Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: XTO Cross Timbers Operating Company

3. ADDRESS AND TELEPHONE NO.: 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 795' FNL & 1,805' FEL Sec 28, T27N, R08W
At proposed prod. zone: same

5. LEASE DESIGNATION AND SERIAL NO.: SF - 079232

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: 28096

8. FARM OR LEASE NAME, WELL NO.: Bolack "C" #10C

9. API WELL NO.: 30-045-31020

10. FIELD AND POOL, OR WILDCAT: Blanco Mesaverde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 28, T27N, R08W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx 24 miles south down Largo Canyon from the Blanco NM Post Office

12. COUNTY OR PARISH: San Juan

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 695'

16. NO. OF ACRES IN LEASE: 312.22

17. NO. OF ACRES ASSIGNED TO THIS WELL: 312.22 E/2

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 650'

19. PROPOSED DEPTH: 4,950'

20. ROTARY OR CABLE TOOLS: 0'-4,950' w/Rotary Tools

21. ELEVATIONS (Show whether DF,RT, GR, etc.): 6,082' GL

22. APPROX. DATE WORK WILL START*: Summer 2002

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8", J-55	24#	270'	160 sx Type III
7-7/8"	4-1/2", J-55	10.5#	4,950'	675 sx Premium Lite cement

XTO Energy Inc. plans to drill the above mentioned well as described in the enclosed Surface Use Program.

A copy of the pipeline ROW is also enclosed with this APD.

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

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

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 JW Patton TITLE Drilling Engineer DATE 3/4/02

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 4/8/02

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 /s/ David J. Mankiewicz TITLE AFM DATE 4/8/02

*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.

NMOCD

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form
Revised August 1

Submit to Appropriate District
State Lease – 4
Fee Lease – 3

☐ AMENDED RI

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-31020	72319	BLANCO MESAVERDE
4 Property Code	**5 Property Name**	**6 Well Number**
28096	BOLACK C	10C
7 OGRID No.	**8 Operator Name**	**9 Elevation**
167067	XTO ENERGY INC	6082'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Co
B	28	27-N	8-W		795	NORTH	1805	EAST	SAN JU

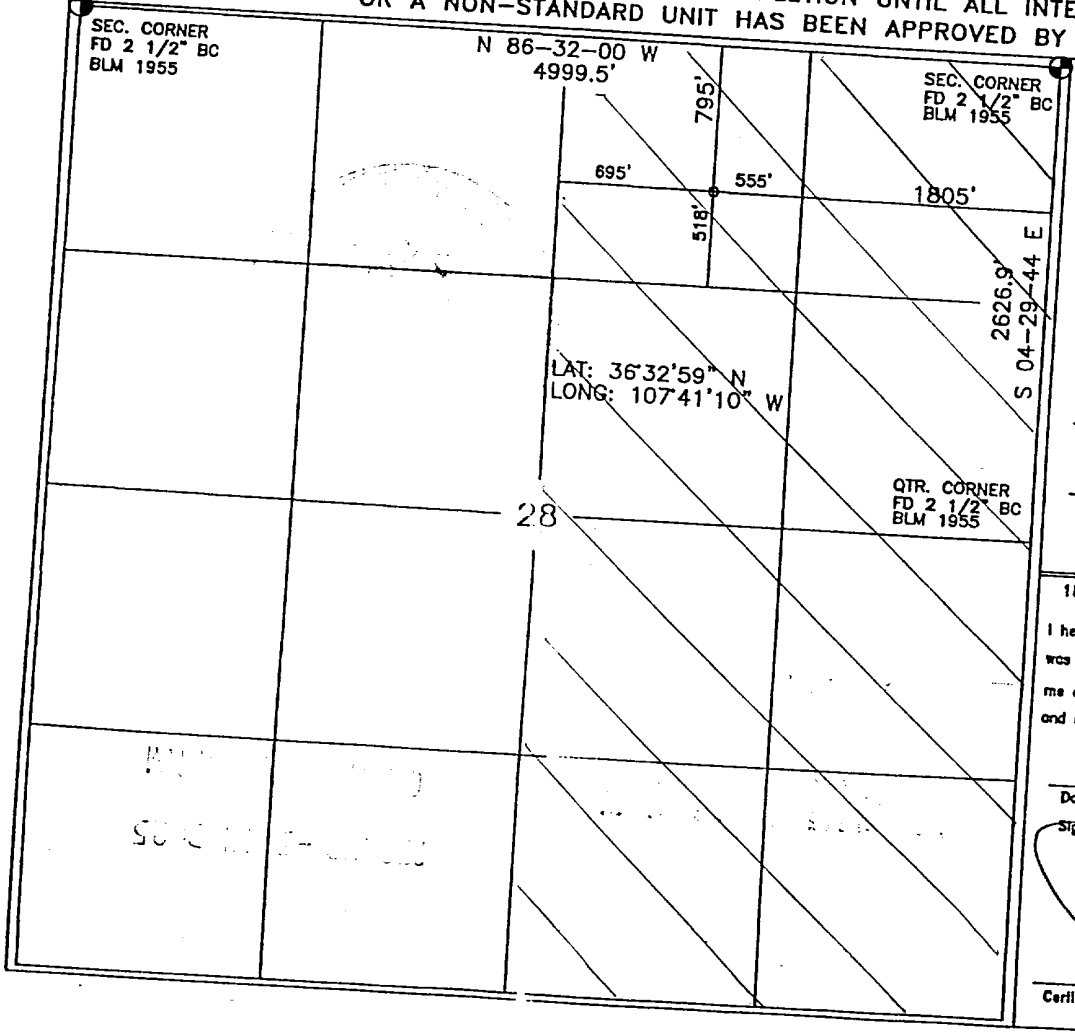
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Co

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
312.22 E/2	I		

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

16



17 OPERATOR CERTIFICATIO

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

Signature: J W Patton

JEFFREY W PATTON
Printed Name

DRILLING ENGINEER
Title

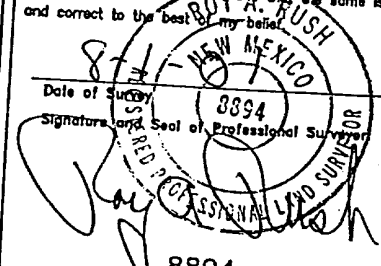
7-9-02
Date

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.

8-1-01
Date of Survey

Signature and Seal of Professional Surveyor

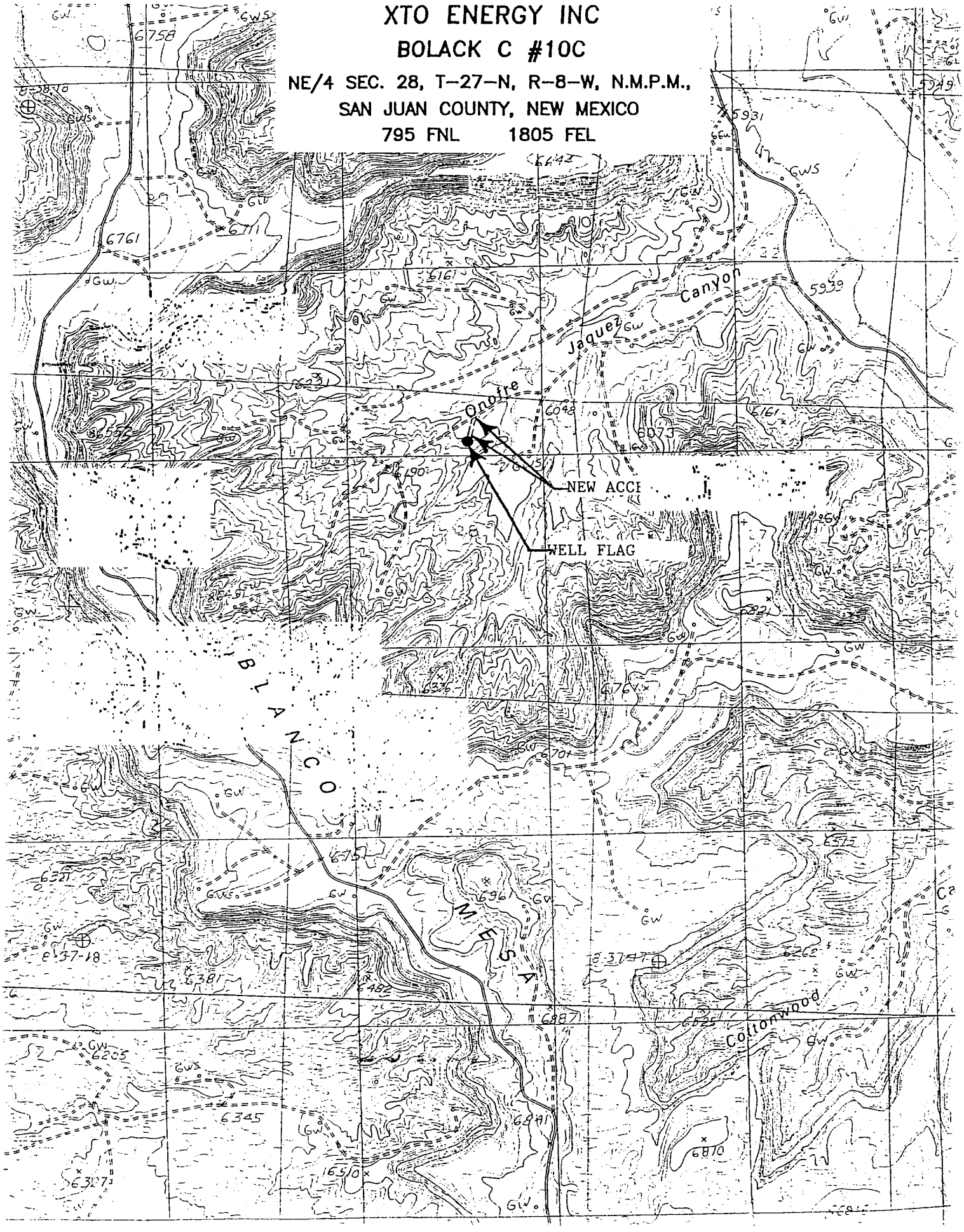


8894
Certificate Number

XTO ENERGY INC

BOLACK C #10C

NE/4 SEC. 28, T-27-N, R-8-W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
795 FNL 1805 FEL



XTO ENERGY INC.

Bolack "C" #10C
APD Data
February 4, 2002

Location: 795' FNL & 1,805' FEL, Sec 28, T27N, R08W **County**: San Juan **State**: New Mexico

PROJECTED TOTAL DEPTH: ±4,950'
GR ELEV: 6,082'

OBJECTIVE: Mesaverde
Est KB ELEV: 6,094 (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 270'	270' to 3,500'	3,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pre-treat with 20% LCM @ 3,500'. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity (>85 sec) at TD for logging. Reduce viscosity after logging for cementing purposes.

2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at ± 270' in 8.8 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-270'	270'	24#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 4-1/2" casing to be set at TD in 9.0 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-TD	4,950'	10.5#	J-55	STC	4010	4790	132	4.052	3.875	1.66	1.33	2.44

3. WELLHEAD:

A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 4-1/2" 8rnd female thread on bottom, 8-5/8" 8rnd thread on top.

4 **EMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to**
5 **e on both casing strings):**

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at ± 270'.

Lead: 160 sx of "Type III" cement containing 3% $CaCl_2$, ¼ pps celloflake, mixed at 14.5 ppg, 1.39 ft^3/sk, & 6.50 gal wtr/sk.

Total slurry volume is 222 ft^3, 100% excess of calculated annular volume to270'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at ±4,950'.

Lead: 525 sx of Premium Lite FM (65/35/6) cement containing 2% KCl, ¼ pps celloflake, 2-4% Phenoseal mixed at 11.9 ppg, 2.39 ft^3/sk, 15.60 gal wtr/sx.

Tail: 150 sx of Premiun Lite HS (65/35/6) cement containing 2% KCl, 7#/sx CSE, ¼ pps celloflake, 0.5% Fluid loss, 0.2% Dispersant mixed at 12.5 ppg, 2.01 ft^3/sk, 10.71 gal wtr/sx..

Total estimated slurry volume (including 40% excess) for the 4-1/2" production casing is 1,555 ft^3.

te: The slurry design may change slightly based upon actual conditions. Final cement volumes will be termined for the caliper logs plus 40%. It will be attempted to circ cement to surface.

5. **LOGGING PROGRAM:**

A. Mud Logger: There are no plans to use a mud logger at this time.

B. Open Hole Logs as follows: Run Dual Induction/SFL/GR/SP fr/TD (±4,950') to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 2,950'.

6. **FORMATION TOPS:**

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+4707'	1390'
Kirtland Shale	+4655'	1442'
Fruitland Formation	+4157'	1940'
Lower Fruitland Coal	+3996'	2101'
Pictured Cliffs SS	+3946'	2151'
Lewis Shale	+3809'	2288'
Chacra	+3028'	3069'
Cliffhouse SS	+2343'	3754'
Menefee*	+2261'	3836'
Point Lookout SS*	+1667'	4430'
Mancos Shale	+1317'	4780'
Projected TD	+1147'	4950'

* Target Reservoir. Maximum anticipated reservoir pressure will be ±1,550 psig.

BOP SCEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

1. Test BOP after installation:
   Pressure test BOP to 200-300 psig (low pressure) for 5 min.
   Test BOP to Working Press or to 70% internal yield of surf csg (10 min).
2. Test operation of (both) rams on every trip.
3. Check and record Accumulator pressure on every tour.
4. Re-pressure test BOP stack after changing out rams.
5. Have kelly cock valve with handle ava
6. Have safety valve and subs to fit all siz drill string.