

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Budget Bureau No. 1004-0135  
Expires: March 31, 1993

dlst

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
LC 029387-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No. SHUGART 'A'  
# 3

9. API Well No.  
30-0015-0563600

10. Field and Pool, or Exploratory Area  
SHUGART (Y,7R,Q)

11. County or Parish, State  
EDDY CO. NM

SUBMIT IN TRIPLICATE

Nov 3 11 27 AM '93

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
SOUTHLAND ROYALTY COMPANY

3. Address and Telephone No.  
P.O. Box 51810 Midland, TX 79710 915-688-6943

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
330' FSL & 1650' FEL  
SEC. 29, T18S, R31E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other ADD THE YATES
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

- MIRU service unit. POOH with: 123, 3/4" rods; 1, 5/8" rod and pump. ND wellhead. NU BOP. Unseat TAC (21,000# shear) and POOH with 96 joints of 2 1/16", 3.25#, J-55 tubing; tubing barrel, TAC and mud joint.
- PU bit and scraper for 4", 11.0# casing on ±3,570' of 2 3/8", 4.7#, J-55 workstring. (Perforating gun and wireline fish at 3,570'.) POOH with tubing, LD bit and scraper.
- MIRU electric wireline unit. RU pack off head on BOP. RIH with 2 5/8" expendable/retrievable perforating gun and GR. Correlate GR to GR/ Compensated Neutron Log dated 9 Apr 87 and perforate the Lower Yates from 2,624' - 2,648' with 4 SPF, 180° phasing. POOH. RDMO electric wireline unit.
- PU slim hole "Sonic Hammer," shear sleeve and tubing check valve on ±2,620' of 2 3/8", 4.7#, J-55 workstring. NU "BIW" stripping head on BOP.
- MIRU stimulation company. RU stand pipe and bales as needed to allow ±60' of tubing movement during stimulation treatment. Pressure test surface lines to 5,800 psi.
- Start pumping 2% KCl water at 2 BPM. Verify on surface monitor that Sonic Hammer is functioning. With annulus open, wash the following perforated intervals with 50 gallons per foot of 2% KCl while passing Sonic Hammer continuously across perforations.

Zone	Perforated Interval	2% KCl (gal)	Resi-Sol (gal)
Lower Yates	2,624' - 2,648'	1,200	1,600
Queen	3,259' - 3,295'	1,800	3,600
Penrose	3,512' - 3,520'	400	800
Permier	Below Fish	0	0
		3,400	6,000

- Close annulus. Increase rate to 3 BPM. Treat the perforated intervals with 6,000 gallons of Resi-Sol acid as per the listed schedule while continuously moving the Sonic Hammer through the perforated interval(s).

14. I hereby certify that the foregoing is true and correct

Signed Donna Williams Title PRODUCTION ASSISTANT Date 11/2/93

Approved by Shannon J. Shaw Title PETROLEUM ENGINEER Date 11/29/93

Anticipated Pressure (tubing): 2,900 psi  
Maximum Pressure (tubing): 6,160 psi  
Maximum Pressure (casing): 5,800 psi  
or Stripping Head rating

NOTE: Pump  $\pm 100$  gallons of 2% KCl between connections.

8. PU and LD tubing check valve. Drop ball. Lower tubing to  $\pm 3,525'$ . Open shear sleeve and annulus. Circulate hole clean with 2% KCl. Monitor returns.
9. POOH with tubing and Sonic Hammer. PU RBP and treating packer for 4", 11.0# casing, on  $\pm 2,680'$  of 2 3/8", 4.7#, J-55 tubing. Set RBP at  $\pm 2,680'$ . PU to  $\pm 2,670'$ . Set packer.
10. MIRU fracture stimulation company. NU on 2 3/8" tubing. Pressure test surface lines and RBP to 5,800 psi.
11. Release packer and POOH with tubing. NU frac valve on 4" casing. Pressure test frac valve and surface lines to 5,800 psi.
12. Fracture Lower Yates with 6,500 gallons of 35# cross-linked gel and 20,000 lbs of 12/20 Brady sand down 4" casing. See attached pump and breaker schedule.

Anticipated Rate: 20 BPM  
Anticipated Pressure: 1,700 psi  
Maximum Pressure: 5,800 psi

13. Record ISIP, 5, 10, 15 minute shut in pressures. SI for  $\pm 4$  hours.
14. RDMO frac company.
15. PU RBP retrieving tool on 2 3/8", 4.7#, J-55 workstring. RU foamed air unit. Clean out to top of RBP at  $\pm 2,680'$ . Allow well to stabilize and foam clean again. Latch on to RBP and release. POOH laying down 2 3/8" workstring, retrieving tool and RBP.
16. PU 2 1/16" mud joint, 2 1/16" x 4" TAC and tubing barrel on  $\pm 2,580'$  of 2 1/16", 3.25#, J-55 production tubing. Set TAC with tubing above top perf at 2,624'. ND BOP. NU wellhead.
17. RIH with 2" x 1 1/2" x 12' pump, 1 - 5/8" rod,  $\pm 103 - 3/4"$  rods. Space out pump and hang on. RDMO service unit.
18. Turn over to production operations. Report well tests daily for 15 days via PDT.