

Case Study

Wellbore Clean Up & Debris Removal

Retrieval of injection valve from tubing crossover at 10,400ft

The Challenge

A Customer was retrieving a bridge plug and injection valve to surface when the injection valve separated from the plug and landed at the 5-1/2" by 4-1/2" tubing crossover at 10,400ft.

An efficient method to fish the injection valve without causing damage to the tubing crossover was required so the injection value could be pulled and a new injection valve set.

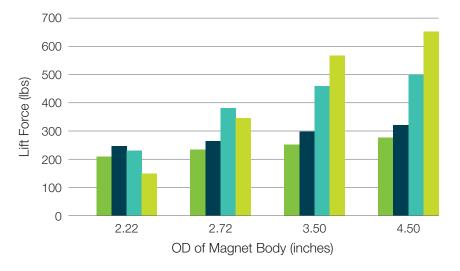
Considerations

The following key requirements and concerns were identified:

- A timely and effective intervention was critical to allow a new injection valve to be installed thereby minimising the impact on production
- Damage to the tubing

crossover was to be avoided

Magnetic lifting capability





Location: North Sea

Customer: Independent Oil

Producer

Well Type: Oil producer (maximum 40 deg deviation)

Products/Services: Peak's High Temperature/High Strength (HTHS) Magnet

50 lbs

Weight of injection valve retrieved

10,400ft Depth of fish

- ◀ Left: This performance graph demonstrates the lifting capacity of a range of Peak HTHS Magnets in open air conditions.
- 15/16" SRT
- 1 1/16" SRT
- 1.55" Un Thread
- 2.00" Un Thread



Peak's Solution

Peak's 4.5" OD High Temperature/ High Strength Magnet was run downhole on slickline to the location of the tubing crossover at 10,400ft.

At depth, the pick-up weight increased significantly - by over 50lbs - confirming the Magnet had a magnetised hold of the injection valve on the first attempt.

Due to the powerful strength of the Magnet, the injection valve was successfully pulled to surface.

Value to Customer

All operations were carried out safely and efficiently, minimising the period of reduced production from the well.

- The tools were run in-hole without issue and successfully fished the injection valve within hours and on the first attempt
- The Customer did not need to rent additional tooling to carry out the operation
- Downward jarring was avoided thus preventing damage to the tubing crossover
- A new retrievable bridge plug and injection valve are now set in the well and full injection available



▲ Workshop demonstration: A 2.220" HTHS Magnet used to pick up a 7" GS Pulling Tool. Clean end-to-end contact not necessary.

Product Code(s): High Temperature/High Strength Magnet – 115

Contact: Global Business Development | info@peakwellsystems.com

