



**U.S. GEOLOGICAL SURVEY LIBRARY
FIELD RECORDS COLLECTION
DENVER, COLORADO**

HAROLD EDWIN MALDE
(1923 - 2007)

NOTES, CORRESPONDENCE, PAPERS

1950 - 1984

(7 linear ft., 36 map folders and 1 map roll)

Harold E. "Hal" Malde was born in Reedsport, Oregon in 1923. He graduated with a BA degree in mathematics and chemistry from Willamette University in 1947 and studied geology at the University of Colorado Graduate School. He began his career with the USGS in 1951 and remained with the agency until his retirement in 1987. Malde performed notable geologic studies of the Snake River Plain in Idaho, coal resources in Montana, and early man sites in Mexico and China. His honors include the U.S. Department of the Interior's Meritorious Service Award, the Geological Society of America's Kirk Bryan Award, and the Nature Conservancy's Oak Leaf Award. He was an active photographer and environmentalist and was known for his repeat photography of historical images.

INVENTORY

By

Carol A. Edwards
U.S. Geological Survey Field Records Collection
MS 914, Box 25046, Federal Center
Denver, CO 80225-0046
March 2004

Location of Field Notebooks: CS 23-2 through 4

GEOLOGY AND STRATIGRAPHY OF THE SNAKE RIVER PLAIN, IDAHO. 1954-1967.

<u>Item Number</u>	<u>Description</u>
NO-03418	History of Snake River Canyon group near Hagerman and King Hill, Idaho.
NO-03391	Book I. 1955-1956. Field notes, station numbers 101-368. Glens Ferry, King Hill, and Pasadena Valley 15' quadrangles, Elmore County; Bliss, Hagerman, and Tuttle 7.5' quadrangles, Gooding County; Marsing 7.5' quadrangle, Bruneau and Glens Ferry 15' quadrangles, Owyhee County; American Falls 15' quadrangle, Power County; Buhl and Pasadena Valley 15' quadrangles, Twin Falls County; Olds Ferry 15' and Weiser 30' quadrangles, Washington County, Idaho.
NO-03392	1957-1958. Field notes, station numbers 368-484. Glens Ferry, King Hill, and Pasadena Valley 15' quadrangles, Elmore County; Bliss 7.5' quadrangle, Gooding County; Big Foot Butte, Bruneau, Glens Ferry, Indian Cove, Oreana, and Pasadena Valley 15' quadrangles, Owyhee County; Buhl 15' quadrangle, Twin Falls County, Idaho; a few notes on Meade County, Kansas, Madison County, Montana, and Malheur County, Oregon.
NO-03393	1958-1959. Field notes, station numbers 485-553. Bennett Mountain, Glens Ferry, King Hill, Pasadena Valley 15' quadrangles, Elmore County; Bliss, Gooding Butte, Hagerman, and Tuttle 7.5' quadrangles, Gooding County; Homedale 7.5' quadrangle, Bruneau, Grand View, Indian Cove, Oreana, Pasadena Valley 15' quadrangles, and Silver City 30' quadrangle, Owyhee County; Buhl and Pasadena Valley 15' quadrangles, Twin Falls County, Idaho; and a few notes on Franklin and Kittitas Counties, Washington.
NO-03394	1959-1960. Field notes, station numbers 554-567. Camas Prairie 30' quadrangle, Camas County; Glens Ferry, King Hill and Pasadena Valley 15' quadrangles, Elmore County; Pasadena Valley 15' quadrangle, Gooding County; Oreana and Pasadena Valley 15' quadrangles, Owyhee County; Hagerman 7.5' quadrangle and Pasadena Valley 15' quadrangle, Twin falls County, Idaho.
NO-03395	1960. Field notes. King Hill and Pasadena Valley 15' quadrangles, Elmore County; Grand View 15' and Silver City 30' quadrangles, Owyhee County; Buhl 15' quadrangle, Twin Falls County; Weiser 30' quadrangle, Washington County, Idaho; also, a few notes on Malheur County, Oregon.
NO-03396	1960. Field notes and measured sections. Glens Ferry 15' quadrangle, Elmore County; Hagerman 7.5' quadrangle, Gooding County; Glens Ferry 15' quadrangle, Owyhee County, Idaho.
NO-03397	1960. Field notes and photo descriptions. Glens Ferry 15' and Camas

Prairie 30' quadrangles, Elmore County; Jerome 15' quadrangle, Jerome County; Bruneau, Glens Ferry, Grand View, Indian Cove, Oreana 15' quadrangles and Silver City 30' quadrangle, Owyhee County; Jerome 15' quadrangle, Twin Falls County, Idaho.

- NO-03398 1960-1962, 1967. Field notes and photo descriptions. King Hill 15' quadrangle and Camas Prairie 30' quadrangle, Camas County; Crater Rings 7.5' quadrangle, Bennett Mountain, Glens Ferry, Indian Cove, King Hill, Mountain Home, and Pasadena Valley 15' quadrangles, Elmore County; Bliss and Hagerman 7.5' quadrangles, Davis Mountain, King Hill, and Thorn Creek 15' quadrangles, Silver City 30' quadrangle, Wilson Peak 7.5' quadrangle, Owyhee County; Jerome 15' quadrangle, Twin Falls County, Idaho; and a few notes on Jerome and Lincoln Counties, Idaho.
- NO-03417 Expandable envelope with 14 groups of field sheets, in pieces: Hagerman, Thousand Springs, Tuttle I-VI, 1959; Glens Ferry Tiers 1-4; Pasadena Valley Tiers 1-4. Idaho.
- NO-05717 1954-1955. Expandable envelope with:
- 6 groups of lists of measured sections numbered 1-5 and unnumbered section of Tuana and Hagerman beds at vertebrate fossil quarry, Hagerman 7.5' quadrangle, Twin Falls County;
 - 1 group of notes and correspondence concerning Hagerman Formation names;
 - 1 group graph paper sheets showing stratigraphic section sketches and descriptions of early Pleistocene sediments for Hagerman, Idaho and Sections A-D;
 - 1 group of notes and graph paper sheets showing stratigraphic section compilations for the Hagerman and Tuana Formations.
- NO-10443 Folder 1 Montini Volcano manuscript; folder 2 Shoshone Falls manuscript; folder 3 Birds of Prey area; folder 4 left Bank data; folder 5 right bank data.
- NO-10446 Andretta's Field Notebook alluvial samples for geochemical field tests.
- MA-00607 Map folder with work from 1961:
- 1 explanation of paleomagnetic samples;
 - one 2-degree map, each of Boise, Ada County and Twin Falls, Twin Falls County, Idaho, with paleomagnetic localities;
 - 1 map, each, Hammett and Bliss 7.5' quadrangles, Elmore and Gooding Counties;
 - 1 map of Craters of the Moon National Monument, Butte County;
 - 1 map Gooding Butte, Bliss, Hagerman, Tuttle, and Thousand Springs 7.5' quadrangles;
 - 1 map, each, Crowsnest, Davis Mountain, and Buhl 15' quadrangles;

- 1 map Buhl 7.5' quadrangle;
- 1 map, each, King Hill, Pasadena Valley, Glenns Ferry, Bennett Mountain, and Blue Butte 15' quadrangles;
- 1 map, each, of Buhl and Bennett Mountain areas, GX [geochemistry] alluvium and soil samples.

MA-00608 Map folder with:

- 2 notebook pages, 8 graph sheets, and 1 paper map, each, of Grand View, Indian Cove, and Bruneau 15' quadrangles, Owyhee County;
- 1 map each, King Hill, Bennett Mountain, Glenns Ferry and Pasadena Valley 15' quadrangles, Elmore County, Idaho;
- 2 maps each of Bliss, Gooding Butte, Hagerman, Thousand Springs, and Tuttle 7.5' quadrangles, Gooding and Twin Falls Counties.

MA-00609 Map folder with:

- 1 cloth-backed map of Pasadena Valley 15' quadrangle;
- 1 cloth-backed map, each, Ticeska, Twenty-Mile Butte, Indian Butte, and Pasadena Valley 7.5' quadrangles;
- 5 maps of the Pasadena Valley 15' quadrangle, Elmore, Gooding, Twin Falls, and Owyhee Counties, Idaho.

MA-00610 Map folder with:

- 1 cloth-backed map of Glenns Ferry 15' quadrangle;
- 1 cloth-backed map, each, of Pot Hole Canyon, Hammett, Glenns Ferry 7.5' quadrangles;
- 6 paper maps of the Glenns Ferry 15' quadrangle;
- 2 paper maps of Blue Butte 15' quadrangle, Elmore and Owyhee Counties, Idaho.

MA-00611 Map folder with:

- 6 paper maps of the Camas Prairie 15' quadrangle;
- 3 paper maps (1960 Field Check Sheet);
- 2 paper maps King Hill 15' quadrangle;
- 1 paper map and 2 plane table sheets of King Hill area, Camas, Elmore, and Gooding Counties, Idaho.

MA-00612 Map folder with:

- 1 cloth-backed and 1 paper map of Gooding Butte 7.5' quadrangle;
- 1 cloth-backed and 2 paper maps of Tuttle 7.5' quadrangle;
- 1 cloth-backed and 3 paper maps of Hagerman 7.5' quadrangle;
- 1 cloth-backed and 3 paper maps of the Thousand Springs 7.5' quadrangle;
- 1 cloth-backed and 3 paper maps of the Bliss 7.5' quadrangle;
- 2 paper maps of David Mountain 15' quadrangle;
- 1 paper map Thorn Creek, 1960 field check sheet.

- MA-00613 Reconnaissance maps of west-central Snake River Plain, Pasadena Valley and Hailey-Twin Falls, Idaho.
- MA-02675 Misc. maps of the Snake River Plain.
- MA-02676 Geologic maps of the state of Idaho and gravity contour and geology maps of Inqua.
- MA-02677 Patterned ground overlays, enlarged aerial photographs and maps of the western Snake River Plain.
- MA-02678 Geochemical samples of stream alluvium, Snake River Basin.
- MA-02680 Bonneville flood area, Snake River Basin.
- Published as: U.S. Geological Survey. Professional Paper 400-B. 1960.
- Published as: U.S. Geological Survey. Professional Paper 424-B. 1960.
- Published as: U.S. Geological Survey. Professional Paper 644-F. 1971.
- Published as: U.S. Geological Survey. Professional Paper 596. 1968.
- Published as: U. S. Geological Survey. Professional Paper 644-F. 1969.
- Published as: U.S. Geological Survey. Miscellaneous Geologic Investigations Map I-373. 1963.
- Published as: U.S. Geological Survey. Miscellaneous Geologic Investigations Map I-696. 1972.

GEOLOGY OF THE BINNEAU FORMATION, WESTERN SNAKE RIVER PLAIN, IDAHO. 1978-1984.

- NO-10444 15 Field Notebooks of the Snake River Valley from Glenn's Ferry to Walter's Ferry, Idaho.
- NO-10445 1 box index notes to Field Notebooks and annotated field maps for Jordan Valley, Twin Falls, Hailey and Boise.
- MA-02671 Annotated topographic maps of the following quadrangles: Antelope Springs, Bellevue, Bennett Mtn., Big Hill, Big Foot Butte, Blaine, Bliss, Blue Butte, Bruneau, Buhl, Chalk Hills, Cinder Cone Butte, Cloverdale, Crater Rings, Crater Rings SE, Crater Rings SW, Crows Nest, Davis Mountain, Dorsey Butte, Eagle, Eden and Fairfield.

- MA-02672 Annotated topographic maps of the following quadrangles: Glens Ferry, Grand View, Hagerman, Hailey, Hammett, Hazelton NE, Hot Springs, Hunt, Indian Butte, Indian Cove, Initial Point, Jerome, Jordan Valley, King Hill, Lake Lowell, Little Joe Butte and Little Valley.
- MA-02673 Annotated topographic maps of the following quadrangles: Milner, Montour, Mora, Marsing, Mountain House, Mouth of Bruneau, Niagara Springs, Opalene Gulch, Oreana, Pence Butte, Parma, Pasadena Valley, Pot Hole Canyon, Reverse and Rough Mountain.
- MA-02674 Annotated topographic maps of the following quadrangles: Sand Dunes, Sands Basin, Sinker Butte, Sugar Valley, Thorn Creek, Thousand Springs, Ticeska, Tuttle, Twin Falls, Walters Butte, Wild Horse Butte, Wilsons Peak and Winter Camp.

Published as: U.S. Geological Survey. MF-2063 A-E. 1989.

Published as: U.S. Geological Survey. I-2096. 1990.

GEOLOGY AND STRATIGRAPHY OF THE VALSEQUILLO AREA, PUEBLA, MEXICO. 1964-1973.

- NO-07158 Field notebook with geologic notes, sketches, measured section data, photo information, and sample listing and descriptions, many on the Tetela peninsula. Sample numbers 64M1—135, 65M1—173. 1964-1965.
- NO-07159 Field notebook with geologic notes, measured section data, sketches, photo information, and sample listing and description for the Bca. Buena Vista locale and other areas. Sample numbers 65M174-263, 66M1—186. 1965-1966.
- NO-07160 Field notebook with geologic notes, sketches, measured section data, photo information, and sample listing and description for the Tetela peninsula and vicinity. Sample numbers 66M188 – 298. 1966.
- NO-07161 Field notebook with geologic notes, photo information, and sample data. Sample numbers 65M1 – 53. Valsequillo, 1968. Book 1.
- NO-07162 Envelope with field notebook and loose sheets with geologic notes, altitude information, photo information, and sample descriptions. Sample numbers 67M54 – 103, 70M3 – 12. Valsequillo, 1968. Book 2. 1970.
- NO-07163 Field notebook with geologic notes, survey data, photo information, and sample descriptions. Sample numbers 73M5, 15 and 16. Valsequillo, 1973.
- NO-07164 Materials in folders 3-6 were formerly in map folder MA-1088. Manuscript box

with:

- Folder #1 – memo from Ray Wilcox (13 June 1968) concerning petrographic examination of a sample of basaltic tuff, 64M60; geologic and stratigraphic notes; notes on illustrations and place names;
- folder # 2 - typed Preliminary Draft, “Stratigraphy of Valsequillo region (except Valsequillo Gravel, volcanic ash stratigraphy, etc)” by Harold E. Malde, May 1968;
- folder #3 – photocopy of typed Preliminary Draft in folder 2, with editing notes and at least 1 illustration not in folder 2 copy;
- folder #4 –
 - o List with descriptions: Steen-McIntyre samples collected on Tetela Peninsula, Valsequillo area, Puebla, Mexico, May 1973; Valsequillo Formation, Buena Vista area – description of beds with corresponding Malde sample numbers, and maximum bed thickness information;
 - o Map, Form Lines at Base of Tetela Mud Member of Valsequillo gravels, Tetela Peninsula, Valsequillo Reservoir;
 - o Map, Buena Vista area, Tetela Peninsula. Bottom Contour, Tetela Mud Member, Valsequillo Gravels. Contours, Map, and Outline of Geologic Bodies by H.E. Malde, 1970;
 - o Map, Position of representative samples of lapilli and ash in Valsequillo gravels at Buena Vista Tetela;
 - o Two similar geologic maps of Buena Vista Tetela area; one with annotations;
- folder #5 –
 - o Index map of southwest part of La Malinche
 - o La Malinche Volcanic Ash stratigraphy;
 - o Correlation chart, La Malinche-Tetela-Rio Frio-Caulapan;
- folder #6 – Six (6) sheets of notes and sketches on samples of Virginia Steen-McIntyre and Harold E. Malde; cover sheet says “Bca. Xotanacatla.”

- NO-07165 Expandable envelope with contents list and 118 aerial photographs dated 1965. Flight 1805 numbers: 12:1-5, 13: 1-5, 14: 1-6, 15: 1-9, 16:1-10, 17: 1-25, 18: 1-19, 19: 1-20, 20: 1-19.
- NO-07166 Expandable envelope with 63 aerial photographs dated 1965. Flight 1805 numbers 21: 1-15, 22: 1-18, 23: 1-10, 24: 1-9, 25: 1-11. (Index map in MA-1088).
- NO-07167 Expandable envelope with 73 aerial photographs dated 1959. Flight 1452 numbers 39-54, 59-62, 75-110, 113-120. (Index map in MA-1088).
- NO-07168 Expandable envelope with “La Malinche” photo and 44 aerial photographs dated 1955. Flight 1230 numbers 1-44.
- NO-07169 Expandable envelope with 98 aerial photographs, “La Malinche West”, dated 1963. Flight 1687 numbers 1-98. (Index map in MA-1088)

- NO-07170 Expandable envelope with 73 aerial photographs, “La Malinche East” dated 1963. Flight 1687 numbers 99-171. (Index map in MA-1088).
- NO-07171 Expandable envelope with 59 aerial photographs, “Presa Valsequillo”. Flight P-64 numbers F1: 1-10; F2: 1-13; F3: 1-12; F4: 1, 3-10; F5: 1-6, 8-14. (Index map in MA-1088)
- MA-01088 Map folder with:
- unlabeled pencil sketch map – Buena Vista area?
 - Aerial photo index maps for Valle de Puebla, Carretera de Puebla, Presa Valsequillo PUE, and La Malinche;
 - 3 black and white vertical aerial photographs of the Buena Vista area, Tetela Peninsula – 2 have annotations;
 - sheet with: Fryxell samples collected at Hueyatlaco, Valsequillo, May 1973;
 - sheet with Monoliths collected at Hueyatlaco, May 1973;
 - paper sheet, Hueyatlaco Trench Diagrams-Key;
 - 2 unlabeled mylar trench diagrams;
 - copy of first set of Hueyatlaco measurements, ca 1973;
 - second set of measurements 5/28/73;
 - 2 similar geologic maps of Buena Vista Tetela area;
 - 4 sample locality maps;
 - one large and one smaller paper geologic map of the Puebla-Atlixco area, by Harold E. Malde, 1968;
 - 2 copies of the geologic map of the Puebla-Atlixco area, by Harold E. Malde, with accompanying legend on the same sheet;
 - 2 copies of the legend only for the geologic map of the Puebla-Atlixco area;
 - mylar geologic map of the Valsequilla area by Harold E. Malde, May 1968, plus 2 paper copies in different sizes;
 - 1-sheet explanatory text on Historic Gully Erosion (2 copies), plus photocopy with map and explanatory text on one sheet;
 - Radiocarbon age determination for mollusk shell specimen, plus 2 stratigraphic drawings showing the sample location, Barranca Caulapan, loc. 66R14;
 - 4 sheets, Valsequillo Project, Stratigraphy and Surveying, May 1973, by R. Fryxell, H. Malde, and V. Steen-McIntyre;
 - copy of letter from Mario Richardo (19 August 1968) with list of Vertebrate Collecting Localities, Valsequillo, and paper geologic map of the Valsequillo area with vertebrate localities shown
 - paper copy, in 5 pieces, of geologic map of the Valsequilla area, including legend, with color added by Steen-McIntyre, to show “units of interest to the archeologist (email, Feb. 16, 2003);
 - paper color copies of the 4 Hueyatlaco archeological site 1973 trench profiles, showing stratigraphic relationships.
- RM-00007 Large mylar geologic map of the Puebla-Atlixco area, 1968.

NEW MEXICO STUDIES: URBAN DEVELOPMENT NEAR SANTA FE, AND GEOLOGY OF CHACO CAÑON. 1970-1977.

- NO-07147 Urban Development. 1970. Book 1. Field notebook with geologic notes and photo information for localities in the Seton Village, Turquoise Hill, Galisteo, Tesuque, and Santa Fe 7.5' quadrangles.
- NO-07148 Urban Development. 1970. Book 2. Field notebook with geologic notes, section data, and repeat photo information, for localities in the Galisteo, Santa Fe, Seton Village, Bull Canyon, Glorieta, Ojo Hedionka, White Rock, and Turquoise Hill 7.5' quadrangles, and the Madrid 15' quadrangle, Santa Fe and Los Alamos Counties.
- NO-07149 Urban Development. 1971. Book 1. Field notebook with repeat photo and photo data for localities in the Madrid 15' and the Turquoise Hill, Glorieta, and Galisteo 7.5' quadrangles. Also includes erosion pin information for the Canada de la Cueva headcut and start of cross-sectional survey data for the Pueblo Cañon area.
- NO-07150 Urban Development. 1971, Book 2. Field notebook with additional cross-sectional survey data for the Pueblo Cañon area.
- NO-07151 Urban Development. 1971, Book 3. Field notebook with cross-sectional survey data for the Pueblo Cañon, Turquoise Hill quadrangle; notes on the Canada de la Cueva headcut; and notes on the Seton Village quadrangle. Includes repeat photo information, and sketches.
- NO-07152 Chaco Cañon. 1972. Book 1. Field notebook with notes, sketches, and section profile data for the Chaco Cañon area, including other localities in the Pueblo Bonito, Pueblo Pintado, and Whitehorse 7.5' quadrangles, San Juan and McKinley Counties.
- NO-07153 Chaco Cañon/Albuquerque-Santa Fe. 1972. Book 2. Field notebook with geologic notes, erosion pin data and repeat photo information for localities in the Canada de la Cueva headcut, Pueblo Cañon, and others in the Truchas and San Felipe Pueblo, Santa Ana Pueblo, Los Cordovas, Placitas, and La Mesita Negra SE 7.5' quadrangles, covering Santa Fe, Rio Arriba, Sandoval, Taos, and Bernalillo Counties.
- NO-07154 Chaco Cañon. 1973, 1974. Book 1. Field notebook with geologic notes, section surveying and repeat photo information for localities in the Chaco Cañon National Monument area, Canada de la Cueva headcut, and the Pueblo Cañon area. Photo information includes other unidentified locales.
- NO-07155 Chaco Cañon. 1974, Book 2. Field notebook with vertical control data, cross-section survey distance data, and photo and repeat photo information for various

areas in Chaco Cañon.

- NO-07156 Santa Fe/Chaco Cañon. 1976, 1977. Field notebook with geologic notes, section surveying, erosion pin data, and repeat photo information. Canada de la Cueva, Pueblo Cañon, and Chaco Cañon regions. Included are Pueblo Bonito, Seven Lakes NW, and Rose 7.5' quadrangles, plus other locales.
- NO-08888 Photocopy of report, "Surveys in Chaco Canyon National Monument, New Mexico," 1972. Malde submitted this report to the National Park Service following his 1972 field season in the Chaco Culture National Heritage Park. The report includes information on topographic surveys and installation of erosion pins and scour chains, along transects that were photographed (original photos transferred to Photo Library). See also Malde notebook NO-7152 in this inventory.

GEOLOGIC INVESTIGATION OF FAULTING NEAR THE NATIONAL REACTOR TESTING STATION, IDAHO. 1968-1969.

- NO-03496 Book NRTS-68-1. Malde, H.E. Field notes. East Butte area, Bingham County and Michaud 15' quadrangle, Power County, in Idaho; Gros Ventre 30' quadrangle, Sublette County, Wyoming.
- NO-03497 Book NRTS-68-2. Malde, H.E. Field notes, Tps. 2-5 N., Rs. 32-33 E. East Butte area, Bingham, Butte, and Jefferson Counties, Idaho.
- NO-03498 Book NRTS-68-3. Malde, H.E. Field notes. Tps. 2,6,7,9,12 and 13 N., Rs. 24, 27, 29, 30, and 32E. East Butte area, Bingham County, Hawley Mountain 15' quadrangle, Pahsimeroi Valley, Custer County, May and Patterson 15' quadrangles, Lemhi County, Idaho.
- NO-03499 Book NRTS-68-4. Field notes by H.E. Malde, W. Teasdale, J. Barraclough, and J. Robertson. Tps. 6-7 N., Rs. 29-30 E. Butte County, Idaho.
- NO-03500 Book NRTS-68-5. Malde, H.E. Field notes. Tps. 4-5, 7-8 N., Rs. 26, 29 E., Tps. 4 and 6 S., R. 31-34 E. Pingree and Springfield 7.5' quadrangles, American Falls 15' quadrangles, Bingham County, and Butte County, Idaho.
- NO-03501 Book NRTS-68-6. Malde, H.E. Section of trench on lineament NE of Experimental Breeder Reactor II (EBR II). T. 3 N., R. 33 E. Bingham County, Idaho.
- NO-03502 Book NRTS-69-1. Malde, H.E. Field notes, T. 6 N., T. 26 E., T. 7 N., Rs. 34-35 E. Pocatello 15' quadrangle, Bannock County, Bingham County, Butte County, Gooding County, and Camas, Hamer, Market Lake, Mud Lake NW, and Ray's Lake 7.5' quadrangles, Jefferson County, Idaho.

NO-03503 Book NRTS-69-2. Malde, H.E. Field notes. Tps. 1-3, 5-6 S., Rs. 33-37 E., T. 7 N., Rs. 34-35 E. Michaud and Pocatello 15' quadrangles, Bannock County; Firth 7.5' quadrangle, Blackfoot 15' quadrangle, Bingham County; Uncon 7.5' quadrangle, Bonneville County, Butte County, Mud Lake NW and Ray's Lake 7.5' quadrangles, Jefferson County, and Michaud 7.5' quadrangle, Power County, Idaho.

NO-03504 Book NRTS-69-3. Malde, H.E. Field notes. T. 2 N., R. 32 E. Bingham and Butte Counties, Idaho.

MA-02667 Map folder with:

- 1 map each of SW corner of Ray's Lake 7.5' quadrangle, and SE corner of Mud Lake NW 7.5' quadrangle, Jefferson County;
- 1 paper map of Arco scarp north of Arco, Idaho;
- 1 mylar sketch map of area near East Butte, Bingham County;
- 1 mylar sketch map of Tps. 4-5 N., Rs. 32-33 E.;
- 1 paper map of sections through drill holes between Clay Butte and Mud Lake;
- 1 paper map of area north of Howe, Idaho;
- 1 generalized geologic cross-section 2 miles north of Arco, Idaho;
- 1 sketch map of north shore of Mud Lake;
- 1 sheet of earthquake locations;
- 2 mylar profile sketches of trenches south of EBR-II.

MA-00619 Map folder with:

- 1 mylar trench profile;
- 1 mylar sketch of unconsolidated fan gravel north of Arco, Idaho, T. 5 N., R. 26 E.;
- 1 table of basalt samples of Mud Lake area;
- 1 preliminary index map of region surrounding National Reactor Testing Station area;
- profile sketches of trenches near East Butte;
- 1 paper profile of trench at Arco site, T. 5 N., R. 26 E.;
- 1 preliminary map showing earthquake locations;
- 1 paper map and 2 mylar sketches of trench north of Howe, Idaho, T. 6 N., R. 29 E.

Published as: U.S. Geological Survey. Open-file Report 71-338. 1971.

ALLUVIAL VALLEY FLOORS IN COAL-BEARING AREAS OF THE CHEYENNE RIVER BASIN, NIOBRARA COUNTY, WYOMING. 1981.

NO-07134 Lance Creek, Wyoming. 1981. Book I. Field notebook with geologic notes, sketches, repeat photography information, section data, and specimen information

for localities in these 7.5' quadrangles: Bowen Flat, Little Alkali Creek, Rabbit Mountains, Funny Rock, Dixon Ranch, Lance Creek, Flat Top, Mikes Draw, Split Hill SW, Lance Creek NW, Mercer Draw, Manville NE, Boggy Reservoir, and Silver Springs. Malde also made trips to Rawhide Buttes and Chalk Buttes quadrangles, Goshen and Converse Counties. Notes include stream profile survey data.

- NO-07135 Lance Creek, Wyoming. 1981. Book II. Field notebook with geologic notes on tree borings, sketches, stream profile survey data and specimen information for localities in both Niobrara and Goshen Counties, including these 7.5' quadrangles: Funny Rock, Lance Creek NW, Greasewood Creek, Rawhide Buttes West, Lance Creek, and Mercer Draw. There are also notes on repeat photography.
- NO-07136 Expandable envelope with "data obtained for Lance Creek" – some material is copied from sketches, field notebooks.
- NO-07137 Expandable envelope with:
Folder #1 – 2 sheets of "notes of possible interest for alluvial history in Wyoming";
Folder #2 – report by Malde, "Survey of Wildcat Draw, 1981", group of graphs, and data sheet (see map folder MA-1086 this project for additional materials);
Folder #3 – 2 sheets of sketches showing reference marks for observation at headcut, Moose Thompson Ranch, sec. 15, T. 36 N., R. 65 W.;
Folder #4 – 2 sheets of sketches showing reference marks for observation of headcuts, sec. 16, T. 36 N., R. 65 W., Wildcat Draw;
Folder #5 – 2 sheets of sketches showing survey of left bank of Lightning Creek point C, NE1/4, sec. 3, T. 37 N., R. 65 W., Lance Creek NW quadrangle, July-August 1981;
Folder #6 – sketch sheet showing reference marks for observation of headcuts A and B, Lightning Creek, sec. 34, T. 38 N., R. 65 W.;
Folder #7 – group of correspondence interfiled with reports by T.M. Yanosky on cottonwood tree rings from Lance Creek, Wyoming, and envelope with 2 photos (from R.F. Hadley?).
- MA-01086 Map folder with:
- group of computer print-outs with data on "indirect measurement of the discharge at Wildcat Draw by WY Dist., USGS-WRD" (see also NO-7137 folder #2 for additional materials);
- 2 sheets with sketches, "Survey of scabland from flood of May 18, 1978, on Lance Creek near Bright, WY... Greasewood Creek quadrangle, Aug., 1981";
- one mylar annotated topographic map, each, of the following 7.5' quadrangles: Boggy Reservoir, Bowen Flat, Buck Creek Hills, Flat Top, Funny Rock, Greasewood Creek, Lance Creek, Lance Creek NW, and Rabbit Mountains, all in Niobrara County.

**GEOLOGIC FIELD INVESTIGATION OF A FORMER RESERVOIR
SITE, MORFIELD CANYON, MESA VERDE NATIONAL PARK,
COLORADO. 1967.**

NO-07141 Geologic field notes with sketches of Site MV-1931 reservoir. The notes are from a visit by Malde to a field party of the University of Colorado, August 15, 1967.

**GEOLOGIC FACTORS FOR MAPPING RECLAMATION POTENTIAL
OF WESTERN COAL LANDS, MONTANA AND WYOMING. 1975.**

NO-07138 Field notebook with geologic notes and photo correlation for various localities in the Saddle Horse Butte, Recluse, Pitch Draw, Neil Butte, Rough Creek, Moyer Springs, and Piney Canyon NW 7.5' quadrangles, Campbell County, Wyoming. Also in the Holmes Ranch, Pine Butte School, Half Moon Hill, Bar V Ranch NE, Kirby, and Decker 7.5' quadrangles, Big Horn County; the Tongue River Dam and Spring Gulch 7.5' quadrangles, Big Horn and Rosebud Counties; the Birney Day School, Birney, Birney SW, Ashland, and Green Creek 7.5' quadrangles, Rosebud County; and the Goodspeed Butte, Yager Butte, King Mountain, Willow Crossing, Coleman Draw, Home Creek Butte, Samuelson Ranch, Selway 1 NE (Epsie NE), Selway 1 NW (Epsie), Stacey 4 SE (Olive), Stacey 4 SW (Leslie Creek), Sonnette, Hodsdon Flats, and Bloom Creek 7.5' quadrangles, Powder River County, in Montana.

Published as: U.S. Geological Survey. Open-file Report no. 71-338. 1971.

**GEOLOGIC FACTORS FOR MAPPING RECLAMATION POTENTIAL
OF WESTERN COAL LANDS, UTAH AND NEW MEXICO. 1974.**

NO-07142 Book I. July 10, 1974 – September 2, 1974. Field notebook with geologic notes and sketches for reclamation factors observed (landscape types, resistant rocks, sediment yield, amount of barren ground, vegetation type and density, index of run-off and field moisture) at localities in the Orderville and Johnson 15' quadrangles, and the Alton, Skutumpah Creek, Bald Knoll, Deer Spring Point, and Rainbow Point 7.5' quadrangles. Kane County, Utah; and the Fruitland, Kirtland SW, and Waterflow 7.5' quadrangles, San Juan County, New Mexico. There is also mention of Canada de la Cueva near Galisteo, Santa Fe County, New Mexico, and of the Black Mesa-Klethla Valley-Tsegi Canyon area, Navajo County, Arizona. Photo information given.

NO-07143 Book 2. September 2, 1974 – September 11, 1974. Field notebook with geologic notes, coal area inventories with reclamation factors observed, and photo

information for localities in these 7.5; quadrangles: Fruitland, Waterflow, Youngs Lake, Kirtland SW, and The Hogback South, in San Juan County, New Mexico.

- NO-07144 Book 3. September 11, 1974 – September 25, 1974. Field notebook with geologic notes, coal inventory data, and photo information for localities in these 7.5' quadrangle: Newcomb NE, The Pillar NW, The Hogback South, Kirtland SW, La Plata, and Burnham Trading Post. San Juan County, New Mexico.
- NO-07145 Book 4. September 25, 1974 – October 3, 1974. Field notebook with geologic notes, coal inventory data, and photo information for localities in these 7.5' quadrangles: Burnham Trading Post, Newcomb SE, La Plata Pillar NW, and Newcomb NE. San Juan County, New Mexico.
- NO-07146 Book 5. October 3, 1974 – October 7, 1974. Field notebook with geologic notes, coal inventory data, and photo information for localities in the Burnham Trading Post and Bisti Trading Post 7.5' quadrangles. San Juan County, New Mexico.

GEOLOGIC AGE OF THE CLAYPOOL ARCHAEOLOGICAL SITE, WASHINGTON AND YUMA COUNTIES, COLORADO. 1954-1960.

- NO-08335 Envelope with a few geologic notes; correspondence; drafts of article, and review comments; 2 aerial photographs (YG-7F: 47, 189, both dated 6-29-47), one with geologic annotations. The site itself is in Washington County, Colorado.
- MA-01743 Map folder with:
- linen locality map of the Claypool site;
 - linen geologic map of the site;
 - 3 sheets (2 with notes) comprising General Highway Map, Washington County, Colorado (1948);
 - 2 sheets (1 with notes) comprising General Highway Map, Yuma County, Colorado (1948).

EXCURSION TO THE DECKER MINE, TONGUE RIVER VALLEY, MILES CITY, AND COLSTRIP, MONTANA, AND THE BIG HORN AND HIGHLAND MINES, WYOMING. 1973.

- NO-07140 Field notes from visits to the Big Horn coal mine and the Highland uranium mines, Sheridan and Converse Counties, Wyoming, and to the Decker mine, the Tongue River Valley, Colstrip, and Miles City, in Big Horn, Rosebud, and Custer Counties, Montana. August 28-31, 1973. The material includes notes on reseeded and areal landscape.

**GEOLOGY OF THE NORWALK SOUTH AND ROXBURY
QUADRANGLES, FAIRFIELD, LITCHFIELD AND NEW HAVEN
COUNTIES, CONNETICUT. 1965-1966.**

NO-10440 Field Notebook of the Norwalk South Quadrangle.

NO-10441 Field Notebook of the Roxbury Quadrangle.

MA-02665 Topographic maps with geologic information for the Norwalk South and Roxbury Quadrangles.

Published as: U.S. Geological Survey. Geologic Quadrangle Map, GQ-611. 1967.

Published as: U.S. Geological Survey. Geologic Quadrangle Map, GQ-718. 1968.

**REPEAT PHOTOGRAPHY FOR DOCUMENTING LANDSCAPE
CHANGE, COLORADO AND NEW MEXICO. 1970-1977.**

NO-10442 One box of sheets of repeat photos various locations Colorado and New Mexico.

MA-02670 Topographic and index maps for Boulder, Niwot, Pike View, Eldorado Springs, Golden, Louisville, Morrison, Devils Head, Kassler, Palmer Lake, Larkspur, Acoma Pueblo, Wagon Mound, Watrous and Las Vegas.

**SURFICIAL GEOLOGY OF THE LOUISVILLE QUADRANGLE,
BOULDER AND JEFFERSON COUNTIES, COLORADO. 1950-1951.**

NO-00637 Typed draft of the Geomorphology of the Louisville area, Colorado. Notes on slide used in project.

MA-02666 Maps of the Louisville Quadrangle.

Published as: U.S. Geological Survey. Bulletin 996-E. 1955.

URBAN DEVELOPMENT NEAR SANTA FE, NEW MEXICO. 1970.

MA-02668 Maps showing suitability for development.

**PUEBLO CANYON ARROYA STUDIES NEAR SANTA FE, NEW
MEXICO. 1970.**

MA-02669 Maps charts and illustrations regarding project area.

**ALLUVIAL VALLEY FLOORS AND STRIPPABLE COAL IN BIG HORN,
ROSEBUD AND POWDER RIVER COUNTIES, MONTANA.**

MA-01084 Topographic maps, cross sections, notes and related data for project counties.

MA-01085 Topographic maps, cross sections, notes and related data for project counties.

Published as: U.S. Geological Survey. OFR 76-162. 1976.

**GEOLOGY OF THE CHARLESTON PHOSPHATE AREA, SOUTH
CAROLINA. 1953-1954.**

NO-02380 Aerial photos of the Berkeley and Charleston Counties, South Carolina.

NO-02381 Manuscript with stratigraphy, phosphates, soils and history of project area.

MA-00493 Topographic maps of Ladson, Stallsville, Summerville and Ridgeville.

MA-00494 Maps of Phosphatic material, stratigraphic section Ladson Formation, Fossil table from Dupson marl, bed correlation F. B. McDowell Jr. Tunnel, Isometric diagrams of Ladson formation and misc. auger logs and cross sections.

MA-00495 Maps of Dorchester County and drill hole logs.

MA-00496 Blueprints of McDowell Tunnel and Edisto River—Goose Creek Tunnel, maps of bore locations Charleston Harbor, location map of Charleston Navy Base deep per River Bridge Plan and boring logs, map of Charleston area, blueprints of building 68 Charleston Navy Ship Yard.

MA-01751 Aerial photo index Ladson Quadrangle.

MA-02679 Topographic maps and drill hole logs.

Published as: U.S. Geological Survey. Bulletin 1079. 1959.

**STRATIGRAPHY OF THE GLENN'S FERRY FORMATION FROM
HAMMETT TO HAGERMAN, IDAHO. 1960-1972.**

MA-00614 Topographic profiles King Hill area and the northwest part of Buhl Quadrangle.

MA-00679 Stratigraphic sections and diagram of fossil collections, basaltic pyroclastic layers, columnar sections for project area.

GEOLOGY, WATER RESOURCES AND CONSERVATION IN WESTERN STATES: SPECIAL ASSIGNMENT "REVIEW OF CONSERVATION DIVISION". 1973.

NO-07139 Field Notebook with geologic notes on mines in Arizona, New Mexico, California, Idaho, Montana, Wyoming and North Dakota.