



# PROJECT NEWSLETTER



## Status Summary

The new Seadrill-Sevan Louisiana drill rig is expected to arrive in Curacao on March 24th. Next stop: Gulf of Mexico. The Seadrill West Neptune is on track to start operations at Delta House in November 2014.

A very important milestone to note is that Delta House Hull fabrication at Hyundai is complete and the hull has been launched. It will be loaded onto the Dockwise Heavy Marine Transport Ship “Treasure”, and begin transit to the Gulf of Mexico before the end of March. ETA to the Kiewit Yard in south Texas is late May.

Production Systems Engineering is mostly focused on final design of the Instrumentation and Electrical Systems and Construction Support. Most of the Owner Furnished Equipment (OFE) has been delivered to Kiewit for integration onto the deck. Deck fabrication is continuing at a very rapid pace. Note the dramatic changes from the newsletter photos last month.

The first offshore facilities work will begin with installation of the mooring system suction piles and pipeline crossing mats. This work will begin in April. It is going to be a very busy summer offshore at the Delta House Field.

## Drilling & Completions

The Sevan Louisiana continues enroute to the Gulf of Mexico. The Louisiana will stop next in Curacao, in the Southern Caribbean, on March 24th where it will take on fuel, supplies, including drill pipe, and continue with commissioning of key rig systems. During the voyage from Walvis Bay, Namibia to Curacao, the pipe handling systems were commissioned. After a short 9-10 day journey from Curacao, it should be in the Gulf of Mexico. The remaining rig IAT (Integrated Activity Testing) will take place in the GOM at the Malachite well location in the Delta House field. We will fully deploy the BOPs on Malachite, function test all subsea systems and emergency disconnect protocols. By early to mid-May, we expect to move to MC 79 and drill a well to TD, prior to moving to the next two Delta House wells for a drill and complete cycle on each well.

The Seadrill West Neptune is scheduled to wrap up final construction in June at Samsung Heavy Industries Shipyard (SHI) in Geoje City, South Korea. The naming ceremony for the rig is set for April 2nd and Carol Eaton, LLOG’s Regulatory Manager, will serve as the Godmother to the West Neptune.

The Seadrill West Neptune is due to depart Korea in July 2014, transit from South Korea to GOM in late September – early October, and will commence operations in GOM in late October 2014. The initial work scope will be to complete 6 Delta House wells prior to the start of any drilling operations on the Neptune.

### Inside This Issue:

Hull Fabrication	2
Production Equipment Fabrication	2
Production Deck Fabrication	3
Production Systems Engineering	4
Mooring & Installation	4
Subsea Systems & Pipeline Engineering	5



- **Major Events:**

Steel Cutting	March 4, 2013
Keel Laying	July 15, 2013
Flooding of Hull	November 19, 2013
Launching	March 18, 2014
Light Ship Survey	March 19, 2014
Ready for Sail Away	March 21, 2014
Wet Tow to Load Out Site	March 21-22, 2014
Load Out to Dockwise vessel	March 22-24, 2014

- HHI has expended 777,492 man hours to date. At time of report, overall construction progress is 96.1%
- Pre-commissioning is complete
- Final walk down of unit completed and issuance of Provisional Acceptance Certificate
- Unit is being prepared for towing and load out
- Dockwise and Matt Daniels inspection of sea fastenings and loadout items is under way
- HHI is preparing H Dock for Dock Out of Delta House
- Sail away ceremony is planned for March 19th with Delivery of Unit on March 21st



Current Hull Status

## Production Equipment Fabrication

The following events have taken place since our last report:

NOV Petrex completed their scope of work on the Condensate Stabilizer and delivered the skid to Kiewit.

At Exterran, the Lower Flash Gas Compressor Skid has been completed and shipped to Kiewit.

Structural fabrication on the Diesel Transfer Skid is nearly complete at AGI Industries. The fabrication of the process piping is under way and most of the valves, instruments and equipment have been received. The completion of this skid depends on the arrival of the Centrifuge Pump which will arrive at AGI in the near future.

The Flare Boom being fabricated at Acadian Contractors is structurally complete and is currently being coated in preparation for shipment.



Condensate Stabilizer Skid

The Delta House Topside has made great strides since the last issue. Structural work is down to bits and pieces, such as stairs, ladders, small access platforms and installation of the crane pedestals.

Interconnect piping is moving forward with the connections to equipment at all levels of the platform. The installation of piping on the production module is nearing completion, and module should be ready to set in mid-March. The majority of the piping was installed on the compression module, generation module, and each of the pipe racks prior to installation on the topside. The majority of the piping is installed on the pipeline pump platforms and is almost ready for installation on the topside.

Electrical has installed nearly all the lights on the topside and platforms, and run cables to have all of the lights burning. The installation of the junction boxes is almost complete. Installation of the cable tray is almost complete, which is necessary to begin pulling cables. The majority of the purchased cable is now on site and we anticipate that cable pulling will begin shortly. The MCC building has been hooked-up with temporary power.

Instrumentation has already installed some tubing runs on the cable tray. RIO panels have been installed at various locations on the platform and routings are being determined, and supports and trays are being installed. Most of the tubing and fittings have been received on site.

Coatings continue all over the topside and modules. The bulk of the blasting and painting has been completed, but due to cutting, fitting and welding all over the platform, coatings work is never done.

Since the last issue, the crane access platforms have been installed on both crane pedestals. The West crane pedestal will be set soon. Both cranes have been assembled and are ready for installation. Pipe racks #1, 5, and 6 have been installed on the topside, only pipe rack #6 remains to be set. The generation module, compression module, North lifeboat platform and the lube oil access platform have all been set on the topside (all were fabricated on site). The instrument air skid, emergency generator, condensate stabilizer skid, flash gas compressor, and the glycol regeneration skid were all received and installed on the topside. The pipeline pump skid modules and the grocery box/trash compactor platform were both fabricated on site and are ready for installation on the topside.



Delta House Topside



Production Module

## **Engineering/Design:**

- Overall progress for Engineering Topsides through February is approximately 98% complete.
- Continuing Factory Acceptance Testing (FATs) and final inspections of major equipment packages.
- Ongoing reviews of Vendor Data Packages.
- 100% of P&ID's have been issued Rev 0.
- 100% (4,672) of Construction Isometric Drawings have been issued.
- Incorporating vendor packages into the 3D model as they are received.
- Continued HMI/PLC development.
- Ongoing submittals / resolutions to DNV Comments.
- Instrument Cable & Tubing Tray Schedules completed.
- Continue issuing Wiring and Instrument Location Plans.
- Comments issued for Operations Manual to Exmar
- Continuing Interfaces between Kiewit, Exmar, Pinnacle, and GATE.
- Electrical One Line Diagrams Issued.
- Electrical Panel Board Issued.
- Electrical Classification Drawings Issued.
- Continue Issuing Construction Work Packages.

## **Procurement:**

- 111 Purchase Orders have been issued (2 issued in February).

## **Mooring & Installation**

### **Mooring:**

- Suction Pile fabrication is 75% complete at Intermoor's fabrication yard in Morgan City.
- Piles 1 and 2 transported to Port Fourchon awaiting mobilization for installation.
- FAT (factory acceptance testing) nearing completion on Piles 3 and 4 for an end of March sail away.
- Mooring pad eye installation nears completion.
- The 12 piles are on schedule for 2nd Quarter of 2014 completion.

### **Installation:**

- Tow-out contract to be awarded by end of March.
- Preparations underway to begin suction pile installation.



Pile 1 Lift Test

## TOPSIDES

- **Hydraulic Power Unit (HPU) and Topsides Umbilical Termination Assembly (TUTA)** (Omega, Delivery: 3/17/14) –HPU fabrication is almost complete. DNV is scheduled to begin certification process of all HPU's in early March before shipping to Kiewit.
- **VK 817 Topsides** – Launcher/Receiver skid and equipment RFQs in development. Purchased compact and large diameter valves.

## SUBSEA

### **Pipeline & Riser**

- Line Pipe (FBE, GSPU of 6" & 8", and SCR end boring)
  - 6" Pipe – FBE coating and end boring are 100% complete. GSPU is 60% complete.
  - 8" and 12" Pipe – 100% complete.
  - 16" Pipe – FBE coating is 87% complete and end boring is 100% complete.
- Titanium Stress Joints (2D/RTI, Delivery: 6/30/14) – TSJ fabrication is ongoing. Steel forging mechanical testing is complete and MTR's are ongoing. 8" forgings failed tensile tests and need to be re-heat treated. Began testing the TSJ bushings.
- VIV Strakes (AIMS, Delivery: 6/24/14) – Fabrication has commenced.

### **Manifolds, Jumpers and PLETs**

- Subsea Manifolds (Spitzer, Delivery: 5/10/14) – Fabrication is ongoing, deliveries are on schedule.
- PLETs – Technip awarded PLET fabrication to Omega, and fabrication has begun.
- Jumper – All loose components ordered. RFQ for fabrication will go out by mid-March.

### **Subsea Distribution**

- Umbilical Fabrication (Duco, Delivery: 10/30/14) – Delivery for SOB2 has slipped to late October due to tube supply issue. Duco investigating other options.
- Subsea Controls – FMC has begun fabrication of UTH's, HDU's and SFL's. All other hardware is on order. Topside controls will deliver to Kiewit in May.
- Issued PO for bend stiffener connectors to Deepsea Technologies.

**Pipeline & Riser Installation** (Technip, Completion: 10/15/14) – Technip continued weld qualification testing on the 6" and 12" pipe at their spoolbase in Mobile, AL. Awarded pull-in engineering, fabrication and rental to Versabar. Installation engineering and project planning is ongoing.

**Umbilical & Subsea Controls Installation** – Completed bid evaluation. Pull test of MC 546 sample to simulate Delta House will take place in early March.

**Export Pipelines** – Valve fabrication and testing is ongoing at Cameron. Preparing RFQ for subsea tie-in fabrication. VK 859 SSTI netguard design is ongoing, with a fabrication RFQ to follow.



6" and 16" Pipe for Stress Joints



12" and 16" Ball Valves