

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078998
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		8. Lease Name and Well No. San Juan 32-7 Unit #227A
3b. Phone No. (include area code) 432-368-1352		9. API Well No. 30-045-33102
4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface NESW 1434 FSL - 602 FWL At proposed prod. zone SENW 2500 FNL - 750 FWL		10. Field and Pool, or Exploratory Basin Fruitland Coal
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area Sec 18, T31N, R7W NMPM K
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish San Juan
16. No. of acres in lease 1718.91 acres		13. State NM
17. Spacing Unit dedicated to this well Order R-9305 - 321.61 acres		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file
19. Proposed Depth 3587' TVD 3987.89' MD		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6604' GL		22. Estimated duration
22. Approximate date work will start*		

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 <i>Vicki Westby</i>	Name (Printed/Typed) Vicki Westby	Date 5/19/2005
Title Staff Agent		

Approved by (Signature) <i>John Lovato</i>	Name (Printed/Typed)	Date 7/11/05
Title Acting Field Manager - Minerals		

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)

HOLD C104 FOR Directional survey

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.

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

NMOCD

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

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

¹ API Number 30-045-3310-2		² Pool Code 71629		³ Pool Name BASIN FRUITLAND COAL (GAS)	
⁴ Property Code 31329		⁵ Property Name SAN JUAN 32-7 UNIT		⁶ Well Number 227A	
⁷ OGRID No. 217817		⁸ Operator Name CONOCOPHILLIPS COMPANY		⁹ Elevation 6604	

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot 14N	Feet from the	North/South line	Feet from the	East/West line	County
K	18	31N	07W		1434	SOUTH	602	WEST	SAN JUAN

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 14N	Feet from the	North/South line	Feet from the	East/West line	County
F	18	31N	07W		2500	NORTH	750	WEST	SAN JUAN

¹² Dedicated Acres 321.61	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-9305
---	-------------------------------	----------------------------------	-----------------------------------

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

WEST 4540.80'

TR 55

7 6

8 2500'

750'

BHL

18

9 602'

Surface

10 434'

WEST 4383.06'

LAT: 36.89626° N
LONG: 107.61580° W
DATUM: NAD27

LEASE FEDERAL

5F-078998

1718.91

total acres

RECEIVED 17/8.91

00 01 00 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

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
Staff Agent
Title and E-mail Address
April 20, 2005
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.

Date of Survey: 03/13/05
Signature and Seal of Professional Surveyor
Henry P. [Signature]
Professional Surveyor
Certificate Number: NM 11393

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.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 32-7 Unit

8. Well Number 227A

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 K 1434 feet from the South line and 602 feet from the West line
Section 18 Township 31N Range 7W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6604' GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type Drill Depth to Groundwater 190' Distance from nearest fresh water well > 1 Mile Distance from nearest surface water 290'

Liner Thickness: mil Below-Grade Tank: Volume bbls; 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 NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Vicki Westby

TITLE Staff Agent

DATE 5/19/2005

Type or print name

E-mail address:

Telephone No.

For State Use Only

APPROVED BY:

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 55

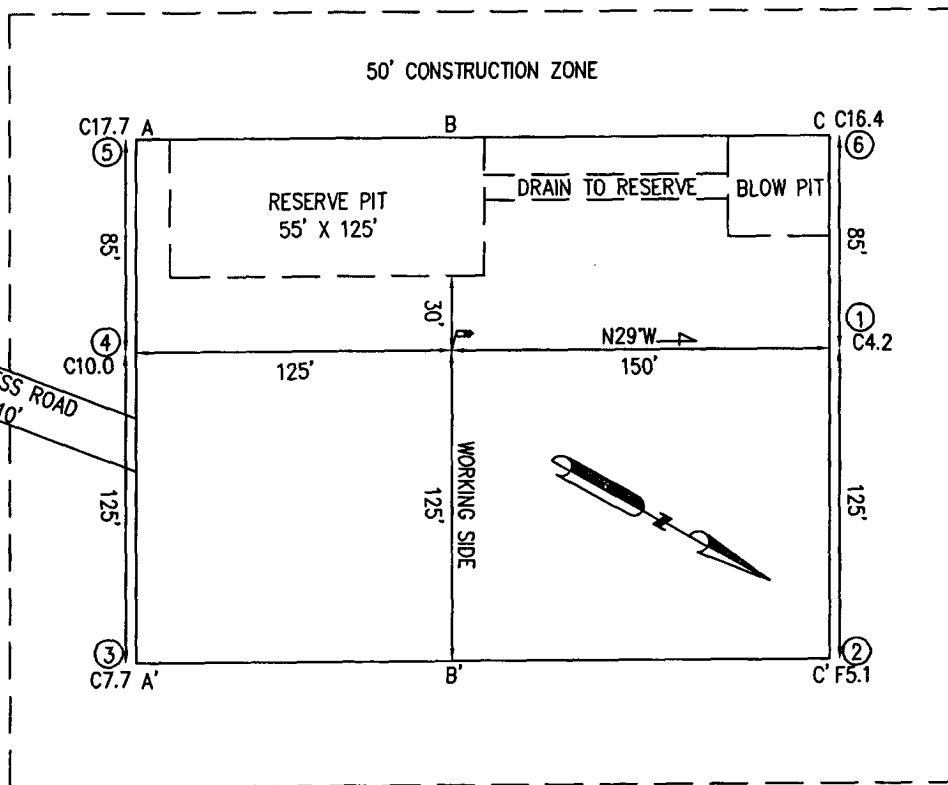
DATE

Conditions of Approval (if any):

JUL 13 2005

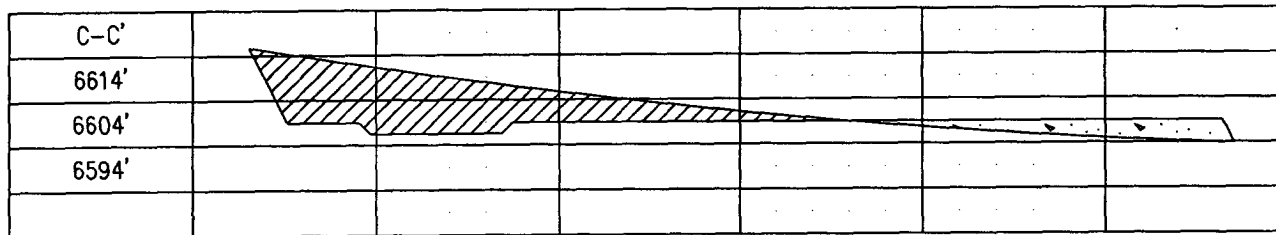
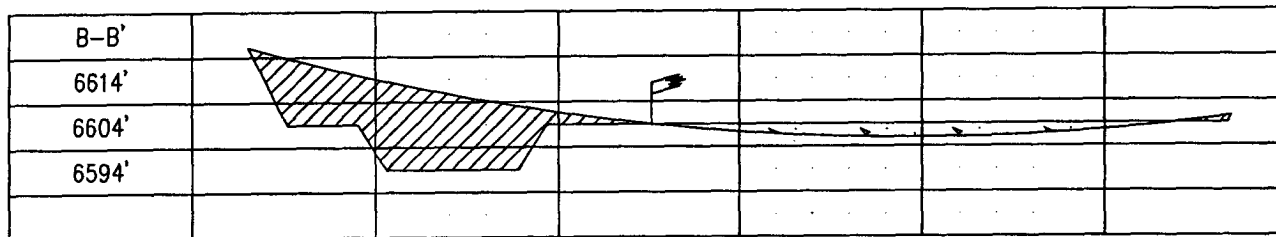
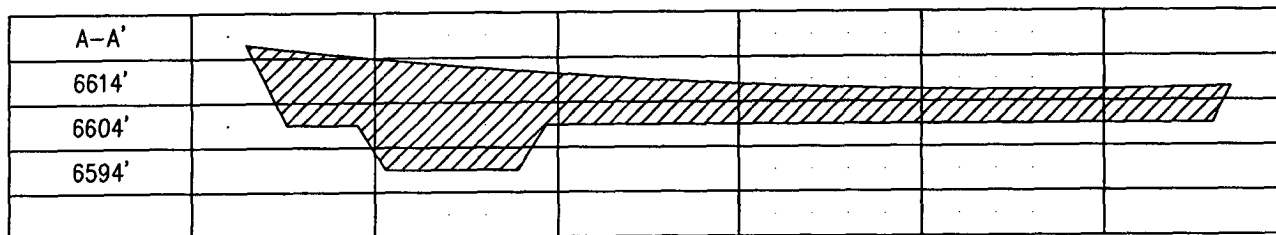
CONOCOPHILLIPS COMPANY SAN JUAN 32-7 UNIT #227A
 1434' FSL & 602' FWL, SECTION 18, T31N, R07W, NMPM
 SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6604'

LATITUDE: 36.89626° N
 LONGITUDE: 107.61580° W
 DATUM: NAD27



PLAT NOTE:

SURFACE OWNER
 BLM



PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-7 227A

Lease:		AFE #: WAN.CBM.5138		AFE \$:	
Field Name: hPHILLIPS 32-7	Rig:	State: NM	County: SAN JUAN	API #:	
Geoscientist: Cloud, Tom A	Phone: +1 832 486-2377	Prod. Engineer:		Phone:	
Res. Engineer: Peterson, Brad T	Phone: 486-2055	Proj. Field Lead:		Phone:	

Primary Objective (Zones):

Zone	Zone Name
JCV	BASIN FRUITLAND COAL (GAS)

Location: Surface Deviated

Latitude: 36.90	Longitude: -107.62	X:	Y:	Section: 18	Range: 7W
Footage X: 602 FWL	Footage Y: 1434 FSL	Elevation: 6604 (FT)	Township: 31N		
Tolerance:					

Location: Bottom Hole Deviated

Latitude:	Longitude:	X:	Y:	Section: 18	Range: 7W
Footage X: 750 FWL	Footage Y: 2500 FNL	Elevation:	(FT)	Township: 31N	
Tolerance:					

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
---------------------------	--------------------	------------------	--------------------

Formation Data: Assume KB = 6617 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
SAN JOSE	13	6604	<input type="checkbox"/>			
Surface Casing	213	6404	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1197	5420	<input type="checkbox"/>			
OJAM	2367	4250	<input type="checkbox"/>			Possible water flows.
KRLD	2477	4140	<input type="checkbox"/>			
FRLD	3117	3500	<input type="checkbox"/>			Possible gas.
Intermediate Casing	3157	3460	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
TOP COAL	3187	3430	<input type="checkbox"/>			
BASE MAIN COAL	3317	3300	<input type="checkbox"/>	200		
PC TONGUE	3387	3230	<input type="checkbox"/>			
BASE LOWEST COAL	3507	3110	<input type="checkbox"/>			
PCCF	3510	3107	<input type="checkbox"/>			
Total Depth	3587	3030	<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	NWPL 32-7 #227	
Intermediate	NWPL 32-7 #201	
Intermediate	COP SJ 32-7 #231A	

Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 32-7 227A

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: Location/Tops/Logging - Target hardlines: east of 700' FWL, west of 1200' FWL, south of 2000' FNL, north of 2600' FNL

Zones - To drill and complete a directional Fruitland Coal well. Directional well required due to topography. Current estimate of 1520' road within the critical area. Sight view from Navajo Lake is an issue but OK at the original onsite with this surface location.

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 -

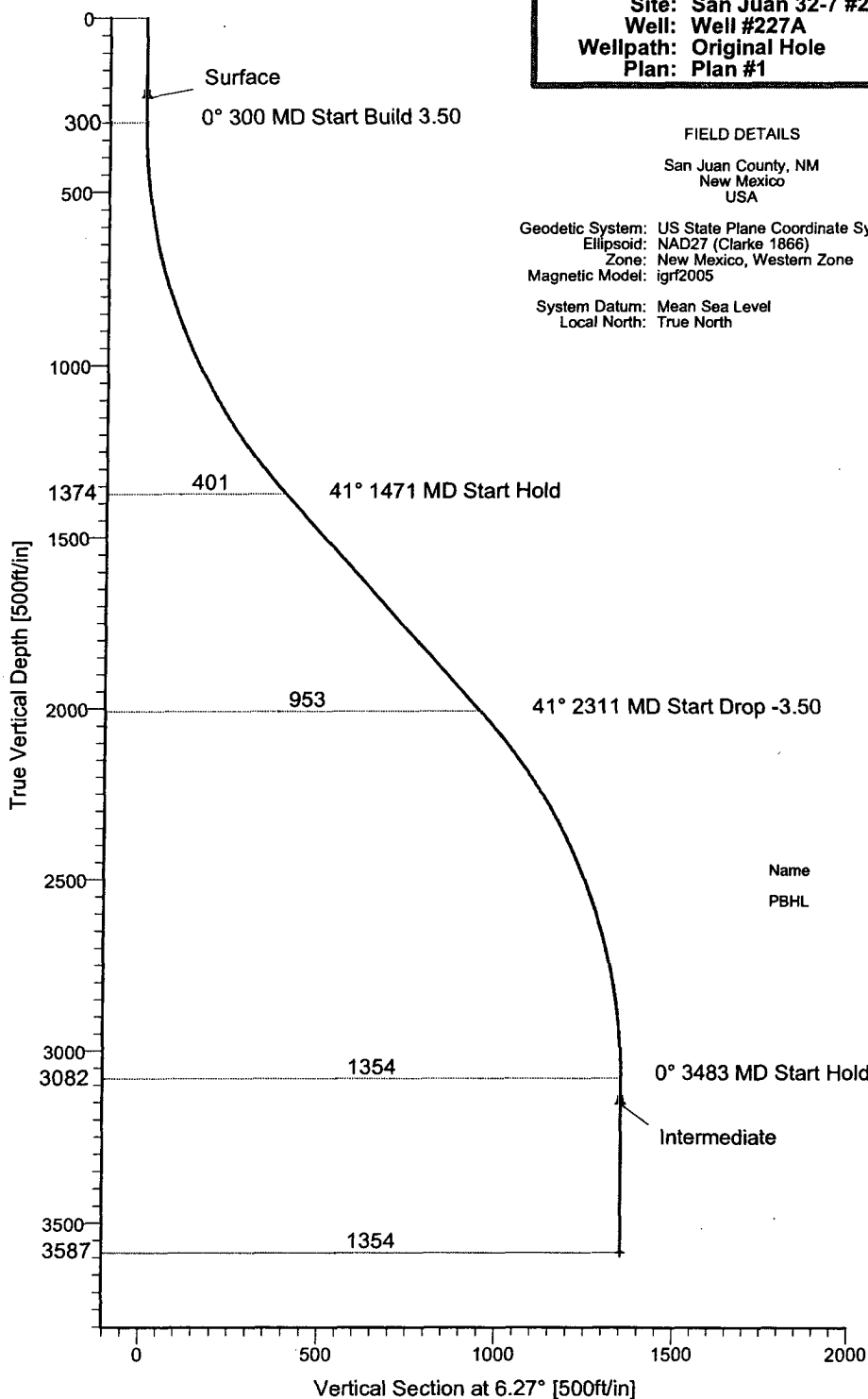
San Juan 32-7 #227A

Formation	TVD	MD
San Jose	13	13
Surface Casing	213	213
NCMT	1197	1249.82
OJAM	2367	2742.61
KRLD	2477	2862.92
FRLD	3117	3517.89
Intermediate Casing	3157	3557.89
TOP COAL	3187	3587.89
Base Main Coal	3317	3717.89
PC Tongue	3387	3787.89
Base Lowest Coal	3507	3907.89
PCCF	3510	3910.89
Total Depth	3587	3987.89



ConocoPhillips

Field: San Juan County, NM
Site: San Juan 32-7 #227A
Well: Well #227A
Wellpath: Original Hole
Plan: Plan #1



FIELD DETAILS

San Juan County, NM
New Mexico
USA

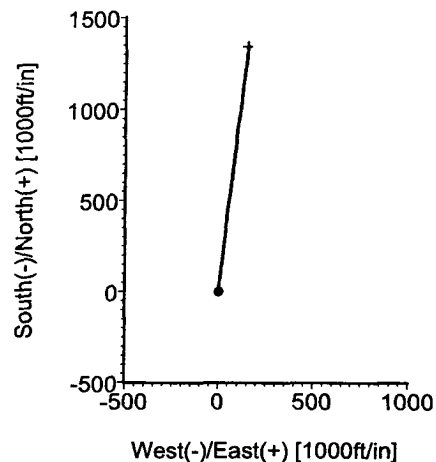
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Western Zone
Magnetic Model: igr2005

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

San Juan 32-7 #227A
Section 18, T31N, R7W
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	3587.00	1346.00	148.00	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
6.27°	0.00	0.00	3587.00

CASING DETAILS

No.	TVD	MD	Name	Size
1	230.00	230.00	Surface	9.625
2	3157.00	3557.89	Intermediate	7.000

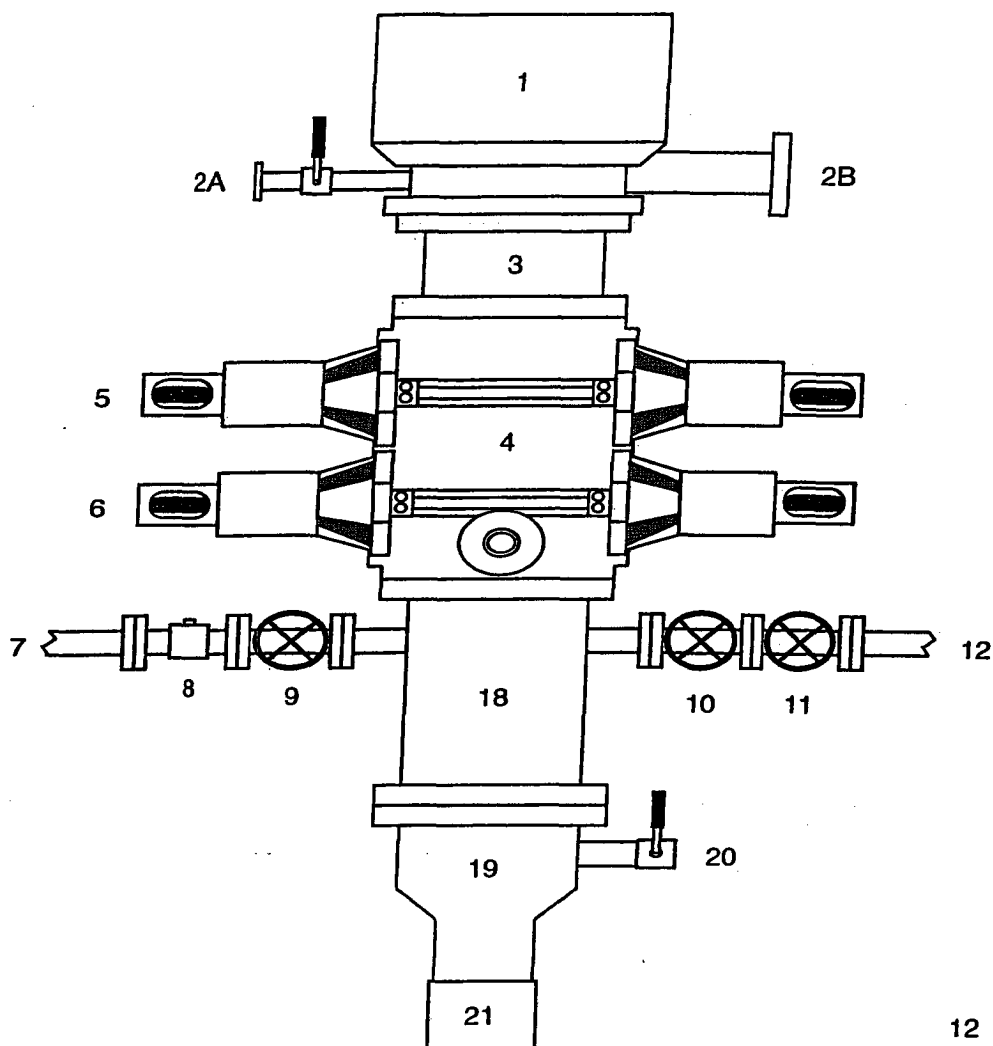
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	6.27	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	6.27	300.00	0.00	0.00	0.00	0.00	0.00	
3	1471.36	41.00	6.27	1373.93	399.09	43.88	3.50	6.27	399.09	
4	2311.44	41.00	6.27	2007.97	946.91	104.12	0.00	0.00	946.91	
5	3482.79	0.00	6.27	3081.90	1346.00	148.00	3.50	180.00	1346.00	
6	3987.89	0.00	6.27	3587.00	1346.00	148.00	0.00	0.00	1346.00	PBHL

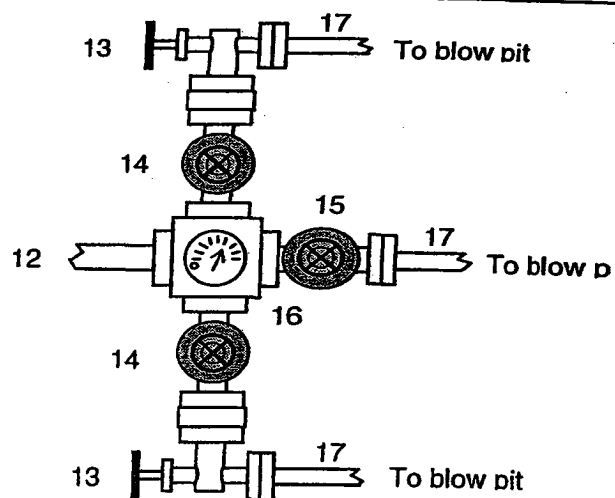


BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

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



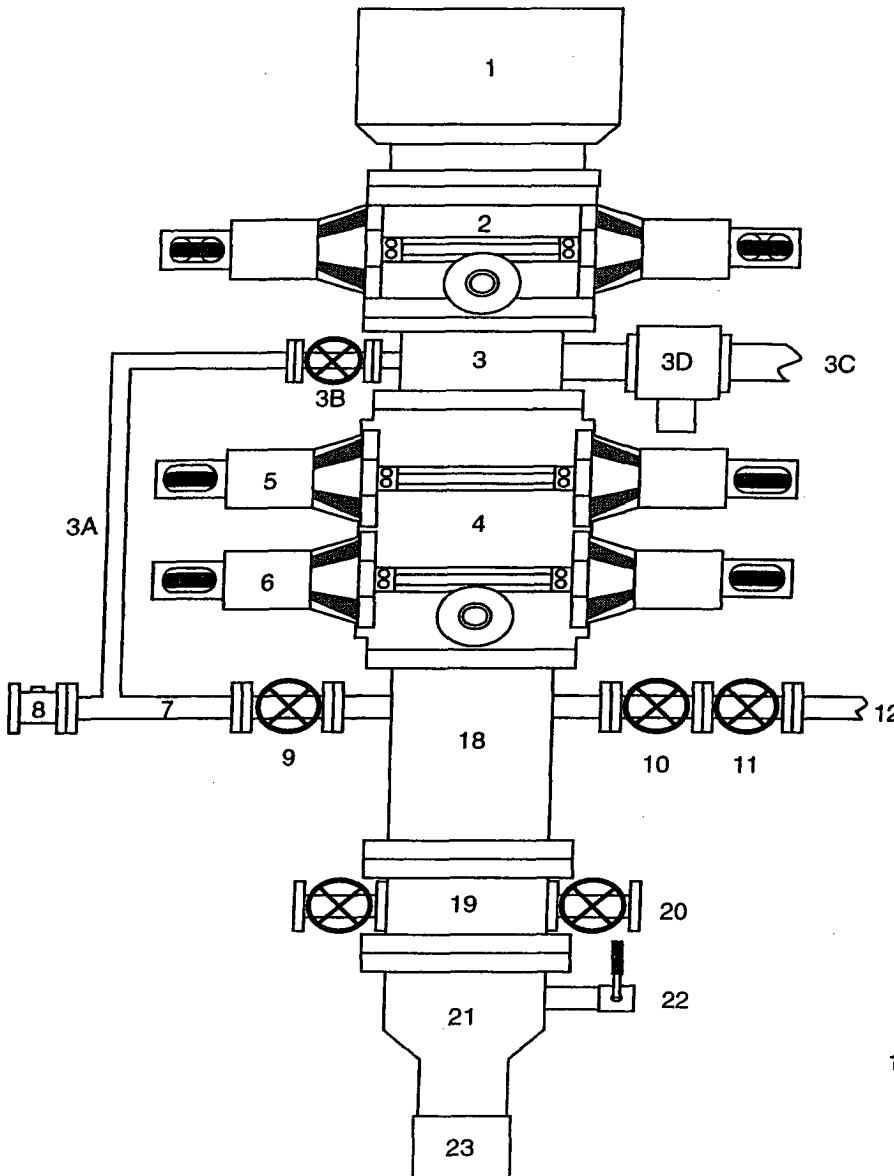
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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:

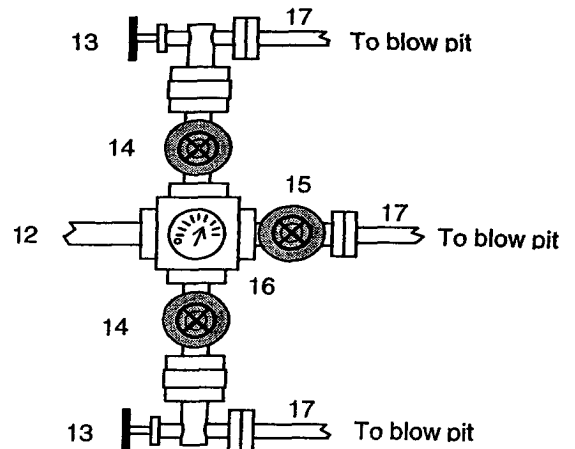
1. Upper Kelly cock Valve with handle

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 32-7 Unit Well #: 227A

Surface Location:

Unit: K Section: 18 Township: 31N Range: 7W

County: San Juan State: New Mexico

Footage: 1434 from the South line, 602 from the West 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.