

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 OCD

MAR 26 2013

RECEIVED

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-025-38374

5. Indicate Type of Lease

STATE ☒FEE ☐

6. State Oil &amp; Gas Lease No.

7. Lease Name or Unit Agreement Name

H.T. ORCUTT NCT-E

8. Well Number 5

9. OGRID Number 4323

10. Pool name or Wildcat

MONUMENT TUBB/SKGS/DRNK

## 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 F: 1980 feet from the NORTH line and 1980 feet from the WEST line

Section 2

Township 20-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:

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: ACIDIZE &amp; 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 INTENDS TO ACIDIZE &amp; SCALE SQUEEZE THE SUBJECT WELL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, &amp; 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

TITLE: REGULATORY SPECIALIST

DATE: 03-22-2013

Type or print name: DENISE PINKERTON

E-mail address: leakejd@chevron.com

PHONE: 432-687-7375

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any).

MAR 28 2013

H.T. Orcutt E#5

2.19.2013

Monument- Tubb/Drinkard Reservoir

API: 3002538374

T20S, R37E, Sec. 2

32°36'17.42" N, 103°13'45.26"W (NAD27)

1980 FNL & 1980 FWL

Job: Sonic Hammer Acidize & Scale Squeeze

**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 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.
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**

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.
3. Unseat pump, POOH with rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary. ND wellhead, unset TAC, NU BOP. POOH and LD 1 jt, PU 5-1/2" 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 2-3 jts of tubing and tag for fill (TAC 6523", Bottom Perfs 7012', EOT 7286', PBTD 7414' from fill). 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 7,320' contact remedial engineer and verify if the clean out is necessary. If so, continue with foam/air clean out per step 5.
- B. If perfs are not covered, clean out in Step 12 after acid job. 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](mailto:LGBI@chevron.com).

5. PU and RIH with 4-3/4" MT bit, 4 (3-1/2") drill collars on 2-7/8" 6.5# L-80 WS. RU power swivel and clean out to 7,320' 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 work string to 7,020' 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 Petroplex. Titrate acids and verify concentration (HCl  $\pm 1.5\%$ ) report results in daily work summary. Treat all intervals from 6,575' to 7,014' with a total of 30 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 6,500 gals 15% NEFE HCl of total acid for all intervals. Spot 3 bbls of acid outside tubing, shut in casing, pump 1,300 gallons of acid @ 5 BPM over first treating interval from 6,575'-6,632', monitor casing pressure not exceeding 500 psi. Flush tubing with 2% KCL brine after every acidized interval, make a connection and continue with remaining interval. Refer to Table A.

**Table A: Perforation Intervals for acid.**

Interval	Depth	Interval (Ft.)	Acid Volume (gal)
1	6,575' – 6,632'	57	1,300
2	6,655' – 6,710'	55	1,300
3	6,728' – 6,788'	60	1,300
4	6,900' – 6,915'	15	1,300
5	6,954' – 7,014'	60	1,300
			6,500

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 260 bbls 2% KCL brine water and 4 drums (220 gallons) Baker SCW-358 Scale Inhibitor Chemical. For all stages, pump chemical as a concentrated pill of 44 gals of SCW-358 with 10 bbl of 2% KCL, then wash with 25 bbls of 2% KCL per interval. Continue moving uphole with Sonic Hammer tool according to the pump schedule. Pump at a max rate of 5 BPM per pump schedule. Ensure top of tubing is flushed with brine water before making a connection. After final stage, move sonic hammer above top perf and displace with 50 bbls 2% KCL. Refer to TableB.

Table B: Scale Sqz Pump Schedule						
Step		Interval (ft)	Max Rate (BPM)	Volume Brine (bbl)	Volume Scale Chem (Gal)	Cum Volume (bbl) <sup>1</sup>
1	Pump Chemical/brine while moving from	7014' - 6954'	5	10	44	11.0
2	Pump Brine while moving from	7014' - 6954'	5	32		43
3	Pump Chemical/brine while moving from	7014' - 6954'	5	10	44	54
4	Pump Brine while moving from	7014' - 6954'	5	30		84
5	Move pipe to next interval of	6915' - 6900'				84
6	Pump Brine while moving from	6915' - 6900'	5	2		86
7	Pump Chemical/brine while moving from	6915' - 6900'	5	10	44	97
8	Pump Brine while moving from	6915' - 6900'	5	29		126
9	Move pipe to next interval of	6788' - 6728'				126
10	Pump Brine while moving from	6788' - 6728'	5	3		129
11	Pump Chemical/brine while moving from	6788' - 6728'	5	10	44	140
12	Pump Brine while moving from	6788' - 6728'	5	28		168
13	Move pipe to next interval of	6710' - 6655'				168
14	Pump Brine while moving from	6710' - 6655'	5	4		172
15	Pump Chemical/brine while moving from	6710' - 6655'	5	10	44	183
16	Pump Brine while moving from	6710' - 6655'	5	28		211
17	Move pipe to next interval of	6632' - 6575'				211
18	Pump Brine while moving from	6632' - 6575'	5	54		265

11. Ensure Sonic Hammer is above all perforations. Do not exceed 500 psi casing pressure or 5 BPM while pumping scale squeeze or casing flush. RD and release pump truck.
12. Run back in the hole and tag for fill. If fill entry was indentified above 7320', clean-out to PBTD, 7521', following step 5.
13. POOH & LD 2-7/8" WS and Sonic Hammer tool.
14. RIH with 2-7/8" production tubing hydrotesting to 6,000 psi. Set TAC per ALCR recommendation. ND BOP. NU WH. RIH with rods and new rod 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 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 7,521' 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.**

Figure 1 is a vertical bar chart showing the distribution of 1000 random numbers. The vertical axis represents the number of occurrences, ranging from 6,550 to 7,050 in increments of 50. The horizontal axis represents the number of occurrences, ranging from 0 to 1000. The chart displays five stages of data: Perfs (Performance), Stage 1, Stage 2, Stage 3, and Stage 4. Stage 1 is represented by a solid black bar, Stage 2 by a bar with diagonal lines, Stage 3 by a bar with horizontal lines, and Stage 4 by a bar with vertical lines. The Perfs data is shown as a series of small squares. The distribution is roughly bell-shaped, centered around 6,700. The Perfs data shows a peak around 6,632 and 6,710. The Stage 1 data shows a peak around 6,632. The Stage 2 data shows a peak around 6,710. The Stage 3 data shows a peak around 6,788. The Stage 4 data shows a peak around 6,915.

[illegible]

## H.T. Orcutt NCT-E #5

### Location:

1980' FNL & 1980' FWL, Sec-2, T-20S, R-37E  
Unit Letter: F  
Field: Monument  
County: Lea  
State: NM  
Area: Hobbs

### Well Info:

Spud Date: 7/14/2007  
API: 30-025-38374  
Cost Center: UCU935700  
WBS#: UWDPS-D7508  
RefNO: JU2426  
Lease: State

### Current Wellbore Diagram

### Elevations:

DF: 3619'  
KB: 3620'  
GL: 3602'

### Well History:

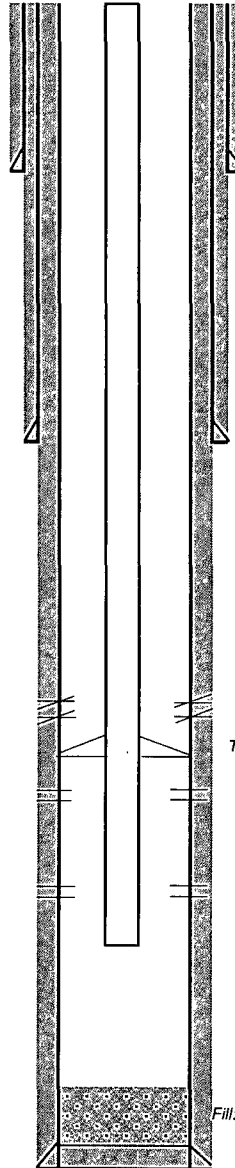
9/4/2007: Drill and complete.  
12/26/2007: Water isolation. Squeeze off Blinbry perfs  
2/12/2008: ESP Failure. Severe thrust and abrasives caused failure.  
Pump only ran a few days. Mag M treatment on well before RTP.  
2/26/2008: Frac Tubb perfs and convert to rod pump  
4/29/2008: Surface job, install rod rotator on 912 PU  
4/3/2009: Rod pump failure, stuck pump.  
FES found in dump valve. CO to 7414'. Dropped 20 biocide sticks.  
9/13/2010: Tubing failure. HIT at 2 7/8" 190th jt. Hot watered rods,  
paraffin found on rods and pump. Changed pump to GaRner Pampa  
9/14/2010: Tested Anchors to 22,500 lbs.  
11/11/2011: Water Analysis (Petrolite)  
9/6/2012: Tested Anchors.  
9/13/2012: Tubing failure. HIT in 12' IPC sub. New BHP.

### Tubing Detail: LOWIS 2011 Rod Pump Failure

#Jts:	Size:	Footage
	KB Correction	18.00
205	Jts. 6.5# 2 7/8" EUE 8R J-55 Tbg	6437.94
1	Jts. 6.5# 2 7/8" EUE 8R J-55 Tbg Sub	4.10
2	Jts. 6.5# 2 7/8" EUE 8R J-55 Tbg	62.59
1	2 7/8" TAC	2.50
19	Jts. 6.5# 2 7/8" EUE 8R J-55 Tbg	641.18
1	Jt. 6.5# 2 7/8" EUE 8R J-55 IPC TK-99 Tbg	31.21
1	2 7/8" SN	1.10
1	2 7/8" x 4' Perf Tbg Sub	4.10
1	2 7/8" x 20' Desander	20.20
2	Jts. 6.5# 2 7/8" EUE 8R J-55 Tbg	62.51
1	Dump Valve	0.60
235	Bottom Of String >>	7286.03

### Rod Detail: LOWIS 2011 Rod Pump Failure

#Jts:	Size:	Footage
	KB Correction	18.00
1	1 1/2" Spray Metal Polish Rod	26.00
1	1" N-97 (HS) x 2' Rod Sub	2.00
2	1" N-97(HS) x 4' Rod Sub	8.00
2	1" N-97 (HS) x 8' Rod Sub	16.00
104	1" N-97 (HS) x 25' Rod	2600.00
116	7/8" N-97 (HS) x 25' Rod	2900.00
52	3/4" N-97 (HS) x 25' Rod	1300.00
12	1 1/2" K x 25' Sinker Bars	300.00
	3/4" N-97 (HS) x 4' Rod Sub w/ 3 Molded	
1	Guides	4.00
1	Rod Pump (25-150-RHBC-4-24-20-0)	24.00
292	Bottom Of String >>	7198.00



### Surface Casing

Size: 11 3/4", 42#, H-40 ST&C  
Set @: 533'  
With: 350 sx  
Hole Size: 14-3/4"  
Circ: yes  
TOC @ Surface

### Intermediate Casing

Size: 8 5/8", 32#, J-55 LTC  
Set @: 2794'  
With: 880 sx  
Hole Size: 11"  
TOC: Surface

### Production Casing

Size: 5 1/2", 17#, L-80 LTC  
Set @: 7600'  
With: 2857 sx  
Hole Size: 7 7/8"  
TOC: Surface  
By: Circulation

This wellbore diagram 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 the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

### Perforations:

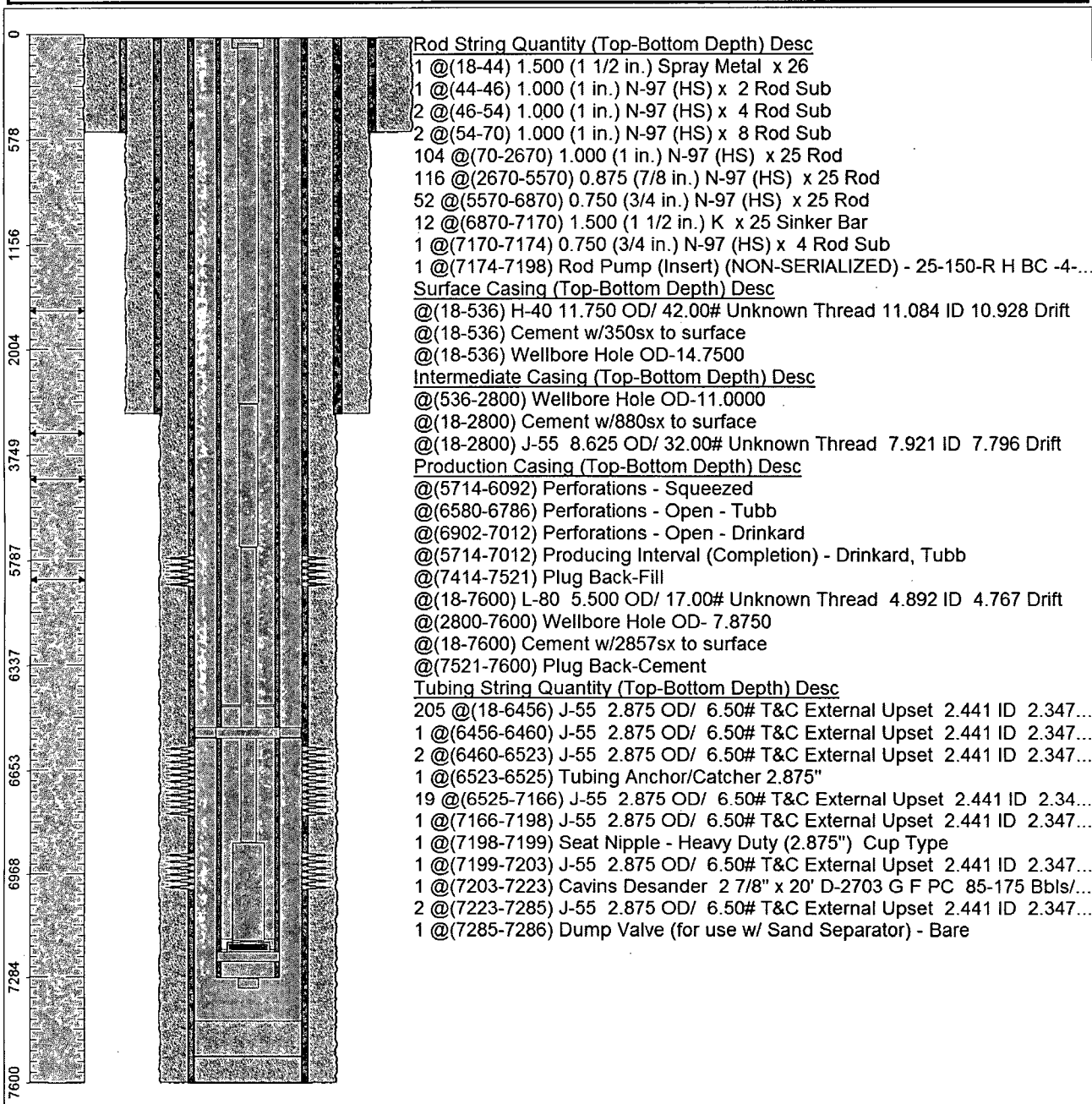
Blinebry-Squeezed 5714'-5732'  
Blinebry-Squeezed 5740'-5752'  
Blinebry-Squeezed 5774'-5780'  
Blinebry-Squeezed 5838'-5850'  
Blinebry-Squeezed 5860'-5872'  
Blinebry-Squeezed 5894'-5906'  
Blinebry-Squeezed 5925'-5943'  
Blinebry-Squeezed 6068'-6092'  
Tubb 6580'-6598'  
Tubb 6620'-6630'  
Tubb 6657'-6674'  
Tubb 6689'-6696'  
Tubb 6702'-6708'  
Tubb 6730'-6740'  
Tubb 6774'-6786'  
Drinkard 6902'-6912'  
Drinkard 6956'-6966'  
Drinkard 6982'-6994'  
Drinkard 7006'-7012'

PBTD: 7414'  
TD: 7600'

Updated: 19-Feb-13  
By: BQVH

## Chevron U.S.A. Inc. Wellbore Diagram : ORCUTTHTNCTE5DHC

<b>Lease:</b> OEU EUNICE		<b>Well No.:</b> ORCUTT, H. T. NCT-E DHC 5D		<b>Field:</b> FLD-SKAGGS	
<b>Location:</b> 1980FNL1980FWL		<b>Sec.:</b> N/A		<b>Blk:</b>	<b>Survey:</b> N/A
<b>County:</b> Lea	<b>St.:</b> New Mexico	<b>Refno:</b> JU2426		<b>API:</b> 3002538374	<b>Cost Center:</b> UCU935700
<b>Section:</b>		<b>Township:</b> N/A			<b>Range:</b> N/A
<b>Current Status:</b> ACTIVE				<b>Dead Man Anchors Test Date:</b> 09/06/2012	
<b>Directions:</b>					



<b>Ground Elevation (MSL)::</b> 3602.00	<b>Spud Date:</b> 08/03/2007	<b>Compl. Date:</b> 01/01/1970
<b>Well Depth Datum::</b> CSI0000N	<b>Elevation (MSL)::</b> 0.00	<b>Correction Factor:</b> 18.00
<b>Last Updated by:</b> bqvh	<b>Date:</b> 02/18/2013	