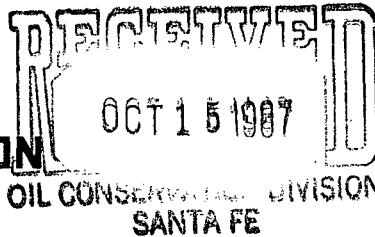


Release Date: November 3, 1987

By DEC
OK - by Roy Johnson



S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

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

October 13, 1987

NSL-2438
RULE-104 F(II)

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

ATTENTION: Mr. William LeMay

330 Acre Dedicated N/2 Section 30
Undesignated Foor Ranch Pre - Permian
Gas Pool

RE: Unorthodox location for
Dragonfly State Unit #1
660' FNL and 990' FWL of
Section 30-T9S-R27E
Chaves County, New Mexico

Dear Sir:

Yates Petroleum Corporation respectfully requests an administrative approval for a proposed unorthodox location as provided for under NMOCD Rule 104F.

Our preferred location for this well is 660' FNL and 990' FWL. Our reason for requesting this non-standard location is geological (please note attached Exhibits 1 and 2).

Enclosed please find a copy of the lease map showing offsetting lease operators and a topographical map of the area. Offsetting lease operators have been notified of our intentions by certified mail, via a xerox copy of this letter, along with a waiver stating that they have no objections.

Formations we expect to drill through area: San Andres, Glorieta, Yeso, Abo, Wolfcamp, Pennsylvanian and Ordovician. We expect to TD in Precambrian.

If you should have any questions concerning this matter, please do not hesitate to call. Thank you.

Very truly yours,

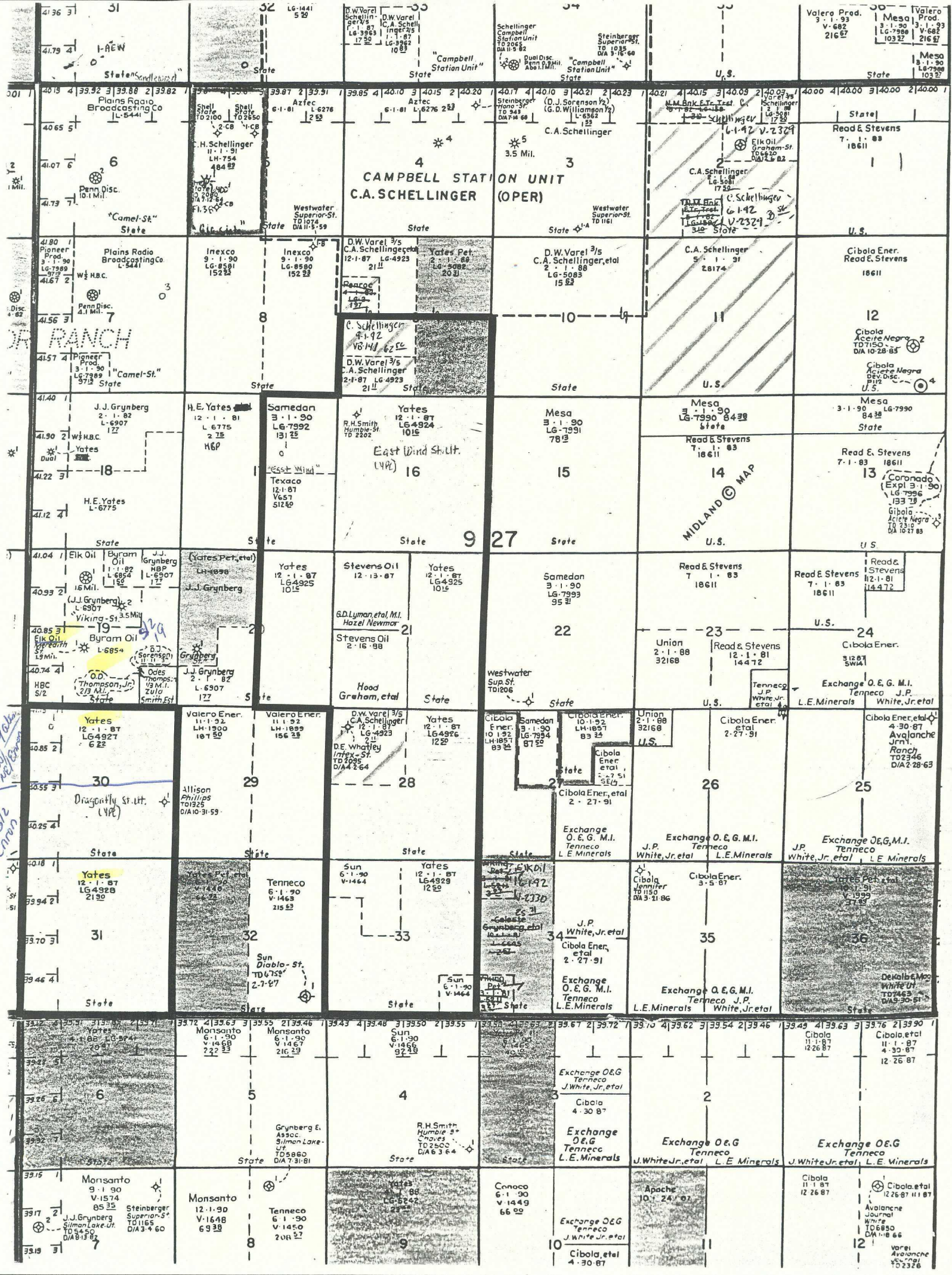
YATES PETROLEUM CORPORATION

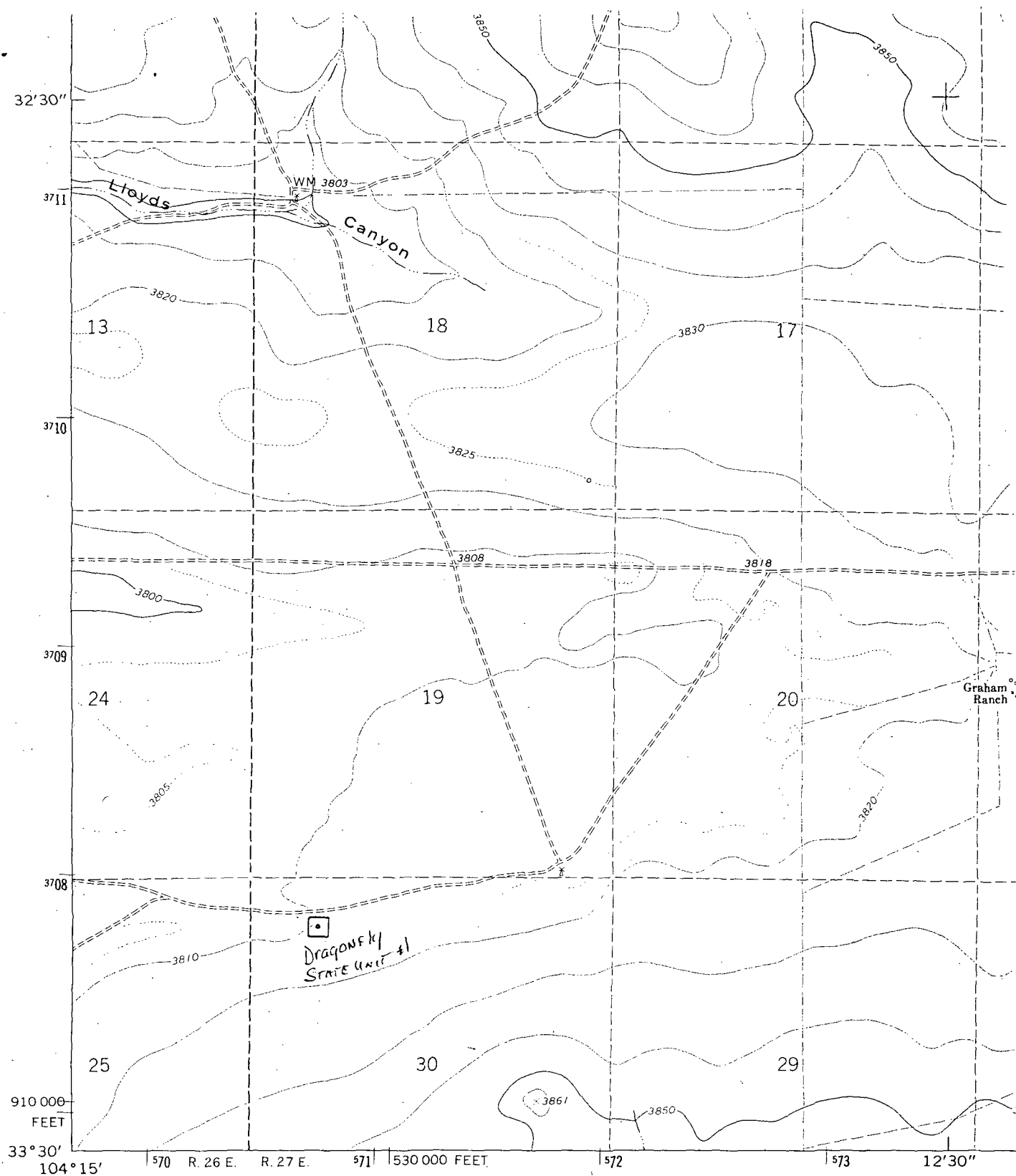
Rusty Jernigan
Rusty Jernigan
Regulatory Secretary

rj

Enclosures

cc: Elk Oil Company
Enron Oil & Gas Company
1st Interstate of Lea County, Trustees
for the Estate of W. K. Byram





(COMANCHE SPRING)
5150 IV NE

Mapped, edited, and published by the Geological Survey

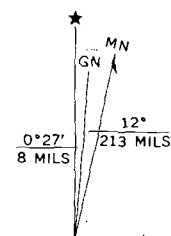
Control by USGS and USC&GS

Topography by photogrammetric methods from aerial
photographs taken 1966. Field checked 1967

Polyconic projection. 1927 North American datum
10,000-foot grid based on New Mexico coordinate system,
east zone

1000-meter Universal Transverse Mercator grid ticks,
zone 13, shown in blue

Fine red dashed lines indicate selected fence lines

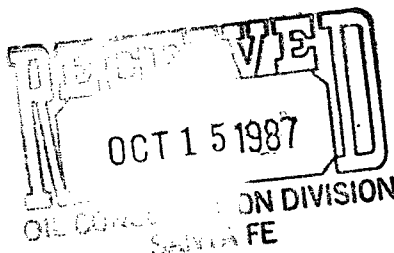


UTM GRID AND 1967 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

FOR :



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



S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

October 13, 1987

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

ATTENTION: Mr. William LeMay

RE: Unorthodox location for
Dragonfly State Unit #1
660' FNL and 990' FWL of
Section 30-T9S-R27E
Chaves County, New Mexico

Dear Sir:

Enclosed you will find a copy of the certification showing that I have notified the offset operators of our intentions on the captioned unorthodox location with a xerox copy of the attached letter.

Thank you.

Very truly yours,

YATES PETROLEUM CORPORATION

Rusty Jernigan
Rusty Jernigan
Regulatory Secretary

ry

Enclosures

P-580 493 671

REQUIREMENT FOR CERTIFIED MAIL

INSURANCE COVERAGE PROVIDED
FOR INTERNATIONAL MAIL
(See Reverse)

Sent to	Elk Oil Company
Street and No.	P. O. Box 310
P.O. State and Zip Code	Roswell, NM 88201
Assignee	Mr. Joseph J. Kelly
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing When and Date Delivered	
Return Receipt showing to whom, Where, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	October 14, 1987 Unortho letter - Dragonfly

P-580 493 670

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800 1-77 U.S. POSTAL SERVICE	Sent to	
	Enron Oil & Gas Company	
	Street and No.	
	P. O. Box 2267	
	P. O., State and ZIP Code	
	Midland, TX 79702	
	Mr. Craig Duke	\$
	Certified Fee	
	Special Delivery Fee	
	Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered		
Return Receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees		\$
Postmark or Date		
October 14, 1987		
Unorthodox letter - Dragonfly		
State Unit #1		

P-580 493 669

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

1st Interstate of Lea County

Sent to Trustees for the Estate of

W. K. Byram

P. O. Box 147

P.O., State and ZIP Code

Hobbs, NM 88240

Postage

\$

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Return Receipt showing
to whom and Date Delivered

Return Receipt showing to whom,
Date and Address of Delivery

TOTAL Postage and Fees

\$

Postmark or Date

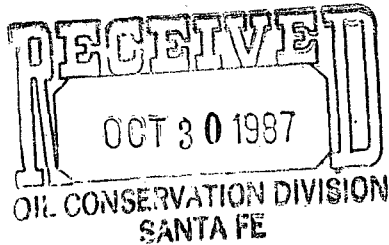
October 1, 1987

Unortho letter for Dragonfly
State Unit #1



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

S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.




October 13, 1987

RE: Unorthodox location for
Dragonfly State Unit #1
660' FNL & 990' FWL of
Section 30-T9S-R27E
Chaves County, New Mexico

Please sign and return one (1) copy to Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, to the attention of Rusty Jernigan, and one (1) copy to the New Mexico Oil Conservation Division, P. O. Box 2088, Santa Fe, NM 87501, to the attention of Mr. William LeMay, if you have no objections to the proposed unorthodox location listed above.

W A I V E R

As an offset operator, Enron Oil & Gas Company, has no objections to the proposed unorthodox location for the captioned well.


Signature

B. H. MORRISON, Agent and Attorney-in-Fact

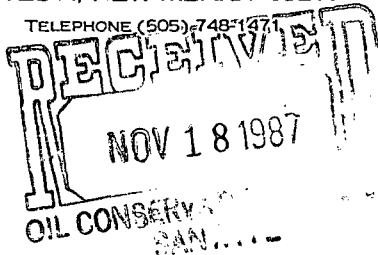
Title


Date



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210

TELEPHONE (505) 748-1471



NS-2438

S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

October 13, 1987

RE: Unorthodox location for
Dragonfly State Unit #1
660' FNL & 990' FWL of
Section 30-T9S-R27E
Chaves County, New Mexico

Please sign and return one (1) copy to Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, to the attention of Rusty Jernigan, and one (1) copy to the New Mexico Oil Conservation Division, P. O. Box 2088, Santa Fe, NM 87501, to the attention of Mr. William LeMay, if you have no objections to the proposed unorthodox location listed above.

W A I V E R

As an offset operator, BYROM OIL COMPANY, has no objections to Yates Petroleum Corporation proposing an unorthodox location no closer than 660' FNL of Section 30, Township 9 South, Range 27 East, Chaves County, New Mexico, provided the spacing unit is a lay down 320, being a N/2 dedication.

BYROM OIL COMPANY

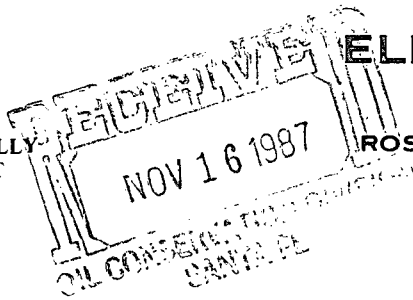
BY: 

Signature

Manager
Title

November 16, 1987

JOSEPH J. KELLY
PRESIDENT



ELK OIL COMPANY

BOX 310

ROSWELL, NEW MEXICO 88201

(505) 623-3190

November 12, 1987

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. William LeMay

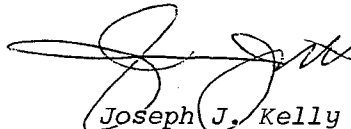
Gentlemen:

As per instructions of Yates Petroleum on October 13, 1987, enclosed please find copy of Waiver of Unorthodox location for Yates Dragonfly State Unit #1 located in Section 30, T-9S, R-27E, Chaves County, New Mexico.

If there are any questions, please advise.

Yours very truly,

ELK OIL COMPANY



Joseph J. Kelly
President

JJK/rm
Encl.



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

S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

October 13, 1987

RE: Unorthodox location for
Dragonfly State Unit #1
660' FNL & 990' FWL of
Section 30-T9S-R27E
Chaves County, New Mexico

Please sign and return one (1) copy to Yates Petroleum Corporation, 105 South Fourth Street, Artesia, NM 88210, to the attention of Rusty Jernigan, and one (1) copy to the New Mexico Oil Conservation Division, P. O. Box 2088, Santa Fe, NM 87501, to the attention of Mr. William LeMay, if you have no objections to the proposed unorthodox location listed above.

W A I V E R

As an offset operator, Elk Oil Company, has no objections to Yates Petroleum Corporation proposing an unorthodox location no closer than 660' FNL of Section 30, Township 9 South, Range 27 East, Chaves County, New Mexico, provided the spacing unit is a lay down 320, being a N/2 dedication.

ELK OIL COMPANY

BY: 

Signature

President

Title

November 12, 1987

Date

GEOLOGICAL CONDITIONS
FOR
UNORTHODOX LOCATION
OF THE
YATES PETROLEUM CORPORATION - DRAGONFLY STATE UNIT #1
660' FNL & 990' FWL, SECTION 30-T9S-R27E
CHAVES COUNTY, NEW MEXICO

Yates Petroleum Corporation respectfully requests administrative approval for the unorthodox location of its proposed Dragonfly State Unit #1 to be drilled 660 feet from the North line and 990 feet from the West line of Section 30, Township 9 South, Range 27 East, Chaves County, New Mexico. The north half of section 30 would be dedicated to the well.

The necessity for this unorthodox location is based upon geological conditions.

Exhibit #1 is a land plat showing the proposed location and its relationship to the surrounding acreage in which Yates has full or partial operating rights. The proration unit is outlined in red.

Exhibit #2 is a map depicting the subsurface structure on top of the Pre-Penn Unconformity. The contour interval is 50'. Datum points are noted by circles and the appropriate datum is listed. Well spots colored in red indicate Ordovician producers. The red outline and the green outline marks the termination of the Mississippian formation and the Ordovician respectfully.

The structure map shows a horst block which is completely fault bounded. Throw on the bounding faults varies from nearly four hundred feet to a slight displacement of less than 50'. Erosion on the uplifted area has resulted in areas where Mississippian and Ordovician sediments have been completely stripped away leaving Pennsylvanian sediments lying unconformably on the Precambrian. The Pre-Pennsylvanian section on the remainder of the horst block consists of Ordovician on Precambrian. A normal sequence of Pennsylvanian resting unconformably on Mississippian occurs on the down thrown side of the bounding faults.

Gas production from the uplifted fault block results from porosity development along the unconformity surface (karst topography) of the Ordovician which is truncated against the Precambrian. The bounding faults are also a trapping mechanism that place the tite Mississippian limestone in juxtaposition with the porous Ordovician dolomite. Therefore a definite relationship exists between production and the structural position. The better Ordovician producers occur above a -2200 subsea datum on top of the Ordovician. Pertinent cumulative production from the Ordovician has been noted to substantiate this relationship. The proposed location was chosen in an attempt to duplicate the Ordovician section as encountered by the Meredith State #1, the highest well, with the best cumulative production.

Exhibit #3, crossection A-A' shows the pertinent well tops and intervals picked by correlation. The mapped subcrop patterns and fault locations are further documented.

Note that the gas/water contact exists in a location where Ordovician porosity on the up thrown side of the fault is lateral to Ordovician porosity on the down thrown side of the fault. It seems that to form an effective seal, the up thrown Ordovician section must be in juxtaposition with the Mississippian.

In summary, the proposed unorthodox location is the best allowable location in the north half of Section 30 wich would enable the borehole to encounter the structure at its highest point possible. It is anticipated that structurally high penetration of the Ordovician formation would enhance earlier and greater recovery of gas reserves. The well will be drilled through to the Precambrian to ensure that the complete section is tested. It is believed that approval of this location would prevent waste and protect correlative rights.

The above discussion of geological conditions and Exhibits #1, #2, and #3 were prepared by Leslie Bentz. Leslie Bentz is employed by Yates Petroleum Corporation as a geologist in Artesia, NM. She has testified before and been approved as an expert witness by the Oil Conservation Division of the State of New Mexico.



Leslie Bentz
Permian Basin Division Geologist
Yates Petroleum Corporation

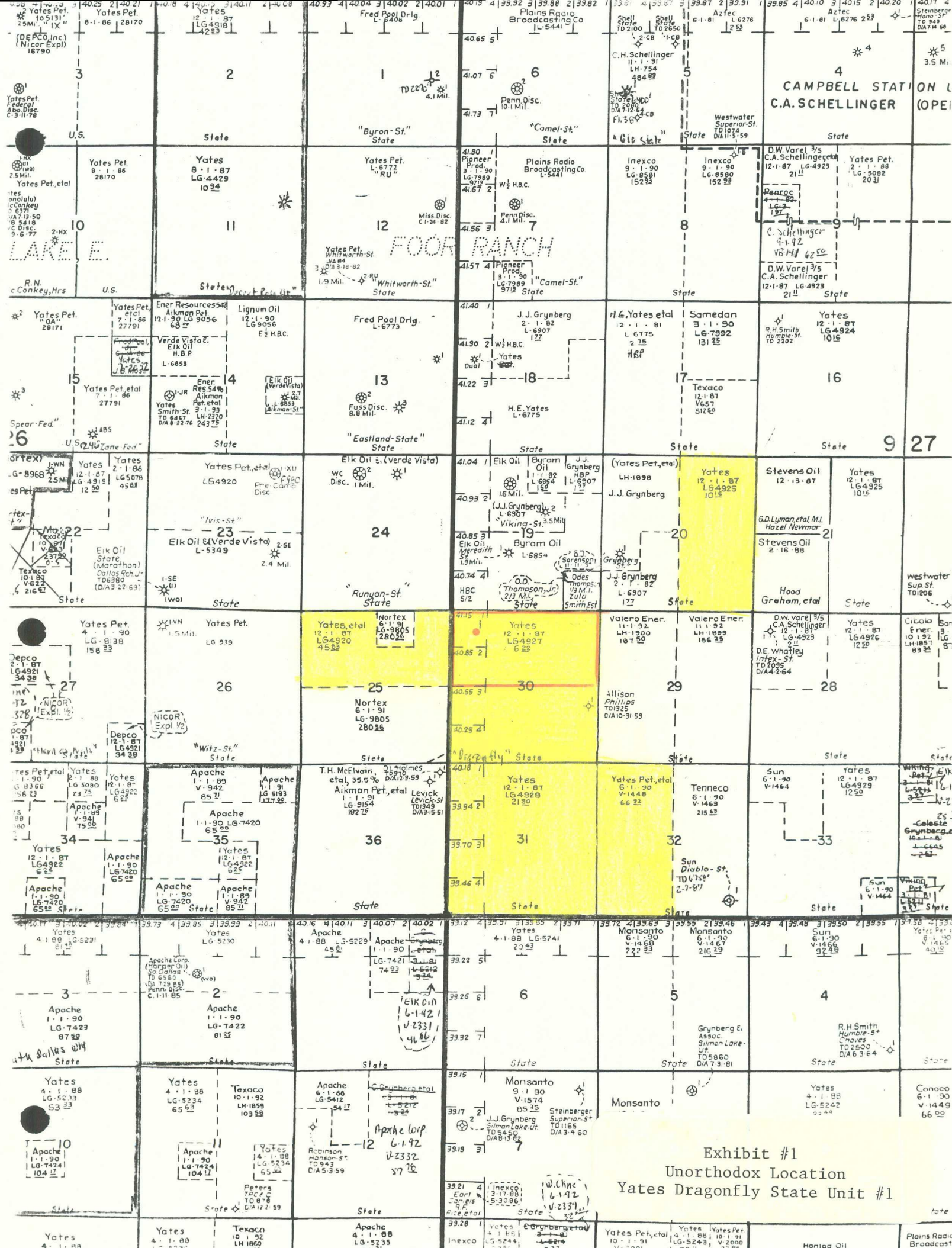


Exhibit #1
Unorthodox Location
Yates Dragonfly State Unit #1