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

5. Lease Serial No.
NMNM012698

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

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 29-6 UNIT 237A

2. Name of Operator
CONOCOPHILLIPS COMPANY
Contact: PATSY CLUGSTON
E-Mail: plclugs@ppco.com

9. API Well No.
30039275 32

3a. Address
5525 HWY.
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 SWSE 1290FSL 1345FEL 36.75093 N Lat, 107.41178 W Lon

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 1 T29N R6W Mer NMP
SME: FEE

14. Distance in miles and direction from nearest town or post office*
43 MILES EAST OF BLOOMFIELD, NM

12. County or Parish
RIO ARRIBA

13. State
NM

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
1290

16. No. of Acres in Lease

17. Spacing Unit dedicated to this well
232.73 E/2

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth
3513 MD
3513 TVD

20. BLM/BIA Bond No. on file
ES0085

21. Elevations (Show whether DF, KB, RT, GL, etc.
6475 GL

22. Approximate date work will start
12/01/2003

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	11/13/2003

Title
AUTHORIZED REPRESENTATIVE

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ David J. Mankiewicz		DEC 3 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 #25108 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Farmington

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

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

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

NMOCD

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO 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

1 API Number	2 Pool Code	3 Pool Name
	71629	BASIN FRUITLAND COAL

4 Property Code	5 Property Name	6 Well Number
31326	SAN JUAN 29-6 UNIT	237A

7 OGRID No.	8 Operator Name	9 Elevation
217817	CONOCOPHILLIPS COMPANY	6475'

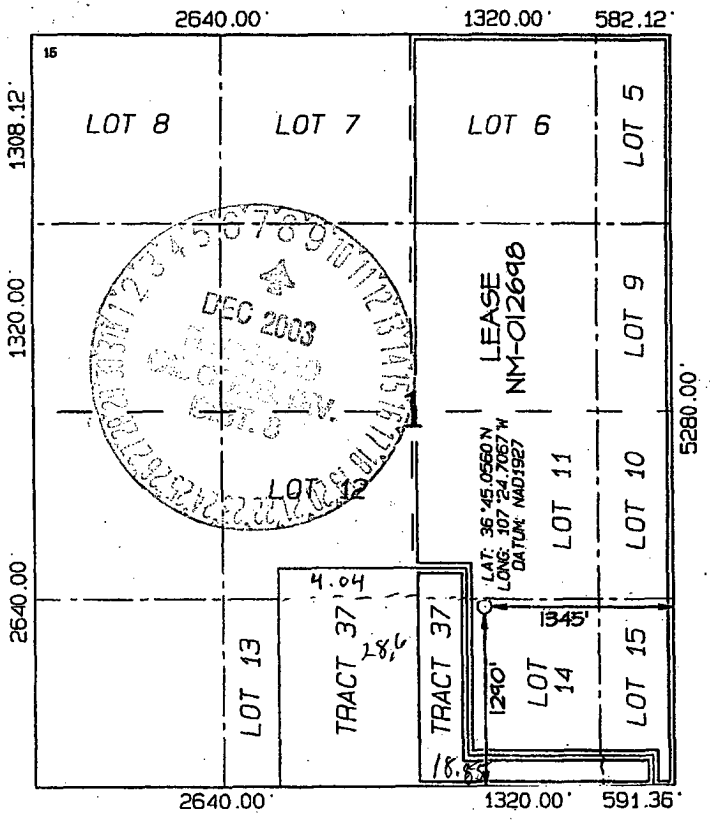
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	1	29N	6W		1290	SOUTH	1345	EAST	RIO ARRIBA

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

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



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: Vicki R. Westby

Printed Name: Vicki R. Westby

Title: Sr. Analyst

Date: October 27, 2003

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

Survey Date: SEPTEMBER 15, 2003

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

CONOCOPHILLIPS COMPANY

WELL NAME: San Juan 29-6 Unit #237A
DRILLING PROGNOSIS

1. Location of Proposed Well: Unit O (SWSE), 1290' FSL & 1345' FEL
   Section 1, T29N, R6W

2. Unprepared Ground Elevation: @ 6475'.

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

4. Type of drilling tools will be rotary.

5. Proposed drilling depth is 3513'.

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

Naciamento -	1283'		
Ojo Alamo -	2487'	PC Interval -	3450'
Kirtland -	2680'	Intermediate casing –	3138'
Fruitland -	3088'	Total Depth -	3513'

TD includes 63' of sump/rathole & COPC will comply with the BLM/OCD's Conditions of Approval for the proposed sump/rathole in this non-producing Pictured Cliffs Formation.

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

Water:	Ojo Alamo -	2487' - 2680'
Oil:	none	
Gas:	Fruitland Coal -	3088' - 3450'
Gas & Water:	Fruitland Coal -	3088' - 3450'

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 @ 3138'
Production Liner: 5-1/2", 15.5# J/K-55 @ 3118' - 3513' (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: Circulate Cement
Surface String: 150.2 sx Class G cement with 2% bwoc CaCl2 (S001), 0.25#/sx Cello-Flake (D029) 1.16 cuft/sx yield = 174.27 cf

9. Cement program: (continued from Page 1)

Intermediate String:

Circulate Cement

Lead Cement: 393 sx Class G w/3% D079 (Extender) 0.25#/sx D029 (Cellephone flakes, + 0.2% D046 Flocele (All purpose antifoam agent) mixed at 11.7 ppg and yield of 2.61 cuft/sx = 1026.28 cf.

Tail: 96 sx – 50/50/G/POZ cement w/2% D020 (Bentonite Extender), 2% S001 (CaCl2), 5#/sxD024 (Gilsonite), ¼#/sx D029 (Celephane flakes) & 2% D046 (all purpose antifoam agent) @ a weight of 13.5 ppg and yield of 1.27 cuft/sx = 122.29 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 :

- A 5 ½" 15.5# liner will be run in the open hole without being cemented.

Completion - depending on well conditions the:

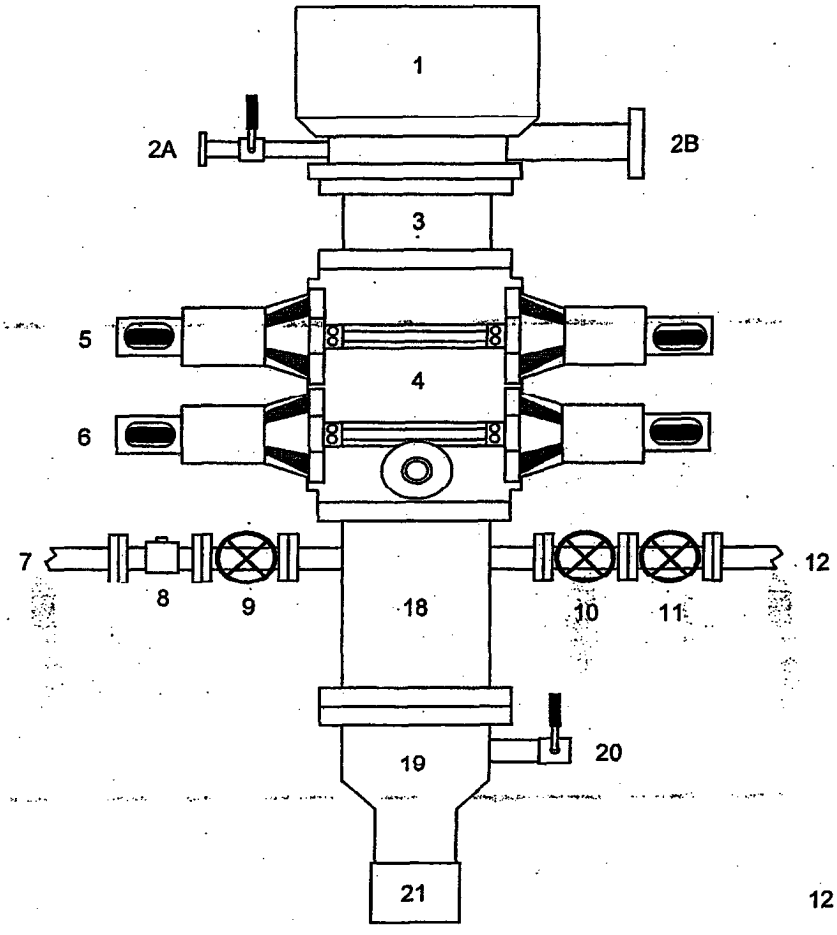
- Well will either be cavitated and a 5-1/2" liner will be run without being cemented, or
- Well will be underreamed, tubing will be set and cavitated at a later date.

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.

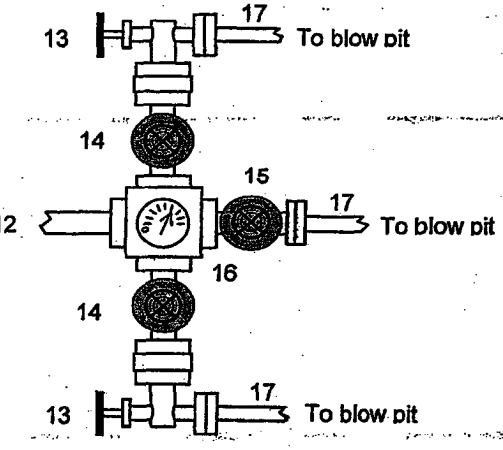
11. Drilling Mud Prognosis: Surface - spud mud on surface casing.
Intermediate - fresh water w/polymer sweeps. Bentonite as required for viscosity.
Below Intermediate - air drilled.

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



1. Rotating Head
2A. Fill-up Line & valve
2B. Flowline
3. Spacer Spool
4. Double Ram BOP (11", 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. Mud Cross Spacer Spool
19. Casing Head "A" Section
20. Casing Head "A" Section 2" Valve
21. 9 5/8" Casing Collar



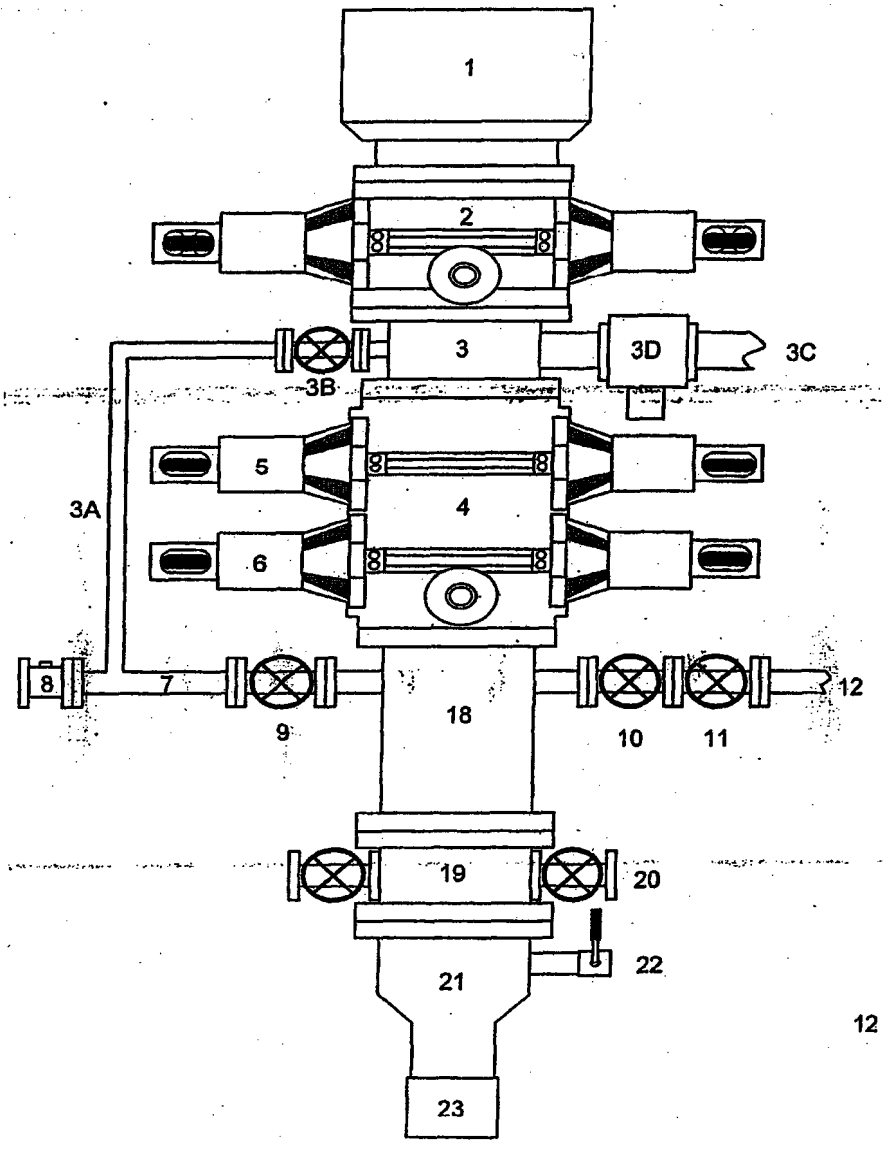
This BOP arrangement is for the drilling operations from the time the 9-5/8" surface casing is set through the setting of the 7" intermediate casing. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. The Pipe Rams, Blind Rams, Choke Manifold, and 9-5/8" surface casing will be tested to a low pressure test of 200 psi to 300 psi and to a high pressure test of **1000 psi** (this value is 44% of the minimum internal yield pressure of the 9-5/8" casing). We will drill the 8-3/4" hole to intermediate casing point and run and cement the 7" intermediate casing. Then we will nipple down the BOP, install a trash cap, & move out the drilling rig. We will install the casing spool on the 7" stub after the drilling rig is moved off location. At a later date we will move in the cavitation rig for the cavitation program.

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

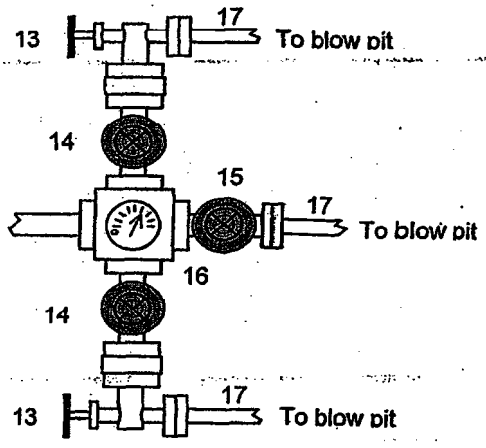
1. Upper Kelly cock Valve with handle.
2. Stab-in TIW valve for all drillstrings in use

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Cavitation Program



1. Rotating Head
2. Single Ram BOP (7-1/16", 3M)
3. Mud Cross
3A. Equalizing Line (2")
3B. Wing Valve (2-1/16", 3M)
3C. Blooie Line (2 ea, 5" OD)
3D. HCR Valve (1 ea per line, 4-1/16")
4. Double Ram BOP (7-1/16", 3M)
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. Vent Line (2")
18. Spacer Spool
19. Tubing Head
20. Tubing Head Valves (2- 9/16")
21. Casing Head "A" Section
22. Casing Head "A" Section 2" Valve
23. 9-5/8" Casing Collar



This BOP arrangement and test program is for the cavitation program. The BOP will be installed on the tubing head. The 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 2-3 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. The pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 2-3 minutes and to 1800 psi (high pressure test) for 10 minutes - This test will be done with a test plug or possibly without a test plug (ie against casing). If we conduct this test without a test plug we will ensure that we have sufficient drillstring weight in the hole to exceed the upward force generated by the test.

We use a power swivel and air/mist to drill the 6-1/4" hole in our cavitation program. We do not use a kelly. In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. String floats will be used inside the drillpipe
2. Stab-in TIW valve for all drillstrings in use
3. Each blooie line is equipped with a hydraulically controlled valve (HCR valve).

San Juan 29-6 Unit #237A
NMNM012698– Unit O, 1290' FSL & 1345' FEL
Section 1, T29N, R6W; Rio Arriba County, NM

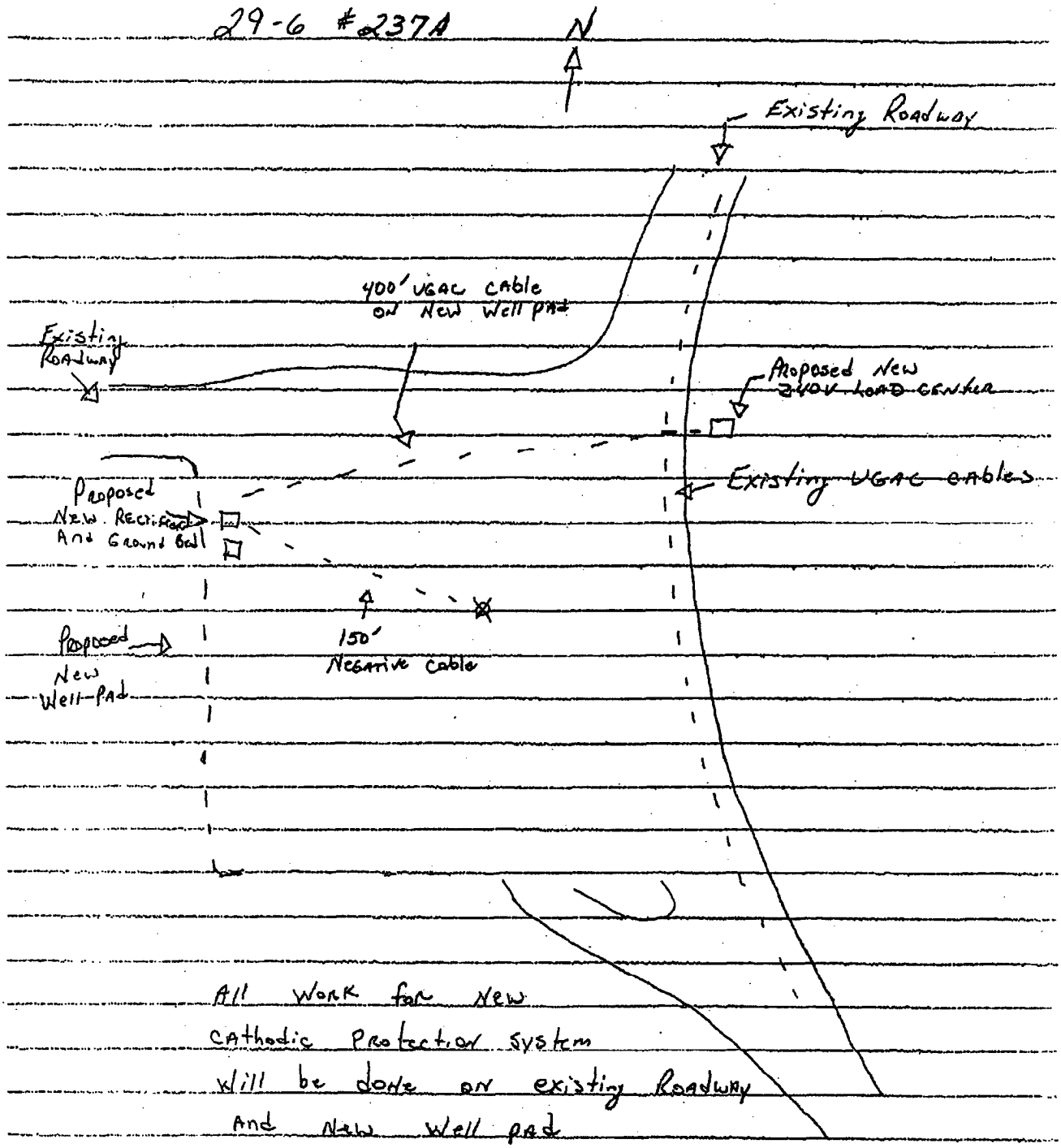
Cathodic Protection

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.

See attached drawing on proposed placement of groundbed & underground AC & DC cables and rectifier.

29-6 #237A



All Work for New Cathodic Protection System will be done on existing Roadway And New Well pad

Casing Design Worksheet - Fruitland Coal Wells

Surface Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
9-5/8"	H-40	32.3	1400	2270	254	ST&C	200	6,460

Intermediate Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
7"	J-55	20	2270	3740	251	ST&C	3,138	62,760
								-
								-
								-
							Total Weight	62,760

Production Casing

Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
5-1/2"	J-55	15.5	4040	4810	202	ST&C	335	5,193
								-
								-
							Total Weight	5,193

Casing Parameters- FC

Tensile

SF_t = Tensile / ; Must Exceed 1.8 for Dry or 1.6 for Bouyant

9-5/8"	Surf.	254000 /	6,460	=	39.3
7"	Int.	254000 /	62,760	=	4.0
5-1/2"	Prod.	202000 /	5,193	=	38.9

Collapse

SF_c = Collapse / (Maximum Formation Pressure) or (Mud Gradient X T. V. D.); Must Exceed 1.125

9-5/8"	Surf.	1400	/	87	=	16.2
7"	Int.	2270	/	1,469	=	1.5
5-1/2"	Prod.	4040	/	150	=	26.9

Burst

SF_b = Burst / (Maximum Foramtion Pressure) or (Mud Gradient X T. V.D.); Must Exceed 1.0

9-5/8"	Surf.	2270 /	150	=	15.1
7"	Int.	3740 /	150	=	24.9
5-1/2"	Prod.	4810 /	150	=	32.1

B.O.P. Requirement - (Maximum Formation Pore Pressue) or (Mud Weight X 0.05195 x T. V. D.) - 0.22 X T.V.D.

150

Excess Cement Volumes

Surface	150%
Intermediate	150%
Production	N.A.

Note: Cement volume calculations are stored in the computer log.

Blowout Preventer Equipment (BOPE)

ABHP= 150 PSI; TVD = 3,513 Feet; Mud Weight = 8.34

Operator's Gradient (ABHP / TVD) = 0.043 PSI/Ft *is / is not* appropriate and *does / does not* coincide with the Anticipated Mud Weight for each drilled interval.
The most credible ABHP is 0.043 PSI/Ft.

Mud Weight x 0.05195 = Gradient

8.34 X 0.05195 = 0.433

ABHP - (0.22 x TVD) = ASP

150 - (0.22 X 3513)= -623 psi

Operator's proposed BOPE of 2 M *exceeds / does not exceed* the ASP and is therefore *adequate / not adequate*.

Note ASP - Anticipated Surface Pressure
ABHP - Anticipated Bottom Hole Pressure

(Decmin) = ASP / (GR - .22)