

## Accepted Manuscript

Title: Emulsification and Improved Oil Recovery with Viscosity Reducer during Steam Injection Process for Heavy Oil

Authors: Zhengbin Wu, Liu Huiqing, Xue Wang, Zequan Zhang



PII: S1226-086X(17)30695-0  
DOI: <https://doi.org/10.1016/j.jiec.2017.12.033>  
Reference: JIEC 3789

To appear in:

Received date: 23-10-2017  
Revised date: 7-12-2017  
Accepted date: 16-12-2017

Please cite this article as: Zhengbin Wu, Liu Huiqing, Xue Wang, Zequan Zhang, Emulsification and Improved Oil Recovery with Viscosity Reducer during Steam Injection Process for Heavy Oil, Journal of Industrial and Engineering Chemistry <https://doi.org/10.1016/j.jiec.2017.12.033>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

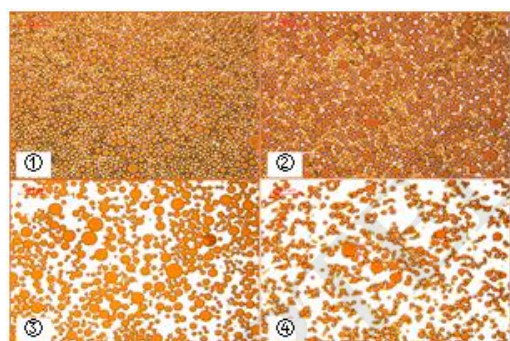
# Emulsification and Improved Oil Recovery with Viscosity Reducer during Steam Injection Process for Heavy Oil

Zhengbin Wu,\* Liu Huiqing, Xue Wang, Zequan Zhang

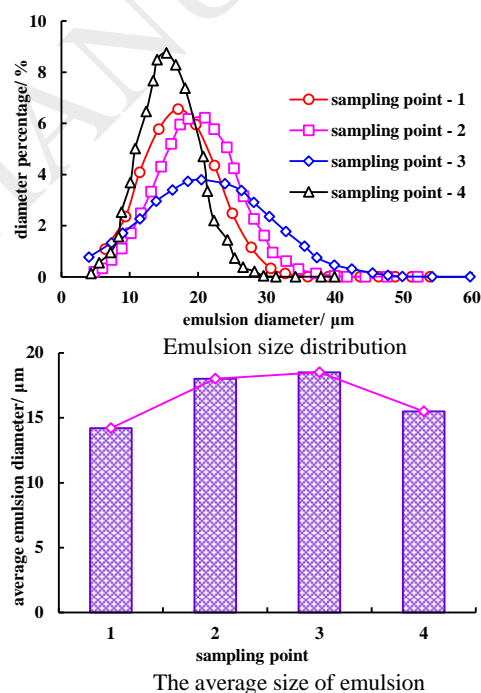
State Key Laboratory of Petroleum Resources and Prospecting, China University of Petroleum, Beijing 102249, PR China

## Graphical abstract

With the injection of steam+VR, plenty of small emulsions generated near the inlet. The emulsions were newly formed, so that they were relatively smaller and not very stable. As the steam+VR was injected continuously, some emulsions coalesced into bigger emulsions and with the further migration of emulsions in the porous media, the emulsion size became small due to the enhancement of shear action.



Microscopic images of emulsions at each sampling point



Download English Version:

<https://daneshyari.com/en/article/6666789>

Download Persian Version:

<https://daneshyari.com/article/6666789>

[Daneshyari.com](https://daneshyari.com)