

DATE IN 2/12/99	SUSPENSE 3/4/99	ENGINEER MS	LOGGED KN	TYPE NSL
--------------------	--------------------	----------------	--------------	-------------

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

### ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

#### Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
 [DD-Directional Drilling] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling  
☒ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM  
 [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☒ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☒ Offset Operators, Leaseholders or Surface Owner  
 [C] ☐ Application is One Which Requires Published Legal Notice  
 [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F] ☐ Waivers are Attached

#### [3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

William F. Carr  
 Print or Type Name

Signature

Attorney  
 Title

2/12/99  
 Date

OIL CONSERVATION DIV.  
 99 FEB 12 PM 2:59

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
ANTHONY F. MEDEIROS  
PAUL R. OWEN  
KATHERINE M. MOSS  
  
JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: ccbspa@ix.netcom.com

February 12, 1999

**HAND DELIVERED**

Michael E. Stogner  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: *Application of Yates Petroleum Corporation for Administrative Approval of an Unorthodox Well Location for its Zingaro ANG Federal Well No. 4 to be located 1500 feet from the North line and 1550 feet from the West line of Section 1, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico*

99 FEB 12 2 59 PM '99  
OIL CONSERVATION DIV.

Dear Mr. Stogner:

Enclosed is a revised Administrative Application for the above-referenced unorthodox well location. The application has been corrected to reflect the applicable pool rules and Division Order No. R-9922-D which was entered on December 7, 1998.

I appreciate your assistance with the revision of this application and the time you took with me during our recent meetings concerning the rules which govern the development of the subject acreage. If you need additional information from Yates concerning this application, please advise.

Very truly yours,



WILLIAM F. CARR

Enc.

WFC:mlh

cc: Mr. Randy Patterson (w/enc.)  
Ms. Janet Richardson (w/enc.)

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
MICHAEL H. FELDEWERT  
ANTHONY F. MEDEIROS  
PAUL R. OWEN  
KATHERINE M. MOSS  
  
JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
FACSIMILE: (505) 983-6043  
E-MAIL: ccbspa@ix.netcom.com

February 12, 1999

**HAND-DELIVERED**

Lori Wrotenbery, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: *Application of Yates Petroleum Corporation for Administrative Approval of an Unorthodox Well Location for its Zingaro ANG Federal Well No. 4, to be located 1500 feet from the North line and 1550 feet from the West line of Section 1, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico*

Dear Ms. Wrotenbery:

Yates Petroleum Corporation hereby seeks administrative approval of an unorthodox well location for its Zingaro ANG Federal Well No. 4 which Yates proposes to drill to a depth of approximately 9,900 feet to test the sands of the Morrow formation and the dolomite of the Upper Pennsylvanian (Cisco-Canyon) interval at an unorthodox well location 1500 feet from the North line and 1550 feet from the West line in Unit F of Section 1, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

This location immediately offsets the Indian Basin-Morrow Gas Pool. Although this pool is governed by Special Pool Rules and Regulations (Order Nos. R-8170-O-1/R-2441-B) which provide for 640-acre spacing and proration units, these rules are applicable only to those lands that are within the pool's horizontal limits. Accordingly, the proposed well location is governed by Division Rule 104.B (1)(a) and 104.C(2)(b) and Yates proposes to dedicate to the Zingaro ANG Federal Well No. 4 a standard 336.57-acre spacing and

Lori Wrotenbery, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
February 12, 1999  
Page 2

proration unit in the Morrow formation comprised of the W/2 of Section 1.

The Indian Basin-Upper Pennsylvanian Gas Pool is a prorated gas pool governed by the Division's General Rules for the Prorated Gas Pools of New Mexico/ Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool. These rules provide for 640-acre spacing and proration units ("GPU") with wells to be located no closer than 1650 feet from the outer boundary of the GPU nor closer than 330 feet from any governmental quarter-quarter section line or subdivision inner boundary. However, Order No. R-9922-D, issued in Case No. 12006, dated December 7, 1998, adjusted the pool boundaries of this pool and the Indian Basin-Upper Pennsylvanian Associated Pool which require 320-acre spacing and proration units, and pre-approved a non-standard 336.57-acre gas spacing and proration unit for the W/2 of Section 1, Township 22 South, Range 23 East, NMPM, for the Indian Basin-Upper Pennsylvanian Gas Pool. Yates proposes to dedicate this pre-approved non-standard gas spacing and proration unit to the Zingaro ANG Federal Well No. 4 in the Upper Pennsylvanian interval.

The well location in the Morrow formation is unorthodox because it is less than 1650 feet to the nearest end boundary of the dedicated spacing and proration unit and is also less than 330 feet from a quarter-quarter section line as required by Division General Rules 104.B(1)(a) and 104.C(2)(B). This well location is unorthodox in the Upper Pennsylvanian interval because it is less than 1650 feet to the northern boundary of the dedicated GPU and also less than 330 feet from a quarter-quarter section line as required by Rule 2 (B) of the General Rules and Regulations for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool. The well is not unorthodox toward the eastern boundary of this W/2 spacing and proration unit for any location more than 660 feet from this boundary is considered to be a standard set back pursuant to Order Paragraph (4) of Order No. R-9922-D.

This unorthodox location is required by topographic conditions. Yates originally proposed this well at a standard location 1650 feet from North and West lines of Section 1. However, when Yates' field personnel met at the well site with representatives of the Bureau of Land Management, the BLM felt the slope was too steep at the original location and required the well to be moved to the current unorthodox location.

Lori Wrotenbery, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
February 12, 1999  
Page 3

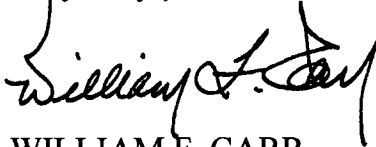
Attached hereto as Exhibits A through C are a geological explanation for this well and attached sand map and production map. These exhibits show that the unorthodox location is supported by the geology of the subject formations.

Attached hereto as Exhibit D is a plat which shows the subject area, the 336.57-acre spacing unit comprised of the W/2 of Section 1 and the proposed unorthodox location.

Exhibit E lists parties affected by this application. A copy of this application, including a copy of the plat described above has been sent to these affected parties by certified mail-return receipt requested in accordance with Rule 1207 (A)(5) advising them that if they have an objection to this application it must be filed in writing within twenty-days from the date this notice was sent.

Your attention to this application is appreciated.

Very truly yours,



WILLIAM F. CARR  
Attorney for Yates Petroleum Corporation

Enclosures

cc: Janet Richardson  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88201

MARTIN YATES, III  
1912 - 1985  
FRANK W. YATES  
1936 - 1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210  
TELEPHONE (505) 748-1471

S. P. YATES  
CHAIRMAN OF THE BOARD  
JOHN A. YATES  
PRESIDENT  
PEYTON YATES  
EXECUTIVE VICE PRESIDENT  
RANDY G. PATTERSON  
SECRETARY  
DENNIS G. KINSEY  
TREASURER

## GEOLOGICAL EXPLANATION OF THE ZINGARO "ANG" FEDERAL #4

The Zingaro "ANG" Fed. #4 is proposed at an unorthodox location 1500' FNL and 1550' FWL in section 1 of Township 22 South - Range 23 East, Eddy County, New Mexico. The location was chosen because of topographic and geologic reasons.

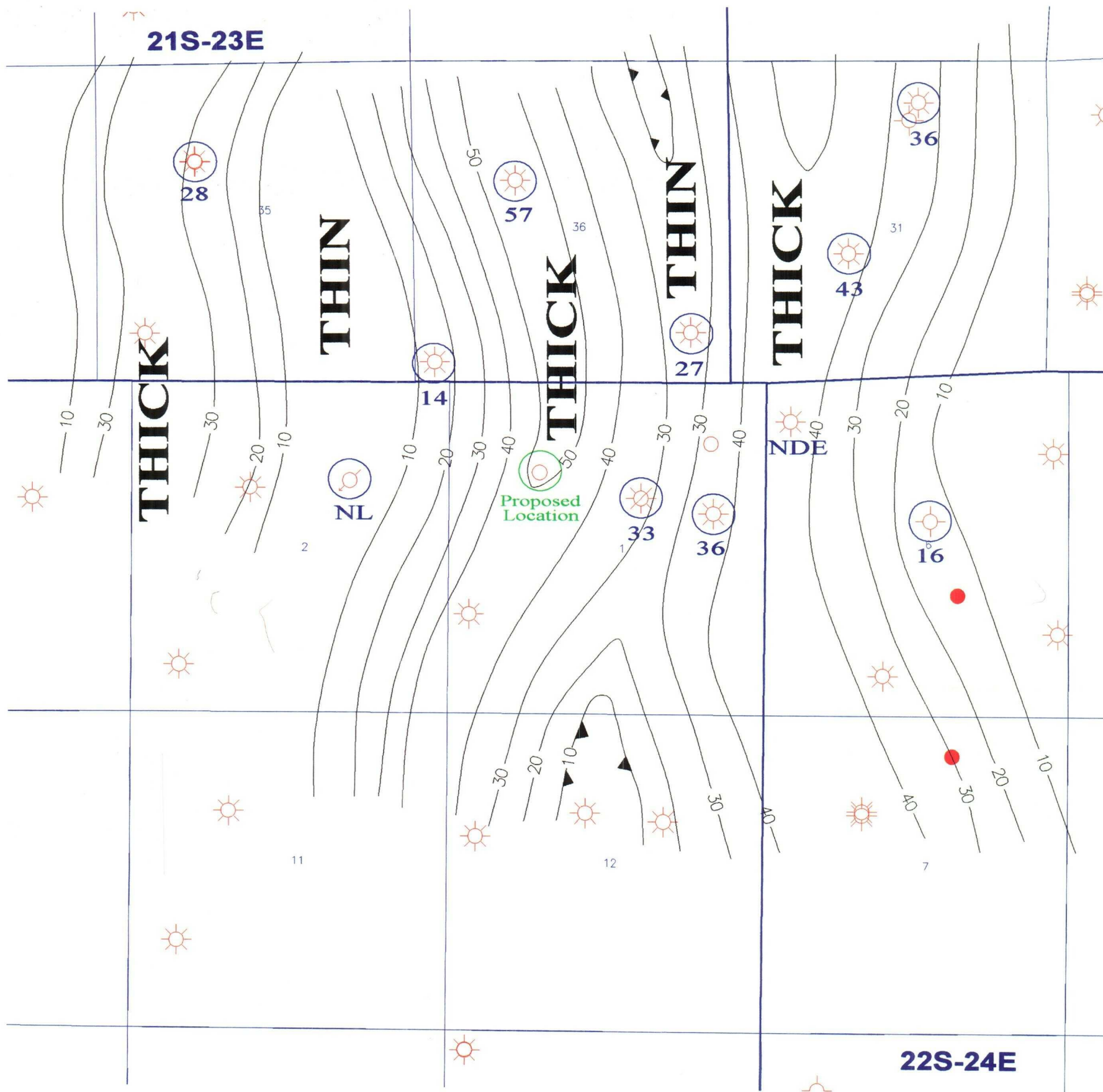
The primary objectives are to test the dolomite of the Upper Penn (Cisco-Canyon) and the sands of the Morrow Formation. Secondary objectives include the Atoka, Strawn, Wolfcamp, and Yeso.

Yates originally sought an orthodox location 1650' FNL and 1650' FWL in section 1, but after meeting with the BLM it was determined the original location could not be granted because of topographic concerns. The BLM did grant the proposed location (1500' FNL & 1550' FWL).

The sand map represents sands of the Morrow Clastics section and shows the limits of sand deposition within a fluvio-deltaic environment. The sand map is a "clean sand" map with a gamma ray cutoff of 50 API units or less. The map shows several north-south sand thicks with one trending through the proposed location. The thickest section of the sand trends should yield the best chance to encounter reservoir quality porosity and permeability. The slightly unorthodox location is within the thicker part of the sand. If the location had been moved further south and/or east sand thickness would be lost.

The cumulative production map shows production "sweet spots" from the Upper Penn dolomite. The Upper Penn dolomite is present throughout the mapped area and productive wells can be drilled into the dolomite in this area (most of the wells on the map have produced from the Upper Penn), but the highly productive wells occur in "sweet spots". The proposed location should be present in a "sweet spot".

In summary, the unorthodox location was chosen over an orthodox location because of topographic concerns. The location should have sufficient sand thickness in the Morrow for economic reserves and should encounter a productive "sweet spot" in the Upper Penn dolomite.



Yates Petroleum Corporation		
Indian Basin Area Sand Map Morrow Clastics Section		
Geol: Brent May	GR ≤ 50 API	1/21/99
TFIBCNTR.gpf	Scale 1:24000.	T. Fuentes

○ Morrow Penetration







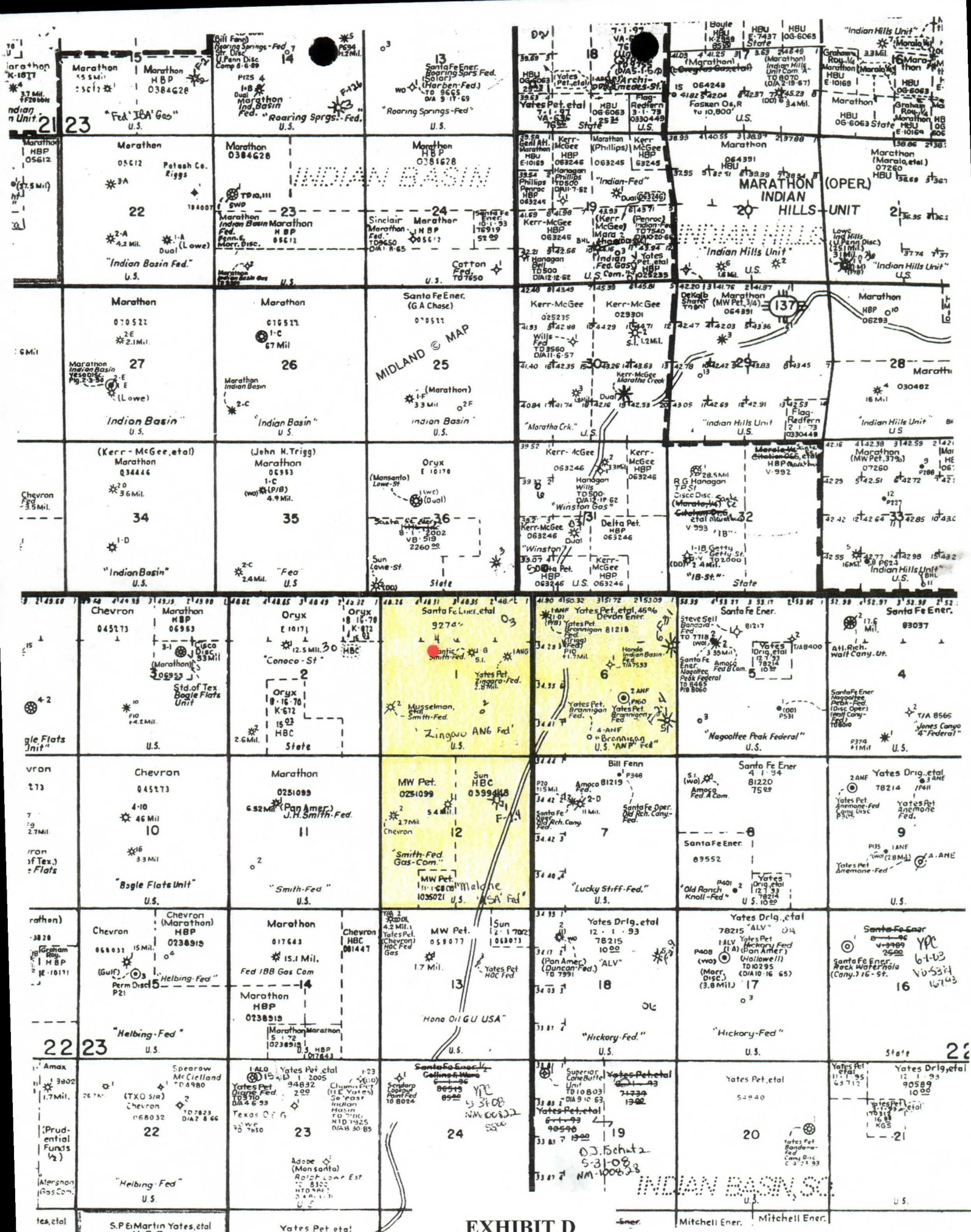


EXHIBIT E

AFFECTED PARTIES  
ZINGARO ANG FEDERAL WELL NO. 4  
1500' FNL and 1550' FWL  
SECTION 1, TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM  
EDDY COUNTY, NEW MEXICO

Section 35, Township 21 South, Range 23 East, NMPM

Marathon Oil Company  
Post Office Box 552  
Midland, TX 79702

Section 36, Township 21 South, Range 23 East, NMPM

ORYX Energy Company  
Post Office Box 2880  
Dallas, TX 75221-2880

Santa Fe Energy Resources, Inc.  
550 West Texas, Suite 1330  
Midland, TX 79701-4257

Section 31, Township 21 South, Range 24 East, NMPM

Devon Energy Corporation  
20 North Broadway, Suite 1500  
Oklahoma City, OK 73102-8260