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	State of New Me Energy, Minerals and Natu HOBBS OCD OIL CONSERVATION OCT 1 0 201320 South St. Fran Santa Fe, NM 87	ral Resources DIVISION acis Dr.	Form C-103 Revised July 18, 2013 WELL API NO. 30-025-29734 5. Indicate Type of Lease STATE FEE A 6. State Oil & Gas Lease No.
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	DECEIVED	505	6. State Off & Gas Lease No.
SUNDRY NO (DO NOT USE THIS FORM FOR PROF DIFFERENT RESERVOIR. USE "APPI PROPOSALS.)	FICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPEN OR PLU JCATION FOR PERMIT" (FORM C-101) FO	JG BACK TO A	<ul> <li>7. Lease Name or Unit Agreement Name</li> <li>M.B. WEIR "B"</li> <li>8. Well Number 12</li> </ul>
1. Type of Well: Oil Well         2. Name of Operator	Gas Well 🗌 Other		9. OGRID Number 4323
CHEVRON U.S.A. INC. 3. Address of Operator 15 SMITH ROAD, MIDLAND, 7	ГЕХАЅ 79705		10. Pool name or Wildcat BLINEBRY/DRINKARD
4. Well Location Unit Letter: M 990 for Section 12	eet from the SOUTH line and 330 fo Township 20S	eet from the WEST Range 37E	line Lea NMPM County EDDY
	11. Elevation (Show whether DR,	U	
12. Check	Appropriate Box to Indicate N	ature of Notice,	Report or Other Data
PERFORM REMEDIAL WORK [ TEMPORARILY ABANDON [ PULL OR ALTER CASING [ DOWNHOLE COMMINGLE [ CLOSED-LOOP SYSTEM [	CHANGE PLANS	SUB REMEDIAL WORI COMMENCE DRI CASING/CEMENT	LLING OPNS. P AND A
OTHER: ACIDIZE & SCAL	E SQUEEZE	OTHER:	

 HER:
 ACIDIZE & SCALE SQUEEZE
 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 & SCALE SQUEEZE THE SUBJECT WELL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE & WELLBORE DIAGRAM.

DURING THIS PROCEDURE WE PLAN TO 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 c	omplete to the best of my knowledge and belief.	
SIGNATURE DEMISS Purpleton	_ TITLE REGULATORY SPECIALIST	DATE 10/08/2013
Type or print name: DENISE PINKERTON	E-mail address: leakeid@chevron.com	PHONE:432-687-7375
For State Use Only		
APPROVED BY:	TITLE DIST. MAR	DATE 0-15-2013
Conditions of Approval (if any):		
	00	T 1 5 2013
		l l



# Workover/ Completion Program

Date: 8/29/2013

Well:	M. B. Weir B #12
Reservoir/Field:	Reservoir: E. Weir/Blinebry Perfs and Skaggs Drinkard Perfs Field - Monument
Surface Location:	M-12-20S-37E 990 FSL 330 FWL
GPS (NAD27) – (Long, Lat):	N 32° 34' 58.692", W -103° 12' 43.236" (NAD27)
API No:	30-025-29734
Cost Center:	UCU936900
Chevron Ref. No.:	IF7235
WBS #:	UWDPS-R3169

#### Job: Clean out, acidize using the Sonic Hammer tool and Scale Squeeze

## **BRIEF BACKGROUND OF THE JOB:**

It is proposed to clean out fill, acidize and Scale Squeeze the Weir Blinebry East (5,714'-5,810'), Skaggs Drinkard formation (6.607' - 6.903') of the M B WEIR B # 012 using the Sonic Hammer tool. The oil production dropped in April 2013 through now from 14 BOPD to 8 BOPD. Gas production fell from 121 mscf/d to 87 mscf/d.

The well was last tested on 08/11/2013, producing 8 BOPD, 123 BWPD & 87 MCF/D. Economics are based on achieving a deterministically incremental IP of 5 BOPD declined exponentially at 16%.

### **CURRENT HOLE CONDITION:**

6,855' (4/12/2011- Wellview) Total Depth: 7,100' TAG: 219' of fill (Production Sand, fish, PBTD: 7,074' etc.) GL: 3,560' KB: 13'

In the last WellView WO report, tag fill recorded was at 6,855' (219' of fill from PBTD).

Also, according to WellVeiw report (2/18/2010), a mud joint was parted, leaving the bottom 3ft and bull plug in the hole. The anticipated fish depth is around 6,860'. The fish is most likely corroded and scaled from sitting in the well for a few years, so we will plan on running a bladed-junk mill to drill it up.

Casing Record:

- 11 ¾", 42#, J-55, ST&C set @ 1,401'
- 8<sup>5</sup>/<sub>8</sub>" 32#, J-55, LT&C casing set @ 3,990' w/1,365 sks cement (Circ,-No), TOC- 3,186' 3,990' & 1,672' - 1,694' (Squeezed backside w/1100 sx cmt)
- 5 1/2" 17# & 15.5#, K-55 LT&C casing set @ 7,100'. Cemented 1<sup>st</sup> stage w/400 sks LW CL "H" w/5#/sx Gilsonite and 1/2"sx flocele. Tail w/300 sx CL "H" w/0.6% Halod 9 & 1/2"sx flocele. 2nd stage, 200 sx LW CL "H" w/10#/sx Gilsonite & 1/4# sx flocele. Tail w/800 sx LW CL "H" & 1/4# sx flocele, TOC - Surface, DV tool @ 5243',

Existing Perforations:

Skaggs Drinkard Perfs - Perf Depth - 6,607-6,903' **E. Weir/Blinebry Perfs** – 5,714'-5,810'

## **REGULATORY REQUIREMENTS:**

Submit C-103 Notice of Intent & Subsequent Reports (to be done by engineering staff)

Prepared by: Prasanna K Chandran (8/29/2013)

# PREWORK:

- 1. Utilize the rig move check list, verifying route and power line heights with FMT.
- 2. Check anchors and verify that pull test has been completed in the last 24 months.
- 3. Ensure location of & distance to power lines (from wellhead) 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, and will support operations.
- Ensure that elevators and other lifting equipment are inspected. For wells to be worked on or drilled in an H<sub>2</sub>S field/area, include the anticipated maximum amount of H<sub>2</sub>S 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.

## <u>Reminders:</u>

- 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/RUMS assessment.

## RIG UP WO UNIT/ PULL WELL EQUIPMENT OUT OF HOLE

- 1. MIRU workover unit & associated surface equipment (i.e. tanks, reverse unit, pipe racks).
- 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 and verify no H<sub>2</sub>S is present. If necessary, kill well with cut brine.
- 3. Unseat pump, POOH laying down rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary.
- 4. Caliper elevators and tubular EACH DAY prior to handling tubing/tools and anytime size changes (Use elevator change out log as well). Note in JSA when and what items are callipered within the task step that includes that work.
- 5. ND wellhead, unset TAC, NU BOP dressed with 2 <sup>7</sup>/<sub>8</sub>" pipe rams on top and blind rams on btm. POOH and LD 1 jt. PU 5 ½" 17# rated packer along with a joint of 2 <sup>7</sup>/<sub>8</sub>" tubing and set ~ @ 25', test BOP pipe rams to 250/500 psi. Note testing pressures on WellView report (Time log and safety/inspections). Release and LD packer.

- PU 1-2 joints of 2<sup>7</sup>/<sub>8</sub>" tubing and tag for fill (TAC 6,364'- 6,367'). <u>Do not push TAC into perfs</u>. Tag lightly due to fish downhole. Top of Skaggs Drinkard perfs: 6,607', EOT 6,838 (this is according to LOWIS), PB: 6,855', anticipated fish depth 6,860'and PBTD: 7,100'. Notify WE of tag depth to determine if cleanout/fishing run is necessary.
- TOOH scanning and standing back 2 <sup>7</sup>/<sub>8</sub>" prod tubing. Tally out with tubing and LD all non-yellow band joints. Acquire additional tubing if needed to reach PBTD if a cleanout run is necessary. Note in WellView any drag or abnormalities while TOH. Secure well.

# **CLEAN OUT/FISHING**

8. PU the following BHA and RIH on 2-7/8" 6.5# L80 workstring to tag depth:

4-3/4" bladed-junk mill

6 jts 3-1/2" drill collars

9. RU power swivel and clean out / mill through fish. Continue cleaning out to 7,074', using foam/air unit if necessary (continue to supplemental procedure and in accordance with attached SOG). Notify WE if you cannot get to PBTD 7,074'.

Recover and send samples in a timely manner to Baker Chemical rep and ALCR for analysis (if possible at location). Discuss treatment recommendation with Chemical rep and ALCR. If there is evidence of sulfate scale treat well accordingly; otherwise, continue per procedure.

10. Circulate clean and POOH with 2 <sup>7</sup>/<sub>8</sub>" WS and milling BHA. LD BHA. Secure well.

# SONIC HAMMER OPERATION

- 11. 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, seat nipple, and work string to 6,903' 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.
- 12. MI & RU Petroplex and pressure test surface lines. Titrate acids and verify concentration (HCI ±1.5%) report results in daily work summary. If well will circulate proceed to step 12.b).
  - a) **Sonic Hammer for non circulating wells**. Treat all 8 intervals from 5,710' to 6,911' 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 A using the acid volumes listed for each interval.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)	
1	5,710' - 5,764'	54	1,200	
2	5,764' - 5,819'	55	1,300	
3	6,602' - 6,661'	59	1,300	
4	6,661' - 6,716'	55	1,300	
5	6,716' - 6,771'	55	1,300	
6	6,771' - 6,826'	55	1,300	
7	7 6,826' - 6,881'		1,300	
8	6,881' - 6,911'	30	1,000	
			10,000	

# Table A: Perforation Intervals for acid.

- 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.

### **Before/During Swabbing:**

Inspect sandline to be sure it's free of excessive rust, bird's nests, frays, kinks, knots, etc.

- v) R/D swab equipment and POOH w/ tubing to top perf.
- vi) Pump 260 bbls cut brine mixed w/ 4 drums Baker SCW-358 scale inhibitor down the tubing through the circulating ports on the Sonic Hammer at a max rate of 5 bpm.
- vii) Displace scale squeeze w/ 110 bbls of cut brine.
- viii) Run back in the hole and tag for fill. If fill entry was indentified, clean-out to PBTD, 7074', following step 8
- ix) TOOH w/ sonic hammer. Proceed to step 13.

### 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 12.b)i) until all intervals are washed.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)	
1	5,710' - 5,764'	54	1,200	
2	5,764' - 5,819'	55	1,300	
3	6,602' - 6,661'	59	1,300	
4	6,661' - 6,716'	55	1,300	
5	6,716' - 6,771'	55	1,300	
6	6,771' - 6,826'	55	1,300	
7	6,826' - 6,881'	55	1,300	
8	6,881' - 6,911'	30	1,000	
			10,000	

#### Table B: Perforation Intervals for acid.

- iii) Starting at interval #8 fill tubing w/ acid and shut in backside. Pump the volume of acid specified in Table B 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 12.b)iii) acidizing each interval according to Table A.

- 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 5,650', above the top perf.
- viii) RU swab crew and flowback tank.

## Before/During Swabbing:

Inspect sandline to be sure it's free of excessive rust, bird's nests, frays, kinks, knots, etc.

- ix) Swab well until returns indicate formation fluid and not spent acid, or fluid level drops enough to make swabbing non productive.
- x) Pump 260 bbls cut brine mixed with 4 drums of scale inhibitor (220 gals) Baker SCW-358 Scale Inhibitor Chemical down the packer. Pump at a max rate of 5 BPM.
- xi) Displace scale squeeze with 110 bbls of cut brine.
- xii) Ensure Sonic Hammer is above all perforations. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. Shut in well overnight.
- xiii) Run back in the hole and tag for fill. If fill entry was indentified, clean-out to PBTD, 7074', following step 8
- xiv) POOH packer and WS. LD 2  $^{7}/_{8}$ " WS and packer.
- 13. RIH with 2 <sup>7</sup>/<sub>8</sub>" production tubing hydrotesting to 5,000 psi. Set TAC per ALCR recommendation. ND BOP. NU WH. RIH with rods and pump per ALCR. Hang well on. RD and release workover unit.
- 14. 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. Set up an exclusion zone around flowback line.
  - 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 4  ${}^{3}/_{4}$ " MT bit, four (3  ${}^{1}/_{2}$ ") drill collars on 2  ${}^{7}/_{8}$ " 6.5# L-80 WS.
  - 5. NU stripper head with <u>NO Outlets</u> (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 7,074' 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.

#### Bottom Interval Length Status ft ft M. B. Weir B #12 • Top ft 5,714 5,764 50 E. Weir/Blinebry Open 5,500 5,814 50 E. Weir/Blinebry 5,764 Open — Perfs 6,606 6,661 55 **Skaggs Drinkard** Open -Stage 1 6,661 6,716 55 Open Skaggs Drinkard 6,716 6,771 55 Open Skaggs Drinkard 5,700 5,710 - Stage 3 55 Skaggs Drinkard 6,771 6,826 Open 5,764 - Stage 4 6,826 6,881 55 **Skaggs Drinkard** Open 5,819 6,881 6,911 30 Open **Skaggs Drinkard** Stage 5 - Stage 6 5,900 Stage 7 Stage 8 6,100 6,300 6,500 6,661 6,700 6,716 6,771 6,826 6,881 6,911 6,900 7,100 and a set for a set Total 6,911 405 5,714

• 1

# CURRENT WELL DATA SHEET

Pay:	Weir E. Blinebry &		Well Name:			Lease Type:	State
	990' FSL & 330' F\		Sec: 12-N			Range:	37E
County:		New Mexico	Refno: IF72	<u>35</u> AF	1: 30-025-29734	Working Int.:	100%
Current St						Well Bore #	428634
	oducing Formation		bry & Drinkard	DHC			
Initial Proc	lucing Formation:	Skag	ggs Drinkard				
5 Surface Cs	a			10		KB	3573'
0 <u>Size:</u>	<u>9.</u> 11 3/4"				2	DF	3572'
5 Wt.:	42#			4		GL	
0 Set @:	1401'		N B	1	0	Spud Date:	
6 Sxs cmt:	1000		NE	12	2	Compl. Date:	
1 Circ:	Yes - 250 sx	N					
6 <b>TOC</b> :	Surface	2		9	6		
1 Hole Size:				1	8		
6		20	N H	1	Ø		
° 1 <i>Intermedia</i>	te Csa			ll an	<u>N</u>		
6 Size:	8 5/8"			611			
1 Wt.:	32#			11			
7 Set @:	3990'			1			
-	1365			1			
7 Circ:	No			la -			
2 TOC:	3990-3186' & 1694	L-1672'		24			
	side w/1100 sx cm		N #	2			
2 Hole Size:				1			
7				l's			
2 Production	n Csa	55		100			
7 Size:	5 1/2"			1.12			
3 Wt.:	17# & 15.5#			1.41			
8 Set @:	7100'		SS III				
	1790			Ch C			
8 Circ:	Yes - 230 sx	M.					
3 TOC:	Surface			1			
8 Hole Size:			N H	l s			
3	1110		N #	14			
8				1			
° 3				1			
9				1			
4	DV Tool @ 5243'			1			
9	54 1001 @ 3243	-		S.			
4			N H	1			
9				4	. Weir/Blinebry Perfs		
4					Perf Depth - 5714-5810'		
9				9A			
4				1			
0					AC - 6,364'-6,367'		
5				16 1	kaggs Drinkard Perfs		
0					Perf Depth - 6,606'-6,903'		
0				2.11		14/2014)	
		EOT - 6,838'	N		855' - Last fill tag depth (12	2/4/2011)	
			N 65X		860' - Expected fish depth		
	7074		N State				
5 PBTD: 0 TD:	7074' 7100'		N P.S. P.L.				
	7 100		2	••••			

 Prepared by:
 K M Jackson
 Updated by:
 Prasanna Chandran

 Date:
 6/4/2004
 Date:
 9/4/2013

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