

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

1. TYPE OF WELL GAS	5. LEASE NUMBER JIC CONT. #4161
2. OPERATOR SOUTHLAND ROYALTY CO.	6. IF INDIAN, ALL. OR TRIBE NAME JICARILLA APACHE
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	7. UNIT AGREEMENT NAME
4. LOCATION OF WELL 2310'FNL 660'FWL	8. FARM OR LEASE NAME MEDIO CANYON
	9. WELL NO. 7
	10. FIELD, POOL, OR WILDCAT WEST LINDRITH GALLUP DAKOTA
	11. SEC. T. R. M OR BLK. SEC. 35 T24N R04W NMPM
14. PERMIT NO.	15. ELEVATIONS 7042'GL
	12. COUNTY RIO ARRIBA
	13. STATE NM

16. SUBSEQUENT REPORT OF:

17. Describe proposed or completed operations

Please note the following change to the cement design on the Medio Canyon #7:

4 1/2" Production casing cemented with lightweight (Nitrified) cement in one stage (see attached revised operations plan).

RECEIVED
AUG 14 1991
OIL CON. DIV.
DIST. 3

18. AUTHORIZED BY:

Regan Bradfield
(REGULATORY AFFAIRS)

8-9-91
DATE

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

APPROVED
AS AMENDED

(This space for Federal or State office use)

APPROVED BY
CONDITION OF APPROVAL, IF ANY:

TITLE

DATE
AUG 09 1991
AREA MANAGER

OPERATIONS PLAN
MEDIO CANYON #7

REVISED 08-08-91

Location: 2310' FNL, 660' FWL Sec. 35-T24N-R04W
Rio Arriba County, New Mexico
Field: West Lindrith Gallup Dakota
Elevation: 7042' Graded Ground Level

Formation Tops			
San Jose	Surface	P. Lookout	5050'
Ojo Alamo	2350'	Mancos	5230'
Fruitland	2845'	Kgl.	6135'
T/ F. Coal	2855'	T/ GH	7045'
B/ F. Coal	2955'	B/ GH	7105'
Pictured Cliffs	2955'	T/ Gran	7120'
Lewis	2980'	Dakota	7230'
Mesaverde	4510'		
Meneffee	4545'	Total Depth	7550'

Logging Program: Mud logs from 2800' to 3000', 5500' to TD.
LDT/CNL/GR: TD - Int. TD
FMS: (1200ft) - TD - Int. TD
DIL/GR: TD to Surface
CALIPER: TD to Surface
CET: TD to Surface

Mud Program:

Interval	Type	Weight	Visc.	Fl.Loss
0 - 200'	Spud	8.4 - 8.9	40-50	no control
200' - 7550'	Non-dispersed	8.4 - 9.1	30-60	> 12 cc's

Casing Program:

Hole size (inches)	Measured Depth (Ft)	Casing Size (in)	Weight (lbs/ft)	Grade
12 1/4"	200'	8 5/8"	24.0	K-55
7 7/8"	7550'	4 1/2"	10.5	K-55

Casing Equipment:

1. 8 5/8" Surface Casing - Sawtooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.
2. 4 1/2" Production Casing - Cement nose guide shoe on bottom, float collar one joint off bottom. Centralizers spaced as follows: One every other joint from shoe to Ojo Alamo. Two (2) turbolizing type centralizers -one below and one into the Ojo Alamo @ 2530'. One every fourth joint from top of Ojo Alamo to surface.

OPERATIONS PLAN
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Tubing: 7700' of 2 3/8", 4.7#, J-55, 8rd EUE tubing with a seating nipple one joint off bottom and an expendable check valve on bottom.

Wellhead Equipment: 8 5/8" x 4 1/2" x 2 3/8" - 11" (3000psi) Wellhead

Cementing

8 5/8" Surface Casing: Use 140 sacks of Class 'B' cement with 1/4# / sack Flocele and 3% Calcium Chloride (165 cu. feet of slurry, 100% excess to circulate to surface.) Wait on cement 12 hours. Test casing to 600 psi.

4 1/2" Production Casing: Lightweight (Nitrified) cement to be pumped between a cap of premium cement and a tail of pozmix slurry.

Non-Nitrified Cap: 87 sacks of Class 'G' with 0.25% Retarder, 0.1 gal/sack Foam stabilizer, and 1.5% (BVOW) Foamer.

Density: 15.8 ppg

Yield: 1.16 cu ft / sack

Water: 4.95 gal / sack

Nitrified (Foam) Cement: 856 sacks of Class 'G' with 0.25% Retarder, 0.1 gal / sack Foam Stabilizer, and 1.5% (BVOW) Foamer. Pumped in (5) stages as follows:

Stage (1): 218 scf N2 / BBL

Density: 9.0 ppg

Stage (2): 386 scf N2 / BBL

Yield: 2.16 cu ft/sack

Stage (3): 554 scf N2 / BBL

Stage (4): 717 scf N2 / BBL

Stage (5): 872 scf N2 / BBL

Non-Nitrified Tail: 200 sacks of 50/50 poz / Class 'G' with 2% Bentonite, 0.6% Fluid Loss Additive, 0.25% dispersant, and 1/4# / sack cellophane flake.

Density: 13.6 ppg

Yield: 1.26 cu ft / sack

Water: 5.40 gal / sack

General Cement Data

Fluid Loss: 235 cc / 30 min

Free Water: 0.0 ml / ml

Compressives: 500 psi 8 hours

1600 psi 12 hours

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BOP and Tests:

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

Additional Information

- * The Gallup Dakota formation will be completed and commingled.
- * This is an oil pool.
- * The NW/4 of Section 35 is dedicated to this well.
- * New casing will be utilized.
- * Pipe movement (reciprocation) will be done if hole conditions permit.
- * No hazardous zones are expected.
- * Possible lost circulation problems at 6200' - will treat mud with LCM as required.
- * Cementing contractor will provide the BLM with a chronological log including the pump rate, pressure, slurry density and volume for all cement jobs.