SPECIFIC ISSUES OF CMM DRAINAGE in DEEP MINES OF KARAGANDA COAL BASIN

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Key factors of Kazakhstan energy economy

- Kazakhstan is one of the main coal producers in Central Asia and FSU region
- Kazakhstan is the main coal exporter to Russia and Central Asia industrial regions
- More than 70% of Kazakhstan energy needs rely on domestic coal
- Kazakhstan Metallurgical industry bases mainly on domestic coal (80%)
- Social energy consumption of the Central and Eastern Kazakhstan regions rely on coal based power generation
- Coal production in 1999 was 58 mln.ton and grown to 109,2 mln.ton in 2020
Karaganda coal basin
Main features of Karaganda basing coal seams

➢ High coal saturation
➢ High inherent gas content
➢ Low permeability
➢ High risk of coal and gas outbursts
CMM drainage methods applied
Pre-draining high-gaseous coal seams

• Low efficiency of in-seam boreholes
• High cost of drainage galleries

Courtesy of Baimukhametov S.K.
Possible application considered

- Directional wells from surface for pre-draining in advance (1- more years
- Subsurface steered wells for local drainage prior and while coal mining
- Improvement of in-seam pre-drainage boreholes housekeeping (sealing, vacuum adjusting, etc.)
Thank you!

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