

OPER. OGRID NO. 202305
PROPERTY NO. 17129
POOL CODE 96229
EFF. DATE 8/29/95
API NO. 30-025-33076ATE*
ions on
e)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995UNIT
DEPARTMENT
BUREAU OF
APPLICATION FOR PI

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Santa Fe Energy Resources, Inc.

3. ADDRESS AND TELEPHONE NO.

550 W. Texas, Suite 1330; Midland, Texas 79701 (915) 682-6373

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

(L) 2170' FSL & 800' FWL

At proposed prod. zone

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

24 miles east of Loving, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

800'

16. NO. OF ACRES IN LEASE

560

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.

1180'

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3511 GR

22. APPROX. DATE WORK WILL START*

July 25, 1995

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	H-40 13 3/8"	48.0	600'	600 sx to circulate
11"	K-55 8 5/8"	32.0	4600'	1300 sx to circulate
7 7/8"	K-55 5 1/2"	17.0	8700'	tie back to 4400'

We propose to drill to a depth sufficient to test the Bone Spring formation for oil. If productive, 5 1/2" casing will be run to 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 Manifold
Exhibit C - Drilling Fluid Program
Exhibit D - Auxiliary Equipment

Exhibit E - Topo Map at Location
Exhibit F - Map Showing Existing Wells
Exhibit F (A) - Plat of Location
Exhibit G - Well Site Layout
Surface Use and Operations Plan

Santa Fe Energy Resources, Inc. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described above.

Bond Coverage: Blanket Bond

BLM Bond File No.: MT 0750

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

James P. PhilpottTITLE Agent for Santa Fe Energy

DATE

6-29-95

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill or deepen an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling operations on an oil and gas lease.

DISTRICT I
P. O. Box 1980
Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals, and Natural Resources Department

Form C-102
Revised 02-10-94
Instructions on back

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

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

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

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

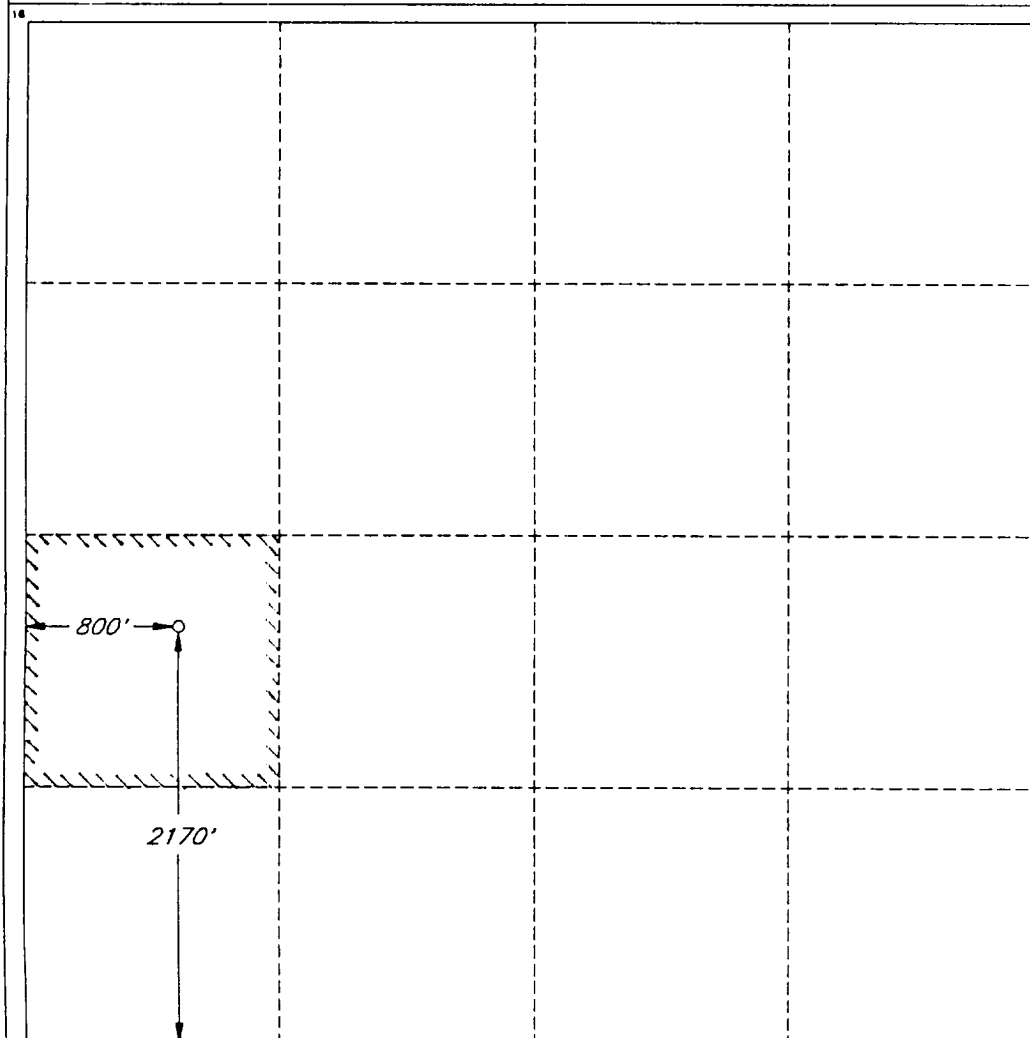
☐ AMENDED REPORT

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 3D-025-33076		2 Pool Code 96196030/96229		3 Pool Name Mesa Verde Delaware/Bone Spring					
4 Property Code 17129		5 Property Name MESA VERDE '6' FEDERAL						6 Well Number 12	
7 OGRID No. 20305		8 Operator Name SANTA FE ENERGY RESOURCES, INC.						9 Elevation 3511'	
10 SURFACE LOCATION									
UL or lot no. L	Section 6	Township 24 SOUTH	Range 32 EAST, N.M.P.M.	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County LEA
"BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE"									
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 40		13 Joint or Infill		14 Consolidation Code		15 Order No.			

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Signature
James P. Phil Stinson
Printed Name
James P. "Phil" Stinson
Title
Agent for Santa Fe Energy
Date
6-29-95

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 belief.

Date of Survey
JUNE 22, 1995

Signature
V. Lynn Bezner
Professional Surveyor
V. LYNN BEZNER
NO. 7920
Certificate No. and State
V. L. BEZNER R.P.S. #7920
JOB #30080 / 22 NW / c/s

New Mexico Oil Conservation Division
C-102 Instructions

IF THIS IS AN AMENDED REPORT, CHECK THE BOX LABELED
"AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the appropriate OCD district office. Independent subdivision surveys will not be acceptable.

16. This grid represents a standard section. You may superimpose a non-standard section over this grid. Outline the dedicated acreage and the separate leases within that dedicated acreage. Show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. (Note: A legal location is determined from the perpendicular distance to the edge of the tract.) If this is a high angle or horizontal hole show that portion of the well bore that is open within this pool.

Show all lots, lot numbers, and their respective acreage.

If more than one lease has been dedicated to this completion, outline each one and identify the ownership as to both working interest and royalty.

17. The signature, printed name, and title of the person authorized to make this report, and the date this document was signed.
18. The Registered surveyors certification. This section does not have to be completed if this form has been previously accepted by the OCD and is being filed for a change of pool or dedicated acreage.

1. The OCD assigned API number for this well
2. The pool code for this (proposed) completion
3. The pool name for this (proposed) completion
4. The property code for this (proposed) completion
5. The property name (well name) for this (proposed) completion
6. The well number for this (proposed) completion
7. Operator's OGRID number
8. The operator's name
9. The ground level elevation of this well
10. The surveyed surface location of this well measured from the section lines. NOTE: If the United States government survey designates a Lot Number for this location use that number in the "UL or lot no." box. Otherwise use the OCD unit letter.
11. Proposed bottom hole location. If this is a horizontal hole indicate the location of the end of the hole.
12. The calculated acreage dedicated to this completion to nearest hundredth of an acre
13. Put a Y if more than one completion will be sharing this same acreage or N if this is the only completion on this acreage
14. If more than one lease of different ownership has been dedicated to the well show the consolidation code from the following table:
 - C Communitization
 - U Unitization
 - F Forced pooling
 - O Other
 - P Consolidation pending

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION!

15. Write in the OCD order(s) approving a non-standard location, non-standard spacing, or directional or horizontal drilling

NOV 1963
OCD RECORDS
OFFICE

DRILLING PROGRAM
SANTA FE ENERGY RESOURCES, INC.
MESA VERDE "6" Fed. No. 12

In conjunction with Form 3160-3, Application For Permit to Drill the subject well, Santa Fe Energy Resources, Inc. submits the following ten items of pertinent information in accordance with Onshore Oil & Gas Order No. 1.

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

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

Rustler	930'
Delaware Lime	4600'
Bell Canyon	4580'
Cherry Canyon	5650'
Bone Spring	8500'
Total Depth	8700'

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

Water	None expected in area
Oil	Delaware @ 4600'
	Bone Spring @ 8500'

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 4600'.

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

Drill Stem Tests: None Planned.

Logging:

Dual Laterolog w/MSFL and Gamma Ray	4600'-8700'
Compensated Neutron/Litho-Density/Gamma Ray	4600'-8700'
Compensated Neutron/Gamma Ray (thru csg)	Surface-4600'

DRILLING PROGRAM

Mesa Verde "6" Fed. No. 12

Page 2

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

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature is 135° psi and the estimated bottom hole pressure is 3100 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 July 25, 1995. Once spudded the drilling operation should be completed in approximately 15 days. If the well is productive, an additional 30 days will be required for completion and testing before permanent facilities are installed.

EXHIBIT A
OPERATIONS PLAN
SANTA FE ENERGY RESOURCES, INC.
Mesa Verde "6" Federal No. 12
Section 6, T-24-S, R-32-E
Lea County, New Mexico

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 twelve hours prior to cutting off.
4. Nipple up an annular BOP system and test casing to 600 psi. WOC twenty-four (24) hours prior to drilling out.
5. Drill a 11" hole to approximately 4600'.
6. Run 8-5/8" 32.0 ppf K-55 ST&C casing. Cement with 1100 sx Cl "C" Lite containing 12 pps salt and 1/4 pps celloflake followed by 200 sx Class "C" with 2% CaCl₂. Run guide shoe on bottom and float collar two joints from bottom. Centralize every other joint for bottom 400' of casing and place two centralizers in surface casing. Thread lock bottom 2 joints.
7. Wait on cement for twelve hours prior to cutting off.
8. Nipple up and install a 3000 psi. Double Ram and Annular BOP system with choke manifold. WOC 24 hours prior to drilling out.
9. Test BOP system to 1500 psi with the rig pump. Test casing to 1500 psi.
10. Drill 7-7/8" hole to 8700'. Run logs. & (SJS)
11. Either run and cement 8700' of 5-1/2" 17.0 ppf K-55 LT&C [^] 5-1/2" 15.50 ppf K-55 LT&C casing or plug and abandon as per BLM requirements.

EXHIBIT B
SANTA FE ENERGY RESOURCES, INC.
 MESA VERDE "6" FED NO 12
 2170' FSL & 800' FWL
 SEC 6, T-24-S, R-32-E
 LEA COUNTY, NEW MEXICO

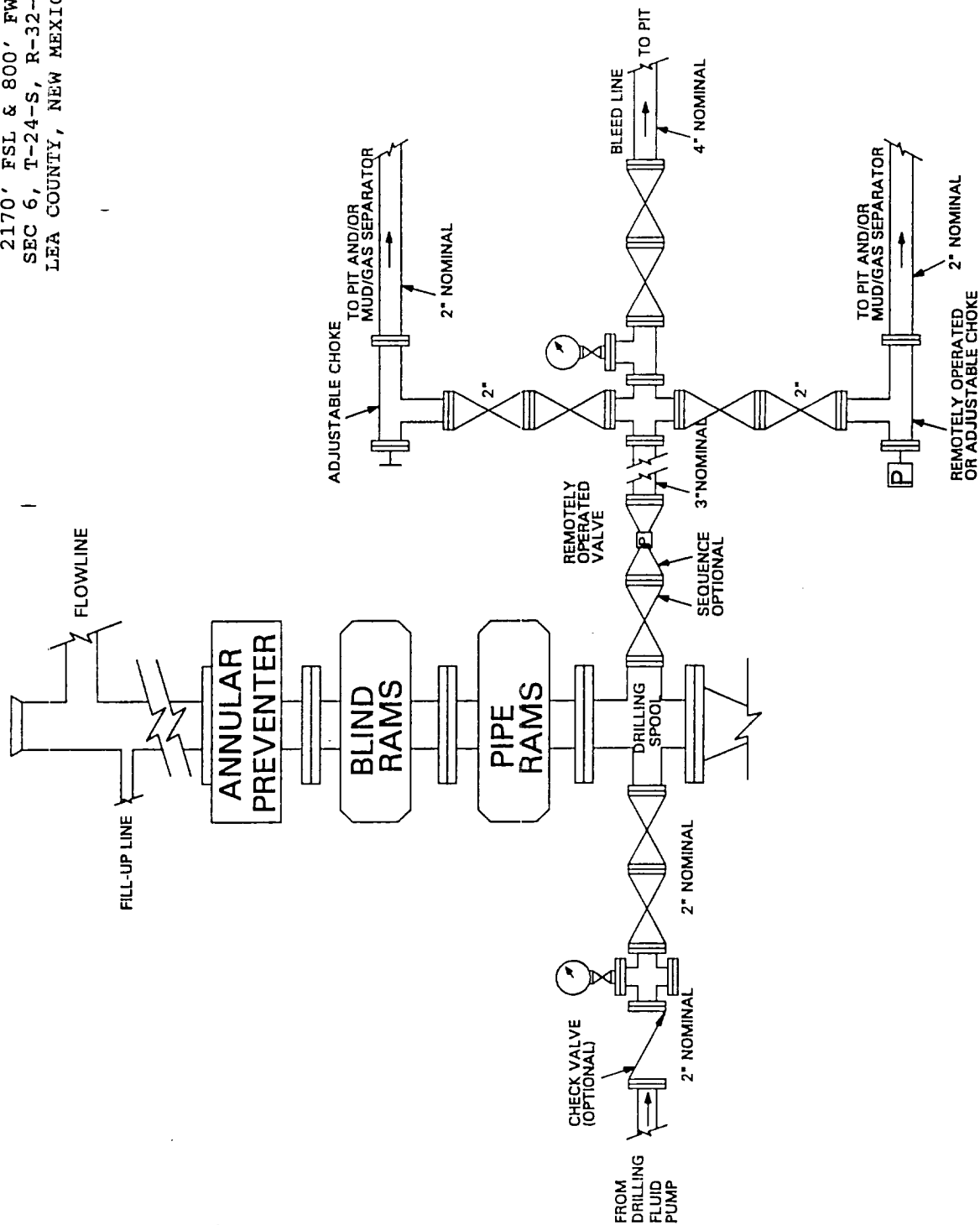


EXHIBIT C
DRILLING FLUID PROGRAM
SANTA FE ENERGY RESOURCES, INC.
Mesa Verde "6" FED NO. 12
Section 6, T-24-N, R-32-E
Lea County, New Mexico

0-600'

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, Vis-40.

600'-4600'

Drill out with brine water circulating the inner portion of the reserve pit. Utilize ground paper mixed in prehydrated fresh gel to sweep the hole. MW-10.0 ppg, Vis-28.

4600'-8700'

Drill out with cut brine (30,000 ppm chlorides minimum) circulating the outer portion of the reserve pit. Maintain pH at 8.5-9.5 with caustic and sweep the hole as necessary with ground paper. If it becomes necessary to mud up due to hole conditions, utilize a cut brine/Drispac system for 15-20 WL and a Vis of 30-32. MW-8.5/8.9 ppg.