

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) 326-3409

4. Location of Well, Footage, Sec., T, R, M

660' FNL, 660' FEL, Sec. 3, T-26-N, R-9-W, NMPM

5. Lease Number
SF-078135

6. If Indian, All. or
Tribe Name

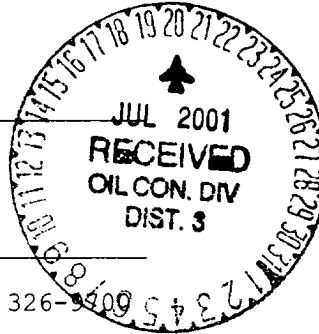
7. Unit Agreement Name
Huerfanito Unit

8. Well Name & Number
Huerfanito Unit #71

9. API Well No.
30-045-06076

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

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

Type of Action

☐ Abandonment
☒ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other - commingle
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut off
☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to recomplete the subject well to the Mesaverde formation and commingle the Mesaverde/Dakota formations according to the attached procedure and wellbore diagram.

2001 MAR -8 PM 2:01

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

Signed [Signature] Title Regulatory Supervisor Date 3/7/01
TLW

(This space for Federal or State Office use)

APPROVED BY /s/ Jim Lovato Title _____ Date JUL 17

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

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

API Number 30-045-06076		Pool Code 72319/71599	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7138	Property Name Huerfanito Unit		Well Number 71
GRID No. 14538	Operator Name Burlington Resources Oil & Gas Company		Elevation 6394' 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
A	3	26N	9W		660	North	660	East	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

Dedicated Acres E/320.75	Joint or Infill	Consolidation Code	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

16 Original plat from M.J. Meyer 12-27-62.		3	660'	660'	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 3-07-01 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 Surveyer:
					Certificate Number

Huerfanito Unit #71
Mesaverde Recompletion and Mesaverde / Dakota Commingle Procedure
660' FNL, 660' FEL
Unit A, Sec. 3, T-26-N, R-09-W
San Juan County, NM

Project Summary:

The Huerfanito Unit #71 was originally as an open hole Dakota well in 1951. In 1962 the open hole was cleaned out and a 4" liner was run and cemented. The existing Dakota zones are producing 60 MCFPD with cumulative production of 725 MMCF.

Completion Procedure:

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

- Comply with all NMOC, 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 6653' (217 jts, SN at 6622') and stand back. Inspect tubing and replace as necessary.
 4. PU 4-3/4" bit and watermelon mill on 2-3/8" 4.7# J-55 tubing. TIH and cleanout to top of 4" liner @ 6542'. TOOH.
 5. MI wireline and run 3-1/8" gauge ring to check TD (4", 11.6# drift – 3.303"). If gauge ring tags above 6554', PU 3-1/4" casing mill on a 2-3/8" 4.7# J-55 tubing. Clean out to PBTD of 6780' (existing Dakota perms 6554' – 6710' OA) **Blow well at PBTD to check sand production rates. Make sure well is not making sand before TOOH.** TOOH.
 6. MI wireline. Set CIBP in 4" liner @ 6548' (Note: TOL @ 6542' and top Dakota perf @ 6554').
 7. PU 5-1/2" packer on 2 jts 2-3/8", 4.7#, J-55 tubing. TIH and set packer @ +60'. Pressure test CIBP, 4" liner top and 5-1/2" casing to **maximum treating pressure of 3600 psi** (~75% of burst for 5-1/2" 15.5# J-55 casing). Bleed off pressure. TOOH.
 8. RU wireline and perforate 2 squeeze holes at 4700'.
 9. PU 5-1/2" packer on 2 jts 2-3/8", 4.7#, J-55 tubing. TIH and set packer @ +60'. Establish injection rate. **Do not exceed maximum treating pressure of 3600 psi** (~75% of burst for the 5-1/2" 15.5# J-55 casing). TOOH.

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660' FNL, 660' FEL
Unit A, Sec. 3, T-26-N, R-09-W
San Juan County, NM

10. RU wireline and perforate second set of squeeze holes 4400'.
11. PU cement retainer on 2-3/8" 4.7# J-55 tubing. TIH and set retainer @ 4650'.
12. Establish circulation through squeeze holes at 4700' up backside of 5-1/2" casing to squeeze holes at 4400'.
13. After establishing circulation, squeeze with 120 sx Class "B" neat w/ 2% CaCl. **Maximum pressure is 3600 psi.** (Note: If circulation is not established contact Drilling Manager or Production Engineer to discuss revisions to cement volumes and squeeze operations.)
14. Sting out of retainer and TOOH to WOC.
15. PU 4-3/4" casing mill on 2-3/8" 4.7#, J-55 tubing and TIH. Drill out cement across top squeeze holes @ 4400'. Pressure test upper squeeze holes to 1000 psi.
16. Drill out cement retainer @ 4650' and cement across bottom squeeze holes at 4700'. Clean out to 4" liner top @ 6542'. Pressure test squeeze holes to 1000 psi. TOOH.
17. MI wireline. Under lubricator, run CBL/GR/CCL log from 4750' to 4350'. Evaluate CBL insure to good bond exists over proposed Point Lookout perfs (4512' – 4590') 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 restrict the frac fluids from traveling up the annulus between the 8-1/4" hole and 5-1/2" casing. The Cliff House interval (3725' – 3845') is expected to be "wet" and must be isolated with at least 50' good bond above the top Point Lookout perforation at 4512'. Breakdown and ball off operations will be conducted under a packer to keep the squeeze holes below the Cliff House from being part of the interval that is "balled off". The fracture treatment will be tagged with radio active tracer determine if the squeeze hole are broken down during the stimulation treatment.

POINT LOOKOUT:

18. 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-3125-302 / 10.0 gram Owen charges; 0.32" Entry hole; 14.30" penetration in concrete. Shoot 24 holes at the following depths:

4512'	4514'	4516'	4518'	4520'	4522'	4532'	4534'
4536'	4538'	4540'	4542'	4546'	4548'	4550'	4556'
4558'	4560'	4564'	4566'	4568'	4586'	4588'	4590'

RD wireline company.

19. PU 5-1/2" packer on 2-3/8", 4.7#, J-55 tubing. TIH and set packer @ 4420' (Note: Upper Squeeze holes are at 4400').

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Unit A, Sec. 3, T-26-N, R-09-W
San Juan County, NM

20. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4600 psi (1000 psi over maximum treating pressure).
21. Breakdown Point Lookout perforations with 2000 gals 15% HCl acid**. Drop 48 RCN 7/8" 1.3 specific gravity perf balls evenly spaced throughout job. Attempt to ball off. Record ISIP. **Maximum surface treating pressure is 3600 psi** (~75% of burst for 5-1/2" 15.5# J-55 casing).
 **HCl acid to contain 2 gals corrosion inhibitor per 1000 gals acid.
22. Bleed off pressure. Release packer and lower to below 4590' to knock off perf balls.
23. Pull out of hole with all but 2 jts of 2-3/8", 4.7#, J-55 tubing. Re-set packer @ $\pm 60'$.
24. NU stimulation company. Hold safety meeting. Pressure test surface lines to 4600 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 3600 psi**. Average surface treating pressure is estimated to be 2018 psi @ 50 BPM. Estimated tubing and perforation friction will be 1713 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)	4,410	
Totals	109,410	100,000

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

25. Record ISIP, 5, 10, and 15 minute shut-in pressure. RD stimulation company.
26. Bleed off pressure. Release packer. TOOH.
27. TIH w/ 3-1/4" casing mill on 2-3/8", 4.7#, J-55 tbg and clean out to 4" liner top at 6542'. When well is sufficiently clean (<5 BWPH), **Take pitot gauges for Mesaverde.** TOOH.
28. Drill out CIBP in the 4" liner at 6548'. Clean out to PBTD of 6780' (existing Dakota perms 6554' -- 6710' OA). Blow well clean and TOOH.
29. TIH with an expendable check; S.N. w/ 1.78" ID; 1 jt. of 2-3/8", 4.7#, J-55 tubing; a 2' pup joint and half of the 2-3/8", 4.7#, J-55 tubing. Run a broach on sand line to insure the tubing is clear.
30. 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.
31. Land tubing @ $\pm 6660'$. Pump off check valve. Flow up tubing. **Take final water rates and pitot gauge for gas rates.**

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San Juan County, NM

32. 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.
33. Rig down & release rig. (Post frac tracer log will be run through tubing after the rig is off location).

Approve: R. Duc 3/5/01
Inventory Development Manager

Approve: Bruce D. Boyer 3-6-01
Drilling Manager

Recommend: W. R. Cole
Production Engineer

Regulatory: Sundry Notice Required
Yes X
No

Jerry Cole 3-7-01

Vendors:

Stimulation:	No Preference		
Radioactive Tagging:	ProTechnics	326-7133	
Production Engineer:	Randy Buckley	Office 326-9597	Pager 326-8820 Home 599-8136
Lease Operator:	Kenny Clubertson		Cell 320-2545 Pager 326-8911
Specialist:	Johnny Cole		Cell 320-2521 Pager 326-8349
Forman:	Darren Randall	Office 326-9808	Cell 320-2618 Pager 324-7335

Huerfanito Unit #71
Unit A, Sec. 3, T-26-N, R-09-W
San Juan County, New Mexico

CURRENT WELLBORE

POST-WORK WELLBORE

