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National Geological and Geophysical Data Preservation Program

Arkansas Geological Survey FY2014 Mineral Survey Preservation Project

Final Technical Report

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In response to the USGS FY2014 National Geological and Geophysical Data Preservation Program (NGGDPP) grant announcement, the Arkansas Geological Survey (AGS) has developed and implemented a plan that included the inventory and scanning of 800 AGS Works Project Administration (WPA) Mineral Survey Inventories dating from 1938-1940. As part of the project the AGS proposed to convert records to digital format to ensure preservation. Metadata was generated for each county, township, and range report as well as the collection as a whole. All documents have been made available to the public digitally on the Agency's website.

The multi-page mineral survey reports contain historical, hand-written information on mineral commodities, surrounding geology, lithologic maps, stratigraphic columns, cross sections, and cultural features listed for a single county, township, and range, with more detailed information for each section. These historical documents show the in-depth analyses of the state's natural resources during the time of heightened interest in mineral exploration throughout the country. These documents provide valuable information for routine mineralogical and lithological inquiries.

Scanning of this collection was completed using existing equipment. Each report was scanned using a .tiff file format at 600 dpi optical resolution at 24 bit, which produced the highest quality images. PDF format at lower resolution was also created and is available online for the public for easier downloading capabilities. Scanned images have been indexed and added to the existing online AGS mineral commodity database. The reports have been transferred from their current degraded folders into archival grade acid free folders and boxes to ensure physical preservation for these historical documents. The availability of the WPA digital records is a highly valuable asset for those researching industrial minerals or metals in the State of Arkansas.

The results of the project went according to plan with only adding some additional steps in the scanning process. Originally the documents were to be scanned straight to black and white. The collection contains a variety of different documents including maps, cross sections, tables and charts on different quality of paper. The documents also were recorded with different mediums including typed ink, pen ink, colored pencils, and standard pencils. Documents recorded in pencil proved to be difficult to scan and be legible. To maintain a consistent quality of scans across all documents they were scanned to color and then converted to black and white. This conversion process produced the best quality of image. Documents were then reviewed for clarity. Documents not legible were then rescanned and enhanced with image manipulation software. Some documents contain information on front and back of the page. These pages had ink bleed through so the scanner setting that would scan front and back while removing blank pages was not able to be used. The blank pages were removed during the review stage. The 800 estimated reports to be scanned were exceeded and the total collection was scanned with the total number of records reaching 1075. Records for the collection inventory were submitted to the national catalog in CSV format through the template available from <http://datapreservation.usgs.gov/>. Additionally, a WPA Mineral Report Index map of Arkansas is included to show the area covered by the WPA Mineral Reports.

WPA Mineral Report Index

