

submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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  
1710' FNL, 1760' FEL, Sec.25, T-25-N, R-2-W, NMPM

5. Lease Number  
SF-081296 NM 03991

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
Hill Federal #2Y

9. API Well No.  
30-039-23752

10. Field and Pool  
Blanco Mesaverde EXT  
Gavilan Mancos

11. County and State  
Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input checked="" type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

It is intended to plug back the subject well according to the attached procedure and wellbore diagram.

RECEIVED  
JUN 27 1995  
OIL CON. DIST.  
DIST. 3

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

Signed [Signature] (CAN9) Title Regulatory Affairs Date 6/14/95

(This space for Federal or State Office Chief, Lands and Mineral Resources)

APPROVED BY [Signature] Title \_\_\_\_\_ Date JUN 26 1995

CONDITION OF APPROVAL, if any:

[Signature]

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-10  
Revised February 21, 199  
Instructions on bac.  
Submit to Appropriate District Office  
State Lease - 4 Copy  
Fee Lease - 3 Copy

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23852		Pool Code 72319	Pool Name Blanco Mesaverde EXT
Property Code 10510	Property Name Hill Federal		Well Number 2Y
OGRID No. 21281	Operator Name SOUTHLAND ROYALTY COMPANY		Elevation 7453'

10 Surface Location

UL or lot no. G	Section 25	Township 25N	Range 2W	Lot Idn	Feet from the 1710	North/South line North	Feet from the 1760	East/West line East	County Rio Arri
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres N/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

Not resurveyed, prepared from a plat dated 5-17-85 by Fred B. Kerr, Jr.				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Peggy Bradfield Printed Name Regulatory Affairs Title 6-12-95 Date			
1710 1760'				18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 6-9-95 Date of Survey Signature and Seal of Professional Surveyor: HERNANDEZ C. EDWARDS 8857 8857 Certificate Number			
				RECEIVED JUN 27 1995 OIL CONSERVATION DIVISION			

**Pertinent Data Sheet - Hill Federal #2Y**

**Location:** SW/NE Section 25, T-25-N, R-02-W, Rio Arriba Co., NM  
Lat. 36 - 22 - 17 Long. 106 - 59 - 52

**Current Field:** Gavilan Mancos

**Spud:** 8/26/85

**Completed:** 10/23/85

**Elevation:** 7453' @ GL  
7465' @ KB

**TD/PBTD:** 8225'/8214'

**Casing Record:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Grade</u>	<u>Depth Set</u>	<u>Cmt Vol./Top</u>
17-3/4"	13-3/8"	68#/K-55	385'	550 sks/surface
8-5/8"/7-7/8"	5-1/2"	15.5 & 17#/K-55	8214'	1075 sks (3 stg.)/1900'(TS)
Stage Tool	5-1/2"		5907'	
Stage Tool	5-1/2"		3687'	

**Tubing Record:**

<u>Size</u>	<u>Weight/Grade</u>	<u>Depth Set/Jts.</u>
2-3/8"	4.7#/J-55	7606'/239 jts.

**Formation Tops:**

Nacimiento	2530'
Ojo Alamo	3254'
Kirtland	3404'
Cliff House	5284'
Point Lookout	5722'
Mancos	5981'
Gallup-Mancos	6944'
Greenhorn	7826'
Dakota	8002'

**Logging Record:** IEL, GR-CNL/CDL, TEMPERATURE SURVEY

**Present Completion:** Mancos  
Perforations: 6948' - 7211' (selective)  
7243' - 7626' (selective)

**Hill Federal #2Y**  
Unit G. Sect. 25. T25N. R02W  
Mesaverde Recompletion

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Inspect location and install and/or test rig anchors. Install 1 -400 bbl rig tank.  
Comply with all BLM. NMOCD, Forestry, and MOI rules and regulations. **BE SAFE**

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**\*\*\*\*\*All vendors/service companies on location will be responsible for protection of the environment, any questions call \_\_\_\_\_ at \_\_\_\_-\_\_\_\_\_.\*\*\*\*\***

**1.0 Load Hole with 2% KCl and Pull Production Tubing**

- 1.1 Hold Safety Meeting. MIRU. Place fire and safety equipment in easily accessible locations. NU relief line and bleed line to laydown flow tank. Obtain and record all wellhead pressures.
- 1.2 Blow well down and load hole with 2% KCl water. ND WH. NU BOP. PU one joint of 2-3/8" tubing and drop below perforations. Circulate hole clean with 2% KCl water. PBTD is 8,168'.
- 1.3 TOH with 7,606' of 2-3/8" 4.7# tubing. Visually inspect and tally tubing on TOH. Lay down any bad joints and leave approximately  $\pm 6,500'$  (103 stands) in the derrick for the Mesaverde recompletion.
- 1.4 MIRU electric line unit. RIH with 5-1/2" 15.5# gauge ring to 6,900' (15.5# x 17# x-over at  $\pm 6,938'$  - 24' 15.5# short joint then 17# on bottom). POOH. RIH with 5-1/2" cement retainer and set same at 6,900'. POOH and RD electric line unit.

**2.0 Abandon Existing Mancos Completion**

- 2.1 PU retainer stinger and TIH on 2-3/8" tubing. Sting into retainer at 6,900' and test backside to 1,000 psi surface pressure.
- 2.2 MIRU cement company. Test surface lines to 3,000 psi. Establish injection rate into Mancos perms.
- 2.3 Perform running squeeze on perforations with 150 sks of neat cement + additives. Sting out and balance 10' of cement on top of retainer. Pull above plug top and reverse out two tubing volumes. TOH and lay down stinger.

### 3.0 Run Cement Bond Log and Evaluate Cement Coverage

- 3.1 Top off casing with 2% KCl water and test casing and cement retainer to 3,000 psi surface pressure (DO NOT exceed 3,800 psi = 80% of burst rating of 5-1/2" 15.5# K-55 csg). If leak is detected, contact production engineer for procedure to repair casing.
- 3.2 RU electric line unit. Run GR/CBL/CCL inside 5-1/2" liner from PBTD to 3,000' with 500 psi surface pressure. Top of cement across Mesaverde must be at least 5,250' (50' above top shot) to continue. Top of cement across Ojo Alamo must be at least  $\pm 3.254'$  to continue. If remedial cementing is necessary, contact production engineer for squeeze procedure.
- 3.3 POOH and RD electric line unit. Send copy of bond log to production engineer and drilling superintendent for evaluation.

### 4.0 Perforate and Stimulate Lower Point Lookout

- 4.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Lower Point Lookout interval. TOH w/ tubing.
- 4.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf, 90° phasing:

**5,908' - 6,220'. (26 holes)**

**Actual select fire settings will be provided to the perforators prior to moving on the well.**

POOH and RD electric line unit.

- 4.3 TIH w/ one stand 2-3/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 1,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 50, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 4.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.

- 4.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 4.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,850'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

### **5.0 Perforate and Stimulate Massive Point Lookout**

- 5.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Massive Point Lookout interval. TOH w/ tubing.
- 5.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306, 12 gram Owen charges 0.31" holes w/ 12.02 " penetration. 2 spf, 90° phasing:
- 5,694' - 5,828'. (142 holes)**
- POOH and RD electric line unit.
- 5.3 TIH w/ one stand 2-3/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 2,500 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 210, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 5.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.
- 5.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 5.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,650'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

#### 6.0 Perforate and Stimulate Menefee

- 6.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Menefee interval. TOH w/ tubing.
- 6.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306. 12 gram Owen charges 0.31" holes w/ 12.02 " penetration, 2 spf, 90° phasing:
- 5,430' - 5,622'. (52 holes)**
- POOH and RD electric line unit.
- 6.3 TIH w/ one stand 2-3/8" tubing and 5-1/2" packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 1,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 80, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 6.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.
- 6.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Lower Point Lookout interval according to attached procedure. Immediately upon completion of the stimulation, shut-in well to keep in static condition. TOH w/ tubing and packer.
- 6.6 RU electric line unit. RIH with 5-1/2" RBP and set same at 5,400'. Pressure test bridge plug to 3,000 psi for 15 minutes. POOH and RD electric line unit.

#### 7.0 Perforate and Stimulate Cliffhouse

- 7.1 TIH w/ 2-3/8" tubing and spot 7.5% HCl acid across the Cliffhouse interval. TOH w/ tubing.

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- 7.2 RU electric line unit. RIH and select-fire perforate the following intervals from top down w/ 3-1/8" HSC -3125-306. 12 gram Owen charges 0.31" holes w/ 12.02 " penetration. 2 spf, 90° phasing:

**5,300' - 5,382' selective (88 holes)**

POOH and RD electric line unit.

- 7.3 TIH w/ one stand 2-3/8" tubing and packer. RU stimulation company and prepare to breakdown and balloff with acid. Hold safety meeting and test surface treating lines to 4,000 psi. Pump 2,000 gals. of 7.5% HCl Acid @ 8-10 bbl/min. Drop a total of 140, 7/8" diameter, 1.3 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job. **Maximum treating pressure is 3,000 psi.**
- 7.4 RD stimulation company and TIH w/ 2-3/8" tubing and knock balls off perforations. Pull up hole and set packer on the end of one stand.
- 7.5 RU stimulation company. Hold safety meeting and test surface treating lines to 4,000 psi. **Maximum treating pressure is 3,000 psi.** Fracture stimulate the Cliffhouse interval according to attached procedure. Immediately upon completion of the stimulation. flow back well until it flow rate is low enough to come out of the hole. TOH w/ tubing and packer.

**8.0 Clean Out, Test Intervals, and Land Tubing**

- 8.1 Stage in the hole with retrieving head and 2-3/8" tubing and clean out to RBP @ 5,400' with air mist then pull above perforations and flow naturally. Continue this cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5,400', TOH, and LD RBP.
- 8.2 TIH w/ retrieving head and 2-3/8" tubing and continue cleaning out to RBP @ 5,650' with air mist then pull above perforations and flow naturally. Continue this cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5,650', TOH, and LD RBP.
- 8.3 TIH w/ retrieving head and 2-3/8" tubing and continue cleaning out to RBP @ 5,850' with air mist then pull above perforations and flow naturally. Continue this cycle until sand production and water production are minimal. **Obtain flow gauge.** Latch on to the RBP @ 5,850', TOH, and LD RBP.



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- 8.4 TIH with one joint 2-3/8" tubing, seating nipple and expendable check valve, (1.810" ID) and 2-3/8" production tubing for the MV. Rabbit production tubing and record final tubing tally for well file. Blow check and clean out to PBTD @ 6,890'. **Obtain final gauge of entire Mesaverde interval.** ND BOP and NU WH. Rig down and release rig.

Approved: \_\_\_\_\_  
Drilling Superintendent

**Suggested Vendors/Contacts:**

Water haul:	Chief Transport	325-2396
Wireline:	Blue Jet	325-5584
Tubing:	MOI, District Tools	326-9826
Stimulation:	DS	325-5096
Packer/RBP:	Mountain States	326-5141
Rig Supervisor:	_____	_____
Production Oper.:	Bruce Voiles	326-9571
Engineering:	Curtis Newstrom	326-9710 w 327-0722 h