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 P.O. Box 2088 <u>DISTRICT I</u> P.O. Box 1980, Hobbs, NM 88240 Santa Fe, New Mexico 87504-2088 DISTRICT II P.O. Drawer DD, Artesia, NM 88210

API NO. (assigned by OCD on New Wells) 30-045-27892 5. Indicate Type of Lease FEE 🛛 STATE

DISTRICT III 1000 Rio Brazos Rd., Azte	c, NM 87410			6. State Oil & Gas Lease	No.
	TION FOR PERMIT T	O DRILL, DEEPEN, O	OR PLUG BACK		
la. Type of Work:				7. Lease Name or Unit A	greement Name
b. Type of Well:	L X RE-ENTER		PLUG BACK	Santa Cara	
OIL GAS WELL	M onex Coal Se	SINGLE ZONE	X ZONE	Scott Gas I	Jnit
2. Name of Operator				8. Well No.	-/20/11
Amoco Produc	ction Co. A	tten. J.L. Ha	umpton	# 4	5/324.44
3. Address of Operator				9. Pool name of Wildcat	Morrad
P.O. Box 80	O, Denver, C	0 80201	····	Basin fruit	and Coal Gas
4. Well Location	1000				
Onli Letter N	: 1200 Feet Fr	om the South	Line and155	Feet From The	West Line
Section 29	Townsi	hip 32N Ra	nge 10W	NMPM San Jua	an County
		10. Proposed Depth	1	ormation	12. Rotary or C.T.
			Ol'TD F	<u>ruitland</u>	Rotary
13. Elevations (Show whether	1	4. Kind & Status Plug. Bond	15. Drilling Contractor	16. Approx.	Date Work will start
5985 GR		State wide	unkn	TUN AS SOC	on as permitt
17.	PRO	OPOSED CASING AN	<b>ID CEMENT PROGR</b>	RAM	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12¼"	9 5/8"	36#	250'	200 cf Cl.B	Surface
8 3/4"	7"	20#	2791'	78( cf Cl.B	Surface
61/4"	5岁"	23#		None	

JUN1 8 1990

OIL CON. DIV.

APPROVAL EXPIRES 12 18 90

SPC	LESS DRILLING IS COMMENCED.  DINOTICE MUST BE SUBMITTED  HIN 10 DAYS:
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: #PROZONE. GIVE BLOWOUT PREVENTER PROGRAM, #F ANY.	POSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE
I hereby certify that the information above is true and complete to the best of	my knowledge and belief.
SIGNATURE J L HAMPTONYU	B TITLE Sr. Staff Admin. Supreme 6/15/90
TYPEOR PRINT NAME / J.L. Hampton	TELEPHONE NO.
(This space for State Use)	TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 JUN 18 1990
APPROVED BY	TITLE DATE

CONDITIONS OF AFFROVAL, 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 intermediate casing point wit a non-dispersed mud system. The attached modified 12" 3000 psi blowout preventer will be used. Amoco will attempt to complete the Fruitland coal by drilling the interval with water and air. A service unit will probably be used to drill into the coals using the attached modified 6" 3000 psi BOP. If commercial productivity is established, then the well will be completed as an open hole.

### SURFACE CASING

Quantity	Size	Weight	Description	Cement Program
250'	9 5/8"	36#	K55 ST&C	200 cf Class B, 2% CaCL <sub>2</sub> 15.6 ppg

### INTERMEDIATE CASING

Quantity	Size	Weight	Description	Cement Program
2791'	7''	20#	K55 ST&C	78/ cf Class B,
				65:35:5 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 9.0 #/gallon mud weight.

## CONTINGENCY OPERATIONAL PLAN

In the event the well does not yield commercial volumes of gas from the open hole completion, the water filled hole will be mudded-up and weighted-up as necessary (9-11#/gal.) for hole stability and well control. The well will then be deepened approximately 200' into the Pictured Cliffs formation to provide necessary footage for a cased and cemented completion technique. The Fruitland coals will then be perforated and fracture stimulated. The Pictured Cliffs formation will be isolated with cement.

### CONTINGENCY LINER

650' 4-1/2" 11.6# K55 LT&C 250 cf Class B

The contingency string is based upon an 11.0 #/gallon mud weight.

#### EVALUATION

Mud logs will be the only logs run if the well is completed as an open hole. The log surveys (FDC/GR/CAL, Microlog, Mudlogger) will be run only if the well is drilled into the Pictured Cliffs formation, and only if well condition is suitable to allow proper wireline log interpretation.

apdatt.clb disk 210

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DISTRICT III

# State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

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

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

1000 Rio Brazos Rd., Aztec, NM 87410

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### **OIL CONSERVATION DIVISION**

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

### WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator			Losse			Well No.
AMOCO	PRODUCTIO	N COMPANY	SCOTT	GAS UNIT		# 4
Unit Letter N	Section 29	Township 32 NORTH	Range 10	WEST	NMPM	SAN JUAN
Actual Footage Loca 1200	stion of Well:	SOUTH lin	e and	1550	feet from the	, WEST line
Ground level Elev. 5985	Froducing	and Cocl	Besin	Fruitand		Dedicated Acreage:  S12 Acres  Acres
1		to the subject well by color cated to the well, outline ea				3.49
		erent ownership is dedicate				
unitizat	tion, force-pooling, etc.	.7	yes" type of consolidation	1		
this form	if neccessary.	-				forced-pooling, or otherwise)
or until a	non-standard unit, elin	rinating such interest, has b	een approved by the Div	ision.		
						OPERATOR CERTIFICATION  I hereby certify that the information true and complete to the tof my knowledge and belief.
					\	Hampton (B)
			OIL COA		Co	more Prod
		29				SURVEYOR CERTIFICATION
					on act sup con bei	nereby certify that the well location shown this plat was plotted from field notes of the surveys made by me or under my pervison, and that the same is true and trect to the best of my knowledge and lief.
	 		 		D.	March 9, 1990
C. KAS	60',002/-				Pr Ga	gnature & Scale of Control of Con
1357.2	9' /3	57.29'				016 POFESSIONAL ME
0 330 660	990 1320 1650	1960 2310 2640	2000 1500	1000 500	0	WESSIONAL WAR

# SAN JAN BASIN FRUITLAND COAL DEGASIFICATION (TOPSET 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 intermediate casing point above the Fruitland Coal.

Prior to drilling below intermediate casing, a modified two (2) double ram pressure control equipment system will be installed. This systems is designed for Fruitland Coal formation interval drilling with air and water. A service unit will typically be used to drill this interval, and the wellbore will be completed as an uncased open hole if commercial productivity is established. If not, the wellbore will be cased and cemented with a 4 1/2" contingency liner. Based upon maximum surface pressure criteria, 2000 PSI equipment is required. However, as stated above, 3000 PSI working pressure equipment will typically be utilized.

# Equipment Specification

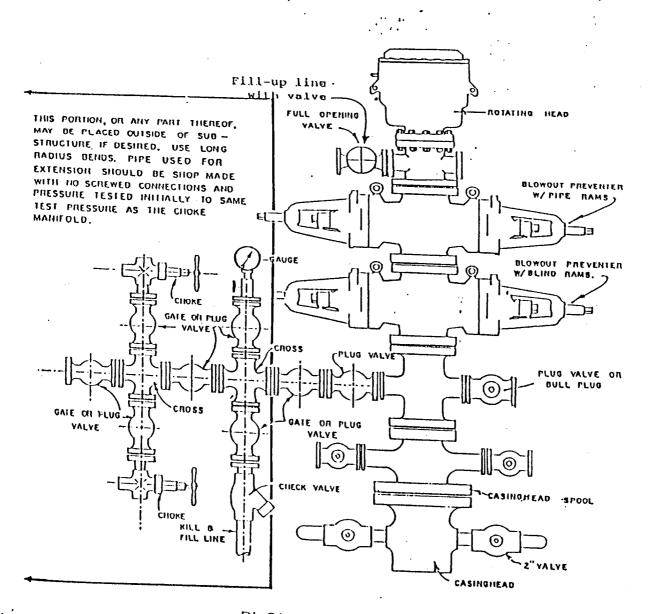
Interval
Below Surface Casing
through
Intermediate Casing

Intermediate Casing to Total Depth BOP Equipment
12" nominal, 3000 PSI double ram
preventer with rotating head (see
Exhibit No. 1 - BOPE)

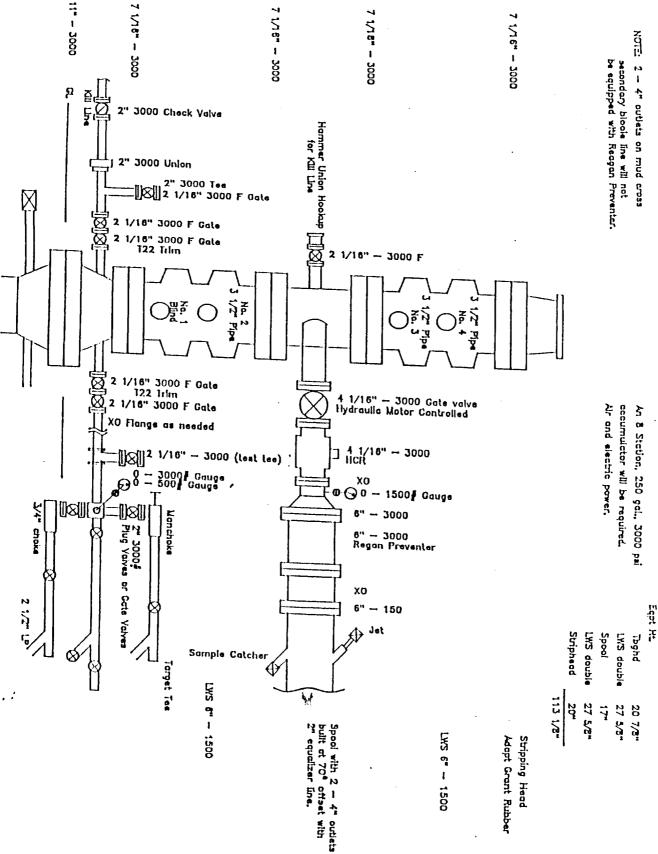
6" nominal, 3000 PSI Two (2) double ram preventers (see Exhibit No. 2 - BOPE)

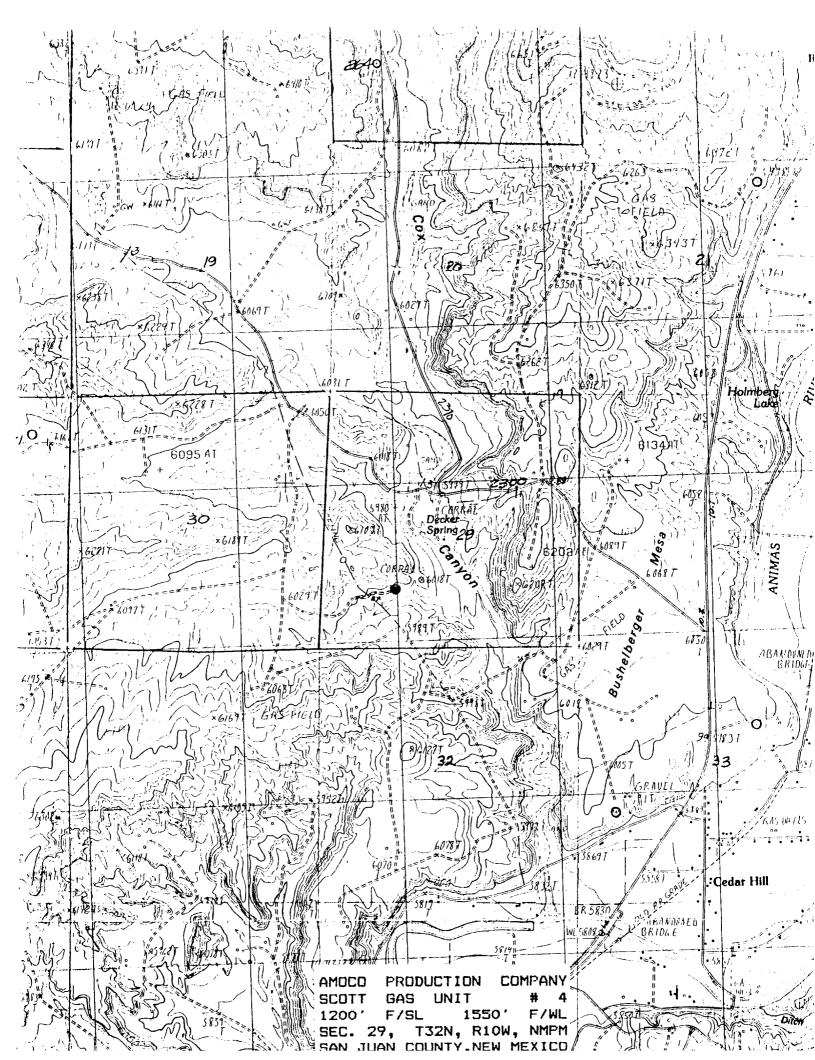
All ram type preventers and related control equipment will be hydraulically tested to 250 PSI (low pressure) and 2000 PSI (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include kelly cock, floor safety valves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

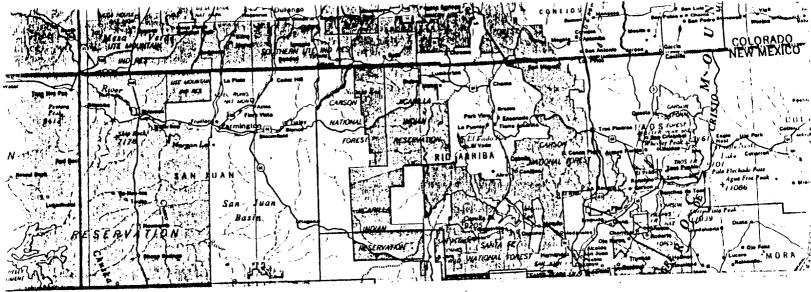
Please direct any questions to George Gray at (303) 830-5190 in our Denver office.



BLOWOUT PREVENTER HOOKUP



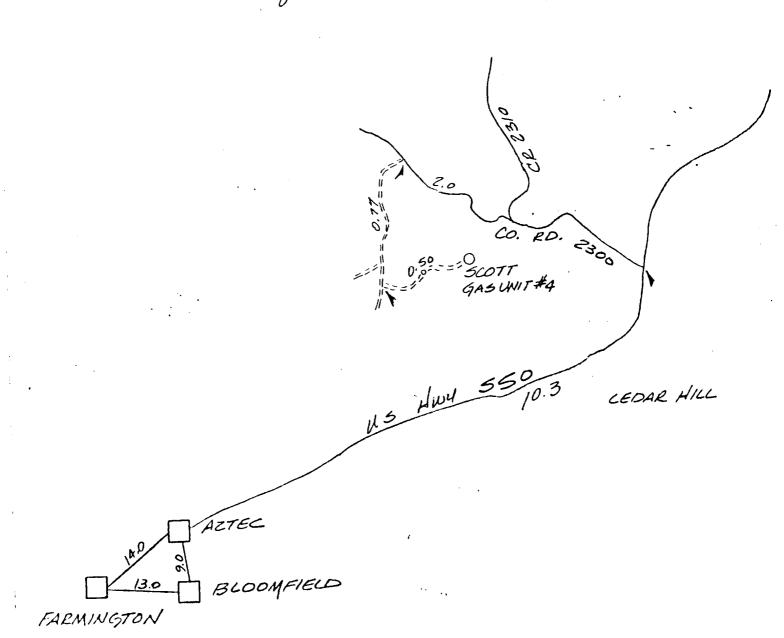




UNIT GAS F/SL 1550' 1200'

POINT: 14 miles - Aztec, nM

CEMENT POINT: 28 miles - Farmington, MM



	PRODUCTI	DN COMPANY	SCOTT GAS UNIT	<b>r</b>	Well No.
Unit Letter N	Section 28	Township 32 NORTH	Range 10 WEST	County	AN JUAN
Actual Footage Lo 1200	feet from the	SOUTH line and	1550	NMPM W	EST line
Fround level Elev. 5985	Produci	ng Formation	Pool		Dedicated Acreage:

