# UNITED STATES

# DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Report	
	5. Lease Number SF-079205
Type of Well	6. If Indian, All. o
GAS	Tribe Name
	7. Unit Agreement Na
Name of Operator	
BURLINGTON	
RESOURCES OIL & GAS COMPANY	8. Well Name & Numb
Address & Phone No. of Operator	Sharp #2A
PO Box 4289, Farmington, NM 87499 (505)	
	30-045-23815
Location of Well, Footage, Sec., T, R, M	10. Field and Pool
1830'FNL, 2090'FEL, Sec.18, T-28-N, R-8-W,	NMPM Otero Chacra/ Blanco Mesaverde
	11. County and State
	San Juan Co, NM
. CHECK APPROPRIATE BOX TO INDICATE NATURE	OF NOTICE, REPORT, OTHER DATA  'ype of Action
Thendown The Committee of the Committee	
X Notice of Intent Abandoniii X Recomple	
Subsequent Report Plugging	Back Non-Routine Fracturing
Casing R	
Final Abandonment Altering	Casing Conversion to Injection
X_Other -	ons  the well to the Chacra formation according
X_Other -  B. Describe Proposed or Completed Operation  It is intended to recomplete the subject	commingle
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The subject to the attached procedure. The Me commingled.  It is intended to recomplete the subject to the attached procedure. The Me commingled.	commingle  ons  ct well to the Chacra formation according esaverde and Chacra formations will be  Oct 2000  Chacker of the Chacra formation according esaverde and chacra formations will be  true and correct.

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

		WE	LL LOC	CATION	AND ACR	EAGE DEDIC	CATION PL	AT		
API Number <sup>1</sup> Pool Code				I .	Plane Chara / Planes Masswards					
30-045-23815 82329/72319				Otero Chacra/Blanco Mesaverde  'Property Name 'Well Number				Well Number		
				Sharp				2A		
1502					Operator Name			* Elevation		
14538			Bur1	ington	Resources	ources Oil & Gas Company			5775 <b>'</b> GR	
					10 Surface	Location				
UL or lot no.	Section	Township	Range Lot Idn Feet from the North/South line Feet from the East/		East/Wes	t line	County			
G	18	28N	8W		1830	North	2090	East		San Juan
			11 Bot	tom Hol		f Different Fro				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t une	County
Cha: NE/16	0		Consolidatio		Order No.				-	
NO ALLO	WABLE	WILL BE	ASSIGNE	D TO TH	IS COMPLETE	ON UNTIL ALL EEN APPROVED	INTERESTS H	IAVE BE ISION	EN CO	NSOLIDATED
Original Fred B.	Kerr		4/1979.	18		2090'	Signature Pegs. Printed Na Regu Title Date  18 SUR I hereby ce was plotted or under m correct to it. Date of Su	RATOR  Affair  y Cole  cole  to the second s	Super  CER  well locat otes of act a, and that y belief.	TIFICATION ion shown on this plat tual surveys made by mo the same is true and
							Certificate	Number		

#### **SHARP #2A**

Single-Stage Chacra Recompletion Procedure 1830' FNL, 2090' FEL Unit G, Section 18, T028N, R008W San Juan County, New Mexico

Latitude: 36 DEG, 39.816' Longitude: 107 DEG, 43.193'

#### 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,  $N_2$  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% KCI WATER. TEST AND FILTER IF NECESSARY.

# **Equipment Needed:**

3 -- 400-bbl frac tanks with 2% KCl water

1 -- 4-1/2" RBP

1 - 4-1/2" CIBP

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 4735'.
- 2. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Lay blowdown line and blow well down. Kill well with 2% KCI 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. 152 jts 2-3/8", 4.7#, J-55 tubing set at additional joints of tubing and tag bottom, recording the depth. PBTD should be at +/- 4825'. 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.
- PU and TIH with 4-1/2" CIBP on 2-3/8" tubing. Set CIBP at 3770'. Load hole with 2% KCI water and spot 14 bbls of 15% HCI\* from 3538' 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 3770' to 2361' (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:

2766-74', 2895-2903', 3021-29', 3132-40', 3156-64', 3260-68', 3289-97', 3360-68', 3374-82', 3420-28', 3440-48', 3480-88'

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 5952 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% HCI\* 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 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

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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)
3525'	3464'	3480-88'	167
3464'	3401'	3420-28', 3440-48'	333
3401'	3330,	3360-68', 3374-82'	333
3327'	3230'	3260-68', 3289-97'	333
3194'	3102'	3132-40', 3156-64'	333
3059'	2991'	3021-29'	167
2933'	2865'	2895-2903'	167
2804'	2736'	2766-74'	167

Rate (bpm)	Max Pressure (psig)
O O	3000
3	3353
5	4018
7	4952

- 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 N2, CHANGE TO NEXT LARGER CHOKE SIZE BEFORE TIME SCHEDULE DICTATES.

Approximately 2 hrs.
Approximately 2 hrs.
Approximately 2 hrs.
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 3770' 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 4825'. 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 **2766'** 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 4721'. 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 3638' to 2616' RD ProTechnics.

Recommend:

Production Engineer

Approve:

Cally Bong 8.14

Approved

Lewis Team Supervisor

Regulatory

Production Engineer: Tom Loveland Production Foreman: Ward Arnold

Specialist: Richard Lopez

Lease Operator: George Reid

Office: 326-9771

Office: 326-9864

Pager: 326-8698 Pager: 326-8303 Pager: 326-8681 Pager: 324-2461

Mobile: 320-6573 Mobile: 320-1497

Home: 564-8571

Mobile: 320-1689

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9-5/8", 36#, K-55 casing set at 228'. Cmtd with 190 sx "B" with additives. TOC at surface by circ.

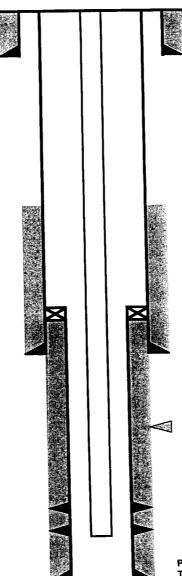
Liner hanger at 2361'.

7", 20#, K-55 casing set at 2529'. Cmtd with 120 sx "B" 65/35 poz with additives + 100 sx "B" with additives. TOC at 1400 by temp svy.

152 jts 2-3/8", 4.7#, J-55. SN at 4735'. End of tubing at 4767'.

4-1/2", 10.5#, K-55 liner set at 4843'.

Marker joint at 3611'. Cmtd with 310 sx "B" 50/50 poz with additives. TOC at L.T. by circ.



Formation Tops San Juan Nacimiento Ojo Alamo Kirtland Fruitland Pictured Cliffs Huerfanito Bentonite 2762 Navajo City Chacra Otero Chacra 3114 Otero Middle Bench 3233 3693 Cliff House Menefee 4494 Point Lookout Mancos Gallup Greenhorn Granerros Dakota

Proposed Lewis perfs: 2766-74', 2895-2903', 3021-29', 3132-40', 3156-64', 3260-68', 3289-97', 3360-68', 3374-82', 3420-28', 3440-48', 3480-88' (60 holes).

Cliff House & Upr Menefee perforations: 3820-4248' (18 holes). Lwr Menefee & Point Lookout perforations: 4304-4779' (24 holes).

PBTD: 4825 TD: 4860