This graph represents that the anti-corrosion measures, used in company are very useful and do not allow the further growth of number of equipment failures due to corrosion. However, it does not mean that the methods used are the most effective methods.

The results shows, that there is no correlation between input parameters and equipment failures as for absolute values as for parameters dynamics. There are no reasons for trying to develop equation, which correlate the rate of corrosion and input data (pH, flowrate. water cut. and water chemical composition). It is possible that other parameters, such as CO2 and H2S fraction, temperature and tubing quality control gives the result and the equation for corrosion rate could be constructed. However, there is no sufficient data for further analysis.

The efficiency of anti-corrosive methods, used in company, was analyzed and on the basis of input data the main parameter for efficiency estimation, mean time before failure, was calculated for each method. Moreover, the analysis of methods efficiency was provided based on input data.

It was discussed that water cut has highly influence on the rate of corrosion. The anti-corrosive measures, used in the company, have a positive effect on corrosive count, and. as a result, the number of failures due to corrosion activity is not increased despite the fact of water cut increasing. The developed parameters, water cut pH, flow rate and formation water composition theoretically influence on the rate of corrosion, and however, there is no dependency in practice for individual wells. Therefore, it is not possible to develop the equation for the rate of corrosion.

It was calculated, that the most economically and technically effective anti-corrosive method is steel with anti-corrosive additives – 26ХМФА and this method is recommended for further use.

As a result of project, the economics of different methods practice for different oilfields was calculated. The steel 26ХМФА was recommended for further implementation due to the fact that this technology has not only the best economic results, but also the number of competitive advantages.

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GEOLOGICAL STRUCTURE AND FUTURE DEVELOPMENTS OF UST-TYM DEPRESSION

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At present Tomsk region is characterized by having oil fields which exploration needs in specific technologies. Ust-Tym depression has some factors of oil presence. Thus, the main objective of the investigation is to determine the reliable occurrences for oil development.

Ust-Tym depression, located in the central part of the Tomsk region, is formed by two systems of north-west and north-east direction chutes. Depression area is 19,400 km^2. Depression is bounded from different directions by the positive structural forms. Ust-Tym depression is bordered by Alexander anticlinal fold in the north-west, in the west and south-west - by Middle-Vasyugan and Pudin megalithic bank, respectively, in the south – by Parabel anticline, in the east – by Payduginsky and Pyl-Karaminsky megalithic bank (Fig.). Shinginskoye saddle is located at the junction of Srednevasyugan and Pudinskogo megalithic bank, small in size and is a zone of articulation Ust-Tym and Nurol depressions in the section of negative structures. Considering depression bounded by Karaminskoy saddle in the north, which includes the North-Tym basin and positive group of local structures: Kiev Yoganskoye, Tungolskaya, Linear, Emtorskaya and others.

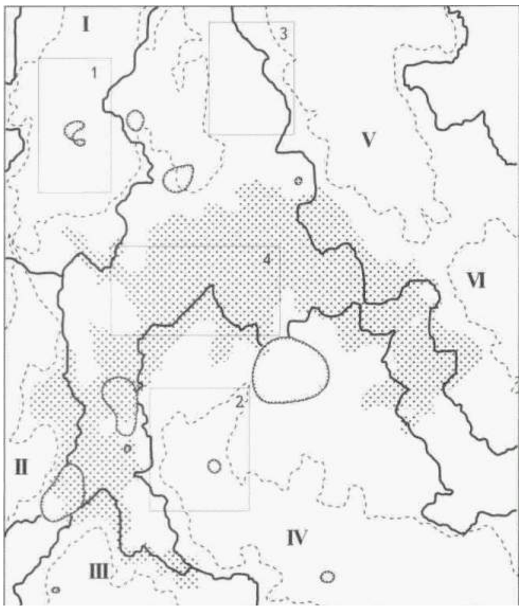

Fig. General cheme of Ust-Tym region: 1 – Ust-Tym depression;2 – positive structures of the 1st order (I – Alexander anticlinal fold, II – Middle-Vasyugan megalithic bank, III – Pudin megalithic bank, IV – Parabel anticline, V – Pyl-Karaminsky megalithic bank, VI – Payduginsky megalithic bank); 3 – zone of sandstone layer U_2 lack; 4 – borders of generalized zones of SAF, associated with positive structures Ist order; 1-4 – fragments of resulting map

Ust-Tym median array is a fragment of Salair fold system. The array is located between the Pyl-Karaminsky and Low-Senkinskim inversion anticlines and is a continuation of Narym Kolpashevo depression. It is a large block structure of the foundation overlain by sedimentary formations of the Middle and Upper Paleozoic. The first structural stage, or intended folded base of the array, is revealed by a number of wells within the neighboring Narym Kolpashevo-depression; at Narym, Parabel, Tibinakskoy and Kargasoksky areas.

The array is divided into several blocks by north-westerly direction faults, which obviously have different thickness covering sedimentary complexes.

Younger complexes of Triassic sediments are developed in the lowered areas. Dimensions of descended blocks are quite large, about 10-15 km wide and about 100 km in length. Thickness of sedimentary complexes is small, about 1-2 km.

The array is completely blocked with sedimentary complexes of middle-upper Paleozoicand penetrated with the small capacity wells on Nikolskaya and Vartovskoy areas. It is composed of red-clastic sediments and limestones, clastic and carbonaceous deposits and acid volcanics. Apparently, the youngest deposits of Ust-Tym depression are located in the central part (Vartovskaya area). The deposits revealed inside the cavity in Nikolskaya Square, are older. There is reason to assume that part of the Middle Paleozoic sedimentary cover Ust-Tym median array in lithological relation may be close to Nurol deflection. This circumstance, in case of confirmation, may significantly increase the degree of prospect for oil a given basin. The rocks occur subhorizontally, those dipping at 60-70° angles are observed only in the zones of fracture (Vartovskaya area).

In the central part of the study area cones deltaic facies duct are expanding. Underwater delta plain facies are preserved in the north of Ust-Tym depression. Stream-mouth bars retain their border near Srednevasyugan megalitik bank, their boundaries are changed on Alexander anticlinal, they appear on Nikolskay area of Ust-Tym depression, and moved to the north-west on Chkalov area. On Alexander anticlinal regressive type bars shift westward from the Nazinskaya area to the Ilyakskaya; in Ust-Tym depression they appear on the Murasovskaya area and disappear on the Golovnaya one. Bars of transgressive type are reduced and form small islands in the area Myldzhinskaya and Prigranichnaya areas. Facies of coastal wetlands are preserved in the south of the territory. In the northern part of the territory, lagoon facies are expanded and moved west to Ambarskoy, South Nazinskoy areas.

Facial characteristic of the layer U^{12}. This layer differs with big drop of particle size distribution: predominantly silt composition, increasing of clay component. This may be associated with reduction of hydrodynamic activity in the sedimentation basin, the tectonic regime stabilization, decreasing of terrigenous material brings from supply area. In the area of the Alexander anticlinal insular land facies on the Chebachya area are replaced with lagoon sediments. Border regressive and stream-mouthbars reduce, land delta facies disappear. In the northern part of Ust-Tym depression ground deltaic facies pass into underwater, leaving only Mygytinskuyu area. In the area Srednevasyugan megalitik bank deltaic facies disappear.

Thus, it can be concluded that Ust-Tym depression is perspective for further investigation to find oil presence occurrences.

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SELECTION OF THE OPTIMUM CONDITIONS OF CORE SAMPLES PREPARATION TO PETROPHYSICAL STUDIES

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Reservoir rock properties acquired in laboratory conditions are needed for interpretation of well logging, reservoir parameters feasibility study and hydrodynamic reservoir modeling.

All existing types of core laboratory analysis start with the process of core samples preparation. Any deviations from the established procedure may affect veracity of resultant petrophysical parameters.

Pursuant to the requirements, stated in ref. [1, 2], it is necessary to identify heavily clayish core samples in process of their preparation for special and standard researches. This separate consignment of core samples with high content of clay needs drying at quite low temperature.

Despite the importance of this stage, methodological recommendations on how to perform this selection are currently missing from regulatory documents [1, 2]. Consequently it is being done on a subjective basis in petrophysical laboratories, which does not exclude the risk of «unsuccessful segregation». The incorrect core samples separation based