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Evaluation of Methods to Eliminate Sulfur from Crude Oil among Iran oil Reservoirs

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Abstract:

According to problems of environmental pollution problems due to burning fuels having high Sulfur as furnace oil and because of related limitations, Sulfur removal methods have been emphasised to heavy crude oil patches. If Sulfur removal is necessary to furnace oil, and parts of crude oil would be processed but it should be pointed that this process include of operational problems as furnace oil Sulfur removal because of asphaltic components and metal contaminations developed chemical methods to mercaptan may not be used to crude oil and heavy parts. Therefore, it is attempted to provide new method to remove Sulfur composition from crude oil. in this paper all related methods to remove Sulfur compositions have been evaluated and operational problems have been assessed. Then, the best possible method has been introduced and supplementary discussion and economic evaluation have been provided.

Keywords: Sulfur Removal, Iran Petroleum Reservoirs, Mercaptan

Introduction:

According to environmental pollution problems of burning fuels having high Sulfur as furnace oil and due to related limitations, the methods to remove Sulfur have been emphasised to crude oil patches. If Sulfur removing is necessary to furnace oil, all crude oil parts should be processed to remove Sulfur. Therefore, the idea to remove Sulfur from crude oil would be drawn. There is operational problems due to having asphalt composition and metal contaminations related chemical methods to mercaptan may not be used to crude oil and heavy parts. By this extensive efforts have been allocated to provide new methods to remove Sulfur from crude oil. In this paper related methods have been evaluated to remove Sulfur from crude oil and operational problems have been discussed (Borgne, 2015).

Crude oil is complex mixture of hydrocarbons by extensive range of boiling point.