

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Sundry Notices and Reports on Wells

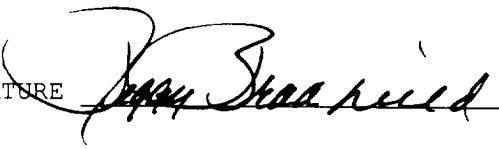
1. Type of Well GAS	API # (assigned by OCD) 30-045-11821 5. Lease Number Fee 6. State Oil&Gas Lease # 7. Lease Name/Unit Name Culpepper Martin 8. Well No. 16 9. Pool Name or Wildcat Blanco MV/Basin DK 10. Elevation:
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	
4. Location of Well, Footage, Sec., T, R, M 990' FNL, 1650' FWL, Sec. 4, T-31-N, R-12-W, NMPM, San Juan County	

Type of Submission	Type of Action
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment <input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Recompletion <input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back <input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair <input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing <input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Commingle

13. Describe Proposed or Completed Operations

It is intended to recomplete the subject well in the Mesaverde formation according to the attached procedure and wellbore diagram. After the recompletion, the well will be down-hole commingled. A down-hole commingle order will be applied for.

RECEIVED
AUG 27 1998
OIL CON. DIV.
DIST. 3

SIGNATURE  (KMCPUD) Regulatory Administrator August 26, 1998
no

(This space for State Use)

Approved by ORIGINAL SIGNED BY ERNIE BUSCH Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date SEP 1 1998

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, 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-
Revised February 21, 1991
Instructions on the
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-11821		Pool Code 72379/71599		Pool Name Blanco Mesaverde/Basin Dakota	
Property Code 6935		Property Name CULPEPPER MARTIN			Well Number 16
GRID No. 14538		Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			Elevation 5989'

10 Surface Location

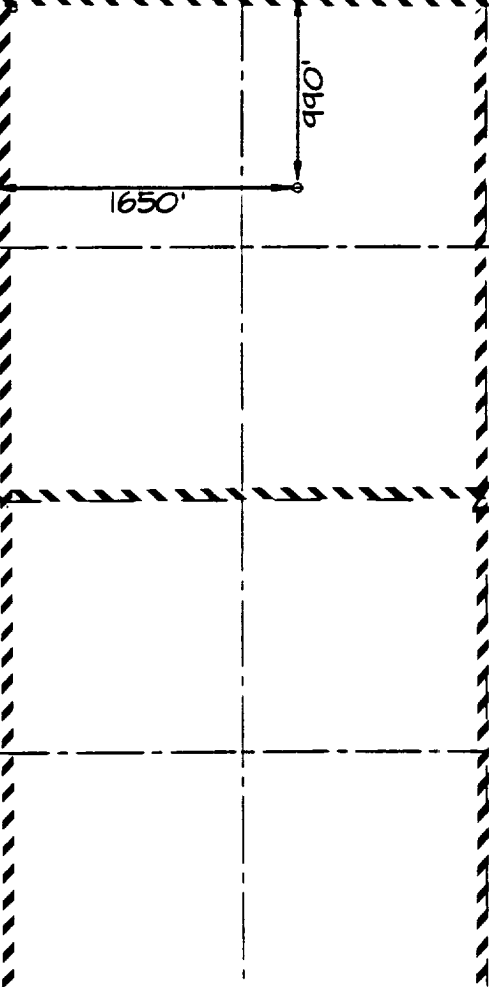
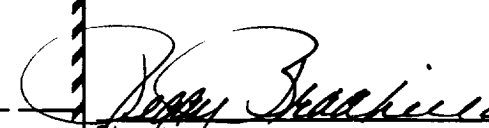
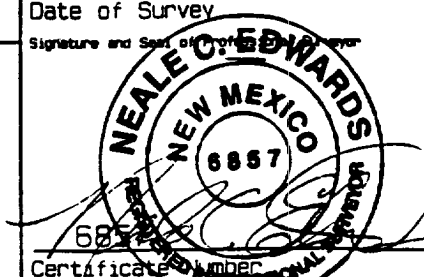
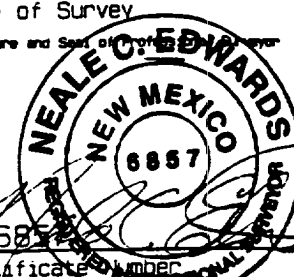
UL or lot no. C	Section 4	Township 31N	Range 12W	Lot 10n	Feet from the 990	North/South line NORTH	Feet from the 1650	East/West line WEST	County SAN JUAN
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres MV-N/320 DK-W/320	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

	<p>*NOT RESURVEYED. PREPARED FROM A PLAT DATED 9-22-66 BY ERNEST V. ECHOHAWK.</p>	17 OPERATOR CERTIFICATION I hereby certify that the information contained here is true and complete to the best of my knowledge and belief.  Signature Peggy Bradfield Printed Name Regulatory Administrator Title 8-26-98 Date
		18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this was plotted from field notes of actual surveys made or under my supervision, and that the same is true and correct to the best of my belief. AUGUST 24, 1998 Date of Survey  Signature and Seal of Surveyor  Certificate Number

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OIL CON. DIV.
DIST. 3

BURLINGTON RESOURCES

Culpepper Martin #16

**990' FNL, 1650' FWL
Unit C, Section 4, T31N, R12W
San Juan County, New Mexico
LAT: 36° 55.95' LONG: 108° 6.21'**

Project Objective:

Well is currently producing +/- 60 mcf/d and 0.5 bopd on plunger lift. Set plug over Dakota and recomplete in the Mesaverde. Mesaverde will be completed with a one stage crosslinked frac. After the Mesaverde is cleaned up tubing will be landed in the Dakota and both zones commingled.

Equipment and Material Requirements:

Deliver the following equipment to location:

1. 150' of 2-3/8" 4.7# J-55 tubing (As needed for replacement)
2. Four (4) - 400 bbls frac tanks to be spotted and filled w/ 2% KCL
3. 4000' of 3-1/2" 9.3# J-55 tubing for frac string
4. 1000' of 2-7/8" 6.5# J-55 tubing for frac string
5. 4-1/2" packer for 2-7/8" tubing
6. 3-7/8" bit/mill
7. Six 3-1/8" drill collars
8. Two (2) CIBP

Below are materials required for fracture stimulations:

	<u>Mesaverde</u>	
1. Fluid Type	Crosslinked	
2. Stages	One	
3. Acid Volume	30	bbls
4. Sand Type	Arizona	
5. Sand Size	20/40	
6. Sand Volume	100,000	#'s

Fill frac tanks 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. Contact Production Engineering and discuss stimulation water source and quality. Run fluid tests on water. Filter water based on Stimulation company solids water analysis.

Procedure:

1. Hold safety meeting. MIRU completion rig. Place fire and safety equipment in strategic locations. Comply with all BR, BLM, and NMOCD rules and regulations. Record tubing, casing, pressures. RU flowlines. Blowdown tbg and csg. **Perform 1 hr Pitot test, if well will flow once blown down.** Note any Oil/Water production if present into DIMS report. Will use as baseline.

2. Kill well w 2% KCL down tubing, if necessary. ND wellhead. Replace any failed valves or seals on wellhead. NU BOP's w/ 2-3/8" pipe rams and stripping head.
3. TOOH with 7041' of 2-3/8", 4.6#, 8rd tubing. Rabbit and strap tubing. Inspect and replace any bad joints.
4. MIRU wireline unit. Under a lubricator, RIH with 4-1/2", 11.6# gauge ring to PBTD of 7100'. POOH. PU 4-1/2" CIBP. Under a lubricator, RIH and set 4-1/2" CIBP at 5300'. POOH. ND wireline unit.
5. Load hole with 2% KCL. Pressure test casing and CIBP to 1000 psi for 15 min.
6. NU wireline. RIH with CBL/GR log. Under 1000 psi, log from CIBP at 5300' to 200' above TOC. Cement bond required from 5300' to 3800'. POOH. Call into office with results of CBL to discuss any possible remedial procedures.

Point Lookout Fracture Stimulation:

7. Under a lubricator, RIH with 3-1/8" HSC casing gun. Select fire perforate Massive Point Lookout with 1 SPF, 0.32" diameter, (Owen, 302) charges at the following depths:
Note: Perforate Lower Point Lookout w/ 2 spf at 120° phasing at the following depths:

Following Lower Point Lookout perforations at **2 spf**:

4935, 4948, 4965, 4980, 4992, 5005, 5026, 5043, 5070

Following Massive Point Lookout at **1 spf**:

4749, 4768, 4784, 4800, 4810, 4814, 4844, 4866, 4876, 4888,
4910, 4916,

(30 total holes, 21 effective holes, 321' of gross interval)

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

8. XO to 2-7/8" pipe rams and slips. PU 2 jts. of 2-7/8" 6.5# tubing, 4-1/2" packer, 800' of 2-7/8" tubing, and 3800' of 3-1/2" tubing. TIH and set packer +/- 5100'. RU stimulation company. Pressure test CIBP to 4100 psi for 15 min. Record results. Bleed off pressure. RD stimulation company. Unseat packer and TUH to 4900'. Spot 5 bbls of 15% HCL across perfs.
9. TUH to 4550' and set packer. Fill annulus behind and apply 500 psi and hold during frac job.
10. NU stimulation company. Pressure test surface lines to 5100 psi. Prepare to breakdown perforations. Pump into perforations to establish injection rate at maximum pressure of 4100 psi. Record breakdown pressure and rate and ISIP. **Note: Calculate the number of perforations open at beginning of the job. Note number of perfs open in frac report. Prepare to ballout to ensure effective stimulation.** (Ballout even if all perforations calculate to be open.) If an injection rate cannot be established, unseat packer and TIH with 2-7/8" tubing and spot 5 bbls 15% HCL across perforations. TUH and reseat packer at +/- 4550'.
11. Begin balloff. Pump 25 bbls of 15% HCL (Add 2/1000 gallons corrosion inhibitor and 1/1000 gallons surfactant to acid.) and flush with 2% KCL at maximum rate pressure will allow. Drop a total of 60, 7/8"

1.3 SG RCN ball sealers spaced evenly throughout job. Maximum pressure at balloff is 4100 psi. ND stimulation company.

12. Unseat packer. PU 3-1/2" tubing and TIH to knock balls off. TUH and reseal packer at +/- 4550'.
13. NU stimulation company. Hold safety meeting. Pressure test surface lines to 5100 psi. Maximum surface treating pressure during frac is 4100 psi. Fracture stimulate Point Lookout / Lower Menefee interval per attached schedule at 40 BPM, with 100,000 #'s of 20/40 Arizona sand. Quick flush at 2 ppg with 2% KCL. Flush with 38 bbls of 2% KCL to 100' of top perforation. Cut pump rate throughout flush as pressure will allow. Shutdown and record ISIP, 5, 10, and 15 min shut-in pressures.
14. Bleed off pressure on tubing and casing. ND stimulation company. Unseat packer and TOOH.
15. XO to 2-3/8" pipe rams and slips. PU 3-7/8" bit and six drill collars on 2-3/8" tubing. Clean out to CIBP set and 5300'. Clean up to less than 5 BPH water and trace of sand. Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the Mesaverde interval. Record on WIMS report.
16. Check for fill on CIBP at 5300'. TIH. Drill out CIBP at 5300'. Use foam/mist rate of 10 to 12 BPH.
17. Clean out to PBTD at 7100'. Clean up to less than 5 BPH and trace of sand. Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the commingled zones. TOOH laying down 2-3/8" tubing, drill collars, and bit.
18. TIH with one joint of 2-3/8", 4.5# J-55 tubing with expendable check, a seat-nipple, and the remaining 2-3/8" tubing. Land tubing at +/- 7060'. Broach tubing while running in hole to seat-nipple with sandline. POOH.
19. ND BOP's. 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 WIMS report. SI well. RD and MOL.

Compiled By:

Kenneth M. Collins 5-22-98
Kenneth M. Collins
Production Engineer

Approval:

Saw for DDC 5/22/98
Regional Engineer

Bruce W. Boyer 6-11-98
Drilling Superintendent

VENDORS:

CASED HOLE:
STIMULATION:
FRAC VALVE:

SERVICE COMPANY

TBA
TBA
District Tools

PHONE NUMBER

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PERTINENT DATA SHEET
CULPEPPER MARTIN #16

<u>Location:</u>	990' FNL, 1650' FWL Unit C, Section 4, T31N, R12W San Juan County, New Mexico	<u>DP#:</u>	10689 - DK 36519A - MV	<u>LAT:</u>	36° 55.95'
<u>Field:</u>	Basin Dakota	<u>Elevation:</u>	5989' GL	<u>GWI:</u>	74.9% (DK) 94.6% (MV)
<u>ID:</u>	7125'	<u>Spud Date:</u>	10/06/66	<u>NRI:</u>	65.5% (DK)
<u>PBTD:</u>	7100'	<u>Completion Date:</u>	11/04/66		81.8% (MV)

Casing Record:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>	<u>Sxs Cmt</u>	<u>Cement Top</u>
	10-3/4"		318'	300 sx	
	7-5/8"	26.4#, J-55	4698'	650 sx	1174' (75% eff)
	4-1/2"	10.5#			
	4-1/2"	11.6#	7123'	400 sx	
		Float @ 7100', Top of Liner Hanger @ 4533'			

Tubing Record:

<u>Tubing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>	<u>BHA</u>
2-3/8"	EUE, 8rd	7041'	

Formation Tops:

Pictured Cliffs:	2350'	Gallup:	6107'	Graneros Sand:	6940'
Cliff House:	3941'	Greenhorn:	6823'	Dakota:	7012'
Pt. Lookout:	4725'	Graneros:	6880'		

Logging Record:

ES - Induction

Stimulation:

Perfd @ 2 SPF: 6941-45', 6959-61', @ 4 SPF: 7020-34', @ 2 SPF: 7044-46', 7050-54', 7060-64', frac'd w/50,000# 20/40 sand, 59,910 gal water, dropped 25 balls

Workover History:

NONE

Production History:

Latest Deliverability	55 MCFD	0.5 BOPD	
Initial Deliverability	2.816 MCF (3 hr test)	FTP = 206, SITP = 1654	FCP = 563, SICP = 1654
Cums:	819.9 MMCF	12.8 MBO	

Transporter:

Oil/Condensate:	Giant	Gas:	Williams
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Culpepper Martin #16

Basin Dakota

Unit C, Section 4, T31N, R12W

San Juan County, NM

Elevation: 5989' GL

LAT: 36° 55.95' / LONG: 108° 6.21'

date spud: 10-06-66

