
20. Casing, Liner and Cement:

| CASING |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Casing Type | Size of Hole | Size of Casing | $\mathrm{Wt} /$ Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Top | Cmt Bot | Status |
| CONDUCTOR | $17+1 / 2$ | $13+3 / 8$ | 54.50 | 0 | 46 | 65 | 0 | 46 | VISU |
| SURF | 11 | $8+5 / 8$ | 24 | 0 | 500 | 205 | 0 | 500 | VISU |
| 1ST | $7+7 / 8$ | $5+1 / 2$ | 15.50 | 0 | 2,539 | 365 | 1,570 | 2,539 | CBL |

Cement work date: 08/23/2011
Details of work:
8/17/2011
MIRU Perforators WL. RIH \& Perf 4 spf, w/19 gm chrgs (.45" holes), phased 120 deg fr/1,510' - 1,511' ( 4 holes). RDMO WL. MIRU. ND WH. NU BOP. TIH 5-1/2" CICR \& 45 jts $2-7 / 8^{\prime \prime}$ tbg. EOT @ 1,453'. Sqz perfs fr/1,510' $-1,511^{\prime}$. SWI. SDFN.

## 8/18/2011

Set CICR @ 1,453'. Sqz perfs fr/1,510' - 1,511'. MIRU HES Cementers. Ld \& PT lines to 4,000 psig w/1 BPW. Tstd OK. Ld \& PT 2-7/8" tbg to 3,000 psig w/1 BPW. Tstd OK. Sting out of CICR. Ld TCA w/2 BPW. Sting into CICR. Ld \& PT TCA to 500 psig w/1 BPW. Tstd OK. SI TCA w/500 psig. Estb inj rate dwn 2-7/8" tbg @ 350 psig \& 3 BPM w/10 BPW. Ppd 200 sks class A cmt mixed @ 13.5\# ppg. Ppd cmt @ 400 psig \& 3 BPM. Displ cmt w/7.5 BPW @ 375 psig \& 3 BPM. ISIP 150 psig. Sting out of CICR. Rev cln w/12 BPW. RDMO HES cementers. TOH 45 jts $2-7 / 8 "$ tbg \& stinger. SWI. SDFN.

## 8/19/2011

TIH new 4-3/4" cone bit, bit sub, 4-3-1/2" DC's, xo \& 44 jts 2-7/8" tbg. Tgd cmt @ 1,443'. RU. Brk circ @ 1,440'. DO cmt fr/1,443 to CICR @ 1,453'. DO CICR. DO cmt fr/1,457' to 1,525' \& fell through (sqz perfs fr/1,510-1,511'). Circ cln. TIH 29 jts 2-7/8" tbg. Tgd PBTD @ 2,488'. Circ cln. RDMO. TOH \& LD 73 jts 2-7/8" tbg \& BHA. SWI. SDFWE.

## 8/22/2011

MIRU Perforators WL. RIH w/GR/CBL/CCL. Logged fr/1,600' to surf. Est TOC @ 916' FS (8-5/8" csg @ 500'). RDMO WL. ND BOP. ND WH. ND csg hd \& pull $5-1 / 2^{\prime \prime}$ csg slips. TIH 26 jts $1-1 / 4^{\prime \prime} \mathrm{IJ}$ tbg dwn 5-1/2" csg ann. Tgd @ 824'. TOH \& LD 11 jts $1-1 / 4 " \mathrm{tbg}$. EOT @ 487'. SWI. SDFN.

## 8/23/2011

TIH 10 jts $1-1 / 4^{\prime \prime}$ IJ tbg dwn 5-1/2" csg ann. EOT @ 799'. MIRU HES Cementers. Estb inj rate dwn 1-1/4" tbg @ 1,500 psig \& 2 BPM w/10 BPW. Ppd 140 sks class A cmt mixed @ 13.5\# ppg. Ppd cmt @ 1,640 psig \& 2 BPM. Circ 10 sks cmt to wrk tnk. TOH \& LD 25 jts $1-1 / 4 "$ tbg. NU csg hd. SWI. RDMO HES \& rig.

| Method used | String | Cementing tool setting/pref depth | Cement volume | Cement top | Cement bottom |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SQUEEZE | 1ST | 1,511 | 200 | 916 | 1,511 |
| 1 INCH | 1ST |  | 140 | 0 | 916 |

21. Formation log intervals and test zones:

FORMATION LOG INTERVALS AND TEST ZONES

| FORMATION NAME | Measured Depth |  | Check if applies |  | COMMENTS (All DST and Core Analyses must be submitted to COGCC) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Top | Bottom | DST | Cored |  |
| RATON COAL | 0 |  | ■ | ■ |  |
| VERMEJO COAL | 1,994 |  | $\Gamma$ | $\Gamma$ |  |
| TRINIDAD | 2,349 |  | $\square$ | $\square$ |  |

Comment:
CBL will be run within the next few weeks. At that time it will be uploaded and mailed to COGCC.
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.
Signed:
Print Name: Wanett McCauley

Title: Reg Compliance Technician Date:

Email: wanett_mccauley@xtoenergy.com

Based on the information provided herein, this Drilling Completion Report (Form 5) complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:
COGCC Approved:

| Att Doc Num | Name |
| :--- | :--- |
| 400207636 | CEMENT JOB SUMMARY |
| Total Attach: 1 Files |  |

Total: 0 comment(s)

