Offshore Platform Repair, Kuwait

Successful Platform Repair Completed Using Wet Welding Techniques

Speciality Welds Ltd completes a successful underwater wet welding repair for Kuwait National Petroleum Corporation (KNPC) at MAB Sea Island off Kuwait.

A vessel moored up alongside the boat landing platform.

Following the discovery of a weld failure on the boat-landing platform, MD-1 at MAB-SEA Island, I had to fly out and conduct a weld repair, in record time, on behalf of Kuwait National Petroleum Company. The weld failure involved a complete fracture of one of the 14" circumferential welds supporting members to the boat-landing platform.

Upon arrival, I conducted an inspection dive to ascertain the damage for myself. After which, I wrote the welding procedure and method statement for its repair. Under the watchful eye of KNPC's representative, I conducted a formal welding procedure test for approval by the client. The repair involved grit blasting the member clean, realigning the members, and manufacturing a saddle connection to join the members together, as the damage wouldn't allow for direct repair.

Photo shows the failed weld/ member

Photo shows the test sample weld.

The welding, which was carried out by David Keats (welding specialist & consultant) was performed to AWS class 'B' specification, using the companies' own branded 'Barracuda' welding electrodes. The repair, which was conducted at the –20' level, was made particularly difficult as strong seas and poor visibility often hampered efforts. It is believed that this was the first time an underwater wet welding procedure had been used to complete a structural weld for KNPC. This was completed prior to commencement of the work, to ensure a satisfactory weld could be made, using the welding procedure specification.

Photo shows top section of weld repair

After completing the repair, divers from Int'l Naval Works completed visual and NDT examinations to ensure compliance to the specification, which I'm happy to say did

Photo shows underside of weld repair