

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a TYPE OF WORK

DRILL ☒

DEEPEN ☐

b TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2 NAME OF OPERATOR

Conoco Inc.

3 ADDRESS AND TELEPHONE NO.

10 Desta Drive, Suite 649W, Midland, TX 79705; 915/686-5515

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

At surface

1890' FNL & 1980' FWL

At proposed prod. Zone

1890' FNL & 1980' FWL

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

15/ DISTANCE FROM PROPOSED*

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

18 DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT

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

6636' -

6. NO. OF ACRES IN LEASE

640+/-

9 PROPOSED DEPTH

~~6059~~ 5759'

17 NO. OF ACRES ASSIGNED
TO THIS WELL

W/319.80

20 ROTARY OR CABLE TOOLS

Rotary

22 APPROX. DATE WORK WILL START*

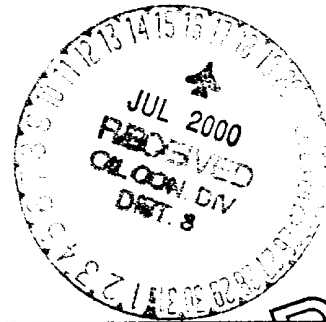
6/1/00

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	J-55; 9-5/8"	32.5#	250' +/-	125 sxs, circ.
8-3/4"	J-55; 7"	20#	3606'	545 sxs, circ.
6-1/4"	J-55, 4-1/2"	10.5#	5759'	242 sxs.,circ.

It is proposed to drill a vertical wellbore to be completed in the Mesaverde Pool. An NOS was filed 11/8/99. The well will be drilled and equipped according to the following additional attachments:

1. Well Location & Acreage Dedication Plat (C-102).
2. Proposed Well Plan Outline.
3. Cementing Plan.
4. Blowout Preventer Hookup.
5. Surface Use Plan.
6. Production Facility Layout.



This application includes ROW for the well pad.

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.

25

SIGNED

Joe Ann Johnson

TITLE Sr. Property Analyst

DATE

6/5/00

(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

David R. Sitzer

TITLE

Acting Asst. Field Mgr

DATE

JUL 11 2000

*See Instructions On Reverse Side

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.

ST

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

District II
PO Drawer 00, 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30039-26491		² Pool Code 72319 -		³ Pool Name BLANCO MESAVERDE	
⁴ Property Code 003133		⁵ Property Name AXI APACHE K			⁶ Well Number 4C
⁷ GRID No. 005073		⁸ Operator Name CONOCO, INC.			⁹ Elevation 6636'

¹⁰ Surface Location

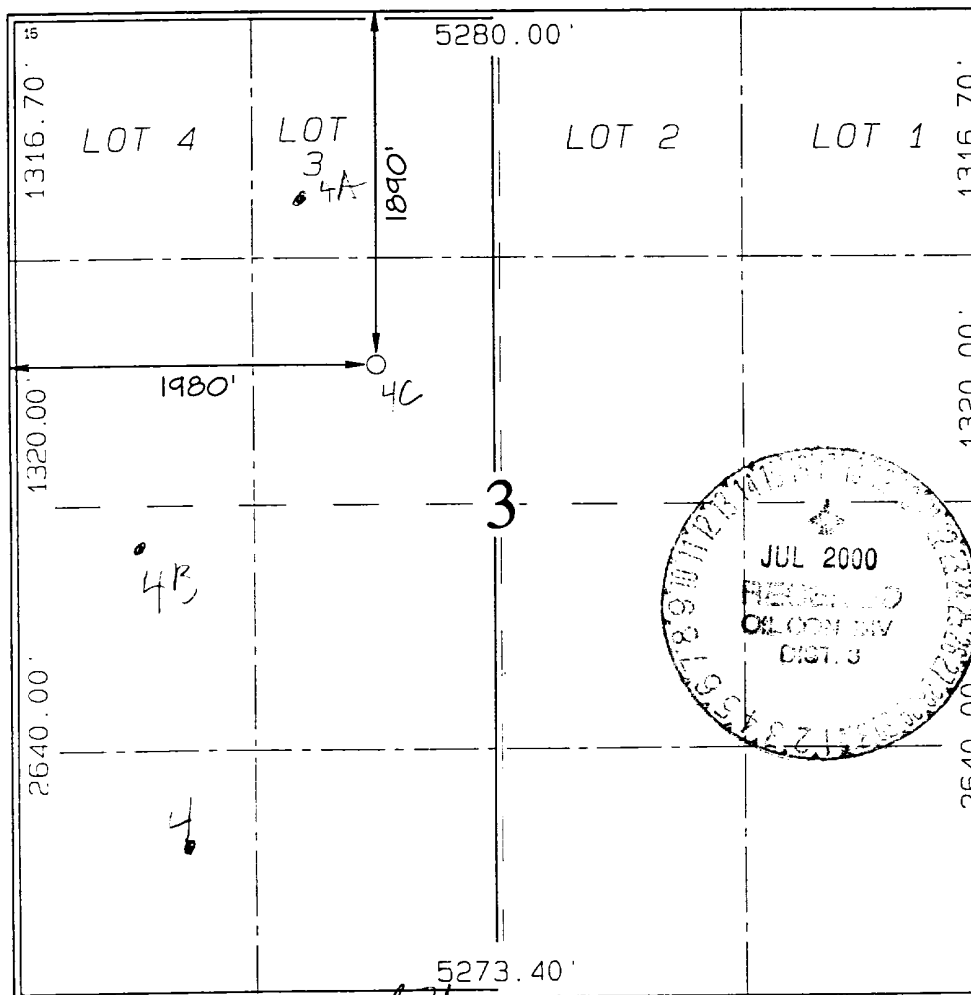
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	3	26N	5W		1890	NORTH	1980	WEST	RIO ARriba

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

¹² Dedicated Acres w/319.80	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

				<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Mike L. Mankin</i> Signature Mike L. Mankin Printed Name Right-of-Way Agent Title 12/12/99 Date</p>	
<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>NOVEMBER 30, 1999 Date of Survey</p> <p>Signature and Seal of Professional Surveyor <i>Neale C. Edwards</i> NEALE C. EDWARDS NEW MEXICO 6857 Professional Surveyor</p> <p>Certificate Number 6857</p>					

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WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26491		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 003133	*Property Name AXI APACHE K		*Well Number 4C
*GRID No. 005073	*Operator Name CONOCO, INC.		*Elevation 6636'

¹⁰ Surface Location

UL or lot no. F	Section 3	Township 26N	Range 5W	Lot Idn	Feet from the 1890	North/South line NORTH	Feet from the 1980	East/West line WEST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

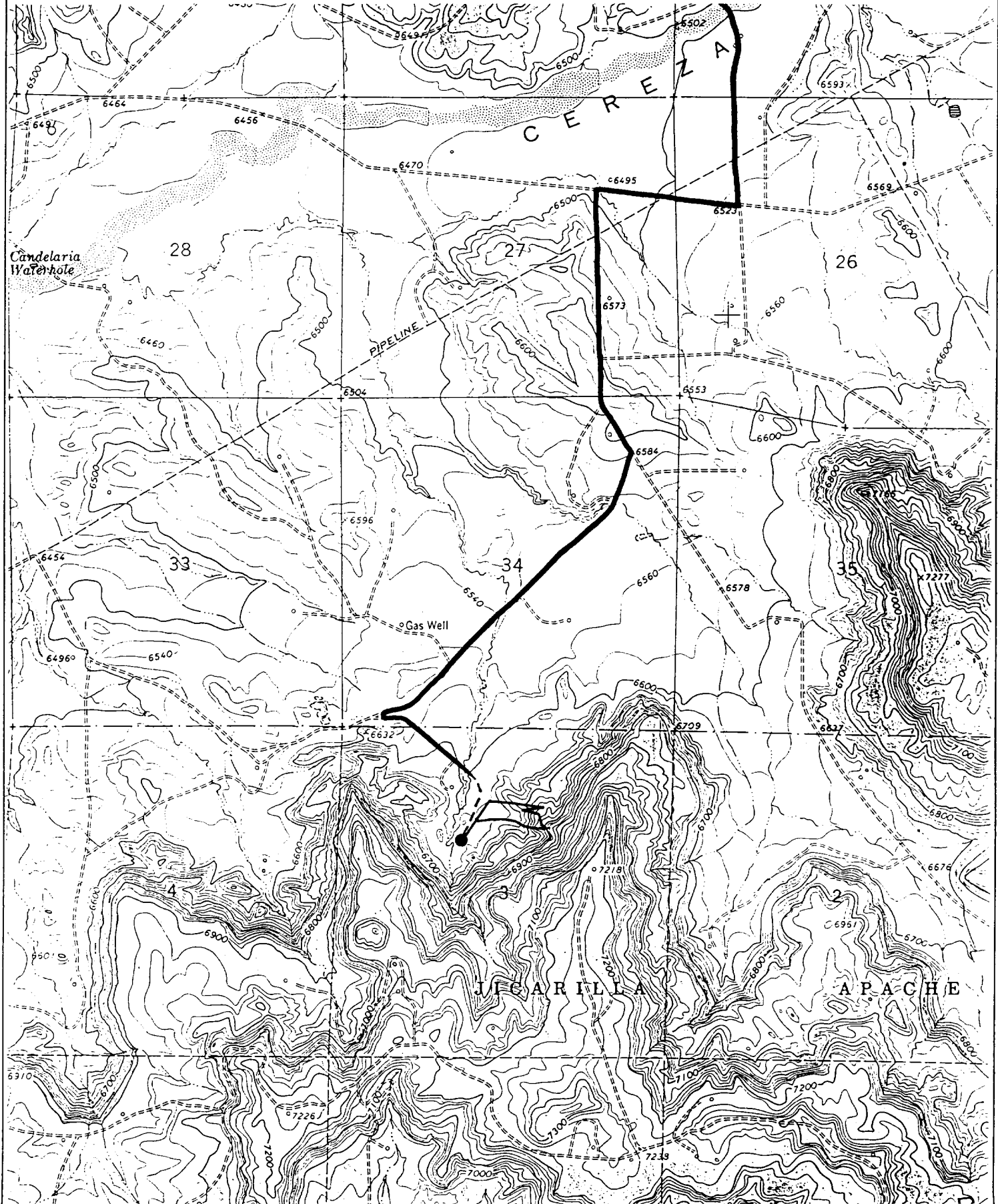
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 319.80		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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	<p>Certificate Number 6857</p>

CONOCO, INC. AXI APACHE K #4C

1890' FNL & 1980' FWL, SECTION 3, T26N, R5W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



At Conoco our work is never so urgent or important that we cannot take time to do it safely.
SAN JUAN DRILLING PROGRAM

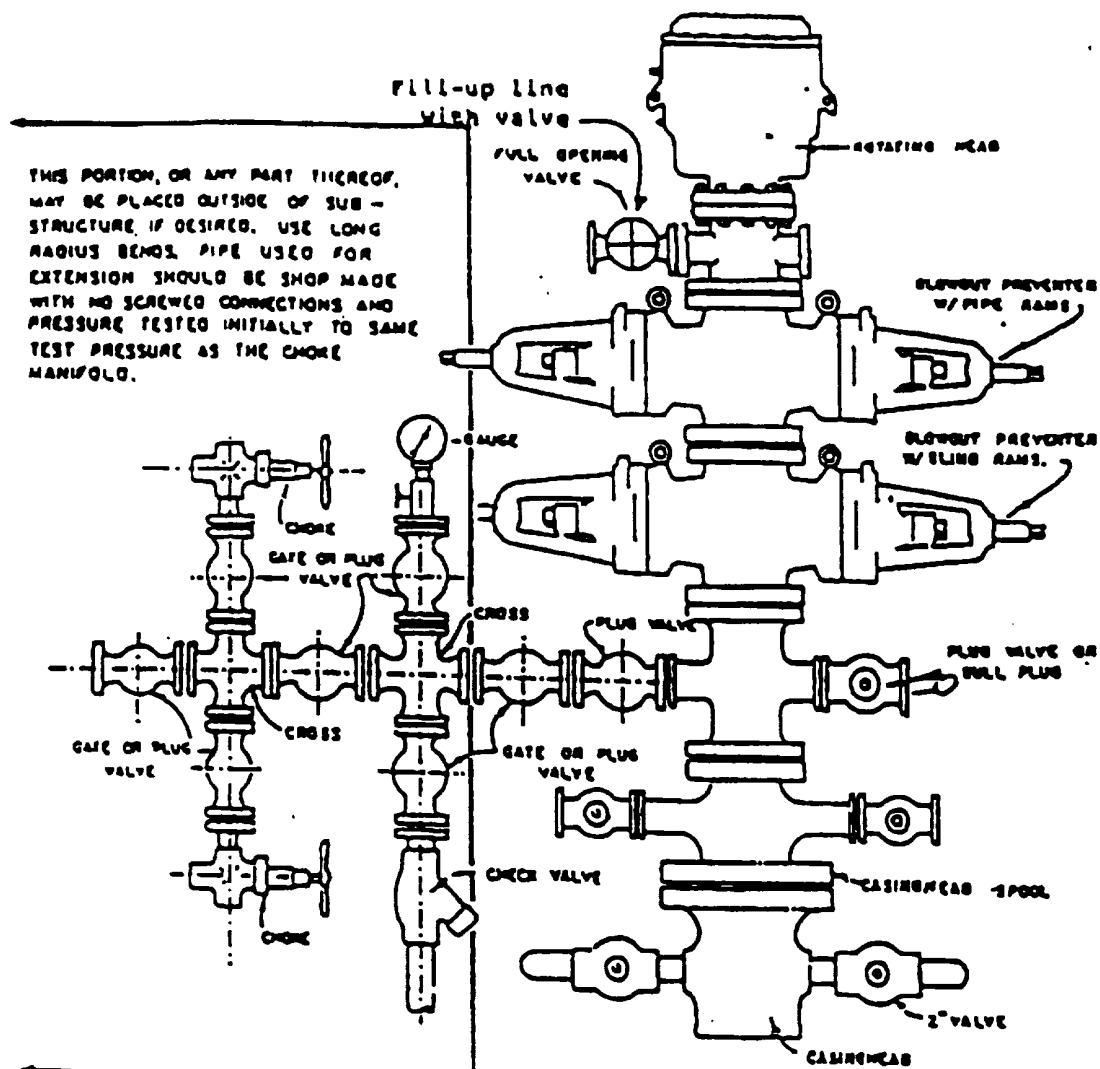
WELL INFO	Well: AXI Apache K 4C		Area: Jicarilla		AFE # (MV)		AFE \$:	
	County: Rio Arriba		State: NM		Rig: Key 43		RKB-GL: 12	
	API #		Permit #		Fresh Wtr Prot: Circulate cement on surface casing			
	MD: 5759'		TVD: 5759'		KOP: N/A		G.L. Elev: 6636'	
	Co-ordinates:	WELL	Latitude: 36°31.1'	Longitude: 107°20.9'	ERA	Latitude: 36°31.2'	Longitude: 107°20.8'	
	Location:	1890 FNL 1980 FWL Section 3, Unit Letter F, T26N, R5W, Rio Arriba County, NM						
	Directional:	N/A						

DISCUSSION	THIS WELL IS TO BE DRILLED WITH SAFETY AND PROTECTION OF THE ENVIRONMENT AS THE PRIMARY OBJECTIVES! Use of the STOP program, Job Safety Analysis and Pre-Job Safety Meetings are imperative.									
	<u>IT IS THE DRILLING REPRESENTATIVES RESPONSIBILITY TO READ AND FOLLOW ALL STIPULATIONS FOR EACH PERMIT AND ENSURE COMPLIANCE</u>									
	REGULATORY NOTIFICATIONS									
	Notify the U.S. Bureau of Land Management:									
	1. Anytime a major deviation from the well plan (plug back, sidetrack, etc...) is going to occur. Leave a message with the intended plan if no one answers. If in doubt notify! Better to notify unnecessarily than not to and get a fine.									
	2. Immediately upon spudding									
	3. Fax reports to Houston office. Houston will fax them to Trigon Engineering Inc. Fax (970) 385-9107, attention Debra Sittner. Call her at (970) 385-9100, ext. 25 or Verla Johnson @ ext. 20. Make verbal notification to BLM and/or NMOCD 24 hours prior to any BOP or casing pressure test.									
	4. 24 hours prior to any cementing operation									
	<u>PHONE NUMBERS</u>									
	BLM – Farmington: (505) 599-8907									
BLM – Albuquerque: (505) 761-8700										
New Mexico Oil Conservation Department: (505) 334-6178										
NOTE – Permits come from either the Farmington OR Albuquerque depending upon the area. Refer to the permit for the correct number to call.										
Review Emergency Response Plan before rigging up and be prepared to execute the plan if needed!										
The objective of this well is to develop the Mesa Verde (MV) geologic horizons.										
Take deviation surveys every 500' except unless drilling with and air hammer. When drilling with an air hammer, a directional survey is required at TD to be run inside casing.										
Good oilfield practices are to be used throughout the drilling of this well. This includes measuring and recording the OD, ID and length of everything that goes through the rotary table, using hole covers, etc.										

TIME	Days From Spud to...								
		Surf Csg Pt	Drig Out	Int. Csg Pt	Drig Out	TD	Log	Prod Csg Set	Rig Rel.
	Days	0.5	1.0	3.5	4.0	7.0	N/A	7.5	8.0

FORMATIONS	Zone	Depth (TVD)	MW	Zone psi	Hole Size	Csg Size	FIT / LOT	Remarks
	Surface Casing	+/- 250	8.4 – 8.8		12 1/4"	9 5/8"		Severe lost circulation is possible. 9 5/8", 32.5 ppf, J-55, STC Casing. Cement to surface.
	OJAM	2766	8.4 – 9.0		8 ¾"			Possible water flows. May need to control fluid loss (10-12 cc) prior to reaching Ojo Alamo.
	KRLD/FRLD	2915						Possible Gas
	PCCF	3306						Possible Gas. Possible last circulation and differential sticking.
	LEWS	3468						
	INT CSG	3606				7"		7", 20 ppf, J-55, STC Casing. Cement to surface.
	CHRA	4232	Air		6 ¼"			Possible Gas.
	CLFH	4953		575				Gas. Frac Gradient 0.5 psi/ft.
	MENF	5070						Gas
	PTLK	5459						Gas
	TD (PTLK +300)	5759						
	Permit TD (TD +300)	6059				4 ½"		4 ½", 10.5 ppf, J-55, STC Casing. Cement to surface.

LOGS	Intermediate Logs:	N/A
	TD Logs:	Cased hole pulsed neutron log with GR to surface. (Open hole GR-SP-CAL-NEUT/DEN-ML possible if shows dictate - one run in hole) Possible temperature survey after 4.5" cement job to verify TOC (consult with the Production Engineer).
	Additional Information:	Loggers to provide a sketch with all lengths, OD's & ID's of all tools prior to running in the hole.



BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

Cathodic Protection System Description

Anode Bed Type	Deep Well	
Hole Size	8"	
Hole Depth	200' - 500'	As required to place anodes below moisture and in low resistance strata.
Surface Casing	8" Diam., \geq 20' Length. Cemented In Annular Space	When needed, casing will be installed at an adequate depth to control ground water flow. Casing will extend a minimum of 2' above grade, be surrounded by a concrete pad, and sealed with a PVC cap. Steel casing will be substituted when boulders are encountered.
Vent Pipe	1" Diam. PVC	Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap.
Type Of Anodes	Cast Iron Or Graphite	
Number Of Anodes	8 - 20	Sufficient quantity to achieve a total anode bed resistance of < 1 ohm and a design life \geq 20 years.
Anode Bed Backfill	Loresco SW Calcined Petroleum Coke Breeze	Installed from bottom of hole to 10' above top anode.
Anode Junction Box	8 - 20 Circuit Fiberglass Or Metal	Sealed to prevent insect & rodent intrusion.
Current Splitter Box	2 - 5 Circuit Metal	Sealed to prevent insect & rodent intrusion.
DC / AC Cable	<p>DC: #2, #4, #6, #8 Stranded Copper (One Size Or Any Combination Of) With High Molecular Weight Polyethylene (HMWPE) Insulation.</p> <p>AC: #8 Stranded Copper HMWPE</p>	<p>18" depth in typical situation, 24" depth in roadway, & 36" depth in arroyo's and streams. EXCEPTION: If trenching is in extremely hard substratum, depth will be 6 - 12" with cable installed in conduit.</p> <p>Installed above foreign pipelines if 1' clearance is available, if not, installed under foreign pipeline with 1' clearance (AC cable a/ways installed under foreign pipeline in conduit).</p>
Power Source	<p>1) Rectifier</p> <p>2) Solar Power Unit</p> <p>3) Thermoelectric Generator</p>	Choice of power source depending on availability of AC & other economic factors.
External Painting	Color to be selected according to BLM specifications.	Paint applied to any surface equipment associated with the CP system which can reasonably be painted.