

Book J

New Display of the 1970 Flathead Lake Seismic Data *On-line Version of the 2011 Northwest Geology Paper by Robert W. Lankston*

**By
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This book contains a slightly modified version of the paper written by Robert Lankston (2011) and published in the Tobacco Root Geological Society (TRGS) journal Northwest Geology. The University of Montana Mansfield Library has this volume in its stacks. Also, the volume may be purchased through the [TRGS](#) website.

The modifications to the published document are slight. For example, the published version mentions that this digital archive was expected to be up by 2012. In fact, a precursor to this site was up in 2012, but this ScholarWorks site went live in 2013. The published document also mentions the Silverman, Pevear, and Prah (1971) bathymetry and survey [track line map](#)¹. [Book B](#): Bathymetry and Survey Line Locations was expanded in early 2016 to include a “photoshopped” version of the scanned image of the surviving Silverman et al. map, and the edited TRGS paper in this book references [that new image](#) of the track lines and bathymetry. A full description of the process of the digital enhancement of the map is presented in the [narrative for Book B](#).

The edited TRGS paper in this book contains hyperlinks to the various items on this site, and these did not appear in the Northwest Geology publication.

The edited TRGS paper in this book describes processing applied only to the seismic lines whose data were preserved on the United States Geological Survey (USGS) analog [archive tape](#) that was discovered in 2006.. The digitized data are described in Books [H](#) and [I](#) on this site.

All of the data processing and interpretation described in the edited TRGS paper were completed prior to the 2011 Northwest Geology publication date. However, Figures 2a, 2b, and 3 have been replotted because the website provides more flexibility in the size and aspect ratio of the illustrations than was available on the printed page.

The figures for the edited TRGS paper are posted as separate files in this book, but the captions are at the end of the text of the paper.

¹ Some graphics files, e.g., maps, seismic sections, and so forth, can be large and can take some time to download.

A few changes were made to the 2011 TRGS paper in order to address punctuation errors, typographical errors, unclear pronoun references, and so forth.

In addition to the edited version of the 2011 TRGS paper, a primer on [recognizing bubble pulse](#) events (Lankston, 2017) is included in this book. This is presented with the hope that concepts in the edited TRGS paper will be more understandable.

References

Lankston, R. W., 2011, New display of the 1970 Flathead Lake seismic data, Northwest Geology, v 40, p 55.

Lankston, R. W., 2017, Identifying the air gun bubble pulse event, in J. New display of the 1970 Flathead Lake seismic data, <http://scholarworks.umt.edu/flathead/13> .

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