



# Exploration and mining highlights, Southeast Region, 2020

Katay, F., 2021. Exploration and mining highlights, Southeast Region, 2020. Ministry of Energy, Mines and Low Carbon Innovation, Geological Survey of British Columbia. GeoFile 2021-05 (poster).

## Overview

Extensive metallurgical coal deposits exist in the Southeast Region, and account for most of Canada's coal production and exports. Four mines currently produce coal (Fording River, Greenhills, Line Creek, and Elkview), operated by Teck Coal Limited. Two major coal projects (Michel Coal, and Crown Mountain) are in the Environmental Assessment process.

Several industrial mineral mines produce silica, magnesite, and gypsum, and one gypsum mine is currently under construction (Kootenay West). Various other industrial products, such as rip-rap, flagstone, railroad ballast, dimension stone, and sand and gravel are quarried throughout the region. Exploration is also ongoing for other minerals, including graphite and phosphate.

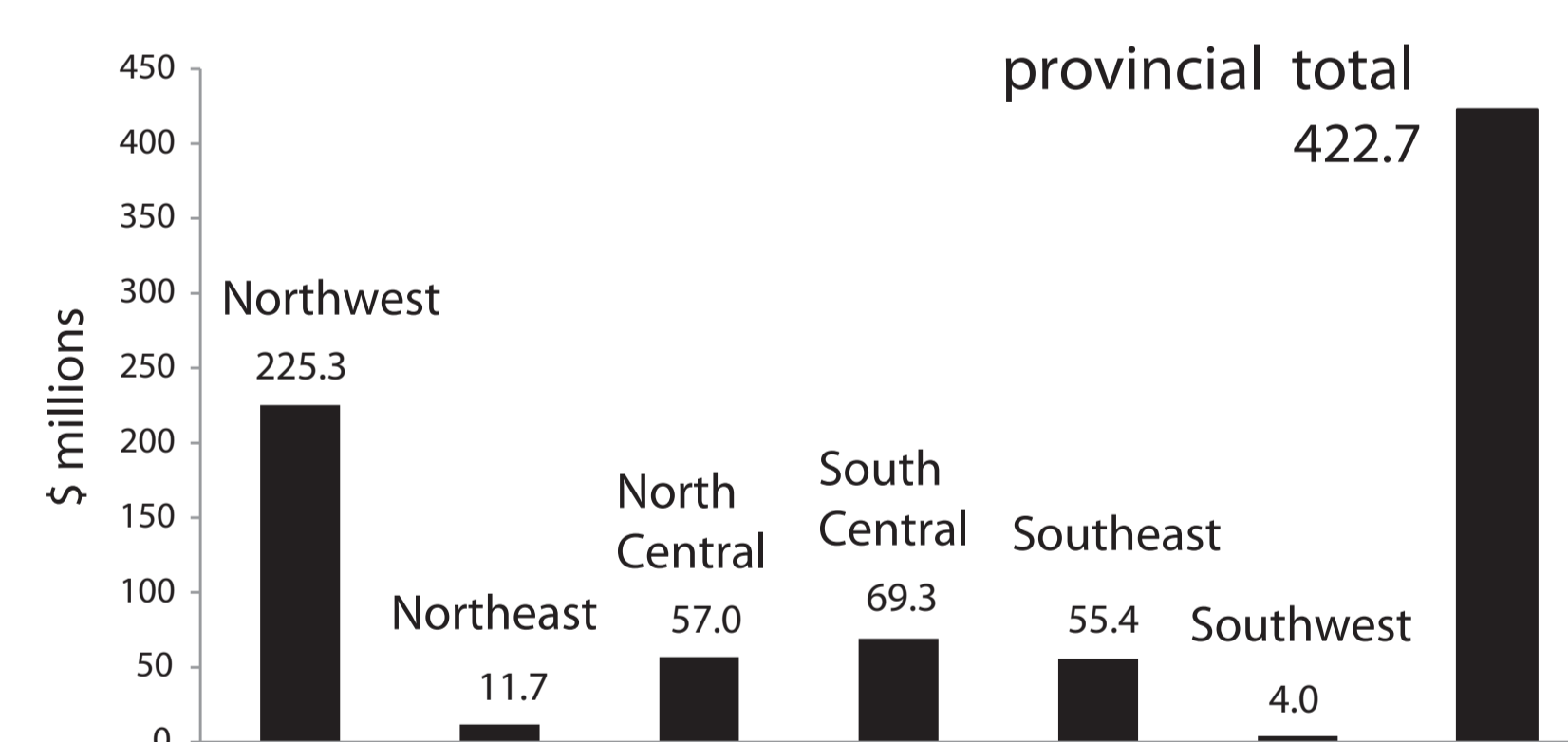
Exploration is also ongoing for precious and base metals, mostly in veins and stockworks, SEDEX, VMS, stratabound and carbonate replacement, and skarn deposits.

The region is accessible by well-developed infrastructure, and the Trail smelter (Teck Resources Limited) is still in operation.

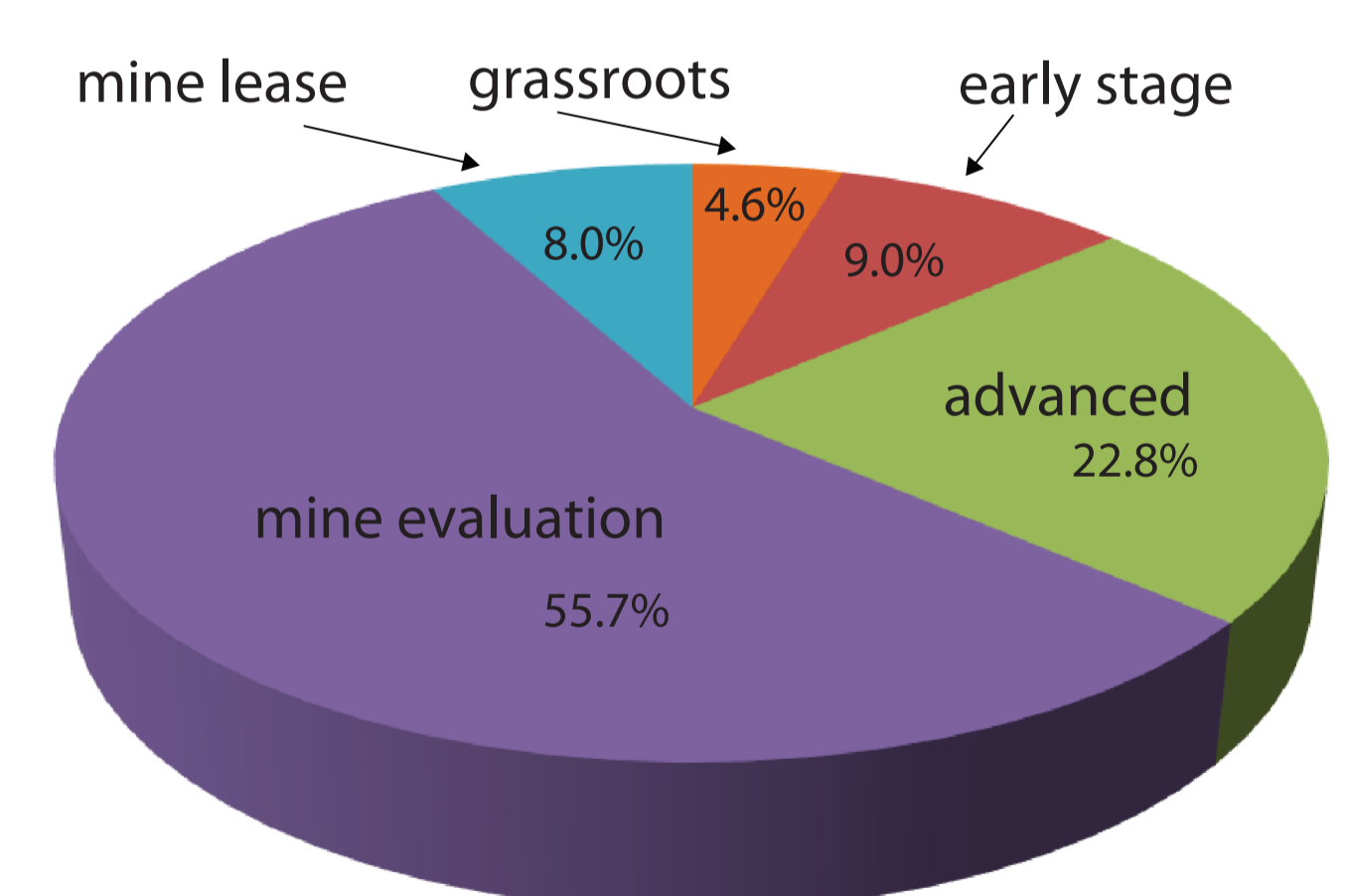
## Exploration and drilling estimates

Total provincial  
• exploration expenditures: \$422.7 million  
• drilling: 991,300 m

Southeast Region  
• exploration expenditures: \$55.4 million  
• drilling: 102,920 m



Province of British Columbia, exploration expenditures

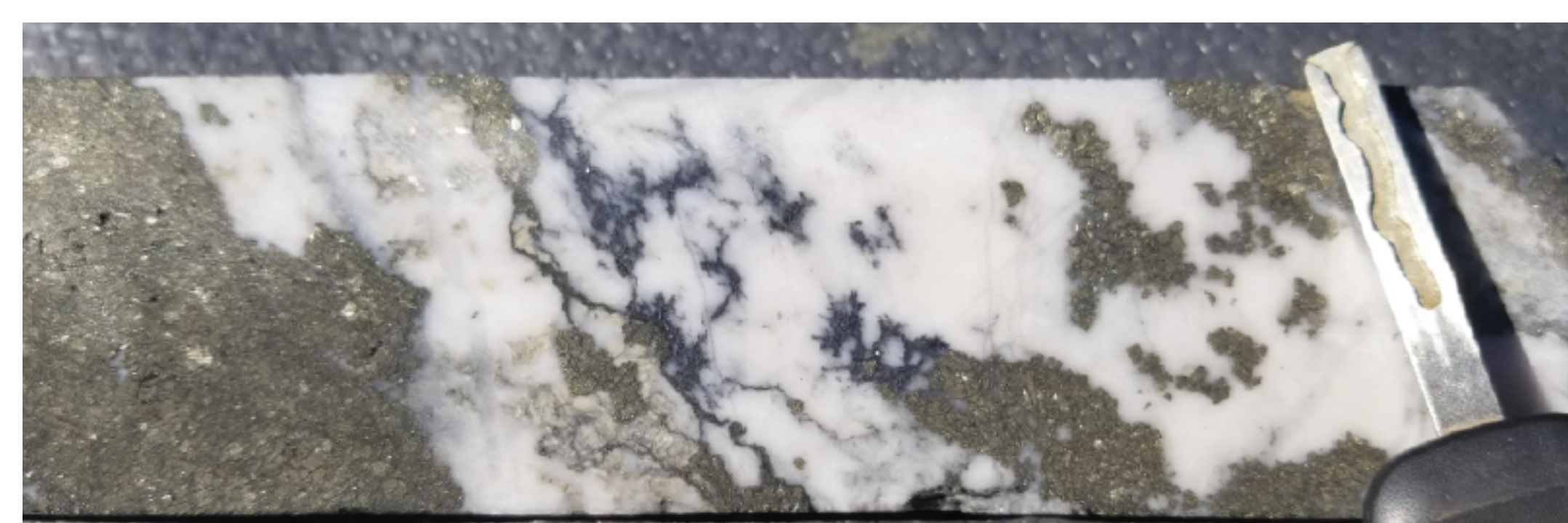
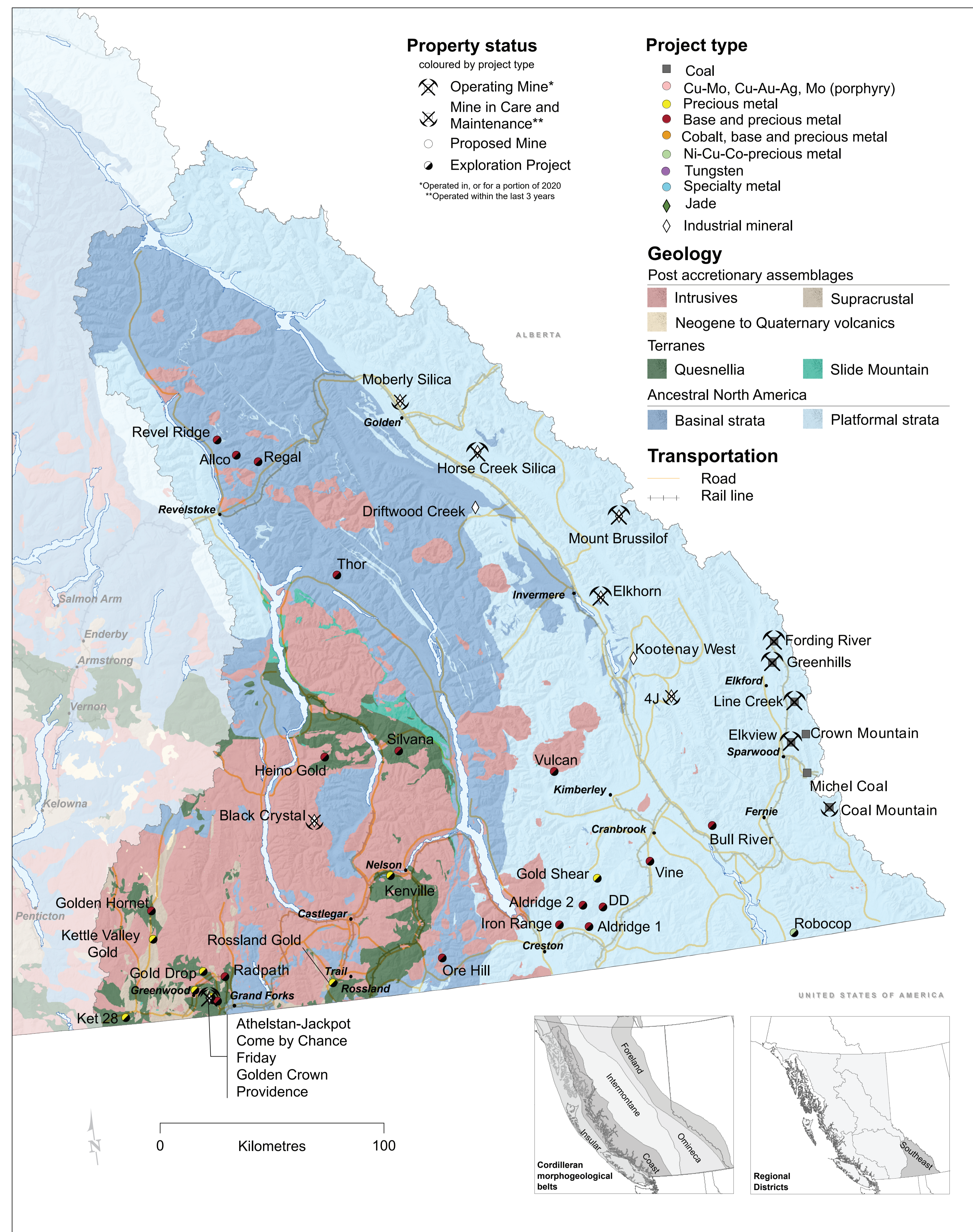


Southeast Region, expenditures by category



Truck and shovel operations at Fording River. Teck Coal Ltd.

## Mines and selected projects, Southeast region

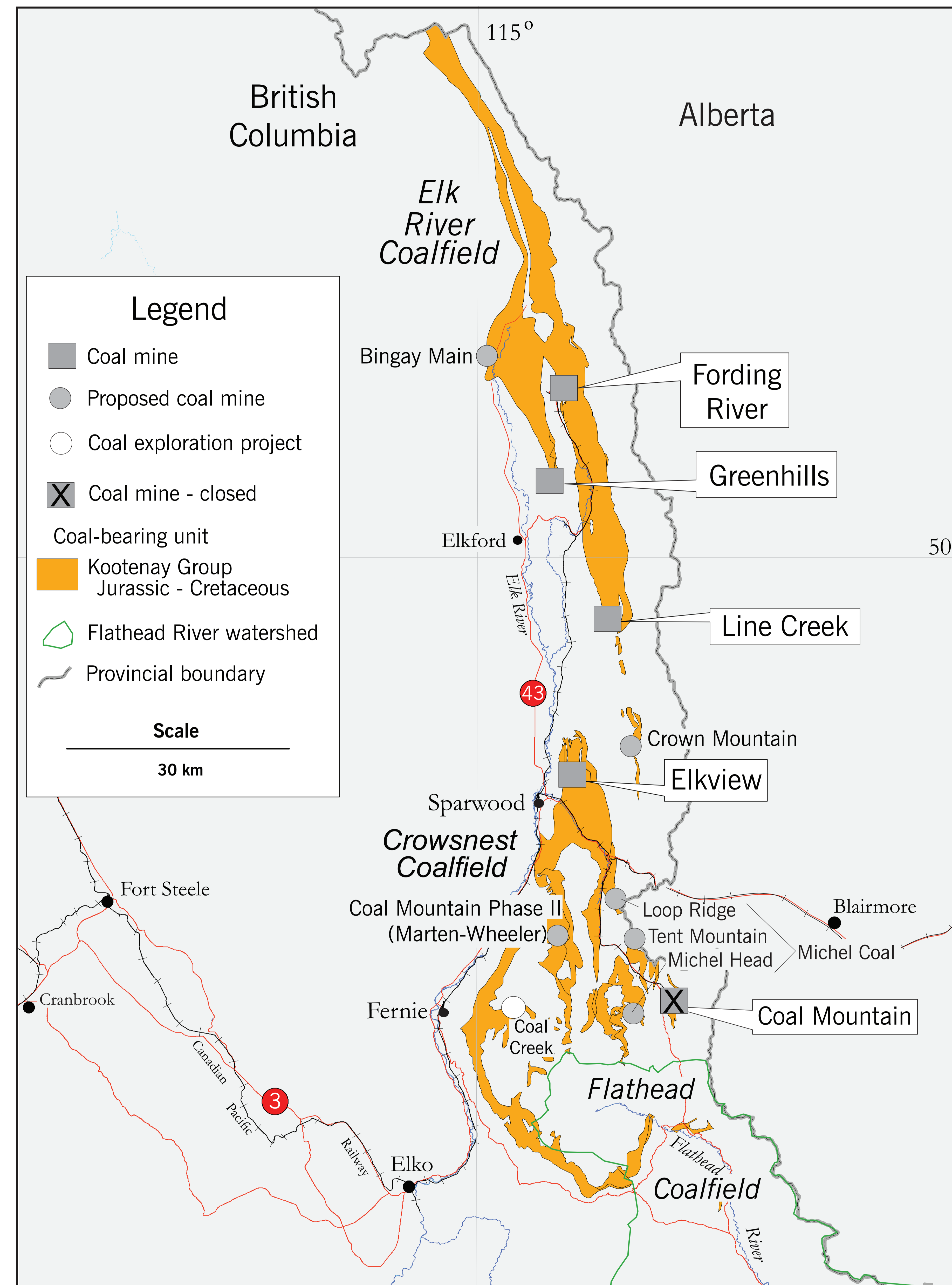


Thor: Pyrite tetrahedrite mineralization. Taranis Resources Inc.



Ore Hill: Visible gold in NQ core. Apex Resources Inc.

## Coal mines and selected projects, Southeast region



Exploration drilling at Greenhills mine. Teck Coal.



Rail load out at Fording River mine. Teck Coal.

## Exploration highlights

Exploration in the Southeast region continued for SEDEX, sediment-hosted copper, stratabound carbonate replacement, VMS, skarn, and epithermal and mesothermal vein deposits for precious and base metals.

Selected exploration projects include the following:

- PJX Resources Inc. drilled at Vine to test deep magnetotelluric anomalies and continued to explore at the Gold Shear (David) for shear-related gold-bearing veins.
- DLP Resources Inc. drilled at DD (in partnership with PJX Resources Inc.), drilled at Aldridge 1 & 2, and expanded magnetotelluric surveys over their claims; drilling encountered indicators of hydrothermal alteration.
- Taranis Resources Inc. drilled at Thor and intersected 10.64 m grading 0.49 g/t Au, 249.4 g/t Ag, and 7.7% Pb+Zn+Cu.
- Rokmaster Resources Corp. optioned the Revel Ridge (J&L), and drilled underground at the Main Zone.
- Affinity Metals Corp. drilled at Regal (Alco) to follow up on 2019 results that included 11.1 m grading 143.29 g/t Ag, including 0.55 m grading 2,612.0 g/t Ag.
- Klondike Silver Corp. continued underground drilling at the Silvana. Encountered elevated sphalerite and galena in every hole, including 0.8 m grading 71.73 g/t Ag, 1.09% Pb and 0.21% Zn.
- Ximen Mining Corp. began rehabilitating a portal at the Kenville in preparation for underground drilling.
- Apex Resources Inc. drilled at Ore Hill and intersected 0.30 m grading 289.97 g/t Au, and 0.3 m grading 32.9 g/t Au.
- GGX drilled and trenched at Gold Drop and discovered new veins that sampled up to 10.15 g/t Au and 142 g/t Ag (grab sample).
- Grizzly Discoveries Inc. drilled at Ket 28. Initial results include 3.08 m grading 7.37 g/t Au.
- KG Exploration (Canada) Inc. drilled at Radpath for epithermal mineralization.



Large Diameter core drilling at Fording River. Teck Coal.



Thor: Massive sulphide at the Bluebell zone. Baymag Inc.

## Mining highlights

Four operating coal mines in the Southeast Region produce metallurgical grade coal, and are operated by Teck Coal Limited:

- Fording River, Greenhills, Line Creek, Elkview
- Exploration drilling and expansion plans at all 4 mines.
- Second water treatment under construction at Fording River, Saturated Rock Fill construction at Elkview.

Total annual coal production for the region in 2020: 20.9 Mt

Two major coal projects are in initial stages of Environmental Assessment:

- Michel Coal (North Coal Ltd.) - proposed production of 2.3 - 4 Mtpy over a 30 year mine life.
- Crown Mountain (NWP Coal Mining Inc.) - proposed production of 3.7 Mtpy over a 15 year mine life.

Industrial Mineral mines:

- Elkhorn mine (Certainteed Canada Inc.) - produces ~ 400 ktpy of a blended gypsum-anhydrite.
- Mount Brussilof (Baymag Inc.) - magnesite; produces ~ 230 ktpy with over 50 Mt of proven reserves.

One gypsum mine in construction phases:

- Kootenay West mine (Certainteed Canada Inc.) - proposed ~ 400 ktpy over a 43 year mine life.



BRX extension at Line Creek mine. Teck Coal Ltd.



Mount Brussilof magnesite mine. Baymag Inc.

## Further information

British Columbia Geological Survey, 2021. British Columbia coal industry overview 2020. British Columbia Ministry of Energy, Mines and Low Carbon Innovation, British Columbia Geological Survey Information Circular 2021-02, 13p.

Katay, F., 2021. Exploration and mining in the Southeast Region, British Columbia. In: Provincial Overview of Exploration and Mining in British Columbia, 2020. British Columbia Ministry of Energy, Mines and Low Carbon Innovation, British Columbia Geological Survey Information Circular 2020-01, in press.

