

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 August 1, 2011

RECEIVED
SEP 03 2013
HOBBS

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-31794
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name B.F. HARRISON "B"
8. Well Number 7
9. OGRID Number 4323
10. Pool name or Wildcat LNGL MATTIX; 7 RV QN G/B
11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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
CHEVRON U.S.A. INC.

3. Address of Operator
15 SMITH ROAD, MIDLAND, TEXAS 79705

4. Well Location

Unit Letter: D 510 feet from the NORTH line and 800 feet from the WEST line

Section 9 Township 23S Range 37E NMPM County LEA

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 ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: SONIC HAMMER ACIDIZE & RTP

OTHER

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.

CHEVRON INTENDS TO SONIC HAMMER ACIDIZE THE GRAYBURG FORMATION AND RETURN TO PRODUCTION.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE & WELLBORE DIAGRAM.

CHEVRON WILL USE THE CLOSED-LOOP SYSTEM WITH A STEEL TANK & HAUL TO THE REQUIRED DISPOSAL, PER THE OCD RULE 19.15.17.

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

Denise Pinkerton

TITLE: REGULATORY SPECIALIST

DATE: 08/29/2013

Type or print name: DENISE PINKERTON

E-mail address: leakejd@chevron.com

PHONE: 432-687-7375

For State Use Only

APPROVED BY:

El Guzman

TITLE

Dist. Mgr

DATE

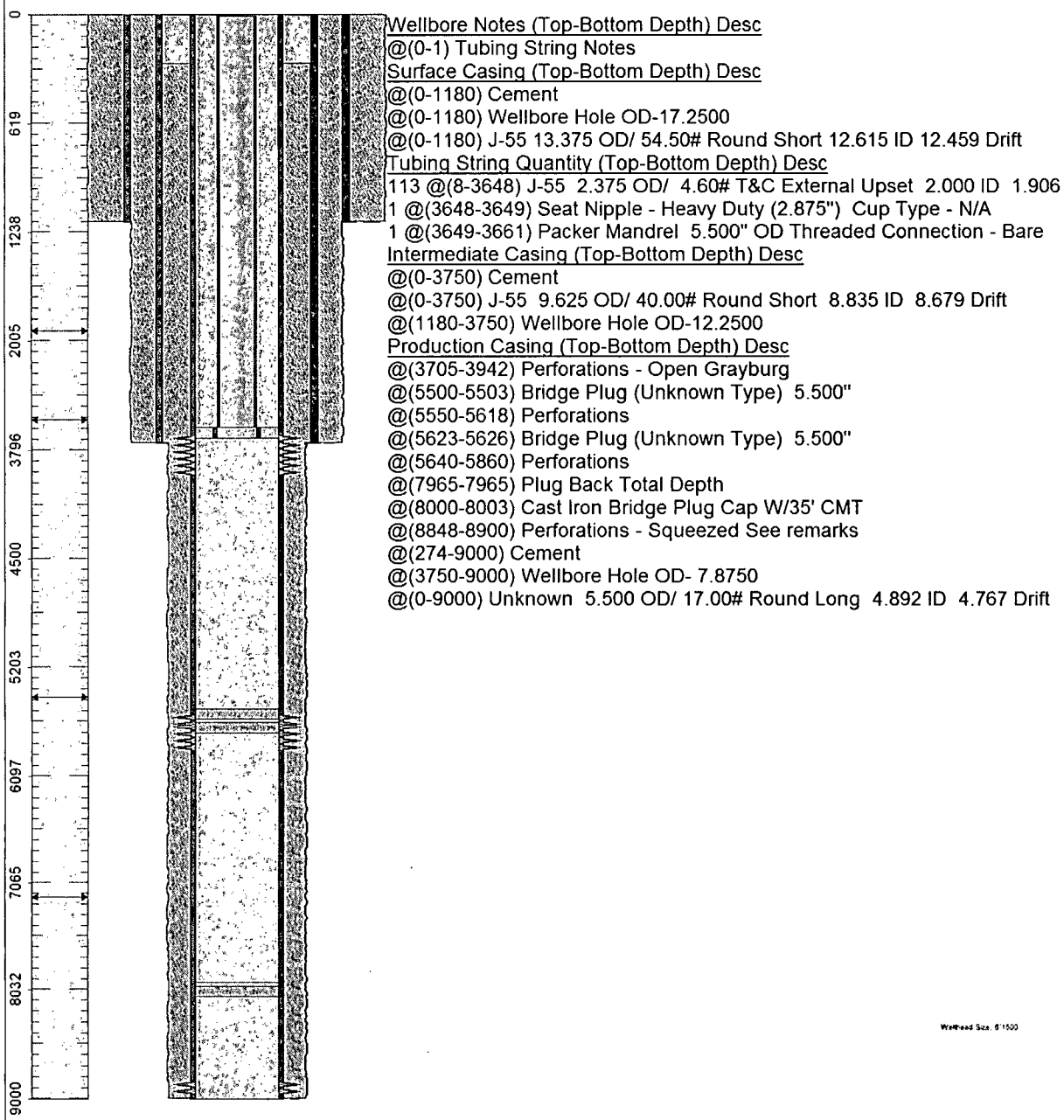
9-25-2013

Conditions of Approval (if any):

SEP 25 2013

Chevron U.S.A. Inc. Wellbore Diagram : BFHARRISONB7G

Lease: OEU EUNICE FMT		Well No.: HARRISON, B. F. -B- T/A 7		Field: FLD-LANGLIE MATTIX NORTH	
Location: 510FNL800FWL		Sec.: N/A		Blk:	Survey: N/A
County: Lea	St.: New Mexico	Refno: QU2983		API: 3002531794	Cost Center: UCMK90200
Section: 9		Township: 023 S			Range: 037 E
Current Status: ACTIVE				Dead Man Anchors Test Date: NONE	
Directions:					



Ground Elevation (MSL):: 3318.00	Spud Date: 11/24/1992	Compl. Date: 03/21/2007
Well Depth Datum:: CSI0000N	Elevation (MSL):: 0.00	Correction Factor: 8.00
Last Updated by: jackssl	Date: 11/11/2009	

BF Harrison #7
Langlie Mattix North - Grayburg
T23S, R37E, Sec. 9
N 32° 19' 29.064", W -103° 10' 24.492" (NAD27)
Job: SH Acidize and RTP

8.7.2013

PREWORK:

1. Utilize the rig move check list.
2. Check anchors and verify that pull test has been completed in the last 24 months.
3. Ensure location of & distance to power lines is in accordance with MCA SWP. Complete and electrical variance and electrical variance RUMS if necessary.
4. Ensure that location is of adequate build and construction.
5. Ensure that elevators and other lifting equipment are inspected. For wells to be worked on or drilled in an H₂S field/area, include the anticipated maximum amount of H₂S that an individual could be exposed to along with the ROE calculations for 100 ppm and 500 ppm.
6. Review JSA and hazards with rig crew. Visually inspect wellhead, casing and tubing valves. Decide whether tubing and casing valves can be used; replace as needed.
7. Scout location and mark off anything that might be hazardous to daily operations.

Reminders:

8. Caliper all lifting equipment at the beginning of each day or when sizes change. **Note in JSA and record on Elevator Change-out Log when and what items are callipered.**
9. When NU anything over an open wellhead (BOP, EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
10. Ensure well is secure/shut in with blind rams between job stages (nothing in well).
11. If pumping any cement, plugging back a well or changing producing intervals, always contact the OCD and give the details.
12. Hold safety meetings with all personnel on location prior to any major or abnormal operation.

Procedure:

This procedure is meant to be followed. It is up to the WSM, Workover Engineer and Production Engineer to make decisions necessary to SAFELY do what is best for the well. In the extent that this procedure does not reflect actual operations, please contact WE, PE and Superintendent for MOC.

- 1) Prior to MIRU, verify with PE that the well passed 300 psi pressure test on backside.
- 2) Verify that well does not have pressure or flow. If the well has pressure, note tubing and casing pressures on Wellview report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
- 3) MI & RU workover unit.
- 4) ND wellhead, NU BOP dressed with 2-3/8" pipe rams on top and blind rams on btm. NU EPA equipment & RU floor. POOH and LD 1 jt 2-3/8" tbgr. PU 5-1/2" 17# rated packer along with a joint of 2-3/8" tubing and set below WH @ ~25'. Test BOP pipe rams to 250/500 psi. Note testing pressures on Wellview report (Time log and safety/inspections). Release and LD packer.
- 5) Release packer, POOH 2-3/8" prod tubing and LD packer. (Packer 3,649', Perfs 3,705-3,942', EOT 3,648', PBTD 5,375' from SL tag 8/6/2013). Secure Well.
- 6) Change out pipe rams to 2-7/8". PU 5-1/2" 17# rated packer along with a joint of 2-7/8" tubing and set below WH @ ~25'. Test BOP pipe rams to 250/500 psi. Note testing pressures on Wellview report (Time log and safety/inspections). Release and LD packer.

- 7) Contact sonic tool rep to be on site during job. *Verify that 2 7/8" 6.5# L-80 WS is clean, inspect for excessive rust.* PU and RIH with Sonic Hammer tool, seat nipple, and work string to 3,945' or enough to cover the bottom perforations with a whole stand. Hydrotest tubing to 5,000 psi. Stand back tubing to top perforations. Install stripper head and stand pipe with sufficient treating line to move tools vertically ~ 65'. Rig up pressure gauges to allow monitoring of tubing and casing pressures.
- 8) MI & RU Petroplex and pressure test surface lines. Titrate acids and verify concentration (HCl $\pm 1.5\%$) report results in daily work summary. Acid Components listed below in Table A. If well will circulate proceed to step 7)b).

Acid Components Table A	
2 gpt	EP-3 Non Emulsion
5 gpt	DX - Iron Control Additive
2 gpt	BX - Activator ICH
2 gpt	I8 - Inhibitor

- a) **Sonic Hammer for non circulating wells.** Treat all 4 intervals from 3,705' to 3,945' with the following procedure from the top interval to the bottom interval. Shut in the annulus. Do not exceed 5,000 psi tubing pressure.
- i) While reciprocating over the perf interval, pump 30 bbls of cut brine, followed by 15% NEFE HCL and then flush tubing with cut brine pumping at 5 BPM. Repeat with all intervals listed in Table B using the acid volumes listed for each interval.

Table B: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	3,705 - 3,770	65	2,000
2	3,770 - 3,803	60	1,400
3	3,830 - 3,893	63	1,400
4	3,893 - 3,945	52	1,200
			6,000

- ii) R/D Petroplex Acidizing, drop Sonic Hammer circulating port opening ball, shut in well for 1 hr for the acid to spend.
- ❖ If WSM believes that the formation may take longer to spend the acid, wait until appropriate to open circulating ports and attempt swabbing.
- iii) Pressure up the tubing to ~2000 psi to open the sonic hammer tool circulating port.
- iv) R/U swab equipment and swab well back to flowback tank until the load is recovered or returns are produced fluid and no longer spent acid.
- v) R/D swab equipment and POOH w/ tubing to top perf.
- vi) Pump 40 bbls cut brine mixed w/ 3 drums Baker SCW-358 scale inhibitor down the tubing through the circulating ports on the Sonic Hammer at a max rate of 5 bpm. Displace scale squeeze w/ 110 bbls of cut brine.
- vii) TOOH w/ sonic hammer. Proceed to step 8.

b) Sonic Hammer treatment w/ a circulating well.

- i) Treat interval #1 (referring to Table B) with 30 bbls of cut brine. Pump down Sonic Hammer tool at 5 BPM while reciprocating tool across intervals. Do not exceed 5,000 psi tubing pressure. Leave annulus open in circulation mode while treating.
- ii) Pick up enough pipe to reach the next interval and repeat step 7)b)i) until all intervals are washed.

Table B: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	3,705 - 3,770	65	2,000
2	3,770 - 3,803	60	1,400
3	3,830 - 3,893	63	1,400
4	3,893 - 3,945	52	1,200
			6,000

- iii) Starting at interval #3 fill tubing w/ acid and shut in backside. Pump the volume of acid specified in Table A at 5 BPM reciprocating over the perf interval. Flush tubing with cut brine. Casing pressure should not exceed 500 psi. If necessary, bleed off or slow pumping rate.
 - iv) TOOH w/ tubing to the next interval and repeat step 7)b)iii) acidizing each interval according to Table B.
 - v) Shut in well for 1 hr for the acid to spend. Monitor casing pressure to keep it below 500 psi. Bleed off excess pressure if necessary.
 - vi) Kill well and POOH Sonic Hammer Tool and WS. LD Sonic Hammer.
 - vii) PU & RIH with 5 1/2" packer and WS. Set treating packer at 5,000', above the top perf.
 - viii) RU swab crew and flowback tank.
 - ix) Swab well until returns indicate formation fluid and not spent acid, or fluid level drops enough to make swabbing non productive.
 - x) Release packer. POOH packer and WS. LD 2 7/8" WS and packer.
- 9) RIH with 2-7/8" production tubing string hydrotesting to 5,000 psi. **Set TAC per ALCR/Planner recommendation and record it on WellView.**
- 10) ND BOP. NU WH. **RIH with rods and pump per ALCR/Planner and record how much the pump was spaced-out on WellView.** Hang well on.
- 11) RD and release workover unit. Turn well over to production (contacts on back). Clean location.

Figure 1 is a vertical bar chart illustrating the distribution of performance metrics (Perfs) across four stages (Stage 1, Stage 2, Stage 3, and Perfs). The Y-axis represents performance values, ranging from 3,650 to 4,000. The X-axis represents the number of occurrences. The chart shows a distribution of performance values across four stages, with Stage 1 having the highest frequency and Stage 3 having the lowest.

Stage	Performance Value (Perfs)	Frequency (Number of Occurrences)
Stage 1	3,705	1
Stage 1	3,770	1
Stage 1	3,830	1
Stage 1	3,893	1
Stage 1	3,945	1
Stage 2	3,705	1
Stage 2	3,770	1
Stage 2	3,830	1
Stage 2	3,893	1
Stage 2	3,945	1
Stage 3	3,705	1
Stage 3	3,770	1
Stage 3	3,830	1
Stage 3	3,893	1
Stage 3	3,945	1
Perfs	3,705	1
Perfs	3,770	1
Perfs	3,830	1
Perfs	3,893	1
Perfs	3,945	1

[illegible]