

## **Rig Engineering Case Study 2720** Sedneth 701 Flare Boom Verification

**Project description:** Sedneth 701 required flaring off gas via flare boom and burner heads during flowing of the well. EXPRO has been selected to perform this work and will furnish a new 60 feet boom to allow for this operation to take place. **R.E.** scope of work

Rig Engineering (RE) has been

tasked to assist with following

1) To assist with rigging arrangement and mounting of

stages:



Rig Name: Sedneth 701 **Rig Type:** Semi-Submersible **Owner name:** Transocean Inc. Classification Society: ABS Pertinent code: ABS Modu Pertinent class rule: ABS Modu

Code design: ASD Click below to see 3D model!



*Stage 1* addressing new structural setup showing the high stress area out with code allowable.



Assessment of the existing and revised system, are addressed in 5 stages as follows:

FEA Model

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Photo before modification

Stage 2 addressing the method to strengthen the high stress member to within code allowable.



Stage 4 addressing detailed connection at deck and elevator house interface.





Stage 3 detailed assessment of foundation plate at ٠ EXPRO pivot plate interface.



Stage 5 addressing detailed main deck plating that assist King Post foundation and connection to elevator house.





Bending Moment





regime provided by EXPRO. 3) Where required and warranted, generate strengthening / fabrication drawings to allow for the implementation of the new system.

4) General ad hoc assistance on material, welding procedure and change out of wire rope replacement to hard pipe with clevis end connections.

## **Engagement** Condition

Upload your problem to us and give us relevant input to allow us to resolve your problem, we will need:

- 1. As built of structure to create 3D FEA model.
- 2. Static and environmental loads of rig.
- 3. Details information about new flare boom installation.



Key word: Sedneth 701; Semi-submersible; Flare Boom, Burner Head





