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

RECEIVED
NOV 18 2008
HOBBS OCD

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
July 17, 2008

1. WELL API NO. **30-025-33607** ✓
2. Type of Lease ☒ **STATE** ☐ FEE ☐ FED/INDIAN
3. State Oil & Gas Lease No **B 3654**

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing

☒ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)

☐ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33, attach this and the plat to the C-144 closure report in accordance with 19 15 17 13 K NMAC)

5. Lease Name or Unit Agreement Name: **McGrail State** ✓
6. Well Number: **#9** ✓

7. Type of Completion
☐ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☒ **OTHER:** YESO-RECOMPLETION

8. Name of Operator: **Marathon Oil Company** ✓
9. OGRID: **14021** ✓
10. Address of Operator: **P.O. Box 3487....Houston, TX 77253-3487.....Mail Stop #3308**
11. Pool name or Wildcat: **Monument-Yeso-Northwest** ✓ 97089

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	**K**	**26**	**19-S**	**36-E**		**1980'**	**South**	**1650'**	**West**	**LEA** ✓
BH:										

13. Date Spudded	14. Date T D Reached	15. Date Rig Released	16. Date Completed (Ready to Produce)	17. Elevations (DF and RKB, RT, GR, etc)
10/15/1996	**11/04/1996**	**10/27/2008**	**10/27/2008**	KB **3697'**, GR **3681'**

18. Total Measured Depth of Well	19. Plug Back	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run
8000'	**7095'**	**Yes**	

22. Producing Interval(s), of this completion - Top, Bottom, Name
Yeso ....6,622'-6,716'

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	**48#**	**500**	**17-1/2"**	**300 sacks**	
8 5/8"	**24.32#**	**2850**	**11"**	**800 sacks**	
5 ½"	**15.5-17#**	**7500**	**7-7/8"**	**950 sacks**	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 7/8"	**3849'**	TAC **3563'**

26. Perforation record (interval, size, and number)
6622'-24', 6636'-38', 6644'-46', 6674'-78', 6694'-98', 6704'-08', 6714'-16', 50 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
6622'-6716'	**60 bls 14% NEFE HCL Acid**
6622'-6716'	
6622'-6716'	

28. **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod or Shut-in)*
10/27/2008	**Pumping**	**Producing**

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil – Bbl	Gas – MCF	Gas – Oil Ratio
11/02/2008	**24**	**40/64**		**0**	**0**	**0**

Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas – MCF	Water - Bbl	Oil Gravity-API - *(Corr)*
180	**60**		**0**	**0**	**905**	**39.4**

29. Disposition of Gas *(Sold, used for fuel, vented, etc)*

30. Test Witnessed By: **Field Operator on Duty!**

NOTE. Zero production shown, with current plans to significantly upgrade the 'ESP'

31. List Attachments: **Wellbore Diagram**

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit: **N/A**

33. If an on-site burial was used at the well, report the exact location of the on-site burial: **N/A**
Latitude Longitude NAD 1927 1983

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature: Rick R. Schell Printed Name: **Rick R. Schell** Title: **Regulatory Compliance Rep.**

Date: **11/12/2008** E-mail Address: **rrschell@MarathonOil.com**

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers 2994'	T. Devonian	T. Cliff House	T. Leadville
T.Queen 3618'	T. Silurian	T. Menefee	T. Madison
T. Grayburg 3843'	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres 4064'	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 5645'	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock 5788'	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry 6227'	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard 6727'	T. Bone Springs	T.Todilto	
T. Abo 6994'	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....

No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology		From	To	Thickness In Feet	Lithology

Recompletion Procedure

McGrail State Well No. 9
1980' FSL, 1650' FWL
Section 26, 19S-36E, UL "K"
Lea County, New Mexico

WBS NO: RW.08.17695 CAP

Date: May 30, 2008

Purpose: Recomplete to Yeso

Elevation: **KB:** 3697' **PBTD:** 7508'
GL: 3681' **TD:** 8000'

Estimated Cost: $314,500

Estimated Rig Days: 5

WI: 100% **NRI:** 87.5%

Surface Casing: 13-3/8", 48#, H-40 casing set at 516'. Cemented w/ 525 sx. Circulated cement to surface (210 sx).

Inter. Casing: 8-5/8", 24/32#, K-55 casing set at 2845'. Cemented w/ 1000 sx. Circulated cement to surface (106 sx).

Production Casing: 5-1/2", 15.5/17#, K-55 casing to 8000'. Cemented shoe with 270 sx. TOC at 6450'. Remedial cement through perfs at 6080'. Sqz 1075 sx. TOC at 556' (TS- 2/97)

Production Tubing: 2-7/8", 6.5#, J-55, EUE, SN @ 7455'

Perforations: **Current:** 7183-87', 7322-26', 7350-54',7376-79', 7396-410', 7419-29', 7422-51', 7452-55'

Safety Issues: High Concentration Of **H_2S** Gas (28,000 ppm)

Tubular Performance/Capacities:

	ID (in.)	Drift (in.)	Burst (psi)	Collapse (psi)	Capacity (bbl/ft)
2-7/8" 6.5# J-55	2.441	2.347	5808	7680	.00579
5-1/2" 15.5# K-55	4.95	4.825	3848	4040	.0238
Tbg/Csg Annulus	------	------	------	------	.0158

Procedure:

1 MIRU WSU. POOH with rods and pump. Install and test BOPE. POOH with 2-7/8" tubing.

2. Make bit and scraper run to PBTD at +/- 7500'. Pick-up additional tubing as needed for this operation

3. RIH with cast iron bridge plug (CIBP). Set CIBP at +/-7150'. Swab well down for negative test on sqz perfs @ 6080'. Circulate wellbore full w/freshwater and test to 500 psi. PU end of tubing to 6720' and circulate a balance 3-bbl slug of acid from 6720' to 6600' using 7-1/2" NEFEHCL inhibited for 48-hours at 125 deg F. Be sure to keep the acid off the squeezed perfs at 6080'. POOH with tubing and tools.

4. RU Baker Atlas electric line Install pack-off. RU lubricator and RIH with 3-1/8" slick gun with 311T charges loaded 2 SPF, phasing is not critical. Perforate from top-down to maximize benefit of acid. For depth control use Wedge Dia-Log CBL dated 11/10/96.

RECOMPLETION PROCEDURE
McGrail State Well No. 9
Lea County, New Mexico
May 30, 2008

6622-24 (2', 4 holes)
6636-38 (2', 4 holes)
6644-46 (2', 4 holes)
6674-78 (4', 8 holes)
6694-98 (4', 8 holes)
6704-08 (4', 8 holes)
6714-16 (2', 4 holes)

Yeso 20 Net Feet – 40 Holes

Casing collars at 6722', 6676', 6633', 6587'. With 41' short joint @6904'-45'

After last gun has been shot, tag CIBP and verify setting depth of top of CIBP Dump 1 bailer of cement on CIBP. Pump 5 bbls of fresh water down casing to flush excess acid

5. RIH w/TBG and PKR. Set packer @ 6590'. Load and test backside to 500 psi Establish injection into new perforations.

6. RU acid company for acid stimulation. Need a minimum of 500 HHP on location. Pump +/- 60 bbls of 15% NEFEHCL inhibited for 4 hours at 125 deg F. Use a ball injector loaded with 50 (1.1 SG) ball sealers for acid diversion Start off pumping 5 bbls of acid, then drop 1-ball for each 1-bbl of acid pumped. After last ball, pump remaining acid Pump at maximum rate (4-5 BPM is desired) not to exceed 5000 psi surface pressure. Displace acid with 45 bbls of fresh water.

7. Release packer and lower past bottom perforation to knock ball sealers off perforations.

8. PU packer to 6590'. Set load and test the backside to 500 psi. Swab test well until dark. Report swab results. If fluid level is high, BHP in next step is not required. If fluid level is low, plan to obtain BHP as noted below.

9. Next morning RU slick line, RIH w/Amerada BHP gauge to measure the bottom hole pressure. Make last stop @ mid-perf (6669). Make stops every 1000' while GIH. RD slickline.

10. Release packer, POOH.

11. RIH with production tubing, insert pump and rods PWOP