

N.M. OIL & GAS COMMISSION
P.O. BOX 1989
ALBUQUERQUE, NEW MEXICO 87103
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN ☐ ORIGINAL
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

3. LEASE DESIGNATION AND SERIAL NO.

NM-77057

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

White Swan "9" Federal

9. WELL NO.

5

10. FIELD AND POOL, OR WILDCAT

Livingston Ridge, E. (Dela

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

Sec. 9, T-22S, R-32E

12. COUNTY OR PARISH | 13. STATE

Lea

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 ☐

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Santa Fe Energy Operating Partners, L.P.

3. ADDRESS OF OPERATOR

550 W. Texas, Suite 1330, Midland, Texas 79701

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

At surface

(G), 1980' FNL and 1980' FEL, Sec. 9, T-22S, R-32E

At proposed prod. zone

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

12 miles Southeast of Halfway Bar, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if any)

1980'

16. NO. OF ACRES IN LEASE

540

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1320'

19. PROPOSED DEPTH

8800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3793' GR

22. APPROX. DATE WORK WILL START*

October 31, 1993

23.

PROPOSED CASING AND CEMENTING PROGRAM

Secretary's Polish

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0	600'	600 sx to circulate
12-1/4"	8-5/8"	32.0	4500'	2300 sx to circulate
7-7/8"	5-1/2"	15.5 & 17.0	8800'	To tie back to 4500'

We propose to drill to a depth sufficient to test the Delaware formation for oil. If productive, 5-1/2" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal Regulations. Specific programs as per Onshore Oil and Gas Order No. 1 are outlined in the following attachments:

Drilling Program

- Exhibit A - Operations Plan
- Exhibit B - BOP and Choke
- Exhibit C - Drilling Fluid Program
- Exhibit D - Auxiliary Equipment
- Exhibit E - Topo Map of Location

- Exhibit F - Plat Showing Wells
- Exhibit G - Well Site Layout
- Surface Use and Operations Plan
- H₂S Drilling Operations

OPER. OGRID NO. 020290

PROPERTY NO. 10005

BOOK CODE 39366

EXP. DATE 2-17-94

APPROVAL NO. 30-025-32420

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 Danell Roberts TITLE Sr. Drilling Engineer DATE 9/18/93

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY H. W. Dixon TITLE (Sealing) DATE FEB 10 1994

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

*See Instructions On Reverse Side

BLM, BUREAU OF LAND MANAGEMENT
HOOVER, ILL. 62201-2220
UNITED STATES

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-77057

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
White Swan 9 Federal #5

9. API Well No.
Not yet assigned

10. Field and Pool, or Exploratory Area
Livingston Ridge, E. (Delta)

11. County or Parish, State
Lea Co., NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Santa Fe Energy Operating Partners, L.P.

3. Address and Telephone No.
550 W. Texas, Suite 1330, Midland, Texas 79701

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
(G), 2130' FNL and 1980' FEL, Sec. 9, T-22S, R-32E

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Move location
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The location for the above referenced well has been moved (per instructions from Kathleen Borovac w/ BLM). Attached is a new C-102 and Location Verification Map.

The new location is 2130' FNL and 1980' FEL, Sec. 9, T-22S, R-32E.

14. I hereby certify that the foregoing is true and correct.

Signed

Title

Sr. Production Clerk

Date

1/26/94

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See instruction on Reverse Side

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1880, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Artec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

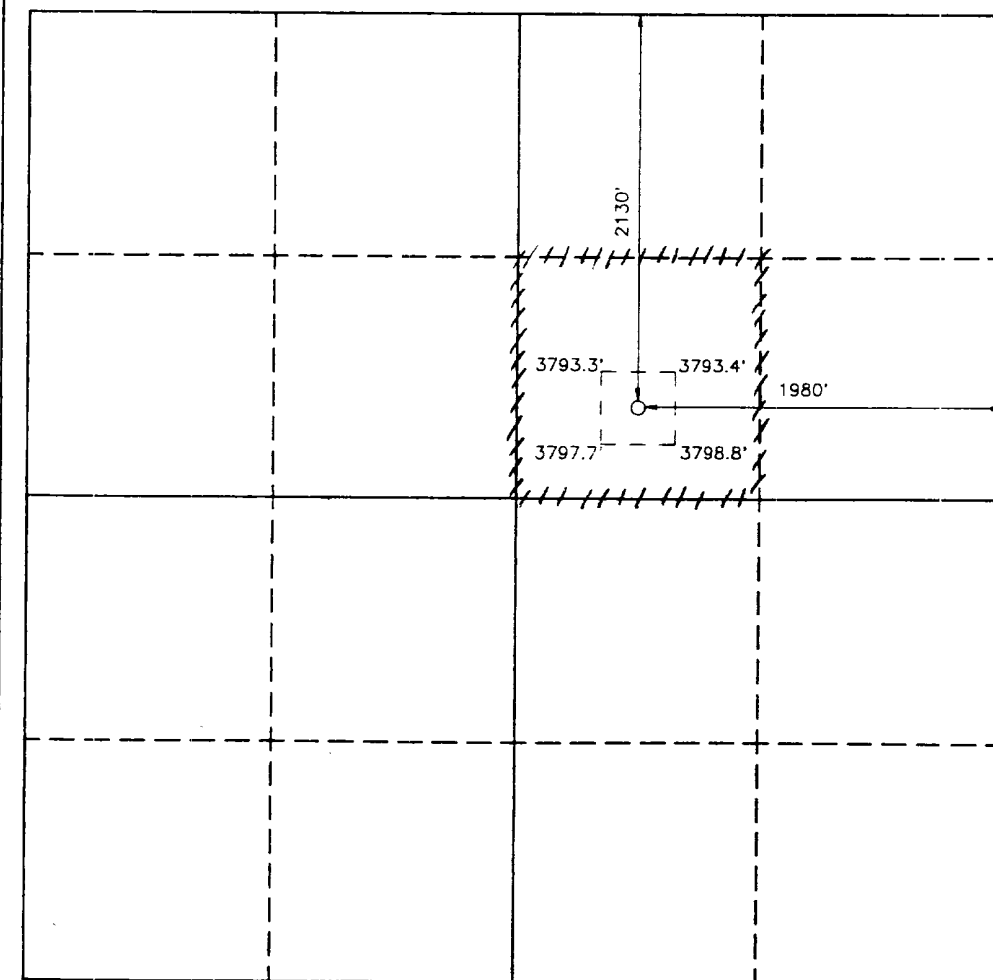
All Distances must be from the outer boundaries of the section

Operator SANTA FE ENERGY RESOURCES		Lease WHITE SWAN 9 FEDERAL		Well No. 5
Unit Letter G	Section 9	Township 22 SOUTH	Range 32 EAST NMPM	County LEA
Actual Footage Location of Well: 2130 feet from the NORTH line and 1980 feet from the EAST line				
Ground Level Elev. 3795.1'	Producing Formation Delaware	Pool Livingston Ridge, E. (Delaware)	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.) _____

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



OPERATOR CERTIFICATION

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

Signature
Terry McCullough
Printed Name
Terry McCullough

Position
Sr. Production Clerk
Company Santa Fe Energy
Operating Partners, L.P.
Date
January 26, 1994

SURVEYOR CERTIFICATION

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.

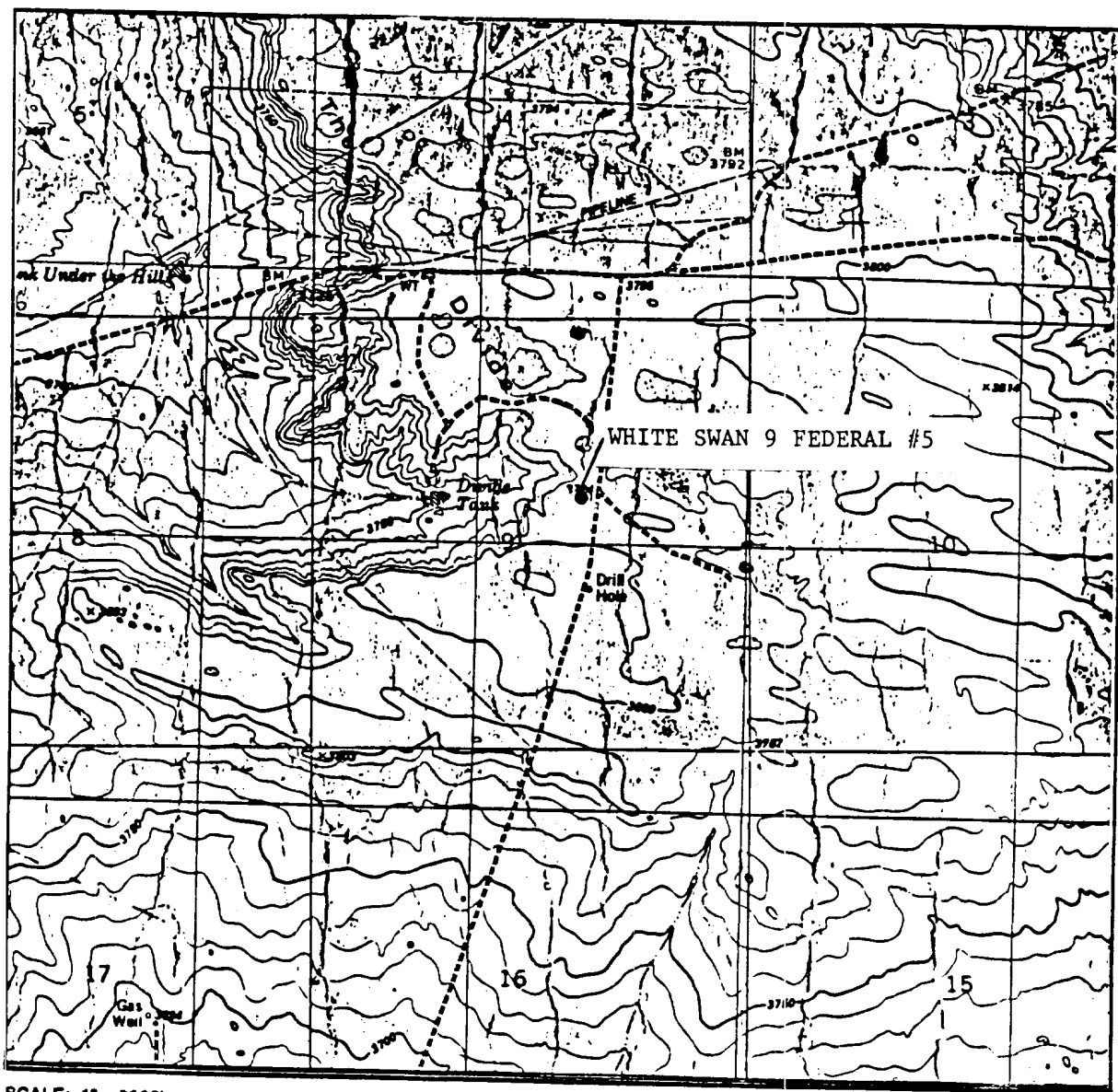
Date Surveyed
NOVEMBER 10, 1993

Signature & Seal of
Professional Surveyor
GARRETT JONES

NEW MEXICO
1977
Professional Surveyor
GARRETT JONES
Certification No. 878
JONES, GARRETT
PROFESOR JONES
8229
JONES, GARRETT
7977

93-11-2266

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL 10'

SEC. 9 TWP. 22S RGE. 32E

SURVEY N.M.P.M.

COUNTY LEA STATE N.M.

DESCRIPTION 2130' FNL & 1980' FEL

ELEVATION 3795.1'

OPERATOR SANTA FE ENERGY RESOURCES

LEASE WHITE SWAN 9 FEDERAL #5

U.S.G.S. TOPOGRAPHIC MAP

THE DIVIDE, N.M.

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

DRILLING PROGRAM
SANTA FE ENERGY OPERATING PARTNERS, L.P.
White Swan "9" Federal No. 5

In conjunction with Form 3160-3, Application to Drill the subject well, Santa Fe Energy Operating Partners, L.P., submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 10.

1. **Geologic Name of Surface Formation:** Alluvium

2. **Estimated Tops of Significant Geologic Markers:**

Rustler Anhydrite	875'
Base of Salt	4450'
Delaware Lime	4775'
Delaware Sand	4850'
Cherry Canyon	5800'
Brushy Canyon	7000'
Bone Spring	8720'
Total Depth	8800'

3. **The estimated depths at which water, oil, or gas formations are expected:**

Water	None expected in area
Brine	Salt Section @ $\pm 3300'$
Oil	Delaware @ 7200'-8000'

4. **Proposed Casing Program:** See Form 3160-3 and Exhibit A.

5. **Pressure Control Equipment:** See Exhibit B.

6. **Drilling Fluid Program:** See Exhibit C.

7. **Auxiliary Equipment:** A mud logging unit will be utilized to monitor penetration rate and hydrocarbon shows while drilling below the intermediate casing at 4500'.

8. **Testing, Logging and Coring Program:**

Drill Stem Tests: (all DST's to be justified on the basis of a valid show of oil or gas):

No Drill Stem Tests Planned.

DRILLING PROGRAM

White Swan "9" Federal No. 5

Page 2

Logging:

Dual Laterolog w/MSFL and Gamma Ray	4500'- 3800'
Compensated Neutron/Litho-Density/Gamma Ray	4500'- 3800'
Compensated Neutron/Gamma Ray (thru csg)	Surface-4500'

Coring: \pm 25 Rotary Sidewall Cores taken at different intervals in Delaware.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature is 135 °F and the estimated bottom hole pressure is 3500 psi. It has been reported that some offset wells encountered brine water flows and associated H₂S from the Salt Section at around 3300'. Brine rates have been 200-300 barrels per hour and H₂S was measured at 60 ppm. Lost circulation has also been experienced while drilling the Salt Section at approximately 3800'. We have enclosed a Hydrogen Sulfide Drilling Operations Plan to address the potential situation.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is ~~October 31~~ ^{DECEMBER 5}, 1993. Once spudded, the drilling operation should be completed in approximately 18 days. If the well is productive, an additional 30 days will be required for completion and testing before permanent facilities are installed.

SANTA FE ENERGY OPERATING PARTNERS,L.P.
OPERATIONS PLAN
White Swan "9" Federal No. 5

1. Drill a 17 1/2" hole to approximately 600'.
2. Run 13 3/8" 48.0 ppf H-40 ST&C casing. Cement with 600 sx Class "C" cement containing 2% CaCl₂. Run centralizers on every other joint above the shoe. Apply thread lock to bottom two joints and guide shoe.
3. Wait on cement four hours prior to cutting off.
4. Nipple up a annular BOP system with a rotating head and test casing to 600 psi. WOC 18 hrs prior to drilling out. Rig up H₂S monitoring equipment prior to drilling out.
5. Drill a 12 1/4" hole to approximately 4500'.
6. Run 8 5/8" 32.0 ppf K-55 ST&C casing. Cement with 1800 sx Cl "C" Lite containing 12 pps salt and 1/4 pps celloflake followed by 500 sx Class "C" with 2% CaCl₂. Run guide shoe on bottom and float collar two joints of bottom. Centralize every other joint for bottom 400' of casing and place two centralizers in surface casing. Thread lock bottom 2 joints. (If lost circulation is very severe, two stage cementing utilizing a stage collar and external casing packer will be considered to enable us to circulate cement to the surface.)
7. Wait on cement for six hours prior to cutting off.
8. Nipple up and install a 3000 psi. Double Ram and Annular BOP system with choke manifold. WOC 18 hours prior to drilling out.
9. Test BOP system to 3000 psi. Test casing to 1500 psi.
10. Drill 7 7/8" hole to 8800'. Run logs.
11. Either run and cement 5 1/2" 15.50 & 17.0 ppf K-55 LT&C casing or plug and abandon as per BLM requirements.

Exhibit A
Santa Fe Energy Operating Partners,L.P.
White Swan "9" Federal No. 5
Section 9, T-22S, R-32E
Lea County, New Mexico

DDR/TJM:WS95

PROPOSED 3-M BOPE AND CHOKE ARRANGEMENT

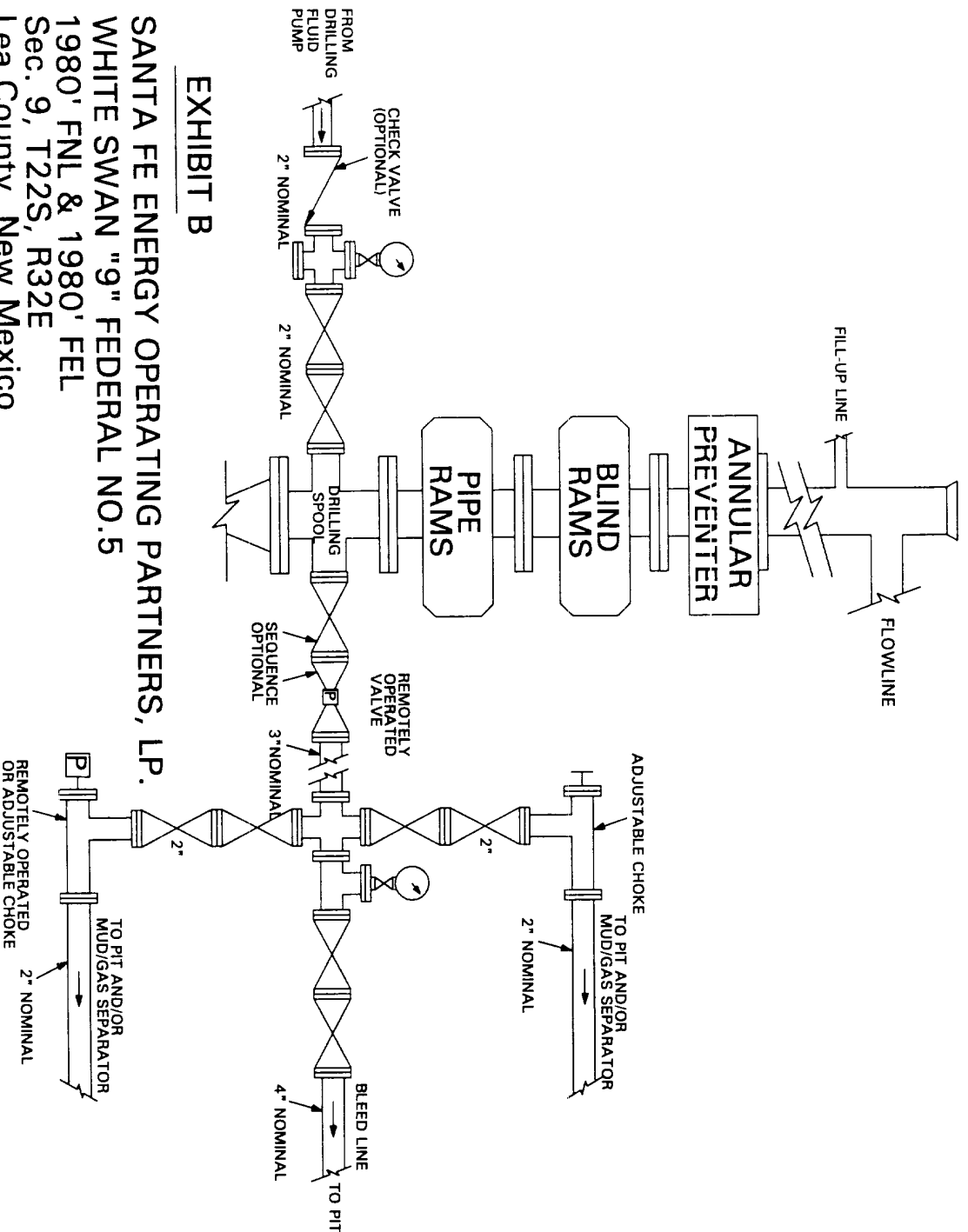


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS, LP.
 WHITE SWAN "9" FEDERAL NO.5
 1980' FNL & 1980' FEL
 Sec. 9, T22S, R32E
 Lea County, New Mexico