



 **srk** consulting

40 years in global mining



Your global mining consultant



Key facts about SRK:

- Established in 1974;
- Global company with over 1,500 staff, augmented with some 150 associates:
 - Our business model aims to earn 80% of our fees through using own staff;
 - Enables SRK to invest in developing skills & technologies.
- Focused on all technical aspects of developing & running mines;
- Owned by over 500 employee shareholders;
- Global turnover ~ \$220m.

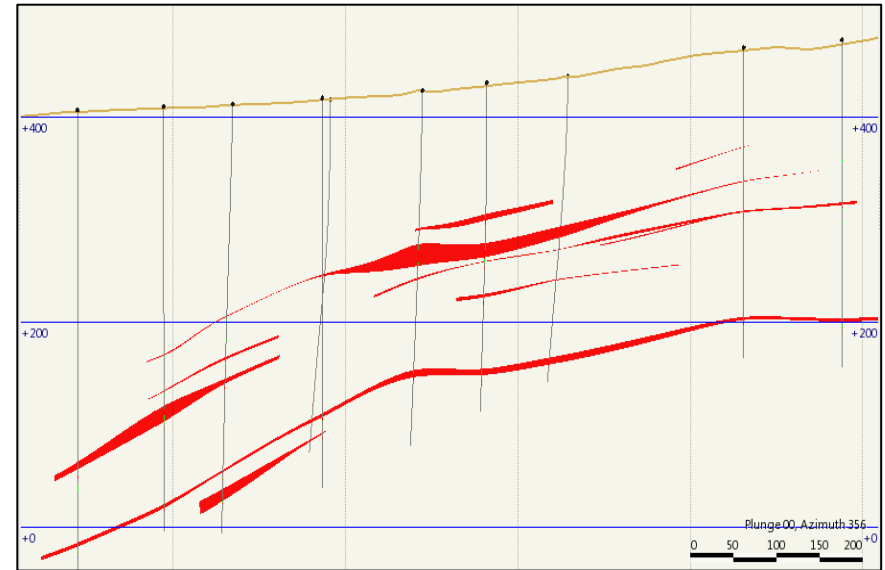
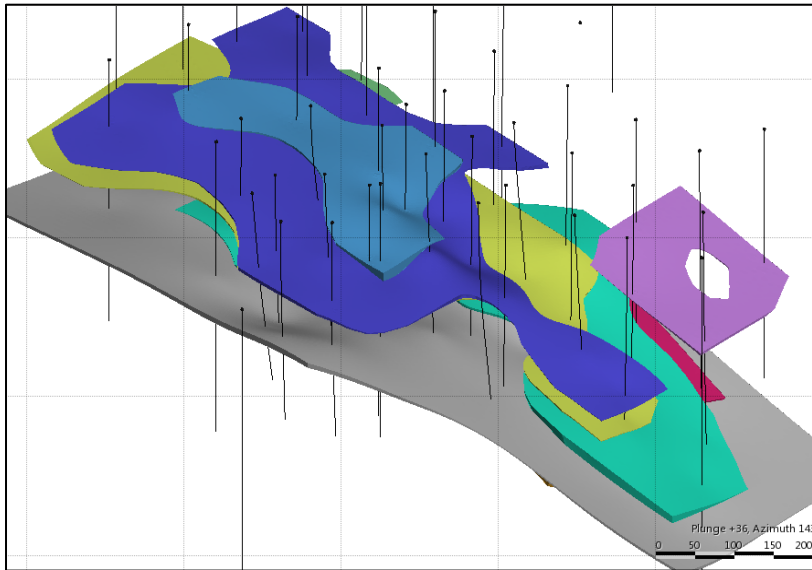
SRK Russia

- Fully staffed office: 48 employees:
 - Geology, Mining, Metallurgy, Geotechnics, Hydrogeology, Hydrology, Environment, Economics;
 - Professional technical translators;
 - Other specialist disciplines available from partner offices:
 - Exploration field management, Tailings, Infrastructure, Tunnelling.
- Established in 2006, now largest international mining consultancy in Russia;
- Unique understanding of linking Russian requirements and international opportunities.

Specialist services

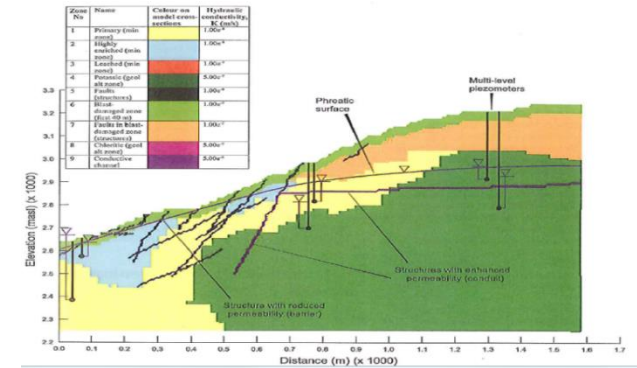
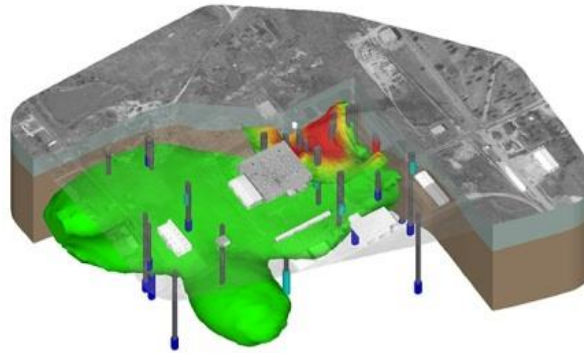
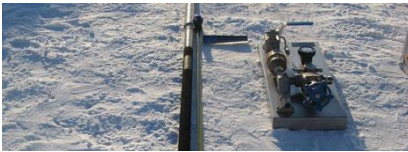
- Technical - Scoping, Prefeasibility and Feasibility studies:
 - Geology and Resources;
 - Mining and Reserves;
 - Geotechnical;
 - Environmental;
 - Surface Water and Groundwater.
- Due Diligence audits:
 - Stock Exchange Listings;
 - Debt Finance;
 - Mergers & Acquisitions;
 - Capital Investment audit.
- Benchmarking & Re-Engineering optimisation.

Resource Geology



- Plan and supervise drilling programmes;
- QA/QC training & audits;
- Geological modelling using LeapFrog, Surpac, Datamine, Micromine;
- Harmonisation of modern resource estimates (JORC, CIM NI 43-101) with traditional Russian estimates;
- Training – effective modelling for mining operations, statistical and geostatistical analyses.

Hydrogeology



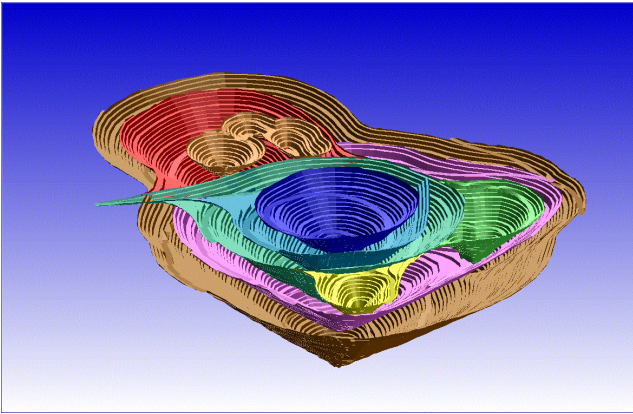
- Plan, undertake and supervise data collection programmes;
- Develop 3D models for dewatering, water supply, contaminant flow, in-situ leaching.

Geotechnics



- Plan, undertake and supervise data collection programmes:
 - Mapping, core logging, remote mapping.
- Supervise laboratory test-work;
- 2D, 3D modelling:
 - Kineamatic, Finite Element;
 - All RocScience software; FLAC; 3DEC.

Mine Planning & Operations

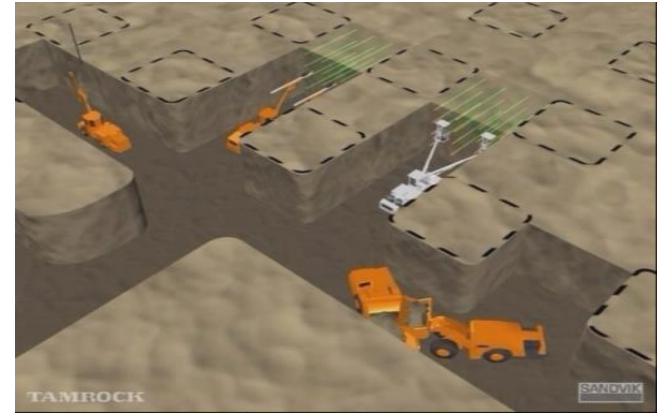


Mining Services - Open Pit

- Pit optimization;
- Sensitivity analysis;
- Ultimate and staged pit designs;
- Mine layout; waste dumps, stockpiles, ROM area and haul roads.

Mining Evaluation

- Resource model evaluation;
- Open pit vs. underground interface evaluation;
- Contract vs. owner mining.



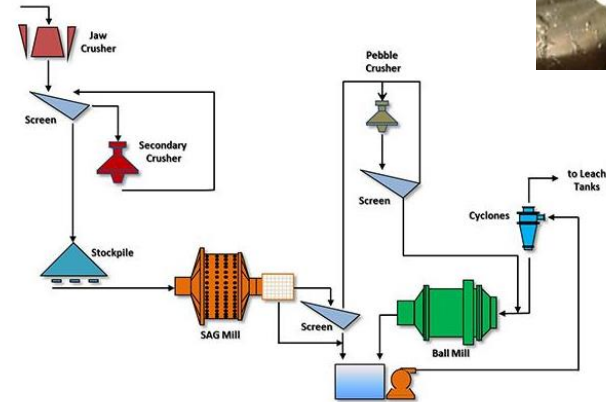
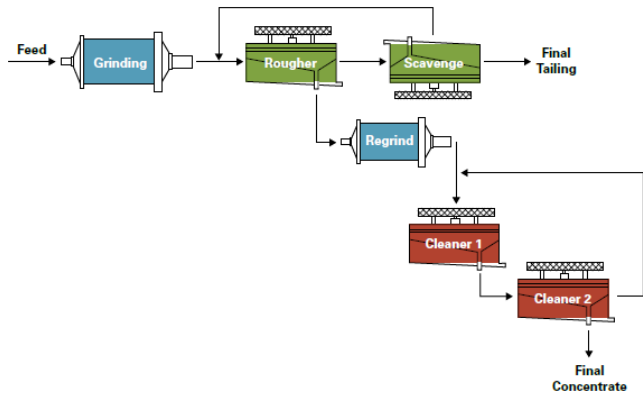
Mining Services - Underground

- Mining method selection;
- Access evaluation;
- Stope systems, layout and design;
- Development design;
- Ventilation design;
- Mining dilution & ore losses.

Mine Services - General

- Mine scheduling;
- Mine fleet assessment;
- Mine capital & operating costs;
- Reviews & audits;
- Ore reserve estimates (JORC, CIM NI 43-101).

Metallurgical



- Supervision of early stage metallurgical sampling & test-work;
- Due diligence & debottlenecking audits;
- Scoping study & Prefeasibility study;
- Mine-to-mill optimisation.

Environmental



- Planning, implementation & supervision of baseline studies;
- Environmental and Social Impact Assessment;
- Risk assessment;
- Acid Rock Drainage & metal Leaching assessment & planning.

Why choose SRK?

Full range of services

- We can provide solutions, whatever are your needs;
- We manage the interfaces so you don't have to.

Unique understanding of Russian requirements and international opportunities

- We use modern techniques to define the optimum solution and identify ways to achieve this solution following Russian norms & standards.

Global experience; local presence

- We operate in the Client's time zone, in the Client's language.

Credibility

- Trusted by financiers and investors for independent and incisive opinions.

Technical Studies in Russia / CIS

Broad studies

- Udokan Feasibility Study & ESIA (BGK, 2011-13);
- Grib Feasibility Study & ESIA (AGD, 2010-11);
- Karchiga Feasibility Study & ESIA (Orsu Metals, 2011);
- Olovskoye Prefeasibility study (ARMZ, 2011).

Geotechnical stability

- Stability guidelines for Potash mines, Uralkali (2013);
- Slope optimisation, Kostamuksha (Severstal) (2014).

Other relevant studies

- Transport study (Lebedinsky GOK) (2012).

Clients

- ARMZ – all uranium projects in Russia, Due Diligence of international projects (uranium);
- Metalloinvest – Udokan Prefeasibility & Feasibility study (copper);
- AGD – Grib Feasibility study (diamonds);
- Confidential – benchmarking (iron);
- SMR – Agaskyrskoye Scoping study (molybdenum);
- Intergeo – Ak-Sug – Scoping study / 43-101 (copper);
- Yuzhuralzoloto – geological modelling and mine planning (gold);
- Artel Starateley Amur – introduce innovative exploration method, geological modelling and equipment strategy (platinum);
- Polyus – internal project audit (gold);
- Severstal - internal project audit (iron);
- GeoProMining – CPR, project audits;
- Nordgold – Mineral resource and Ore reserves estimates for several deposits.

40 years close at hand

SRK has **50 offices globally**, providing Clients with an opportunity to improve their knowledge of efficient mining methods practiced worldwide.

Offices in Russia

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Thank you.