State of Washington

Department of
Natural Resources

SIXTH BIENNIAL REPORT
1966-1968

BERT L. COLE
Commissioner of Public Lands

DON LEE FRASER
Supervisor

The Public Lands Building, in which the Department of Natural Resources is located, was completed in 1937. One of the interesting features is the set of elevator doors on the first floor. The cover of this report was reproduced from a charcoal rubbing of those bronze doors.
SIXTH BIENNIAL REPORT

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Margaret E. Felt
Editor

Graphs and Art work: Jack Moody and by the Technical Services Division, Department of Natural Resources

NOTE: The 1966-68 SIXTH Biennial Report is published in two sections. This portion covers the Department’s general operations for the two-year period and a supplemental booklet, available on request, contains the detailed statistics on the Department’s various activities for the same period.
Office of State Geologist Created in March 1890  
Terminated in 1891  

State Geological Survey created in 1901, name changed to Division of Geology in 1921 and became part of the Department of Conservation and Development, continued to 1945. Division of Mines and Mining created in 1935 as part of the Department of Conservation and Development. From 1941 to 1945 the duties of the two divisions were almost identical. In 1945 they were combined by executive order and the Division of Mines and Geology was created in the Department of Conservation and Development. In 1967 the division was transferred to the Department of Natural Resources.
Activities of the Division

The Division is a service agency that has the responsibility of compiling information on the geology, mineral resources and mineral industries of Washington. They distribute this information to the general public and representatives of the mining and oil industries.

The activities of the Division in fulfilling its statutory duties are described in the following paragraphs.

MINERAL DEPOSIT EXAMINATIONS

Division geologists during the biennium made field examinations on deposits of copper, gold, iron, lead, mercury, nickel, uranium, zinc, barite, bauxite, black sand, clay, coal, diatomite, limestone, olivine, peat, pumice, saline compounds, sand and gravel and silica. Most field studies served the dual purpose of adding to our fund of information on the state's mineral resources and giving aid to the prospector or owner of the claim on which the mineral deposit was located.

MINING AND MILLING STATISTICS

The Division cooperates with the U. S. Bureau of Mines in collecting production data on all minerals produced in Washington. These data are published in the annual Minerals Yearbooks of the Bureau of Mines. Reprints of the Washington chapter on mineral production are available from the Department of Natural Resources.

At least once in each 2 years, Division geologists visit the state's active mining operations—metallic, nonmetallic, and sand and gravel—in order to compile the Directory of Washington Mining.

MINERAL IDENTIFICATION SERVICE

The Division provides a free mineral identification service for the public. Samples of ores, rocks, minerals, and clays from Washington localities are examined and identified. The senders are advised of the possible value of submitted samples, and suggestions are given for further prospecting or analysis whenever such action appears warranted. Through this service new occurrences of potential value are occasionally found and brought to the attention of those who are seeking new sources of mineral raw materials in the state. Sample identification does not include assays or quantitative chemical analyses, as these services are available from commercial concerns.

During the biennium the Division of Mines and Geology received and reported upon 838 samples. This indicates an active interest in Washington's mineral resources and shows public dependence upon help and advice from the Division in developing these resources.

Library—Mineral Collection

A rather complete labeled collection of all metallic and nonmetallic minerals of known economic importance is maintained in the Division office for the use of prospectors, miners, or anyone else who is interested. Also included in the collection are mineral substances that may have future value but that are not now being mined.

The Division maintains an extensive collection of cuttings and cores from oil and gas test wells drilled in the State. These samples are of particular value to the geologists of companies exploring for oil in Washington.

A fairly large, specialized reference library of approximately 14,000 publications is maintained for the use of the staff, other state agencies, and for public reference. It includes authoritative tests and reports on all phases of the mineral industry. The library has almost complete collections of the reports of the U. S. Geological Survey and U. S. Bureau of Mines. Included also are pertinent reports of the U. S. Atomic Energy Commission and other Federal agencies, as well as the publications of Canadian and other foreign geological surveys and the reports of other state geological surveys and mining bureaus.
Oil and Gas Information

Since the early 1930's the Division has collected and cataloged all available information on the progress and results of oil and gas test drilling. These data are on open file for all geologists and oil men who desire to see or copy them.

In 1951 the Oil and Gas Conservation Act was passed by the Legislature. The Act and the rules and regulations drawn up under its authority govern the drilling, testing, and other operations that comprise exploration and production of oil and gas in Washington. In January, 1954 the Oil and Gas Conservation Committee appointed the Supervisor of the Division of Mines and Geology to be Oil and Gas Supervisor for the state and gave him the duty of administering the Act.

From January 18, 1954, through June 30, 1968, a total of 242 drilling permits were issued, of which 28 were issued during the 1966-68 biennium.

One geologist's specialty is "Biostratigraphy." In simple terms it means the changes in microscopic sea life identify the earth's crust like a roadmap to a tourist or fingerprints to a detective. The tiny "foraminifera," millions of years old, are one-celled creatures encased in shells. They were inhabitants of seas whose sediments eventually became rock layers and sources of most oil deposits.
Reports Published by Mines and Geology Division:


A publications list is available from the Division. Listed are all the Bulletins, Reports of Investigations, Information Circulatrs, administrative reports and reprints that have been published by the Division of Mines and Geology and its predecessor agencies.

Washington's Channeled Scabland, by J. Harlen Bretz, Bulletin 45 (reprinted), 57 pages, 4 plates, 36 figures. 50 cents.

Limestone resources of Western Washington, by Wilbert R. Danner, Bulletin 52,474 pages, 218 figures. $4.50.


"Boss Geologist" of the Division of Mines and Geology recently added to DNR, points to an oil well log. His office maintains records of all wells drilled in the state.
Cooperative Projects

The Division continued to cooperate with the U. S. Geological Survey in both topographic and geologic mapping within the state. The mapping is conducted by the Survey, the state contributing half of the funds through a cooperative, matching agreement. Additional topographic and geologic mapping is carried on and paid for solely by the Federal agency.

Cooperation is maintained with the U. S. Bureau of Mines in the collection of mineral-production statistics in Washington. Information on mining operations and mineral producers, obtained separately by the Bureau and the State Division of Mines and Geology, is exchanged in the interest of complete coverage.

The Division cooperates with the U. S. Coast and Geodetic Survey by maintaining in Olympia for the Survey a strong-motion accelerograph. Periodic checks are made to be sure that the instrument is in good operating condition and to determine whether or not the instrument has recorded any strong-motion earthquakes.

During the past biennium the Division had occasions to provide information and be of assistance to the U. S. Forest Service and other Federal agencies as well as such State agencies as the Department of Commerce and Economic Development, Department of Highways, Pollution Control Commission, Department of Employment Security, Tax Commission, and Department of Licenses.

During the biennium the Division participated with the Puget Sound and Adjacent Waters Task Force of the Columbia Basin Inter-Agency Committee in preparing an appendix for a report on a comprehensive plan for the development of water resources of the Puget Sound Basin and adjacent areas.