

submitted in lieu of Form 3160-5

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

1015' FSL, 850' FEL, Sec. 7, T-29-N, R-11-W, NMPM

5. Lease Number
SF-078813

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

Well Name & Number

Cooper B #1E

API Well No.

30-045-24212

10. Field and Pool

Otero Chacra/

Basin Dakota

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 recompleate the Chacra formation in the existing Dakota wellbore according to the attached procedure. The Chacra and Dakota formations will be commingled.

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

Signed Peggy Call Title Regulatory Supervisor Date 10/2/01
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.

NOV 02 2001

K

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

¹ API Number 30-045-24212		² Pool Code 82329/71599		³ Pool Name Otero Chacra/Basin Dakota	
⁴ Property Code		⁵ Property Name Cooper B			⁶ Well Number 1E
⁷ OGRID No. 14538		⁸ Operator Name Burlington Resources Oil & Gas Company, LP			⁹ Elevation 5733' GR

¹⁰ Surface Location

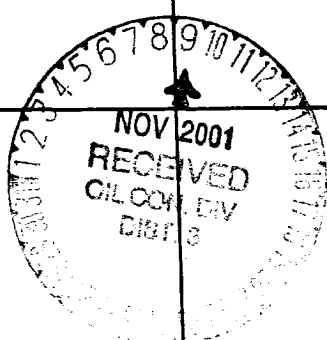
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	29N	11W		1015	South	850	East	San Juan

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 Cha: SE/160 DK: E/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

¹⁶ Original plat from Fred B. Kerr Jr., 10/18/79. 200 OCT - 3 11 4 03 070 F				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature: <u>Peggy Cole</u> Printed Name: <u>Peggy Cole</u> Regulatory Supervisor Title: <u>10-2-01</u> Date: _____	
				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. Date of Survey: _____ Signature and Seal of Professional Surveyor: _____ Certificate Number: _____	
		1015'		850'	

COOPER B #1E

Single-Stage Chacra Recompletion Procedure

1015' FSL, 850' FEL

Unit P, Section 07, T029N, R011W

San Juan County, New Mexico

Latitude: 36 DEG, 44.145'

Longitude: 108 DEG, 1.567'

Summary:

Chacra pay is going to be added to the existing Dakota production. The Chacra will be hydraulically fracture stimulated in one stage with 200,000# 20/40 sand and a 75 quality, N₂ foamed, 20# linear gel. Foam is used to limit the fluid damage to the Chacra by reducing liquid volumes and by aiding in the liquid recovery during the flowback.

- COMPLY WITH ALL NMOC, BLM, AND BR REGULATIONS.
- CONDUCT DAILY SAFETY MEETINGS FOR ALL PERSONNEL ON LOCATION.
- PLACE FIRE SAFETY EQUIPMENT IN STRATEGIC LOCATIONS.
- INSPECT LOCATION AND WELLHEAD, AND INSTALL RIG ANCHORS PRIOR TO RIG MOVE.
- DIG FLOWBACK PIT OR SET FLOWBACK TANK.
- SET AND FILL 3 400-BBL FRAC TANKS WITH 2% KCl WATER. TEST AND FILTER IF NECESSARY.

Equipment Needed:

- | | |
|---|--|
| 3 -- 400-bbl frac tanks with 2% KCl water | 1178' -- 3-1/2", 9.3#, N-80 with turned-down collars |
| 1 -- 5-1/2" CIBP | 62' -- 2-7/8", 6.4#, N-80 |
| 1 -- 5-1/2" packer with bypass | |
| 1 -- 5-1/2" RBP | |

PROCEDURE:

1. Prior to moving in rig, RU slickline and set a tubing plug as deep as possible in the tubing to prevent a plunger or any other equipment from surfacing. The seating nipple is located in the tubing string at **6521'**.
2. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Lay blowdown line and blow well down. Kill well with 2% KCl water. ND WH, NU BOP. Test and record operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
3. 215 jts 2-3/8", 4.7#, J-55 tubing set at **6554'**. PU additional joints of tubing and tag bottom, recording the depth. PBTD should be at +/- **6599'**. **NOTE: DURING A WORKOVER IN 5/96, WE DID NOT GO BELOW 6578'. IT WAS NOT RECORDED IF THIS WAS BECAUSE WE WERE UNABLE TO DO SO.** TOO with 2-3/8" tubing and stand back. Visually inspect tubing and replace bad joints as necessary. Check tubing for scale, and notify Production Engineer and Drilling Manager if it is present.
4. RU wireline. RIH with a 5-1/2" CIBP and set at **6316'**. Load the hole from surface with 2% KCl water. Wait for air to work its way out of the system, and then pressure test the CIBP and casing to **500** psig. Run GR-CBL-CCL with **500** psig from **6316'** to **2060'** (DV tool at 2060') and correlate to attached Processed log. Contact Production Engineer and Drilling Manager to evaluate CBL and decide course of action.
5. PU 5-1/2" packer on 2-3/8" tubing and spot **16** bbls of 15% HCl* from **3222'** to above the top perf. Pull up and set packer at **1240'**. Pressure test the 5-1/2" casing and CIBP to **3850** psig. Release and TOO with packer.

***NOTE: ALL ACID TO CONTAIN THE FOLLOWING ADDITIVES PER 1000 GAL:**

1000 gal	15%	Hydrochloric acid
2 gal		Corrosion inhibitor
2 gal		Surfactant

6. Perforate the Chacra interval with 4" Select-Fire guns loaded with HSC-4000-317T charges (23 gram, 0.44" perf diameter, 24.88" penetration). Shoot **60** holes 1 shot every 2' from the top down in 15% HCl* at the following depths and then RD wireline:

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1015' FSL, 850' FEL

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2626-34', 2726-34', 2764-72', 2795-2803', 2870-78', 2927-35', 2949-57', 2973-81', 3030-38', 3062-70', 3138-46', 3164-72'

7. PU and TIH with 5-1/2" RBP, on/off tool, and 5-1/2" packer on 2-3/8" tubing. Set RBP at the first RBP Setting Depth listed in the table below. PUH +/-10 ft and set packer. RU stimulation company and pressure test surface lines to 6177 psig. Pressure test RBP to 3850 psig. Release packer, and reset packer at the first Packer Setting Depth listed in the table below. Open the packer bypass and circulate the amount of 15% HCl* listed in the table below to the bypass depth. **NOTE: BY CIRCULATING THE ACID TO DEPTH WE MINIMIZE THE AMOUNT OF WATER PUMPED INTO THE CHACRA** Close the packer bypass. Breakdown perforations and attempt to establish an injection rate of 5 bpm. Max breakdown pressures for various rates are listed in the 2nd table below (70% burst of 2-3/8" tubing). Pump acid into the perfs and then SD the pumps. Release packer and RBP. Repeat breakdown procedure for remaining intervals, and when finished, TOOH with RBP and packer.

RBP Setting Depth	Packer Setting Depth	Perforation Interval	Acid Volume (gals)
3212'	3108'	3138-46', 3164-72'	333
3100'	3000'	3030-38', 3062-70'	333
3011'	2965'	2973-81'	167
2965'	2897'	2927-35', 2949-57'	333
2908'	2840'	2870-78'	167
2833'	2749'	2764-72', 2795-2803'	333
2749'	2696'	2726-34'	167
2664'	2596'	2626-34'	167

Rate (bpm)	Max Pressure (psig)
0	3850
2	4039
3	4326
4	4707
5	5177

8. PU and TIH with 5-1/2" packer; 2 jts 2-7/8", 6.4#, N-80 tubing; 2-7/8" x 3-1/2" crossover; and 38 jts 3-1/2", 9.3#, N-80 frac string. Set packer at 1240'.
9. Install frac valve. RU stimulation company and pressure test surface lines to 6470 psig. Apply 500 psig to frac string annulus and monitor this pressure throughout the stimulation. RU ProTechnics and tag sand with 3 radioactive tracers. Fracture stimulate the Chacra at a constant downhole rate of 40 bpm with 75 quality N2 foamed 20# linear gel and 200,000# 20/40 sand according to the attached frac schedule. Flush to 100' above the top perf with 75 quality N2 foam. **NOTE: THE MAX TREATING PRESSURE WILL VARY WITH RATE ACCORDING THE THE TABLE BELOW.**

Rate (bpm)	Max Pressure (psig)
0	3850
10	4244
20	4632
30	5020
40	5470

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10. Record ISIP, 5, 10, and 15-minute shut-in pressures. Shut-in frac valve. RD ProTechnics. RD stimulation company and install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Open well to pit in accordance with the flowback schedule listed in the table below. **NOTE: DO NOT SHUT WELL IN DURING FLOWBACK.** When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to appropriate size from table and begin flowing through the adjustable choke. 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 adjustable choke and close adjustable choke. **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 SMALLER CHOKE SIZE. IF WELL BEGINS TO TAPER OFF IN LIQUID PRODUCTION AND FLOW MOSTLY N₂, CHANGE TO NEXT LARGER CHOKE SIZE BEFORE TIME SCHEDULE DICTATES.**

10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 3 hrs.
18/64" Choke	Approximately 3 hrs.
20/64" Choke	Approximately 3 hrs.
22/64" Choke	Approximately 3 hrs.
24/64" Choke	Approximately 3 hrs.
32/64" Choke	Approximately 3 hrs.

11. Release packer and TOOH with frac string. LD frac string and packer.
12. PU and TIH with 4-3/4" mill on 2-3/8", 4.7#, J-55 tubing and CO to CIBP at 6316' with air/mist. When the well is sufficiently clean, gauge the Chacra interval for 1 hour, recording results every 15 minutes. A quickly dropping pitot gauge (unstable) over the 60 minutes may indicate liquid loading, and that further time should be spent cleaning up the Chacra interval. Further cleanup should be discussed with the Production Engineer and Drilling Manager. Drill out the CIBP with air/mist. **NOTE: WHEN MILLING, MIST RATE MUST NOT BE LESS THAN 12 BPH.**
13. CO to PBTD at 6599'. TOOH and LD mill.
14. TIH with an expendable check; a 1.78" ID seating nipple; one joint of 2-3/8", 4.7#, J-55 tubing; one 2' pup joint; and then half of the 2-3/8" production tubing. Run a broach on sandline to ensure that the tubing is clear. TIH with remaining 2-3/8" tubing. Replace any bad joints. CO to PBTD with air/mist.
15. PU above the top Chacra perf at 2626' and flow the well naturally, making short trips for cleanup when necessary. Discuss sand production with Production Engineer and Drilling Manager to determine when cleanup is sufficient.
16. Land tubing at 6515'. Broach the upper half of the production tubing. ND BOP and NU tree. Pump off expendable check. If well will not flow on its own, make swab run to seating nipple with rig's sandline. **NOTE: 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. Return well to production.
17. RU ProTechnics. Run Spectral GR tool across the Chacra from 3322' to 2476'. RD ProTechnics.