

Dr. John Renton, Professor of Geology, Papers and Educational Materials A&M 4759

Dr. John Renton, Professor of Geology, Papers and Educational Materials
1928-2008, undated



Title Statement

Dr. John Renton, Professor of Geology, Papers and Educational Materials A&M 4759

Author: Hannah Ford

Publication Statement

Publisher: West Virginia and Regional History Center

1549 University Ave.
P.O. Box 6069
Morgantown, WV 26506-6069
Business Number: 304-293-3536
wvrhceref@westvirginia.libanswers.com
URL: <https://wvrhc.lib.wvu.edu>



2026/07/02

Profile Description

Creation: This finding aid was produced using ArchivesSpace on 2026-07-31 08:00:50 -0400.

Language Usage: Description is written in: English, Latin script.

Descriptive Rules: Describing Archives: A Content Standard

Descriptive Summary

Unit ID

A&M 4759

Unit ID

[Archival Resource Key](#)

Unit ID

/repositories/2/resources/7164

Unit Date

1928-2008, undated

Language

English .

Creator

Renton, John J.

source

Renton, John J.

Extent

2.29 Linear Feet 5 document cases, 5 in. each; 1 document case, 2.5 in.

Physical Location

West Virginia and Regional History Center / West Virginia University / 1549 University Avenue / P.O. Box 6069 / Morgantown, WV 26506-6069 / Phone: 304-293-3536 / URL: <https://wvrhc.lib.wvu.edu/>

Repository

West Virginia and Regional History Center

Administrative Information

Conditions Governing Access

No special access restriction applies.

Conditions Governing Use

The materials created by John Renton are licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. For more information regarding permission to publish or reproduce, please contact, the West Virginia & Regional History Center reference department.

Immediate Source of Acquisition

Gift of Renton, John, 2019 March 21.

Preferred Citation

[Description and date of item], [Box/folder number], Dr. John Renton, Professor of Geology, Papers and Educational Materials, A&M 4759, West Virginia and Regional History Center, West Virginia University Libraries, Morgantown, West Virginia.

Biographical / Historical

Dr. John Renton was a professor in the Geology Department at West Virginia University for about 50 years, from 1965 until 2015. Renton had a bachelor's degree in chemistry from Waynesburg College, and completed his Master's in geology and doctoral program at WVU, being awarded his PhD in 1963. Dr. Renton's specialties included geochemistry, coal geology, x-ray analysis, and clay mineralogy, and he has contributed to at least 45 published papers in these fields. Dr. Renton was also passionate about introductory education, as evidenced in his Geology 101 course and the Planet Earth study guide, his renowned Nature of Earth lecture series for the Great Courses, his Physical Geology Across the American Landscape textbook, and his the Introduction to Earth Science page. Renton's decades of contribution to research and education earned him several teaching awards, such as from the Sigma Gamma Epsilon, the American Association of Petroleum Geologists, the Carnegie Foundation for the Advancement of Teaching and Council for the Advancement and Support of Education, and WVU.

Sources and More information: IN MEMORIAM: John J. "Jack" Renton, PhD, Eberly College of Arts and Sciences, 6 March 2020. Renton, John J., Nature of Earth: An Introduction to Geology, Course Guidebook, The Teaching Company, 2006.

Scope and Contents

Papers from Dr. John Renton, who was an Emeritus Professor of Geology at West Virginia University. This collection includes a variety of materials, such as maps, illustrations, transparencies, essays, and articles, all pertaining to his work in the geology department. A wide range of topics are covered, and the level spans from basic, introductory geological concepts to academic research. Renton also created regionally specific resources, such as lessons on Appalachian and West Virginian geology (Series 1 and 2). This collection is arranged into two series. The first series consists of educational resources Renton created to be used by West Virginian K-12 Earth Science teachers, and in his own instructive undertakings. The second series contains other materials created and collected by Renton over the course of his career, such as unpublished educational and research manuscripts; published academic articles; and various lessons and field trip guides.

Some of the materials have digital copies, which can be found on the Introduction to Earth Science page on the WVU Research Repository website. At this time, not every link has been matched to the original content. See box list for more information about available digital copies. If there is no note about digital materials, no digital copies exist.

Keywords

Geology

Description of Subordinate Components

Series 1: Educational Materials

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254609

Unit Date undated

Scope and Contents

Educational materials created by Dr. Renton for K-12 geology education, as well as for his Geology 101 class. Materials cover a variety of topics, and include lessons from his Geology 101 course and Planet Earth study Guide, as well as his Nature of Earth lecture series. Each topic generally includes written material on the topic, as well as supplemental images and graphics created and collected by Renton. This collection is partially available online: digitized images can be explored by topic on the "An Introduction to Earth Science" webpage, and some of the supplemental written materials can be viewed on the "Readings and Notes" page. See each folder for more information on digitization. If there is no note about digital materials, no digital copies exist.

Many of the materials in this series correspond with his Geology 101 course, his Planet Earth Study Guide, and his Nature of Earth lecture series. PDF copies of Renton's Geology 101 syllabus, unit outlines, and study guides are available upon request, or can be viewed on his archived website.

Geology and Earth Science Lesson Materials: Atoms-Glaciers

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254610

Unit Date undated

Mixed Materials 1 (Box)

Atoms, Elements, and the Periodic Table

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254611

Unit Date undated

Mixed Materials 1 (Box)

Container 1 (Folder)

A Chemistry Primer

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254612

Unit Date undated

Mixed Materials 1 (Box)

Container 2 (Folder)

Deserts and the wind

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254613

Unit Date undated

Mixed Materials 1 (Box)

Container 3 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the articles "Deserts and Wind" and "Adiabatic Cooling and Warming," as well as some of the images can be viewed online through the Research Repository's website.

Earth and its place in space

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254614

Unit Date undated

Mixed Materials 1 (Box)

Container 4 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. A copy of the article "Earth's Place in Space" can be viewed online through the Research Repository's website.

Earthquakes and seismology

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254615

Unit Date undated

Mixed Materials 1 (Box)

Container 5 (Folder)

Container 6 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the article "Earthquakes" and some of the images can be viewed online through the Research Repository's website.

Economic Geology and Energy

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254616

Unit Date undated

Mixed Materials 1 (Box)

Container 7 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Energy: Alternative Sources

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254617

Unit Date undated

Mixed Materials 1 (Box)

Container 8 (Folder)

Glaciers

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254618

Unit Date undated

Mixed Materials 1 (Box)

Container 9 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Geology and Earth Science Lesson Materials: Groundwater-Rocks and Minerals

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254619

Unit Date undated

Mixed Materials 2 (Box)

Groundwater

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254620

Unit Date undated

Mixed Materials 2 (Box)

Container 1 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Ice Sculpts the Final Scene

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254621

Unit Date undated

Mixed Materials 2 (Box)

Container 2 (Folder)

Igneous Rocks

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254622

Unit Date undated

Mixed Materials 2 (Box)

Container 3 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Mass Wasting

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254623

Unit Date undated

Mixed Materials 2 (Box)

Container 4 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Metamorphic Rocks

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254624

Unit Date undated

Mixed Materials 2 (Box)

Container 5 (Folder)

Minerals

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254625

Unit Date undated

Mixed Materials 2 (Box)

Container 6 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Oceans, Shorelines, and Coastlines

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254626

Unit Date undated

Mixed Materials 2 (Box)

Container 7 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the article "Oceans and Shorelines" and some of the images can be viewed online through the Research Repository's website.

Plate Tectonics

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254627

Unit Date undated

Mixed Materials 2 (Box)

Container 8 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Paleolithic Plants and Animals

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254628

Unit Date undated

Mixed Materials 2 (Box)

Container 9 (Folder)

Scope and Contents

Illustrations and short descriptions of roughly 75 Paleolithic plants and animals.

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the images of Paleolithic Plants and Paleolithic Animals can be viewed online through the Research Repository's website. The descriptions have not been digitized.

Rocks and Minerals

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254629

Unit Date undated

Mixed Materials 2 (Box)

Container 10 (Folder)

Geology and Earth Science Lesson Materials: Sedimentary Rocks-Weathering and Soils, Other Related Materials

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254630

Unit Date undated

Mixed Materials 3 (Box)

Sedimentary Rocks

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254631

Unit Date undated

Mixed Materials 3 (Box)

Container 1 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Stratigraphy Drawings

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254632

Unit Date undated

Mixed Materials 3 (Box)

Container 2 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Streams and Erosion

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254633

Unit Date undated

Mixed Materials 3 (Box)

Container 3 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Volcanism

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254634

Unit Date undated

Mixed Materials 3 (Box)

Container 4 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the article "Kinds of Volcanoes" and some of the images can be viewed online through the Research Repository's website.

Weathering and Soils

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254635

Unit Date undated

Mixed Materials 3 (Box)

Container 5 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of some of the images can be viewed online through the Research Repository's website.

Miscellaneous Lessons

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254636

Unit Date undated

Mixed Materials 3 (Box)

Container 6 (Folder)

Scope and Contents

Mini-Lessons on: Earth's Atmosphere; Eons, Eras, and Periods; Geologic Time; Human Evolution; and Thin Skinned Tectonics

Existence and Location of Copies

Some of the materials in this folder have been digitized. Copies of the articles "Eons, Eras and Periods" and Geologic Time can be viewed online through the Research Repository's website.

Geology 101 Exam Preparation Study Guide

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254637

Unit Date undated

Mixed Materials 3 (Box)

Container 7 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. Dr. Renton's Geology 101 study guide, as well as other class outlines can be viewed on his archived website.

Illustrations for Unidentified Lessons

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254638

Unit Date undated

Mixed Materials 3 (Box)

Container 8 (Folder)

Series 2: Personal and Professional Papers

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254639

Unit Date 1928-2007

Scope and Contents

The personal and professional papers created and collected by Dr. Renton during his time as a Geology professor. This includes unpublished chapters and articles on a variety of subjects, published academic articles to which Renton contributed, academic articles Renton collected, and a small collection of lessons and field trip guides. Many of these materials are centered around Appalachian geology, including what appears to be chapters or lessons for an overview of Appalachian geology and history. Some of the unpublished works and field trip guides have been digitized and can be accessed online at the repository. See folders for more information on digitization status. If there is no note about digital materials, no digital copies exist.

Manuscripts

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254640

Unit Date undated

Mixed Materials 4 (Box)

Appalachian Geology- Various Articles

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254641

Unit Date undated

Mixed Materials 4 (Box)

Container 1 (Folder)

Scope and Contents

Three short essays on Appalachian Geology and History: "The Early History of Appalachian Oil and Gas"; Appalachian Physiographic Provinces" (2 copies); "The Appalachian Plateaus"

The Clay Mineral Structures: A Synopsis

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254642

Unit Date undated

Mixed Materials 4 (Box)

Container 2 (Folder)

Coal Genesis

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254643

Unit Date undated

Mixed Materials 4 (Box)

Container 3 (Folder)

Existence and Location of Copies

Coal Genesis has been digitized and can be viewed online through the Research Repository's website. It should be noted that this scan is currently missing the last seven pages.

Coal Geology: The Origin of Coal

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254644

Unit Date undated

Mixed Materials 4 (Box)

Container 4 (Folder)

Existence and Location of Copies

Coal Geology: The Origin of Coal has been digitized and can be viewed online through the Research Repository's website.

Fossil Fuels

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254645

Unit Date undated

Mixed Materials 4 (Box)

Container 5 (Folder)

Scope and Contents

Chapter 7 of an unidentified work, concerning fossil fuels in Central Appalachia.

Geochemistry

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254646

Unit Date undated

Mixed Materials 4 (Box)

Container 6 (Folder)

Geologic History of West Virginia

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254647

Unit Date undated

Mixed Materials 4 (Box)

Container 7 (Folder)

Existence and Location of Copies

Geologic History of West Virginia has been digitized and can be viewed online through the Research Repository's website.

The Geology of West Virginia

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254648

Unit Date undated

Mixed Materials 4 (Box)

Container 8 (Folder)

Existence and Location of Copies

The Geology of West Virginia has been digitized and can be viewed online through the Research Repository's website.

I-68/I-70: A Window to the Appalachians

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254649

Unit Date undated

Mixed Materials 4 (Box)

Container 9 (Folder)

An Introduction to X-Ray Analysis

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254650

Unit Date undated

Mixed Materials 4 (Box)

Container 10 (Folder)

An Introduction to X-Ray Analysis- Draft

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254651

Unit Date undated

Mixed Materials 4 (Box)

Container 11 (Folder)

Container 12 (Folder)

Manuscripts

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254652

Unit Date undated

Mixed Materials 5 (Box)

Prehistoric Earth, Cambrian Period-Cenozoic Era

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254653

Unit Date undated

Mixed Materials 5 (Box)

Container 1 (Folder)

Scope and Contents

Eleven unpublished chapters on eras/periods of prehistoric earth, including Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian, Permian, Triassic, Jurassic, Cretaceous, and Cenozoic.

Existence and Location of Copies

The eleven chapters in this folder have been digitized individually and can be viewed online on the Readings and Notes page of the Research Repository's website.

A Synopsis of X-Ray Powder Diffraction

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254654

Unit Date undated

Mixed Materials 5 (Box)

Container 2 (Folder)

The West Virginia's Valley and Ridge Physiographic Province: An Overly Simplistic Introduction

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254655

Unit Date undated

Mixed Materials 5 (Box)

Container 3 (Folder)

Existence and Location of Copies

The West Virginia's Valley and Ridge Physiographic Province: An Overly Simplistic Introduction has been digitized and can be viewed online through the Research Repository's website.

Professional and Personal Papers

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254656

Unit Date 1928-2008; undated

Mixed Materials 6 (Box)

Published Articles

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254657

Unit Date 1966-1995

Mixed Materials 6 (Box)

Container 1 (Folder)

Scope and Contents

Original copies of published articles to which Dr. Renton contributed.

The articles are: "Normal Faulting in the Caldwell-Lewisburg Area of Greenbrier County, West Virginia;" "Experimental Study of Sandstone Cementation;" "Late Paleozoic molasse of central Appalachians;" "A laboratory procedure to evaluate the acid producing potential of coal associated rocks;" "The acid-producing potential of the various rock units associated with the mining of coal;" "The effect of iron disulfide type, size and morphology on the acid-producing potential of rock encountered in the mining of coal;" "An experimental evaluation of the use of rock phosphate (apatite) for the amelioration of acid-producing coal mine waste;" "The potential use of coal mine refuse as feedstock for gasification or combustion and concurrent elimination as a source of acid mine drainage;" "A comparison of methods for the determination of the pyritic sulfur content of coal;" "An evaluation of fluidized bed combustor ash as a source of alkalinity to treat toxic rock materials;" "Association of coal macerals, sulfur, sulfur species and the iron disulphide minerals in three columns of the Pittsburgh coal;" "FTIR microspectroscopy of particular liptinite- (lopinite-) rich, Late Permian coals from Southern China;" "Application of Limestone to Restore Fish Communities in Acidified Streams;" "Petrographic zonation within the Waynesburg coal;" "Petrographic zonation within the Pittsburgh coal;" and "Neutralization

Potential of Overburden Samples Containing Siderite."

Articles Collected by Dr. Renton

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254658

Unit Date 1956-2007

Mixed Materials 6 (Box)

Container 2 (Folder)

Clay Minerals: A Guide to Their X-ray Identification

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254659

Unit Date 1970

Mixed Materials 6 (Box)

Container 3 (Folder)

Global Cyclostratigraphy: Short Course for the U.S.G.S.

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254660

Unit Date 1992

Mixed Materials 6 (Box)

Container 4 (Folder)

A Geology Field Trip; Collected Photos of Machu Picchu, Peru; Utah Field Camp

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254661

Unit Date undated

Mixed Materials 6 (Box)

Container 5 (Folder)

Existence and Location of Copies

Some of the materials in this folder have been digitized. A Geology Field Trip has been digitized and can be viewed online through the Research Repository's website.

Geology of the Southern Part of the Pennsylvania Anthracite Fields Field Trip Guide

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254662

Unit Date 1982

Mixed Materials 6 (Box)

Container 6 (Folder)

Mississippi River Depositional System: Field Trip Guidebook

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254663

Unit Date 1989

Mixed Materials 6 (Box)

Container 7 (Folder)

Yosemite and the Mother Lode Gold Belt: Geology, Tectonics, and the Evolution of Hydrothermal Fluids in the Sierra Nevada of California, Volume and Guidebook

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254664

Unit Date 1990

Mixed Materials 6 (Box)

Container 8 (Folder)

Louisiana's Coastal Wetlands and Barrier Islands: Field Trip Guide

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254665

Unit Date 1993

Mixed Materials 6 (Box)

Container 9 (Folder)

Paleosols, Paleoclimate and Paleoatmospheric CO₂; Paleozoic Paleosols of Central Pennsylvania Field Trip Guide

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254666

Unit Date 1993

Mixed Materials 6 (Box)

Container 10 (Folder)

Personal Papers

Unit ID [Archival Resource Key](#)

Unit ID /repositories/2/archival_objects/254667

Unit Date 1928-1930, circa 1972-1973, 2008

Mixed Materials 6 (Box)

Container 11 (Folder)

Scope and Contents

Student records (primarily names and grades) from H.P. Woodward's Geology course (1928 and 1930); a newsprint page of student poetry, possibly from the Daily Athenaeum, including two poems by geology student John Golay and "The 7:00 News" by Pulitzer Prize-winning author Jayne Anne Phillips (circa 1972-1973); and a letter from a student regarding the Introduction to Geology course (2008)