

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

1540' FSL, 935' FEL, Sec.8, T-31-N, R-10-W, NMPM

5. Lease Number  
SF-078604

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
Marcotte #2

9. API Well No.  
30-045-29466

10. Field and Pool  
Basin Dakota

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 -

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to recomplate the subject well to the Dakota formation according to the attached procedure and wellbore diagram. The deadline to submit this procedure is 8/1/01.

RECEIVED

2001 JUL 31 PM 2:10

070 Farmington NM



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

Signed Jim Lovato Title Regulatory Supervisor Date 7/31/01  
SDM

(This space for Federal or State Office use)

APPROVED BY /s/ Jim Lovato Title \_\_\_\_\_ Date AUG 30 2001

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

1 APT Number 30-045-29466		2 Pool Code 71599		3 Pool Name Basin Dakota	
4 Property Code 7287		5 Property Name Marcotte			6 Well Number 2
7 OGRID No. 14538		8 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			9 Elevation 5987'

10 Surface Location

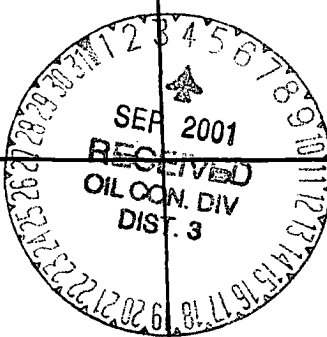
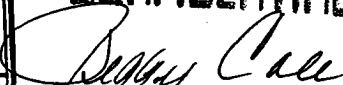
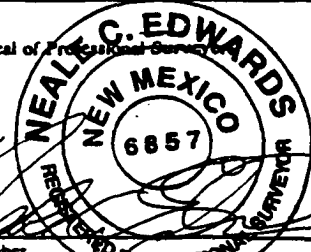
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	8	31-N	10-W		1540	South	935	East	S.J.

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 E/318.74	13 Joint or Infill	14 Consolidation Code	15 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 RECEIVED 2001 JUL 3 PM 2:10 070			17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <b>CONFIDENTIAL</b>  Signature Peggy Cole Printed Name Regulatory Supervisor Title 7-31-01 Date
	8 SF - 078604 2 1 935' 1540' 3 4 5		
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. 2/16/97 Date of Survey Signature and Seal of Professional Surveyor  6857 Certificate Number			

# **BURLINGTON RESOURCES**

## **Marcotte #2**

1,540' FSL, 935' FEL  
Unit O, Section 8, T31N, R10W  
San Juan County, New Mexico  
LAT: 36° 54.60' / LONG: 107° 54.00'  
Dakota Pay Add Completion

## **RECOMPLETION PAY-ADD PROCEDURE**

### **Directions to Location:**

From Aztec, NM, travel North on US Hwy 505 approximately 8 miles, Turn Right on Dutchman Hill Road. Go ¼ mile and Turn Right at dump station. Follow main road 1 ½ miles, half way up the canyon, and Turn Right. Follow to location.

### **Project Objective:**

*RECOMPLETION*  
This is a ~~pay-add completion~~. The Marcotte #2 was originally completed in Sept of 1997 to test the Pennsylvanian formations in the San Juan Basin. Multiple zones were tested and found to be non-productive. These zones include the Granite Wash Diorite, Leadville, Pinkerton Trail, Molas, Alkali, Barker Creek, Alkali Gulch, Upper Akah, and the Morrison. Several highly porous and permeable sands still exist behind casing and this completion will attempt to further exploit the Upper Dakota for productive gas reserves. If the Upper Dakota completions are unsuccessful, the well will once again be temporarily P&A until further studies can be made.

**FYI:** It is anticipated that the 89' of net pay present in the well will require perforating and hydraulic fracturing to establish commercial production. This procedure is designed to pump down large casing, 9 5/8" and 7". The treatment can be done rig-less but requires a rig to run production tubing after the frac. Perforations must be large enough to penetrate both casing strings while still allowing an entrance hole size of at least 0.27". A normal sized slick-water Upper Dakota frac will be placed.

Deliver to location the following equipment:

1. Nine (9) - 400 bbl tanks filled with 2% KCl water.
2. One (1) 2 3/8" pump off expendable check
3. One (1) 2 3/8" Seating Nipple
4. 7,100' of 2 3/8" 4.7 J-55 EUE tubing for production tubing
5. 2' of 2 3/8" 4.7 J-55 EUE tubing for marker joint

### **UPPER DAKOTA COMPLETION AND TESTING:**

**Notify NMOCD of our move on location**

1. Inspect location. Place fire and safety equipment in strategic locations. Conduct safety meeting with all personnel on location to discuss potential hazards and project procedure. Comply with all BR, BLM, and NMOCD rules and regulations.
2. Set nine (9) 400 bbl frac tanks and fill with 2% KCl.
3. Record and report SI pressure on casing.
4. Blow down well. NU pressure testers to wellhead, load hole with ~~Clickwater~~ **2% KCl**.

5. Pressure test casing to 4,100 psi and hold for five minutes. Release pressure from casing. RD Pressure testers.
6. NU Basin Well Logging. Under full lubricator with 2" bleed-off valve in lubricator, RIH with 4" Ported Hollow steel carrier gun. Block perforate the Dakota at the following depths with HSC-4000-317T charges (23 gram, 0.33" dia., 20" penetration) at 1 spf and 0° phasing.

Interval	Interval Length	Number of holes	Phasing	Shots per Foot
7,139'-7,170'	31'	32	0°	1
7,221'-7,236'	15'	16	0°	1
7,267'-7,280	13'	14	0°	1
7,310'-7,340'	30'	31	0°	1
<b>Total</b>	<b>89' Gross</b>	<b>93</b>		

7. Perforate with well shut-in in three gun runs. Inspect guns to ensure all shots fired. Note any pressure changes after each run. Once gun runs have been completed, record the stabilized surface shut-in pressure. POOH with casing gun.
8. RU stimulation company prepare to breakdown perforations. Pressure test surface lines to 5,100 psi. Pump slickwater into perforations to establish rate at maximum of 4,100 psi (85% of burst). Record breakdown pressure. (If an injection rate of 10 bpm cannot be established at max pressure, call office for instruction.)
9. Once formation has broken, switch to acid. **Do NOT balloff.** Pump 30 bbls of 15% HCL (Add 2/1,000 gallons corrosion inhibitor) and flush with designed frac pad at the maximum rate that pressure or horsepower limitations will allow (which ever occurs first). Do not exceed 4,100 psi. Initially, pressure may be higher due to friction losses while the 2% KCl is in the casing.
10. Once acid has been pumped away, switch to slick water and begin pad to fracture stimulate Upper Dakota interval per the attached schedule at 50 BPM, with an estimated 40,000 #'s of 20/40 Tempered LC proppant in slickwater (max. surface press. 4,100 psi). Flush within 200' of top perforation. Shut down and record ISIP, 5, 10, and 15 min. shut-in pressures. Record the barrels of break down and frac load to recover. RD and release stimulation company.
11. Immediately flow well back as necessary to minimize sand production, assuming the well will unload. Clean up to less than 1 BPH water and trace of sand. If the liquid rate stabilizes above 1 BPH, then call the office for handling instructions. Obtain a pitot gauge and record results on DFW report.
12. If the well will not flow, MIRU completion rig. Inspect location and test rig anchors. Place fire and safety equipment in strategic locations. Conduct safety meeting to discuss potential hazards and project procedure. Comply with all BR, BLM, and NMOCD rules and regulations.
13. Record and report SI pressures on casing. Blow down well. ND WH and NU BOPE with annular preventor, flow tee and stripping head. Redress production wellhead as necessary. Ensure all lines are staked down securely.
14. MU tubing string w/ expendable check on bottom, seating nipple, 1 joint 2-3/8", 4.7# J-55 tubing, 1-2' pup joint and the remaining 2-3/8" tubing. Broach tubing while RIH. Check for fill. Clean out to PBTD @ 7,389'. Land tubing at +/- 7,100'. (Top Dakota perf at 7,139')
15. ND BOP and NU Tree and manifold assembly. Pump off expendable check. Make swab runs to kick well off if needed. Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the entire

well. Record on DFW report. During cleanout operations the reservoir may be charged with air. As a result of excess oxygen levels that 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. If well does produce, RD completion rig and MOL.

16. If well does not produce, POOH and LD 2 3/8" tubing. Notify BR Regulatory (Peggy Cole 326-9727) and the appropriate Regulatory Agency. RU wireline unit, RIH with 7" CIBP and set @ 7,100'. Dump bail 5 sacks Class "B" neat on top of CIBP. RD wireline unit. RD completion rig and MOL.

Compiled By:



David C. Smith  
Production Engineer

Approval:

  
Inventory Development Manager  
Drilling Superintendent 7/26/01

Engineer

David C. Smith  
Office - 326-9826  
Pager - 324-7430  
Fax - 324-9882

**VENDORS:**

Cased Hole:  
Stimulation:  
Frac Valve  
Potassium Chloride

SERVICE COMPANY

Basin Perforating  
Halliburton  
District Tools

PHONE NUMBER

327-5244  
325-3500

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## Marcotte 2

1540' FSL, 935' FEL  
Section 8, T31N, R10W  
#REF!

LAT: 36 deg 54.60' LONG: 107 deg 54.00'

GL = 5,984' KB= 6,012'

### Current Wellbore

#### Conductor Casing:

36" 36 lb/ft  
Set @ 073'  
TOC @ Surface

#### Surface Casing:

30" 94 lb/ft  
Set @ 490'  
TOC @ Surface

#### Intermediate Casing:

13 7/8" 68 lb/ft  
Set @ 3,101'  
TOC @ Surface

#### Intermediate Casing:

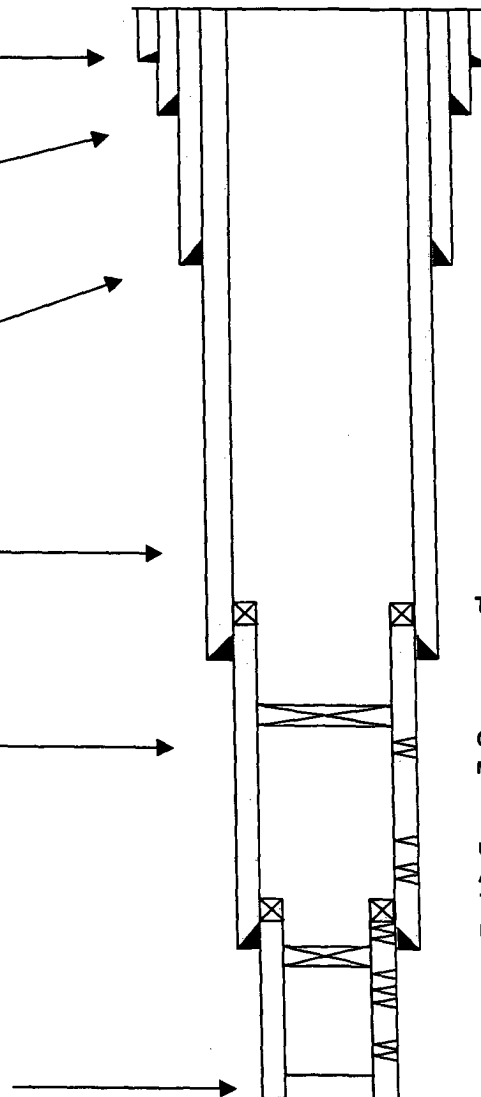
9 5/8" 47/43 lb/ft - L80  
Set @ 7,250'  
TOC @ Surface

#### Intermediate Liner:

7" 26 lb/ft - N80  
Set @ 13,484'  
TO Liner @ 7,090'

#### Production Liner:

5" 18 lb/ft - P110  
Set @ 14,018'  
TO Liner @ 13,362'



Top of Liner @ 7,090'

CIPB w/ Cmt @ 7,389'  
Morrison Perfs @ 7,561-7,573 (2 spf)

Upper Akah Perfs @ 12,661-12,687 (1 spf)  
Akah/Bkr Cr/Alkali Gul Perfs @ 12,890-13,349 (67 total)  
Top of Liner @ 13,362'

Pinkerton Tri/Molas Perfs @ 13,390-13,554 (65 total)  
CIPB w/ Cmt @ 13,850'  
Leadville Perfs @ 13,5620-13,733 (69 total perfs)

Diorite Perfs @ 13,969-14,004

PBTD= 7,481'  
TD= 14,020'

CURRENT WELLBORE

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#### Surface Casing:

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TO Liner @ 7,090'

#### Production Liner:

5" 18 lb/ft - P110  
Set @ 14,018'  
TO Liner @ 13,362'

#### Production Tubing:

2 3/8" 4.7 lb/ft  
EOT @ 7,100'

Top of Liner @ 7,090'

Upper Dakota Perfs @ 7,139-7,340 (93 total perfs)

CIPB w/ Cmt @ 7,389'

Morrison Perfs @ 7,561-7,573 (2 spf)

Upper Akah Perfs @ 12,661-12,687 (1 spf)

Akah/Bkr Cr/Alkali Gul Perfs @ 12,890-13,349 (67 total)

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PROPOSED WELLBORE

DCS 07/24/01