

MC243-A5 WELL PROGRAM

The well MC243-A5 from Matterhorn platform has two intervals completed in the A sand and both intervals were produced at the same time (the lower interval was designed to be shut off in case of water production).

On September 17th 2007, the well started to produce important amount of solids. On September 18th 2007, the well was shut-in in order to keep the production facility running. Despite three attempts, it was impossible to get back this well on production.

The status of the sand inside the tubing is unknown (no intervention since shut-in) but based on MC243-A2, it is believed that the flow paths are plugged with solids preventing any flow. As the flow paths are in annuli behind isolation tubing similar to "intelligent" completions, no direct access is possible to jet/wash the screens.

A program of operations was built to take into account if injectivity is possible or not. If injectivity is possible, cement will be squeezed in each interval independently. If injectivity is NOT possible, the reservoir is already isolated from the well bore and cement cannot be squeezed. In both cases the tubing will be cut, the completion will be pulled out and a 300' high cement plug will be set in casing. This cement plug will be tagged and pressure tested. Then the well will be side tracked.

A decision tree of the summary of the operations to be performed is presented hereafter:

GENERAL DECOMPLETION PROGRAM (NO INJECTIVITY CASE)

Skid the rig SSD19 from Matterhorn A2 well over A5 well. Perform an injectivity test through dry tree without exceeding frac pressure.

With Dry Tree still nipped up install lubricators.

Proceed to set Back Pressure Valves (BPV) through the dry tree and into the tubing hanger.

Pressure test each BPV. Nipple down FMC dry tree. Install blanking plugs in over Back Pressure Valves.

Nipple up BOP (11' 5,000 psi W.P Drilling BOP's). Perform BOP function and pressure testing.

Prepare to unset the Mudline POTH (Pack off Tubing Hanger) located at 3208.98ft MD-RKB-SSD16.

Rig up and RIH with slickline to shift POTH sleeve located at 3,238.65ft MD-RKBSSD16.

Once the sleeve is shifted, rig down slickline and perform pull test to confirm that the POTH is unset.

Rig up wireline and run in hole with tubing puncher. Punch hole in 3 ½" 13Cr-85 Ksi, 9.3# tubing located from 8182.85ft and 8194.59ft MD-RKB-SSD16 such to establish communication and equalize pressure between tubing and annulus. Pull out of hole with wireline.

RIH with wireline and perform a cut in the middle of the 11.74' Pup Joint 3 1/2" 13Cr-85 Ksi, 9.3# tubing at a depth of 8189ft MD-RKB-SSD16. This cut will be made above Quantum Production Packer with tubing in tension.

When the string is confirmed free with over-pull, proceed to pull out of hole with all completion accessories and tubing above the QMP production packer. Lay down same as pull out of hole.

Proceed to secure well with a 300' cement plug that will be located from 8189ft to 7889ft MD-RKB-SSD16: RIH with 4 ½" XTM43 workstring to +/- 8189ft to the top of QMP packer and pump

cement at desired rates. Once set, pressure test to 2500 psi, displace plug, and reverse circulate two pipe volumes to surface.

GENERAL DECOMPLETION PROGRAM (INJECTIVITY CASE)

In case of injectivity, the decompletion program is identical except that prior to nipple down the tree, a coil tubing unit will be mobilized and a cement retainer will be set in-between the ICVs at 8250 ft MD-RKB-SSD16 in the middle of a 3 ½" 13Cr-85 Ksi, 9.3# tubing joint. Then cement will be squeezed in the lower interval, CT will be pulled out from cement retainer and cement will be squeezed in the upper interval. Then cement plugs will be tested at 2500psi and program will resume as per the no injectivity case (= nipple down the tree).

Should a Coiled Tubing Unit be necessary for operations Total E&P will provide a CT BOP schematic as a revision to the APM. Upon approval, Total E&P will provide MMS with 24 hours notice prior to mobilization of the unit on location. Total E&P will comply with 30 CFR 250.615 and use a double check valve in the coiled tubing string.

