

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## Sundry Notices and Reports on Wells

2001 MAR -6 PM 25.16 Lease Number  
SF-078266

1. Type of Well  
GAS

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

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

1090' FNL, 640' FEL, Sec. 20, T-29-N, R-10-W, NMPM

8. Well Name & Number  
San Jacinto #6E

9. API Well No.  
30-045-24057

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

☒ Notice of Intent

☐ Abandonment

☐ Change of Plans

☐ Subsequent Report

☒ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

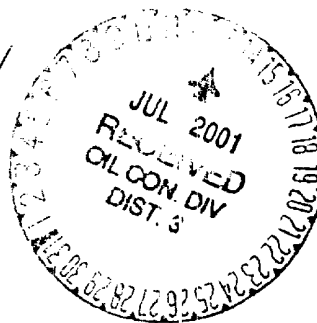
☐ Conversion to Injection

☒ Other - commingle

13. Describe Proposed or Completed Operations

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

DHC 371 AZ, 4-18-1



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

Signed [Signature] Title Regulatory Supervisor Date 3/6/01  
TLW

(This space for Federal or State Office use)

APPROVED BY /s/ Jim Lovato Title \_\_\_\_\_ Date JUL 11

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

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|    |  |    |  |       |      |   |
|----|--|----|--|-------|------|---|
| 16 |  |    |  | 1090' | 640' | <b>17 OPERATOR CERTIFICATION</b><br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief<br><br><i>Peggy Cole</i><br>Signature<br><b>Peggy Cole</b><br>Printed Name<br><b>Regulatory Supervisor</b><br>Title<br><b>3-6-01</b><br>Date   |
|    |  |    |  |       |      | <b>18 SURVEYOR CERTIFICATION</b><br>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.<br><br>Date of Survey<br>Signature and Seal of Professional Surveyer:<br><br>Certificate Number |
|    |  | 20 |  |       |      | Original plat from Fred B. Kerr Jr., 9-12-79.   |

**San Jacinto #6E**  
**Mesaverde Re-completion & Mesaverde / Dakota Commingle**  
**1090' FNL, 640' FEL**  
**Unit A, Sec. 20, T-29-N, R-10-W**  
**San Juan County, NM**

**Project Summary:**

The San Jacinto #6E was originally completed in the Dakota formation in 1981. Current Dakota production is  $\pm 100$  MCFPD with cumulative production of 878 MMCF.

**Completion Procedure:**

The following procedure details the proposed operations to re-complete the wellbore in the Point Lookout and Menefee intervals of the Mesaverde formation, and then commingle with the existing 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. TOOH w/ 2-3/8", 4.7#, J-55 production string set at 6478' (203 jts, SN at 6448'). Inspect tubing and replace as necessary. Stand back 2-3/8" tubing.
  4. MI wireline company. Run 3-3/4" gauge ring to check TD (4-1/2" 10.5# csg drift – 3.927"). If gauge ring tags above 6401', PU 3-3/4" casing mill on the 2-3/8", 4.7# J-55 tubing. Clean out to PBTD of 6543' (existing Dakota perms 6401' – 6510' OA). **Blow well at PBTD to check sand production rates. Make sure well is not making sand before TOOH.** TOOH.
  5. Set 4-1/2" CIBP @ 6370'. TIH w/ 4-1/2" packer on 2-3/8", 4.7#, J-55 tubing. Load hole with 2% KCl water and set packer @ 6320'. Pressure test CIBP to 4050 psi (~85% of burst for 4-1/2" 10.5# K-55 casing).
  6. Bleed off pressure. Release packer and pull up to 4528'. Spot 5 Bbls of 15% HCl acid\*\* across proposed Point Lookout perf interval (4280' – 4528' OA). TOOH. \*\* 15% HCl acid to contain 2 gals of corrosion inhibitor per 1000 gals of acid.
  7. Under a lubricator, run CBL-GR-CCL log from 4900' to 3500' (or TOC). Hold 1000 psi on casing while running bond log. Bleed off pressure.
  8. Evaluate CBL. Good bond must exist across the proposed Mesaverde perforation intervals (Point Lookout 4280' – 4528' OA; Menefee 3820' – 4148' OA) to isolate the stimulation treatments. Good bond and isolation above the Menefee perforations is also required to prevent the "wet" Massive Cliff House (3604' – 3646') from communicating with the wellbore. (Should CBL indicate poor bond or isolation, contact Drilling Manager or Production Engineer to discuss modification of planned perforation depths).

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**San Juan County, NM**

9. Install MB wellhead isolation tool. Pressure test CIBP and 4-1/2" casing to 4050 psi (~85% of burst for 4-1/2", 10.5#, K-55 casing).

**POINT LOOKOUT:**

10. NU wireline company's perforating guns. Correlate CBL / GR log with attached openhole log section and perforate the **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:

|      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|
| 4280 | 4282 | 4284 | 4286 | 4288 | 4290 | 4292 | 4294 | 4296 | 4298 |
| 4334 | 4336 | 4338 | 4340 | 4354 | 4356 | 4358 | 4378 | 4380 | 4382 |
| 4490 | 4492 | 4494 | 4496 | 4498 | 4520 | 4522 | 4524 | 4526 | 4528 |

RD wireline company.

11. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi.
12. 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 balloff. Record ISIP. **Maximum surface treating pressure for Breakdown and Ball Off is 4050 psi** (~85% of burst for 4-1/2", 10.5#, K-55 casing). \*\*15% HCl acid to contain 2 gals of corrosion inhibitor per 1000 gals of acid.
13. NU wireline company. Under lubricator, RIH with junk basket to recover perf balls (4-1/2" 10.5# csg drift – 3.927"). Run basket over perfs several times to ensure maximum ball recovery. POOH and ND wireline company.
14. NU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi.
15. Fracture stimulate the Point Lookout with 100,000 lbs 20/40 Arizona sand in 105,000 gals of slickwater at 50 BPM. Tag sand with 3 isotopes. **Maximum surface treating pressure during Fracture Treatment is 4050 psi** (~85% of Burst for 4-1/2", 10.5#, K-55 casing). Average surface treating pressure is estimated to be 2072 psi @ 50 BPM. Estimated tubing and perforation friction will be 1777 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 (50' above top perf) | 2,825          |                   |
| <b>Totals</b>              | <b>107,825</b> | <b>100,000</b>    |

Slow rate during flush. Calculate displacement to spot 10 Bbls of 15% HCl acid\*\* across Menefee perf interval (3820' – 4148' OA). If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing. \*\* 15% HCl acid to contain 2 gals of corrosion inhibitor per 1000 gals of acid.

16. Record ISIP, 5, 10, and 15 minute shut-in pressure. ND stimulation company.

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**San Juan County, NM**

17. NU wireline company. Under a lubricator, RIH with CIBP and set @ 4200'.
18. ND wireline. Pressure test CIBP and 4-1/2" casing to 4050 psi (~85% of burst for 4-1/2", 10.5#, K-55 casing).

**MENEFEE:**

19. NU wireline company's perforating guns. Correlate CBL / GR log with attached openhole log section and perforate the **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:

|      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|
| 3820 | 3822 | 3824 | 3932 | 3934 | 3936 | 3938 | 3940 | 3942 | 3944 |
| 3960 | 3962 | 3964 | 3966 | 3968 | 4012 | 4014 | 4016 | 4018 | 4020 |
| 4022 | 4024 | 4134 | 4136 | 4138 | 4140 | 4142 | 4144 | 4146 | 4148 |

RD wireline company.

20. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi.
21. 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 balloff. Record ISIP. **Maximum surface treating pressure for Breakdown and Ball Off is 4050 psi** (~85% of burst for 4-1/2", 10.5#, K-55 casing). \*\*15% HCl acid to contain 2 gals of corrosion inhibitor per 1000 gals of acid.
22. NU wireline company. Under lubricator, RIH with junk basket to recover perf balls (4-1/2" 10 5# csg drift – 3.927"). Run basket over perms several times to ensure maximum ball recovery. POOH and ND wireline company.
23. NU stimulation company. Hold safety meeting. Pressure test surface lines to 5050 psi.
24. Fracture stimulate the Menefee with 100,000 lbs 20/40 Arizona sand in 105,000 gals of slickwater at 50 BPM. Tag sand with 3 isotopes. **Maximum surface treating pressure during Fracture Treatment is 4050 psi** (~85% of Burst for 4-1/2", 10.5#, K-55 casing). Average surface treating pressure is estimated to be 2383 psi @ 50 BPM. Estimated tubing and perforation friction will be 1717 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) | 2,484          |                   |
| <b>Totals</b>               | <b>107,484</b> | <b>100,000</b>    |


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

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27. When pressure allows, TIH w/ 3-3/4" casing mill on 2-3/8", 4.7#, J-55 tubing and clean out to CIBP @ 4200'. Blow well clean and monitor fluid rates until well is sufficiently clean (<5 BWPH). **Take pitot gauges for Menefee only interval.**
28. Drill out CIBP @ 4200' and clean out to CIBP @ 6370'. Blow well clean and monitor fluid rates until well is sufficiently clean (<5 BWPH), **Take pitot gauges for the combined Menefee and Point Lookout intervals.**
29. Drill out CIBP @ 6370' and clean out to PBTD of 6543' (Existing Dakota perfs 6401' – 6510'). Blow well clean and monitor fluid rates until well is sufficiently clean (<5 BWPH), **Take pitot gauges for the combined Mesaverde and Dakota intervals.** TOOH.
30. 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 production string. Run a broach on sand line to insure the tubing is clear.
31. 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.
32. Land tubing @ +6460'. Pump off check valve. Flow up tubing. **Take final water rates and pitot gauge for gas rates.**
33. 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.
34. Rig down & release rig. (Post frac tracer log will be run through tubing after the rig is off location).

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**San Juan County, NM**

Approve:   
Team Leader

Approve: Bruce W. Boye 3-2-01  
Drilling Manager

Recommend:   
Production Engineer

Regulatory: Sundry Notice Required  
Yes X  
No     

**Vendors:**

|                      |               |          |
|----------------------|---------------|----------|
| Stimulation:         | No Preference |          |
| Radioactive Tagging: | ProTechnics   | 326-7133 |

 3-2-01

|                             |                 |                 |                |                |
|-----------------------------|-----------------|-----------------|----------------|----------------|
| <b>Production Engineer:</b> | Randy Buckley   | Office 326-9597 | Pager 326-8820 | Home 599-8136  |
| <b>Lease Operator:</b>      | Donnie Thompson |                 | Cell 320-2639  | Pager 327-8814 |
| <b>Specialist:</b>          | Terry Nelson    |                 | Cell 320-2503  | Pager 326-8473 |
| <b>Forman:</b>              | Steve Florez    | Office 326-3560 | Cell 320-0029  | Pager 326-8199 |

**San Jacinto #6E**  
Unit A, Sec. 20, T-29-N, R-10-W  
San Juan County, New Mexico  
Wellbore Diagram

**Pre-Work**

**Post-Work**

