



High permeability heavy oil reservoir nitrogen injection EOR research

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Nitrogen chemically very unreactive under normal showed great inertia. It is difficult to burn , dry, non-explosive , non-toxic , non-corrosive , and thus the use of safe and reliable. Coefficient of variation of nitrogen increases with increasing pressure , less affected by temperature . Under the same conditions, the ratio of the nitrogen gas formation volume factor carbon dioxide gas is high, about three times the carbon dioxide , the greater the elastic expansion of nitrogen play a beneficial role in flooding . EOR project trends increase the number of oil and gas injection gas injection from the calendar view, carbon dioxide miscible flooding gas injection EOR is the focus of the flue gas project currently has less to carry , nitrogen flooding is still subject to considerable attention. Note the nitrogen requirements of the basic conditions for enhanced oil recovery from major tectonic conditions , reservoir properties of crude nature of the gas injection timing and other aspects to consider , for different reservoir injected in different ways. Oilfield against a thick , high permeability and other characteristics, to improve oil recovery by injecting nitrogen indoor experiments conducted nitrogen injection process factors and supporting technical studies ; and introduced the field of nitrogen injection EOR field test conditions .