# The Stock Pile

VOLUME 1 - NO. 6 THE STOCK PILE MAY, 1953

## Testifies

F. I. Bristol, president of the Oregon Mining association, who returned home Sunday after testifying before a U.S. House of Representatives select small business committee at San Francisco last week-end, reports that the government's future strategic - minerals-production policies were given considerable attention.

While particularly concerning himself with the present chrome program, centered in the Grants Pass receiving depot for Northwest production, Bristol said he also stressed the possibilities of production of manganese and, to a lesser degree tungsten, in Southern Oregon.

Commenting on his appearance before the committee, Bristol said that these programs have been altered by the government during the past two years to the point where they are workable. However, he stressed the need for extending the time limit on buying programs.

"As it normally takes about five years to develop a mine to put it into efficient operation, these programs should be extended by a minimum of three years," Bristol testified.

The Oregon Mining association official proposed the purchase of chrome be continued indefinitely, with authority to cancel after 28 months' notice on any June 30, that a limitation be placed on production per individual property to prevent over - production and that price guarantees be continued near the present level.

Discussing other production of metals, Bristol said:

Mercury needs protection from the Spanish - Italian Cartelle as it is their normal practice to break the price as soon as domestic production reaches any appreciable quantity. As soon as the mines are closed they immediately raise the price back up.

The plight of the lead and zinc miners has numerous contributing factors, which actually contributes to all strategic metal mines within the United States. Any metal imported into the U.S. for defense purposes either by the stockpile, or industry can receive payment in gold, based on the price of $35 per ounce. In most of the countries producing these metals gold is worth very much more than $35 an ounce, and in many cases, $80 an ounce.

"Also, even though the cost be the same the foreign producer gets a bonus of as much as 100 percent by exchanging his strategic minerals for our $35 gold.

This situation created during the last 20 years by our government is very baffling and frustrating to the producer of strategic minerals, who in most cases was formerly a producer of gold.

To have a stable mining industry and supply the needs of our nation in times of peace and war, these conditions need immediate attention by both Congress and the executive branch of our government."

Attorney Niel R. Allen, member of the board of the State Board of Geology and Mineral Resources, was scheduled to testify before the committee but was unable to appear.

In a telegram to the committee Allen stated that Daniel L. Goldy, regional administrator of the Pacific Northwest Office of the Bureau of Land Management, once had told him that "the people should get over their archaic ideas of property rights."

## NOTICE!

A very important meeting of the Oregon Mining Association, and chrome miners and producers, is called for May 18th at the Veteran's of Foreign Wars Hall, 234 S.W.L Street, Grants Pass, Oregon, starting at 10:00 A.M.

It is important that everyone be there. Plans are being made to have important speakers at the meeting.

Contact everyone you know interested in mining and chrome, and tell them of this important meeting, stressing the fact they should attend.

REMEMBER THE DATE
MAY 18TH
V.F.W. HALL, GRANTS PASS

One might think the beautiful foot bridge pictured above was taken as a scenic view. Careful examination will show the chrome mill on upper right. The picture on the lower right is the so-called low water bridge necessary to cross to operate the numerous mines up the Pearsoll Peak Rd., and the Rancherie Creek Rd. Among the chrome mines up this road are the following:

Elmo and Franklin King, and Roy Hanson, partners in Chrome King Mines #1 and #2. They are building a new road off the McCaleb Rd. A high water bridge located at the point of the low water bridge would be a very great help to them, and others located on that side of the river. Mine is 1 1/2 miles N.E. of Pearsoll Peak. Frank King reported the mine shipped 50 tons chromite in 1952. Property is leased from Dr. E.E. Thompson.

Jackson Chrome Mine, owned by Roy Jackson, Selma, Ore. This ore will be milled in the Six Mile mill.

Mohawk Chrome Mine, owned by Carl Stevens, Selma, Ore.

Pearsoll Mine, owned by Ernest Foster, Grants Pass, Ore. Milling ore is being stockpiled at his mill site.

W.D. Bowser chrome mine. Ore from this mine is being milled at Bowser's, located far up this road.

R.E. McCaleb, Selma, Ore. has four mines up this road, all containing milling ore. Claims known as Sourdough #1 and #2, Uncle Sam Claim, and Lost-and Found Claim.

Walt Freeman and La Vern Twombly of Selma, Ore. have the Wonder group of claims, and they have completed their mill, which is near their mines. They were able to ship some ore last Fall; about the highest grade of any concentrates received at the stockpile.

# THE STOCK PILE

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## EDITORIAL

This is the first edition of the Stockpile using pictures, which to many tell a story better than words. This paper has been prepared entirely with volunteer help, and with a different approach to the problems of the strategic mineral miner, with particular emphasis on chrome, than has been evidenced in the past few months. We hope you will like it and that it will be of a benefit to you. Any comments you might have will be greatly appreciated.

We particularly want to thank Joe Holman, on his report and pictures of chrome for Southern California; Walter Hoppe, for his pictures and report on be Central California chrome picture; Dean Axtell, for pictures and trips throughout California and Oregon; and Ruth and Bill Robertson for their truly amazing aerial photographs. Walt Freeman and Dewey Van Curler have given freely of their time and their assistance. Sincere appreciation to all who helped organize this information.

The Stockpile will be published monthly, and anyone interested in having articles, or pictures, published in the paper kindly send them to the Oregon Mining Association, P. O. Box 505, Rogue River, Oregon.

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My testimony given before the House Small Business Committee at San Francisco, can be considered an all inclusive editorial on the subject of chromite.

Fay I. Bristol, President
Oregon Mining Association

# DOMESTIC CHROME ORE PRODUCTION PROBLEMS

(Testimony of Fay I. Bristol, President of Oregon Mining Association before House Select Small Business Committee, San Francisco, Cal. April 25, 1953.)

A little background on the chrome production, I feel, will be in order. The world's first production came from the State of Maryland, and the ore was used in the manufacture of chrome chemicals. Up until the 1860's all that was needed was produced locally in the State of Maryland. The producers then decided to look for other sources of supply.

They did this by giving samples of chrome ore to the sailing vessels in Baltimore harbor. A prospector on the docks at Crescent City, California, said he knew where there was some ore like that, and as a result world production of chrome for the next 20 years was mostly shipped through the Crescent City harbor by small sailing boats around South America and into Baltimore. I am now quoting from California Journal of Mines and Geology, October, 1952:

"Del Norte County is the largest producer of lump chromite in the United States having a recorded production of over 70,000 long tons. Chromite was first mined at the Mountain View mine at High Divide in the early 1860's by the Tyson Mining Company of Baltimore, Maryland. Little is recorded about the ore produced in these early operations but R. A. Crippen, Jr., (Minerals Commodities of California, Chromite: California Div., Mines) states that 1500 to 2000 tons of ore were shipped annually from 1860 to 1889 from Cape Horn to Baltimore. When the tariff was removed from chromite in 1894 the domestic price dropped and Del Norte County production ceased."

Next chrome production moved to Turkey, which was on the more regular shipping lanes. Transportation then became the factor, and the chrome mines of northern California closed. It cost $10 to $15 per ton more to ship from California than from Turkey.

It was not until World War 1 that the Chrome Mines of Oregon and California again became active. Prices skyrocketed, miles of road were built by hand labor, and the mines just reaching good production when the war ended. The miners thought they had a commitment from the Government, and some of their heirs did collect claims during the middle 30's.

The deposits laid dormant until about 1940. Rustless Iron and Steel Co., of Baltimore, Maryland, started an investigation in 1938, as they were worried about the European situation, and desired a source of supply in case of emergency. Union Carbide & Carbon Corp., entered the field in 1940. In 1941 both of them started buying ore in Oregon and California. At the outbreak of hostilities the Federal Government took over the supplies of chrome and The Metals Reserve set up a buying program, the price eventually reaching $52.80 per ton, F.O.B. Stockpiles U.S.A., and $65 F.O.B. Turkey. This Metals Reserve program was set up to be effective six months at a time, and renewed at the end of each six months. The six months purchasing program of the metals reserve did not result in any development work, but merely scratched the surface of the chrome deposit.

A 2,000 ton mill was constructed at Government expense in Montana to produce low grade concentrates which were not used during the war due to their refractory nature. Most of the chrome produced in Oregon and California went into the manufacture of chrome alloys.

In early 1950 members of the National Minerals Advisory Council became interested in what might be done in the way of producing chromite under a realistic development program. It was suggested

DOMESTIC CHROME PRODUCTION PROBLEMS (continued)

that I make an investigation and write a paper on the chrome situation on the West Coast, of which the writer was familiar. I wrote the following paper, which was published in the Ore Bin, a monthly magazine published by the Oregon State Department of Geology and Mineral Industry, as follows, and titled:

### WE CAN PRODUCE HIGH GRADE CHROME ORE

This paper is being written as the United States is undergoing partial mobilization to fight a war in Korea with very good chances of it breaking out in other parts of the world.

As of today there is no domestic production of chrome ore in the United States. Our stockpile of chrome ore is very short.

The writer's background in domestic chrome ore production is as follows:

Was a chrome ore producer in 1942, 1943, and 1944.

Was Chairman of Military Affairs Committee hearing and an RFC hearing held in Grants Pass, Oregon. Out of these meetings came the establishment of local buying depots for strategic minerals during the war.

President of Oregon Mining Association and member of American Institute of Mining and Metallurgical Engineers.

During the war with Germany and Japan substantial production of high-grade chrome was made. The Stockpile at Grants Pass, Oregon, received approximately 40 per cent of the high-grade chrome produced and production continued up to and including the spring of 1949 when operating costs climbed above the market price.

This area of chrome ore producing mines is throughout Jackson, Josephine, and Curry Counties in Oregon and Siskiyou and Del Norte Counties in California. All of this country is very rugged. In most cases the chrome mines are on high ridges where much snow is encountered during the winter. Truck hauls will average 60 miles. A very few mines can operate during the winter although the climate in the valleys is mild. There are in this area approximately 350 mines and prospects from which some chrome ore can be produced.

Chrome ore occurs in irregular kidneys in the peridotites. The remarkable thing about these kidneys is that the best place to look for another one is in the neighborhood of the one you have just finished mining out. It is very rare that a chrome mine has any real tonnage blocked out. Development work is the biggest part of the cost.

(Continued on page 3)

## MINING NOTES

by
J. R. HOLMAN
1465 E. Orange Grove Ave.,
Pasadena, California

Mr. Vernon E. James, formerly of Phoenix, Arizona, now residing at Atascadero, California, has completed the preparations of roads and mill site 3 miles South of San Luis Obispo on the Froom Ranch, construction of a sizable mill feeding from four to six tables is to be started at once. This property has a past record of supplying considerable quantity of high grade chrome and should develop into a firstclass mine under the management of Mr. James.

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Mr. Jack M. James of Coalinga is doing considerable development with his new D.6 dozer on Rucker Ridge adjacent to the property under lease to J. R. Holman. The leads are not as strong as were evident in the Holman lease but are sufficient to indicate a fair prospect for the same type of high grade ore of both milling and shipping grade.

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There has also been some talk of the Pierce Bros. undertaking development work in this same district West of Coalinga, California.

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The writer has recently been in correspondence with a St. Louis, Missouri, manufacturer of Refractory products who is seeking a source of domestic chrome for this purpose Any one who might be interested may contact J. R. Holman for more information.

STOCKPILE OF ORE AT ERNEST FOSTER MILL ON ILLINOIS RIVER, JOSEPHINE COUNTY, OREGON MAY 3, 1953

SIX MILE CHROME MILL, ILLINOIS RIVER, JOSEPHINE COUNTY ON MAY 2, 1953.

GENERAL SERVICE ADMINISTRATION CHROME BUYING DEPOT AT GRANTS PASS OREGON, 1952.

DOMESTIC CHROME PRODUCTION PROBLEMS
(Continued from page 2)

The largest producers in World War I were the largest producers in World War II, even though most of them were considered worked out in World War I.

The modern bulldozer opened up many new areas in World War II. So today, after producing more chrome ore than was thought possible during World War II, there is now more high-grade chrome ore indicated than was the case in 1941.

In 1941 it was possible to get good miners in this area for $26 per week. The price paid for chrome ore during 1942 and 1943 was based on this wage scale. It so happens that as of the present the lumber mills have moved into this area and it is enjoying the highest wages in the United States, plus a boom. The men in the woods are now getting $85 to $100 per week and are the same type of help needed to mine chrome ore.

The foregoing are the basic problems of producing chrome ore.

This area can produce:

30,000 tons of metallurgical grade chrome ore in 1951
75,000 tons of metallurgical grade chrome ore in 1952
110,000 tons of metallurgical grade chrome ore in 1953

To do this the following must be done:

Program made effective by September 1, 1950, delivery to be accepted in Grants Pass, Oregon, and Yreka, California, after this date in carload lots and truckload lots by January 1, 1951.

Prices good through 1953.

As the grade of chrome ore delivered will depend more on the price structure than anything else. The price must favor the highest grade.

Basic Price

$120 per long dry ton of 2240 pounds for ores and concentrates analyzing as follows:

Chromic oxide ($Cr_2O_3$)..... 48.00%
Chromium (Cr) to iron (Fe) ration..... 3.00:1

(The chromium (Cr) content of any ore or concentrate is 68.4 per cent of the chromic oxide ($Cr_2O_3$) content)

Premiums

Chromic oxide content - above 48 per cent $5.00 per ton for each 1 per cent of chromic oxide content.

Chromium to iron ratio - above 3:00 to 1: $5.00 per ton for each 0.10 to 1 ratio up to but not exceeding 4.00 to 1.

Penalties

Chromic oxide content - below 48 per cent: $4.00 per ton for each 1 per cent of chromic oxide content down to and including 40 per cent.

Chromium to iron ratio - below 3:00 to 1: $3.00 per ton for each 0.10 to 1 ratio down to and including 2 to 1.

(CONTINUED ON PAGE 4)

DEEP GORGE MINE ON THE ILLINOIS RIVER, OPERATED BY JOE INMAN AND OWNED BY JAMES AND MAX GRISSON. THE CABLES FAR BELOW ARE ALL THAT IS LEFT OF THE BRIDGE TO CHROME KING MINE.

SIX MILE MILL

Six Mile Mill will be operating in about five weeks. It is owned by Jean W. Pressler, Paul Floyd and Roy Jackson. It is an approximate 50 ton mill. Mill is located at Six Mile Creek, on the road to Oak Flat. It is equipped with a hammer mill, duplex Denver jigs, three by six Marcy rod mill and uses four tables. All the equipment is powered by a diesel electric plant. It is planned they will do custom milling. Their ore will mostly come from the Pearsoll Peak area.

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LUNIUM COMPANY

The Lunium Company has holdings in El Dorado, Nevada, Lake and Placer Counties. All considerable distance from their mill, but considering all ore on, or near, paved roads the distance is no serious handicap. Their capacity will be about 30 tons daily. The Mill is located near New Castle, California and is now running.

The Lytell mill is a conversion from a gold plant, to a chrome mill. It has a capacity of approximately 30 tons daily. The operator has holding in El Dorado and Placer Counties. The location is on Highway 40 near New Castle.

ERNEST FOSTER MILL

The Ernest Foster Mill is approximately eight miles from his mine which is located near mile post 13 on the Illinois River Road. Has a three by four center discharge home-made ball mill with a complete maintenance repair shop. Mill has a one and one-half tons hourly mill capacity with a crushing capacity of 9 to 10 tons per hour. At the time of writing he was changing from electric drive on his tables to gasoline engines.

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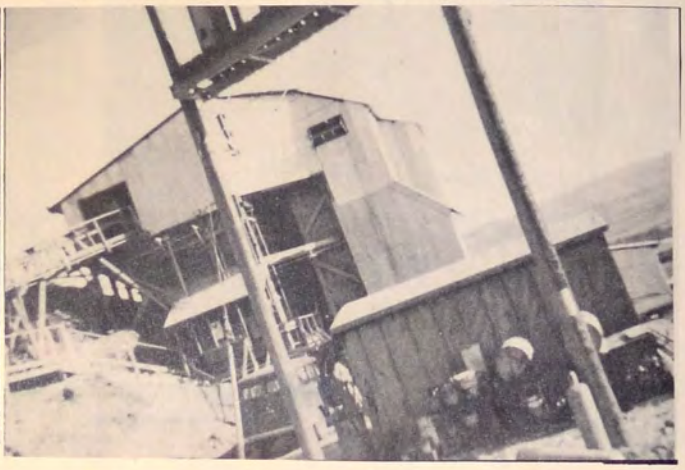
JOE R. HOLMAN'S MILL APPROXIMATELY 30 MILES NORTH OF COALINGA IN WESTERN FRESNO COUNTY. APPROXIMATE CAPACITY 60 TONS DAILY. MINE ABOUT 3 MILES BEHIND MILL PLANT, ON TOP OF MOUNTAIN.

JOE HOLMAN AND A CARLOAD OF CHROME CONCENTRATES AT HIS RAILROAD SIDING LOCATED IN COALINGA, AWAITING RAIL CAR FOR SHIPMENT TO CHROME DEPOT, GRANTS PASS, OREGON.

CONCONCULLY MINING & MILLING CO. A HUNTINGTON MILL WITH APPROXIMATE CAPACITY OF 75 TONS DAILY. MILL IS LOCATED IN THE RED BLUFF AREA. OPERATED BY FRED STOREY. CHROME DEPOSITS LOCATED ADJACENT TO MILL.



INTERNATIONAL METALLURGICAL CHROME CORPORATION MILL OPERATED BY H & J CHROME CO. LOCATED ABOUT 9 MILES WEST OF SAN LUIS OBISPO, NEAR THEIR MINING PROPERTY. CAPACITY OF MILL IS 200 TONS OF HIGH GRADE CONCENTRATES PER DAY. RAIL SHIPMENT MADE FROM GOLDTREE SIDING ABOUT 8 MILES FROM MILL.

INTERNATIONAL METALLURGICAL CHROME CORPORATION'S IRON CONTROL PLANT LOCATED AT GOLDTREE SIDING, NEAR SAN LUIS OBISPO, CALIFORNIA.

SAN LUIS MINING CO., SAN LUIS OBISPO, CALIF. CHROME DEPOSITS AD JACENT TO MILL. SHIPMENTS BY RAIL MADE FROM GOLDTREE SIDING ABOUT 3 MILES FROM MILL. MILL HAS AN APPROXIMATE 25 TON DAILY CAPACITY. AL THEIMANN WAS THE SHIPPER OF A CARLOAD OF BEAUTIFUL PICTURE ROCK FROM FRESNO COUNTY IN 1951, SAMPLES OF WHICH WERE SENT TO THE SMITHSONIAN INSTITUTE IN WASHINGTON, D.C.


THIS GARAGE BUILDING IS BEING CONVERTED INTO A CHROME CONCENTRATING MILL BY HELMKE, THOMAS AND JANSSEN. ROLL CRUSHER NOTED IN DOORWAY. OPERATION UNDER MANAGEMENT OF JIM MC DONALD OF MAGALIA. MINE IS LOCATED ABOUT 4 MILES WEST OF MILL. UPON COMPLETION MILL WILL HAVE AN APPROXIMATE 50 TON DAILY CAPACITY OF HIGH GRADE ORE.

## DOMESTIC CHROME ORE PRODUCTION PROBLEMS

(Continued from page 3)

This price schedule means paying approximately $50.00 per ton premium for domestic chrome ore or a total cost to the nation of $5,000,000 per year to insure a supply of high-grade chrome ore.

During the war with Germany and Japan over 63 of the first 68 boats carrying chrome ore to the United States were sunk. So the cost of $5,000,000 per 1,000,000 tons would be a real saving.

Taxes would recover a substantial portion of the $5,000,000.
End of published paper.

This paper was later revised at the American Mining Congress meeting in the fall of 1951, at which time Fay W. Libbey, Director of the Oregon State Department of Geology and Mineral Industries, and P. R. Bradley, the Chairman of the California Mining Board along with Olaf Jenkins, Director of the Bureau of Mines of California, met with members of the Munitions Board, the National Minerals Advisory Council, Bureau of Mines and Geological Survey. At this time the

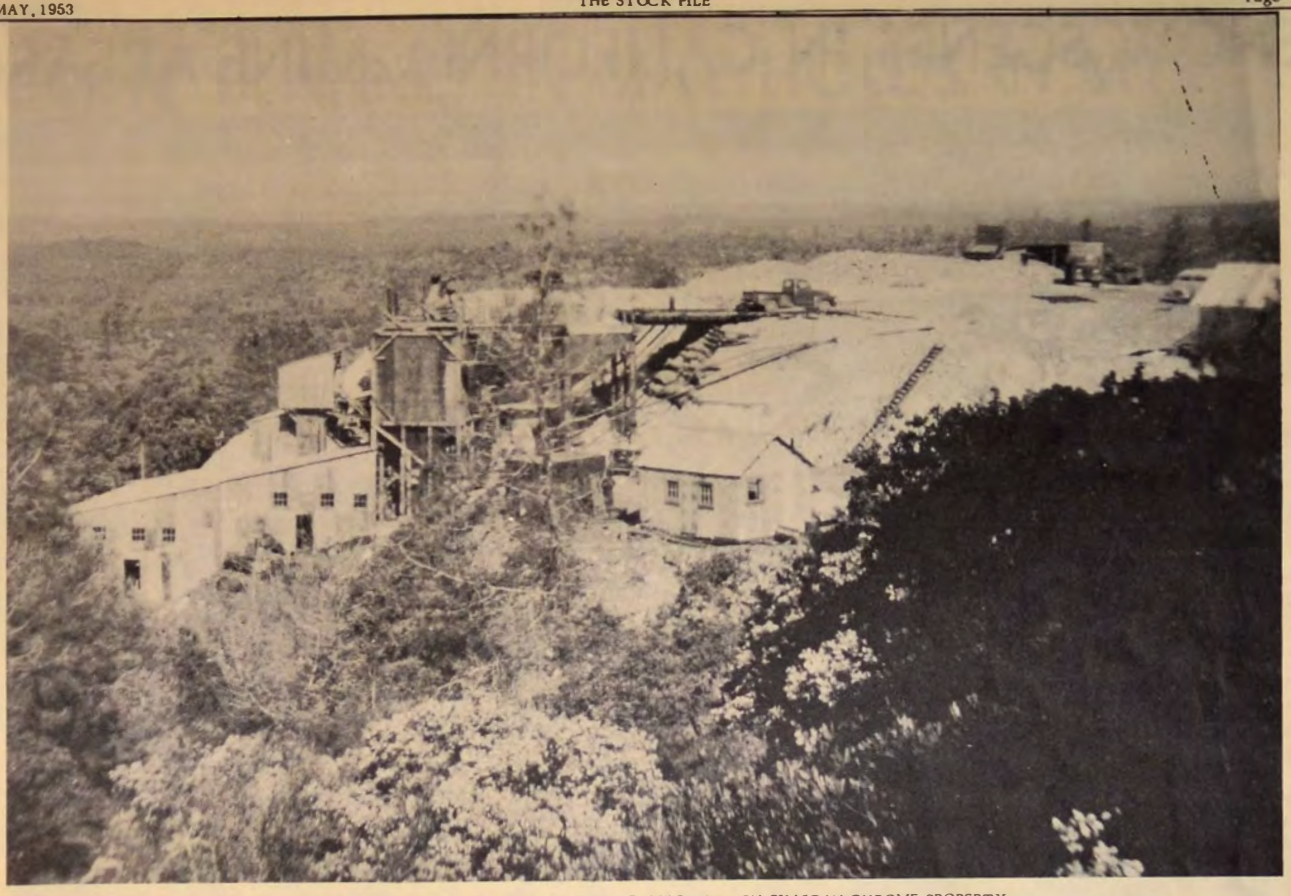
(CONTINUED ON PAGE 10)

## CHURCH MINE MILL

The Church Mine Mill is a conversion from gold to chrome ore. The mill has a capacity of about 150 tons per day. They have leases at LaTrobe and near Sonora, California. The ore from the Sonora area is a better grade than ore previously milled. The mill is located near El Dorado County, California.

## RADIOACTIVE MINERALS

The Atomic Energy Commission is investigating possible sources of radioactive minerals in Oregon. Anyone suspecting radioactive minerals is asked to correspond with or send samples to H. W. Norman, P.O. Box 1984, Butte, Mont.



ALLIED MILL LOCATED NEAR AUBURN, CALIFORNIA, ON PILLICAN CHROME PROPERTY

REPORT TO EMERGENCY PROCUREMENT ADMINISTRATION

REPORT BY JOE HOLMAN

Addressed to Mr. A. B. Parsons.
Emergency Procurement Admin.

Dear Sir:

In further support of your efforts in behalf of the California chrome producers to secure car-load acceptance F. O. B. railhead this report is prepared on the information developed by personal inspection and visitation of the mines and mills detailed herein. The facts set forth are current as inspection and interviews were conducted March 16, 17, 18 this week.

It is an interesting sidelight on the stimulus of the current strategic mineral program, that with the single exception of the Pierce Bros. operation at Morro Bay, none of the producers reporting were in business last year at this time.

International Metallurgical
Chrome Corporation.
1026 Chorro St.
San Luis Obispo Ph. 1923
Mgr: W. H. Harrison

Ball mill type operation, capacity 170 tons per day, present production 3 cars per week. Have been running their own ore of comparatively low grade, however arrangements have been made to mill ore from Castro Chrome properties controlled by Durand Hall of San Francisco which has a proven record of 2 1/2 to 1 concentration and it is expected production increase will reach 7 cars per week. This I understand is immediate programming andshould be established fact by April first.

San Luis Mining Co. Ltd.
1185 Monterey St.
San Luis Obispo, Calif.
Mgr: Al Tiemann Ph. 2234

This operation has under lease some of the biggest and oldest known properties in the State. The Miller Seely 280 acres has 14 recorded claims and the Thornberg property has 5 recorded claims dating back to 1870.

Mining by open pit is just getting under way this week and there is every indication of unlimited mill feed.

The mill is Ellis type, similar to Pierce Bros. and Holman Powell. It is equipped with 3 tables and 1 jig has a capacity estimated at 3 carloads per month on present ores. While the first shipment has not yet been made the stock pile already accumulated for car loading is between 60 - 65 tons and is of excellent metallurgical grade 52 % CR203 271 - 1 Cr. -Fe.

A second mill operation by this group is also being considered; however the plans are not as yet definite and cannot be considered.

Pierce Bros.
P. O. Box 386
Morro Bay, Calif. Ph. 4707
Mgr: Frank Pierce

This Ellis type mill with 2 tables has been very successful all last year. They have just started mining the Stevens claims adjacent to Castro Chrome at San Luis Obispo and have now eliminated any doubt as to ore supply. Their present shipping rate is 35 long dry tons per week on 1 1/2 shifts per day operation. Should they extend to 24 hour operation believe they can almost double present production. Incidentally they have never shipped by rail and the transportation cost from this location is in excess of $20.00 per long ton.

Palo Alto Mining Co.
599 San Tomas St.
Campbell, Calif.
Ph. Cypress 36693
Mgr: Steve Ridgely

This mill is set up with 4 x 4 ball mill, 2 jigs, 3 tables and is considered 80 ton capacity. They have run a considerable test period and their initial 20 ton shipment was of excellent grade bringing $119.00 per ton. Here again mining is just getting under way this week and since they have se-

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STOCKPILE OF ORE READY TO RUN THROUGH ALLIED MILL

WEST BASIN # 2 ON PILLICAN CHROME PROPERTY - LUMP ORE AND MILLING ORE.

# SNOW SCENES IN CALIFORNIA MINE AREAS

DEVIL'S PUNCH BOWL NEAR PRESTON PEAK, SISKIYOU COUNTY, CALIFORNIA ON MAY 2, 1953

NORTH SIDE OF SANGER PEAK PASS, SHOWING YOUNG VALLEY ROAD ON MAY 2, 1953. DEL NORTE COUNTY, CALIFORNIA

# WHITE BLANKET IN MAY HOLDS IN MTS.

ROUND MOUNTAIN SOUTH SIDE OF YOUNGS VALLEY, DEL NORTE COUNTY, CALIFORNIA. MAY 2, 1953

SOUTH SIDE OF SANGER PASS SHOWING YOUNGS VALLEY ROAD ON MAY 2, 1953. DLE NORTE COUNTY, CALIFORNIA

REPORT BY JOE HOLMAN
(Continued from page 5)

veral properties to draw from feel well assured of ore supply. It is anticipated April first will see this plant in full operation and the belief is that they will have no difficulty in producing I carload per week.

Holman and Powell Paving Co
2980 Allesandro St.
Los Angeles 39,
Ph. Olympia 0539
Mgr: J.R. Holman

The operation of this plant is 29 miles from Coalinga in Western Fresno County. The mill is Ellis type with 2 tables, the proven capacity of this mill is 40 tons of ore per day and the table output is 1/2 ton of concentrates per hour. This mill is now running around the clock six days per week and with allowance for variation in mill feed, it is a conservative conclusion that 1 carload per week will be maintained from here on. The James-Thickstun lease supplying ore is very extensive and should support a long and consistent development. Present mining is done with 1/2 yard shovel in connection with D6 dozer support for stripping and it is expected to maintain continued open pit operation.

During February 120 tons of concentrates and 18 tons of high grade was shipped to Grants Pass by 20 ton transport; all proved to be of excellent grade and while 10 days were lost in mining changes this week it is expected to equal February production since there is a carload awaiting shipment at present. It is informative for your office to know something of costs where it is necessary to consign to Grants Pass, Ore. Last month when shipping by transport the cost breakdown per short ton was as follows:
Transportation mill to Coalinga, $ 2.50 per ton; loading in Coalinga, 50¢ per ton; Transport rate, $18 per ton; Grants Pass unloading, 50¢ per ton; a total of $21.50 per ton.

Returns consistently showed 20 short tons equal to approximately 16.2 long dry tons. One does not have to be brilliant at mathematics to see that 16.2 tons costing $443.00 equals $27.40 per ton. Add labor and mill operation cost and little is left for capital risk or continued development. Even with the benefit of carload railshipment it presents a picture which makes informed persons with capital hesitate to embark in production. And just as certainly the other side of the picture, that of ore production is just as full of cost hazards, due to the constant requirement of dead work ahead to assure a continued operation.

Recently at the instigation of the writer a new man was brought into the chrome producers group. Mr. Vern James of Phoenix spent about 3 months with Holman and Powell in Coalinga opening up the ore body and became so interested as to lease a very large known ore deposit about 3 miles south of San Luis Obispo and is going into the operation with about $30,000 worth of equipment and has announced plans to install a sizeable mill in conjunction. This will be a man to watch and while it is too soon to make a more detailed report, I feel confident that this will be an excellent contribution to the strategic minerals program.

I regret that this report covers such a small section of the California chrome producing areas and wish time permitted to immediately summarize the Northern districts as well, but if further information is necessary to convince Uncle Sam that special consideration is necessary to California producers to set up on a continuing basis, I shall be happy to broaden my inquiries.

# MANGANESE

## DOMESTIC MANGANESE PROGRAM

(Testimony by Hewitt S. West, Manganese, Inc. Henderson, Nev. before House Select Small Business Committee, San Francisco, California, April 25, 1953)

During July 1951, General Services Administration instituted a five year domestic manganese purchasing program to encourage the discovery, development and production of manganese by small producers in the United States. Purchase depots were to be set up at Butte and Phillipsburg, Montana, and at Deming, New Mexico. Ores containing 15 per cent or more metallic manganese ore were to be purchased but for some unknown and, up to date, unexplained reason different prices for identical ore were offered at each depot. These prices were far below the levels advised by industry as necessary to stimulate production and a state of confusion and stalemate was immediately created.

In May 1952, a National Program for small mines was set up to buy metallurgical specification ore in carload lots at the nearest mine railhead but deliveries under this program have been minor. This state of inactivity continued until September 1952, when the price structure at depots was revised upward, the question of Cu, Pb and Zn content of crude ore to be processed was determined and a new purchase depot at Wenden, Arizona was agreed to. However, 25 per cent of the proposed life of the programs had elapsed before their terms were made workable which made it exceedingly difficult to interest qualified producers to open up and develop underground mines or any mines requiring preliminary up grading facilities.

In January 1953, the authorities in Washington finally admitted that Pb and Zn could be removed in the nodulizing of flotation concentrates and decided that a charge of $2.25 per ton of concentrate should be made for removal of these impurities. However, in formulating and publishing this amendment, the usual mix-up of signals occurred and the amendment was issued with a charge of $2.25 per ton of crude ore. This was manifestly unfair as it penalized low grade, low price ore where the price was already on the border line. 15 per cent ore which can be concentrated on a four ton to one ton basis pays $9.00 per ton of concentrate against a base price of $8.54 per ton of ore. 27 per cent ore which will concentrate on a basis of two tons of crude ore to 1 ton of concentrate only pays $4.50 for nodulizing against a base price of $32.40 per ton of ore. Certainly it costs no more to nodulize concentrate from low grade ore than from medium grade ore and this unfair penalty should be corrected.

Prices paid today at the depots will stimulate production and appear to be reasonable and fair under todays conditions. The depot at Wenden is booming and more ore is being offered than can be handled on an eight hour shift. Deliveries to the other depots are picking up and the entire program could be a great success if three amendments were promptly made.

First - the programs should be extended for at least three years in order to allow underground mines to be developed and still have time to deliver ore to the depots so that the recovery of the necessary investment is reasonably assured if the mine is successful.

Second - the size of the depot programs should be more than doubled. Present limit of 6,000,000 units is too small to interest producers in opening large low grade mines. The total amount of ore allowed at any one depot is not sufficient to support an efficient size milling plant. A completely integrated mill to handle all types of ore, including nodulizing, should handle at least 500 tons of crude ore per day and have an absolute minimum of five years supply of ore. The ore delivered at the depots to date averages about 20 per cent and it would take 750,000 tons or 15,000,000 units of this ore as minimum supply for an efficient milling plant. It is extremely doubtful that the National Program covering specification ore from small mines will reach any appreciable percentage of its goal. A new depot should be established in the Virginia district to receive low grade ore.

Third - the cut-off grade of 15 per cent should be reviewed and revised downward where feasible. Important quantities of good milling ore of 13 per cent to 14 per cent grade are available. Some of these ores will upgrade to specifications as readily and in many cases more readily than some acceptable 15 per cent ores. The cut-off limit on grade of crude ore accepted should be based solely on the amenability of the ore to satisfactory upgrading by the standard metallurgical processes already provided for.

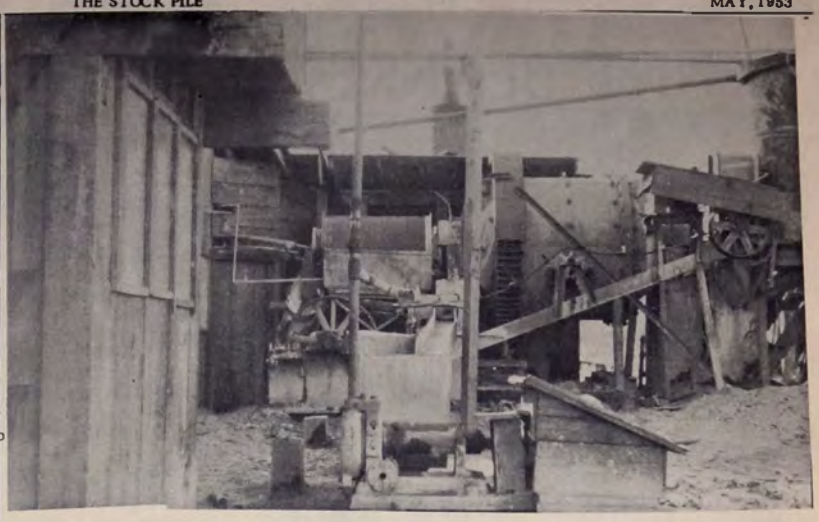
With these proposed changes in the programs it seems certain, from present progress, that the domestic manganese production of the United States can be very materially stimulated. New deposits will be put into production that will greatly alleviate our utter dependence on imported ores and will provide a stockpile of readily available ore in time of emergency.

A the present time the United States is consuming 2,000,000 tons of manganese ore per year. Domestic production of metallurgical grade is , at present, 240,000 tons per year. Present production of low grade manganese under the Government purchase program is approximately 180,000 tons, which will process into about 60,000 tons of

If, in the event, the recommendations suggested in this testimony were to be put into effect, the production of domestic low grade would more than double, increasing our present metallurgical grade produced in the United States by more than 50 per cent.

## STRATEGIC METALS PROGRAM

Senator George Malone ( Rep. Nev.) has introduced a measure which would extend the present termination dates of all purchase programs, initiated under terms of the Defense Production Act, for tungsten, manganese, chromite, mica, asbestos, beryl, and columbium-tantalum bearing ores and concentrates for another two years.



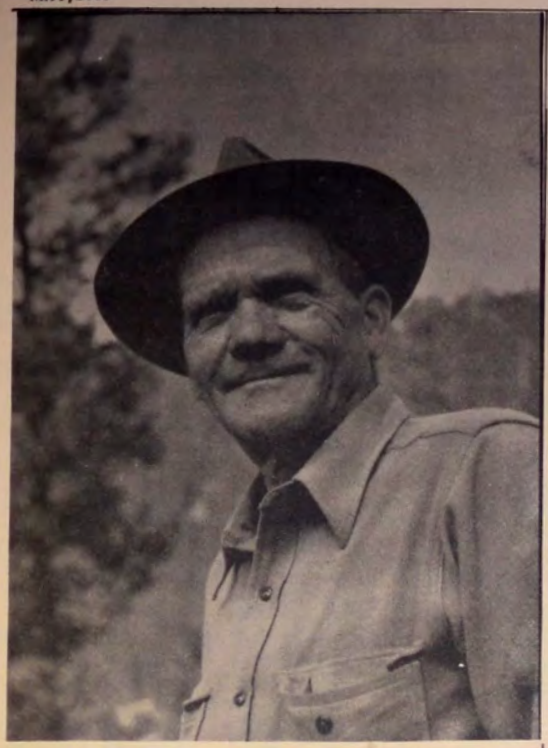
RICE BROS. MILL NEAR TAKILMA, OREGON. HAS JUST BEEN SOLD TO EGGERS AND TYCER.

WILLIAM S. ROBERTSON, MRS. W.S. (RUTH) ROBERTSON AND BEN B. BAKER READY TO TAKE OFF WITH FRED HALE TO TAKE AERIAL PICTURES FOR "THE STOCK PILE".

FRED LANGLEY AND CLAUDE DEAN, GRANTS PASS, OREGON, HAVE BEEN OPERATING THE BIG BEAR PROPERTY SINCE JUNE, 1952. IT IS ABOUT SIX MILES UP SLATE CREEK FROM THE REDWOOD HIGH WAY. A CROSSCUT, 75 FEET LOWER IN ELEVATION THAN THE ORIGINAL WORKINGS HAS BEEN DRIVEN. MORE THAN 200 TONS OF CHROMITE HAVE BEEN MINED FROM THE ORIGINAL ADIT AND STOPE, AND A CHROMITE LENS WITH A MAXIMUM WIDTH OF ABOUT 7 FEET IS EXPOSED IN THE FLOOR OF THESE WORKINGS. ON MAY 4, 1953, ORE WAS FOUND AT 310 FEET.

## HIGH IRON - LOW CHROME

Word has been received that the Laclede-Christy Company, Arcade Building, Saint Louis 1, Missouri, are interested in purchasing chrome with high iron and low chrome, 27% up to 46% Cr203. You might write them if you have some.



WILLIAM S. ROBERTSON. LARGEST SHIPPER OF LUMP CHROME ORE DURING 1952 FOR BOTH OREGON AND CALIFORNIA.

## Dearth Of Metal Threatens Survival

(Testimony by Granville S. Borden of Idaho-Maryland Mines Corp., San Francisco, Calif., before the House Select Small Business Committee, San Francisco, Calif. April 25, 1953

I appreciate the privilege of presenting this testrimony to you distinguished members of the Small Business Committee of the 83rd Congress of the United States about the business of prospecting for metallic ore deposits.

Our people through their votes and through the provisions of the Constitution of the United States have placed you gentlemen and your colleagues on Capitol Hill in Washington in the drivers seat of the 1953 model of the American car and they have instructed you to guide it down Destiny Highway.

There are about150 million back seat drivers. Under our form of democracy it is their right and duty as citizens to strive to keep you from driving recklessly, to keep you from napping at the wheel, and to direct your attention to dangerous spots on the highway ahead of us.

Acting now in the capacity of a back seat driver, I am going to exclaim a lusty "WATCH OUT". I shall direct your attention to an obscure danger, a hazard which in my opinion could cause disaster to our country unless you recognize the danger and eliminate it.

Would you like to order our boys into battle with bows and arrows, sling shots and pop guns? But what can they use if there are not enough metallic ingredients for the manufacture of modern weapons and ammunition?

From V-J Day to Korea Day we spent $50 billion for a war machine but hardly a nickel's worth went for the stuff to make it run, and this happened notwithstanding some very narrow escapes from disasterous shortages of strategic materials in World War II.

I am informed by experts that the situation is not much better today. They tell me that in the event of a hot war should enemy action shut off the flow of foreign imports, our stockpiles would be depleted in a brief period. Then we would be in serious jeopardy of losing the conflict because the capacity to produce metals from the mines in United States is far below the minimum hot war requirements.

Now if these facts are true, and it should not be difficult to obtain the truth - WHAT ARE WE GOING TO DO ABOUT IT? Will we remain apathetic while we are vulnerable to defeat by some barbaric aggressors?

The only recourse is to discover and develop in the United States ample reserves with the installation of adequate capacity to process timely requirements.

Thus the survival of our Country, our institutions, the preservation of our freedoms and even our lives may depend upon the degree of success of these ventures where some of our citizens strive to force Mother Nature to disclose where she has hidden her hordes of mineral wealth.

The degree of success of these ventures will depend on how many go hunting and how much money is spent in them thar hills. But the number who hunt and the number of dollars that will be spent will vary with the economic climate which will enshroud their enterprise. No one will prospect if the fog is too dense to perceive any economic rewards should Old Lady Luck lead to a mineral deposit. No one will bet on a long shot if the rewards of victory are apt to be lost in cheap foreign labor or in confiscatory taxes.

In the stopes of taxation and in D.M.E.A. you gentlemen have installed some good ventilating equipment but there are some uninformed in the Congress who would vote to abandon this equipment.

Now, gentlemen of our Congress, here is my prayer:

(1) Be ever mindful of this obscure but real threat to our security.

(2) Be ever mindful that Uncle Sam is an interested partner in all of these prospecting ventures. He shares in every discovery. Every discovery makes a real contribution to our defense effort. Every discovery constitutes a new weapon to use in the fight against inflation. Every discovery creates a new source of revenue through new tributaries of income and excise taxes which lead directly into the Federal Treasury. Every discovery engenders a new defense against depression and a genuine contribution to the forces which support prosperity.

(3) Be alert back on Capitol Hill to the necessity of administering vitamins and stimulants to Mr. U. S. Prospector.

### MONEY FOR ROADS

Word has been received from Senator Guy Cordon that money to improve the Illinois River Road, the Wimer Road and the Youngs Valley Road has been approved and will soon be available to the Forest Service so work can be started.

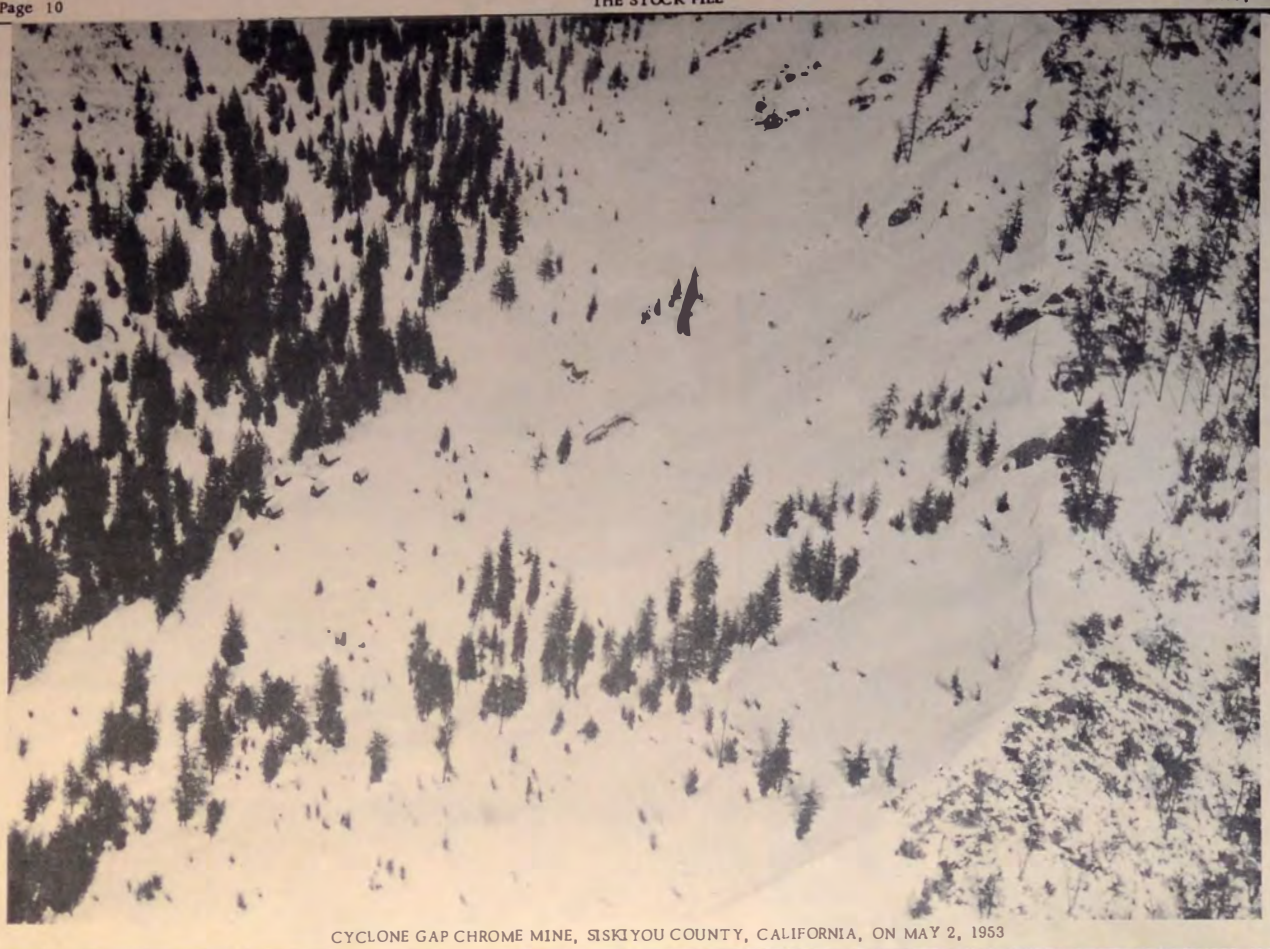
### CHROMITE

Chromite, the ore of chrome is a heavy dark mineral that shows a milk chocolate color when scratched with a pick.

LYTELL MILL ON HIGHWAY 40 WEST OF AUBURN, CALIFORNIA

CHURCH MILL, PLACER COUNTY, CALIFORNIA

LUNIUM CO. MILL, PLACER COUNTY, CALIFORNIA



CYCLONE GAP CHROME MINE, SISKIYOU COUNTY, CALIFORNIA, ON MAY 2, 1953

DOMESTIC CHROME ORE PRODUCTION PROBLEMS
(Continued from page 4)

paper was revised to include Montana, and the chrome on the Kenai peninsula in Alaska, with some recommendation on the beach sands of Oregon.

The chrome program is now almost identical with the recommendations made by this group. When the regulations were first issued a 2,000 ton limit was put on production per mine, which held back much major development work. In May 1952, this limit was raised to 5,000 ton per mine, and on April 13, 1953, this limit was removed. The other exception is the lack of accepting carload lot deliveries F.O.B. railheads. This results in the shipping of chrome from California to Grants Pass, Oregon, at a cost that varies from $10 to $25 per ton, which is a complete waste of money and railroad facilities, as the ore is immediately transhipped over the same railroad.

From the belt of peridotites that extends from south of San Luis Obispo, California, up through California, Oregon and on into the State of Washington, chrome prospects have become chrome mines. Never before has there been a sustained market as at the present time. Wherever the roads between the inland valleys and the Coast cut these peridotites and made transportation possible the mines have developed. There are still vast unprospected areas, so with the market assured the free enterprise and ingenuity of free Americans has brought the chrome program to the following position: During 1952 chrome was received from 110 producers. There have been 15 new producers in 1953. Making a total of 125 producers of metallurgical grade chromite in the United States, who have shipped ore during 1952 and 1953. Of this number 22 were from mills that have been constructed since the program was started and concentrates shipped. 14 more mills are nearing completion and will be shipping within the next few months.

Production for the first full year was estimated at 30,000 tons, actual production was about 22,000 tons of better grade than anyone thought possible. The estimates were made on the basis of a little higher price with no limit per mine. Nor did we expect the worst winter in fifty years, with the chrome miners plowing snow in July. Shipments so far this year are running three times that of last year at this time.

This means that without any federal assistance some 2,000 tons of mill capacity has been installed, and is either operating, or ready to operate to produce metallurgical grade chrome. A very conservative figure on the investment would be $2,000 per ton of installed capacity. Which means that $4,000,000 has been invested in small business to produce high grade chrome. The average concentrating ratio is about 3 to 1, which means that we can expect production by late fall of 1953 to reach 500 to 700 tons per day of concentrates, or approximately 100,000 tons per year in 1954. The reason for the 100,000 tons per year is that many of the mills will be closing during the winter and there will be numerous ones with production and mining problems that will materially influence their production.

High grade lump ore production will not reach the proportions of the milling program as it takes much longer to develop a lump ore mine. From the information we were able to obtain from the Munitions Board and others connected with Defense planning, domestic production of 200,000 tons per year of metallurgical grade chrome would mean that we could fight a war indefinitely and not have to divert our Navy to convoy chrome ore. We are rapidly approaching this goal, and it can be maintained, if the following recommendations are followed:

(CONTINUED ON PAGE 11)

CYCLONE GAP CHROME MINE, AUGUST 1952. LARGEST SHIPPER LUMP ORE, 1952

DOMESTIC CHROME ORE PRODUCTION PROBLEMS
(Continued from page 10)

1. That a small active strategic metal mining industry be declared a national policy.
2. That the chrome purchase program be extended indefinitely, and that notice of cancellation can be given any time effective two years and four months after the June 30th succeeding, the notice of cancellation.
3. That some limitation be placed on production per property so as to eliminate the possibility of over-production.
4. That the relative price guaranteed on chrome ore after June 30, 1955 closely approach that now being paid.

Cost of extending this program and keeping some 200 plus small mines running is not near as much as one would think.

Nearly one-third of the money paid out for chrome comes back to the United States Government in the way of taxes.

This is about what we are paying over foreign ore where wages are measured in cents instead of dollars, and E.C.A. has paid for harbors and railroads to increase chrome production.

So here is a program that is moving our alloy steel plants back to the United States of America from Turkey. It is developing an entirely new mining industry. It is making the United States much safer. It is developing the resources and the manpower of this country.

But, it must have more time.

Let's not wait until the last minute but tell the chrome mining industry now that they will have more time.

EXTEND THE PROGRAM NOW!

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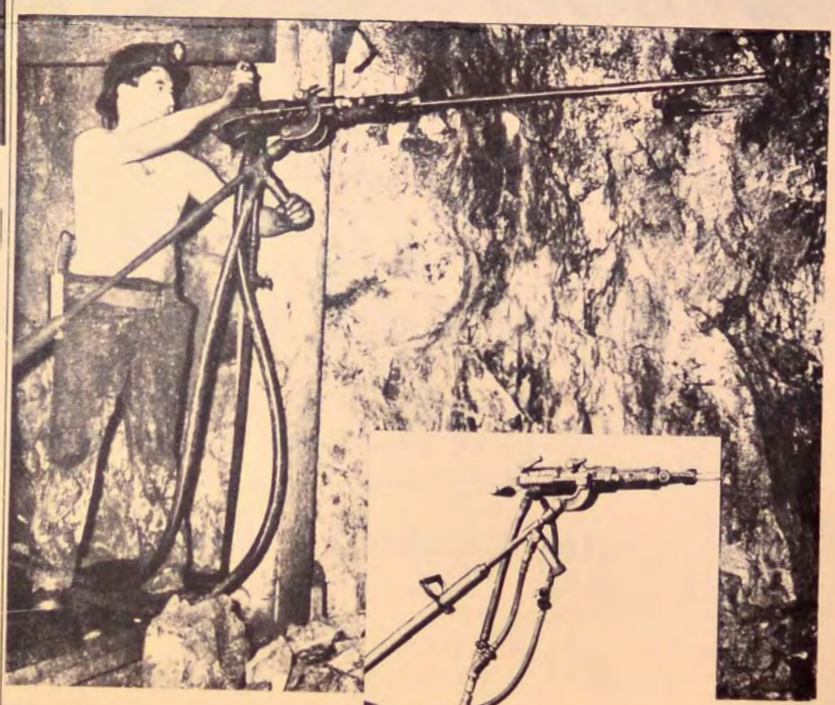
**Remember—Only you can PREVENT RANGE FIRES!**

M. M. MCCLELLAND, INSPECTOR OF MATERIALS IN SAMPLE ROOM AT CHROME DEPOT.

DAN BEYER, MANAGER OF G.S.A. CHROME DEPOT STANDING IN FRONT OF LOADER.

LOADER IN ACTION AT G.S.A. CHROME DEPOT

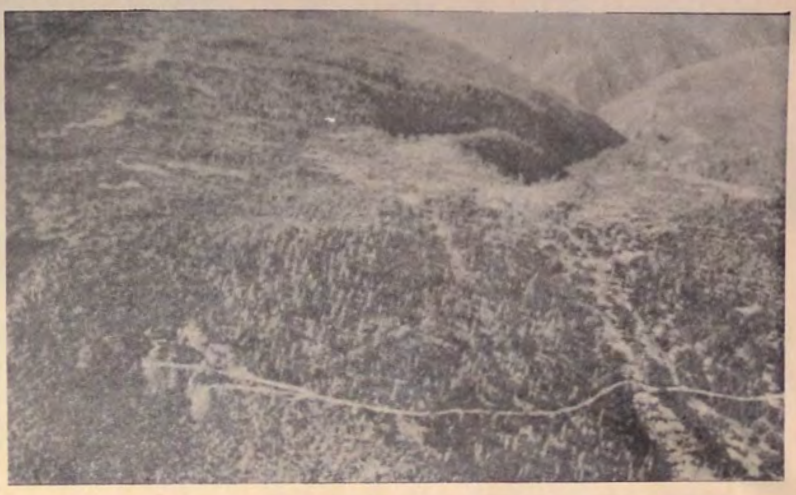
MCTIMMIONS CHROME MINE ON ILLINOIS RIVER, JOSEPHINE COUNTY, OREGON, MAY 3, 1953. NOTE LARGE AMOUNT OF STRIPPING.



ERNEST FOSTER'S MILL ON THE ILLINOIS R IVER, JOSEPH INE COUNTY, WHICH HE STARTED 7 MONTHS AGO WITH ONE HELPER, IS NOW READY TO RUN.

OREGON CHROME MINE ON ILLINOIS RIVER, JOSEPHINE COUNTY. LARGEST SHIPMENTS OF ANY OREGON CHROME MINE.

LOADING RAMP TO SOURDOUGH CHROME MILL LOCATED AT SOURDOUGH CAMP. CURRY COUNTY, OREGON.



HIGH PLATEAU CHROME MINE, OWNED AND OPERATED BY GENE BROWN, LARGE SHIPPER OF VERY HIGH GRADE CHROME ORE. DEL NORTE COUNTY, CALIFORNIA. MAY 2, 1953.