

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM C. CONS. COMMISSION
Drawer DD
Artesia, NM 88210

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

LC 029426-B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

H.E. WEST 'B' #50

9. API Well No.

30-015-27109

10. Field and Pool, or Exploratory Area

Grayburg Jackson Pool

11. County or Parish, State

Eddy Co., NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

SOCORRO PETROLEUM COMPANY

3. Address and Telephone No.

P.O. BOX 37, LOCO HILLS, NM 88255 (505) 677-3223

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

50' FSL & 1400' FWL, Sec 3-T17S-R31E

12 CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other PERF, ACIDIZE-FRAC

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

5/15/93 RU logging truck and mask truck. RIH. Found P8TD @ 4285'. Ran Digital Array Sonic Log from P8TD to 3000'.

7/09/93 MURU Service Unit.

7/10/93 Open well. Circulate well clean with fresh water. Test Casing to 2000#, held OK. Spot with 535 gal 15% NEFE Double Inhibited acid across interval to be perforated. Rig down. POH with 2-7/8" tubing. Perforate the following intervals: Jackson perfs 3980'-4052', 3936'-3947', 3907'-3923', 3845'-3858', 3825'-3833' (total of 240 holes).

7/12/93 1) Open well. 0 press. RIH with pkr and RBP. Set plug @ 4100', set pkr @ 3800'. Swab well (no show of oil). Spot 4 bbls acid across perfs 3980'-4052'. Set pkr @ 3965'. Acidize Jackson perfs 3980'-4052' with a total of 3750 gal. Good ball action. Pressure increased to 1770# @ 4.13 B/M. Surge balls off. Pump remainder of acid. ISIP 1190#, 15 min 30#. Max press 1810#, avg press 1700#, min press 0#, avg rate 3.75 B/M.

2) Lower tbg, circulate balls off RBP @ 4100'. Pull up set plug @ 3965' test to 2000#, held OK. PU. Set pkr @ 3885' to acidize Jackson perfs 3907'-3947' with 1600 gal 15% NEFE acid. Lower pkr. Spot 2 bbls acid across perfs 3907'-3947'. PU. Set pkr @ 3885'. Did not have good ball action. Avg rate 1.7 B/M, max press 2980#, avg press 3650#, ISIP 2560#, 15 min 2370#.

3) Lower pkr. Wash balls off RBP @ 3965' Move RBP to 3885'. Spot 2 bbls acid across Jackson perfs 3825'-3858'. PU set pkr @ 3800'. Acidize zone with 1100 gal 15% NEFE acid. Did not have good ball action. Avg rate 1 B/M, max press 2890#, avg press 2600#, ISIP 2130#, 15 min 1850#. Flow well back. Circulate balls off RBP. PU set pkr @ 3800'.

CONTINUES ON THE BACK OF THIS PAGE

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

Signed

Title

Production Manager

Date

11 OCT 93

(This space for Federal or State Office use)

Approved by

Title

Date

Conditions of approval, if any:

ACCEPTED FOR RECORD

7 1993

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.

CARLSBAD, NEW MEXICO

*See instruction on Reverse Side

7/13/93 1) Open well with 350# on tbq (acid gas). Fluid flow. Rig up swab equipment. RIH found fluid at surface. Swab Jackson zone - perms 3825'-3858'. First swab run found FL at surface. Made a total of 7 swab runs down to 3490' FS. Rec 30 bbls fluid. Last two runs had 55% oilcut. Found 300' fluid entry having 55% oilcut after 30 minutes.

2) Swab Jackson zone - perms 3907'-3947'. First swab run found FL @ 1100' FS. Made total of 7 swab runs, to 4000' FS. Rec 25 bbls total fluid having and avg of 40% oilcut. Rec 10 BO and 15 BW. Wait 30 min. Found 400' of fluid entry having 50% oilcut.

3) Swab Jackson zone - perms 3980'-4052'. First swab run found FL @ 1600' FS. Made total of 5 swab runs down to 1600' FS. Made total of 5 swab runs down to 1600' FS. Rec 26 bbls total fluid having a trace of oil. Wait 5 minutes. Make final swab run with show of oil in last run.

NOTE: No communication between perms 3825'-3858', 3907'-3947', and 3980'-4052'.

7/14/93 RIH with swab. Tag fluid @ 1600'. First swab run recovered 300' oil and 700' water. Made total of 29 swab runs. Oilcut on last 13 runs averaged 2.5%. Fluid level on last run was 2600' FS. Turn well to test tank with small blow of gas. SWI.

7/15/93 POH with 2-7/8" tbq. RIH with 2-7/8" tbq to 4123'.

7/16/93 Open well. RU and ran Base Gamma Ray Collar Log and set on depth with Open Hole Log. Sand Frac Jackson perms 3825'-4052' with 42,100 gal crosslinked gel and 90,000 lbs 16/30 sand. ISIP 2230#, max press 2800#, min press 1840#, avg press 1900#, avg IR 20 BPM, 15 min SI 1103#. 1903 bbls load to recover.

7/17/93 Tagged sand @ 2900'. RU pump truck. Circulated wellbore clean to 3380'. POH with 2-3/8" tbq.

7/19/93 RIH with 2-7/8" tbq, tag fill @ 3380'. Rig up reverse unit. Wash sand. Clean well to 4285'. Set seating nipple @ 3805'-above all perms. Rig down BOP Nipple up wellhead.

7/20/93 Ran tbq rods and pump. Left well pumping.

7/25/93 Pump 24 hours. 0 BO and 409 BW.

8/01/93 First day of production.

8/06/93 Install submersible pump.

8/09/93 Pump 24 hours. 26 BO and 304 BW, 8% oilcut.

9/01/93 Bleed well down. POH with tbq and ESP pump. Lay down pump. Change out wellhead and install BOP. Pickup RBP and RIH and set @ 3716'. RU pump truck Circulate wellbore clean with 100 bbls 2% KCL water. Test RBP and BOP to 2000#. Held OK. Spot 260 gals acid from 3558' to 3300'. RU wireline truck Perforate the following intervals with 2-JSPI 90° out of phase. Grayburg zone: Premier Sand perms 3558', 55', 52', 50', 46', 41', 37', 34', 25', 16', 12', 3500', 3498' & 74'. Metex perms 3434', 31', 28', 19', 14' & 06'. Loco Hills Sand perms 3379' & 77'. Grayburg Carb perms 3300'. (Total of 46 holes).

9/02/93 Acidize Grayburg perms 3300' to 3558' with 4500 gal 15% NEFE acid. Spot 6 bbls acid across Grayburg perms 3300' to 3558' (total 46 holes). POH and set pkr @ 3223'. Press 1800# @ 1.1 BPM. Pump 4500 gal 15% NEFE acid. Drop 92 balls. Ballout occurred. Finish pumping acid. Max press 4000#, avg press 2700#, min press 0#, ISIP 2300#, 15 min SIP 2070#. 123 bbls load to rec. Avg rate 3.0 BPM. Swab entire Grayburg perms 3300' to 3558'. 10% oilcut on last run. Shut well in for 30 minutes had no fluid entry. Isolate Premier Sand 3474'-3558'. Make 4 swab runs fluid to SN. Shut well in for 30 minutes had 50' fluid entry 2% oil.

9/03/93 1) Open well with Premier Sand perms 3558'-3474' isolated. RIH tag fluid 2400' from surface SN @ 3460'. Swab well to SN. Fluid had 30% - 35% oilcut.

2) Isolate Metex zone 3406'-3443'. Swab well down. Had 4% oilcut. Wait 30 minutes no fluid entry.

3) Isolate Loco Hills Sand 3377'-3379'. Make 7 swab runs with 8% oilcut. After 30 minutes had 250' fluid entry.

4) Isolate Grayburg Carb perf @ 3300'. Swab well to SN had no fluid entry.

5) Lay down 2-7/8" tbq. Pickup 2-3/8" tbq. Hang tbq @ 3699'. Close well in ready to frac Grayburg section.

9/04/93 1) Run Base log.

2) Press test surface line to 4500#.

3) Circulate hole clean with 20# gel water. Test wireline lubricator and BOP to 2000# held OK.

4) Frac Grayburg perms 3558'-3300' (total 46 holes) down 5-1/2" x 2-3/8" casing annulus with 79,000 gal crosslinked gel carrying 157,700# 16/30 mesh sand.

5) Placement of the treatment was monitored with a Gamma Ray Tool located in the 2-3/8" monitoring string. The survey showed that all perms were taking treatment and the top of the treatment went to 3292' and that the bottom of the treatment went down to 3575'.

6) Maximum press 4097#, avg press 3850#, min press 2307#, AIR 28 BPM, ISIP 2935#, 15 minutes SIP 2646. 1883 bbls load to recover.

7) Rig down. Flow well to working pit.

9/07/93 Bleed well down. RIH with 2-7/8" tbq. Fill @ 3680'. RU pump truck. Circulate wellbore, clean with 2% KCL wtr to top of RBP @ 3729'. POH with RBP. RIH with pump and rods. Left well pumping to battery.

9/09/93 Pump 24 hours. 54 BO and 91 BW. 37.2% oilcut.

9/13/93 RU. POH w/rods and pump. Unflange wellhead. Pick up 2-7/8" tbq and RIH to 3713'. Circulate wellbore clean to 3720' w/2% KCL wtr. Release from RBP and pull up hole. Flange up wellhead. Pick up reconditioned pump. RIH with pump and rods. Left well pumping to battery.

9/17/93 First day of test. Pump 24 hours. 35 BO and 120 BW.