Form 3160-3 (August 1999)

# UNITED STATES **DEPARTMENT OF THE INTERIOR**

FORM APPROVED OMB NO. 1004-0136

BUREAU OF LAND MANAGEMENT			Expires: November 30, 2000		
APPLICATION FOR PERMIT TO DRILL OR REENTER			No. 32		
a. Type of Work X DRILL REENT	6. If Indian, A	6. If Indian, Allotee or Tribe Name			
b. Type of Well Oil Well X Gas Well Other		7. Unit or CA Agreement Name and No. San Juan 29-5 Unit			
Name of Operator Phillips Petroleum Company	A MINGTON, NN	8. Lease Name SJ 29-5	and Well No. Unit #54M		
a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401		9. API Well N	039-26582		
. Location of Well (Report location clearly and in accordance with any S At surface Unit C, 664' FNL & 2543' FWL	MAR 2001		Pool, or Exploratory ( & Blanco MV		
At proposed prod. zone Same as above	MAH	€Sec. 31	., M., or Blk. and Survey of T29N, R5W		
4. Distance in miles and direction from nearest town or post office*  24 miles west of Bla	anco, NN	S∏2. County or Sio Arriba			
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit ded	icated to this well  /2 MV & DK		
8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth  7861' —	20. BLM/BIA Bond No. on file ES0048			
1. Elevations (Show whether DF, KDB, RT, GL, etc. 6469' GL —	art* 23. Estim	23. Estimated duration 20 days			
The following, completed in accordance with the requirements of Onshore	24. Attachments  Oil and Gas Order No. 1. shall be attac	hed to this form:			
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System Lands SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover the operation Item 20 above). 5. Operator certification.	ons unless covered by	an existing bond on file (se		
5. Signuature	Name (Printed/Typed) Date				
Title Sr. Regulatory/Proration Clerk	Patsy Clugston		11/28/00		
Approved by (Signautre)	Name (Printed/Typed)  Date				
Fitle	Office				
Application approval does not warrant or certify that the applicant holds le conduct operations thereon.  Conditions of approval, if any, are attached.	egal or equitable title to those rights in t	he subject lease which	n would entitle the applican		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a United States any false, fictitious or fraudulent statements or representation			ny department or agency of		
*(Instructions on Reverse)  To the degree of the property of the developed and the control of th	f 3		O ARTHORIZED ARE		

Gra Approxi (Assessed to 65 CFA \$166.4.

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District I PO Bug 1980, Hubbn, NM 20241-1980 District II BH South First, Artesia, NM 20210 District III

# State of New Mexico Energy, Minerals & Natural Remuseren Department

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

MOREUSIONS

OIL CONSERVATION DIVISION 2040 South Pacheco Submit to Appropriate District Office
State Lease - 4 Copies
Free Lease - 3 Copies

Fee Lease - 3 Copies 1800 Rio Brazon Rd., Aztec, NM 87416 Santa Fe, NM 87505 NOV 29 PM 3: 15 District IV ☐ AMENDED REPORT 2040 South Pacheco, Santa Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PL \* Pool Code 71599 / 1231 9 LAPI\_Number Basin Dakota \* Well Number <sup>5</sup> Property Name <sup>4</sup> Property Code 54M JUAN 29-5 UNIT 009256 PHILLIPS PETROLEUM COMPANY 'OGRID No. 6469 017654 Surface Location East/West line North/South line Feet from the County Lot Ida Feet from the Township Range UL or lot se. Section RIO ARRIBA 25431 WEST 6641 NORTH C 31 29N 5W " Bottom Hole Location If Different From Surface North/South line Feet from the East/West line County Lot Ida Feet from the UL or lot no. Section Township 15 Order No. 12 Dedicated Acres " Joint or Infill "Consolidation Code U 320 W/2 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 S89°44'E 5290.561 16 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 25431 SF-078282 1280 acres Signature Patsy Clugston Fee Printed Name Sr. Regulatory/Proration Cler 21/ 11-28-00 Date Secti 18SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat NM-011348 was plotted from field notes of actual surveys made by me NO0 01'E 17 or under my supervision, and that the same is true and North correct to the best of my belief. 08/29/2000 Fee Date of Survey Signature and Scal of Professional Surveyer: Oz A SF-078410A 5280.001

District I Pt) Box 1980, Hobba, NM 88241-1980 District II BH South First, Artesia, NM 88210 District III 1880 Rio Brazon Rd., Aztec, NM 87410

District IV

## State of New Mexico Energy, Minerals & Natural Remurees Department

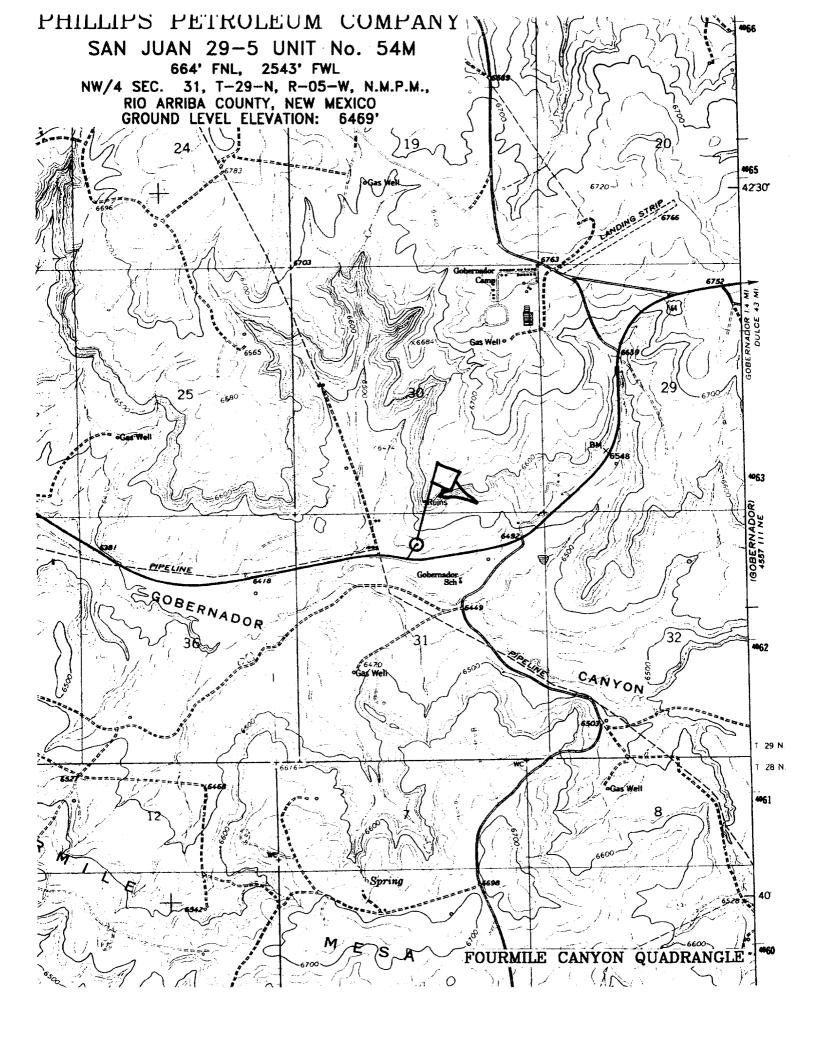
Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

2 PM 3 1 AMENDED REPORT

2040 South Pacheco, Santa Fe, NM 87505

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APL Number Poul Code				Blanco Mesaverde,							
<sup>4</sup> Property 009256	Circle	<del>•</del>	<sup>5</sup> Property Name SAN JUAN 29-5 UNIT					* Well Number 54M			•
' <b>ogrid</b> 017654	No.	Operator Name PHILLIPS PETROLEUM COMPANY					Elevation 6469				
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UL or lot no. C	Section	Township	Range	Lot Ida	Fect from the	North/South line	Feet	from the	East/West	lot .	County
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320 W/2 NO ALLOW	ABLE W	ILL BE A	SSIGNED	TO THIS	S COMPLETIO	N UNTIL ALL IN	ΓERE	STS HAV	E BEEN C	ONSC	LIDATED OR
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#### PHILLIPS PETROLEUM COMPANY

WELL NAME:	San Juan 29-5 Unit #54M MV/DK	

#### **DRILLING PROGNOSIS**

- 1. Location of Proposed Well: Unit C, 664' FNL & 22543' FWL Section 31, T29N, R5W
- 2. Unprepared Ground Elevation: <u>@ 6469' (unprepared)</u>.
- 3. The geological name of the surface formation is <u>San Jose</u>.
- 4. Type of drilling tools will be <u>rotary</u>.
- 5. Proposed drilling depth is <u>7861</u>.
- 6. The estimated tops of important geologic markers are as follows:

Naciamento - 1461'	Menefee Fm 5276'
Ojo Alamo - 2571'	Pt. Lookout - 5553'
Kirtland Sh - 2771'	Mancos Sh - 5749'
Fruitland Fm 3166'	Gallup Ss 6711'
Pictured Cliffs - 3377'	Greenhorn Ls 7533'
Lewis Shale - 3477'	Graneros Sh 7594'
Cliff House Ss - 5186'	Dakota Ss - 7711'

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 - 2571' - 2771'

Gas & Water: Fruitland - 3166' - 3371'

Gas: Mesaverde - 5186' - 5749'

Dakota - 7711' - 7861'

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 @ 3602'
Production String: 4-1/2", 11.6#, I-80 or N-80 @ 7861' (TD)

9. Cement Program:

Surface String: 158.5 sx Type III cement with 2% bwoc CaCl2 + ½#/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 110% excess hole volume.

Intermediate String: Lead Cement: 431 sx Type III cement (35:65) POZ with 5#/sx Gilsonite, 1/4#/sx Cello-flake, 6% bwoc gel (bentonite), 10#/sx CSE, 3% bwow 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 - 1021 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 Cl 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: 334.6 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 -713 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 2<sup>nd</sup>, 4<sup>th</sup> & 6<sup>th</sup> joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th its &

1 jt. Above surface casing.

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.

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)

I 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