

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. NMSF078687
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: CBM <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. If Unit or CA Agreement, Name and No.
Contact: PATSY CLUGSTON E-Mail: pclugs@ppco.com		8. Lease Name and Well No. SJ 32 FED 8 1A
3a. Address 5525 HWY. 64 FARMINGTON, NM 87401	3b. Phone No. (include area code) Ph: 505.599.3454 Fx: 505-599-3442	9. API Well No. 30-045-31268
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESE 693FSL 767FEL 36.99389 N Lat, 107.79610 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 16 1/2 MILES N/NE OF AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 8 T32N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 693	16. No. of Acres in Lease 1818.20	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3593 MD 3593 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6843 GL	22. Approximate date work will start 01/01/2003	17. Spacing Unit dedicated to this well 354.47
		20. BLM/BIA Bond No. on file ES0048
		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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) PATSY CLUGSTON	Date 11/15/2002
Title AUTHORIZED REPRESENTATIVE		
Approved by (Signature) /s/ David J. Mankiewicz	Name (Printed/Typed)	Date DEC 18 2002
Title AFM	Office FFO	

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 #16145 verified by the BLM Well Information System
For PHILLIPS PETROLEUM COMPANY, sent to the Farmington
Committed to AFMSS for processing by Lucy Bee on 11/18/2002 ()

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

NMOC

DISTRICT I
P.O. Box 1880, Hobbs, N.M. 88241-1880

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

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

DISTRICT IV
3040 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

APN Number 30-045-31268		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 24189	Property Name SAN JUAN 32 FED 8		Well Number 1A
OGMD No. 007654	Operator Name PHILLIPS PETROLEUM COMPANY		Elevation 6843'

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
P	8	32N	9W		693	SOUTH	767	EAST	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
P									

Dedicated Acres 354.47	Joint or Infill I	Consolidation Code	Order No. R 9222
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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 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Patsy Clugston Signature Patsy Clugston Printed Name Sr. Regulatory Clerk Title August 26, 2002 Date	
					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. 07/16/02 Date of Survey HENRY P. BROADBENT Signature and Seal NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 11393 Certificate Number	

Juan Fed # A

F: L

Section 8, T32N, R9W, N.M.P.M. BOUNDARY 51

47° 30'

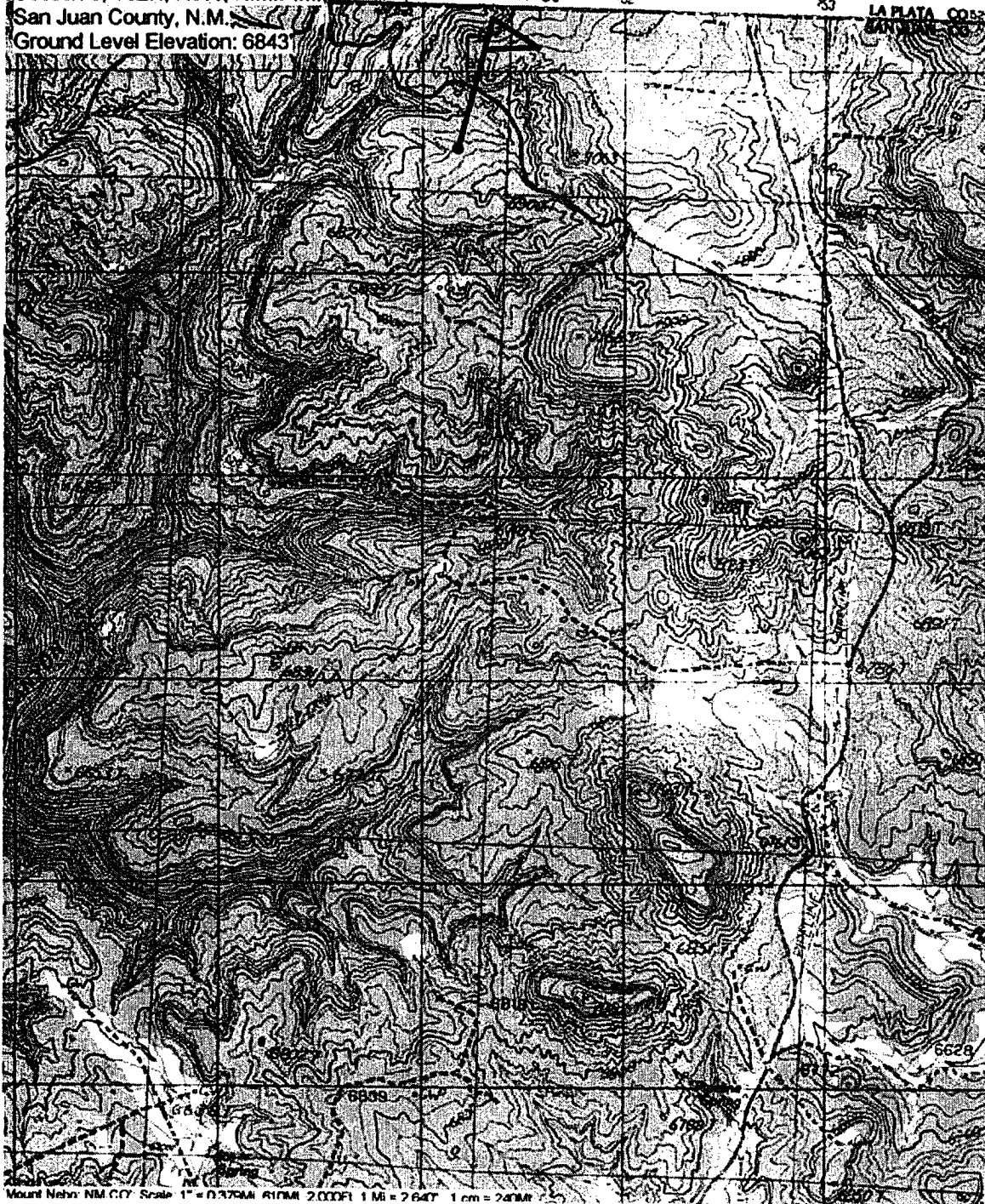
52

53

LA PLATA CO. 52

San Juan County, N.M.

Ground Level Elevation: 6843



Mount Nehv: NM CO. Scale 1" = 0.375MI 610MI 2.000FI 1 MI = 2.640" 1 cm = 2.49MI

PHILLIPS PETROLEUM COMPANY

WELL NAME: San Juan 32 Fed 8 #1A

DRILLING PROGNOSIS

Location of Proposed Well: Unit P, 693' FSL & 767' FEL
Section 8, T32N, R9W

2. Unprepared Ground Elevation @ 6843'
3. The geological name of the surface formation is San Jose.
4. Type of drilling tools will be rotary
5. Proposed drilling depth is 3593'.
6. The estimated tops of important geologic markers are as follows:

<u>Nacimiento - 758'</u>	
<u>Ojo Alamo - 1998'</u>	<u>Base of Coal - 3628'</u>
<u>Kirtland - 2033'</u>	<u>Picture Cliffs - 3638'</u>
<u>Fruitland - 3233'</u>	<u>Interm. Casing - 3363'</u>
<u>Top of Coal - 3263'</u>	<u>T. D. - 3593'</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 - 1998' - 2033'</u>
Oil:	<u>none</u>
Gas:	<u>Fruitland Coal - 3263' - 3628'</u>
Gas & Water:	<u>Fruitland Coal - 3263' - 3628'</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 @ 3363'
Production Liner: 5-1/2", 15.5# J/K-55 @ 3343' - 3593' (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: 384.9 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 = 970cf)

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 2nd, 3rd, & 4th jts.

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

Turbulators: Total three (3) - one at 1st 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.

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 Fed 8 #1A

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 '	
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 :

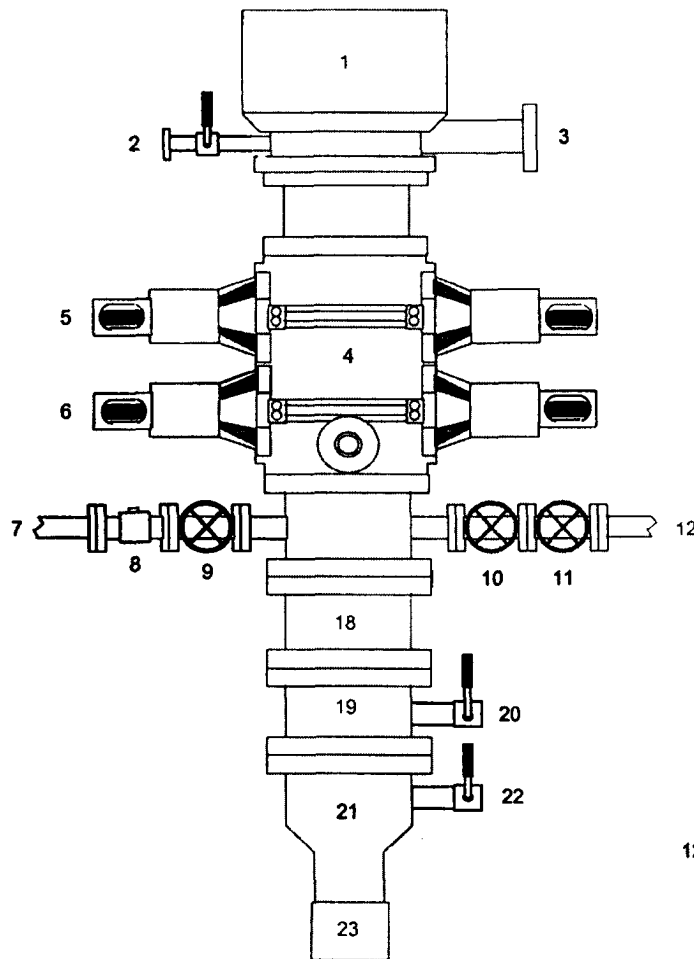
Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20 ppf	
Casing Grade	J-55	
Shoe Depth	3363 '	
Lead Cement Yield	2.52 cuft/sk	
Lead Cement Excess	110 %	
Tail Cement Length	200 '	
Tail Cement Yield	1.4 cuft/sk	
Tail Cement Excess	110 %	
Casing Capacity	0.0405 bbl/ft	0.2272 cuft/ft
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	384.9 sx	
Tail Cement Required	50.0 sx	

LINER TOP 3343 '

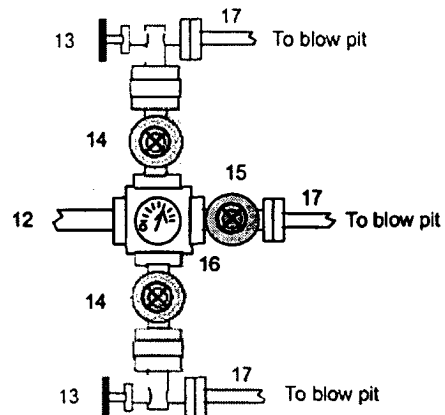
SHOE 3363 ', 7 ", 20 ppf, J-55

LINER BOTTOM 3593 '

BOP & EQUIPMENT:



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



In addition to the equipment listed above, the following will be kept on the drill floor:

1. Upper Kelly cock valve & wrench
2. Stab-in TIW valve for all drillstrings in use

Note: The fill-up line must be hooked up to the rotating head. NOT the kill line!

High and low pressure BOP tests shall be conducted every 14 days or anytime flange seals are broken for repair or service. Functional and visual tests will be conducted daily and so noted on the IADC report.

Proper test plug seating must be checked.

The 2" casing valve below the test plug **MUST** be open and unobstructed.