

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103

October 13, 2009

HOBBS OGD

CONSERVATION DIVISION

1220 South St. Francis Dr.

AUG 08 2011

Santa Fe, NM 87505

WELL API NO. 30-005-29155
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Rock Queen Unit
8. Well Number 310
9. OGRID Number 247128
10. Pool name or Wildcat Caprock; Queen
11. Elevation (Show whether DR, RKB, RT, GR, etc.)

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 Injection ☒2. Name of Operator  
Celero Energy II, LP3. Address of Operator 400 W. Illinois, Ste. 1601  
Midland, TX 79701

4. Well Location

Unit Letter N : 660 feet from the South line and 2100 feet from the West line  
Section 24 Township 13S Range 31E NMPM County Chaves

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 ☐

OTHER: ☐

## SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: Sqz csg leak ☒

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.

6/9/11 - MIRU. Lwr pkr to 3188' & attempt to circ the hole w/ 50 BPW. Had partial circ. TOH w/ pkr & found pkr rubbers cut. TIH w/ 94 jts (3039') of 2 3/8" OD 4.7# 8rd EUE IPC tbg w/ 5 1/2" plastic coated AD-1 pkr. Ran to 3039'. Circ pkr fluid. Set pkr @ 3039'. Attempt to test annulus. Reset pkr @ 3007' & unable to get pkr to seal off & eliminate communications between tbg & csg.

6/10/11 - Ran 2 3/8" OD IPC tbg w/ 5 1/2" ASI-X pkr (Kenco) to 3007'. Found 5 1/2" csg to hold pressure @ 2964' & leaked @ 2984'. TIH w/ 2 7/8" WS w/ pkr & RBP. Set RBP @ 3050' & tested to 500#, held okay. Raise pkr & found 5 1/2" csg leak from 2084'-3012'. Pumped into leak @ 1.5 BPM @ 0# psi.

6/13/11 - Ran CIL from 1800'-3096'. CIL verified csg leak @ 2984'-85'. Mill & rotate through DV tool area @ 2290 +/- ft. Wiped out tight spot. Ran to 3090'. Ran & set RBP @ 2348'. Test csg from surface to 2348' to 650#, held okay. Worked pkr through tight spot @ 2290 +/- ft. TIH w/ 4 3/4" bull nose mill & 4 3/4" string mill. Run through DV tool. Did not feel a tight spot @ 2290 +/- ft. Ran RBP retrieving tool & latched onto RBP @ 2348'. RBP came free.

\* Continued on attached sheet

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

Lisa Hunt

TITLE Regulatory Analyst

DATE 08/03/2011

Type or print name Lisa Hunt

E-mail address: lhunt@celeroenergy.com

PHONE: (432)686-1883

For State Use Only

APPROVED BY:

[Signature]

TITLE

STATE MGR

DATE

8-9-2011

Conditions of Approval (if any):

AUG 09 2011

**Rock Queen Unit #310 – C103 continued**

**6/14/11** - TIH w/ tbg & RBP & set @ 3055'. Dump sand on same for a PBTD of 3050'. Set pkr @ 3039' & test RBP to 550#, held okay. Raise pkr to 2809'. Load & test annulus to 550#. Pump 5 BFW @ 200# & 2 BPM followed w/ 275 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> + 3# sand per sx of cmt. Wash up & displaced cmt 1.1 bbls below pkr @ 1 BPM & 250# SD psi. WOC 30 min. Pump 1 BFW w/ SD psi of 250#. WOC. Pressure increased to 650# but fell back to 400#. WOC 10 min. Pump ½ BFW, psi increased to 1000# then fell back to 400#. Over displaced cmt w/ 5 BFW w/ SD psi of 300#. WOC. Pump 100 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> + 1# sand per sx of cmt. SD, Wash up & displaced cmt @ 1.1 BPM to 2864', 1.2 bbls below pkr @ 250# SD psi. Staged cmt in 4 stages w/ pressures ranging from 250#-600#. Pressure would fall back to 300# each time. Over displaced cmt w/ 5 BFW.

**6/15/11** – WOC. Pumped into leak on csg @ 1 ¼ BPM @ 400#. Pump 200 sx Class "C" cmt w/ 2% CaCl<sub>2</sub> + 3# sand per sx in the 1<sup>st</sup> 150 sx, tailed in w/ 50 sx w/o sand. Displaced 1.2 bbls below pkr to 2864' @ .93 BPM & 375# psi. SD psi = 300#. Staged cmt in 3 stages w/ a max psi of 500#, however the psi would fall back to 300#. Over displaced cmt w/ 5 BFW. SD psi = 350#. WOC 3 hrs. Pump 175 sx Class "C" cmt w/ 2% CaCl<sub>2</sub> + 3# sand per sx in the 1<sup>st</sup> 125 sx, tailed in w/ 50 sx w/o sand. Displaced w/ 17.7 BFW (2880') @ 1 BPM @ 500#, SD psi was 350#. WOC.

**6/16/11** - WOC 17 hrs, TP = slight vacuum. Release pkr & TOH. TIH w/ 4 ¼" bit, 6- 3 1/8" DC's & 2 7/8" tbg WS. Ran & tag @ 2847'. Test csg from surface to 2847' w/ 600# & held okay. D/O cmt from 2847' – 2991'. Test csg leak area (2984+/-') w/ 650# psi & held okay. Circ hole clean, lower bit & wash sand off of RBP @ 3055'.

**6/17/11** - C/O from 3088'-3095' to FC. Ran GR/CCL/CBL from 2100'-3095'.

**6/20/11** - TIH w/ 2 7/8" tbg & 5 ½" AD-1 pkr. Ran & set @ 2878'. Load & test backside w/ 550# & held. Stage #1: Pump 5 BFW @ 2 BPM & 400# psi. Pump 150 sx of cmt containing 2% CaCl<sub>2</sub>. SD, wash up & displace cmt w/ 18 BFW to 2934' @ 1.3 BPM @ 350# SD psi. Stage cmt w/ max psi of 450# SD psi. Over displaced cmt w/ 6 BFW @ 1 BPM & 400# SD psi. WOC 2 ½ hrs. Stage #2: Pump 5 BFW @ 2 BPM & 600# psi. Pump 150 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> w/ the 1<sup>st</sup> 100 sx of cmt w/ 2# sand per sx, tailed w/ 50 sx of cmt w/ no sand. Displaced w/ 18 BFW to 2934', (1.3 bbls below pkr) @ 1 BPM @ 500# psi. SD psi = 400#. Staged cmt w/ max psi of 450#. Over displace w/ 6 BFW, SD psi of 400#. WOC 2 ½ hrs. Stage #3: Pump 5 BFW @ 2 BPM & 600# psi. Pump 150 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> w/ th 1<sup>st</sup> 100 sx of cmt w/ 2# sand per sx, tailed w/ 50 sx of w/ no sand. Displaced w/ 18 BFW to 2934' @ 1 BPM & 600# psi. SD psi = 400#.

**6/21/11** - TOH w/ tbg & pkr. Test csg from surface to 2920', held 525# ok. Drl cmt from 2920' – FC @ 3096'. Circ hole clean. Test to 500# & held. Circ hole clean. Test csg from surface to 3136'. Ran GR/CCL/CBL from 2100'-3136'.

**6/22/11** - Perf 5 ½" csg w/ 4" cased gun, 2 SPF, 120 degree phasing, 38 gram charges from 3066'-3080'; 15' & 30 holes. TIH w/ 2 7/8" tbg & 5 ½" AD-1 pkr. Ran to 3001'. Load & test tbg-csg annulus to 500# & held.

**6/23/11** - Acdz 5 ½" perfs 3066-80' w/ 3000 gals of 12% NEFE acid + 60- 7/8" ball sealers. Flushed w/ 18 BFW, 100 bbls overflush. Treating pressures: Max = 2000#, Avg = 1570#. Had ball action ranging from 200#-900#. Did not ball out. Avg injection rate = 5 BPM. ISIP = 467#, 5 min = 460#, 10 min = 458#, 15 min = 451#. TLTR = 201 bbls. SD 2 ½ hrs, TP = 370#. Start flowing back. Backflow 3 1/2 hrs before & during pulling & LD 2 7/8" tbg WS. Recoverd 370 bbls fluid. 201BLW & 169 bbls of formation wtr.

**6/24/11** - TIH w/ 94 jts (3039') of 2 3/8" OD 4.7# 8rd EUE J-55 IPC tbg w/ 5 ½" AS1-X nickel plated pkr w/ 1.5 "F" profile nipple & on/off tool. Ran & set pkr @ 3039'-3047' & pulled 15 pts of tension on same. Test tbg-csg annulus to 550#, held 30 min.

**6/27/11** - Tested to 500# & would not pass MIT test. NDBOP & NUWH. RDMO.

**7/6/11** - Displace down tbg-csg annulus w/ 15 gal of 16 ppg composite liquid using nitrogen @ 300# to force down annulus. SD 1 hour & placed 560# psi on tbg-csg annulus to squeeze fluids into csg leakage.

**7/7/11** - Displace a 2<sup>nd</sup> batch of composite fluid using 240# (15 gal) of 16 ppg fluid w/ 400# psi of nitrogen. Bled off nitrogen, filled annulus w/ 3 BFW taking fluid @ ¼ BPM @ 400# psi w/ pressure trying to climb.

**7/19/11** - TOH w/ 2 3/8" IPC tbg & 5 ½" AS1-X pkr. Ran & set 5 ½" Watson RBP @ 3007' on tbg WS. TOH. Ran tbg WS & 5 ½" AD-1 pkr. Ran & set @ 2364' (DV tool @ 2290' & cmt squeeze csg leak @ 2984'). Test from 2364'-3007' w/ 500#, held for 10 min. Pump down tbg-csg annulus from surface to 2364' & would take fluid @ 0.7 BPM & 250# psi indicating the DV tool @ 2290' is leaking. Raise pkr to 2268', above the DV tool & tested down the tbg-csg annulus w/ 500# & held. Pumped down tbg, testing csg from 2268'-3007' w/ csg leaking @ 2290' & taking fluid @ 250# psi & 0.7 BPM rate. TOH w/ tbg & pkr. TIH w/ tbg WS & retrieving head for RBP. Latched onto same @ 3007'.

**7/20/11** - Ran 4" Watson Duplex shoe, 5 jts of 4" 10.8# J-55 UFJ csg w/ bond coat (197'), + 19 jts of 4" 10.8# J-55 UFJ csg (842'), for a total of 1039' of csg as liner. Ran 4" in 5 ½" csg well bore using 2 3/8" OD tbg w/ Duplex shoe retrieving tool to 3130'. Circ hole w/ 24 BPW w/ liner set from 2091'-3130' w/ 4" collar looking up on top of 4" liner @ 2091'. Pumped 5 BFW followed w/ 50 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> & displaced w/ 11 BFW @ 1 BPM w/ 600# psi, leaving 1+ bbl of cmt in 2 3/8" tbg. Release Duplex shoe @ 3130'. WOC 3 ¼ hrs & pressured up well bore to 500# taking fluid @ 1.6 BPM. Well has a small backflow. The first 35 sx of cmt contained ¼# sx of celloflakes.

**7/21/11** - TIH w/ tbg & 4 ½" OD bit. Ran to TOL @ 2091'. No cmt on TOL. Ran tbg w/ 6- 27/8" DC's & 3 ¼" bit. Tag cmt inside of 4" liner @ 2154'. Drill cmt from 2154'-2586' (432') recovering cmt w/ celloflakes. Fell out of cmt. Ran bit to 3129' (TD 3130'). Rotate & circ hole clean

**7/22/11** - TIH w/ tbg & 4" AD-1 pkr. Ran to 2142' (TOL @ 2098'). Test 4" liner from 2142'-3135' w/ 600# psi, held for 15 min. Ran GR/CCL/CBL from 2000'-3133'. TOC @ 2290'. Per CBL dated 7/22/11, the 4" liner is from 2098'-3135'. TD = 3135'.

**7/25/11** - Set pkr @ 1889'. Load & test tbg-csg annulus w/ 500# & held. Pumped down tbg through TOL @ 450# psi & 1.5 BPM. Pumped 5 BFW @ 500# & 2 BPM. Pump 100 sx of Class "C" cmt w/ 2% CaCl<sub>2</sub> (1<sup>st</sup> 50 sx was mixed w/ 3# sand per sx of cmt) & displaced 1.2 bbls below pkr w/ 700# psi & 1 BPM. Staged cmt, displacing cmt w/ a total of 11 BFW (displacement to TOL = 12.2 bbls) w/ SD psi of 50#. Over displaced well bore w/ 5 BFW & SD psi increased to 350# (cmt mixed @ 14.8 ppg).

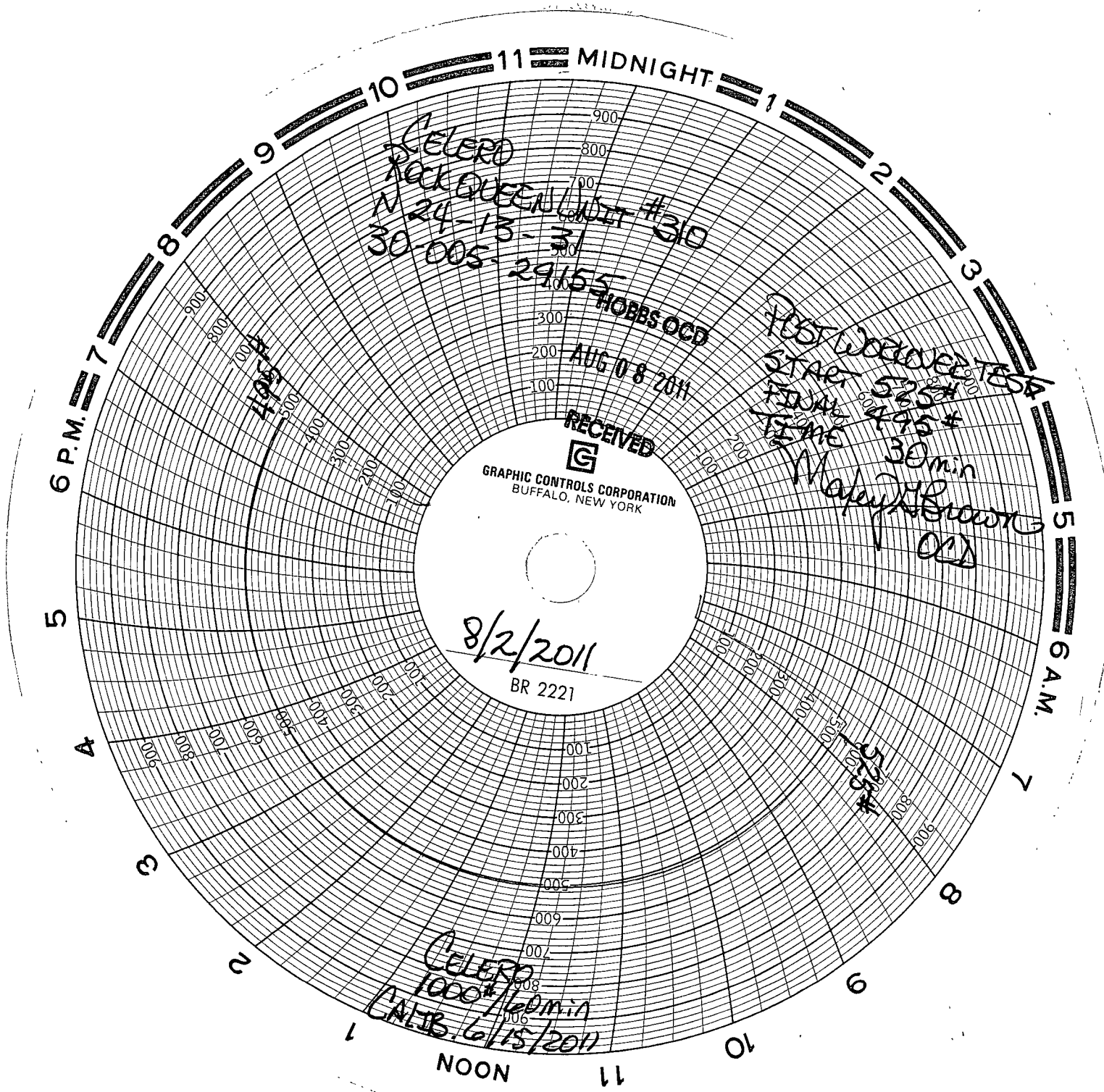
WOC 3 hrs. Pumped 5 BFW @ 1.5 BPM & 700# psi. Pumped 150 sx Class "C" cmt (1<sup>st</sup> 100 sx mixed w/ 3# sand per sx of cmt & remaining 50 sx mixed @ 15 ppg). Displaced cmt w/ 9 BFW (displacement to TOL = 12.2 bbls) @ 1 BPM & 1000# psi. WOC 25 min & psi fell to 300#. Pumped an additional 1 BFW for a total of 10 BFW, leaving 2.2 bbls (90' above TOL). Psi climbed to 900#, SD psi = 800#.

7/26/11 - TOH w/ tbg & pkr. TIH w/ tbg WS & 4 1/4" bit. Tag @ 2000#. Test 5 1/2" csg w/ 525#. Lost 25# in 15 min. D/O cmt from 2000'-2098'. Circ hole clean. Test 5 1/2" & TOL w/ 550# for 15 min & lost 25#. TOH w/ 4 1/4" bit. TIH w/ tbg & 3 1/4" bit. Tag cmt @ 2098' (TOL). Drilled 15' of cmt & ran bit to 2200'. TIH w/ tbg & 5 1/2" pkr. Ran & set @ 2049'. Test tbg-csg annulus to 525# & lost 25# in 15 min. Test down tbg, testing TOL & 4" liner to TD w/ 600#. Tested 30 min & lost 25#. TOH w/ tbg & pkr. Ran GR/CCL/CBL from 2070'-3121'. Perf 4" liner from 3066'-3080' w/ 2 1/2" cased gun, 2 SPF w/ 180 degree phasing from 3066'-3080'; 15' & 30 holes.

7/27/11 - TIH w/ 2 3/8" tbg WS & 4" AS-1 pkr. Ran & set @ 2970'. Pump 5 BFW @ 4 BPM @ 1390# psi to establish injection rate. Acdz perms 3066'-3080' down tbg w/ 3000 gal of 7 1/2% NEFE acid + 50- 7/8" ball sealers & flushed w/ 13 BFW. No overflush. Treating pressures: Max = 3350# (balled out); Avg psi = 1910#; Avg rate = 4.0 BPM; ISIP = 210#; 5 min = 171#; 10 min = 170#; 15 min = 170#; TLTR = 101 bbls. Raise & set pkr from 3031'-3039'.

7/28/11 - TIH w/ 35 jts of 2 3/8" OD 4.7# 8rd EUE J-55 IPC tbg w/ TDC (1131') + 59 jts of 2 3/8" OD 4.7# 8rd EUE J-55 IPC tbg (1908' of RC) w/ 4" AS1-X pkr on/off tool. Ran to top of pkr @ 3039', circ hole w/ pkr fluid. Latch onto 4" nickel plated AS1-X pkr w/ 1.50" profile nipple w/ on/off tool. Set pkr from 3039-47', pulled 20 pts tension. NDBOP & NUWH.

8/2/11 - Ran MIT. Tested for 30 min w/ 525# psi. Lost to 495# or 30# psi. Test is ok & witnessed by Maxey Brown w/ the OCD. Original chart is attached.



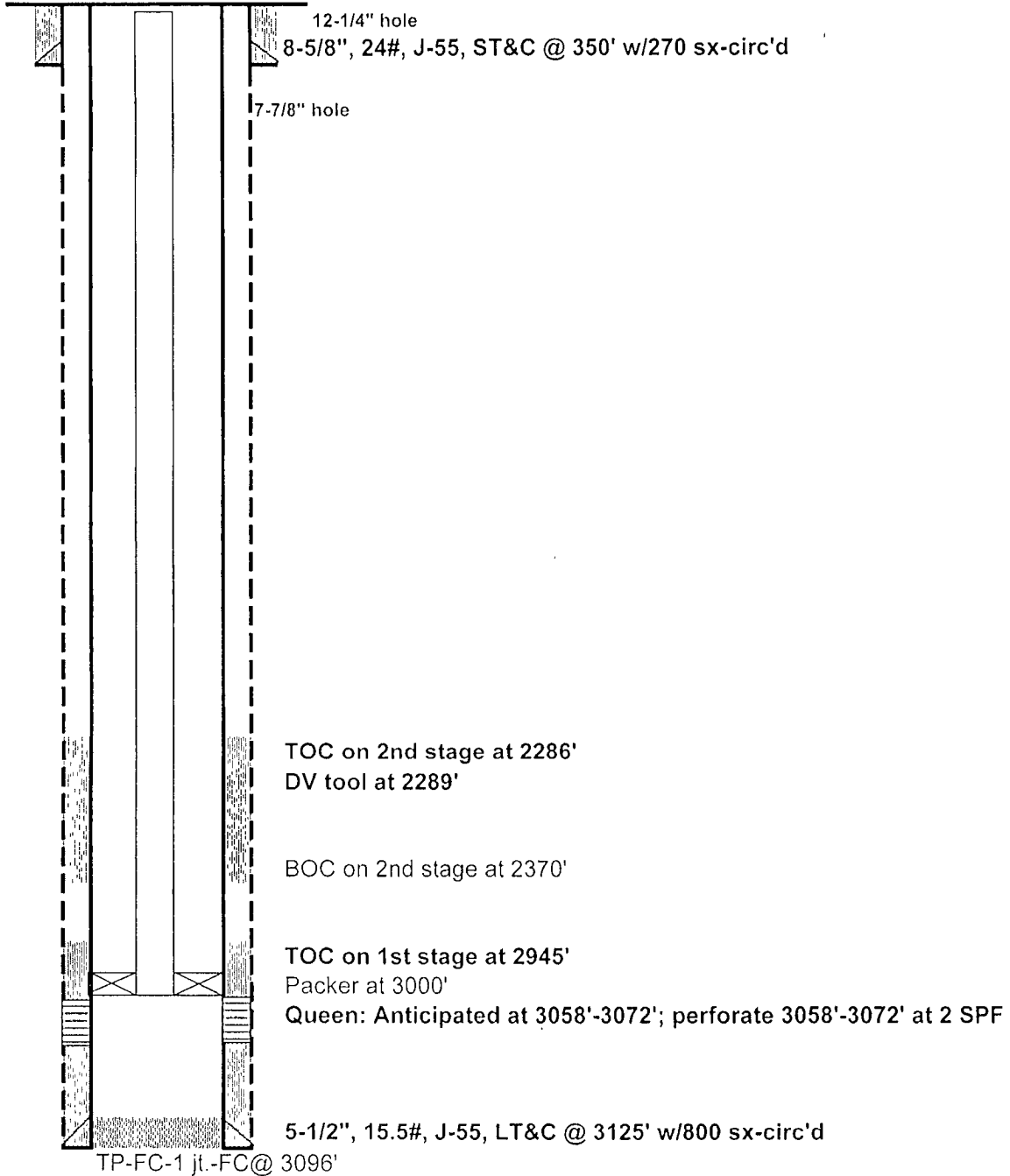
# CELERO ENERGY

FIELD: Caprock  
LEASE/UNIT: Rock Queen Unit  
COUNTY: Lea

DATE: Feb. 24, 2011  
BY: MWM  
WELL: 310  
STATE: New Mexico

Location: 660' FSL & 2100' FWL, Sec 24N, T13S, R31E  
SPUD: COMP:  
CURRENT STATUS: Pending D&C

KB = 13' AGL  
GL = 4399'  
API = 30-005-29155



PBTD - 3096 est  
TD - 3125'