

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. NMNM84809
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. NMNM78424B
3a. Address 5525 Highway 64, NBU 3004, Farmington, NM 87401		8. Lease Name and Well No. SJ 32-8 Unit #264
3b. Phone No. (include area code) 505-599-3454		9. API Well No. 30-045-30985
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface L. (NWSW) 2469' FSL & 663' FWL; Lat-36.99806. Long-107.6847 At proposed prod. zone same as above		10. Field and Pool, or Exploratory Basin Fruitland Coal
14. Distance in miles and direction from nearest town or post office* 20.5 miles N NE of Blanco, NM		11. Sec., T., R., M., or Blk. and Survey or Area Section 9, T32N, R8W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 663'	16. No. of Acres in lease 582.84 acres	17. Spacing Unit dedicated to this well 382.84 8F <del>383.04</del> whole Section
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3451'	20. BLM/BIA Bond No. on file ES0048
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6726' GL	22. Approximate date work will start* May 15, 2002	23. Estimated duration 30 days

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

24. Attachments

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

- |   |  |
|---|--|
| 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 1/31/02
Title Sr. Regulatory/Proration Clerk		
Approved by (Signature) <i>/s/ David J. Mankiewicz</i>	Name (Printed/Typed)	Date 4/1/02
Title <i>AFM</i>	Office <i>FFO</i>	

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)

NMOCU

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 811 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-107  
 Revised October 18, 1994  
 Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> APL Number 30-045-30985		<sup>1</sup> Pool Code 71629	<sup>1</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code 009261	<sup>2</sup> Property Name SAN JUAN 32-8 UNIT		<sup>6</sup> Well Number 264
<sup>7</sup> OGRID No. 017654	<sup>4</sup> Operator Name PHILLIPS PETROLEUM COMPANY		<sup>6</sup> Elevation 6726

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	9	32N	8W		2469	SOUTH	663	WEST	SAN JUAN

<sup>11</sup> 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
L									

<sup>12</sup> Dedicated Acres 382.84 382.04	<sup>13</sup> Joint or Infill Y	<sup>14</sup> Consolidation Code U	<sup>15</sup> 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

<div style="display: flex; justify-content: space-between;"> <div> <p>16</p> <p>528.0'</p> <p>663'</p> <p>N11°36'E</p> <p>2685.54'</p> <p>2469'</p> </div> <div> <p>Section 9</p> <p>NM-84809</p> <p>582.84 acres</p> </div> <div> <p>591.36'</p> <p>2702.04'</p> <p>N11°34'E</p> </div> </div>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Patsy Clugston</i></p> <p>Signature</p> <p>Patsy Clugston</p> <p>Printed Name</p> <p>Sr. Regulatory/Proration Clerk</p> <p>Title</p> <p>11/30/01</p> <p>Date</p>	
	<p>18 SURVEYOR CERTIFICATION</p> <p>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 knowledge and belief</p> <p>10/11/01</p> <p>Date of Survey</p> <p><i>[Signature]</i></p> <p>Signature and Seal of Professional Surveyor</p> <p><i>[Seal]</i></p>	
	<p>Certificate Number</p>	
	<p>19</p>	

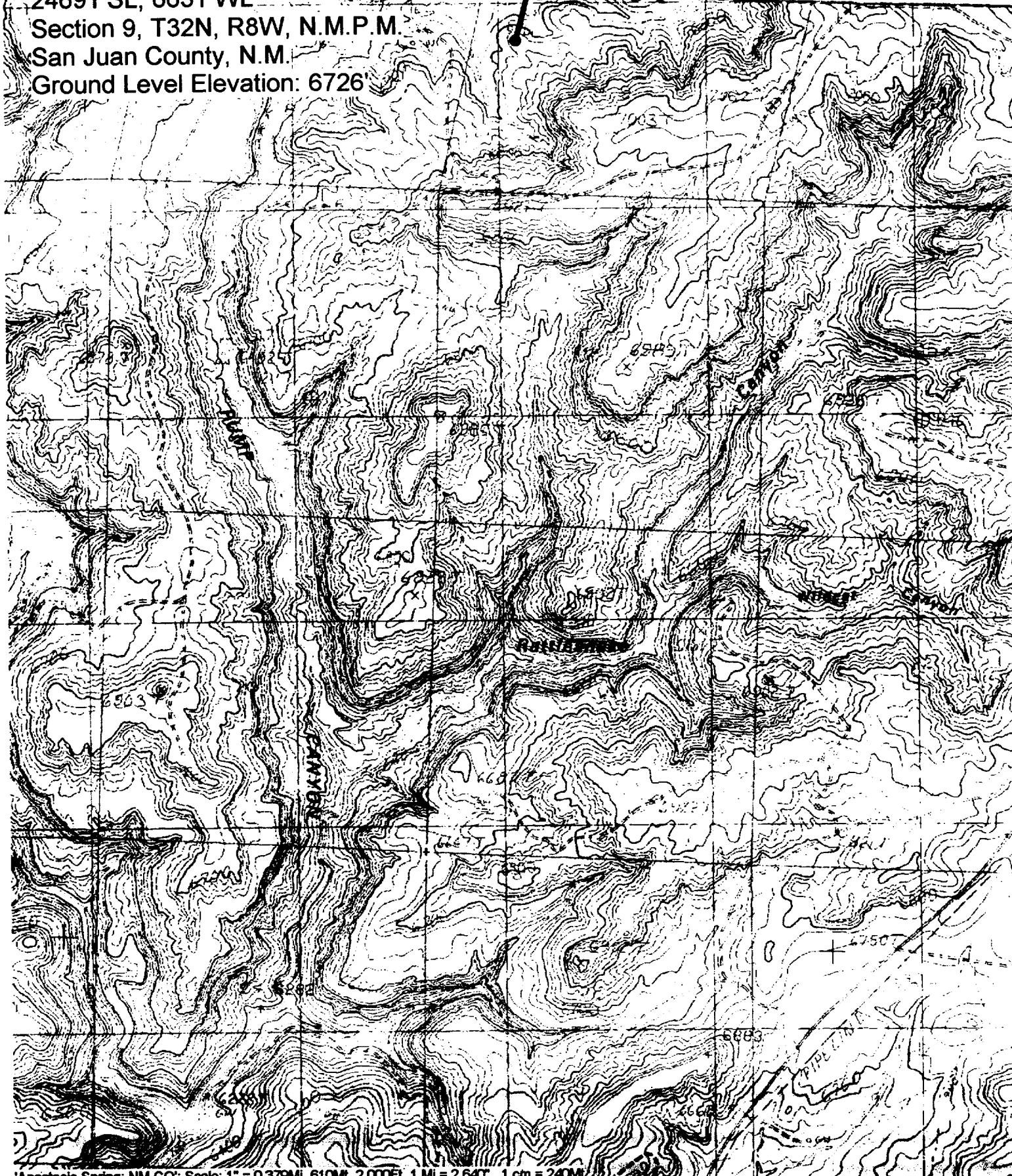
Phillips Petroleum Co.  
San Juan 32-8 Unit #264

2469'FSL, 663'FWL

Section 9, T32N, R8W, N.M.P.M.

San Juan County, N.M.

Ground Level Elevation: 6726'



## PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 32-8 Unit #264

### DRILLING PROGNOSIS

1. Location of Proposed Well: Unit L, 2469' FSL & 663' FWL  
Section 9, T32N, R8W
2. Unprepared Ground Elevation: @ 6726'.
3. The geological name of the surface formation is San Jose.
4. Type of drilling tools will be rotary.
5. Proposed drilling depth is 3451'.
6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 891'</u>	
<u>Ojo Alamo - 2196'</u>	<u>Base of Coal - 3411'</u>
<u>Kirtland - 2266'</u>	<u>Picture Cliffs - 3621'</u>
<u>Fruitland - 3171'</u>	<u>Interm. Casing - 3306'</u>
<u>Top of Coal - 3326'</u>	<u>T. D. - 3451'</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 - 2196' - 2266'</u>
Oil:	<u>none</u>
Gas:	<u>Fruitland Coal - 3326' - 3411'</u>
Gas & Water:	<u>Fruitland Coal - 3326' - 3411'</u>
8. The proposed casing program is as follows:

Surface String: 9-5/8", 32.3#, H-40 @ 200' \*  
Intermediate String: 7", 20#, J/K-55 @ 3306'  
Production Liner: 5-1/2", 15.5# J/K-55 @ 3286' - 3451' (see details below)

\* The surface casing will be set at a minimum of 200', but could be set deeper if required to maintain hole stability.
9. Cement Program:

Surface String: 102.7 sx Type III cement. Cement to surface w/110% excess of casing/hole annulus volume w/Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx Cello-flake + 60.6% Fresh water (14.5 ppg). (1.41 cf/sx yield = 145 cf)

## 9. Cement program: (continued from Page 1)

Intermediate String: **Lead Cement:** 377.8 sx Type III cement. Cement to surface - 110% excess casing/hole annular volume w/ Type III cement + 0.25#/sx Cello-flake + 5#/sx Gilsonite + 6% bwoc Bentonite + 10#/sx CSE + 3% bwow KCL + 0.4% bwoc FL-25 mixed + 0.02#/sx static free mixed at 12.0 ppg. (2.52 cf/sx yield = 952 cf)

**Tail:** 50 sx Type III cement + 0.25#/sx Cello-flake + 1% Calcium Chloride mixed at 14.5 ppg. (1.40 cf/sx yield = 70 cf)

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 be use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) - 10' above shoe and top of 2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> jts.

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

Turbulators: Total three (3) - one at 1<sup>st</sup> jt below Ojo Alamo and next 2 jts up.

Liner :

- If the coal is cleated a 5 1/2" 15.5# liner will be run in the open hole without being cemented.
- If the coal is not cleated, a 4-1/2" 11.6# liner will be run & cemented. The well will then be completed by fracture stimulation.

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.  
Intermediate - fresh water w/polymer sweeps. Bentonite as required for viscosity.  
Below Intermediate - air drilled.
12. The testing, logging, and coring programs are as follows:  
D.S.T.s or cores:  
Logs: Mud logs only

**San Juan 32-8 #264 (CS)**

**SURFACE CASING :**

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	8.989
Casing Weight	32.3 ppf	
Casing Grade	H-40	
Shoe Depth	200 '	30 '
Cement Yield	1.41 cuft/sk	
Excess Cement	110 %	

Casing Capacity	0.0785 bbl/ft	0.4407 cuft/ft
Hole / Casing Annulus Capacity	0.0558 bbl/ft	0.3132 cuft/ft

**Cement Required 102.7 sx**

**SHOE 200 ', 9.625 ", 32.3 ppf, H-40**

**INTERMEDIATE CASING :**

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20 ppf	
Casing Grade	K-55	
Shoe Depth	3306 '	
Lead Cement Yield	2.52 cuft/sk	
Lead Cement Excess	110 %	
Tail Cement Length	200 '	30 '
Tail Cement Yield	1.4 cuft/sk	
Tail Cement Excess	110 %	

Casing Capacity	0.0405 bbl/ft	0.2272 cuft/ft
Casing / Casing Annulus Capacity	0.0309 bbl/ft	0.1734 cuft/ft
Hole / Casing Annulus Capacity	0.0268 bbl/ft	0.1503 cuft/ft

**Lead Cement Required 377.8 sx**  
**Tail Cement Required 50.0 sx**

**LINER TOP 3286 '**

**SHOE 3306 ', 7 ", 20 ppf, K-55**

**LINER BOTTOM 3451 '**

## **BOP AND RELATED EQUIPMENT CHECK LIST**

### **2M 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.*