

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  
**BURLINGTON RESOURCES**  
OIL & GAS 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  
1825'FNL, 1475'FEL, Sec.10, T-30-N, R-10-W, NMPM

5. Lease Number  
SF-078125

6. If Indian, All. or Tribe Name

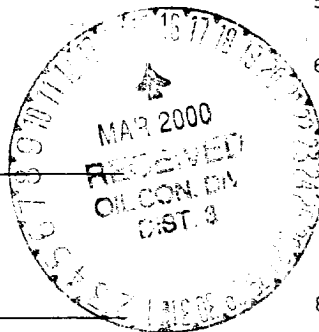
Unit Agreement Name

8. Well Name & Number  
Sunray A #2R

9. API Well No.  
30-045-27528

10. Field and Pool  
Blanco Mesaverde

11. County and State  
San Juan 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 type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input 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 checked="" type="checkbox"/> Other - Payadd	

13. Describe Proposed or Completed Operations

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

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

Signed Tammy Wimsatt Title Regulatory Administrator Date 2/16/00  
TLW

(This space for Federal or State Office use)

APPROVED BY Errol P. Riche Date MAR - 7 2000

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes 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.

calsc

00000

**Sunray A #2R**  
 Lewis Payadd Procedure  
 Unit 6, Section 10, T-30N, R-10 W  
 Lat: 36° 49.68' Long: 107° 51.97'

*This well was originally drilled in 1989 and is currently completed in the Cliff House, Menefee, and Point Lookout. It is intended to add the Lewis to the existing Mesaverde production. The Lewis will be sand fracture stimulated in two stages using 100,000 lbs 20/40 sand and 75Q 20 lb linear gel in each stage. Foam will be used to limit fluid damage to the Lewis and aid in the flowback. The flowback choke schedule is to be used to ensure that the proppant remains in the fractures.*

- > Comply with all BLM NMOCD, and BR rules and regulations.
- > Hold safety meetings.
- > Place fire safety equipment in strategic locations.
- > Inspect location and test rig anchors.
- > Dig flowback pit or set flowback tank.
- > Set and fill 3-400 BB - Frac tanks w/ 2% KCl water. Test and filter if necessary.

**Equipment Needed:**

- (3) Frac Tanks with 2% KCl water
- (2) 4-1/2" CIBP
- (1) 4-1/2" RBP
- (1) 4-1/2" Packer
- 3500' -- 3-1/2" N-80 9.3#

**PROCEDURE:**

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Lay blowdown line and blow well down. Kill well with 2% KC water. ND WH, NU BOP. Test and record operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
2. TOOH w/ 2-3/8" 4.7# J-55 tubing set at 5707' (SN @ 5670'). Visually inspect tubing, note and report any corrosion and/or scale\*\* in/on tubing. Replace bad joints as needed.

\*\* If tubing is scaled up, contact the production engineer so a scale analysis can be run to determine if an acid treatment is needed.

3. RU wireline. Run 4-1/2" gauge ring to 4650'. If ring tags up before 4650', TIH with 3-7/8" Bit, 4-1/2" 10.5# casing scraper on 2-3/8" tubing and CO to 5901'. POOH.
4. TIH with 4-1/2" CIBP on/off tool and 4-1/2" packer on 2-3/8" tubing and set CIBP @  $\pm$  4610'. Load Hole w/ 2% KCl water. PUH and set packer @ 3400'. Pressure test CIBP and casing to 3800 psi. Release packer and TOOH.
5. Correlate to GR-CBL-CCL and perforate the Lower Lewis as follows using Scallop HSC guns loaded with TAG-4000-311T 23 gm, .42" diameter, 22.2" penetration charges at 1 SPF in the following intervals from bottom up:

**4566-56, 4503-4493, 4447-37, 4392-82, 4328-18, 4245-35, 4215-05**

RD wireline.

6. TIH with 4-1/2" RBP, on/off tool and 4-1/2" packer on 2-3/8" tubing.

Set RBP at RBP setting depth. PUH  $\pm$  10 ft and set Packer. RU stimulation company and pressure test RBP and lines to 3800 psi. Release packer, and reset packer at Packer Setting Depth. Breakdown perforations and establish an injection rate between 8 and 10 BPM with 333 gals of Acetic Acid + 5% NH<sub>4</sub>Cl \*\*. Breakdown to the **Max pressure of 3800 psi**. Release packer and RBP. Repeat for the remaining intervals.

**Sunray A #2R**  
 Lewis Payadd Procedure  
 Unit 6, Section 10, T-30N, R-10 W  
 Lat: 36° 49.68' Long: 107° 51.97'

\*\* All Acid to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH <sub>4</sub> CL	clay control

FBP Setting Depth	Packer Setting Depth	Perforation Intervals
4600	4460	4493-4503, 4456-66
4480	4405	4437-47
4405	4170	4205-15, 4235-45, 4318-28, 4382-92

7. TOOH w/ RBP. Packer, and 2-3/8" tubing. PU and TIH w/ 4-1/2" packer, 4 joints 2-3/8" 4.7# J-55, 2-3/8" X 3-1/2" N-80 crossover, and 3-1/2" 9.3# N-80 Frac String. Set Packer @ 3400' or where good cement dictates.
8. Pressure Test surface lines to 7000 psi. Fracture stimulate Lower Lewis with 100,000 lbs 20/40 sand in 66,184 gals 75Q 20 lb linear gel at a rate of 35 BPM in 0.5 to 3.0 ppg stages. Apply 500 psi to annulus. Monitor annulus pressure throughout stimulation. **Tag sand with 3 radioactive isotopes. Maximum Surface Treating Pressure is 6000 psi.** At 35 BPM friction pressure is approximately 3400 psi. Slow rate during flush. Flush to 100' above top perf with 75Q foam.
9. Record ISIP, 5, 10 and 15 shut-in pressure. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Begin flowback after stimulation company has rigged down from frac valve. Open well to pit on accordance with flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to pre-determined size listed in table and begin flowing through adjustable choke. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of adjustable choke and close adjustable choke.

10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 3 hrs.
18/64" Choke	Approximately 3 hrs.
20/64" Choke	Approximately 3 hrs.
22/64" Choke	Approximately 3 hrs.
24/64" Choke	Approximately 3 hrs.
32/64" Choke	Approximately 3 hrs.

**NOTE: Follow this schedule to utilize a 24+ hour flowback. If well begins to slug or make large amounts of sand to surface, drop to next lower choke size. If well begins to taper off in liquid production (mostly N<sub>2</sub>), change to next larger choke size before time schedule dictates.**

10. Release packer and TOOH. Stand back 3-1/2" frac string, 3-1/2" X 2-3/8" crossover, and 2-3/8" Frac String.
11. TIH w/ 4-1/2" CIBP, on/off tool and 4-1/2" packer on 2-3/8" tbg and set CIBP @ ± 4170'. PUH, set packer @ 3400', and pressure test CIBP and casing to 3800 psi. Release packer and TOOH.

**Sunray A #2 R**  
 Lewis Payadd Procedure  
 Unit **G** Section **10**, T-30N, R-10 W  
 Lat: **36° 49.68'** Long: **107° 51.97'**

12. RU wireline. Correlate to GR-CBL-CCL and perforate the Upper Lewis as follows using Scallop HSC guns loaded with TAG-4000-311T 23 gm, .42" diameter, 22.2" penetration charges at 1 SPF in the following intervals from bottom up:

**4122-12, 4053-43, 3984-74, 3964-54, 3901-3891, 3870-60**

RD wireline.

13. TIH with 4-1/2" RBP, on/off tool and 4-1/2" packer on 2-3/8" tubing.

Set RBP at RBP setting depth. PUH  $\pm$  10 ft and set Packer. RU stimulation company and pressure test RBP and lines to 3800 psi. Release packer, and reset packer at Packer Setting Depth. Breakdown perforations and establish an injection rate between 8 and 10 BPM with 333 gals of Acetic Acid + 5% NH<sub>4</sub>Cl \*\*. Breakdown to the **Max pressure of 3800 psi**. Release packer and RBP. Repeat for the remaining intervals.

\*\* All Acic to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH <sub>4</sub> CL	clay control

RBP Setting Depth	Packer Setting Depth	Perforation Intervals
4155	4000	4043-53, 4112-22
4030	3920	3954-65, 3974-84
3935	3810	3860-70, 3891-3901

14. TOOH w/ RBP, Packer, and 2-3/8" tubing and stand back. TIH w/ 4-1/2" packer, 4 joints 2-3/8" 4.7#, 2-3/8" X 3-1/2" N-80 crossover, and 3-1/2" 9.3# N-80 Frac String. Set Packer @ 3400' or where good cement dictates.
15. Pressure Test surface lines to 7000 psi. Fracture stimulate Lower Lewis with 100,000 lbs 20/40 sand in 65,953 gals 75Q 20 lb linear gel at a rate of 35 BPM in 0.5 to 3.0 ppg stages. Apply 500 psi to annulus. Monitor annulus pressure throughout stimulation. **Tag sand with 3 radioactive isotopes. Maximum Surface Treating Pressure is 6000 psi.** At 35 BPM friction pressure is approximately 3300 psi. Slow rate during flush. Flush to 100' above top perf with 75Q foam.
16. Record ISIP, 5, 10 and 15 shut-in pressure. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Begin flowback after stimulation company has rigged down from frac valve. Open well to pit on accordance with flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to pre-determined size listed in table and begin flowing through adjustable choke. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of adjustable choke and close adjustable choke.

10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 3 hrs.
18/64" Choke	Approximately 3 hrs.
20/64" Choke	Approximately 3 hrs.
22/64" Choke	Approximately 3 hrs.
24/64" Choke	Approximately 3 hrs.
32/64" Choke	Approximately 3 hrs.

**Sunray A #2R**  
Lewis Payadd Procedure  
Unit **G**, Section **10**, T-30N, R-10 W  
Lat: 36° 49.68' Long: 107° 51.97'

**NOTE:** Follow this schedule to utilize a 24+ hour flowback. If well begins to slug or make large amounts of sand to surface, drop to next lower choke size. If well begins to taper off in liquid production (mostly N<sub>2</sub>), change to next larger choke size before time schedule dictates.

17. Release packer and TOOH. Laydown 3-1/2" frac string, 3-1/2" X 2-3/8" crossover, and 2-3/8" Frac String.
18. TIH w/ 3-7/8" bit on 2-3/8" tubing and CO to CIBP @ 4170'. Monitor gas and water returns. When sand and water allow (less than 5 BPH and trace sand), take a Upper Lewis pitot gauge. DO CIBP @ 4170' with a minimum of 12 BPH mist rate.
19. CO to CIBP @ 4610'. Monitor gas and water returns. When sand and water allow (less than 5 BPH and trace sand), take a complete Lewis pitot gauge. DO CIBP @ 4610' with a minimum of 12 BPH mist rate.
20. Continue to CO to PBTD with air. Blow well at PBTD and monitor water rates. If needed continue to blow well for clean up. When water rates are below 5 BPH and there is no sand production, TOOH.
21. TIH with an expendable check, one 2-3/8" joint, seating nipple, and remaining production tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. Obtain final Lewis/Cliff House/Menefee/Point Lookout pitot gauge. Land tubing at ± 5850'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.
22. RU Pro-Technics. Run After Frac Log across Lewis (4700' – 3600'). RD Pro-Technics.

Recommended: Michele Quisel 11-23-99  
Production Engineer

Approved: PJBS 11/24/00  
Drilling Superintendent

Approved: [Signature] 11/27/99  
Team Leader

Contact:

Michele Quisel 324-6162 (WORK) 326-8196(PAGER) 564-9097(HOME)

Vendors:	Wireline:	Basin	327-5244
	RA Tagging:	Pro-Technics	326-7133

# Sunray A #2R

1825' FNL, 1475' FEL

Unit G Sec. 10, T-30 R-10W

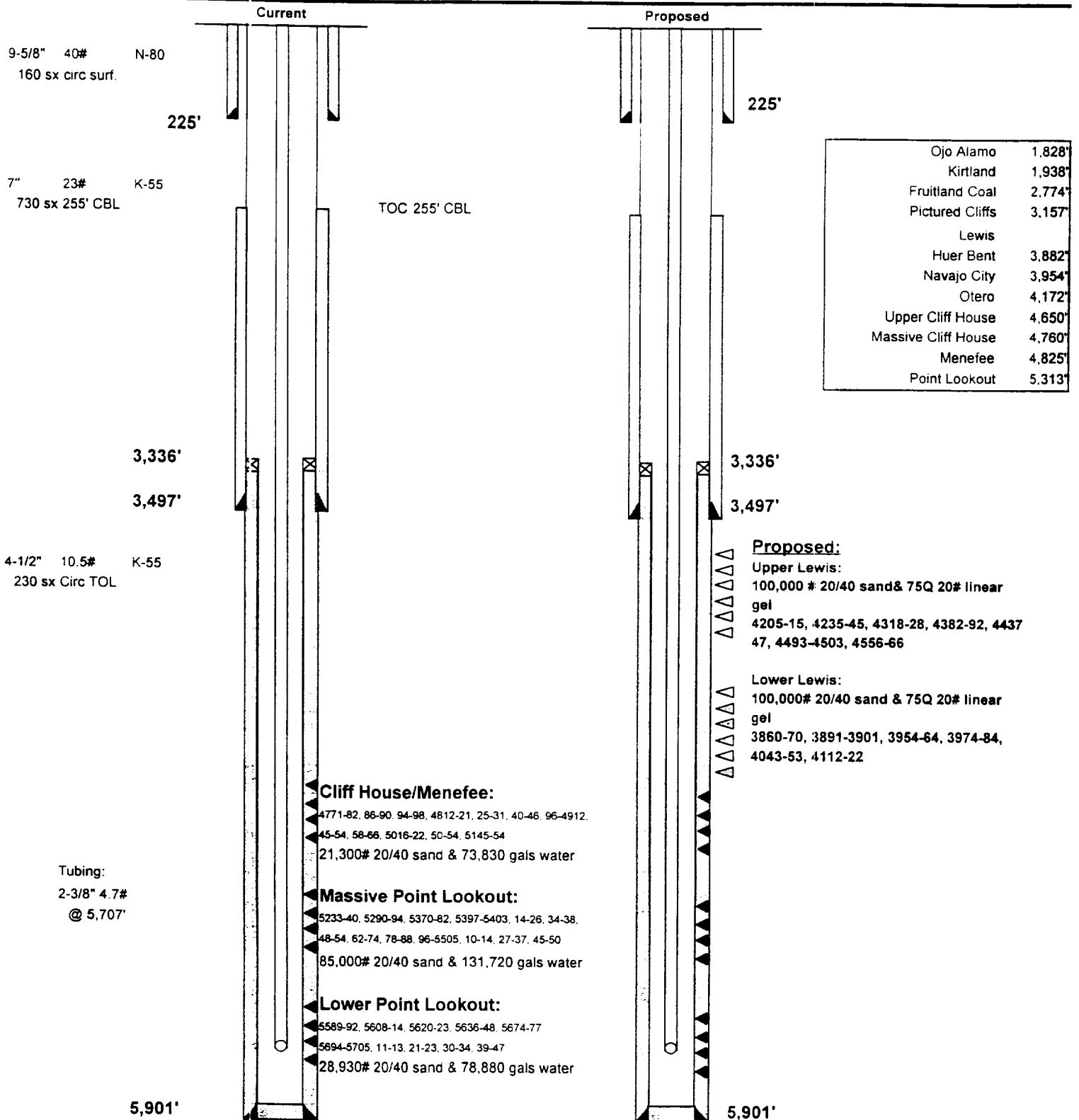
San Juan County, New Mexico

KB 6509

GL 6496

Lat: 36o 49.68'

Long: 107o 51.97'



Ojo Alamo	1,828'
Kirtland	1,938'
Fruitland Coal	2,774'
Pictured Cliffs	3,157'
Lewis	
Huer Bent	3,882'
Navajo City	3,954'
Otero	4,172'
Upper Cliff House	4,650'
Massive Cliff House	4,760'
Menefee	4,825'
Point Lookout	5,313'

PBTD = 5,886'  
TD= 5,901'

11/23/1999

MSQ