

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.  
NMSF077764

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

8. Well Name and No.  
SCHUMACHER 12

9. API Well No.  
30-045-09441-00-S1

10. Field and Pool or Exploratory Area  
~~UNNAMED~~  
Basin Dakota

11. County or Parish, State  
SAN JUAN COUNTY, NM

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
SOUTHLAND ROYALTY COMPANY LLC  
Contact: HOLLY WOOD  
Email: hwood@mspartners.com

3a. Address  
400 W 7TH STREET  
FORT WORTH, TX 76102  
3b. Phone No. (include area code)  
Ph: 817-334-7842

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 17 T30N R10W SWSW 0800FSL 0800FWL  
36.806671 N Lat, 107.912979 W Lon

**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
<i>BP</i>	<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 recomplate 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

**Notify NMOCD 24 hrs prior to beginning operations**

**BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS**

**OIL CONS. DIV DIST. 3  
FEB-13 2018**

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

**Electronic Submission #402589 verified by the BLM Well Information System  
For SOUTHLAND ROYALTY COMPANY LLC, sent to the Farmington  
Committed to AFMSS for processing by JACK SAVAGE on 02/09/2018 (18JWS0102SE)**

Name (Printed/Typed) <b>ROBBIE A GRIGG</b>	Title <b>SUPVR REGULATORY REPORTING</b>
Signature (Electronic Submission)	Date <b>01/29/2018</b>

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By JACK SAVAGE Title PETROLEUM ENGINEER Date 02/09/2018

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 Farmington

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 \*\***

**NMOCD**

*u*

# THE AZTEC WELL FAMILY

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



## Southland Royalty Company

### Plug & Abandon Procedure

September 12, 2017

Well:	Schumacher #12	API:	3004509441
Location:	800 FSL & 800 FWL	Field:	Dakota
Sec, T, R:	Sec. 17, T30N, R10W	Elevation:	GL: 6455
Cnty/State:	San Juan County, NM	By:	Aztec Well Servicing
Lat/Long:	36.806483, -107.9135437		

#### Objective:

Permanently plug & abandon the well from 7,247' to surface containing 6 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 unit and cementing equipment
2. ND WH, NU BOP stack, RU rig floor and 2 3/8" handling tools
3. LD production string, Tally & TIH work string / 4 1/2" CSG scraper to 7260' TOOH
4. TIH w/ 4 1/2" CICR and set @ 7247', test TBG, roll well & Test CSG. (WOC to be determined if test holds, note prior squeezes)
5. **Plug #1, 7078' - 7247' (Dakota perms: 7297'-7400', DK Top: 7382', Graneros Top: 7238', Greenhorn Top: 7178')**: Sting out of retainer, mix & pump 15 sxs (17.7 cf) of Class B cement (or equivalent), leaving 169' of cement on top of retainer to cover Dakota, Graneros and Greenhorn tops.
6. Pull above cement & reverse TBG clean. If required, run CBL.
7. WOC, TIH & tag TOC, re-spot if necessary
8. LD TBG to 5476'
9. **Plug #2, 5326' - 5476' (Mancos Top: 5426')**: Pull up to 5476'. Mix and pump 15 sx (17.7 cf) of cement in a balanced cement plug from 5476' - 5326'.
10. Pull above cement and reverse circulate to clean out tubing.
11. WOC, TIH & tag TOC, re-spot if necessary
12. LD TBG to 4590'
13. **Plug #3, 4440' - 4590' (Mesaverde Top: 4540')**: Pull up to 4590'. Mix and pump 15 sx (17.7cf) of cement in a balanced cement plug from 4590' - 4440'.
14. Pull above cement and reverse circulate to clean out tubing.
15. WOC, TIH & tag TOC, re-spot if necessary

# THE AZTEC WELL FAMILY

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



## Southland Royalty Company

### Plug & Abandon Procedure

September 12, 2017

<b>Well:</b>	Schumacher #12	<b>API:</b>	3004509441
<b>Location:</b>	800 FSL & 800 FWL	<b>Field:</b>	Dakota
<b>Sec, T, R:</b>	Sec. 17, T30N, R10W	<b>Elevation:</b>	GL: 6455
<b>Cnty/State:</b>	San Juan County, NM	<b>By:</b>	Aztec Well Servicing
<b>Lat/Long:</b>	36.806483,-107.9135437		

16. LD TBG to 3040'
17. **Plug #4, 2890' - 3040' (Pictured Cliffs Top: 2909')**: Pull up to 3040'. Mix and pump 15 sx (17.7cf) of cement in a balanced cement plug from 3040' - 2890'.
18. Pull above cement and reverse circulate to clean out tubing.
19. WOC, TIH & tag TOC, re-spot if necessary
20. LD TBG to 1622'
21. **Plug #5, 1472' - 1622' (Ojo Alamo Top: 1572')**: Pull up to 1622'. Mix and pump 15 sx (17.7 cf) of cement in a balanced cement plug from 1622' - 1472'.
22. Pull above cement and reverse circulate to clean out tubing.
23. WOC, TIH & tag TOC, re-spot if necessary
24. LD all TBG
25. **Plug #6, (9-5/8" Surface casing shoe, 350' to Surface)**: If required by BLM, Perforate at 350' and attempt to establish circulation to surface out the bradenhead valve (note: circulated cement to surface on primary surface casing cement job). Mix approximately 100 sxs (118 cf) of cement and pump down the 5-1/2" casing to circulate out the bradenhead casing valve. If unable to circulate, top off as necessary.
26. Mobilize unit and equipment to next well

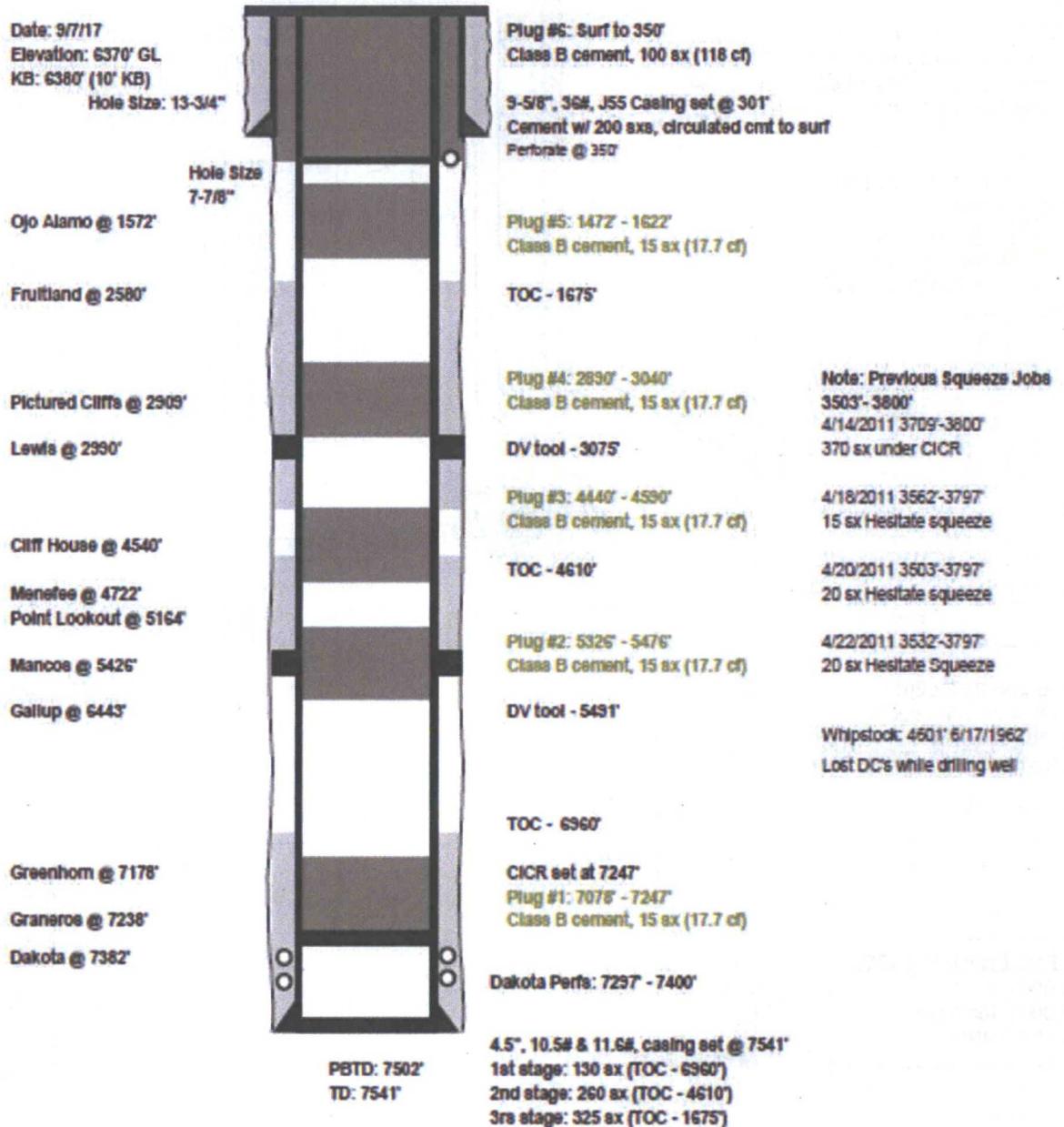
# THE AZTEC WELL FAMILY

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



## Southland Royalty Company Plug & Abandon Procedure September 12, 2017

<b>Well:</b>	Schumacher #12	<b>API:</b>	3004509441
<b>Location:</b>	800 FSL & 800 FWL	<b>Field:</b>	Dakota
<b>Sec, T, R:</b>	Sec. 17, T30N, R10W	<b>Elevation:</b>	GL: 6455
<b>Cnty/State:</b>	San Juan County, NM	<b>By:</b>	Aztec Well Servicing
<b>Lat/Long:</b>	36.806483,-107.9135437		





Southland Royalty Company

### CURRENT WBD

## Schumacher 12 San Juan, NM

TD - 7,541', PBTD - 7,502'

13-3/4" hole to 303'  
Surface Csg: 9 Jts 9-5/8" 36# J-55  
Setting Depth: 301' kb

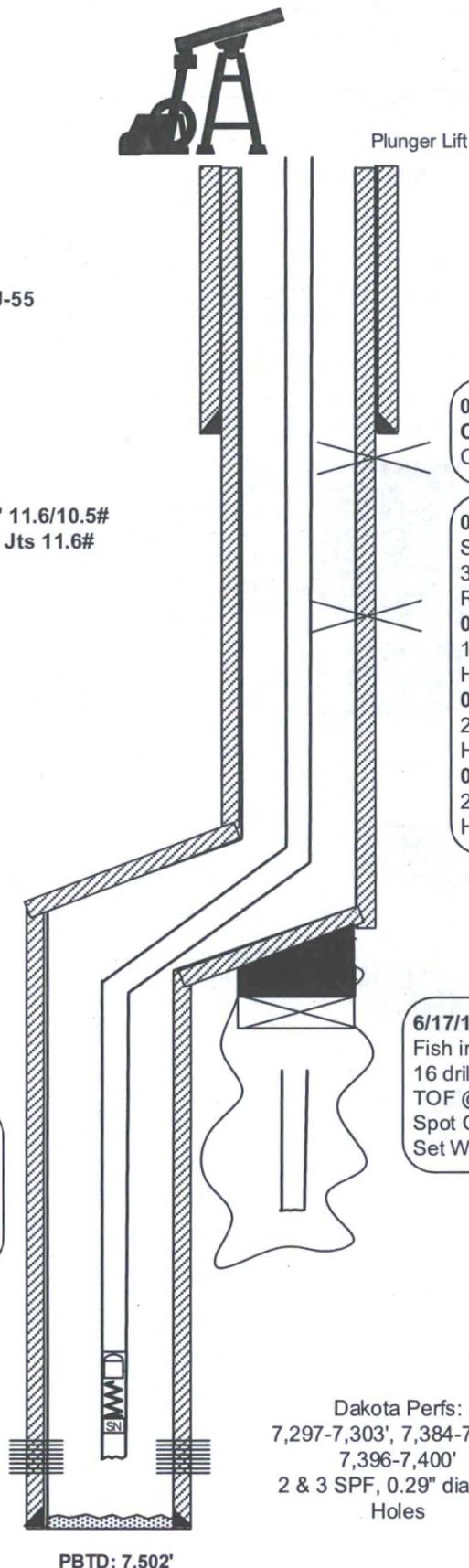
Cement  
200 Sx Regular  
Circulate cmt to surface

7-7/8" hole to 7,541'  
Production Csg: 236 Jts 4-1/2" 11.6/10.5#  
7 Jts - 11.6#, 197 Jts 10.5#, 32 Jts 11.6#  
Setting Depth: 7,541'

Cement  
3<sup>rd</sup> Stage @ 3075': 325 Sx  
TOC @ 1675'  
2<sup>nd</sup> Stage @ 5491': 260 Sx  
TOC @ 4610'  
1<sup>st</sup> Stage @ 7541': 130 Sx  
TOC @ 6960'

**Prod Tbg 05/02/2011:**  
2-3/8" 4.7# J-55 Blue Band Tbg  
12' Tbg Sub, SN, 237 jts Tbg  
EOT=7,383' KB; SN= 7,370' KB

**Dakota Frac 07/09/1962:**  
71,000 gal Wtr  
80,000# 40/60 Sd  
AIR 31.5 BPM



PBTD: 7,502'

Dakota Perfs:  
7,297-7,303', 7,384-7,388',  
7,396-7,400'  
2 & 3 SPF, 0.29" dia, 120  
Holes

Prepared by: CArnold  
Date: 08/30/2017  
  
KB = 10'  
KB = 6,380'  
GL = 6,370'  
API# 30-045-09441  
Pool: Basin Dakota  
  
Spud Date: 05/20/1962  
Completed: 07/19/1962

01/18/1963  
Csg Patch @ 1077'  
Cmt backside w/ 150 Sx

04/14/2011  
Sqz Csg Leak f/ 3709-3800'  
370 Sx Class G Under Cmt  
Retainer  
04/18/2011  
15 Sx Balanced Plug f/ 3562-3797'  
Hesitate Sqz to 950 psi  
04/20/2011  
20 Sx Balanced Plug f/ 3503-3797'  
Hesitate Sqz to 1020 psi  
04/22/2011  
20 Sx Balanced Plug f/ 3532-3797'  
Hesitate Sqz to 1002 psi

6/17/1962  
Fish in Original Vertical Hole  
16 drill collars w/ BHA left in hole  
TOF @ 4686'  
Spot Cmt above Fish  
Set Whipstock @ 4601' for Vertical Sidetrack

**Formation Depths:**  
Ojo Alamo: 1572-1660'  
Kirtland: 1660-2580'  
Fruitland: 2580-2909'  
Pictured Cliffs: 2909-2990'  
Lewis: 2990-4540'  
Cliff House: 4540-4722'  
Menefee: 4722-5164'  
Point Lookout: 5164-5426'  
Mancos: 5426-6443'  
Gallup: 6443-7178'  
Greenhorn: 7178-7238'  
Graneros: 7238-7382'  
Dakota: 7382-7508'  
Morrison: 7508-7541'

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: Shumacher #12

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) Add a cement plug (6490 – 6390) ft. **inside/outside** to cover the Gallup top. **BLM picks top of Gallup at 6440 ft.** Adjust cement volume accordingly.
  - b) Set Plug #2 (5710 - 5610) ft. **inside/outside** to cover the Mancos top. **BLM picks top of Mancos at 5660 ft.**
  - c) Add Plug (3701 – 3601) ft. **inside/outside** to cover the Chacra top. **BLM picks top of Chacra at 3651 ft.** Adjust cement volume accordingly.
  - d) Set Plug #4 (2946 – 2846) ft. **inside/outside** to cover the Pictured Cliffs top. **BLM picks top of Pictured Cliffs at 2896 ft.**
  - e) **Add a cement plug (2630 – 2530) ft. inside/outside** to cover the Fruitland top. **BLM picks top of Fruitland at 2580 ft.** Adjust cement volume accordingly.
  - f) Set Plug #5 (1710 – 1515) ft. **inside/outside** to cover the Ojo Alamo and Kirtland tops. **BLM picks top of Kirtland at 1660 ft. BLM picks top of Ojo Alamo at 1565 ft.**

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

**H<sub>2</sub>S has not been reported at this location, however, High to Very High concentrations of H<sub>2</sub>S (180 – 500 ppm GSV and 800 ppm STV) have been reported in several wells within a 1 mile radius of this location. It is imperative that H<sub>2</sub>S monitoring and safety equipment be on location during plugging operations at this location.**

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.