



Sap & Kaps Petroleum Services I.L.C

24" Repair of Sea Water Header Leakage Composite Repair Case Study



24” Repair of Sea Water Header Leakage (Tee Joint)

01

(Fig. I):- A 24” Tee joint sea water header had through wall metal loss and water leakage due to internal corrosion. The leak was arrested by welding a 10” pipe branching off at the 6 O’clock position.

02

(Fig. II):- The repair methodology was requested to secure the full geometry from any further leakage due to internal corrosion. Clock Spring Contour composite wrapping technology was proposed by SKPS as a repair for the geometry.

03

The complete configuration of the pipe including the branches was reinforcement.

Fig. III):- 5 layers and total length of 3.5 meters where applied on the pipe and the relevant branches. The application, including the surface preparation and necessary safety precautions where completed in 2 days.

Design Criteria

Operating Pressure	:	8 PSI
Operating Temp	:	Ambient (35°C - 50°C)
Defect Type	:	Internal Corrosion
Size	:	24”
Material	:	Carbon Steel—Cement lined
Defect Analysis	:	Through wall metal loss due to internal corrosion
Orientation of Leak	:	6 O’clock
Life time	:	3 years

Location: Abu Dhabi, U.A.E.

For more information on this repair or any similar repairs, please contact us :

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