## REVIEW OF THE FOREIGN CONSULTANT

for the doctoral dissertation of Kenesbayeva Aigul on the topic:

"Modeling of geodynamic processes in the oil and gas field North Buzachi" submitted for the degree of Doctor of Philosophy (PhD) specialty 6D071100 - Geodesy

The dissertation work of Kenesbayeva A. is devoted to modeling the subsidence of the earth's surface based on the data of integrated monitoring of geodynamic processes, which improves the safety and efficiency of oil and gas field development.

The presented dissertation work of Kenesbayeva A. has novelty and practical significance, which are reflected in generalizations and conclusions. The author carried out modeling of geodynamic processes, taking into account the geological structure of the field, the physical and mechanical properties of reservoir rocks, the intensity of field development and geodetic observation data on the territory of the North Buzachi oil and gas field.

Based on the results of scientific research, a logarithmic relationship was obtained between the magnitude of subsidence of the earth's surface and the depth of the formation, which makes it possible to take into account the effect of attenuation of the magnitude of subsidence of the day surface with increasing depth of the formation.

The methodological accuracy of the work and the reliability of the results obtained were the reason that the work was successfully presented at high-level scientific conferences and formed the basis of publications in scientific journals.

The main provisions of the dissertation research carried out are structured, correspond to the content of the dissertation, and are confirmed by the arguments given by the author.

The obtained results meet the criteria of reliability, novelty and practical significance of the dissertation, which is confirmed by the conclusions and approach to the study of an important and complex problem, as well as the evidence of both the scientific and practical orientation of the dissertation.

The work leaves a good impression and is a completed study. I believe that Kenesbayeva Aigul deserves to be awarded a PhD degree in the specialty "6D071100 - Geodesy".

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Associate Editor: Surveying and Land Information Science (SaLIS)

American Association of Geodetic Surveying

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