

Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-101  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

API NO. (assigned by OCD on New Wells)
30-045-27946
5. Indicate Type of Lease STATE <input type="checkbox"/> FTE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mudge Gas Com "C"
8. Well No. #1 E/32-83
9. Pool name or Wildcat Basin Fruitland Coal Gas

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>					
b. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER coal seam SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>					
2. Name of Operator Amoco Production Company ATTN: J.L. Hampton					
3. Address of Operator P. O. Box 800 Denver, Co. 80201					
4. Well Location Unit Letter A : 950 Feet From The North Line and 810 Feet From The East Line Section 3 Township 31N Range 11W NMPM San Juan County					
10. Proposed Depth 2885' (TD)		11. Formation Fruitland Coal		12. Rotary or C.T. Rotary	
13. Elevations (Show whether DF, RT, GR, etc.) 5976' GR		14. Kind & Status Plug. Bond State-wide		15. Drilling Contractor unknown	
16. Approx. Date Work will start As soon as permitted					
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	250'	250 cf (cement to surface)	
7 7/8"	5 1/2"	17#	2885' (TD)	808 cf (cement to surface)	

RECEIVED

JUN 29 1990

OIL CON. DIV  
DIST. 3

APPROVAL EXPIRES 1-2-91  
UNLESS DRILLING IS COMMENCED.  
SPUD NOTICE MUST BE SUBMITTED  
WITHIN 10 DAYS.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE MUDWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE J. L. Hampton TITLE Sr. Staff Admin. Supv. DATE 6/27/90  
(303)  
TYPE OR PRINT NAME J. L. Hampton TELEPHONE NO. 830-5119

(This space for State Use)

APPROVED BY Gene Bush DEPUTY OIL & GAS INSPECTOR, DIST. #3 JUL 02 1990  
TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

Amoco proposes to drill the well to further develop the Fruitland Coal reservoir. The well will be drilled to the surface casing point using native mud. The well will then be drilled to the total depth with a non-dispersed mud system. The attached modified 12" 3000 psi blowout preventer will be used (please see attached BOP information). The well will be completed in the Fruitland Coal with a fracture stimulation.

<u>Quantity</u>	<u>Size</u>	<u>Weight</u>	<u>Description</u>	<u>Cementing Program</u>
<u>SURFACE CASING</u>				
250'	8-5/8"	24#	K55 ST&C	250 cf Class B, 2% CaCl <sub>2</sub> 15.6 ppg
<u>INTERMEDIATE STRING</u>				
2885	5.5"	17#	K55 ST&C	808 cf Class B, 65:35:6 10% salt, .25% dispersant 13.1 ppg 118 cf Class B, 2% CaCl <sub>2</sub> 15.6 ppg

The above casing design is based upon a 11.0#/gal mud weight.

#### EVALUATION

The log surveys (FDC/GR/CAL, Microlog) will be run per attached drilling and completion program.

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

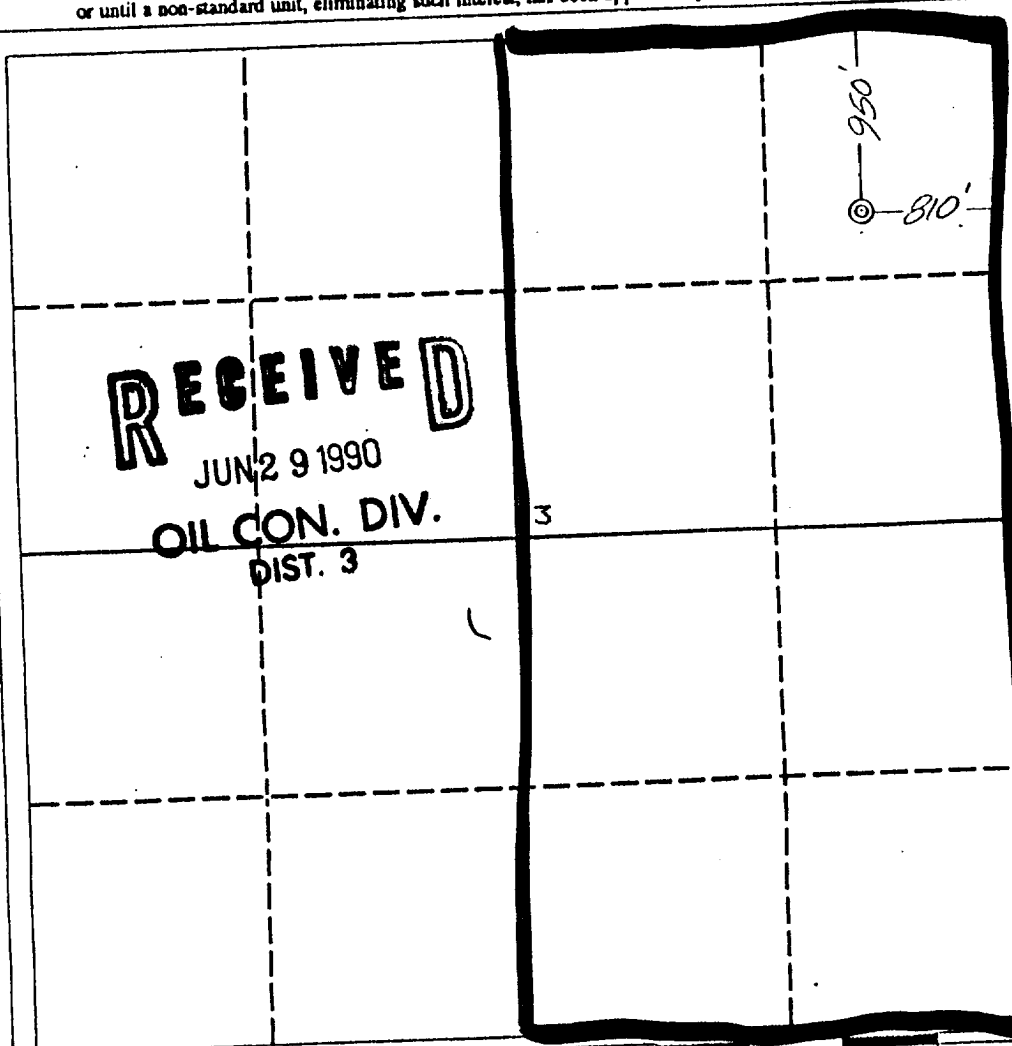
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>MUDGE GAS COM /C/</b>		Well No. <b># 1</b>
Unit Letter <b>A</b>	Section <b>3</b>	Township <b>31 NORTH</b>	Range <b>11 WEST</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>950</b> feet from the <b>NORTH</b> line and <b>810</b> feet from the <b>EAST</b> line					
Ground level Elev. <b>5976</b>	Producing Formation <b>Fruitland Coal</b>		Pool <b>Basin Fruitland Coal Gas</b>		Dedicated Acreage: <b>320.83</b> Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

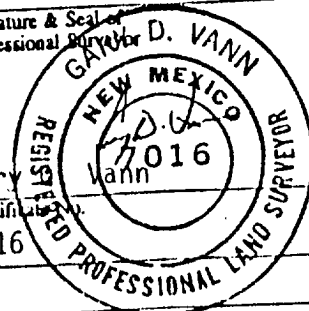
Signature *[Signature]*  
Printed Name **SL Hampton**  
Position **Sr Staff Admin Supt**  
Company **Amoco**  
Date **6/27/90**

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 knowledge and belief.

Date Surveyed **June 13, 1990**

Signature & Seal of Professional Surveyor  
**GARY D. VANN**  
7016



SAN JUAN BASIN  
FRUITLAND COAL DEGASIFICATION  
(DRILL THROUGH WELLS)  
PRESSURE CONTROL EQUIPMENT

Background

The objective Fruitland Coal formation maximum surface pressure is anticipated to be 1400 PSI, based on completion testing. Pressure control equipment working pressure minimum requirements are therefore 2000 PSI. Equipment to be used will conform to API RP-53 (Figure 2.C.2) for a 2000 PSI system per Federal Onshore Order No. 2. Due to available conventional equipment within the area, 3000 PSI rated pressure control equipment will typically be utilized in a double ram type arrangement. Regional drilling rigs to be utilized have substructure height limitations which exclude use of annular preventers; therefore a rotating head will be installed above these rams. This pressure control equipment will be utilized for conventional drilling below surface to total depth in the Pictured Cliffs.

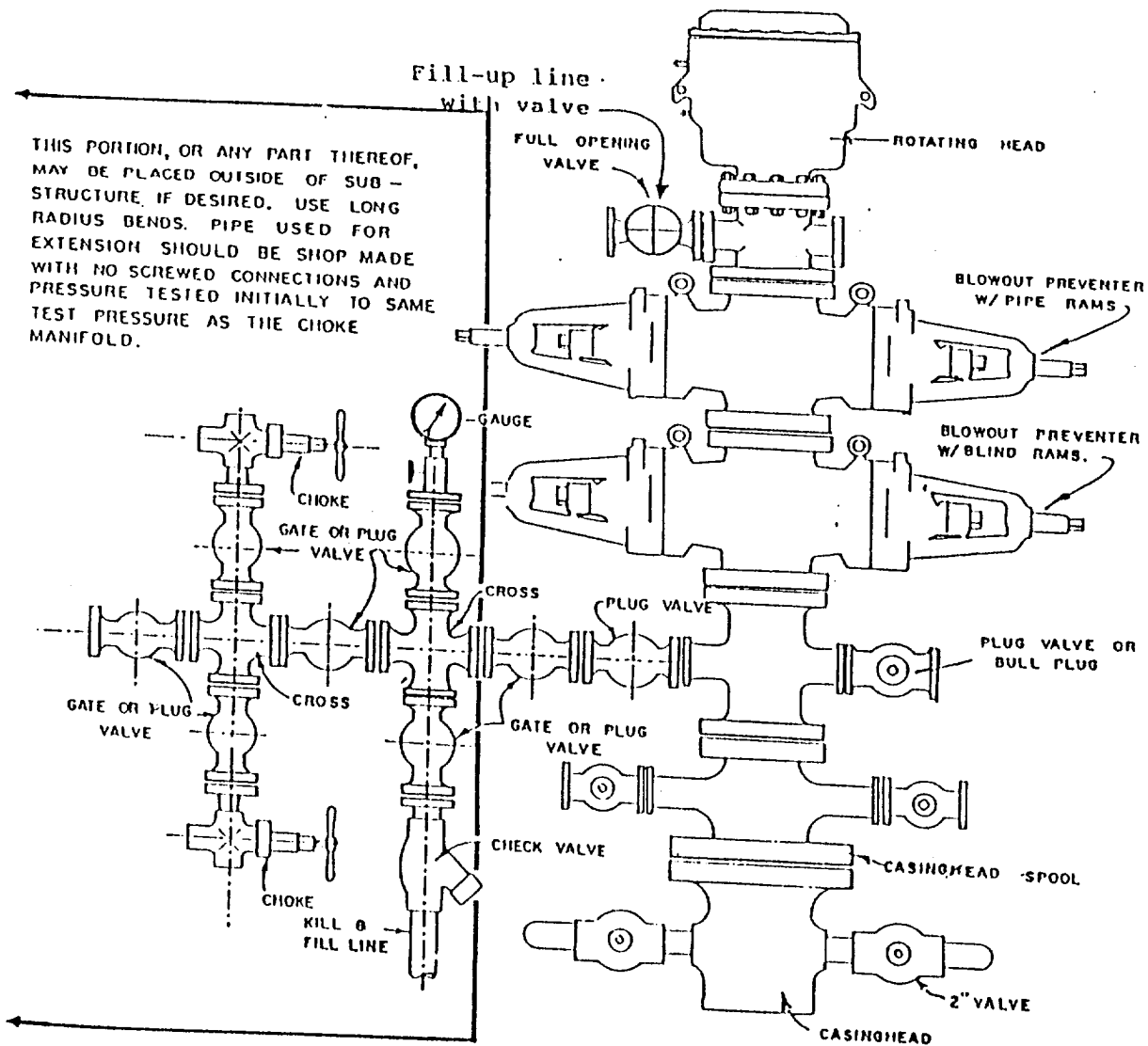
Equipment Specification

<u>Interval</u>	<u>BOP Equipment</u>
Below Surface Casing to Total Depth	12" nominal, 3000 PSI double ram preventer with rotating head (see Exhibit No. 1 - BOPE)

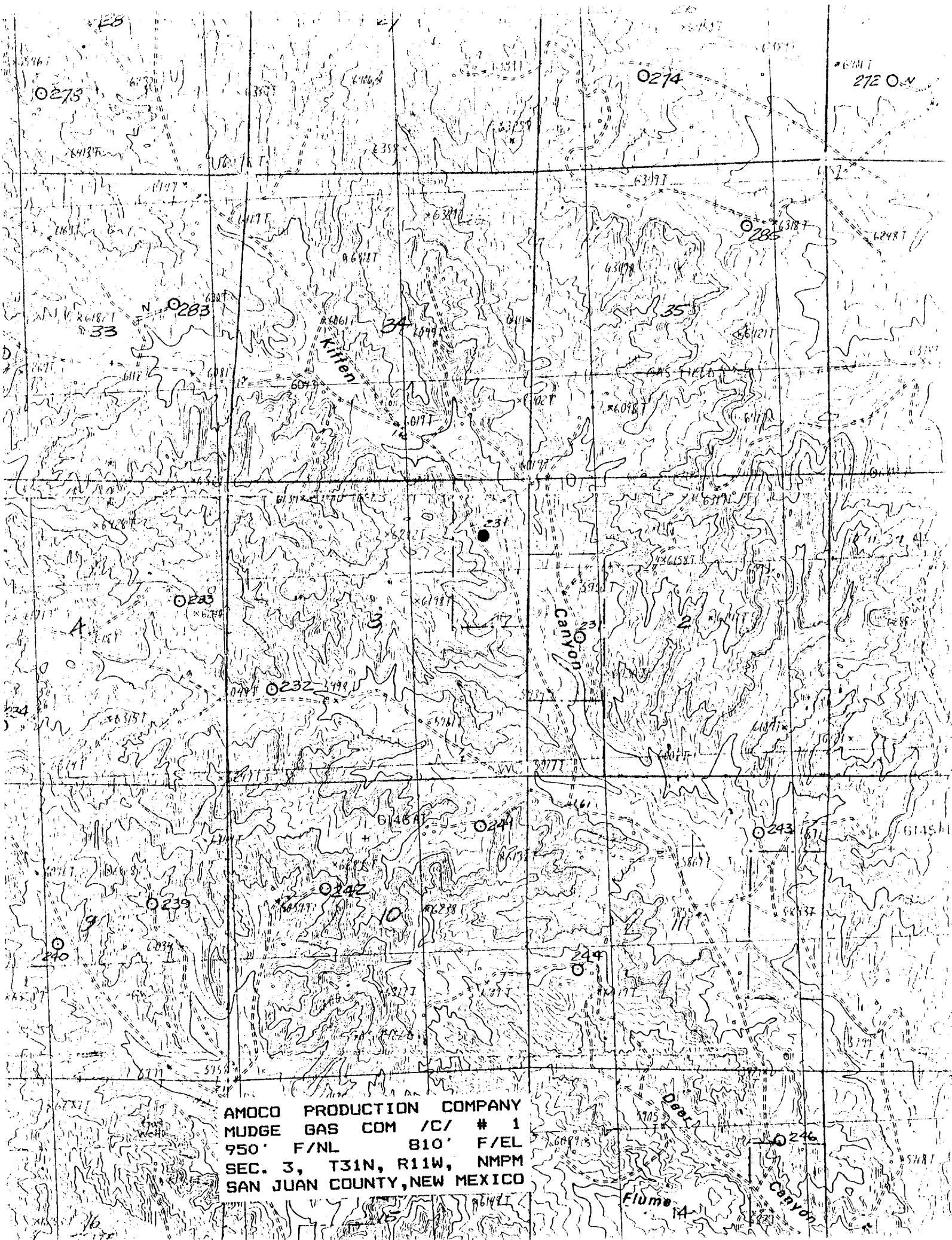
All ram type preventers and related control equipment will be hydraulically tested to 250 PSI (low pressure) and 2000 PSI (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include kelly cock, floor safety valves and choke manifold which will also be tested to equivalent pressure.

Please direct any questions to George Gray at (303) 830-5190 in our Denver office.

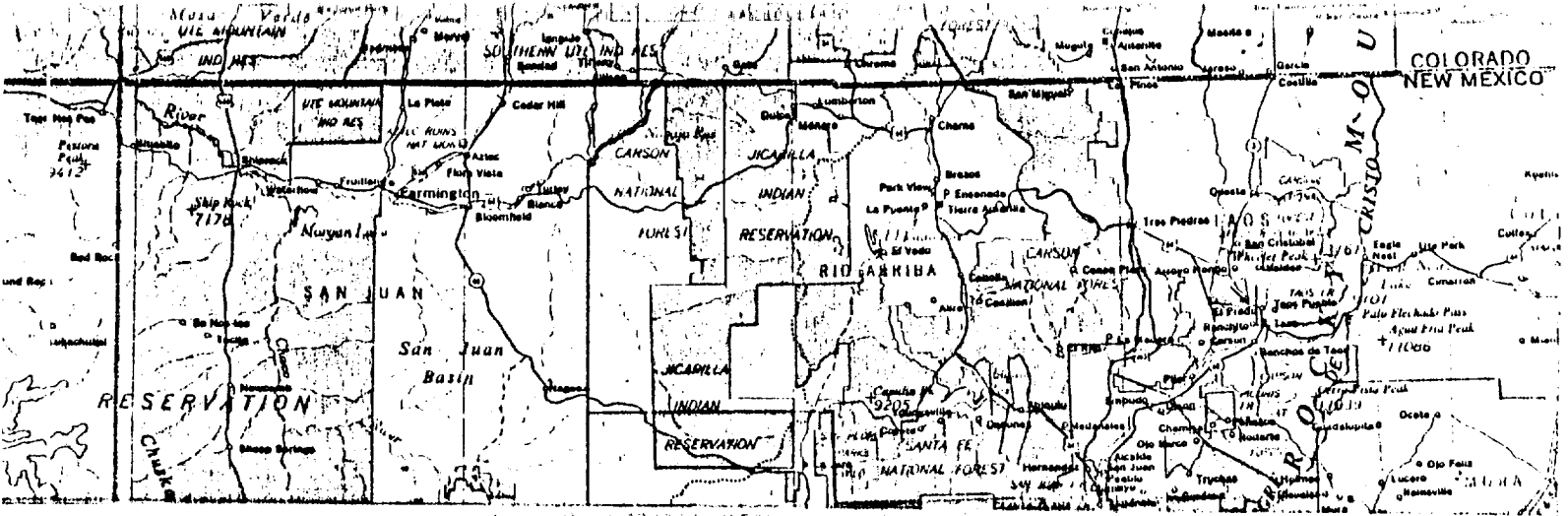
# EXHIBIT NO. 1 - BOPE



BLOWOUT PREVENTER HOOKUP



AMOCO PRODUCTION COMPANY  
MUDGE GAS COM /C/ # 1  
950' F/NL 810' F/EL  
SEC. 3, T31N, R11W, NMPM  
SAN JUAN COUNTY, NEW MEXICO



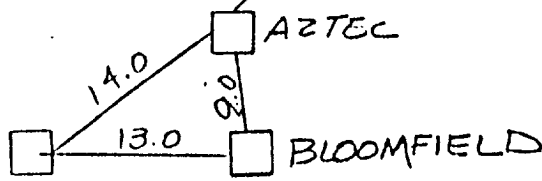
MUDGE GAS COM /C/ # 1  
 50' F/NL B10' F/EL  
 EC. 3, T31N, R11W, NMPM  
 POINT: 153 miles to Montrose, Co.  
 POINT: 10 miles - Aztec, NM  
 POINT: 24 miles - Farmington, NM

MUDGE GAS COM /C/ #1

KIFFEN CANYON

DEER CANYON

RUINS ROAD  
COUNTY ROAD 2900



FARMINGTON