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

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
SANTA FE ENERGY RESOURCES	N.E. LOVING "34" FEDERAL	3

Unit Letter	Section	Township	Range	County
A	34	22 SOUTH	28 EAST NMPM	EDDY

Actual Footage Location of Well:
660 feet from the NORTH line and 660 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3070.9'	Delaware	Herradura Bend, East (Delaware)	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

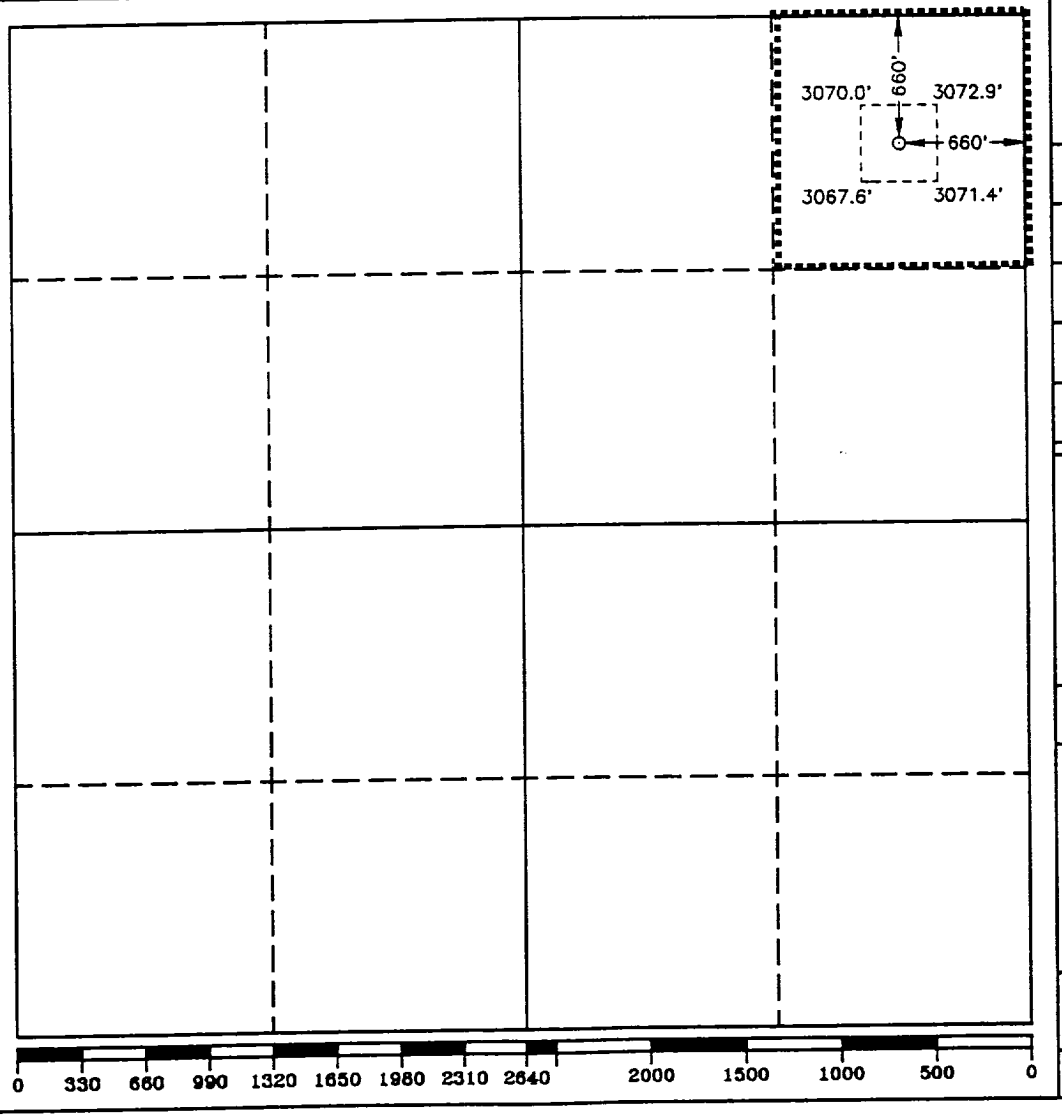
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the 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: Darrell Roberts
Printed Name: Darrell Roberts
Position: Sr. Drilling Engineer
Company: Santa Fe Energy Operating Partners, L.P.
Date: February 23, 1993

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: JANUARY 21, 1993
Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JONES 7977

93-11-0106

DRILLING PROGRAM
SANTA FE ENERGY OPERATING PARTNERS, L.P.
N.E. Loving "34" Federal No.3

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	540'
Top of Salt	1185'
Base of Salt	2680'
Delaware "Ramsey" Sand	2725'
Cherry Canyon	3460'
Brushy Canyon	4755'
Brushy Canyon "U"	5810'
Brushy Canyon "V"	5950'
Brushy Canyon "W"	5980'
Brushy Canyon "X"	6030'
Brushy Canyon "Y"	6110'
Brushy Canyon "Z"	6155'
Bone Spring	6205'
Total Depth	6300'

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

Water	None expected in area
Oil	B/C "U" Sand @ 5810'
Oil	B/C "X" Sand @ 6030'

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 from 2600' - T.D.

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):

   None Planned

Logging:

ARI w/MSFL and Gamma Ray	2650'- 6300'
Compensated Neutron/Litho-Density/Gamma Ray	2650'- 6300'
Compensated Neutron/Gamma Ray (thru csg)	Surface- 400'

Coring: No conventional cores are planned.

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

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature is 120 °F and the estimated bottom hole pressure is 2400 psi. No Hydrogen Sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major lost circulation zones have been reported in the offsetting wells.

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 April 1, 1993. Once spudded, the drilling operation should be completed in approximately 10 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
N.E. Loving "34" Federal No.3

1. Drill a 12 1/4" hole to approximately 400'.
2. Run 8 5/8" 24.0 ppf K-55 ST&C casing. Cement with 400 sx Class "C" cement containing 2% $CaCl_2$. 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 and install a 3000 psi. Double Ram and Annular BOP system with choke manifold.
5. Test BOP system to 3000 psi. Test casing to 600 psi. Wait on cement 12 hrs. prior to drilling out.
6. Drill a 7 7/8" hole to approximately 6300'. Log the open hole section.
7. Either run and cement 5 1/2" 15.50 ppf K-55 LT&C casing or plug and abandon as per BLM requirements.

Exhibit A
Santa Fe Energy Operating Partners,L.P.
N.E. Loving "34" Federal No.3
Section 34,T-22S,R-28E
Eddy County , New Mexico

NELVNG34.PMT

PROPOSED 3-M BOPE AND CHOKE ARRANGEMENT

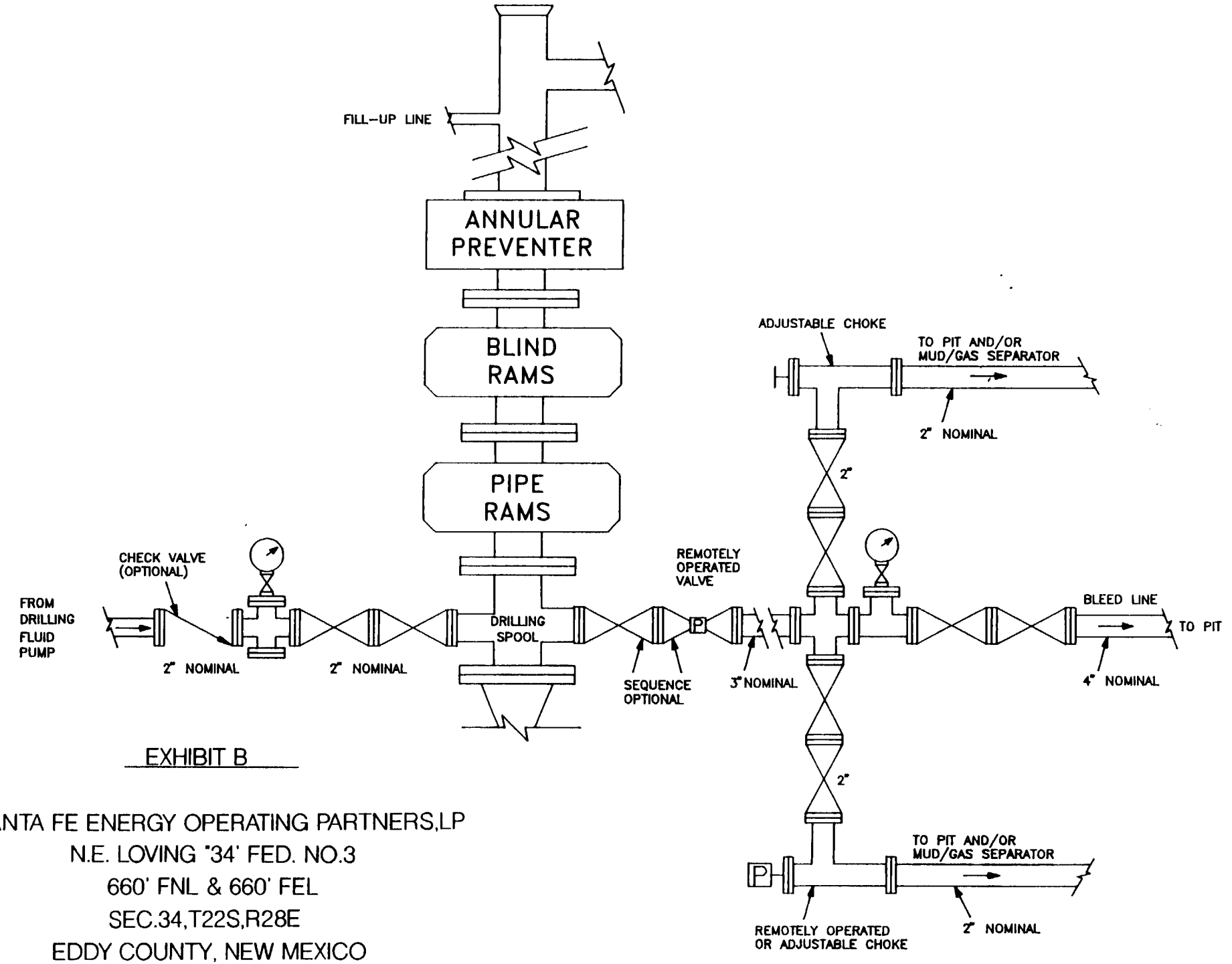


EXHIBIT B

SANTA FE ENERGY OPERATING PARTNERS,LP
N.E. LOVING "34" FED. NO.3
660' FNL & 660' FEL
SEC.34,T22S,R28E
EDDY COUNTY, NEW MEXICO

PROPOSED DRILLING FLUID PROGRAM

0 - 400'

Spud mud consisting of fresh water gel flocculated with Lime. Use ground paper for seepage control and to sweep the hole. MW-8.5 ppg and Vis-40.

400-5500'

Drill out with brine water circulating the reserve pit. Utilize ground paper mixed in prehydrated fresh gel to sweep the hole. Utilize lime to maintain pH of 8-9. MW-10.0 ppg and Vis-28.

5500-6300'

Mud up with Starch in the existing Brine to control the WL to 15-20 and a viscosity of 28-32 sec/qt. MW-10.0 ppg.

Exhibit C
Santa Fe Energy Operating Partners,L.P.
N.E. Loving "34" Fed. No.3
Section 34,T-22S,R-28E
Eddy County, New Mexico

NELVNG34.PMT

AUXILIARY EQUIPMENT

DRAWWORKS	BDW 650M 650 HP, with Parmac Hydromatic brake
ENGINES	Two Caterpillar D-353 diesels rated at 425 HP each
ROTARY	Ideco 23", 300 ton capacity
MAST/SUB	Ideal 132',550,000 lb rated static hook load with 10 line Wagner 15' high substructure
TRAVELLING EQUIPMENT	Gardner-Denver,300 ton,5 sheave w/ BJ 250 ton hook. Brewster Model 7 SX 300 ton swivel.
PUMPS	Continental-EMSCO DC-700 and DB-550, 5 1/2 X 16" Duplex, Compound driven.
PIT SYSTEM	1-Shale Pit 6X7X35',1-Settling Pit 6X7X38', 1-Suction Pit 6X7X34' w/ 5 mud agitators. Two centrifugal mud mixing pumps and a Double Screen Shale Shaker.
LIGHT PLANT	Two CAT 3306 diesel electric sets 180 KW prime power.
BOP EQUIP	13 5/8" 5000 psi WP double ram and 13 5/8" 5000 psi WP Shaffer Annular Preventer. Choke manifold rated at 5000 psi. Valvcon 5-station 80 gallon closing unit.

Exhibit D
Santa Fe Energy Operating Partners,L.P.
N.E. Loving "34" Federal No.3
Section 34, T-22S,R-28E
Eddy County, New Mexico

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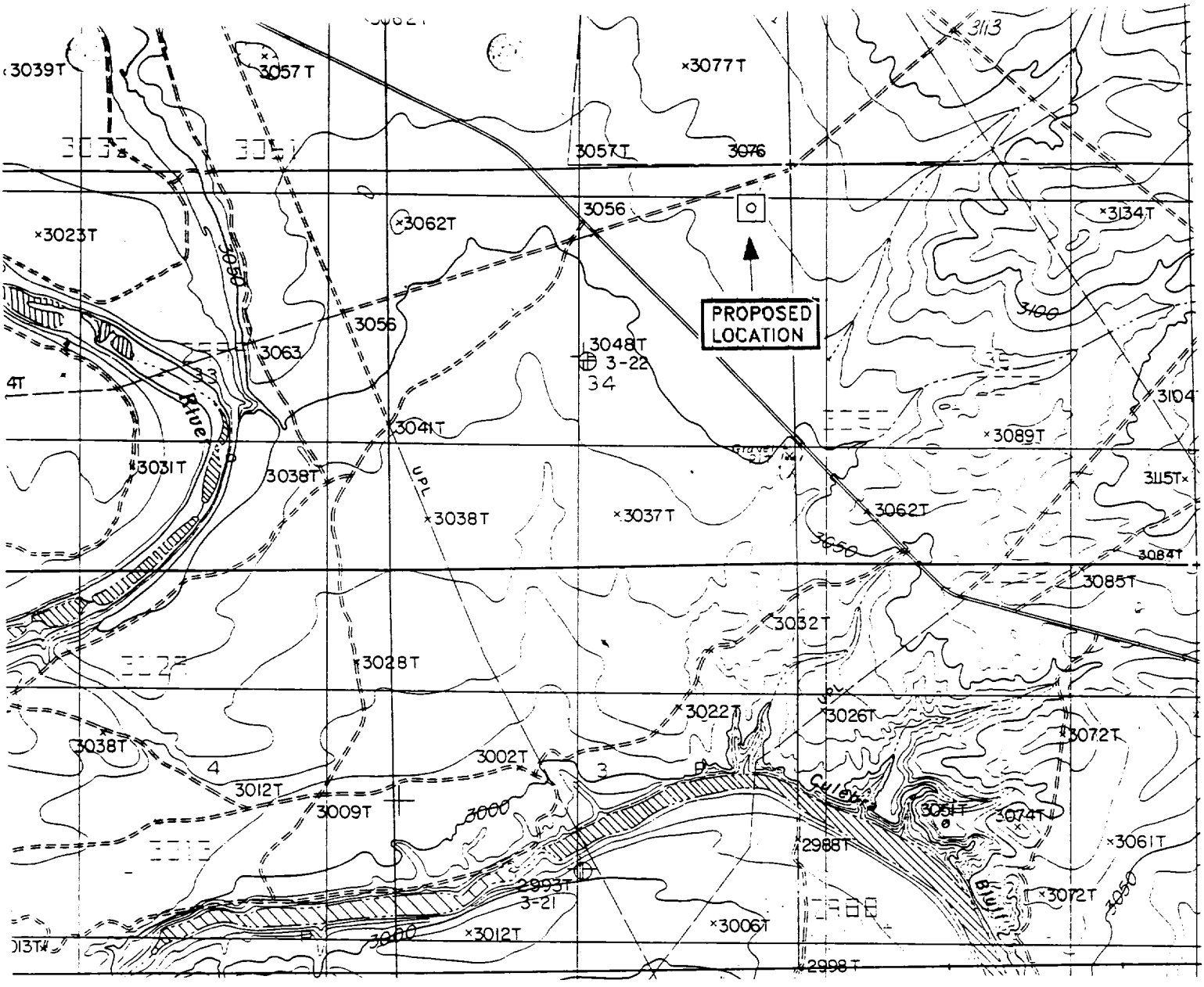


EXHIBIT E

SANTA FE ENERGY OPERATING PARTNERS,LP

N.E. LOVING '34' FED. NO.3

660' FNL & 660' FEL

SEC.34,T22S,R28E

EDDY COUNTY, NEW MEXICO

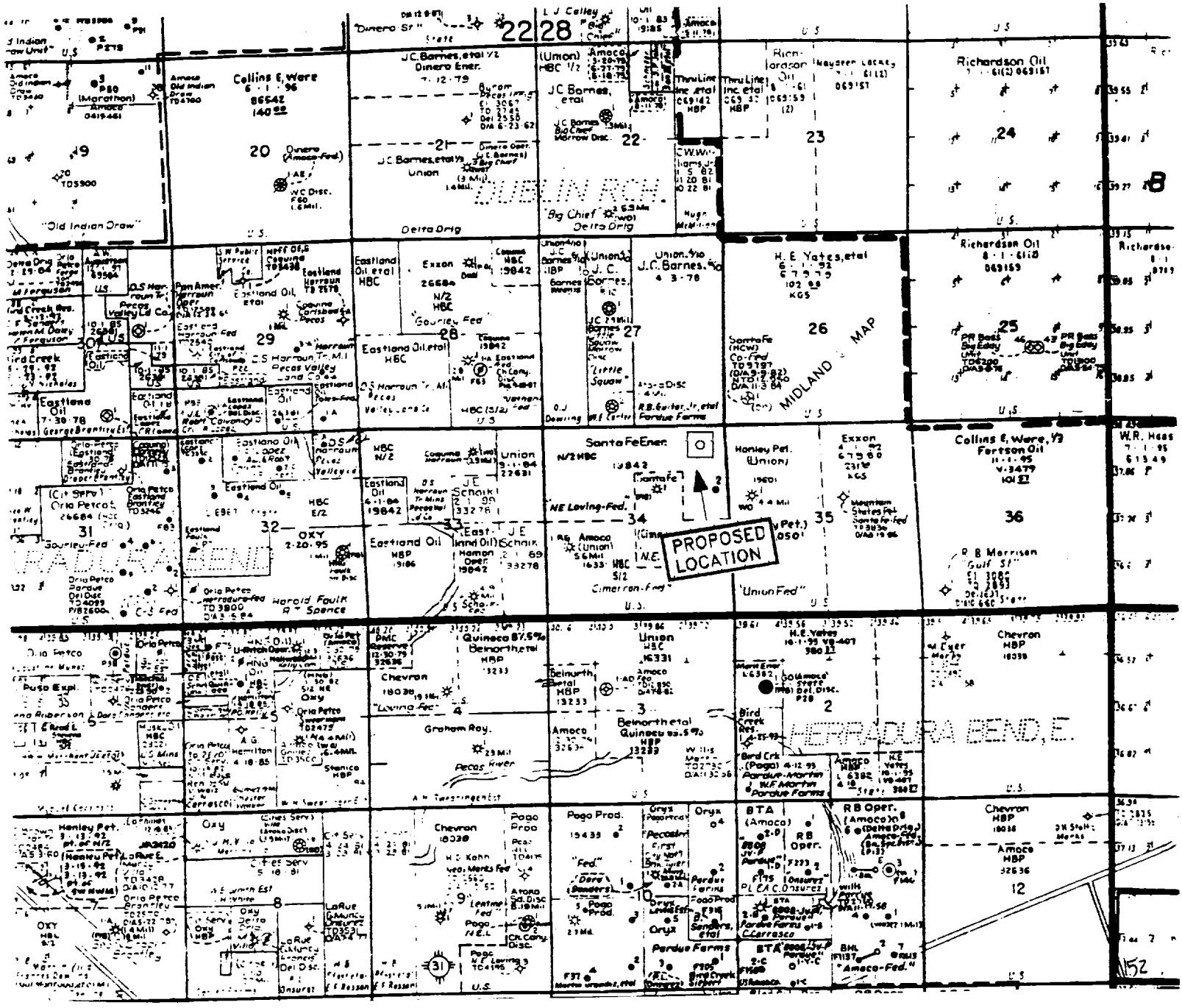


EXHIBIT F

SANTA FE ENERGY OPERATING PARTNERS,LP

N.E. LOVING "34' FED. NO.3

660' FNL & 660' FEL

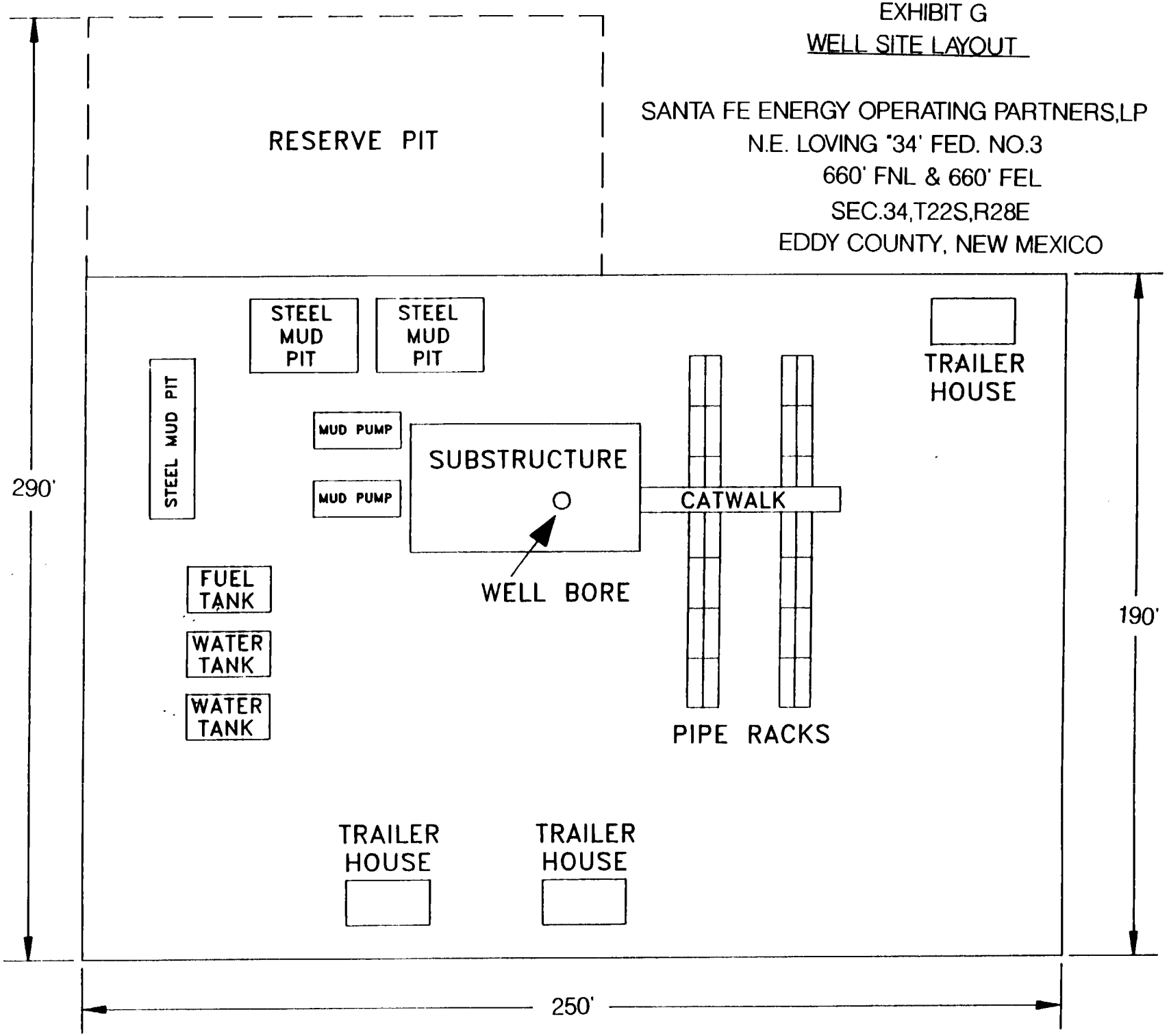
SEC.34,T22S,R28E

EDDY COUNTY, NEW MEXICO

EXHIBIT G

WELL SITE LAYOUT

SANTA FE ENERGY OPERATING PARTNERS,LP
N.E. LOVING "34' FED. NO.3
660' FNL & 660' FEL
SEC.34,T22S,R28E
EDDY COUNTY, NEW MEXICO



MULTI-POINT SURFACE USE AND OPERATIONS PLAN
SANTA FE ENERGY OPERATING PARTNERS,L.P.
N.E. Loving "34" Federal No.3
660' FNL & 660' FEL
Section 34, T-22S, R-28E
Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed by rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS.

   A. Exhibit E is a 15 minute topographic map which shows location of the proposed wellsite and roads in the vicinity. The proposed location is situated approximately 6 miles east of Otis, New Mexico.

   DIRECTIONS:

   1. From the intersection of Hwy 285 & Hwy 31 (3 miles south of Otis), travel east on Hwy 31 for 5 miles.

   2. Turn north on Refinery Road and go 3.6 miles northwest, turn right off of pavement onto lease road and go 4/10 miles to location on southside of lease road.

2. PLANNED ACCESS ROAD.

   A 14' wide access road will extend from an existing lease road 100' north of the proposed well.

3. LOCATION OF EXISTING WELLS.

   A. The well Locations in the vicinity of the proposed well are shown Exhibits E & F.

4. LOCATION OF EXISTING AND/ OR PROPOSED FACILITIES.

   A. There is one existing producing gas wells on this lease at this time.

   B. ~~In~~ the event the well is productive, the necessary production equipment will be installed on the drilling pad. If the well is productive of oil, a gas or diesel self-contained unit will be used to the necessary power.

5. LOCATION AND TYPE OF WATER SUPPLY

   A. It is planned to drill the well with both fresh water and brine water systems. Both types of waters will be hauled to the location by truck over existing roads. Both types will be obtained from commercial sources.

6. SOURCES OF CONSTRUCTION MATERIALS.

   A. Any caliche required for construction of the drilling pad will be obtained from a pit located off the wellsite.

7. METHODS OF HANDLING WASTE DISPOSAL

   A. Drill cuttings will be disposed of in the reserve pits.

   B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

   C. Water produced during operations will be either placed in the reserve pits and allowed to evaporate or collected in tanks until hauled to an approved disposal system or a separate disposal application will be submitted to the BLM for appropriate approval.

   D. Oil produced during operations will be stored in tanks until sold.

   E. Human waste will be disposed of per current standards.

   F. Trash, waste paper, garbage, and junk will be collected in trash trailers and disposed of in an approved waste facility such as a land fill. The trash trailers will contain all of the material to prevent scattering by the wind.

   G. All debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES.

   None required

9. WELLSITE LAYOUT

   A. Exhibit G shows the dimensions of the well pad and reserve pits, and the location of major rig components.

   B. The ground surface of the location is located among several several mesquite bushes on a rolling plain. The location will constructed by leveling the necessary area and covering the sand with at least six inches of compacted caliche.

   C. The reserve pit will be plastic lined.

   D. A 400' X 400' work area which will contain the pad and pit area has been staked and flagged.

10. PLAN FOR RESTORATION OF THE SURFACE.

   A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleared of all trash and junk, to leave the wellsite in as aesthetically pleasing a condition as possible.

B. Unguarded pits, if any, containing fluid will be fenced until they have been filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and levelled within 300 days after abandonment.

11. TOPOGRAPHY

A. The wellsite and access route are located in a relatively flat area.

B. The top soil at the wellsite is sandy.

C. The vegetation cover at the wellsite is moderately sparse, with prairie grasses, some mesquite bushes, and shinnery oak.

D. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.

E. There are no ponds, lakes, streams, or rivers within one mile of the wellsite.

F. There is no evidence of any archaeological, historical, or cultural sites in the vicinity of the location.

12. OPERATOR'S REPRESENTATIVES.

A. The field representatives responsible for assuring compliance with the approved surface use plan are:

Michael R. Burton
Division Operations Manager
Santa Fe Energy Operating
Partners, L.P.
550 W. Texas, Suite 1330
Midland, Texas 79701
915-686-6616 - office
915-699-1260 - home
915-559-6842 - cellular

Darrell Roberts
Senior Drilling Engineer
Santa Fe Energy Operating
Partners, L.P.
550 W. Texas, Suite 1330
Midland, Texas 79701
915-686-6614 - office
915-684-4130 - home
915-553-1214 - cellular

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Santa Fe Energy Operating Partners, L.P., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

SIGNED this 23rd day of February, 1993. Darrell Roberts
Darrell Roberts, Senior Drilling Engineer