

№ 1 Translate the text.

The well's construction

A well is called a cylindrical mountain hole, constructed without man's access in it and its diameter is many times smaller than its length.

Well's construction is a pipeline from the surface of the earth to the oil bearing formation. Oil flows to the surface through this pipeline. Such a pipeline is a line of special pipes that are connected with each other, they are named casing string.

The main parts of the well:

1. Wellhead is the crossing of the wellbore with the surface of the earth.
2. Bottomhole is the bottom of the well, deepening as a result of the influence of rock cutting tools on the rock. Walls of the well are side surfaces of the wells. Casing strings are the strings, connected with the casing pipes.

3. Wellbore is the space in the earth, is occupied by the well.

4. Well axis is an imaginary line connecting the centers of cross-sections of wells.

The first diameter of oil and gas wells usually does not exceed 900 mm, and the final diameter is rarely less than 165 mm. The deepness of oil and gas wells varies within a few thousand meters.

By constructing a well, it is necessary to fasten its bore and isolate the beds containing various fluids. Oil and gas wells are the most expensive capital installations; they have been serving for many decades.

The wellbore is connected letting down the casing pipes into it. A series of casing pipes connected successively with each other is formed a casing string. Steel casing pipes are used for fixing the wells.

By well drilling's process in the loose rocks is impossible different rock falls, landslides, etc.

To avoid this, the annulus is filled with plugging (insulating) material with cement between the borehole' wall and the casing string.

Thus, as a result of drilling's wellbore, its next fastening and formation isolation is created a hard underground installation of a specific structure.

A well' s construction is a set of information about the number and size of casing strings, wellbore's diameters for each string, period's cementing and the methods and the intervals for connecting a well to a productive bed.

№2. Answer the following questions:

1. What is the well?
2. What are the main parts of the well?
3. How long is the diameter of oil and gas wells?
4. What is the main condition by well' construction?
5. What is meant by a well's construction?