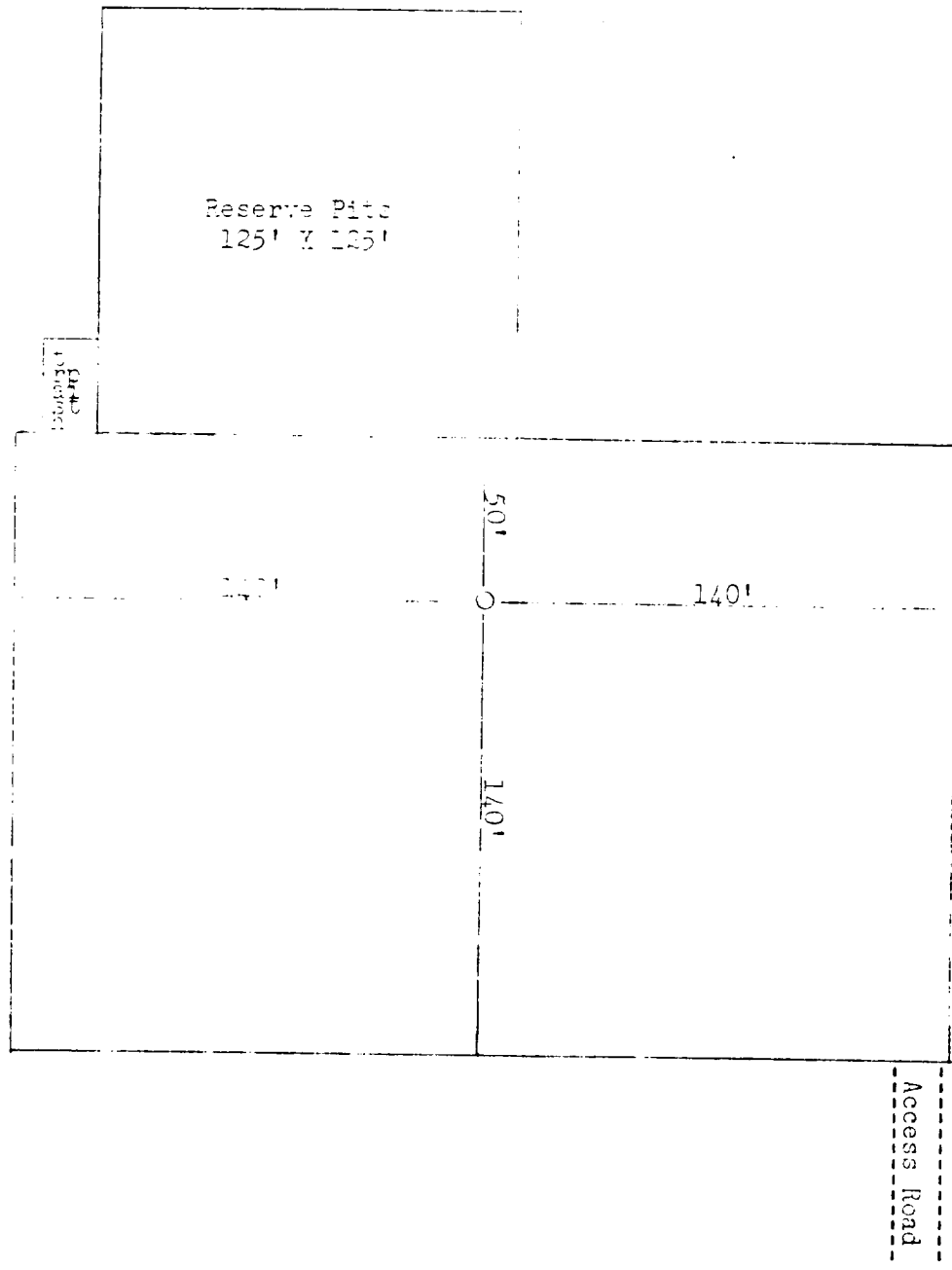


EXHIBIT 'C'
Petrus Oil Company, L. P.
Henshaw Federal No. 2
2310' FSL & 660' FEL
Sec. 15, T16S, R30E
Eddy County, New Mexico