

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

HOBBS OGD  
OCT 26 2011

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

WELL API NO. 30-025-36742 ✓
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 V.M. HENDERSON ✓
8. Well Number 17 ✓
9. OGRID Number 4323 ✓
10. Pool name or Wildcat PENROSE; SKELLY GRAYBURG ✓

**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 A: 1308 feet from the NORTH line and 1120 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

<p><b>NOTICE OF INTENTION TO:</b></p> <p>PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/></p> <p>TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/></p> <p>PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/></p> <p>DOWNHOLE COMMINGLE <input type="checkbox"/></p> <p>OTHER: ACIDIZE, SCALE SQUEEZE</p>	<p><b>SUBSEQUENT REPORT OF:</b></p> <p>REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/></p> <p>COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/></p> <p>CASING/CEMENT JOB <input type="checkbox"/></p> <p>OTHER:</p>
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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 ACIDIZE AND SCALE SQUEEZE THE GRAYBURG FORMATION USING THE SONIC HAMMER TOOL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, & C144CLEZ 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: 10-25-2011

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

APPROVED BY: E. Campbell TITLE: STAFF MGR DATE: 11-9-2011

Conditions of Approval (if any):

V.M. Henderson # 17  
Penrose Skelly - Grayburg  
T21S, R37E, Section 30  
Job: Sonic Hammer, Acidize & Scale Squeeze

10.12.2011

**Procedure:**

1. *This procedure is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of 10/12/2011. Verify what is in the hole with the well file in the Eunice Field office. Discuss w/ WEO Engineer, Workover Rep, OS, ALS, and FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.*
2. Verify that well does not have pressure or flow. If well has pressure, record tubing and casing pressures. Bleed down well; if necessary, kill with cut brine fluid (8.6 ppg).
  - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
3. MI & RU workover unit. POOH w/ rods & pump. ND wellhead, unset TAC, NU BOP, PU 1 jt & TAG for fill (TAC 3,574', Top Perf 3,635', EOT 4,074', PBTD 4,298'). POOH while scanning 2-7/8" prod tbg. LD all non-yellow band joints. If no fill is tagged skip to step 5. Strap pipe out of the hole to verify depths. Send scan report to [hccf@chevron.com](mailto:hccf@chevron.com).
  - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
4. PU and RIH with 4-3/4' MT bit & bailer on 2-7/8" 6.5# L-80 WS and clean out to 4,298'. POOH w/ 2-7/8" tbg string and bit. LD bit & bailer.
  - **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
5. Contact sonic tool rep to be on site during job. PU and GIH with Sonic Hammer tool and 2-7/8" L-80 6.5#, work string to 3,935'. Hydro test tbg to 5,500 psi while GIH. Stand back tbg to top perfs. Install stripper head and stand pipe with sufficient treating line to move tools vertically 65'. Rig up pressure gauges to allow monitoring of tbg and csg pressure.
6. MI & RU Petroplex. Treat interval 3,635'-3,931' with 50 bbls of 8.6 ppg cut brine water per stand. Pump down 2-7/8" WS and through Sonic Hammer tool at **5 BPM** while reciprocating tool across the perforating interval. Do not exceed 500 psi. Leave annulus open in circulation mode while treating the perforated interval with water.

Follow the 8.6 ppg cut brine water w/ 1,500 gals 15% NEFE HCl acid. Ensure that enough tbg is made up to cover each ~65' treating interval. Spot 3 bbls of acid outside tbg, shut in and close

csg flowback line, pump acid @ 5 BPM over first treatment interval from 3,635' – 3,682', monitor csg pressure and do not exceed 500 psi on backside. Ensure that 1,500 gal of acid is pumped across each ~65' perfs treatment interval. Flush tbg w/ 8.6 cut brine, make a connection and continue w/ next interval. See the below example of intervals.

Interval	Depth
1	3,635' - 3,682'
2	3,695' - 3,747'
3	3,769' - 3,818'
4	3,824' - 3,880'
5	3,888' - 3,931'

Shut in for 1 hrs for the acid to spend. Bleed excess pressure off at surface if necessary to keep casing pressure below 500 psi. Release Petroplex.

7. Pump down 2-7/8" tbg and through Sonic Hammer tool at **5 BPM** from 3,931'-3,888' with 200 bbls 2% KCl water containing 3 drums (165 gallons) Baker SCW-358 Scale Inhibitor. Ensure top of tbg is flushed with water before making a connection. Continue with next interval.

Interval	Depth
1	3,931' - 3,888'
2	3,880' - 3,824'
3	3,818' - 3,769'
4	3,747' - 3,695'
5	3,682' - 3,635'

PU to top of perfs. Pump 10 bbls 8.6 PPG cut brine water to scale squeeze well. Do not exceed **500 psi** casing pressure or **5 BPM** while pumping scale squeeze or casing flush. RD and release pump truck.

8. POH & LD 2-7/8" WS and Sonic Hammer tool.
9. RIH w/ 2-7/8" production tubing and hang off per ALS recommendation. NDBOP. NUWH. RIH w/ rods and pump per ALS. RD and release workover unit.
10. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

Perfs Detail				
Top ft	Bottom ft	Interval Length ft	Status	Reservoir
3,635	3,641	6	Open	Grayburg
3,649	3,657	8	Open	Grayburg
3,675	3,682	7	Open	Grayburg
3,695	3,699	4	Open	Grayburg
3,704	3,710	6	Open	Grayburg
3,718	3,725	7	Open	Grayburg
3,741	3,747	6	Open	Grayburg
3,769	3,776	7	Open	Grayburg
3,782	3,788	6	Open	Grayburg
3,794	3,802	8	Open	Grayburg
3,810	3,818	8	Open	Grayburg
3,824	3,832	8	Open	Grayburg
3,846	3,854	8	Open	Grayburg
3,861	3,867	6	Open	Grayburg
3,875	3,880	5	Open	Grayburg
3,888	3,894	6	Open	Grayburg
3,904	3,910	6	Open	Grayburg
3,916	3,921	5	Open	Grayburg
3,928	3,931	3	Open	Grayburg
		0		
		0		
		0		
		0		
		0		
Total				
3,635	3,931	120		

## WELL DATA SHEET

FIELD: Penrose Skelly

WELL NAME: V. M. Henderson # 17

LOC: 1308' FNL & 1120' FEL  
TOWNSHIP: 21S  
RANGE: 37E  
LOT:

SEC: 30  
COUNTY: Lea  
STATE: NM

GL: 3492'  
DF:

CURRENT STATUS:  
API NO: 30-025-36742  
REFNO: HP6002  
SAP: UCU493800

### Surface Casing

8-5/8" 24# K-55  
11" hole to 408'  
Set @ 408' w/250 sx cmt  
Circ cmt to surface

FORMATION: Grayburg

Current

Spud Date: 9/14/2004  
Date of Completion: 10/8/2004  
Initial Completion: Grayburg

### Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	6.00
114	Jts. 2 7/8" EUE 8R J-55 Tbg	3571.17
	TAC	2.75
13	Jts 2 7/8" EUE 8R J-55 Tbg	404.82
2	Jt 2 7/8" EUE 8R J-55 IPC Tbg	31.38
	SN	1.10
	2 7/8" x 4' Perf tbg Sub	4.06
1	Desander	20.25
1	Jt. 2 7/8" EUE 8R J-55 Tbg	31.82
	Dump Valve	0.80
131	Bottom Of String >>	4074.15

### Perfs

3635-41'  
3649-57'  
3675-82'  
3695-99'  
3704-10'  
3718-25'  
3741-47'  
3769-76'  
3782-88'  
3794-3802'  
3810-18'  
3824-32'  
3846-54'  
3861-67'  
3875-80'  
3888-94'  
3904-10'  
3916-21'  
3928-31'

### Status

Grayburg - Open  
Grayburg - Open  
Grayburg - Open  
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Grayburg - Open  
Grayburg - Open  
Grayburg - Open

### Production Casing

5-1/2", 15.5# K-55  
7-7/8" hole to 4357'  
Set @ 4348' w/1000 sx cmt  
Circ cmt to surface  
AMH 10/12/2011

Updated: 10/12/2011

PBTD @ 4298'

TD 4357'

By: Derek Nash

henderson17 wb diagram.xlsx