

# IN THE FIELD

## Thru Tubing Case Study



### Suspected Tubing patch damage cleared, and full wellbore access regained

#### Background & Challenges

- Previous Thru Tubing Intervention was unsuccessful to pass obstruction.
- Suspected Top Tubing Patch (ID of 2.992") collapse, with scale or fill build-up which prevented production from main production zones.
- A 2.375" OD pilot hole should be attempted first prior to opening up to a max of 2.5" due to the 2.659" ID set a seat restriction in the wellbore.

#### Operation

- A major operator in the Taranaki region of New Zealand regained access to TD, and restored production in a gas well which had suspected Tubing Patch damage, where previous Thru Tubing intervention work had not been successful with a junk mill. Taranaki Thru Tubing Tools were then selected to provide a downhole tool solution which would provide the highest chance of success.
- A MX Type Mill successfully milled through the suspected Tubing damage and passed frac sleeve restrictions in the well. This was utilised with a 2-1/8" 5/6 6.0 stage powered motor, and Tempres MGS tools to ensure optimum performance in the low BHP well.
- The MX Milling bottom hole assembly was deployed and the obstruction at the tubing patch was cleared, however scale was encountered below the patch requiring additional hole cleaning to be performed through the tubing and a further two tubing patches.

#### Overview

**Location:** New Zealand

**Well Type:** Gas Well

**Solution Provided:** MX Type Mills, 2-1/8" 5/6 6.0 stage powered motor and Tempres MGS tools

#### Results

- MX Type Mills utilised to pass the expected Tubing Patch damage.
- Top Tubing Patch obstruction cleared and a further 62 meters of unexpected milling passing a further two tubing patches to allow for clear access to TD was achieved.

#### Benefits

- TD reached allowing access to all production zones.
- Well was returned to production with full wellbore access through the original obstruction point

#### Before



2.5" OD MX Mill



2.375" OD MX Mill

#### After



OD reduced to 2.496"



OD reduced to 2.310"