



TP-220313ZA Connection of 5 new Gas Wells at Arshad Field

SUMMERY

The objective of this project is to bring 5 new gas wells from Arshad Field on stream with tie back to the nearby Alestiqal Field's production facilities. The Gas wells fluid will be collected in production manifold at Arshad and from manifold to Alestiqal gas processing facility via trunk pipeline about **22.5 km** long.

The new Arshad field shall be an unmanned and consist of one gas gathering manifold, a portable test separator, one pig launcher, burn pit, ignition panel and accessories. The facilities will be prepared for additional 2 wells for future use. At each well site, it will require to provide a corrosion probe, corrosion coupon, temperature indicator, pressure indicator, sample connection and connection for injection of corrosion inhibitor, chemical injection and methanol injection facilities. Chemical injection pumps to be powered by gas tapped from the well stream, depressurized and treated in the gas conditioning system.

Manual blow-down facilities will be provided within wellsite area, for each flow line. Blow-down header will be routed preferably underground, with a downward slope of 1/4 inch per 10 feet length, towards a ground flare or burn pit, located at the minimum un-obstructed distance surrounding a flare from 250 to 500 feet, depending on heat release.



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Along the 165 feet (1/32 of a mile) of its length, well yard piping should run preferably above ground. Within this distance from the Well Head and Christmas Tree Equipment there should be a well kill connection for the mud injection. A flow line manual isolation valve shall be provided, at each well yard piping system, within 150 to 200 feet distance from the Wellhead & Christmas Tree Equipment. All 5 new gas flow lines will be adequate to use 4" (or 6") size Carbon steel pipeline.

A trunk line (12" Carbon steel) will be routed to Alestiqal and tie in to existing MFD No. 3 and burn pit, and be integrated with the existing control system. Trunk pipeline shall include pig launching at Arshad production manifold side and pig receiver at Alestiqal side.

This project shall be executed as Engineering, Procurement and Construction Contract (EPC).