Form 3160-3
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NMSF079341
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☒ Other: CBM ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. SAN JUAN 32 FED 22 1A
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: PATSY CLUGSTON E-Mail: plclugs@ppco.com	9. API Well No. 30045 31614
3a. Address 5525 HWY. 64 FARMINGTON, NM 87401 / 3b. Phone No. (include area code) Ph: 505.599.3454 Fx: 505-599-3442	10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NESE 1885FSL 1285FEL 36.96778 N Lat, 107.76170 W Lon At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 22 T32N R9W Mer NMP
14. Distance in miles and direction from nearest town or post office* 18.9 MILES NE OF AZTEC, NM	12. County or Parish SAN JUAN / 13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1285 / 16. No. of Acres in Lease 1560.00	17. Spacing Unit dedicated to this well 317.56 E/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. / 19. Proposed Depth 3520 MD 3520 TVD	20. BLM/BIA Bond No. on file ES0085
21. Elevations (Show whether DF, KB, RT, GL, etc. 6730 GL / 22. Approximate date work will start 05/30/2003	23. Estimated duration 30 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	Name (Printed/Typed)	Date
(Electronic Submission)	PATSY CLUGSTON	04/04/2003

Title: AUTHORIZED REPRESENTATIVE

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ David J. Mankiewicz		APR 25 2003
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 #20309 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington

DRILLING 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., Aztec, 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 Febuary 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

1 API Number	2 Pool Code	3 Pool Name
30-045-31614	71629	Basin Fruitland Coal

4 Property Code	5 Property Name	6 Well Number
31353	SAN JUAN 32 FED 22	1A

7 OGRID No.	8 Operator Name	9 Elevation
217817	CONOCOPHILLIPS COMPANY	6730

10 Surface Location

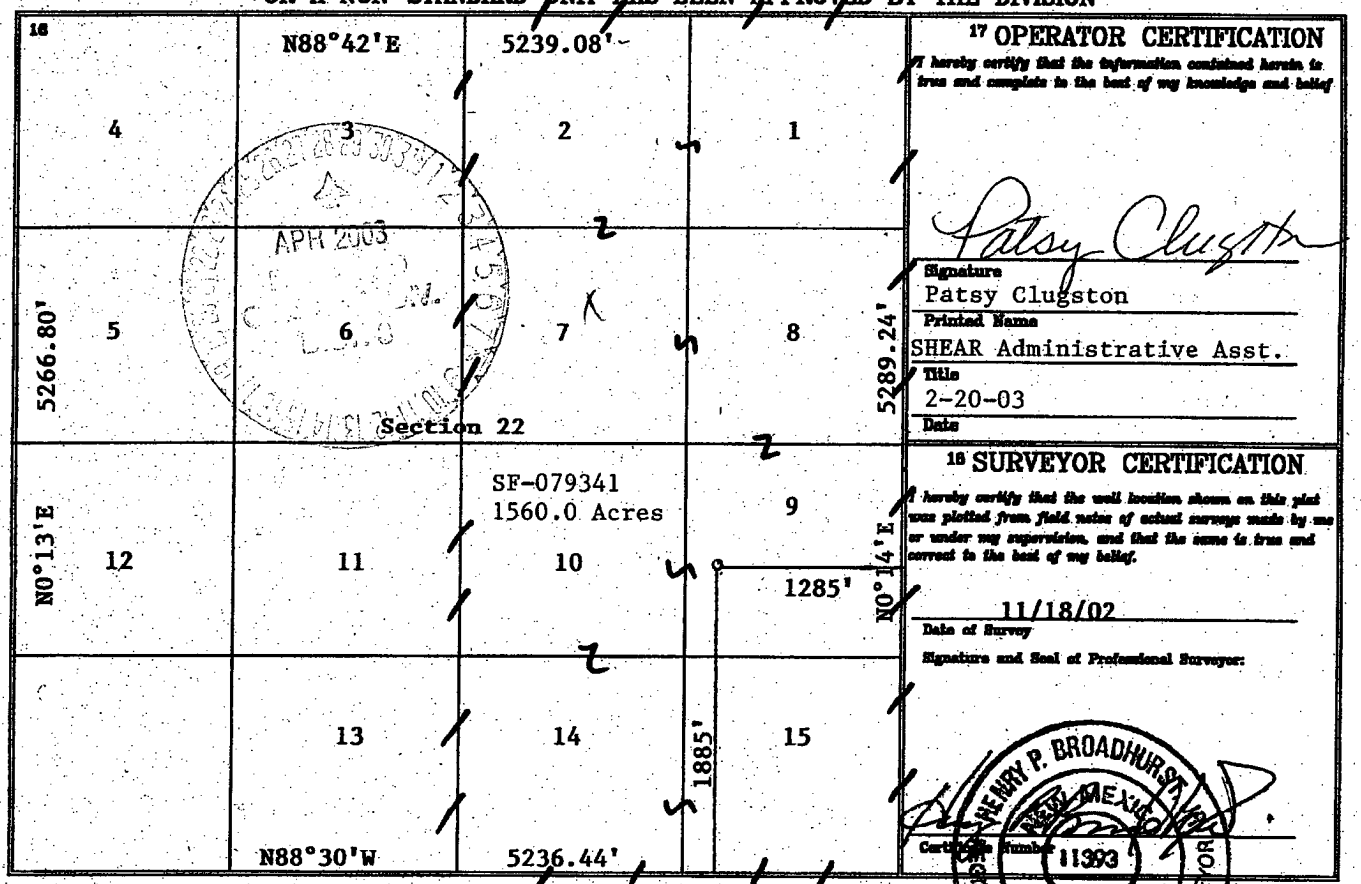
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	22	32N	9W		1885	SOUTH	1285	EAST	SAN JUAN

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
I									

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
317.56E/2	Y		

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

Signature: Patsy Clugston
Printed Name: Patsy Clugston
Title: SHEAR Administrative Asst.
Date: 2-20-03

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: 11/18/02

Signature and Seal of Professional Surveyor:

HENRY P. BROADHURST
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 11393

CONOCOPHILLIPS COMPANY

WELL NAME: San Juan 32 Fed 22 #1A

DRILLING PROGNOSIS

1. Location of Proposed Well: Unit I, 1885' FSL & 1285' FEL
   Section 22, T32N, R9W

2. Unprepared Ground Elevation: @ 6730'.

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

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 3520'.

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

Naciamento -	730'	Base of Coal –	3520'
Ojo Alamo -	2010'	Intermediate casing –	3305'
Kirtland -	2030'	Picture Cliffs -	3530'
Fruitland -	3155'	T. D. -	3520'
Top of Coal -	3180'		

7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Water:	Ojo Alamo -	2010' – 2030'
Oil:	none	
Gas:	Fruitland Coal -	3180' – 3520'
Gas & Water:	Fruitland Coal -	3180' - 3520'

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 @ 3305'
   Production Liner: 5-1/2", 15.5# J/K-55 @ 3285' - 3520' (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: Cement to Surface
   Surface String: 123.2 sx Class G cement with 1.16 cuft/sx yield, 2% bwoc CaCl2 (S001), 0.25#/sx Cellophane Flake (D029) = 142.9 cf

9. Cement program: (continued from Page 1)

Intermediate String: TOC At least 100' above surface csg Base

Lead Cement: 417.2 sx Class G w/3% D079 (chemical extender) 0.25#/sx D029 (Cellephone flakes, 0.05 GPS D047 (Antifoam Agent) 0.2% D046 Flocele (All purpose antifoam agent) mixed at 11.7 ppg and yield of 2.61 cuft/sx = 1088.89 cf.

Tail: 96.8 sx – 50/50/G/POZ cement w/2% D020 (Bentonite Extender), 2% S001 (CaCl2), 5#/sxD024 (Gilsonite), ¼#/sx D029(Celephane flakes) & 1% D046 (all purpose antifoam agent) @ a weight of 13.5 ppg and yield of 1.27 cuft/sx = 122.93 cf.

Note: ConocoPhillips Company continually works to improve the cement slurries on our wells. Our Cementing Service Companies are 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 :

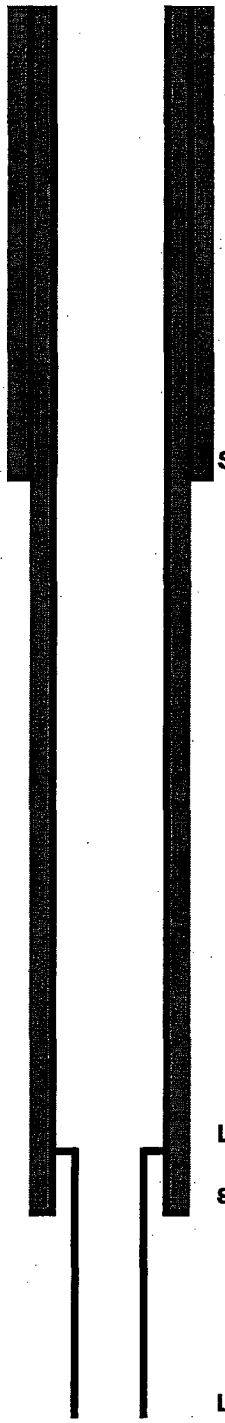
- If the coal is cleated a 5 ½" 15.5# liner will be run in the open hole without being cemented.
- If the coal is NOT cleated, a 4-1/2" 11.6# liner will be run & cemented. The well will then be completed by fracture stimulation. The top of the liner will be set approx. 200' into the 7" casing and be set @ TD and be cement in place as follows:

Lead Cement: Approx. 150% excess - Standard with 3% Econolite + 10 lbs/sx Gilsonite + 0.5 lbs/sx Flocele + mixed at 11.4 ppg with a yield of 2.91 ft^3/sx

Tail: 50/50 Poz Standard with 0.25 lbs/sx Flocele + 5 lbs/sx Gilsonite + 2% Bentonite and 2% $CaCl_2$ mixed at 13.5 ppg with a 1.33 ft^3 /sx yield.

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.

San Juan 32 Fed 22 #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	'	40 '
Cement Yield	1.16	cuft/sk	
Excess Cement	100	%	

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

Cement Required **123.2 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	3305	'	
Lead Cement Yield	2.61	cuft/sk	
Lead Cement Excess	150	%	
Tail Cement Length	300	'	45 '
Tail Cement Yield	1.27	cuft/sk	
Tail Cement Excess	150	%	

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

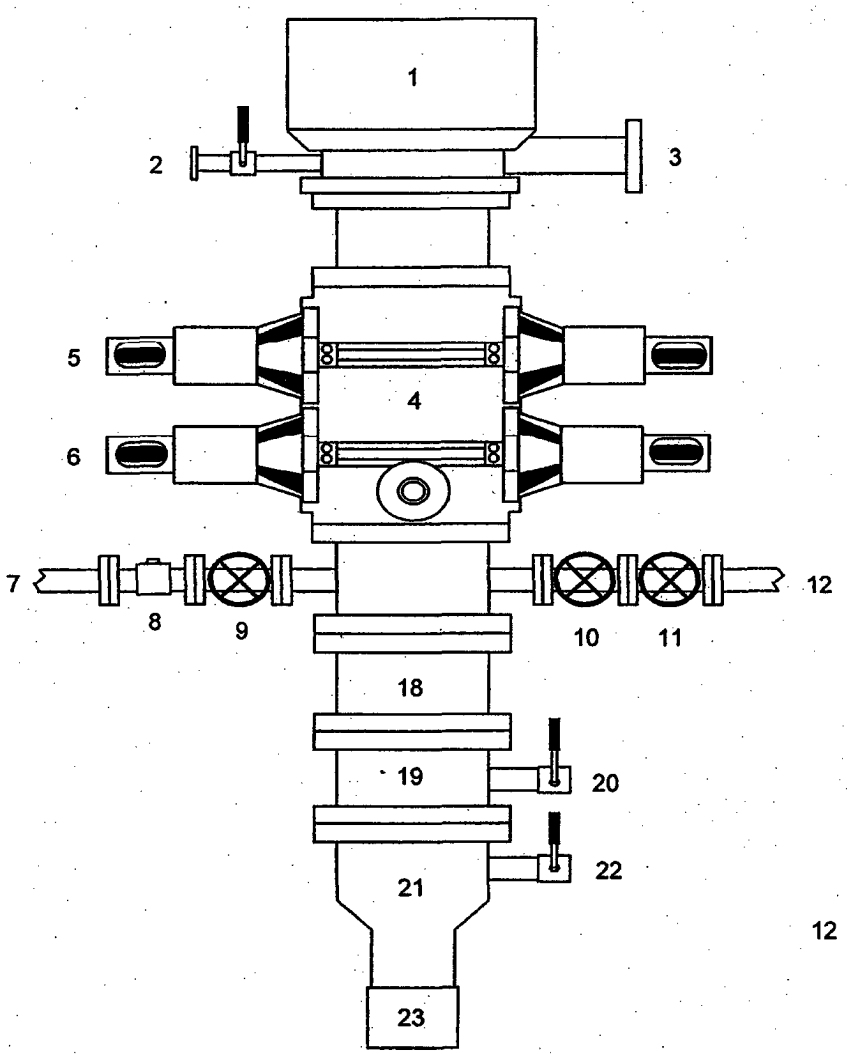
Lead Cement Required **417.2 sx**
Tail Cement Required **96.8 sx**

LINER TOP **3285 '**

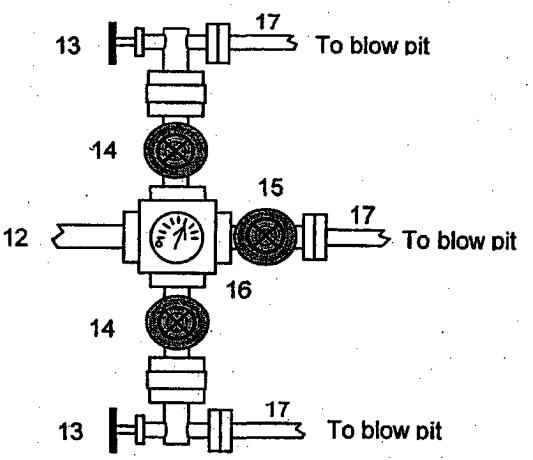
SHOE **3305 ', 7 ", 20 ppf, J-55**

LINER BOTTOM [redacted] **'**

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 suppy 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 thought 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

The BOPs will be pressure tested according to Onshore Order #2III, A1 and 30% Safety factor.

San Juan 32 Fed 22 #1A
SF-079341; Unit I, 1885' FSL 7 1285' FEL,
Section 22, T32N, R9W; San Juan County, NM

Cathodic Protection

ConocoPhillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and a Farmington based company will be doing the drilling for ConocoPhillips.