

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMSF078910

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit or CA/Agreement, Name and/or No.
8920007130

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
LINDRITH UNIT 90

2. Name of Operator
SOUTHLAND ROYALTY COMPANY LLC
Contact: ROBBIE A GRIGG
Email: rgrigg@mspartners.com

9. API Well No.
30-039-21266-00-S1

3a. Address
AZTEC, NM 87410

3b. Phone No. (include area code)
Ph: 817-334-7842
Fx: 817-334-7889

10. Field and Pool or Exploratory Area
S BLANCO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 28 T24N R2W NWSE
36.279511 N Lat, 107.051012 W Lon

11. County or Parish, State
RIO ARRIBA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) 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"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

SEE ATTACHED PLUG AND ABANDON PROPOSAL AND WBD FOR YOU APPROVAL.

NMOC D
MAY 18 2018
DISTRICT III

Notify NMOC D 24 hrs
prior to beginning
operations

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

**Electronic Submission #407781 verified by the BLM Well Information System
For SOUTHLAND ROYALTY COMPANY LLC, sent to the Rio Puerco
Committed to AFMSS for processing by JACK SAVAGE on 04/17/2018 (18JWS0004SE)**

Name (Printed/Typed) ROBBIE A GRIGG	Title SUPVR REGULATORY REPORTING
Signature (Electronic Submission)	Date 03/14/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JACK SAVAGE	Title PETROLEUM ENGINEER	Date 04/17/2018
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Rio Puerco

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NMOC D

8

THE AZTEC WELL FAMILY

Family-owned, founded in 1963 with Aztec Well Servicing Co.



Southland Royalty Company

Plug & Abandon Procedure

September 11, 2017

Well:	Lindrith Unit 90	API:	3003921266
Location:	1850 FSL & 1480 FEL	Field:	Pictured Cliffs
Sec, T, R:	Sec. 28, T24N, 2W	Elevation:	GL: 7207'
Cnty/State:	Rio Arriba County, NM	By:	Aztec Well Servicing
Lat/Long:	36.2695067, -107.0509872		

Objective:

Permanently plug & abandon the well from 3,170' to surface containing 2 separate cement plugs.

Prior to Rig:

1. Notify BLM & NMOCD
2. Note: verify all cement volumes based on actual slurry to be pumped.
3. See attached COA's from BLM & NMOCD.

Procedure:

1. MIRU P&A package, wash pit and wireline package.
2. Establish injection rate into perforations with water.
3. **Plug #1, 2750' - 3170' (PC top: 3108', Fruitland top: 2994', Kirtland top: 2908', Ojo Alamo top: 2853'). PC Perfs: 3108' - 3170')**: Rig up to pump down 2-7/8" casing. Mix & pump 30 sxs (35.4 cf) of Class B cement (or equivalent). After pumping the first 10 sx (11.8 cf), drop 40 ea. 1.3 S.G. RCN balls and then continue to pump remaining 20 sx (23.6 cf) of cement. Displace to 2750'. Monitor pressure/fluid level to make sure hole is staying full. WOC. If required by BLM, run CBL (note: cement to 2000' on primary cement job). Confirm TOC w/ either CBL or Perf Gun
4. **Plug #2, (8-5/8" Surface casing shoe, 150' to Surface)**: If required by BLM, Perforate at 150' and attempt to establish circulation to surface out the bradenhead valve (note: circulated cement to surface on surface casing when well was drilled). Mix approximately 60 sxs (70.8 cf) of cement and pump down the 2-7/8" casing to circulate out the BH valve. If unable to circulate, top off as necessary.
5. ND BOP and cut off wellhead below surface casing flange per regulation. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.

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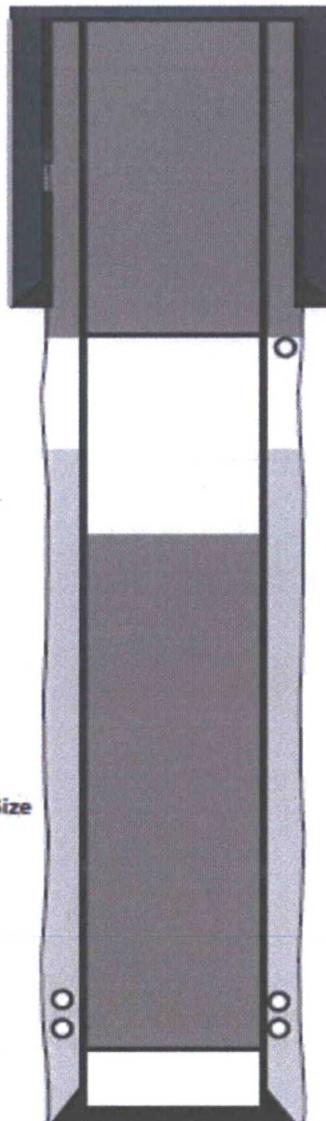
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Lat/Long:	36.2695067, -107.0509872		

Date: 9/1/17

Elevation: 7207' GL
7218' KB



Hole Size: 12-1/4"

8-5/8", 24#, Casing set @ 124'
Cement w/ 65 sxs, circulated omt to surf

Plug #2: 150' - 0'.
Class B cement, 60 sxs (70.8 cf)

Perforate @ 150'

TOC - 2000'

Ojo Alamo @ 2853'

Kirtland @ 2908'

Plug #1: 3170' - 2750'
Class B cement, 30 sxs (35.4 cf)

Hole Size
6.75"

Fruitland @ 2994'

Pictured Cliffs @ 3108'

Pictured Cliffs Perfs:
3108' - 3170'

PBTD: 3198'
TD: 3208'

2-7/8", 6.4#, J-55 casing set @ 3208'
Cement w/ 149 cf



Southland Royalty Company

CURRENT WBD

Lindrith Unit 90
Rio Arriba County, NM

TD - 3,208'; PBD - 3,198'

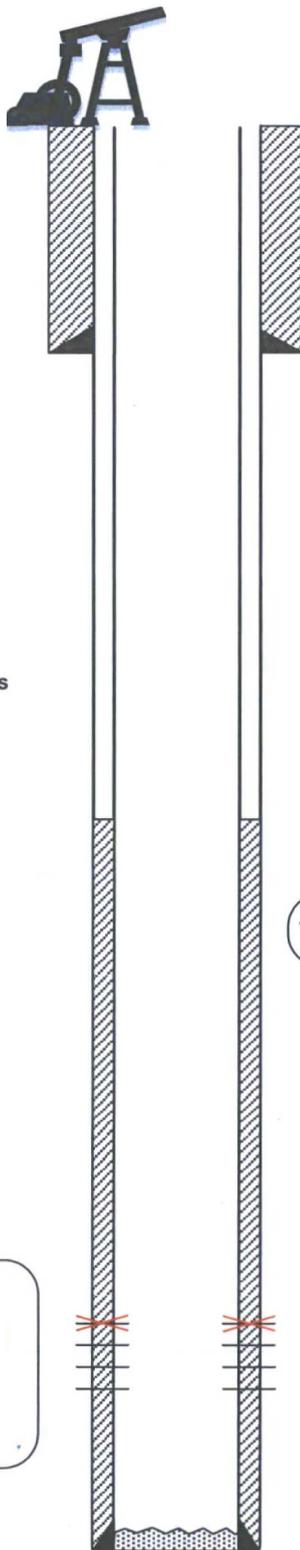
12-1/4" hole to 124' KB.
Surface Csg: 3 jts 8 5/8" 24# K-55
Setting Depth: 124'

Cement
106 ft³ Cmt
Circulated cmt to surface

6-3/4" hole to 3,208'
Production Csg: 108 jts 2-7/8" 6.4# J-55
Setting Depth: 3,208'

Cement:
149 ft³ Cmt
TOC @ 2,000'

Suicide Sqz w/ perf @ 2,855'
Cmt Retainer @ 3,196'
Sqz 75 Sx under retainer, 50 Sx into 2,855' Perfs
Tested to 4,000 psi - ok



Prepared by: CAmold
Date: 08/30/2017

KB = 11'
KB = 7,218'
GL = 7,207'
API# 30-039-21266

Spud Date: 10/05/1976
Date Completed: 12/29/1976

Ojo Alamo: 2,853'
Kirtland: 2,908'
Fruitland: 2,994'
Pictured Cliffs: 3,108'

Tubingless Completion

Pictured Cliffs Frac 12-06-1976:
3108-3170'
51,920# 10/20 Sd
51,920 gal Treated Wtr
Dropped 3 sets of 14 balls

Pictured Cliffs Perfs:
3108-15', 3130-44', 3147-59',
3163-70'
12-06-1976

2855' sqz'd w/ 175 Sx
11-23-1976

PBD: 3,198'



Southland Royalty Company

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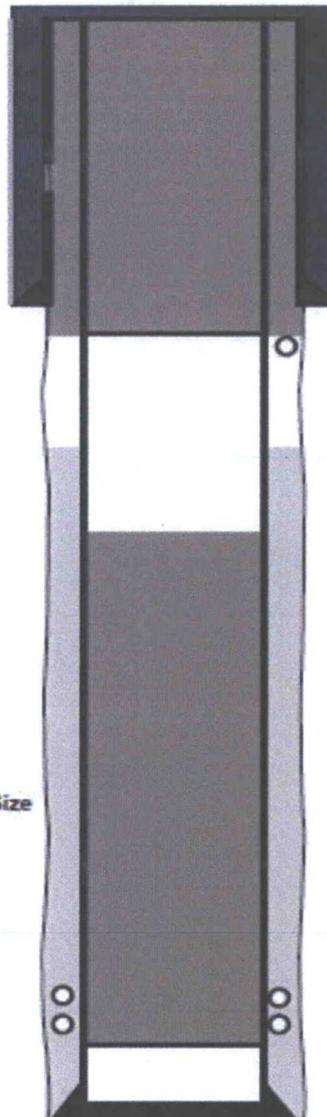
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3108' - 3170'

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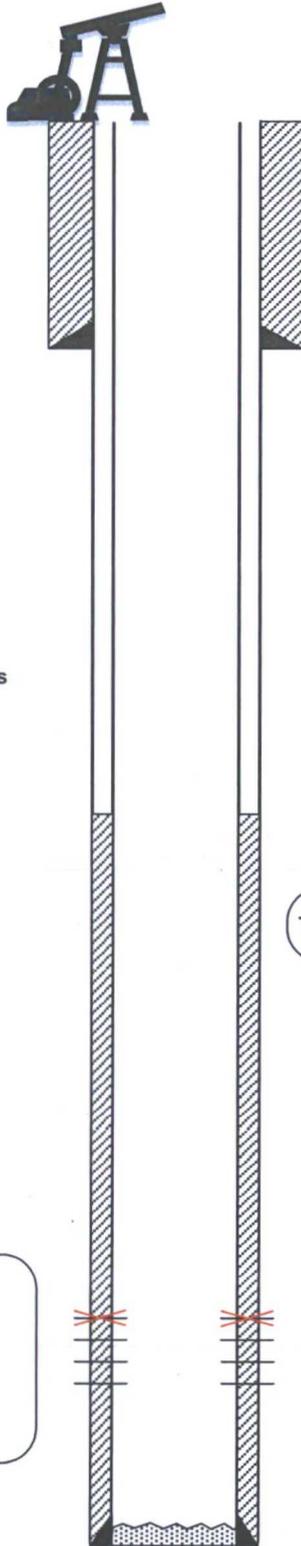
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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: Lindrith Unit 90

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
 - a) Set plug #1 (3170-2701) ft. to cover the PC, Fruitland, Kirtland and Ojo Alamo tops. BLM picks top of Ojo Alamo at 2751 ft.
 - b) Set a cement plug (1442-1342) ft. inside/outside to cover the Nacimiento top. BLM picks top of Nacimiento at 1392 ft.
 - c) Set the surface plug (174-0) ft. inside/outside to cover the surface shoe at 124 ft.

Operator must run CBL from to surface to identify TOC. Submit the electronic copy of the log for verification to the following addresses: jwsavage@blm.gov Brandon.Powell@state.nm.us

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.