Corrosion of API X70 steel due to near shore sediment

Abstract :

Pipelines those have been buried under seabed sediment are at risk of corrosion due to the corrosiveness of this particular environment. Hereby, corrosion experimental study has been conducted to highlight the importance of near shore sediment as an aggressive environment towards steel structures. Coupons made from API X70 steel of actual pipe have been considered to calculate the corrosion rate by means of weight lost determination at both near shore and offshore areas. The results show that the corrosion rates of coupons buried at near shore area were higher than corrosion rates at offshore. Convincingly, near shore environment has shown a significant influence on corrosion rates of steel pipelines.