SKPS
Sap & Kaps Petroleum Services l.l.c

Case Study

48” Sea Water Header with Rivet in 20 mm Hole using Clock Spring® Contour Composite Wrapping

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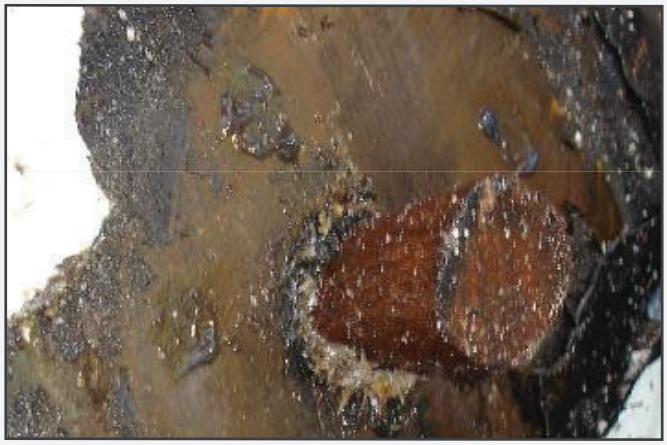
1 Defect area

48” Sea water header had a severe leak that required to be sealed using a wooden rivet. Shutting down the line was not an option, the “Clock Spring Contour” was the nominated method of repair to hold the “Leak” for at least another 2 years.



2 Clock Spring® Contour Application

The repair was completed over a period of 2 days. The 4 layers where put on first day (after the surface was prepared to SA 2/1 2) and the 4 layers the next day.

3 Clock Spring® Contour Application

The rivet was not removed and the “bulging” on the center can be clearly seen at the 5 O’clock position.

4 Design Criteria

Operating Temperature	: Ambient
Operating Pressure	: 4 barg
Defect Type	: Internal Corrosion
Size	: 48 inch
Material	: API5L
Defect Analysis	: Wall metal loss 20mm dia hole leak
Orientation of leak	: 5 O'clock
Lifetime	: 5Years