State of New Mexico
Energy, Minerals and Natural Resources Department
**Oil Conservation Division**

## Sundry Notices and Reports on Wells

1. **Type of Well**
   GAS

2. **Name of Operator**
   SOUTHLAND ROYALTY COMPANY

3. **Address & Phone No. of Operator**
   PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. **Location of Well, Footage, Sec., T, R, M**
   1640'FNL, 1770'FEL, Sec.2, T-31-N, R-12-W, NMPM, San Juan County

**API #/ (assigned by OCD)**
30-045-23958

5. **Lease Number**
   E-3150-11

6. **State Oil&Gas Lease #**
   E-3150-11

7. **Lease Name/Unit Name**
   Patterson A Com

8. **Well No.**
   **1E**

9. **Pool Name or Wildcat**
   Basin Dakota

10. **Elevation:** 6269 GR

| **Type of Submission** | **Type of Action** | |
|---|---|---|
| _X_ Notice of Intent | ___ Abandonment | ___ Change of Plans |
| | ___ Recompletion | ___ New Construction |
| ___ Subsequent Report | ___ Plugging Back | ___ Non-Routine Fracturing |
| | ___ Casing Repair | ___ Water Shut off |
| ___ Final Abandonment | ___ Altering Casing | ___ Conversion to Injection |
| | _X_ Other - Bradenhead repair | |

**13. Describe Proposed or Completed Operations**

It is intended to repair the bradenhead of the subject well according to the attached procedure and wellbore diagram.

RECEIVED
MAR 15 1995
OIL CON. DIV.
DIST. 3

SIGNATURE [signature] (LWD4) Regulatory Affairs March 13, 1995

(This space for State Use)
Approved by [signature] Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date MAR 15 1995

* Notify in time to witness

WORKOVER PROCEDURE - BRADENHEAD REPAIR

PATTERSON A COM # 1E
Dakota
NE/4 Sec. 2, T31N, R12W
San Juan Co., New Mexico
DPNO 57960

1. Comply to all NMOCD, BLM, and MOI regulations. Conduct daily safety meetings for all personnel on location.

2. Test location rig anchors and repair if necessary. Prepare blow pit. MOL and RU daylight pulling unit. Install a 400 bbl frac tank and an atmospheric blow tank. NU blooie line to blow pit, and relief line to atmospheric tank. Fill frac tank with 2% KCl water.

3. Blow down tubing (7478' of 2 3/8", 4.7#, EUE) to atmospheric tank. Control well with 2% KCl water as needed. ND wellhead and NU BOP's. Test and record operation of BOP's. Send wellhead to A-1 Machine for inspection.

4. PU on tubing and strap out of hole. Visually inspect tubing, and replace joints that are in bad condition. Note any buildup of scale, and notify Operations Engineer.

5. RU wireline unit. Run gauge ring inside liner (4 1/2", 11.6 ppf) to PBTD of 7536'. PU 4 1/2" RBP and TIH. Set RBP at 7100'. Pressure test casing to 1000 psig. Spot one sack of sand on top of RBP. POOH.

6. Run CBL (with 1000 psig pressure) to determine TOC behind 7" casing. Estimated TOC is 2000' per temperature survey. Contact Operations Engineer for design of squeeze cement.

7. Perforate 4 squeeze holes 20' above TOC. TIH with 7" fullbore packer and set 150' above perforations. Pressure up casing/tubing annulus to 500 psig. Establish rate into perforations with bradenhead valve open. Max pressure 1000 psig.

8. Mix and pump cement. (If cement circulates to surface, go immediately to tail slurry.) Displace cement to packer. Close bradenhead valve and squeeze 2 to 4 bbl of cement into perforations. Hold squeeze pressure and WOC 12 hours (overnite).

9. Release packer and POOH. TIH with 6 1/8" bit and drill out cement. Pressure test casing to 1000 psig. Test bradenhead valve for flow. Re-squeeze as necessary to hold pressure, or to stop bradenhead flow. Clean out to 4 1/2" liner top.

10. TIH with retrieving tool and retrieve RBP from 4 1/2" liner. POOH and LD RBP. TIH with 3 7/8" bit and CO to PBTD with air. Blow well clean and gauge production. POOH.

11. TIH with production tubing (seating nipple with pump-out plug one joint off bottom). Land tubing at 7500'.

12. ND BOP's and NU wellhead. Pump plug from tubing. Obtain final gauge.

13. Release rig.

Recommend: _____
Operations Engineer

Approve: _____
Drilling Superintendent

| | | | |
|---|---|---|---|
| **Contacts:** | Cement | Halliburton | 325-3575 |
| | Downhole Tools | Baker | 325-0216 |
| | Wireline | Basin | 327-5244 |
| | Operations Engineer | Larry Dillon | 326-9714 |

lwd 03/03/95

# PERTINENT DATA SHEET

3/3/95

| | | | |
|---|---|---|---|
| **WELLNAME:** | Patterson A Com 1E | **DP NUMBER:** | 57960 |
| **WELL TYPE:** | Basin Dakota | **ELEVATION:** | GL: 6269'<br>KB: 6281' |
| **LOCATION:** | 1640' FNL 1770' FEL<br>Sec. 2, T31N, R12W<br>San Juan County, New Mexico | **INITIAL POTENTIAL:** | Pitot 190 MCF/D 9/24/80<br>INITIAL SICP: 1381 psig 2/24/80<br>CURRENT SICP: 648 psig 3/29/92 |
| **OWNERSHIP:** | DK<br>GWI: 34.4058%<br>NRI: 29.0070%<br>SJBT: 65.5940% | **DRILLING:** | SPUD DATE:<br>COMPLETED: 9/24/80<br>TOTAL DEPTH: 7566'<br>PBTD: 7536' |

**CASING RECORD:**

| HOLE SIZE | SIZE | WEIGHT | GRADE | DEPTH | EQUIP. | CEMENT | TOC |
|---|---|---|---|---|---|---|---|
| 12 1/4" | 9 5/8" | 32.30# | H40 | 234' | | 200 sx | Surface |
| 8.75" | 7" | 23# | K55 | 5000' | Stage tool set at 2972' | Stage 1 100 s<br>Stage 2 230 s | TS 2000' |
| 6 1/4" | 4 1/2" | 11.6 / 10.5# | K55 | 4692'–7563 | | 340 sx | 4400' |
| Tubing | 2 3/8 | 4.70# | K-55 | 7479' | | | |

**FORMATION TOPS:**

| | | | |
|---|---|---|---|
| Ojo Alamo | 1570' | Cliff House | |
| Kirtland | | Menefee | |
| Fruitland | 2407' | Point Lookout | |
| Pictured Cliffs | 2710' | Gallup | 6512' |
| Lewis | | Greenhorn | |
| Huerfanito Bentonite | 4400' | Graneros | 7171' |
| Chacra | 5078' | Dakota | 7358' |

**LOGGING:** IES, GR-Density
GR-Correlation Log from TD-7,000'; GR/CBL from TD to TOC and across 4 1/2" liner top.B51

**PERFORATIONS** Dakota – 7281' – 7506 (14 Holes)

**STIMULATION:** Dakota 167,988 gal. 30# gel & 73,155# 20/40 sand

**WORKOVER HISTORY:** While drilling: 7: Casing parted at 4794'. Run alignment tool from 4787'-4809'. Cement with 300 sx.

| **PRODUCTION HISTORY:** | Gas | Oil |
|---|---|---|
| Cumulative as of 1994: | 1.1 BCF | 6.3 MBO |
| Current: | 6.10 MMCF | 23 BBL |

| **DATE OF LAST PRODUCTION:** | Gas | Oil |
|---|---|---|
| 12 94 | 6.10 MMCF | 23 BBL |

**PIPELINE:** Sunterra Gas Gathering Co.