

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 87911
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

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

HOBBS OCD
OCT 25 2012

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. 30-025-32498
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator CHEVRON U.S.A. INC.		6. State Oil & Gas Lease No.
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705		7. Lease Name or Unit Agreement Name B.F. HARRISON "B"
4. Well Location Unit Letter F: 1815 feet from the NORTH line and 1815 feet from the WEST line Section 9 Township 23-S Range 37-E NMPM County LEA		8. Well Number 23
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 4323
		10. Pool name or Wildcat N.TEAGUE;BLN,DRNK-ABO

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: INTENT TO ACIDIZE, SCALE SQUEEZE, SONIC HMR

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 U.S.A. INC. INTENDS TO ACIDIZE, SONIC HAMMER, & SCALE SQUEEZE THE SUBJECT WELL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, & C-144 INFORMATION.

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: 10-24-2012

Type or print name DENISE PINKERTON

E-mail address: leakejd@chevron.com

PHONE: 432-687-7375

For State Use Only

APPROVED BY

Ed Gonzalez

TITLE

DIST. MGR

DATE

10-30-2012

Conditions of Approval (if any):

OCT 30 2012

B.F. Harrison B #23
North Teague, Blinebry, Drinkard/Abo
T22S, R37E, Sec. 9
N 32° 19' 16.104", W -103° 10' 12.648" (NAD27)
Job: Sonic Hammer, Acidize & Scale Squeeze

10.16.2012

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. Caliper all lifting equipment at the beginning of each day or when sizes change.
6. When NU anything over and open wellhead (EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
7. 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.
8. If the possibility of trapped pressure exists, check for possible obstructions by:
 - Pumping through the fish/tubular – this is not guaranteed with an old fish as the possibility of a hole above the obstruction could yield inconclusive results
 - Dummy run – make a dummy run through the fish/tubular with sandline, slickline, eline or rods to verify no obstruction. Prior to making any dummy run contact RE and discuss.

If unable to verify that there is no obstruction above the connection to be broken, or if there is an obstruction:

- Hot Tap at the connection to check for pressure and bleed off

Observe and watch for signs / indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.

Procedure:

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

WELL RECORDS SHOW THE LAST WELL PULL 2001, SOME OF THE DATA IN THE WELL FILES MAY NOT BE THE MOST CURRENT. VERIFY TUBING OD BEFORE PULLING AND USE CAUTION WHEN NEARING TAC AS DEPTH MIGHT BE OFF.

1. Prior to moving on location, verify that anchors have been set and tested within the past two years, check that powerline distances are the appropriate length for derrick height. Verify that well does not have pressure or flow. If well has pressure, note tubing and casing pressures on Wellview report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
2. MI & RU workover unit.
3. Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary. Tally rod length to verify SN depth on provided wellbore diagram. Monitor well for flow and verify that it is static. ND wellhead and verify tbg OD, unset TAC, NU BOP. POOH and LD 1 jt, PU 7" packer and set ~ @ 25', test BOP pipe rams to 250 psi/1000 psi. Note testing pressures on Wellview report. Release and LD packer.

4. PU 1 jts of tubing and tag for fill (TAC 5,554', Top Perf 5,606', EOT 7,057', PBTD 7,083'). Do not push TAC into perfs. POOH while scanning 2-3/8" prod tubing. LD all non-yellow band joints. If fill is tagged:
 - A. Above 7,077' continue with foam/air clean out per step 5.
 - B. Below 7,077' clean out not needed, skip step 5.

Note: Strap pipe out of the hole to verify depths and note them on Wellview report.
Send scan log report to LGBI@chevron.com.

5. If no fill is tagged, skip this step. Close blind rams on BOP, switch BOP's pipe rams and elevators to 2-7/8". P/U PKR for 7" casing on one joint of 2 7/8", set and test rams to 250/500 psi. Caliper elevators. PU and RIH with 6 1/8" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to 7,083' with foam/air unit (**continue to supplemental procedure and in accordance with attached SOG**). POOH with 2-7/8" WS and bit. LD bit & BHA.
6. Contact sonic tool rep to be on site during job. *Verify that WS is clean, inspect for excessive rust.* PU and RIH with Sonic Hammer tool and 2-7/8" work string to 7,005' or enough to cover the bottom perforations with a whole stand. Hydrotest tubing to 6,000 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.
7. MI & RU Acid Stim trucks and equipment. Titrate acids and verify concentration (HCl $\pm 1.5\%$) report results in daily work summary. Treat all intervals from 5,602'-7,005' with 20 bbls of 2% KCL brine water per interval (refer to Table A). 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 intervals with 2% KCL brine.
8. Follow the brine water wash with 6,000 gals 15% NEFE HCl pumped in 12 stages. Spot 3 (~126 gal) bbls of acid outside tubing, shut casing valve, install stripper head, pump 500 gallons of acid @ 5 BPM over first treating interval from 5,602'-5,615', monitor casing pressure not exceeding 500 psi. Strip pipe through stripper head while acid washing the interval up and down until the 500 gal has been pumped. Flush tubing with 2% KCL brine after every acidized interval, make a connection and continue with remaining interval. Repeat process for the remaining 11 intervals. Refer to Table A.

Table A: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	5602' - 5615'	13	500
2	5678' - 5738'	60	500
3	5738' - 5765'	27	500
4	5805' - 5820'	15	500
5	6385' - 6445'	60	500
6	6445' - 6505'	60	500
7	6505' - 6550'	45	500
8	6608' - 6630'	22	500
9	6680' - 6725'	45	500
10	6804' - 6865'	61	500
11	6865' - 6930'	65	500
12	6955' - 7005'	50	500
			6,000

9. 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.

10. Scale squeeze well with a total of 150 bbls 2% KCL brine water and 3 drums (165 gallons) Baker SCW-358 Scale Inhibitor Chemical. For each stage, close casing valve, install stripper head, pump chemical as a concentrated pill of 55 gals of SCW-358 with 13 bbl of 2% KCL then displaced with 37 bbls of 2% KCL per interval. Continue moving uphole with Sonic Hammer. Pump at max rate of 5 BPM per pump schedule. Ensure top of tubing is flushed with brine water before making a connection. Ensure Sonic Hammer is above all perforations. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. Refer to Table B.

Table B: Scale Squeeze Pump Schedule.

Stage	Depth	SCW-358 Volume (gal)	Brine Volume (bbl)
1	6,612'	55	13
2	6,612'		37
3	6,389'	55	13
4	6,389'		37
5	5,600'	55	13
6	5,600'		37
		165	150

11. RD and release pump truck.
12. Run back in the hole and tag for fill. If fill entry was identified above 7,077', clean-out to PBTD following step 5.
13. POOH & LD 2-7/8" WS and Sonic Hammer tool.
14. Close blind rams on BOP, switch BOP's pipe rams and elevators to 2-3/8". RIH with 2-3/8" production tubing hydrotesting to 6,000 psi. Set TAC per ALCR recommendation. Monitor well for flow & ND BOP. NU WH. RIH with rods and pump per ALCR. Hang well on. RD and release workover unit.
15. Turn well over to production.

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.
 1. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery. Hardline pipes from 2" casing valve to manifold to half pit with gas buster.
 2. Install flowback tank downwind from rig.
 3. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
 4. RIH with 6" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS.
 5. NU stripper head with **NO Outlets** (Check stripper cap for thread type - course threads preferred). **Stripper head to be stump tested to 1,000 psi before being delivered to rig.** Check chart or test at rig.
 6. RU foam air unit. Make quality foam on surface before going down hole with foam/air. Install flapper float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute

Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.

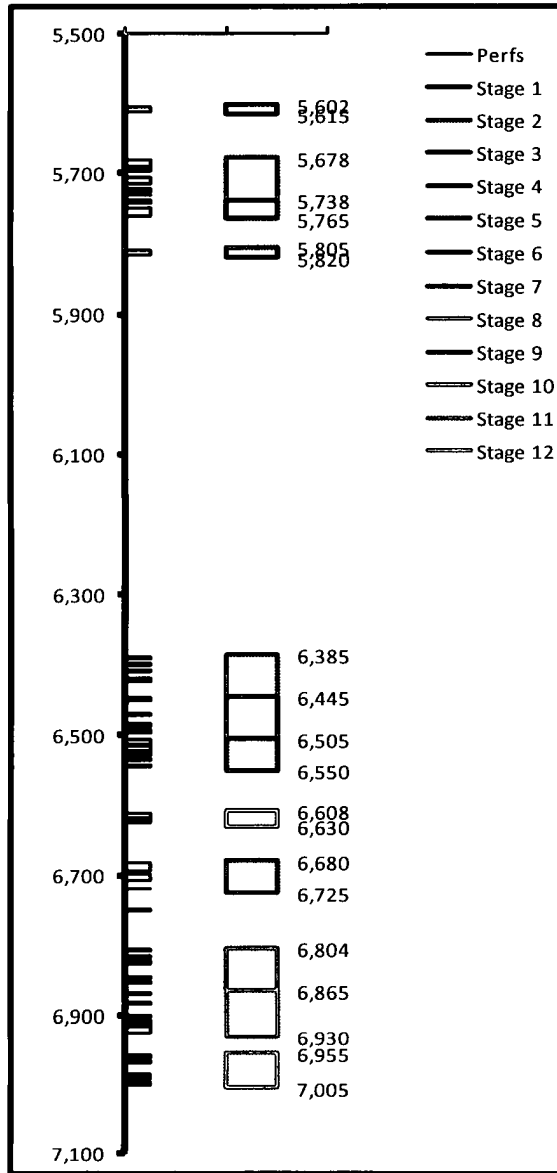
7. Clean out fill to 7,083' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull above the perforations.
8. When tripping out of hole, have special float bleed off tool available to relieve trapped pressure below float.

Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition.

Continue on with original procedure for completion.

B.F. Harrison B #23



Perfs Detail				
Top ft	Bottom ft	Interval Length ft	Status	Reservoir
5,606	5,612	6	Open	L Pad/Blry
5,680	5,690	10	Open	L Pad/Blry
5,693	5,696	3	Open	L Pad/Blry
5,707	5,714	7	Open	L Pad/Blry
5,723	5,726	3	Open	L Pad/Blry
5,730	5,732	2	Open	L Pad/Blry
5,738	5,743	5	Open	L Pad/Blry
5,750	5,760	10	Open	L Pad/Blry
5,810	5,816	6	Open	L Pad/Blry
6,389	6,392	3	Open	Drinkard
6,399	6,401	2	Open	Drinkard
6,407	6,410	3	Open	Drinkard
6,418	6,424	6	Open	Drinkard
6,446	6,451	5	Open	Drinkard
6,469	6,471	2	Open	Drinkard
6,483	6,487	4	Open	Drinkard
6,492	6,496	4	Open	Drinkard
6,505	6,512	7	Open	Drinkard
6,515	6,522	7	Open	Drinkard
6,525	6,528	3	Open	Drinkard
6,533	6,536	3	Open	Drinkard
6,543	6,545	2	Open	Drinkard
6,612	6,618	6	Open	Abo
6,620	6,625	5	Open	Abo
6,683	6,693	10	Open	Abo
6,698	6,708	10	Open	Abo
6,718	6,720	2	Open	Abo
6,748	6,750	2	Open	Abo
6,807	6,809	2	Open	Abo
6,816	6,817	1	Open	Abo
6,823	6,827	4	Open	Abo
6,846	6,848	2	Open	Abo
6,852	6,854	2	Open	Abo
6,868	6,871	3	Open	Abo
6,882	6,884	2	Open	Abo
6,900	6,903	3	Open	Abo
6,906	6,910	4	Open	Abo
6,911	6,914	3	Open	Abo
6,917	6,926	9	Open	Abo
6,958	6,962	4	Open	Abo
6,966	6,970	4	Open	Abo
6,984	6,987	3	Open	Abo
6,990	6,992	2	Open	Abo
6,996	7,001	5	Open	Abo
Total				
5,606	7,001	191		

WELL DATA SHEET

FIELD: TEAGUE NORTH
 LOC. 1,815' FNL, 1,815' FWL
 TOWNSHIP. 23S
 RANGE 37E

WELL NAME: B.F. Harrison B #23
 SEC 9 GL 3,313'
 COUNTY Lea KB 3,325'
 STATE NM DF to GL 12'

FORMATION: Blinebry, Drinkard/Abo
 CURRENT STATUS Producing Oil Well
 API NO: 30-025-32498
 Chevno: QY2617 Wellbore #
 N 32° 19' 16 104", W -103° 10' 12 648" (NAD27)

Current

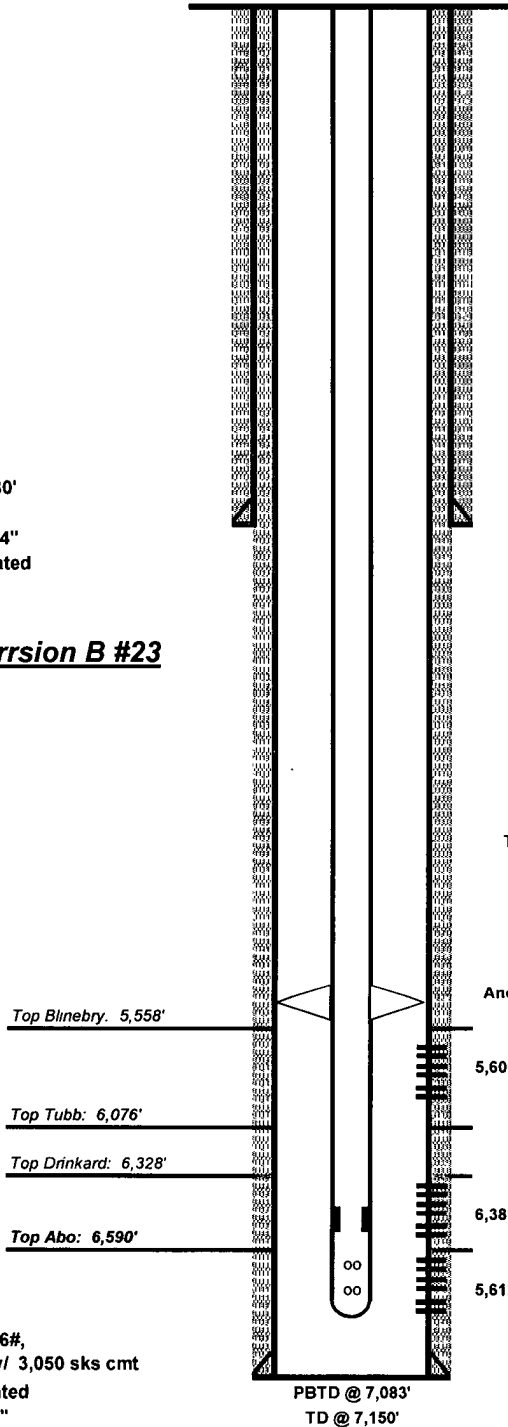
Initial completion date: 12/7/1994	Initial Production
Initial Formation	
FROM	TO:

Completion data:

1999- Acid, perf and frac

9-5/8" OD, 36#
 csg set @ 1,180'
 w/ 550 sx cmt
 hole size 12-1/4"
 TOC @ Circulated

B.F. Harrsion B #23



PBTD: 7,083
 EOT: 7,057
 TAC: 5,554
 Top Perf: 5,606
 TAC to top perf: 52
 EOT to PBTD: 27

Tubing Detail:

#Jts:	Size:	Footage
	KB	12 0
173	2-3/8" J55 tbg	5,538 9
1	7" TAC	2 7
44	2-3/8" J55 tbg	1,439.1
1	2-3/8" J55 tbg	31 3
1	SN 2-3/8" cup type	1 1
1	2-3/8" J55 tbg	31 4

221	Bottom Of String >>	7,056.5
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Rod Detail:

#Jts:	Size:	Footage
1	1 5" SM Polished rod	26 0
1	0 875" N-78 Rod Sub	6 0
84	0 875" N-78 Rod	2,100 0
195	0 750" N-78 Rod	4,875 0
1	20-125-RHBC-20-5-2	22.0

282	Length of string	7,029.0
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7" OD, 23# & 26#
 csg @ 7,150' w/ 3,050 sks cmt
 TOC @ Circulated
 Hole size 8-3/4"

Updated DNCU 10 11 2012