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

| APPLICATION FOR PERMIT TO DRILL | 5. Lease Serial No. NM-03040-A | | | |
|--|---|---|--|--|
| 1a. Type of Work X DRILL REENT | 6. If Indian, Allotee or Tribe Name | | | |
| 1b. Type of Well Oil Well X Gas Well Other | 7. Unit or CA Agreement Name and No. San Juan 29-6 Unit | | | |
| 2. Name of Operator Phillips Petroleum Company | 8. Lease Name and Well No. SJ 29-6 Unit #116 P | | | |
| 3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 8740 | | 9. API Well No. 30 -039 - 2668 / | | |
| 4. Location of Well (Report location clearly and in accordance with any At surface Unit K, 1697' FSL & 1791' FWL | State equirements)* | 10. Field and Pool, or Exploratory So. Blanco PC; Basin FC | | |
| At proposed prod. zone Same as ab | /* *** | Sec., T., R., M., or Blk. and Survey or A | | |
| 14. Distance in miles and direction from nearest town or post office* 21 miles east of Bla | MAR 200 anco, NM C RECEIVE | 1 12. County or Parish 13. State | | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) | 16. No. of Abres in lease 1400. Que Acres | 160 SW/4 PC FC | | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | to nearest well, drilling, completed, | | | |
| Elevations (Show whether DF, KDB, RT, GL, etc. | 22. Approximate date work will start 1st or 2nd Qtr 2000 | * 23. Estimated duration 20 days | | |
| This action is subject to technical and procedural review pursuant to 43 CFR 3165.3. The forcewing, completed in accordance with the requirements of Onshore 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 Land SUPO shall be filed with the appropriate Forest Service Office). | Oil and Gas Order No. 1, shall be attache 4. Bond to cover the operation Item 20 above). 5. Operator certification. | OPERATIONS AUTHORIZED ARE TO GOMPLIANCE WITH ATTACHED THE REQUIREMENTS** d to this form: as unless covered by an existing bond on file (see armation and/or plans as may be required by the | | |
| 25. Signuature Latsy Clust | nauthorized officer. Name (<i>Printed/Typed</i>) Patsy Clugston | Date 2/22/01 | | |
| Sr. Regulatory/Proration Clerk | | | | |
| Approved by (Signautre) | Name (Printed/Typed) | Date | | |
| Title | Office | | | |
| Application approval does not warrant or certify that the applicant holds I 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 | | | | |

*(Instructions on Reverse)

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I PO Box 1980, Hobbs, NAI 88241-1980 District II #11 South First, Artesia, NM ##210 District III

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994 Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

OIL CONSERVATION DIVISION 2040 South Pacheco

| | AMENDED | REPORT |
|---|-----------|--------|
| _ | ' AMENDED | KCFUKI |

| 1000 Rio Benzos | Rd., Adec. | NM 87410 | ı | | Santa Fc, N | NM 87505 | | | | Fee | Lease - 3 Copies |
|------------------------------|---|-----------|------------------|---------------------------------------|-------------------|------------------|--------|--|---|--------------|--|
| District IV 2040 South Pache | eco. Santa F | c. NM #75 | 0 5 | | | ממון רבת מים | Du | | | AME | NDED REPORT |
| 2010 1010000 2 | | | | | | 2001 FEB 23 | | | A TT | | |
| | . 100 81 1 | | WELL LC | CATIO | | REAGE DEDI | CA | ON PL. | | | |
| 30-03 | 11 Numb | 568 | 72 | 439 | 3 | o. Blanco Pi | ctu | | | <u>t.</u> | |
| | ⁴ Property Code ⁵ Property Name | | | | | | • | Well Number 116 P | | | |
| OLIZATIO | Ne. | | | DUTTI | Operator TOPTO PT | Name EUM COMPANY | | | | | 'Elevation 6315 |
| 017654 | | | | I IIIIII | 10 Surface | | | : | | <u></u> | <u> </u> |
| UL or lut no. | Section | Townsh | ip Range | Let Ida | Feet from the | North/South line | Fee | from the | East/West | t line | County |
| K | 27 | 29N | 6W | <u> </u> | 1697' | SOUTH | | 791' | WEST | | RIO ARRIBA |
| | | | ¹¹ Bo | tom Hol | e Location I | f Different Fro | om S | Surface | | | |
| UL or lot no. K | Section | Townshi | p Range | Lot Ida | Feet from the | North/South line | Fee | l from the | East/Wes | t line | County |
| 11 Dedicated Act | res "Joint | or Infill | 14 Consolidation | n Code " | Order No. | | | | | | |
| 160 SW/4 | 4 5 | 7 | | U | | | | | | | |
| NO ALLOW | ABLE WI | LL BE A | ASSIGNED | TO THIS | COMPLETION | UNTIL ALL INT | rere | STS HAVE | BEEN (| CONSO | LIDATED OR A |
| | | | | | | N APPROVED BY | | · · · · · · · · · · · · · · · · · · · | *************************************** | CEDT | rification |
| 16 | | S89 | °58'E | 527 | 2.08' | | | I hereby certify | that the inj | formation (| contained herein is |
| | | | | / | | | | true and comp | leic io ihe b | est of my k | nowledge and belief |
| | | | | | | | | | | | |
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| | | | | | 15 16 1 | 18 79 20 | | Signature Patsy (| lugeto | . / | |
| | | | | | | | 9 | Printed Name | | | |
| 5280.00 | | | | · · · · · · · · · · · · · · · · · · · | MAR | 001 | 280.00 | Sr. Regu Title | latory | /Pror | ation Clerk |
| 280 | | | | | D CALOR | NEW S | 528 | Decembe | r7. 20 | 00 | |
| , n | | , | -Sect | ion 27 |) (%.'^^ | r. 3 | | Date | | | |
| | | | | | | . A. B. | | 18SURV | EYOR | CERT | TIFICATION |
| <u>_</u> | | NM-O | 3040-A | 1 | | 318.32 | | I hereby certif | y that the w | ell location | shown on this plat I surveys made by me |
| 1 2 | | | 00.00 Ac | res | | | 3'E | or under my s | upervision, | and that th | se same is true and |
| 00°02'E | 91' | | | | | | N00°03 | correct to the | | | |
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| | | | _ | | | | | Signature and | Seq.PAN | ARM | ur veyer: |
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District I

Pt) Box 1980, Hobbs, NAI 88241-1980

District II

211 South First, Artesia, NM 2210

District III

1000 Rio Brazos Rd., Actec, NN 87410

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

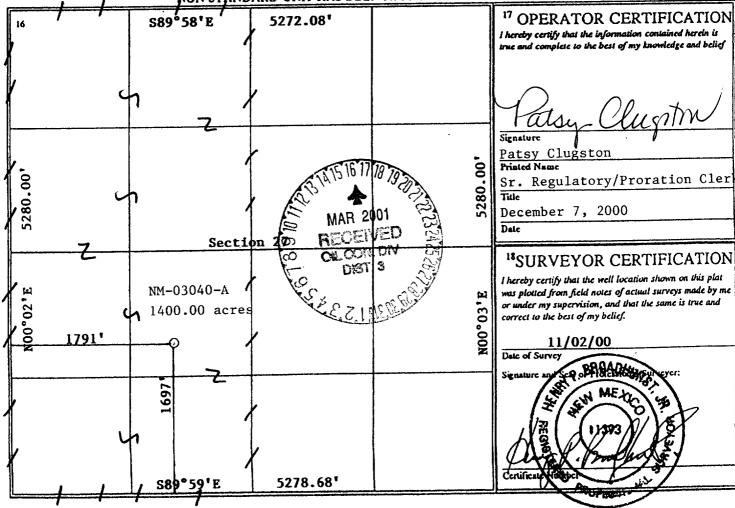
Form C-102 Revised October 18, 1994 Instructions on back

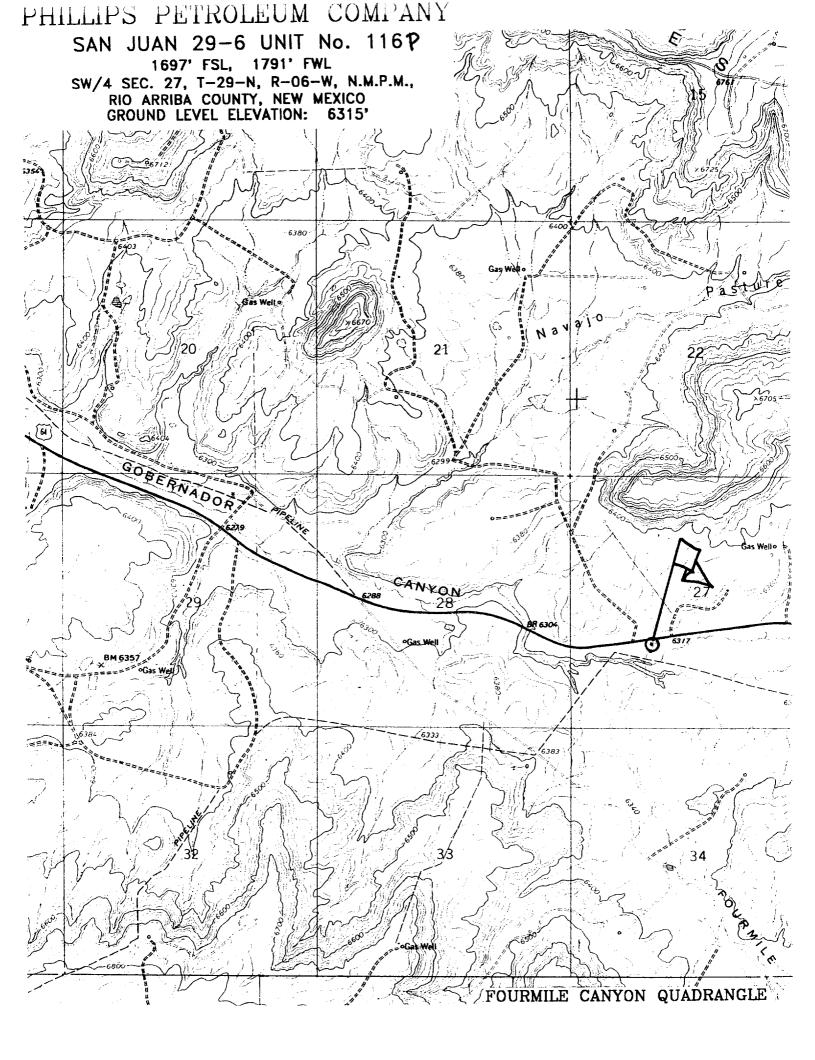
Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

District IV ☐ AMENDED REPORT 2040 South Pacheco, Santa Fc, NM 27505 WELL LOCATION AND ACREAGE DEDICATION PLAT 1 Pool Code All Number Basin Fruitland Coal 71629 * Well Number ³ Property Name ⁴ Property Code 116 P SAN JUAN 29-6 UNIT 009257 * Elevation Operator Name 1 OCKID No. 63151 PHILLIPS PETROLEUM COMPANY 017654 10-Surface Location North/South line East/West line County Feet from the Lot Ida Feet from the Township Range Ul. or lot no. Section RIO ARRIBA 1791' WEST 16971 SOUTH K 27 29N 6W 11 Bottom Hole Location If Different From Surface North/South line Feet from the East/West line County Feet from the Lot Ida Range Section Township UL or lot no. 15 Order No. ¹⁴ Consolidation Code 13 Joint or Infill 11 Dedicated Acres 320 W/2 Y 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 5272.08 S89°58'E 16 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief





PHILLIPS PETROLEUM COMPANY

| WELL NAME: | San Juan 29-6 Un | it #116P | |
|------------|------------------|----------|--|
| | | | |

DRILLING PROGNOSIS

- 1. Location of Proposed Well: <u>Unit K, 1697' FSL & 1791' FWL</u> Section 27 T29N, R6W, Rio Arriba, NM
- 2. Unprepared Ground Elevation: <u>@ 6315</u>.
- 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 <u>3417'</u>.
- 6. The estimated tops of important geologic markers are as follows:

| Nacimiento Fm | 1305' |
|-------------------|-------|
| Ojo Alamo - | 2254' |
| Kirtland - | 2752' |
| Fruitland - | 3087' |
| Pictured Cliffs - | 3217' |

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 - 2254' - 2752'

Gas & Water: Fruitland - 3087' - 3217'

Gas: Pictured Cliffs- 3217' - 3317'

8. The proposed casing program is as follows:

Surface String: <u>8.5/8", 24#, J or K-55 ST&C @ 285'</u>
Production String: <u>4-1/2", 11.6#, J or K-55 @ 3417'</u>

Surface Centralizers – 10' above shoe & at 2nd, 4th, and 6th joints

Production Centralizers – 10' above shoe & at 1st, 2nd, 4th, 6th, & 8th jts & 1 jt above surface casing shoe.

Turbulators: 1st joint below Ojo Alamo (base 2617') and next 2 jts up.

9. Cement Program:

Surface String:

201.2 sx Class H with 2% CaCl₂ + ½#/sx Cello Flake mixed at

15.6 ppg with 1.2 ft³/sx yield or quantity sufficient to circulate

cement to surface (243 cf).

Production String:

Lead 305 sx 35/65 (POZ/Class H) cement with 6% Bentonite & 5#/sx Gilsonite, & \(\frac{4}{4}\rangle \sigma \) Celloflake 2.1 ft³/sx yield (640.5 cf) (100% excess)

Tail 61 sx Class H cement with ½#/sx Celloflake, 5#/sx Gilsonite, 2% CaCl2 & 0.3% FL-52. Yield 1.21 (74 cf).

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.

- 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 Hole - water with native clays & bentonite as

needed.

<u>Production Hole – Water with native clays, bentonite and LCM as needed VIS 35-40 All low solids, nondispersed,</u>

9.0+ ppg, fresh water base mud.

12. The testing, logging, and coring programs are as follows:

D.S.T.s or cores:

Logs: GSL & GR/CCL/CBL

13. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H₂S equipment will be used. Estimated bottomhole pressures:

Fruitland - 800 psi

Pictured Cliffs - 1100 psi

14. Anticipated starting date is sometime in the 1st or 2nd Quarter of 2001 with duration of drilling operations for approximately 20 days thereafter.

296#116Ppc. prog.

BOP AND RELATED EQUIPMENT CHECK LIST

2M 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.

drilling\BOPck.lst