

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells 11/2/96

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

990' FNL, 1650' FWL, Sec. 33, T-28-N, R-6-W, NMPM

C

5. Lease Number
SF-079049B

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 28-6 Unit
8. Well Name & Number
San Juan 28-6 U #116
9. API Well No.
30-039-07266
10. Field and Pool
Blanco MV/Basin DK
11. County and State
Rio Arriba 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 -
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut off
☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to recompleate the subject well in the Mesaverde formation according to the attached procedure and wellbore diagram. The well will then be down hole commingled. A down hole commingle order will be applied for with the New Mexico Oil Conservation Division.

RECEIVED
NOV 18 1996

OIL CON. DIV.
DIST. 3

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

Signed Regina S. Martinez (JAS8) Title Regulatory Administrator Date 11/12/96

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

Date

APPROVED

NOV 13 1996

10, Diego W. Escobar

DISTRICT MANAGER

(4)

NMOC

District I
PO Box 1988, Hobbs, NM 88241-1988
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-10
Revised February 21, 199
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 30-039-07266 | | Pool Code 72319/71599 | | Pool Name Blanco Mesaverde/Basin Dakota | |
| Property Code 7462 | | Property Name San Juan 28-6 Unit | | | Well Number 116 |
| OGRID No. 14538 | | Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY | | | Elevation 6597' |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C | 33 | 28-N | 6-W | | 990 | North | 1650 | West | R.A. |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

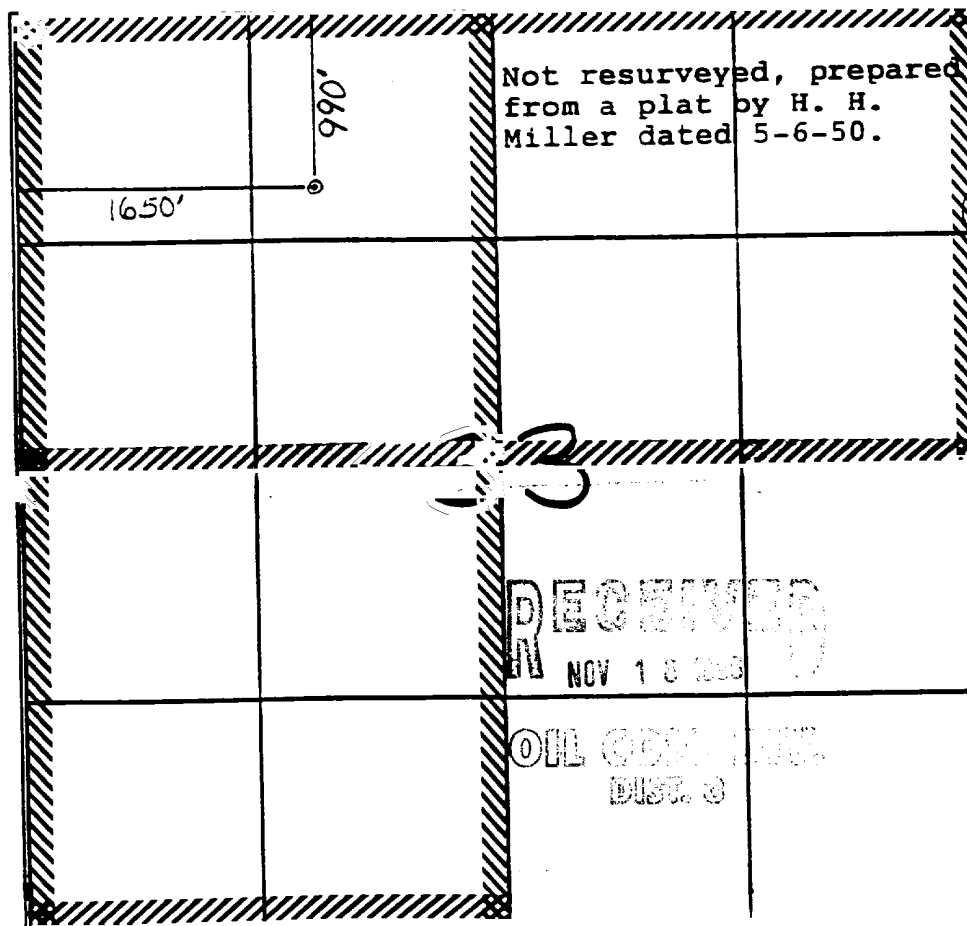
12 Dedicated Acres
MV-W/325.59
DK-N/320

13 Joint or Infill

14 Commencement Code

15 Order No.

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Administrator
Title

11-12-96
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.

11/08/96

Date of Survey

Signature and Seal of Professional Surveyor

NEALE G. EDWARDS
NEW MEXICO
6887
PROFESSIONAL SURVEYOR
Certificate Number

BURLINGTON RESOURCES

San Juan 28-6 Unit #116

Blanco Mesaverde/Basin Dakota Workover
Unit C, NW Section 33, T28N, R6W
Rio Arriba County, New Mexico
Lat: 36° 37' 20" Long: 107° 28' 31"

-
- Comply with all BLM, NMOCD, & MOI rules & regulations.
 - **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
 - Use DRILL GAS if possible over AIR.
 - Seven (7) joints of 2-3/8" 4.7# EUE J-55 tubing and six (6) 3-1/8" drill collars on location
 - 21 frac tanks to be spotted and filled with 2% KCl water (includes 1 rig tank).
 - **Immediate flowback will be implemented on the last frac stage.**
 - Ensure CIBP's used are T-Lok for easier drilling of stacked plugs.
 - **Tight spots/hole in casing below 7724'. Bridge Plug left in hole @ 7770', covering bottom Dakota perforations @ 7779'-7868' (see attached 1963 completion summary).**
 - **Do not attempt to go below 7727' without Drilling Superintendent approval.**
-

This well is part of the 1996 MV PUD Commingle program. The well is currently completed in the Dakota with a production rate of 117 MCFD/ <1 BOPD. Cumulative Dakota production is 2378 MMCF and 16.3 MBO. A casing pitot gauge taken on 10/21/96 showed 391 MCFD for 1 hour. The Mesaverde interval will be added and the zones will be commingled upon completion of the well.

1. MIRU. Record and report SI pressures on tubing, casing, & bradenhead. Lay blowdown line. **Obtain 15, 30, 45 & 60 minute pitot gauges and record on WIMS Report. These pitot gauges will be used for commingling allocation required by the NMOCD.** Blow down casing & tubing. Kill well w/ 2% KCl down tubing. ND WH, NU BOP.
2. TOOH, rabbit, & strap 240 jts of 2-3/8" (J-55, EUE, 4.7#) tubing @ 7616'. Visually inspect tubing, note and report any scale in tubing. Lay down bad joints. Tubing may be used for cleanout and rerun for production string if there is no scale or other problems.
3. PU 3-7/8" bit, 4-1/2" casing scraper, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring. Clean out w/ gas to @ 7720' (7' above PBTD tight spot). Note if there is any sand/shale or drilling mud in returns. TOOH with bit & collars.
4. RU wireline. Run 4-1/2" 11.6# - 3.875" WL gauge ring to 7600'. RIH and set 4-1/2" CIBP @ 7600'.
5. Load hole w/ 2% KCL water. PU 4-1/2" pkr on 2 jts of 2-3/8" or 2-7/8" tubing and set @ 60'. Pressure test casing and CIBP to 3000 psi (62% of 4800 psi burst). Hold for 10 minutes. If PT does not hold, TIH and search for leaks. Stage collar @ 5817'. Locate leak(s). TOOH. Engineering will provide additional squeeze design if necessary.

Procedure to squeeze cement behind 4-1/2" longstring to cover upper Mesaverde interval

6. RU wireline. Run GR-CCL-CBL from 7600' to 5350' (100' above cement top from unavailable 1963 CBL log, est. TOC from 1963 CBL @ 5450'). Note and report all cement top and quality of bond across Mesaverde interval. Send two copies to office (engineer and drilling sup.).
7. Precise squeeze procedure will be based on CBL. Proposed squeeze procedure: Perforate 2 squeeze holes @ approximately 5440' (10' above estimated TOC). Set cement retainer on tubing and circulate cement behind 4-1/2" to 4700' (Enough to cover 300' above top of Cliffhouse @ approximately 5000').

10/30/96

8. WOC recommended time. Drill out cement. Pressure test to 2000 psi. If casing integrity is not sound, identify leaks, & engineering will recommend squeeze procedure & modify stimulation work.

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9. RU wireline under packoff. Perforate Lower Menefee and Point Lookout top-down @ the following depths with 3-1/8" HSC guns, 2 SPF, 12 gram charges (Owen HSC-3125 306T) and 0.29" diameter holes:

5414, 5430, 5434, 5452, 5458, 5499, 5548, 5560, 5580,
5610, 5630, 5645, 5670, 5677, 5680, 5700, 5715

(17 total intervals, 34 total holes, 301' of gross interval)

10. PU 4-1/2" FB PKR on 2-3/8" workstring. Blow down as you TIH. Set PKR 100' above top perforation. Hold 500 psi on annulus during acid job.
11. RU stimulation company. Pressure test surface lines to 7000 psi. **Max pressure = 6000 psi.** Prepare to break down perforations w/ 250 gallons 7-1/2% HCL (w/ 2 gal/1000 corrosion inhibitor) and 34 - 1.3 SG ball sealers. Attempt to achieve 15 BPM on breakdown, go higher if possible. Release pressure, RD stimulation company.
12. Release PKR & TIH knocking balls below bottom perforation. TOOH.
13. Change out rams to 2-7/8". PU 4-1/2" PKR on 2 jts of 2-7/8", 6.5#, J-55 or N-80 fracstring. RU immediate flowback equipment (frac nipple, valve, tee, etc.). Pressure test immediate flowback lines to 2000 psi.
14. RU stimulation company. Pressure test surface lines to 4000 psi. **Maximum STP = 3000 psi.** Hold 500 psi on annulus. Fracture stimulate the Mesaverde w/ 10,000# 40/70 Arizona sand and 122,500# 20/40 Arizona sand in slickwater. When rate and pressure stabilize during pad shut down and obtain ISIP. When one-half of flush volume is gone, slow rate by 50% to determine if fluid will be on a vacuum. Plot Rate vs. Pressure to determine ISIP when flush is gone. Adjust flush volume accordingly. Tag sand w/ Ir-192. See attached frac schedule for details. *(10 frac tanks needed for this stage)*
15. If well has pressure when stimulation is complete, flow back well immediately. -- **NOTE: Time from frac shut-down until flow tee is opened for flow back should be less than 1 minute. Time is critical to achieve reverse gravel packing, especially in a slickwater fluid. Flowback rate not to exceed 4 BPM - choke flowback line with 1/4" to 1/2" positive choke.** Frac company is to monitor flowback pressures for 30 minutes after shutdown. Flowback should continue for as long as necessary to release PKR. When well dies, release packer and stand back.
16. RU wireline. Run 4-1/2" 11.6# - 3.875" WL gauge ring to 5400'. RIH and set 4-1/2" RBP @ 5390'. Spot 5-10' sand on RBP.
17. Load hole w/ 2% KCL water. PU 4-1/2" PKR on 2 jts of 2-7/8", 6.5#, J-55 or N-80 fracstring. Pressure test casing and CIBP to 3000 psi (62% of 4800 psi burst). Hold for 10 minutes. Release pressure and stand back packer.
18. Change to 2-3/8" rams. TIH open ended w/ 2-3/8" workstring. Blow down with gas going in hole. Blow hole dry @ 5390'. Spot 300 gallons of 7-1/2% HCL (w/ 2 gal/1000 corrosion inhibitor). TOOH.
19. RU wireline under packoff. Underbalance perforate the Cliffhouse and upper Menefee top-down @ the following depths with a 3-1/8" HSC gun, 2 SPF, 12 gram charges (Owen HSC-3125 306T) and 0.29" diameter holes:
5025', 5032', 5040', 5070', 5083', 5125', 5132', 5140', 5158',
5165', 5195', 5215', 5265', 5269', 5309', 5315', 5342',

(17 total intervals, 34 total holes, 317' of gross interval)

20. Change out rams to 2-7/8". PU 4-1/2" PKR on 2 jts of 2-7/8", 6.5#, J-55 or N-80 fracstring. RU immediate flowback equipment (frac nipple, valve, tee, etc.).

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21. RU stimulation company. Pressure test surface lines to 4000 psi. **Maximum STP = 3000 psi.** Hold 500 psi on annulus. Fracture stimulate the Cliffhouse/Menefee w/ 10,000# 40/70 Arizona sand and 132,500# 20/40 Arizona sand in slickwater. Begin pumping 7,000 SCF/M of nitrogen at the beginning of the 1/2 ppg 20/40 sand stage. When rate and pressure stabilize during pad shut down and obtain an ISIP. When one-half of flush volume is gone, slow rate by 50% to determine if fluid will be on a vacuum. Plot Rate vs. Pressure to determine ISIP when flush is gone. Adjust flush volume accordingly. Tag sand w/ Ir-192. See attached frac schedule for details. (10 frac tanks needed for this stage)
22. Flow back well immediately after shutdown – **NOTE: Time from frac shut-down until flow tee is opened for flow back should be less than 1 minute. Time is critical to achieve reverse gravel packing, especially in a slickwater fluid. Flowback rate not to exceed 8 BPM - choke flowback line with a 1/2" positive choke.** Frac company is to monitor flowback pressures for 30 minutes after shutdown. Flowback should continue for as long as necessary to release PKR.
23. Release PKR & stand back. Change out rams to 2-3/8".
24. TIH w/ retrieving head on 2-3/8" tubing and clean out to RBP @ 5390'. Obtain pitot gauge. Retrieve RBP @ 5390' and TOOH.
25. PU 3-7/8" bit and collars (if necessary) on 2-3/8" workstring and TIH. Clean out to CIBP @ 7600'. When sand and water rates are acceptable obtain pitot gauge. **Obtain 15, 30, 45 & 60 minute MV pitot gauges. These pitot gauges are required by the NMOCDC for commingling approval.** Drill CIBP @ 7600'. Clean out to PBDT @ 7720'. Do not attempt to go any deeper without Drilling Superintendent approval. Clean up to +/- 5 BPH and trace to no sand. Obtain final commingled pitot gauge. **Obtain 15, 30, 45 & 60 minute pitot gauges. Pitot gauges are required by the NMOCDC for commingling approval.** TOOH.
26. RU wireline. Run After-Frac GR across Dakota and MV intervals. RD wireline.
27. Run production tubing as follows: expendable check, one joint 2-3/8" tubing, 1.81" FN, and remaining tubing. Rabbit/gauge tubing before running in hole. Land tubing @ 7616' as removed from well. Broach tubing on sandline to FN.
28. ND BOP, NU WH. Pump off expendable check and flow well up tubing. Run swab to SN to ensure tubing is clear. RD & release rig to next location.

Approved: _____

Regional Engineer

Approved: _____

Drilling Superintendent

Recommended Vendors:

| Stimulation | Rig Dependent | Cased Hole Services | Rig Dependent | |
|--------------------|--------------------|---------------------|-----------------|---------------|
| Engineering | Jimmy Smith | 326-9713-(W) | Sean Woolverton | 326-9837- (W) |

San Juan 28-6 Unit #116
Mesaverde Recompletion
10/30/96

324-2420-(P)
327-3061-(H)

326-8931- (P)
326-4525- (H)

JAS/Q:\area\!mvpud\1996\sj286116\pro.doc

PERTINENT DATA SHEET
SAN JUAN 28-6 UNIT #116

| | |
|---|--|
| <p>Location: 990' FNL, 1650' FWL Unit C, Section 33, T28N, R6W Rio Arriba County, New Mexico</p> <p>Field: Basin Dakota</p> <p>Spud Date: 07/03/50 (MV)</p> <p>Completion Date: 10/21/50 (MV)</p> <p>Workover Completion Date: 05/28/63 (DK)</p> | <p>Elevation: 6597' GL</p> <p>LAT: 36° 37' 20"</p> <p>LONG: 107° 28' 31"</p> <p>DP#: 51503A</p> <p>WI/Ni (DK): 56.56%/46.14%</p> <p>WI/Ni (MV): 34.14%/29.31%</p> <p>TD: 7986'</p> <p>PBTD: 7727' (tight spot)</p> |
|---|--|

| <u>Casing Record:</u> | | | | | |
|-----------------------|----------------------|---------------------------|------------------|----------------|-------------------|
| <u>Hole Size</u> | <u>Casing Size</u> | <u>Weight & Grade</u> | <u>Depth Set</u> | <u>Sxs Cmt</u> | <u>Cement Top</u> |
| | 13-3/8" | 48#, H-40 | 265' | 210 (248 FT3) | surface |
| | 7" | 23#, J-55 | 5559' | 150 (177 FT3) | |
| | 4-1/2" | 10.5#, J-55 | | 125 (148 FT3) | 5450' (CBL) |
| | 4-1/2" | 11.6#, J-55 | 7986' | 100 (118 FT3) | 7590' (CBL) |
| | Stage Collar @ 5817' | | | | |

| <u>Tubing Record:</u> | | | | <u>BHA</u> |
|-----------------------|---------------------------|------------------|--|------------|
| <u>Tubing Size</u> | <u>Weight & Grade</u> | <u>Depth Set</u> | | |
| 2-3/8" (240 jts) | 4.7#, J-55, EUE | 7616' | | |

| <u>Formation Tops:</u> | | | | | |
|------------------------|-------|---------------|-------|----------|-------|
| Kirtland | 2732' | Point Lookout | 5550' | Dakota | 7736' |
| Pictured Cliffs | 3410' | Greenhorn | 7584' | Morrison | 7969' |
| Cliffhouse | 5040' | | | | |

Logging Record:
NO INFO

Stimulation:
Perf's one hole each @ 7868', 7864', 7849', 7845', 7835', 7832', 7821', 7805', 7802', 7789', 7783', 7779'. Frac'd w/70,700 gal wtr, 30,000# 40/60 sand, 20,000# 20/40 sand, & 40 tons CO₂. Perf'd w/4 jets per foot 7739-7758'. Frac'd w/63,840 gal wtr, 47,500# 20/40 sand, & 32.75 tons CO₂. Perf'd w/1 jet per foot 7643-56'. Frac'd w/76,240 gal wtr, 40,000# 40/60 sand, 20,000# 20/40 sand, & 40.83 tons CO₂.

Workover History:
05/1963: Drilled well from original TD (5902') to TD of 7988'. Ran 226 jts of 4-1/2", 10.5#, J-55 ST&C & 23 jts 4-1/2", 11.6#, J-55 LT&C csg, landed @ 7986' w/2-stage collar @ 5817'. 1st stage cmt'd w/125 sx. 2nd stage cmt'd w/100 sx. CBL indicated tops @ 5450' & 7590'.
06/1963: Drilled DV Tool & CO to TD. Perf's one hole each @ 7868', 7864', 7849', 7845', 7835', 7832', 7821', 7805', 7802', 7789', 7783', 7779'. Frac'd w/70,700 gal wtr, 30,000# 40/60 sand, 20,000# 20/40 sand & 40 tons CO₂. Perf'd w/4 jets per foot 7739-7758'. Frac'd w/63,840 gal wtr, 47,500# 20/40 sand & 32.75 tons CO₂. Perf'd w/1 jet per foot 7643-56'. Frac'd w/76,240 gal wtr, 40,000# 40/60 sand, 20,000# 20/40 sand & 40.83 tons CO₂. Ran 240 jts 2-3/8", 4.7# tbg, landed @ 7616'. Tight spot @ 7724' & 7733'. Rolled w/csg roller. While cleaning out, the deepest could get to was 7727'. Bridge plug possibly still in hole @ 7770'. Bottom perforations @ 7779-7868' are isolated by the BP.

| <u>Production History:</u> | | | |
|----------------------------|---------------|-------------|-------------|
| Latest Deliverability | 117 MCFD | 1 BOPD | |
| Initial Deliverability | 5569 MCFD AOF | ISITP: 2325 | ISICP: 2331 |
| Cums: | 2378 MMCF | 16.3 MBO | |

Transporter:
Oil/Condensate: Giant Gas: Williams

San Juan 28-6 Unit #116

Basin Dakota

Unit C, Section 33, T28N, R6W

Rio Arriba County, NM

Elevation: 6597' GL

LAT: 36°37' 20"

LONG: 107°28' 31"

date spud: 07-03-50

