Using geo-electrical methods as a monitoring aid for Microbial Enhanced Oil Recovery

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During the 2nd period of the experimental cycle we independently confirmed that MEOR processes did happen in our system by analyzing stored fluids with GS/MS. This analysis confirmed that SIP signals are the result of microbial induced oil degradation in our experimental columns.

We are moving forward with experiments to quantitatively link geophysical measurements with MEOR processes and adapt mechanistic models to better describe the SIP signals. We believe this research could significantly impact tertiary oil recovery projects and interest from the oil industry further suggests this.

The results are also applicable for remediation projects involving hydrocarbon contaminants.