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

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

HOBBS OCD
JUL 13 2012
RECEIVED

Form C-103
Revised August 1, 2011

WELL API NO. 30-025-06909	
5. Indicate Type of Lease STATE ☐ FEE ☒	
6. State Oil & Gas Lease No.	

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.)

7. Lease Name or Unit Agreement Name V.M. HENDERSON	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	8. Well Number 3
2. Name of Operator CHEVRON U.S.A. INC.	9. OGRID Number 4323
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705	10. Pool name or Wildcat PENROSE SKELLY GRAYBURG

4. Well Location
Unit Letter H: 1980 feet from the NORTH line and 660 feet from the EAST line
Section 30 Township 21-S Range 37-E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: INTENT TO SONIC HAMMER, ACIDIZE, SC SQZ		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 SONIC HAMMER, ACIDIZE, & SCALE SQUEEZE THE SUBJECT WELL.

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

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: 07-11-2012

Type or print name: DENISE PINKERTON E-mail address: leakejd@chevron.com PHONE: 432-687-7375

APPROVED BY: TITLE Dist. Mgr DATE 7-16-2012
Conditions of Approval (if any):

JUL 16 2012

V.M. Henderson #3 – [30-025-06909]
Penrose Skelly field
T21S, R37E, Section 30
N 32° 27' 6.012", W -103° 11' 42.8634" (NAD27)
Job: Sonic Hammer, Acidize & Scale Squeeze

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 possible MOC.

Procedure:

1. MI & RU Workover unit.

2. Verify that well does not have pressure/flow. If well has pressure, record tubing and casing pressures on WellView report. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).

➢ **Caliper elevators and tubular EACH DAY prior to handling tubing/rods/tools. Note in JSA when and what items are callipered within the task step that includes that work.**

3. Unseat pump. POOH with rods & pump. Examine rod string for paraffin/corrosion. Do not hot water, unless significant paraffin is seen. ND wellhead, unset TAC, NU BOP.

4. POOH & LD 1 joint, PU 5-1/2" packer and set @ ~ 25'. Close and test BOP pipe rams to 250psi (low)/ 500psi (high). Record testing pressures on WellView report. Release and LD packer.

5. PU tubing and run back in hole to tag for fill.
   Depths: (TAC 3,600', Bottom Perfs 3,854', EOT 3,943', PBTD 3,977')

6. RU Scanners and POOH while scanning all 2-7/8" 6.5# J-55 production tubing. LD all non-yellow band joints. If fill is tagged:
   a. Above 3,900' proceed to step #7.
   b. Below 3,900' skip to step #9.

   Strap pipe out of the hole to verify depths. Send scan report to lgbi@chevron.com.

➢ **Caliper elevators and tubular EACH DAY prior to handling tubing/rods/tools. Note in JSA when and what items are callipered within the task step that includes that work.**

7. PU and RIH with 4-3/4" Milled Tooth (MT) Bit, 4 (3-1/2') drill collars on 2-7/8" 6.5# L-80 Workstring. RU power swivel and C/O to 3,900'. POOH with 2-7/8" WS and bit. LD bit and BHA.

   Note: If circulation is not expected/achieved, notify Remedial Engineer to discuss C/O with bailer (proceed to step #8) or utilize foam/air unit (continue to supplemental procedure at end).

8. PU and RIH with 4-3/4" MT and Bulldog bailer on 2-7/8" 6.5# L-80 WS. Clean out to 3,900'. POOH with 2-7/8" WS and bit. LD bit and BHA.

➢ **Expect trapped pressure inside tubing while breaking connections during bailing operations, discuss on JSA and mitigate hazard. Use mudbucket (remove bottom seals if applicable) while breaking connections.**

9. Contact sonic tool representative to be on-site during job. PU and RIH with Sonic Hammer tool and 2-7/8" Workstring to 3,860' or enough depth to cover the bottom perforations (@ 3,854') with a whole stand. Hydrotest tubing to 6,000 psi. Stand back tubing to top perforations (@ 3,636'). Install stripper head and stand pipe with sufficient treating line to move tools vertically ~ 50'. RU pressure gauges to allow monitoring of tubing and casing pressures during job.

10. MI and RU Petroplex equipment. Titrate acids and verify concentration (HCl ± 1.5%). Treat all intervals from 3,630' to 3,860' with 30 bbls of 8.6 ppg cut brine water per interval (**see Table 1**). 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 brine water.

Perf Intervals for Acid			
Interval (#)	Depth	Net Feet (ft)	Acid Volume (gal)
1	3,630' - 3,665'	35	1,000
2	3,670' - 3,715'	45	1,000
3	3,715' - 3,760'	45	1,000
4	3,770' - 3,805'	35	1,000
5	3,810' - 3,860'	50	1,000
Total		210	5,000

Table 1

11. Follow the brine water wash with 5,000 gals 15% NEFE HCl of total acid for all intervals. Spot 3 bbls of acid outside tubing, shut in casing, pump 1,000 gals of acid @ 5 BPM over first treating interval from 3,630' – 3,665', monitor casing pressure not exceeding 500 psi on backside. Flush tubing with brine water after every acidizing interval, make a connection and continue with remaining interval. **Refer to Table 1**.

12. Shut in well for 1 hr to allow time for acid to spend. Monitor and bleed off excess pressure at surface if necessary to keep casing pressure below 500 psi.

13. Scale squeeze well with a total of 180 bbls 8.6 ppg brine water mixed with 4 drums (220 gallons) Baker SCW-358 Scale Inhibitor Chemical. Pump down Sonic Hammer tool at a max rate of 5 BPM. Start from lowest interval of 3,860' – 3,810' and continue moving uphole per pump schedule (**see Table 2**). Ensure top of tubing is flushed with brine water before making a connection.

Scale Squeeze Pump Schedule						
	Step	Interval (ft)	Max Rate (BPM)	Volume Brine (bbl)	Volume Scale Chem. (gal)	Cum Volume (bbl)
1	Pump Chemical/brine while moving from	3860' - 3810'	5	12	50	13
2	Pump Brine while moving from	3860' - 3810'	5	18		31
3	Move pipe to next interval of	3805' - 3770'				31
4	Pump Brine while moving from	3805' - 3770'	5	9		40
5	Pump Chemical/brine while moving from	3805' - 3770'	5	8	35	49
6	Pump Brine while moving from	3805' - 3770'	5	13		62
7	Move pipe to next interval of	3760' - 3715'				62
8	Pump Brine while moving from	3760' - 3715'	5	9		71
9	Pump Chemical/brine while moving from	3760' - 3715'	5	12	50	84
10	Pump Brine while moving from	3760' - 3715'	5	9		93
11	Move pipe to next interval of	3715' - 3670'				93
12	Pump Brine while moving from	3715' - 3670'	5	9		102
13	Pump Chemical/brine while moving from	3715' - 3670'	5	12	50	115
14	Pump Brine while moving from	3715' - 3670'	5	9		124
15	Move pipe to next interval of	3665' - 3630'				124
16	Pump Brine while moving from	3665' - 3630'	5	9		133
17	Pump Chemical/brine while moving from	3665' - 3630'	5	8	35	142
18	Pump Brine while moving from	3665' - 3630'	5	33		175

Table 2

14. PU workstring to higher than top perforations. Displace tubing volume with 8.6 ppg cut brine water. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. Release Petroplex.

15. TOH and LD 2-7/8" WS and Sonic Hammer tool.

16. RIH with 2-7/8" production tubing and hydrotest to 6,000 psi. ND BOP, set TAC, NU WH. RIH with rods and pump per ALCR's recommendation/Rodstar design. Hang well on.

17. RD and release Workover unit. 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 4-3/4" 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 3,977' 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.

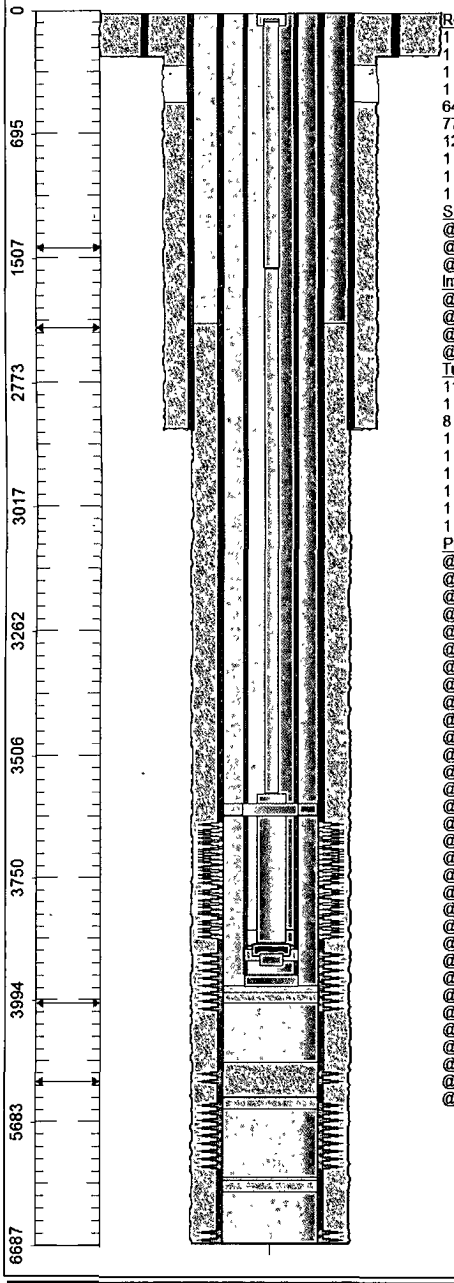
Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

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.

Chevron U.S.A. Inc. Wellbore Diagram : VMHENDERSON3G

Lease: OEU EUNICE FMT	**Well No.:** HENDERSON, V. M. 3	**Field:** PENROSE SKELLY	
Location: 1980FNL660FEL	**Sec.:** N/A	**Blk:**	**Survey:** N/A
County: Lea **St.:** New Mexico	**Refno:** FA8006	**API:** 3002506909	**Cost Center:** UCU493800
Section: 30	**Township:** 021 S		**Range:** 037 E
Current Status: ACTIVE		**Dead Man Anchors Test Date:** NONE	
Directions:			



Rod String (Top-Bottom Depth) Desc
1 @(12-38) 1.500 (1 1/2 in) Spray Metal x 26
1 @(38-40) 0.875 (7/8 in) N-78 (D) x 2 Rod Sub
1 @(40-48) 0.875 (7/8 in) N-78 (D) x 8 Rod Sub
1 @(48-54) 0.875 (7/8 in) N-78 (D) x 6 Rod Sub
64 @(54-1654) 0 875 (7/8 in) D x 25 Rod
77 @(1654-3579) 0 750 (3/4 in) D x 25 Rod
12 @(3579-3879) 1 500 (1 1/2 in) K x 25 Sinker Bar
1 @(3879-3880) No-Tap Tool
1 @(3880-3900) Rod Pump (Insert) (NON-SERIALIZED) - 25-125-RHBC-20-4 (Bore = 1 25)
1 @(3900-3901) Strainer Nipple 1 250 OD x 0 5'
Surface Casing (Top-Bottom Depth) Desc
@(12-254) H-40 13 375 OD/ 48 00# Round Short 12 715 ID 12 559 Drift
@(12-254) Cement
@(12-257) Wellbore Hole OD-17 2500
Intermediate Casing (Top-Bottom Depth) Desc
@(12-310) Cement (behind Casing)
@(12-2864) H-40 8 625 OD/ 28 00# Round Short 8 017 ID 7 892 Drift
@(510-2864) Cement per Temp Survey
@(257-2865) Wellbore Hole OD-10 7500
Tubing String Quantity (Top-Bottom Depth) Desc
114 @(12-3600) J-55 2 875 OD/ 6.50# T&C External Upset 2 441 ID 2 347 Drift
1 @(3600-3603) Tubing Anchor/Catcher 2 875"
8 @(3603-3854) J-55 2 875 OD/ 6.50# T&C External Upset 2 441 ID 2 347 Drift
1 @(3854-3885) J-55 2 875 OD/ 6 50# T&C External Upset 2 441 ID 2 347 Drift
1 @(3885-3886) Seat Nipple - Standard (2 875") Cup Type
1 @(3886-3890) J-55 2 875 OD/ 6 50# T&C External Upset 2 441 ID 2 347 Drift
1 @(3890-3910) Cavins Desander (Sand Separator) 2 7/8" x 20'
1 @(3910-3942) J-55 2 875 OD/ 6 50# T&C External Upset 2 441 ID 2 347 Drift
1 @(3942-3943) Cavins Dump Valve (for use w/Desander) 2 875"
Production Casing (Top-Bottom Depth) Desc
@(3636-3639) Perforations - Open - Grayburg
@(3647-3650) Perforations - Open - Grayburg
@(3655-3662) Perforations - Open - Grayburg
@(3675-3678) Perforations - Open - Grayburg
@(3686-3690) Perforations - Open - Grayburg
@(3695-3700) Perforations - Open - Grayburg
@(3706-3712) Perforations - Open - Grayburg
@(3720-3725) Perforations - Open - Grayburg
@(3728-3732) Perforations - Open - Grayburg
@(3737-3739) Perforations - Open - Grayburg
@(3752-3758) Perforations - Open - Grayburg
@(3774-3780) Perforations - Open - Grayburg
@(3786-3790) Perforations - Open - Grayburg
@(3797-3800) Perforations - Open - Grayburg
@(3815-3823) Perforations - Open - Grayburg
@(3836-3838) Perforations - Open - Grayburg
@(3846-3854) Perforations - Open - Grayburg
@(3636-3854) Producing Interval (Completion) - Grayburg
@(3965-3977) Fill in Wellbore (Sand, etc)
@(3977-4010) Plug Back - Cement
@(3898-4068) Perforations - Squeezed - Grayburg/San Andres
@(5164-5180) Perforations - Squeezed - Paddock
@(5029-5475) Plug - Cement on Top of Bridge Plug
@(5475-5479) Bridge Plug Cast Iron 5 500"
@(5513-6062) Perforations - Squeezed - Blinebry
@(6120-6150) Plug - Cement on Top of Bridge Plug
@(6150-6154) Bridge Plug Cast Iron 5 500"
@(6545-6655) Perforations - Abandoned - Drinkard
@(12-6657) J-55 5 500 OD/ 15 50# Round Short 4 950 ID 4 825 Drift
@(12-6662) Wellbore Hole OD- 7 8750
@(2590-6662) Cement per Temp Survey
@(6657-6662) Plug - Cement

Ground Elevation (MSL):: 3496.00	**Spud Date:** 05/20/1950	**Compl. Date:** 07/16/1950
Well Depth Datum:: CSI0000N	**Elevation (MSL)::** 3484.00	**Correction Factor:** 12.00
Last Updated by: bujq	**Date:** 06/25/2012	