

Reuse of the Produced Water in Steam Assisted Gravity Drainage Process (SAGD)

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Produced water has been effectively and economically treated for reuse in steam Assisted Gravity Drainage Process (SAGD).

Contaminants in the produced water such as Oil, and Suspended Solids (SS) are normally removed by Flotation and Filtration processes. However, contaminants such as Silica (Dissolved), Hardness as (CaCO_3) and Total Dissolved Solids (TDS) will dictate the selection of treatment process schemes.

This paper will present and discuss some of the rough guidelines for the selection of treatment processes including, but not limited to Two-Stage Ion-Exchange Softening (SAC/SAC), Two Stage Softening (SAC/WAC), Lime softening and Evaporation. Furthermore, detailed discussion of each treatment process will be presented.