

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NCS 5-07-02

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

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER1b. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other: CBM ☒ Single Zone ☐ Multiple Zone2. Name of Operator  
PHILLIPS PETROLEUM COMPANYContact: PATSY CLUGSTON  
E-Mail: pclugs@ppco.com3a. Address  
5525 HWY. 64  
FARMINGTON, NM 874013b. Phone No. (include area code)  
Ph: 505.599.3454  
Fx: 505-599-34425. Lease Serial No.  
NMSF079013

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
SAN JUAN 32-8 UNIT 229A9. API Well No.  
30-045-3120810. Field and Pool, or Exploratory  
BASIN FRUITLAND COAL

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface NWNW 795FNL 760FWL 36.97500 N Lat, 107.70390 W Lon

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 20 T32N R8W Mer NMP

14. Distance in miles and direction from nearest town or post office\*  
18 MILES N/NE OF AZTEC, NM12. County or Parish  
SAN JUAN13. State  
NM15. Distance from proposed location to nearest property or  
lease line, ft. (Also to nearest drig. unit line, if any)  
76016. No. of Acres in Lease  
2560.00

17. Spacing Unit dedicated to this well

320.00

18. Distance from proposed location to nearest well, drilling,  
completed, applied for, on this lease, ft.19. Proposed Depth  
3629 MD  
3629 TVD

20. BLM/BIA Bond No. on file

ES0048

21. Elevations (Show whether DF, KB, RT, GL, etc.)  
6724 GL22. Approximate date work will start  
01/01/200323. 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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
(Electronic Submission)Name (Printed/Typed)  
PATSY CLUGSTONDate  
11/27/2002Title  
AUTHORIZED REPRESENTATIVE

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

Application approval does not warrant or certify 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.

## Additional Operator Remarks (see next page)

Electronic Submission #16475 verified by the BLM Well Information System  
For PHILLIPS PETROLEUM COMPANY, sent to the FarmingtonDRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\*

NMOCD

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
811 South First, Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Artesia, N.M. 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 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

API Number 30-045-31208		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 009261	Property Name SAN JUAN 32-8 UNIT		Well Number 229A
OGED No. 017654	Operator Name PHILLIPS PETROLEUM COMPANY		Elevation 6724'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	20	32N	8W		795	NORTH	760	WEST	SAN JUAN

11 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
D									

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320.0 W/2	I	U	

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

	<b>17 OPERATOR CERTIFICATION</b> 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 Clerk Title August 27, 2002 Date
	<b>18 SURVEYOR CERTIFICATION</b> 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 07/17/02 Signature and Seal of Professional Surveyor:  Certificate No.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.****SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: COAL BED METHANE		5. Lease Serial No. NMSF079013
2. Name of Operator PHILLIPS PETROLEUM COMPANY		6. If Indian, Allottee or Tribe Name
3a. Address 5525 HIGHWAY 64 NBU 3004 FARMINGTON, NM 87401		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 505.599.3454 Fx: 505-599-3442		8. Well Name and No. SAN JUAN 32-8 UNIT 229A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 20 T32N R8W NWNW 795FNL 760FWL 36.97500 N Lat, 107.70390 W Lon		9. API Well No. 30-045-31208
		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
		11. County or Parish, and State SAN JUAN COUNTY, NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

More details on the drilling prognosis submitted with the APD.


#9. Cement Program: Liner-if the coal is NOT cteated, a 4-1/2" 11.6#, J/K-55 liner will be run & set @ TD and tie 200' into the 7" shoe. It then would be cement in place. The well will be completed by fracture stimulation.

Will cement the Lead Slurry with Type III cement - 150% excess casing hole annular volume with Type III cement + 0.25#/sx Cello-flake + 5#/sx Gilsonite + 6% bwoc Bentonite + 10#/sx CSE + 3% bwow KCl + 4% bwoc FL-25 mixed + 0.2#/sx static free mixed at 10. ppg (2.52 cf/sx yield).

Tail - 50 sx Type III cement + 0.2#/sx Cello-flake + 1% CaClum Chloride mixed at 14.5 ppg (1.40 cf/sx yield = 70 cf).

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #16868 verified by the BLM Well Information System For PHILLIPS PETROLEUM COMPANY, sent to the Farmington Committed to AFMS for processing by Adrienne Garcia on 12/13/2002 (03AXG0404SE)</b>	
Name (Printed/Typed) PATSY CLUGSTON	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 12/12/2002

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By 	Title AFM	Date 2/3/02
Conditions of approval, if any, are attached. Approval of this notice 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.	Office FFO	

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.

**\*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\***

PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 32-8 Unit #229A

DRILLING PROGNOSIS

1 Location of Proposed Well: Unit D, 795' FNL & 760' FWL  
Section 20, T32N, R8W

2. Unprepared Ground Elevation: @ 6724'

3. The geological name of the surface formation is San Jose

4. Type of drilling tools will be rotary

Proposed drilling depth is 3629'

6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 564'</u>	
<u>Ojo Alamo - 2094'</u>	<u>Base of Coal - 3629'</u>
<u>Kirtland - 2144'</u>	<u>Picture Cliffs - 3634'</u>
<u>Fruitland - 3159'</u>	<u>Interm. Casing - 3359'</u>
<u>Top of Coal - 3299'</u>	<u>T. D. - 3629'</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 - 2094' - 2144'</u>
Oil:	<u>none</u>
Gas:	<u>Fruitland Coal - 3299' - 3629'</u>
Gas & Water:	<u>Fruitland Coal - 3299' - 3629'</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 @ 3359'

Production Liner: 5-1/2", 15.5# J/K-55 @ 3339' - 3629' (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 )

Intermediate String: Lead Cement: 384.4 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 = 969cf)

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 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.

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

## San Juan 32-8 Unit #229A

### 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,

### INTERMEDIATE CASING :

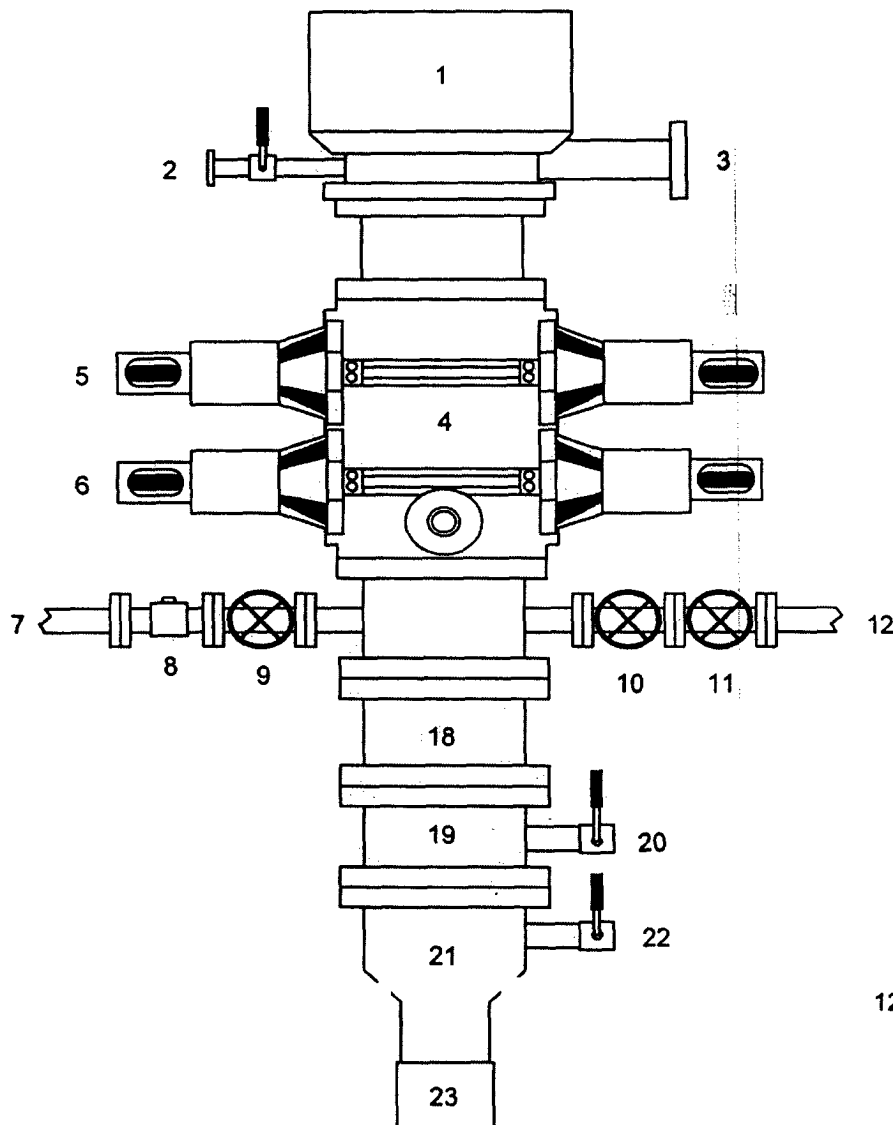
Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20 ppf	
Casing Grade	J-55	
Shoe Depth	3359	
Lead Cement Yield	2.52 cuft/sk	
Lead Cement Excess	110 %	
Tail Cement Length	200 '	30
Tail Cement Yield	1.4 cuft/sk	
Tail Cement Excess	110 %	
Casing Capacity	0.0405 bbl/ft	0.2272 cuft/ft
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	384.4 sx	
Tail Cement Required	50.0 sx	

LINER TOP 3339

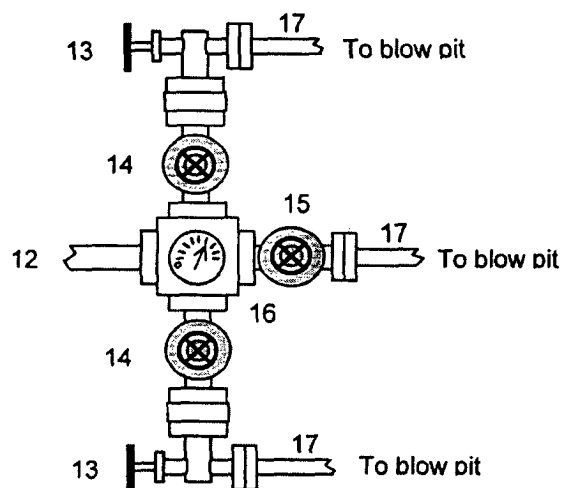
SHOE 3359 ', 7 ", 20 ppf,

LINER BOTTOM 3629 '

# BLOWOUT PREVENTER HOOKUP



1. Rotating Head
2. Fill-up Line & valve
3. Flowline
4. Blowout Preventer (3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Spacer Spool
19. Casing Spool "B" Section
20. Casing Spool "B" Section 2" Valve
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9 5/8" Casing Collar



Drilling contractors used in the San Juan Basin supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. The above diagram of the BOP system details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use