BACKGROUND

The TREK—Targeting Resources through Exploration and Knowledge—project is a multidisciplinary Geoscience BC-led initiative that targets mineral resources in the NE section of British Columbia’s mineral belt. The project operates on the support and financial assistance provided by the mining industry and the Natural Sciences and Engineering Research Council of Canada, which operates on the support and financial assistance provided by the mining industry and the Natural Sciences and Engineering Research Council of Canada.

To complement airborne magnetic data interpretation and to provide additional data layers for targeted mineral exploration, Fathom Geophysics have compiled available gravity data for the region and generated a suite of derivative digital graphical products. These images have been highlighted through an A-D continuity enhancement using Fathom Geophysics’ raster processing filters to enhance the range of data interrelationships and structural relationships. Consequently, these filters have been applied to the IRG grid using differential upward filtering, enhancing the range of data relations and structural relationships. The images below have been prepared using Fathom Geophysics’ raster processing filters to highlight the range of depth-related features and to create a thematic model grid. These images have been developed to enhance the range of data interrelationships and structural relationships. Additionally, all structural features of the IRG grid have been interpreted to accommodate the range of data interrelationships and structural relationships.

ENHANCEMENT FILTERING OF THE IR GRAVITY GRID

The images below have been prepared using Fathom Geophysics’ raster processing filters to highlight the range of depth-related features and to create a thematic model grid. These images have been developed to enhance the range of data interrelationships and structural relationships. Additionally, all structural features of the IRG grid have been interpreted to accommodate the range of data interrelationships and structural relationships.

FIRST VERTICAL DERIVATIVE

First vertical derivative (1VD) images provide an image of lineaments and small regional features. This image is shown at the top left of the figure. First vertical derivative (1VD) images are shown at a range of different scales. Generally, the 1VD images are best interpreted at a range of scales, as they can provide a range of information at different scales. Included in that package are a range of different scales, as they can provide a range of information at different scales. The images below have been prepared using Fathom Geophysics’ raster processing filters to enhance the range of data interrelationships and structural relationships. Consequently, these filters have been applied to the IRG grid using differential upward filtering, enhancing the range of data relations and structural relationships. The images below have been prepared using Fathom Geophysics’ raster processing filters to highlight the range of depth-related features and to create a thematic model grid. These images have been developed to enhance the range of data interrelationships and structural relationships. Additionally, all structural features of the IRG grid have been interpreted to accommodate the range of data interrelationships and structural relationships.

COMBINED MULTI-SCALE STRUCTURE

Results of the area automated, multi-scale data enhancement applied to the IRG grid combined across scales. This approach highlights the range of data interrelationships and structural relationships. Additionally, these filters have been applied to the IRG grid using differential upward filtering, enhancing the range of data relations and structural relationships. The images below have been prepared using Fathom Geophysics’ raster processing filters to enhance the range of data interrelationships and structural relationships. Consequently, these filters have been applied to the IRG grid using differential upward filtering, enhancing the range of data relations and structural relationships. The images below have been prepared using Fathom Geophysics’ raster processing filters to highlight the range of depth-related features and to create a thematic model grid. These images have been developed to enhance the range of data interrelationships and structural relationships. Additionally, all structural features of the IRG grid have been interpreted to accommodate the range of data interrelationships and structural relationships.

GRAVITY DOMAINS

Gravity domains were generated from the IRG grid using a combination of an A-D continuity enhancement. These images can be best deployed during a range of data interrelationships and structural relationships. Additionally, all structural features of the IRG grid have been interpreted to accommodate the range of data interrelationships and structural relationships.

REPORT WITH DATA AND MAPS

Data and maps are provided in the form of a data package and associated reports. These packages are provided in a range of formats, including PDF and HTML, and can be accessed through the project website at http://www.geosciencebc.com/s/TREK.asp.