

From:

06/01/2010 10:14

#239 P.002 '005

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

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

Form C 103
 May 27 2004

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. 30-025-03610 ✓
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other INJECTION <input checked="" type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator EOR OPERATING COMPANY		6. State Oil & Gas Lease No. 257420
3. Address of Operator ONE RIVERWAY, SUITE 610, HOUSTON, TX 77056		7. Lease Name or Unit Agreement Name CROSSROADS SILURO DEV Ut ✓
4. Well Location Unit Letter <u>A</u> : <u>660</u> feet from the NORTH <u> </u> line and <u>660</u> feet from the EAST <u> </u> line Section <u>27</u> Township <u>9S</u> Range <u>36E</u> NMPM County <u>LEA</u> ✓		8. Well Number 304 ✓
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 4027' GR		9. OGRID Number 257420 ✓
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat CROSSROADS SILURO DEVONIAN
Pit type <u> </u> Depth to Groundwater <u> </u> Distance from nearest fresh water well <u> </u> Distance from nearest surface water <u> </u> Pit Liner Thickness: <u> </u> mil Below-Grade Tank: Volume <u> </u> bbls; Construction Material <u> </u>		

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

NOTICE OF INTENTION TO:
 PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:
 REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER

OTHER: MIT

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

MIT failed. Start date: 4/12/10. Completion date 5/28/10. MIT date 6/1/10.

1.) See work over attachment.

(5 1/2", 17 & 20# CSG @ 12,118', 9-5/8", 36 & 40# CSG @ 4668'. Perfs 12,089'-12,095.

2 7/8", EUE, 6.5# IPC (TK99) tbg w/ 2 7/8" x 5 1/2" Arrowset 1X nickel plated pkr w/ 2 7/8" on/off tool set @ 12,020')

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 Andy Chalker TITLE Operations Manager DATE 6/1/10

Type or print name: Andy Chalker. E-mail address: andy.chalker@att.net Telephone No.: 432-687-0303

For State Use Only

APPROVED BY: [Signature] TITLE Staff MGR DATE 6-1-10
 Conditions of Approval (if any):

RECEIVED
 JUN 01 2010
 HOBBSOCD

3m

Wildcat Measurement Service, Inc.

416 East Main Street
P.O. Box 1836
Artesia, New Mexico 88211
Office: (575)746-3481
Toll Free: 1-888-421-9453

Calibration Certificate

Company Name: EOR

Recorder Type: Barton

Recorder Serial: # 265-50140

Recorder Pressure Range: 0-1000# Accuracy +/-: 0.2% PSIG

Temperature Range: _____ Deg F.

Increasing Pressure			Decreasing Pressure		
Applied Pressure	Indicated Pressure	Error%	Applied Pressure	Indicated Pressure	Error%
0.0#	0.0#	0	800#	800#	0
100#	100#	0	600#	600#	0
300#	300#	0	400#	400#	0
500#	500#	0	200#	200#	0
700#	700#	0	0.0#	0.0#	0
1000#	1000#	0			

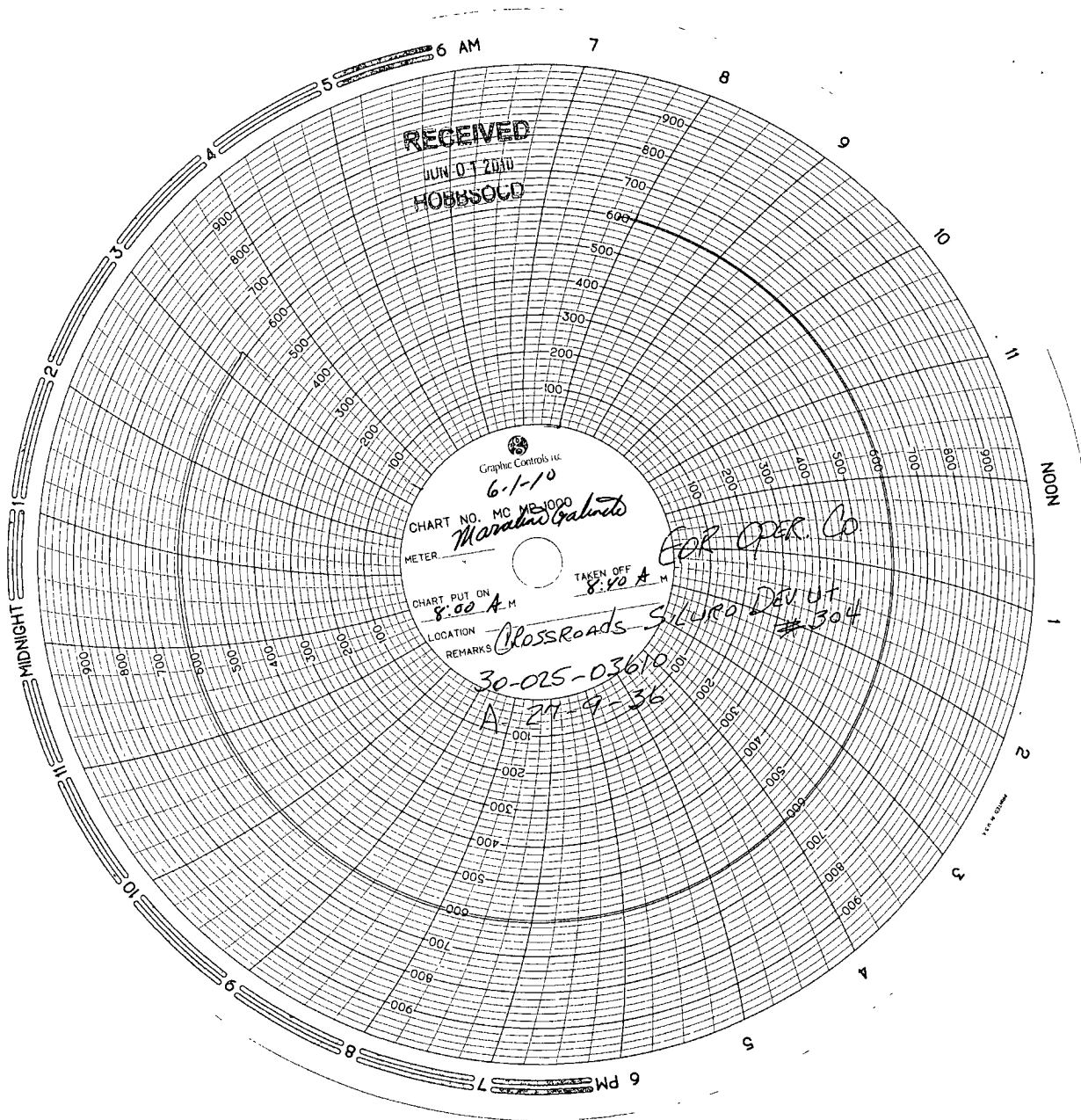
Temperature Test		
Applied Temperature	Indicated Temperature	Error%

Certified Calibration Instrument Used
Gauge: <u>Crystal</u>
Deadweight: _____

Remarks: _____

Calibration Date: 05/26/2010

Technician: Troy Sutherland Troy Sutherland



Form C-103 SUBSEQUENT REPORT
CROSSROADS SILURO DEV Ut well # 304
API #30-025-03610

Start date: 4/12/10. MIRU.

4/13/10: Unable to release pkr. Scheduled wire line for free point survey.

4/14/10: Free point tbg @ 10,748. LD 4750' of 2 7/8" Duoline tbg.

4/15/10: LD remaining 2 7/8" Duoline tbg. PU overshot, 4' sub, bumper sub, jars & DC's of 2 7/8" work string. Start to TIH.

4/16/10: TIH to 10,748'. Latched onto top of 2 7/8" Duoline tbg. Start to TOH.

4/17/10: TOH w/ overshot & no tbg. Overshot was packed full of Duoline tbg orings. Start to TIH w/ overshot.

4/18/10: Finished TIH w/ overshot. Latched onto 2 7/8" Duoline tbg. Jarred free 5 1/2" pkr. TOH w/ remaining 2 7/8" Duoline tbg, 5 1/2" Baker loc-set pkr w/ 2 7/8" on/off tool. Left 27' of 2 3/8" tail pipe tbg in hole.

4/19/10: TIH w/ 4 5/8" mill & 4 DC's. TIH tagged @ 11,300'. Broke circulation. SIWFN.

4/20/10: Tagged @ 11,370'. Pushed thru salt ring. TIH down to 12,101'. Unable to mill up the 27' of jt of 2 3/8" tbg. Circulated clean. Start to TOH w/ mill.

4/21/10: Finished TOH w/ mill. TIH w/ overshot. Unable to latch onto 2 3/8" tbg fish. Start to TOH w/ overshot.

4/22/10: Finished TOH w/ overshot. RU Schlumberger cased hole loggers. Ran RTS-GR & CBL-CCL logs from 12,096' to 4050'. RD Schlumberger.

4/23/10: TIH w/ 5 1/2" pkr. Isolated @ top of 5 1/2" csg stub @ 4566'. TOH w/ 5 1/2" pkr.

4/24/10: RU Gray wireline. Set 5 1/2" CIBP @ 4700'. RD Gray wireline. TIH w/ 9 5/8" pkr. Pressured test 9 5/8" csg to 500 psi ok.

4/25/10: TOH w/ 9 5/8" pkr. TIH w/ 9 5/8" tension set pkr. Test 9 5/8" csg from 1800' to surface to 500 psi ok.

4/27/10: TOH w/ 9 5/8" tension set pkr.

4/28/10: TIH w/ 9 5/8" pkr. Unable to set pkr. TOH w/ 9 5/8" pkr.

4/29/10: TIH w/ 9 5/8" model "R" pkr & 400' of 2 7/8" tail pipe. Set pkr @ 3936. Tail pipe 221' above top of 5 1/2" csg stub.

4/30/10: Circulated csg annulus w/ fresh water. RU HES. Mixed & pumped 80 sks of Premium Plus Class C 14 ppg, 1.67 yield, 8.46 water (24 bbls) w/ 10 lbm Micro Matrix cement & 0.7% CFR-3, w/ deformer. Pumped 24 bbls of Premium Plus cmt @ 2 bpm, 70 psi. Pumped 24.5 bbls of fresh water @ 2 bpm, 56 psi. Reversed circulated well. Pumped 40 bbls of fresh water. Circulated back 14 bbls of cement. LD 4 jts. Re-set pkr. 1st stage-Sqz to 1000 psi, dropped to 500 psi in 10 min. 2nd stage-Sqz to 1000 psi, held. SI well w/ 1000 psi on sqz.

5/1/10: SI waiting on cmt sqz to set up.

5/2/10: SI waiting on cmt sqz to set up.

5/3/10: Released 9 5/8" pkr. TOH. TIH w/ 8 5/8" bit. Tag top of cmt @ 4475'. (91' above 5 1/2" csg stub). D/O cmt sqz to top of 5 1/2" csg stub. Circulated clean. Conducted MIT on 9 5/8" csg to 500 psi ok. TOH 8 5/8" bit.

5/4/10: LD 8 5/8" bit. TIH w/ 4 5/8" bit tag cmt @ 4565'. D/O cmt sqz to 5 1/2" CIBP set @ 4700'. Conducted MIT to 500 psi for 30 min ok. TOH w/ 4 5/8" bit.

5/5/10: TIH w/ new 4 5/8" bit. D/O 5 1/2" CIBP @ 4700'. TOH w/ 4 5/8" bit. TIH w/ 5 1/2" pkr. Set pkr @ 11,300'. Conducted MIT to 500 psi for 30 min ok. Released pkr. TIH w/ pkr to 12,000'. Set pkr. Unable to establish injection rate into perforations 11,400'-11,450' for cmt sqz.

Form C-103 SUBSEQUENT REPORT
CROSSROADS SILURO DEV Ut well # 304
API #30-025-03610

5/7/10: Released pkr. Set pkr @ 11,300'. RU swab rig. Swab back black compound. Sent compound to Champion Chemical lab for a break down analysis,
5/7/10: Released pkr. Circulated/spotted 55 gals of Champion X-203 mixed in 20 bbls of fresh water. Followed by 15 gals of DT-78 solvent. Set pkr and pressured up to 500 psi over night.
5/8/10: Well on a vacuum. Released pkr. Circulated/spotted mixed 55 gals of Champion X-203 demulsifier w/ 50 bbls of condensate. Followed by 15 bbls of fresh water. Set 5 1/2" pkr. Pressured up on open perforations to 1200 psi over night.
5/9/10: Released pkr. Start to TOH w/ pkr.
5/10/10: Finished TOH w/ pkr. RU Gray wireline Set 5 1/2" CIBP @ 11,522'. RD Gary wireline. TIH w/ 5 1/2" pkr. Circulated hole clean w/ fresh water. Set pkr.
5/11/10: SI. Stand by on HES cmt.
5/12/10: SI. Stand by on HES cmt.
5/13/10: RU HES. Mixed & pumped 35 sks of Premium Plus Class C 14 ppg, 1.68 yield, 8.48 water w/ 10 lbm Micro Matrix cement & 0.7% CFR-3, w/ deformer. Perforation sqz 11,400'-11,413' 7 11,442'-11,450'. Pumped 10.5 bbls of Premium Plus cmt @ 3 bpm, 500 psi. Reversed circulated well. Pumped 85 bbls of fresh water. LD 4 jts. Re-set pkr. 1st stage-Sqz to 1000 psi, dropped to 750 psi in 10 min. 2nd stage-Sqz to 1000 psi, dropped to 800 psi in 10 min. 3rd stage-Sqz to 1000 psi, dropped to 850 psi in 10 min. 4th stage-Sqz to 1000 psi, dropped to 950 psi in 10 min. SI well w/ 1000 psi on sqz. RD HES.
5/15/10: SI waiting on cmt sqz to set up.
5/16/10: Released pkr. TOH w/ pkr. TIH w/ 4 5/8" bit. Tag to of cmt sqz @ 11,211'. D/O cmt sqz to 11,306'.
5/17/10: D/O cmt sqz from 11,306' to 11,522' (CIBP). Conducted MIT to 500 psi for 30 min ok. D/O 5 1/2" CIBP @ 11,522'. TIH tag fill @ 12,021'.
5/18/10: D/O fill/CIBP remains to 12,100'. Circulate clean. Start to TOH w/ bit.
5/19/10: Finish TOH w/ bit. RU Gray wireline. Perforated 5 1/2" csg w/4JSPF from 12,089'-12,095'. RD Gray wireline. TIH w/ 5 1/2" pkr. Set & load pkr @ 12,000'. RU Crain acid. Spotted acid across perms w/ no rate.
5/20/10: Acidize perms 12,089'-12,095' w/ 6000 gals of 15% LST acid. Flushed tbg. RD Crain Acid. Max press 2535 psi. Min press vacuum. Avg inj rate 3.5 bpm. ISDP-1260 psi. 15 min SI-O psi.
5/21/10: Conducted injection test. 300 bpd @ 300 psi.
5/22/10: Acidize perms 12,089'-12,095' w/ 4000 gals of 20% LST acid & 150 frac balls in 4 ball stages. Flushed tbg. RD Crain Acid. Max press 2400 psi. Min press vacuum. Avg inj rate 4 bpm. ISDP-vacuum. 15 vacuum SI-O psi.
5/23/10: Conducted injection test. 4 bpm on a vacuum.
5/24/10: Released pkr. TOH LD workstring.
5/25/10: TIH w/ a new 2 7/8" x 5 1/2" Big bore Arrowset 1X nickel plated pkr w/ stainless steel 2.31" "F" profile nipple W/ 2 7/8" on/off tool on 381 jts of 2 7/8", J-55, EUE, IPC (TK-99) coated tbg. Set pkr @ 12,020'. RU Gray wireline. Set 2.31" "F" plug on pkr. RD Gray wireline.

Form C-103 SUBSEQUENT REPORT
CROSSROADS SILURO DEV Ut well # 304
API #30-025-03610

06/01/2010 10:15

3

5/26/10: Jay off pkr. Circulated corrosion pkr fluid to surface. Jay onto pkr. RU Gray wireline. Pulled 2.31" "F" plug. RD Gray wireline. ND BOP's. NU wellhead.

5/27/10: Conducted pre-MIT to 500 psi ok. RD released frac tank reverse unit.

5/28/10: RD released rig. Scheduled MIT w/ OCD in Hobbs, NM.

6/1/10: Conducted MIT for 30 minutes and delivered chart to OCD office in Hobbs, NM as requested by OCD.



Current Well bore Diagram

Crossroads Siluro Devonian Unit Well #304
30-025-03610
Unit Letter A. 660' FNL & 660' FEL
SEC. 27, T9S R36E
Lea CO., NM
Spud date 12/19/51

13 3/8", 40#, csg @ 259'
300 sxs of cmt. Cir to surface.
Hole size 17"

9 5/8", 36# & 40#, csg @ 4668'
2400 sxs of cmt. Cir to surface
Hole size 12"

5 1/2" csg cut @ 4566'.
Bowen lead seal csg patch hung in 9 5/8" @ 4544'.
7 1/16" OD on 5 1/2" csg stub.

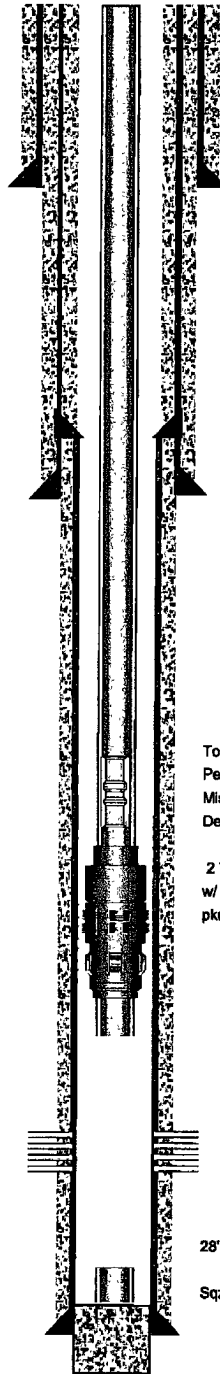
Cmt sqz csg stub leak @ 4566 May 2010.

Perforations: (1JSPF)
11,400'-11,413' Sqz May 2010.
11,442'-11,450' Sqz May 2010.
12,085'-12,100' Sqz Apr 1974.

Perforations: (5JSPF)
12,089'-12,095' 1JSPF Apr 1974
12,089'-12,095' Re-perf w/4JSPF May 2020.

5 1/2", 17# & 20#, csg @ 12,118'.
1178 sxs of cmt. Est TOC (TS) 6320'
Hole size 7 7/8"

PBTD 12,101'
TD 12,130'



ELEV: 4027' GR

Top of pay:
Penn-9275'
Miss-11,520'
Den-12,070'

2 7/8", J-55 EUE, 6.5#, IPC (TK-99) tbg
w/ 2 7/8" x 5 1/2" Attowset 1X Nickel plated full bore set
pkr @ 12,020' w/ 2 7/8" on/off tool.

28' of 2 3/8" EUE tbg left in hole.

Sqz O.H.-12,118'-12,132'.

Well Name & Number:	Well #304	Lease:	Crossroads Siluro Devonian Unit
County or Parish:	Lea	State/Prov.	NM
Prepared By:	L.A. Spittler, Jr.	Country:	USA
		Last Revision Date:	6/1/2010