

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. NMNM03402
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input 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. NMNM78424A
3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401		8. Lease Name and Well No. San Juan 32-8 Unit #21A
3b. Phone No. (include area code) 505-599-3454		9. API Well No. 30-045-30966
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface Unit 0, 322' FSL & 1546' FEL At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Blanco Mesaverde
14. Distance in miles and direction from nearest town or post office* 16-1/2 N by NE of Blanco, NM		11. Sec., T., R., M., or Blk. and Survey or Area 0 Section 15, T31N, R8W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 322'		12. County or Parish San Juan
16. No. of Acres in lease 840.00 acres		13. State NM
17. Spacing Unit dedicated to this well 320 E/2		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file ES0048
19. Proposed Depth 6251'		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6539'		22. Approximate date work will start* July 6, 2002
		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:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan  | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. 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 1/3/02
Title Sr. Regulatory/Proration Clerk		
Approved by (Signature) <i>/s/ Jim Lovato</i>	Name (Printed/Typed)	Date 3/7/02
Title <i>Petr. Eng.</i>	Office BLM-FFO	

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 3160.3 and appeal pursuant to 43 CFR 3160.4.

MINING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"

NM000

Revised October 18, 1954

Instructions on b:

Submit to Appropriate District Office

State Lease - 4 Cop

Fee Lease - 3 Cop

☐ AMENDED REPO

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

# WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number <b>30-045-30966</b>		2 Pool Code <b>72319</b>	3 Pool Name <b>Blanco Mesaverde</b>	
4 Property Code <b>009261</b>	5 Property Name <b>SAN JUAN 32-8 UNIT</b>			6 Well Number <b>21A</b>
7 OGRID No. <b>017654</b>	8 Operator Name <b>PHILLIPS PETROLEUM COMPANY</b>			9 Elevation <b>6539'</b>

### <sup>10</sup> Surface Location

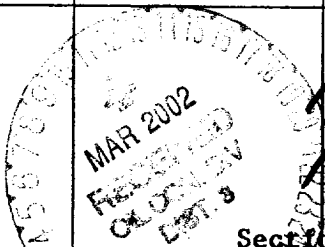
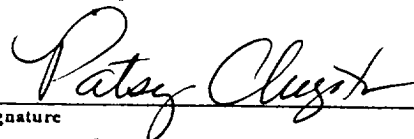
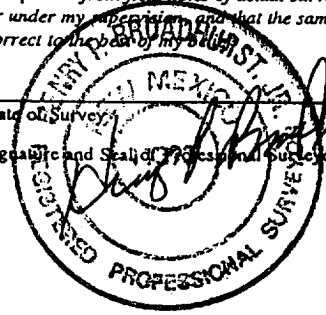
UI, or lot no.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
0	15	31N	8W		322'	SOUTH	1546'	EAST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

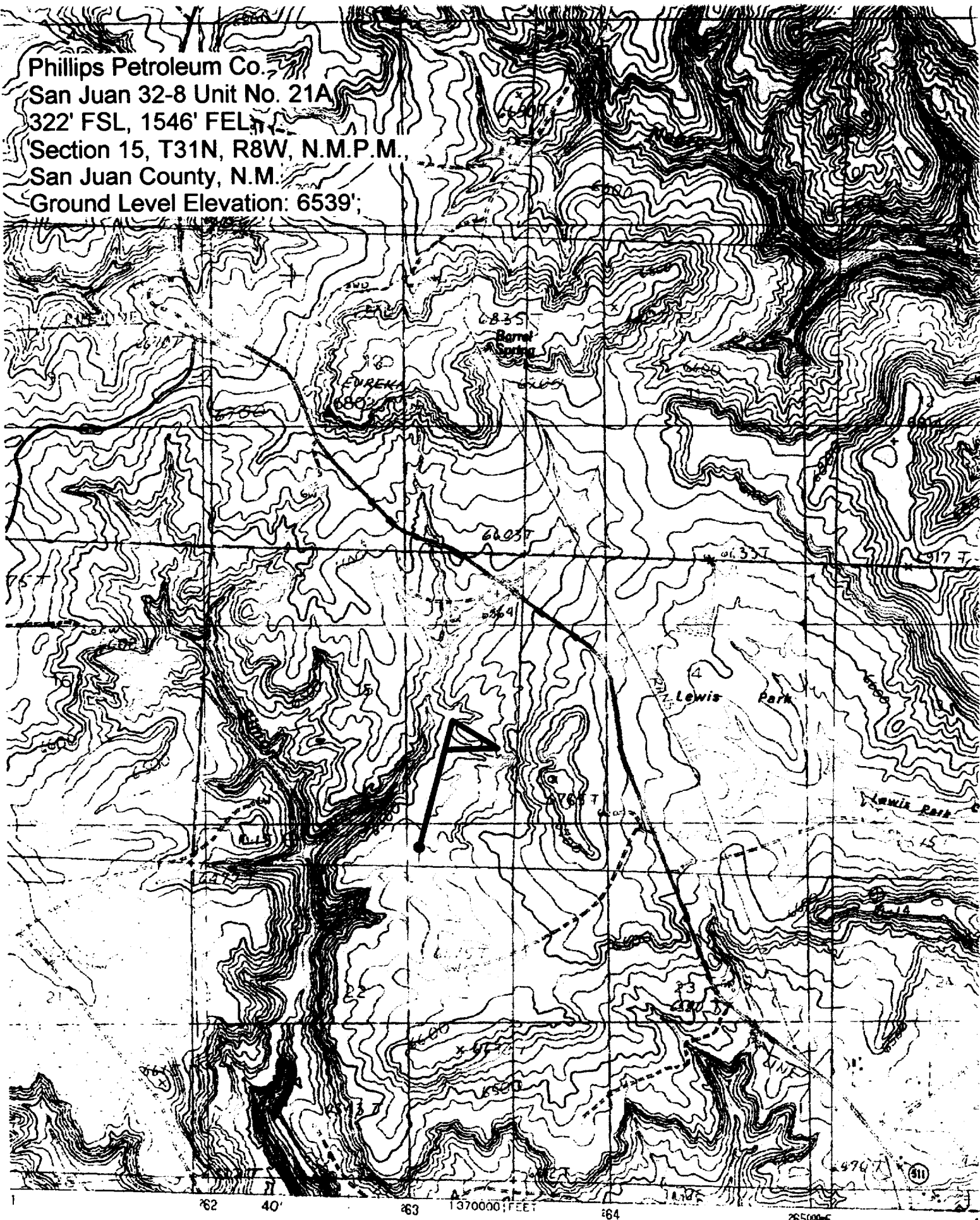
UL or lot no. 0	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>13</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>14</sup> Order No.
320.0 E/2	I	U	

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

16 5204.76'	S89°28'W 	5126.22'	SF-079004	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 10/25/01 Date
N02°16'E	Section 15			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.  Date of Survey: 9/12/01 Signature and Seal of Registered Professional Surveyor:
	S89°23'W	NM-03402 840.0 acres 5237.1'	1546' 322'	Certificate Number

Phillips Petroleum Co.  
San Juan 32-8 Unit No. 21A  
322' FSL, 1546' FEL  
Section 15, T31N, R8W, N.M.P.M.,  
San Juan County, N.M.  
Ground Level Elevation: 6539'



## PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 32-8 Unit #21A (MV)

### DRILLING PROGNOSIS

1. Location of Proposed Well: Unit O, 322' FSL & 1546' FEL  
Section 15, T31N, R8W
2. Unprepared Ground Elevation: @ 6539' (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 6251'.
6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 1223'</u>	<u>Lewis Shale - 3659'</u>
<u>Ojo Alamo - 2091</u>	<u>Cliff House Ss - 5382'</u>
<u>Kirtland Sh - 2317'</u>	<u>Menefee Fm. - 5423'</u>
<u>Fruitland Fm. - 3128'</u>	<u>Pt. Lookout - 5734'</u>
<u>Pictured Cliffs - 3423'</u>	<u>Mancos Sh - 6051'</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 - 2091' - 2317'</u>
Gas & Water:	<u>Fruitland - 3128' - 3423'</u>
Gas:	<u>Pictured Cliffs - 3423' - 3659'</u>
	<u>Mesaverde - 5382' - 6051'</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 @ 3759' (J-55 will be used, unless the K-55 is the only casing available.

Production String: 4-1/2", 11.6#, J-55 @ 6251' (TD)

\* The surface casing will be set at a minimum of 320', but could be set deeper if required to maintain hole stability.

9. Cement Program:

Surface String: 197.6 sx Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx Cello-flake + 60.6% FW (1.41 yield = 278 cf). *Circa*

## 9. Cement Program (cont.)

Intermediate String: **Lead Cement:** 472.8 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 = 1121 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).

**2<sup>nd</sup> Lead Cement:** 120.4 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 = 279 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% excess and annular volume 200' 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 2<sup>nd</sup>, 4<sup>th</sup> & 6<sup>th</sup> joint

Intermediate: Total seven (7) – 10' above shoe, top of 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, & 8<sup>th</sup> jts & 1 jt. above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1<sup>st</sup> jt. below the Ojo Alamo and next 2 jts up.

## **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.*