UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

1. TYPE OF WELL GAS	5. LEASE NUMBER SF-077874 6. IF INDIAN,ALL. OR TRIBE NAME
2. OPERATOR SOUTHLAND ROYALTY CO.	7. UNIT AGREEMENT NAME
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME HANKS 9. WELL NO. 230
4. LOCATION OF WELL 1460'S 855'W	10. FIELD,POOL,OR WILDCAT BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. SEC. 7 T27N R09W NMPM
14. PERMIT NO. / 15. ELEVATIONS 6190'GL	12. COUNTY SAN JUAN / 13. STATE NM

16. NOTICE OF INTENTION TO: Change Plans

17. Describe proposed or completed operations

Attached is a revised operations plan, BOPE diagram and anticipated production facilities diagram on the subject well.

RECEIVED
MAR 23 1990
OIL CON. DIV.
DIST. 3

18. AUTHORIZED BY: _____ REGULATORY AFFAIRS — DATE 9/9/89

APPROVED
DATE Ken Townsend
FOR

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-5.

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITION OF APPROVAL, IF ANY:

OPERATIONS PLAN

DATE: SEP 9,1989

Well Name: 230 HANKS
Sec. 7 T27N R09W
BASIN FRUITLAND COAL

1460'S 855'W
SAN JUAN NEW MEXICO
Elevation 6190'GL

Formation tops:

Surface-	NACIMIENTO
Ojo Alamo-	1168
Kirtland-	1310
Fruitland-	1855
Fruitland Coal Top-	1988
Fruitland Coal Base-	2102
Intermediate TD-	1968
Total Depth-	2104
Pictured Cliffs-	2106

Logging Program: Mud logs from intermediate to total depth.

Mud Program:

Interval	Type	Weight	Visc.	Fl. Loss
0 - 200	Spud	8.4 - 8.9	40-50	no control
200 - 1968	Non-dispersed	8.4 - 9.1	30-60	no control
1968 - 2104	Formation Water	8.4		no control

Casing Program:

	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 200	9 5/8"	32.3#	H-40
	8 3/4"	0 - 1968	7"	20.0#	K-55
	6 1/4"	1918 - 2104	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2104	2 7/8"	6.5#	J-55

Float Equipment: 9 5/8" surface casing - saw tooth guide shoe.

7" intermediate casing - guide shoe and self-fill insert float valve. Three centralizers run every other joint above shoe. Run insert float one joint above the guide shoe.

5 1/2" production casing - float shoe on bottom and a pre-drilled liner run to the 7" casing with a minimum 50' overlap. Liner hanger is a double slip grip type.

Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

Cementing:
9 5/8" surface casing - cement with 106 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (125 cu ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

7" intermediate casing - lead with 63 sacks of 65/35 class "B" poz with 6% gel, 2% calcium chloride and 1/2 cu ft. Perlite/sack (10.3 gallons of water/sack) tail with 100 sacks of class "B" with 2% calcium chloride. 240 cu ft. of slurry, 100% excess to cover the Ojo Alamo. Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1500 psi for 30 minutes.

5 1/2" liner - do not cement.

BOP and Tests:

Surface to intermediate TD - 11" 2000 psi(minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 600 psi for 30 minutes.

Intermediate TD to TD - 7 1/16" 2000 psi(minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test rams to 1500 psi(minimum) for 30 minutes.

From surface to TD - choke manifold (Reference Figure #3).

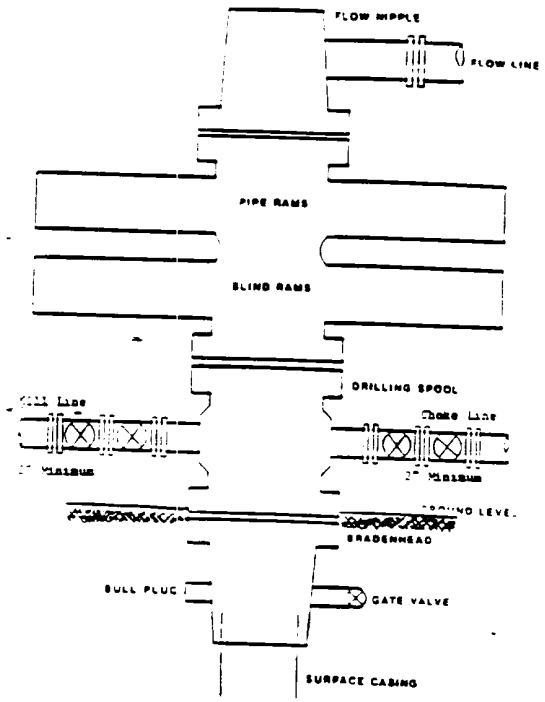
Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. A kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Addition Information:

The Fruitland coal formation will be completed.
This gas is dedicated.
The W/2 of Section 7 is dedicated to this well.

TOP SET FRUITLAND COAL

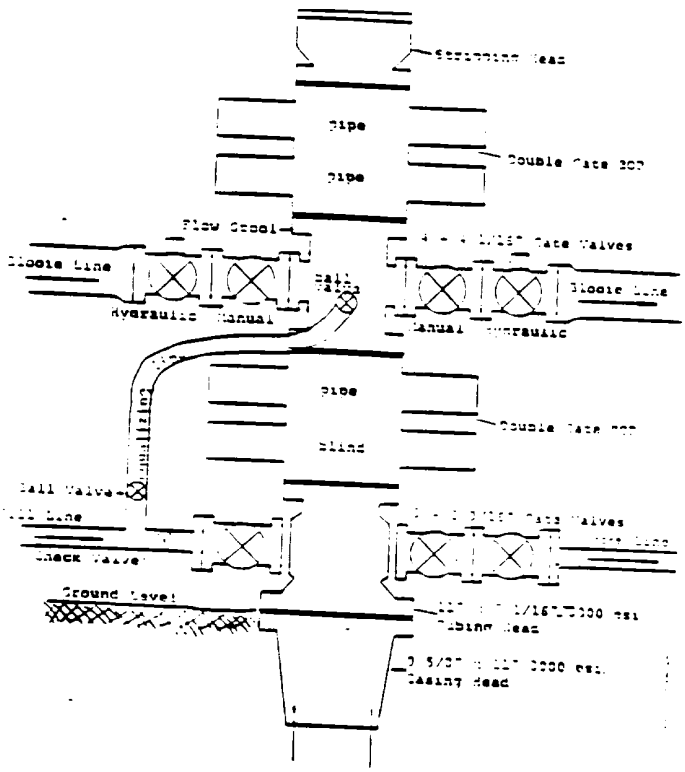
FIGURE #1



Minimum BOPE installation for a typical Fruitland Coal well from surface to intermediate TD. 11", 2000 psi working pressure double gate BOP equipped with blind and pipe rams.

TOP SET FRUITLAND COAL

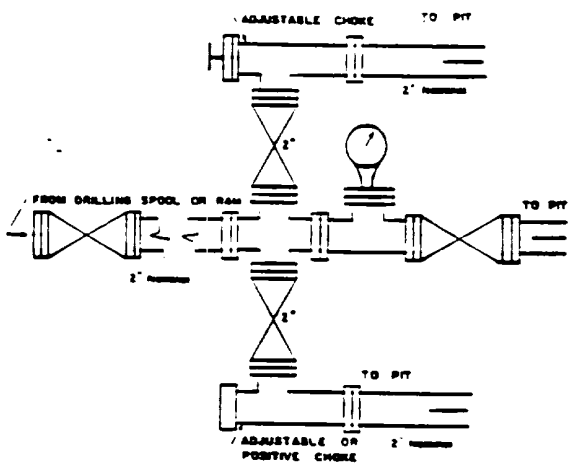
FIGURE #2



Minimum BOPE installation for a typical Fruitland Coal well from intermediate TD to TD. 6", 3000 psi working pressure double stack double gate BOP equipped with three pipe and one blind ram.

TOP SET FRUITLAND COAL

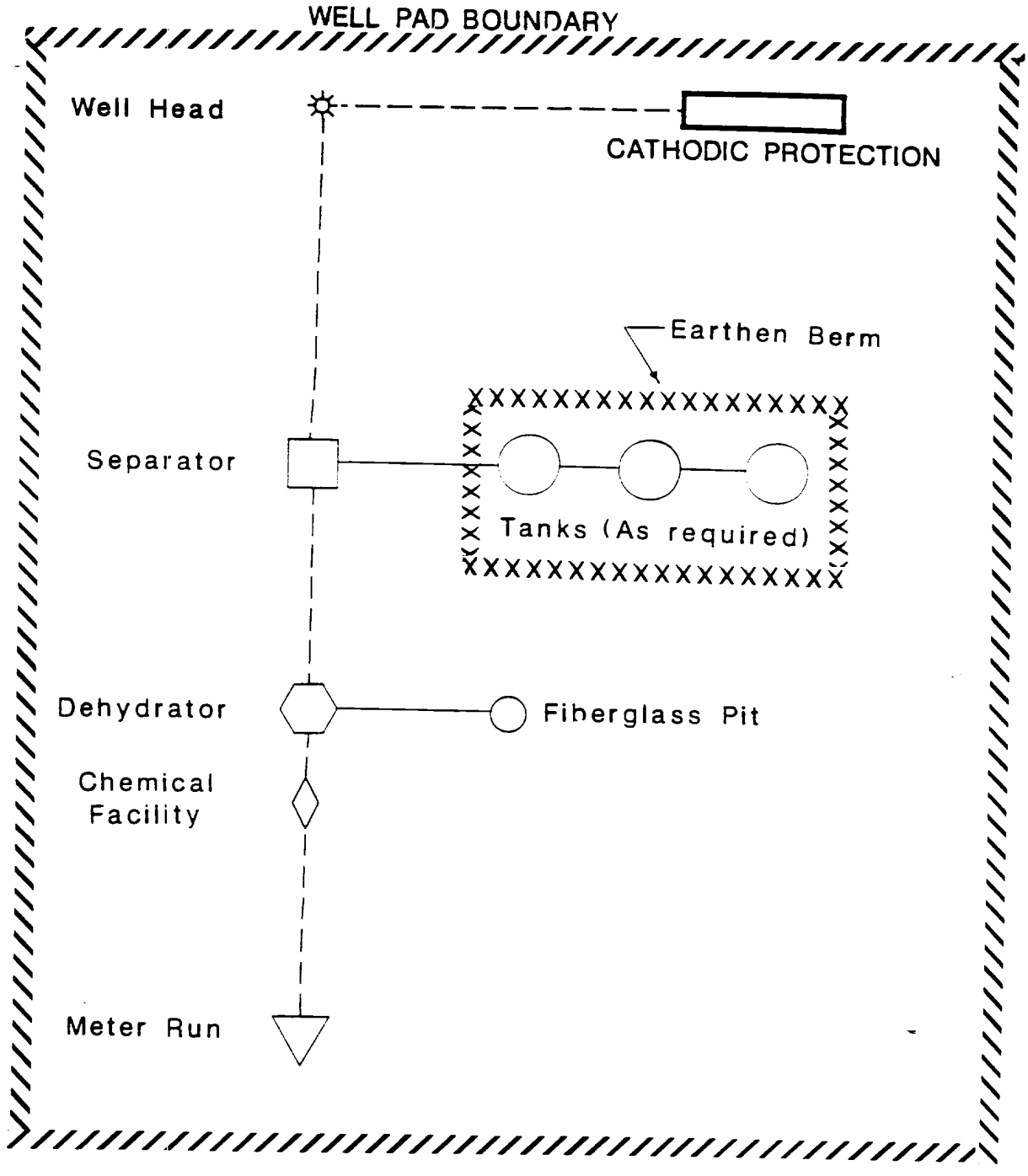
FIGURE #3



Minimum choke manifold configuration for a typical Fruitland Coal well from surface to TD. 3", 2000 psi working pressure equipment with two chokes.

TOP SET FRUITLAND COAL WELL BOPE

UPDATED 9/8/89



MERIDIAN OIL

ANTICIPATED
PRODUCTION FACILITIES
FOR A
FRUITLAND WELL

J. Falconi 4/28/89