A PUBLICATION OF THE WASHINGTON STATE DIVISION OF GEOLOGY AND EARTH RESOURCES

WASHINGTON GEOLOGIC NEWSLETTER

APRIL 1975

BERT L. COLE
COMMISSIONER OF PUBLIC LANDS

VOLUME 3 - NUMBER 2

DON LEE FRASER, SUPERVISOR
DEPARTMENT OF NATURAL RESOURCES

VAUGHN E. LIVINGSTON, JR., STATE GEOLOGIST
DIVISION OF GEOLOGY AND EARTH RESOURCES

DEPARTMENT OF NATURAL RESOURCES, DIVISION OF GEOLOGY AND EARTH RESOURCES, OLYMPIA, WASHINGTON, 98504

THE OLD MINING CAMPS OF WASHINGTON

By

Wayne S. Moen

Washington, like other western mining states, had its share of early-day mining camps, but they never became such famous camps as Tombstone, Arizona; Rhyolite, Rawhide, and Virginia City, in Nevada; and Calico, California. Most mining camps in Washington sprang up in the 1880's and 1890's, when valuable deposits of gold and silver were discovered in the metalliferous areas of Washington. When the news of these discoveries reached mining districts in adjoining states, prospectors and miners rushed to Washington hoping to cash in on discoveries that might be as rich or possibly richer than those made earlier in other western states. Wherever a group of prospectors and miners congregated, a camp came into existence. At first, the mining camps consisted mainly of tents, but as camps grew, the tents were replaced by log cabins and cabins of rough-sawn lumber.

The mining town of Conconully in Okanogan County is probably typical of many of the mining towns that sprang up in the mining regions of Washington. The birth of Conconully is described as follows: "Most of the claims were staked in May 1886. During the summer the prospectors lived in tents where now stands Conconully, passing a large portion of their time prospecting in the hills. In October, when the nights grew colder, they erected cabins to replace the tents and went into winter quarters. The following spring more people came to the camp, and a store was opened by a man named Boardman. He built a cabin and freighted in a small stock of goods. The succeeding fall the second store was established by the Buckingham boys. In the spring of 1888 there was an immense rush to the new camp. The town quickly gained a population of 500 people. New business enterprises made their appearance and cabins

Barron - A gold camp near Harts Pass in Whatcom County (circa 1895).

dotted the valleys and hillsides. In July 1888, the "Okanogan Outlook" was established, and the camp had a lively newspaper to chronicle its varied passing events. After repeated unsuccessful efforts, in August 1888, the citizens succeeded in securing a post office."

Other mining camps grew much more rapidly. As an example, in August 1898, only 2 months after the camp at Keller in southern Ferry County was founded, the camp consisted of 3 general stores, 1 saloon, 3 restaurants, 1 barber shop, 1 recording office, 2 assay offices, and 1 blacksmith shop. By November, 2 lodging houses, 1 butcher shop, 1 feed stable had been added to the camp, and 20 cabins were under construction.

Some camps remained dormant for several years following their founding, but when mining companies moved in, the camps boomed. Activity in the mining camp of Loomis in 1899 has been described as follows: "During the summer and fall of 1899 a wonderful change for the better passed over Loomis. From a sleepy, unprogressive settlement there sprang into life a bustling, hustling mining camp where the sound of the hammer was heard from morning until nightfall; only the scarcity of lumber retarded the erection of many buildings badly needed . . . . Every hotel and lodging house was crowded to the point of discomfort. It was a daily occurrence to meet men going from one hotel to another in search of a bed. The underlying

cause of this new-born prosperity may be signified in two words, 'mining development'."

Little if any thought was given in the selection of sites for many camps. Some camps were perched on steep rocky hillsides, while others were hidden in the bottom of narrow gulches that provided little room for future growth. The mining town of Loomis in 1887 was described as follows: "A typical western mining town is Loomis. Its main street of three blocks in length was laid out in perhaps the worst place in the valley. It rises abruptly north and south from a deep ravine which intersects the theoretical townsite. This ravine has been partially filled in and 'Main' street graded." On the other hand a camp such as Oro (Oroville) was situated at a site that appeared ideal for future expansion. Oroville in 1892 was described as follows: "Oro is laid out on a perfectly level plateau at the junction of the Okanogan and Similkameen rivers. It is high and dry; no boulders or even gravel, but a rich loam; fine ice cold water can be secured in wells at a depth of only 12 or 15 feet; there is any amount of fine timber adjacent and its surroundings make it the natural distributing point for at least 70 miles in every direction."

Eureka gold camp, Ferry County, 1897.

The mining camps faded away almost as quickly as they had sprung up, and today only an isolated cabin or two, or rusting mining equipment and old mine dumps, mark most of their sites. Many camps and mining towns met their doom shortly after their founding because the mines, which were the cause of their upbuilding, did not prove to be as rich in precious metals as had been expected. The death of Ruby, which in 1891 and 1892 was one of the liveliest and best known mining camps in northeastern Washington, is described as follows: "The price of silver fell in the fall of 1892. To continue working the mines would be unprofitable; they were closed down. People moved away, leaving vacant houses unprotected; the once flourishing town was depopulated. For some time the scores of dwellings and business houses remained solitary and empty, sad reminders of a town that had seen better days. Then came vandals who stripped the houses of all that could be carried away. Buildings, fences, and sidewalks fell into decay and the city presented a decidedly delapidated appearance. About 1900 fire destroyed three-fourths of what remained of Ruby. A few buildings, riddled and tottering, still stand—monuments to mark the spot where stood the town."

Not all the mining camps and towns of northeastern Washington became ghost towns. Towns such as Colville, Oroville and Conconully survived, after the prospectors and miners had deserted them, and grew into active farming communities. Had it not been for the optimistic mining men who settled the remote valleys of the metal mining regions of northeastern Washington, many areas of the state would have waited long for settlers.

In western Washington, metal mining camps were established in several parts of the Northern Cascade Mountains as early as 1874, but like the mining camps of northeastern Washington most camps were short lived. Unlike northeastern Washington where several camps survived to become present day cities and towns, none of the western metal mining camps grew into cities or towns. Little if anything remains at the sites of most of the metal mining camps, and only at the old gold camp of Monte Cristo has an attempt been made to preserve mining history.

In addition to metal mining camps, coal mining camps sprang up at the site of many coal discover-

Silver camp of Ruby, Okanogan County - 1891

ies. Present-day cities and towns such as Bellingham, Renton, Wilkinson, Black Diamond, Carbonado, and Fairfax grew from coal mining camps that were founded between 1853 and 1880. Other coal mining camps, such as Blue Canyon, Cokedale, Bayne, Spiketon, and Melmont, faded out of existence to become coal mining ghost towns. The coal mining towns that did survive did so because the mines operated over a longer period of time than the average metal mine, and during this time the towns diversified to the point where they were not entirely dependent upon coal mining in order to survive.

Gold camp of Blewett, Chelan County - 1900

Following is a list of many of the old mining camps and towns of Washington. The heyday for most metal mining camps was from around 1885 to 1900, whereas the coal mining camps were active from around 1853 to the 1930's.

METAL MINING CAMPS AND TOWNS

1 *Republic (Eureka)
2 *Conconully (Salmon City)
3 Ruby City
4 Loup Loup City
5 Meaghersville
6 Liberty
7 Blewett
8 *Chesaw
9 *Curlew
10 Barron
11 Chancellor
12 Monte Cristo
13 *Silverton
14 Deer Trail
15 Cedarville
16 Turk
17 Galena
18 Mineral City (Silver Cr.)
19 *Northport
20 *Orient
21 Holden
22 Gilbert
23 Silver
24 Mazama
25 Ventura
26 Trinity
27 *Molson
28 Galena City
29 Trail City
30 Gold Hill (Shuksan)
31 Union City
32 Gold City
33 Excelsior
34 Meteor
35 Covada
36 *Oroville
37 Wauconda
38 Toroda
39 Bodie
40 Wehesville
41 Nighthawk
42 *Loomis
43 Golden
44 Stehekin
45 *Metaline
46 Leadpoint
47 Embry
48 Keller
49 Danville
50 Bolster
51 Park City
52 West Fork
53 Electric Point
54 Shawnee
55 Sheridan
56 Belcher
57 Methow
58 *Colville
59 *Metaline Falls
60 *Bossburg
61 Pershall
62 Mineral Park
63 Goodell

COAL MINING CAMPS AND TOWNS

1 *Roslyn
2 *Ronald
3 Blue Canyon
4 Franklin
5 Cokedale
6 Burnett
7 Bayne
8 *Carbonado
9 *Wilkinson
10 Coal Creek
11 *Fairfax
12 Ravensdale
13 Cedar Mountain
14 Taylor
15 *Black Diamond
16 Spiketon
17 Melmont
18 Montezuma

* - Present day town or city

WHATCOM
SKAGIT
SNOHOMISH
KING
KITSAP
CLALLAM
JEFFERSON
GRAYS HARBOR
MASON
THURSTON
PIERCE
PACIFIC
LEWIS
COWLITZ
WAHKIAKUM
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
CHELAN
OKANOGAN
DOUGLAS
GRANT
BENTON
FRANKLIN
FERRY
STEVENS
PEND OREILLE
LINCOLN
SPOKANE
ADAMS
WHITMAN
GARFIELD
COLUMBIA
WALLA WALLA
ASOTIN
METAL MINING CAMPS AND TOWNS
• METAL MINING CAMPS AND TOWNS
▫ COAL MINING CAMPS AND TOWNS

GEOLOGIC RESEARCH PROJECTS

Current geologic work is always of interest to consultants, industries, schools, and many others in related work areas. In an attempt to provide information that is not readily available, the division requested listings of current geologic research projects being conducted in Washington colleges and universities. The responses we received are listed as follows:

Eastern Washington State College

Master's Theses Proposals

Geology of a part of the Whitecloud Peaks, Custer County, Idaho. James M. Faurote.

Petrography of the crystalline rocks south of Okanogan, in north-central Washington. Lloyd G. Fritz.

Depositional environment of the Revett-St. Regis transition zone (Precambrian) of northwestern Montana. Douglas I. Jayne.

Geology of the Sherwin Point area, Latah County, Idaho. Harold Kemple.

Geology and mineral resources of part of the Utopia Mining District, Beaverhead County, Montana. Donald B. Kennedy.

The genesis of the White Mountain magma series of New England. David J. Lachance.

Geology and groundwater resources of part of Hangman Creek and Marshall Creek drainage basins. Theodore M. Olson.

Sand and gravel deposits in part of the Spokane (SE and SW) quadrangles, Washington. Mark Powers.

Geology and porphyry molybdenum mineralization of the Turnley Ridge stock in the Elkhorn mining district, Jefferson County, Montana. Lance E. Senter.

Geology of the Gold Hill-Mica Mountain area, Latah County, Idaho. Gary D. Walker.

A detailed gravity study of the Cheney quadrangle, Spokane County, Washington. Carl Yost.

Faculty Research Projects

Petrology of the Mount Stuart batholith, central Cascades, Washington. Erik H. Erikson.

Thermal history of the Mount Stuart region from apatite fission-tracks. Erik H. Erikson.

Mineral resource availability of Southeast Asia and the Far East (U.S. Bureau of Mines). Erik H. Erikson and Ernest H. Gilmour.

Geothermal ice caves in volcanic craters, Mounts Baker and Rainier. E. P. Kiver and W. K. Steele.

Geologic map of the Inchelium quadrangle, Washington (U.S. Geological Survey). J. R. Snook and Campbell.

University of Puget Sound

Geology Department

Alkali metal and trace element transport in silicic inclusions from Volcan de Pacaya, Guatemala. Martin Sebran (student); A. A. Eggers (faculty).

Eruptive mechanisms from gravity changes, seismicity, and muzzle velocity at Volcan de Pacaya, Guatemala. Jeffery Krause, Harold Rush, James Ward (students); A. A. Eggers (faculty).

Gravity survey of the Moses Lake-Soap Lake area, Washington. John Battie, Harold Rush (students); Z. F. Danes, A. A. Eggers (faculty).

Lead in the soils of north Tacoma. Scott Matthes (student); A. A. Eggers (faculty).

Palynology of northeast Tacoma bogs. Lyman Burk (student); J. S. Lowther (faculty).

Photogeology of the area of the 1974 Volcan de Fuego earthquake swarm. Madelyn McKenna (student); David Harlow (U.S.G.S.); A. A. Eggers (faculty).

Relationship between ERTS linears, faulting, earthquake epicenters, and volcanic centers of the Mexican volcanic chain. Marcia Knadle (student); A. A. Eggers (faculty).

Spanaway-Parkland planning project. Donnella Jackson, John Battie, Craig Searles (students); N. R. Anderson (faculty).

Strontium isotope geochemistry of the lavas of the Volcan de Pacaya Complex. Norman K. Grant (Oberlin College, Ohio); A. A. Eggers (faculty).

Trace element geochemistry of residual glasses from the Volcan de Pacaya Complex, Guatemala. Ronald Knaak (student); A. A. Eggers (faculty).

Volatile content of tephra from Volcan de Pacaya, Guatemala. A. T. Anderson (University of Chicago); A. A. Eggers (faculty).

Physics Department

Regional gravity survey of the Cascade Mountains of Washington. Z. F. Daneš (plus student coworkers, project in progress since 1963).

Gravity survey of Mount Rainier National Park. Z. F. Daneš (paper ready to be submitted for publication).

Convection in the Earth's Mantle. Z. F. Daneš and Ken Burrell (theoretical research in progress).

Tectonism of Washington. Z. F. Daneš (paper in final stages).

Washington State University

A hydrologic study of an alpine karst, Flathead County, Montana. J. Ayers (student).

Deformation in Stevens County. J. Bressler (student). J. W. Mills and A. J. Watkinson (faculty).

An analysis of folded boudinage from Grand Forks, B.C. G. LeBret (student); A. J. Watkinson (faculty).

Geology and mineral deposits of the Blacktail Mountain Area, Bonner County, Idaho. W. Green (student); J. W. Mills (faculty).

Geology and ore deposits of the Leadpoint Mining District, Stevens County, Washington. B. Hurley (student); J. W. Mills (faculty).

Geology and mineral deposits of the Sultan Basin, Washington. R. Griffis (student).

Chemistry and mineralogy of manganese nodules. D. Banning, R. Fewkes, J. Papendieck, D. Pitzl (students); R. K. Sorem (faculty).

Manganese deposits, Olympic Penninsula, Washington. S. Lee (student); R. K. Sorem (faculty).

Petrochemistry of the Columbia River Basalts in the southeast corner of the Plateau. V. Camp, W. Kleck, S. Reidel, C. Sundstrom (students); P. R. Hooper (faculty).

Petrology and structure of Saddle Mountains, Central Washington. T. Taylor (student); P. R. Hooper (faculty).

Palagonite and pillow basalts of the Columbia River Group. K. Summers (student).

Lava Tubes of Mt. Adams, Washington. L. Nieuwenhuis (student).

Petrochemistry of the Mt. Baker andesites. V. Swan (student).

Variations in beach profiles, Olympic Penninsula, Washington. J. Dombrowski (student).

Distribution and migration of beach sediments along the coast of the Olympic Penninsula, Washington. C. Plopper (student).

Differentiation of sedimentary environments by statistical methods. R. Tucker (student).

A study of trace element chemistry of coal, using neutron activation analysis. T. Jones (student).

Crystal chemistry of an alkali-deficient tourmaline. J. Vry (student); F. F. Foit, Jr., and P. E. Rosenberg (faculty).

Permian crinoid columnals from Battleship Wash, Clark County, Nevada. J. Lindberg (student); G. D. Webster (faculty).

Compositional variations in sphene. P. E. Rosenberg (student).

Crystal chemistry and structure of datolite, cancrinite, plagioclase. F. F. Foit, Jr. (faculty).

Geophysical borehole investigation of Boyd County pumped storage power project of the Nebraska Public Power District. J. W. Crosby III (faculty).

Benthonic Foraminifera in Arctic Ocean and Mediterranean Sea. Y. Herman-Rosenberg (faculty).

Tectonic evolution of a part of the Caledonian Orogenic Belt, North Norway. P. R. Hooper (faculty).

Structural interpretation of the Lake Vermilion iron-ore bearing area in northeast Minnesota. P. R. Hooper (faculty).

Lead-zinc deposits of NE Washington. J. W. Mills (faculty).

Tin-zinc Lode Mine, north central Nigeria. J. W. Mills (faculty).

Geology of the San Juan Island, NW Washington. W. F. Scott (faculty).

Microreflectivity of ore minerals. R. K. Sorem (faculty).

Fold geometry and mechanisms of folding in highly deformed multilayers. A. J. Watkinson (faculty).

Mechanics of deformation in the Shuswap terrane, northern Washington and British Columbia. A. J. Watkinson (faculty).

Late Paleozoic paleontology and stratigraphy of the Western United States. G. D. Webster (faculty).

Water resources of Bermuda. H. L. Vacher (faculty).

Geophysical investigations of Washington's groundwater resources. J. W. Crosby III (faculty).

Western Washington State College

Master's Theses

Distribution and transport of mercury within the Nooksack River drainage, Whatcom County, Washington. R. Thomas Falley.

Biochemical origin of coastal weathering features in the Chuckanut Formation of northwest Washington. George E. Mustoe.

Stratigraphic relationship between Picture Gorge and and Yakima Basalt Formations, north-central region. Robert S. Cockerham.

Weathering of ultramafic rocks, Twin Sisters, Washington and Trinity massif, California. C. Gene Whitney. (In progress)

A gravity survey and analysis of the Republic graben of northeastern Washington and southeastern British Columbia. Ralph P. Soule. (In progress)

Yakima Valley College

Geologic hazards map—Yakima County. Newell Campbell (faculty).

Mineral and fossil displays and classification for Yakima Valley Museum. Newell Campbell (faculty).

UNPUBLISHED GRAVITY MAP NOW IN DIVISION REFERENCE LIBRARY

Dr. Z. F. Daneš, University of Puget Sound, has provided us with a copy of his recently completed but unpublished Bouguer Gravity Map of Mount Rainier National Park, Washington. The map is at a scale of one inch to the mile (1:63,360) and covers the area between lat. 46°45' and 47°00' N. and long. 121°30' and 121°55' W. We cannot provide reproductions of this map, but interested persons may inspect it at our offices at 14th and Jefferson in Olympia.

THE NACHES SLIDE

A large earth slump, which initially moved in 1956, is located along the southwest side of the Naches River, approximately 2½ miles west of the

town of Naches. The slump has the appearance of having occurred "yesterday" as do many slides in areas of low rainfall, such as eastern Washington. There

The Naches Slide

may have been additional movement since 1956; however, the slide has not been monitored so it would be difficult to ascertain. The slump is approximately 1,200 feet wide, extends upslope about 300 feet, and probably could be 50 to 100 feet deep. Total volume of each material involved is perhaps as high as 1.3 million cubic yards. The slump occurred in colluvium (and in Ellensburg Formation?). The slump, which bears signs of recent activity, has possibly moved slightly off and on for several years. Complete and sudden failure of this slump could result in diversion of the Naches River with resultant flooding of nearby properties.

Ernest R. Artim

NEW STAFF MEMBER

Ellis R. Vonheeder joined the Division of Geology and Earth Resources as a geologist on January 13, 1975. His work pertains to the utilization and promotion of coal resources on state-owned land; at present, he is concerned with coal on state land in Whatcom County.

Ellis received his B.A. degree in 1965 from Western Washington State College, where he also obtained his M.S. in 1972. He previously worked for American Smelting and Refining Co. and the Seattle district office of the U.S. Army Corps of Engineers. Ellis holds a commercial pilots license, and he skies, hikes, and climbs the mountains of our state.

Ellis, his wife Rae, and two daughters Kimberly (10) and Kelli (6) now make their home in Lacey.

COAL GEOLOGY

Within the past 12 to 18 months, the small, almost unknown Middle East countries have vividly demonstrated to the rest of the world only a fraction of the political power available by banding together to control petroleum supplies and prices. By Presidential mandate, Project Independence has been embarked upon to make this nation self-sufficient in energy within 15 years.

Among the various alternate energy sources is coal. Due to handling inconveniences and strict clean-air standards, the use of coal as an energy-source plays a lesser role than do gaseous and liquid petroleum fuels. However, on a uniform BTU basis, domestic coal resources of the United States are

greater than those of petroleum, natural gas, oil shale and bituminous sandstone combined. When viewed in this perspective, coal is coming into sharper focus as a source of not only energy but of synthetic lubricants as well.

A survey of known coal reserves here in Washington state (1961) indicates at least 2,750 million tons of measured coal, although at present there are but two working mines in the state. Clearly, a vast reserve of energy lies essentially, as yet, untapped.

With the increased emphasis of energy self-sufficiency, the Department of Natural Resources has accordingly hired a full-time geologist engaged in the utilization and promotion of coal on state-owned land.

All known significant data (consultant reports, out-of-print periodicals, etc.) are presently being compiled on the coal reserves of Whatcom County. It is hoped that this information, primarily concerned with (but not restricted to) state-owned land, will be made available soon. Also available soon will be a complete bibliography, listing by subject and author from 1814 to present, articles written on every aspect of Washington State coal. (Also available, at no charge, is a current Division of Mines and Geology Publication List which enumerates coal-related literature presently in print and available.)

It is anticipated that the above information will evoke increased interest from those companies who plan to engage in coal-exploration activities within the state in the future.

Ellis R. Vonheeder

REPRODUCTION OF "GOLD IN WASHINGTON" NOW AVAILABLE

The Shorey Book Store has made a facsimile reproduction of the Division of Mines and Geology Bulletin 42, "Gold in Washington," by Marshall T. Huntting. This was first published by us in 1955 and has been out of print for several years. A Shorey publications catalog has been added in the back also. "Gold in Washington" may now be purchased for $6 from: The Shorey Book Store, 815 Third Ave., Seattle, WA 98104.

"Yup, I staked it for copper, nickel, lead, zinc, silver, gold, mercury, silica, aluminum ..."

NWMA TO HAVE FULL-TIME DIRECTOR

The Board of Trustees of the Northwest Mining Association has authorized the hiring of a full-time executive director. A committee is now in the process of selecting this administrator.

An up-to-date listing of current legislation and events affecting geologists and the mineral industry is an important function of the NWMA monthly newsletter. A recent issue states that their memberships are up 97 percent compared with last year. The dues remain at $15 per year, and a special amendment provides that students may join for $5. Their address is Northwest Mining Assoc., W. 1020 Riverside Ave., Spokane, WA 99201.

"Statistics are no substitute for judgment."

Henry Clay

HOUSE BILL 1068 INTRODUCED IN LEGISLATURE

State Representative Lorraine Wojahn introduced House Bill 1068 in the Washington State legislative session on March 25, 1975. The bill establishes registration of geologists and geophysicists in Washington State. Any comment should be addressed to State Representative John Martinis, Chairman of the House Natural Resources Committee, Room 402, House Office Building, Olympia, WA 98504. Copies of HB 1068 may be obtained from the House of Representatives, Bill Room, Legislative Bldg., Olympia, WA 98504.

YOUR STATE GEOLOGIST REPORTS

President Lincoln, in 1865, sent a word of congratulations to the miners in the western United States by Congressman Schuyler Colfax. In this message Lincoln said, "Tell the miners for me that I shall promote their interests to the utmost of my ability, because their prosperity is the prosperity of the nation; and we shall prove in a few years that we are indeed the treasury of the world."

I think this is remarkable foresight for a man who lived over 100 years ago. I believe that President Lincoln saw the entire picture much more clearly than perhaps our leaders of today do. As a nation, we must look to our "own potato patch" for our needs; as a people, we need to work in consort rather than as adversaries to strengthen our economic welfare.

I am concerned by what has happened in the last few years to our mineral industry at the hands of government, and yet I see the underlying fallacies that have brought this on. Most people have no real concept of where a nation's basic wealth lies, or that the entire economy is founded on two basic resources: those that are renewable and those that are not renewable. Attention has been concentrated on the renewable resources in recent years with an accepted acknowledgment of their importance in our economic wealth. But what has happened and is still happening to our nonrenewable resources? Environmental concerns—some real and some based on a utopia—have become the primary goal of government. The realization must come that when our mining is gone our economy will sag and collapse. Where does the steel to make machines, the cement to build dams, heating fuel, etc. come from? Everything that contributes to our standard of living has a basic mineral component. Even the renewable extractive industries (farming, lumbering, fishing, etc.) cannot operate efficiently without their counterpart, the nonrenewable extractive industry.

Yes, we need another Abe Lincoln. Strong leadership that has the courage to plainly state and prepare a program for our nation with this objective: To facilitate, encourage, and promote the development of our mineral resources.

Ted Livingston

Department of Natural Resources
Division of Geology and Earth Resources
Olympia, WA 98504

BULK RATE
U. S. POSTAGE PAID
Olympia, Washington
Permit 263