

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

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

OIL CONSERVATION DIVISION

San Fe, New Mexico 87504-2088

JUN 22 1990

OIL CON.

API NO. (assigned by OCD on New Wells)
30-045-27905
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Mudge Gas Com "E"
8. Well No. #1 w/320
9. Pool name or Wildcat Basin Fruitland Coal Gas

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, 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 <input type="checkbox"/> coal seam <input type="checkbox"/> 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 <u>L</u> : <u>1830</u> Feet From The <u>North</u> Line and <u>810</u> Feet From The <u>West</u> Line					
Section <u>23</u> Township <u>31N</u> Range <u>11W</u> NMPM San Juan County					
10. Proposed Depth 2601' (TD)		11. Formation Fruitland Coal		12. Rotary or C.T. Rotary	
13. Elevations (Show whether DF, RT, GR, etc.) 5744' 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#	2601' (TD)	728 cf (cement to surface)	

Lease Description:

Sec. 23: NW/4 SW/4, W/2 NE/4, E/2 NW/4, NE/4 SW/4, NW/4 SE/4, SW/4 NW/4, NW/4 NW/4
Sec. 22: E/2 SE/4, NW/4 SE/4
Sec. 27: NE/4 NE/4
Sec. 8: E/2
Sec. 9: All
Sec. 14: S/2 NW/4, SW/4 SW/4
Sec. 17: E/2
Sec. 20: Lots 1-6, N/2 NE/4 ; Sec. 21: Lots 1-16

APPROVAL EXPIRES 12-25-90
UNLESS DRILLING IS COMMENCED.
SPUD NOTICE MUST BE SUBMITTED
WITHIN 10 DAYS.

RECEIVED
JUN 15 1990

OIL CON. DIV
DIST. 3

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 BLOWOUT 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 6/13/90
(303)
TYPE OR PRINT NAME J.L. Hampton TELEPHONE NO. 830-5119

(This space for State Use)

APPROVED BY [Signature] DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE JUN 25 1990
CONDITIONS OF APPROVAL, IF ANY:

1947

1948

1949

1947

1948

1949

1950

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

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

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 AMOCO PRODUCTION COMPANY			Lease MUDGE GAS COM /E/		Well No. # 1
Unit Letter L	Section 23	Township 31 NORTH	Range 11 WEST	County SAN JUAN	
Actual Footage Location of Well: 1830 feet from the SOUTH line and 810 feet from the WEST line					
Ground level Elev. 5744	Producing Formation Fruitland Coal		Pool Basin Fruitland Coal Gas		Dedicated Acreage: W/2 320.00 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.

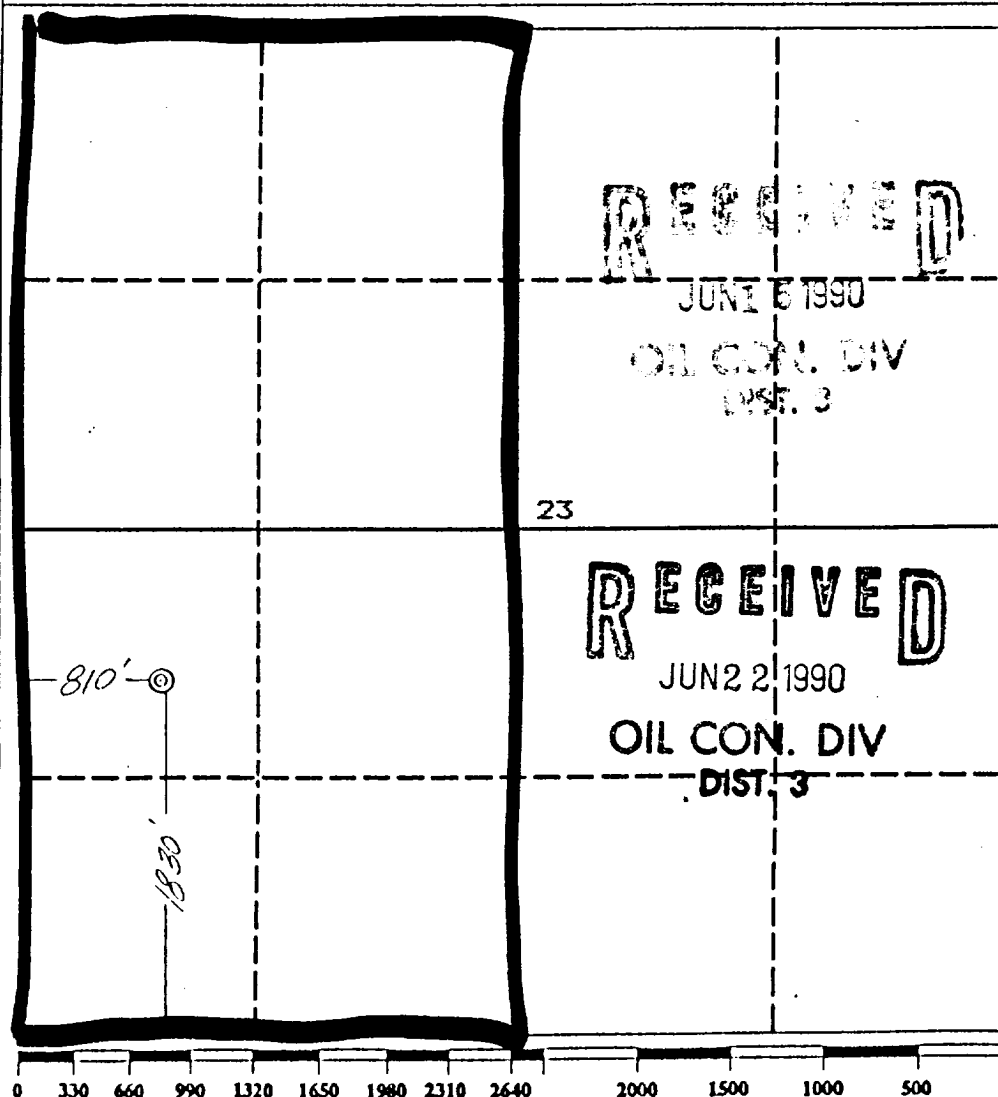
Signature *JL Hampton*
Printed Name **JL Hampton**
Position **Sr Staff Admin Supv**
Company **Amoco Prod**
Date **6-14-90**

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 5, 1990**

Signature & Seal of Professional Surveyor
GARY D. VANN
7016
Gary Vann
Certification No. **7016**



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 ₂ 15.6 ppg
<u>INTERMEDIATE STRING</u>				
260'	5.5"	17#	K55 ST&C	728 cf Class B, 65:35:6 10% salt, .25% dispersant 13.1 ppg 118 cf Class B, 2% CaCl ₂ 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.

**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

Interval

Below Surface Casing
to
Total Depth

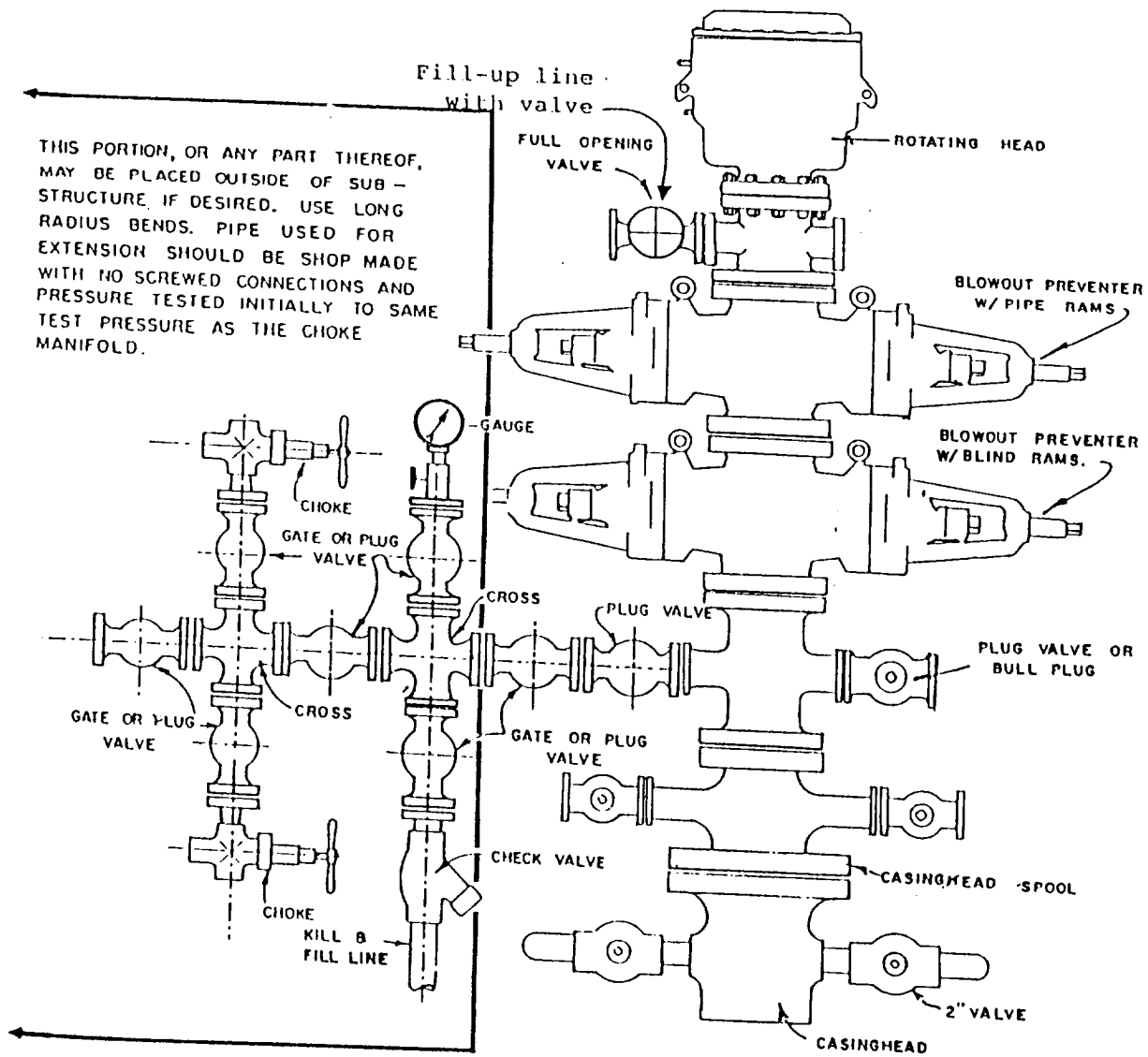
BOP Equipment

12" nominal, 3000 PSI double ram
preventer with rotating head (see
Exhibit No. 1 - BOPE)

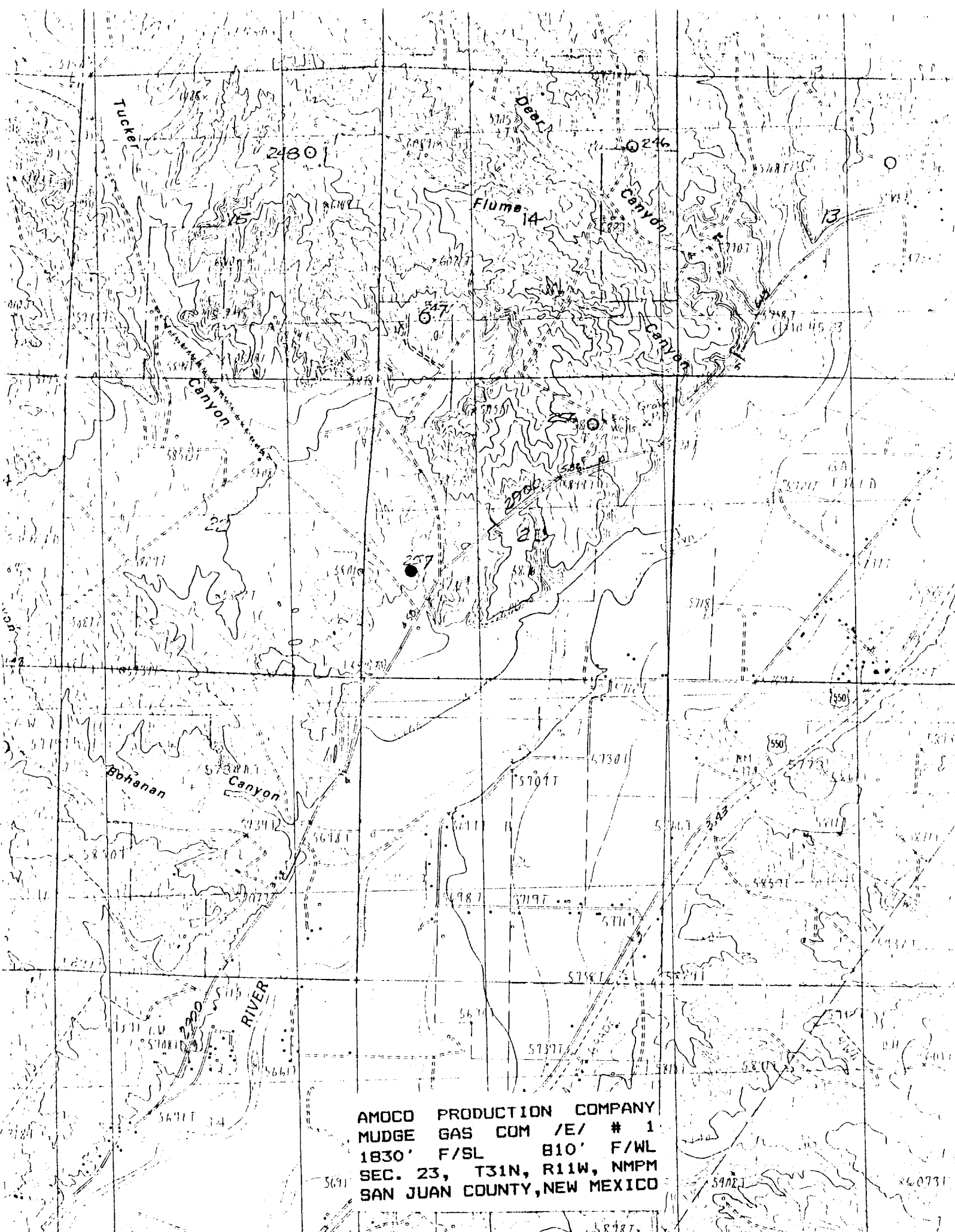
All ram type preventers and related control equipment will be hydraulically tested to 250 PSI (low pressure) and 2000 PSI (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include kelly cock, floor safety valves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

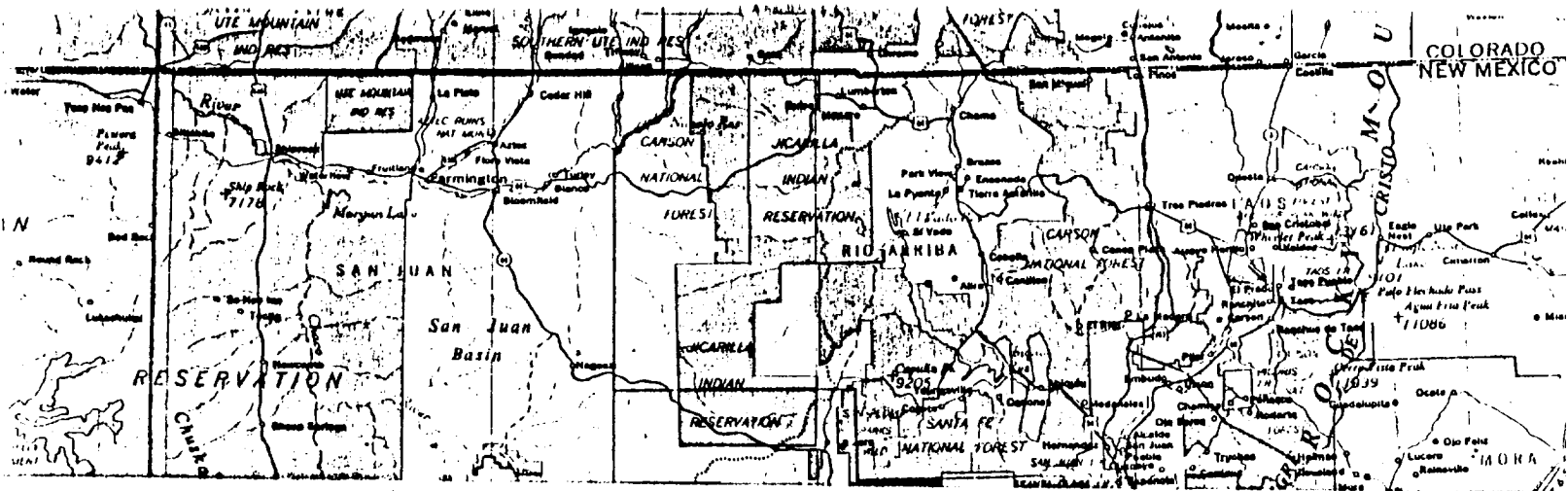
EXHIBIT NO. 1 - BOPE



BLOWOUT PREVENTER HOOKUP



AMOCO PRODUCTION COMPANY
MUDGE GAS COM /E/ # 1
1830' F/SL B10' F/WL
SEC. 23, T31N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO



MUDGE GAS COM /E/ # 1

1830' F/SL B10' F/WL

SEC. 23, T31N, R11W, NMPM

RAIL POINT: 139 miles - Montrose, Co

MUD POINT: 5 miles - Aztec, NM

CEMENT POINT: 29 miles - Farmington, NM

