#### UNITED STATES

# DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| Sundry Notices and Reports on Wehle of 19: "  | 7    |   |
|---|------|---|
| 1. Type of Well GAS   | 5.   | Lease Number<br>SF-079050C<br>If Indian, All. or<br>Tribe Name                      |
| 2. Name of Operator   | 7.   | Unit Agreement Name   |
| RESOURCES OIL & GAS COMPANY   | 8.   | San Juan 28-6 Unit<br>Well Name & Number  |
| 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700   | 9.   | San Juan 28-6 U #31<br>API Well No.   |
| 4. Location of Well, Footage, Sec., T, R, M 2250'FSL, 2595'FWL, Sec.28, T-28-N, R-6-W, NMPM   |      | 30-039-26247  Field and Pool  Blanco Mesaverde  County and State  Rio Arriba Co, NM |
| 12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, C   | THER | DATA  |
| Type of Submission  _X_ Notice of Intent X_ Notice of Intent  | truc |   |
| Casing Repair Water Sh  | ut o |   |
| 13. Describe Proposed or Completed Operations   |      |   |
| It is intended to change the approved casing and cementing well according to the attached operations plan. It the subject well at the depths indicated. |      |   |
| V   |      |   |
|   |      |   |
| 14. I hereby certify that the foregoing is true and correct.  |      |   |
| Signed Varcy Oltmanns - (CHGJ) Title Regulatory Supervision   | or   | Date 3/28/00  |
| (This space for Federal or State Office use) APPROVED BY CONDITION OF APPROVAL, if any:   | te A | PR 10 2000  |

## OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #31B

Location: 2250'FSL, 2595'FWL, Section 28, T-28-N, R-6-W

Rio Arriba County, New Mexico

Latitude 36° 37.9, Longitude 107° 28.4

Formation: Blanco Mesa Verde

Elevation: 6430'GL

| Formation Tops:      | <u>Top</u> | Bottom        | <u>Contents</u> |
|----------------------|------------|---------------|-----------------|
|                      | Con Togo   | 2432′         |                 |
| Surface              | San Jose   |               |                 |
| Ojo Alamo            | 2432′      | 2557'         | aquifer         |
| Kirtland             | 2557′      | 2812'         |                 |
| Fruitland            | 2812'      | 3202'         | gas             |
| Pictured Cliffs      | 3202'      | 3341'         | gas             |
| Lewis                | 3341'      | 3772 <i>'</i> | gas             |
| Huerfanito Bentonite | 3772′      | 4147′         | gas             |
| Chacra               | 4147'      | 4867'         | gas             |
| Intermediate TD      | 4630'      |               |                 |
| Massive Cliff House  | 4867′      | 5022′         | gas             |
| Menefee              | 5022'      | 5382'         | gas             |
| Point Lookout        | 5382'      |               | gas             |
| Total Depth          | 5782'      |               |                 |

## Logging Program:

Mud Logs/Coring/DST -

Mud logs - none

Coring - Lewis cores @ 3832-3892', 4161-4221', 4312-4372'

DST - none

Wireline - GR, SP, AIT, ML, CNL, CDL, FMI, DPS, CMR - surface to TD

Cased hole - Gamma Ray, Cement bond - surface to TD

### Mud Program:

| Interval- MD | <u>Type</u> | <u>Weight</u> | <u>Vis.</u> | <u>Fluid Loss</u> |
|--------------|-------------|---------------|-------------|-------------------|
| 0- 200'      | Spud        | 8.4-9.0       | 40-50       | no control        |
| 200- 4630'   | LSND        | 8.4-9.0       | 30-60       | no control        |
| 4630- 5782'  | Air/Mist    | n/a           | n/a         | n/a               |

Pit levels will be visually monitored to detect gain or loss of fluid control.

# Casing Program (as listed, the equivalent, or better):

#### Measured

| Hole Size | <u>Depth</u>  | <u>Csq Size</u> | <u>Weight</u> | <u>Grade</u> |
|-----------|---------------|-----------------|---------------|--------------|
| 12 1/4"   | 0' - 200'     | 9 5/8"          | 32.3#         | H-40         |
| 8 3/4"    | 0' - 4630'    | 7"              | 20.0#         | J-55         |
| 6 1/4"    | 4530' - 5782' | 4 1/2"          | 10.5#         | J-55         |

Tubing Program: 0' - 5782' 2 3/8" 4.7# J-55

# BOP Specifications, Wellhead and Tests:

## Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

# Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

# Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

# Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

#### Wellhead -

 $9.5/8" \times 7" \times 2.3/8" \times 2000$  psi tree assembly.

#### General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

#### Cementing:

9 5/8" surface casing - cement with 159 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

#### 7" intermediate casing -

Lead w/435 sx Class "B" w/3% sodium metasilicate, 5# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/6% gel, 2% calcium chloride, 5# gilscnite/sx and 0.25# flocele/sx (1393 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 2712'. First stage: cement with 198 sx Class "B" 50/50 poz w/2% gel, 7 pps Gilsonite, 1% calcium chloride, 0.5 pps Cellophane. Second stage: 280 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 7 pps Gilsonite (1393 cu.ft., 100% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 2557'. Two turbolating centralizers at the base of the Ojo Alamo at 2557'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

#### 4 1/2" Production Liner -

Cement to circulate liner top. Pump 142 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 2% gel, 0.1% retardant, 5# gilsonite/sx and 0.4% fluid loss additive (180 cu.ft., 40% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

• If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

## Special Drilling Operations (Air/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The bloose line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

#### Additional Information:

- The Mesa Verde formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 300 psi
Pictured Cliffs 600 psi
Mesa Verde 700 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 9 is dedicated to the Mesa Verde.
- This gas is dedicated.

Drilling Engineer

Date