

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-07756
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. 330361
7. Lease Name or Unit Agreement Name Warren McKee Unit
8. Well Number #501
9. OGRID Number 256073
10. Pool name or Wildcat Warren; McKee

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.)

1. Type of Well: Oil Well Gas Well Other

2. Name of Operator
JR Oil Ltd

3. Address of Operator
P.O. Box 2975
Hobbs, NM 88241

4. Well Location
Unit Letter O : 330 feet from the S line and 1,650 feet from the E line
Section 07 Township 20S Range 38E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input checked="" type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input 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"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input 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 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

JR Oil suspects a casing leak exists in this well bore and requests permission to test casing, isolate leak(s), squeeze cement, drill out, test squeeze to 500 psi for 30 minutes, and return to production.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE ENGINEER DATE 6/16/21

Type or print name IAN PETERSEN E-mail address: IAN@DAPETRO.COM PHONE: (432) 634-4922

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 5/11/22
Conditions of Approval (if any) 575-263-6633

J R Oil, Ltd.

Warren McKee Unit #501

Casing Repair Procedure

06/11/2021

Pull production equipment

1. MIRU service unit, kill truck, pipe racks, and stripping (2x4's for layering tubing).
2. POOH rods and pump, hang pump in derrick or lay down and keep clean from dirt.
3. ND WH, release TAC, NU BOP, lay down production tubing (no tally needed).
4. Move production tubing to edge of location, rack & tally 9,200' of 2-7/8" N-80 or better work string.

Test casing and isolate leak

5. Trip 4-3/4" bit & 5-1/2" scraper to ~9,047'.
6. RIH 5-1/2" RBP & test packer dressed for 17# to ~9,047', set RBP, PUH, set packer and test RBP to 500 psi.
7. Move packer to ~6,509' and test casing above and below to 500 psi. Isolate casing leak(s) to within 1 jt.
8. After a leak has been isolated establish a low and a high injection rate, i.e. 0.5 and 2.0 BPM. Open 8-5/8" casing valve and report if communication exists or not. Report rates and pressures for cement design.

Cement squeeze

9. MIRU 75-100 bbl open top tank for cement wash up. Drop 1-2 sacks of sand on RBP, and set 5-1/2" CICR dressed for 17# on tubing 1-2 joints above top of leak.
10. Test casing above retainer to 500 psi, (test tubing to 500 psi if possible), and verify injection under retainer. Release kill truck and MIRU reverse unit.

11. MIRU 2 transports of fresh water (NO KCL) and cement service (preferably first thing in the morning), discuss cement design (TBD in step 8) and max pressure. Dump sugar in wash up pit per cement service's recommendation.
12. Establish rate on water, and squeeze cement. After successful squeeze, bleed pressure to 500 psi, sting out, reverse clean, and POOH tubing.
13. RIH 4-3/4" bit & drill collars. Allow cement to cure 24 hours.
14. Drill out retainer and cement.
 - a. Check returns for soft/green cement. If cement not cured report and shut down for another 24 hours.
Circulate clean, close pipe rams, test sqz to 500 psi for 15 minutes, and report results.
 - b. If sqz doesn't hold pressure call engineer to discuss plan.

Return to production

15. Lay down bit & drill collars, POOH RBP.
16. Lay down work string and RIH production string same as before. ND BOP, set TAC, NU WH.
17. Notify foreman & pumper of handover, load pump w/ diesel and RIH pump and rods same as before, space out, L&T, long stroke, hang well on, and hand over to production.
18. Clean location and RDMO.

Information Page

Well

Name: Warren McKee Unit #501

API: 30-025-07756

Location: Unit O, section 7, T 20S, R 38E, 330' FSL, 1,650' FEL

Lat/long: 32.5813103, -103.184639

Directions: From Eunice Hwy, turn on to Billy Walker Road. Drive 2.9 miles West to locked gate on south side of road. Enter with code 2002 or 0352 and re-lock gate. Continue south 0.7 miles, turn West (right) and drive 0.3 miles to well.

Contacts

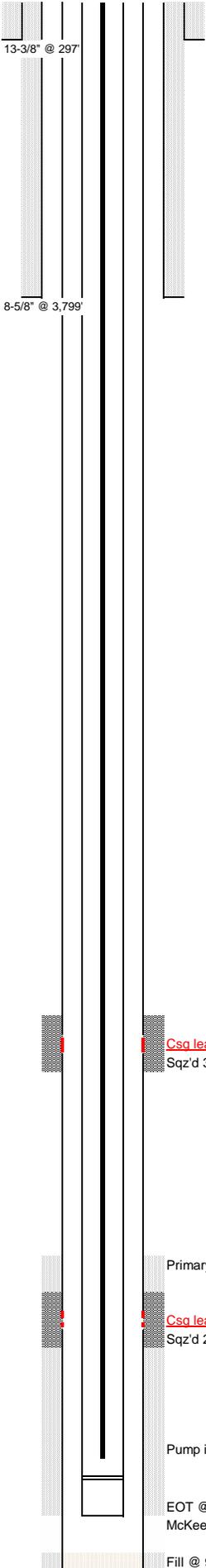
Engineer: Ian Petersen (432) 634-4922

Production Foreman: Josh Latimer (575) 414-9188

Pumper: Isaiah Urias (806) 841-0848

JR Oil Ltd.

Warren McKee Unit #501



WELL NAME: Warren McKee Unit #501				FORMATION: KcKee				KB:				
API NO: 30-025-07756				FIELD: Warren McKee				PBTD: 9,192				
SPUD DATE: January 8, 1953				COUNTY: Lea				TD: 9,199				
CASING								CEMENT & HOLE DATA				
	OD	lb/ft	grade	ID (in)	drift (in)	top	bottom	bit size	depth	sacks	ppg	TOC
Surface	13 3/8					0'	297'	17 4/8	297'	300		0'
Intermediate	8 5/8	32.00		7.921	7.796	0'	1,980'	11				0'
	8 5/8	24.00		8.097	7.972	1980'	3,799'	11	3,799'	2,200	9.0	
Production	5 1/2	15.50	J-55	4.950	4.825			7 7/8				
	5 1/2	17.00	N-80	4.892	4.767			7 7/8				
	5 1/2	17.00	J-55	4.892	4.767			7 7/8	9,199'	350	9.0	6,092'

History:
 1/8/1953 Spud
 2/23/1953 Lost circulation 7,878' - 9,000', spot (15) cement plugs
 4/2/1966 Clean out, rec. drilling mud, cuttings, and cement
 6/10/1975 **Isolate csg leak @ 6,431' - 59'**, sqz 213 sx, test, held 800#
 7/13/1978 Clean out 8,975' - 9,173', convert from TA'd gas lift to rod pump
 9/6/1978 Clean out 9,163' - 98'
 2/20/1985 **Isolate csg leak @ 4,479-541'**, EIR 2"/500#, sqz 321 sx, final psi 2,200 cure 48 hrs, drill out, test, held 550#, RTP
 6/16/1989 Cleanout sand 9,160' - 83'
 12/26/1999 Clean out 9,145' - 68', rec. sand & scale
 3/19/2003 **Water analysis:** TDS 161k, SG 1.11, H2S 17 ppm, CO2 90 ppm, Cl 292, Iron 30, pH 5.96, comparable to 142 performed 5/27/21
 9/13/2005 mud anchor full of sand & "iron"
 6/15/2005 TFF @ 9,124', bail to 9,185'
 1/8/2007 Scan tbg, MA full of sand
 2/9/2010 Fish & clean out to 9,192'

PERFORATIONS					
date	top	bottom	zone	status	tft shots
03/28/53	9097'	9183'	McKee	Active	

5/17/2021 Rplc all tubing from 5,541' to 9,096' due to bacteria pitting
 5/27/2021 **Water analysis:** TDS 20.7k, SG 1.016, H2S 450 ppm, CO2 442 ppm, Cl 12k, Iron 1.6, pH 6.4, **indicates csg leak.**

TUBING (grade NA)					
	OD (in)	ID (in)	joints	length (ft)	depth (ft)
Tubing	2 7/8	2.441	276	8,742.28	8,742
Marker	2 7/8	2.441	1	2.00	8,744
Tubing	2 7/8	2.441	2	61.85	8,806
TAC	5 1/2	2.441	1	2.75	8,809
Tubing	2 7/8	2.441	1	31.56	8,840
IPC	2 7/8	2.441	1	32.75	8,873
SN (w/ XO)	2 3/8	1.750	1	1.10	8,874
Sand Screen			1	8.35	8,883
De-sander			1	24.00	8,907
Mud anchor	2 7/8	2.441	6	188.50	9,095
BP	2 7/8		1	0.65	9,096

RODS					
	OD (in)	grade	rods	length (ft)	depth (ft)
SMPR	1 1/2		1	26.0	181
FG pony	1 1/4	FG	1	3.0	184
FG rods	1 1/4	FG	135	5,062.5	5,246
steel rods	1	D90	66	1,650.0	6,896
steel rods	7/8	D78	78	1,950.0	8,846
guided pony	7/8		1	4.0	8,850
RHBC	2.0x1.5x24		1	24.0	8,874

Csg leak @ 4,479' - 541' (1985)
 Sqz'd 321 sx

Primary TOC @ 6,092'

Csg leak @ 6,431' - 59' (1975)
 Sqz'd 213 sx

Pump intake @ 8,874'

EOT @ 9,096'
 McKee perms @ 9,097' - 9,183'

Fill @ 9,192' (2010)

5-1/2" @ 9,199'
TD @ 9,200'

Updated: June 11, 2021 by Ian Petersen

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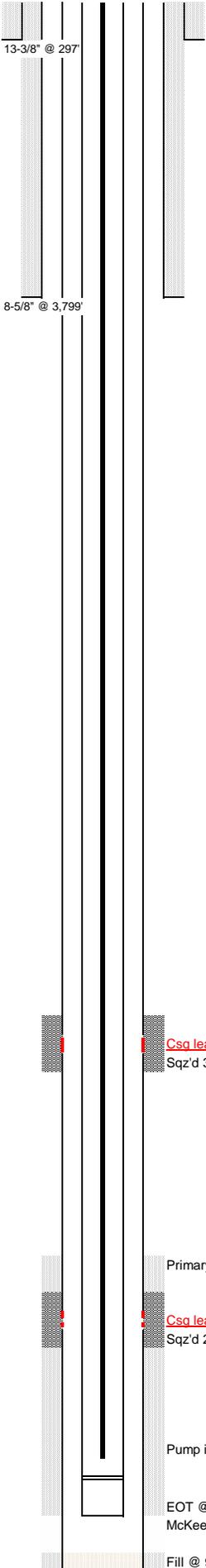
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 32445

CONDITIONS

Operator: J R OIL, LTD. CO. P.O. Box 52647 Tulsa, OK 74152	OGRID: 256073
	Action Number: 32445
	Action Type: [C-103] Sub. Workover (C-103R)

CONDITIONS

Created By	Condition	Condition Date
kfortner	None	5/11/2022