submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

2001 FEB -6 PM 1:03

1. **Type of Well**
GAS

5. **Lease Number**
1-149-IND-8464

6. **If Indian, All. or Tribe Name**
Jennie Bunny etal (Nav)

7. **Unit Agreement Name**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

JUN 2001

8. **Well Name & Number**
Bunny et al #1E

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-045-26048

4. **Location of Well, Footage, Sec., T, R, M**
1100'FSL, 1000'FWL, Sec.10, T-27-N, R-9-W, NMPM

10. **Field and Pool**
Blanco MV/Basin DK

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	
_X_ Notice of Intent	___ Abandonment	___ Change of Plans
	_X_ Recompletion	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	___ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other - commingle	

13. **Describe Proposed or Completed Operations**

It is intended to recomplete the Mesaverde formation in the existing Dakota wellbore according to the attached procedure. The Mesaverde and Dakota formations will be commingled.

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

Signed Peggy Cole Title Regulatory Supervisor Date 2/5/01

TLW

(This space for Federal or State Office use)
APPROVED BY /s/ Jim Lovato Title _____ Date JUN 25
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.

NMOCD

K

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-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-26048	72319/71599	Blanco Mesaverde/Basin Dakota

4 Property Code	5 Property Name	6 Well Number
6869	Bunny et al	1E

7 OGRID No.	8 Operator Name	9 Elevation
14538	Burlington Resources Oil & Gas Company	6129'GR

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	10	27N	9W		1100	South	1000	West	San Juan

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
S/320			

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

16

Original plat from Edgar L. Risenhoover 4-24-84.

JUN 2001
RECEIVED
OIL CON. DIV.
DIST. 3

10

1000'

1100'

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 Cole
Printed Name

Regulatory Supervisor
Title

2-5-01
Date

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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Bunny et al #1E

Mesaverde Recompletion and Mesaverde / Dakota Commingle Procedure
1100' FSL, 1000' FWL
Unit M, Sec. 10, T-27-N, R-09-W
San Juan County, NM

Project Summary:

The Bunny et al #1E was completed in the Dakota formation in 1984 by Mobil Oil Corp. BR acquired ownership and operations in September of 1992. The existing Dakota zones are producing 45 MCFPD with cumulative production of 297 MMCF.

Completion Procedure:

The following procedure details the proposed operations to re-complete this wellbore in the Menefee and Point Lookout intervals of the Mesaverde formation, and to commingle the Mesaverde and Dakota production.

- Comply with all NMOCD, BLM and BR regulations. Conduct daily safety meetings for all personnel on location. **Notify BR regulatory (Peggy Cole 326-9727)** and the appropriate Regulatory Agency prior to pumping **any** cement job and after CBL is run. If an unplanned cement job is required, **approval is required before the job can be pumped. If verbal approval is obtained, document the approval in Dims.** Allow adequate notice prior to the pump time for the Agency to witness the cementing operation.
- Inspect location and wellhead and install rig anchors prior to rig move.
- Construct blow pit.

1. MOL, hold safety meeting and RU completion rig. Insure all safety equipment is strategically located and functioning properly. NU relief lines to blow pit. Set frac tanks and fill with 2% KCl water. Blow well down and kill with 2% KCl water as necessary.

2. ND wellhead. NU BOP, stripper head and blooie line. Test BOP.

3. TOH w/ 2-3/8", 4.7# J-55 tbg set at 6579' and stand back. Inspect tubing and replace as necessary for production string following workover operations.

4. MI wireline and run 4-1/2" gauge ring to check TD (5-1/2" 15.5# csg drift – 4.825"). If gauge ring tags above 6580', PU 4-3/4" casing mill on a 2-3/8" tubing, 4.7# J-55 tubing. Clean out to top Dakota perf at 6580'. TOOH.

5. MI wireline. Set CIBP @ 6540'. Load hole with 2% KCL water.

6. PU 5-1/2" packer and 2 jts 2-3/8", 4.7#, J-55 tubing. TIH and set packer @ +60'. Pressure test CIBP and 5-1/2" casing to **maximum treating pressure of 4050 psi** (~85% of burst for 5-1/2" csg). Bleed off pressure. TOOH.

7. RU wireline and perforate two sets of squeeze holes (2 spf) at 4710' and 3710'.

8. PU cement retainer on 2-3/8" 4.7# J-55 tubing. TIH and set retainer @ 4660'.

9. Establish circulation through squeeze holes at 4710' up backside of 5-1/2" casing to squeeze holes at 3710'.

10. After establishing circulation, squeeze with 300 sx Class "B" neat w/ 2% CaCl. **Maximum pressure is 4050 psi**. (Note: If circulation is not established contact Drilling Manager or Production Engineer to discuss revisions to cement volumes and squeeze operations.)

11. Sting out of retainer and TOOH to WOC (Note: Do not reserve circulate).

12. Load hole with 2% KCL water and pressure test casing to 500 psi.

13. PU 4-3/4" mill on 2-3/8" 4.7#, J-55 tubing and TIH. Drill out cement across top squeeze holes @ 3710'. Shut in backside and test upper squeeze holes to 500 psi.

14. Drill out cement retainer @ 4660' and cement across bottom squeeze holes at 4710'. Clean out to CIBP @ 6540'. Shut in backside and test squeeze holes to 500 psi. TOOH.

15. MI wireline. Run CBL/GR/CCL log from CIBP @ 6540' to 3300' and from 2200' to surface. Evaluate CBL insure to good bond exists over proposed Point Lookout (4450' – 4604') and Menefee (4022' – 4318') perforation intervals for isolation of hydraulic fracture treatment.

    Note: Should poor bond or questionable isolation exist over the proposed perforation interval, contact the Drilling Manager or Production Engineer to discuss modification of the planned perforation depths. The cement squeeze is required to isolate the two fracture treatments and restrict the frac fluids from traveling up the annulus between the 7-7/8" hole and 5-1/2" casing. The Cliff House interval (3788' – 3818') is expected to be "wet" and must be isolated with good bond above and below the zone to keep water from being produced in this wellbore. Breakdown and ball off operations will be conducted under packers to keep the squeeze holes above the Cliff House from being part of the intervals to be "balled off". It should not be a problem if these squeeze perfs are partially broken down during the fracture stimulation activity, as long as good cement bond exists between the Cliff House zone and the squeeze perfs.

POINT LOOKOUT:

16. NU wireline company's perforating guns. Correlate CBL / GR log with attached open hole log section. Perforate **Point Lookout** interval with a select fire HSC gun with HSC-3125-302T / 10.0 gram Owen charges; 0.29" Entry hole; 16.64" penetration in concrete. Shoot 30 holes at the following depths:

4450	4452	4454	4456	4458	4460	4462	4474	4476	4478
4480	4494	4496	4498	4500	4502	4504	4532	4534	4536
4554	4556	4558	4560	4566	4568	4570	4600	4602	4604

    RD wireline company.

17. PU 5-1/2" packer on 2-3/8", 4.7#, J-55 tubing. TIH and set packer @ 4200'.

18. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi (1000 psi over maximum treating pressure).

19. Breakdown Point Lookout perforations with 2000 gals 15% HCl acid**. Drop 60 RCN 7/8" 1.3 specific gravity perf balls evenly spaced throughout job. Attempt to ball off. Record ISIP. **Maximum surface treating pressure is 4050 psi** (~85% of burst for 5-1/2" csg). **HCl acid to contain 2 gals corrosion inhibitor per 1000 gals acid.

20. Bleed off pressure. Release packer and lower to below 4604' to knock off perf balls.

21. Pull out of hole with all but 2 jts of 2-3/8", 4.7#, J-55 tubing. Re-set packer @ ±60'.

22. NU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi. Fracture stimulate the Point Lookout with 100,000 lbs 20/40 Arizona sand in 105,000 gals of slick water at 50 BPM. Tag sand with 3 isotopes. **Maximum surface treating pressure is 4050 psi.** Average surface treating pressure is estimated to be 1816 psi @ 50 BPM. Estimated tubing and perforation friction will be 1513 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	15,000	
0.5 ppg	25,000	12,500
1.0 ppg	30,000	30,000
1.5 ppg	25,000	37,500
2.0 ppg	10,000	20,000
Flush (75' above top perf)	4,373	
Totals	**109,373**	**100,000**

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

23. Record ISIP, 5, 10, and 15 minute shut-in pressure. RD stimulation company.

24. Bleed off pressure. Release packer. TOOH.

25. NU wireline company. Under a lubricator, RIH with CIBP and set @ 4350'.

MENEFEE:

26. NU wireline company's perforating guns. Correlate CBL / GR log with attached open hole log section. Perforate **Menefee** interval with a select fire HSC gun with HSC-3125-302T / 10.0 gram Owen charges; 0.29" Entry hole; 16.64" penetration in concrete. Shoot 30 holes at the following depths:

4022	4024	4026	4028	4060	4062	4064	4082	4084	4086
4088	4124	4126	4128	4154	4156	4158	4202	4204	4206
4300	4302	4304	4306	4308	4310	4312	4314	4316	4318

RD wireline company.

27. TIH with 5-1/2" packer on 2-3/8', 4.7#, J-55 tubing. Set packer at ±4335' (Bottom Menefee perf @ 4318'). Pressure Test CIBP @4350' to 4050 psi (~85% of burst for 5-1/2" casing).

28. Bleed off pressure. Release packer and POOH to 4318'. Spot 8 bbls of 15% HCL acid** over proposed Menefee perforation interval (4022' - 4318'). ** 15% HCl acid to contain 2 gals corrosion inhibitor per 1000 gals of acid

29. POOH and set packer @ 3800' (Upper Squeeze holes @3710').

30. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi (1000 psi over maximum treating pressure).

31. Breakdown Menefee perforations with 2000 gals 15% HCl acid**. Drop 60 RCN 7/8" 1.3 specific gravity perf balls evenly spaced throughout job. Attempt to ball off. Record ISIP. **Maximum surface treating pressure is 4050 psi** (~85% of burst for 5-1/2" csg). **HCl acid to contain 2 gals corrosion inhibitor per 1000 gals acid.

32. Bleed off pressure. Release packer and lower to below 4318' to knock off perf balls.

33. Pull out of hole with all but 2 jts of 2-3/8", 4.7#, J-55 tubing. Re-set packer @ ±60'.

34. NU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi. Fracture stimulate the Menefee with 100,000 lbs 20/40 Arizona sand in 105,000 gals of slick water at 50 BPM. Tag sand with 3 isotopes. **Maximum surface treating pressure is 4050 psi.** Average surface treating pressure is estimated to be 2181 psi @ 50 BPM. Estimated tubing and perforation friction will be 1484 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	15,000	
0.5 ppg	25,000	12,500
1.0 ppg	30,000	30,000
1.5 ppg	25,000	37,500
2.0 ppg	10,000	20,000
Flush (100' above top perf)	3,920	
Totals	**108,920**	**100,000**

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

35. Record ISIP, 5, 10, and 15 minute shut-in pressure. RD stimulation company.

36. Flow back through choke manifold & monitor flow. Flow @ 20 bbl/hr. or less, if sand is observed.

37. When pressure allows, release packer and TOOH.

38. TIH w/ 4-3/4" casing mill on 2-3/8", 4.7#, J-55 tbg and clean out to CIBP @ 4350'. When well is sufficiently clean (<5 BWPH), **Take pitot gauges for Menefee only** (Menefee perfs 4022' - 4318' OA).

39. Drill out CIBP @ 4350' and clean out to CIBP @ 6540'. When well is sufficiently clean (<5 BWPH), **Take pitot gauges for combined Point Lookout and Menefee intervals.** (Point Lookout perfs 4450' - 4604' OA).

40. Drill out CIBP @ 6540' and clean out to PBTD of 6740' (Existing Dakota perfs 6580'- 6717'). Blow well clean and TOOH.

Bunny et al #1E
Mesaverde Recompletion and Mesaverde / Dakota Commingle Procedure
1100' FSL, 1000' FWL
Unit M, Sec. 10, T-27-N, R-09-W
San Juan County, NM

41. TIH with an expendable check; 1 jt. of 2-3/8", 4.7#, J-55 tubing; S.N. w/ 1.78" ID; and half of the 2-3/8", 4.7#, J-55 tubing. Run a broach on sand line to insure the tubing is clear.

42. TIH with remaining 2-3/8" tubing and broach this tubing. Replace any bad joints. CO to PBTD with air/mist. PU above perforations. Alternate blow and flow periods, making short trips for clean up as necessary.

43. Land tubing @ ±6665'. Pump off check valve. Flow up tubing. **Take final water rates and pitot gauge for gas rates.**

44. ND BOP & NU wellhead & tree. **During workover operations the reservoir may be charged with air. As a result of introducing air to the wellbore, excess oxygen levels may be in the reservoir and/or wellbore. Contact the Lease Operator to discuss the need for determining oxygen levels prior to returning the well to production.**

45. Rig down & release rig. (Post frac tracer log will be run through tubing after the rig is off location).

Approve: _____ 1/30/01
Team Leader

Approve: Bruce D. Boyer 1-31-01
Drilling Manager

Recommend: _____
Production Engineer

Regulatory: Sundry Notice Required
Yes X
No ___

Peggy Cole 2-1-01

Vendors:

Stimulation:	No Preference	
Radioactive Tagging:	ProTechnics	326-7133

Production Engineer:	Randy Buckley	Office 326-9597	Pager 326-8820		Home 599-8136
Lease Operator:	Joe Golding		Cell 320-1595		Pager 324-7824
Specialist:	Johnny Cole		Cell 320-2521		Pager 326-8349
Forman:	Darren Randall	Office 326-9808	Cell 320-2618		Pager 324-7335