

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

1635' FSL, 1625' FEL, Sec. 20, T-28-N, R-5-W, NMPM

5. Lease Number
SF-079519A

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 #63E

9. API Well No.

30-039-23814

10. Field and Pool **EXT**
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

☒ 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 add the Gallup formation to the existing Dakota formation of the subject well according to the attached procedure and wellbore diagram. The Gallup will be tested for approximately six months. After testing, the well will be commingled. A down-hole commingle application will be made.

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

Signed *Duane W. Spencer* (BGOpps) Title Regulatory Administrator Date 6/16/99
no

(This space for Federal or State Office use)

APPROVED BY */s/ Duane W. Spencer* Title Team Lead, Petroleum Management Date 6/16/99
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCB

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

| | | |
|----------------------------|---|--|
| API Number 30-039-23814 | Pool Code 96767/71599 | Pool Name EXT WC:Munoz Canyon Gallup/Basin Dakota |
| Property Code 7460 | Property Name San Juan 28-5 Unit | Well Number 63E |
| OGRID No. 14538 | Operator Name Burlington Resources Oil & Gas Company | Elevation 6776 GR |

¹⁰ Surface Location

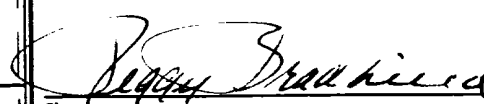
| | | | | | | | | | |
|--------------------|---------------|-----------------|-------------|---------|-----------------------|---------------------------|-----------------------|------------------------|--------------|
| UL or lot no. J | Section 20 | Township 28N | Range 5W | Lot Idn | Feet from the 1685 | North/South line South | Feet from the 1625 | East/West line East | County RA |
|--------------------|---------------|-----------------|-------------|---------|-----------------------|---------------------------|-----------------------|------------------------|--------------|

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 Gal-160 DK-E/320 | 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

| | | | | |
|---|--|--|--|--|
| <div>16</div> <div>Original plat from William E. Mahnke 7-9-85</div> <div>RECEIVED JUN 28 1999</div> <div>OIL & GAS DIV DIST. 3</div> | <div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div> Signature Peggy Bradfield Printed Name Regulatory Administrator Title 6-17-99 Date</div> | | | |
| | <div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>Date of Survey Signature and Seal of Professional Surveyer:</div> | | | |
| | <div>1625'</div> <div>1685'</div> | | | |
| | <div>Certificate Number</div> | | | |

at @

San Juan 28-5 Unit # 63E
Mancos (Gallup) Recompletion Procedure
Unit J, Section 20, T28N, R05W
Lat: 36°- 38.63'/Long: 107° - 22.71'

Summary:

This well is currently completed in the Dakota. Cumulative production from the DK is 383 MMCF and is currently producing at 90 MCFD. It is intended to recomplete the Mancos interval, produce Mancos only for 6-9 months, run production logs and pressure build-up tests, and eventually commingle the Mancos/Dakota production. The Mancos will be stimulated in two stages using a total of 200,000 lbs 20/40 Tempered LC sand in a 65-70 Quality foam and 25# Linear gel system.

1. Inspect location and test rig anchors. Comply with all NMOC, BLM, Forestry & BR rules and regulations. Dig flowback pit. Haul to location a new or inspected 8200', 2-3/8" 4.7# J-55 production string, 8000' 2-7/8" buttress frac string, and 6-400 bbl frac tanks.
2. MIRU. Fill 400 bbl tanks w/ 3# biocide/tank & 2% KCL water. Put one load of fresh water in each tank before adding 20% concentrated KCL water. Run fluid tests on water. Filter water based upon stimulation company water analysis. Record and report SI pressures on tubing, casing and bradenhead. Lay blowdown line. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP, offset spool, and offset rams with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
3. TOOH with 1-1/2" 2.9 lb/ft J-55 10rd EUE Dakota string set at 8006' and laydown. Visually inspect tubing, send in to BR yard for possible reuse. Note and report any scale in/on tubing.
4. PU and RIH with a 3-7/8" bit, 4-1/2" (11.6 lb/ft) casing scraper on the 2-3/8" 4.7# J-55 production string. Clean out to PBTD (~8070') with air/mist. TOOH.
5. TIH with **tubing set** 4-1/2" CIBP on 2-3/8" 4.7# J-55 tubing. Set CIBP at 7810'. Release from CIBP and fill casing with ~ 122 bbls 2% KCL. TOOH.
6. RU wireline company. Run GR-CBL-CCL from 7810' to 200' above clean top of cement under 1000 psi. Evaluate CBL. Good cement bond must exist from 7850' to 6350' to continue with the procedure. ND wireline company.
7. TIH with 4-1/2" packer and 2 joints of 2-7/8", buttress frac string. Set packer for wellhead isolation. Pressure test CIBP and casing to 6200 psi (80% of burst on 4-1/2" 11.6# N80 csg). Bleed off pressure. Release packer and TOOH. LD packer and stand back 2-7/8" buttress joints.
8. TIH with open ended 2-3/8" 4.7# J-55 tubing. In stages, blow casing dry to 78¹⁰~~50~~'. RU stimulation company. Spot 10 bbls 10% Acetic + 5% NH₄CL across Lower Mancos perf interval (7365'-7780'). RD stimulation company. TOOH.
9. NU wireline. Correlate openhole Gearhart Log (8/31/85) to GR-CBL-CCL. Perforate (**Top Down**) Lower Mancos interval as follows using select fire HSC guns loaded with Owens HSC-3125-306T 12 gram charges set at **1 SPF** (Av. perf diameter - 0.30", Av. pen. - 17.48" in concrete). **7365', 7375', 7385', 7460', 7468', 7610', 7620', 7630', 7640', 7650', 7660', 7670', 7680', 7690', 7700', 7710', 7720', 7730', 7740', 7750', 7760', 7770', 7780'** (**23 holes total**) ND wireline company.

10. TIH with 4-1/2" pkr / RBP combo on 2-7/8" N80 buttress tbg. Set packer and RBP at the depths listed below. Perform breakdown with Acetic Acid on each interval.

| Setting # | Packer Depth | RBP Depth | Perf Interval |
|-----------|--------------|-----------|-------------------------|
| 1 | 7580' | 7800' | 7610'- 7780' (18 perfs) |
| 2 | 7340' | 7490' | 7365'- 7468' (5 perfs) |

11. RU stimulation company. Test surface lines to 7200 psi. **Max surface pressure = 6200 psi at 8 BPM. Max static pressure = 6200 psi.** Break down each setting interval with 200 gallons 10% Acetic Acid. Pump at 8 BPM until breakdown is achieved and start on flush. Pump 1 tbg volume of 2% KCl and shut down. Record ISIP for each setting. Release pressure, release pkr, and TIH to RBP. Latch on to RBP and move to next setting depth. Continue this process for both setting depths. TOOH.
12. TIH with 4-1/2" pkr on 2 jts 2-3/8" tbg set at 60'. RU stimulation company. Test surface lines to 7200 psi. **Max surface pressure = 6200 psi.** Fracture stimulate the first stage w/ 100,000# 20/40 Arizona sand in 65-70 Quality foam with 25# Linear gel at 35 BPM. See attached frac schedule for details. Frac will be tagged with radioactive tracers (0.4 mCi Ir-192, 0.3 mCi Sb-124, and 0.3 mCi Sc-46). (2 frac tanks needed)
13. Record ISIP, 5, 10 and 15 minute shut-in pressures. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-flowbean or dual-choke manifold. Begin flowback 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 or adjustable choke and open adjustable choke or place correct size flowbean on manifold to pre-determined size listed in table and begin flowing through adjustable choke or 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.

| 16/64" Choke | From Shut-in – Until 2/3 of flush volume has been recovered (Approximately 26 BBL). |
|--------------|---|
| 10/64" Choke | Approximately 3 hrs. |
| 12/64" Choke | Approximately 3 hrs. |
| 14/64" Choke | Approximately 3 hrs. |
| 16/64" Choke | Approximately 4 hrs. |
| 18/64" Choke | Approximately 4 hrs. |
| 20/64" Choke | Approximately 4 hrs. |
| 22/64" Choke | Approximately 4 hrs. |
| 24/64" Choke | Approximately 4 hrs. |
| 32/64" Choke | Approximately 5 hrs. |
| 48/64" Choke | Approximately 5 hrs. |

NOTE: 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.

14. TIH with 4-1/2" CIBP and packer on 2-3/8" 4.7# J-55 tubing. Set CIBP at 7100'. Release from CIBP and PUH with packer. Set packer just above CIBP and pressure test to 6200 psi. Bleed off pressure. Release packer. Blow hole dry of any fluid to 7050'.
15. Spot 15 bbls 10% Acetic + 5% NH₄CL across Upper Mancos perf interval (6425'-7028'). RD stimulation company. TOOH.
16. NU wireline. Correlate openhole Gearhart Log (8/31/85) to GR-CBL-CCL. Perforate (**Top Down**) Upper Mancos interval as follows using select fire HSC guns loaded with Owens HSC-3125-306T 12 gram charges set at **1 SPF** (Av. perf diameter - 0.30", Av. pen. - 17.48" in concrete). **6425', 6440', 6455', 6470', 6485', 6500', 6515', 6530', 6545', 6780', 6795', 6810', 6825', 6840', 6855', 6870', 6885', 6900', 6915', 6930', 6945', 6960', 6975', 7020', 7028' (25 holes total)** ND wireline company.
17. TIH with 4-1/2" pkr / RBP combo on 2-3/8" tbg. Set packer and RBP at the depths listed below. Perform breakdown with Acetic Acid on each interval.

| Setting # | Packer Depth | RBP Depth | Perf Interval |
|-----------|--------------|-----------|-------------------------|
| 1 | 6750' | 7050' | 6780'- 7028' (16 perfs) |
| 2 | 6390' | 6570' | 6425'- 6545' (9 perfs) |

18. RU stimulation company. Test surface lines to 7200 psi. **Max surface pressure = 6200 psi at 8 BPM. Max static pressure = 6200 psi.** Break down each setting interval with 200 gallons 10% Acetic Acid. Pump at 8 BPM until breakdown is achieved and start on flush. Pump 1 tbg volume of 2% KCl and shut down. Record ISIP for each setting. Release pressure, release pkr, and TIH to RBP. Latch on to RBP and move to next setting depth. Continue this process for both setting depths. TOOH.
19. TIH with 4-1/2" pkr on 2 jts 2-3/8" tbg set at 60'. RU stimulation company. Test surface lines to 7200 psi. **Max surface pressure = 6200 psi.** Fracture stimulate the second stage w/ 100,000# 20/40 Arizona sand in 65-70 Quality foam with 25# Linear gel at 35 BPM. See attached frac schedule for details. Frac will be tagged with radioactive tracers (0.4 mCi Ir-192, 0.3 mCi Sb-124, and 0.3 mCi Sc-46). (4 frac tanks needed)
20. Record ISIP, 5, 10 and 15 minute shut-in pressures. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-flowbean or dual-choke manifold. Begin flowback 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 or adjustable choke and open adjustable choke or place correct size flowbean on manifold to pre-determined size listed in table and begin flowing through adjustable choke or 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.

| 16/64" Choke | From Shut-in – Until 2/3 of flush volume has been recovered (Approximately 26 BBL). |
|--------------|---|
| 10/64" Choke | Approximately 3 hrs. |
| 12/64" Choke | Approximately 3 hrs. |
| 14/64" Choke | Approximately 3 hrs. |
| 16/64" Choke | Approximately 4 hrs. |

| | |
|--------------|----------------------|
| 16/64" Choke | Approximately 4 hrs. |
| 18/64" Choke | Approximately 4 hrs. |
| 20/64" Choke | Approximately 4 hrs. |
| 22/64" Choke | Approximately 4 hrs. |
| 24/64" Choke | Approximately 4 hrs. |
| 32/64" Choke | Approximately 5 hrs. |
| 48/64" Choke | Approximately 5 hrs. |

NOTE: 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.

21. TOOH and laydown 2 jts 2-7/8" N80 buttress tbg and 4-1/2" pkr.
22. TIH with 3-7/8" bit on 2-3/8" 4.7# J-55 tubing and clean out to 7100'. Alternate between blow and natural flow stages until water rates are less than 1 BPH. **Take an Upper Mancos pitot gauge.** Drill out CIBP at 7100'. Use a 10-12 BPH mist rate while drilling CIBP.
23. Continue to clean out well to ^{7810'}~~7850'~~. Alternate between blow and natural flow stages until water rates are less than 1 BPH. Take a total Mancos pitot gauge. TOOH.
24. TIH with an expendable check, one 2-3/8" joint, standard SN and remaining 2-3/8" tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. **Obtain final Mancos pitot gauge.** Land tubing at 7750'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.
25. RU Pro-Technics. Run After-Frac log across Mancos (6350-7850'). RD Pro-Technics
26. CIBP above the Dakota perms will remain for 6-9 months for accurate testing of the Mancos zone. After this period, post frac injection tests will be performed on the Mancos and production logs will be run. Finally the well will be placed on commingled production.

Recommend:


Production Engineer 4-26-99

Approved:


Drilling Superintendent

Approved:


Team Leader

VENDORS:

Wireline:
Stimulation:

Schlumberger
Halliburton

325-5006
325-3575

Contact:

Bobby Goodwin
Neale Roberts

326-9713 (work)
326-9856 (work)

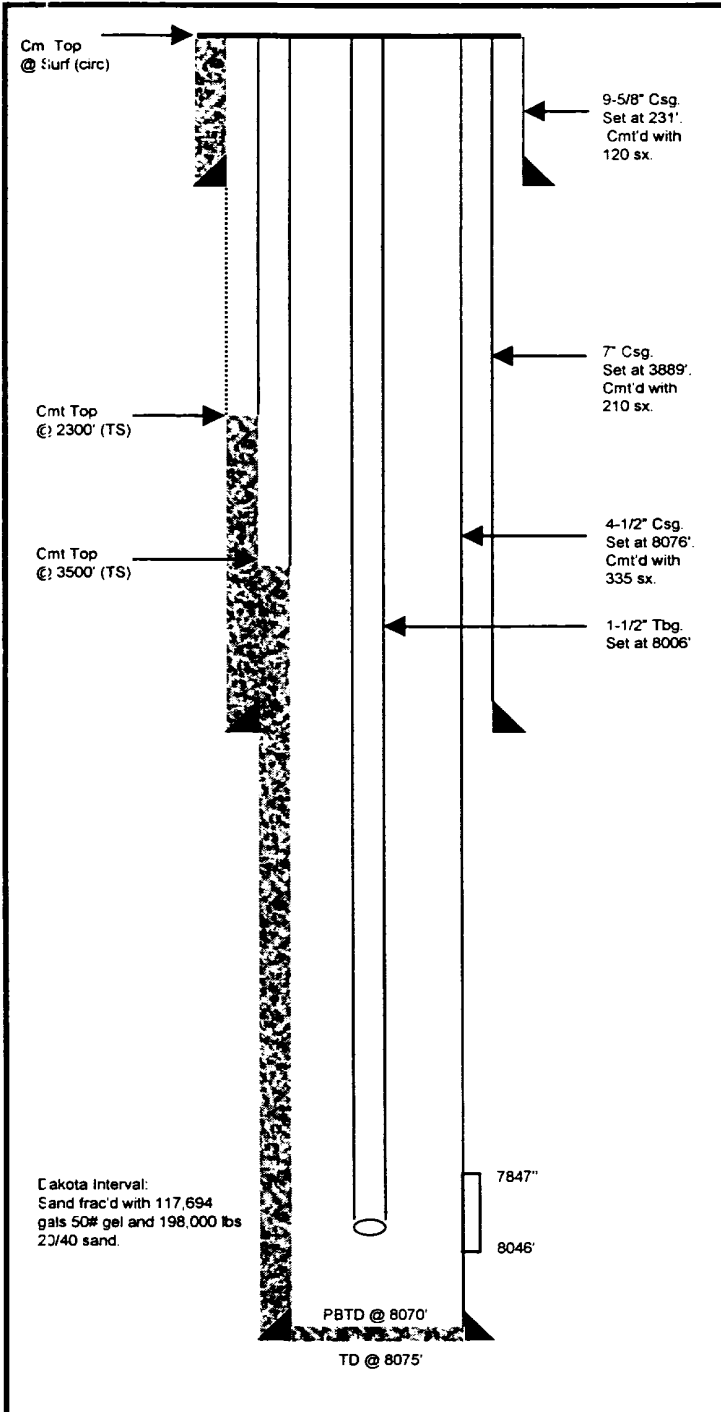
599-0992 (home)

564-7096 (pager)

San Juan 28-5 Unit #63E

Unit J, Section 20, T28N, R5W
 Lat: 36°- 38.6334' / Long: 107°-22.70508'
 Rio Arriba County, NM

Current Schematic



Proposed Schematic

