

REAL RESULTS

Renaissance[™] System Retrofits Well With Chemical Injection System, Removes Asphaltene Deposits, Maintains SCSSV Functionality

Objectives

- Remove the asphaltene deposits restricting production. Without treatment, asphaltene deposits would build up in the well and choke back production.
- Prevent further deposits by installing a continuous downhole injection system to test different chemicals. Injection chemicals dissolve the asphaltenes and prevent further deposits from forming, which increases production compared to a well without chemical injection.

Results

- The new Optimax[™] surface-controlled subsurface safety valve (SCSSV) provided a conduit for injection fluid around the valve while using the existing control line to function open and close. When combined with the rest of the *Renaissance* system, it enabled downhole chemical injection without compromising master valve or SCSSV functionality.
- The CLH was landed in the Weatherford QN nipple profile in a spool section below the lower master valve. A Type-H profile was provided above the CLH for installation of a backpressure valve (BPV) in the future.
- Weatherford project managed the whole operation, including the post-installation of the chemical injection module and solar panel to remote power the module.

Value to Client

- Weatherford's *Renaissance* system enabled the operator to retrospectively install a chemical injection system down through the existing tubing and around a safety valve without requiring the operator to kill the well, pull the tubing, or perform a major rig workover.
- The Renaissance system enabled the operator to trial continuous chemical injection at different rates to test their effect on asphaltene removal and build-up prevention to increase production.

Weatherford Koos Reinders Technical Sales Manager koos.reinders@me.weatherford.com renaissance@weatherford.com



Weatherford's WCS system enabled trailing of a number of chemicals to dissolve and prevent reformation of asphaltine deposits, increasing production.

Location Abu Dhabi

Well Type Onshore, oil

Casing Size 3-1/2 in.

Depth 8,200 ft (2499 m)

Products/Services

- Project management of completions, wellheads capillary and artificial lift components.
- Surface chemical injection module
- Solar panel
- Wellhead spool
- Control line hanger
- Optimax SCSSV
- Well control sub
- Chemical injection valve
- 3/8-in. capillary services

Weatherford products and services are subject to the Company's standard terms and conditions, available on request or at weatherford.com. For more information contact an authorized Weatherford representative. Unless noted otherwise, trademarks and service marks herein are the property of Weatherford and may be registered in the Unless States and/or other countries. Weatherford products named herein may be protected by one or more U.S. and/or foreign patents. Specifications are subject to change without notice. Weatherford sells its products and services in accordance with the terms and conditions sel forth in the applicable contract between Weatherford and the client.