Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-078739
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. SAN JUAN 30-5 UNIT 229A
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conocophillips.com	9. API Well No. 30 039 27723
3a. Address 4001 PENBROOK, SUITE 346 ODESSA, TX 79762 3b. Phone No. (include area code) Ph: 915.368.1352	10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
4. Location of Well *(Report location clearly and in accordance with any State requirements.*) At surface NWSE 1700FSL 1500FEL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T30N R5W Mer NMP
14. Distance in miles and direction from nearest town or post office*	12. County or Parish RIO ARRIBA 13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 16. No. of Acres in Lease	17. Spacing Unit dedicated to this well 320 Ac E/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 3215 MD	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6401 GL 22. Approximate date work will start	23. Estimated duration

AUG 2004 Received OIL CONS. DIV. DIST. 3

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 the location is on National Forest System 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 (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 06/07/2004
Title AGENT		
Approved by (Signature) /s/ Manken	Name (Printed/Typed)	Date 7-30-04
Title AFM	Office FFO	

Application approval does not warrant or certify 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.

Additional Operator Remarks (see next page)

Electronic Submission #31536 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington

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

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

NMOCD

State of New Mexico
Energy, Minerals & Natural Resources
Department

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

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-27773	71629	BASIN FRUITLAND COAL (GAS)

4 Property Code	5 Property Name	6 Well Number
31327	SAN JUAN 30-5 UNIT	229A

7 OGRID No.	8 Operator Name	9 Elevation
217817	CONOCOPHILLIPS COMPANY	6401

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
J	21	30N	5W		1700'	SOUTH	1500'	EAST	RIO ARRIBA

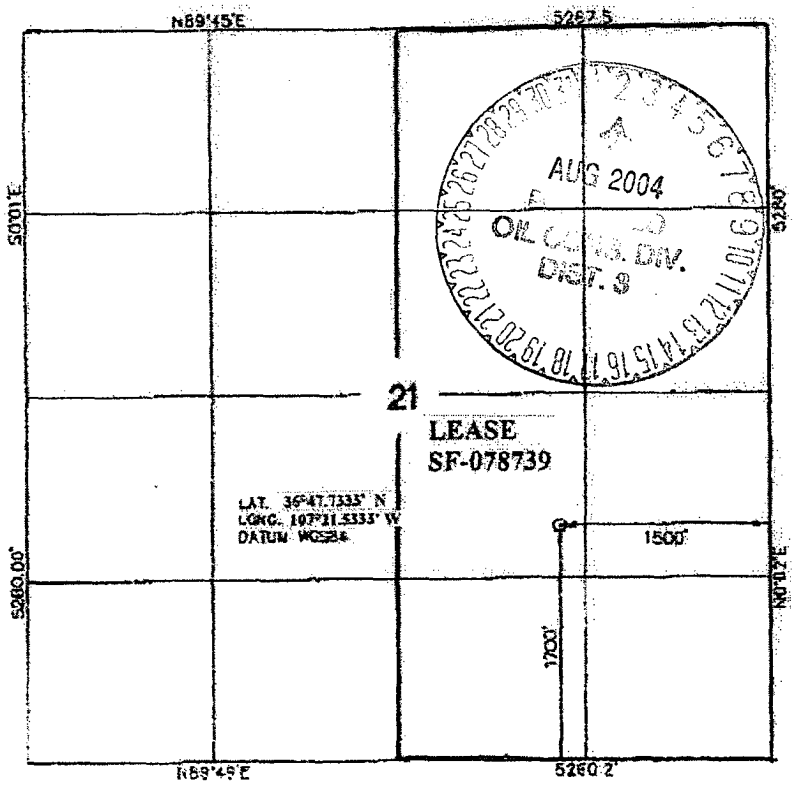
11 Bottom Hole Location If Different From Surface

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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

16



17 OPERATOR CERTIFICATION

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

Vicki Westby
Signature

Vicki Westby
Printed Name

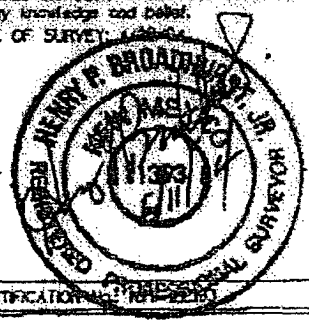
Sr. Analyst
Title and E-mail Address

June 7, 2004
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 direct supervision, and that the same is true and correct to the best of my knowledge and belief.

DATE OF SURVEY: [illegible]



CERTIFICATE NO. [illegible]

Additional Operator Remarks:

ConocoPhillips Company proposes to drill a vertical wellbore to the Basin Fruitland Coal formation. This well will be drilled and equipped in accordance with the attachments submitted herewith. This is a HPA well that doesn't require notification. The 229A is located entirely within the SJ 30-5 FC PA and is surrounded by the PA Operator - ConocoPhillips Company. This application is for APD/ROW.

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

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

Form C-103
March 4, 2004

WELL API NO.

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
San Juan 30-5 Unit

1. Type of Well:
Oil Well ☐ Gas Well X☐ Other

8. Well Number
229A

2. Name of Operator
ConocoPhillips Company

9. OGRID Number
217817

3. Address of Operator
4001 Penbrook, Odessa, TX 79762

10. Pool name or Wildcat
Basin Fruitland Coal

4. Well Location

Unit Letter J : 1700 feet from the South line and 1500 feet from the East line

Section 21 Township 30N Range 5W NMPM Rio Arriba County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
6401' GL

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL J Sect 21 Twp 30N Rng 5W Pit type Drill Pit Depth to Groundwater >100' Distance from nearest fresh water well >200 <1 000' Distance from nearest surface water >200 <1000' Below-grade Tank Location UL Sect Twp Rng ; feet from the line and feet from the line

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPLETION	☐	CASING TEST AND CEMENT JOB	☐		
OTHER: Drill Pit Notification			√	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.

ConocoPhillips Company's Generic Pit Plan is on file at NMOCD in Aztec, NM. See the attached diagram that details the location of the pit in reference to the proposed wellhead. The drill pit will be lined. The drill pit will be closed after the well has been completed. The solids left after the water has been disposed of will be sampled and NMOCD approval will be obtained prior to closure of this pit.

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 Vicki Westby TITLE Sr. Analyst DATE 6/7/04

Type or print name Vicki Westby E-mail address: Vicki.R.Westby@conocophillips.com Telephone No. 432-368-1352

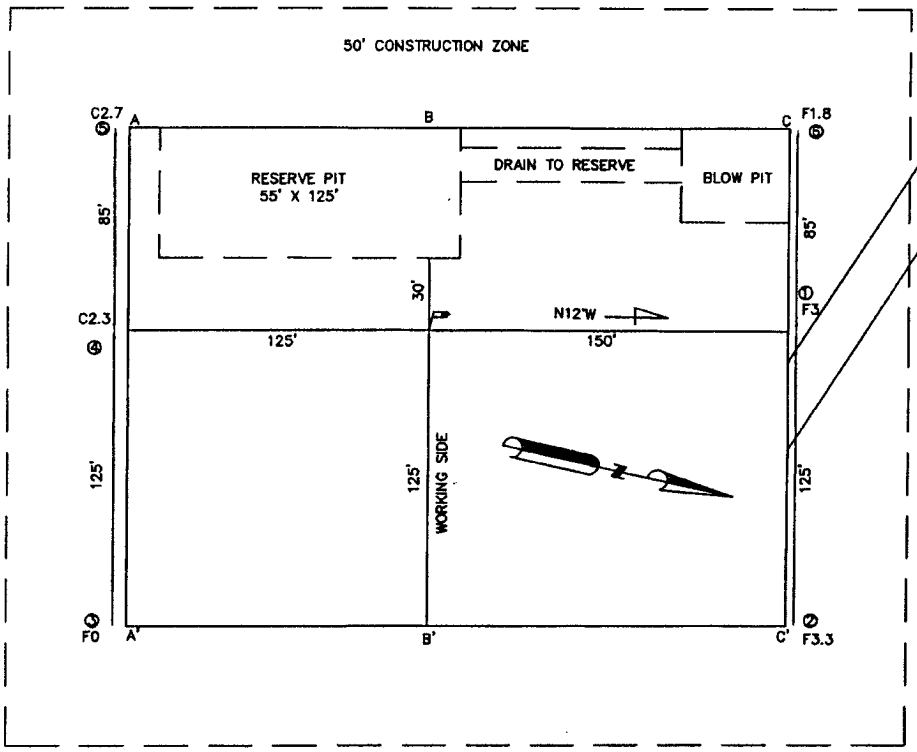
(This space for State use)

APPPROVED BY TITLE DEPUTY OIL & GAS INSPECTOR, DIST. DATE AUG – 2 2004

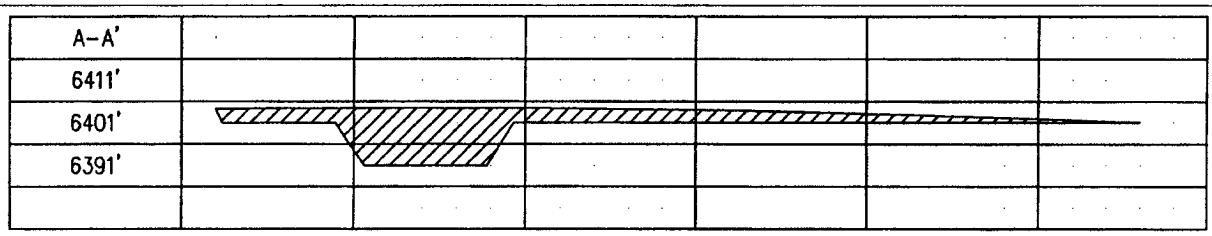
Conditions of approval, if any:

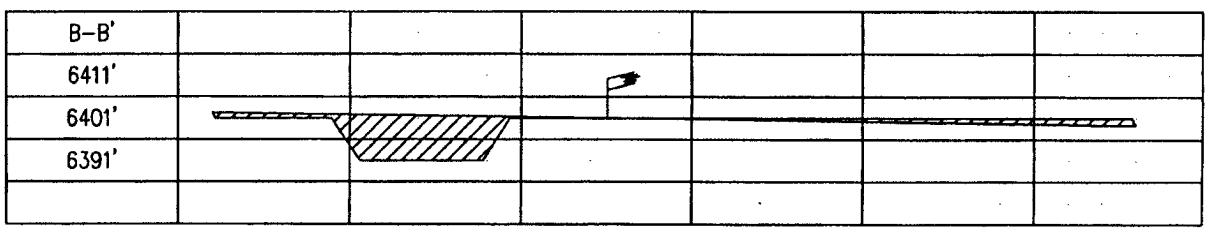
CONOCOPHILLIPS COMPANY SAN JUAN 30-5 UNIT #229A
1700' FSL & 1500' FEL, SECTION 21, T30N, R5W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION: 6401

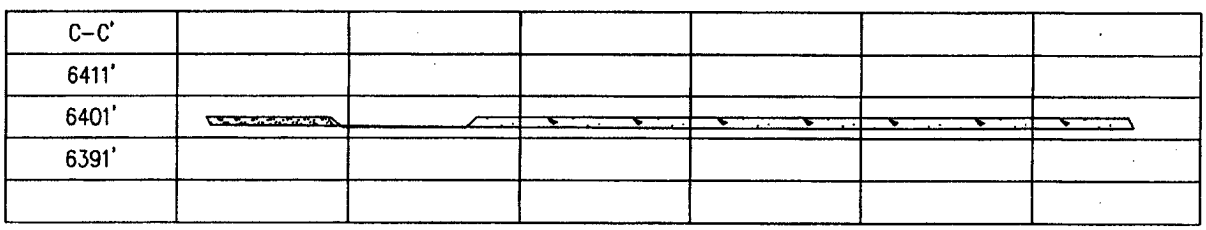
LATITUDE: 36.79556° N
LONGITUDE: 107.35889° W
DATUM: WGS84



PLAT NOTE:
SURFACE OWNER ARMONDO ESPINOSA







FILENAME: 30-5 229A.dwg	SHEET 2 OF 6	CHENAULT CONSULTING INC.	DRAWN BY:J.FUNK	CHECKED BY:P.B.

CONOCOPHILLIPS COMPANY

WELL NAME: San Juan 30-5 # 229A

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit J, 1700' FSL & 1500' FEL
   Section 21, T30N, R5W

2. Unprepared Ground Elevation: @ 6401'.

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

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 3215'.

6. The estimated tops (MD RKB) of important geologic markers are as follows:
   Note: RKB is 13' above ground level.

San Jose -	13'	Base of Main Coal -	3124'
Naciamento -	1349'	**Total Depth -**	**3215'**
Ojo Alamo -	2449'		
Kirtland Shale -	2649'		
Fruitland -	2924'		
Intermediate Csg -	2995'		

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 -	2449' – 2649'
Oil:	none	
Gas:	Fruitland Coal -	2924' - 3215'
Gas & Water:	Fruitland Coal -	2924' - 3215'

8. The proposed casing program is as follows:

   Surface String: 9-5/8", 32.3#, H-40, ST &C @ 200' below ground level*
   Intermediate String: 7", 20#, J-55, ST&C @ 2995' MD RKB
   Prod Liner Option: 5-1/2", 15.5#, J-55, LT &C @ 2975' – 3215' MD RKB

   * The surface casing will be set at a minimum of 200' below ground level, but could be set deeper if required to maintain hole stability.

9. Cement Program:

   Surface String: 150 sx Class G cement with 1.16 cuft/sx yield, 2% bwoc CaCl2 (S001), 0.25#/sx Cellophane Flake (D029) = 174.0 cf. **Cement will circulate to surface.**

9. Cement program: (continued from Page 1)

Intermediate String:

Lead Cement: 384 sx Class G w/3% D079 (chemical extender) 0.25#/sx D029 (Cellophane flakes), 0.05 GPS D047 (antifoam agent) 0.2% D046 (antifoam agent) mixed at 11.7 ppg and yield of 2.61 cuft/sx = 1002.2 cf. **Lead slurry Cement will circulate to surface.**

Tail: 100 sx – 50/50/G/POZ cement w/2% D020 (bentonite extender), 2% S001 (CaCl2), 5#/sxD024 (gilsonite), ¼#/sx D029(cellophane flakes) & 2% D046 (antifoam agent) @ a weight of 13.5 ppg and yield of 1.27 cuft/sx = 127.0 cf.

Note: ConocoPhillips Company continually works to improve the cement slurries on our wells. Our Cementing Service Companies are currently trying to improve what we are using now and before we would use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) - 10' above shoe and top of 2nd, 3rd, & 4th jts.

Intermediate: Total seven (7) - 10' above shoe and top of 1st, 2nd, 4th, 6th, 8th, & 1st jt. into shoe.

Turbulators: Total three (6) - one at 1st jt below top of Ojo Alamo and at each joint to top of Kirtland Shale.

10. Cavitation Option: Depending on well conditions the well may be cavitated or may be completed without cavitation.

11. Production liner option: Depending on well conditions a 5-1/2" liner may be run or the well may be completed without a liner. If a liner is run, it would be run without a liner hanger – or possibly with a liner hanger – and would be left uncemented.

12. Perforations: If a liner is run, it will be perforated using electric line perforating guns in the Fruitland Coal interval(s).

13. Tubing will be run in either flowing well configuration or in pumping well configuration. The size of tubing run and the configuration (either pumping or flowing configuration) will be dependent on the well conditions and flow test results. Our proposed options for the tubing string are as follows:

Pumping Well Configuration:

- Mud Anchor consisting of one joint 2-7/8" tubing, orange peeled, with slots in the upper 2' of the joint below the upset.
- 2-7/8" x 2-3/8" x-over
- 2-3/8" OD x 1.78" ID F-Nipple
- 2-3/8", 4.7#, J-55, EUE 8RD tubing to surface
- Insert pump run on rods and set in F-Nipple

2-3/8" Flowing Well Configuration:

- 2-3/8" OD x 1.78" ID F-Nipple
- 2-3/8", 4.7#, J-55, EUE 8RD tubing to surface

2-7/8" Flowing Well Configuration:

- 2-7/8" OD x 2.5" ID F-Nipple
- 2-7/8", 6.5#, J-55, EUE 8RD tubing to surface

3-1/2" Flowing Well Configuration:

- 3-1/2" OD x 1.78" ID F-Nipple
- 3-1/2", 9.2# J-55 FL4S (as an option inside the liner or in the open hole)
- 3-1/2" 9.3# J-55 EUE 8rd tubing to surface

14. 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.

15. Drilling Mud Prognosis:
    - Surface - spud mud on surface casing.
    - Intermediate - fresh water w/polymer sweeps. Bentonite as required for viscosity.
    - Below Intermediate – air / water mist drilling media with foamer and polymer as needed for hole stability and with corrosion inhibitor.

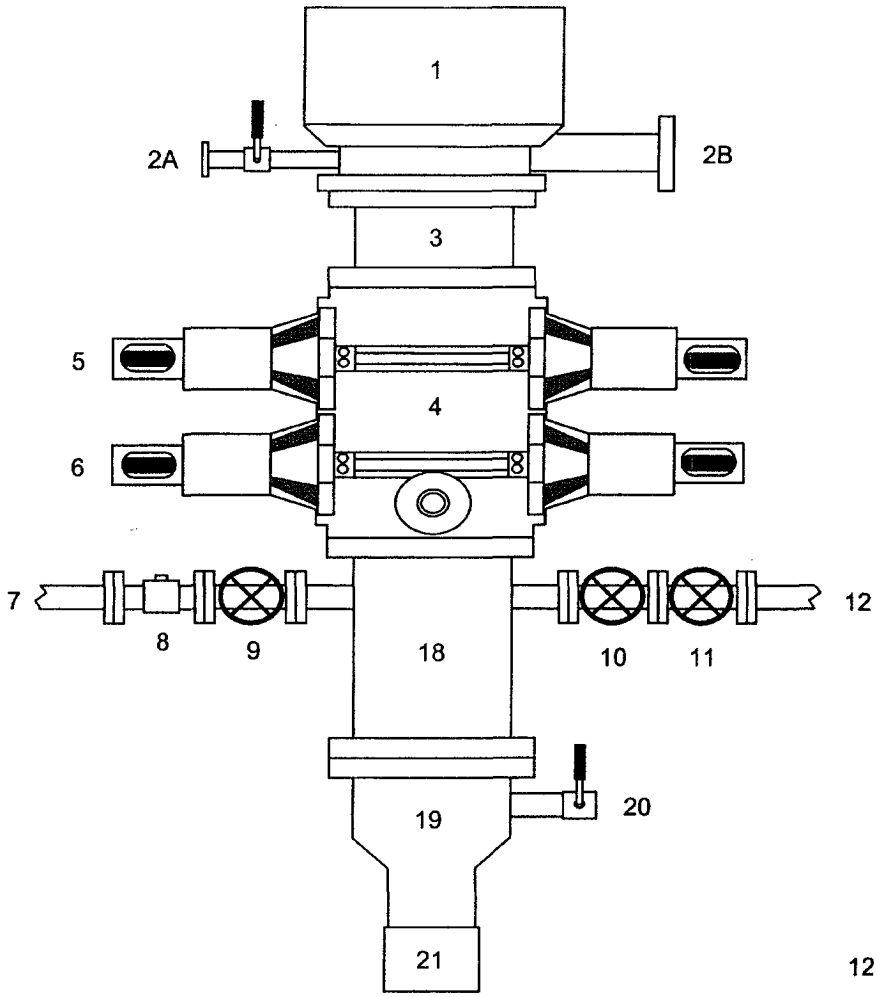
16. The testing, logging, and coring programs are as follows:
    - D.S.T.s: Flow Tests and Shut-In pressure build up tests will be taken as needed in the Fruitland coal interval.
    - Cores: None
    - Logs: **Mud log from intermediate casing shoe to TD**

17. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H2S equipment will be used.

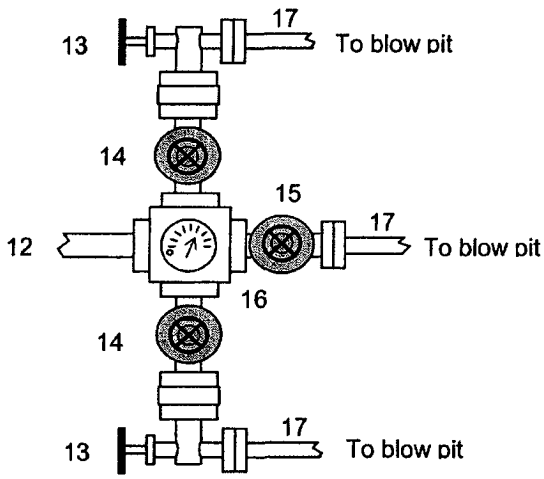
Estimated Bottomhole pressures: Fruitland Coal - +/- 115 psi

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



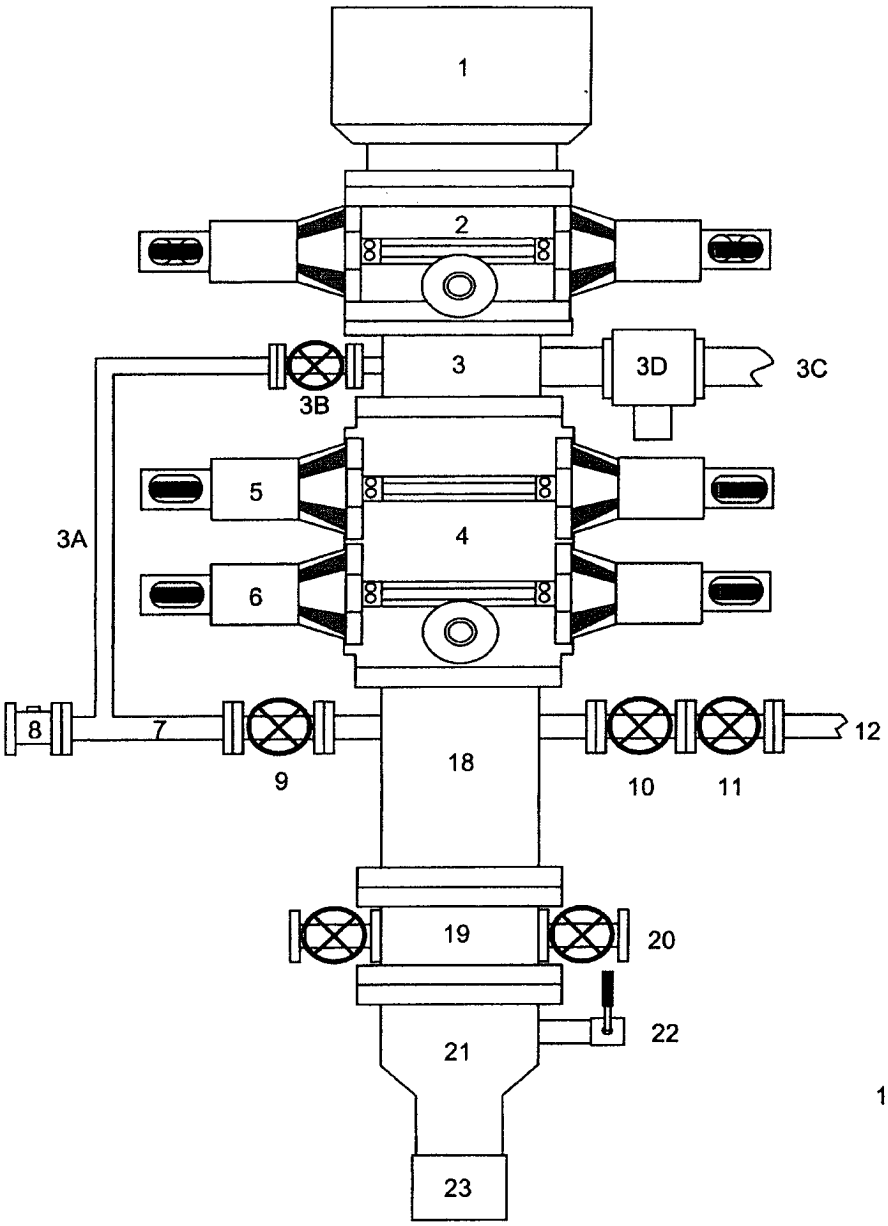
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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). (Note: per regulatory requirements we will wait on cement at least 8 hrs after placement before testing the 9-5/8" surface casing). Then an 8-3/4" hole will be drilled to intermediate casing point and 7" intermediate casing will be run and cemented.

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

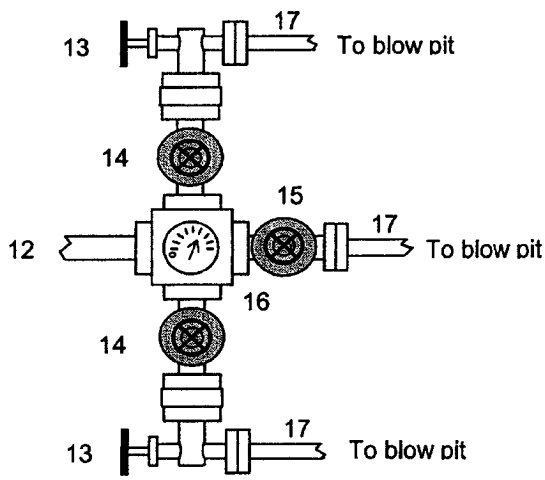
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Cavitation Program



1. Rotating Head
2. Single Ram BOP (7-1/16", 3M)
3. Mud Cross
3A. Equalizing Line (2")
3B. Wing Valve (2-1/16", 3M)
3C. Blooie Line (2 ea, 5" OD)
3D. HCR Valve (1 ea per line, 4-1/16")
4. Double Ram BOP (7-1/16", 3M)
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. Vent Line (2")
18. Spacer Spool
19. Tubing Head
20. Tubing Head Valves (2- 9/16")
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9-5/8" Casing Collar



This BOP arrangement and test program is for the cavitation program. The BOP will be installed on the tubing head. 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. The pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 1800 psi (high pressure test) for 10 minutes - This test will be done with a test plug or possibly without a test plug (ie against casing). If we conduct this test without a test plug we will ensure that we have sufficient drillstring weight in the hole to exceed the upward force generated by the test.

We use a power swivel and air/mist to drill the 6-1/4" hole in our cavitation program. We do not use a kelly. In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. String floats will be used inside the drillpipe
2. Stab-in TIW valve for all drillstrings in use
3. Each blooie line is equipped with a hydraulically controlled valve (HCR valve).