

*DOPAS Training Workshop 2015, 14 – 18 September 2015  
The Josef Underground Research Centre  
Faculty of Civil Engineering, Czech Technical University in Prague*

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# The Josef gallery - Geology



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D2 6.2b



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**nagra.**



**NRG**



Správa úložišť radioaktivních odpadů  
Radioactive Waste Repository Authority

**B+TECH**

**SKB**

Svensk Kärnbränslehantering AB

**Radioactive Waste Management**



**VTT**

**GRS**



**Galson Sciences Ltd**

**DBE TEC**  
DBE TECHNOLOGY GmbH



# Geographic position (1)

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Příbram region =

Basement sediments

VS.

Central Bohemian plutonic complex



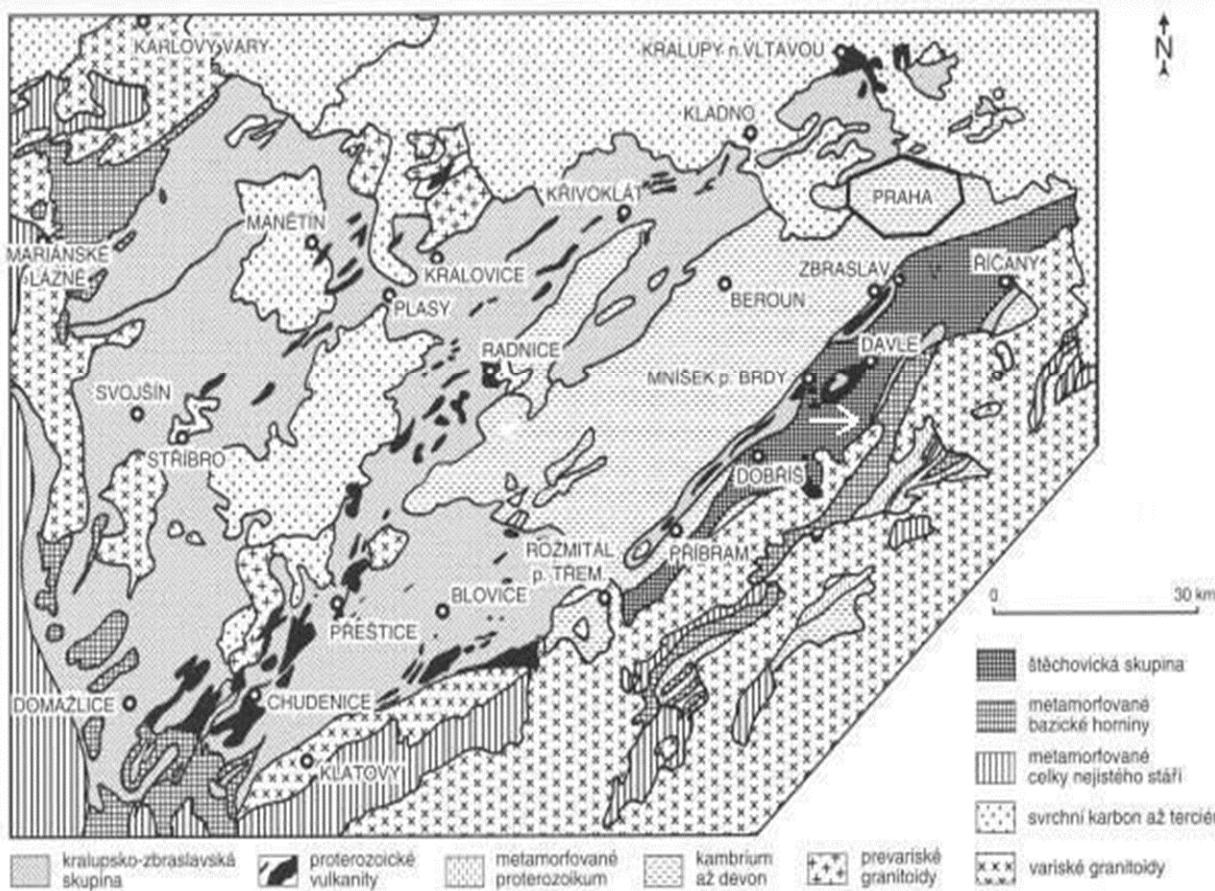
[http://pruvodce.geol.cechy.sci.muni.cz/regionalni\\_geol/barrandien.htm](http://pruvodce.geol.cechy.sci.muni.cz/regionalni_geol/barrandien.htm)

[http://www.mcz-krbykamna.cz/cms.php?id\\_cms=6](http://www.mcz-krbykamna.cz/cms.php?id_cms=6)

2



# Geographic position (2)



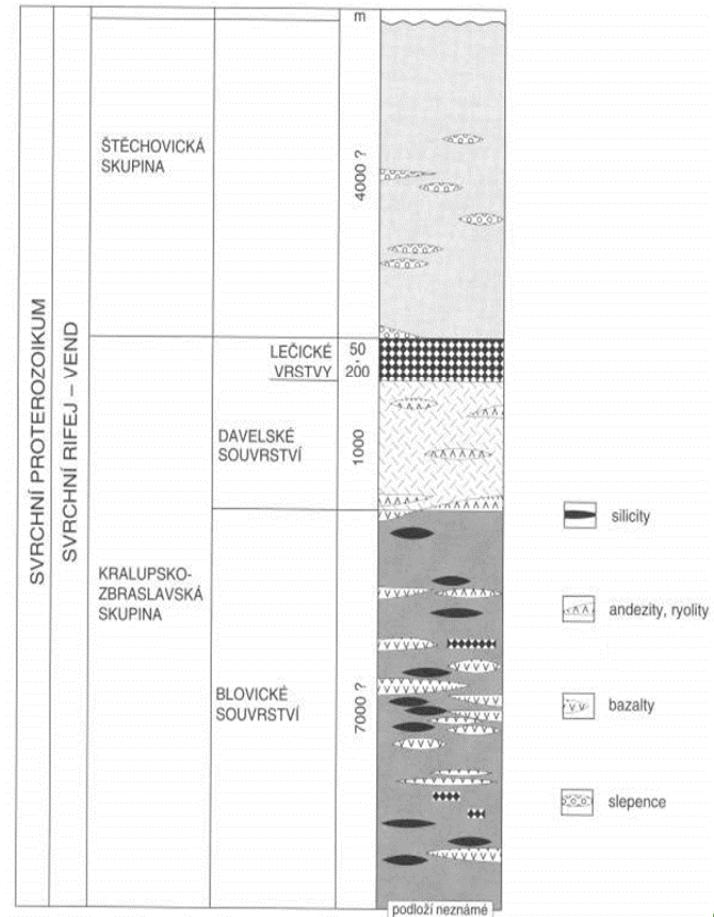
[http://pruvodce.geol.cechy.sci.muni.cz/regionalni\\_geol/barrandien.htm](http://pruvodce.geol.cechy.sci.muni.cz/regionalni_geol/barrandien.htm)

[http://www.mcz-krbykamna.cz/cms.php?id\\_cms=6](http://www.mcz-krbykamna.cz/cms.php?id_cms=6)



# Jílové zone

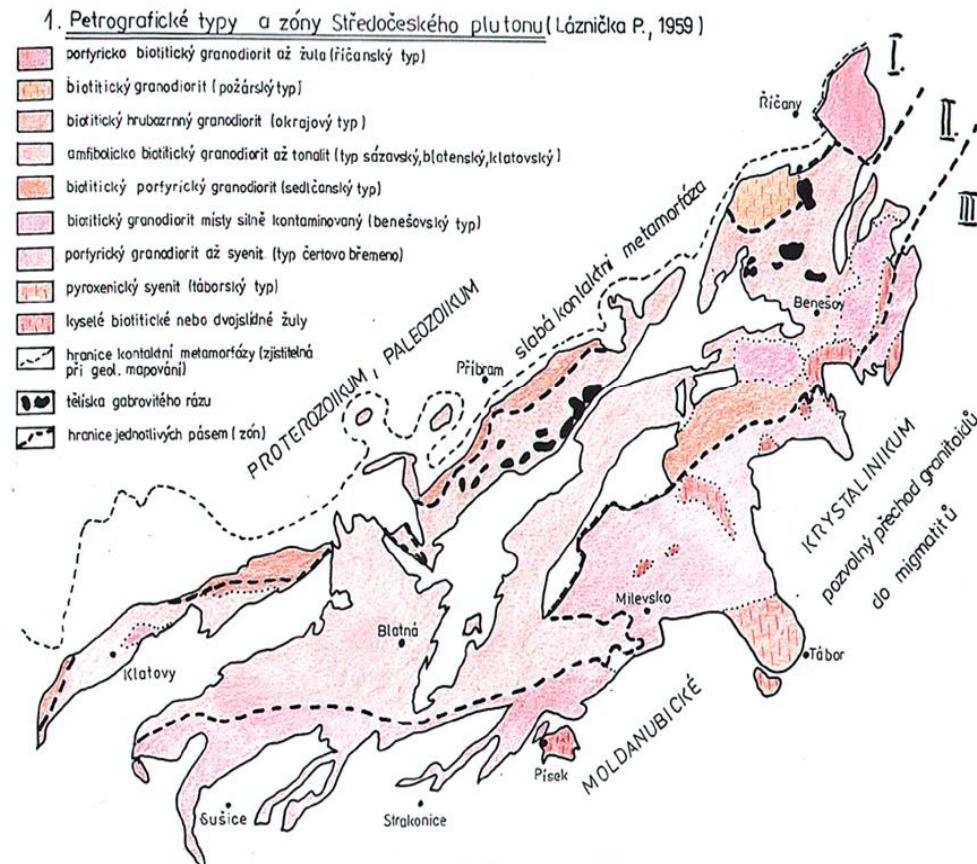
- Ø Kralupsko-Zbraslavská group
- Ø Davle formation
- Ø Jílové zone
- Ø Direction SW-NE, in length ~ 70 km
- Ø Clay schists, siltstones, greywacke
- Ø Andesite, dacite, ryolite and their pyroclastics
- Ø Age ~ 600 million years



[http://pruvodce.geol.cechy.sci.muni.cz/regionální\\_geol/barrandien.htm](http://pruvodce.geol.cechy.sci.muni.cz/regionální_geol/barrandien.htm)

# Central Bohemian plutonic complex

- Ø Complicated structure
- Ø X0 – X00 sectional plutons
- Ø Amphibol-biotitic granodiorite even tonalite
- Ø Age 350 – 330 million years

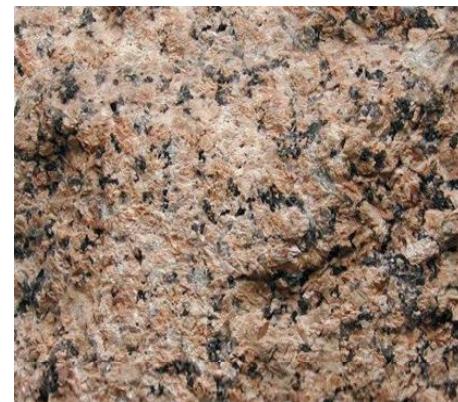


[http://departments.fsv.cvut.cz/k135/wwwold/webkurzy/obrazky/str\\_pluton.gif](http://departments.fsv.cvut.cz/k135/wwwold/webkurzy/obrazky/str_pluton.gif)

# Vein-rock types

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Albitic granite



Spessartite



<http://www.geologie.uni-frankfurt.de/gesteine/Gesteine-Seiten/Bild27.html>

<http://petrol.sci.muni.cz/poznavanihornin/magmatity/alkalickozivcovygranit.htm>

# Mineralogy

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- Ø Deposits Čelina a Mokrsko
- Ø Au-mineralization and Scheelite mineralization
- Ø Mesothermal type, Q-veins, direction W-E.
- Ø Average grade 2 g/t, decreases with depth
- Ø Another ore minerals: pyrite, pyrhotine, molybdenite aurostibite and antimony
- Ø Another gangue minerals: calcite, baryte



<http://www.hofmann.estranky.cz/fotoalbum/mineraly/mineral-scheelit/scheelit-medoveho-zbarveni.html>

<http://www.muzeum-pribram.cz/cz/akce/detail/zlato-u-celiny/37/>

# List of references

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- Morávek P. (1992) Gold in Bohemian Massif, Czech Geological Survey, 245 pages.



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