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FORECAST RESOURCES OF UNDERGROUND WATERS OF THE AKMOLA REGION

Abstract. In water scarce districts of the Akmola region the areas were revealed, perspective for carrying out exploration on underground waters and the card of forecast resources of underground waters of the Akmola region of scale 1:1 000 000 is constituted.

As the main methods of researches are used: decryption of satellite images using cloudless fragments of space pictures of Landsat-8 from 2013 for 2016. In case of decryption of satellite images of the Akmola region comic pictures of the territory on 6 sites are processed.

For confirmation of results of decryption the analysis and generalization of results of earlier performed works on the published and share materials is made. And also on, field works on studying of hydrogeological and geo-ecological features of the territory are carried out.

Allocation of the areas and sites, perspective for production of search and prospecting works on underground waters is as a result executed. Assessment of natural resources and inventories of the main water-bearing horizons, and also forecast resources of underground waters on prospective areas is made. The purpose of works was improvement of providing settlements of the Akmola region by inventories of high-quality drinking water in the conditions of the increasing deficit of water resources.

Results of work are directed to increase in efficiency of exploration on underground waters in the Republic of Kazakhstan in case of a program implementation of providing rural settlements with drinking water – «Akbulak», and also the «Development of a Mineral and Raw Complex» in the Republic of Kazakhstan" programs.

The received results can be the basis for carrying out research works in the similar territories of the Republic of Kazakhstan and other areas of Central Asia, will undoubtedly exert positive impact on further enhancement of a technique of assessment of forecast resources of underground waters, will lead to increase in efficiency of exploration.

Keywords: forecast resources, natural resources and inventories, prospective areas, remote sensing.

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ПРОГНОЗНЫЕ РЕСУРСЫ ПОДЗЕМНЫХ ВОД АКМОЛИНСКОЙ ОБЛАСТИ

Абстракт. В вододефицитных районах Акмолинской области были выявлены перспективные площади для проведения поисково-разведочных работ на подземные воды и составлена карта прогнозных ресурсов подземных вод Акмолинской области масштаба 1:1 000 000.

В качестве основных научных методов исследований использованы: анализ и обобщение опубликованных и фондовых материалов по результатам ранее выполненных работ, дешифрирование космоснимков; проведение полевых работ по изучению гидрогеологических и геоэкологических особенностей территории.

В результате произведено выделение площадей и участков, перспективных для производства поисково-разведочных работ. Произведена оценка естественных ресурсов и запасов, а также прогнозных ресурсов под-