

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

1510' FNL, 2100' FWL, Sec. 14, T-31-N, R-12-W, NMPM

5. Lease Number
NMSF077652

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
East #7F

9. API Well No.
30-045-30438

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 according to the attached procedure and wellbore diagram. The Mesaverde and Dakota formations will be commingled. A down hole commingle application will be applied for.

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

Signed Jim Lovato Title Regulatory Supervisor Date 2/20/02

TLW

(This space for Federal or State Office use)

APPROVED BY /s/ Jim Lovato Title _____ Date _____

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
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. 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 30-045- 30438	² Pool Code 71599 / 72319	³ Pool Name Basin Dakota/Blanco Mesaverde
⁴ Property Code 18517	⁵ Property Name EAST	⁶ Well Number 7F
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.	⁹ Elevation 6276

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
F	14	31-N	12-W		1510	NORTH	2100	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 W/282.06					¹³ Joint or Infill		¹⁴ Consolidation 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

<p>16 FD 3 1/2" BLM 1951 B.C.</p> <p>LOT 4</p> <p>LOT 3</p> <p>LOT 2</p> <p>LOT 1</p> <p>Reissued to show revised location.</p> <p>LOT 5</p> <p>LOT 6</p> <p>USA SF-077652</p> <p>14</p> <p>LOT 9</p> <p>LOT 8</p> <p>LOT 7</p> <p>LOT 10</p> <p>LOT 11</p> <p>FD 3 1/2" BLM 1951 B.C.</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Peggy Cole</i></p> <p>Signature</p> <p>Peggy Cole</p> <p>Printed Name</p> <p>Regulatory Supervisor</p> <p>Title</p> <p>2.20.02</p> <p>Date</p>
<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>10-17-02</p> <p>Date of Survey</p> <p><i>[Signature]</i></p> <p>Signature and Seal of Registered Surveyor</p> <p>ROY A. RUSH</p> <p>REGISTERED PROFESSIONAL LAND SURVEYOR</p> <p>8894</p> <p>Certificate Number</p>	

PROJECT OBJECTIVE:

- The Dakota interval was completed in July 2001. This is a MV payadd.
- A CIBP will be set above the Dakota interval. Then, the Mesaverde will be completed in one (1) slickwater frac stages.
- The stimulation work will be performed rigless. The Dakota interval will be restored to production and one string of tubing will be landed.

STIMULATION:

- Cased hole GR/CBL previously run June 4, 2001. TOC found at +/-2910' (per CBL).
- Maximum Treating Pressure: 4100 psi (~85% of Burst of 10.5#, 4.5", J-55 casing)

Deliver to location following equipment:

1.	Nine (9) - 400 bbl Frac Tanks.
2.	MBIT for wellhead isolation during the frac
3.	One CIBP, One Frac plug

Below are materials required for the proposed 2 Stage fracture stimulation:

	PTLO/MN	LEWIS
Fluid Type	Slickwater	20# 75Q Foam
Stages	One	One
Acid Volume (HCL)	40 bbls	30 bbls
Fluid Volume 2% KCl	2537 bbls	731 bbls
Sand Type	Arizona	Arizona
Sand Size	20/40 – 100,000#	20/40 – 200,000#

WELL SITE PREPARATION

1. Hold pre-job meeting with rig supervisor, engineers, frac consultant, wireline company, stimulation company, and other key vendors to review procedure.
2. Run fluid tests on water. Filter water based upon stimulation company solids water analysis. Contact Production Engineer and discuss stimulation water source and quality. Inspect wellsite, verify and report wellhead size and pressure rating. Mark location with flagging for tank spotting. Spot nine (9) frac tanks and fill w/ 3# biocide/tank & 2% KCl water. Put one load of fresh water in each tank before adding 20% concentrated KCl water. Set location proppant container and fill with sand.
3. MIRU completion rig. ND wellhead. NU BOPs. POOH w/ 2-3/8" production tubing (240 joints, seating nipple on bottom). Inspect all joints. Replace bad joints, if necessary. Utilize MBT for pressure testing and frac. Check pressure ratings on complete wellhead to ensure all fittings are rated to at least 5000 psi.
4. MIRU wireline company. Under a lubricator, RIH with CIBP and set at 5480'. POOH and ND wireline

5. MIRU stimulation company. Pressure test surface lines to 1000 psi above maximum treating pressure. Pressure test CIBP to maximum treating pressure for 15 minutes. Pressure test casing and frac valve to maximum treating pressure for 15 minutes. Record results. Ensure all personnel are clear of wellhead before pressure testing. Note: Isolation tool not required. Bleed off pressure. ND stimulation company.

POINT LOOKOUT/LOWER MENEFEE PERFORATING AND FRACTURE STIMULATION

6. MIRU wireline company. Under lubricator, RIH with 3-1/8" HSC casing gun. While holding 2000 psi on casing, select fire perforate Point Lookout and Menefee with 1 & 2 SPF, 0.28" diameter, 20.4" penetration, 10 gram charges (Owen 302) at the following depths:

Following Lower Point Lookout at 2 spf, 120° Phasing:									
5339	5317	5303	5286	5273	5253				
Following Massive Point Lookout at 1 spf:									
5224	5205	5197	5172	5167	5147	5140	5104	5072	5011
5007	4948	4931	4922	4915	4891	4886	4871	4862	4829
4797	4772	4764							
(29 Effective holes, 35 Total holes, 6 settings at 2 spf and 23 settings at 1 spf, 575' of gross interval)									

POOH and ND wireline. Inspect casing gun to ensure all perforations fired.

7. NU stimulation company. Pressure test surface lines to 1000 psi above maximum treating pressure. Prepare to breakdown perforations. Pump into perforations to establish injection rate at maximum treating pressure. Record breakdown pressure, rate and ISIP. If an injection rate cannot be established, RIH w/ 50' of acid dump bailer filled with 28% HCl and spot across bottom perforations. If an injection rate of 4 –20 BPM was established prepare to balloff. If an injection rate of 20 BPM or greater was established, pump acid at the maximum rate the pressure or equipment will allow, whichever is reached first. Begin by pumping 25 bbls 15% HCL acid followed by stimulation design pad fluid.
8. Balloff procedure (if necessary). Pump 25 bbls of 15% HCl (Add 2/1000 gallons corrosion inhibitor) and flush with 2% KCl at maximum rate pressure will allow. Drop two 7/8" 1.3 SG RCN ball sealers for every perforation, spaced evenly throughout the acid. Maximum pressure at balloff is maximum treating pressure. ND stimulation company.
9. NU wireline company (if necessary). Under lubricator, RIH with 4-1/2" junk basket to recover ball sealers. Run basket by perforations several times to ensure maximum ball recovery. POOH and ND wireline company. Record number of hits and balls recovered. NU stimulation company.
10. Hold safety meeting. Pressure test surface lines to 1000 psi above maximum treating pressure. Maximum pressure during fracture stimulation is not to exceed maximum treating pressure. Fracture stimulate the Point Lookout/Menefee interval per attached schedule at 50 BPM, with 100,000#'s of 20/40 Arizona sand. Increase injection rate above scheduled rate if pressure and equipment will allow ensuring maximum fluid

diversion. Furthermore, it is acceptable to reduce the total fluid volume of this stage by +/- 400 bbls if water on location is limited. Add 0.0 to 0.5/1000 gals friction reducer as needed and no surfactant. Flush with 2% KCl once all the 2.0 ppg sand has cleared the blender tub. Flush to within 50' of top perforation. Calculate displacement to spot 15 bbls of 15% HCl across next interval. Cut rate throughout flush as pressure allows. Shut down and record ISIP, 5, 10, 15 min shut-in pressures. ND stimulation company.

11. NU wireline company. Under a lubricator, RIH with frac plug and set at 4170'. POOH and ND wireline.
12. NU stimulation company. Pressure test surface lines 1000 psi above maximum treating pressure. Pressure test frac plug to maximum treating pressure for 15 minutes. **Note:** Pressure may bleed slowly past the frac plug during the pressure test. Notify the engineer or drilling department if pressure bleeds more than 500-psig in 15 minutes. Bleed off pressure. ND Stimulation company.

LEWIS (OTERO/NAVAJO CITY) PERFORATING AND FRACTURE STIMULATION (2ND STAGE):

13. NU wireline company. Under lubricator, RIH with 3-1/8" HSC casing gun. While holding 2000 psi on casing, select fire perforate Lewis with 1 SPF, 0.28" diameter, 20.4" penetration, 10 gram charges (Owen 302) at the following depths:

3885	3891	3893	3895	3897	3899	3901	3906	3908	3910
3912	3914	3916	3924	3926	3928	3930	3974	3976	3978
3980	3982	3987	3989	3991	4012	4014	4048	4050	4056
4058	4060	4062	4064	4066	4080	4082	4084	4086	4088
(40 total holes, 203' of total gross interval)									

POOH and ND wireline. Inspect casing gun to ensure all perforations fired.

14. NU stimulation company. Pressure test lines to 1000 psi above maximum treating pressure. Prepare to breakdown perforations. Pump into perforations to establish injection rate at maximum treating pressure. Record breakdown pressure, rate and ISIP. Do not displace all acid outside perforations. If operations are suspended for night, leave 5 bbls inside casing to work on perforations overnight. If an injection rate of > 5 BPM can be established, prepare to balloff. If an injection rate cannot be established, set CIBP above the frac plug at 4170'. RIH w/ 50' of acid dump bailer filled with 15% HCl and spot acid across bottom perforations.
15. **Begin balloff.** Pump 30 bbls of 15% HCl and flush with 2% KCl at maximum rate pressure will allow. Drop two 7/8" 1.3 SG RCN ball sealers for every perforation, spaced evenly throughout the acid. Maximum pressure at balloff is maximum treating pressure. ND stimulation company.
16. NU wireline company. Under lubricator, RIH with 4-1/2" junk basket to recover ball sealers. Run basket by perforations several times to ensure maximum ball recovery. POOH and ND wireline company. Record number of hits and balls recovered. NU stimulation company.
17. Hold safety meeting. Pressure test surface lines to 1000 psi above maximum treating pressure. Maximum pressure during fracture stimulation is not to exceed maximum

treating pressure. Fracture stimulate the Lewis interval per attached schedule at 45 BPM BH foam rate, with 200,000 #'s of 20/40 Arizona sand. **Increase Injection rate above scheduled rate if pressure and equipment will allow.** Flush with N₂ foam once 3.0 ppg BH sand has cleared the blender to 200' above top perforation. Cut rate throughout flush as pressure allows. Shut down, ND and release stimulation company.

18. Rig up to flow back Lewis until well dies or completion rig moves on location utilizing a BR dual-flowbean choke manifold and the following schedule for the first 24 hours only. Begin flow back when stimulation company is rigged down. Open well to pit in accordance to flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of 2nd flowbean and place correct size flowbean on manifold to pre-determined size listed in table and begin flowing through 2nd flowbean. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of 2nd flowbean or adjustable choke. flow back while waiting on completion rig.

24-hour Flowback

16/64" Choke	FROM SHUT-IN – UNTIL 2/3 OF FLUSH VOLUME HAS BEEN RECOVERED.
10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 2 hrs.
18/64" Choke	Approximately 2 hrs.
20/64" Choke	Approximately 2 hrs.
22/64" Choke	Approximately 2 hrs.
24/64" Choke	Approximately 2 hrs.
32/64" Choke	Approximately 3 hrs.
48/64" Choke	Approximately 5 hrs.

NOTE: Follow this schedule to utilize a 24-hour flowback. If well begins to slug or make large amounts of sand to surface, drop to next lower choke size. If well begins to taper off in liquid production (mostly N₂), change to next larger choke size before time schedule dictates.

WELLBORE CLEAN OUT, AND LAND TUBING

Deliver to location the following equipment:

1.	500' 2-3/8", 4.7#, J-55, EUE workstring / production tubing
2.	One rig tank filled w/ 2% KCl
3.	3-7/8" bit/mill and bit sub
4.	Six 3-1/8" drill collars (if necessary)

***Note: Attempt to minimize the use of kill fluid on the wellbore during cleanout/landing operations.**

19. Hold safety meeting. Place fire and safety equipment in strategic locations. Comply with all BR, BLM, and NMOCD rules and regulations.
20. PU 3-7/8" bit/mill on 2-3/8" tubing. Strap and rabbit tubing. Stage in hole to frac plug at 4170'. Drill frac plug at 4170' with 10-12 BPH mist rate.

21. Continue TIH to CIBP set at 5480'. Clean up to less than 5 BPH water and trace of sand. Obtain stabilized pitot gauge and record on DFW report when water rates are less than 5 BPH and sand volumes are acceptable
22. Drill CIBP at 5480' with 10-12 BPH mist rate. Continue cleaning out to PBTD depth of 7501'. Clean up to less than 5 BPH water and trace of sand. Obtain stabilized pitot gauge and record on DFW report when water rates are less than 5 BPH and sand volumes are acceptable, TOOH & LD bit.
23. MU expendable check, SN, one joint of 2-3/8" tubing, one 2' pup joint and the remaining 2-3/8" tubing. Broach tubing while RIH. Check for fill. Clean out to PBTD. Land tubing @ +/- 7420' maintaining a minimum of 60' of rat hole.
24. ND BOPs. NU Tree and manifold assembly. Pump off expendable check. Make swab run 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. SI well. RD and MOL.

Engineers							
Laura Nofziger		James Erlandson		Sean Corrigan			
Office	326-9765	Office	599-4010	Office	326-9812		
Home	326-1790	Home	327-9168	Home	324-2028		
Pager	327-8667	Pager	949-2642	Pager	324-4208		

Frac Consultants:			
Mark Byars		Mike Martinez	
Pager	327-8470	Pager	599-7429
Mobile	320-0349	Mobile	320-7473
Home	327-0096	Home	327-6161

Production Dept:				
		Office	Pager	Cellphone
Lease Operator	Toby Young		324-7617	320-2738
Production Foreman	Ken Raybon	326-9804	320-2559	320-0104
Specialist	Mick Ferrari		326-8865	320-2508

VENDORS:				
		SERVICE COMPANY		PHONE NUMBER
CASED HOLE:		Basin		327-5244
STIMULATION:				
FRAC VALVE:		District Tools		
FREEPOINT/STRING SHOT:		Wireline Specialties		327-7141
TRACER SURVEY:				

East 7F

1510 FNL , 2100 FWL
Unit , Section 14, T31N, R12W
San Juan County, NM

LAT: 36 Deg. 54.1 Min.

LONG: 108 Deg. 4 Min.

GL = 6,276'

KB= 6,290'

Proposed Wellbore

Surface Casing:

8-5/8" 32#
Set @ 344'
TOC @ Circ 18 bbls

J-55

344'

TOC @

2910'

Ojo Alamo	0,000'
Kirtland	0,000'
Fruitland	0,000'
Pictured Cliffs	0,000'
Lewis	0,000'
Huer. Bent. *	3,498'
Chacra	3,884'
Upper Cliff House	4,307'
Mass. Cliff House	4,380'
Menefee	4,567'
Point Lookout	5,102'
Mancos	5,534'
Upper Gallup	N/A
Greenhorn	N/A
Graneros	N/A
Dakota	N/A

Tubing:

2-3/8" 4.7#, J-55
Set @ 7,420'

Production Casing

4-1/2" 10.5#
Set @ 7,546'
TOC @ 2910'

J-55

7,546'

PBTD= 7,501'

TD= 7,550'

PROPOSED STIMULATIONS:

Lewis:

3885' - 4088'
200000# 20/40 Arizona, 75Q foam

Point Lookout/Lower Menefee:

4764' - 5339'
100000# 20/40 Arizona, 2537 bbls 2% KCl

Dakota (existing):

6,997' - 7,232'
40,000# 20/40 Brady, 2516 bbls SW

PROPOSED WELLBORE

LLN

07/30/01