Form 3160-3 (August 1999)

# UNITED STATES

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

| DEPARTMENT OF T  | ·   |   |                   |
|--|---|---|-------------------|
| BUREAU OF LAND   | 5. Lease Serial No.<br>NMSF078426                                   |   |                   |
| APPLICATION FOR PERMIT   | 6. If Indian, Allottee or Tribe Name                                |   |                   |
| 1a. Type of Work: DRILL REENTER  | 7. If Unit or CA Agreement, Name and No.                            |   |                   |
|  | her ☐ Single Zone ☑ Multiple Zone                                   | 8. Lease Name and Well No.<br>SAN JUAN 29-6 UNIT 106    |                   |
| 1b. Type of Well: Oil Well Gas Well Oth  |   |   |                   |
| 2. Name of Operator Contact: CONOCOPHILLIPS COMPANY  | 9. API Well No. 30039 273   |   |                   |
| 3a. Address<br>5525 HWY.<br>FARMINGTON, NM 87401   | 3b. Phone No. (include area code) Ph: 505.599.3454 Fx: 505-599-3442 | 10. Field and Pool, or Exploratory BASIN DK & BLANCO MV |                   |
| 4. Location of Well (Report location clearly and in accord   | ance with any State requirements.*)                                 | 11. Sec., T., R., M., or Blk. and                       | Survey or Area    |
| At surface NWSE 1730FSL 2605FEL At proposed prod. zone   | 36.67971 N Lat, 107.50361 W Land                                    | Sec 31 T29N R6W Mer<br>SME: BLM                         | NMP               |
| 14. Distance in miles and direction from nearest town or post  | office*   | 12. County or Parish                                    | 13. State         |
| 38 MILES EAT OF BLOOMFIELD, NM   | EC 2003   | RIO ARRIBA  | NM                |
| <ol> <li>Distance from proposed location to nearest property or<br/>lease line, ft. (Also to nearest drig. unit line, if any)</li> </ol> | 16. No. of Acres in Lease   | 17. Spacing Unit dedicated to the                       |                   |
|  | (C)   | 320.00 S/2 DK   | ES MV             |
| 18. Distance from proposed location to nearest well, drilling,   | 19. Proposed Depth  | 20. BLM/BIA Bond No. on file                            |                   |
| completed, applied for, on this lease, ft.   | 8129 MD<br>8129 TVD   | ES0085  |                   |
| 21. Elevations (Show whether DF, KB, RT, GL, etc. 6807 GL.   | 22. Approximate date work will start 02/01/2004                     | 23. Estimated duration<br>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.   |   | ons unless covered by an existing b                     | ond on file (see  |
| <ol> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys</li> </ol>                              |   |   |                   |
| SUPO shall be filed with the appropriate Forest Service Of   | ffice).  6. Such other site specific in authorized officer.         | formation and/or plans as may be re                     | equired by the    |
| 25. Signature<br>(Electronic Submission)   | Name (Printed/Typed) PATSY CLUGSTON                                 |   | ate<br>11/24/2003 |
| Title AUTHORIZED REPRESENTATIVE  |   | •   |                   |
| Approved by (Signature)  | Name (Printed/Typed)  | , D   | ate               |
|  | /a/ David J. Mankley  | VICZ  | -000              |
| Title  | Office  | DEC   | 17 2000           |
| Application approval does not warrant or certify the applicant ho operations thereon.  Conditions of approval, if any, are attached.     | olds legal or equitable title to those rights in the subject le     |   | int to conduct    |
| 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                        | y of the United   |
| States any false, fictitious or fraudulent statements or representat   | tions as to any matter within its jurisdiction.                     |   |                   |
|  |   |   |                   |

Additional Operator Remarks (see next page)

Electronic Submission #25426 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 PD 80x 1980, Hobbs, NM 88241-1980 District II PD Drawer DD, 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

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

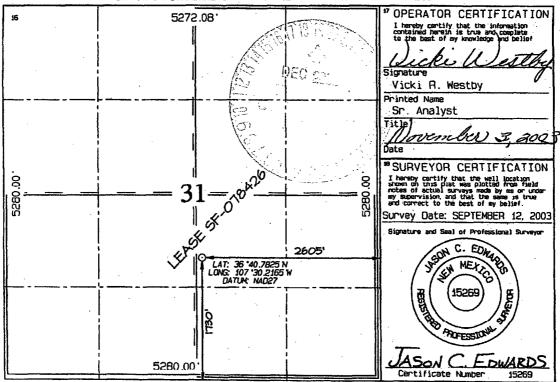
Form C-102 Revised February 21, 1994 Instructions on beak Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

| 30-039-27      | 72319 \ 71599          | *Pool Name<br>BLANCO MESAVERDE \ BASI | N DAKOTA     |
|----------------|------------------------|---------------------------------------|--------------|
| 'Property Code | SA                     | *Property Name                        | *Well Number |
| 31326          |                        | N JUAN 29-6 UNIT                      | 106M         |
| '0GRID No.     | "Operator Name         |                                       | *Elevation   |
| 217817         | CONOCOPHILLIPS COMPANY |                                       | 6807         |

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



## **CONOCOPHILLIPS COMPANY**

| WEL1     | LL NAME: San Juan 29-6 Un  | <u>it #106M (MV/DK)</u>  |  |  |  |
|----------|--|--|--|--|--|
| DRIL     | LLING PROGNOSIS  |  |  |  |  |
| 1.       | Location of Proposed Well: Unit J. 1730 Section 31,  | )' FSL & 2605' FEL<br>T29N, R6W  |  |  |  |
| 2.       | Unprepared Ground Elevation: @   | 6807' (unprepared).  |  |  |  |
| 3.       | The geological name of the surface formation is San Jose.  |  |  |  |  |
| 4.       | Type of drilling tools will be <u>rotary</u> .   |  |  |  |  |
| 5.       | Proposed drilling depth is 8129.   |  |  |  |  |
| 6.<br>7. | Ojo Alamo -         2724'         Pt. I           Kirtland Sh -         2904'         Man           Fruitland Fm         -         3374'         Gall           Pictured Cliffs -         3614'         Gree           Lewis Shale -         3814'         TD           Cliffhouse -         5304'         Interpretable | efee - 5464'  ookout - 5814'  cos Shale - 6064'  up - 7089'  whorn - 7774'  8129'  mediate Casing - 3580'  ated water, oil, gas or other mineral bearing |  |  |  |
|          | Water: Ojo Alamo -  Gas & Water: Fruitland -  Gas: Pictured Cliffs -  Mesaverde -  Dakota -  | 2724' - 2904'<br>3374' - 3614'<br>3614' - 3814'<br>3814' - 6064'<br>7774' - 8129'  |  |  |  |
| 8.       | The proposed casing program is as follow   | s:   |  |  |  |
|          | Surface String: 9-5/8", 32.3# H-40 @ 20  | 00, *  |  |  |  |
|          | Intermediate String: 7", 20#, J-55 @ 391<br>only casing available  |  |  |  |  |
|          | Production String: 4-1/2", 11.6#, J-55 ST  | C @ 8129' (TD)   |  |  |  |
|          |  | ~ \ <del>-</del> \   |  |  |  |

\* 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 5.39 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: 396 sx Standard cement + 3% Econolite (extender) + 10#/sx Pheno-seal: (2.88 yield = 1040 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 = 304 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: 464 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 - 672.4 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 easing cement is calculated to cover the openhale 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:

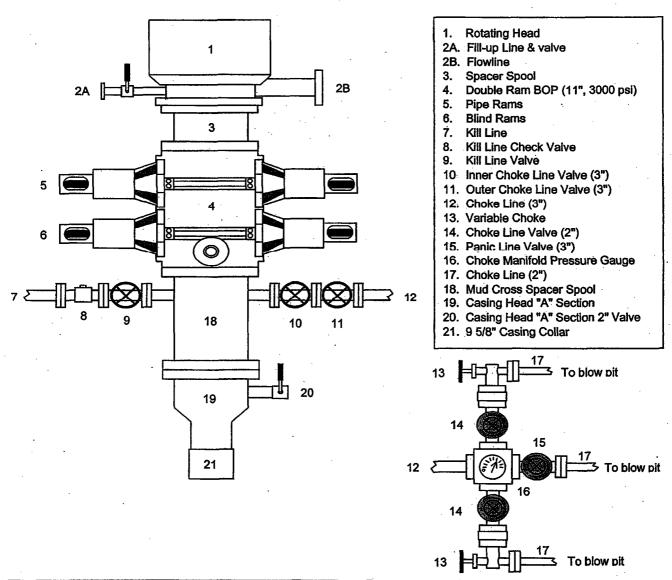
Total Three (3) - on intermediate casing at 1<sup>st</sup> it, below the Ojo

Alamo and next 2 its up.



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

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



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.

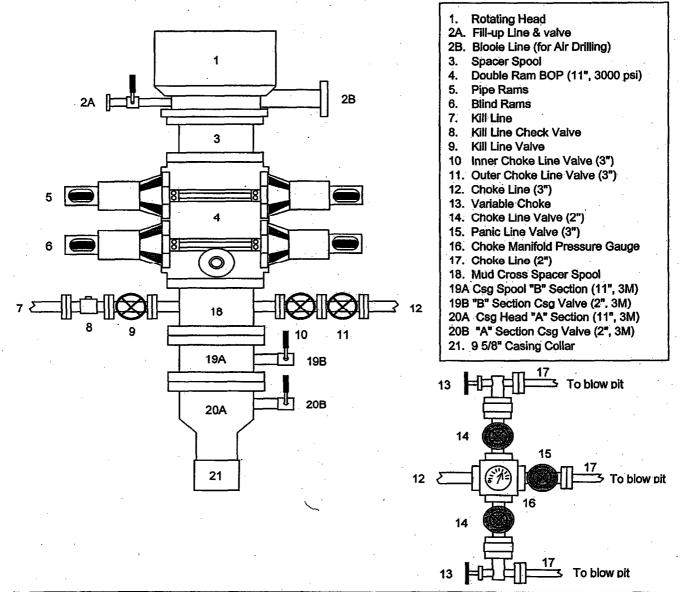
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

- 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



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
- Stab-in TIW valve for all drillstrings in use

### San Juan 29-6 Unit #106M NMSF078426- Unit J, 1730' FSL & 2605' FEL Section 31, T29N, R6W; Rio Arriba 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.

See attached drawing on proposed placement of groundbed & underground AC & DC cables and rectifier.