

## INTRODUCTION

Geoscience BC, in partnership with the East Kootenay Chamber of Mines (EKCM), announced the launch of the SEEK (Stimulating Exploration in the East Kootenays) Project in November 2011. The goal of the SEEK project is to increase economic activity related to mineral exploration by acquiring, compiling and adding value to public and private sector mineral exploration information. The East Kootenays have a long and successful history of mineral exploration and mining. The former Sullivan Mine alone represented \$43 billion of production and sustained the economy of Kimberley and the East Kootenay region for almost 100 years.

The SEEK project is focussed on the East Kootenay region of the Belt-Purcell basin (Figure 1).

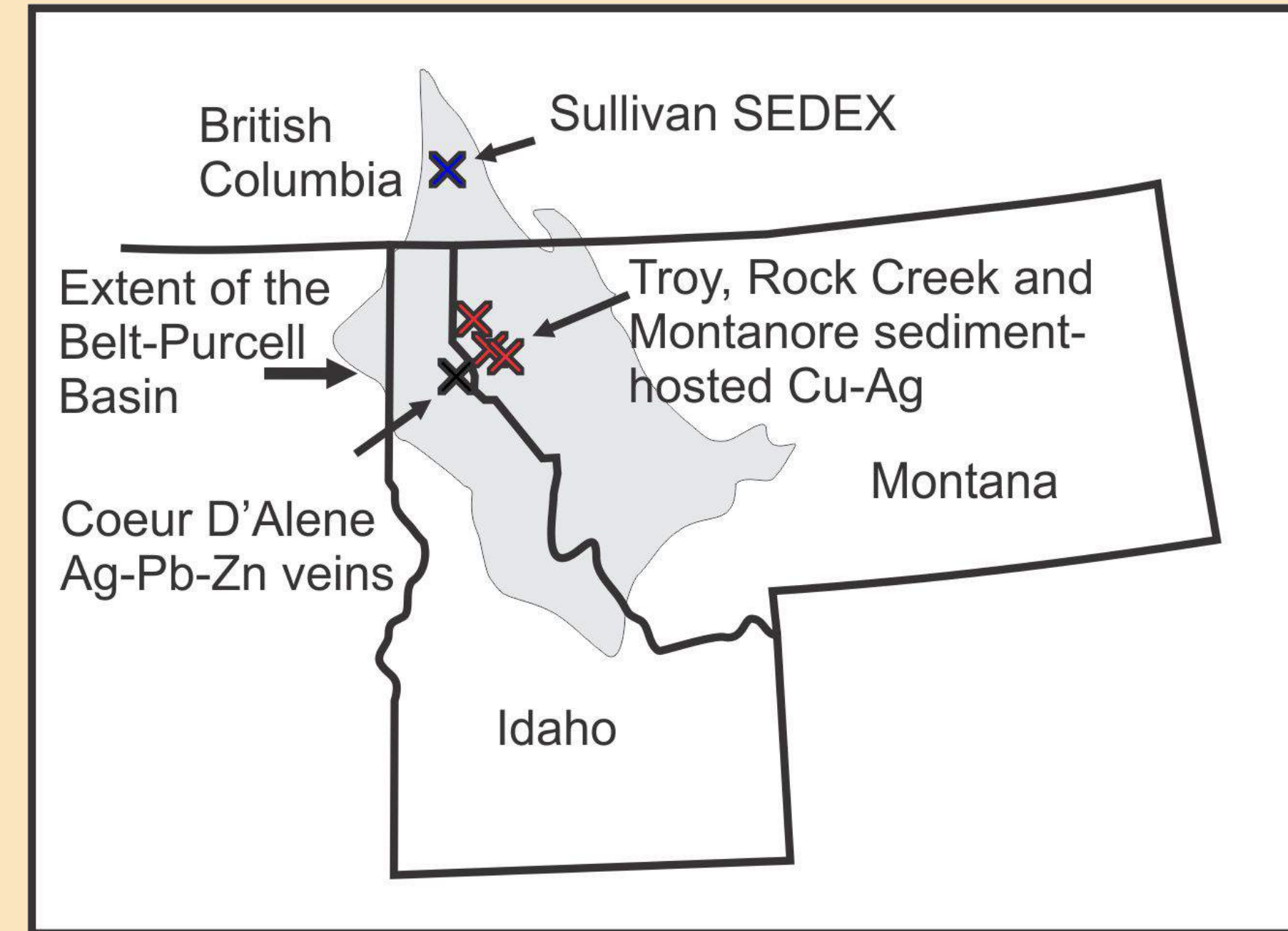


Figure 1: Regional extent of the Purcell Basin.

## Project activities carried out in 2011/2012

SEEK project activities in 2011/12 included:

- (1) providing support towards the establishment of a new EKCM core library
- (2) re-examining the Minfile database and methods of collecting historical geoscience data
- (3) completion of a ground geophysical gravity data compilation for the East Kootenay region.

### The EKCM core library

The core library is being developed to archive a selection of historically important core from the region. The initial focus of this library is to collect, restore, and catalogue core from the Sullivan Sedex deposit and surrounding area.

### Ground geophysical gravity compilation

Ground geophysical gravity data has been demonstrated to be an excellent tool for the targeting of a variety of mineral deposit types. A project led by Ted Sanders is focussed on bringing together all of the existing ground gravity information into a single database. To do this, data from more than 2800 unique ground gravity stations were compiled and reprocessed. The database is designed so that future datasets can easily be added. The database, and a report detailing processing methods, are publicly available and released on the Geoscience BC website.



Figure 3: Core from the Sullivan deposit prior to moving to the new EKCM core facility.



Figure 4: View of the new EKCM core storage facility.

## Proposed Project Activities

- 1) Categorize and add-value to existing discoveries.  
This includes compiling the knowledge of local prospectors and exploration geologists, identifying high-interest mineral occurrences, and adding additional geological information that is not presently in public record.
- 2) Acquisition and dissemination of high value historical private sector mineral exploration information, such as maps, core and core logs, and geochemical databases.
- 3) Acquisition, compilation and dissemination of public and private geophysical data.
- 4) Publication and promotion of the mineral potential of the East Kootenay region.  
Highlight the key deposit types in the region and link up with current mineral exploration knowledge from the American side of the border.

## Regional Geology and Areomagnetic maps

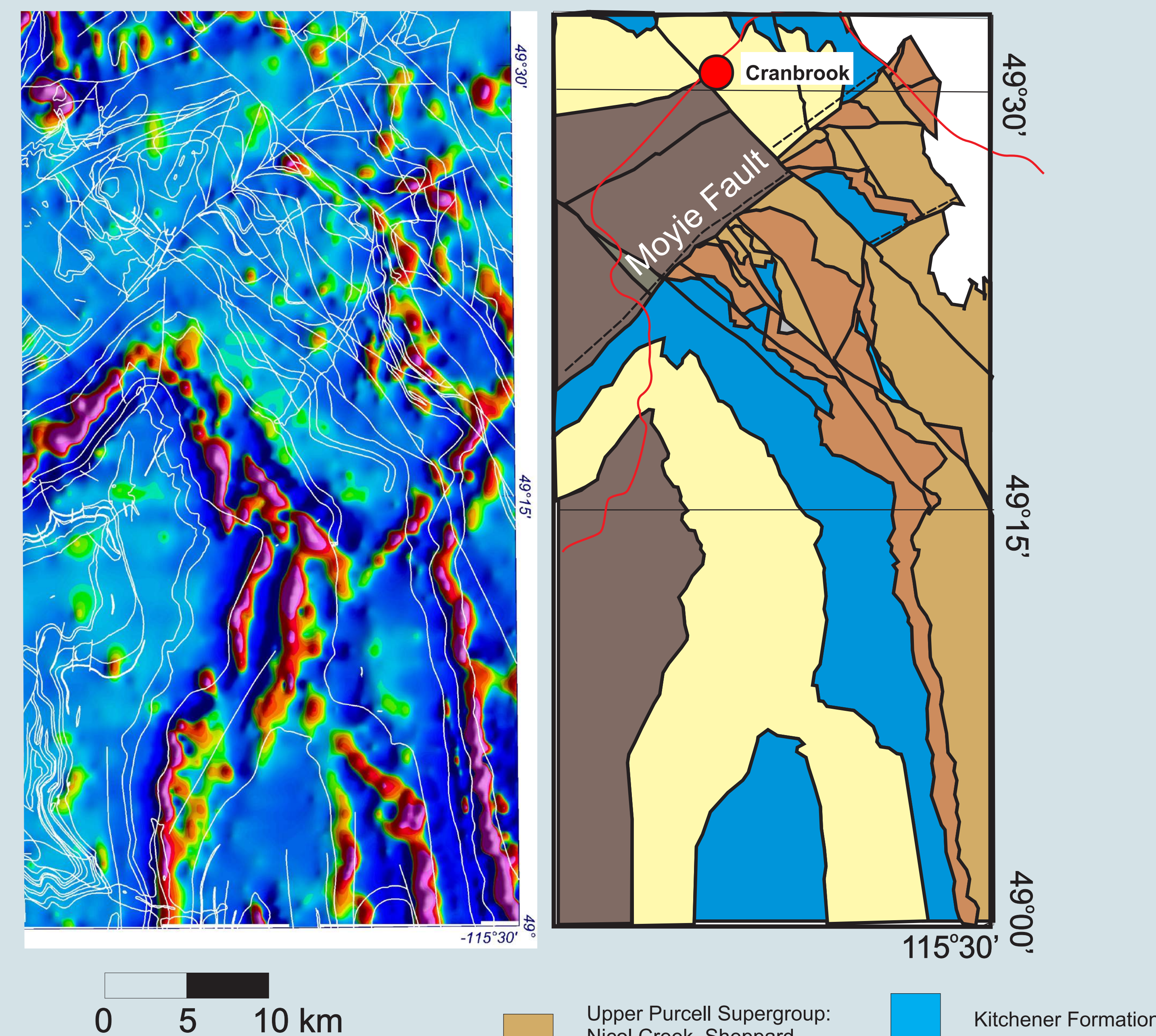


Figure 2: Vertical gradient airborne magnetic map for the central East Kootenay region from the Canadian Aeromagnetic Data Base. Compilation of private geophysical data is one goal of the SEEK project.



Figure 5: Map of ground gravity stations in the East Kootenay region (Ted Sanders, 2012).



Figure 6: Jim McDonald, Fred Cook, Doug Anderson, Sean Kennedy, Ross Stanfield and Peter Klewchuk examining a newly discovered boulder of massive-sulfide galena at the "Spikes Great Adventure" property south of Cranbrook. New discoveries such as this one highlight the exploration potential of the East Kootenay.



Figure 7: East Kootenay field trip organized by Craig and Sean Kennedy.