



# Occidental Permian Limited Partnership

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281-552-1000

August 25, 2000

United States Department of the Interior  
Bureau of Land Management  
Roswell District Office  
2909 West Second Street  
Roswell, New Mexico 88201

Re: Application for Permit to Drill  
Occidental Permian Limited Partnership  
South Mattix Unit Federal #47  
Lea County, New Mexico  
Lease No. NM032450A

Gentlemen:

Occidental Permian Limited Partnership respectfully requests permission to drill our South Mattix Unit Federal #47 located 1830 FNL and 660 FEL of Section 22, T24S, R37E, Lea County, New Mexico, Federal Lease No. NM032450A. The proposed well will be drilled to a TD of approximately 6500' (TVD). The location and work area has been staked. It is approximately 6 miles northeast of Jal, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

I. Application for Permit to Drill:

1. Form 3160.3, Application for Permit to Drill.
2. Form C-102 Location and Acreage Dedication Plat certified by Gary L. Jones, Registered Land Surveyor No. 7977 in the State of New Mexico, dated July 10, 2000.
3. The elevation of the unprepared ground is 3231 feet above sea level.
4. The geologic name of the surface formation is Permian Rustler.
5. Rotary drilling equipment will be utilized to drill the well to TD 6500' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
6. Proposed total depth is 6500' TVD.
7. Estimated tops of important geologic markers.

Drinkard	6000' TVD
Blinbry	5300' TVD
Yeso	5100' TVD
Queen	3200' TVD
Grayburg	3480' TVD
7 River	2700' TVD
8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:  
Primary Objective: Drinkard 6000' TVD

9. The proposed casing program is as follows:

Surface: 13-3/8" 48# H40 ST&C new casing set at 300'  
Intermediate: 8-5/8" 32# K55 ST&C new casing from 0-1100'  
Production: 5-1/2" 17# L80 LT&C new casing from 0-6500'  
DV Tool-@ 3500'

10. Casing setting depth and cementing program:

- A. 13-3/8" surface casing set at 300' in 17-1/2" hole.  
Circulate cement with 390sx Premium Plus cement w/ 2%  $\text{CaCl}_2$ .

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2%  $\text{CaCl}_2$ .

- B. 8-5/8" intermediate casing set at 1100' in 11" hole.  
Circulate cement with 525sx Premium Plus cement w/ 4% Gel + 2%  $\text{CaCl}_2$  + .25#/sx Flocele followed by 200sx Premium Plus cement w/ 2%  $\text{CaCl}_2$  + .25#/sx Flocele.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2%  $\text{CaCl}_2$ .

Note: Cement volumes may be adjusted according to fluid caliper.

- C. 5-1/2" production casing set at 6500'. Circulate cement  
1<sup>st</sup> stage-285sx Interfill C cement followed by 395sx  
Premium Plus Cement with .3% CFR-3 + .3% D-AIR-1 + .4%  
LAP-1.  
2<sup>nd</sup> stage-240sx Interfill C cement followed by 395sx  
Premium Plus Cement with 2%  $\text{CaCl}_2$ .

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0' - 300'	None.
300' - 1100'	11" 5M blind and pipe with 5M annular preventer.
1100' - 6500'	11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 5300'. Exhibit A.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.



After setting the 8-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

0 - 300' Fresh water/native mud. Lime for pH control (9-10). Paper for seepage.  
Wt. 8.7-9.2 ppg, vis 32-34 sec.

300' - 1100' Fresh/\*brine water. Lime for pH control (10-10.5). Paper for seepage.  
Wt. 8.3-9.0/10.0-10.1 ppg, vis 28-29 sec.  
\*Fresh water will be used unless chlorides in the mud system increase to 20000PPM.

1100' - 6500' Brine Water (10.0). Starch for shales.  
Paper for seepage. Vis 28-32sec. WL 10-15cc

Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until the production casing is run and cemented. Monitoring equipment shall consist of the following:

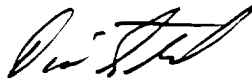
- 1) A recording pit level indicator.
- 2) A pit volume totalizer.
- 3) A flowline sensor.

13. Testing, Logging and Coring Program:

- A. Testing program: No DST's are anticipated.
- B. Mud logging program: One-man unit from 1100' to TD.
- C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.

14. No abnormal temperatures are anticipated. The highest anticipated pressure gradient would be .55psi/ft. H<sub>2</sub>S might be present, H<sub>2</sub>S plan is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.
15. Anticipated starting date is September 30, 2000. It should take approximately 15 days to drill the well and another 10 days to complete.
16. The Multi-Point Surface Use & Operation Plan is attached.
17. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

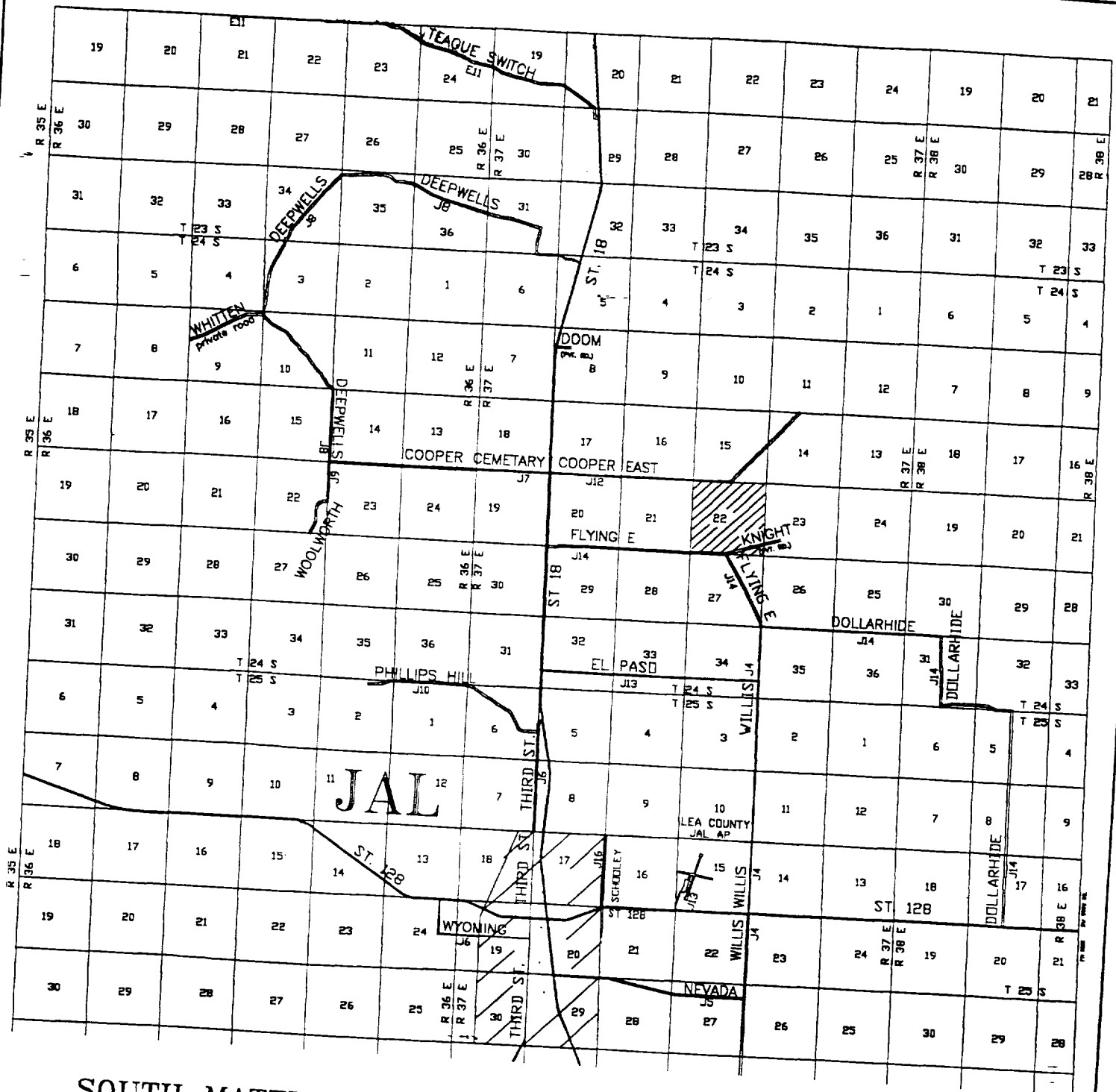
Very truly yours,



David Stewart  
Regulatory Analyst  
Occidental Permian Limited Partnership

DRS/drs

Attachments



# SOUTH MATTIX UNIT # 47

Located at 1830' FNL and 660' FEL  
 Section 22, Township 24 South, Range 37 East,  
 N.M.P.M., LEA County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
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 basinsurveys.com

W.O. Number: 0392AA - GWS # 1

Survey Date: 07-07-2000

Scale: 1" = 2 MILES

Date: 07-10-2000

**OXIDENTAL**  
**PERMIAN LTD.**