DIGITAL MAPPING TECHNIQUES 2023

The following was presented at DMT’23
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The contents of this document are provisional

See Presentations and Proceedings from the DMT Meetings (1997-2023)

http://ngmdb.usgs.gov/info/dmt/
Focus Areas for Subsidence from the Butte Stope Books

The Butte Stope Books are a unique part of Butte, Montana’s mining heritage. The books hold all of the underground mine workings information from the Anaconda Mining Company. The workings inside the books date from pre-1897 to 1892. Even though underground mining ceased to exist after 1895, there is mapping as late as 1987 due to the New Butte Mining Company. There are a total of 362 stope books in the collection which are currently held by Montana Resources, the Butte-Silver-Bow Public Archives and the New Butte Mining Company.

Each stope book footprint represents 40.4 acres of surface space and shows the workings for all mines that fall inside of the book footprint. Each page of every stope book represents an elevation of 6.64" unless otherwise noted in the workings. The total amount of surface covered by the books is 12.14 square miles.

The books are currently being scanned by the Data Preservation Department at the Montana Bureau of Mines and Geology so that the collection can not only be saved from possible destruction, but also to become a full collection again digitally.

Over the past three years, several entities have expressed interest in the stope books including the county of Butte-Silver-Bow for subsidence issues within 200 feet of surface (shown), Blackjack Silver Corporation who is currently conducting exploration drilling on the Butte hill and Dr. Keith Riss who is currently using the books to create a three-dimensional model of the Butte mines which can be viewed at www.abandonedminemodels.com.

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