

INSTALLING TWO LARGE IMPRESSED CURRENT ANODE SLEDS ON A SHELF PLATFORM

Two Impressed Current Cathodic Protection (ICCP) anode sleds installed to extend the life of the Ewing Bank 305-A platform by 20 years.

THE PROBLEM

In January 2013, Deepwater Corrosion Services retrofitted an eight-leg, fixed steel jacket in the Gulf of Mexico with two RetroBuoy™ impressed-current cathodic-protection (ICCP) sleds.

Sitting in about 300ft of seawater, the platform's CP life will be extended by 20 years.

INSTALLATION

Using a dive-support vessel, both Retrobuoy systems were installed in two days offshore.

LOCATION ON SEAFLOOR

In order to protect the jacket evenly, one RetroBuoy was put on bottom approximately 150 feet away from the northeast corner of the platform. The other was installed approximately 150ft away from the southwest corner. The cables from the Retrobuoy were unreeled from a deck-mounted winch on the vessel and laid in a predetermined path on the seafloor. The pulling end of the cable was left close to the bell mouth guide on an empty riser.

PULLING UP THE CABLE

Before the Retrobuoys were installed, crews installed a pull-in cable down the selected riser. After the buoys were installed on bottom, this pull wire was connect to the pull head on the end of the subsea cables. Pulled across the seabed and up through the riser, each cable was terminated topside in a hang-off support flange at the sub-cellar deck where it could be connected to the rectifier.



Photo: After each Retrobuoy is terminated and installed on the sea floor, it is hooked up to a transformer rectifier on the platform deck.



Photo: EW-305-A This platform is situated in the Gulf of Mexico in 300 ft of seawater.



Two Retrobuoy™ sleds were designed and built to provide 800 total amps of cathodic protection current.