Form 3160-3 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

BUREAU OF LAND MA	Lease Serial No.     NMSF079004     If Indian, Allottee or Tribe Name		
APPLICATION FOR PERMIT TO			
1a. Type of Work: DRILL REENTER		7. If Unit or CA Agreement, N	lame and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well 🔀 Other:	CBM ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. SAN JUAN 32-8 UNIT 22	:6A
	TSY CLUGSTON fail: plclugs@ppco.com	9. API Well No. 3004532	
5525 HWY.	b. Phone No. (include area code) Ph: 505.599.3454 x: 505-599-3442	10. Field and Pool, or Explora BASIN FRUITLAND C	tory OAL
4. Location of Well (Report location clearly and in accordance	e with any State requirements.*)	11. Sec., T., R., M., or Blk. an	d Survey or Area
At surface SESE 1090FSL 1070FEL 36.8 At proposed prod. zone	89312 N Lat, 107.65714 W Lon?	P Sec 15 T31N R8W Me SME: BLM	r NMP
14. Distance in miles and direction from nearest town or post office APPROX. 39-1/2 MILES NE OF AZTEC, NM	ce* JUL 2004	12. County or Parish SAN JUAN	13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	6. No. of Acres in Lease	320.00 E/2	this well
Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	3481 MD 3481 TVD	20. BLM/BLA Bond No. on file ES0085	e .
21. Elevations (Show whether DF, KB, RT, GL, etc. 6518 GL	2. Approximate date work will start 05/30/2004	23. Estimated duration 30 DAYS	
	24. Attachments		
The following, completed in accordance with the requirements of O	nshore Oil and Gas Order No. 1, shall be attached to	this form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office</li> </ol>	Lands, the Item 20 above). 5. Operator certification	ns unless covered by an existing ormation and/or plans as may be	`
(Electronic Submission)	ame (Printed/Typed) PATSY CLUGSTON		Date 04/08/2004
Title AUTHORIZED REPRESENTATIVE		,	
18/Mantiews	ame (Printed/Typed)		Date 7-19-0
AFN	ffice FFS		
Application approval does not warrant or certify the applicant holds operations thereon.  Conditions of approval, if any, are attached.	legal or equitable title to those rights in the subject lea	ise which would entitle the application	cant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mak States any false, fictitious or fraudulent statements or representations	e it a crime for any person knowingly and willfully to as to any matter within its jurisdiction.	make to any department or agen	cy of the United
Additional Operator Remarks (see next page)			

Electronic Submission #29457 verified by the BLM Well Information System For CONOCOPHILLIPS COMPANY, sent to the Farmington

DRESS OF A SECOND PLANT OF THE ATTACHED SECOND REAL REQUIREMENTS".

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

District I PO 80x 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 State of New Mexico

Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

District III 1000 Roo Brazos Rd. Aztec, NM 67410 District IV PO Box PORA Santa Fe. NM 87504-2088 OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

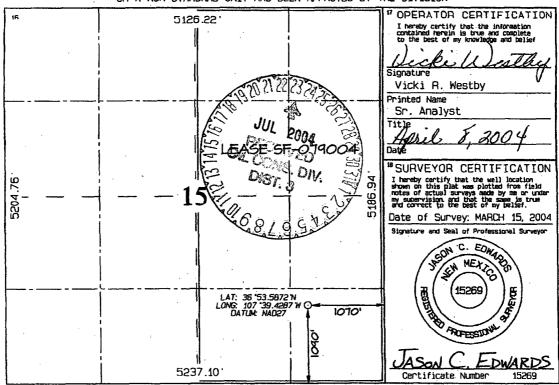
MENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-065-3	229 Pool Code 71629	Pool Name BASIN FRUITLAN	D COAL
Property Code 31330	- 5	*Property Name SAN JUAN 32-8 UNIT	*Well Number 226A
'0GAID No. 217817	. coi	"Operator Name NOCOPHILLIPS COMPANY	"Elevation

:				•	<sup>10</sup> Surface				
Ut or lot no.	Section	Township	Range "	Lot Idn	Feet from the	North/South line	Feet from the	East/Nest line	County
ρ	15	31N	8W		1090	SOUTH	1070	EAST	SAN JUAN
		11 E	ottom	Hole l	ocation I	f Different	From Surt	ace	
Ut or lot ro.	Gention	Township	Renge	Lot 23:	Feet from the	MOTER/SOUTH 11/18	Pest from the	East/West line	County
12 Dedicated Acres	L		L	L	Support or Tofill	<sup>34</sup> Conso)idetion Code	S Order No.	<u> </u>	<u> </u>

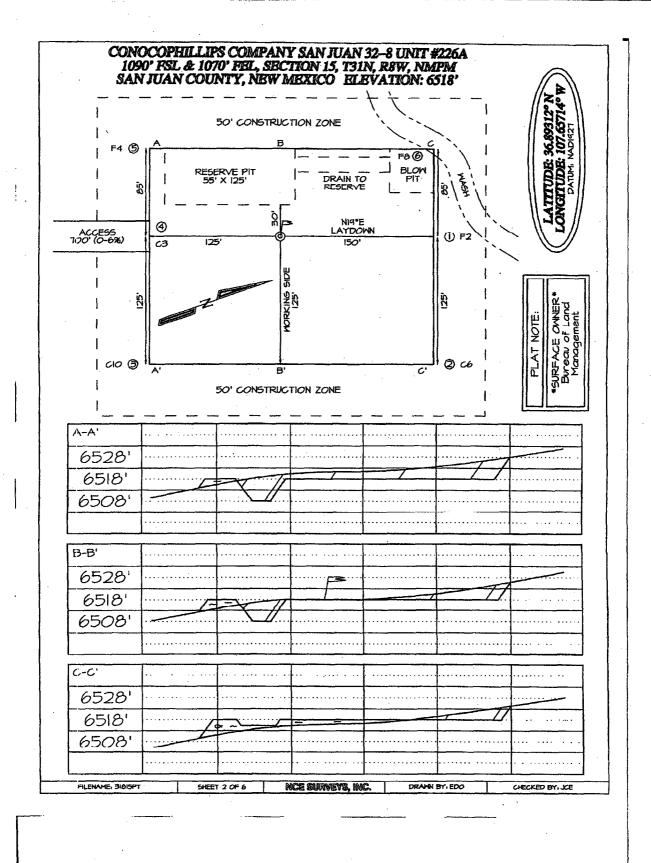
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



# Additional Operator Remarks:

\* See attached for Surface Use Plan, Drilling Plan, topo maps, cut & fill diagram, BOP & cathodic details

This is a HPA well that doesn't require Notification. The 226A is located entirely withing the SJ 32-8 FC PA and is surrounded by the PA Operateor - ConocoPhillips.



# CONOCOPHILLIPS COMPANY

WEL	L NAME: San Juan32-8 Unit #226A – HPA well
זוממ	LING PROGNOSIS
1.	Location of Proposed Well: Unit P, (SESE), 1090 FSL & 1070 FEL
1.	Section 15, T31N, R8W
	Section 13, 13th, Row
2.	Unprepared Ground Elevation:@ 6518'
3.	The geological name of the surface formation is <u>San Jose</u> .
4.	Type of drilling tools will be <u>rotary</u> .
نے	D
5.	Proposed drilling depth is 3481'.
6.	The estimated tops of important geologic markers are as follows:
U.	Naciamento - 661' Base of Lowest Coal - 3401'
	Ojo Alamo - 2173' PC Interval - 3481'
	Kirtland - 2301' Intermediate casing - 3151'
	Fruitland - 2961' Total Depth - 3481'
	Frintiand - 2501 10tai Deptii - 3461
	TD includes 80' of sump/rathole & COPC will comply with the BLM/OCD's Conditions
	of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs
	Formation.
	1 of mation.
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 - 2173' - 2301'
	Oil: none
	Gas: <u>Fruitland Coal - 2961' - 3401'</u>
	Gas & Water: Fruitland Coal - 2961' - 3401'
8.	The proposed easing program is as follows:
	Surface String: 9-5/8", 32.3#, H-40 @ 200' *
	Intermediate String: 7", 20#, J/K-55 @ 3151'
	Production Liner: 5-1/2", 15.5# J/K-55 @ 3131' - 3481' (see details below)
	* The surface casing will be set at a minimum of 200', but could be set deeper if
	required to maintain hole stability.
9.	Cement Program: Circulate commit
	Surface String: 150.2 sx Class G cement with 2% bwoc CaCl2 (S001), 0.25#/sx
	Cello-Flake (D029) 1.16 cuft/sx yield = $174.27 \text{ cf}$

9. Cement program: (continued from Page 1)

**Intermediate String:** 

Lead Cement: 395 sx Class G w/3% D079 (Extender) 0.25#/sx D029 (Cellephone flakes, + 0.2% D046 Flocele (All purpose antifoam agent) mixed at 11.7 ppg and yield of 2.61 cuft/sx = 1031 cf.

Tail: 96 sx - 50/50/G/POZ cement w/2% D020 (Bentonite Extender), 2% S001 (CaCl2), 5#/sxD024 (Gilsonite), ½#/sx D029 (Celephane flakes) & 2% D046 (all purpose antifoam agent) @ a weight of 13.5 ppg and yield of 1.27 cuft/sx = 122.29 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 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> its.

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

1<sup>st</sup> it. into shoe.

Turbulators: Total three (3) - one at 1st it below Ojo Alamo and next 2 its up.

#### Liner:

• A 5 ½" 15.5# liner will be run in the open hole without being cemented.

#### Completion - depending on well conditions the:

- Well will either be cavitated and a 5-1/2" liner will be run without being cemented, or
- Well will be underreamed, tubing will be set and cavitated at a later date.
- 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 - fresh water w/polymer sweeps. Bentonite as

required for viscosity.

Below Intermediate - air drilled.

#### San Juan 32-8 Unit #226A (Cavitate) HPA Well

#### **SURFACE CASING:**

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Shoe Depth
Cement Yield
Excess Cement

#2.25 \* 9.001 32.3 ppf H-40 200 ' 40 ' 1.16 cufl/sk 150 %

Casing Capacity
Hole / Casing Annulus Capacity

0.0787 bbl/ft 0.4419 cuft/ft 0.0558 bbl/ft 0.3132 cuft/ft

0.2273 cuft/ft

0.1746 cuft/ft

0.1503 cuft/ft

**Cement Required** 

150.2 sx

SHOE

200 ', 9.625 ",

32.3 ppf,

H-40

#### **INTERMEDIATE CASING:**

8.75 **Drill Bit Diameter** Casing Outside Diameter 6.456 20 ppf Casing Weight **Casing Grade** J-55 Shoe Depth 3151 Lead Cement Yield 2.61 cuft/sk **Lead Cement Excess** 150 % **Tail Cement Length** 300 42 ' 1.27 cuft/sk **Tail Cement Yield Tail Cement Excess** 150 %

Casing Capacity 0.0405 bbl/ft
Casing / Casing Annulus Capacity 0.0311 bbl/ft
Hole / Casing Annulus Capacity 0.0268 bbl/ft

Lead Cement Required 395.1 sx Tail Cement Required 96.3 sx

LINER TOP

3131 '

SHOE 3151',

7 ",

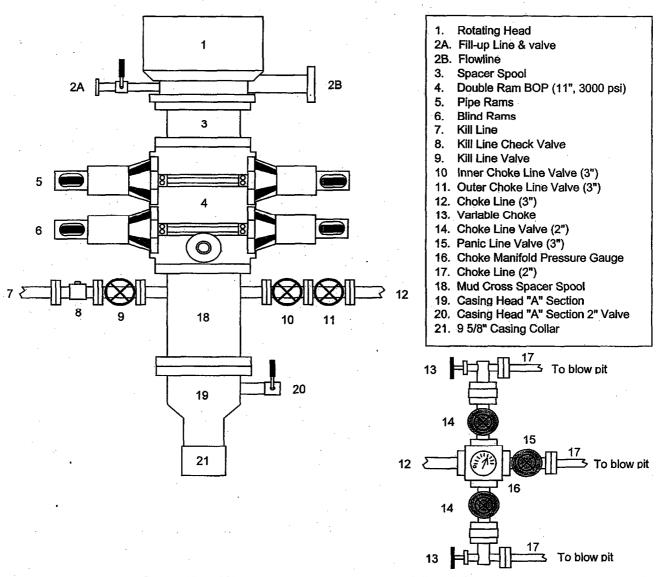
20 ppf,

J-55

LINER BOTTOM 3481 (Uncernented)

### **BLOWOUT PREVENTER ARRANGEMENT & PROGRAM**

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



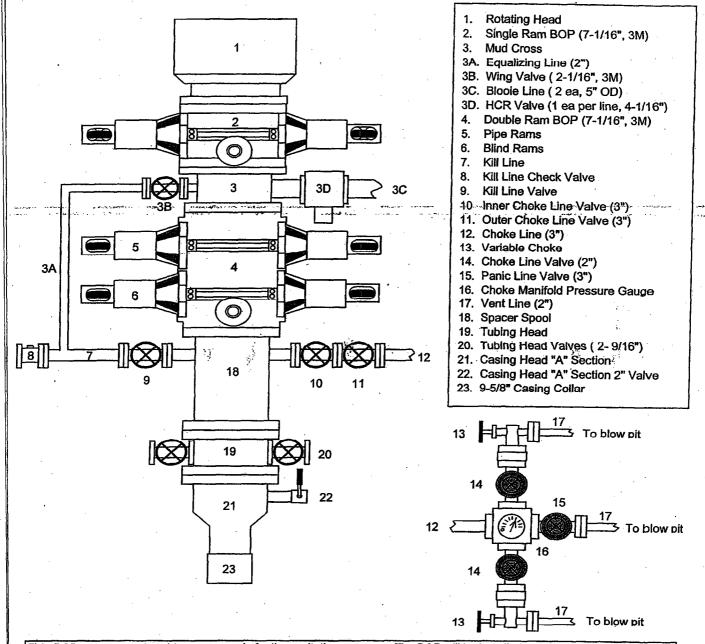
This BOP arrangement is for the drilling operations from the time the 9-5/8" surface casing is set through the setting of the 7" intermediate casing. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. The Pipe Rams, Blind Rams, Choke Manifold, and 9-5/8" surface casing will be tested to a low pressure test of 200 psi to 300 psi and to a high pressure test of 1000 psi (this value is 44% of the minimum internal yield pressure of the 9-5/8" casing). We will drill the 8-3/4" hole to intermediate casing point and run and cement the 7" intermediate casing. Then we will nipple down the BOP, install a trash cap, & move out the drilling rig. We will install the casing spool on the 7" stub after the drilling rig is moved off location. At a later date we will move in the cavitation rig for the cavitation program.

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



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).

## San Juan 32-8 Unit #226A NMSF079004; Unit P, 1090 FSL & 1070 FEL Sec. 15, T31N, R8W, San Juan County, NM

#### **Cathodic Protection**

ConocoPhillips proposes to drill a cathodic protection deep well groundbed for the subject well. 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 existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.