

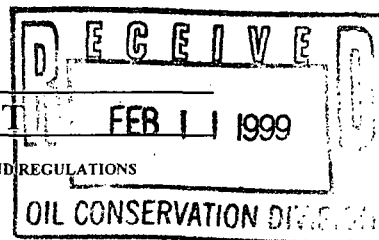
DATE IN 2/11/99	SUSPENSE 3/3/99	ENGINEER MS	LOGGED N	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

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

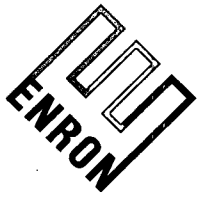
[A] ☐ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☒ Offset Operators, Leaseholders or Surface Owner  
 [C] ☐ Application is One Which Requires Published Legal Notice  
 [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public 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.

Mike Francis	<i>Mike Francis</i>	Agent	2/4/99
Print or Type Name	Signature	Title	Date



**Enron Oil & Gas  
Company**

P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

February 3, 1999

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

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

Re: Application of Enron Oil & Gas Company for  
Administrative Approval of an Unorthodox  
Gas Well

Dear Mr. Stogner:

Enclosed please find the Application of Enron Oil & Gas Company for administrative approval of an Unorthodox Location for the drilling of Enron's Brininstool "4" State No. 2 well, a Wolfcamp gas well.

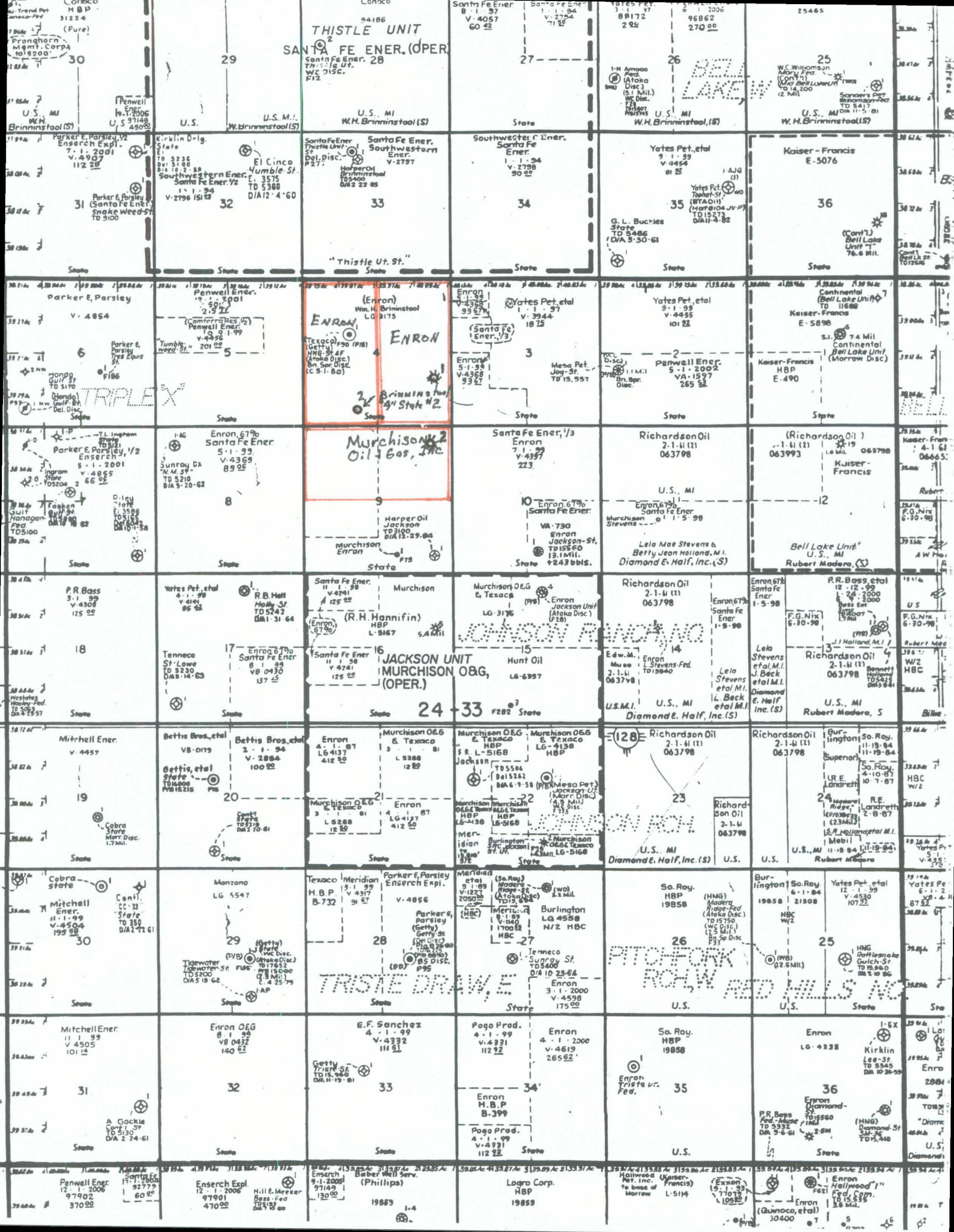
By separate letter (copy attached) Enron has sent notification via certified return receipt mail to the affected parties by submitting a copy of this application and a plat required by OCD rules. A sworn statement attesting to this notification is hereby enclosed for your files.

Your due consideration to this Application is most appreciated. Should you have any questions, please feel free to call me at 915/686-3714.

Sincerely,

ENRON OIL & GAS COMPANY

  
Mike Francis



BEFORE THE  
OIL CONSERVATION DIVISION  
NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION  
OF ENRON OIL & GAS COMPANY FOR  
ADMINISTRATIVE APPROVAL OF AN  
UNORTHODOX WELL LOCATION FOR ITS  
BRININSTOOL "4" STATE NO. 2  
WELL LOCATED 660 FEET FROM THE  
SOUTH LINE AND 1890 FEET FROM THE  
WEST LINE OF SECTION 4 TOWNSHIP 24  
SOUTH, RANGE 33 EAST,  
LEA COUNTY, NEW MEXICO.

CASE NO. \_\_\_\_\_

AFFIDAVIT

STATE OF TEXAS           §  
                                  § ss.  
COUNTY OF MIDLAND   §

Mike Francis, authorized representative of Enron Oil & Gas Company ("Enron"), the Applicant herein, being first duly sworn, upon oath, states that on or before this application was submitted to the New Mexico Oil Conservation Division, and in accordance with the notice provisions of Division Rule 104, Enron has sent notification to the affected parties by submitting a copy of the application, including a copy of the plat described in Rule 104.F(3) by certified or registered mail, return receipt, in accordance with Rule 1207 (A)(5) advising them that if they have an objection it must be filed in writing within twenty (20) days from the date notice was sent.

Mike Francis

Mike Francis

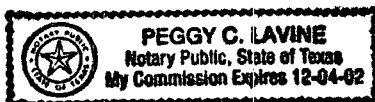
SUBSCRIBED AND SWORN to before me this 10<sup>th</sup> day of February, 1999.

Peggy C. Lavine

Notary Public

My Commission Expires:

U:\tm\aff\_nmocd





**Enron Oil & Gas  
Company**

P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

February 3, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Murchison Oil & Gas, Inc.  
1445 Ross, Suite 5300, LB 152  
Dallas, Texas 75202-2883

Attention: Mr. Michael S. Daugherty

Re: Application for Unorthodox  
Location Drilling Permit  
Brininstool "4" State No. 2 Well  
W/2 of Section 4, T24S, R33E  
Lea County, New Mexico

Gentlemen:

Enron Oil & Gas Company (Enron) proposes the drilling of the captioned test well at a location 660' FSL & 1890' FWL of Section 4, T24S, R33E to a depth sufficient to test the Wolfcamp formation, at an approximate total depth of 14,200'. In this regard, please find a plat showing the subject spacing unit (W/2), its proposed unorthodox well location, and offsetting spacing unit and leases.

Enron hereby seeks an exception to the well location requirements of the New Mexico Oil Conservation Division Rule 104.C and has applied pursuant to Division Rule 104F.(2) for administrative approval of an Unorthodox Location Drilling Permit for all formations through the base of the Wolfcamp formation which may be developed on 320 acre proration units.

Enron has determined that the drilling of the proposed test well at the specified location is necessary and prudent in order to recover oil and gas reserves underlying the above referenced Section 4 (W/2).

If you have no objection to the above location please date and sign the attached Waiver of Objection and return one executed copy to the undersigned in the enclosed self addressed stamped envelope. Please fax a copy of signed waiver to the undersigned at (915) 686-3773.

Should you have an objection to Enron's unorthodox location, it must be filed in writing within twenty (20) days from the date of this notice.

Page Two

Should you have any questions regarding the above or wish to discuss this matter further, please do not hesitate to call. Your early and favorable reply will be most appreciated.

Sincerely,

ENRON OIL & GAS COMPANY

  
Mike Francis

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**Enron Oil & Gas  
Company**

P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

February 3, 1999

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

Re: Application for Unorthodox  
Location Drilling Permit  
Brininstool "4" State No. 2 Well  
Section 4, T-24-S, R-33-E, NMPPM  
Lea County, New Mexico

Gentlemen:

Murchison Oil & Gas, Inc. as an offset operator or owner of operating rights, has been advised of Enron Oil & Gas Company's intent to drill the above referenced Wolfcamp well at a location of 660' FSL & 1890' FWL of Section 4, T-24-S, R-33-E, Lea County, New Mexico.

This letter is to advise that Murchison Oil & Gas, Inc. has no objection to the granting of a permit to drill at this location and hereby waives objection and notice of hearing on this application.

Sincerely,

ENRON OIL & GAS COMPANY

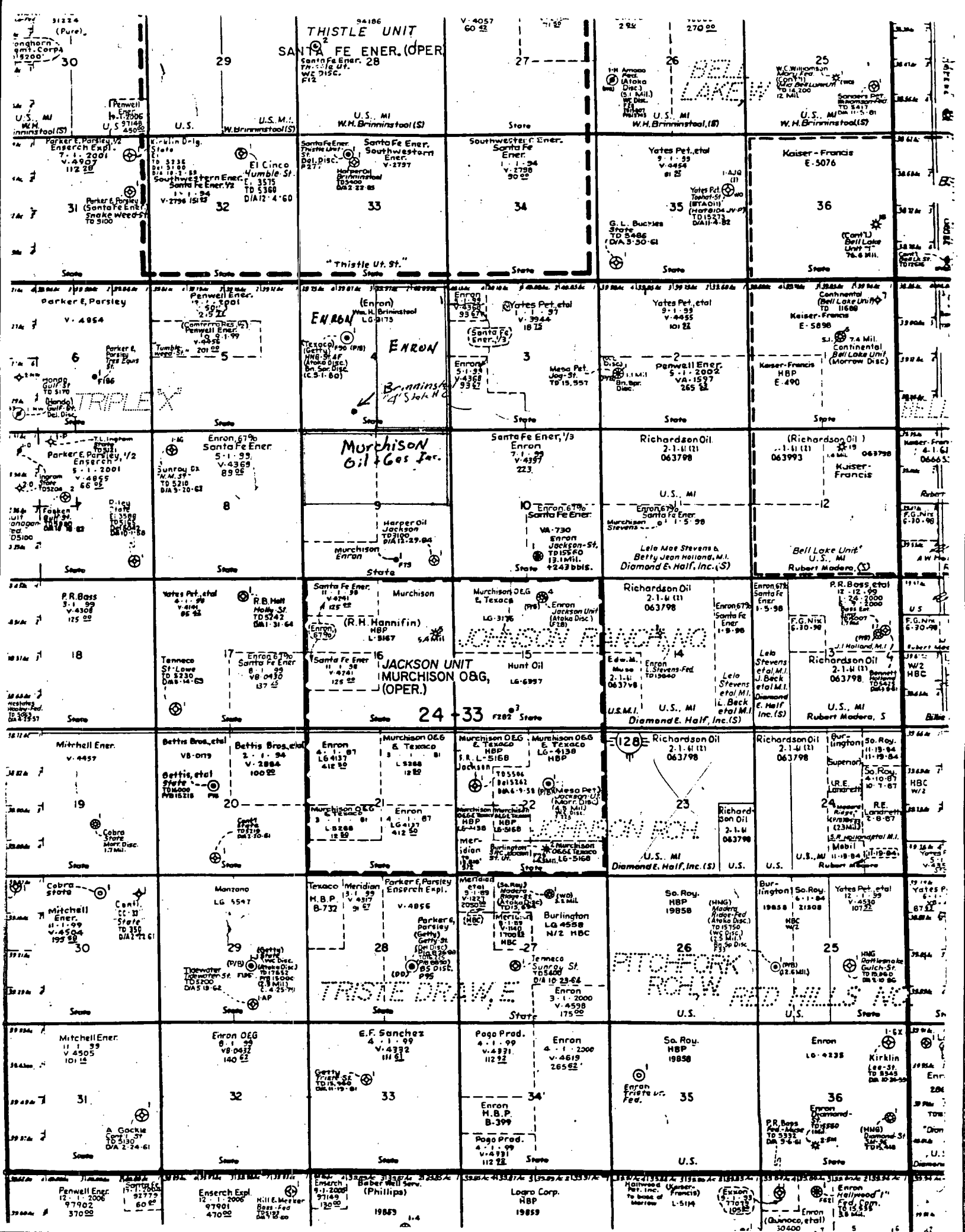
  
Mike Francis

MURCHISON OIL & GAS INC.

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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## Geologic Discussion

Enron Oil & Gas Company is seeking approval for an unorthodox location in the Johnson Ranch area Lea County, New Mexico, based on geological reasons. The proposed unorthodox location for the Brininstool "4" State #2 (W/2 spacing unit / 660 FSL & 1890 FWL Section 4 -T24S-R33E) is a northwest offset to the Enron "9" State Com #2 and a west southwest offset to the Brininstool "4" State #1 (reference Exhibit 1). The Enron "9" State Com #2 was completed in the Wolfcamp for approximately 2.5 MMcfcpd & 500 Bcpd and the Brininstool "4" State #1 was completed in the Wolfcamp for approximately 1.6 MMcfcpd & 200 Bcpd. The proposed location is within the Johnson Ranch (Wolfcamp) Field, which currently has 14 producers. Production in the Johnson Ranch Field (reference Exhibit 2) is from a series of detrital carbonate zones in the Lower Wolfcamp.

The Brininstool "4" State #1 is targeting the correlative Wolfcamp detrital carbonate zone, which is productive in the Enron "9" State Com #2 and is present but non-productive in the Getty, HNG State 4-F #1 (1980 FNL & 1650 FWL Section 4-T24S-R33E). Enron's mapping in the area indicates this productive detrital zone trends NW to SE through this portion of the field (reference Exhibit 1).

The HNG State 4-F #1 well has a thick Upper detrital zone (reference Exhibit 2), but is located within an interpreted fault zone and consequently lacks the over-pressuring needed to be a commercial producer. The Wolfcamp was DST'd from 13,188'-300' during drilling operations. Although there was a strong blow at surface no gas flow was measured and the IFP and FFP was 1,684-1,998#. Recovery was 3,300' water cushion and 1,000' of mud. The ISIP and FSIP of 7,396# and 7,354# respectively, is of special interest because the Wolfcamp producers in this area have original BHP of approximately 10,500#. The Wolfcamp was perforated from 13,250'-337' during recompletion operations. After a total of 1,000 gallons acid stimulation the zone failed to flow gas and was abandoned. A regional study indicates that the over-pressured reservoirs produce commercial quantities of gas yet the normal pressured reservoir produce poorly if at all. We believe the lack of over-pressuring in the 4-F well may have been due to leakage along the fault plane.

**Geologic Discussion**  
**Page 2**

It is Enron Oil & Gas concern for locating the proposed well in the thickest portion of the prospective carbonate isopach and also staying a significant distance from the breached HNG STATE 4-F #1 well that has led us to request an unorthodox location (reference Exhibit 1).

Exhibit 1 is an gross isopach of the Enron "9" State Com #2 Carbonate Pay  
Exhibit 2 is stratigraphic cross-section A – A'

### INTENTIONAL OMISSIONS

The following document(s) have been intentionally omitted from this file due to the indicated reasons.

FILE # NSL 4213

### DESCRIPTION OF OMITTED DOCUMENTS

OMITTED DOCUMENT

REASON OMITTED

EXHIBIT 2 GRAPH

TOO LARGE

CMD : ONGARD 02/12/99 09:31:51  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPWU

OGRID Idn : 7377 API Well No: 30 25 34571 APD Status(A/C/P): A  
Opr Name, Addr: ENRON OIL & GAS CO Aprvl/Cncl Date : 02-08-1999  
PO BOX 2267  
MIDLAND, TX 79702

Prop Idn: 24199 BRINNINSTOOL 4 STATE Well No: 2

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
Surface Locn	: N	4	24S	33E		FTG 660 F S	FTG 1890 F W
OCD U/L	: N		API County	: 25			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): G Cable/Rotary (C/R) : F  
Lease typ(F/S/P/N/J/U/I): S Ground Level Elevation : 3616

State Lease No: Multiple Comp (Y/N) : N  
Prpsd Depth : 14200 Prpsd Frmtn : WOLFCAMP

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD :  
OG5SECTONGARD  
INQUIRE LAND BY SECTION02/12/99 09:31:06  
OGOMES -TPWU  
PAGE NO: 1

Sec : 04 Twp : 24S Rng : 33E Section Type : NORMAL

4 39.75 CS LG3175 0001 11/85 ENRON OIL & GAS C	3 39.87 CS LG3175 0001 11/85 ENRON OIL & GAS C	2 39.97 CS LG3175 0001 11/85 ENRON OIL & GAS C	1 40.09 CS LG3175 0001 11/85 ENRON OIL & GAS C
E 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	F 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C  A	G 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	H 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C

PF01 HELP  
PF07 BKWDPF02  
PF08 FWDPF03 EXIT  
PF09 PRINTPF04 GoTo  
PF10 SDIVPF05  
PF11PF06  
PF12

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79.75  
79.87  

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159.62  
16  
319.62

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

02/12/99 09:31:13  
OGOMES -TPWU  
PAGE NO: 2

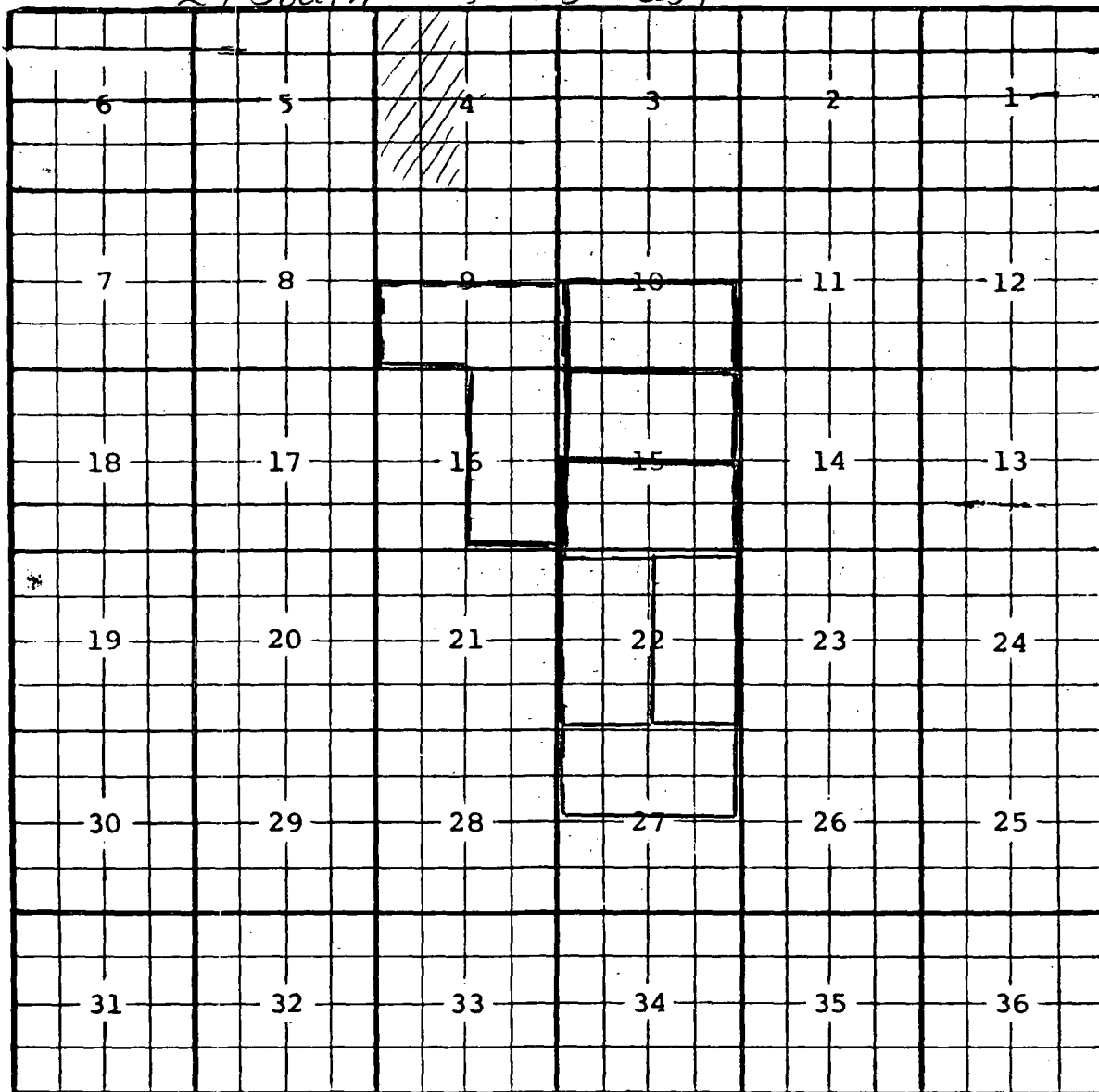
Sec : 04 Twp : 24S Rng : 33E Section Type : NORMAL

L 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	K 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	J 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	I 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C  A
M 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	N 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C  A	O 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C	P 40.00 CS LG3175 0001 11/85 ENRON OIL & GAS C

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

County Lea Pool Johnson Ranch-Wolfcamp Gas

TOWNSHIP 24 South Range 33 East NMPM



Description:  $\frac{E}{2}$  Sec. 22 (R-8075, 11-8-85)

Correct Range from 32 to 33 (R-8125, 1-14-86)

Ext:  $\frac{W}{2}$  Sec. 22 (R-8193, 3-21-86) Ext:  $\frac{N}{2}$  Sec. 27 (R-8299, 9-4-86)

Ext:  $\frac{S}{2}$  Sec. 15 (R-10641, 8-19-96) Ext:  $\frac{N}{2}$  Sec. 15 (R-10776, 2-28-97)

Ext:  $\frac{S}{2}$  Sec. 10 (R-10785, 4-28-97) Ext:  $\frac{S}{2}$  Sec. 9,  $\frac{E}{2}$  Sec. 16 (R-10922, 4-13-98)





**Enron Oil & Gas  
Company**

P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

February 3, 1999

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

Re: Application for Unorthodox  
Location Drilling Permit  
Brinatool "4" State No. 2 Well  
Section 4, T-24-S, R-33-E, NMPM  
Lea County, New Mexico

Gentlemen:

Murchison Oil & Gas, Inc. as an offset operator or owner of operating rights, has been advised of Enron Oil & Gas Company's intent to drill the above referenced Wolfcamp well at a location of 660' FSL & 1890' FWL of Section 4, T-24-S, R-33-E, Lea County, New Mexico.

This letter is to advise that Murchison Oil & Gas, Inc. has no objection to the granting of a permit to drill at this location and hereby waives objection and notice of hearing on this application.

Sincerely,

ENRON OIL &amp; GAS COMPANY

*Mike Francis*  
Mike Francis

MURCHISON OIL &amp; GAS INC.

By: *Michael Stogner*  
Title: VICE PRESIDENT OPERATIONS  
Date: FEBRUARY 15, 1999

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Natural gas. Electricity. Endless possibilities.™



MAR - 8 1999

**Enron Oil & Gas  
Company**

P.O. Box 2267  
Midland, TX 79702  
(915) 686-3600

February 3, 1999

NSL-4213

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

Re: Application for Unorthodox  
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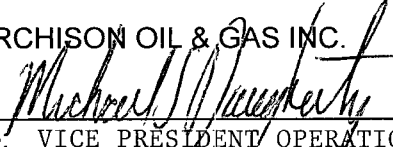
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ENRON OIL & GAS COMPANY

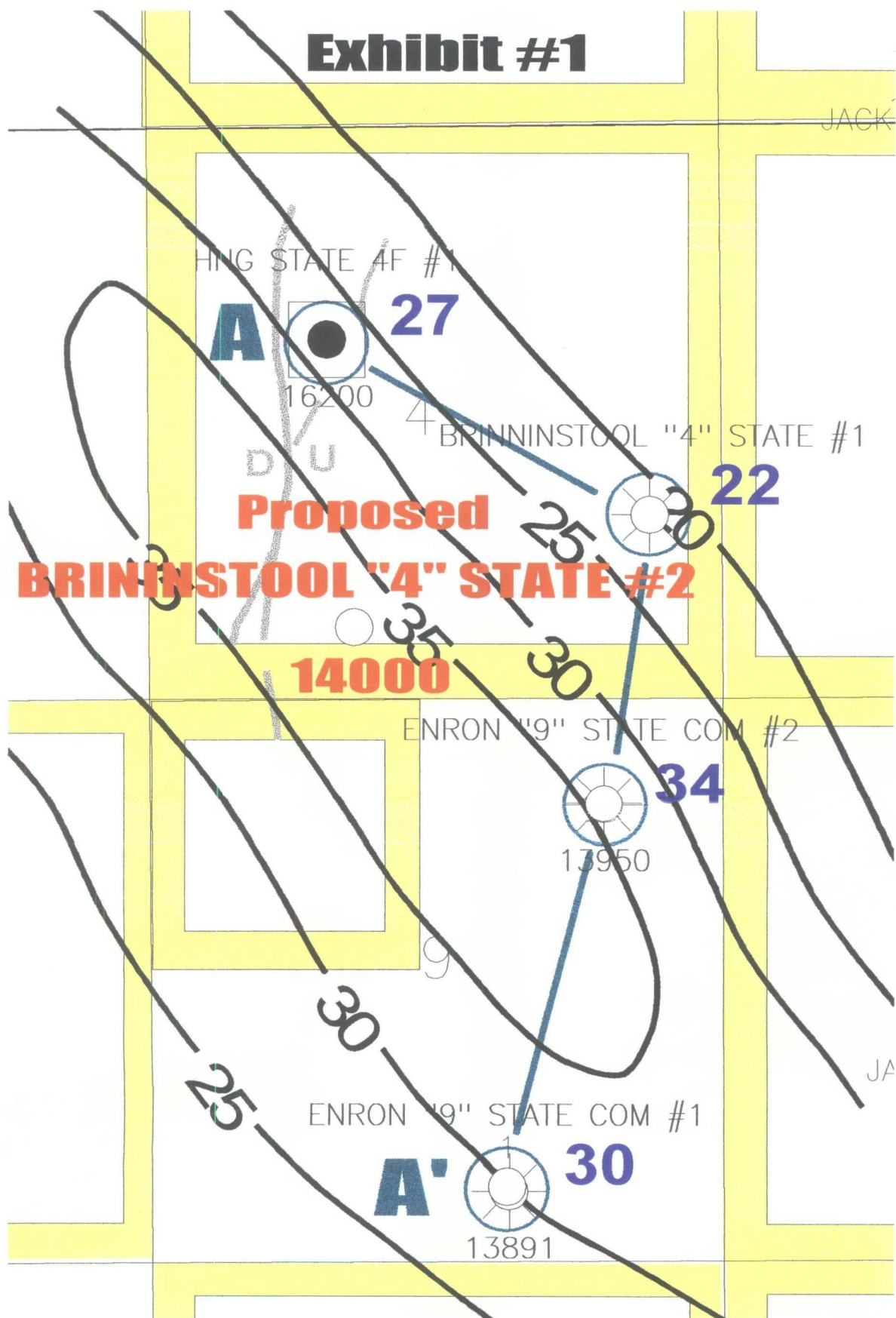
  
Mike Francis

MURCHISON OIL & GAS INC.

By:   
Title: VICE PRESIDENT OPERATIONS  
Date: FEBRUARY 15, 1999

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# Exhibit #1



Brininstool "4" State #2		
SESW, Sec 4, T24S R33E, Lea Co., NM Enron "9" State Com #2 Carbonate Pay Gross Isopach		
Butkus	Cl : 25'	2/9/99
Scale 1:16000.		