

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-048573
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator POGO PRODUCNG (SAN JUAN) COMPANY		7. If Unit or CA Agreement, Name and No. N/A
3a. Address P. O. BOX 10340 MIDLAND, TX 79702-7340	3b. Phone No. (include area code) (432) 685-8143	8. Lease Name and Well No. ROPCO FEE FC 15 1 T
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 970' FSL & 1920' FEL At proposed prod. zone SAME		9. API Well No. 30-045-33375
14. Distance in miles and direction from nearest town or post office* 5 AIR MILES S OF FLORA VISTA POST OFFICE		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 694' (970' to CA)	16. No. of acres in lease 313.59	11. Sec., T. R. M. or Blk. and Survey or Area 0 15-29N-12W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 122' (DAKOTA)	19. Proposed Depth 2,200'	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,546' GL	22. Approximate date work will start* 11/01/2005	13. State NM
17. Spacing Unit dedicated to this well S2 316.6		
20. BLM/BIA Bond No. on file BLM NM2125		
23. Estimated duration 2 WEEKS		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 09/30/2005
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Title  
CONSULTANT  
PHONE: (505) 466-8120 FAX: (505) 466-9682

Approved by (Signature) 	Name (Printed/Typed)	Date 3/13/06
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Title  
AFM  
Office  
FTO

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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

NMOC



State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number <b>30-045-33375</b>	Pool Code <b>71629</b>	Pool Name <b>BASIN FRUITLAND COAL</b>
Property Code <b>301374</b>	Property Name <b>ROPCO FEE FC 15</b>	Well Number <b>1 T</b>
GRID No. <b>233194</b>	Operator Name <b>POGO PRODUCING (SAN JUAN) CO.</b>	Elevation <b>5546'</b>

Surface Location

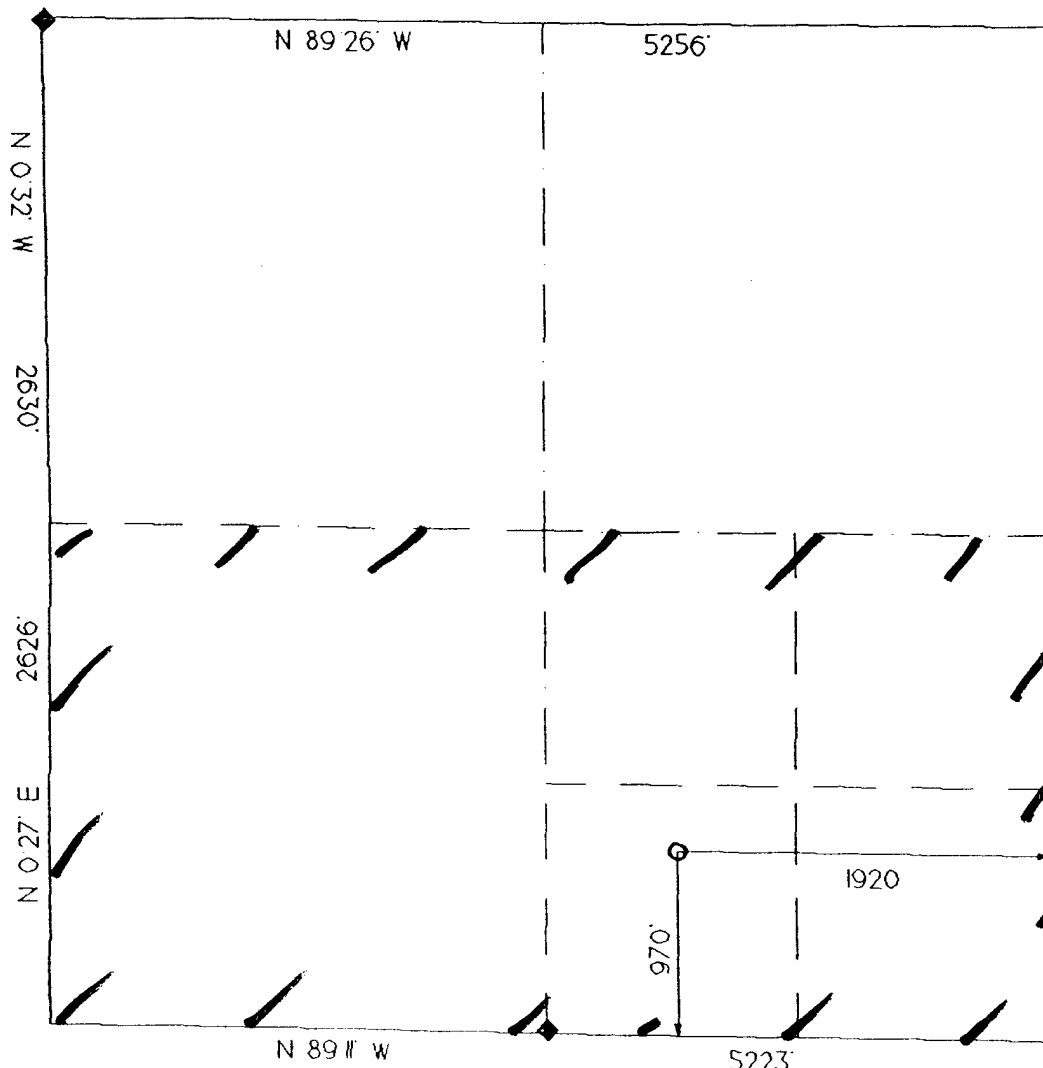
UL or Lot	Sec.	Twp.	Rge.	Lot Lth.	Feet from >	North/South	Feet from >	East/West	County
0	15	29 N.	12 W.	970'	SOUTH	1920'	EAST		SAN JUAN

Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Lth.	Feet from >	North/South	Feet from >	East/West	County

Dedication <b>316.60</b>	Joint ?	Consolidation <b>C</b>	Order No.
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NO ALLOWABLE WILL 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

*Brian Wood*

Printed Name

**BRIAN WOOD**

Title

**CONSULTANT**

Date

**SEPT. 30, 2005**

SURVEYOR CERTIFICATION

I hereby certify that the well location 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

10-4-02

Signature and Seal of Professional Surveyor



Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.	30-045-33375
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. NMNM-048573	
7. Lease Name or Unit Agreement Name ROPCO FEE FC 15	
8. Well Number	1 T
9. OGRID Number	149052
10. Pool name or Wildcat BASIN FRUITLAND COAL	

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5,546' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILLING Depth to Groundwater >75' Distance from nearest fresh water well >1000' Distance from nearest surface water >200'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume \_\_\_\_\_ bbls Construction Material \_\_\_\_\_

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: DRILLING PIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

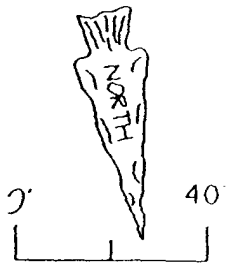
SIGNATURE Brian Wood TITLE CONSULTANT DATE 9-30-05

Type or print name BRIAN WOOD  
For State Use Only

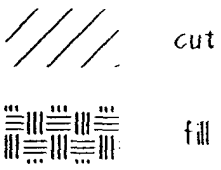
E-mail address: brian@permitswest.com Telephone No. (505)

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. III DATE MAR 13 2006  
Conditions of Approval (if any):

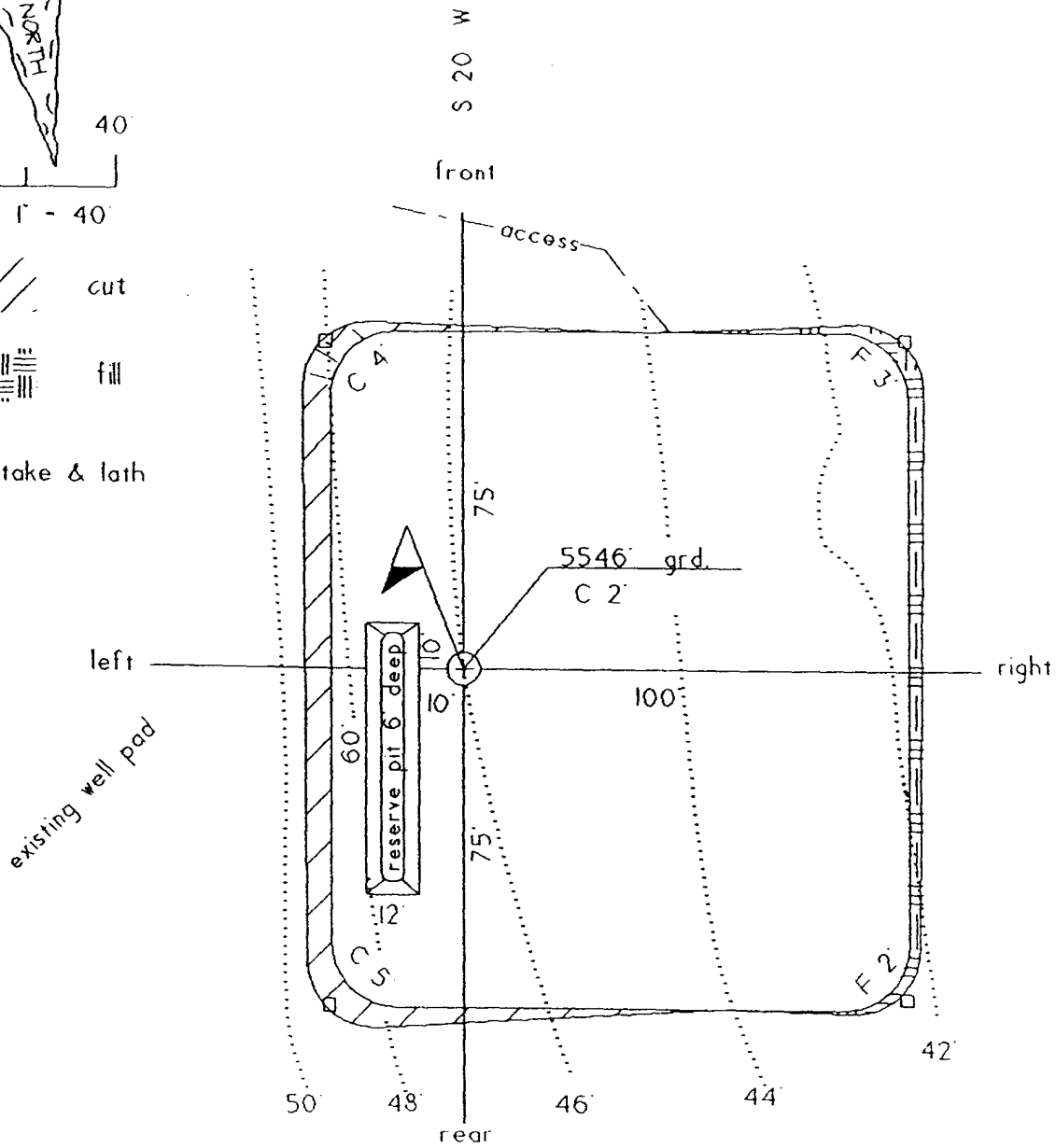
ROPCO FEE FC 15 # 1 T  
well pad & section



Scale 1" = 40'

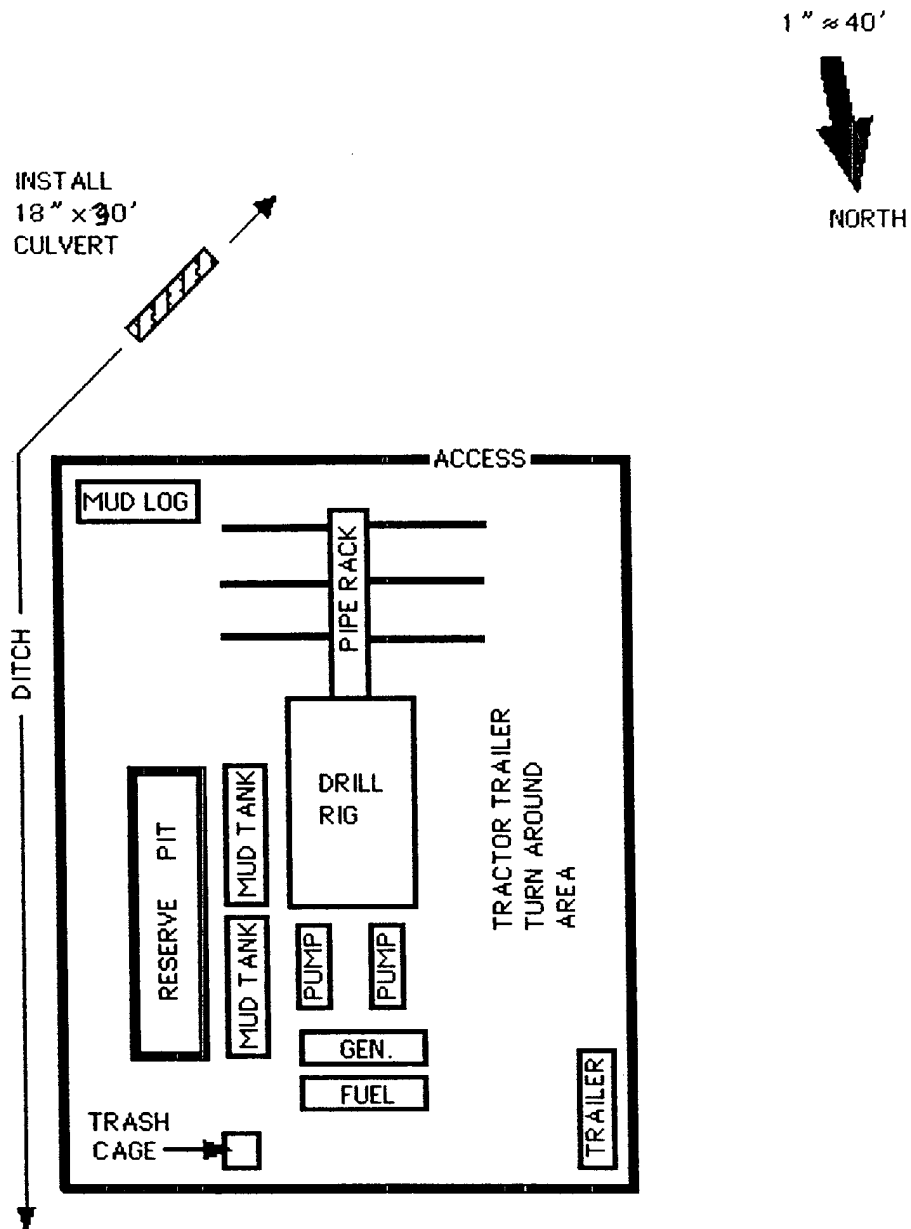


set stake & lath



Pogo Producing (San Juan) Company  
Ropco Fee FC 15 1 T  
970' FSL & 1920' FEL  
Sec. 15, T. 29 N., R. 12 W.  
San Juan County, New Mexico

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Pogo Producing (San Juan) Company  
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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento	0'	5'	+5,546'
Kirtland Shale	356'	361'	+5,190'
Fruitland Coal	1,346'	1,351'	+4,200'
Pictured Cliffs Sandstone	1,571'	1,576'	+3,975'
Lewis Shale	1,746'	1,751'	+3,800'
Total Depth (TD)	2,200'	2,205'	+3,346'

### 2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	Ojo Alamo	Fruitland
Pictured Cliffs	Fruitland	

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) Double ram or annular 2,000 psi system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1,000 psi.

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Blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2,000 psi. Maximum expected pressure is  $\approx 880$  psi.

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	K-55	New	120'
6-1/4"	4-1/2"	10.5	K-55	New	2,200'

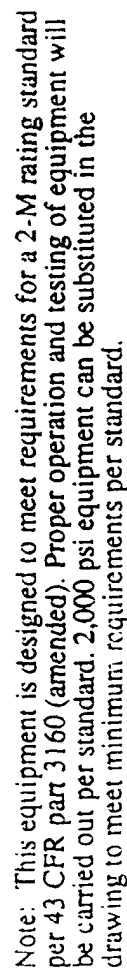
Surface casing will be cemented to surface with  $\approx 59$  cubic feet ( $\approx 50$  sacks) Class B + 2%  $\text{CaCl}_2$ . Volume is based on 100% excess, yield of 1.18 cubic feet per sack, and slurry weight of 15.6 pounds per gallon. W. O. C. = 12 hours. Pressure test surface casing to  $\approx 600$  psi for 30 minutes.

Production casing hole will be cleaned of rock chips by circulating  $\geq 150\%$  of hole volume with mud. Forty barrels of fresh water will next be circulated. Lead with  $\approx 393$  cubic feet ( $\approx 191$  sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with  $\approx 59$  cubic feet ( $\approx 50$  sacks) of Class B with 2%  $\text{CaCl}_2$  (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume = 452 cubic feet @ 100% excess and circulating to surface.

Production casing will have 4-1/2" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Six or seven centralizers will be spaced on every other joint starting above the shoe. Six or seven turbolizers will be placed on every other joint starting from the top of the well.

**Note:** 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary subs to fit all drill string in use will be available.





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Ropco Fee FC 15 1 T  
970' FSL & 1920' FEL  
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5. MUD PROGRAM

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.5 pounds per gallon.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned.

Spectral Density/Dual Spaced Neutron and Dual Induction/Guard with GR, SP, and Caliper and logs will be run from TD to at least the base of the surface casing.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be  $\approx 880$  psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take one week to drill the well and one week to complete the well. Drilling will be daylight only.

Surface Use Plan