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Portland, Oregon

STATE OF OREGON

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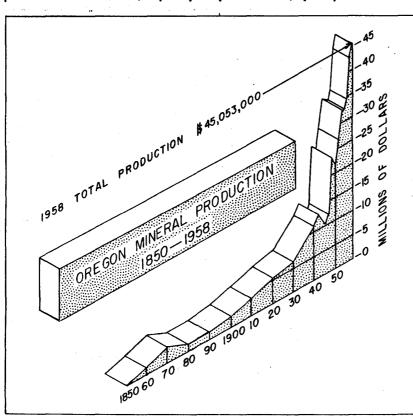
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Grants Pass

STATE MINERAL PRODUCTION AT ALL-TIME HIGH

By Ralph S. Mason*

The value of Oregon's mineral production for 1958 increased slightly more than 5 percent over the 1957 figure (see Table 1, p. 62), raising the total to the highest point in the State's history. Figures released by the U.S. Bureau of Mines give a total value for Oregon minerals produced in 1958 of \$45,053,000, which is \$2,233,000 more than for 1957. Employment in



the mining and metallurgical industries in the State rose to 9,700, an apparent increase of 1,100 over 1957. Most of this increase was due to changes in the industrial classification system. Mineral industry payrolls for the State totaled \$55,733,000 for the year. The employment figure does not, however, include all of the wage earners who are employed full time in the mining and metallurgical industries, since firms with fewer than two employees, and those who are self employed are not reported. Table 2 shows the comparison between mineral and metallurgical industry payrolls for 1957 and 1958. The apparent discrepancy between total value of minerals produced and the payrolls

for the same period is due in part to the exclusion of the value of metals mined and refined in the State, such as nickel, and those imported and refined, such as aluminum, zirconium, titanium, and elemental silicon. The addition of the value of these products would greatly swell the total reported in Table 1.

Not all segments of the mining and metallurgical industry showed gains during the year. Sand and gravel production decreased by about \$3.2 million, and clay for brick and tile was down for the year. Chromite production ceased in May with the closing of the stockpile, and

^{*} Mining Engineer, State of Oregon Department of Geology and Mineral Industries.

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all but one of the mercury mines were closed at the end of the year. Increases in crushed stone, cement, diatomite, building stone, lightweight aggregates, nickel ore, and lime more than overcame the losses, however.

Distribution of the mineral industry over the entire State is graphically shown on the accompanying map which gives the value of the minerals produced in each county and lists the minerals in order of their importance.

Table 1.							
Mineral Production in Oregon, 1957-1958 1/							
	1957		1958				
	Short tons		Short tons				
	(unless other-	Value	(unless other-	Value			
Mineral	wise stated)	(thousands)	wise stated)	(thousands)			
Chromium ore and concentrate - gross weight	7,900	\$ 675	4,133	\$ 379 -			
Clays - thousand short tons	240	266	252	293 +			
Copper (recoverable content of ores, etc.)	23	14	10	5 -			
Gold (recoverable content of ores, etc.) - troy ounces	3,381	118	1,423	50 -			
Lead (recoverable content of ores, etc.)	5	1	1.	<u>2/</u> 521 -			
Mercury - 76-pound flasks	3,993	986	2,276	521 -			
Nickel (content of ore and concentrate)	12,276	3/	12,697	<u>3</u> /			
Pumice and volcanic cinder - thousand short tons	123	294	138	331 +			
Sand and gravel – thousand short tons	12,843	13,481	10, 464	10, 265 -			
Silver (recoverable content of ores, etc.) - thousand troy ounces .	16	14	3	2 -			
Stone – thousand short tons	<u>4</u> /10,583	<u>4</u> /11,745	15,004	15,483 +			
Value of items that cannot be disclosed: Carbon dioxide, cement,				•			
diatomite, gem stones, iron ore (1957), iron oxide pigments	1]		ļ			
(1957), lime, tungsten (1957), uranium (1957), and values		l					
indicated by footnote 3		16,154		18,932 +			
Total ^{5/}		<u>4</u> /42,820		\$45,053			

^{1/} Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

Table 2.

Oregon Mineral Industry Employment and Payrolls*

	1957		1958		
	Employment	Payrolls	Employment	Payrolls	
Mining	1,216	\$ 6,150,380	1,330	\$ 7,381,345	
Mineral manufacturing	1,663	8, 482, 287	2,500	13, 139, 764	
Primary metals	4,985	28,728,266	5,023	30,814,502	
Miscellaneous	701	3,641,569	801	4,398,000	
					
Totals	8,565	\$ 47,002,502	9,654	\$ 55,733,611	

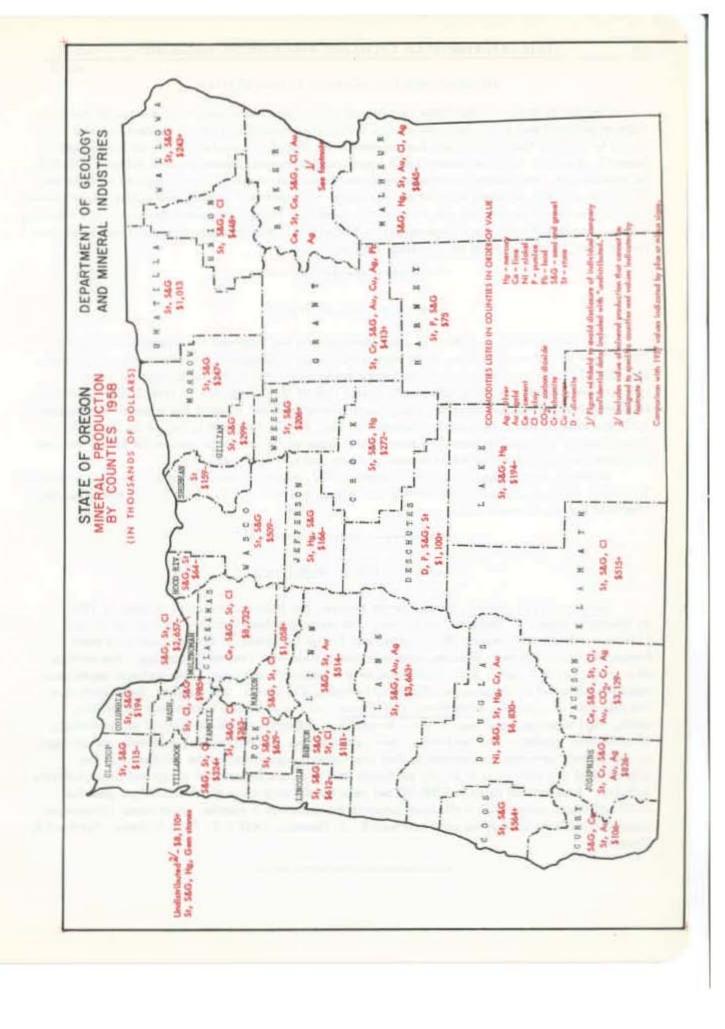
^{*} Oregon State Unemployment Compensation figures. Only firms hiring two or more employees are included.

^{2/} Less than \$500.

^{3/} Figure withheld to avoid disclosing individual company confidential data.

^{4/} Revised figure

^{5/} Total adjusted to eliminate duplicating value of clays and stone.



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MINING LAW ON COUNTY LANDS REVISED

The latest session of the State Legislature revised and made easier the manner of obtaining right to prospect and hold claims on county lands. The Senate bill which became law was introduced by Senator Dan Dimick and Representative Al Flegel of Douglas County at the request of Robert E. Kischel, Douglas County Land Agent, and amended Oregon Revised Statutes 275.294. As now written, the County Court may execute leases and contracts upon a royalty basis for the mining of valuable minerals without the necessity of competitive bidding and public advertisement. Lands to be leased for oil and gas still must be submitted for bids and advertised for two successive weeks. Senator Dimick's and Representative Flegel's bill bore the emergency act and so became law on May 26 upon signing by Governor Hatfield.

WITHDRAWAL ACTIVITY

This month the U.S. Bureau of Land Management has informed the Department that the Forest Service has made another of its strip withdrawals in Oregon. This particular withdrawal, No. 59-13, is for approximately 2,340 acres in the Deschutes National Forest. It takes a strip of land 330 feet on each side of the center line of U.S. Highway 97 (The Dalles-California Highway) from appropriation under the general mining laws but excepts the mineral leasing laws. As in the case of the 2,781-acre withdrawal of No. 59-10, this land is for use by the U.S. Forest Service as roadside zones "to protect and preserve the aesthetic values for public use and enjoyment and for eventual establishment of camp and picnic grounds."

Proposed withdrawal Serial No. Oregon 04707, made in February 1956, has been terminated. This land, which included approximately 200 acres, was in T. 24 S., R. 6 E., of the Deschutes National Forest, Klamath County.

NEW OIL REPORT PUBLISHED

Northwest Oil Report, a news-letter service, has been started up as of July 7, 1959, by geologist Robert J. Deacon. At present, the letter is a semi-monthly summary of oil exploration activity in Oregon, Washington, and British Columbia; it may be published more frequently in the future. Deacon, who received his Master's Degree in geology, has worked as a geologist for 8 years, 6 of which were with a major oil company. His geologic experience has been obtained in Oregon, Washington, Nevada, California, and Alaska. He reports that the principal service of his Northwest Oil Report will be to supply information on drilling wells, well histories, and lease plays. In addition, subscribers will be advised of availability of well data, geologic and land maps, new publications, legislation, log releases, and changes in exploratory personnel in companies that are currently operating in the Northwest. The objective of this service is to supply an honest and accurate summary of all phases of exploratory activity. Subscription price is \$300.00 per year for the first copy and \$150.00 per year for each additional copy, with a minimum subscription period of 6 months. Additional information about the publication may be obtained from R. J. Deacon, 3437 S.E. Francis Street, Portland 2, Oregon.

USGS SUMMER FIELD WORK IN OREGON

The U.S. Geological Survey has announced the following field studies in Oregon during the present season.

R. E. Wilcox will continue the field work started in 1958 in the Monument quadrangle of Grant County. Mr. Wilcox is combining his geologic studies with remanent magnetism investigations on the basalts. Thomas P. Thayer, assisted by C. E. Brown, has resumed his mapping in the Prairie City quadrangle, Grant County. Dr. Thayer has in preparation a report on the Upper Triassic rocks in Aldrich Mountain, Grant County. Robert Q. Lewis, who has been doing reconnaissance mapping for the State geologic map in northeastern Oregon, will continue this work. George Walker, who started systematic reconnaissance mapping in southeastern Oregon in 1958, will extend his work northward. Mr. Walker's work will be used for the State geologic map. Aaron C. Waters is completing the geologic maps and text of the Mount Hood and Dufur quadrangles, north-central Oregon, for publication in the Survey's MF series. Dr. Waters is also completing the maps and text for a report on the quick-silver deposits of the Ochoco Mountains area.

The Survey's Fuels Branch has P. D. Snavely, Jr., and W. W. Rau working in the western Coast Range this summer. Snavely is continuing a project started in 1958 in the Yaquina, Alsea, and Siletz river basins. Dr. Rau is continuing his measurement of stratigraphic sections and collections of foraminiferal samples.

DEPARTMENT FIELD ACTIVITIES

Norman S. Wagner and Dr. David A. Bostwick have started a 2-year program on the stratigraphy and paleontology of the Paleozoic rocks of Oregon. Dr. Bostwick, professor of paleontology at Oregon State College, will work for the Department during the summer months, and Wagner, geologist in charge of the Department's field office in Baker, in addition to working with Bostwick, is continuing his field mapping studies for the State geologic map in northeastern Oregon.

Howard C. Brooks, field geologist, Baker, is completing the mapping of quicksilver deposits in Oregon. Brooks' work, which will replace Department Bulletin 4, "Quicksilver in Oregon," will be completed this field season.

Norman V. Peterson, field geologist, Grants Pass, is extending the mapping done last year in the vicinity of the White King uranium deposits, Lake County, westward to include the quicksilver deposits near Quartz Mountain. Peterson will also do reconnaissance work in southern Lake County for use in the State geologic map.

Len Ramp, field geologist, Grants Pass, is mapping and cataloging several limestone, silica, and iron ore prospects and occurrences in southwestern Oregon. Ramp completed his study on the chromite deposits of southwestern Oregon early this year.

Herbert G. Schlicker, field geologist, Portland, is continuing his reconnaissance work on the intrusives in the Coast Range. Schlicker's work will be coordinated with that of P. D. Snavely, Jr., of the U.S. Geological Survey.

Margaret L. Steere, geologist, Portland, is finishing her bulletin on western Oregon fossil localities and the third supplement (1951–1955) to the bibliography of geology and mineral resources of Oregon.

R. E. Stewart, micropaleontologist, Portland, will complete his studies on Oregon micropaleontology. This will be published as Part IX of Department Bulletin 36.

Vernon C. Newton, Jr., petroleum engineer, Portland, is completing the dry-hole map of western Oregon. The dry-hole map of eastern Oregon was finished earlier this year.

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Dr. George S. Koch, Jr., professor of economic geology, Oregon State College, is mapping in the area of the Clover Creek greenstone in Baker, Union, and Wallowa counties of northeastern Oregon. This work is in connection with a study on copper deposits in the State. Dr. Koch is assisted by Harold J. Prostka, graduate student from The Johns Hopkins University, Baltimore, Maryland.

H. J. Buddenhagen, consulting geologist, is working for the Department in central Oregon. Mr. Buddenhagen's work is largely in Grant, Wheeler, and Crook counties and is concerned with the structure and stratigraphy of the pre-Tertiary with emphasis on the Mesozoic.

DEPARTMENT GEOLOGIST RETIRES

Roscoe E. Stewart, better known as "Doc," will retire July 31, 1959, from the State of Oregon Department of Geology and Mineral Industries where he has been a geologist since 1944. His work with the Department has dealt primarily with micropaleontology, and he is regarded as one of the foremost authorities in this field on the West Coast. Petroleum geology in the search for oil and gas has also received much of his attention.

A graduate of the University of Chicago in 1923, he received his Master's degree from the University of Southern California. He studied also at Columbia University and at the Cushman Laboratory for Foraminiferal Research, Harvard University, and taught petroleum geology for several years in California. Between 1923 and 1944 he was employed in California by the Chanslor-Canfield Midway Oil Company, first on drilling crews and later as resident oil-field geologist and petroleum engineer.

Most important of his publications for the Department is his Bulletin 36, Parts 1-8, on Tertiary Foraminifera. The bulletin is co-authored with his wife, Katherine C. Stewart, and the late Dr. Joseph A. Cushman. Part 9 of Bulletin 36, to be published soon, will be a revision of a paper which appeared in three parts in the Ore.-Bin under the title, "Stratigraphic Implications of some Cenozoic Foraminifera from Western Oregon." In 1954 Mr. Stewart compiled a record of oil and gas exploration in the State. This was published by the Department as Miscellaneous Paper 6.

"Doc" says that after retirement he plans to do a little consulting, a little research, and a lot of living and loafing that had to be postponed way back in 1923 when he graduated from a diploma to a job.

TUALATIN VALLEY GEM CLUB EXHIBITS

The Tualatin Valley Gem Club of Forest Grove, Oregon, has been displaying a fine exhibit of agates, minerals, and petrified wood in one of the Department's display cases at 1069 State Office Building in Portland. The agate material consists of cut and polished slabs, cabochons, and jewelry. Types of agates displayed include polka dot, plume, Holley blue, white plume, Carey plume, sagenite, and morrisonite. One of the interesting features of the display is the arrangement showing both the finished gem stone and the rock from which it was cut. Other specimens in the exhibit include gold ore, garnets, amethyst-filled geodes, thunder eggs, and polished sections of petrified wood.

EASTERN OREGON MINING NEWS

Lode mines (gold, silver, copper)

The Boaz Mining Company, operator of the Buffalo Mine at Granite in Grant County, is driving a new working adit designed to intercept the veins at a depth of approximately 230 feet below the present lowest level. When completed the tunnel will be approximately 1,400 feet long and will intersect all known veins on the property. The Buffalo has been Oregon's top lode gold producer since World War II.

The Gold Star Mining and Milling Company, Baker, Oregon, has a crew engaged in diamond drilling at the Phoenix mine near Greenhorn in Grant County. The work is being done under the direction of Lawrence Banta. Some drilling was done by the company last season.

Cobalt-Gold Mines, Inc., of Boise, Idaho, has leased the Tri-County Mining and Milling Company mill in John Day and is milling gold ore from a company-owned property north of Prairie City, on Dixie Creek in Grant County. Milling was started during the last week in June. The company is headed by H. F. Stevens, Boise, president; James Evans, Boise, vice president; and Atty. J. D. Lane, Ontario, secretary. B. A. Bailey, Prairie City, is in charge of operations. The company has been doing exploratory work on the property for several years, and developed stoping ground in a 310-foot drift last year. Three men are employed at the mine.

The upper workings of the Bay Horse mine, an old silver lode on the Snake River below Huntington in Baker County, have been reopened recently for examination. The operators, Messrs. Franz and Traver of Ritzville, Washington, plan to do some exploratory drifting.

T. D. French, Spokane, recently purchased the Ward Hill lease on the consolidation of the Columbia, E & E, Tabor Fraction, and North Pole lode-mining properties in the Cracker Creek mining district, Baker County. A few men have already been hired and put to work at the Columbia mine and on renovating jobs in the mill, but Mr. French's ultimate development plans are not known at the present time.

Placer mines

The Suksdorf placer in the Mormon Basin district of Baker County is being worked by a Tulsa, Oklahoma, company known as the Oil-Minerals Operation. Mining is being done by a dragline-washing trommel set-up and is under the direction of Calvin Suksdorf, Baker, Oregon. Water for the operation is being pumped from the old Humboldt mine. This is the third season that this company has been active in the Basin.

A sizeable section of the Cracker Creek channel below Bourne, Baker County, is being readied for hydraulic placering by F. A. Ramsey, A. M. Rowe, and Associates, Box 80, Sumpter, Oregon. Water for the operation originates from Cracker Creek. Mining will be done by a 7-inch Giant with dozer and slusher assist for boulders. The present stage of development is such that a bedrock pit and full face of gravel should be exposed for productive washing by mid-July.

Placer gravels on the Mohawk claims on Vincent Creek, in the Greenhorn area of Grant County, are being washed by Messrs Haskins and Fleming, Bates, Oregon. Pocket gold has been found on this ground in the past and it is therefore possible that the present placering will lead to new lode discoveries.

Frank Mayo, Sumpter, Oregon, has leased a group of placer claims on Burnt River above Whitney and is currently engaged in setting up a 75-yard-per-day skid-mounted washing plant. This ground is adjacent, on the up-river side, to a large tract dredged by the Murphy-Sunshine interests prior to World War II.

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A high bar placer on the old Fullbright homestead on Burnt River, below Cave Creek, in Baker County, has been developed for hydraulic placering by Charles Griffin, Durkee. This bar was drift-mined in the early days. Water for the new operation will be pumped from the river. H. A. Upton and Associates of Durkee are testing the river channel on this property with a float-mounted suction pump.

Quicksilver

Exploratory trenching and test pitting is being done on two new quicksilver finds in Baker County. One, owned by James Anderson, James Dickerson, Albert Smith, and Jack Pittman, lies two miles west of Hereford and half a mile north of Oregon Highway 7 on the slopes of Wood Gulch, a tributary of Burnt River. Cinnabar occurs in an area of hot-spring activity along fractures cutting early Tertiary dacite. The prospect was discovered in February 1958.

The other discovery, owned by Robert Hulin and Carl Bowman, lies on the slopes of a tributary of Cave Creek, about $2\frac{1}{2}$ miles by road from its junction with Burnt River. Cave Creek enters Burnt River from the south about 9 miles by road upriver from U.S. Highway 30. The prospect, discovered in March 1959, occurs in a silicified "reef" of Paleozoic Burnt, River schist.

Molybdenum - copper

W. W. Serrine and W. W. Decker, 102 Atlas Building, Salt Lake City, and Robert Hulin, Baker, are erecting a small flotation mill on a molybdenite-copper prospect in the Rock Creek district of Baker County to process ore recovered during the course of development work last year. The operators plan to start a shaft and to continue surface exploration with a dozer again this season.

Miscellaneous

Tailings impounded from the mill of the old Cornucopia gold mine in Baker County are being utilized for concrete mix and grout at the Idaho Power Company's Brownlee and Oxbow dams on the Snake River above Homestead. The tailings were purchased and are being trucked to the dam sites by the N.C. Jones Company of Halfway.

******** SOUTHERN OREGON MINING NEWS

Lode gold mines (Jackson County)

Operations at the Warner gold mine, sec. 4, T. 33 S., R. 4 W., were discontinued May 1. The mine had been under lease to Ben Baker, Bob Hanford, and Clarence Ford. The mine is owned by A. M. Ropp and J. C. Wells of Albany, Oregon. Frank Gelhaus, Rogue River, operated the mine between 1954 and 1959, during which time small amounts of high-grade gold ore were produced.

Excavation and trenching work at the Braden mine, sec. 27, T. 36 S., R. 3 W., has been carried on by R. D. Grabar and H. V. Burgard. Mr. Grabar reported that they are installing a mill in the old Birdseye Creek mill building to concentrate ore from the Braden mine. Mill tests of the ore made earlier at the Waldo mill in Josephine County were somewhat discouraging.

Stanley Smith, Bend, Oregon, is working the Queen of the Hills gold mine on a part-time basis. The mine is located in sec. 34, T. 36 S., R. 4 W. Co-owner of the mine is Archie Bell, Grants Pass. They have installed a small test mill at the Homa mine site near the Birdseye mill.

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Lode gold mines (Josephine County)

Some development work and a minor amount of mining were done on some of the lode gold mines in Josephine County. Notable among these was construction of a small mill and some drifting by Wes Pieren at the Greenback mine, secs. 32,33, T. 33 S., R. 5 W.

A small mill was installed at the Howland mine, sec. 24, T. 35 S., R. 7 W., by owners Harry Commers, C. W. Robertson and Jim McClellan. A shallow shaft was sunk and at present diamond drilling is being done.

At the Humdinger mine, sec. 21, T. 38 S., R. 5 W., Earle Young and Walter Lonnon have cleaned out the No. 1 and No. 2 tunnels and put in a raise in the No. 1. They have installed a small mill. Equipment includes a crusher, ball mill, amalgamation plates, a table, and a small cyanide plant.

George Slade has recently constructed a small gold mill at his Snow Bird (Tip Top) mine on the road west of the Humdinger mine. He has extended the drift to about 300 feet in length and put in a raise.

A gold prospect located in the $SE_{\frac{1}{4}}$ sec. 28, T. 33 S., R. 5 W., and recently developed by Les Hudson and Ed Bowling, Grants Pass, is being worked by Frank Kolkow. The gold occurs as thin films on shears of a talcky serpentine and finely disseminated in the talc.

Lode gold mines (Douglas and Curry counties)

The Zinc Creek Mining Corporation has added equipment to the old Waldo Milling Company mill on French Flat and is running a mill test on about 75 tons of material from a mineralized zone on the Zinc Creek logging road about 10 miles northeast of Tiller in Douglas County.

A new gold prospect near Canyon Peak in sec. 1, T. 39 S., R. 10 W., Curry County, is being developed by Bert and Ernest McTimmonds, Grants Pass, and Russell Calhoun, Wilderville. They are installing a small mill to recover free gold and concentrates.

Placer mines

At least two dozen small placer mines were active intermittently during the winter and spring months in Jackson, Josephine, and Douglas counties. Twelve operations are known to have been active in Josephine County alone.

Shortage of water this year forced many of the mines to shut down early. Placer mines along Bull Run Creek, Hogum Creek, Cow Creek, Foots Creek, Humbug Creek, Palmer Creek, Pleasant Creek, Sterling Creek, Ward Creek, Josephine Creek, Althouse Creek, Democrat Gulch, Louse Creek, Grave Creek, Wolf Creek, Coyote Creek, Rocky Creek, and Galice Creek were active during the 1958–1959 season.

Uranium

White King uranium mine, Lake County, is proceeding with conversion of underground mining to open pit mining on schedule. Overburden is being removed at a rate of 10,000 yards per day and ore is being mined as stripping advances. The operation so far has been highly successful as sufficient ore has been removed to keep the mill in operation and in addition ore is being stockpiled at the mill and mine. The deepest part of the pit is now at elevation 6,344 feet, 45 feet below the collar of the No. 1 shaft. Howard Dutro, chief geologist and assistant manager for the Lakeview Mining Company, resigned in July.

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Quicksilver

The Gray Cinnabar property in the Coyote Hills, Lake County, has been leased to a Grants Pass group headed by Albert Schiermeister and Frank Melvin.

The Bonanza quicksilver mine in Douglas County has been in operation during the year. Production was slowed down for a period last year during repair of the main haulage winze. Bert Avery, former mine superintendent, has taken a new job at the Sonoma quicksilver mine near Guerneville, California. Tom W. Bidwell, Jr., who has worked at the mine for several years, was promoted to mine superintendent in November 1958. Mr. Bidwell reported that both the mine and furnace are in full operation. Development work is currently being carried on at the 1400-foot level.

Lime

Work has been started at the Jones marble quarry near Williams, sec. 31, T. 38 S., R. 5 W., Josephine County, by the Pacific Northwest Lime Inc. This is a newly formed corporation including Mr. and Mrs. Mabry Ogle and Gene L. Brown, attorney, Grants Pass. They have improved the road and started drilling for blasting down rock. They plan to produce paper rock, ag lime, and possibly building stone.

Silica

The Bristol Silica Company plant at Rogue River in Jackson County is to be moved to a new location in the near future due to routing of U.S. Highway 99 through the present site. The new site for the plant, which is used to crush, wash, and screen both quartz and granite, has not yet been announced.

Exploration and development work is continuing at the Big Quartz silica deposit on Quartz Mountain, sec. 2, T. 28 S., R. 1 E., Douglas County. The claims are owned by Roy and G. D. Rannells. Geologic maps of the area are being prepared by Walter A. Foster, Hanna Mining Company geologist, and Len Ramp, field geologist at the Department's Grants Pass field office. A thorough sampling program planned by the Hanna Mining Company is being carried out by Mr. Foster.

MINING ENGINEER GETS FOREIGN ASSIGNMENT

Jean W. Pressler, Consulting Mining and Metallurgical Engineer, of Grants Pass, Oregon, has accepted a foreign assignment with the U.S. Bureau of Mines and the I.C.A. Mission in Taejon, Korea. He will be Metallurgical Advisor to the government of Korea and will be in charge of the Mineral Dressing Station at Taejon. After a 3-week orientation course in Washington, D.C., he will depart with his family for Korea about September 15.

AFRICAN CHROME PRODUCERS HIT

Salisbury (McGraw-Hill World News): Chrome producers in the Federation of Rhodesia and Nyasaland are alarmed at the amount of chrome ore the United States is buying from Russia. It was reported locally that in January and February this year the United States bought 80,000 tons of chrome ore from Russia and 53,000 tons from the Federation. The Federation's chrome industry has asked the Federal Minister of Commerce and Industry to take the matter up with the U.S. Government. The industry complains that it was able to supply the 80,000 imported from Russia. The industry further complains that their export market is already depressed without the additional handicap of competing with Communist countries.

P.S. - Domestic chrome producers are shut down because of African, Turkish, etc., imports. (Ed.)

(From: E&MJ Metal & Mineral Markets, June 25, 1959.)
