

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

850' FSL, 1120' FEL, Sec. 22, T-28-N, R-8-W, NMPM

5. Lease Number  
NM-013861

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
Grambling A #2A

9. API Well No.  
30-045-23817

10. Field and Pool  
Otero Chacra/  
Blanco Mesaverde

11. County and State  
San Juan 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 - commingle

13. Describe Proposed or Completed Operations

It is intended to recomplate the subject well to the Chacra formation according to the attached procedure. The Mesaverde and Chacra formations will be commingled.



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

Signed

*[Signature]*

Title Regulatory Supervisor Date 8/20/01

TLW

(This space for Federal or State Office use)

APPROVED BY

*/s/ Jim Lovato*

Title

Date OCT - 2

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.

NMOCD

## GRAMBLING A #2A

Single-Stage Chacra Recompletion Procedure

850' FSL, 1120' FEL

Unit P, Section 22, T028N, R008W

San Juan County, New Mexico

Latitude: 36 DEG, 38.512'

Longitude: 107 DEG, 39.748'

### Summary:

Chacra pay is going to be added to the existing Cliff House, Menefee, and Point Lookout 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 NMOCD, 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

1 – 4-1/2" CIBP

1 – 4-1/2" RBP

1 – 4-1/2" retrievable packer with bypass

### 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 **4839'**.
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. **NOTE: THIS WELL HAS A PLUNGER-LIFT SYSTEM.** 153 jts 2-3/8", 4.7#, J-55 tubing set at **4871'**. PU additional joints of tubing and tag bottom, recording the depth. PBTD should be at +/- **4936'**. TOOH 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. PU and TIH with 4-1/2" CIBP on 2-3/8" tubing. Set CIBP at **3816'**. Load hole with 2% KCl water and spot **13** bbls of 15% HCl\* from **3663'** to above the top perf. Pressure test the casing and CIBP to **1000**psig. TOOH with tubing and stand back.

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

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

5. RU wireline. Run GR-CBL-CCL with **1000**psig from **3816'** to **2452'** (top of 4-1/2" liner) and correlate to attached 2" Induction log. Contact Production Engineer and Drilling Manager to evaluate CBL and decide course of action. Pressure test the casing and CIBP to **3000** psig.
6. Perforate the Chacra interval with 3-1/8" Select-Fire guns loaded with HSC-3125-306T charges (12 gram, 0.3" perf diameter, 17.48" penetration). Shoot **60** holes 1 shot every 2' from the top down in 15% HCl\* at the following depths and then RD wireline:

**2915-23', 2984-92', 3040-48', 3111-19', 3226-34', 3265-73', 3346-54', 3376-84', 3407-15', 3481-89', 3552-60', 3605-13'**

7. PU and TIH with 4-1/2" RBP, on/off tool, and 4-1/2" 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 **6058** psig. Pressure test RBP to **3000** 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**

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**THE AMOUNT OF WATER PUMPED INTO THE CHACRA** Close the packer bypass. Breakdown perforations and attempt to establish an injection rate of 7 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)
3653'	3522'	3552-60', 3605-13'	333
3519'	3396'	3407-15', 3481-89'	333
3396'	3316'	3346-54', 3376-84'	333
3303'	3196'	3226-34', 3265-73'	333
3149'	3016'	3040-48', 3111-19'	333
3016'	2885'	2915-23', 2984-92'	333

Rate (bpm)	Max Pressure (psig)
0	3000
2	3135
4	3686
6	4531
7	5058

8. Install WH isolation tool. RU stimulation company and pressure test surface lines to 4000 psig. RU ProTechnics and tag sand with 3 radioactive tracers. Fracture stimulate the Chacra at a constant downhole rate of 40 bpm with 75 quality N<sub>2</sub> 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 N<sub>2</sub> foam. **NOTE: THE MAX TREATING PRESSURE IS 3000 PSIG.**
9. 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 N<sub>2</sub>, 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.

10. ND WH isolation tool. PU and TIH with 3-7/8" mill on 2-3/8", 4.7#, J-55 tubing and CO to CIBP at 3816' with air/mist. When the well is sufficiently clean, gauge the Chacra interval for 1 hour, recording results every 15

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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.**

10. CO to PBTD at 4936'. TOOH and LD mill.

11. 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.

12. PU above the top Chacra perf at 2915' 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.

13. Land tubing at 4832'. 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.

14. RU ProTechnics. Run Spectral GR tool across the Chacra from 3763' to 2765' RD ProTechnics.

Recommend: *J. Yon Lovel* 8/10/01  
Production Engineer

Approve: *Bruce W. Boyer* 8-14-01  
Drilling Manager

Approved: *W.S. Smith* 8/13/01  
Lewis Team Supervisor

Approve: *Reggie Cole* 8-15-01  
Regulatory

Production Engineer: Tom Loveland  
Production Foreman: Ward Arnold  
Specialist: Richard Lopez  
Lease Operator: Joe Herrera

Office: 326-9771  
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Pager: 326-8681  
Pager: 949-2373

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Mobile: 320-6573  
Mobile: 320-2731

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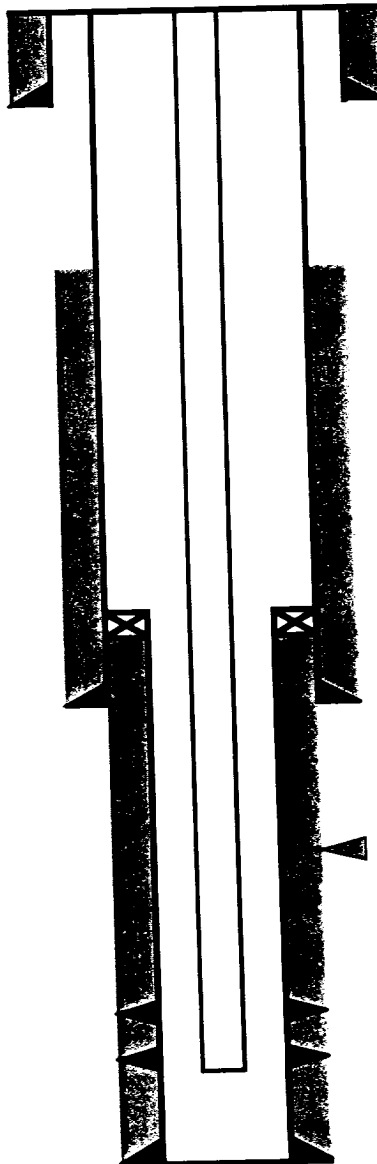
9-5/8", 36#, K-55 casing set at 220'. Cmt'd with 250 sx "B" with additives. TOC at surface by circ.

Liner hanger at 2452'.

7", 20#, K-55 casing set at 2596'. Cmt'd with 114 sx "B" 65/35 poz with additives + 100 sx "B" with additives. TOC at 1000 by temp svy.

153 jts 2-3/8", 4.7#, J-55. 1.78" ID SN at 4839'. End of tubing at 4871'.

4-1/2", 10.5#, K-55 liner set at 4954'. Marker joint at 3842'. Cmt'd with 314 sx "B" 50/50 poz with additives. TOC at L.T. by circ.



Formation Tops	
San Juan	
Nacimiento	
Ojo Alamo	
Kirtland	
Fruitland	
Pictured Cliffs	
Huerfano Bentonite	
Navajo City Chacra	2873
Otero Chacra	3214
Otero Middle Bench	3340
Cliff House	3807
Menefee	3970
Point Lookout	4494
Mancos	
Gallup	
Greenhorn	
Graneros	
Dakota	

Proposed Lewis perms: 2915-23', 2984-92', 3040-48', 3111-19', 3226-34', 3265-73', 3346-54', 3376-84', 3407-15', 3481-89', 3552-60', 3605-13' (60 holes).

Cliff House & Menefee perforations: 3866-4452' (9 holes).

Point Lookout perforations: 4500-4890' (22 holes).

PBTD: 4936  
 TD: 4954