

### **Edge Oil Field Waters as Medical Waters.**

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The descriptions of medical water in Iwonicz region (southern Poland) from 17<sup>th</sup> century indicated that contemporary mineral water springs contained some amounts of liquid hydrocarbons. Iwonicz and nearby Krosno and Rymanów were, in 19<sup>th</sup> century significant oil production center, one of earliest in the whole world, located in central part of the Polish Carpathians. At the moment these petroleum deposits are practically exhausted. One of the depleted fields Iwonicz, was connected with Carpathian Flysch formation of the Cretaceous and Tertiary age and it occurred in three oilbearing horizons. The shallowest horizon had its outcrops about Iwonicz and edge waters flowed out from surrounding springs. The investigations prove that they are brines with mineralization below 8g/dm<sup>3</sup>, type Cl-HCO<sub>3</sub>-Na, which contain increased amount of J, Br and HBO<sub>2</sub> ions, and also they are saturated by CO<sub>2</sub>. The waters from deeper levels are not saturated by CO<sub>2</sub>, and their chemical content is similar but their mineralization is higher. Exploitation of oil and associated edge waters caused local desalting of shallower medical waters. It was the reason to adapt to a medical use, already in 1942, several waterflooded oil wells in with selected chemical types of saline water were put on – stream. In the Iwonicz and Rymanów health resorts these waters are used for drinking and bathing cure and they are staple for iodine- bromine salt production. Presenting problems confirm the fact of inescapable exhausting of mineral deposits and show that complex geological recognition and appropriate extracting technology can minimize unfavourable influence on environment. Existing health resorts are good example.