

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

IN TRIPLICATE

FORM APPROVED
OMB No. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

2001 MAR 15 PM 1:13

5. Lease Serial No. I-149-IND-8463

6. If Indian, Allottee or Tribe Name
NAVAJO ALLOTTEE

7. If Unit or CA, Agreement, Name and No.
N/A

8. Well Name and Well No.
BLANCO 17659

1B

9. API Well No.
30-045-30603

10. Field and Pool or Exploratory
BLANCO MESA VERDE

11. SEC., T., R., M., or BLK. and Survey or Area
H
Sec. 1, Township 27N, Range 9W

12. County or Parish SAN JUAN
13. State NM

17. Spacing Unit dedicated to this well
319.70 E/2

20. BLM/BIA Bond No.
K02907914-F4072

23. Estimated duration
6 DAYS

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if location is on National Forest Systems Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator Certification.

6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Arthur D. Archibeque

TITLE

Eng. Assistant

NAME (Printed, Typed)

Arthur D. Archibeque

DATE

3/12/01

Approved by (Signature)

/s/ Joel Farrell

NAME (Printed, Typed)

TITLE

Office

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.

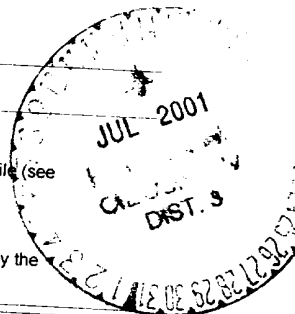
Conditions of approval, if any are attached.

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.

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

NMOCOD

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



JUL 11

K

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer CD, Artesia, NM 88211-0719

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

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2001 MAR 15 PM 1:43 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-30603		Pool Code 72319	Pool Name BLANCO MESAVERDE
Property Code 17659	Property Name BLANCO		Well Number 1B
OGRIID No. 131994	Operator Name FOUR STAR OIL & GAS COMPANY		Elevation 5869'

10 Surface Location

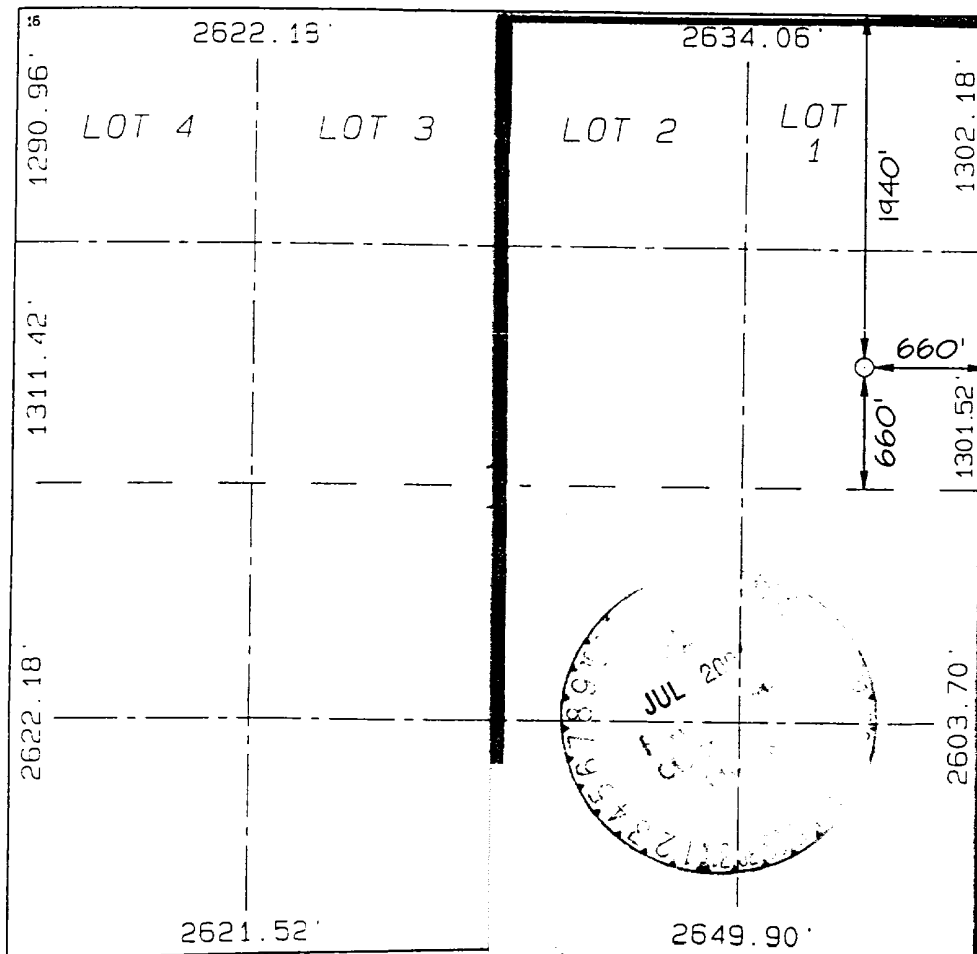
UL or lot no. H	Section 1	Township 27N	Range 9W	Lot Idn.	Feet from the 1940	North/South line NORTH	Feet from the 660	East/West line EAST	County SAN JUAN
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 319.7 E/2	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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



17 OPERATOR CERTIFICATION

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

Arthur D. Archibeque
Signature

Arthur D. Archibeque
Printed Name

Engineer Assistant
Title

12/28/2000
Date

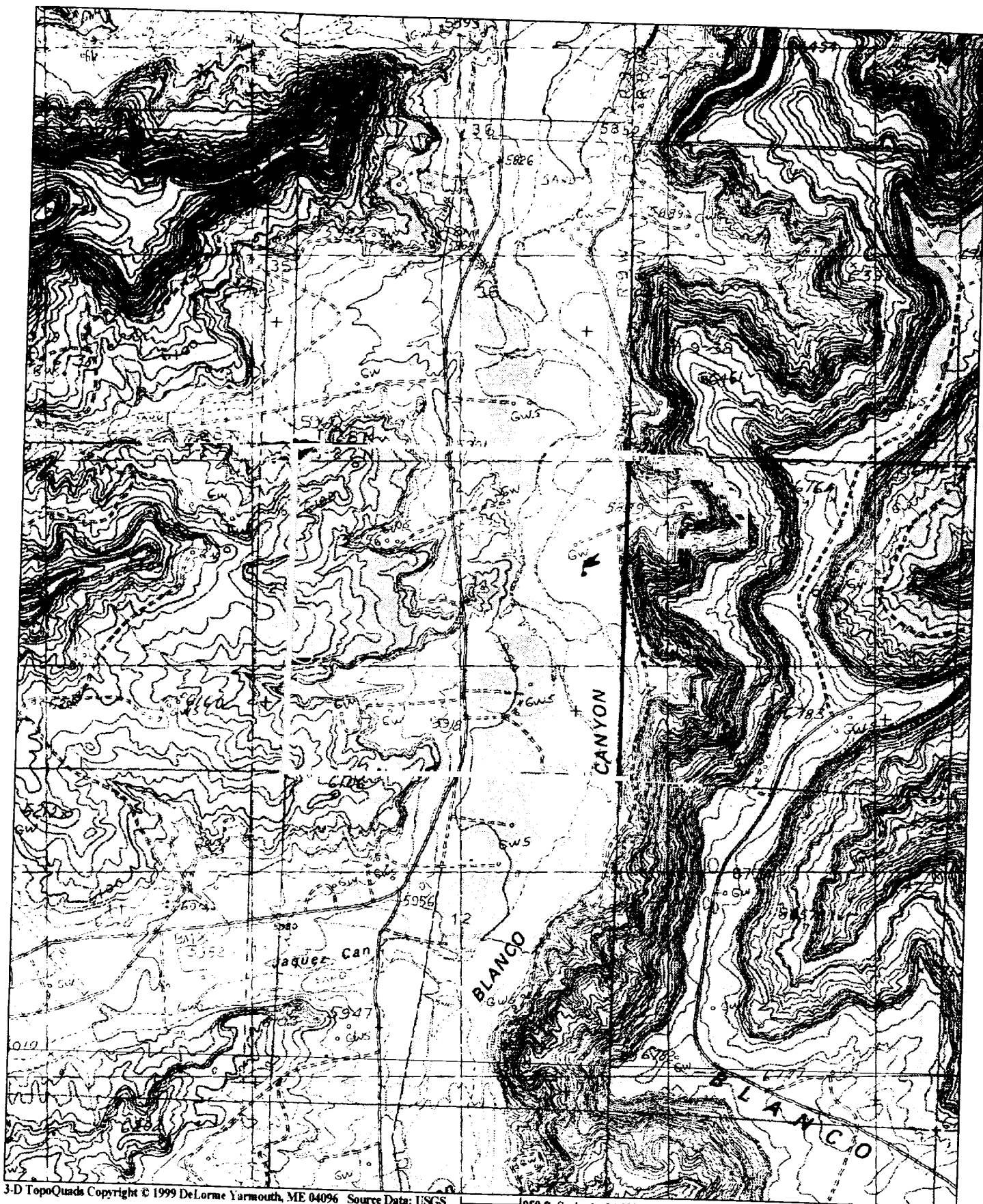
18 SURVEYOR CERTIFICATION

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.

DECEMBER 20, 2000
Date of Survey

NEALE C. EDWARDS
Signature and Seal of Professional Surveyor

6857
Certificate



DRILLING PROGRAM

OPERATOR: FOUR STAR OIL & GAS Co.
LEASE NAME: BLANCO 1-B
LOCATION: 1940' FNL- 660' FEL SEC. 1 27N-9W SAN JUAN COUNTY, NEW MEXICO

1. **ESTIMATED TOPS OF GEOLOGIC MARKERS.**

THE ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS ARE AS FOLLOWS:

<u>FORMATION</u>	<u>DEPTH</u>	<u>SUBSEA</u>
MESA VERDE	3684'	2197'
T.D.	4600'	1390''

2. **ESTIMATED DEPTHS OF ANTICIPATED OIL, GAS, WATER, OR OTHER MINERAL BEARING ZONES.**

<u>FORMATION</u>	<u>DEPTH</u>	<u>SUBSTANCE</u>
MESA VERDE	4400'	GAS
T.D.	4600'	--

IF ANY UNEXPECTED WATER OR MINERAL BEARING ZONES ARE ENCOUNTERED DURING DRILLING, THEY WILL BE REPORTED, EVALUATED, AND PROTECTED AS CIRCUMSTANCES AND REGULATIONS REQUIRE.

3. **BOP EQUIPMENT.**

TEXACO'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT ARE AS FOLLOWS:

RAM TYPE: HYDRAULIC DOUBLE, 3000 PSI W.P.

RAM TYPE PREVENTERS AND ASSOCIATED EQUIPMENT SHALL BE TESTED TO APPROVED STACK WORKING PRESSURE IF ISOLATED BY TEST PLUG OR TO 70 PERCENT OF INTERNAL YIELD PRESSURE OF CASING. PRESSURE SHALL BE MAINTAINED FOR AT LEAST 10 MINUTES OR UNTIL REQUIREMENTS OF TEST ARE MET, WHICHEVER IS LONGER. IF A TEST PLUG IS UTILIZED, NO BLEED-OFF PRESSURE IS ACCEPTABLE. FOR A TEST NOT UTILIZING A TEST PLUG, IF A DECLINE IN PRESSURE OF MORE THAN 10 PERCENT IN 30 MINUTES OCCURS, THE TEST SHALL BE CONSIDERED TO HAVE FAILED. VALVE ON CASING HEAD BELOW TEST PLUG SHALL BE OPEN DURING TEST OF BOP STACK.

ANNULAR TYPE PREVENTERS (IF USED) SHALL BE TESTED TO 50 PERCENT OF RATED WORKING PRESSURE. PRESSURE SHALL BE MAINTAINED AT LEAST 10 MINUTES OR UNTIL PROVISIONS OF TEST ARE MET, WHICHEVER IS LONGER.

AS A MINIMUM, THE ABOVE TEST SHALL BE PERFORMED:

- A. WHEN INITIALLY INSTALLED;
- B. WHENEVER ANY SEAL SUBJECT TO TEST PRESSURE IS BROKEN
- C. FOLLOWING RELATED REPAIRS; AND
- D. AT 30 DAY INTERVALS

VALVES SHALL BE TESTED FROM WORKING PRESSURE SIDE DURING BOPE TESTS WITH ALL DOWNSTREAM VALVES OPEN.

WHEN TESTING THE KILL LINE VALVE(S), THE CHECK VALVE SHALL BE HELD OPEN OR THE BALL REMOVED.

ANNULAR PREVENTERS (IF USED) SHALL BE FUNCTIONALLY OPERATED AT LEAST WEEKLY.

PIPE AND BLIND RAMS SHALL BE ACTIVATED EACH TRIP, HOWEVER, THIS FUNCTION NEED NOT BE PERFORMED MORE THAN ONCE A DAY.

A BOP PIT LEVEL DRILL SHALL BE CONDUCTED WEEKLY FOR EACH DRILLING CREW.

PRESSURE TESTS SHALL APPLY TO ALL RELATED WELL CONTROL EQUIPMENT.

ALL OF THE ABOVE DESCRIBED TESTS AND/OR DRILLS SHALL BE RECORDED IN THE DRILLING LOG. TEST CHARTS, WITH INDIVIDUAL TEST RESULTS IDENTIFIED, SHALL BE MAINTAINED ON LOCATION WHILE DRILLING AND SHALL BE MADE AVAILABLE TO A BLM REPRESENTATIVE UPON REQUEST. PRESSURE TESTS SHALL APPLY TO ALL RELATED WELL CONTROL EQUIPMENT.

BOP SYSTEMS SHALL BE CONSISTENT WITH API RP53. PRESSURE TESTS WILL BE CONDUCTED BEFORE DRILLING OUT FROM UNDER CASING STRINGS WHICH HAVE BEEN SET AND CEMENTED IN PLACE. BLOWOUT PREVENTER CONTROLS WILL BE INSTALLED PRIOR TO DRILLING THE SURFACE CASING PLUG AND WILL REMAIN IN USE UNTIL THE WELL IS COMPLETED OR ABANDONED. PREVENTERS WILL BE INSPECTED AND OPERATED AT LEAST DAILY TO ENSURE GOOD MECHANICAL WORKING ORDER, AND THIS INSPECTION WILL BE RECORDED ON THE DAILY DRILLING REPORT. PREVENTERS WILL BE PRESSURE TESTED BEFORE DRILLING CASING CEMENT PLUGS.

THE REGULATORY OFFICE SHALL BE NOTIFIED, AT LEAST 24 HOURS PRIOR TO INITIATING THE PRESSURE TEST, IN ORDER TO HAVE A STATE REPRESENTATIVE ON LOCATION DURING PRESSURE TESTING.

- A. THE SIZE AND RATING OF THE BOP STACK IS SHOWN ON THE ATTACHED DIAGRAM.
- B. A CHOKE LINE AND A KILL LINE ARE TO BE PROPERLY INSTALLED. THE KILL LINE IS NOT TO BE USED AS A FILL UP LINE.
- C. THE ACCUMULATOR SYSTEM SHALL HAVE A PRESSURE CAPACITY TO PROVIDE FOR REPEATED OPERATION OF HYDRAULIC PREVENTORS.
- D. DRILL STRING SAFETY VALVE(S), TO FIT ALL TOOLS IN THE DRILL STRING, ARE TO BE MAINTAINED ON THE RIG FLOOR WHILE DRILLING OPERATIONS ARE IN PROGRESS.

4. **CASING AND CEMENTING PROGRAMS.**

- A. THE BLM OFFICE SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE RUNNING AND CEMENTING OF ALL CASING STRINGS, IN ORDER TO HAVE BLM REPRESENTATIVE ON LOCATION WHILE RUNNING AND CEMENTING ALL CASING STRINGS.
- B. THE PROPOSED CASING AND CEMENTING PROGRAM SHALL BE CONDUCTED AS APPROVED TO PROTECT AND/OR ISOLATE ALL USABLE WATER ZONES, POTENTIALLY PRODUCTIVE ZONES, LOST CIRCULATION ZONES, ABNORMALLY PRESSURED ZONES, AND ANY PROSPECTIVELY VALUABLE DEPOSITS OF MINERALS. ANY ISOLATING MEDIUM OTHER THAN CEMENT SHALL RECEIVE APPROVAL PRIOR TO USE. THE CASING SETTING DEPTH SHALL BE CALCULATED TO POSITION THE CASING SEAT OPPOSITE A COMPETENT FORMATION WHICH WILL CONTAIN THE MAXIMUM PRESSURE TO WHICH IT WILL BE EXPOSED DURING NORMAL DRILLING OPERATIONS. DETERMINATIONS OF CASING SETTINGS DEPTH SHALL BE BASED ON ALL RELEVANT FACTORS, INCLUDING; PRESENCE/ABSENCE OF HYDROCARBONS; FRACTURE GRADIENTS; USABLE WATER ZONES; FORMATION PRESSURES; LOST CIRCULATION ZONES; OTHER MINERALS; OR OTHER UNUSUAL CHARACTERISTICS. ALL INDICATIONS OF USABLE WATER SHALL BE REPORTED.
- C. ALL WAITING ON CEMENT TIMES SHALL BE ADEQUATE TO ACHIEVE A MINIMUM OF 500 PSI COMPRESSIVE STRENGTH AT THE CASING SHOE PRIOR TO DRILLING OUT
- D. ALL CASING EXCEPT THE CONDUCTOR CASING, SHALL BE NEW OR RECONDITIONED AND TESTED, USING CASING THAT MEETS OR EXCEEDS API STANDARDS FOR NEW CASING.

- E. THE SURFACE CASING SHALL BE CEMENTED BACK TO SURFACE EITHER DURING THE PRIMARY CEMENTING JOB OR BY REMEDIAL CEMENTING.
- F. ALL INDICATIONS OF USABLE WATER SHALL BE REPORTED TO THE AUTHORIZED OFFICER PRIOR TO RUNNING THE NEXT STRING OF CASING OR BEFORE PLUGGING ORDERS ARE REQUESTED, WHICHEVER OCCURS FIRST.
- G. THE SURFACE CASING SHALL HAVE CENTRALIZERS ON THE BOTTOM THREE JOINTS OF CASING (A MINIMUM OF ONE CENTRALIZER PER JOINT, STARTING WITH THE SHOE JOINT), THEN EVERY FOURTH JOINT OF CASING UP TO THE BOTTOM OF THE CELLAR.
- H. TOP PLUGS SHALL BE USED TO REDUCE CONTAMINATION OF CEMENT BY DISPLACEMENT FLUID. A BOTTOM PLUG OR OTHER ACCEPTABLE TECHNIQUE, SUCH AS A SUITABLE PREFLUSH FLUID, INNER STRING CEMENT METHOD, ETC. SHALL BE UTILIZED TO HELP ISOLATE THE CEMENT FROM CONTAMINATION BY THE MUD FLUID BEING DISPLACED AHEAD OF THE CEMENT SLURRY.
- I. ALL CASING STRINGS BELOW THE CONDUCTOR SHALL BE PRESSURE TESTED TO 0.22 PSI PER FOOT OF CASING STRING LENGTH OR 1500 PSI, WHICHEVER IS GREATER, BUT NOT TO EXCEED 70 PERCENT OF THE MINIMUM INTERNAL YIELD. IF PRESSURE DECLINES MORE THAN 10 PERCENT IN 30 MINUTES, CORRECTIVE ACTION SHALL BE TAKEN.
- J. THE PROPOSED CASING PROGRAM WILL BE AS FOLLOWS:

<u>PURPOSE</u>	<u>DEPTH</u>	<u>HOLE SIZE</u>	<u>O.D.</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>TYPE</u>	<u>NEW OR USED</u>
SURFACE	0-350'	12-1/4"	8-5/8"	24 #	K-55	LT&C	NEW
PRODUCTION	0-4600'	7-7/8"	4-1/2"	11.6#	J-55	LT&C	NEW

- K. CASING DESIGN SUBJECT TO REVISION BASED ON GEOLOGIC CONDITIONS ENCOUNTERED.

- L. THE CEMENT PROGRAM WILL BE AS FOLLOWS:

<u>SURFACE</u>	<u>TYPE AND AMOUNT</u>
0-350'	CEMENT TO SURFACE WITH 260 SX CLASS G CEMENT 15.8 PPG, 1.16 CU. FT /SK
<u>PRODUCTION</u>	<u>TYPE AND AMOUNT</u>
0-4600'	CEMENT TO SURFACE WITH 550 SX CEMENT (9.55 PPG, 2.5CU. FT/SK)

- M. THE BLM RESOURCE AREA OFFICE SHOULD BE NOTIFIED, WITH SUFFICIENT LEAD TIME, IN ORDER TO HAVE A BLM REPRESENTATIVE ON LOCATION WHILE RUNNING AND CEMENTING ALL CASING STRINGS.
- N. AFTER CEMENTING, BUT BEFORE COMMENCING ANY TEST, THE CASING STRING SHALL STAND CEMENTED UNTIL THE CEMENT HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 500 PSI AT THE SHOE. WOC TIME SHALL BE RECORDED IN THE DRILLER'S LOG.
- O. THE FOLLOWING REPORTS SHALL BE FILED WITH THE DISTRICT MANAGER WITHIN 30 DAYS AFTER THE WORK IS COMPLETED.

1, PROGRESS REPORTS, FORM 3160-5 "SUNDRY NOTICES AND REPORTS ON WELLS", MUST:

INCLUDE COMPLETE INFORMATION CONCERNING

A. SETTING OF EACH STRING OF CASING, SHOWING THE SIZE, GRADE, WEIGHT OF CASING SET, HOLE SIZE, SETTING DEPTH, AMOUNTS AND TYPES OF CEMENT USED, WHETHER CEMENT CIRCULATED OR THE TOP OF THE CEMENT BEHIND THE CASING, DEPTH OF CEMENTING TOOLS USED, CASING TEST METHOD AND RESULTS, AND THE DATE WORK WAS DONE. SHOW THE SPUD DATE ON THE FIRST REPORT SUBMITTED.

B. TEMPERATURE OR BOND LOGS MUST BE SUBMITTED FOR EACH WELL WHERE THE CASING CEMENT WAS NOT CIRCULATED TO THE SURFACE.

5. **MUD PROGRAM**

A. THE PROPOSED CIRCULATING MEDIUMS TO BE EMPLOYED IN DRILLING ARE AS FOLLOWS:

<u>INTERVAL</u>	<u>MUD TYPES</u>	<u>MUD WEIGHT</u>	<u>VISC.</u>	<u>F/L</u>	<u>PH</u>
0-350'	FRESH WATER	8.5-8.9	--	--	
350'-TD	LSND	9.2			

B. HAZARDOUS SUBSTANCES SPECIFICALLY LISTED BY THE E.P.A. AS A HAZARDOUS WASTE OR DEMONSTRATING A CHARACTERISTIC OF A HAZARDOUS WASTE WILL NOT BE USED IN DRILLING, TESTING OR COMPLETION OPERATIONS. DUE TO POTENTIAL CONTAMINATION OF USABLE QUALITY WATER AQUAFERS, CHROMATES ARE BANNED FROM FEDERAL LEASES.

6. **EVALUATION PROGRAM.**

THE ANTICIPATED TYPE AND AMOUNT OF TESTING, LOGGING AND CORING ARE AS FOLLOWS:

A. THE LOGGING PROGRAM WILL CONSIST OF A GR & NEUTRON TO SURFACE AND A CNL-LDT-AIT MIN & MNO FROM TD TO CASING.

B. WELL WILL NOT BE CORED.

D. WHETHER THE WELL IS COMPLETED AS A DRY HOLE OR AS A PRODUCER, "WELL COMPLETION AND RECOMPLETION REPORT AND LOG" (FORM 3160-4) WILL BE SUBMITTED NOT LATER THAN 30

E. DAYS AFTER COMPLETION OF THE WELL OR AFTER COMPLETION OF OPERATIONS PERFORMED, IN ACCORDANCE WITH 43 CFR 3164. TWO COPIES OF ALL LOGS, CORE DESCRIPTIONS, CORE ANALYSES, WELL-TEST DATA, GEOLOGIC SUMMARIES, SAMPLE DESCRIPTION, AND ALL OTHER SURVEYS OR DATA OBTAINED AND COMPILED DURING THE DRILLING, WORKOVER, AND/OR COMPLETION OPERATIONS, WILL BE FILED WITH FORM C-105. SAMPLES (CUTTINGS, FLUIDS, AND/OR GASES) WILL BE SUBMITTED WHEN REQUESTED BY THE AUTHORIZED OFFICER (AO).

E. THE ANTICIPATED COMPLETION PROGRAM IS AS FOLLOWS:

SET 4-1/2" CASING, FRACTURE STIMULATE AND PRODUCE THROUGH 2-3/8" TUBING.

7. **ABNORMAL PRESSURES AND H2S GAS.**

A. NO ABNORMAL CONDITIONS ARE ANTICIPATED.

B. NO HYDROGEN SULFIDE GAS IS ANTICIPATED.