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 D	5. Lease Serial No. NMSF078281	
Type of Work X DRILL R	6. If Indian, Allotee or Tribe Name	
o. Type of Well Oil Well Gas Well Other	X Single Zone Multiple Zone	7. Unit or CA Agreement Name and No. NMNM78415A
Name of Operator		8. Lease Name and Well No.
Phillips Petroleum Company	3b. Phone No. (include area coo	San Juan 29-5 Unit #24A
n Address 5525 Highway 64, NBU 3004, Farmington, NM 8	7401 505-599-3454	9. API Well No. 30-039-26910
Location of Well (Report location clearly and in accordance with At surface H, (SENE) 1821' FNL & 520' FEL; La		10. Field and Pool, or Exploratory Blanco Mesaverde 11. Sec., T., R., M., or Blk. and Survey or Ar
At proposed prod. zone same as all	bove	Section 17, T29N, R5W
4. Distance in miles and direction from nearest town or post office*		12 County or Parish 13. State
25-1/2 miles east		Rio Arriba, NM
5. Distance from proposed* location to nearest	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
property or lease line, ft. (Also to nearest drg. unit line, if any)	2560.0 acres	320 E/2
Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20 BEM/BIA Bond No. on file
applied for, on this lease, ft.	6091'	ES0048
1. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will star	t* 23. Estimated duration
6622 ' GL	approx. 12/3/02	20 days
	24. Attachments	
he following, completed in accordance with the requirements of Onsl	hore Oil and Gas Order No. 1, shall be attache	d 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 I SUPO shall be filed with the appropriate Forest Service Office). 	Item 20 above). Solution 20 above). Just 20 above 20 above 21 above 22 above 22 above 23 above 24 above 24 above 25 above 25 above 25 above 26 ab	formation and/or plans as may be required by the
5. Signuaţure	Name (Printed/Typed)	Date
Aller (lustr	Patsy Clugston	1/22/02
Sr. Regulatory/Proration Clerk		
Approved by (Signautre) /s/ Charle Beecham	Name (Printed/Typed)	Date AUG 2 6 2002
itle	Office	· · · · · · · · · · · · · · · · · · ·
ACTING		
Application approval does not warrant or certify that the applicant ho onduct operations thereon. Conditions of approval, if any, are attached.	olds legal or equitable title to those rights in t	the subject lease which would entitle the applicant

*(Instructions on Reverse)

Phia action is subject to technical and procedural review pursuant to 43 CFR 3185.3 and appeal pursuant to 43 CFR 3185.4

DIMELING OPERATIONS AS HORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III

State of New Mexico Energy, Minerals & Natural Resources Department

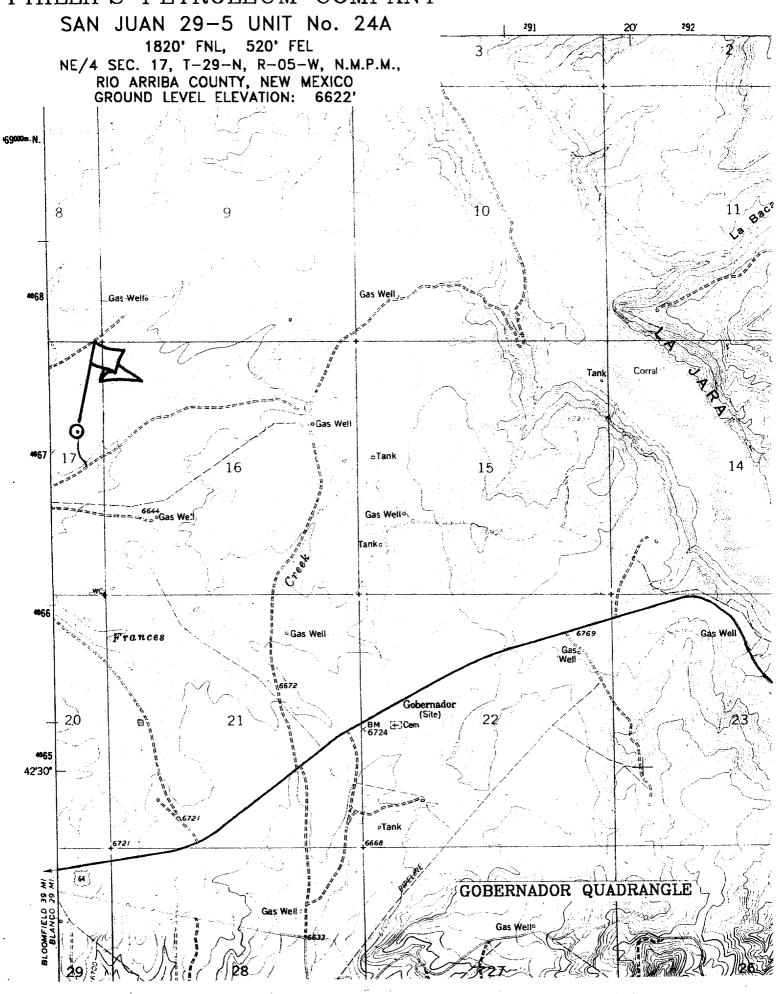
Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION 2040 South Pacheco

RT

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1 Property Code 009256				SAN JUAN 29-5 UNIT					24 A		
OGRID No.						erator PDOT	Name EUM COMPANY				'Elevation 6622'
017654		l		PHILL			Location				-
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PHILLIPS PETROLEUM COMPANY



PHILLIPS PETROLEUM COMPANY

WELL		San Jua	an 29-5 Unit #24A (MV)
DRILI	LING PROGNOSIS Location of Proposed	_	Unit H, 1821' FNL & 520' FEL Section 17, T29N, R5W
2.	Unprepared Ground F	Elevation:	n: <u>@ 6622' (unprepared)</u> .
3.	The geological name	of the sur	urface formation is San Jose.
4.	Type of drilling tools	will be _	<u>rotary</u> .
5.	Proposed drilling dep	th is <u>6</u>	<u>6091'</u> .
6.	The estimated tops of	importar	ant geologic markers are as follows:
	Ojo Alamo - 27		Lewis Shale - 4308' Cliff House Ss - 5408' Menefee Fm. - 5466' Pt. Lookout - 5731' Mancos Sh - 5891'
7.	•		nich anticipated water, oil, gas or other mineral bearing encountered are as follows:
	Water: Gas & Water: Gas:	Ojo Ala Fruitlan Pictured Mesave	nd - 3253' - 3571' d Cliffs - 3571' - 4308'
8.	The proposed casing	program	is as follows:
	Production String: _4	7", 20#, J only casir -1/2", 11	J/K-55 @ 3850' (J-55 will be used, unless the K-55 is the ng available.
	to maintain hole stab	ility.	
9.	Cement Program: Surface String:	197.6 s	sx Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx

Cello-flake + 60.6% FW (1.41 yield = 278 cf).

9. Cement Program (cont.)

Intermediate String: Lead Cement: 485.5 sx Type III cement (35:65) POZ + 5#/sx

Gilsonite + 0.25 #/sx Cello-Flake + 6% bwoc Bentonite + 10#/sx CSE + 3% bwow KCL + 0.4% bwoc FL-25 + 0.02#/sx static free + 129% FW (2.37 yield = 1151 cf). Cement to surface with 120%

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 120% excess of casing/hole annulus volume.

Production String *: Lead Cement: 50 sx Type III (35:65) POZ L (Fly Ash L) with 6% gel Bentonite, 5#/sx Phenoseal, 0.2% bwoc CD-32, 0.75 bwoc FL-52 1#/sx LCM-1 0.25#/sx Cello-Flake, 10#/sx CSE, 0.02#/sx Static Free (2.34 yield = 117 cf).

> 2nd Lead Cement: 103.8 sx Type III (35:65) POZ L (Fly Ash L) with 6% gel Bentonite, 2.5#/sx Phenoseal, 0.2% bwoc CD-32, 0.75 bwoc FL-52 1#/sx LCM-1 0.25#/sx Cello-Flake, 10#/sx CSE, 0.02#/sx Static Free (2.32 yield = 241 cf)

> Tail Cement - 20 sx Type III (35:65) POZ L (Fly Ash L) with 6% gel Bentonite, 5#/sx Phenoseal, 0.2% bwoc CD-32, 0.75 bwoc FL-52 1#/sx LCM-1 0.25#/sx Cello-Flake, 10#/sx CSE, 0.02#/sx Static Free (1.91 yield = 38 cf).

*The production casing cement is calculated to cover the openhole interval with 50% Depending on hole excess and annular volume 200' within intermediate shoe. conditions, the well may be cemented in a single stage or two staged.

Centralizer Program:

Total four (4) 1 @ 10' above shoe & top of 2nd, 4th & 6th joint Surface:

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

Production: None planned.

Total Three (3) - on intermediate casing at 1st it. below the Oio Turbulators:

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.
- 11. Drilling Mud Prognosis:

Surface - spud mud on surface casing.

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

Below Intermediate - air or gas drilled.

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

D.S.T.s or cores:

Logs: GR/CCL/CBL & GSL over zones of interest

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 pressure:

Mesaverde - 600 psi

14. The anticipated starting date is approximately December 3, 2002 with duration of drilling / completion operations for approximately 20 days thereafter.

2002 Drilling\295#24A mv drill prog.doc

San Juan 29-5 Unit #24A (MV)

SURFACE CASING:

Drill Bit Diameter 12.25 "

Casing Outside Diameter 9.625 " 8.913

Casing Weight 36 ppf
Casing Grade H-40
Shoe Depth 320 '

Cement Yield 1.41 cuft/sk Excess Cement 165 %

Hole / Casing Annulus Capacity 0.0558 bbl/ft 0.3132 cuft/ft

Cement Required 197.6 sx

SHOE 320', 9.625", 36 ppf, H-40

INTERMEDIATE CASING:

Drill Bit Diameter 8.75 "

Casing Outside Diameter 7 " 6.455

Casing Weight 20 ppf Casing Grade J-55

Shoe Depth 3850 '
Lead Cement Yield 2.37 cuft/sk
Lead Cement Excess 120 %
Tail Cement Length 211.5 '

Tail Cement Yield 1.4 cuft/sk
Tail Cement Excess 120 %

 Casing / Casing Annulus Capacity
 0.0296
 bbl/ft
 0.1660
 cuft/ft

 Hole / Casing Annulus Capacity
 0.0268
 bbl/ft
 0.1503
 cuft/ft

 Casing Capacity
 0.0405
 bbl/ft
 0.2272
 cuft/ft

Lead Cement Required 485.5 sx Tail Cement Required 50.0 sx

SHOE 3850', 7", 20 ppf, J-55

PRODUCTION CASING:

Drill Bit Diameter 6.25 "

Casing Outside Diameter 4.5 " 4.000 Casing Weight 11.6 ppf

Casing Grade J-55
Top of Cement 3750 ' 100' inside intermediate casing

 Shoe Depth
 6091 '

 Cement Yield
 2.33 cuft/sk

 Cement Excess
 50 %

 Tail Cement Length
 248 '

 Tail Cement Yield
 1.91 cuft/sk

Tail Cement Yield 1.91 cuft/sk
Tail Cement Excess 50 %

Casing / Casing Annulus Capacity
Hole / Casing Annulus Capacity
Casing Capacity

0.0208 bbl/ft 0.1168 cuft/ft 0.0183 bbl/ft 0.1026 cuft/ft 0.0155 bbl/ft 0.0872 cuft/ft

Cement Required 153.8 sx Tail Cement Required 20 sx

SHOE 6091', 4.5", 11.6 ppf, J-55

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.

drilling\BOPck.lst