

Form 3160-5
(July 1989)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVED
OFFICE FOR NUMBER
OF COPIES REQUIRED
(Other instructions on reverse
side)

BLM Roswell District
Modified Form No.
NM060-3160-4

5. LEASE DESIGNATION AND SERIAL NO.
Fed. 29-055648

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Southland Royalty Company

8. FARM OR LEASE NAME
Keohane etal A Federal

3. ADDRESS OF OPERATOR
21 Desta Dr., Midland, TX 79705

3a. AREA CODE & PHONE NO.
915-686-5714

9. WELL NO.
2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

Unit L 1980' FSL & 660' FWL

10. FIELD AND POOL, OR WILDCAT
Shugart (Y,SR, Q, G)

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 28, T18S, R31E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GB, etc.)
3643'

12. COUNTY OR PARISH
Eddy

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐
☒

PULL OR ALTER CASING

☐
☐

FRACTURE TREAT

MULTIPLE COMPLETE

☐
☐

SHOOT OR ACIDIZE

ABANDON*

☐
☐

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐
☐

REPAIRING WELL

☐
☐

FRACTURE TREATMENT

☐
☐

ALTERING CASING

☐
☐

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

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

17. 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.)*

Refrac Queens, add Yates

See attached procedure for details.

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

SIGNED

Kevin L. Medley
TITLE

Production Engineer

DATE

2/21/91

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

***See Instructions on Reverse Side**

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment: data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

PRIVACY ACT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160. **PRINCIPAL PURPOSE:** The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations. (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2). (3) Analyze future applications to drill or modify operations in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

**Keohane Et Al A Federal No. 2
Shugart Field
Eddy County, New Mexico**

Recommended Procedure

1. MIRU PU. ND WH, NU BOP. POOH with any tubing (suspect that only one joint is in well).
2. Deliver $\pm 3600'$ of 2 3/8" J-55 newd production tubing to location.
3. RIH with casing scraper to PBTD or 3500', which ever is shallower. POOH.
4. MIRU wireline company. RIH with 4 1/2" CIBP and set at 3490'. RIH with 3 1/8" casing guns and perforate Queen with 2 spf at 3322'-3335' and 3341' to 3351'. POOH.
5. RIH with treating packer on 2 3/8" tubing. Test CIBP to 3500 psi. MIRU service company. NU surface lines and test to 7000 psi. Set packer at 3200'. Load, monitor and maintain 1000 psi on 2 3/8"-4 1/2" annulus. Breakdown Queen with 1500 gal of treated 2% KCl water and 81 7/8" RCNBS (sp gr = 1.3).(Bring 200 gal 7 1/2% NEFe HCl to location to use as spot acid if necessary).

| | | |
|---------------------------|---|----------|
| Rate | = | 7 bpm |
| Anticipated Pressure | = | 3900 psi |
| Maximum Pressure at 7 bpm | = | 5400 psi |
| Maximum Pressure at 4 bpm | = | 4200 psi |
| Maximum Pressure at 0 bpm | = | 3500 psi |

6. Release packer and run through perfs. POOH with tubing and packer. RU stimulation company to frac Queen.
7. Fracture stimulate Queen down 4 1/2" casing with 15500 gal 70 quality N2 foam and 38000 lbs 12/20 sand according to schedule. Pump at 12 bpm surface rate.

| <u>Stage</u> | <u>Fluid</u> | <u>PPG</u> | <u>Volume</u> |
|--------------|----------------------------------|------------|---------------|
| Pre-pad | 2% KCl + 3 drums Scale inhibitor | | 2000 |
| Pad | 70 Quality Foam | 0 | 6000 |
| 1 | 70 Quality Foam | 1 | 1000 |
| 2 | 70 Quality Foam | 2 | 1000 |
| 3 | 70 Quality Foam | 3 | 1000 |
| 4 | 70 Quality Foam | 4 | 2000 |
| 5 | 70 Quality Foam | 5 | 3000 |
| 6 | 70 Quality Foam | 6 | 1500 |
| Flush | Base Gel | 0 | 600 |

| | | |
|---------------------------|---|----------|
| Rate | = | 12 bpm |
| Anticipated Pressure | = | 1800 psi |
| Maximum Treating Pressure | = | 3500 psi |

Monitor pressure after frac for indication of closure. If closure is observed then flow frac back. Otherwise flow back 90 minutes after pumps shut down.

8. MIRU wireline company. Run gauge ring and clean out sand if necessary. Set CIBP at 3200'. Test casing and CIBP by pressuring up 4 1/2" casing to 3500 psi. Perforate Yates with 3 1/8" casing gun at 2441'-2458', 2483'-2498', 2506'-2510', 2525'-2530', and 2566'-2578' (all with 2 spf). RDMO wireline company.
9. RIH with treating packer on 2 3/8" tubing to $\pm 2600'$. MIRU stimulating company. NU surface lines and test to 6000 psi. Set packer at $\pm 2340'$. Breakdown Yates with 3000 gallons of treated 2% KCl water and 159 7/8" RCNBS (sp gr = 1.3). (Bring 250 gallons of 7 1/2% NEFe HCl to use as spot acid if necessary).

| | |
|--------------------------|------------|
| Rate | = 8 bpm |
| Anticipated Pressure | = 4350 psi |
| Maximum Pressure @ 8 bpm | = 5350 psi |
| Maximum Pressure @ 4 bpm | = 4000 psi |
| Maximum Pressure @ 0 bpm | = 3500 psi |

Release packer and run through perfs. POOH.

10. RU stimulation company to frac Yates down 4 1/2" casing. Frac Yates with 35000 gal of 70 Quality N2 foam and 85000 lbs 12/20 sand at 20 bpm. Load, monitor and maintain 1000 psi on 8 5/8"-4 1/2" annulus.

| | |
|----------------------|------------|
| Rate | = 20 bpm |
| Anticipated Pressure | = 2100 psi |
| Maximum Pressure | = 3500 psi |

| <u>Stage</u> | <u>Fluid</u> | <u>PPG</u> | <u>Volume</u> |
|--------------|----------------------------------|------------|---------------|
| Pre-pad | 2% KCl + 3 drums Scale inhibitor | | 2000 |
| Pad | 70 Quality Foam | 0 | 11000 |
| 1 | 70 Quality Foam | 1 | 3000 |
| 2 | 70 Quality Foam | 2 | 4000 |
| 3 | 70 Quality Foam | 3 | 4000 |
| 4 | 70 Quality Foam | 4 | 5000 |
| 5 | 70 Quality Foam | 5 | 6000 |
| 6 | 70 Quality Foam | 6 | 2000 |
| Flush | Base Gel | 0 | 1650 |

Monitor pressure after frac for indication of closure. If closure is observed then flow frac back. Otherwise flow back 90 minutes after pumps shut down.

11. When pressure is relieved RIH with bit and drill out CIBP at 3200'. clean out to CIBP at 3490'. POOH. RIH with mud anchor, SN and production tubing to $\pm 2400'$.
12. Deliver $\pm 2400'$ 5/8" grade KD rods to location (with a set of pony rods). Also deliver 2" x 1 1/2" x 10' pump to location. RIH with pump and rods. Space out and put on production. RDMO PU. After one week lower tubing to 3400'. Deliver 1000' of 3/4" KD rods and put back on production. (Production personnel will lower tubing.)

Approved _____ Date _____
T. J. Harrington

MERIDIAN OIL
KEOHANE A FED. NO. 2
SHUGART FIELD
EDDY COUNTY, NEW MEXICO

KLM 4/18/90

KB=3613'
GL=3602'

CURRENT CONDITION

