

# CASE: Barzan Gas Project, Qatar

## Lube Oil Flushing of 48 systems

**The Ocean Team Group client saved 1,400 working days purifying 300,000 liters of lubrication oil due to customized work method improvements.**

### **Ocean Team Group Contributes to the Society**

The \$10 bn Barzan Gas Project in Qatar is set to start in 2016 with full output expected in 2017. The project is developed by a joint venture (JV) of Qatargas and Exxon Mobil, which appointed RasGas as the project manager and as responsible for operating the plant once it is in service.

This Qatar-to-Qatar project is a powerful step forward in fuelling Qatar's overall industrial and human development, in line with the Qatar National Vision 2030.

### **Contracting for JGC, Japan**

The Barzan offshore platform is located 80 kilometers North-East of Ras Laffan Industrial City. While offshore facilities have been completed by Hyundai Heavy Industries of South Korea, onshore facilities are being constructed by JGC of Japan.

### **Production Output**

Train 1 & Train 2 are expected to produce around 1.4 billion standard cubic feet a day (bcfd) of sales gas. Barzan onshore project will produce about 22,000 barrels per day (bpd) of field condensate, 6,000 bpd of plant condensate, 34,000 bpd of ethane, and 10,500 bpd of propane and 7,500 bpd of butane.

### **Technological Advanced Project**

Ocean Team Group worked onshore on one of the largest and most technologically advanced gas projects in the region. The massive gas project in Qatar employed up to 20,000 people in the construction works. The project site covered about three square kilometers.

### **Scope**

Ocean Team Qatar was awarded the lube oil flushing contract of 48 systems comprising mainly of Start-up Blowers, Recycle Compressors, Steam Turbines, C3 Refrigerant Compressors and Residue Gas Compressor & Gas Turbines.



*Aerial View – Barzan Onshore Plant* ▲

# CASE:

## Barzan Gas Project, Qatar

### Lube Oil Flushing of 48 systems

#### Process

Ocean Team Group prepared Method Statements and mobilized the required equipment and qualified personnel. The flushing skids consisted of high flow pumps, electric heater units, and duplex filter units. Mesh screens were installed at various points in the supply and return lines of the lube oil systems to trap foreign objects. These screens were checked with regular intervals to monitor the purity of the lube oil.

#### Benefits for The Client

Besides using conventional oil flushing methods for turbine and compressor lubricating oil systems, Ocean Team Group developed and implemented a number of significant improvements to the flushing process during the project, thereby decreasing the flushing time significantly.

#### System Reliability, Extended Life at Reduced Cost

The LubriCARE program is a perfect example of Ocean Team Groups innovative capabilities to continually develop new methods for better results to the benefit of our customers.

The LubriCARE program equals reduced flush time and increased level of oil purity classes. For our customers this means higher system reliability, extended system and component lifetime and considerable cost savings due to reduced maintenance and repair costs and less production losses.

#### Contributing to the National Vision

Once completed, a major portion of the Barzan gas production will be used by the power and desalination sectors, enabling them to utilise clean-burning natural gas to support several of Qatar's new projects underway. Ethane produced from the plant will be used as a feedstock for the growing Qatari petrochemical industry.



Gas Inlet and Process area - Barzan Onshore Project ▲



Utility Area - Barzan Onshore Project ▲