CASE HISTORY

Multiple Set Testing Capability Allows Operator to Reinitiate Injection

TAM-J Multiple Set Inflatable Packer System enables Canadian operator to identify leak, isolate and re-instate injection in dual injection well.

Challenges: A major Canadian operator had recognized loss of injection into an unwanted zone during a recent injection test. The well was a key injection well for the field, and was specifically needed to effectively sweep the reservoir as part of the operator's secondary recovery efforts. The completion was configured as such that it would be very difficult to identify the leak with standard evaluation means. The customer needed a cost effective solution that would allow them to successfully test, identify, and isolate the lost injection in a single operation.

Solution: TAM International worked with the customer on the deviated dual injection well to design a multiple set testing program. One of the major technical hurdles was to successfully deploy a thru-tubing assembly that would have multi-set / multi-zone testing capabilities in a one-trip operation. The 3 7/16" TAM-J Inflatable packer was chosen as it would allow the operator to complete the task at hand and was capable of being run through the restriction of the sliding sleeve which was part of the completion. Multiple sets and injection tests were performed to determine that the leak path was one of the sliding sleeves within the completion. The sleeve was closed, as was confirmed by a follow-up injection test with the Tam-J assembly.

Results and Benefit: $20 Million

The cost to replace a dual completion injection well within the field is in excess of $20 million USD. By applying TAM’s solution the operator has realized improved sweep efficiency for the field without the need for a new injection well.

The TAM-J multi-set packer used to test the injection well.