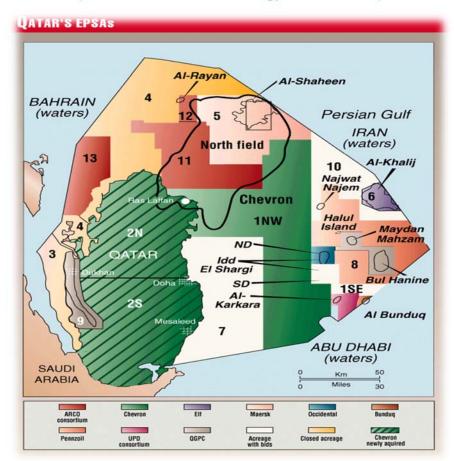


Iran Oil Industry

Bul Hanine Oil Field Redevelopment, Qatar

(Reference: Offshore-Technology & Pennwellnet)



Key Data

Project Type: Oil field redevelopment

Location: Offshore Qatar

Investment: QAR40bn (\$11bn)

First Oil: 1972

Production: 40,000bpd

Operator: Qatar Petroleum



Iran Oil Industry



Bul Hanine field is located approximately 120km to the east of the Qatari coastline and currently produces 40,000bpd.

The field was discovered in 1970 and opened in 1972.

Qatar Petroleum, the field operator, announced plans to redevelop the field in May 2014 to prolong the field life and increase production. The redevelopment is aimed at increasing the production to 90,000bpd by 2020 to counter its declining production.

Plans for the field redevelopment involve an investment of QAR40bn (\$11bn) making it one of the biggest projects to be managed and executed by Qatar Petroleum.

Oil fields managed by Qatar Petroleum that were developed using older technology have entered a redevelopment phase. These fields, including the Bul Hanine oil field, are currently undergoing seismic surveys, and reservoir and field-wide studies to estimate their reserves and long-term production prospects.

Oil recovery techniques, full field redevelopment plans, innovative technology, computer modelling and processing are some of the techniques that are being discussed for increasing field life.

Offshore work under the Bul Hanine oil field redevelopment



Iran Oil Industry

The Bul Hanine redevelopment project involves both offshore and onshore facilities that include new central production facilities and a onshore gas liquids processing facility at Mesaieed.

A total of 150 new wells are planned to be drilled by 2028 from both existing and new well-head jackets. Modification work will be carried out on the existing wellhead jackets for the excavation of new wells, in addition to installing 14 wellhead jackets.

Related production and injection flowlines will also be fitted accordingly.

An offshore central complex consisting of production, compression, utility and living quarter platforms will be installed. Fluids obtained from the wellheads will be processed at the complex. Topsides will weigh between 4,000t and 14,000t.

Two jackets are scheduled to be installed at the field by December 2016, while two more jackets are expected to be installed in July 2017. The combined weight of the four structures will be 3,495t.

Onshore details of Bul Hanine oil field redevelopment

Oil produced will be sent onshore to Halul Island for exportation. Approximately 900 million cubic feet a day (mcf/d) of sour, rich gas will be produced that will be transported to a new gas treatment facility in Mesaieed via a 150km subsea pipeline.

The gas will be treated for products recovery, while lean sweet gas obtained in the process will be sent back to the new offshore facilities for compression and injection via a new subsea pipeline.

Bul Hanine oil field production details

Bul Hanine oil field produces high-quality crudes, associated gas and condensate, and is operated by Qatar Petroleum through offshore production station PS-3.



Iran Oil Industry

"Bul Hanine oil field produces high-quality crudes, associated gas and condensate."

Oil with condensate is transported to Halul Island for storage and exportation. Gas produced is used as fuel gas at the production station and Halul, and also as feed for the Mesaieed natural gas liquids (NGL) facilities.

Key players involved with Bul Hanine oil field redevelopment

A contract was awarded to McDermott International in October 2015 for the engineering, procurement, construction and installation (EPCI) of four wellhead jackets.

McDermott's teams, based in Dubai, will perform the essential design engineering and procurement. Fabrication of jackets will also be performed at McDermott's Dubai fabrication facility. Installation will be done by vessels provided by McDermott's global fleet.

Swansea Surveys provided surveying expertise for onshore redevelopment activities that included real-time solutions for issues.