

2005 MAY 17 AM 10 50

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
RECEIVED  
FARMINGTON, NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078687
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator ConocoPhillips Company		7. If Unit or CA Agreement, Name and No.
3a. Address 4001 Penbrook, Odessa, TX 79762	3b. Phone No. (include area code) 432-368-1352	8. Lease Name and Well No. San Juan 32 Fed 15 #1
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface NENE 270 FNL - 697 FEL At proposed prod. zone NENE 660 FNL - 1000 FEL		9. API Well No. 30-045-33088
14. Distance in miles and direction from nearest town or post office*		10. Field and Pool, or Exploratory Basin Fruitland Coal
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 1305.05 acres	11. Sec., T. R. M. or Blk. and Survey or Area Section 15, T32N, R9W (Surface and Bottom Hole)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3809' TVD 3857.16' MD	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6951' GL	22. Approximate date work will start*	13. State NM
17. Spacing Unit dedicated to this well E/2 317.6 acres		
20. BLM/BIA Bond No. on file		
23. Estimated duration		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must 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 BLM.

25. Signature Vicki Westby (pj)	Name (Printed/Typed) Vicki Westby	Date 5/16/2005
Title State agent		
Approved by (Signature) [Signature]	Name (Printed/Typed)	Date 9/28/05
Title AFM	Office FFO	

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 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.

\*(Instructions on page 2)

ConocoPhillips Company proposes to drill a directional wellbore to the Basin Fruitland Coal formation. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD/ROW.

ConocoPhillips will use mudloggers to prevent us from accessing the Pictured Cliffs formation.

This well does not require HPA notification.

NMOCD

HOLD C1M FOR

Directional Survey

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-33088		Pool Code 71629	Pool Name BASIN FRUITLAND COAL (GAS)
Property Code 35156	31354	Property Name SAN JUAN 32 FED	Well Number 15 #1
OGRIID No. 217817	Operator Name CONOCOPHILLIPS COMPANY		Elevation 6951

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	15	32N	09W	270	697	NORTH	697	EAST	SAN JUAN

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
A	15	32N	09W	660	1000	NORTH	1000	EAST	SAN JUAN

Dedicated Acres E/2 317.6	Joint or Infill	Consolidation Code	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>16</p>	<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>Vicki Westby</i> Signature Vicki Westby Printed Name Staff Agent Title and E-mail Address April 25, 2005 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>Date of Survey: 03/28/05 Signature and Seal of Professional Surveyor <i>Henry P. Britton</i> HENRY P. BRITTON JR. REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO 4133295 Certificate Number: NM 4133295</p>

2005 MAY 17 PM 10 50

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

May 27, 2004

WELL API NO.

30-045-33088

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 32 Fed 15

8. Well Number

1

9. OGRID Number

217817

10. Pool name or Wildcat

Basin Fruitland Coal

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.)

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

2. Name of Operator

ConocoPhillips Company

3. Address of Operator

4001 Penbrook, Odessa, TX 79762

4. Well Location

Unit Letter A 270 feet from the North line and 697 feet from the East line  
Section 15 Township 32N Range 9W NMPM San Juan County

1. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6951 GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type Drill Depth to Groundwater 80' Distance from nearest fresh water well > 1000' Distance from nearest surface water 200'

Liner Thickness:

mil

Below-Grade Tank: Volume

bb1s; Construction Material

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

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 11.03. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

The pit will be constructed and closed in accordance with Rule 50 and as per the Nov. 1, 2004 Guidelines. 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.

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 NMOCDC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Vicki Westby

TITLE Staff Agent

DATE 5/16/2005

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:

Conditions of Approval (if any)

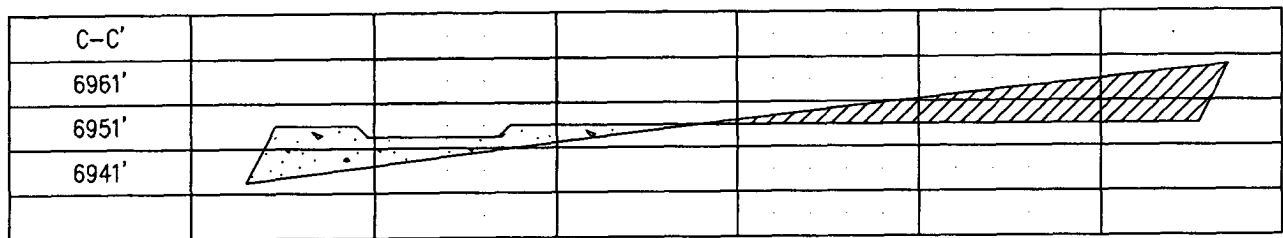
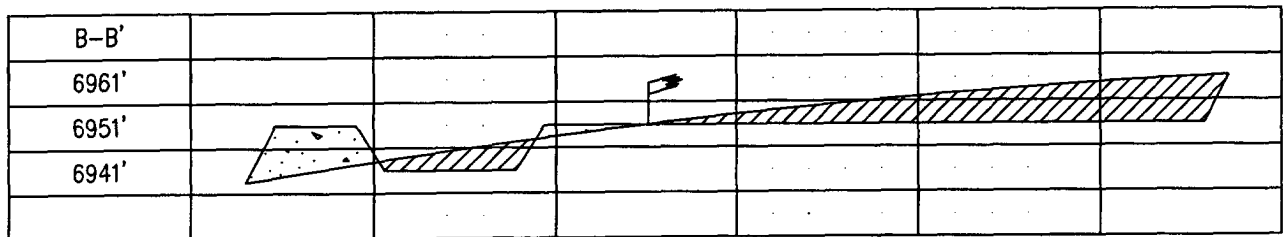
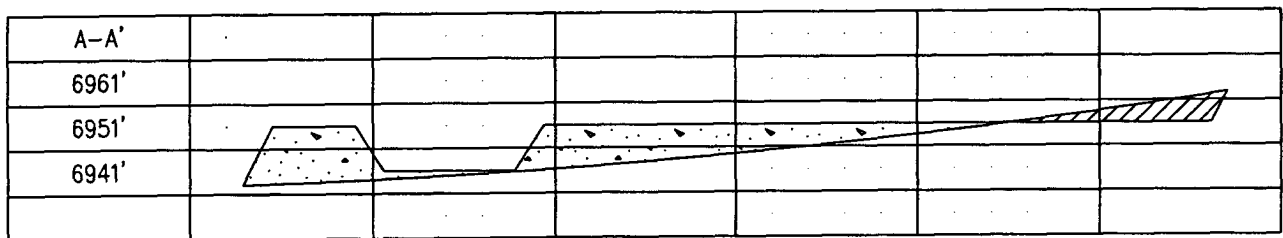
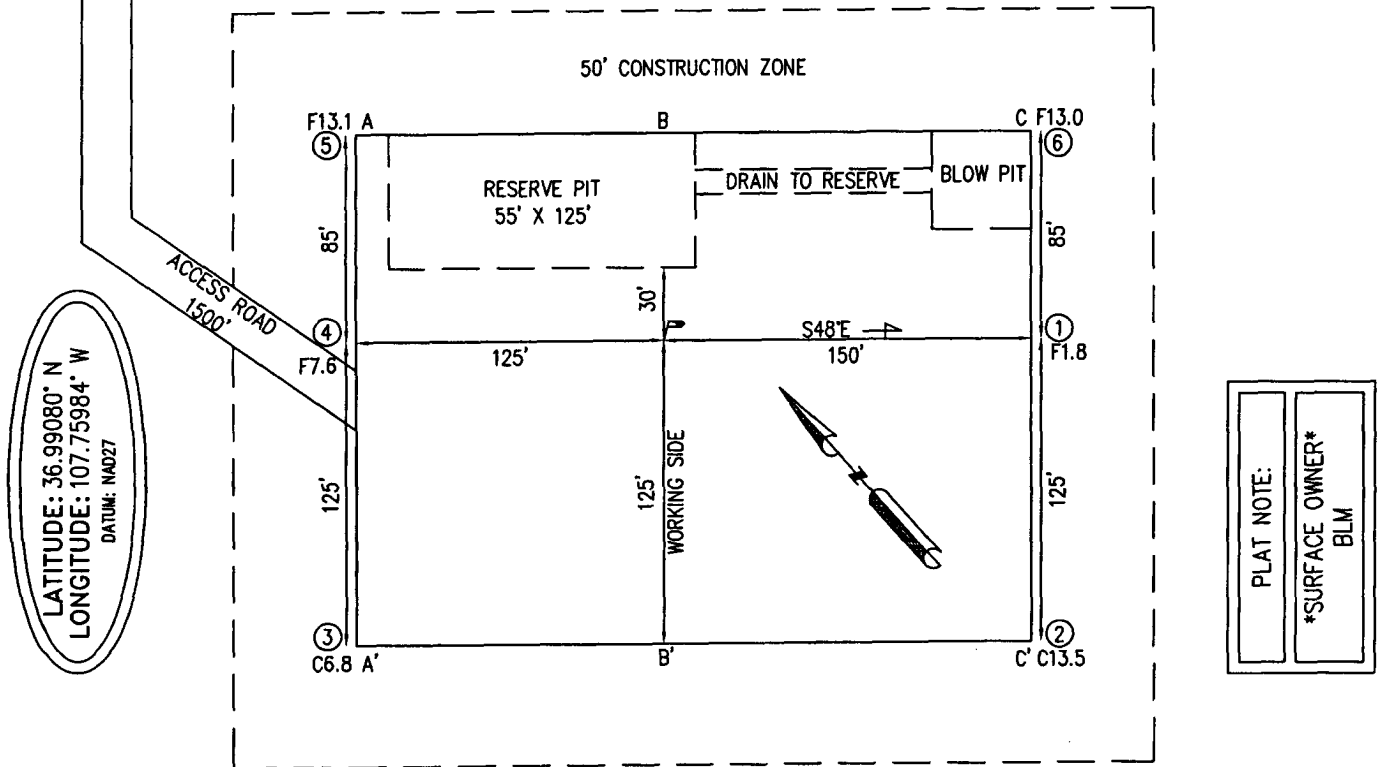
TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 4

DATE

OCT 03 2005

CONOCOPHILLIPS COMPANY SAN JUAN 32 FED 15 #1  
 270' FNL & 697' FEL, SECTION 15, T32N, R09W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6951'



# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32 FED 15 1

Lease:		AFE #: WAN.CBM.5107		AFE \$:	
Field Name: CBM DRILL BLOCKS		Rig:		State: NM	County: SAN JUAN
Geoscientist: Cloud, Tom A		Phone: +1 832 486-2377		Prod. Engineer: Limb, H G	
Res. Engineer: Peterson, Brad T		Phone: 486-2055		Phone: 1-832-486-2427	
		Proj. Field Lead:		Phone:	

## Primary Objective (Zones):

Zone	Zone Name
JCV	BASIN FRUITLAND COAL (GAS)

## Location: Surface

## Straight Hole

Latitude: 36.99	Longitude: -107.76	X:	Y:	Section: 15	Range: 9W
Footage X: 697 FEL	Footage Y: 270 FNL	Elevation: 6951	(FT)	Township: 32N	
Tolerance:					

## Location: Bottom Hole

## Straight Hole

Latitude:	Longitude:	X:	Y:	Section: 15	Range: 9W
Footage X: 1000 FEL	Footage Y: 660 FNL	Elevation:	(FT)	Township: 32N	
Tolerance:					

Location Type:	Start Date (Est.):	Completion Date:	Date In Operation:
Formation Data: Assume KB = 6964 Units = FT			

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	13	6951	<input type="checkbox"/>			
SURFACE CSG	213	6751	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1014	5950	<input type="checkbox"/>			
OJAM	2354	4610	<input type="checkbox"/>			Possible water flows.
KRLD	2454	4510	<input type="checkbox"/>			
FRLD	3399	3565	<input type="checkbox"/>			Possible gas.
Intermediate Casing	3429	3535	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
TOP COAL	3454	3510	<input type="checkbox"/>			
BASE MAIN COAL	3614	3350	<input type="checkbox"/>	1000		
PC TONGUE	3664	3300	<input type="checkbox"/>			
BASE LOWEST COAL	3729	3235	<input type="checkbox"/>			
PCCF	3734	3230	<input type="checkbox"/>			
Total Depth	3809	3155	<input type="checkbox"/>			6-1/4" hole possibly underreamed to 9.5". Optional Liner: 5.5", 15.5#, J-55 LTC - left uncemented.

## Reference Wells:

Reference Type	Well Name	Comments
Intermediate	EPNG SJ 32-9 #66	
Intermediate	Pacific NW SJ #54-14	

# PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32 FED 15 1

<b>Logging Program:</b>					
Intermediate Logs: <input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo					
TD Logs: <input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input type="checkbox"/> TDT					
TD includes 80 feet sump/rathole & COPC will comply with					
Additional Information: the BLM's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs formation					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

Comments: Zones - Fruitland directional well.

Mud Log from intermediate casing shoe to TD will be obtained.

**Drilling Mud Program:**

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist drilling media with foamer, polymer, & corrosion inhibitor as needed

**Centralizer Program:**

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

General/Work Description -

# ConocoPhillips

**ConocoPhillips**  
 Field: San Juan County, NM  
 Site: San Juan 32 Fed 15 No. 1  
 Well: Well #1  
 Wellpath: Original Hole  
 Plan: Plan #1



## FIELD DETAILS

San Juan County, NM  
 New Mexico  
 USA

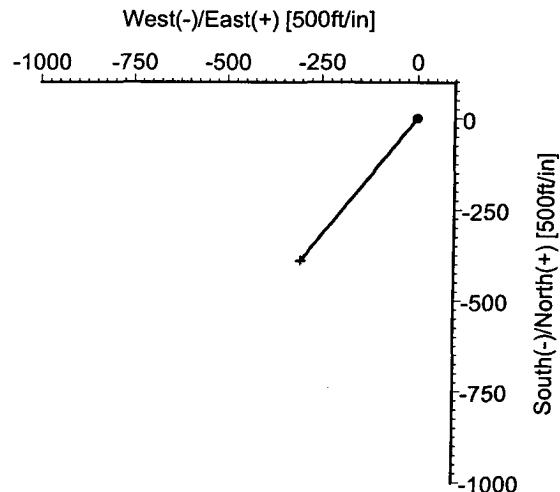
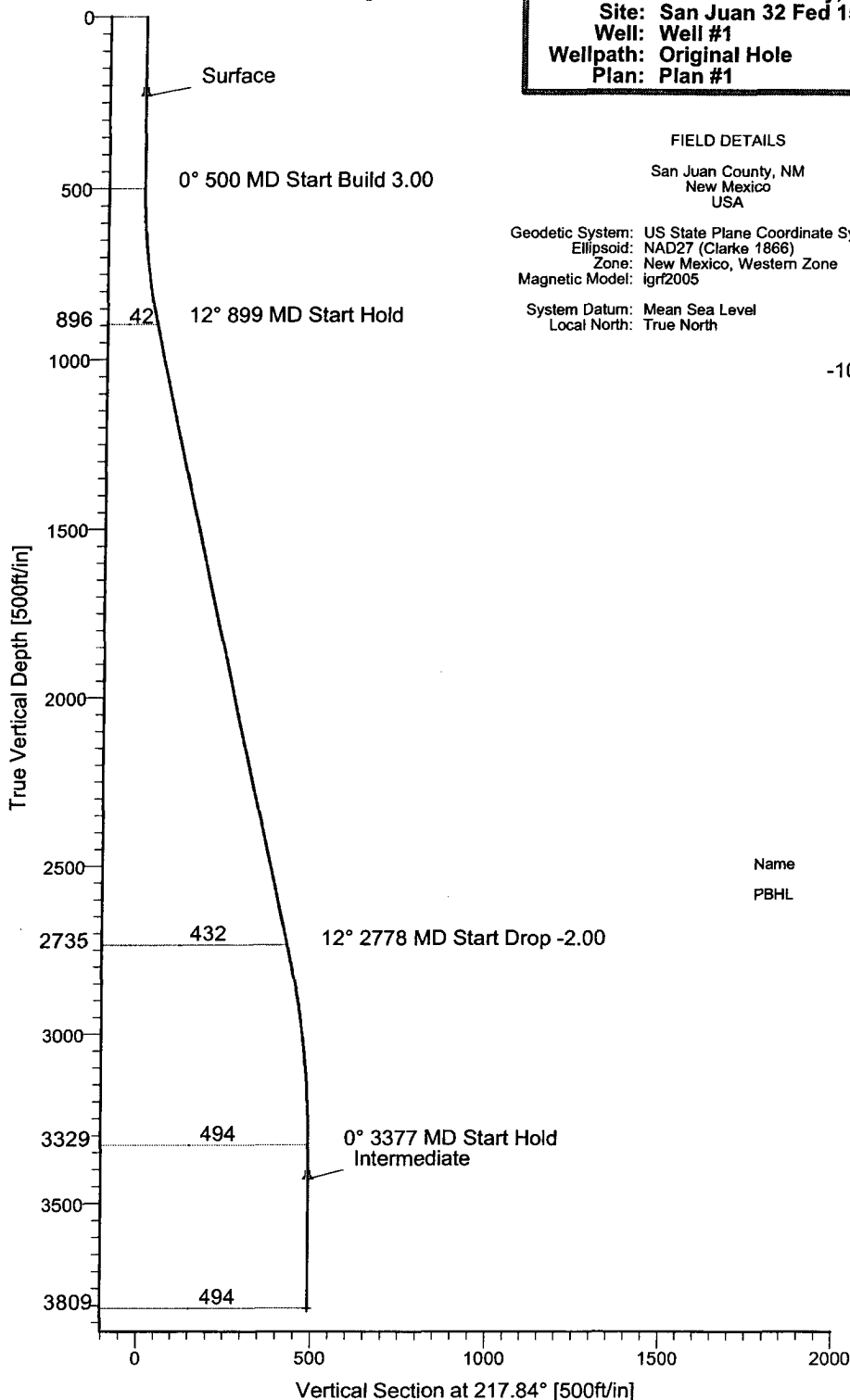
Geodetic System: US State Plane Coordinate System 1927  
 Ellipsoid: NAD27 (Clarke 1866)  
 Zone: New Mexico, Western Zone  
 Magnetic Model: igr2005

System Datum: Mean Sea Level  
 Local North: True North

## SITE DETAILS

San Juan 32 Fed 15 No. 1  
 Section 15, T32N, R9W  
 San Juan County, NM

Water Depth: 0.00  
 Positional Uncertainty: 0.00  
 Convergence: 0.00



## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	3809.00	-390.00	-303.00	0.00	0.00	Point

## WELLPATH DETAILS

### Original Hole

Rig:			
Ref. Datum:	SITE	0.00ft	
V. Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
217.84°	0.00	0.00	3809.00

## CASING DETAILS

No.	TVD	MD	Name	Size
1	230.00	230.00	Surface	9.625
2	3429.00	3477.16	Intermediate	7.000

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	217.84	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	217.84	500.00	0.00	0.00	0.00	0.00	0.00	
3	899.22	11.98	217.84	896.32	-32.83	-25.51	3.00	217.84	41.57	
4	2778.32	11.98	217.84	2734.52	-340.76	-264.74	0.00	0.00	431.51	
5	3377.16	0.00	217.84	3329.00	-390.00	-303.00	2.00	180.00	493.87	
6	3857.16	0.00	217.84	3809.00	-390.00	-303.00	0.00	0.00	493.87	PBHL

**San Juan 32 Fed 15 # 1**  
**Halliburton Cementing Program**

**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	230 '	
Cement Yield	1.21	cuft/sk
Cement Density	15.6	lb/gal
Excess Cement	125	%
Cement Required	141	sx

SHOE      230 ',   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	3477 '	
Lead Cement Yield	2.91	cuft/sk
Lead Cement Density	11.5	lb/gal
Lead Cement Excess	160	%
Tail Cement Length	315 '	
Tail Cement Yield	1.33	cuft/sk
Tail Cement Density	13.5	lb/gal
Tail Cement Excess	160	%
Lead Cement Required	407	sx
Tail Cement Required	100	sx

LINER TOP      3457 '

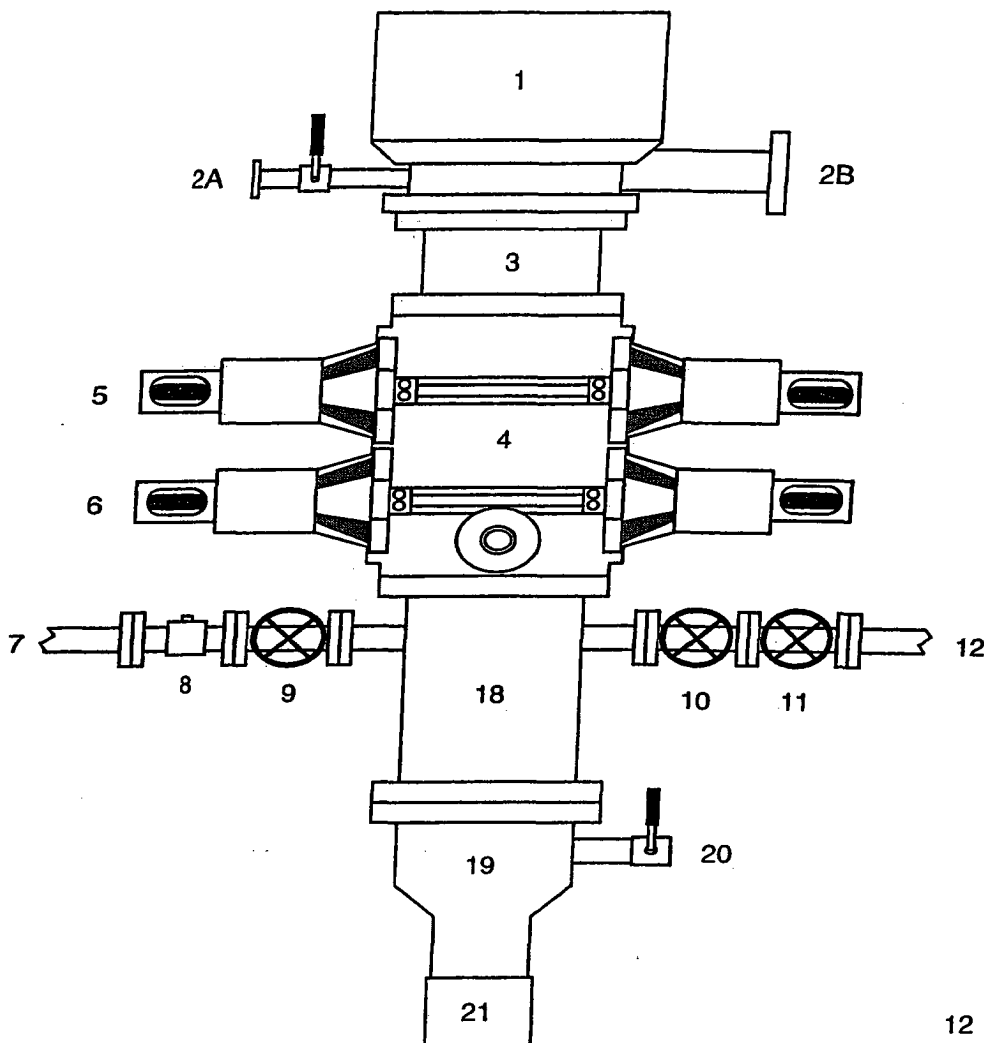
SHOE      3477 ',   7 ",   20 ppf,   J-55

LINER BOTTOM      3857 ' (Uncemented)

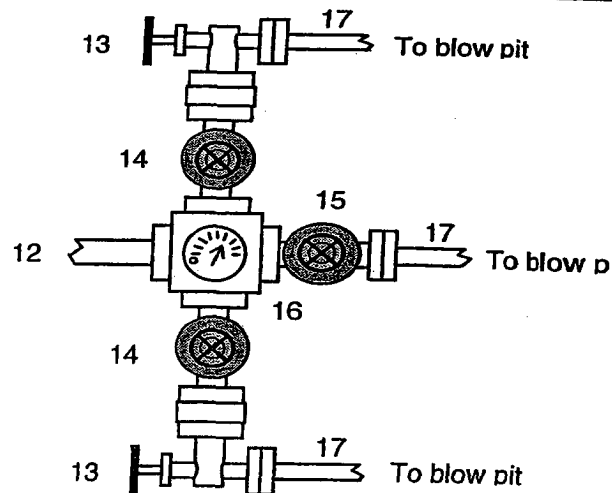


# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



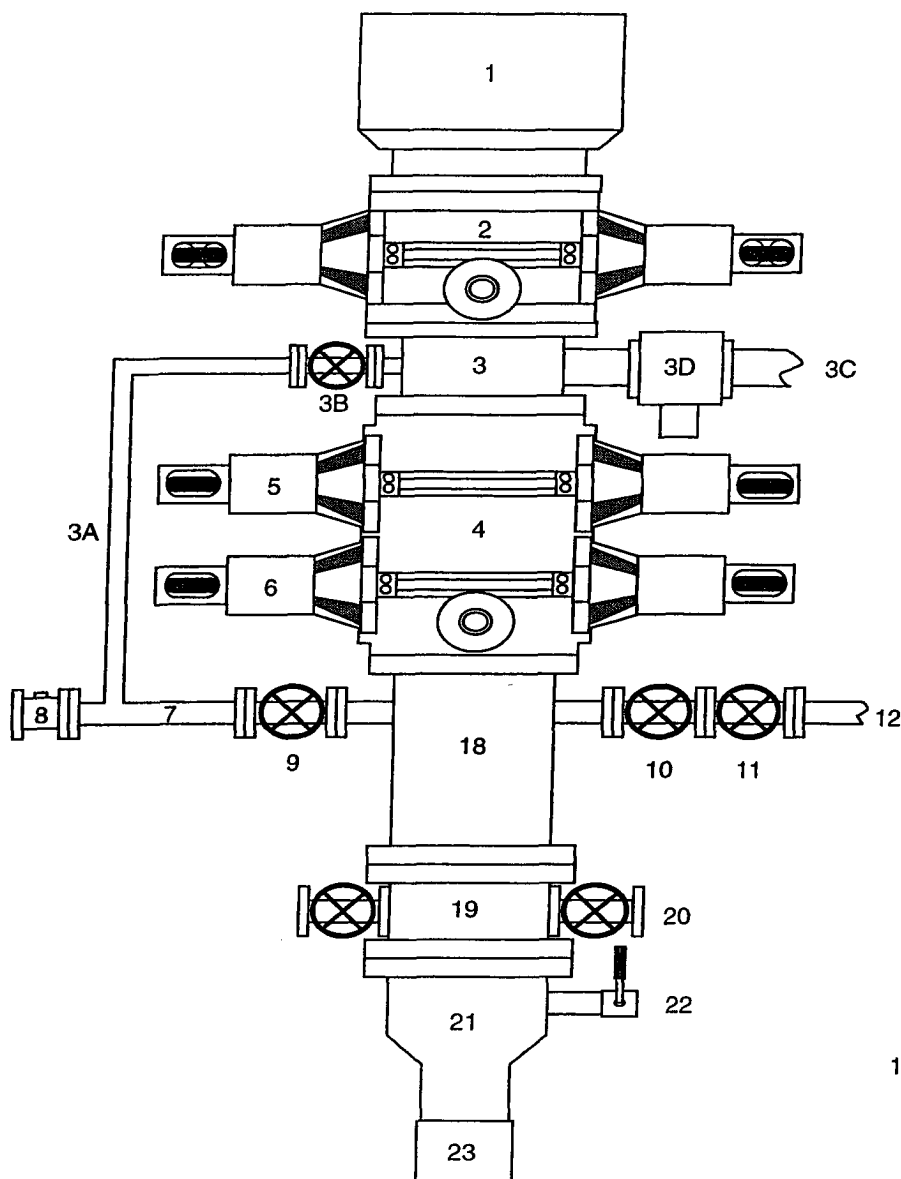
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 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 10 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:

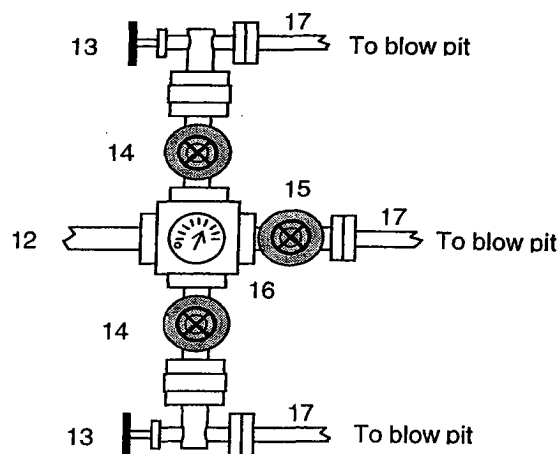
1. Upper Kelly cock Valve with handle

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Cavitation Program



1. Stripping 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 10 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 10 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).

Property : San Juan 32 Fed 15 Well #: 1

**Surface Location:**

Unit: A Section: 15 Township: 32N Range: 9W

County: San Juan State: New Mexico

Footage: 270 from the North line, 697 from the East line.

**CATHODIC PROTECTION**

ConocoPhillips (COP) proposes to drill a cathodic protection deep well groundbed for the subject well. COP will drill a hole vertically at the surface large enough to accommodate 20 feet of 8 inch diameter PVC pipe for surface casing to assist in further drilling and loading. Casing may be cemented in place for stability if needed. COP will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on the existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.