

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.

NM-63362

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Lusk 20 Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

N. Hackberry - Y-SR

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec. 20, T-19S, R-31E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

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

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Santa Fe Energy Company

3. ADDRESS OF OPERATOR

500 W. Illinois, Suite 500, Midland, TX 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1980' FNL, 660' FEL, Sec. 20, T-19S, R-31E

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

22 miles east of Carlsbad, NM

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

N/A

16. NO. OF ACRES IN LEASE

120

19. PROPOSED DEPTH

2300'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3462.0' GR

22. APPROX. DATE WORK WILL START\*

ASAP

23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0	450'	300 sx
7 7/8"	4 1/2"	9.5	2300'	800 sx

Move on location and rig up. Drill 12 1/4" hole to 450'±. Run 8 5/8" casing. Cement with 300 sx C1 C, 2% CaCl<sub>2</sub>, 1/4# celloflake per sack. WOC till 500 psi compressive obtained. Cement to be circulated to surface. Nipple up BOP. Test BOP to 600 psi. Drill 7 7/8" hole to TD. Run logs and/or core as needed. Run 4 1/2" casing. Cement with sufficient amount of C1 C containing 8% gel, 2% CaCl<sub>2</sub>, 10#/sk salt, 1/4#/sk celloflake followed by 200 sx Class C w/1% CaCl<sub>2</sub> to circulate cement to surface.

Posted LDI,  
API, NL  
12-15-85

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. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Mike Burton

Mike Burton

TITLE

Sr. Drilling Engineer

DATE

11/14/85

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

MARK Hollis

TITLE

acting

DATE

12-5-85

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

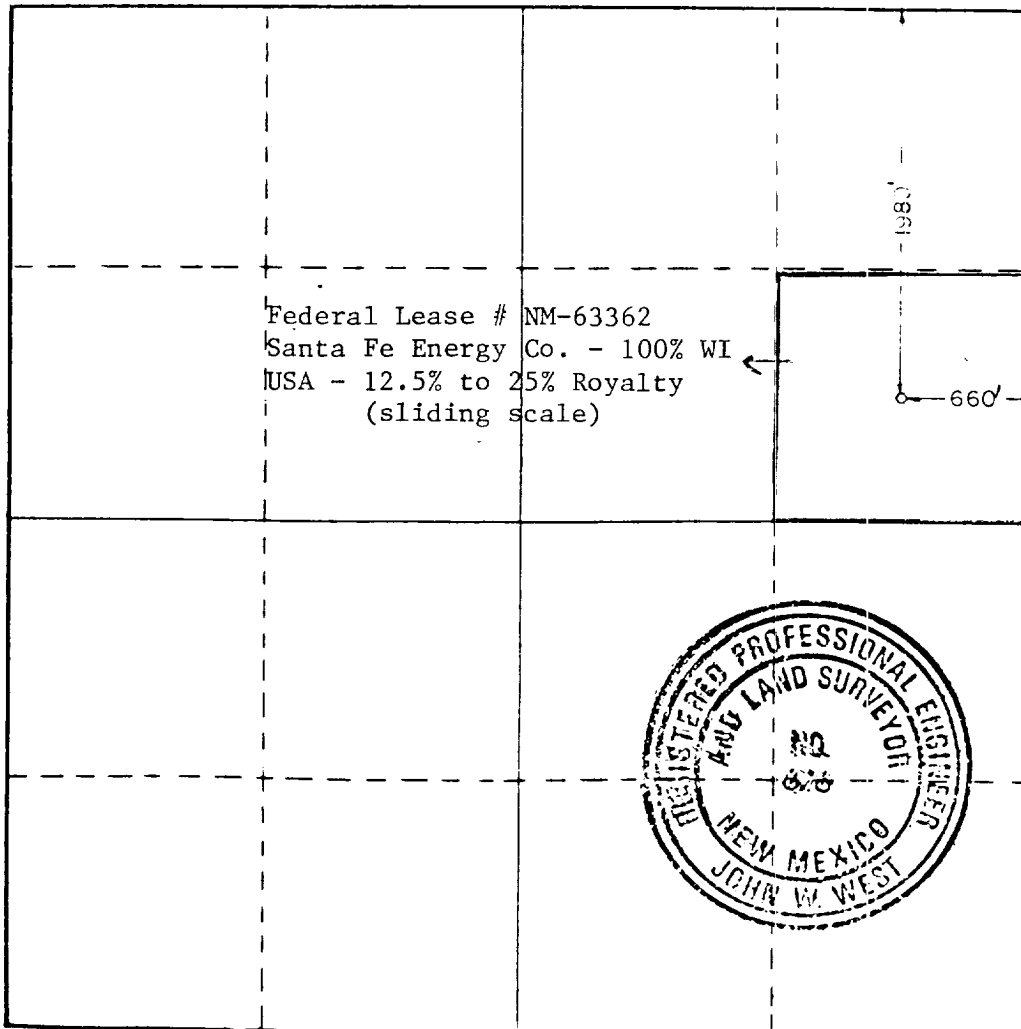
Operator <b>SANTA FE ENERGY</b>			Lease <b>LUSK 20 FEDERAL</b>		Well No. <b>1</b>
Tract Letter <b>H</b>	Section <b>20</b>	Township <b>19S</b>	Range <b>31E</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>NORTH</b> line and <b>660</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3462.0</b>	Producing Formation <b>Yates</b>		Pool <b>N. Hackberry</b>		Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.) One lease - Santa Fe Energy Company owns 100% operating rights.

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.

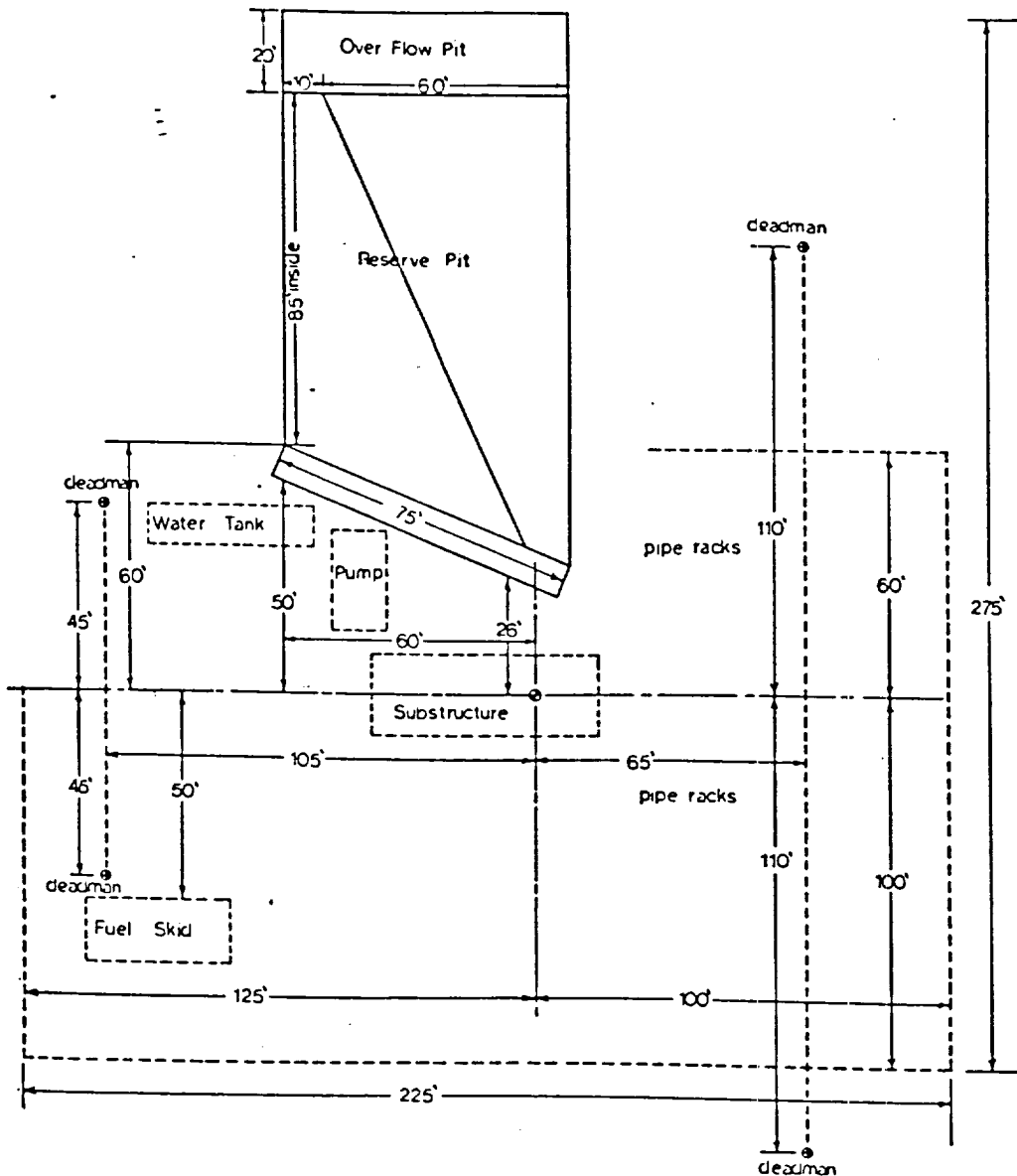
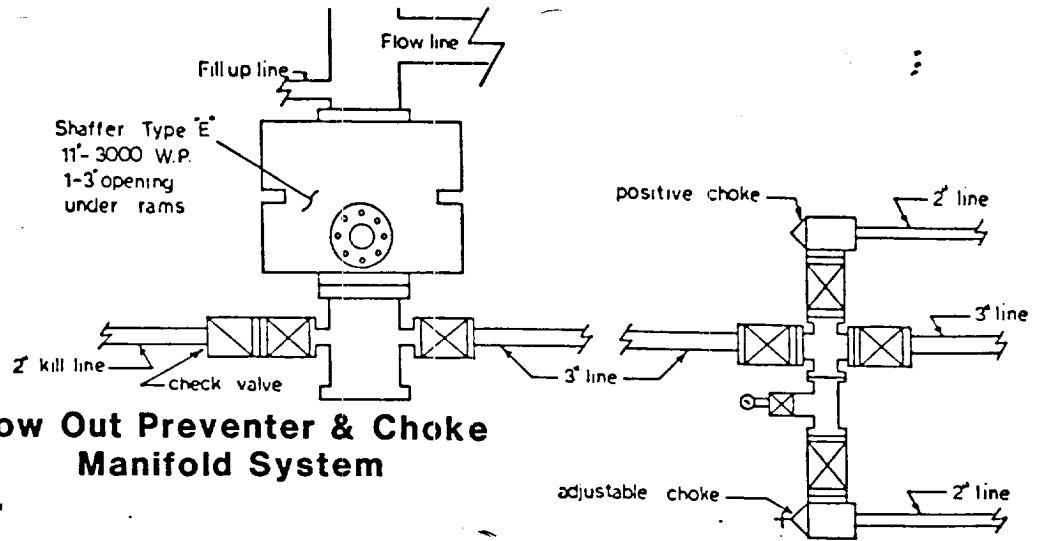
Name  
*Michael R. Burt*  
Position  
**Sr. Drilling Engineer**  
Company  
**Santa Fe Energy Company**  
Date  
**November 5, 1985**

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.

Date Surveyed  
**11/01/85**  
Registered Professional Engineer and/or Land Surveyor  
*John W. West*

Certificate No. **JOHN W. WEST, 676**  
**RONALD J. EIDSON, 3239**

## Blow Out Preventer & Choke Manifold System



Well Site Lay Out

Exhibit B  
 Santa Fe Energy Co.  
 Lusk 20 Fed #1  
 Sec. 20, T-19-S,R-31-E  
 Eddy County, New Mexico

APPLICATION FOR DRILLING  
SANTA FE ENERGY COMPANY  
Lusk 20 Federal No. 1

In conjunction with form 9-331C, Application to Drill subject well, Santa Fe Energy Company submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geologic surface formation is Rustler.
2. The estimated tops of geologic markers are as follows:

Rustler Anhydrite	490
Salado Salt	640
Yates	2132
TD	2300

3. The estimated depth at which water, oil, or gas formations are expected to be encountered:

Water	Water is not expected to be encountered.
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Oil or Gas	Yates 2132 - TD
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4. Proposed casing program: See Form 9-331C and Exhibit A.
5. Pressure control Equipment: See Form 9-331C and Exhibit B.
6. Drilling Fluid Program: See Exhibit C.
7. Auxilliary Equipment: See Exhibit D.
8. Testing, Logging and Coring Programs:

Core:

Yates 2132 - 2192

Logging:

Logging from 1300' - TD:  
Dual Laterolog with Gamma Ray  
Neutron-Density with Gamma Ray  
Computer Process Log over selected intervals

Logging from surface to TD:  
Neutron with Gamma Ray

