

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

Head Office: 702 Woodlark Building, Portland 5, Oregon

State Governing Board

Niel R. Allen, Chairman, Grants Pass
H. E. Hendryx Baker
Mason L. Bingham Portland
F. W. Libbey, Director

Staff

Hollis M. Dole Geologist
L. L. Hoagland Assayer & Chemist
Ralph S. Mason Mining Engineer
T. C. Matthews Spectroscopist
M. L. Steere Geologist
R. E. Stewart Geologist
D. J. White Geologist

Field Offices

2033 First Street, Baker
N. S. Wagner, Field Geologist

239 S.E. "H" Street, Grants Pass
Harold D. Wolfe, Field Geologist

CHROMITE PURCHASING DEPOT NEWS

Construction activities at the Grants Pass government ore purchasing depot have been stepped up in order to provide satisfactory sampling and shipping facilities and additional storage capacity. An extensive addition to the present concrete slab will be laid and platform scales of 40,000 pounds capacity are being installed. A new railroad siding is under construction. It is expected that crushing and mechanical sampling equipment will also be included. In excess of 1,000 tons of chrome ore had been received at the depot up to September 15. Weather conditions will probably prevent shipments from some of the chrome properties during the winter but with the large amount of exploration work going on, there is good evidence that there will be a substantial production of chrome in 1952. The purchasing depot is located on the old C. & O. C. Railroad line to Marble Mountain about 1 mile west of Grants Pass. This connects with the Southern Pacific line at Grants Pass.

The Chetco Mining Company is a partnership made up of Ben Baker, F. I. Bristol, Ed Knox, and Gordon White, all of Grants Pass, and T. T. Leonard of Eugene. The company is building nearly 9 miles of road into the headwaters of the Chetco River in Curry County to mine chromite from properties in that area. It is expected that shipping will be started within 40 days. Two caterpillar tractors and a compressor are now on the property.

A new deposit of chromite has been found in a tunnel on the old Jack Shade property above the Oregon Chrome mine in Josephine County. The property is being explored by Roy Hillis of Galice.

Joe Inman is shipping about one truckload of chrome ore a day. The Inman property is located near the Illinois River below the Oregon Chrome mine, and was a shipper during World War II.

A group headed by W. S. Robertson of the Oregon Chrome mine is exploring a large body of chromite discovered recently in a new tunnel at Cyclone Gap about 10 miles south of the Oregon line in Siskiyou County, California. The tunnel has penetrated 30 feet of chromite and a raise is now being driven to show vertical extent above the tunnel level. Development ore from the Cyclone Gap mine is being hauled to Grants Pass. Chromite was shipped from the Cyclone Gap locality to the Grants Pass depot during World War II.

George Clark is shipping to Grants Pass from the Black Diamond mine near Bolan Lake, Josephine County, close to the California line. About 100 tons of ore has been shipped so far.

* * * * *

Dana Bowers has set up a small concentrating mill on Galice Creek, Josephine County, and is milling chromite ore from the Harry Sordy property on Briggs Creek. Concentrates are being delivered to the Grants Pass depot.

* * * * *

Exploratory work at the Tyson chromite property just south of the Redwood Highway near Gasquet, Del Norte, California, has opened up a large body of chromite. The Tyson mine, one of the oldest chromite producers in the West, was a large shipper of chromite to the Grants Pass depot during World War II.

* * * * *

Other shippers to the Grants Pass depot are as follows: Grissom Bros from the Deep Gorge mine, Josephine County; William Robertson from the Oregon Chrome mine, Josephine County; Ed Carlson from the Holiday mine, Josephine County; Eugene Brown from the High Plateau mine, Del Norte County, California; Dr. Thompson from the Cox mine, Josephine County; and R. McCaleb from the McCaleb mine, Josephine County. During World War II, Eugene Brown shipped some of the highest grade chromite that was mined in the United States. This premium ore ran better than 50 percent Cr_2O_3 and more than 3.5 to 1 chrome-iron ratio.

RAILROAD FREIGHT RATES ON CHROMITE FROM EASTERN OREGON TO GRANTS PASS

Mr. R. H. Holmes, Southern Pacific Freight and Passenger Agent at Medford, Oregon, has written to Mr. Niel R. Allen, Chairman of the Department's Governing Board, in reply to an inquiry concerning carload freight rates on chromite ore from eastern Oregon points to Grants Pass. Mr. Holmes writes that this rate matter was considered by members of the North Pacific Coast Freight Bureau at their August 1951 meeting in Seattle under Docket NC-2059. He states that since there are presently low rates in effect as given below from Baker and Seneca to Portland, it was concluded not to publish any through rates to Grants Pass.

From Baker, Oregon, to Portland, Oregon \$ 4.21 per ton
minimum 100,000 lbs.

From Seneca, Oregon, to Portland, Oregon \$ 7.32 per ton
minimum 80,000 lbs.

The Southern Pacific Company is publishing, effective October 1, 1951, the following rate:

From Portland, Oregon, to Grants Pass, Oregon . . \$4.60 per ton of 2,000 lbs.,
minimum 100,000 lbs.

This rate will be subject to a possible increase of 6 percent of the total freight bill which was authorized by the Interstate Commerce Commission effective August 28, 1951. However, since routing of chrome shipments would be intra-state, this increase must be approved by the Oregon Public Utilities Commissioner who has not yet authorized the increase. The through rate would be the combination of the rates from Baker or Seneca to Portland plus the rate from Portland to Grants Pass.

AMERICAN MINING CONGRESS WESTERN DIVISION CONVENTION

The annual convention of the Western Division, American Mining Congress will be held in Los Angeles October 22-24 inclusive. Western Division Chairman is Harvey S. Mudd, Los Angeles, and the national Program Chairman is Ross D. Leisk, Kellogg, Idaho. Sessions of the convention will have discussions of subjects vital to the mining industry such as taxation, strategic metals, gold, uranium, public land problems, and mining and metallurgical technology subjects. The A.M.C. convention will be followed by a two-day meeting October 25 and 26 in Los Angeles of the Industrial Minerals Division of the American Institute of Mining and Metallurgical Engineers.

DEPARTMENT FIELD STUDIES

During August, Department field men examined reported occurrences of manganese in Grant County, sulphur in Douglas County, and cobalt-copper in Curry County. Further studies will be made of the cobalt-copper occurrence.

U.S. TO OPPOSE HIGHER GOLD PRICE, SNYDER SAYS

Secretary of the Treasury John W. Snyder informed the press on September 7 that the United States is opposed to any increase in the price of gold over the \$35 an ounce level in effect since 1934.

He could see no good reason for this country to pay a higher price, he told a news conference, adding that nothing would contribute more to a world-wide inflation of prices than a higher price for newly mined gold.

Mr. Snyder declared that the International Monetary Fund and World Bank is making a study of the gold price situation, which should be completed before the end of the year.

Representatives from 50 member countries are in Washington to attend the sixth annual meeting of the Fund. The discussions will center on monetary problems. Foreign exchange restrictions, originally scheduled to end next March, are expected to occupy a key position on the program.

United States gold producers have joined with those of South Africa and Canada in urging the Fund to alter its position on gold.

Four domestic mining groups who have appealed to the Fund for a change in its gold-pricing policy are: the California Gold Committee; Western Mining Council; the Colorado Mining Association; and the Mining Workers Protective League.

"FREE" GOLD PRICES

Increased tension resulting from developments in Korea strengthened the free gold market. According to Pick's World Currency Report, the following prices were named in leading trading centers for bars of 12.5 kg. at the end of July and August.

	Per Fine Ounce	
	July 31	Aug. 31
New York, transit	\$40.50	\$40.25
Manila	39.75	42.10
Hong Kong	43.50	43.65
Bombay	49.00	49.50
Tangier	40.25	40.45
Beyrouth	40.25	40.50
Paris	42.25	41.90
Buenos Aires	43.50	44.00

(From E&M Metal and Mineral Markets, New York, September 13, 1951.)

MERCURY IN SECOND QUARTER OF 1951

According to U.S. Bureau of Mines Mercury Report No. 99 domestic production of mercury rose in the second quarter chiefly because of larger output at the recently reopened Bonanza mine, Douglas County, Oregon, and of expanded operations of smaller properties.

The Mt. Jackson mine (including Great Eastern) Sonoma County, California, retained first place among domestic producers. The Bonanza mine in Oregon was the second largest domestic producer. Other large California producers were the Archer mine, Fresno County; Abbott mine, Lake County; James Creek property, Napa County; Juniper mine, San Bernite County; New Almaden property, Santa Clara County; and the Colver-Baer mine, Sonoma County. At least eight other properties in California contributed to production in the second quarter. Production of mercury at the 38 Mine, Brewster County, Texas, was reported. This was the first output of record in Texas since 1945.

Imports during the second quarter totaled 8,065 flasks, of which 3,903 flasks came from Italy, 1,141 flasks from Spain, and 1,405 flasks from Yugoslavia.

Of some interest is the statement that 400 flasks were re-exported to Japan, a country that has been the source of imports into the United States since World War II.

CHROMITE IN SECOND QUARTER 1951

Domestic consumption of chromite during the second quarter 1951 decreased slightly from the first quarter and totaled 300,694 short tons, according to the Bureau of Mines, United States Department of the Interior. A total of 140,749 tons (47 percent) was consumed for metallurgical purposes, chiefly in the manufacture of ferrochromium. In the production of 130,343 tons of chromium refractories, a total of 101,457 tons (34 percent) of chromite was consumed, and 9,672 tons (3 percent) were used for miscellaneous purposes, chiefly in repairing basic-furnace linings; thus, a total of 111,129 tons (37 percent) was consumed for refractory use. The producers of chromium chemicals consumed 48,816 tons (16 percent) of chromite (a ratio of 1.5 tons of chromite per ton of sodium bichromate equivalent) in the manufacture of 34,790 tons of chromium chemicals. The proportions of the various grades used were unchanged from the previous period when metallurgical, refractory, and chemical consumers used 142,989 tons, 113,933 tons, and 49,243 tons respectively.

Consumers of chromium alloys, during the second quarter of 1951, reported using 46,157 short tons of ferrochromium, 6,286 tons of the exothermic chromium additive (Chrom-X) in addition of small quantities of chromium metal and miscellaneous chromium products. Alloy consumers, canvassed by the Bureau of Mines, normally use about 85 percent of the total.

Stocks of chromite on hand in consumers' yards totaled 527,098 short tons on June 30, 1951, compared with 591,528 tons on March 31, 1951. Of the total on hand at the end of the second quarter, 221,530 tons were metallurgical, 254,967 refractory, and 50,601 tons chemical.

Domestic production of chromite, during the second quarter 1951, totaled 576 short tons; all came from Butte County, California.

Chromite in 1948-50 and first half of 1951 in short tons

	<u>Domestic production</u>	<u>Imports</u>	<u>Total new supply</u>	<u>Consumption</u>
1948	3,619	1,542,125	1,545,744	875,033
1949	433	* 1,203,852	* 1,204,285	672,773
1950	404	* 1,303,713	* 1,304,117	980,369
1951:(1st quarter)	* 74	359,474	* 359,548	306,165
(2d ")	576	319,371	319,947	300,694

* Revised.

Imports of chromite into the United States during the second quarter 1951 decreased 11 percent from the first quarter and totaled 319,371 short tons. The Union of South Africa was the largest supplier, furnishing 26 percent of the total, mainly chemical grade; the Republic of the Philippines supplied 22 percent, mostly refractory; Southern Rhodesia furnished 19 percent, both metallurgical and refractory; Turkey supplied 18 percent, the largest portion of which was chemical grade; Cuba shipped 7 percent, all refractory; New Caledonia furnished 5 percent, all metallurgical; the balance of 3 percent was supplied by Yugoslavia and India, all metallurgical grade.

Total chromite imported into the United States during second quarter 1951

Source	Gross weight	Cr ₂ O ₃ content	Value	Percent Cr ₂ O ₃	Value per ton
Cuba	21,459	7,354	\$ 347,600	34.27	\$16.19
French Pac. Islands (New Caledonia) . . .	15,454	7,282	356,974	47.18	23.09
India	2,266	1,066	44,503	47.04	19.60
Philippines, Rep. of	70,649	23,969	754,131	33.92	10.67
Southern Rhodesia. . .	60,917	27,067	1,039,309	44.43	17.06
Turkey	56,849	27,039	1,806,483	47.56	31.77
Union of So. Africa	84,620	38,108	945,056	45.03	11.16
Yugoslavia	7,157	2,456	235,610	34.31	32.78
Total	319,371	134,341	\$5,529,666		

Note: Computations in last 2 columns added to Bureau of Mines tabulation in first 3 columns. It is not known how value in third column is figured. Market quotations are usually on a long ton basis f.o.b. Atlantic ports with ocean freight differential to Portland, Oregon, and Tacoma, Washington.

(Ed.)

(From U.S. Bureau of Mines Chromite Report No. 22)

NEW CALIFORNIA SPECIAL REPORTS

Special reports recently received from California Division of Mines, Ferry Building, San Francisco.

Special Report 7-B: Economic geology of the Rincon pegmatites, San Diego County, California, by John B. Hanley. 1951. 24 pp., 1 pl., 5 figs. Price 35 cents.

Special Report 10-A: Nephrite jade and associated rocks of the Cape San Martin region, Monterey County, California, by Richard A. Crippen, Jr. 1951. 14 pp., 14 figs. Price 25 cents.

Special Report 10-B: Nephrite in Marin County, California, by Charles W. Chesterman. 1951. 11 pp., 16 figs. Price 25 cents.

Special Report 10-C: Nephrite in San Benito County, California, by H. S. Yoder and C. W. Chesterman. 1951. 8 pp., 6 figs. Price 25 cents.

Special Report 11: Guide to the geology of Pfeiffer Big Sur State Park, Monterey County, California, by Gordon B. Oakshott. 1951. 16 pp., 1 pl., 28 figs. Price 25 cents.

GOOD FISHING

Some of the best fishing in the midwest is the result of coal mining. When the pits left behind after coal stripping lie below the water table of the surrounding region, they become lakes soon after mining operations cease. Forward looking coal companies have in many cases stocked these lakes with fish and planted evergreen trees on the surrounding country. The result is a blanket of valuable evergreen forest and lakes well stocked with fish.

In the State of Indiana the state Coal Producers Association has thus created 45,000 acres of forest, with 4,500 acres of fine fishing lakes. In one county alone the coal operators have donated 3,900 acres as a state forest, dotted with 350 acres of well-stocked anglers' paradises. (From Mining Congress Journal, June 1951.)

SHELL GEOLOGISTS IN WESTERN OREGON

Grant Valentine, formerly geologist with the Washington State Division of Mines and Geology, and Howard G. Kinsey, a graduate of Oregon State College, are doing geological mapping in western Oregon for the Shell Oil Company.

NEW PLACER PROJECT

A new gold placer project has been started on Deer Creek north of Sumpter Valley in Baker County, Oregon, on land owned by Warren MacDonald, Sumpter. About 450 acres are under lease to a partnership composed of Messrs. I. S. Decker, Ward Hill, and Vanderjack, all of Eureka, California, and Mr. Burt Delzine of Junction City, California, who is in charge of the work.

The placer ground contains old Tertiary gravel and is being tested for a hydraulic set-up. An old ditch has been reconditioned and pipe, flumes, boxes, and tailings dams installed. Several miles of access road have been built. Because of water conditions the first test run will be in the spring of 1952.

PERCENTAGE DEPLETION

The Senate Finance Committee on September 5 agreed to the House-approved provisions increasing the percentage depletion allowance for coal from 5 percent to 10 percent and extending percentage depletion to other minerals (Bull. 22, p. 3). It voted, however, to reduce from 15 percent, as approved by the House, to 10 percent the depletion allowance provided for borax, Fuller's earth, tripoli, refractory and fire clay, quartzite, perlite, diatomaceous earth, and metallurgical and chemical grade limestone.

The committee also approved percentage depletion for aplite at a 15-percent rate, and for asbestos, magnesium compound, and wollastonite at a 10-percent rate. In later action the committee granted a 5-percent depletion allowance to salt and wells containing brines of calcium chloride, magnesium chloride, sodium chloride, potassium chloride or bromine. It provided specifically a 5-percent depletion rate for slate, in addition to the previous action covering stone, shale, sand, gravel, brick and tile clay, etc.

The committee has thus followed the House in rejecting the Administration's proposals for reduction in depletion allowances on oil, gas, and nonmetallic minerals, and has extended the percentage depletion principle to a number of other important mineral commodities. (From The American Mining Congress Bulletin Service No. 30, September 10, 1951.)
