

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
N.M. Oil Cons. Division
1625 N. French L.
Hobbs, NM 88240

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

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

Doyle Hartman

3. Address and Telephone No.

500 N. Main St., Midland, TX 79701, (915) 684-4011

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

1980' FSL & 1980' FEL (Unit J),
Section 35, T-23-S, R-36-E, N.M.P.M

5. Lease Designation and Serial No.

LC-030556 (A)

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Stevens A-35 Com No. 1

9. API Well No.

30-025-09465

10. Field and Pool, or Exploratory Area

Jalmat (T-Y-7R)

11. County or Parish, State

Lea, NM

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 (Installed 4 1/2" O.D. Liner)
☒ Other Returned Abandoned Wellbore to Active Producing Status
☐ 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.)*

For details of completed operations, please refer to pages 2 of 6, 3 of 6, 4 of 6, 5 of 6 and 6 of 6 attached hereto, and made a part hereof.

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

Signed

Title Engineer

Date 03/19/2003

(This space for Federal or State office use)

Approved by

Title

Date

Conditions 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.

*See Instruction on Reverse Side

GWW

Details of Completed Repair Operations

Moved in roustabout crew, on 1-29-03. Rigged up welder. Removed original wellhead equipment.

Moved in trackhoe. Dug out around well. Cut off upper 14' of 7 5/8" O.D. casing. Cut off upper 12' of 5 1/2" O.D. casing.

Installed new segments of 7 5/8" O.D. casing and 5 1/2" O.D. casing. Sealed 7 5/8" x 5 1/2" casing annulus with 7 5/8" x 5 1/2" x 1/2" steel seal ring. Welded 2" O.D. threaded tap onto side of 7 5/8" O.D. casing. Supported exposed casing with 2" O.D. cross braces. Installed 52" O.D. x 18' corrugated steel cellar can. Backfilled around corrugated cellar can.

Installed B & M Oil Tool 5 1/2" x 2 3/8" x 3 1/2" 3000-psi Type MR tubinghead.

Hooked up kill truck. Pressured 5 1/2" O.D. casing to 1000 psi. Tied onto 7 5/8" O.D. casing. Pumped 45 bbls of water down 7 5/8" x 5 1/2" casing annulus, and into Rustler formation, at 2 BPM, at 950 psi. Initial breakdown pressure was 1100 psi.

Rigged up Halliburton. Pressured 5 1/2" O.D. casing to 1000 psi. Pumped 200 gal of 15% MCA acid down 7 5/8" O.D. casing, and into Rustler formation. Flushed acid with 30 bbls of water, at 2 BPM, at 750 psi.

Squeeze cemented down 7 5/8" x 5 1/2" casing annulus, and into Rustler formation, by mixing and pumping 400 sx of a 15.0 lb/gal API Class "C" cement slurry containing 3% CaCl₂, 5 lb/sx Gilsonite, and 1/4 lb/sx Flocele.

Cumulative Cement Volume (bbls)	Pump Rate (BPM)	Wellhead Pressure (psi)
20	7	645
40	8	735
60	8.3	1000
80	6	970
90	5.5	955
90	0	955 (SIP)

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BLM Form 3160-5 dated 03-19-03
Doyle Hartman
Stevens A-35 Com. No. 1
J-35-23S-36E
API No. 30-025-09465

Filled 52" O.D. x 18' cellar can with 200 sx of API Class "C" cement containing 3% CaCl_2 . Released pressure on 5 1/2" O.D. casing. Left pressure on 7 5/8" O.D. casing.

Moved in well service unit, on 2-3-03. Installed BOP. Ran 2 7/8" O.D. work string and bottom-hole drilling assembly consisting of 4 7/8" rock bit and (6) 3 1/2" O.D. drill collars. Tagged 5 1/2" CIBP, at 2860'.

Rigged up high-volume air-foam unit. Pumped air and unloaded water from wellbore. Commenced generating and pumping foam. Drilled on 5 1/2" CIBP, for 3.5 hours, before CIBP released and started moving down hole.

Cleaned out formation fill, to 3470'. Circulated hole clean.

Drilled hard cement, from 3470' to 3707'. Circulated hole clean and dry. Pulled bottom-hole drilling assembly.

Ran string-mill assembly consisting of 4 7/8" bit, (2) 4 3/4" string mills, and (6) 3 1/2" O.D. drill collars. Rotated string-mill assembly down to 3573'. Rotated and circulated from 3573' to 3707'. Circulated hole clean.

Pumped 55 bbls of water down 2 7/8" O.D. tubing. Pulled 2 7/8" O.D. tubing and string-mill assembly.

Rigged up Schlumberger. Attempted to log open-hole interval. Could not run logging tools below 3003'. Rigged down Schlumberger.

From 2-7-03 to 2-12-03 (5 days), continued to circulate hole with foam and clean out new fill, utilizing two high-volume air-foam circulating units.

On the morning of 2-12-03, after circulating off of bottom, at 3718', for 12 hrs, made a 13-stand short trip. Found 5' of fill, upon returning to bottom. Pulled drill string.

Made up and ran 24-joint (898'), 4 1/2" O.D., 11.6 lb/ft, K-55, flush-joint liner. Bottom of liner initially tagged up at 3463'. Circulated bottom of liner down to 3573'. Could not work liner below 3573'. Unscrewed 2 7/8" O.D. work string from top of liner. Pulled 2 7/8" O.D. work string.

Ran and set 5 1/2" Model "C" packer at 2527'. Loaded 5 1/2" O.D. casing with water. Pressured 5 1/2" O.D. casing to 500 psi. ↑

Pumped water down 2 7/8" O.D. work string, at 14 BPM, at 2043 psi. Squeeze cemented liner into

place utilizing a total of 1800 sx of cement consisting of 400 sx of API Class "C" cement containing 2% CaCl_2 , followed by 1300 sx of API Class "C" cement containing 2.5% CaCl_2 , 5 lbs/sx Gilsonite, and 1/4 lb/sx Flocele, followed by 100 sx of API Class "C" cement containing 1.5% CaCl_2 . Displaced cement with 16.75 bbls of water. Mixed and pumped slurry at an average rate of 12 BPM. Maximum cementing pressure was 3968 psi, at 11.3 BPM. Final displacement rate was 0.25 BPM, at 2077 psi.

After shutting down for 15 minutes, released wellhead pressure. Observed no cement flowback.

Pulled and laid down 5 1/2" Model "C" packer.

Ran bottom-hole drilling assembly consisting of 4 7/8" O.D. rock bit, 5 1/2" casing scraper, and (14) 3 1/2" O.D. drill collars. Drilled cement to 2677' (presumed top of liner). Circulated hole clean. Pulled and laid down large-bore bottom-hole drilling assembly.

Ran small-bore bottom-hole drilling assembly consisting of 3 7/8" blade bit and (6) 3 1/8" O.D. drill collars. Drilled cement to 3567' (8' above presumed bottom of 4 1/2" O.D. flush-joint liner). Circulated hole clean. Pulled and laid down small-bore bottom-hole assembly.

Ran 4 1/2" casing scraper. Scraped presumed liner interval, from 2677' to 3567'. Pulled casing scraper.

Rigged up Schlumberger. Logged well DS-CNL-GR-CCL log and VDCBL-GR-CCL log. Review of logs revealed that actual top of 4 1/2" O.D. liner was at 2823' (not 2677'), documenting that liner had slid down hole an additional 148', during the squeeze cementing process.

Ran bottom-hole drilling assembly consisting of 4 7/8" rock bit and (6) 3 1/8" drill collar. Reamed cement, from 2690' to top of liner at 2823'. Circulated hole clean. Pulled bottom-hole drilling assembly.

Ran small-bore bottom-hole drilling assembly consisting of 3 7/8" rock bit, 4 1/2" casing scraper, and (6) 3 1/8" O.D. drill collars. Drilled out remainder of cement, to 3710'. Circulated hole clean. Pressure tested wellbore, to 3000 psi, for 15 minutes. Observed no drop in pressure. Raised bottom of drill string to 3578'.

Hooked up air unit. Unloaded water from wellbore. Blew hole dry. Pulled and laid down small-bore bottom-hole drilling assembly.

Rigged up Capitan Corporation. Perforated Jalmat interval, with 3 1/8" O.D. select-fire casing gun, with a total of (26) 0.37" x 19" holes, with one shot each at:

2950	2980	3025	3056	3222
2956	2990	3029	3061	3227
2960	2995	3034	3070	
2964	3000	3038	3074	
2971	3005	3048	3078	
2976	3010	3052	3218	

While perforating, Capitan found fluid level at 3360'.

Ran 2 3/8" O.D. tubing and 4 1/2" Model "C" packer, to 3240'. Pumped 3 bbls of 2% KCl water, to raise fluid level, from 3360' to 3240'. Spotted acid across perfs, by pumping 250 gal of 15% MCA acid, followed by 1 bbl of 2% KCl water. Allowed acid to fall and equalize.

Pulled 10 jts of 2 3/8" O.D. tubing. Set 4 1/2" Model "C" packer, at 2903'. Loaded 2 3/8" O.D. tubing with 350 gal of 15% MCA. Let acid soak for 30 minutes.

Acidized Jalmat perfs, from 2950'-3227' (26 holes), with an additional 5000 gal of 15% MCA acid and 38 ball sealers, at an average treating rate of 4.4 BPM, and average treating pressure of 1580 psi. Displaced acid with 16.3 bbls of 2% KCl water. Final pump rate was 3.6 BPM, at 2446 psi. ISIP = 345 psi. 20-sec SIP = 0 psi.

Released packer. Lowered packer 5 stands, to knock off ball sealers. Pulled and laid down 4 1/2" Model "C" packer.

Ran and landed 2 3/8" O.D. tubing, at 3567' RKB (108 jts @ 32.77'/jt + 1.1' SN + 18' MA - 2' AGL + 11' KBC = 3567').

Ran 2" x 1 1/4" x 12' RHAC insert pump and 3/4" API Class "KD" rod string. Commenced cleaning up and pump testing well, at 6:30 p.m., CST, 2-17-03.

Rigged up well service unit, on 3-4-03. Pulled rods and pump. Raised bottom of 2 3/8" tubing, to 2815' RKB (85 jts @ 32.77'/jt + 2' CBJ + 1.1' SN + 18' MA - 2' AGL + 11' KBC = 2815'). Installed 3 1/2" heavy duty frac valves and 2 3/8" EUE 3000-psi full-opening gate valve.

Rigged up Halliburton. Performed CO₂ foam frac down 5 1/2" O.D. casing, utilizing 106,348 gal

of gelled water, 520 tons of CO₂, and a combined total of 500,000 lbs of frac sand (10% 20/40, 15% 10/20, 75% 8/16), at an average treating rate of 36.4 BPM and average wellhead casing pressure of 2396 psi (static tubing pressure = 1123 psi).

Flowed well to blowdown tank for 17 hours.

Rigged up high-volume air-foam circulating unit. Lowered 2 3/8" O.D. tubing. Found top of frac sand at 3375'. Cleaned out frac sand to 3710'. Circulated hole clean and dry.

Raised and landed bottom of 2 3/8" O.D. tubing, at 3534 RKB (107 jts @ 32.77'/jt + 1.1' SN + 18' MA - 2' AGL + 11' KBC = 3534.49'). Ran 2" x 1 1/4" x 12' RHAC insert pump and 3/4" API Class "KD" rod string. Commenced pumping well at 8.5 x 64 x 1 1/4, at 1:15 p.m., CST, 3-7-03.

Tested well as follows:

Test Date:	3/17/03
Choke size	22/128
Test Period	24 hrs
Gas	81 MCF
Water	1.67 BBLS
Oil	0.42 BBLS
CO ₂	13%
FCP	47.5 psi

3/17/03
DOH