

Недра – 2021

Круглый стол

??:

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POLYMETAL

ПОЛИМЕТАЛЛ

Общие факты



ОБЩИЕ ФАКТЫ



EXPLORATION: KEY CHALLENGES



EXPLORATION: CHALLENGES

2021

- ▼ Increased scope and pace
- ▼ Human resources
- ▼ Technological progress
- ▼ Sustainable development

EXPLORATION: NEW TECHNOLOGIES

Faster, More productive, More efficiently

FIELD WORK

Equipment
Organization

- ▶ Maximum mobility for fast prospecting
- ▶ Processing data during field-work
- ▶ Faster targeting
- ▶ Fast decision making

METHODS

Geophysical
Geochemical
Mineralogical
Structural

- ▶ Needed parameters set of researched geological environment
- ▶ Methods enabling “to see” under the cover (geophysics and deep-penetrating geochemistry)

GEOLOGICAL DATA

Storage
Exchange
Processing

- ▶ Get the most benefit from geological data
- ▶ Use maximum experience and unique knowledge of staff and experts
- ▶ Geological Data accessible for all members of the production chain

EXPLORATION: NEW TECHNOLOGIES

Main results 2020

FIELD WORK

Mobile drill rigs
pXRF
UAV
Geobank

- ▶ pXRF (15 units) - allow to speed up targeting
- ▶ UAVs – routine method of magnetic survey 1:10000
- ▶ XRF-core scanner at Prognoz for quick sorting of ore intervals
- ▶ Geobank - exploration data management

METHODS

Mobile-MT (Mobile MagnetoTellurics)
MMI
TerraSpec
Corescan

- ▶ Prognoz: magnetic survey using UAV on 1350 km²
- ▶ Test work of deep-penetrating geochemistry in Ural and Kazakhstan
- ▶ Test work of mineral mapping at Birkachan using TerraSpec-4
- ▶ Mobile-MT on 1300 km² around Ducat

GEOLOGICAL DATA

Geobank
ArcGIS
Aster/ Sentinel Imagery
ML

- ▶ Cooperation with S.Garvin and Fathom Geophysics - ASTER/Sentinel Imagery for targeting on Balkhash AOI
- ▶ Mineral system modeling (MSM) and mineral prospectivity modelling using machine learning (ML) technique by SRK ES for Ducat AOI