

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

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  
1650'FNL, 1650'FEL, Sec.25, T-31-N, R-11-W, NMPM, San Juan County

API # (assigned by OCD)  
30-045-10341  
5. Lease Number  
Fee  
6. State Oil&Gas Lease #  
7. Lease Name/Unit Name  
Bruington  
8. Well No.  
1  
9. Pool Name or Wildcat  
Blanco Mesaverde  
10. Elevation:

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	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other - Pay add
	<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

13. Describe Proposed or Completed Operations

It is intended to repair the subject well and add pay to the Mesaverde zone according to the attached procedure and wellbore diagram.

RECEIVED  
DEC - 8 1994  
OIL CON. DIV.  
DIST. 3

SIGNATURE *[Signature]* (MEL5) Regulatory Affairs December 6, 1994

(This space for State Use)  
Approved by *[Signature]* Title Oil & Gas Inspector Date DEC - 8 1994

**Pertinent Data Sheet - Bruington #1**

**Location:** 1650' FNL, 1650' FEL, Unit G, Section 25, T31N, R11W, San Juan County, New Mexico

**Field:** Blanco Mesaverde

**Elevation:** 5814' GR

**TD:** 4960'

**PBTD:** 4960'

**Completed:** 03-13-53

**DP #:** 6625

**Sidetrack:** 06-21-73

**Prop #:** 0023066

**Casing Record:**

<u>Hole Size</u>	<u>Csg. Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Top/Cement</u>
10 1/2"	9 5/8"	36.0# J-55	215'	125 sxs	Surface/Circ
7 7/8"	7"	20.0# J-55	4125'	225 sxs	TOC @ 2255' TS
6 3/4"	4 1/2"	10.5# J-55	4960'	170 sxs	TOC ?

**Tubing Record:**

<u>Tbg Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>
1 1/2"		4786'

**Formation Tops:**

Ojo Alamo:	1052'	Huer. Bentonite:	2742'
Kirtland:	1124'	Chacra:	2805'
Fruitland:	2023'	Cliff House:	3930'
Pictured Cliffs:	2454'	Menefee:	4268'
Lewis:	2740'	Point Lookout:	4702'

**Logging Record:** CBL, IEL, GRN

**Stimulation:**

04-53: Well was shot from 4969' to 4700' w/2,095 qts of oil well explosives.

**Workover History:**

07-73: Whipstock

Set retainer @ 3855', cement w/300 sxs cement. Sidetrack.

Perf'd: 4705'-4714', 4718'-4730', 4738'-4744', 4750'-4760', 4768'-4770', 4794'-4798',

4816'-4826', 4836'-4842' w/2 SPF. Dropped 30 balls.

Frac'd: 4705' to 4842' w/40,000# 20/40 sand, 25,000# 10/20 sand & 63,010 gal water.

**Transporter:** Southern Union Gathering

# BRUINGTON #1

AS OF 10/1/1994

BLANCO MESAVERDE

UNIT G, SEC 25, T31N, R11W, SAN JUAN COUNTY, NM

COMPLETED 3/13/53  
SIDETRACKED 6/21/73

9-5/8" 36# J-55 CSG SET @ 215'  
CMT W/ 125 SX  
CIRC CMT TO SURFACE

OJO ALAMO @ 1052'  
KIRTLAND @ 1124'

1-1/2" TBG SET @ 4786'

FRUITLAND @ 2023'

TOC @ 2255' (TEMP SURVEY)

PICTURED CLIFFS @ 2454'  
LEWIS @ 2740'  
HUER. BENTONITE @ 2742'  
CHACRA @ 2805'

TOC ??

CLIFF HOUSE @ 3930'

SET RET @ 3855', CMT W/300  
SX CMT & SIDETRACK

7" 20# J-55 CSG SET @ 4125'  
CMT W/225 SX

MENEFEE @ 4268'

POINT LOOKOUT @ 4702'

PERF 4705'-4842'  
FRAC W/63,010 GAL WATER,  
40,000# 20/40 & 25,000# 10/20 SAND

4-1/2" 10.5# J55 CSG SET @ 4960'  
CMT W/170 SX

TD 4960'

**Bruington #1 - Mesaverde**  
Cliff House and Menefee Payadd / Intermediate and Bradenhead Flow Repair  
Lat-Long by GITI: 36.872253 - 107.938065  
NE/4 Section 25, T31N-R11W  
November 21, 1994

1. Hold safety meeting. MIRU. Install safety equipment and fire extinguishers in strategic locations. Install 6x400 bbl frac tanks and 1x400 bbl rig tank. Fill each frac tank with 5#s of biocide and filtered (25 micron) 2% KCl water.
2. Obtain and record all wellhead pressures. ND WH, NU BOP. TOOH with 1-1/2" tubing set at 4786' and lay down. Replace bad tubing as needed.
3. Pick up 3-7/8" bit and 4-1/2" 10.5# casing scraper on 2-3/8" workstring and TIH. Make scraper run to PBDT of 4960'. TOOH. Lay down casing scraper and bit.
4. PU 4-1/2" RBP and wireline set RBP @ 4695'. Dump sand on top of RBP with dump bailer.
5. Load hole with fresh water. Run CBL-CCL-GR and noise log from 4695' to surface w/ 1000# of pressure. RD wireline. Send copy of CBL and noise log to engineering and a squeeze procedure will be provided. If necessary, cut 4-1/2" casing above TOC and pull. Locate and squeeze 7" failure.
6. After squeeze work, TIH w/ bit and tubing and drill out cement. Obtain 700 psi pressure test and resqueeze if necessary. TOOH w/ tubing and bit.
7. Perforate the following intervals under balanced w/ 1000' of hydrostatic using 0.30" diameter holes and 3-1/8" HSC guns: ( 19 holes total.)

4362	4537
4376	4545
4392	4561
4406	4567
4422	4576
4426	4587
4456	4617
4480	4637
4516	4672
4522	

Inspect guns to ensure all perforations fired.

8. PU 2-7/8" (N-80 buttress or turned down collars) fracstring. TIH w/ blanking plug in "F" nipple and packer. Set packer @ 4680'. Pressure test tubing to 5000 psi. Retrieve blanking plug w/ slick line and test BP to 3600 psi.
9. Release packer and PUH to 4250'. Set packer @ 4250'. Balloff Menefee perforations with 1500 gallons of 15% HCl acid and 38 RCN balls. Maximum allowable treating pressure is 5000 psi (3600 psi static surface). Release packer, TIH and knock balls off. Reset packer @ 4250'.
10. SI well for 24 hours with an Amerada pressure bomb set at 4425'. Have BHP information sent to engineering within 24 hours.
11. Install 5000# frac valve on top of the 2-7/8" fracstring.

November 21 December 1, 1994

12. RU frac company. Hold safety meeting. Test surface lines to 6000 psi. **Maximum surface treating pressure is 5000 psi.** Fracture Menefee according to attached procedure. Shut in well immediately after completion of the stimulation until pressure falls to zero. RD frac company.
13. Remove frac valve. Release packer and TOOH, standing back frac string. Lay down packer.
14. PU 4-1/2" RBP and wireline set RBP @ 4250'. Dump sand on top of RBP w/ dump bailer.
15. Perforate the following Cliff House intervals under balanced w/ 1000' of hydrostatic using 0.30" diameter holes and 3-1/8" HSC guns: ( 21 holes total.)

4009	
4071	4200
4081	4207
4087	4215
4093	4226
4108	4240
4135	4253
4141	4263
4167	4268
4180	4275
4192	4281

17. PU 2-7/8" (N-80 buttress or turned down collars) fracstring. TIH w/ blanking plug in "F" nipple and packer. Set packer @ 4240'. Pressure test tubing to 5000 psi. Retrieve blanking plug w/ slick line and test BP to 3600 psi.
18. Release packer and PUH to 3950'. Set packer @ 3950'. Balloff Cliff House perforations with 1500 gallons of 15% HCl acid and 42 RCN balls. Maximum allowable treating pressure is 5000 psi (3600 psi static surface). Release packer, TIH and knock balls off. Reset packer @ 3950'.
19. Install 5000# frac valve on top of the 2-7/8" fracstring.
20. RU frac company. Hold safety meeting. Test surface lines to 6000 psi. **Maximum surface treating pressure is 5000 psi.** Fracture Cliff House according to attached procedure. Shut in well immediately after completion of the stimulation until pressure falls to zero. RD frac company.
21. Remove frac valve. Release packer and TOOH, laying down frac string. Lay down packer.
22. SI well for 3 hours after stimulation to allow gel to break then flow-back naturally as long as possible. When either flow has ceased or returns have reached a level allowing re-entry of the wellbore, TIH with 2-3/8" tubing with notched collar. CO to PBTD of 4250'. PU above the Cliff House perforations and flow the well naturally, making short trips for clean up when necessary. When returns have diminished (both sand and water), flow test the Cliff House for 3 hours.
23. PU retrieving head and TIH. Clean out to PBTD. Release RBP @ 4250' and TOOH.
24. TIH and CO to PBTD of 4695'. PU above the Menefee perforations and flow the well naturally, making short trips for clean up when necessary.

Bruington #1

Cliff House and Menefee Payadd/Intermediate and Bradenhead Flow Repair

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25. When returns have diminished (both sand and water), TOOH. PU 4-1/2" packer and TIH w/ 2-3/8" tubing. Set packer @ 4250'. Flow test the Menefee for 3 hours. Release packer and TOOH.
26. PU retrieving head and TIH. Clean out to PBTD. Release RBP @ 4695' and TOOH.
27. TIH with tubing and clean out to TD of 4960'. When water rates and sand production have diminished, TOOH, laying down 2-3/8" workstring.
28. RU wireline company. Run after - frac GR. RD wireline company.
29. TIH with one joint of 1-1/2" tubing w/ expendable check, an F-nipple, then the remaining 1-1/2" tubing. CO to PBTD. Land tubing at 4882'.
30. ND BOP's, NU WH. Pump off expendable check. Obtain final pitot. RDMO. Return well to production.

Approval: \_\_\_\_\_

Drilling Superintendent

**Contacts:**

Engineering - Mary Ellen Lutey

Office - (599-4052)

Home - (325-9387)

Frac Consultant - Mark Byars

Pager - (327-8470)

Mobile - (320-0349)

Home - (327-0096)

or Mike Martinez

Pager - (599-7429)

Mobile - (860-7518)

Home - (326-4861)