

## CASE STUDY

Leaking trunk main valves easily and quickly sealed with ValvePAK®



### THE CHALLENGE

3 large diameter trunk main valves operating at a mean average of 8 bar were leaking and causing a long standing boggy mess on the landowner's agricultural land.

The valves had previously been repacked by a specialist oil and gas company at a considerable cost, however the method used left the injection port prominent in the valve stuffing box area, hindering future maintenance. The combined loss of water from all valves was estimated at around 0.023MLD.

### ACTION

We used ValvePak®, our DWI approved injection sealing product, to seal the valves' leaking packing glands.

The 3 valves were fitted with integral gearboxes, hindering access to the stuffing box. One valve required a core hole within the casting to create access, whilst the other two required modification to existing legacy injection ports to allow a coupling to our ValvePAK® unit.

We injected all 3 valves at 0.5 bar above mains water pressure and sealed them fully within a short time period. The injection ports were plugged and the valves operated to ensure full sealing capability.

ValvePAK® complies with DWI Reg 31(4)(b), passing BS 6920 test requirements for:

- Odour and flavour of water (BS 6920: Part 1: 2014, Clause 4 - 23°C)
- Appearance of water (BS 6920: Part 1: 2014, Clause 5)
- Growth of microorganisms (BS 6920: Part 1: 2014, Clause 6)

To support water companies with 'Reg 4 Wholesomeness' and 'Reg 27 Risk Assessments', ValvePAK® has also passed the testing requirements for:

- Extraction of substances that may be of concern to public health (BS 6920: Part 1: 2014, Clause 7 - 23°C)
- Extraction of metals (BS 6920: Part 1: 2014, Clause 8 - 23°C)

### RESULTS

- ✓ All three valves fully sealed and tested.
- ✓ 23 cubic metres of water saved per day.
- ✓ Ability to be adjusted by conventional means in the future if needed.
- ✓ Chamber emptied of water for future access without the need for pumps.
- ✓ Agricultural land able to dry out.
- ✓ Customers view of our client meets expectations.