



NEW BACKFILL SYSTEMS FOR EXTRACTION OF THE OIL

Description

In the process of oil extraction, one of the relevant problems is waterproofing and selective isolation of the water. Backfill consistencies are used for this purpose, which detains the water and transmit the oil.

The project concerns preparation of silicon-containing backfill compounds and application in oil wells for selective isolation of plastic waters.

Innovative Aspect and Main Advantages

We have obtained new backfill consistences from:

- The waste products of silicon tetrachloride hydrolytic etherification with ethyl alcohol;
- The waste products of methylchlorosilane and silicon tetrachloride hydrolytic etherification with ethyl alcohol;
- Interaction of oligomethoxychlorosiloxane and the waste products of phenol hydrogenation.

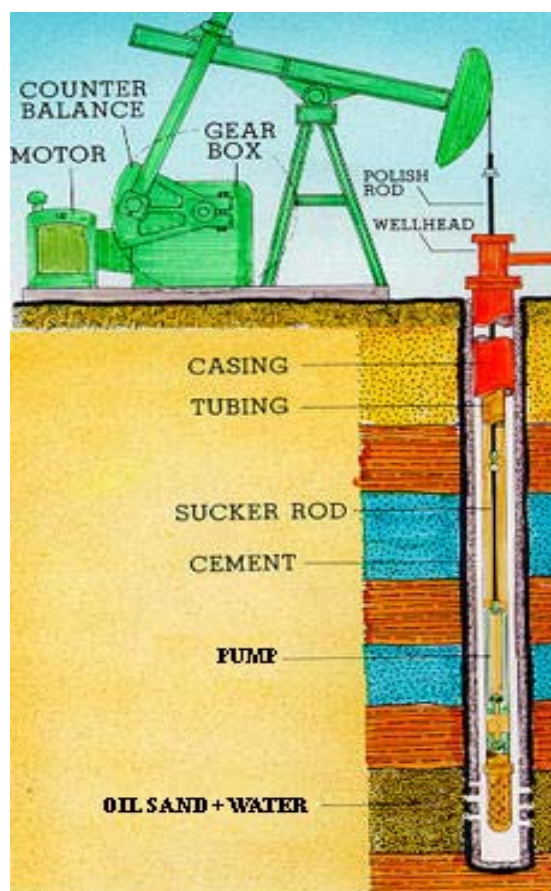
Offered backfill systems are characterized with:

- High isolation effect (99,4-99,9%);
- Low costs because of using industrial waste products;
- Control and growth (14-15 min) of the gel-formation time;
- Depression of the pressure (0.4 atm) during the pressing of the reagent in the layer is achieved via using organophenoxychlorosilane.

All of the mentioned factors improve the quality of the oil and its producing efficiency.

Areas of Application

Offered proposal can be applied in Georgian oil wells as well as in the countries of the Near East.



Stage of Development

Covered by patent of Georgia, Pilot sample is available.

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