Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR RUPEAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

BUREAU OF LAND MANAGEME		
APPLICATION FOR PERMIT TO DRILL O	5. Lease Serial No. NM-03471	
Type of Work X DRILL REENTER	6. If Indian, Allotee or Tribe Name	
o. Type of Well Oil Well X Gas Well Other	7. Unit or CA Agreement Name and No. San Juan 29-6 Unit	
Name of Operator Phillips Petroleum Company		8. Lease Name and Well No. SJ 29-6 Unit #105R
. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401	3b. Phone No that area co	9. API Well No. 30-26467
Location of Well (Report location clearly and in accordance with any Sta At surface Unit M, 660' FSL & 860' FWL	$I_{c}^{(n)}$ $I_{L}^{(n)}$	10. Field and Pool, or Exploratory Blanco MV & Basin DK
At proposed prod. zone Same as above	FECTIVED	fl., Sec., T., R., M., or Blk. and Survey or Section 28, T29N, R6W
Distance in miles and direction from nearest town or post office* 18.5 miles east of Bla	nco. NINGS	Rio Arriba NM
Distance from proposed*	16. No. of acres in lease	Spacing Unit dedicated to this well
location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	1960 acres	320 W/2 for MV & DK
Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20. BLM/BIA Bond No. on file
applied for, on this lease, ft.	7729'—	ES0048
Elevations (Show whether DF, KDB, RT, GL, etc. 6382 (unprepared GL)	22. Approximate date work will sta	art* 23. Estimated duration 1 month
Procedural review pursuant to 48 CFR 3186.3 24 and appeal pursuant to 48 CFR 3186.4	Attachments	shed 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, surface Use Plan (if the appropriate Forest Service Office).	4. Bond to cover the operati Item 20 above). the 5. Operator certification.	ions unless covered by an existing bond on file (see
. Signuature N	Name (Printed/Typed)	Date 5/ 34 /00
Talky Clusiin ;	Patsy Clugston	j 5,22₹/00
Sr. Regulatory/Proation Clerk	1. (District ITT m. A	Date
oproved by (Signautre)	Name (Printed/Typed)	7/36/00
tla C	Office	,
pplication approval does not warrant or certify that the applicant holds legand the segment of approval, if any, are attached.	al or equitable title to those rights in	the subject lease which would entitle the applicant

*(Instructions on Reverse)

CONTROL OF THE TOTAL ANTHORIZED ARE SUBJECT IN THE TRUE DATE ATTACHED "GENERAL LOGILLEMENTO" District I Ft) Bug 1988, Hobba, NAI BE241-1980 District II BII South First, Artesia, NAI BE210 District III 1800 Rio Bruzon Rd., Aztec, NM 87410

2040 South Pacheco, Santa Fe, NM 87505

Unitriet IV

State of New Mexico Knergy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Form C-102 Revised October 18, 1994 Instructions on buck nit to Appropriate District Office

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

MORESSIONAL

AMENDED REPORT

		WE	LL LO	CATI	ON AND ACR	EAGE DEDI	CAT	ION PL	АТ			
30-039 -36467 72319						Pool Name Blanco Mesaverde						
* Property 009257		SAN JUAN 29-6 UNIT						* Well Number 105R				
'ogrid 017654	No.	DAN COLLE E / C CALE						Elevatipa 6382				
	16 Surface Location											
UL er lot no.	Section 28	Township 29N	Range 6W	Lat Id	a Feet from the 660°	North/Sweth line SOUTH		from the 360°	East/West I		County RIO ARRIBA	
H 28 29N 6W 660' SOUTH 860' WEST KITO ARKIBA												
UL or lot ac.	Section	Township	Range	Let 1d		North/South line		from the	East/West I	Lac	County	
Dedicated Act	res ¹³ Joint	er Infill 14	L Consolidatio	a Code	u Order No.	I	l					
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District I 311 Hog 1980, Habba, NAC 88241-1980 District II Bill South First, Actonia, NM 88210 District III 1000 Rie Brazes Rd., Aztec, NM 27410 District IV

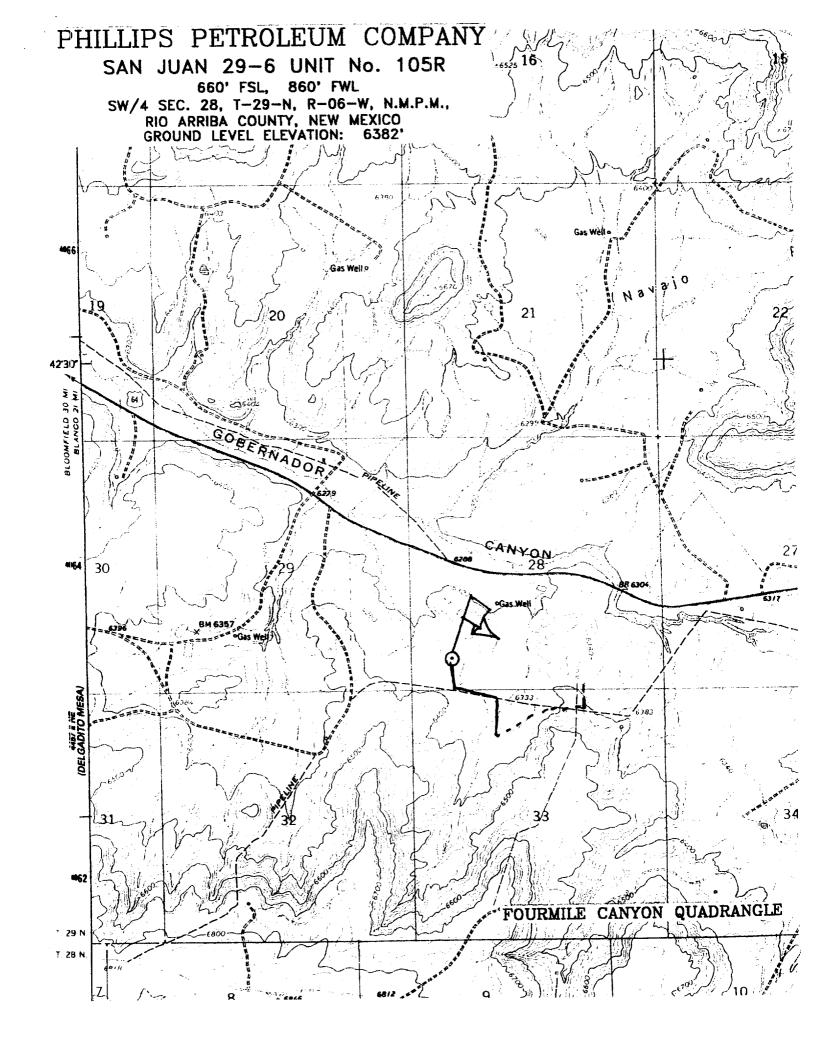
State of New Mexico

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

2040 South Pacheco, Santa Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT O-O-S-S-³ Pool Name ¹ Pool Code 71599 Basin Dakota ⁴ Property Code ⁵ Property Name * Well Number 105R SAN JUAN 29-6 UNIT 6382 ¹OGRID No. ⁴ Operator Name PHILLIPS PETROLEUM COMPANY 017654 10 Surface Location County North/South line Lot Ida Feet from the Foot from the East/West line UL or lot no. Section Township Range RIO ARRIBA 6601 SOUTH 8601 WEST 28 29N 6W H 11 Bottom Hole Location If Different From Surface Let Ida Feet from the North/South Ene Feet from the East/West East County UL or lot so. Section Towaship Range М " Joint or Infill [™] Consolidation Code 4 Order No. 12 Dedicated Acres 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 5280.00 N89°55'E I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Patsy Clugston Printed Name Sr. Regulatory/Proration Cler May 22, 2000 "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-03/27/2000 Detc of Survey Signature and Scal of Professional Surveyor: NM-03471 1960 acres 8601 5282.641 189°58'E



PHILLIPS PETROLEUM COMPANY

WEL	L NAME: <u>San Juan 29-</u>	6 Unit #105R DK/MV
DRIL	LING PROGNOSIS	
1.		l: <u>Unit M, 660' FSL & 860' FWL</u>
	1	Section 28, T29N, R6W
2.	Unprepared Ground Eleva	tion: <u>@ 6382' (unprepared)</u> .
3.	The geological name of the	e surface formation is <u>San Jose</u> .
4.	Type of drilling tools will	be <u>rotary</u> .
5.	Proposed drilling depth is	<u>7729'</u> .
6.	The estimated tops of impo	ortant geologic markers are as follows:
	Naciamento - 1379'	Menefee Fm 5079'
	Ojo Alamo - 2389'	Pt. Lookout - 5394'
	Kirtland Sh - 2549'	Mancos Sh - 5709'
	Fruitland Fm2904'	Gallup Ss 6644'
	Pictured Cliffs - 3224'	Greenhorn Ls 7384'
	Lewis Shale - 3544'	Graneros Sh 7439'
	Cliff House Ss - 4984'	<u>Dakota Ss - 7579'</u>
7.		which anticipated water, oil, gas or other mineral bearing be encountered are as follows:
	Water: Oio	Alamo - 2389' - 2549'
		tland - 2904' - 3224'
		averde - 4984' - 5709'
		ota Ss - 7579' - 7729'
8.	The proposed casing progr	am is as follows:
	Surface String: 9-5/8", 30	5#, J/K-55 @ 320' *
		0#, J/K-55 @ 3659' (J-55 will be used, unless the K-55 is the
		sing available.
	Production String: 4-1/2"	, 11.6#, I-80 @ 7729' (TD)
	* The surface casing will to maintain hole stability	be set at a minimum of 320', but could be set deeper if required

Cement Program: 9.

Surface String:

158.5 sx Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx

Cello-flake + 60.6% FW (1.41 yield = 223 cf).

Intermediate String: Lead Cement: 437.4 sx Type III cement (35:65) Poz + 5#/sx

Gilsonite + 0.25 #/sx Cello-Flake + 6% bwoc Bentonite + 10#/sx CSE + 3% bwoc KCL + 0.4% bwoc FL-25 + 0.02#/sx static free + 129% FW (2.37 yield = 1037 cf). Cement to surface with 110%

excess casing/hole annular volume.

Tail Cement: 50.0 sx Type III cement + 0.25#/sx Cello-Flake + 1% Calcium Chloride + 60.5% FW (1.4 yield = 70 cf). Cement to

surface with 110% excess of casing/hole annulus volume.

Production String *: 320.0 sx (35:65) Poz Class H cement + 10#/sx CSE + 0.25#/sx

Cello-Flake + 0.2% bwoc CD-32 + 5#/sx Gilsonite + 0.5% bwoc FL-52 + 6% bwoc Bentonite + 112.4% FW (2.13 yield = 682 cf). The production string casing cement is designed to cover openhole

section with 60% excess.

*The production casing cement is calculated to cover the openhole interval with 60% excess and annular volume 100' within intermediate shoe. Depending on hole conditions, the well may be cemented in a single stage or two staged.

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 its &

1 it. 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.

- The minimum specifications for pressure control equipment which are to be used, a 10. 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 - spud mud on surface casing.

Intermediate - spud mud generated from natural clays with gel sweeps pretreated w/LCM before entering coal interval.

Below Intermediate - air or gas drilled.

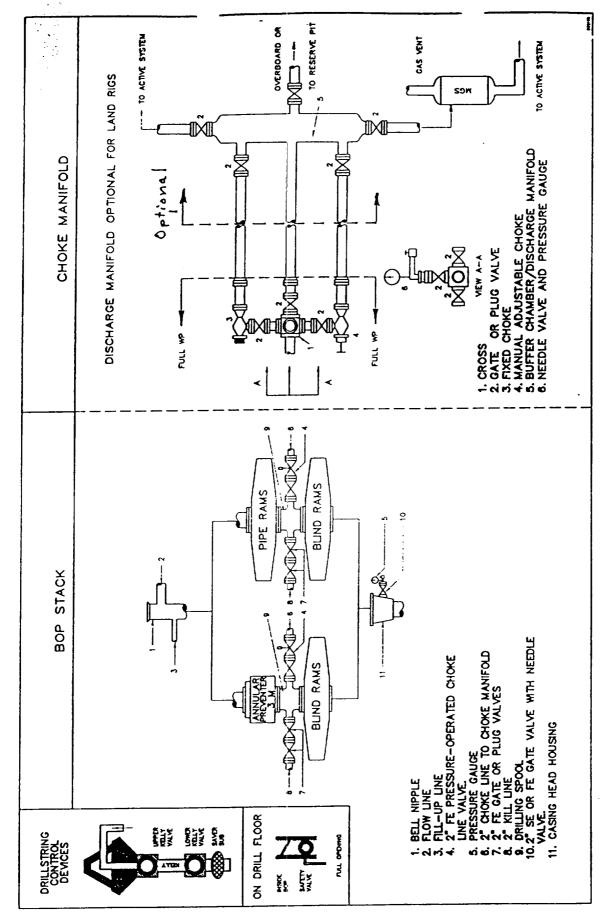


Fig. 2.4. Class 2 BOP and Choke Manifold.