

Book D

Bathymetry Profiles

By
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[Wold](#) (1982) does not mention a bathymetric recording system, and Ronald Friedel, Wold's technician, has not mentioned it in our correspondence. My narrative in Book B, however, discusses the magnetostrictive source for the depth sounding equipment that accompanied the Wold-Friedel seismic system during the 1970 surveying. The set of slides that Wold provided to me in 2006 serendipitously captured parts of the depth sounder source and receiver, but the strip chart recorder that rendered the sections in this book is not pictured. Arnold [Silverman](#), University of Montana Geosciences Department faculty member in the 1960's and 1970's, with the help of David Pevear and perhaps other students, had been recording bathymetry in the lake for some time prior to the 1970 Wold-Crosby reflection seismic survey. The bathymetric sections from the Wold-Crosby program were likely recorded with the [Silverman equipment](#) as I discussed in the narrative for Book B.

The bathymetric sections appear to be displayed in depth in units of feet. Along lines that crossed the deeper parts of the lake, the depth images wrap around in order to maintain a constant depth scale. The wrapping appears to have been an automatic feature of the recording system. These bathymetric sections can be a valuable resource in resolving time zero and timing line spacing issues on some of the field recordings and the redisplayed seismic sections.

The bathymetric sections were recorded on a paper with a metallic coating, which is in contrast to the wet-paper chart recorder used for recording the seismic data in the field.

References Cited

Wold, R. J., 1982, Reflection seismic study of Flathead Lake, Montana, USGS Miscellaneous Field Studies Map MF-1433: US Geological Survey. (URL: <https://pubs.usgs.gov/mf/1433/plate-1.pdf>)

Citing this Narrative

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Therefore, I am suggesting a citation for this narrative. My suggested citation is in a slightly different form than the ScholarWorks form, but that is not critical. Every medium has its

preferred format. The important components of a digital citation are the author(s), the title of the work, the year of creation, the name of the collection in which the work appears, and the URL of the work. The following meets those specifications.

Lankston, R. W., 2023, "D. Bathymetry profiles – narrative by Robert W. Lankston" in 1970 *Flathead Lake Seismic Survey*. URL:
<https://scholarworks.umt.edu/cgi/viewcontent.cgi?filename=0&article=1002&context=flathead&type=additional>

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I would suggest the same citation format and the same technique for capturing the URL of the supplemental files that form the heart of the content of this book. For the Line A bathymetry profile, specifically, the citation could look like:

Crosby, G. W., and Wold, R. J., 1970, "D. Bathymetry profiles – Line A bathymetry" in 1970 *Flathead Lake Seismic Survey*. URL:
<https://scholarworks.umt.edu/cgi/viewcontent.cgi?filename=1&article=1002&context=flathead&type=additional>

In this case, the authors are those who collected (created) the seismic and bathymetric data, and the date is when the data were collected. The authors of the files, other than my narrative, are listed after the book title on the ScholarWorks page, and the year of creation is listed in the Date field below the list of available files. Those author and date fields are ones that I set when I enter the metadata for the book.

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