Ecological Experiment with the Impact of a Magnetic Field on ESPO Oil

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Abstract: The features of changes in the properties of oil after exposure to a magnetic field under environmentally safe conditions are studied. The studies were carried out with three classes of ESPO oil: 1 – low-sulfur (up to 0.6 %); 2 – sulfur (0.61 – 1.8 %); 3 – high-sulfur (1.8 – 3.5 %). The mechanism of the effect of a magnetic field that does not affect the temperature of crude oil without the formation of harmful substances is considered. The efficiency and environmental safety of using magnetic impact for oil processing at different values of density and processing time are assessed. The results of experiments with the impact of a magnetic field on oil are presented, and the results of changing the density of oil are given in percentage terms.

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