BRIGHAM YOUNG UNIVERSITY

GEOLOGY STUDIES

Volume 9 Part 2 December 1962

CONTENTS

Brigham Young University Geology Studies

Volume 9, Part 2 — December, 1962

Contents

A publication of the
Department of Geology
Brigham Young University
Provo, Utah

Brigham Young University Geology Studies is published annually by the Department. Volume 9 is complete with part 2. *Geology Studies* consists of graduate student and staff research in the Department.

Distributed February 28, 1963

Price $4.00

Current Research in the Department of Geology, Brigham Young University

J. KEITH RIGBY

Research in systematic paleontology, biostratigraphy, paleoecology, stratigraphy, sedimentary petrology, mineralogy, and structural geology is being conducted by students and staff of the department.

Paleontology and paleoecology.—A study of the dominantly trilobite-graptolite shale fauna of the Ordovician Pogonip Group in the Confusion Range of western Utah is being done by Lee Braithwaite. Robert Pinney is studying the Mississippian conodont biostratigraphy in Central Utah. Medial Triassic conodonts of western Nevada are the thesis topic of Cameron Mosher. Fred Marshall is working on fusulinid biostratigraphy in the Pennsylvanian rocks of the Spring Mountains in Nevada, in the transition zone from shelf to basin sequences. David Clark is in the early stages of a long-term study of Paleozoic conodonts of the Great Basin. J. Keith Rigby is studying Early Paleozoic sponges of North America and faunas and stratigraphy of Late Paleozoic sequences in northwestern British Columbia.

Colbeth Killip is investigating the paleoecology of the marine to nonmarine transition in the Jurassic Carmel-Twin Creek beds of central and eastern Utah. Closely related is a detailed study of the petrology and paleoecology of the dominantly marine Twin Creek limestone near Thistle, Utah by LaDell Bullock. A similarly detailed study of some coal cyclothems in the Lower Pennsylvanian part of the type Manning Canyon Formation in the Oquirrh Mountains is being done by Donald Prince.

Jim Jensen is collecting reptiles from the Jurassic Morrison Formation and mammals and fish from the Green River Formation for later study and display.

Stratigraphy and sedimentary petrology.—Walter Zabriskie is nearing completion of a study on the petrology and petrography of Permian rocks in the Butte-Deep Creek Trough in east-central Nevada, and a similar study is underway by William Sweet of the Lower Pennsylvanian part of the Oquirrh Formation in the Oquirrh Basin. Petrology of the Middle Pennsylvanian to Permian sedimentary quartzites of the Oquirrh Formation and related rocks in Central Utah is a study now nearing completion by Richard Wells. Harold Bissell is involved in a long-range petrologic and stratigraphic study of Pennsylvanian and Permian rocks in the Great Basin.

Mineralogy and structural geology.—Edward John is completing a petrographic study of several small intrusive masses in the northern Gunnison Plateau in Central Utah, and Kenneth Bullock is working on a petrographic study of selvage joints in the Rodman Mountains in California. Harold Kaufmann is finishing a study of classification of the amphiboles, and his work is being expanded in research by Revell Phillips, who is also working on chlorite classi-

fication. DeForrest Smouse is working with Tracy Hall on aspects of mineral formation under extremely high pressure and temperature.

Harold Winkler is finishing mapping the Scipio Pass region and parts of the southern Canyon Range in southcentral Utah. Lehi Hintze is engaged in a joint effort with members of the University of Utah staff in completing a new map of the state of Utah, the northeastern quarter of which has been issued. The northwestern quarter is being printed currently, the southwestern quarter is in proof stage, and the southeastern quarter is still being compiled. Jess Bushman is completing stratigraphic and structural studies of the San Carlos area in northwestern Venezuela and is doing further study on effects of submarine sliding on stratigraphic and structural interrelations in the Barquisimeto area in Venezuela.