ANNOTATION

of dissertationin candidacy for academic master degree of Engineering and Technology by specialty 6M070900 - Metallurgy

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on the topic of **«IMPROVING THE TECHNOLOGY OF EXTRACTION OF ORE GOLD DEPOSIT BESTOBE»**

1. The dissertation consists of 93 pages.

2. The number of pictures - 31, graphic part – presentation , 43 tables, literature -26 formula – 38

3. Relevance of the research work. The urgency of the problems caused by the depletion of stocks and the increasing complexity of the geological conditions of deposits, appreciation of underground mining of mineral raw materials, as well as increasing the negative impact of accumulated waste products on the environment.

Traditional gold mining technologies often do not provide the required profitability, a significant proportion of reserves lost during extraction, refining and metallurgical processing of raw materials extracted from the subsoil.

In the transition from a centralized funding subsidizing production to private research increases the relevance of innovative technologies for the extraction and processing of gold.

Therefore, the creation of effective technology of the mine Bestobe is an actual scientific and technical task that will increase productivity, improve the quality and quantity of extraction performance, reduce production costs and increase the safety of mining operations

4. The object of the research is gold deposit Bestobe

5. The subject of research is to ore extraction technology on gold deposits Bestobe

6. The aim is to develop technologies for the extraction of ore deposits on Bestobe with minimum losses and dilution.

7. Research Methods. To achieve the objectives through an integrated research approach, including scientific generalization of earlier work on the topic of the dissertation, the analysis obtained on application development systems.

8. Research Tasks:

1 Increase of efficiency of mining operations at the gold fields Bestobe.

2 Identify the design parameters of the development of systems that ensure the safety and efficiency of extraction of ore.

9. Scientific provisions for the defense:

Protected scientific positions

1) Bestobinskoe deposit characterized by a variety of occurrence of ore bodies represented thin, thin veins of ore ore body and powerful "far" area, with dips 5-85□, ore and host rocks are mainly stable and moderate stability fortress f = 9-14. In accordance with the mining and geological conditions of the deposit

provides for the application of technologically mastered at Bestobe systems, continuous dredging ore spacer bolting. Depth envisaged in the project development of balance ores varies within the boundaries: along the zone "far" from 150 to 340 m, with thin veins of ore excavation - from 500 m to 800 m The use of such systems provide development ore mining with losses of 5.9% ore..

2) When the system of the continuous excavation of ore with a spacer bolting size purification unit (unit height equal to the height of 45 m floor, on the fall of the ore body block length of 45 - 58m (α = 50-80□), block length along the strike of the ore body 45m, 25-38 m length of the chamber, the chamber is equal to the width of the recessed power orebody 1.2-1.3 m) provides desktop productivity downhole 3.6-3.8 m3 / h and unit capacity 2,9-3 tons / months.

10. Scientific novelty of the research:

1) The correct choice of systems development, taking into account all factors that will allow, firstly, the completeness of extraction in mining of ore bodies, and secondly, reduced losses and ore dilution.

2) to determine the design parameters of the development of systems that ensure the safety and efficiency of extraction of ore.

11. The practical significance of the work

The application development system of continuous dredging ore from bolting the spacer allows the mine production capacity of 300 thousand / t. A year, with rates of 5.9% ore loss.

12. Publications related to the work

The contents and the main provisions of the thesis were presented at the XV International scientific-technical conference of students, graduate students and young scientists "Creativity young innovative development of Kazakhstan» Ust-Kamenogorsk, 2016 "Improving the technology of extraction of ore gold deposit Bestobe".