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A REVIEW OF OREGON MINING IN 1948

by

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Introduction

Metal mining in Oregon has remained static during 1948 while nonmetals continued to be in large demand especially those nonmetallic minerals used in construction. Total value of production has increased substantially because of this demand.

Metals

Gold

There has been no increase in gold mining throughout the year. In fact, there are fewer dredges operating now than during 1947 (4 against 12); they are all in eastern Oregon. None of the gold lode mines which closed down because of war conditions has resumed production except the Buffalo mine in eastern Grant County. Here high-grade ore is sorted for shipment and the lower grade milled. When a car of Buffalo concentrates is shipped, the high-grade is included in the car. A small amount of exploration work has been done at three or four gold properties in southern Oregon. Twenty hydraulic mines operated when water was available.

The Legislature which meets in January will probably have a bill or bills presented designed to regulate surface mining under the theory that surface mining destroys agricultural land. It seems doubtful if bills of this kind will be passed. Under the present sad conditions in gold mining, gold dredging operators cannot stand regulation which will increase costs. It would be the last straw, and they would say to the chrome and quicksilver miners "move over."

Chrome

One chrome mine which is located on the Illinois River in Josephine County of southwestern Oregon attempted to operate during the first six months of the year. After struggling with rising costs and a low price, the mine closed down in June and pulled out its equipment. About 10,000 tons of metallurgical grade chrome was mined from this property during World War II. Considering the strategic nature of chrome, it would seem to be the part of wisdom for the Government stockpiling agency to contract for this chrome.

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at a price which would allow production and development in order to keep the mine active and to help build up the chrome stockpile which everybody knows is much too low for comfort in these uncertain times. However, the owner of the property could get no satisfaction from Washington concerning a contract. The underground workings in serpentine will not stay open very long in the absence of repair work. This means that should an emergency come, this property will require complete new reopening because we all know that in the event of war, as in the past, Government authorities would be frantically looking for domestic chrome production.

Mercury

In considering the mercury situation, there is some interest in the fact that one Oregon quicksilver mine, the Bonanza, continues to produce. This mine was one of the large producers during World War II. It is running its furnace about 12 days each month. Part of the ore is coming from development work. Production is at the rate of about 100 flasks a month. Now that nearly all of the country's quicksilver mines have been forced to close down, foreign metal will take over the domestic market. Then, of course, the cartel-controlled European quicksilver will go up in price. There has been a slight strengthening in the market price of quicksilver in the past two weeks and it may be that the rise has begun.

Copper, lead, and zinc

A small amount of new activity has been in evidence during the past summer in some southern Oregon and western Cascade mining properties. These mines, with the exception of the Ruth zinc mine in the North Santiam area, were all originally opened up because of gold values at or near the surface. Sulphides came in a short distance below the surface along with a reduction in gold and silver values. Generally speaking, copper, lead, and zinc are more important than gold in these properties at the present market prices for metals. Some underground work is being done at the Ruth mine but the greatest amount of activity is in the Bohemia district of southern Lane County southeast of Cottage Grove. Here a flotation mill built during World War II by the H and H Mining Company has been put into operation by the owner of the Champion mine, Fred Bartells. The mill treats ore from three properties, the Champion, Musick, and Helena.

Bauxite

Alcoa Mining Company has continued to drill and sample high-iron bauxite deposits in northwestern Oregon, mainly in Columbia County. Churn drilling was discontinued and auger hole drilling has been stepped up to sample areas between churn drill holes. It is impossible now to state whether or not the recently discovered bauxite deposits in Clackamas County are of importance in the picture. Sampling of the original discovery shows high silica material, also relatively high alumina. It may very well be that areal extent of the Clackamas County deposits will prove to be much less than in counties farther west and north.

Nonmetallics

Perlite

Dant & Russell, Inc., has continued to expand its operations. Output has been nearly all for plaster sand. This sand was used in plastering the new Equitable and Oregonian buildings in Portland and its use resulted in a very large saving in weight of the buildings. Recently the company has announced that it will build a $1,000,000 plant at the mine located on the Deschutes River in southern Wasco County. This new plant will consist of furnacing units and an addition to the present mill. Possibly an acoustical tile plant will be built also. The improvements at the mine will include new homes for employees and installation of new water and sewage systems.
Pumice

The demand for pumice has continued excellent throughout the year. Production in 1947 was 33,250 tons valued at $111,400. In 1948 production was greater but no definite estimates have been made. There has been some restriction of output due to scarcity of railroad cars. Central Oregon pumice is shipped to western Oregon, parts of western Washington, and into California. There seems to be no doubt that light-weight building blocks have come to stay. When building materials are in greater supply and competitive conditions return, some producers of the less desirable materials will be forced out of business.

Jadite

This light-weight material obtained by heating suitable clay or siltstone in a kiln is produced in one plant near Portland. The product is reported to be excellent as a light-weight aggregate.

Other construction materials

Sand, gravel, and crushed rock continue to be produced in relatively large quantities. In value this production amounts to nearly half of the total production of the State. Portland cement plants are running at capacity. There is apparently a shortage of portland cement in the Northwest, and because of the big construction program planned by the Corps of Engineers, this shortage is likely to become acute in the next year or two, unless there is a big increase in capacity started very shortly.

Gemstones

One of Oregon's profitable industries which receives little notice in the industrial world is the collection and cutting of agate and similar material. The business has grown by leaps and bounds during the last few years. It is impossible to obtain accurate estimates of value of production since the business is conducted both by hobbyists and commercial lapidary shops. The uncut material collected could be valued in many thousands of dollars. Value of the cut material would be in the hundreds of thousands of dollars.

Mining Regulations on O and C Lands

The so-called Oregon and California Railroad revested lands comprise 2,500,000 acres located west of the Cascades. They were incorporated in the public domain in 1916. From 1916 to August 1937 there was no question concerning the application of the United States mining laws to these lands the same as other public land. In August 1937 Congress passed a law establishing a program of sustained yield of timber on these lands. No mention was made in the law about application of the mining laws. However, the Secretary of the Interior in a formal interpretation of the law prohibited mineral entry and location on these lands and declared that all mining claims located after August 28, 1937, would be invalid. It is not difficult to explain the Secretary's position, as interested persons know that the Interior Department's desire has been and is to replace the mining laws with a leasing system on public land. The Department hoped to gain a foothold by establishing a leasing system on O and C land. In Oregon there was a ground swell of feeling at the injustice of the Secretary's interpretation. This feeling finally resulted in passage of Public Law 477 last April which reopened these lands to mineral entry and location. At the request of the Bureau of Land Management there was inserted in the law an innocent-sounding provision, requiring that copies of location notices as well as records of assessment work be filed in the U.S. District Land Office. This is, of course, in addition to filing under State law. To implement the law the Bureau of Land Management issued regulations which, of course, have the effect of law, establishing rules governing filing of location notices in the District Land Office. One rule is that in filing a location notice, if the claim is on surveyed land and the notice does not include a description of the claim by legal subdivisions,
the copy of the location notice must be accompanied by a letter giving legal descriptions. If the location is on unsurveyed land, and the copy of the location notice does not show the land located as connected by course and distance to the nearest corner of the public land surveys and does not give the probable legal subdivisions affected if the lands were surveyed, the copy of the notice must be accompanied by a statement giving that information or satisfactory reasons for not doing so. Who is to decide whether or not the reasons are "satisfactory"? The Land Office, of course. Will the claim owner be able to find out from the Land Office whether or not his reasons are "satisfactory"? Possibly he will, but it is easy to imagine the difficulties confronting the prospector in trying to get this information from the Land Office. Will the Land Office inform a potential claim jumper whether or not a claimant has filed a "satisfactory" statement? The effect of these regulations will be to cloud the title on many mining locations and will be a further obstacle in the way of the legitimate prospector in Oregon.

Every informed person knows that the country needs positive action in the way of encouraging mineral exploration. Several things are needed including rational tax laws, but from a "grass roots" standpoint ways should be found to encourage prospecting and discourage claim squatting. The mining industry should for once act as a unit in cooperation with federal departments that have to do with public lands so that there may be agreement in possible additions or changes in the mining laws and administrative regulations in order to give definite encouragement to prospecting and discovery. Congress would then be advised properly on how to proceed. This cooperation could be effected best probably by working through the Minerals Advisory Committee of the Department of the Interior, but in any event there should be action and soon.

OIL PROSPECTING

Those who believe that Oregon has been adequately tested for oil and gas possibilities and therefore that the chances of finding oil and gas are nil should read two papers presented at the meeting of the Pacific Section, American Association of Petroleum Geologists, held in Pasadena, October 28 and 29, 1948. One of these papers entitled "Recent Developments in the Salinas Valley" by R. R. Thorup, consultant, King City, California, presents the case of a long search for oil in the Salinas Valley. His abstract reads as follows:

"The discovery of oil in the Upper Miocene by the Texas Company at San Ardo in November 1947, culminated 47 years of unsuccessful exploration and 91 dry holes. In the ensuing ten months (to October 1948) an additional 38 wells have been drilled. These include three discoveries, 19 producing wells, 15 dry holes, and four wells currently drilling...

"Three different pools have been discovered and oil sands recently encountered by the Cleveland Oil Company north of San Ardo indicate the probability of a fourth pool. Oil sands on both sides of the King City fault suggest that the time of original accumulation was pre-King City fault."

Mr. Thorup makes the additional comment in a personal communication:

"The discovery of oil in the Salinas Valley should be an object lesson for all those who would condemn a sedimentary basin strictly on the basis of a large number of dry holes drilled in the area, because that in itself is not enough evidence. All the ideas have to be thoroughly tested before one can say the basin contains no oil. Practically all of the pre-discovery drilling had been based on the anticlinal theory, which in this area has so far failed to pay off. It was not until exploration was started in another part of the valley, with different geologic conditions, that oil was found in commercial quantities. So the history of drilling in this valley should serve as a warning to some, and a ray of hope to others, that oil can still be found in areas where numerous dry holes have been drilled."
The other paper, entitled "Russell Ranch Oil Field" by Mason L. Hill, geologist with the Richfield Oil Corporation, Bakersfield, California, discusses the recent discovery of two oil pools in Cuyama Valley. This is an excellent example of how an area containing rich accumulations of oil may lie practically unnoticed for years even in a highly petrolierous province like southern California where, during the past three quarters of a century, hundreds of geologists have been engaged in an intensive search for oil and gas. The abstract of Mr. Hill's paper reads as follows:

"The Cuyama Valley, lying in the Coast Ranges midway between the San Joaquin and Santa Maria districts, was established as a commercial oil producing province by the completion of Richfield Oil Corporation's Russell No. 28-5, on June 13, 1948. This new field is known as the Russell Ranch oil field. It is situated in the western portion of the valley and is producing from Lower Miocene sands on fault closures. Previously less than a dozen holes and one small producer from Upper Miocene sand (Norris Oil Company's Cuyama No. 2) had been drilled in the valley.

"Geologically the Cuyama Valley, between the Caliente and San Rafael uplifts, comprises granitic basement and Cretaceous to Pliocene strata folded and faulted in ESE trends. Eocene strata are present only in the eastern part of the valley, the Oligocene (?) is a red bed facies, 5000 feet of Lower Miocene sands pinch out southwestward, marine Miocene shales and sands grade eastward into red beds and the Pliocene strata are entirely non-marine.

"Initial production of the discovery well, Richfield Oil Corporation's Russell No. 28-5, was 506 barrels per day, flowing, 30° gravity oil, from the interval 2970-3350 feet. This interval is Lower Miocene and has been designated the Dibblee zone. Five days later another pool was established two and one-quarter miles to the northwest by completion of Richfield Oil Corporation's Anderson No. 37-30, flowing 3041 barrels per day, 33.5° gravity oil, from the interval 2800-3019 feet, also Lower Miocene. The former, named the Russell area, had on October 1, 1948, eight completed wells with initial rates to 2500 barrels per day, and maximum sand interval of 350 feet. The latter, designated Whiterock area, had nine completed wells with initial rates to 4000 barrels per day, and maximum sand interval of 480 feet. Also, on October 1, 1948, the Russell Ranch field had eight active development wells, while eight wildcats were drilling at locations as far as nine miles from production."

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CHROME ORE PRICE

According to the West Coast edition of Iron Age, issue of December 9, 1948, the Chromium Iron and Smelting Company is offering $21 a gross ton for chrome ore delivered at the Grants Pass, Oregon, area on Highway 199. Minimum specifications call for 45 percent Cr2O3 and 2.5 to 1 chrome-iron ratio. This company is treating chrome ore at Weade, Washington, in electric furnaces used during the war for the production of ferro-silicon.

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NEW ENGINEERING FIRM ESTABLISHED

Ivan Bloch and Associates, consultants for the Pacific Northwest and Alaska, announce opening of offices at 621 Park Building, Portland, Oregon. Mr. Bloch, formerly in charge of the Market Development Section of Bonneville Power Administration, includes in the field covered by his consultation service raw materials, power and fuels, water, labor, plant sites, transportation, and market surveys, as well as analyses of area and community development.
MERCURY CARTEL JUMPS PRICE

The Wall Street Journal, issue of December 22, 1948, under a London date line carries the announcement that the European-controlled mercury cartel has boosted the price of the metal $14 a flask at Spanish and Italian ports. The cartel, called Mercurio Europeo, is a combination of Italian and Spanish producers and this set-up absolutely controls the price of quicksilver. The announcement states that the steep advance came as a complete surprise to the trade, even though a rise of some sort has been expected. The cost to United States consumers will jump from $78 to about $92 a flask owing to $19.25 tariff plus freight and insurance.

Beginning just before World War II the United States quicksilver industry was built up to a point where it could supply domestic demands. The incentive was a market price which allowed producers a profit. At first this price was governed by supply and demand when European quicksilver was cut off. Later the Government established a ceiling of $196 a flask and bought domestic production at that price, at the same time urging operators to produce at maximum capacity. Even before the end of the war when Spanish quicksilver became available, Government buying of domestic quicksilver stopped and the industry was told in effect to shift for itself. It then had to compete not only with cheap European labor and a cartel-controlled price but also had to buck a policy in this country which favored importing cheap foreign quicksilver. The Army did its part in kiting the domestic industry in the teeth by bringing in and dumping large quantities of Japanese quicksilver.

The inevitable results were foretold many times by people who knew the scores. The price which had been $196 a flask when domestic supplies were needed for prosecution of the war finally settled down to $78-80 a flask where it has remained for a year or so. This price is the equivalent of about $56 in Europe, the price established by the cartel. Domestic mines operated at a loss for a while but nearly all of them finally gave up the ghost. Only two mines, the Sonoma in California and the Bonanza in Oregon, are producing at present.

S. H. Williston, Vice-President of Cordero Mining Company which operated one of the largest quicksilver mines of the country during the last war, summed up the situation in a talk at the American Mining Congress in San Francisco last September when he said: "The quicksilver industry has fewer mines in operation at the present time than at any time since 1849, and the current rate of production is now below that of the depression years of 1932 and 1933. After October 1, 1948, with the closing of the nation's largest producer, domestic production will be below the 6000 flasks per year of 1921 and 1922 and at the lowest level since the metal was first mined in this country in 1842. After October 1, 1948, we must count on importing over eighty-eight percent of our domestic requirements."

The cheap price set by the cartel and high operating costs in this country have worked according to the cartel's plan. Domestic production has been rendered inequivalent and now the price of the metal has been increased to a point which is just below that which would warrant reopening United States mines. This is the culmination of the post-war throttling of our quicksilver industry.

All of this would not be so very important to the country as a whole if quicksilver were not an essential war mineral. It takes time to reopen mines and build up production. In an emergency we must now depend upon foreign quicksilver.

P. W. L.

MINERALOGY TAUGHT

Mr. Harold D. Wolfe, field geologist of the Department stationed at Grants Pass, is teaching a class in rock and mineral identification organized among members of the Grants Pass Mineral Society. A course in general geology will also be given.

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CLEARING HOUSE

Mr. Tom Aten, General Delivery, Newport, Oregon, wishes to obtain somebody with a car to help with prospecting and treasure hunting. Mr. Aten states that he has a "doodle bug" metal locator, good camping and mining outfit, and is a member of the United Prospectors (Sourdough) Union, card no. 326.

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