October 1950

Portland, Oregon

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES Head Office: 702 Woodlark Building, Portland 5, Oregon

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IS THERE ANY HOPE FOR THE PUTURE?

- (1) A healthy mining industry is essential to the security of this country.
- (2) The western mining industry is far from healthy. Witness the large decrease in number of shipping mines over the past five years, the absence of prospecting, and the scarcity of exploration projects except by a few large mining companies.
- (3) The low estate of the mining industry is highlighted by the "Defense Production Act of 1950" which, being interpreted, means that the Federal Government has found it necessary to "take over" the financing of development projects in an attempt to stimulate the domestic industry.

 Instead of removing the handouffs the industry gets a "shot in the arm."
- (4) The Defense Production Act of 1950 is an emergency measure rushed through Congress because of the threat of war and the unhappy condition both of our mining industry and the national stockpile. Does anyone believe that the threat of war will be alleviated in the foreseeable future? How then can we escape the fact that the Defense Production Act of 1950 is a long step in the direction of a subsidized industry, which means a government-controlled industry.
- (5) The contributing factors to the condition of the mining industry are high taxes and low metal prices in relation to operating costs.
- (6) Canada's industry is in a relatively healthy condition as evidenced by the amount of prospecting, new exploration projects, and the flow of American capital into mines across the border.
- (7) One of the principal factors in the discouragement of new domestic mining operations is repressive taxation. An illuminating comparison between mining taxation in the United States and in Canada appeared on the editorial page of the September Mining Congress Journal; it is reproduced on the succeeding page.

Treatment Accorded Mining:

IN THE USA

TAXES are imposed on mining income at once, often on assumed profit without known and proven ore to assure recovery of investment.

All development and preliminary costs, until a mine reaches the "production stage," are required to be treated as capital expenditures recoverable only through depletion allowances.

Depletion allowance for metal and some nonmetallic mines computed at 15 percent of "gross income from the property" but not more than 50 percent of "net income from the property." Over a period of years, these provisions frequently reduce actual depletion allowances to materially less than either of these percentage standards.

Capital gains subject to substantial tax.

Double taxation - first on corporate income and then on this same income again when distributed to stockholder in form of dividends.

Operating loss in any year may be "carried back" two years and "carried forward" two years, but in so doing the taxpayer is denied the benefit of percentage depletion, both for the year of loss and the year to which the loss is carried.

Losses from fruitless mining ventures in many cases can only be written off as tax deductions by abandonment or sale of the property, with many questions as to when abandonment may be recognized or loss on sale may be deductible.

"Straight-line" or unit depreciation to be written off each year, including loss years when no tax benefit can be realized.

IN CANADA

NEW mines are entirely exempt from taxation for first three years of operation. An additional six-months period of tax-free operation is allowed for "tune-up."

Expenditures for prospecting, exploration, and development are deductible from taxable income as operating expenses. These charges may be deferred until expiration of the tax-exempt period, and then written off at any rate in any one year, from zero up to a maximum of 25 percent.

Depletion allowance at rate of 33-1/3 percent of net annual earnings. In the case of mines with the valuable production derived from gold to the extent of 70 percent of the total output, depletion allowances are established at 40 percent of net annual earnings or \$4 an ounce of gold produced, whichever is greater.

Capital gains not taxed. Profits of bona-fide prospector or prospecting syndicate from sale of mine considered as capital and not subject to tax.

Depletion allowances granted to share-holders of 10-20 percent of the dividend.

Operating loss in any year may be "carried back" one year or "carried forward" five years. No disallowance of percentage depletion.

Losses from fruitless ventures dedustible from taxable income in year of loss.

"Diminishing balance" depreciation may be taken at such rate in each year as taxpayer chooses, from zero to 30 percent, based on the undepreciated balance. Full application of the tax benefit principle.

UNITED STATES GOLD AND SILVER MOVEMENTS IN JULY 1950

The monetary gold stock of the United States was decreased during July by \$94,305,000 to \$24,136,262,000 at the end of the month as the combined result of ear-marking operations, receipts from foreign countries, exports, domestic production, and other factors. Gold held under earmark at the Federal Reserve Banks increased during July by \$89,969,049 to \$4,708,987,187.

Total exports of gold were \$4,069,404, of which \$1,750,017 was to Formosa, \$669,409 to Portuguese Asia and \$434,305 to Germany. Total imports of gold were \$2,555,941, of which \$616,896 was from Canada. Total exports of silver were \$375,182, of which \$185,000 was to Germany. Total imports of silver amounted to \$10,408,279, of which \$4,081,982 was from Cuba, \$2,433,828 from Mexico, \$1,293,745 from Canada and \$1,014,536 from Peru.

(From World Trade News, U.S. Dept. of Commerce, Field Service, August 31, 1950.)

DEPARTMENTAL NEWS ITEMS

Hollis Dole has finished this field-season's mapping in the Dutchman Butte quadrangle located principally in southwestern Douglas County. This 15-minute quadrangle is north of and adjoins the Galice quadrangle. Mapping of the Galice quadrangle has just been completed by Francis G. Wells and George W. Walker of the U.S. Geological Survey in cooperation with the Department. This is Dole's second field season in geological mapping of the Dutchman Butte quadrangle. He is now engaged in strategic mineral investigations with special attention to manganese deposits.

Harold Wolfe and David White have completed a reconnaissance of the area near Silver Butte in southwestern Douglas County. This reconnaissance is a continuation of the work done in 1948 by Ewart M. Baldwin, now associate professor of geology, University of Oregon, and Hollis Dole. It is planned to publish results of the work by Wolfe and White in the Ore.-Bin.

Harold Wolfe has completed field work on the study of tungsten occurrences in Jackson County. Results will be issued as a Departmental report as soon as editorial and multigraphing work can be done.

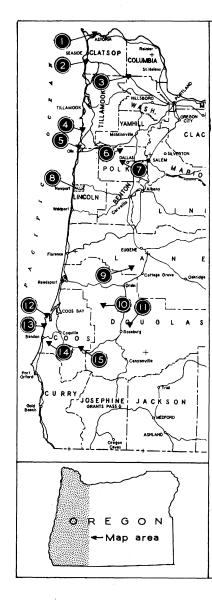
Norman Wagner and David White are engaged in a geological reconnaissance in southeastern Oregon. Most of their studies will be in the Pueblo Mountains of southern Harney County.

Hollis Dole and F. W. Libbey have recently made investigations of some manganese deposits in Coos and Curry counties. This work was designed to review some old Departmental reports and also to investigate some newly reported occurrences. When analytical results of samples obtained are available, it is likely that further studies will be made in southwestern Oregon.

Thomas Matthews has been on leave on his annual tour as a naval reserve officer. His duties were centered at Treasure Island, California.

Norman Wagner has completed field mapping of the Telocaset quadrangle located in northern Baker County and southern Union County. Wagner's work has been a part-time activity and has extended over about five years. The map will be published as soon as possible.

R. E. Stewart, Department micropaleontologist, is carrying on studies of samples collected by geologists of this Department and various other organizations working in the State. The samples were obtained from Tertiary formations so located that the identification and range determination of the microfossils contained will greatly assist in unraveling the Tertiary stratigraphy of western Oregon. This work, in which Miss Ruth Todd of the U.S. Geological Survey is scoperating, is very important in assigning accurate ages to formations encountered in geologic mapping. The following page lists Department microfossil studies now in progress and gives an index map of western Oregon showing the locations from which samples for these studies were collected.



MICROPALEONTOLOGICAL PROJECTS IN PROGRESS* by State of Oregon Department of Geology and Mineral Industries

- Astoria city and environs, Astoria quadrangle. Astoria formation, Miocene.
- 2 Highway cut about 1-1/3 miles northeasterly from Cannon Beach on Oregon Coast Highway, Cape Falcon quadrangle. Miocene.
- 3 Cuts along Sunset Highway northwesterly and southeasterly from Sunset Tunnel near northeast corner of Timber quadrangle and northwest corner of Gales Creek quadrangle. Sunset Tunnel. Keasey section.
- 4 Sea cliff exposure 1-1/2 miles northerly from Cape Kiwanda, 500 feet south of Triangulation Station NIP. Nestucca Bay quadrangle. Oligocene.
- 5 Exposure near mouth of Salmon River, southwestern Nestucca Bay Quadrangle. Nestucca formation, upper Eccene.
- 6 Section exposed along Mill Creek and South Yamhill River, northwestern Dallas quadrangle and southern Sheridan quadrangle. Upper Eccene and upper middle Eccene.
- 7 Ellendale quarry, about 2-3/4 miles east of Dallas, Dallas quadrangle. Middle Eccene.
- Newport-Toledo section of Nye shale and Toledo formation along highway and Yaquina Bay shore from Newport eastward to a little beyond Toledo, Yaquina and Toledo quadrangles. Miocene-Oligoceneupper Eccene.
- 9 Highway cut near Lorane southwest of Eugene, Cottage Grove quadrangle. Stratigraphic position uncertain.
- 10 Turner's Basket Point locality northwest of Roseburg. Type Tyee formation, upper middle Eocene. Believed to belong between the Mill Creek-Sacchi Beach beds and the Umpqua formation.
- 11 Turner's Glide section along North Umpqua River northeast of Roseburg. Umpqua formation (middle Eccene below Tyee) with perhaps some Tyee at top of section.
- 12 Coastal section between Tunnel Point and Cape Arago south of Coos Bay, Empire quadrangle.

 Bastendorf and Coaledo formations. Oligocene and upper Eocene.
- 13 Sacchi Beach section along coast north and south of mouth of Five Mile Creek south of Cape Arago, Empire quadrangle. Appears to be same age as Mill Creek beds, upper middle Eocene.
- 14 Bear Creek southwest of Coquille, Bandon quadrangle. Umpqua formation, middle Eccene.
- Turner's "Middle Fork of Coquille River section" southeast of Coquille along highway east and west of Remote just east of Coquille quadrangle. Umpqua and Tyee formations, middle Eocene.
- *Geologic ages are tentative pending completion of work.

DECISIONS ON OREGON NAMES

By

The United States Board of Geographic Names
Decision List No. 5006 rendered during April, May, and June 1950

- Conundrum Creek: stream about 2.5 miles long, heading about 3 miles southwest of Cornucopia in sec. 6, T. 7 S., R. 45 E., and flowing southward to Spring Creek about 0.5 of a mile upstream from its mouth, in Whitman National Forest; Baker County; sec. 13, T. 7 S., R. 44 E., Willamette meridian, 44°57°20° N., 117°15°45° W. Not: Spring Creek (q.v.)
- Coos Bay: incorporated city (1940 population 5,259) at the head of Coos Bay and about 3 miles south of the City of North Bend; Coos County; 43°22' N., 124°13' W. Not: Marshfield.
- Dewey Creek: stream about 3.5 miles long, heading in the NW4 sec. 1, T. 10 S., R. 11 W., and flowing southeastward to the Siletz River about 1 mile west of Siletz and 0.5 of a mile downstream from the mouth of Mill Greek; Lincoln County; sec. 8, T. 10 S., R. 10 W., Willamette meridian; 44.043.15" N., 123.056.15" W. Not: Miller Greek (q.v.)
- Mill Creek: stream about 3.5 miles long, heading in sec. 23, T. 10 S., R. 10 W., and flowing generally northwestward to the Siletz River about 1 mile southwest of Siletz and 0.5 of a mile upstream from the mouth of Dewey Creek; Lincoln County; sec. 8, T. 10 S., R. 10 W., Willamette meridian, 44.42.55" N., 123.55.50" W. Not: East Fork (for upper course of the stream).
- Miller Greek: stream about 2.5 miles long, heading in sec. 36, T. 9 S., R. 11 W., and flowing eastward and then southward to Dewey Greek about 1.3 miles upstream from its mouth; Lincoln Gounty; NW sec. 7, T. 10 S., R. 10 W., Willamette meridian, 44.43.20" N., 123.57,30 W.
- Slab Greek: stream about 1 mile long, heading in sec. 15, T. 10 S., R. 35 E., and flowing southeastward to its confluence with Greenhorn Greek to form the North Fork Burnt River, in Whitman National Forest; Baker Gounty; sec. 23, T. 10 S., R. 35 E., Willamette meridian, 44°41'10" N., 118°28'15" W. Not: Kinkade Greek, Kinkale Creek.
- Smith Ridge: ridge about 4 miles long, extending northwestward from sec. 4, T. 29 S.,
 R. 1 W., to see. 24, T. 28 S., R. 2 W., between Straight Creek and West Creek, in
 Umpqua National Forest; named for William C. Smith, a former Forest Service employee
 and a native of the area; Douglas County; T. 28 S., Rs. 1 and 2 W., and T. 29 S.,
 R. 1 W., Willamette meridian, 43°06' N., 122°52' W.
- Spring Creek: stream about 2 miles long, heading in sec. 17, T. 7 S., R. 45 E., and flowing on a winding course to Little Eagle Creek about 4 miles upstream from its mouth, in Whitman National Forest; Baker County; sec. 24, T. 7 S., R. 44 E., Willamette meridian, 44056'50" N., 117016'15" W.
- Stices Gulch: stream about 6 miles long, heading in sec. 30, T. 11 S., R. 40 E., in Whitman National Forest, and flowing northward to the Powder River about 10 miles upstream from Baker; Baker County; sec. 36, T. 10 S., R. 39 E., Willamette meridian, 44°39'15" N., 117°52'30" W. Not: Stice Gulch.
- Sunny Valley: settlement about 13.5 miles north-northwest of the city of Grants Pass;

 Josephine County; 42°37'42" N., 123°22°30" W. Not: Grave, Grave Creek.
- Thornton Greek: stream about 4 miles long, heading in sec. 20, T. 10 S., R. 9 W., and flowing south-southwestward to the Yaquina River about 1 mile west of the village of Chitwood; Lincoln County; sec. 31, T. 10 S., R. 9 W., Willamette meridian, 44°39'27" N., 123°50'15" W. Not: Horton Greek, Thorton Greek.
- Trail Creek: stream about 3.5 miles long, heading in sec. 20, T. 11 S., R. 40 E., in Whitman

 National Forest, and flowing north-northwestward to Stices Gulch about 1 mile upstream

 from its mouth; Baker County; sec. 6, T. 11 S., R. 40 E., Willamette meridian, 44°38'30" N.,

 117°52'15" W. Not: Belgian Gulch.

West Fork Mill Creek: stream about 3 miles long, heading in SW4 sec. 12, T. 10 S., R. 11 W., and flowing eastward to Mill Creek about 0.3 of a mile upstream from its mouth; Lincoln County; sec. 8, T. 10 S., R. 10 W., Willamette meridian, 44°42°40" N., 123°56'05" W. Not: Dewey Creek (q.v.).

STEEL CAPACITY

Every day, the finished steel made from 24 hours of full output of ingots and castings will provide steel for all the following items (average sizes): An aircraft carrier, 500 airplanes, 1,000 anti-aircraft guns, 500 tanks, half a million 3-inch shells, 1,000 howitzers, 2,000 aerial bombs, two heavy eruisers, 1,000 freight ears, 2,000 trucks, two cargo ships, two tankers, 12,000 autos, 2,000 homes, 20,000 household refrigarators, and 20,000 stoves. And after all that, 23,000 tons of steel would remain for other purposes.

(From Steel Facts, August 1950, published by American Iron and Steel Institute, New York.)

NEW PUBLICATION ON COAL

"The Chemical Utilization of the Subbituminous Coals of Washington," by Lorentz A. Conradi, research assistant in the Engineering Experiment Station at the University of Washington, has recently been issued by the University of Washington Press, Seattle. The publication is called Engineering Experiment Station Report No. 6.

FOX NAMED EDITOR OF MINING CONGRESS JOURNAL

John C. Fox has been named editor of <u>Mining Congress Journal</u> to succeed Sheldon P. Wimpfen, who has resigned to join the Raw <u>Materials Operations of the Atomic Energy Commission</u>, where he will be engaged in special problems of uranium production.

Mr. Fox brings to the Journal the benefits of broad experience in mining and technical writing. He worked as sampler and surveyor in a Nevada gold mine; as draftsman and engineer for Chile Exploration Company; in the New Jersey mines of New Jersey Zinc Company, first as a miner and later as engineer; at the Bertha Mineral Division lead-zinc mines in Virginia, as engineer; and with the Nicaro Nickel Company in Cuba, first as engineer in charge of stripping operations, later as office and cost engineer. Extensive knowledge of underground and strip mining of bituminous and anthracite coal was gained as a technical representative in the explosives field, and during this period he also became well versed in the mining and quarrying of limestone and sandstone.

More recently he taught all phases of mining engineering at the School of Mines of Columbia University, of which he is a graduate. He also did mine consulting work, wrote for American Metal Market and was the author of the "New York Letter" of the Ganadian Mining Journal.

NEW LIMESTONE QUARRY

Limestone is being quarried under contract for use as agricultural stone at the Lander's quarry located about 10 miles east of Roseburg, Douglas County.

METAL PRICES

Copper, $24\frac{1}{2}$ % per pound Connecticut Valley; lead, 16% per pound New York; zinc, $17\frac{1}{2}$ % per pound East St. Louis; tin, $\$1.13\frac{1}{2}$ per pound, New York; mercury, \$88-\$91 per flask; platinum, \$100-\$103 per ounce troy; silver (foreign) 80% per ounce troy.
