# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

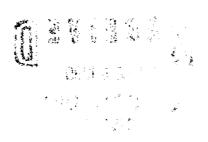
NOTE: THIS FORMAT IS ISSUED IN LIEU OF U	APPROVED s blm form 3160-5.
18. AUTHORIZED BY: REGULATORY AFFAIRS	DIL CON. DIV DIST 9/9/89 DATE
R	MAR2 6 1990
i and an energy and the subj	FECT WEIL:
Attached is a revised operations plan, BO production facilities diagram on the subj	OPE diagram and anticipated
17. Describe proposed or completed operat	ions
16. NOTICE OF INTENTION TO: Change Plan	าร
14. PERMIT NO. 15. ELEVATIONS 6399'GL	12. COUNTY 13. STATE SAN JUAN NM
4. LOCATION OF WELL 1660'N 1150'E	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. SEC. 4 T29N R08W NMPM
P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME HILL 9. WELL NO. 210
2. OPERATOR SOUTHLAND ROYALTY CO.  3. ADDRESS & PHONE NO. OF OPERATOR	7. UNIT AGREEMENT NAME
1. TYPE OF WELL GAS	5. LEASE NUMBER SF-078487 6. IF INDIAN, ALL. OR TRIBE NAME
SUNDRY NOTICES AND RE	PORTS ON WELLS
	/

TITLE

FARMINGTON RESOURCE AREA

APPROVED BY

CONDITION OF APPROVAL, IF ANY:



Well Name: 210 HILL

1660'N 1150'E

Sec. 4 T29N R08W

SAN JUAN NEW MEXICO

BASIN FRUITLAND COAL

Elevation 6399'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 1985

Kirtland- 2150

Fruitland- 2770

Fruitland Coal Top- 2905

Fruitland Coal Base- 3070

Total Depth- 3070

Pictured Cliffs- 3073

Logging Program: Mud logs from 2770 to total depth.

Mud Program: Interval Type Weight Visc. Fl. Loss 0 - 200 Spud 8.4 - 8.9 40-50 no control 200 - 3070 Non-dispersed 8.4 - 9.5 30-60 no control

Casing Program: Hole Size Depth Interval Csg. Size Weight Grade

12 1/4" 0 - 200 8 5/8" 24.0# K-40 7 7/8" 0 - 3070 5 1/2" 15.5# K-55

Tubing Program: 0 - 3070 5 1/2" 15.5 K-55 0 - 3070 2 3/8" 4.7 J-55

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

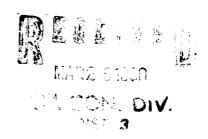
5 1/2" production casing - float shoe on bottom. Three centralizers run every other joint above shoe.

Wellhead Equipment:  $8 \frac{5}{8}$ " x 5  $\frac{1}{2}$ " x 2  $\frac{3}{8}$ " x 11" 3000 psi xmas tree assembl

## Cementing:

8 5/8" surface casing - cement with 140 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (165 cu ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

5 1/2" production casing - lead with 134 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. 376 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.



#### BOP and Tests:

Surface to TD - 11" 2000 psi(minimum) double gate BOP stack

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

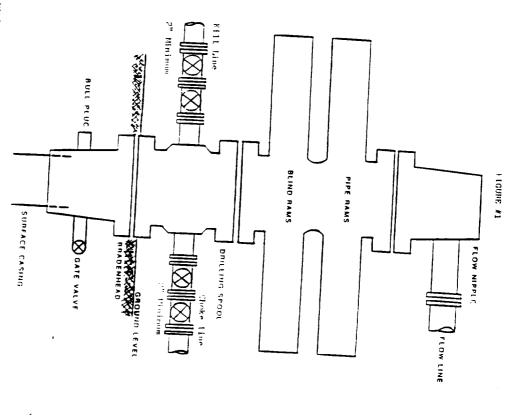
Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. A kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

## Addition Information:

The Fruitland coal formation will be completed. This gas is dedicated. The  $\frac{1}{2}$  of Section 4 is dedicated to this well.

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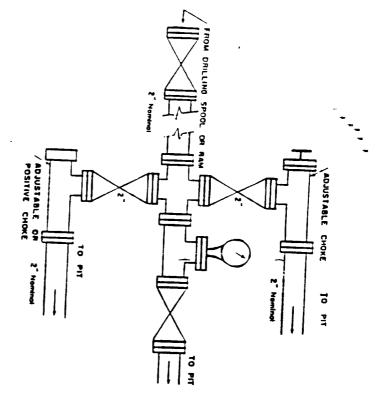
TVOS GRETALIA SELECT



Minimum POTE installation for a typical Fruitland Coal well from surface to Total Depth. 11", 2000 psi working pressure double gain BOF equipped with blind and pipe rams.

TONG STRING FRUITLAND COAL

FIGURE #3



Hinimum choke manifold configuration for a typical Fruitland Coaluell from surface to TD. 2", 2000 psi working pressure equipment with two chokes.

LONG STRING FCW BOPE

WELL PAD BOUNDARY Well Head CATHODIC PROTECTION Earthen Berm Xxxxxxxxxxxxxxx Separator Tanks (As required) ¥xxxxxxxxxxxxxx Dehydrator ) Fiberglass Pit Chemical Facility Meter Run 

# MERIDIAN OIL

ANTICIPATED
PRODUCTION FACILITIES
FOR A
FRUITLAND WELL

J. Falconi

4/28/89