

Abstract Submitted  
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**Experimental model for visualization of the isotherm patterns conformed in the steam chamber in SAGD oil recovery** AYAX H TORRES-VICTORIA, SALOMN PERALTA-LPEZ, SEPI ESIME Azcapotzalco Instituto Politecnico Nacional, FERNANDO ARAGN-RIVERA, Universidad Nacional Autonoma de Mxico, ABRAHAM MEDINA-OVANDO, SEPI ESIME Azcapotzalco Instituto Politecnico Nacional, JAIME KLAPP, Instituto Nacional de Investigaciones Nucleares — Steam assisted gravity drainage (SAGD) method was designed to inject steam into a horizontal pipeline to increase the temperature in an oil reservoir. The injected steam conforms a characteristic chamber and finally the previously heated oil, now with low viscosity is recovered by gravity drainage to other horizontal pipeline located below the injection pipeline. An experimental model was designed according to the theoretical model proposed by Higuera Medina to observe the isotherm patterns conformed into the steam chamber during the SAGD. Their numerical computations were compared with our experimental temperature values obtained from infrared thermography. The experimental model also proved the existence of a thin layer at the boundary of the steam chamber where the condensed water flows into the recovery pipeline.

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