

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED
DEC 2 1997

DEC - 2 PM 1:39

OIL CON. DIV. NM

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

800' FSL, 1650' FEL, Sec. 19, T-27-N, R-5-W, NMPM

5. Lease Number

SF-079392

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 27-5 Unit

8. Well Name & Number

San Juan 27-5 U #138E

9. API Well No.

30-039-23758

10. Field and Pool

WC:Cereza 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 -☐ 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 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 1997OIL CON. DIV.
DIST. 3

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

Signed Donna Shaahmud (RGOpps) Title Regulatory Administrator Date 12/1/97

(This space for Federal or State Office use)

APPROVED BY /s/ Duane W. Spencer Title _____Date DEC - 4 1997

CONDITION OF APPROVAL, if any:

HOLD C-124 For P&C

NMDCO

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-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

57 DEC -2 PM 1:39

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-23758		*Pool Code 96766/71599	*Pool Name WC:Cereza Canyon Gallup/Basin Dakota
*Property Code 7454	*Property Name SAN JUAN 27-5 UNIT		*Well Number 138E
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6603'

¹⁰ Surface Location

UL or lot no. 0	Section 19	Township 27N	Range 5W	Lot Idn	Feet from the 800	North/South line South	Feet from the 1650	East/West line East	County RIO ARriba
--------------------	---------------	-----------------	-------------	---------	----------------------	---------------------------	-----------------------	------------------------	----------------------

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
*Dedicated Acres Gal - 160 DK E/320		*Joint or Infill		*Consolidation Code		*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

15	19	*Not re-surveyed: Prepared from plat By: Fred B. Kerr Jr. Dated: May 1, 1985	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
			Signature Peggy Bradfield Printed Name Regulatory Administrator Title 12-2-97 Date	
RECEIVED DEC - 8 1997 OIL CON. DIV. DIST. 3			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 Professional Surveyor NEALE C. EDWARDS NEW MEXICO 6857 6857 Certificate Number	

San Juan 27-5 Unit #138E
Burlington Resources Oil & Gas
~~Niobrara Payadd~~ **GALLUP RECOMPLETION**
Unit O-Sec 19-T27N-R05W
Lat: 36° 39' 17"
Long: 107° 23' 46"

-
- Comply with all BLM, NMOCD, & BR rules & regulations.
 - **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
 - Spot and fill 4 frac tanks with 2% KCl water.
 - Use drill gas for all operations.
 - **(2) 4-1/2" CIBP** required for 4-1/2" 11.6# K-55 pipe.
 - (1) 4-1/2" Model 'EA' Retrieivamatic Packer
 - 7900' 2-3/8" 4.7# 8rd EUE workstring
 - 2 joints (+/- 60') 2-7/8" 6.4# N-80 BTC tubing
-

The well is currently completed in the Basin Dakota (150 MCFD). Cumulative production is 818 MMCF from the Dakota. Gallup ~~Niobrara pay~~ ^{RECOMPLETED} will be added and stimulated in two stages with a 70 Quality foam and 30# linear gel frac. The frac will be done in two days, allowing time for proper flowback of each stage. Foam is being used to keep damaging fluids off the formation and assist in flowback. Controlled flowback will be used to insure proppant placement in the frac.

NOTE: Dakota perfs open 7560' - 7748'

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 7707' (238 joints) and LD. Rabbit and strap tubing. Visually inspect tubing, note any scale. Replace any bad tubing.
3. RU wireline unit. Run gauge ring to 7500'. Wireline set 4-1/2" CIBP at 7200' 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 and hunt hole(s). Engineering will provide squeeze design if required. TOOH.

First Stage: (First Day)

6. Spot 350 gallons 15% Acetic acid (w/ 2 gal/1000 corrosion inhibitor) at 7150'. TOOH, standing 2-3/8" back. (If separate trip is required, skip spotting acid.)
7. RU wireline under packoff. Perforate first stage (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.

6965', 6970', 6975', 6980', 6985', 6990', 6995', 7005', 7010', 7015', 7020', 7025', 7030',
7035', 7040', 7045', 7050', 7055', 7070', 7075', 7080', 7085', 7090', 7095', 7115', 7119',
7123', 7127', 7131', 7135', 7139', 7143', 7147', 7151'
(34 total holes, 195' gross interval)

8. Set packer at 60'. RU stimulation company. Pressure test surface lines to 4800 psi. **Max surface pressure = 3800 psi.** Break down first stage w/ 1000 gallons 15 % **Acetic acid** (w/ 2 gal/1000 corrosion inhibitor) and 60 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 the first stage w/ 145,000# 20/40 Arizona sand in 54,775 gal 70 Quality foam with 30# Linear gel. See attached frac schedule for details. (2 *frac tanks needed*)

	Foam Volume	Gel Volume	Sand Volume
<u>Stage</u>	<u>(gals)</u>	<u>(gals)</u>	<u>(lbs)</u>
Pad	10,000	3,000	0
2.0 ppg	5,000	1,500	10,000
3.0 ppg	15,000	4,500	45,000
4.0 ppg	10,000	3,000	40,000
5.0 ppg	10,000	3,000	50,000
Flush	4,775	1,433	0
Totals	54,775	16,433	145,000

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#	(Bactericide 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 commencing 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.

Second Day

13. RD flowback equipment. TOOH.

14. RU wireline unit. Wireline set 4-1/2" CIBP at 6950' to isolate the first stage from the second. POOH. RD wireline unit.

15. Set packer at 60'. RU stimulation company. Pressure test CIBP to 3800 psi. RD stimulation company. TOOH.

Second Stage:

16. RU wireline under packoff. Perforate second stage 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.

**6750', 6755', 6760', 6765', 6770', 6775', 6780', 6785', 6790', 6795', 6800', 6810', 6815',
6820', 6825', 6830', 6835', 6840', 6845', 6850', 6855', 6860', 6870', 6874', 6878', 6882',
6886', 6890', 6894', 6898', 6902', 6906', 6910'**
(33 total holes, 472' gross interval)

17. Set packer at 60'. RU stimulation company. Pressure test surface lines to 4800 psi. **Max surface pressure = 3800 psi.** Break down second stage w/ 1000 gallons 15% **Acetic acid** (w/ 2 gal/1000 corrosion inhibitor) and 36 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.

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

19. Set packer at 60'. RU stimulation company. Pressure test surface lines to 4800 psi. **Max surface pressure = 3800 psi.** Fracture stimulate the first stage w/ 155,000# 20/40 Arizona sand in 57,114 gal 70 Quality foam with 30# Linear gel. See attached frac schedule for details. (2 *frac tanks needed*)

<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	5,000	1,500	10,000
3.0 ppg	15,000	4,500	45,000
4.0 ppg	12,500	3,750	50,000
5.0 ppg	10,000	3,000	50,000
Flush	4,614	1,384	0
Totals	57,114	17,134	155,000

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#	(Bactericide 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)

20. Shut well in after frac and record ISIP. RD stimulation company. Install flowback line above frac valve. Wait for 30 min before commencing 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.

21. RD flowback equipment. TOOH.

22. TIH w/ 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 6950'. Pull up above perfs, obtain pitot gauge. Drill up CIBP, clean out to 7200'. Clean up to minimal water and trace to no sand. Obtain pitot gauge on Gallup.

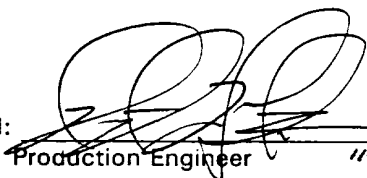
23. ~~Drill up CIBP, clean out to PBTD at 7751'. Clean up to minimal water and trace to no sand. Obtain final pitot gauge. TOOH, laying down workstring.~~ **CIBP WILL REMAIN FOR 3 MONTHS FOR PRODUCTION TEST**

24. RU wireline unit. Run afterfrac and perf efficiency logs ~~from 6700' to 7750'.~~

25. Run production tubing string as follows: expendable check, one joint 1-1/2" tubing, 1.78" seating nipple, and remaining tubing. Land tubing @ ~~7710'.~~ **7100'.**

26. ND BOP, NU WH. Pump off expendable check and flow well up tubing to ensure check pumped off. Gauge well. RD & release rig to next location.

Recommended:


Production Engineer 11-7-97

Concur:


Basin Opportunities Team Leader 11/15/97

Approved:


Drilling Superintendent 11/17/97

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 27-5 Unit # 138E

O 19 T27N R05W

Location: 800' FSL & 1650' FEL, Unit O, Section 19, T27N, R05W, Rio Arriba County, New Mexico

Field: Basin Dakota

Elevation: 6603' GL
6615' KB

TD: 7767'
PBTD: 7751'

Spud Date: 7/5/85

Completion Date: 8/23/85

Dakota
Niobrara

Lease#: SF-079392

DP #: 54075A

GWl: 55.02% **NRI:** 46.03%

GWl: 73.61% **NRI:** 60.73%

Prop#: 007972600

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
12-1/4"	9-5/8"	36.0# K-55	227'	110 sx	Circ 5 BBL Cmt
8-3/4"	7"	20.0# K-55	3703'	195 sx	3100'
6-1/4"	4-1/2"	10.5# K-55	6500'	Total of	
6-1/4"	4-1/2"	11.6# K-55	7760'	350 sx	2500'

Marker Joint at 6825'

Tubing Record:

1-1/2"	2.9# J-55	7760'	238 Jts
--------	-----------	-------	---------

Formation Tops:

Ojo Alamo:	2704'	Point Lookout	5497'
Kirtland Shale:	2840'	Mancos	5997'
Fruitland:	3128'	Gallup	6570'
Pictured Cliffs:	3350'	Greenhorn	7450'
Chacra	4290'	Graneros	7507'
Mesaverde	4968'	Dakota	7627'
Menefee	5114'		

Logging Record: Induction Log, Density-Nuetron Log, Temperature Survey

Stimulation: Perfed Dakota w/1 spf @ 7560', 7564', 7572', 7586', 7589', 7592', 7660', 7662', 7665', 7668', 7671', 7674', 7677', 7680', 7700', 7703', 7714', 7718', 7722', 7726', 7740', 7744', 7748'. Total 23 holes. Fraced w/166,000# 20/40 Arizona sand in 121,020 gal 50# guar gum and slickwater pad and flush.

Workover History: None

Production History: Dakota in this well has an EUR of 1.655 BCF and is producing at 148 MCFD.

Pipeline: Williams Field Service - Gas
Giant - Oil/ Condensate

San Juan 28-5 Unit #138E

Basin Dakota/ ~~Niobrara Payadd~~ Gallup

Unit O, Section 19, T27N, R05W

Rio Arriba County, NM

Elevation: 6603' GL

LAT: 36 39' 17"

LONG: 107 23' 46"

date spud: 07-05-85

RECOMPLETION

