

NSL-420-A

Rec: 2-16-98

Susp: 3-9-98

Released 3-9-98

February 18, 1998

Yates Petroleum Corporation
c/o Campbell, Carr, Berge & Sheridan, P.A.
P. O. Box 2208
Santa Fe, New Mexico 87504-2208

Attention: William F. Carr

Administrative Order NSL-420-A

Dear Mr. Carr:

Reference is made to your application on behalf of the operator, Yates Petroleum Corporation ("Yates"), dated February 16, 1998 for an unorthodox wildcat Morrow gas well location for the plugged and abandoned Pan American Petroleum Corporation Duncan Federal Gas Com. Well No. 1 (API No. 30-015-20163), redesignated the Hickory "ALV" Federal Well No. 2, located 950 feet from the North and West lines (Lot 1/Unit D) of Section 18, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

The Duncan Federal Gas Com. Well No. 1 was originally drilled to a total depth of 7,991 feet in 1968 in order to test the Undesignated Indian Basin Upper-Pennsylvanian Gas Pool at an unorthodox gas well location, approved by Division Administrative Order NSL-420, dated June 10, 1968, whereby it tested dry and was subsequently plugged and abandoned.

It is our understanding that Yates now intends to reenter said well and deepen it to an approximate depth of 10,400 feet in order to test the Morrow formation for gas within a standard 296.40-acre gas spacing and proration unit comprising Lots 1, 2, 3, and 4 and the E/2 W/2 (W/2 equivalent) of said Section 18.

The application has been duly filed under the provisions of Division General Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division.

By the authority granted me under the provisions of Division General Rule 104.F(2), the above-described unorthodox gas well location is hereby approved.

Sincerely,

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia
U. S. Bureau of Land Management - Carlsbad
File: NSL-420

DATE IN 2/16/98	SUSPENSE 3/9/98	ENGINEER MS	LOGGED BY MW	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVER SHEET

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

RECEIVED

FEB 16 1998

Oil Conservation Division

[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,

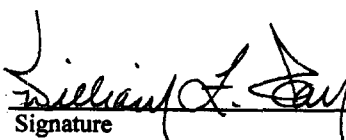
 [F] ☐ Waivers are Attached

[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 (including API numbers, pool codes, etc.), pertinent information and any required 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

2/16/98
Date

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

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February 16, 1998

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

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FEB 16 1998

Oil Conservation Division

Re: *Application of Yates Petroleum Corporation for Administrative Approval of an Unorthodox Well Location for its Hickory "ALV" Federal Well No. 2, 950 feet from the North and West lines of Section 18, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.*

Dear Ms. Wrotenbery:

Yates Petroleum Corporation hereby seeks administrative approval pursuant to the provisions of Division Rule 104 F (2) adopted on January 18, 1996, of an unorthodox well location for its Hickory "ALV" Federal Well No. 2, 950 feet from the North and West lines of Section 18, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico. Yates proposes to re-enter this wellbore which was originally drilled at an orthodox location in the Upper Pennsylvanian formation and deepen the well to the Morrow formation at a projected total depth of approximately 10,400 feet. The W/2 of Section 18 will be dedicated to the well.

This location in the Morrow formation is unorthodox because it is governed by the Division's statewide rules which provide for wells on 320-spacing units to be located no closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 1650 feet to the nearest end boundary.

Lori Wrotenbery, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
February 16, 1998
Page 2

This unorthodox location is required by geological conditions in the Morrow formation. Attached hereto as Exhibit A is a Structure Map on the Top of the Lower Morrow which shows the proposed location should be in a productive hydrocarbon column. Exhibit B is a net sand map which shows a well at the proposed location should encounter 15 feet of sand with the sand thick occurring in the N/2 of this section. Exhibit C is a geological explanation which demonstrates that the proposed location is the optimum location for a Morrow well in this spacing unit.

Attached hereto as Exhibit D is a plat as required by Rule 104 F (3) showing the subject spacing unit, the proposed unorthodox well location, the offsetting wells and the diagonal and adjoining spacing units.

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.

Also enclosed is a proposed order approving this application.

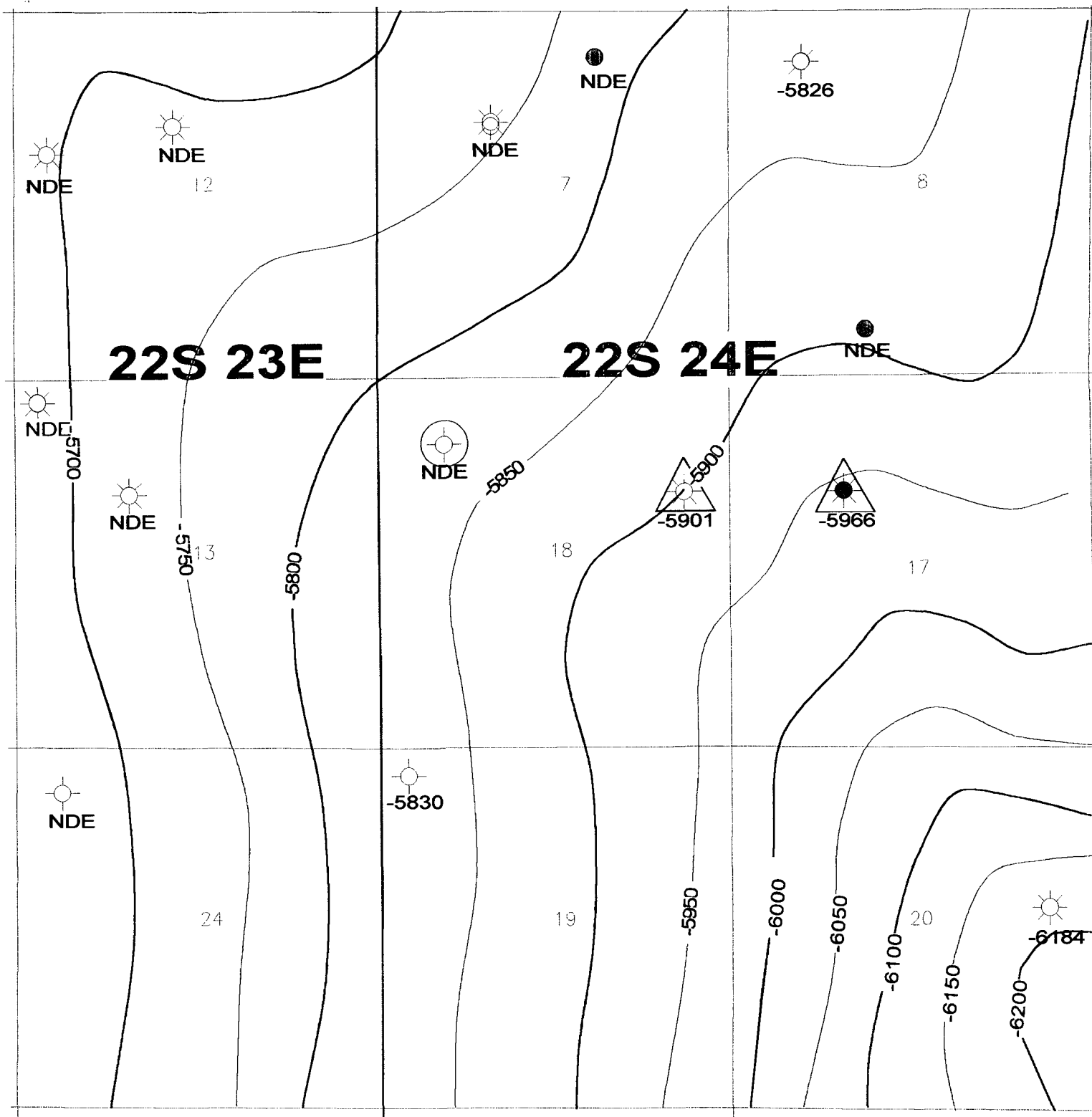
Your attention to this matter is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is fluid and cursive, with a large initial "W" and a stylized "C".

WILLIAM F. CARR
Attorney for Yates Petroleum Corporation
Enclosures

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



LEGEND



Morrow Producer

Yates Petroleum Corporation

Hickory "ALU" Fed. #2
Structure Map
Top of Lower Morrow

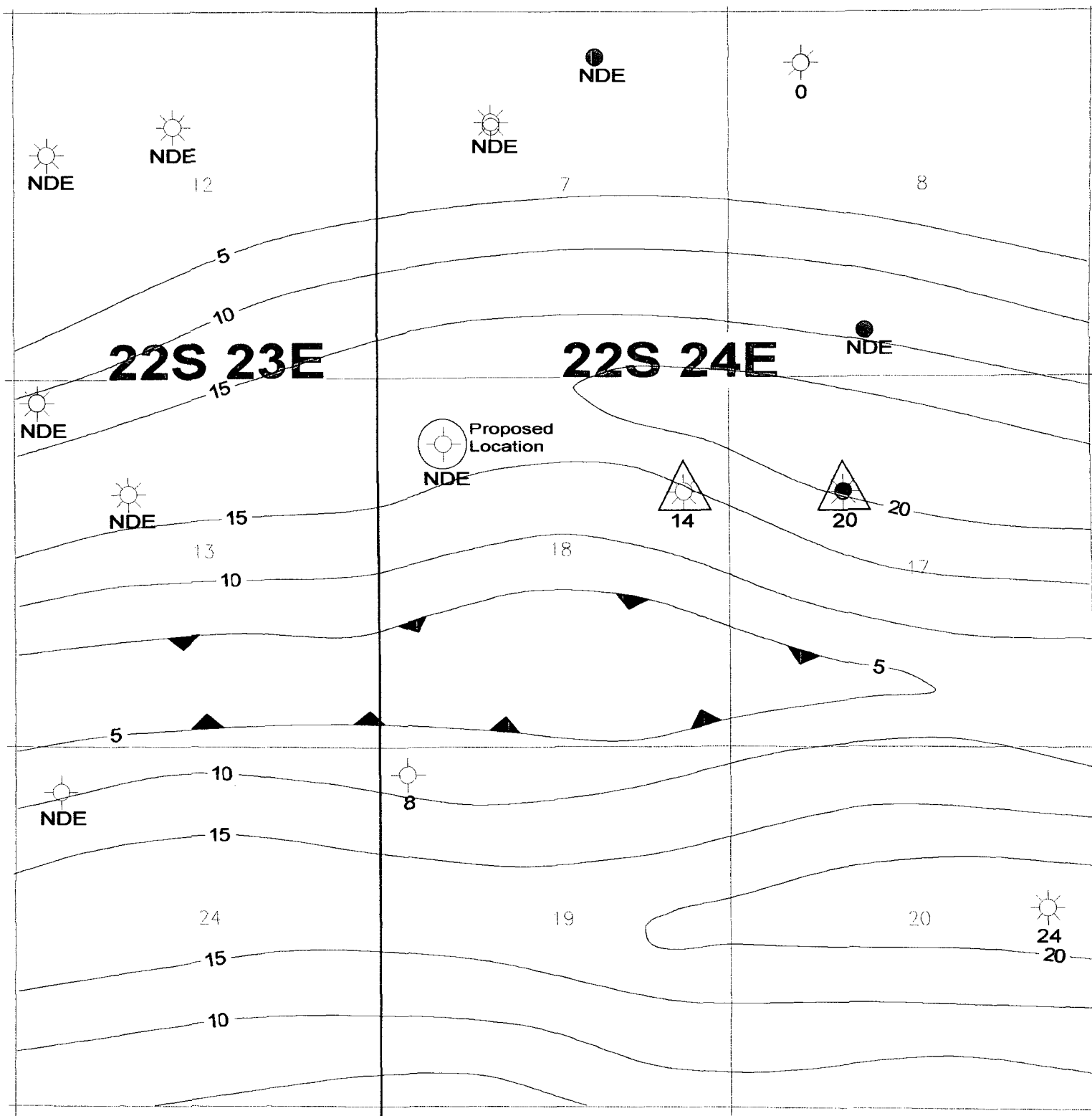
Geol: Brent May

2/5/98

T. Fuentes

Scale 1:24000.

22S2324E.gpf



LEGEND



Morrow Producer

Yates Petroleum Corporation		
Net Sand Map Morrow Formation / "Hickory Sand" GR ≤ 50 API		
Geol: Brent May		2/5/88
T. Fuentes	Scale 1:24000	22S24EHS.gpf

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



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
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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 HICKORY "ALU" FEDERAL #2

Yates Petroleum seeks approval of the Hickory "ALU" Fed. #2, an unorthodox location in the NW/4 of Section 18 of Township 22 South - Range 24 East. Yates proposes to re-enter the existing borehole, which was originally TD'd in the Upper Penn at 7991 feet, and deepen to the Morrow at a projected total depth of 10400 feet. The primary objective of the proposed re-entry is to test the hydrocarbon potential of the Morrow and Upper Penn formations (the location is orthodox for the Upper Penn).

The structure map, with the top of the Lower Morrow as a datum, shows a dip to the southeast. The proposed re-entry should be 70 to 75 feet updip of current Morrow production. Thus, the location should be in the productive hydrocarbon column.

The net sand map shows the limits of the "Hickory Sand", which is a sand at the top of the Morrow Formation and currently is the producing sand in the E/2 of section 18. The map is a net isopach of "clean" gamma ray (less than 50 API units) in thickness of feet. The proposed re-entry should have a net sand thickness of more than 15 feet with the sand thick occurring in the N/2 of the section. The "Hickory Sand" is a marine bar or beach sand that runs parallel to the shoreline, it is not the "classic" channel sands that are generally encountered in the Morrow.

The proposed re-entry is in the optimum location for structure and sand thickness. Economically, the re-entry is prudent because the existing borehole appears to be in good condition and it will save on costs versus drilling a new hole. Also, existing locations are at a premium in this area because of the rough topography.

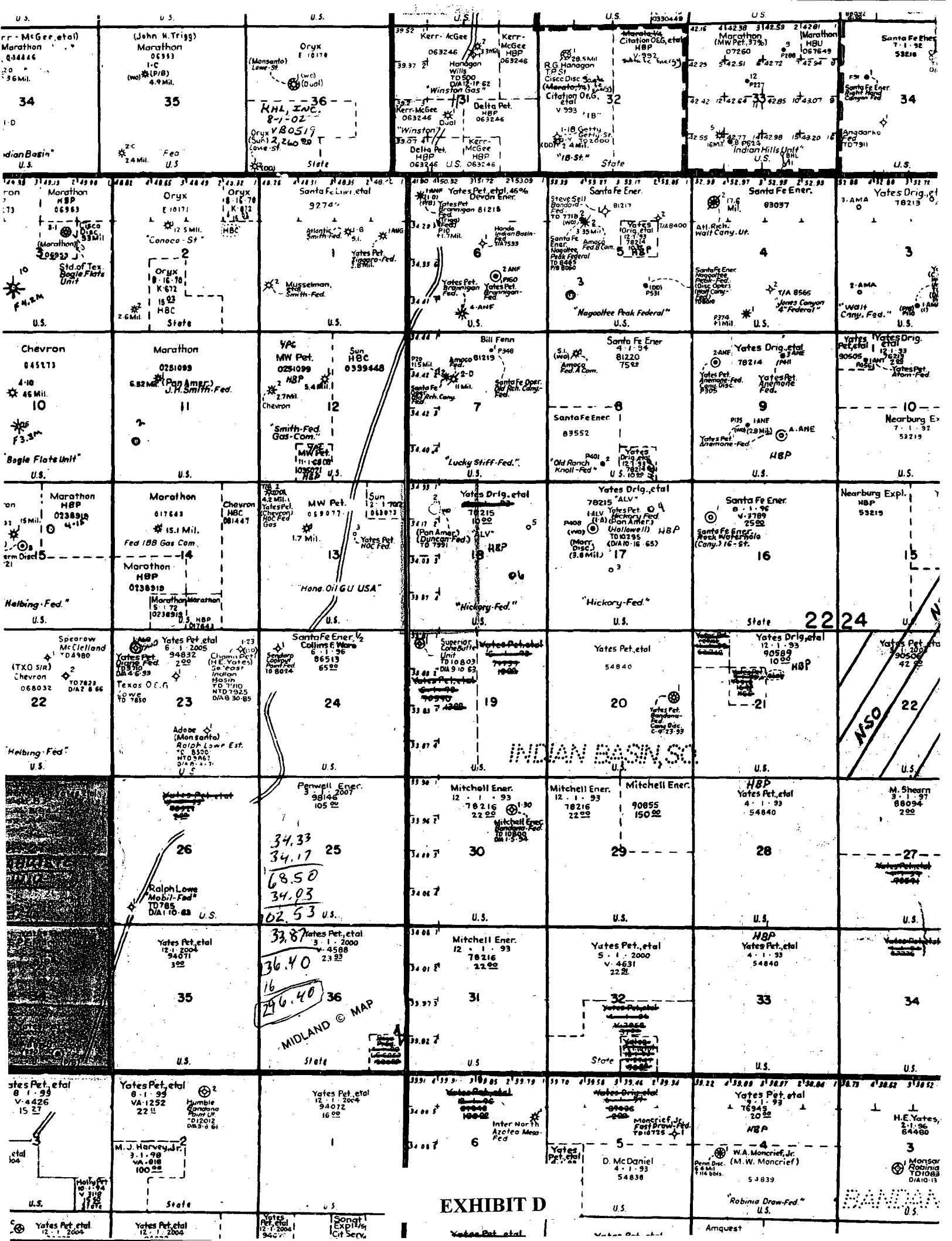


EXHIBIT E

AFFECTED PARTIES

Application of Yates Petroleum Corporation for
administrative approval of an unorthodox well location
Hickory "ALV" Federal Well No. 2
950 feet from the North and West lines
Section 18, Township 22 South, Range 24 East, NMPM
Eddy, New Mexico

Oryx Energy Company
Post Office Box 2880
Dallas, Texas 75221-2880

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