

## Pengamatan perilaku korosi pipa baja api 5l grade b penyalur minyak mentah dalam lingkungan air formasi berinhibitor

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### Abstrak

Telah dilakukan penelitian untuk mengetahui pengaruh air formasi berinhibitor terhadap perilaku korosi dan laju korosi baja API 5L Grade B. Metode yang digunakan yaitu Weight loss dan Polarisasi Potensiodinamik. Uji celup dilakukan dengan variasi waktu 8, 11, dan 14 hari. Hasil penelitian menunjukkan bahwa kondisi baja API 5L dalam larutan air formasi berinhibitor mengalami pemasifan dan laju korosi semakin menurun seiring pertambahan waktu. Hasil pengujian XRD menunjukkan bahwa produk korosi yang dihasilkan adalah Fe<sub>3</sub>O<sub>4</sub>.

.....A research has been conducted to know the influences formation water with presence of inhibitor to the corrosion behaviour and corrosion rate API 5L Grade B steel. Weight loss and Potentiodynamic Polarization methodology has been carried out. An immersion test with various time 8,11, and 14 days has been done. This research has show that passivity happened and the corrosion rate has decreased as the increased of time. The corrosion product of Fe<sub>3</sub>O<sub>4</sub> has been known as the result of XRD test.