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FIELD RECORDS COLLECTION
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HENRY FAUL
(1920 - 1981)

NOTES, CORRESPONDENCE, PAPERS

1945 – 1957

(0.3 linear ft.)

Henry Faul was born in Prague, Czechoslovakia, in 1920. He earned a B.S. from the Massachusetts Institute of Technology in 1941, an M.S. from Michigan State University in 1942, and a Ph.D. from M.I.T. in 1949. During World War II, Faul worked on the Manhattan Project, based in Los Alamos, New Mexico. He was employed as a geophysicist with the USGS from 1949 to 1963 in Denver and Washington, D.C. From 1963 to 1966 Faul served on the staff of the Southwest Research Institute. In 1966 he became a professor of geophysics and head of the geology department at the University of Pennsylvania, where he remained until his death. Faul's areas of specialty were nuclear geophysics, geochronology, and the history of the solar system. He was also a noted expert and author in the field of antique furniture.

INVENTORY

By

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MS 914, Box 25046, Federal Center
Denver, CO 80225-0046
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Location of Field Notebooks CS 21-8

GAMMA-RAY LOGGING OF DRILL HOLES. 1945-1946.

Item Number	Description
NO-08756	Expandable envelope with an unpublished report prepared by Henry Faul and Dr. Clark Goodman under a contract with Union Mines Development Corporation. The report describes development and application of a portable gamma-ray drill hole logging apparatus. This equipment, code-named "Barnaby," supplemented geological and engineering studies in programs to locate and evaluate radioactive ore deposits, and was widely used in these activities in the Colorado Plateau region of the southwestern United States. The report is in 4 parts: - Folder 1. Part 1. April 30, 1946. "The Logging Instrument". Includes information on the history, design and development, operating procedure, and records produced by the instrument. There are several black and white photographs as well as other illustrations. - Folder 2. Part 2. January 14, 1946. "Calibration of Instrument". Includes sections on preliminary theoretical considerations, experimental conditions, measurement of records, interpretation of records, application to drill-hole logs, future considerations, summary and conclusions, and recommendations. There are also illustrations. - Folder 3. Part 3. "Supplementary Calibration of Instrument and Manual of Operating Instructions". The "Summary" notes that Part 2, above, "reviewed the theoretical aspects of [calibrating the instrument[and presented preliminary calibration data on simulated drill holes containing known distributions of ore. Section A includes additional calibration measurements which are combined with the preliminary results to give an accurate method of interpreting field observations. "Manual of Operating Instructions" includes drill hole preparation, preparation of instrument for logging, chart preparation, logging record keeping, chart evaluation, plus illustrations. Also included is Appendix 1, dated August 4, 1945, titled: "Barnaby – A Transportable Counting-rate Meter for Gamma Measurements up to Two Hundred Feet Distant by Means of a Small Probe. Operating Instructions". - Folder 4. "Directional Barnaby Attachment". Includes information on design, calibration, and field tests of the attachment. Also included is Appendix 1, titled "Four Memoranda on Directional Logging", and Appendix 2, titled "Manual of Operation for Directional Barnaby Attachment", with illustrations.

FOSSIL FOOTPRINTS FROM THE RIFLE SANDSTONE, COLORADO. 1950.

NO-00080	Expandable envelope with a draft of an article, one letter, six illustrations, one

map, and four photographs relating to fossil tracks, most of which were found in sandstone on the crest of Flag Ridge, south of Meeker in Rio Blanco County, Colorado. Coauthor Wayne A. Roberts was a coworker with Faul.

Published as: Journal of Paleontology, V. 25, No. 3, pp 266-274. 1951.

GEOLOGIC APPLICATIONS OF MAGNETIC RESONANCE. 1957.

NO-08957 Envelope with a copy of an informal, unpublished report on the geologic applications of nuclear magnetic resonance. The report is from the files of the former USGS Geologic Division Branch of Geophysics.