



# PROJECT NEWSLETTER



## Status Summary

Note that there is no drilling section in this edition of the newsletter. Rest assured that the rigs are on the way. There is simply nothing new on the drilling front to report this month.

The Dockwise HTV “Treasure” with the Delta House Hull on board is underway to Ingleside, TX. At the time of this writing, she has rounded the tip of South Africa and is in the southern Atlantic Ocean. ETA to the Kiewit Yard in south Texas is May 16th.

All major equipment has been delivered to Kiewit and has been placed on the Production Deck. Interconnect piping installation is continuing at a very rapid pace. Instrumentation and Electrical installation is ramping up. The topside deck photos in this newsletter are very close to what the final deck will look like.

The offshore facilities work has begun with installation of the mooring system suction piles and pipeline crossing mats. Activity offshore will continue to ramp up over the coming months.

Inside This Issue:	
Hull Fabrication	2
Production Systems Engineering	2
Production Deck Fabrication	3
Production Equipment Fabrication	3
Mooring & Installation	4
Subsea Systems & Pipeline Engineering	4



Hull Exiting Dock



Hull Load-out onto Dockwise Vessel

## • Major Events:

- |                               |                   |
|-------------------------------|-------------------|
| Steel Cutting                 | March 4, 2013     |
| Keel Laid                     | July 15, 2013     |
| Flooding of Hull              | November 19, 2013 |
| Launching in H Dock           | March 19, 2014    |
| Dock Out of Hull From H Dock  | March 20, 2014    |
| Ready for Sail-away           | March 21, 2014    |
| Wet Tow to Load-out Site      | March 21—22, 2014 |
| Load-out onto Dockwise Vessel | March 22—24, 2014 |
- Delivery and Acceptance Signing occurred March 26, 2014.
  - Delta Marine Services arrived at HHI on March 21<sup>st</sup> and began a 24-hour tow to load-out site.
  - Load-out of unit was on March 22<sup>nd</sup> near ChinHae (northern approach to Geoje Island). The load-out location is approximately 75 nautical miles from HHI offshore yard.
  - Dry tow of unit will be approximately 53 days to KOS yard after sea fastenings are complete and sail certificate has been issued by marine warranty surveyor.
  - Dockwise vessel underway to Keiwit GOM March 26, 2014, 08:50 KST
  - Approximate arrival date at Keiwit - May 16, 2014.



Sail-away Ceremony—Blair Kirkland, Tom Bare, Glen Authement, Mijoo Choi, Polly Bare, Ji-Hyun Lee, H.G. Park and Craig Mullett



Sail-away Ceremony—Craig Mullett, Rick Fowler and Eric Zimmerman

# Production Systems Engineering

## Engineering/Design:

- Progress for Engineering Topsides through March is approximately 99% 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.
- To date, approximately 4672 (100%) (Revised estimated total) have been issued.
- Incorporating vendor packages into the 3D model as they are received.
- Continued HMI/PLC development.
- Ongoing submittals / resolutions to DNV Comments.
- Continue issuing Wiring and Instrument Location Plans.
- Continuing Interfaces between Kiewit, Exmar, Pinnacle, and GATE.
- Continue Issuing Construction Work Packages.
- Continue LOOP Diagrams

## Procurement:

- 113 (revised total) total Topsides Purchase Orders will be completed by the end of the project. Two were issued in March.

## Production Deck Fabrication



The Delta House Topsides has had another very good month. Structural work is a matter of picking up loose ends and installing the tubulars and stiffeners required for integration. All the major equipment has been set on the topside, including the living quarters, both cranes, pipe racks, and all the large modules that were fabricated on-site. Only a few small skids remain to be set when they arrive, along with stairs, ladders and small platforms.

Again, interconnect piping continues on all levels of the platform and modules. All of the pipeline pump platforms have been installed, along with the production module. Hydrostatic testing has begun with several already completed. The United States Coast Guard and DNV are witnessing the systems that require regulatory approval.

Electrical continues to ramp up with workers. They have started pulling the large cables from the MCC building to the pipeline pumps, generators and compressors. Once the cables reach their destination, they are being terminated on both ends. There are still some supports to be installed to support the cable trays. The big push will now be on the electrical work.

Instrumentation continues to run tubing in trays all over the deck and at all levels, and install supports for the tubing trays. Most of the panels have been installed, and work is in progress to pull the tubing into their locations to be terminated.

The sand blasters and painters continue to do touch-up work where required. This will be an ongoing process until the project is completed.



Delta House Topside



Setting of the Living Quarters

## Production Equipment Fabrication



The following events have taken place since our last report:

The NGL skid is in the early stages of fabrication at **Accurate Measurement**. The structural elements of the skid have been constructed.

Fabrication on the Flare Boom at **Acadian Contractors** is complete and is being prepared for blast and paint.

At **AGI Industries**, the Diesel Transfer Skid is currently disassembled and at the paint facility for coatings. All major components have arrived, such as the centrifuge skid, pumps, motors, filters, and potable water bladder. Once coatings and reassembly have been completed, I & E will begin working on the skid.



Flare Boom

# Mooring & Installation

## Mooring:

- Suction Pile fabrication is 92% complete at Intermoor's fabrication yard in Morgan City.
- Fabrication of piles 1 through 6 are complete.
- Fabrication of 6 remaining piles is on schedule for 2nd quarter of 2014 completion.

## Installation:

- Tow-out was awarded to Crowley.
- Piles 1 through 4 are installed.
- Preparations underway to begin mooring preset installation.



Pile Installation Going Overboard

# Subsea Systems & Pipelines Engineering



## TOPSIDES

### **Hydraulic Power Unit (HPU) and Topsides Umbilical Termination Assembly (TUTA)** (Omega, Delivery: 3/17/14)

- Fabrication is complete and units have been shipped to Kiewit.

**VK 817 Topsides** (UPCS, Delivery: 7/14/14) – Launcher/receiver skids awarded to United Production & Construction Services.

## SUBSEA

**Engineering & Regulatory** – Received BSEE approval of CVA final design reports. All infield pipelines, umbilicals, and the oil export pipeline permits have been approved by BSEE.

### **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 72% complete.
- Sumitomo continued manufacturing 6" SCR and line pipe for new satellite pipeline, 87% complete.
- Began shipping 12" line pipe from Bayou to Technip spoolbase.
- Titanium Stress Joints (2D/RTI, Delivery: 6/30/14) – TSJ fabrication is ongoing. Continuing UT and mechanical testing of TSJ and steel forging components.
- VIV Strakes (AIMS) – 12" antifouling strakes scheduled for May delivery. 6" and 8" strakes scheduled for August delivery. Remaining 12" and 16" strakes scheduled for September delivery.

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

- Subsea Manifolds (Spitzer, Delivery: 5/10/14) – Fabrication is ongoing, deliveries are on schedule.
- PLETs – Fabrication at Omega is ongoing. Awarded PLET insulation to Perma Pipe.
- Jumper – Agreed to VOR with FMC to purchase 4 sets of jumper fabrication hubs and support structures.

### **Subsea Distribution**

- Umbilical Fabrication (Duco, Delivery: 10/30/14) – Delivery for SOB2 has slipped to late October due to tube supply issue.
- Subsea Controls – Manufacturing continues on schedule at FMC.

**Pipeline & Riser Installation** (Technip, Completion: 10/15/14) – Technip continued weld qualification testing on pipe at their spoolbase in Mobile, AL. Installation engineering and project planning is ongoing. Received final proposal from Cal Dive for dive scope. LLOG approved Technip Change Order #6 for the satellite pipeline.

**Umbilical & Subsea Controls Installation** – Trial pull testing of the MC 546 umbilical sample to Delta House calculated top tensions has been completed by Oceaneering. Plan to issue umbilical and controls installation award to Oceaneering by first week of April.

**Export Pipelines** – Hydrotest completed on 12" hot tap. Received bids for net guard fabrication. Awarded subsea assembly fabrication to Performance Energy Services.