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

Lease Serial No.
NMSF078282

APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Trib	e Name
1a. Type of Work: DRILL REENTER		7. If Unit or CA Agreement	Name and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ O	ther Single Zone Multiple Zone	8. Lease Name and Well No SAN JUAN 29-5 UNIT	
2. Name of Operator CONOCOPHILLIPS COMPANY	:: PATSY CLUGSTON E-Mail: plclugs@ppco.com	9. API Well No. 30039 27	1537
3a. Address 5525 HWY. FARMINGTON, NM 87401	10. Field and Pool, or Explo BASIN DK & BLANC	ratory	
4. Location of Well (Report location clearly and in accord	dance with any State requirements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area
At surface NWSW 2185FSL 470FWI At proposed prod. zone	_ 36.69538 N Lat, 107.38753 W Lon	L Sec 29 T29N R5W N SME: BLM	ler NMP
<ol> <li>Distance in miles and direction from nearest town or pos APPROX. 38.5 MILES EAST OF BLOOMFIELD</li> </ol>	t office* D, NM	12. County or Parish RIO ARRIBA	13. State NM
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 470</li> </ol>	16. No. of Acres in Lease	320.00 W/2	to this well
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed Depth	20. BLM/BIA Bond No. on	file
	8075 MD 8075 TVD	ES0085	•
21. Elevations (Show whether DF, KB, RT, GL, etc. 6667 GL	22. Approximate date work will start 01/01/2004	23. Estimated duration 30 DAYS	
	24. Attachments		
he following, completed in accordance with the requirements	of Onshore Oil and Gas Order No. 1, shall be attached	to this form:	· <del></del>
<ul> <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 Sy SUPO shall be filed with the appropriate Forest Service C</li> </ul>	stem Lands, the Item 20 above).  5. Operator certification	itions unless covered by an existing information and/or plans as may	
25. Signature (Electronic Submission)	Name (Printed/Typed) PATSY CLUGSTON		Date 11/24/2003
Title AUTHORIZED REPRESENTATIVE			,
Approv <b>as Davidrė. Iviankiewicz</b>	Name (Printed/Typed)		UAN - 6 2
Title	Office		
pplication approval does not warrant or certify the applicant horizons thereon. onditions of approval, if any, are attached.	lolds legal or equitable title to those rights in the subject	lease which would entitle the app	olicant to conduct

Electronic Submission #25457 verified by the BLM Well Information System For CONOCOPHILLIPS COMPANY, sent to the Farmington

DRILLING 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 District I PO Box 1980, Hobbs, NM 68241-1980

District II PO Orawer GO. Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico Energy, Nimerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

30039-2°	7537 72319 \ 71599	*Pool Name BLANCO MESAVERDE \ BASIN I	DAKOTA
'Property Code 31325	S	"Property Name AN JUAN 29-5 UNIT	32G
'09AID No. 217817	CON	*Operator Name HOCOPHILLIPS COMPANY	*Elevation 5557

10 Surface Location

U. or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/Acast line RIO ARRIBA

11 Bottom Hole Location If Different From Surface

U. or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/Acast line County

RIO ARRIBA

11 Bottom Hole Location If Different From Surface

U. or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/Acast line County

Decision Acres 320.0 Acres - W/2 (MV) 320.0 Acres - W/2 (DK) Joint or [rif1]] \*\* Consolidation Code Order No.

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

		1 STATOATO OTET TAS DE	CIT AFTINOTED DI	HE DIVISION
15		5287.92		" OPERATOR CERTIFICATION
	 			I hereby certify that the information contained herain is true and complete to the best of my knowledge and belief
				Dicke Westby Signature
,				Vicki R. Westby
			<u> </u>	- Printed Name
	i			Sr. Analyst
	 SF-078282	10070	<b>-</b>	Dovember 5, 2003 Date
		1 25010	19% .	*SURVEYOR CERTIFICATION
8		- 65° 8	(4/2) 8	I hereby certify that the well location shown on this plat was plotted from field
5280.00	<del></del>	- 29\- \tau_{\text{\text{This}}}		I hereby certify that the well location stown 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
ព	LAT: 36 41.7225 N O LONG: 107 23.2520 W			Survey Date: SEPTEMBER 19, 2003
470	LUNG 107 23.2520 W			Signature and Seal of Professional Surveyor
				SECH C. EDWARD OF
	2,165	Regn.	23	(15269) 85 150 AROTESTOWN
		5293.20	<u>.</u> 1	JASON C. EDWARDS Certificate Number 15269

## CONOCOPHILLIPS COMPANY

WELL NAME:	San	Juan	29-5	Unit#	32G	(MV/DK)
				V		1-1-1

## **DRILLING PROGNOSIS**

- 1. Location of Proposed Well: <u>Unit L, 2185' FSL & 470' FWL</u>
  Section 29, T29N, R5W
- 2. Unprepared Ground Elevation: <u>@ 6649' (unprepared)</u>
- 3. The geological name of the surface formation is <u>San Jose</u>.
- 4. Type of drilling tools will be <u>rotary</u>.
- 5. Proposed drilling depth is 8075.
- 6. The estimated tops of important geologic markers are as follows:

Nacimiento - 1505'	Menefee - 5490'
Ojo Alamo - 2805'	Pt. Lookout – 5775'
Kirtland Sh - 2975'	Mancos Shale - 6025'
Fruitland Fm 3320'	Gallup - 7030'
Pictured Cliffs - 3600'	Greenhorn - 7725'
Lewis Shale - 3800'	<u>Cubero - 7905'</u>
Chacra - 45990'	Intermediate Casing – 3900'
Cliffhouse - 5330'	TD-8075'

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 -	2805' - 2975'
Gas & Water:	Fruitland	3320' - 3600'
Gas:	Pictured Cliffs -	3600' - 3800'
	Mesaverde -	3800' - 6025'
	Dakota -	7905' – 8075'

8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3# H-40 @ 200' \*

Intermediate String: 7", 20#, J-55 @ 3900' (J-55 will be used, unless the K-55 is the only casing available)

Production String: 4-1/2", 11.6#, I-80 @ 8075' (TD)

\* 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:

Surface String:

130 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 = 174 cf); Cement density -13.5 ppg. Water required 5.39gal/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: 395 sx Standard cement + 3% Econolite (extender) + 10#/sx Pheno-seal; (2.88 yield = 1136 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: 228 sx 50/50 POZ - Standard cement + 2% Bentonite + 6#/sx Pheno Seal; (1.33 yield = 302.8 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: 459 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 - 666.2 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 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> joints latched over the casing collar

Intermediate: Total seven (9) 10' above shoe, top of 2nd, 4th, 6th, & 8th, 10th its & 10<sup>th</sup> 1 it. above surface casing, and on first two casing collars below the wellhead. .

Production:

None planned.

Turbulators:

Total Three (3) – on intermediate casing at 1<sup>st</sup> it. below the Ojo

Alamo and next 2 its 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.

<u>Intermediate</u> - 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: Cased hole TDT with GR to surface., RFT

13. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H<sub>2</sub>S equipment will be used.

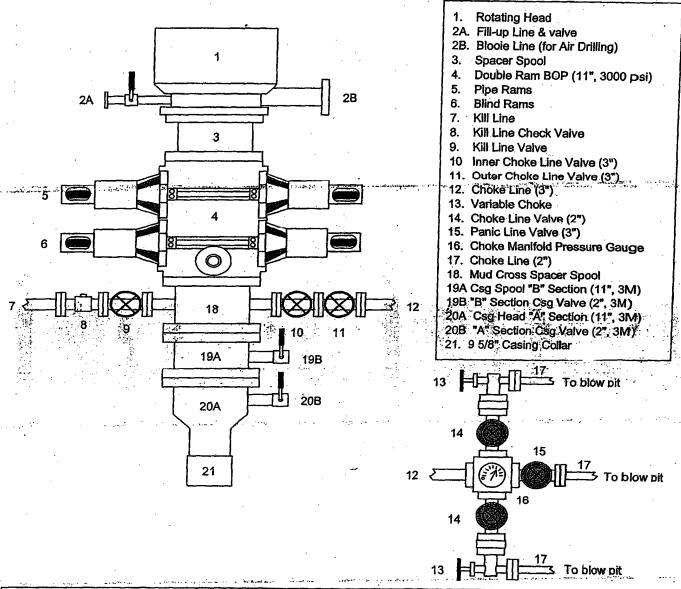
Estimated Bottomhole pressure:

Dakota - 3300 psi Mesaverde - 1000 psi

- 14. The anticipated starting date is approximately January 1, 2004 with duration of drilling / completion operations for approximately 20 days thereafter.
- 15. ConocoPhillips will be DHC'ing the Mesaverde and Dakota intervals of the subject well per Order 11363. The original Reference Case where partner notification was made was R-11708. Once production tests are conducted we will be submitting the allocation factors we will be using to report both gas and oil production for this well.

2003 Drilling\295#32G newest drill prog - 11-24-03.doc

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM For Drilling to TD and Setting 4.5 inch Casing



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