

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF078278
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 checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: PATSY CLUGSTON E-Mail: pclugs@ppco.com		7. If Unit or CA Agreement, Name and No. NMNM78416A
3a. Address P O BOX 2197 WL 6106 HOUSTON, TX 77252		8. Lease Name and Well No. SAN JUAN 29-6 UNIT 33M
3b. Phone No. (include area code) Ph: 505.599.3454 Fx: 505.599.3442		9. API Well No. 30-039-27527-00-X1
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SWSE 164 FSL 164 FEL At proposed prod. zone 165 1840		10. Field and Pool, or Exploratory BLANCO MESAVERDE BASIN DAKOTA
14. Distance in miles and direction from nearest town or post office* 23 MILES E NE OF BLANCO, NM		11. Sec., T., R., M., or Blk. and Survey or Area 0 Sec 13 T29N R6W Mer NMP SME: FEE
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 164	16. No. of Acres in Lease	12. County or Parish RIO ARRIBA ✓
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8164 MD 8164 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6739-GL 6722	22. Approximate date work will start 12/01/2003	17. Spacing Unit dedicated to this well 232.10 F/2
		20. BLM/BIA Bond No. on file ES0085
		23. Estimated duration 30 DAYS

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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) PATSY CLUGSTON	Date 10/16/2003
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) DAVID J MANKIEWICZ	Date 11/15/2004
Title FIELD MANAGER MINERALS		
Office Farmington		

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 #24321 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington  
Committed to AFMSS for processing by MARGIE DUPRE on 10/20/2003 (04MXD1323AE)

HOLD C104 FOR Basin Dakota NSL order

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer 00, 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, Minerals & Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

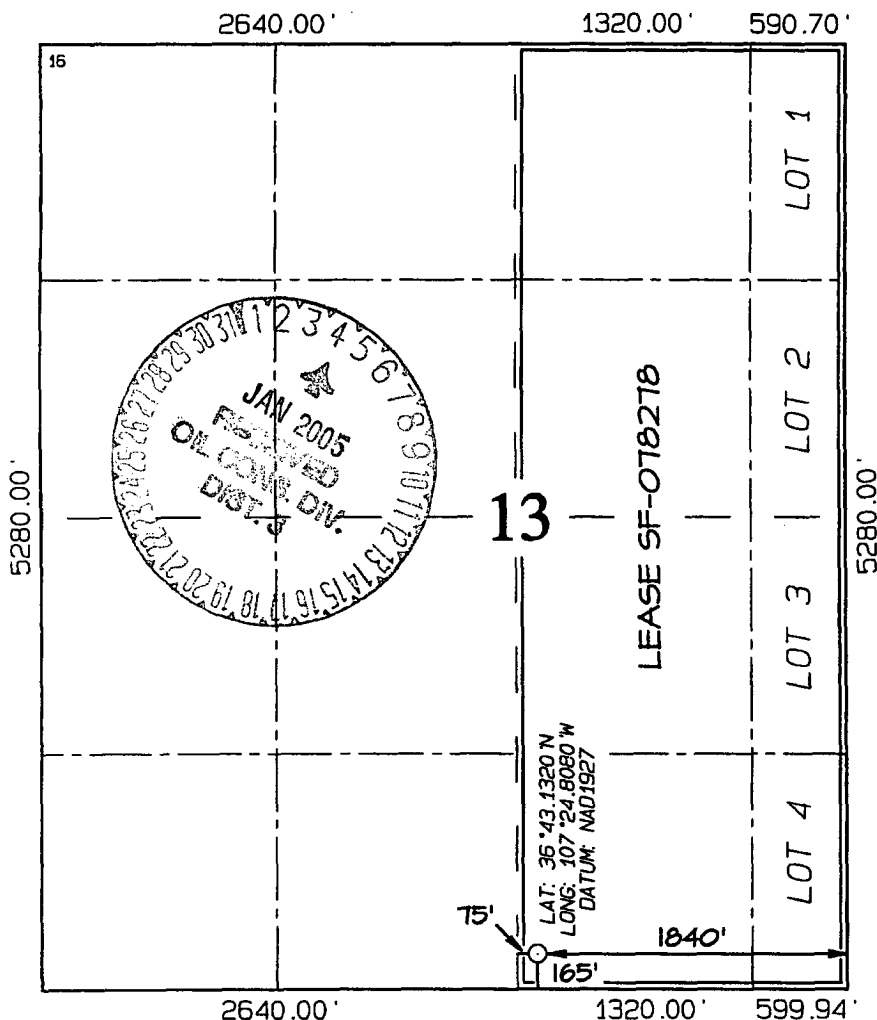
*API Number <b>30-039-27527</b>		*Pool Code <b>72319 / 71599</b>	*Pool Name <b>BLANCO MESAVERDE / BASIN DAKOTA</b>
*Property Code <b>31326</b>	*Property Name <b>SAN JUAN 29-6 UNIT</b>		*Well Number <b>33M</b>
*GRID No. <b>217817</b>	*Operator Name <b>CONOCOPHILLIPS COMPANY</b>		*Elevation <b>6722'</b>

<sup>10</sup> Surface Location


UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	13	29N	6W		165	SOUTH	1840	EAST	RIO ARriba

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres		232.16 Acres - E/2 (MV)			<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. <b>NW 4 551</b>		
		232.16 Acres - E/2 (DK)							



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><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <u>Vicki Westby (pp)</u> Signature Vicki R. Westby Printed Name Staff Agent Title <u>10/15/04</u> Date</p>
<p><sup>18</sup> 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: JULY 1, 2004 Signature and Seal of Professional Surveyor  <u>JASON C. EDWARDS</u> Certificate Number 15269</p>

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

5. Lease Serial No.  
NMSF078278

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
NMNM78416A

8. Well Name and No.  
SAN JUAN 29-6 UNIT 33M

9. API Well No.  
S.0004039-27527-00-X1

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

2. Name of Operator  
CONOCOPHILLIPS COMPANY

Contact: VICKI WESTBY  
E-Mail: VICKI.R.WESTBY@CONOCOPHILLIPS.COM

3a. Address  
P O BOX 2197 WL 6106  
HOUSTON, TX 77252

3b. Phone No. (include area code)  
Ph: 915-368-1352

10. Field and Pool, or Exploratory  
BASIN DAKOTA  
BLANCO MESAVERDE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 13 T29N R6W SWSE ~~1840'~~ FSL ~~165'~~ FEL  
165'

11. County or Parish, and State

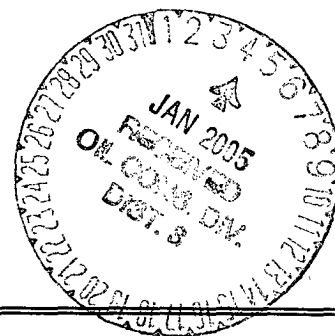
RIO ARRIBA COUNTY, NM

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

ConocoPhillips Company requests to submit this sundry to change the location and access road for this well. Supporting documents are attached.



14. I hereby certify that the foregoing is true and correct.

Electronic Submission #50105 verified by the BLM Well Information System  
For CONOCOPHILLIPS COMPANY, sent to the Farmington  
Committed to AFMSS for processing by ADRIENNE BRUMLEY on 10/20/2004 (05AXB0120SE)

Name (Printed/Typed) VICKI WESTBY

Title AGENT

Signature (Electronic Submission)

Date 10/15/2004

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By DAVID J MANKIEWICZ

Title FIELD MANAGER MINERALS

Date 11/15/2004

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Farmington

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

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

Fonn C- 1 03  
May 27, 2004

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator ConocoPhillips Company		6. State Oil & Gas Lease No.
3. Address of Operator 4001 Penbrook, Odessa, TX 79762		7. Lease Name or Unit Agreement Name SAN JUAN 29-6 UNIT
4. Well Location Unit Letter O 165 feet from the SOUTH line and 1840 feet from the EAST line Section 13 Township 29N Range 6W NMPM RIO ARRIBA County		8. Well Number 33M
I 1. Elevation (Show whether DR, RKB, RT, GR, etc.) 6722 GL		9. OGRID Number 217817
		10. Pool name or Wildcat Mesaverde/Dakota

Pit or Below-grade Tank Application <input checked="" type="checkbox"/> Closure <input type="checkbox"/>	
Pit type DRILL Depth to Groundwater > 100' Distance from nearest fresh water well > 1000' Distance from nearest surface water < 200'	
Liner Thickness: mil	Below-Grade Tank: Volume bbls; Construction Material

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

ConocoPhillips' Generic Pit Plan is on file at the 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.

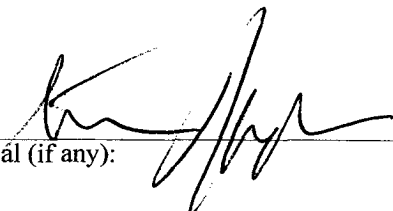
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Vicki Westby TITLE Staff Agent DATE 10/15/04

Type or print name  
For State Use Only

E-mail address:

Telephone No.

APPROVED BY:   
Conditions of Approval (if any):

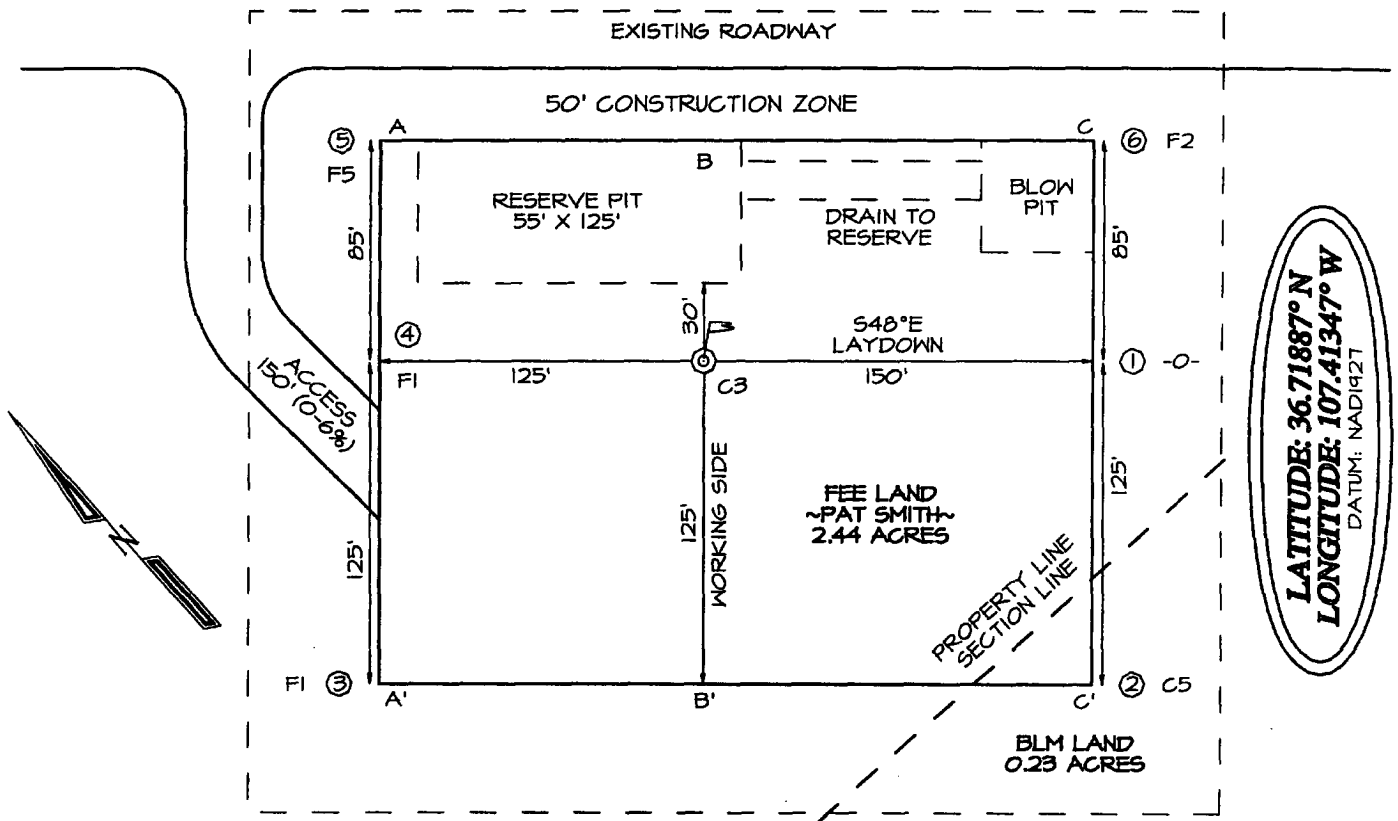
TITLE

DATE

OFFICE OF OIL & GAS INSPECTION, DIST. 41

JAN - 4 2005

**CONOCOPHILLIPS COMPANY SAN JUAN 29-6 UNIT #33M**  
**165' FSL & 1840' FEL, SECTION 13, T29N, R6W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6722'**



A-A'						
6729'						
6719'						
6709'						

B-B'						
6729'						
6719'						
6709'						

C-C'						
6729'						
6719'						
6709'						

## CONOCOPHILLIPS COMPANY

WELL NAME: San Juan 29-6 Unit #33M (MV/DK)

### DRILLING PROGNOSIS

1. Location of Proposed Well: Unit O, 164' FSL & 1841' FEL  
Section 13, T29N, R6W

2. Unprepared Ground Elevation: @ 6739' (unprepared)

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

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 8164'.

6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 1572'</u>	<u>Pt. Lookout - 5842'</u>
<u>Ojo Alamo - 2907'</u>	<u>Mancos Shale - 6142'</u>
<u>Kirtland Sh - 3012'</u>	<u>Gallup - 7112'</u>
<u>Fruitland Fm. - 3372'</u>	<u>Greenhorn - 7814'</u>
<u>Pictured Cliffs - 3652'</u>	<u>Two Wells - 7924'</u>
<u>Lewis Shale - 3852'</u>	<u>Cubero - 8004'</u>
<u>Cliffhouse - 5487'</u>	<u>Intermediate Casing - 3952'</u>
<u>Menefee - 5577'</u>	<u>TD - 8164'</u>

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Water:	<u>Ojo Alamo - 2907' - 3012'</u>
Gas & Water:	<u>Fruitland - 3372' - 3652'</u>
Gas:	<u>Pictured Cliffs - 3652' - 3852'</u>
	<u>Mesaverde - 3852' - 6142'</u>
	<u>Dakota - 7924' - 8164'</u>

8. The proposed casing program is as follows:

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

Intermediate String: 7", 20#, J-55 @ 3952' (J-55 will be used, unless the K-55 is the only casing available)

Production String: 4-1/2", 11.6#, J-55 LTC @ 8164' (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% CaCl<sub>2</sub>, 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 5.39 gal/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:** 400 sx Standard cement + 3% Econolite (extender) + 10#/sx Pheno-seal; (2.88 yield = 1151.9 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:** 231 sx 50/50 POZ – Standard cement + 2% Bentonite + 6#/sx Pheno Seal; (1.33 yield = 306.7 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:** 463 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 – 671.9 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) - 1<sup>st</sup> 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, 4<sup>th</sup>, 6<sup>th</sup>, & 8<sup>th</sup>, 10<sup>th</sup> jts & 10<sup>th</sup> 1 jt. 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> jt. below the Ojo Alamo and next 2 jts 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.  
                                      Intermediate - 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: GR/CCL/CBL & GSL over zones of interest
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 – 1300 psi
14. The anticipated starting date is approximately November 30, 2003 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-11187. 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.



## San Juan 29-6 #33M

### 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	200 '	
Cement Yield	1.34	cuft/sk
Excess Cement	150	%
Cement Required	130	sx

SHOE 200 ', 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	3952 '	
Lead Cement Yield	2.88	cuft/sk
Lead Cement Excess	150	%
Tail Cement Length	790.4 '	= 20% of setting depth
Tail Cement Yield	1.33	cuft/sk
Tail Cement Excess	150	%
Lead Cement Required	400	sx
Tail Cement Required	231	sx

SHOE 3952 ', 7 ", 20 ppf, J-55 STC

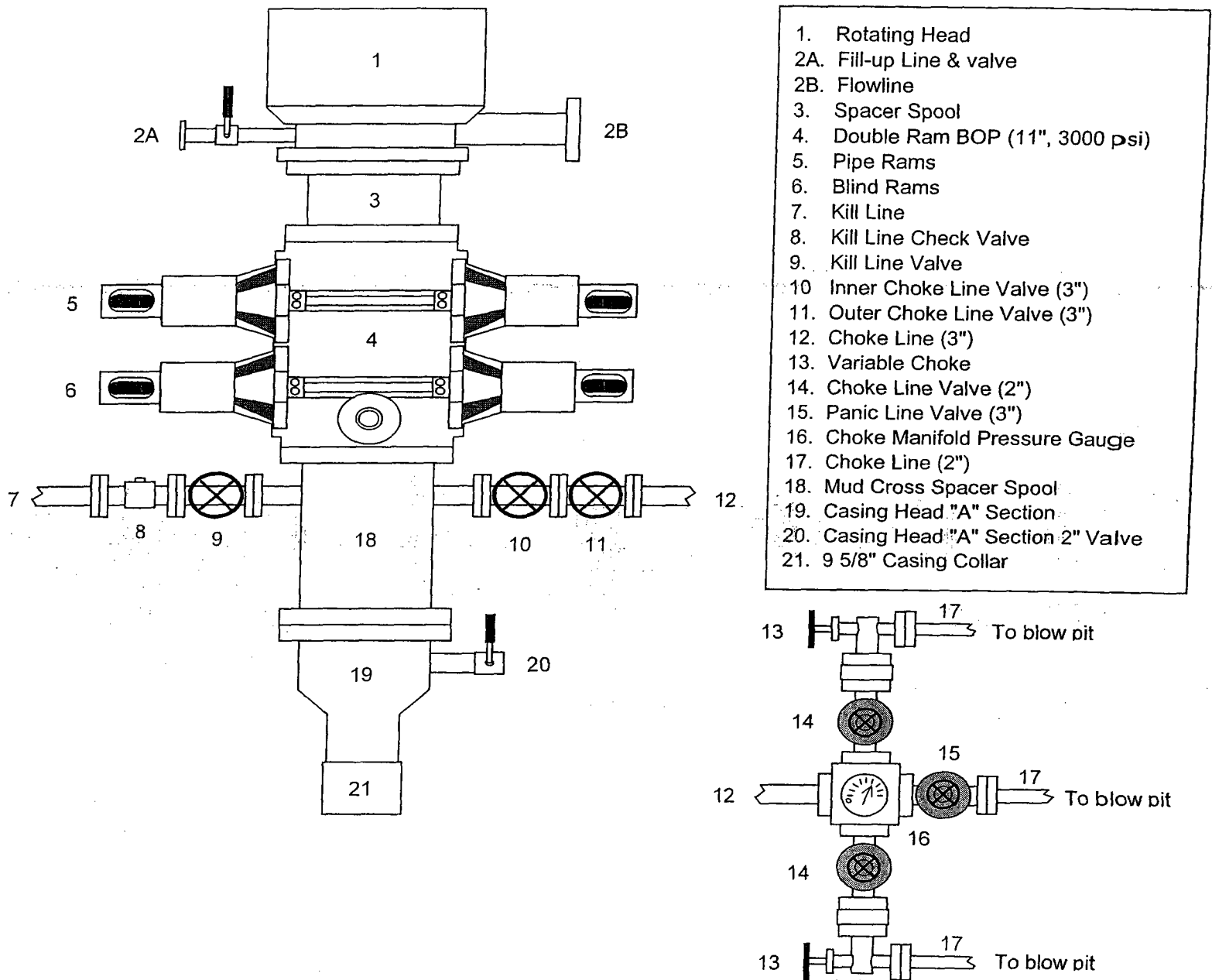
### PRODUCTION CASING :

Drill Bit Diameter	6.25 "	
Casing Outside Diameter	4.5 "	Casing Inside Diam. 4.000 "
Casing Weight	11.6	ppf
Casing Grade	J-55	
Top of Cement	3752 '	200' inside intermediate casing
Shoe Depth	8164 '	
Cement Yield	1.45	cuft/sk
Cement Excess	50	%
Cement Required	463	sx

SHOE 8164 ', 4.5 ", 11.6 ppf, J-55 LTC

# 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

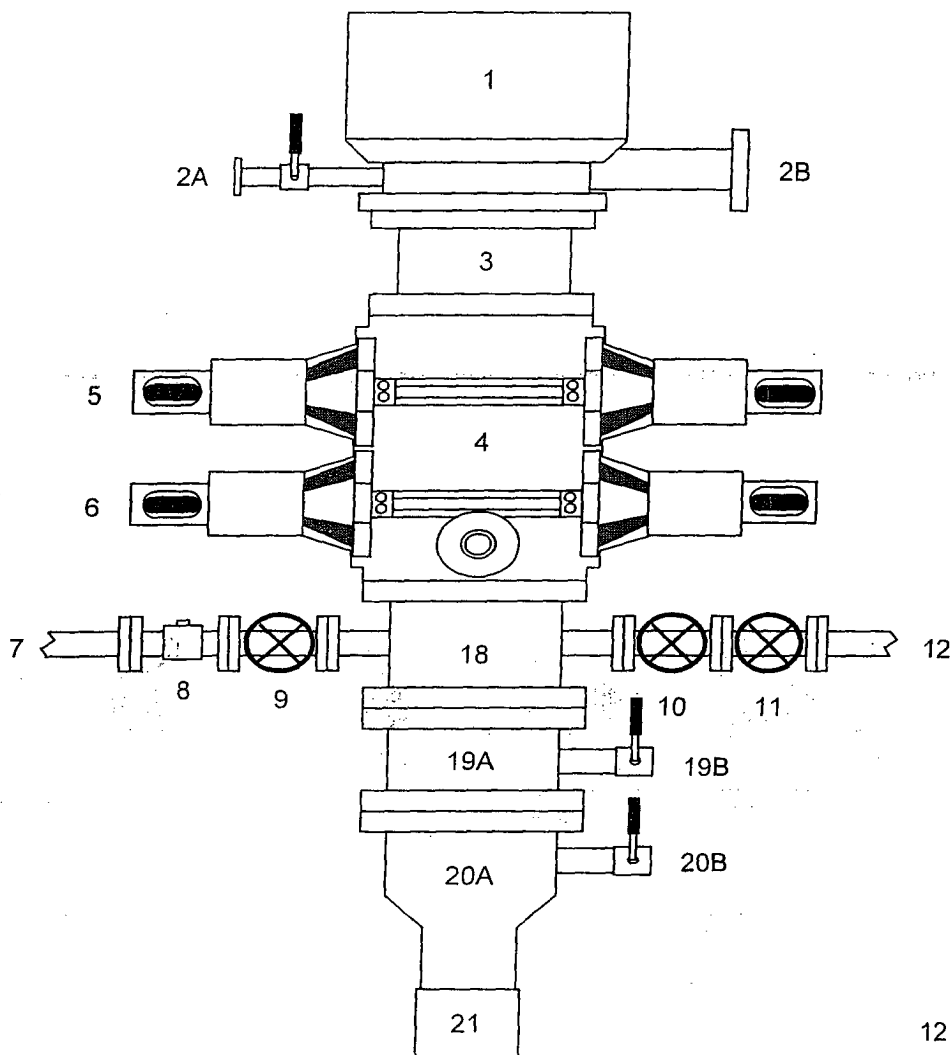
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe 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). An 8-3/4" hole will be drilled to intermediate casing point and 7" casing will be run and cemented.

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

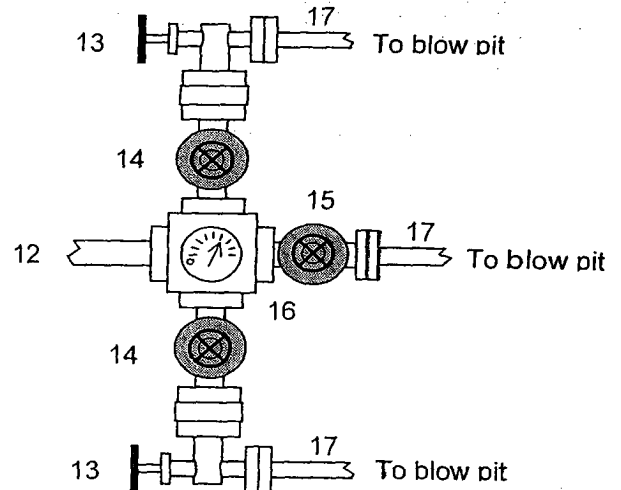
1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

# BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bleeed Line (for Air Drilling)
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
- 19A Csg Spool "B" Section (11", 3M)
- 19B "B" Section Csg Valve (2", 3M)
- 20A Csg Head "A" Section (11", 3M)
- 20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



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

**Property :** SAN JUAN 29-6 UNIT **Well #:** 33M

**Surface Location:**

**Unit:** O **Section:** 13 **Township:** 29N **Range:** 6W

**County:** RIO ARRIBA **State:** New Mexico

**Footage:** 165 **from the** SOUTH **line,** 1840 **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.