

Enhanced Oil Recovery in the Tyler Formation (Early Pennsylvanian) Using Miscible Phase Carbon Dioxide Flooding

Michael Farzaneh¹

¹University of North Dakota, Grand Forks, ND

ABSTRACT

The Tyler/Heath pool production has dropped significantly despite a boom in the Williston Basin. Due to its high paraffin content and high viscosity, unconventional exploitation has not been shown to be advantageous for the Tyler pool. Carbon dioxide is frequently used as an enhanced oil recovery method in oil and gas plays and can possibly be used in the Tyler. Several samples taken from various depths within the Tyler are saturated with Tyler oil and then flooded with carbon dioxide to determine if a carbon dioxide and kerogen miscible phase is possible. If miscibility is observed it may be possible to use carbon dioxide flooding as an enhanced oil recovery method in the Tyler Formation.