

2005 SEP 7 AM 10 26

UNITED STATES RECEIVED
DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
SANTA FE ARMINGTON NM

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

| | | |
|---|---|---|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM-012292 |
| 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 | 3b. Phone No. (include area code) 432-368-1230 | 8. Lease Name and Well No. SAN JUAN 31-6 UNIT #18G |
| 4. Location of Well (Report location clearly and in accordance with any State requirements, *) At surface SWNW 1350 FNL - 685 FWL At proposed prod. zone | | 9. API Well No. 30-039-29649 |
| 11. Sec., T. R. M. or Blk. and Survey or Area SECTION 3, T30N, R6W NMPM | | 10. Field and Pool, or Exploratory BLANCO MESAVERDE / BASIN DAKOTA |
| 12. Distance in miles and direction from nearest town or post office* | | 11. Sec., T. R. M. or Blk. and Survey or Area SECTION 3, T30N, R6W NMPM |
| 12. County or Parish RIO ARRIBA | | 13. State NM |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | 16. No. of acres in lease 640.48 ACRES | 17. Spacing Unit dedicated to this well MV - W/2 - 320.16 ACRES DK - W/2 - 320.16 ACRES |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | 19. Proposed Depth 8021' TVD | 20. BLM/BIA Bond No. on file |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6435' GL | 22. Approximate date work will start* | 23. Estimated duration |

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>Peggy James</i> | Name (Printed/Typed) Peggy James | Date 9/06/2005 |
| Title Sr. Associate | | |

| | | |
|---------------------------------------|-----------------------------|------------------|
| Approved by (Signature) <i>AFM</i> | Name (Printed/Typed) AFM | Date 11/22/05 |
| Title AFM | Office FFO | |

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)

ConocoPhillips Company proposes to drill a vertical wellbore to the Blanco Mesaverde / Basin Dakota formations. This well will be drilled and equipped in accordance with the attachments submitted herewith. This application is for APD / ROW.

This well will be downhole commingled pursuant to the terms and conditions outlined in Order R-11363.

NMOCD

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

OIL CONSERVATION DIVISION

PO Box 2088 SEP 7 PM 10 26
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

RECEIVED

☐ AMENDED REPORT

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|------------------------------------|--|-----------------------------|---|
| *API Number 30-039-29649 | | *Pool Code 72319 / 71599 | *Pool Name BLANCO MESAVERDE / BASIN DAKOTA |
| *Property Code 31328 | *Property Name SAN JUAN 31-6 UNIT | | *Well Number 18G |
| *GRID No. 217817 | *Operator Name CONOCOPHILLIPS COMPANY | | *Elevation 6435' |

10 Surface Location

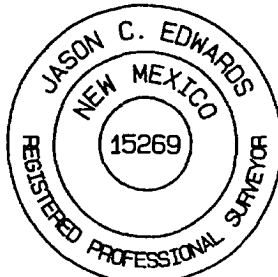
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| E | 3 | 30N | 6W | | 1350 | NORTH | 685 | WEST | RIO ARriba |

11 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|--|--------------------|-----------------------|--------------|
| 12 Dedicated Acres 320.16 Acres - (W/2) | 13 Joint or Infill | 14 Consolidation Code | 15 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

| | | | | | |
|---|--|--|--|--|--|
| <div>16</div> <div>1321.32'</div> <div>1350'</div> <div>LOT 8</div> <div>LOT 7</div> <div>LOT 6</div> <div>LOT 5</div> <div>5280.00'</div> <div>1326.60'</div> <div>685'</div> <div>1320.00'</div> <div>2640.00'</div> <div>5270.76'</div> <div>LAT: 36°50.7065' N LONG: 107°27.3768' W DATUM: NAD27</div> <div>LEASE NM-012292 640.48 acres Issue date: 8/11/1951</div> <div>3</div> | | | | <div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div><u>Vicki Westby (rj)</u> Signature Vicki R. Westby Printed Name Staff Agent Title <u>9/16/2005</u> Date</div> <div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>Date of Survey: MAY 20, 2005</div> <div>Signature and Seal of Professional Surveyor</div> <div> JASON C. EDWARDS Certificate Number 15269</div> | |
|---|--|--|--|--|--|

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.

30-039-29649

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

SAN JUAN 31-6 UNIT

8. Well Number 18G

9. OGRID Number 217817

10. Pool name or Wildcat

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 E 1350 feet from the NORTH line and 685 feet from the WEST line
Section 3 Township 30N Range 6W NMPM RIO ARRIBA County

1. Elevation (Show whether DR, RKB, RT, GR, etc.)
6435' GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type DRILL Depth to Groundwater 60' Distance from nearest fresh water well 2 MILES 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

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 COPC June 2005 General Pit Plan on file with the NMOCD. 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 Peggy James

TITLE Sr. Associate

DATE 9/6/2005

Type or print name
For State Use Only

E-mail address:

Telephone No.

APPROVED BY: 
Conditions of Approval (if any):

DEPUTY OIL & GAS INSPECTOR, DIST. #8
TITLE

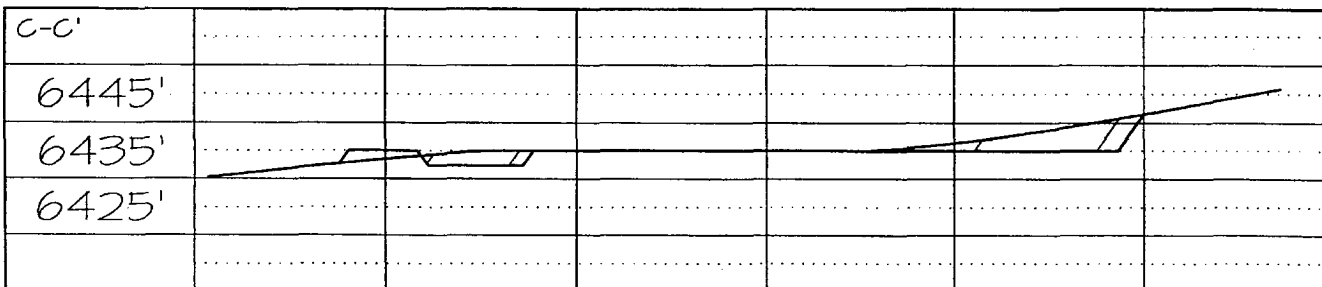
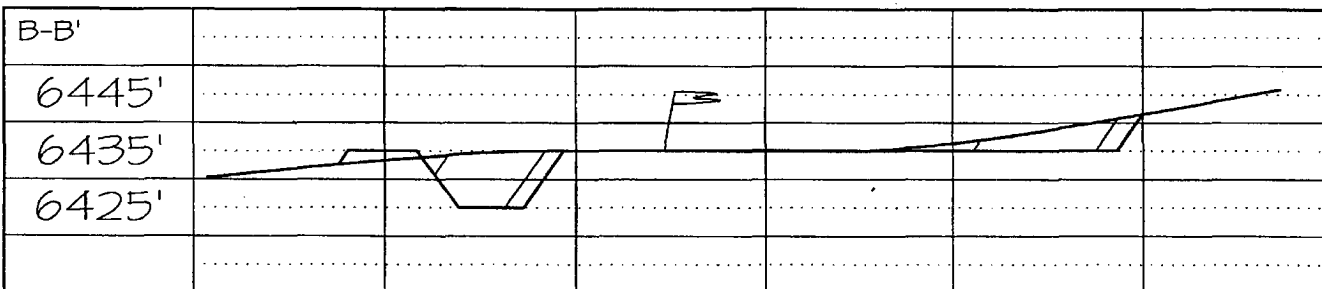
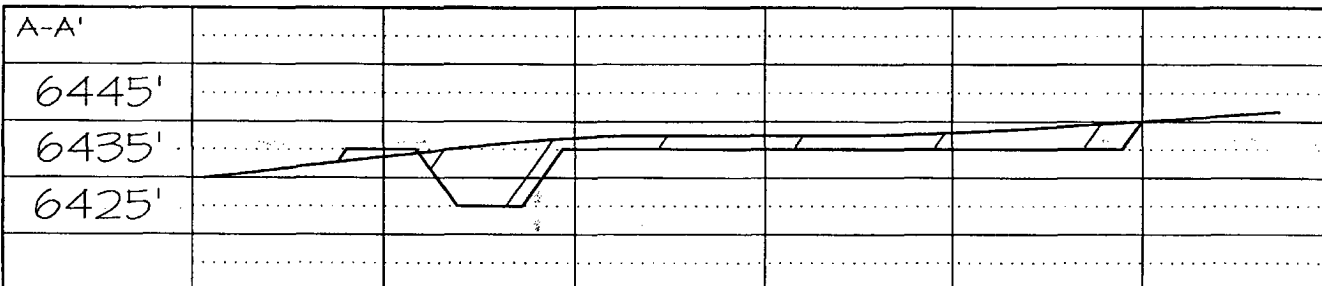
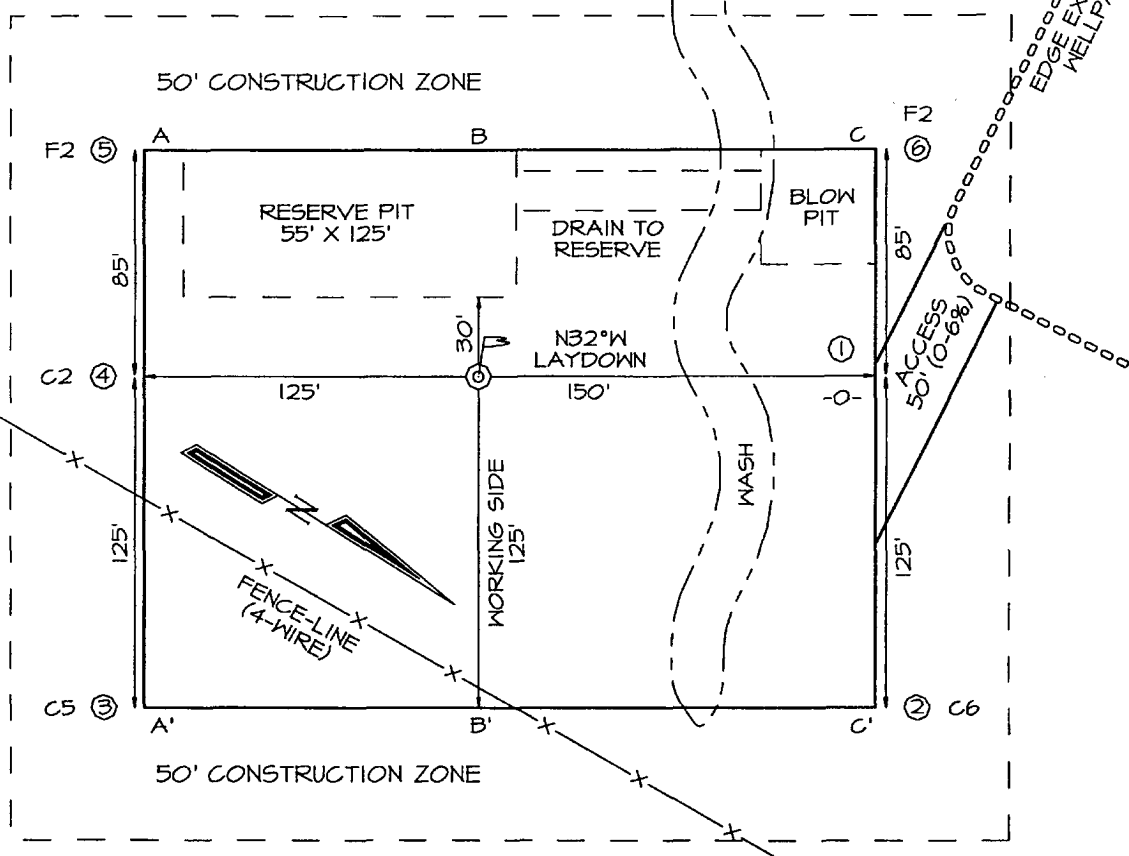
DATE NOV 28 2005

CONOCOPHILLIPS COMPANY SAN JUAN 31-6 UNIT #18G
1350' FNL & 685' FWL, SECTION 3, T30N, R6W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6435'

LATITUDE: 36.84511° N
LONGITUDE: 107.45628° W
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 31-6 18G

| | | | | | |
|--|---------------------|-----------------------|-------------------------------------|--------------------|-----------------|
| Lease: | | AFE #: | | AFE \$: | |
| Field Name: hPHILLIPS 31-6 | | Rig: | State: NM | County: RIO ARRIBA | API #: |
| Geoscientist: Glaser, Terry J | | Phone: (832)486-2332 | Prod. Engineer: Moody, Craig E. | | Phone: 486-2334 |
| Res. Engineer: Tomberlin, Timothy A | | Phone: (832) 486-2328 | Proj. Field Lead: Franssen, Eric E. | | Phone: |
| Primary Objective (Zones): | | | | | |
| Zone | Zone Name | | | | |
| R20002 | MESAVERDE(R20002) | | | | |
| R20076 | DAKOTA(R20076) | | | | |
| Location: Surface | | | | | |
| Straight Hole | | | | | |
| Latitude: 36.85 | Longitude: -107.46 | X: 0.00 | Y: 0.00 | Section: 3 | Range: 6W |
| Footage X: 685 FWL | Footage Y: 1350 FNL | Elevation: 6435 | (FT) | Township: 30N | |
| Tolerance: | | | | | |
| Location Type: | | Start Date (Est.): | Completion Date: | Date In Operation: | |
| Formation Data: Assume KB = 6451 Units = FT | | | | | |
| Formation Call & Casing Points | Depth (TVD in Ft) | SS (Ft) | Depletion (Yes/No) | BHP (PSIG) | BHT |
| Surface Casing | 213 | 6238 | <input type="checkbox"/> | | |
| NCMT | 1401 | 5050 | <input type="checkbox"/> | | |
| OJAM | 2361 | 4090 | <input type="checkbox"/> | | |
| KRLD | 2541 | 3910 | <input type="checkbox"/> | | |
| FRLD | 3006 | 3445 | <input type="checkbox"/> | | |
| PCCF | 3376 | 3075 | <input type="checkbox"/> | | |
| LEWS | 3576 | 2875 | <input type="checkbox"/> | | |
| Intermediate Casing | 3676 | 2775 | <input type="checkbox"/> | | |
| CHRA | 4531 | 1920 | <input type="checkbox"/> | | |
| CLFH | 5341 | 1110 | <input type="checkbox"/> | | |
| MENF | 5401 | 1050 | <input type="checkbox"/> | | |
| PTLK | 5601 | 850 | <input type="checkbox"/> | | |
| GLLP | 7051 | -600 | <input type="checkbox"/> | | |
| GRHN | 7671 | -1220 | <input type="checkbox"/> | | |
| Total Depth | 8021 | -1570 | <input type="checkbox"/> | | |
| Remarks | | | | | |
| 12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface. | | | | | |
| Possible water flows. | | | | | |
| Possible gas. | | | | | |
| 8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface. | | | | | |
| Gas; possibly wet | | | | | |
| Gas. | | | | | |
| Gas. | | | | | |
| Gas. Possibly wet. | | | | | |
| Gas possible, highly fractured | | | | | |
| 6-1/4" Hole. 4-1/2", 11.6 ppf, N-80, LTC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface. | | | | | |
| Reference Wells: | | | | | |
| Reference Type | Well Name | Comments | | | |

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 31-6 18G

| | | | | | |
|---|--------------|------------------|----------------|-----------------------|----------------|
| Logging Program: | | | | | |
| Intermediate Logs: <input type="checkbox"/> Log only if show <input type="checkbox"/> GR/ILD <input type="checkbox"/> Triple Combo | | | | | |
| | | | | | |
| TD Logs: <input type="checkbox"/> Triple Combo <input type="checkbox"/> Dipmeter <input type="checkbox"/> RFT <input type="checkbox"/> Sonic <input type="checkbox"/> VSP <input checked="" type="checkbox"/> TDT | | | | | |
| | | | | | |
| Additional Information: | | | | | |
| | | | | | |
| Log Type | Stage | From (Ft) | To (Ft) | Tool Type/Name | Remarks |

Comments: Zones - Non DK PA - Need to check DK ownership

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen 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

San Juan 31-6 # 18G
Halliburton Cementing Program

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 | 235' | |
| Cement Yield | 1.21 | cuft/sk |
| Cement Density | 15.6 | lb/gal |
| Excess Cement | 125 | % |
| Cement Required | 143 | sx |

SHOE 235 ', 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 | 3676' | |
| Lead Cement Yield | 2.88 | cuft/sk |
| Lead Cement Density | 11.5 | lb/gal |
| Lead Cement Excess | 150 | % |
| Lead Cement Required | 367 | sx |
| Tail Cement Length | 735.2' | |
| Tail Cement Yield | 1.33 | cuft/sk |
| Tail Cement Density | 13.5 | lb/gal |
| Tail Cement Excess | 150 | % |
| Tail Cement Required | 215 | sx |

SHOE 3676 ', 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 | N-80 | |
| Top of Cement | 3476' | 200' inside intermediate casing |
| Shoe Depth | 8021' | |
| Cement Yield | 1.45 | cuft/sk |
| Cement Density | 13.1 | lb/gal |
| Cement Excess | 50 | % |
| Cement Required | 478 | sx |

SHOE 8021 ', 4.5 ", 11.6 ppf, N-80 LTC

SAN JUAN 31-6 #18G
HALLIBURTON OPTION

| 9-5/8 Surface Casing | | |
|----------------------|-----------------------|---------|
| Cement Recipe | Standard Cement | |
| | + 3% Calcium Chloride | |
| | + 0.25 lb/sx Flocele | |
| Cement Volume | 143 | sx |
| Cement Yield | 1.21 | cuft/sx |
| Slurry Volume | 172.9 | cuft |
| | 30.8 | bbls |
| Cement Density | 15.6 | ppg |
| Water Required | 5.29 | gal/sx |

| 7" Intermediate Casing | | |
|------------------------|---------------------------|---------|
| Lead Slurry | | |
| Cement Recipe | Standard Cement | |
| | + 3% Econolite (extender) | |
| | + 10 lb/sx Pheno Seal | |
| Cement Required | 367 | sx |
| Cement Yield | 2.88 | cuft/sx |
| Slurry Volume | 1058.4 | cuft |
| | 188.5 | bbls |
| Cement Density | 11.5 | ppg |
| Water Required | 16.85 | gal/sx |

| 7" Intermediate Casing | | |
|------------------------|-----------------------------|---------|
| Tail Slurry | | |
| Cement Slurry | 50 / 50 POZ:Standard Cement | |
| | + 2% Bentonite | |
| | + 6 lb/sx Pheno Seal | |
| Cement Required | 215 | sx |
| Cement Yield | 1.33 | cuft/sx |
| Slurry Volume | 286.0 | cuft |
| | 50.9 | bbls |
| Cement Density | 13.5 | ppg |
| Water Required | 5.52 | gal/sx |

| 4-1/2" Production Casing | | |
|--------------------------|------------------------------------|---------|
| Cement Recipe | 50 / 50 POZ:Standard Cement | |
| | + 3% Bentonite | |
| | + 3.5 lb/sx PhenoSeal | |
| | + 0.2% CFR-3 Friction Reducer | |
| | + 0.1% HR-5 Retarder | |
| | + 0.8% Halad-9 Fluid Loss Additive | |
| Cement Quantity | 478 | sx |
| Cement Yield | 1.45 | cuft/sx |
| Cement Volume | 692.4 | cuft |
| | 123.3 | |
| Cement Density | 13.1 | ppg |
| Water Required | 6.55 | gal/sx |

SCHLUMBERGER OPTION

| 9-5/8 Surface Casing | | |
|----------------------|-------------------------------------|---------|
| Cement Recipe | Class G Cement | |
| | + 3% S001 Calcium Chloride | |
| | + 0.25 lb/sx D029 Cellophane Flakes | |
| Cement Volume | 148 | sx |
| Cement Yield | 1.17 | cuft/sx |
| Cement Volume | 172.9 | cuft |
| Cement Density | 15.8 | ppg |
| Water Required | 4.973 | gal/sx |

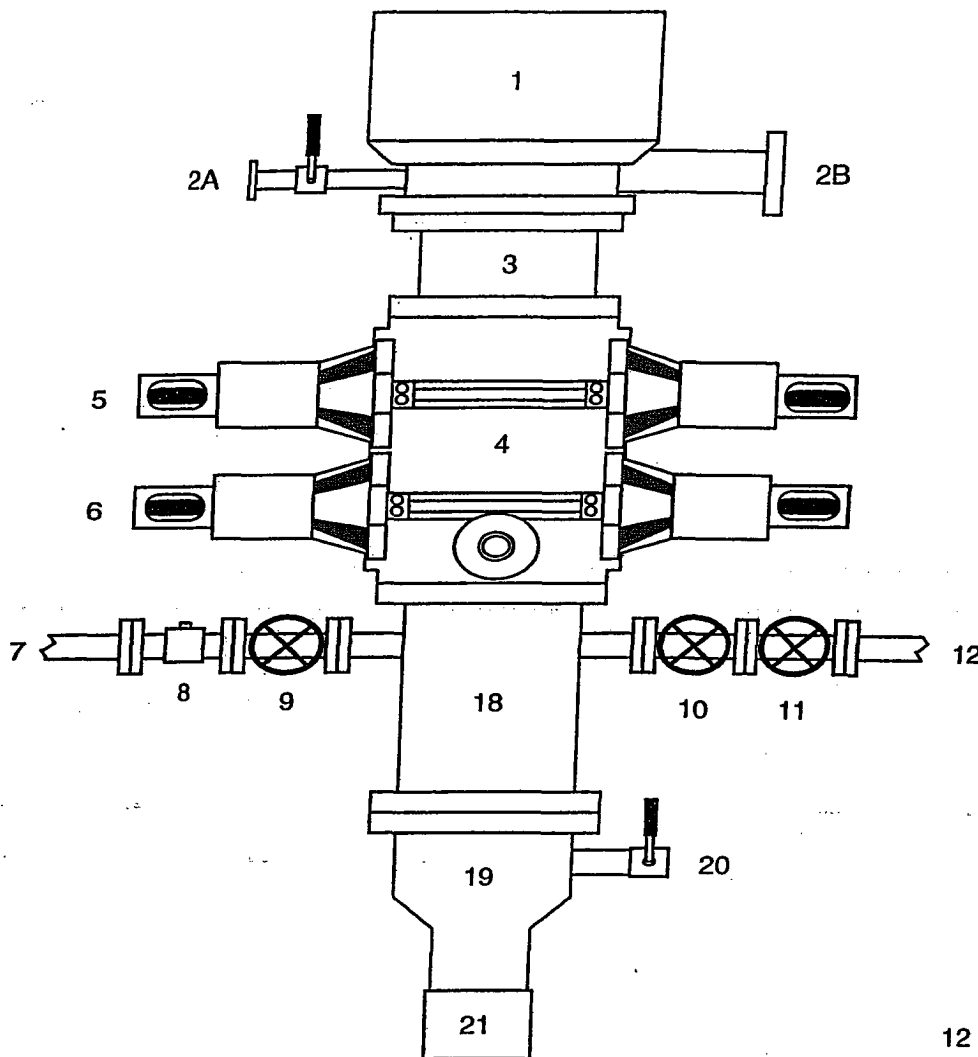
| 7" Intermediate Casing | | |
|------------------------|-------------------------------------|---------|
| Lead Slurry | | |
| Cement Recipe | Class G Cement | |
| | + 0.25 lb/sx D029 Cellophane Flakes | |
| | + 3% D079 Extender | |
| | + 0.20% D046 Antifoam | |
| | + 10 lb/sx Pheno Seal | |
| Cement Required | 389 | sx |
| Cement Yield | 2.72 | cuft/sx |
| Slurry Volume | 1058.4 | cuft |
| | 188.5 | bbls |
| Cement Density | 11.7 | ppg |
| Water Required | 15.74 | gal/sx |

| 7" Intermediate Casing | | |
|------------------------|-------------------------------------|---------|
| Tail Slurry | | |
| Cement Slurry | 50 / 50 POZ: Class G Cement | |
| | + 0.25 lb/sx D029 Cellophane Flakes | |
| | + 2% D020 Bentonite | |
| | + 1.5 lb/sx D024 Gilsonite Extender | |
| | + 2% S001 Calcium Chloride | |
| | + 0.10% D046 Antifoam | |
| | + 6 lb/sx Pheno Seal | |
| Cement Required | 218 | sx |
| Cement Yield | 1.31 | cuft/sx |
| Slurry Volume | 286.0 | cuft |
| | 50.9 | bbls |
| Cement Density | 13.5 | ppg |
| Water Required | 5.317 | gal/sx |

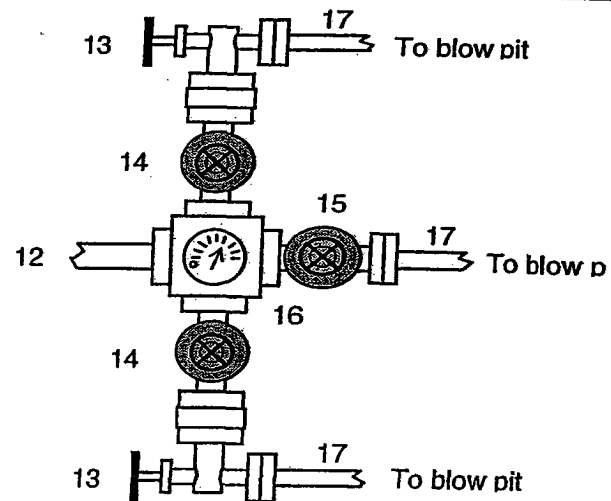
| 4-1/2" Production Casing | | |
|--------------------------|-------------------------------------|---------|
| Cement Recipe | 50 / 50 POZ:Class G Cement | |
| | + 0.25 lb/sx D029 Cellophane Flakes | |
| | + 3% D020 Bentonite | |
| | + 1.0 lb/sx D024 Gilsonite Extender | |
| | + 0.25% D167 Fluid Loss | |
| | + 0.15% D065 Dispersant | |
| | + 0.1% D800 Retarder | |
| | + 0.1% D046 Antifoamer | |
| | + 3.5 lb/sx PhenoSeal | |
| | | |
| Cement Quantity | 481 | sx |
| Cement Yield | 1.44 | cuft/sx |
| Cement Volume | 692.4 | cuft |
| | 123.3 | |
| Cement Density | 13 | ppg |
| Water Required | 6.47 | gal/sx |

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



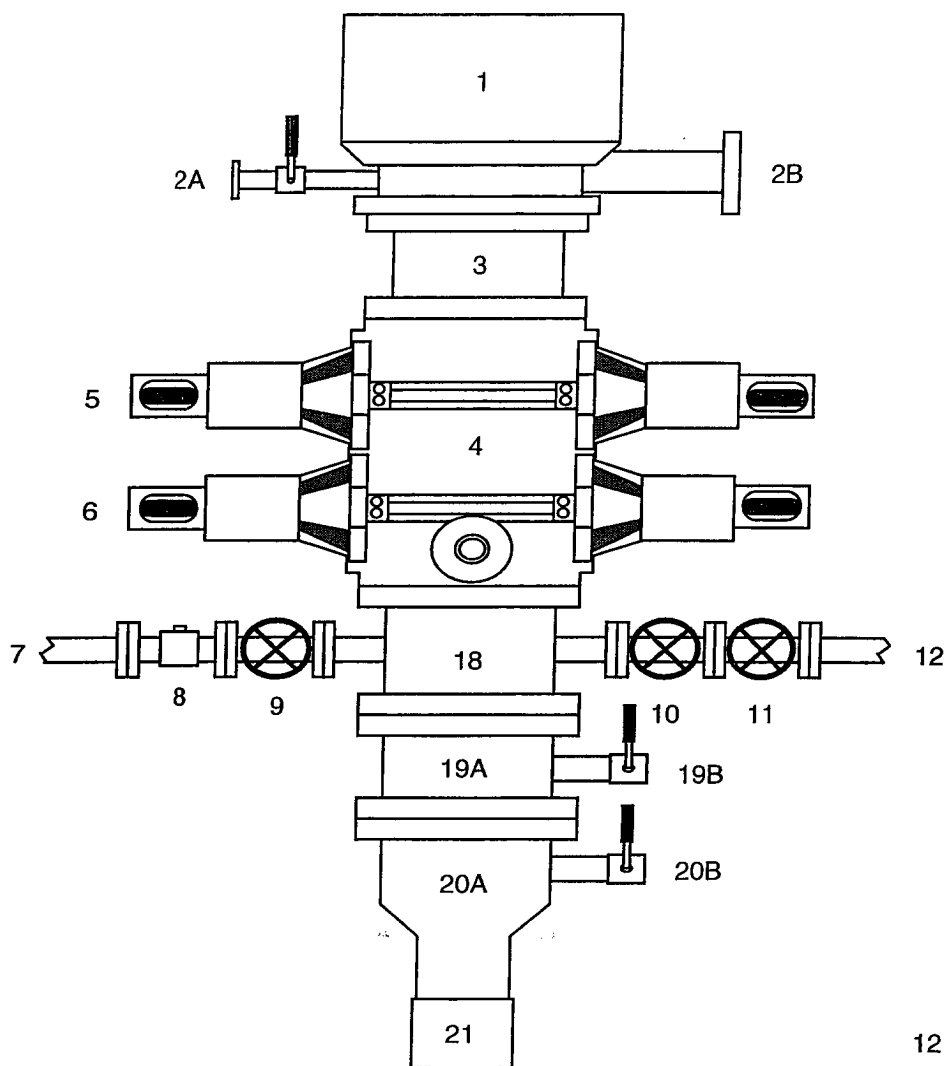
A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe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

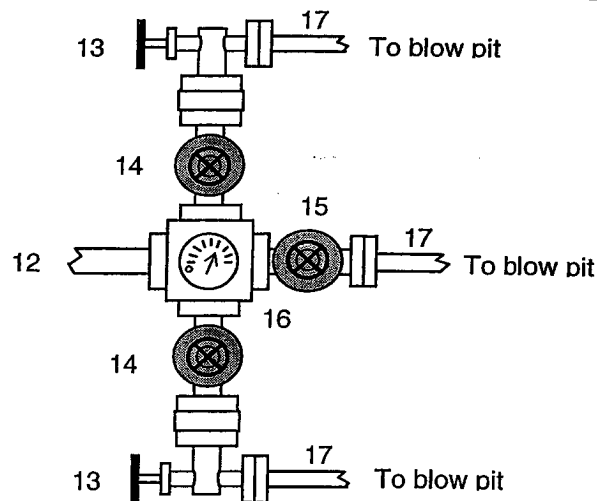
1. Upper Kelly cock Valve with handle

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bleeie 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 10 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 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. 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 31-6 UNIT Well #: 18G

Surface Location:

Unit: E Section: 3 Township: 30N Range: 6W

County: RIO ARRIBA State: New Mexico

Footage: 1350 from the NORTH line, 685 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.