

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

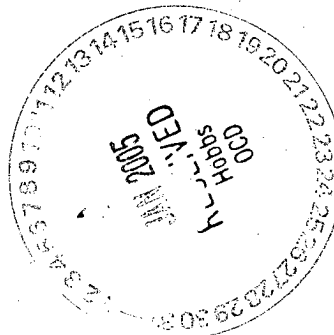
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-09476
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Doyle Hartman		6. State Oil & Gas Lease No. B-1431
3. Address of Operator 500 N. Main St., Midland, TX 79701		7. Lease Name or Unit Agreement Name State "LMT"
4. Well Location Unit Letter <u>A</u> : <u>660'</u> feet from the <u>North</u> line and <u>660'</u> feet from the <u>East</u> line Section <u>36</u> Township <u>23S</u> Range <u>36E</u> NMPM <u>Lea</u> County		8. Well Number 5
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3317' GR		9. OGRID Number 6473
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Jalmat (T-Y-7R) Oil
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mll Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	Install 4 1/2" FJL <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: Return Jalmat to Production <input checked="" type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

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



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE [Signature] TITLE Engineer DATE 09/09/2004

Type or print name Steve Hartman E-mail address: dhoo-sh@swbell.net Telephone No. (432) 684-4011
For State Use Only

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE JAN 31 2005
Conditions of Approval (if any):

2A Langlie matrix

Details of Completed Operations

Moved in well service unit on 6-23-04.

Pressured 5 1/2" O.D. casing to 520 psi. Tied pump truck to 8 5/8" O.D. casing. With 520 psi on 5 1/2" O.D. casing, performed injectivity test down 8 5/8" x 5 1/2" annulus, at 3.5 BPM, at 250 psi.

Ran 180.09' bottom-hole cleanout assembly, consisting of 4 3/4" bit and (6) 3 1/2" O.D. drill collars. Cleaned out to 3418'. Pulled bottom-hole cleanout assembly.

Ran 189.89' mill-shoe assembly. Milled and cleaned out to 3423'. Circulated hole clean. Pulled mill-shoe assembly.

Ran bottom-hole fishing assembly equipped with top half of on/off tool. Latched onto bottom half of on/off tool. Unsuccessfully attempted to release mandrel from Model "D" packer. Pulled bottom-hole fishing assembly.

Ran bottom-hole fishing assembly equipped with 4 3/4" overshot and 2 5/8" grapple. Latched onto fish at 3417'. Pulled out of hole with fishing-tool assembly, and fish consisting of:

- 1) Bottom hole of on/off tool
- 2) 2 3/8" x 6' tubing sub.
- 3) 2 3/8" sliding sleeve.
- 4) Latch-type seal assembly.
- 5) 2 3/8" x 2 1/16" x-over.
- 6) 2 1/16" x 6' sub.
- 7) 2 1/16" seating nipple.

Ran Baker packer picker. Milled on Baker 5 1/2" Model "D" packer, for 2 hours. Pulled Baker Packer Picker and 5 1/2" Model "D" packer.

Ran 180.09' bottom-hole drilling and cleanout assembly. Tagged top of fill at 3487'. Cleaned out to 3605'. Circulated hole clean. Pulled bottom-hole drilling and cleanout assembly.

Ran 209.80' string-mill assembly. Circulated and rotated down to 3605'. Circulated hole clean. Pulled 4 3/4" O.D. string-mill assembly.

Rigged up Schlumberger. Ran DS-CNL-GR-CCL log and VDCBL-GR-CCL log.

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

Rigged up casing crew. Ran 4 1/2" O.D., 11.6 lb/ft, L-80, FJ liner. Landed bottom of liner at 3605', with top of liner at 2768'. Circulated hole with water. Pumped down 2 7/8" O.D. tubing with 525 gal of 15% MCA acid followed by 16 bbls of water (bottom of acid at 3600'). Unscrewed from 4 1/2" O.D. liner. Pulled 2 7/8" O.D. work string and liner setting tool.

Ran and set Baker 5 1/2" Model "C" packer at 2625'. Load 5 1/2" casing with water. Pumped down 2 7/8" O.D. work string with an additional 675 gal of 15% MCA acid. Cemented 4 1/2" O.D. liner into place at an average cementing rate of 12.4 BPM and average pressure of 3600 psi utilizing 400 sx of API Class "C" cement containing 2.5% CaCl₂, followed by 900 sx of API Class "C" cement containing 2.5% CaCl₂, 3 lb/sx Gilsonite, 0.25 lb/sx Flocele, followed by 100 sx of API Class "C" cement containing 1.5% CaCl₂, 3 lb/sx Gilsonite, 0.25 lb/sx Flocele. Displaced cement with 16.5 bbls of water, to a final squeeze pressure of 2970 psi. Released pressure. Observed no flowback. Pulled 2 7/8" Model "C" packer.

Tied Halliburton to 8 5/8" O.D. casing. Pressured 5 1/2" O.D. casing to 500 psi. Cemented down 8 5/8" x 5 1/2" casing annulus with 1200 sx of API Class "C" cement containing 3% CaCl₂, 5 lb/sx Gilsonite, 0.25 lb/sx Flocele. Mixed and pumped cement at an average pump rate of 8.5 BPM and average pump pressure of 575 psi. ISIP = 127 psi.

Ran 2 7/8" O.D. work string equipped with 184.89' bottom-hole drilling assembly. Tagged top of cement at 2625'. Drilled cement to 2768' (top of 4 1/2" O.D. liner). Circulated hole clean. Pulled and laid down 2 7/8" O.D. work string.

Ran 2 3/8" O.D. tubing and 176.05' bottom-hole drilling assembly consisting of 3 7/8" blade bit and (6) 3 1/8" O.D. drill collars. Waited one additional day for cement to fully harden. Drilled cement from 2768' to 3595'. Circulated hole clean. Pulled and laid down 176.05' bottom-hole drilling assembly.

Ran and set 5 1/2" Model "C" packer at 2643'. Pressure tested 5 1/2" O.D. casing and 4 1/2" O.D. liner, from 2643' to 3595', to 3000 psi, for 20 minutes. Pressure held okay. Pulled and laid down 5 1/2" Model "C" packer.

Ran 2 3/8" O.D. tubing equipped with 3 7/8" bit and 4 1/2" casing scraper. Scraped inside of 4 1/2" O.D. liner, from 2768' to 3595'. Pulled and laid down 3 7/8" bit and 4 1/2" casing scraper.

Ran and landed 2 3/8" O.D. tubing at 3502' RKB (107 jts @ 32.48 ft/jt + 1.1' SN + 18' MA + 8' KBC = 3502.46'). Hooked up air unit. Unloaded water from hole. Pulled 2 3/8" O.D. tubing.

Hooked up wireline truck. Re-perforated Jalmat interval with 3 1/8" O.D. casing gun, with (29) 0.38" x 17" holes, with one shot each at:

2978	3012	3037	3071	3163	3188
2981	3018	3040	3147	3167	3191
3000	3022	3043	3151	3171	3244
3004	3025	3047	3155	3174	3247
3009	3034	3067	3159	3184	

Ran 4 1/2" Model "C" RBP and 4 1/2" Model "C" packer. Set 4 1/2" Model "C" RBP at 3297'. Raised 4 1/2" Model "C" packer to 3263'. Spotted acid by pumping 50 gal of 15% MCA acid followed by 0.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 4 1/2" Model "C" packer at 3230'. Acidized perfs, from 3244' to 3247' (2 holes), with an additional 200 gal of 15% MCA acid, at an average treating rate of 3.0 BPM and average pressure of 1168 psi. ISIP = 0 psi.

Raised and set 4 1/2" Model "C" RBP at 3233'. Raised 4 1/2" Model "C" packer to 3198'. Spotted acid by pumping 100 gal of 15% MCA acid followed by 0.5 bbls of 2% KCl water.

Raised and set 4 1/2" Model "C" packer at 3100'. Acidized perfs, from 3147' to 3191' (11 holes) with an additional 2050 gal of 15% MCA acid and 17 ball sealers, at an average treating rate of 4.1 BPM and average treating pressure of 1168 psi. Maximum treating pressure = 3450 psi, at ballout (11th ball). Displaced acid with 13.3 bbls of 2% KCl water.

Raised and set 4 1/2" Model "C" RBP at 3102'. Raised 4 1/2" Model "C" packer to 3094'. Spotted acid by pumping 150 gal of 15% MCA acid, followed by 0.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 4 1/2" Model "C" packer at 2938'. Acidized perfs, from 2978' to 3071' (16 holes) with an additional 2950 gal of 15% MCA acid and 24 ball sealers, at an average treating rate of 4.8 BPM and average treating pressure of 1900 psi. Maximum treating pressure = 3700 psi (ballout on 20th ball). Flushed acid with 12 bbls of 2% KCl water. ISIP = 174 psi. 1-min SIP = 0 psi.

Pulled and laid down 4 1/2" Model "C" packer and 4 1/2" Model "C" RBP.

Ran and landed 2 3/8" O.D. tubing at 3438' RKB (105 jts @ 32.48 ft/jt = 1.1' MA + 18' MA + 8' KBC = 3437.5'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump. Started pumping well at 10:00 P.M., CDT, 7-8-04, at 7.5 Spm x 64" x 1 1/4".

Moved in well service unit on 7-15-04. Pulled 3/4" rod string and 2 3/8" O.D. production tubing.

Ran Halliburton 5 1/2" x 2 7/8" PLS treating packer and 3 1/2" O.D., 9.3 lb/ft, N-80 frac string. Set treating packer at 2742'. While running into hole with frac string, tested frac string to 7000 psi. Installed 5000-psi heavy duty frac valves.

Rigged up Halliburton. Foam fraced down 3 1/2" O.D. frac string with 200,700 gal of gelled water and CO₂ (58.9% CO₂) and 500,000 lbs of frac sand (10% 20/40, 15% 10/20, 75% 8/16), at an average foam rate of 43.9 BPM and average wellhead tubing pressure of 4214 psi. ISIP = 991 psi. 15-min SIP = 571 psi.

After leaving well shut in for 1 hour, cleaned up well to blowdown tank, for 19.25 hours.

Killed well. Pulled and laid down 3 1/2" O.D. frac string and 5 1/2" x 2 7/8" PLS treating packer.

Ran 2 3/8" O.D. production tubing. Hooked up air units. Cleaned out frac sand, from 3373' to 3595'. Circulated hole clean and dry.

Raised bottom of 2 3/8" O.D. tubing to 2788'. Flowed well to blowdown tank overnight.

Lowered 2 3/8" O.D. tubing. Tagged sand fill at 3589' (6' of fill). Cleaned out to 3595'. Circulated hole clean and dry.

Raised and landed bottom of 2 3/8" O.D. tubing at 3438' RKB (40 jts @ 32.48 ft/jt + 1.1' SN + 18' MA + 8' KBC = 3437.5'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump.

Commenced pump testing and cleaning up well at 12:00 P.M., CDT, 7-21-04, at 7.5 Spm x 64" x 1 1/4".

On 7-31-04, tested well as follows:

Gas:	53 MCFPD
Oil:	2 BOPD
Water:	9 BWPD
GOR:	26,500 SCF/STB
Choke:	16/128
CP:	28.1 psi
CO ₂ :	20%