

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

1190' FNL, 1495' FWL, Sec. 20, T-28-N, R-5-W, NMPM

5. Lease Number  
SF-080516A

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

San Juan 28-5 Unit

8. Well Name & Number

San Juan 28-5 U #54E

9. API Well No.

30-039-23813

10. Field and Pool

WC:Munoz Canyon Gallup/  
Basin Dakota

11. County and State

Rio Arriba 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 -

13. Describe Proposed or Completed Operations

It is intended to add the Gallup formation to the subject well according to the attached procedure and wellbore diagram. A cast iron bridge plug will be set for approximately 90 days for testing purposes. The well will then be down-hole commingled. A down-hole commingle order will be applied for.

**RECEIVED**  
DEC - 8 1997  
**OIL CON. DIV.**  
DIST. 3

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

Signed [Signature] (RGOpps) Title Regulatory Administrator Date 12/1/97

(This space for Federal or State Office use)

APPROVED BY [Signature] Title

Date DEC - 4 1997

CONDITION OF APPROVAL, if any:

[Signature] 11/15 C-104 for EHC

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

Form C-10  
Revised February 21, 1995

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

97 DEC -2 PM 1:38

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-23813		Pool Code 96767/71599	Pool Name WC:Munoz Canyon Gallup/Basin Dakota
Property Code 7460	Property Name SAN JUAN 28-5 UNIT		Well Number 54E
GRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		Elevation 6544'

10 Surface Location

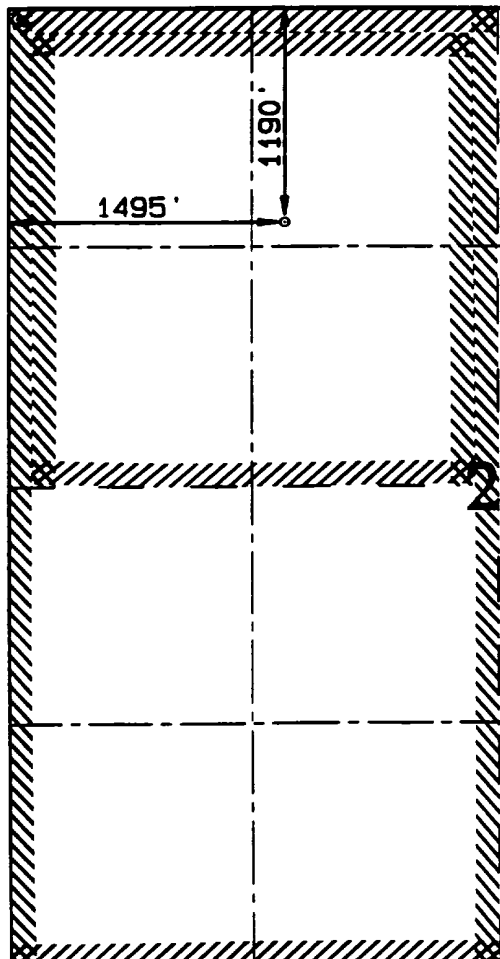

UL or lot no. C	Section 20	Township 28N	Range 5W	Lot Idn	Feet from the 1190	North/South line North	Feet from the 1495	East/West line West	County RIO ARriba
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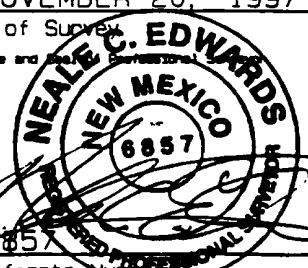
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres Gal - 160 DK - W/320	Joint or Infill	Consolidation Code	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 re-surveyed: Prepared from plat By: William E. Mahnke II Dated: July 9, 1985</p> <p><b>RECEIVED</b> DEC - 8 1997 OIL CON. DIV. DIST. 3</p>	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
		<p> Signature Peggy Bradfield Printed Name Regulatory Administrator Title 12-2-97 Date</p>
		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.

NOVEMBER 20, 1997  
Date of Survey  
Signature and Seal of Surveyor  
  
Certificate Number

San Juan 28-5 Unit #54E  
Burlington Resources Oil & Gas  
~~Nebraska Payson~~ **GALLUP RECOMPLETION**  
Unit C-Sec 20-T28N-R05W  
Lat: 36° 39' 03''  
Long: 107° 23' 09''

- 
- Comply with all BLM, NMOCD, & BR rules & regulations.
  - **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
  - Spot and fill 3 frac tanks with 2% KCl water.
  - Use drill gas for all operations.
  - (1) 4-1/2" CIBP required for 4-1/2" 11.6# K-55 pipe.
  - (1) 4-1/2" Model 'EA' Retrieivamatic Packer
  - 8000' 2-3/8" 4.7# 8rd EUE workstring
  - 2 joints (+/- 60') 2-7/8" 6.4# N-80 BTC tubing
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*The well is currently completed in the Basin Dakota (179 MCFD). Cumulative production is 987 MMCF from the Dakota. Gallup/~~Nebraska pay~~ <sup>RECOMPLETED</sup> will be added and stimulated in one stage with a 70 Quality foam and 30# linear gel frac. Foam is being used to keep damaging fluids off the formation and assist in flowback. Controlled flowback will be used to insure propant placement in the frac.*

**NOTE: Dakota perms open 7712' - 7902'**

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Blow down casing and tubing. Kill well w/ 2% KCl. ND WH, NU BOP.
2. TOOH with 1-1/2" 2.9# J-55 tubing from 7891' (255 joints) and LD. Rabbit and strap tubing. Visually inspect tubing, note any scale in tubing. Replace any bad tubing.
3. RU wireline unit. Run gauge ring to 7390'. Wireline set 4-1/2" CIBP at 7380' to isolate the Dakota. POOH.
4. PU 4-1/2" retrievable packer with 2 joints of 2-7/8" BTC tubing. Set packer at 60'.
5. Pressure test 4-1/2" casing to 3800 psi for 10 minutes. If casing fails, TIH with 4-1/2" packer an hunt hole(s). Engineering will provide squeeze design if required. TOOH
6. Spot 350 gallons 15% Acetic acid (w/ 2 gal/1000 corrosion inhibitor) at 7300'. TOOH, standing 2-3/8" back. (If separate trip is required, skip spotting acid.)
7. RU wireline under packoff. Perforate (top-down if in acid) at the following depths with a 3-1/8" HSC gun w/ Owen 3125306P 12g charges (0.29" hole, 12" penetration), 1 SPF @ 180 degree phasing.

6910', 6920', 6930', 6940', 6950', 6970', 7010', 7020', 7030', 7040', 7050', 7060', 7070',  
7080', 7090', 7100', 7110', 7150', 7160', 7170', 7180', 7200', 7210', 7220', 7230', 7240',  
7250', 7260', 7270', 7280', 7300', 7310', 7320', 7330'  
(34 total holes, 390' gross interval)

8. Set packer at 60'. RU stimulation company. Pressure test surface lines to 4800 psi. **Max surface pressure = 3800 psi.** Prepare to break down w/1000 gallons 15% **Acetic acid** (w/2 gal/1000 corrosion inhibitor) and 68 7/8" 1.3 s.g. ball sealers. Release pressure, RD stimulation company. TOOH. RU wireline unit. Run junk basket and recover balls. Record number of hits. RD wireline unit.

9. RU flowback equipment so that flowback can commence within 30 min. after shutdown

10. Set packer at 60'. RU stimulation company. Pressure test surface lines to 4800 psi. **Max surface pressure = 3800 psi.** Fracture stimulate w/ 303,000# 20/40 Arizona sand in 93,895 gal 70 Quality foam with 30# Linear gel. See attached frac schedule for details. *(2 frac tanks needed for stimulation, and 1 tank needed for balloff/ breakdown)*

<u>Stage</u>	<u>Foam Volume (gals)</u>	<u>Gel Volume (gals)</u>	<u>Sand Volume (lbs)</u>
Pad	10,000	3,000	0
2.0 ppg	10,000	3,000	20,000
3.0 ppg	20,000	6,000	60,000
4.0 ppg	22,000	6,600	88,000
5.0 ppg	27,000	8,100	135,000
Flush	4,895	1,468	0
Totals	93,895	28,168	303,000

11. Treat frac fluid with the following additives per 1000 gallons:

* 6.75 gal	(Guar Slurried Gel)
* 5.0 gal F-52.1	(Foamer mix on the fly)
* 1.0#	(Enzyme Breaker mix on the fly)
* 1.0#	(Oxidator Breaker mix on the fly)
* 2.0 gal L55	(Clay Control)
* 0.38#	(Bacteriacide mix on the fly)
* 0.4 mCi Ir-192	(Radioactive tracer)
* 0.3 mCi Sb-124	(Radioactive tracer)
* 0.3 mCi Sc-46	(Radioactive tracer)

12. Shut well in after frac and record ISIP. RD stimulation company. Install flowback line above frac valve. Wait for 30 min before comencing flowback. Open well to pit, starting with a 10/64" choke. If minimal sand is being produced, change to a larger choke size (16/64"). If choke plugs off, shut well in and remove obstruction from choke and return to flowback. Continue increasing choke size and cleaning well up until fluid returns are negligible. Take pitot gauges when possible.

13. RD flowback equipment. TOOH

14. TIH w/ 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 7380'. Pull up above perfs, obtain pitot gauge on Gallup. ~~Drill up CIBP, clean out to PBTD at 7954'. Clean up to minimal water and trace to no sand. Obtain pitot gauge. TOOH. CIBP WILL REMAIN FOR A 3 MONTH PRODUCTION TEST~~


15. RU wireline unit. Run afterfrac and perf efficiency logs.

16. Prepare to run production tubing string as follows: expendable check, one joint 1-1/2" tubing, 1.78" seating nipple, and remaining tubing. Land tubing @ ~~7800'~~

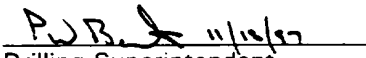
**7300'**

San Juan 28-5 Unit #54E  
Burlington Resources Oil & Gas  
11/10/97

17. ND BOP, NU WH. Pump off expendable check and flow well up tubing to ensure check pumped off. Obtain final pitot gauge. RD & release rig to next location.

Recommended:   
Production Engineer 11-10-97

Concur:   
Basin Opportunities Team Leader 11/18/97

Approved:   
Drilling Superintendent 11/18/97

Vendors:

Wireline	Basin	327-5244
Stimulation	Dowell	325-5096
RA Tagging	Pro-Technics	326-7133

Production Engineer: **Bobby Goodwin**  
**326-9713-work**  
**564-7096-pager**  
**599-0992-home**

**Pertinent Data Sheet - San Juan 28-5 Unit # 54E**  
**C 20 T28N R05W**

**Location:** 1190' FNL & 1495' FWL, Unit C, Section 20, T28N, R05W, Rio Arriba County, New Mexico

**Field:** Basin Dakota

**Elevation:** 6644' GL  
6656' KB

**TD:** 7961'

**PBTD:** 7954'

**Spud Date:** 9/1/85

**Lease#:** SF-080516A

**DP #:** 54329A

**GWl:** 69.61% **NRI:** 58.90%

**GWl:** 100.0% **NRI:** 82.50%

**Prop#:** 007970400

**Dakota**  
**~~Niobrara~~**  
**Gallup**

**Casing Record:**

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
12-1/4"	9-5/8"	32.3# K-55	225'	125 sx	Circ 3 BBL Cmt
8-3/4"	7"	20.0# K-55	3856'	205 sx	2500' (TS)
6-1/4"	4-1/2"	11.6# N-80	7961'	340 sx	2600' (TS)

**Tubing Record:**

1-1/2"	2.9# J-55	7891'	255 Jts
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**Formation Tops:**

Ojo Alamo:	2774'	Point Lookout	5656'
Kirtland Shale:	2925'	Mancos	6156'
Fruitland:	3235'	Gallup	6680'
Pictured Cliffs:	3488'	Greenhorn	7595'
Chacra	4452'	Graneros	7655'
Mesaverde	5245'	Dakota	7795'
Menefee	5305'		

**Logging Record:** Induction Log, Density-Nuetron Log, Gamma -Ray Log, Temperature Survey Log

**Stimulation:** Perfed DK (Dakota) w/1 spf @ 7712', 7716', 7802', 7806', 7810', 7814', 7818', 7850', 7853', 7855', 7871', 7874', 7877', 7880', 7882', 7891', 7894', 7897', 7900', 7902'. Total 20 holes. Fraced w/122,000# Arizona 20/40 sand in 100,490 gal water with 50# J-18 (Guar Gum) per 1000 gal.

**Workover History:** None

**Production History:** This well is booked for 1.57 BCF EUR. Remaining reserves are 582 MMCF and the well is producing 179 MCFD.

**Pipeline:** El Paso Natural Gas - Gas  
Gaint Industries - Oil

# San Juan 28-5 Unit #54E

Basin Dakota/ ~~Niobrara Payadd~~ **GALLUP RECOMPLETION**  
 Unit C, Section 20, T28N, R05W  
 Rio Arriba County, NM  
 Elevation: +6644' GL  
 LAT: 36 39' 03"  
 LONG: 107 23' 09"  
 date spud: 09-01-85

