

# Supplementary Material: Prediction of Temperature and Viscosity Profiles in Heavy-Oil Producer Wells implementing a Downhole Induction Heater

Javier Ramírez<sup>1,\*</sup>, Alexander Zambrano<sup>2</sup>, Nicolás Ratkovich<sup>1</sup>

<sup>1</sup> Department of Chemical and Food Engineering, Universidad de los Andes,  
Cra. 1 N °18A – 12, Bogotá 111711, Colombia

<sup>2</sup> BCPGroup Artificial Lift, Autopista Medellín Km 0+440 Mts., Tenjo 250208,  
Colombia

\*Correspondence: [ja.ramirezs2@uniandes.edu.co](mailto:ja.ramirezs2@uniandes.edu.co)

## 1 Supplementary Material

Table S1: Dynamic Viscosity and Reynolds Number of Oil function of temperature.

<b>T</b> [K]	$\mu_0$ [Pa · s]	<b>NRe</b>
310.93	2.1699	0.0107
322.04	0.80739	0.0288
333.15	0.34908	0.0666
344.26	0.16855	0.1379
355.37	0.08852	0.2626
366.48	0.04962	0.4683
377.59	0.02929	0.7935
388.71	0.01801	1.2906
399.82	0.01143	2.0334
410.93	0.00743	3.1283
422.04	0.00491	4.7347
433.15	0.00327	7.1069
444.26	0.00218	10.6807
455.37	0.00143	16.2804
466.48	0.0009	25.6899
477.59	0.00053	43.6536