

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. NMSF080538 | |
| 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 Phillips Petroleum Company | | 7. Unit or CA Agreement Name and No. San Juan 30-5 Unit | |
| 3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401 | | 8. Lease Name and Well No. SJ 30-5 Unit #29M | |
| 3b. Phone No. (include area code) 505-599-3454 | | 9. API Well No. 30-039-26777 | |
| 4. Location of Well (Report location clearly and in accordance with any State requirements) At surface Unit H, 1834' FNL & 1060' FEL At proposed prod. zone Same as above | | 10. Field and Pool, or Exploratory Basin DK & Blanco MV | |
| 14. Distance in miles and direction from nearest town or post office* 28-1/2 miles NE of Blanco, NM | | 11. Sec., T., R., M., or Blk. and Survey or Area Section 14, T30N, R5W | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1060' | | 12. County or Parish Rio Arriba, NM | |
| 16. No. of Acres in lease 2522.75 acres | | 13. State NM | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | | Spacing Unit dedicated to this well 320 E/2 both MV & DK | |
| 19. Proposed Depth 8163' | | 20. BLM/BIA Bond No. on file ES0048 | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6690' GL | | 22. Approximate date work will start* 2nd Qtr 2002 | |
| | | 23. Estimated duration 1 month | |

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 <i>Patsy Clugston</i> | Name (Printed/Typed) Patsy Clugston | Date 7/7/01 |
| Title Sr. Regulatory/Proration Clerk | | |
| Approved by (Signature) <i>Mark Keeney</i> | Name (Printed/Typed) Mark Keeney | Date 12/5/01 |
| Title AFM | | |

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 Reverse)

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

DRILLING OPERATIONS AUTHORIZED AND
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

District I
 501 Box 1908, Hobbs, NM 88241-1908
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 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

| | | | | | |
|-------------------------------------|--|---|--|---|------------------------------|
| 1. APL Number 30039-76777 | | 2. Pool Code 72319 | | 3. Pool Name Blanco Mesaverde | |
| 4. Property Code 009258 | | 5. Property Name SAN JUAN 30-5 UNIT | | | 6. Well Number 29M |
| 7. OGRID No. 017654 | | 8. Operator Name PHILLIPS PETROLEUM COMPANY | | | 9. Elevation 6690' |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| H | 14 | 30N | 5W | | 1834' | NORTH | 1060' | EAST | RIO ARriba |

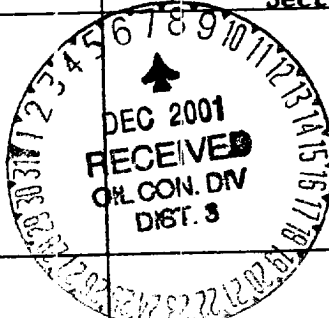
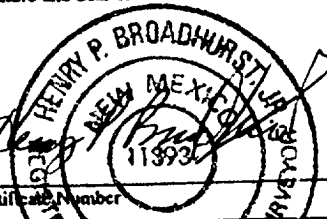
11. Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | | | | | | | | | |

| | | | |
|---|---------------------------------|------------------------------------|---------------|
| 12. Dedicated Acres 320.0 E/2 | 13. Joint or Infill Y | 14. Consolidation Code U | 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

| | |
|--|---|
| | <p>17. OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Patsy Clugston</i> Signature Patsy Clugston Printed Name Sr. Regulatory/Proration Clerk Title July 7, 2001 Date</p> |
| | <p>18. SURVEYOR CERTIFICATION</p> <p>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.</p> <p>08/23/00 Date of Survey Signature and Seal of Professional Surveyer: Certificate Number</p> |

| NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION | | 17 OPERATOR CERTIFICATION | |
|---|------------|----------------------------|---|
| 16 | N89°40'E | 5266.14' | <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p style="text-align: right;"><i>Patsy Clugston</i></p> <p>Signature _____</p> <p>Patsy Clugston Printed Name _____</p> <p>Sr. Regulatory/Proration Clerk Title _____</p> <p>July 7, 2001 Date _____</p> |
| 5280.00' | | SF-080538 2522.75 acres | <p style="text-align: center;">1060'</p> <p style="text-align: center;">5280.00'</p> |
| | Section 14 | | |
| N00°03'E | | | <p style="text-align: center;">N00°03'E</p> |
|  | | | <p style="text-align: center;">18</p> <p style="text-align: center;">SURVEYOR CERTIFICATION</p> <p>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.</p> <p style="text-align: center;">08/23/00</p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <div style="text-align: center;">  </div> <p>Certificate Number _____</p> |
| | N89°43'E | 5278.68' | |

PHILLIPS PETROLEUM COMPANY

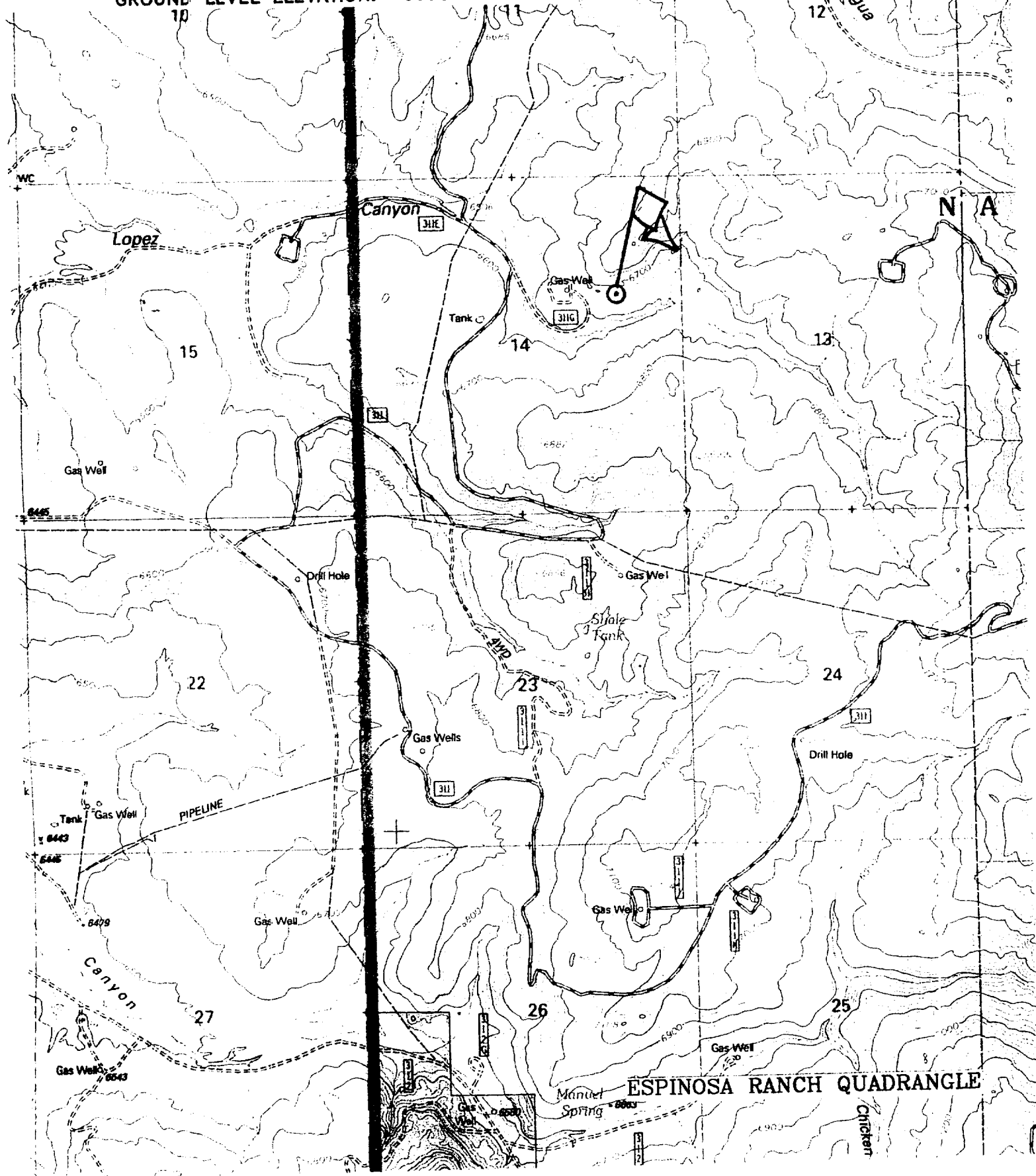
SAN JUAN 30-5 UNIT No. 29M

1834' FNL, 1060' FEL

NE/4 SEC. 14, T-30-N, R-5-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6690'



PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 30-5 Unit #29M MV/DK

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit H, 1834' FNL & 1060' FEL
Section 14, T30N, R5W

2. Unprepared Ground Elevation: @ 6690' (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 8163'.

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

| | |
|--------------------------------|------------------------------|
| <u>Nacimiento - 1631'</u> | <u>Menefee Fm. - 5602'</u> |
| <u>Ojo Alamo - 2752'</u> | <u>Pt. Lookout - 5814'</u> |
| <u>Kirtland Sh - 2957'</u> | <u>Mancos Sh - 6100'</u> |
| <u>Fruitland Fm. - 3299'</u> | <u>Gallup Ss. - 6980'</u> |
| <u>Pictured Cliffs - 3587'</u> | <u>Greenhorn Ls. - 7830'</u> |
| <u>Lewis Shale - 3782'</u> | <u>Graneros Sh. - 7882'</u> |
| <u>Cliff House Ss - 5517'</u> | <u>Dakota Ss - 8013'</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 - 2752' - 2957'</u> |
| Gas & Water: | <u>Fruitland - 3299' - 3587'</u> |
| Gas: | <u>Mesaverde - 5517 - 6100'</u> |
| | <u>Dakota - 8013' - 8163'</u> |

8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3#, H-40 @ 320'
Intermediate String: 7", 20#, J/K-55 @ 3907'
Production String: 4-1/2", 11.6#, I-80 @ 8163' (TD)

9. Cement Program:

Surface String: 158.5 sx Type III cement with 2% bwoc CaCl₂ + 1/4#/sx Cello-flake mixed at 14.5 ppg with a 1.41 ft³/sx yield w/46.5% H₂O or sufficient to circulate to surface - 223 cf.

Note: Cement slurry calculations based on cement to surface with 140% excess hole volume.

Intermediate String: **Lead Cement:** 471.7 sx Type III cement (35:65) POZ with 5#/sx Gilsonite, 1/4#/sx Cello-flake, 6% bwoc gel (bentonite), 10#/sx CSE, 3% bwoc KCL, 0.4% bwoc FL-25 mixed and 0.02#/sx Static Free mixed at 12.0 ppg with a yield of 2.37 ft³/sx – 1118 cf.

Tail Cement: 50 sx – Type III cement with 1/4#/sx Cello-flake and 1% CaCl₂ mixed at 14.5 ppg with a 1.40 ft³/sx yield (70 cf).

In the event we encounter fluid loss during drilling operations, a contingency plan for cementing the intermediate casing may require a stage collar. Phillips cannot predict exact volumes. However the 1st stage will be Class H cement w/5#/sx Gilsonite, 0.25#/sx Cello-flake, 0.3% FL-25 & 2% CaCl₂ mixed at 15.2 ppg 1.28 yield. Stage 2 - lead slurry: 65 % Class H & 35% POZ w/6% Bentonite mixed at 12.6 ppg 1.79 cf/sx Tail Slurry - Class H w/2% CaCl₂ mixed at 15.6 ppg 1.20 yield. All attempt to be circulated to surface. *100' overlap w/ sub. csg min.*

Production String

Lead: 334.3 sx Type III (35/65 POZ (Fly Ash) with 6% bwoc Bentonite, 10#/sx CSE, 0.2#/sx Static Free, 1% bwoc FL-52, 0.3% bwoc CD-32, 0.3% bwoc R-3 & 0.25#/sx Cello-flake mixed at 12.3 ppg with a yield of 2.13 ft³/sx – 712cf.

Note: The Production String casing cement is designed to cover openhole section (with 40% excess) and 100' inside the 7" shoe.

Note: Phillips Petroleum continually works to improve the cement slurries on our wells. BJ Services is 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) 1 @ 10' above shoe & top of 2nd, 4th & 6th joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th jts & 1 jt. Above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1st 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.

BOP AND RELATED EQUIPMENT CHECK LIST

3M SYSTEM:

2 hydr. rams (pipe & blind) or hydr. ram and annular with blind ram on bottom

Kill Line (2-inch minimum)

1 kill line valve (2-inch minimum)

1 choke line valve

2 chokes (refer to diagram in attachment 1) on choke manifold

Upper kelly cock valve in open position with handle available

Safety valve (in open position) and subs to fit all drill strings in use (with handle available)

Pressure gauged on choke manifold

2 inch minimum choke line

Fill-up line above the uppermost preventer

The BOPs will be pressure tested according to Onshore Order #2 III, A 1 and 30% safety factor.