June 1953

Portland, Oregon

# STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES Head Office: 1069 State Office Bldg., Portland 1, Oregon

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		Lenin Ramp	Geologist
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# Field Offices

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#### ASSESSMENT WORK

The assessment year ends at noon, July 1, 1953. Holders of unpatented mining claims should have \$100 worth of work or improvements done on each claim prior to that time. However, if the work has not been completed July 1, it should at least have been started and then it must be prosecuted "with reasonable diligence" until completed.

Within 30 days after the performance of labor or making of improvements to comply with the law, an affidavit setting forth the following facts must be recorded in the mine records of the county in which the mining plaim is situated:

- 1. The name of the claim or claims, if grouped, and the book and page of the record where the location notice of said claim or claims is recorded.
- 2. The number of days work done and the character and walue of the improvements placed thereon, together with the location of such work and improvements.
  - 3. The date or dates of performing said labor and making said improvements.
  - 4. At whose instance or request said work was done or improvements made.
- 5. The actual amount paid for said labor and improvements and by whom paid if the same was not done by the owner or owners of said claim.

If a mining claim is on O&C lands, the owner, within 60 days after the expiration of any annual assessment year, must file for record a statement under cath as to the assessment work done or improvements made during the previous assessment year at the office of the Bureau of Land Management, Swan Island, Portland, Oregon.

A bill (HR 5704) has been introduced in Congress by Representative Pfost of Idaho to extend the time to complete assessment work in the United States and Alaska for three months to October 1. The bill has been referred to the Interior and Insular Affairs Committee, but because of the lateness of time it seems unlikely that this bill will be acted upon before the end of the assessment year.

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H.R. 4983

#### IN THE HOUSE OF REPRESENTATIVES

#### May 4, 1953

Mr. D'Ewart introduced the following bill; which was referred to the Committee on Interior and Insular Affairs

#### A BILL

To define the surface rights vested in the locator of a mining claim hereafter made under the mining laws of the United States, prior to issuance of patent therefor, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That mining claims hereafter located on lands belonging to the United States under the mining laws of the United States shall not, prior to issuance of patent therefor, be used for any pruposes other than prospecting, mining, or processing operations and uses reasonably incident thereto.

- Sec. 2. (a) Any mining claim hereafter located, prior to the issuance of patent therefor, shall be subject to the right of the United States, its permittees and licensees for surface uses only, under the limitations of subsection (c) hereof, to use so much of the surface thereof as may be necessary or appropriate for forage control or usage, or reforestation, fire prevention, or other forest protection, upon such claim of for access to adjacent land for said purposes or to cut and remove timber on the adjacent land, and to the right of the United States, its permittees and licensees, under the limitations of subsection (c) hereof, to cut and remove dead, down, diseased, insect-infested, or over-mature timber.
- (b) Except to the extent required to provide timber for the mining claimant's prospecting, mining, or processing operations and uses reasonably incident thereto, or to provide clearance for such operations or uses, or for buildings or structures in connection therewith, no claimant of an unpatented mining claim hereafter located shall cut and remove any timber growing thereon without authorization from the United States. Any cutting and removal of timber for such prospecting, mining, or processing operations and uses reasonably incident thereto (but not cutting required to provide clearance as aforesaid) shall be conducted in accordance with sound principles of forest management.
- (c) Any use of the surface of an unpatented mining claim authorized to be made under this section 2 by the United States, or its permittees or licensees, shall be such as to not interfere materially with the prospecting, mining, or processing operations or reasonably incidental uses of the mining claimant.
- Sec. 3. Nothing in this Act shall be construed in any manner to limit or restrict or to authorize the limitation or restriction of any existing rights of any claimant under any valid mining claim heretofore located or to authorize inclusion in any patent hereafter issued under the mining laws of the United States for any mining claim heretofore or hereafter located, of any limitation or restriction not otherwise authorized by law.

This bill received the endorsement of the Department of the Interior and was approved unanimously by the Subcommittee of the Interior and Insular Affairs Committee. The companion measure in the Senate is S. 1830.

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#### EXPLORATION WORK AT THE BONANZA QUICKSILVER MINE

New exploration work is now underway at the Bonanza quicksilver mine near Sutherlin, Douglas County, Oregon. The 830 drift from the No. 19 winze is being extended southerly to get under the south ore body which was mined above on the 630 south drift. In the near future additional exploration work will be done through drifts on the 1050 level extending both north and south on the north ore body. A DMEA exploration loan of \$50,056 has been granted, of which \$37,542 is the Government's share. Burt Avery is superintendent, and about 15 men are employed. Production is from a Gould rotary kiln.

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#### MONTANA CHROME

The News Letter of the Mining Association of Montana, of which Mr. Carl Trauerman has long been the efficient secretary, states that the American Chrome Company in a few months expects to start full-scale operations at its Mouat chrome mine near Nye, Stillwater County, Montana, according to Estey A. Julian, San Francisco, president of the company, who visited the property in the middle of May. Production would be 1,000 tons of ore per day, to be concentrated and delivered to the United States Government on a contract providing for 900,000 tons of chrome concentrates over an 8-year period. The mine has been re-equipped and housing provided for 350 workers. The mill also will be re-equipped. The property last was operated by the U.S. Government during World War II. The U.S. Government and American Chrome Company are financing present building and equipment program. Mr. Julian estimates that the company will spend in the community, when the property is in full operation, about \$300,000 per month.

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### CESSATION OF THE KAISER PERLITE OPERATION

It is reported that the Kaiser Gypsum Division of Kaiser Industries has abandoned the perlite operation at Dant on the Deschutes River about 14 miles south of Maupin. Dant & Russell, Inc., Dantore Division, installed a mill, expansion plant, and an accustical-tile plant and then gave an option to the Kaiser Gypsum people in May 1952.

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# NEW DIATOMITE PROJECT

According to the Oregonian, a group representing Portland interests has been incorporated to develop and produce diatomite at the extensive deposits in the Harper-Westfall district of northern Malheur County. It is reported that about 2700 acres of diatomite have been leased and claims covering more than 1200 acres have been filed upon. New uses for diatomite are continually being found and an expansion of the industry in Oregon is logical because of the extensive deposits in central and eastern parts of the State. For many years the only consistent operation has been near Terrebonne on the Deschutes River now owned and operated by Great Lakes Carbon Corporation.

Diatomite deposits in Oregon were formed in fresh water as distinguished from those in California which were formed in a marine environment. Diatoms are the minute siliceous skeletons of single-celled plants. They accumulate by the billions on the bottom of fresh and salt water lakes and inlets, and when covered up and consolidated form porous white deposits of opaline silica, called diatomite or diatomaceous cearth.

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#### NEW ALUMINUM PLANT AT THE DALLES

According to the <u>Oregon Statesman</u>, the General Services Administration announced that the first firm to sign an agreement under the present aluminum expansion program is the Harvey Machine Company, Torrance, California. It was announced that Harvey would build an aluminum reduction plant at The Dalles, Oregon, having a capacity of 54,000 tons of primary aluminum annually. The Harvey concern had previously announced that a 500-acre plant site had been purchased. Previously the Harvey Company had purchased the Salem alumina-from-clay plant at Salem, Oregon, and plans are being made for research work on high aluminous materials at the Salem plant.

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#### DEPARTMENTAL NOTES

Hollis Dole, geologist with the Department, who has been on leave engaged in graduate work at the University of Utah for the past two years, has returned to the Department and is now stationed at the Portland office. He will devote a considerable part of his time to State geologic map work.

Len Ramp, Department geologist, has resumed work on his chromite study project begun last year. As chromite areas become accessible they will be visited and mapped by Mr. Ramp. His headquarters are at present in Grants Pass.

Norman Wagner, Department geologist stationed at Baker, is on annual leave during June visiting his father in Pennsylvania. In his absence, R. E. Corcoran and Ralph S. Mason of the Portland office successively substituted in the Baker office. In July Wagner will resume mapping in Umatilla County on a project started in 1951.

Thomas Matthews, Department spectroscopist, is chairman of the Oregon Section of the American Institute of Mining and Metallurgical Engineers for 1953.

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According to the <u>Bulletin Service</u> of the American Mining Congress, H.R. 2824 by Representative Aspinall of Colorado was passed by the House on June 15. The measure provides for a two-year extension of the government purchase program for domestically mined tungsten. As amended by the House Interior and Insular Affairs Committee, the bill provides for publication by the government of the amounts of ores purchased during each quarter and total amounts purchased under the program. It is reported that an attempt will be made in the Senate to amend the bill to include other strategic metals including chrome.

Fay Bristol, State Senator Gene Brown, and Joe Holman, members of a chrome committee of the Oregon Mining Association, have just returned from Washington, D.C., where they worked on securing an extension of the government chrome purchase program. They report that government officials and legislators were receptive to their arguments that the chrome purchase program should be extended.

Senator Cordon has stated that he is giving a great deal of attention to the inclusion of chrome in the bill which extends the government tungsten purchase program.

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### NEW FOSSIL PUBLICATION

"Facts About Fossils" is the title of Miscellaneous Paper No. 3 just issued by the State Department of Geology and Mineral Industries. This paper is a collection of eight articles on fossils previously published by the Department, chiefly in its monthly publication, The Ore.-Bin. Authors of these reprinted articles are: Dr. John E. Allen.

Dr. E. L. Packard, Mr. R. E. Stewart, Dr. Ralph W. Macey, and Mr. W. F. Barbat. The paper was issued to supply the demand which has built up among geology students and fossil collectors in Oregon.

Miscellaneous Paper No. 3 may be obtained at the Portland office of the State Department of Geology and Mineral Industries in the State Office Building, or at Department field offices in Grants Pass and Baker. The price is 35 cents.

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#### METAL MARKETS

The E&MJ Metal and Mineral Markets, New York, issue of June 18, 1953, quoted the following prices of metals:

Copper - domestic, average refinery price, 29.68¢ per pound. Deliveries in May totaled 146,815 tons. Chilean copper has remained at  $35\frac{1}{2}$ ¢ per pound, f.o.b. port of shipment.

Lead -  $13\frac{1}{2}g$  per pound, New York. Demand is reported excellent with a possible oversold condition in London.

Zinc - ll¢ per pound, East St. Louis.

Tin - 92¢ per pound, New York. It is reported that the Bolivian government has reached an agreement with the nationalized Patino Tin Mine Corporation to compensate the company's stockholders, including American investors.

Tungsten ore - Foreign ore is quoted at \$42-\$43 per short ton unit for \$03, c.i.f. United States ports. The floor price on domestic tungsten is \$63, f.o.b. mine.

Quicksilver - Business was reported slow and limited largely to small lots. The price was quoted as \$191-\$193 per flask, down \$2 from the preceding week.

Aluminum - 20 per pound in ingots, 99 percent plus; 19 in pigs.

Antimony - Domestic boxed, New York, 37.97¢ per pound; bulk 34.5¢ per pound.

Bismuth - \$2.25 per pound in ton lots.

Cadmium - \$2 per pound commercial sticks, \$2.15 per pound in special shapes for platers.

Chromium - 97 percent grade, \$1.23 per pound, spot (usually sold as chrome metal).

Cobalt - in 500 to 600 pound containers, \$2.40 per pound, New York or Niagara Falls.

Germanium - \$340 per pound.

Indium - 99.9 percent pure, \$2.25 per ounce troy.

Iridium - \$172-\$175 per ounce troy.

Lithium - \$11-\$14 per pound, 98 percent.

Magnesium - 99.8 percent, 27¢ per pound in carload lots, 29¢ per pound in less than carload lots.

Manganese - 96 percent, carloads, bulk, 36.2 f to 37.45 g per pound; electrolytic, 99.98 percent Mn, 30 g per pound in carload lots, 32 g in ton lots.

Molybdenum - 99 percent, \$3.00 per pound.

Nickel - Electrolytic cathodes, f.c.b. Port Colborne, Ontario, contract price, 60¢ per pound; U.S. import duty included.

Osmium - \$200 per ounce troy.

Palladium - \$22-\$24 per ounce troy.

Platinum - \$93-\$95 per ounce troy.

Rhodium - \$125 per ounce troy.

Ruthenium - \$90 to \$93 per ounce troy.

Selenium - \$4.25-\$4.75 per pound, 99.5 percent pure.

Silicon - Minimum, 97 percent Si, maximum, 1 percent Fe,  $18\frac{1}{2}$ ¢ per pound.

Tantalum - Base price per kilo, \$160.60 for rod; \$143 for sheet

Tellurium - \$1.75 per pound.

Thallium - \$12.50 per pound.

Titanium - 99.3 percent plus, \$5 per pound.

Tungsten - 98.8 percent minimum, \$5.35 per pound in 1000 pound lots.

Zirconium - \$7 per pound, powder.

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#### M. I. T. GROLOGY DEPARTMENT RENAMED

"The M.I.T. Department of Geology was recently renamed the Department of Geology and Geophysics to recognize increased emphasis on instruction and research in Geophysics. Two separate courses, each with its own curriculum, were started in September.

"Course XIIA, Geology, leads to the Bachelor of Science degree in Geology; Course XIIB, Geophysics, leads to the Bachelor of Science degree in Geophysics. The two courses of study are essentially similar for the first two years, including a required Summer Field Camp in Nova Scotia at the end of the second year. They differ greatly in the third and fourth years, for the Course XIIB students take additional work in Mathematics, Physics, and Electrical Engineering, while the Course XIIA students take advanced work in Geology. Summer field work at the end of the third year is strongly advised, but not required.

"Either course satisfies requirements for admission to the M.I.T. Graduate School for work on the masterate or doctorate degree in Geology, Geochemistry, or Geophysics."

(From News Letter of the American Geological Institute, November 1952.)

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# NEW OREGON EXPLORATION PROJECT

Exploration work is underway at the Almeda mine on the Rogue River just north of Galice, Josephine County, Oregon. Work is being done by the Alaska Copper Corporation, of which C. F. Herbert, Seattle, is president. The Alaska Copper Corporation is controlled jointly by Yukon Placer Mining Company and Transcontinental Resources, Ltd., of Toronto, Ontario, and British Columbia. Examination work began last April. Equipment was installed and diamond drilling started early in May 1953. Drilling was started underground on the river level. Roy Hillis, Galice, is owner of the Almeda, one of the old Oregon gold and copper mines.

The principal period of activity at the Almeda was between 1908 and 1916 during which time more than \$100,000 was produced. In 1908 a 100-ton matting furnace was erected at the mine and was in operation from 1911 to 1916.

Ore bodies occur in a wide zone of intense silicification called the Big Yank Lode that follows the contact between porphyritic dacite and argillite (Galice slate). Two types of ore have been described: siliceous gold-silver ore and copper ore in barite gangue.

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