

Release April 16, 1985

B4 DEC



Santa Fe Energy Company

500 West Illinois  
Midland, Texas 79701  
915/687-3551

March 11, 1985

NSP (L) 1453  
RULE- 104 F(II) and  
104 D(II)

Mr. Richard L. Stamets  
Technical Support Chief  
Oil Conservation Division  
Energy and Minerals Department  
State of New Mexico  
P. O. Box 1088  
Santa Fe, New Mexico 87501

990 FN & 990 FW  
~~306.44~~ 306.44 acre deduction  
w/2 Section 19, 22S-33E  
Undesignated Morrow.

Re: Bootleg Ridge 19 State No. 1  
Sec. 19-22S-33E  
Lea County, New Mexico

Dear Sir:

Santa Fe Energy Company is requesting administrative approval for an unorthodox location due to geologic reasons and a nonstandard unit due to variation in the legal subdivision of the U. S. Public Land Survey.

Please find enclosed seven (7) copies of the following:

1. Letter requesting administrative approval of unorthodox location and nonstandard unit
2. Plat showing acreage dedicated
3. Geologic exhibits
4. Form C-101
5. Form C-102

Six (6) copies of the above have been sent to the District Office in Hobbs.

Sincerely,

*Billie Hood*

Billie Hood  
Senior Production Clerk

BH:dz-186

Enclosures



*Santa Fe Energy Company*



500 West Illinois  
Midland, Texas 79701  
915/687-3551

March 11, 1985

Mr. Joe D. Ramey, Director  
Oil Conservation Division  
Energy and Minerals Department  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Bootleg Ridge 19 State No. 1  
Sec. 19-22S-33E  
Lea County, New Mexico

Gentlemen:

Santa Fe Energy Company requests administrative approval of a non-standard unit and an unorthodox location for a 15,300' Morrow test to be drilled 990' FNL, 990' FWL, Section 19, T-22S, R-33E, Lea County, New Mexico.

The nonstandard unit is due to variations in the legal subdivision of the U. S. Public Land Survey. The reasons for the unorthodox location are geologic. The relevant geologic exhibits are enclosed.

All offset operators have been notified by certified or registered mail of this request for administrative approval of an unorthodox location. Enclosed are two (2) offset signed approvals.

Sincerely,

Billie Hood  
Senior Production Clerk

BH:dz-318  
Enclosures





500 West Illinois  
Midland, Texas 79701  
915/687-3551

February 26, 1985

Mr. Richard Stamets  
Technical Support Chief  
Oil Conservation Division  
Energy and Minerals Department  
State of New Mexico  
Box 2088  
Santa Fe, NM 87501

RE: NM 111-3-3  
Geological Exhibits  
SFEC Bootleg Ridge 19 State-1  
Lea County, NM

Dear Mr. Stamets:

Santa Fe Energy Company is proposing an unorthodox location (990' FNL, 990' FWL) in Section 19-22S-33E, Lea County, New Mexico. Reasons for this location are as follows:

1. The Morrow "A" sand produces in the Superior SST St 7-1 (1980' FSL, 1980' FEL, Section 7, 22S-33E). This sand also exhibits good reservoir characteristics and a probable gas-water contact in the Pogo No. 2 NBR (1980' FNL, 1980' FWL, Section 18-22S-33E). Santa Fe Energy's proposed location (See Maps 1 and 2) is updip to both the Superior and Pogo wells mentioned above and should encounter the best Morrow "A" sand reservoir development possible in Section 19-22S-33E.
2. The Morrow "F" sand is one of the major sands contributing to production in the Pogo No. 2 NBR (NW Section 18-22S-33E). This sand should be better developed in the northwest corner of Section 19 than at any other location in that Section (See Map 3). This interpretation further supports the unorthodox location.

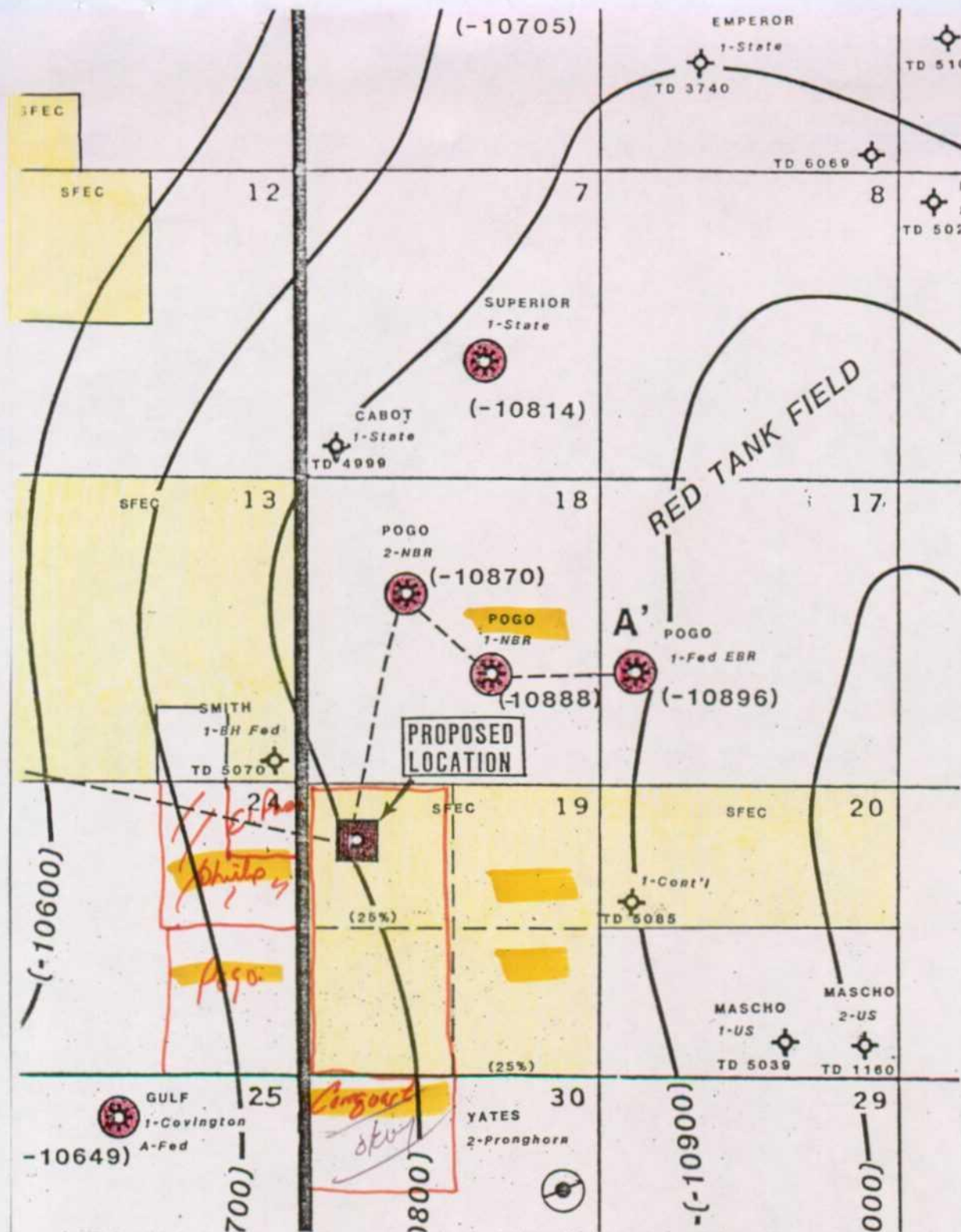
The location proposed by Santa Fe Energy Company is the optimum location in Section 19-22S-33E based on our knowledge of the Morrow formation in Bootleg Ridge Field.

Yours truly,

Donald Eckerty  
Senior Geophysicist

cys532  
attachment





### LEGEND

- SFEC ACREAGE
- MORROW WELL



SANTA FE ENERGY COMPANY  
PERMIAN BASIN DISTRICT  
MIDLAND, TEXAS

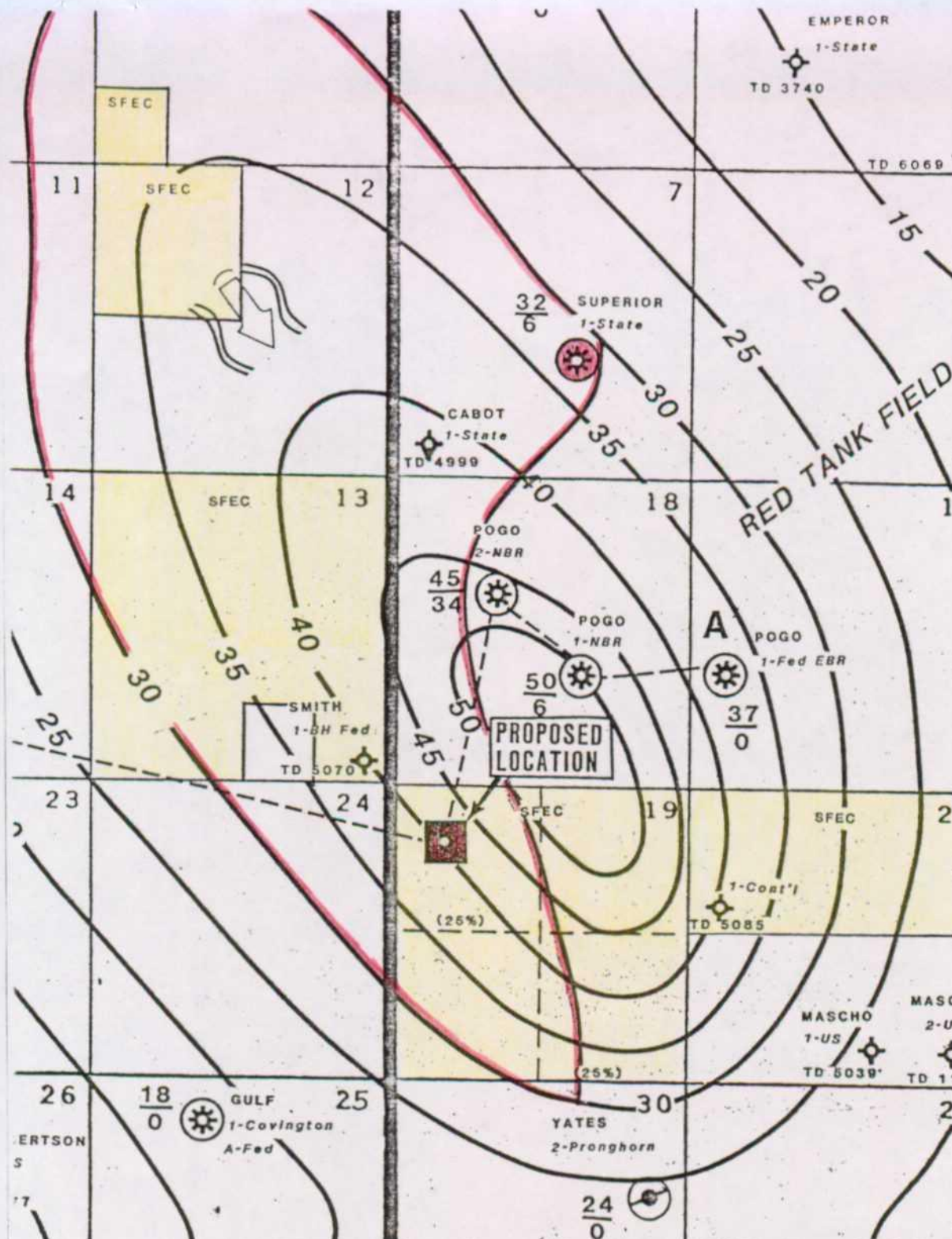
LEA, SOUTH AREA  
**BOOTLEG RIDGE PROSPECT**  
LEA CO., NEW MEXICO

**STRUCTURE MAP**  
**ON THE MORROW "A" SAND**

C.I.: 100'  
GEOL: K.H. SCHMIDTMAN

DRAFT: CDW  
DATE: 5-84





### LEGEND



SFEC ACREAGE

MORROW PRODUCER



45 = NO. ft. of sandstone < 50 API GR UNITS  
34 = NO. ft. of sandstone > 8% porosity



DENOTES A PALEOCURRENT DIRECTION



Inside red border the gas is confined to porosity developed in sand greater than 30' and above gas/water contact. The porosity is occluded by secondary cement below gas column.



SANTA FE ENERGY COMPANY

PERMIAN BASIN DISTRICT  
MIDLAND, TEXAS

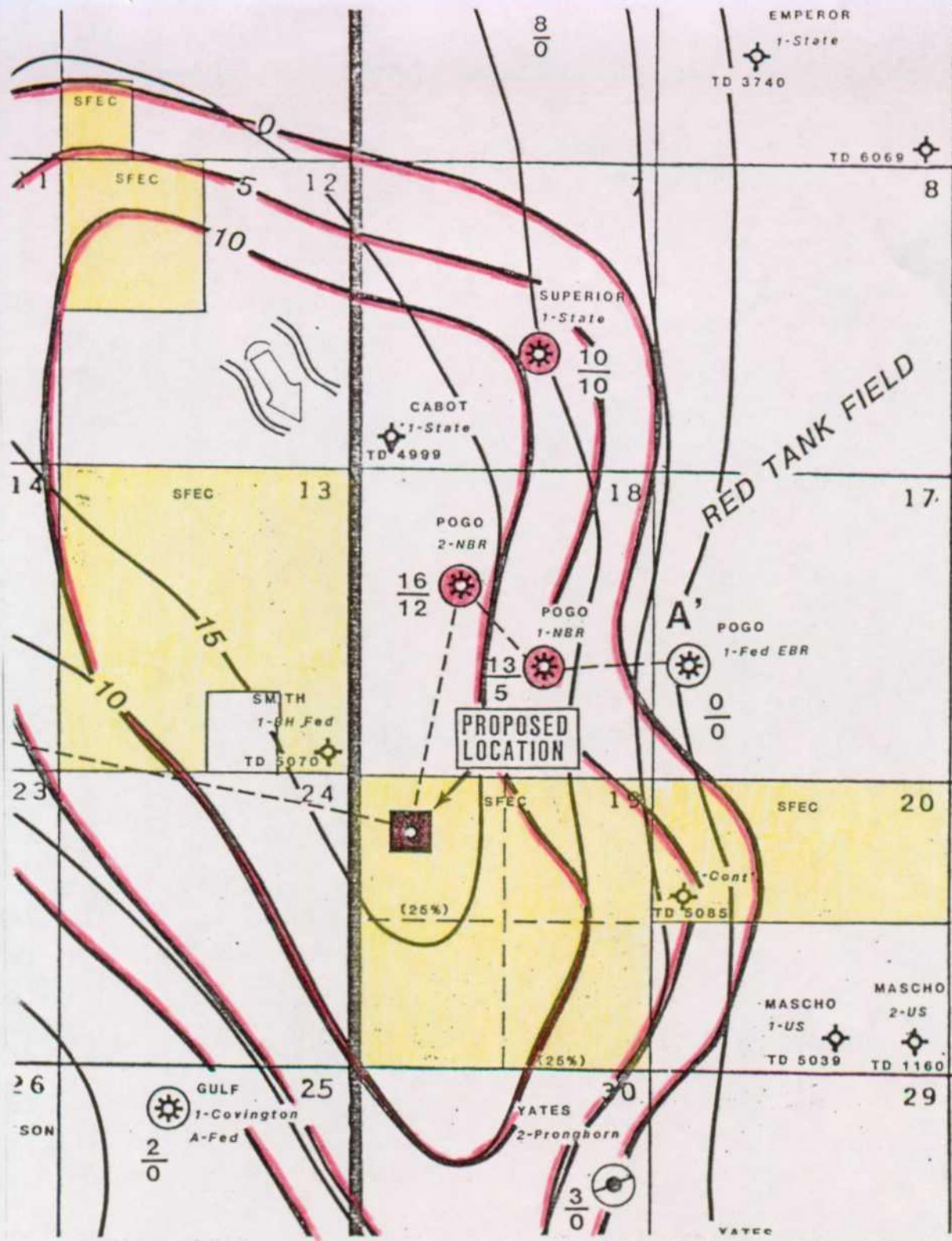
LEA, SOUTH AREA  
**BOOTLEG RIDGE PROSPECT**  
LEA CO., NEW MEXICO

**ISOPACH MAP**  
**MORROW SANDSTONE "A" PAY**  
**GROSS CLEAN SAND < 50 API GR UNITS**

C.I.: 100'  
GEOL: K.H. SCHMIDTMAN

DRAFT: CDW  
DATE: 5-84





### LEGEND



SFEC ACREAGE



$\frac{16}{12} = \frac{\text{NO. ft. of sandstone} < 50 \text{ API GR UNITS}}{\text{NO. ft. of sandstone} > 8\% \text{ porosity}}$



DENOTES PALEOCURRENT DIRECTION



SANTA FE ENERGY COMPANY

PERMIAN BASIN DISTRICT  
MIDLAND, TEXAS

LEA, SOUTH AREA  
**BOOTLEG RIDGE PROSPECT**  
LEA CO., NEW MEXICO

**ISOPACH MAP**  
**MORROW SANDSTONE "F" PAY**  
**GROSS CLEAN SAND < 50 API GR UNITS**

C.I.: 100'  
GEOL: K.H. SCHMIDTMAN

DRAFT: CDW  
DATE: 5-84

500 West Illinois  
Midland, Texas 79701  
915/687-3551

February 25, 1985

Re: OD-NM-617,9017  
Bootleg Ridge 19 State-1  
Well  
Lea County, New Mexico

El Paso Exploration Company  
1800 Wilco Bldg.  
Midland, Texas 79702

Attention: Mr. Phil M. Whitsitt

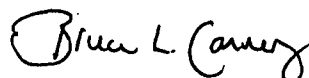
Gentlemen:

Santa Fe Energy Company has filed an application with the State of New Mexico Conservation Commission for the drilling of a 15,300' Morrow Test at a location 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico. This is an unorthodox location and we are therefore attempting to receive the approval of offset operators to our well, so that administrative approval can be obtained.

We respectfully request that you indicate your approval and consent to our location by signing the duplicate copy of this letter in the space provided and returning same to us as soon as possible.

Should you require any information regarding this matter, please let us know.

Sincerely,



Bruce L. Connery  
Senior Landman

El Paso Exploration Company does not wish to oppose Santa Fe's application to drill a 15,300' Morrow test at an unorthodox location being 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico.

EL PASO EXPLORATION COMPANY

BY: 

Date: 2/26/85

500 West Illinois  
Midland, Texas 79701  
915/687-3551

February 25, 1985

Re: OD-NM-617,9017  
Bootleg Ridge 19 State-1  
Well  
Lea County, New Mexico

Pogo Producing Company  
P. O. Box 10340  
Midland, Texas 79702

Attention: Mr. Jerry Cooper

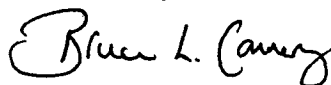
Gentlemen:

Santa Fe Energy Company has filed an application with the State of New Mexico Conservation Commission for the drilling of a 15,300' Morrow Test at a location 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico. This is an unorthodox location and we are therefore attempting to receive the approval of offset operators to our well, so that administrative approval can be obtained.

We respectfully request that you indicate your approval and consent to our location by signing the duplicate copy of this letter in the space provided and returning same to us as soon as possible.

Should you require any information regarding this matter, please let us know.


Sincerely,



Bruce L. Connery  
Senior Landman

Pogo Producing Company does not wish to oppose Santa Fe's application to drill a 15,300' Morrow test at an unorthodox location being 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico.

POGO PRODUCING COMPANY

BY:   
A. T. Carleton  
Vice President

Date: 2/27/85



500 West Illinois  
Midland, Texas 79701  
915/687-3551

February 25, 1985

Re: OD-NM-617, 017  
Bootleg Ridge 19 State-1  
Well  
Lea County, New Mexico

Phillips Petroleum Company  
4001 Penbrook  
Odessa, Texas 79762

Attention: Mr. Kent Crawford

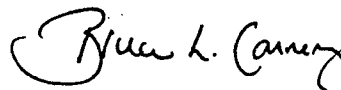
Gentlemen:

Santa Fe Energy Company has filed an application with the State of New Mexico Conservation Commission for the drilling of a 15,300' Morrow Test at a location 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico. This is an unorthodox location and we are therefore attempting to receive the approval of offset operators to our well, so that administrative approval can be obtained.

We respectfully request that you indicate your approval and consent to our location by signing the duplicate copy of this letter in the space provided and returning same to us as soon as possible.

Should you require any information regarding this matter, please let us know.

Sincerely,



Bruce L. Connery  
Senior Landman

Phillips Petroleum Company does not wish to oppose Santa Fe's application to drill a 15,300' Morrow test at an unorthodox location being 990' FNL and 990' FWL Section 19, T22S, R33E, Lea County, New Mexico.

PHILLIPS PETROLEUM COMPANY

BY: \_\_\_\_\_

Date: \_\_\_\_\_

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5A. Indicate Type of Lease
STATE <input checked="" type="checkbox"/> REC <input type="checkbox"/>

5. State Oil &amp; Gas Lease No.

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work				7. Unit Agreement Name			
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. Farm or Lease Name Bootleg Ridge 19 State			
2. Name of Operator Santa Fe Energy Company				9. Well No. 1			
3. Address of Operator 500 W. Illinois, Suite 500, Midland, TX 79701				10. Field and Pool, or Wildcat Wildcat			
4. Location of Well UNIT LETTER <u>D</u> LOCATED <u>990</u> FEET FROM THE <u>North</u> LINE AND <u>990</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>19</u> TWP. <u>22</u> RGE. <u>33</u> NMPM				12. County Lea			
19. Proposed Depth 15,300'				19A. Formation Morrow		20. Rotary or C.T. Rotary	
21. Elevations (show whether DF, RT, etc.) 3692.9'		21A. Kind & Status Plug. Bond Blanket - current		21B. Drilling Contractor TBD		22. Approx. Date Work will start May 1, 1985	

23.

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17 1/2"	13 3/8"	48.0	300'	315	Surface
12 1/4"	10 3/4"	40.5	4,800'	200	4400'+ Base Sal
9 1/2"	7 5/8"	33.7 & 39.0	12,220'	300	11,000'
6 1/2"	5"	18.0	15,300-11,900'	650	11,900'

Move on location and rig up rotary tools. Drill 17 1/2" hole to 300'. Run 13 3/8" casing. Cement with 315 sacks Class "C" Neat w/2% CaCl<sub>2</sub>. WOC till 500 psi compressive is obtained. Nipple up 1500 psi annular preventer. Test to 750 psi. Test casing to 600 psi. Drill 12 1/4" hole to 4800'. Run 10 3/4" casing. Cement w/200 sx Class "C" Neat.

WOC till 500 psi compressive strength obtained. Nipple up triple ram 5000 psi w.p. BOP w/bag type preventer and rotating head and choke manifold. Test rams and manifold to 5000 psi. Test bag preventer to 1500 psi. Test casing to 1500 psi. Drill 9 1/2" hole to 12,200'. Run 7 5/8" casing. Cement w/300 sx Class "H" w/1% fluid loss additive. WOC till 500 psi compressive strength obtained. Re-test BOP 5000 psi. Test casing to 1500 psi. Drill 6 1/2" hole to 15,300'. Log & drill stem test if needed. Either P&A per NMOC rules or run 5" liner and cement w/sufficient Class "H" to circulate to liner top. Drill out to liner top and test liner prior to removing drilling rig.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE, GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Mike Burton Mike Burton Title Sr. Drilling Engineer Date March 8, 1985

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-122  
Supersedes C-128  
Effective 12-65

All distances must be from the outer boundaries of the Section

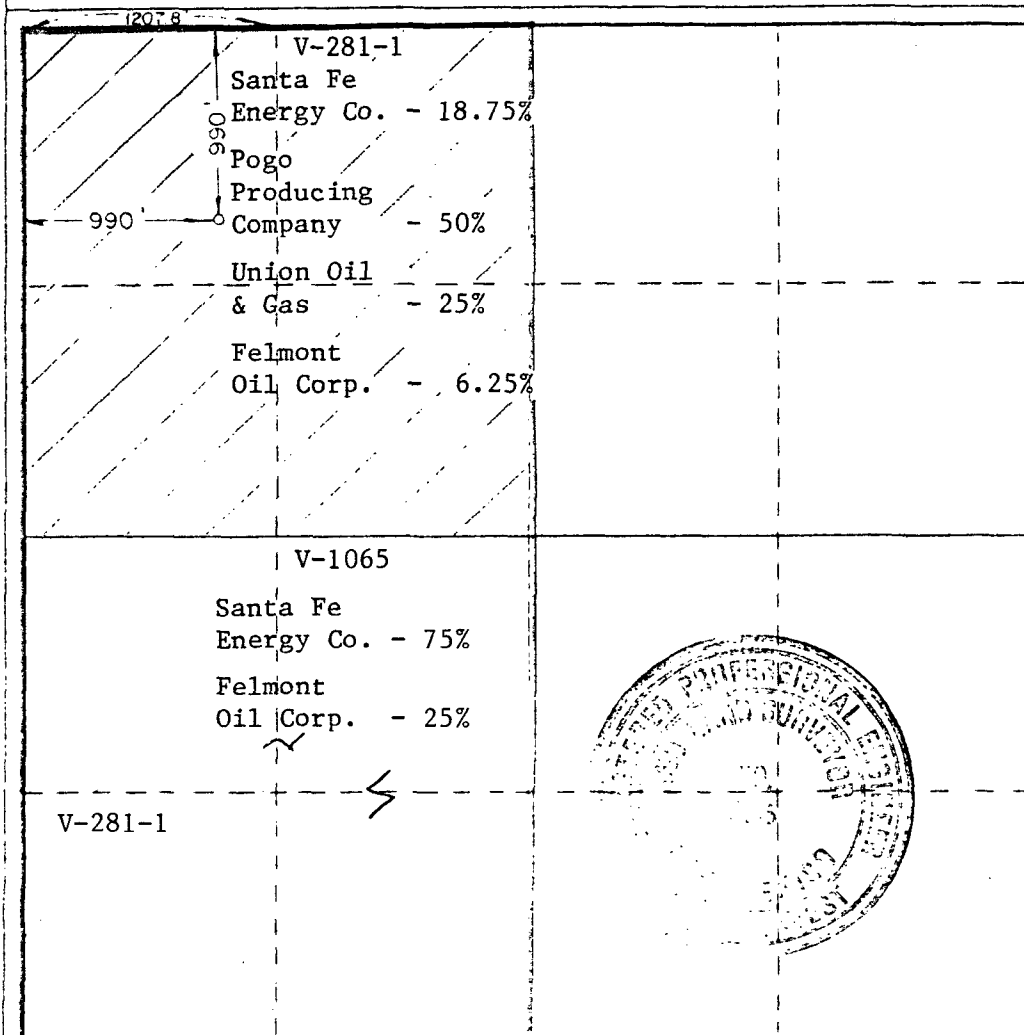
Operator <b>SANTA FE ENERGY CO.</b>			Lease <b>Bootleg Ridge 19 State</b>		Well No. <b>1</b>
Tract Letter <b>D</b>	Section <b>19</b>	Township <b>22S</b>	Range <b>33E</b>	County <b>LEA</b>	
Actual Footage Location of Well: <b>990</b> feet from the <b>NORTH</b> line and <b>990</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>3692.9</b>	Producing Formation <b>Morrow</b>	Pool <b>Wildcat</b>		Dedicated Acreage: <b>(w/2) 306.44</b>	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) Attached

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Mike R. Burton*

Name

Mike R. Burton

Position

Sr. Drilling Engineer

Company

Santa Fe Energy Company

Date

3-11-85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

I have received

3/11/85

Registered Professional Engineer

State of New Mexico

*Ronald J. Eidson*

Certificate No. JOHN W. WES 576

RONALD J. EIDSON, 3239

This well is being drilled under the provision of a working interest unit involving all owners of interests in W/2 Sec. 19, T-22S, R-33E, Lea County, New Mexico. If commercial production is established, a formal pooling declaration will be placed of record.