Corrosion Study Requires Field/Lab Data Case Stuy of Syrian Crude Pipelines[1]

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Abstract

Nowadays, it is quite difficult to live without oil because This product represents the backbone of the world economy. Petroleum poses a range of risks when released into the pipes, production, transport and treatment of crude oil, although these problems have always solutions but some of them remain complex and numerous. Among those corrosion problem is the metal of pipes for example. Crude oil pipelines, which transport the production from one oilfield to a refinery, case study has been taken from Syrian crude pipelines, one of these pipes is for light crude , the other is for heavy crude oil. The scope of work is as following :

•To estimate corrosion problems in oil transportation system and determining the areas of active corrosion, of crude oil, by using smarts pigs that give corrosion rates (depth, length, width, degree) and predicted types of corrosion.

•To evaluate the effects of environmental factors and operating conditions.

•To evaluate the effects of mean shear rate and shear stress on crude oil

•Incorporation between the corrosion types, severity, its causes, and the metallurgical data and operating system

[1] For the paper in Arabic see pages (313-342).

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