Form	3160-5
(June	1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

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

DUDEAU OF LAN	DMANACEMENT	Copaco: maioror, roco	
BUREAU OF LAND MANAGEMENT		5. Lease Designation and Serial No.	
		LC-032450-B	
SUNDRY NOTICES ANI	6. If Indian, Allottee or Tribe Name		
Do not use this form for proposals to drill or Use "APPLICATION FOR P	to deepen or reentry to a different reservoir. ERMIT-" for such proposals		
SUBMIT IN	7. If Unit or CA, Agreement Designation		
1. Type of Well Gas Gas		8. Well Name and No.	
Well X Well Other 2. Name of Operator	Courtland Myers C No. 1		
Doyle Hartman		9. API Well No.	
3. Address and Telephone No.	30-025-26353		
500 N. Main St., Midland, TX 79701, (432) 684-	10. Field and Pool, or Exploratory Area		
4. Location of Well (Footage, Sec., T., R., M., or Survey Description		Langlie Mattix (7R-Qn)	
1650' FNL & 1650' FWL (Unit F), Section 15, T-24-S, R-37-E, N.M.P.M	11. County or Parish, State		
	WELLOW TO THE OF MOTION DEPOSIT OF	Lea, NM	
	INDICATE NATURE OF NOTICE, REPORT, O	OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION Abandonment	Change of Plans	
Notice of Intent	Recompletion	New Construction	
X Subsequent Report	=	Non-Routine Fracturing	
(A) Subsequent Report	☐ Plugging Back XI Repaired Cement	X Water Shut-Off (Zonal Isolation)	
Final Abandonment Notice	X Installed 4 1/2" O.D. FJL	Conversion to Injection	
Frita Abandonnian Notes	X Other Re-perforated & Acidized	Dispose Water	
	Langlie Mattix (Queen)	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
		Horos	
		Same of the	
14. I hereby cartify that the foregoing is true and correct Signed	т _{itie} Engineer	Date 03/09/2004	
(This space for Federal or State office user)			
Approved by Conditions of approved, (Lange D.) DAVID 51. GV ASS MAY 1 9 2004	Title	Date	
Title 18 U.S.C. Section 1001, makes it a crime for any person kno statements or representations as to any matter within its jurisdiction.	wingly and willfully to make to any department or agency of the Un on.	ited States any false, fictitious or fraudulent	
PETROLEUM ENGINEER	*See Instruction on Reverse Side		

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Doyle Hartman
Courtland Myers "C" No. 1
F-15-24S-37E
API No. 30-025-26353

Details of Completed Cement Repair Operations

Moved in and rigged up well service unit, on 11-25-02. Pulled rods and 2 3/8" O.D. tubing.

Ran 2 7/8" O.D. work string, 6 1/4" bit, and 7" casing scraper. Tagged at 3692'. Pulled 2 7/8" O.D. work string.

Rigged up wireline company. Perforated 7" O.D. casing, from 3405' to 3462', with 9 squeeze holes. Acidized squeeze holes, from 3405' to 3462', with 1200 gal of 15% MCA acid, and 13 ball sealers.

Perforated 7" O.D. casing, from 3503' to 3688', with 16 additional squeeze holes. Acidized squeeze holes, from 3503' to 3688', with 1700 gal of 15% MCA acid.

Set 7" Model "C" packer at 3026'. Repaired long-string primary cement job, by squeeze cementing production perfs, from 3165' to 3220' (168 holes), and squeeze perfs, from 3405' to 3688' (25 holes), with 3950 cu. ft. (3000 sx) of cement slurry, consisting of 500 sx of API Class "C" cement containing 2.5% CaCl₂, followed by 200 sx of API Class "C" cement containing 3% CaCl₂, followed by 2150 sx of API Class "C" cement containing 2.5% CaCl₂, 5 lb/sx Gilsonite, and 0.25 lb/sx Flocele, followed by 150 sx of API Class "C" cement containing 1.5% CaCl₂. Mixed and pumped cement slurry at an average pump rate of 11 BPM, and average pump pressure of 3600 psi. Displaced cement slurry with 18.5 bbls of water, at a displacement rate of 1.2 BPM. Staged to a final squeeze pressure of 4000 psi. Pulled 7" Model "C" packer.

Ran 359.49' bottom-hole drilling assembly, consisting of 6 1/4", bit, and (12) 4 3/4" O.D. drill collars. Tagged cement at 3030'. Drilled cement from 3030' to 3692'. Fell out of cement at 3692'.

Circulated out frac sand to 3966'. Pulled bottom-hole drilling assembly.

Ran 6 1/4" bit and 7" casing scraper, to 3966'. Pulled bit and casing scraper.

Rigged up wireline company. Perforated 7" O.D. casing, from 3450' to 3638', with 6 squeeze holes. Perforated 7" O.D. casing, from 3695' to 3827', with 11 squeeze holes.

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Ran 7" Model "C" packer. Acidized bottom 10 squeeze holes (3745' to 3827') with 1100 gal of 15% MCA acid. Performed injectivity test into bottom 10 squeeze holes (3745' to 3827'), at 5.8 BPM, at 1000 psi. Pulled 7" Model "C" packer.

Ran 5" O.D., 15 lb/ft, J-55, ST&C liner (equipped with (1) 7" x 5" centralizer per joint). Set 5" O.D. liner at 3080' to 3965'. Pulled 2 7/8" O.D. work string.

Ran and set 7" Model "C" packer at 2933'. Pressured 7" O.D. casing to 1500 psi. Squeeze cemented 5" O.D. liner into place, with 1850 cu. ft. (1400 sx) of cement slurry, consisting of 400 sx of API Class "C" cement containing 2.5% CaCl₂, followed by 850 sx of API Class "C" cement containing 2.5% CaCl₂, 5 lb/sx Gilsonite, and 0.25 lb/sx Flocele, followed by 150 sx of API Class "C" cement containing 1.5% CaCl₂. Mixed and pumped cement at an average pump rate of 11 BPM and average pump pressure of 3500 psi. Displaced cement with 19.8 bbls of water. Staged to a final squeeze pressure of 2500 psi. Pulled 7" Model "C" packer.

Ran 363.89' large-bore bottom-hole drilling assembly consisting of 6 1/4" bit and (12) 4 3/4" O.D. drill collars. Tagged cement at 2936'. Drilled cement to top of 5" O.D. liner, at 3080'. Pulled and laid down 2 7/8" O.D. work string and large-bore bottom-hole drilling assembly.

Ran small-bore bottom-hole drilling assembly consisting of 4 1/4" blade bit and (6) 3 1/8" drill collars. Drilled cement from 3080' to 3445'. Fell out of cement at 3445'. Circulated down to 3965'. Circulated hole clean. Pressure tested wellbore, from surface to 3965', to 2000 psi. Pulled and laid down bottom-hole drilling assembly.

Ran 4 1/4" bit and 5" casing scraper to 3965'. Circulated hole clean. Pulled bit and casing scraper.

Rigged up Schlumberger. Logged well with DSI-CNL-GR-CCL log and VDCBL-GR-CCL log. Found bottom of cement, on outside of 5" O.D. liner, at 3827' (bottom squeeze perf).

Ran 5" Model "C" packer to 3759'. Before setting 5" Model "C" packer, pressure tested wellbore, from surface to 3965', to 3100 psi, for 20 minutes. Pressure held okay.

Set 5" Model "C" packer, at 3757'. Pressure tested 5" O.D. liner, from 3757' to 3965', to 3300 psi. Pressure held okay. Pulled 5" Model "C" packer.

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Rigged up wireline company. Set 5" CIBP at 3810' and 3805' (2 plugs). New PBTD at 3805'.

Ran 2 3/8" O.D. tubing to 3522'. Hooked up air unit. Unloaded water from hole, to blowdown tank. Re-perforated Langlie Mattix (Queen) producing interval, with (33) 0.38" x 17" holes, with one shot each at:

3156	3175	3202	3226	3282	3319	3373
3160	3180	3208	3229	3286	3324	3388
3164	3184	3213	3232	3292	3355	3406
3168	3187	3217	3242	3298	3359	•
3171	3199	3220	3278	3309	3370	

Ran 5" Model "C" RBP and 5" Model "C" packer. Set 5" Model "C" RBP at 3430'. Pumped 125 gal of 15% MCA acid down 2 3/8" O.D. tubing. Allowed acid to fall and equalize. Raised and set 5" Model "C" packer at 3257'. Pumped 250 gal of 15% MCA acid down tubing. Let acid soak for 15 minutes. Acidized perfs, from 3278' to 3406' (14 holes), with an additional 2450 gal (total of 2825 gal) of 15% MCA acid and 20 ball sealers, at an average treating rate of 4 BPM. Minimum treating pressure = 1262 psi. Maximum treating pressure = 3000 psi (at ballout). Flushed acid with 13.5 bbls of 2% KCl water.

Raised and set 5" Model "C" RBP at 3263', with 5" Model "C" packer at 3259'.

Pumped 125 gal of 15% MCA acid down 2 3/8" O.D. tubing. Allowed acid to fall and equalize. Raised and set 5" Model "C" packer at 3100'. Pumped 350 gal of 15% MCA acid down tubing. Let acid soak for 15 minutes.

Acidized perfs, from 3156' to 3242' (19 holes), with an additional 3500 gal (total of 3975 gal) of 15% MCA acid and 27 ball sealers, at an average treating rate of 4 BPM. Minimum treating pressure = 0 psi. Maximum treating pressure = 1800 psi. Flushed acid with 12.5 bbls of water. ISIP = 0 psi. Pulled 5" Model "C" packer.

Ran and landed 2 3/8" O.D. tubing at 3565' (113 jts @ 31.31'jt + 1.1'SN + 18'MA - 3'AGL + 11'KBC = 3565.1'). Ran 2" x 1 1/4" x 12' RHAC insert pump and 3/4" API Class "KD" rod string. Started pumping well and recovering load, at 12:45 P.M., CST, 12-7-02.

