

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. SF-078281 | |
| 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 29-5 Unit | |
| 3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401 | | 8. Lease Name and Well No. SJ 29-5 Unit #72M | |
| 3b. Phone No. (include area code) 505-657-9845 | | 9. API Well No. 30-039-26541 | |
| 4. Location of Well (Report location clearly and in accordance with any State equipment regulations) At surface Unit C, 880' FNL & 1815' FWL At proposed prod. zone Same as above | | 10. Field and Pool, or Exploratory Basin Dakota and Blanco MV | |
| 14. Distance in miles and direction from nearest town or post office* 30 miles east of Blanco, NM | | 11. Sec., T., R., M., or Blk. and Survey or Area Section 17, T29N, R5W | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 880' | | 12. County or Parish Rio Arriba, NM | |
| 16. No. of Acres in lease 1280.00 acres | | 13. State | |
| 17. Spacing Unit dedicated to this well 320 W/2 | | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | |
| 19. Proposed Depth 8022' | | 20. BLM/BIA Bond No. on file ES0048 | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6580' GL | | 22. Approximate date work will start* 4th Qtr 2000 | |
| | | 23. Estimated duration 20 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- 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 10/30/00 |
| Title Sr. Regulatory/Proration Clerk | | |
| Approved by (Signature) <i>/s/ Jim Lovato</i> | Name (Printed/Typed) | Date DEC - 5 2000 |
| Title Office | | |

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 technical and procedural review pursuant to 43 CFR 3165.2 and appeal pursuant to 43 CFR 3165.4.

ONLYING OFFICIALS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

District I
1911 Box 1980, Hobbs, NM 88241-1980
District II
R11 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

700 OCT 21 PM 1:03

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|--------------------------------------|---|-------------------------------------|------------------------------|
| 1. Well Number 30039-26541 | 2. Pool Code 71599 | 3. Pool Name Basin Dakota | 4. Well Number 72M |
| 5. Property Code 009256 | 6. Property Name SAN JUAN 29-5 UNIT | | 7. Elevation 6580 |
| 8. OGRID No. 017654 | 9. Operator Name PHILLIPS PETROLEUM CO. | | |

10 Surface Location

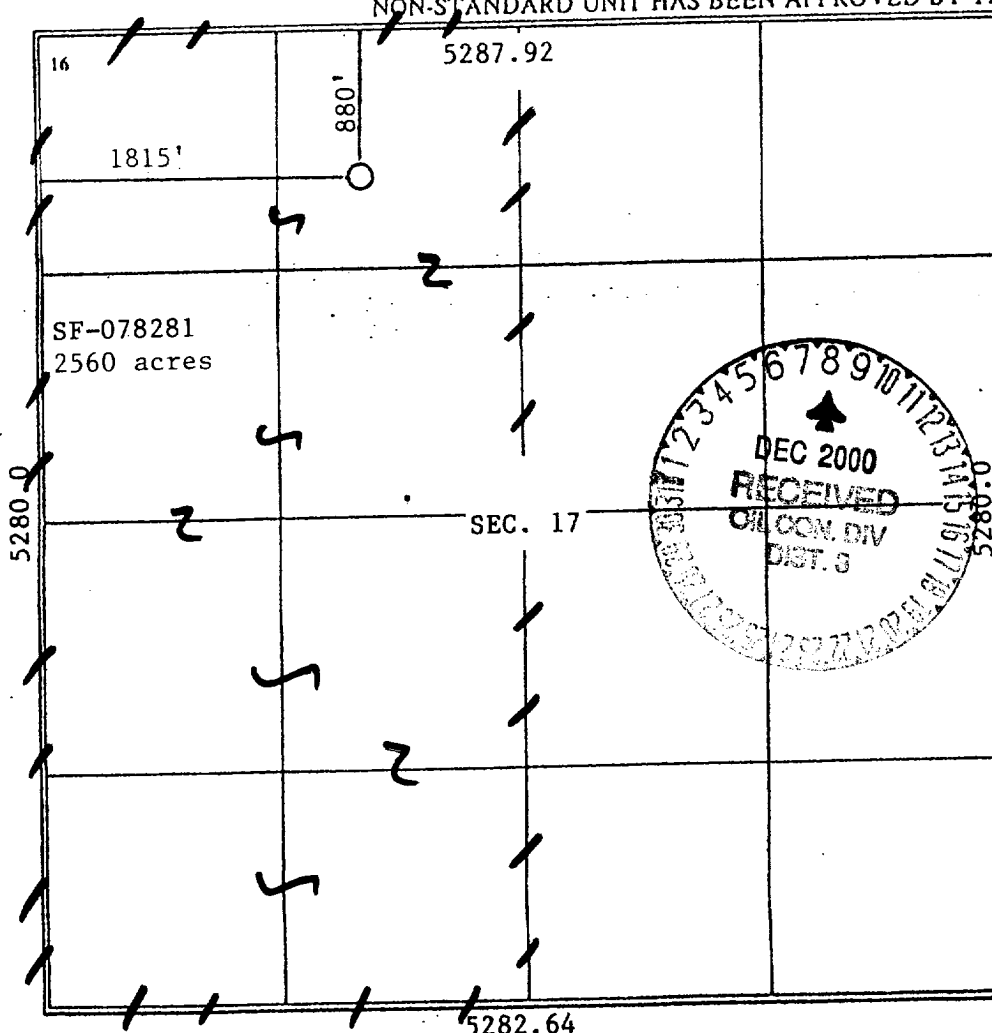
| | | | | | | | | | |
|---------------------------|----------------------|------------------------|--------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------------|
| UL or lot no. C | Section 17 | Township 29N | Range 5W | Lot Idn | Feet from the 880 | North/South line NORTH | Feet from the 1815 | East/West line WEST | County RIO ARriba |
|---------------------------|----------------------|------------------------|--------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------------|

11 Bottom Hole Location If Different From Surface

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

| | | | |
|--------------------------------------|--------------------------------|-----------------------------------|--------------|
| 12 Dedicated Acres 320 W/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



17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature
Patsy Clugston
Printed Name
Sr. Regulatory/Proration Clerk
Title
10/30/00
Date

18 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.

11-10-1997
Date of Survey
Signature and Seal of Professional Surveyor:

HEATH P. BROADHURST, JR.
NEW MEXICO
Professional Surveyor
Certificate Number
1993

District I
P1 Box 1980, Hobbs, NM 88241-1980
District II
R11 South First, Artesia, NM 88210
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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-10.

Revised October 18, 1997

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-----------------------------------|--|--------------------------------------|
| APN Number 30-039-26541 | Pool Code 72319 | Pool Name Blanco Mesaverde |
| Property Code 009256 | Property Name SAN JUAN 29-5 UNIT | Well Number 72M |
| OCRID No. 017654 | Operator Name PHILLIPS PETROLEUM CO. | Elevation 6580 |

10 Surface Location

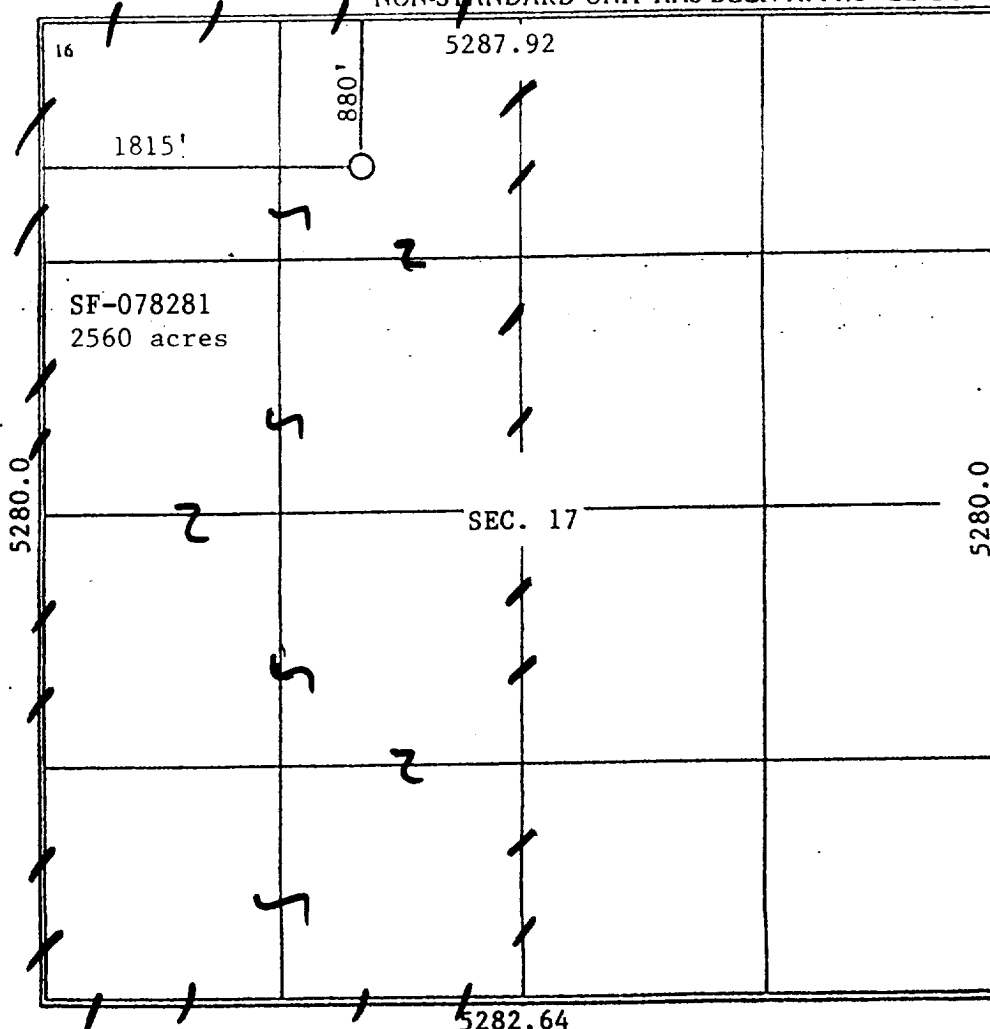
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| C | 17 | 29N | 5W | | 880 | NORTH | 1815 | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C | | | | | | | | | |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|--------------------|--------------------|-----------------------|--------------|
| 320 W/2 | Y | U | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR /
NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Patsy Clugston
Signature

Patsy Clugston
Printed Name

Sr. Regulatory/Proration Clerk
Title

10/30/00
Date

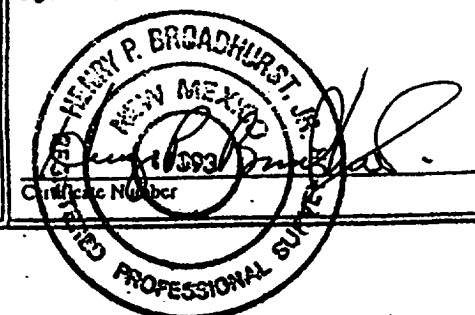
18 SURVEYOR CERTIFICATION

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.

11-10-1997

Date of Survey

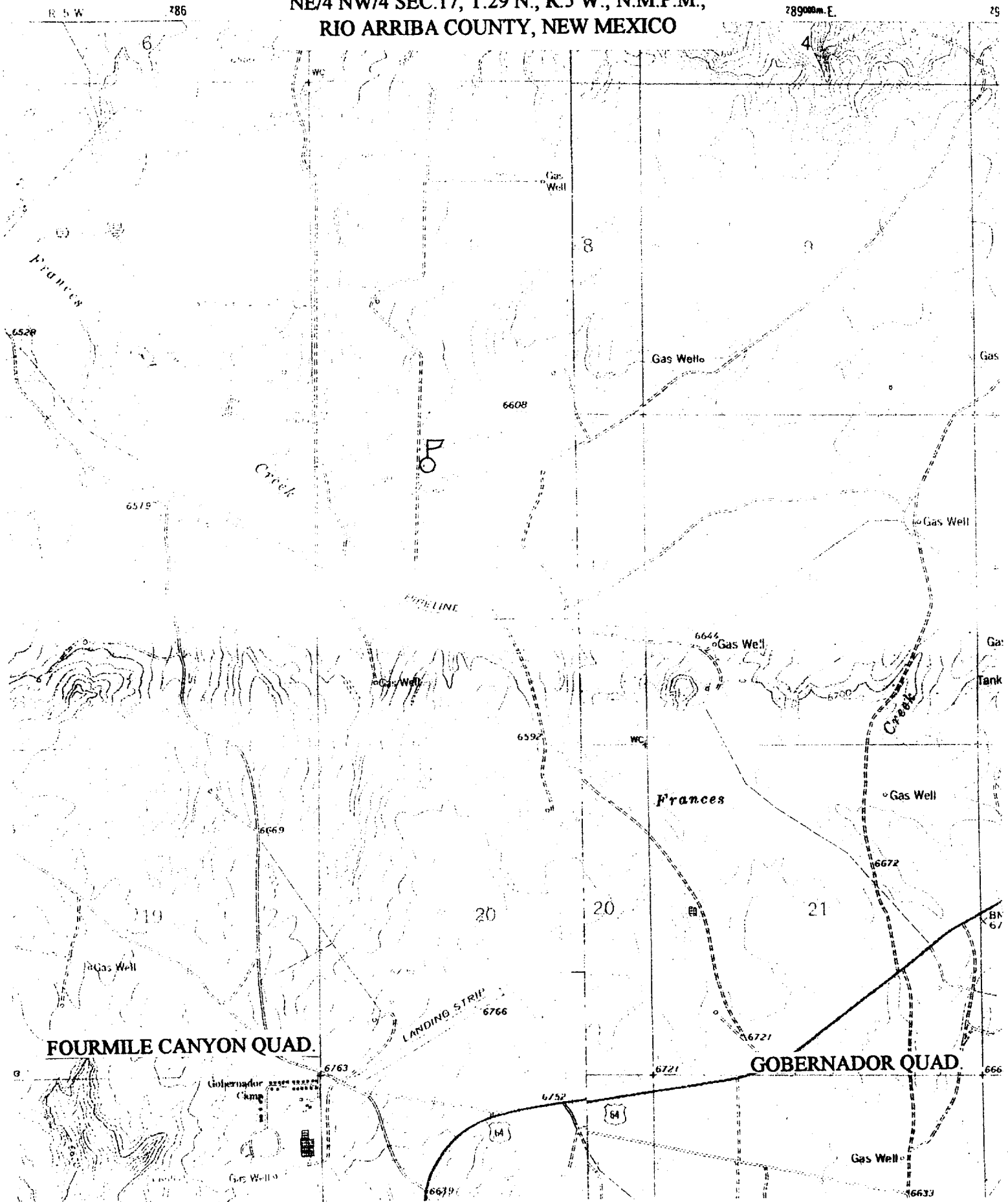
Signature and Seal of Professional Surveyor:



PHILLIPS PETROLEUM CO.

SAN JUAN 29-5 UNIT #72M

NE/4 NW/4 SEC.17, T.29 N., R.5 W., N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO



PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 29-5 Unit #72M MV/DK

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit C, 880' FNL & 1815' FWL,
Section 17, T29N, R5W
2. Unprepared Ground Elevation: @ 6580' (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 8022'.
6. The estimated tops of important geologic markers are as follows:

| | |
|--------------------------------|------------------------------|
| <u>Nacimiento - 1418'</u> | <u>Menefee Fm. - 5428'</u> |
| <u>Ojo Alamo - 2658'</u> | <u>Pt. Lookout - 5690'</u> |
| <u>Kirtland Sh - 2819'</u> | <u>Mancos Sh - 5840'</u> |
| <u>Fruitland Fm. - 3183'</u> | <u>Gallup Ss. - 6764'</u> |
| <u>Pictured Cliffs - 3536'</u> | <u>Greenhorn Ls. - 7686'</u> |
| <u>Lewis Shale - 3660'</u> | <u>Graneros Sh. - 7736'</u> |
| <u>Cliff House Ss - 5386'</u> | <u>Dakota Ss - 7872'</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 - 2658' - 2819'</u> |
| Gas & Water: | <u>Fruitland - 3183' - 3409'</u> |
| Gas: | <u>Mesaverde - 5386' - 5840'</u> |
| | <u>Dakota - 7872' - 8022' —</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 @ 3785'
Production String: 4-1/2", 11.6#, N-80 @ 8022' (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:** 455.4 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 – 1079 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 CI 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.

Production String

Lead: 292.0 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 – 623 cf.

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.

ATTACHMENT 1

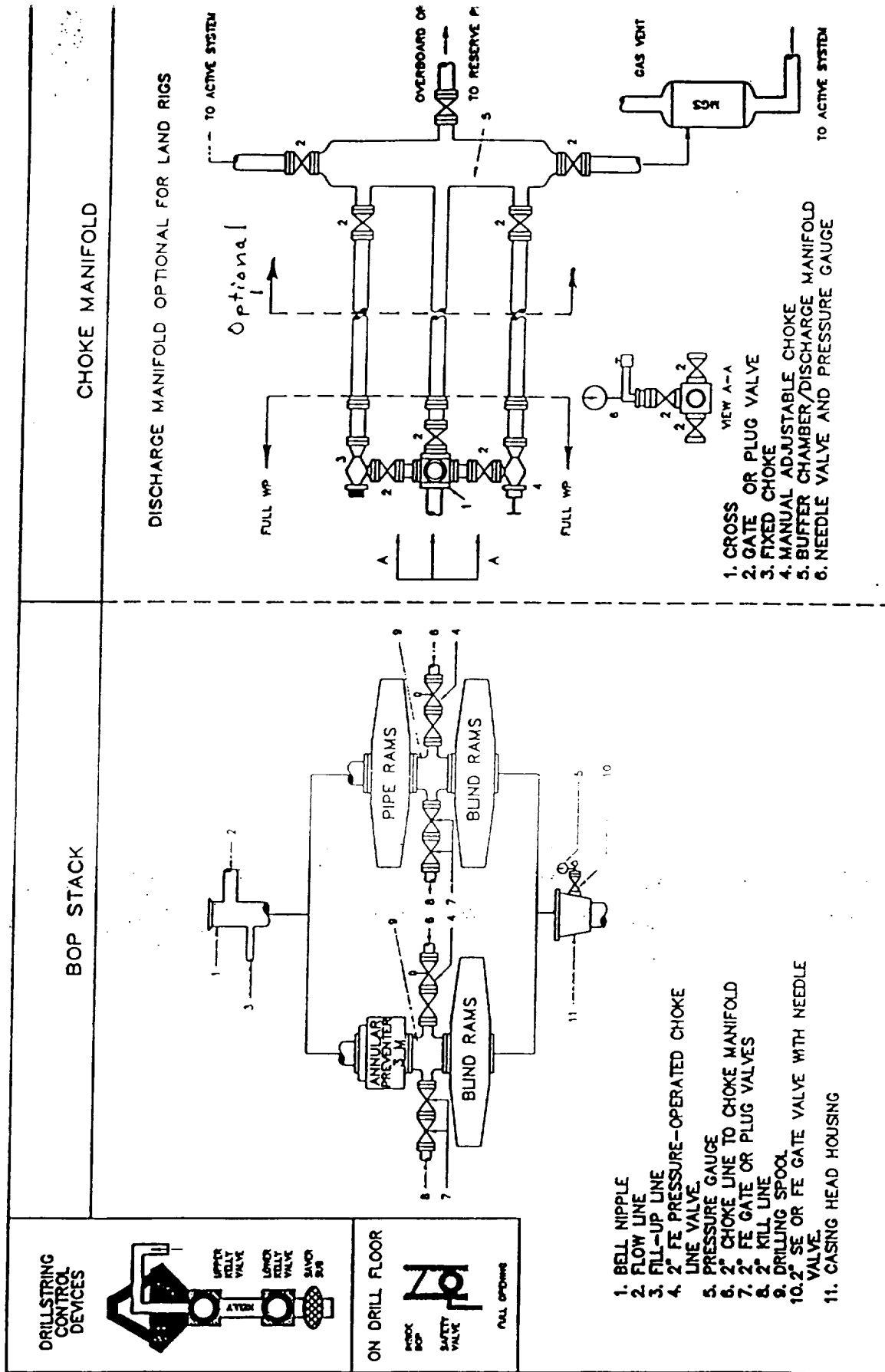


Fig. 2.4. Class 2 BOP and Choke Manifold.