Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMSF079289

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SAN JUAN 28-7 UNIT 61B

2. Name of Operator
CONOCOPHILLIPS COMPANY
Contact: PATSY CLUGSTON
E-Mail: plclugs@ppco.com

9. API Well No.
30-039-27250-00-X1

3a. Address
5525 HIGHWAY 64
FARMINGTON, NM 87401

3b. Phone No. (include area code)
Ph: 505.599.3454
Fx: 505-599-3442

10. Field and Pool, or Exploratory
Multiple--See Attached

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T28N R7W SWSW 1070FSL 450FWL

11. County or Parish, and State
RIO ARRIBA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

See attached for changes in the Drilling Plans and BOP submitted with the original APD. We will be ready to spud this well in 2 days.

OCT 2003

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #24403 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington
Committed to AFMSS for processing by ADRIENNE GARCIA on 10/21/2003 (04AXG1578SE)

Name *(Printed/Typed)* PATSY CLUGSTON — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 10/20/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By /s/ Jim Lovato — Title — Date OCT 24 2003

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NMOCD

Additional data for EC transaction #24403 that would not fit on the form

10. Field and Pool, continued

TAPACITO PC/ BLANCO MV

CONOCOPHILLIPS COMPANY

WELL NAME: San Juan 28-7 Unit #61B (FC/PC/MV)

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit M (SWSW), 1070' FSL & 450' FWL
   Section 10, T28N, R7W

2. Unprepared Ground Elevation: @ 6606' (unprepared) .

3. The geological name of the surface formation is San Jose .

4. Type of drilling tools will be rotary .

5. Proposed drilling depth is 5794' .

6. The estimated tops of important geologic markers are as follows:

Ojo Alamo - 2409'	Cliffhouse - 4949'
Kirtland Sh - 2559'	Pt. Lookout - 5494'
Fruitland Fm. - 3069'	Intermediate Casing – 3669'
Pictured Cliffs - 3319'	TD - 5794'
Lewis Shale - 3569'	

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Water:	Ojo Alamo -	2409' - 2559'
Gas & Water:	Fruitland -	3069' - 3319'
Gas:	Pictured Cliffs -	3319' – 3569'
Gas:	Mesaverde -	4949' - 5794'

8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3# H-40 @ 220' *

Intermediate String: 7", 20#, J-55 @ 3669' (J-55 will be used, unless the K-55 is the only casing available) 5794'

Production String: 4-1/2", 10.5#, J-55 LTC @ ~~6222~~' (TD)

* The surface casing will be set at a minimum of 220', but could be set deeper if required to maintain hole stability.

9. Cement Program:

Surface String: 142 sx 50/50 POZ, + 2% Bentonite, 3% CaCl2, 5#/sx Gilsonite, 0.25#/sx Cellophane flakes, & 0.2% CFR-3 Friction Reducer (1.34 yield = 190 cf); Cement density – 13.5 ppg. Water required 5.39 gal/sx. Compressive Strength – Sample cured at 70 deg F for 8 hours; 3 hrs 05 min. 50 psi; 7 hrs 45 min 500 psi; cement to surface w/150% excess of casing/hole annulus volume.

Intermediate String: **Lead Cement:** 368 sx Standard cement + 3% Econolite (extender) + 10#/sx Pheno-seal; (2.88 yield = 1059.3 cf). Cement Density 11.5 ppg; Water required – 16.91 gal/sx. Compressive strength – Sample cured at 130 deg F for 24 hrs – 1 hr 47 min – 50 psi; 12 hrs – 350 psi; 24 hrs – 450 psi; Cement to surface with 150% excess of casing/hole annulus volume.

Tail Cement: 215 sx 50/50 POZ – Standard cement + 2% Bentonite + 6#/sx Pheno Seal; (1.33 yield = 285.4 cf); Cement Density – 13.5 ppg; Water required – 5.52 gal/sx; Compressive strength – Sample cured at 130 deg F for 24 hrs – 2 hrs 5 min – 50 psi; 2 hr 6 min – 500 psi; 12 hr – 1250 psi; 24 hrs – 1819 Cement to surface with 150% excess of casing/hole annulus volume.

Production String *: **Cement:** 242 sx 50/50 POZ – Standard cement + 3% Bentonite + 5#/sx PhenoSeal + 0.2% CFR-3 Friction Reducer + 0.1% HR-5 Retarder + 0.8% Halad-9 Fluid Loss Additive (1.45 Yield – 350.6 cf) Cement density – 13.1 ppg; Water required 6.47 gal/sx; Compressive Strength – Sample cured at 200 de F for 23 hrs; 9 hr 50 min – 50 psi; 13 hrs 45 min – 500 psi; 16 hrs – 1500 psi; 23 hrs 2525 psi.

*The production casing cement is calculated to cover the openhole interval with 50% excess and annular volume 200' within intermediate shoe. Depending on hole conditions, the well may be cemented in a single stage or two staged.

Centralizer Program:

Surface: Total four (4) - 1st joint - 10' above the shoe & 1 at the top of the 2nd, 3rd and 4th joints latched over the casing collar

Intermediate: Total seven (9) – 10' above shoe, top of 2nd, 4th, 6th, & 8th , 10th jts & 10th 1 jt. above surface casing, and on first two casing collars below the wellhead. .

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1st jt. below the Ojo Alamo and next 2 jts up.

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet.

11. Drilling Mud Prognosis: Surface - spud mud on surface casing.
Intermediate - spud mud generated from natural clays with gel sweeps pretreated w/LCM before entering coal interval.
Below Intermediate - air or gas drilled.

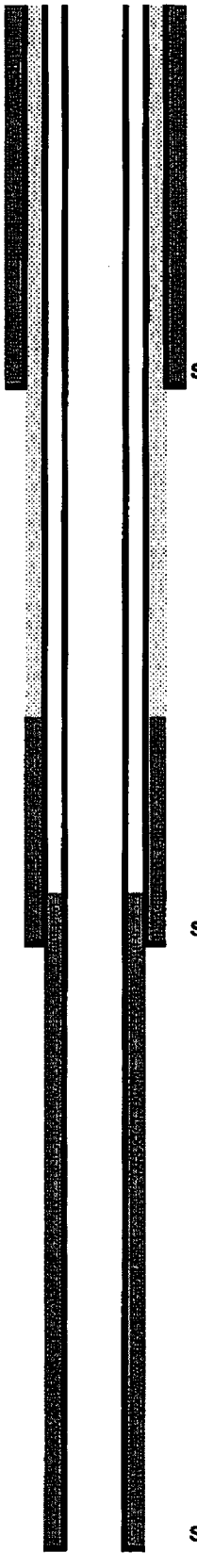
12. The testing, logging, and coring programs are as follows:
D.S.T.s or cores: _____
Logs: GR/CCL/CBL & GSL over zones of interest

13. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H_2S equipment will be used.

Estimated Bottomhole pressure:
Mesaverde – 1300 psi

14. The anticipated starting date is approximately October 21, 2003 with duration of drilling / completion operations for approximately 20 days thereafter.

San Juan 28-7 # 61B



SURFACE CASING :

Drill Bit Diameter	12.25	"	
Casing Outside Diameter	9.625	"	Casing Inside Diam. 9.001 "
Casing Weight	32.3	ppf	
Casing Grade	H-40		
Shoe Depth	220	'	
Cement Yield	1.34	cuft/sk	
Excess Cement	150	%	
Cement Required	142	**sx**	

SHOE 220 ', 9.625 ", 32.3 ppf, H-40 STC

INTERMEDIATE CASING :

Drill Bit Diameter	8.75	"	
Casing Outside Diameter	7	"	Casing Inside Diam. 6.456 "
Casing Weight	20	ppf	
Casing Grade	J-55		
Shoe Depth	3669	'	
Lead Cement Yield	2.88	cuft/sk	
Lead Cement Excess	150	%	
Tail Cement Length	733.8	'	
Tail Cement Yield	1.33	cuft/sk	
Tail Cement Excess	150	%	
Lead Cement Required	368	**sx**	
Tail Cement Required	215	**sx**	

SHOE 3669 ', 7 ", 20 ppf, J-55 STC

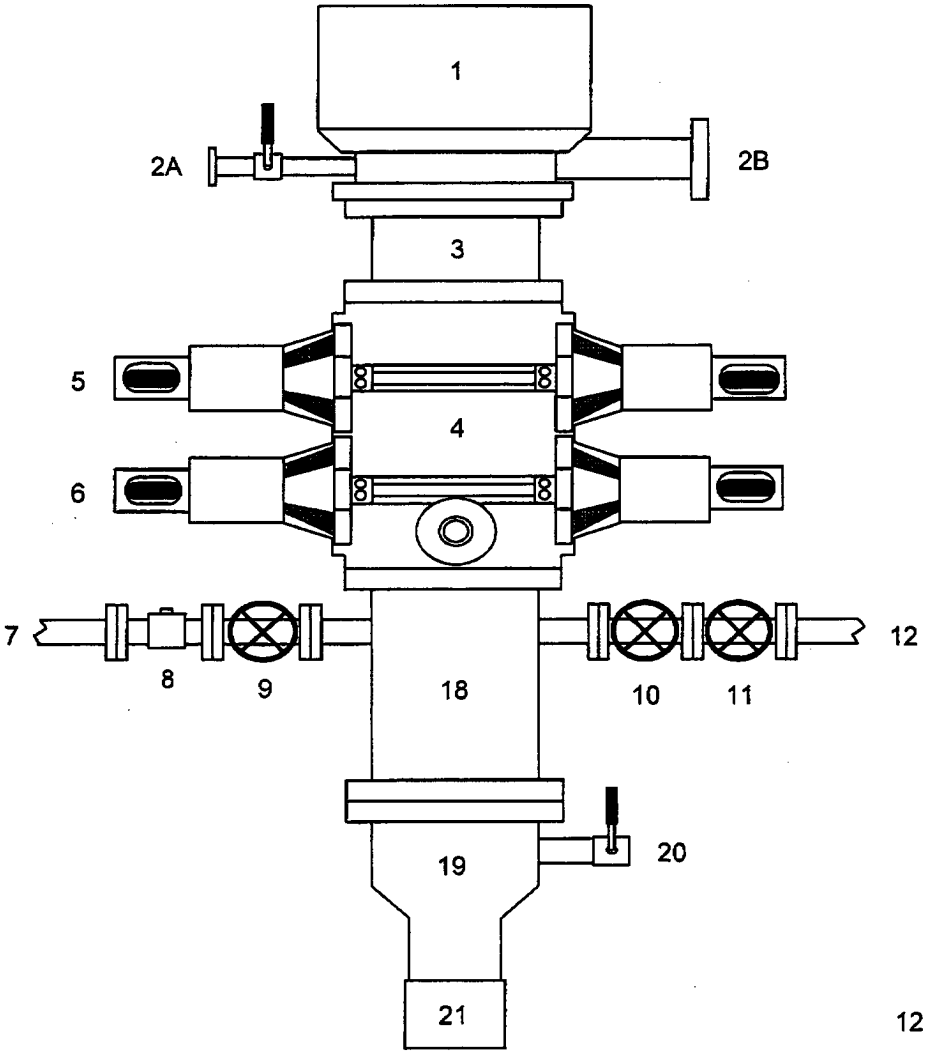
PRODUCTION CASING :

Drill Bit Diameter	6.25	"	
Casing Outside Diameter	4.5	"	Casing Inside Diam. 4.052 "
Casing Weight	10.5	ppf	
Casing Grade	J-55		
Top of Cement	3469	'	200' inside Intermediate casing
Shoe Depth	5794	'	
Cement Yield	1.45	cuft/sk	
Cement Excess	50	%	
Cement Required	242	**sx**	

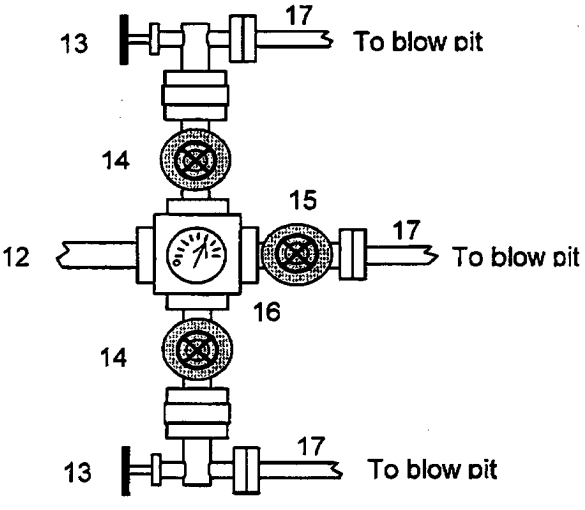
SHOE 5794 ', 4.5 ", 10.5 ppf, J-55 STC

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



1. Rotating Head
2A. Fill-up Line & valve
2B. Flowline
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10 Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
19. Casing Head "A" Section
20. Casing Head "A" Section 2" Valve
21. 9 5/8" Casing Collar



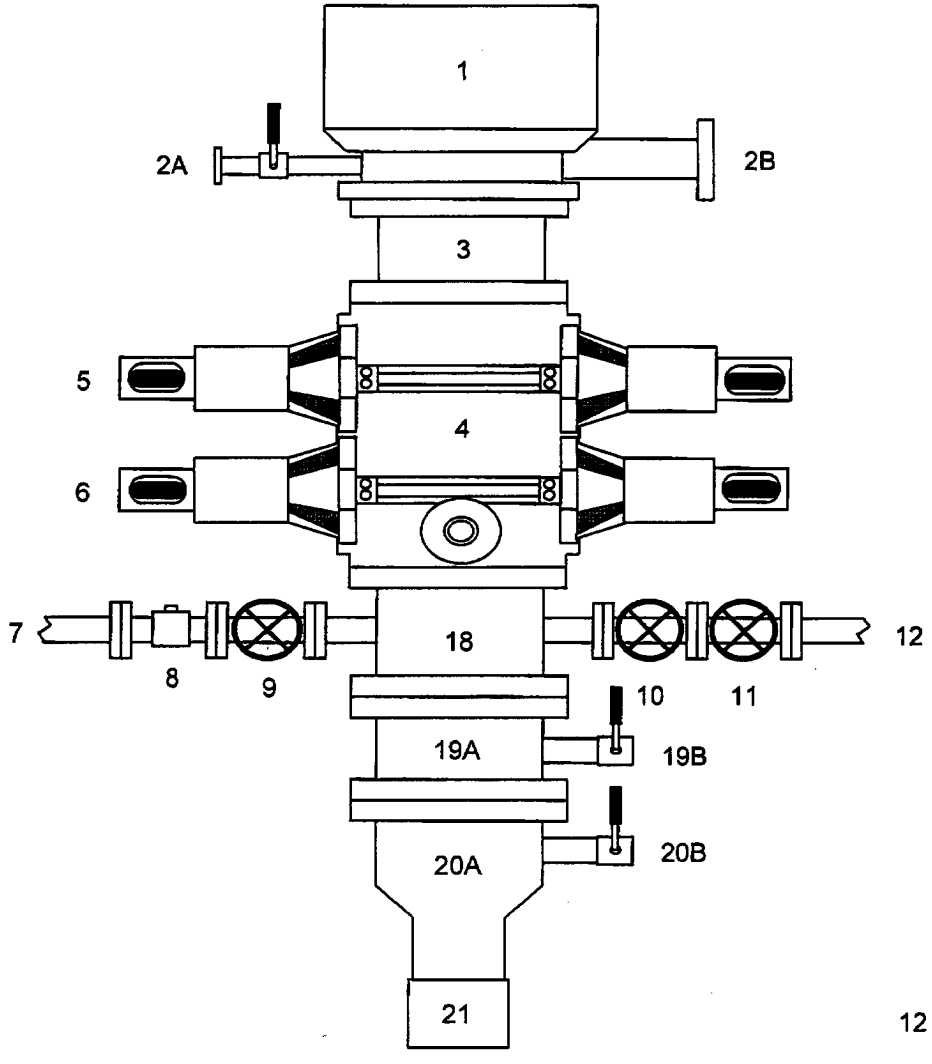
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 1000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the **9-5/8" casing will be pressure tested** against closed blind rams to 200 psi to 300 psi for 2-3 minutes and **to 1000 psi for 30 minutes** (this value is one 44% of the minimum internal yield pressure of the 9-5/8" casing). An 8-3/4" hole will be drilled to intermediate casing point and 7" casing will be run and cemented.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

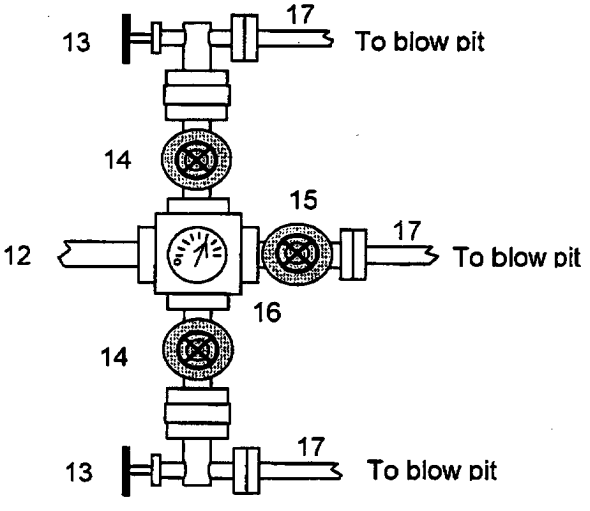
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
2A. Fill-up Line & valve
2B. Blooie Line (for Air Drilling)
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10 Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
19A Csg Spool "B" Section (11", 3M)
19B "B" Section Csg Valve (2", 3M)
20A Csg Head "A" Section (11", 3M)
20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 2-3 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

Casing Design Worksheet - FC/PC/MV well

Surface Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
9-5/8"	H-40	32.3	1400	2270	254	ST&C	220	7,106

Intermediate Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
7"	J-55	20	2270	3740	254	ST&C	3,669	73,380
								-
								-
								-
							Total Weight	73,380

Production Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
4-1/2"	J-55	10.5	4960	5350	162	ST&C	5,794	60,837
								-
								-
								-
							Total Weight	60,837

Casing Parameters

Tensile

SF_t = Tensile / ; Must Exceed 1.8 for Dry or 1.6 for Bouyant

9-5/8"	Surf.	254000	/	7,106	=	35.7
7"	Int.	254000	/	73,380	=	3.5
4-1/2"	Prod.	162000	/	60,837	=	2.7

Collapse

SF_c = Collapse / (Maximum Formation Pressure) or (Mud Gradient X T. V. D.); Must Exceed 1.125

9-5/8"	Surf.	1400	/	160	=	8.8
7"	Int.	2270	/	1300	=	1.7
4-1/2"	Prod.	4960	/	1300	=	3.8

Burst

SF_b = Burst / (Maximum Formation Pressure) or (Mud Gradient X T. V.D.); Must Exceed 1.0

9-5/8"	Surf.	2270	/	160	=	14.2
7"	Int.	3740	/	1300	=	2.9
4-1/2"	Prod.	5350	/	3300	=	1.6

B.O.P. Requirement - (Maximum Formation Pore Pressure) or (Mud Weight X 0.05195 x T. V. D.) - 0.22 X T.V.D.

1,300

Excess Cement Volumes

Surface	150%
Intermediate	150%
Production	n/a

Note: Cement volume calculations are stored in the computer log.

Blowout Preventer Equipment (BOPE)

ABHP= 1300 PSI; TVD = 5,794 Feet; Mud Weight = NA*
*Air drilled hole for production casing.
Operator's Gradient (ABHP / TVD) = 0.224 PSI/Ft *is / is not* appropriate and *does / does not* coincide with the Anticipated Mud Weight for each drilled interval.
The most credible ABHP is 0.224 PSI/Ft.

Mud Weight x 0.05195 = Gradient

NA* X 0.05195 = #VALUE!

ABHP - (0.22 x TVD) = ASP

1300 - (0.22 X 5794)= 25 psi

Operator's proposed BOPE of 3 M *exceeds / does not exceed* the ASP and is therefore *adequate / not adequate*.

Note ASP - Anticipated Surface Pressure
ABHP - Anticipated Bottom Hole Pressure