

# **WELL OPERATIONS REPORT**

## **HOME SIGNAL CSP CELIBETA NO. 2 (H-78)**

### **300/H-78-6010-12200/1**

### **WELL ABANDONMENT**

**WID# 0156**

**OA# OA-2018-004-PAR**

**ACW# ACW-2018-010-PAR-H-78-WID0156**

**ABANDONMENT RIG RELEASE DATE: 03/09/2020**

#### **Summary of well operations:**

A service rig and support equipment were moved to location on Feb. 23, 2020. Rig in was completed with required inspections and well control equipment pressure testing. Confirmed no tubing in well and well dead. Run in with 177.8mm casing scraper on 73mm tubing and tag liner top. Circulate well to clean, fresh water. Pressure test casing and noted failed test. Pulled casing scraper and ran 177.8mm test packer to locate casing leak from 203.0 – 233.0 mKB. Removed packer and ran cement bond log on electric wire line. Obtained approval from OROGO for change of scope to abandonment procedure. Ran in open ended 73mm tubing and balanced a class G cement plug from 1112.0 – 1016.9 mKB. Tag cement top and run packer to pressure test cement plug. Conducted remedial operations for zonal isolation as follows:

- Perforate 720.0-721.0 mKB. Establish feed rate. Set cement retainer and test. Perform 7.6m3 cement squeeze to perforations. Balance 1.0m3 cement on top of retainer.
- Perforate 600.0-601.0 mKB. No feed rate obtained. Set permanent bridge plug and pressure test. Circulate 1.0m3 cement onto top of bridge plug.
- Perforate 457.8-458.8 mKB. No feed rate obtained. Set permanent bridge plug and pressure test. Circulate 1.0m3 cement onto top of bridge plug.
- Ran 73mm tubing and balanced 3.7m3 class G cement to place plug from 370.0-163.0 mKB. Tagged cement top with tubing and pressure tested plug to 7 Mpa x 10 min. Test good.
- Perforated 157.5-158.5 mKB. Established circulation to surface. Set and tested 177.8mm 10K cement retainer. Pumped 4.0m3 circulation squeeze through retainer and recovered 1.0m3 good returns to surface.

Rigged out all equipment and moved off location. Cut and cap completed after rig move.

See attachment for daily operations summary for details.

**Problems Encountered:**

- Corroded casing was discovered during abandonment operations leading to change of scope to abandonment procedures.
- 2 zonal isolation intervals were not cement squeezed due to lack of useable feed rate. Intervals were abandoned with a 10K permanent bridge plug with 1.0m<sup>3</sup> cement plug balanced on top.

**Description of completion fluid properties:**

- Fresh water was used for all well operations during well abandonment.

**Downhole Equipment used:**

- KAPPA 177.8mm 10K cement retainer (See Spec sheet attachment)
- KAPPA 177.8mm 10K permanent bridge plugs (See Spec sheet attachment)
- Class G cement
- No tubulars were left in the well. Wellhead was removed during cut and cap operations
- Well is abandoned (See DH Schematic attachment)