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

HOBBS OCD
OIL CONSERVATION DIVISION
OCT 10 2013
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. 30-025-37834

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: HARRY LEONARD NCT-E

1. Type of Well: Oil Well ☐ Gas Well ☐ Other

8. Well Number 8

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 2310 feet from the NORTH line and 1030 feet from the EAST line
Section 16 Township 21S Range 37E 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 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 AT STEEL TANK AND 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: 10/08/2013

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

For State Use Only

APPROVED BY E. Gonzales TITLE Dist. Mgr DATE 10-15-2013

Conditions of Approval (if any):

OCT 15 2013

H Leonard NCT-E #8 **9.9.2013**
Penrose Skelly - Grayburg
T21S, R37E, Sec. 16
N 32° 28' 46.92", W -103° 9' 48.96" (NAD27)
Job: SH Acidize and SS

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.
5. Ensure that elevators and other lifting equipment are inspected. For wells to be worked on or drilled in an H_2S field/area, include the anticipated maximum amount of H_2S 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) 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).

2) MI & RU workover unit & associated surface equipment (i.e. tanks, reverse unit, pipe racks).

3) Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary (Last WO, rods parted when trying to pull; had to hot water thereafter).

4) ND wellhead, unset TAC, NU BOP dressed with 2-7/8" pipe rams on top and blind rams on btm. NU EPA equipment & RU floor. POOH and LD 1 jt 2-7/8" tbg. PU 5-1/2" 15.5# rated packer along with a joint of 2-7/8" tubing and set below WH @ ~25'. Test BOP pipe rams to 250/1000 psi. Note testing pressures on Wellview report (Time log and safety/inspections). Release and LD packer.

5) PU 2 jts of 2 7/8" tubing and RIH to 4,171' to tag for fill (TAC 3,652', Perfs 3,743' – 4,000', EOT 4,133', PBTD 4,200'). Last tag depth = 4,171' (Workover – 2011). Do not push TAC into perfs. POOH while scanning 2-7/8" prod tubing. LD all non-yellow band joints. If fill is tagged:
    A. Above 4,160' contact workover engineer and verify if the clean out is necessary. If so, continue with foam/air clean out per step 6.
    B. Below 4,160' clean out not needed, skip step 6.

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

6) PU and RIH with 4-3/4" MT bit on 2-7/8" tubing (Prodn tbg pulled or rental 6.5# L-80 WS). RU power swivel and clean out to 4,200' with foam/air unit **(continue to supplemental procedure and in accordance with attached SOG)**. *POOH with 2-7/8" tbg and bit. LD bit & BHA.*

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 4,000' 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 ±1.5%). Report results in daily work summary. Acid Components listed below in Table A. If well will circulate proceed to step 8)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 3,743' to 4,000' 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	3,743 - 3,808	61	1,200
2	3,808 - 3,870	64	1,400
3	3,870 - 3,934	60	1,100
4	3,934 – 4,000	61	1,300
			5,000

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.

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 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.

vi) 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.

Pick up enough pipe to reach the next interval and repeat step 8)b)i) until all intervals are washed.

Table B: Perforation Intervals for acid.

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	3,743 - 3,808	61	1,200
2	3,808 - 3,870	64	1,400
3	3,870 - 3,934	60	1,100
4	3,934 – 4,000	61	1,300
			5,000

ii) 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.

iii) TOOH w/ tubing to the next interval and repeat step 8)b)ii) acidizing each interval according to Table B.

iv) 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.

v) Kill well and POOH Sonic Hammer Tool and WS. LD Sonic Hammer.

vi) PU & RIH with 5 ½" packer and WS. Set treating packer at 3,700', above the top perf.

vii) RU swab equipment and flowback tank.

Before/During Swabbing:

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

viii) Swab well until returns indicate formation fluid and not spent acid, or fluid level drops enough to make swabbing non productive.

ix) Pump 40 bbls cut brine mixed with 3 drums of scale inhibitor (165 gals) Baker SCW-358 Scale Inhibitor Chemical down the packer. Pump at a max rate of 5 BPM.

x) Displace scale squeeze with 110 bbls of cut brine.

xi) Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. Shut in well overnight.

xii) 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.

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 halfpit with gas buster for flowback.
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 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.

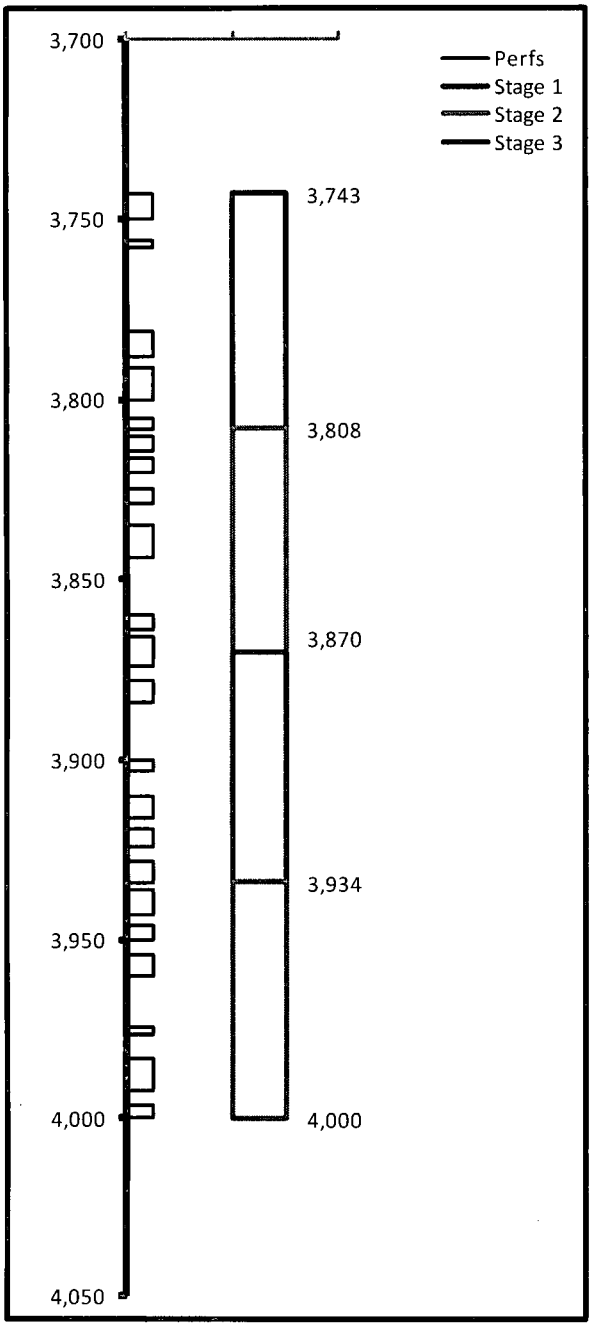
7. Clean out fill to 4,200' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull 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.

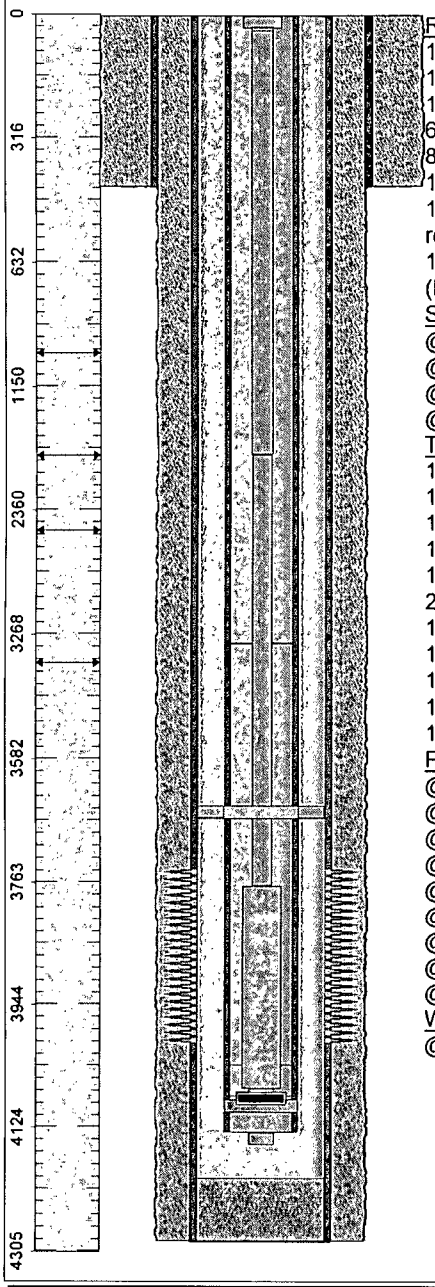
H Leonard NCT-E # 8



Perfs Detail				
Top ft	Bottom ft	Interval Length ft	Status	Reservoir
3,743	3,750	7	Open	Grayburg
3,756	3,758	2	Open	Grayburg
3,781	3,788	7	Open	Grayburg
3,791	3,800	9	Open	Grayburg
3,805	3,808	3	Open	Grayburg
3,810	3,814	4	Open	Grayburg
3,816	3,820	4	Open	Grayburg
3,825	3,829	4	Open	Grayburg
3,835	3,844	9	Open	Grayburg
3,860	3,864	4	Open	Grayburg
3,866	3,874	8	Open	Grayburg
3,878	3,884	6	Open	Grayburg
3,900	3,903	3	Open	Grayburg
3,910	3,916	6	Open	Grayburg
3,919	3,924	5	Open	Grayburg
3,928	3,934	6	Open	Grayburg
3,936	3,943	7	Open	Grayburg
3,946	3,950	4	Open	Grayburg
3,954	3,960	6	Open	Grayburg
3,974	3,976	2	Open	Grayburg
3,983	3,992	9	Open	Grayburg
3,996	4,000	4	Open	Grayburg
Total				
3,743	4,000	119		

Chevron U.S.A. Inc. Wellbore Diagram : HLEONARDE8

Lease: OEU EUNICE	**Well No.:** LEONARD H /NCT-E/ 8	**Field:** FLD-PENROSE SKELLY	
Location: 2310FNL1430FEL	**Sec.:** N/A	**Blk:**	**Survey:** N/A
County: Lea **St.:** New Mexico	**Refno:** JA3645	**API:** 3002537834	**Cost Center:** UCU492000
Section:	**Township:** N/A		**Range:** N/A
Current Status: ACTIVE		**Dead Man Anchors Test Date:** NONE	
Directions:			



Rod String Quantity (Top-Bottom Depth) Desc
1 @(6-32) 1.500 (1 1/2 in.) Spray Metal x 26-
1 @(32-34) 0.875 (7/8 in.) N-90 (D) x 2 Rod Sub-
1 @(34-42) 0.875 (7/8 in.) N-90 (D) x 8 Rod Sub-
67 @(42-1717) 0.875 (7/8 in.) N-78 (D) x 25 Rod-
82 @(1717-3767) 0.750 (3/4 in.) N-78 (D) x 25 Rod-
12 @(3767-4067) 1.500 (1 1/2 in.) K x 25 Sinker Bar-
1 @(4067-4071) Rod Sub Group Total Length 04 feet - Rod Guides-Molded (3 per rod)-
1 @(4071-4091) Rod Pump (Insert) (NON-SERIALIZED) - 25-150-R H BC -4-20-16-0 (Bore = 1.50)-

Surface Casing (Top-Bottom Depth) Desc
@(6-442) Cement-
@(6-442) Wellbore Hole OD-12.2500-
@(6-442) J-55 8.625 OD/ 24.00# Unknown Thread 8.097 ID 7.972 Drift-
@(6-442) J-55 8.625 OD/ 24.00# Unknown Thread 8.097 ID 7.972 Drift-

Tubing String Quantity (Top-Bottom Depth) Desc
105 @(6-3328) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(3328-3332) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
10 @(3332-3652) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(3652-3655) Tubing Anchor/Catcher 2.875"-
12 @(3655-4034) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
2 @(4034-4078) J-55 2.875 OD/ 6.50# T&C Non-Upset 2.441 ID 2.347
1 @(4078-4079) Seat Nipple - Heavy Duty (2.875") Cup Type-
1 @(4079-4083) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(4083-4102) Cavins Desander (Sand Separator) 2 7/8" x 20'-
1 @(4102-4132) J-55 2.875 OD/ 6.50# T&C External Upset 2.441 ID 2.347
1 @(4132-4133) Dump Valve (for use w/ Sand Separator) - Bare-

Production Casing (Top-Bottom Depth) Desc
@(3743-4000) Perforations - Grayburg-
@(3743-4000) Producing Interval (Completion) - Grayburg-
@(6-4290) Cement-
@(6-4290) J-55 5.500 OD/ 15.50# Unknown Thread 4.950 ID 4.825 Drift-
@(442-4290) Wellbore Hole OD- 7.8750-
@(6-4291) J-55 5.500 OD/ 15.50# Unknown Thread 4.950 ID 4.825 Drift-
@(6-4291) Cement-
@(4200-4291) Fill in Wellbore (Sand, etc)-
@(4300-4300) Plug Back-

Wellbore Notes (Top-Bottom Depth) Desc
@(4300-4300) Total Depth-

Ground Elevation (MSL):: 3484.00	**Spud Date:** 06/21/2006	**Compl. Date:** 07/01/2006
Well Depth Datum:: Kelly Bushing	**Elevation (MSL)::** 0.00	**Correction Factor:** 6.00
Last Updated by: fitecl	**Date:** 09/09/2013	