

MINING ACTIVITIES

FIRST DIVISION - The Alaska Mining and Exploration Company of Seattle is reported to have taken over the DMEA exploration work at the well-known Riverside lead-tungsten mine near Hyder. Red Hawk Mines Alaska, Inc., who earlier planned the same move as reported in our April Bulletin, are apparently no longer in the deal. Pacific Northern Minerals of Spokane originally had the contract.

The diamond drilling exploration program at the Funtler Bay copper-nickel lode is progressing favorably and showing further mineralization.

SECOND DIVISION - C. E. (Al) Stout, placer miner formerly of the Fortymile, is now starting to mine on Dall Creek in the Kobuk area.

THIRD DIVISION - Grubstakers Incorporated is another Anchorage group recently organized for the purpose of grubstaking Alaskan prospectors. This is another step forward in reviving the old traditional custom of furnishing a prospector with food, equipment, and transportation in return for a share (usually fifty-fifty) of anything the prospector finds. A spokesman advises that interested prospectors may contact James E. Riggsby, Box 1818, Anchorage.

By the appearance of the surprising increase over last year in the number and enthusiasm of radioactive prospectors in the Third and Fourth Divisions, we would guess that if uranium is ever to be found in Alaska (and we think it is), this will be the "discovery year."

FOURTH DIVISION - Since the rehabilitation of the Red Devil mercury mine was undertaken February 1, rapid progress has been made in the surface work, and underground exploration work will start shortly. A shaft has been sunk 165 feet from the 2nd level to the 3rd level from which the underground exploration will be conducted. New camp buildings and cottages are being built, and 35 men are employed. A total of 200,000 pounds of materials and equipment have been flown to the property. Production will commence as soon as possible.

The U.S. Smelting Refining & Mining Company is now dismantling its recently-purchased dredge at Livengood and plans to move it to the company's holdings at "Hog" (Hogatza) River this summer. The dredge will be trucked to Fairbanks, then shipped 800 miles by water down the Chena, Tanana, and Yukon Rivers, then up the Koyukuk River to a point where it will be again trucked for a short distance to its destination. Company officials hope to be ready for digging in the new location in 1956.

OIL NEWS

The Alaska Propane Gas and Oil Company, Inc. of Fairbanks has moved a drill to an area near where Seaton struck gas on the Alaska Highway near the border. They are all set to start drilling, but must wait for a decision from the Bureau of Land Management as to the approval or legality of their lease.

Shell Oil Company has announced plans for setting up a headquarters office in Anchorage for their Alaskan operations. Four field parties will be employed, which will include mapping with the aid of helicopters on the Kenai and Alaska Peninsulas and seismic exploration at Wide Bay.

Two employees of Alaska Freight Lines have applied for oil leases on land up the Coleen River in the northeast section of the Territory. This is along a route pioneered by that firm for winter hauling of supplies for the DEW line.

The Havenstrite drilling operation at Iniskin is again under way. The new group (Aledo) is at the Alaska Oil and Gas Development Company site near Eureka on the Glenn Highway ready to continue the drilling there. Drilling of the Sullivan No. 1 hole by Phillips near Icy Bay has nearly reached the limit of the rig, and preparations are being made to move to a new drilling site.

GEOCHEMICS NEWS

The recent geochemical prospecting course given by the University of Alaska was a definite success. An unprecedented percentage of the people starting the course (including 4 TDM assayers and one engineer) received their diplomas. The course was intense, particularly for the TDM personnel who put in full shifts in the laboratory each day, in addition to the regular evening sessions, working out simplified methods and procedures for field work. A definite benefit will be realized by all concerned as a result of the TDM participation.

The TDM assayers will continue to cooperate with the research group at the U. of A. in improving existing methods and developing new methods for metals not easily detected by present known methods. Our future policy will also be to help prospectors obtain their equipment and necessary chemicals for their field work, and help with advice, but we do not plan to run the samples except at Nome. Our Nome office is set up for the analysis of samples for the purpose of stimulating prospecting in the Second Division.

RADIOACTIVE ADVICE

The Valdez "uranium strike" came to naught. So did three others last month that did not get into the papers. Some of these were the result of inexperienced prospectors with highly sensitive scintillation counters becoming unduly excited when they merely encountered a higher background count caused by a change in the local rock type. It should be remembered that the country rock changes as one traverses the terrian, and that some rocks such as igneous rocks and black shales have more radioactivity than others such as limestones, sandstones, and ordinary shales. With the highly sensitive scintillation counters, this change in background count is magnified considerably, but should be treated only as another background count. If one finds hot spots within the higher count area, then he may properly start to become more enthusiastic. This point is emphasized in the instructions that come with most counters, and also in the various publications that we have suggested from time to time that prospectors obtain and study. To quote a recent article on the subject ".....beware of the radiation detection instruments. Be sure you use them as a tool and not as a weapon."

LAND REGISTRATION INFORMATION

Under the Alaska Land Registration Law passed in 1953 and amended in 1955, all owners of patented mining claims which are located outside of incorporated municipalities, cities, or towns, school districts or public utility

districts are required to file a Statement of Ownership before December 31, 1955, if they have not already done so. Holders of unpatented claims are not required to file. If the patented claim holders have already filed under the requirements of the 1953 law or the old 1945 law, they need not file again this year.

Filing of the statement will be done in the precinct recording office of the precinct in which the patented claim is located. Recorders have been furnished with forms for land owners to fill out for the filing, or they can be obtained from the Territorial Department of Lands. Recorders have been given complete instructions and will be able to assist claim owners in filling out the forms. More than one claim may be listed on one statement. When patented claims are sold or transferred to a new owner, the new owner must file a Statement of Ownership within the calendar year in which the transaction was completed. Further information can be obtained from the local Recorder or the Territorial Department of Lands, Box 368, Anchorage, Alaska.

TREASURY OPPOSES FREE GOLD MARKET

Delegate Bartlett's recently submitted bill to create a free gold market in the U.S. has been actively opposed in a committee hearing by the Treasury Department. Treasury officials stated that under a free market, the U.S. would have to either stay out of the market or stand ready to buy and sell at the official price to prevent fluctuations. If they did the first, they claim it would be a step away from a sound monetary policy, and the second alternative would be, in effect, convertibility of currency into gold which they feel we are not ready for until foreign currencies are freed from existing restrictions and made convertible with other world currencies.

CHROMIUM

The use of chromium and its compounds in metallurgical and chemical industries is so important, and the United States is so dependent on imports, that the government made an active and widespread search for chrome ores in Alaska during the war. It is used for giving steel greater hardness, tensile strength, and resistance to corrosion, but its greatest use is in the form of ferrochromium for steel alloys such as stainless steel. The mineral chromite is used as a refractory in smelting. Chrome is also used in electroplating and direct plating, and in making chromic acid, which is used in several industries.

Chromite is the chief ore mineral of chromium. It is an iron-chromium oxide which often resembles magnetite, and to the unpracticed eye is sometimes also mistaken for a number of other hard black minerals such as ilmenite, wolframite, or pitchblende. Chromite can be easily distinguished from magnetite by its brown streaks and feeble magnetism, if any. Its color often runs to brownish-black and sometimes gray. It is brittle, has an uneven fracture, high specific gravity of 4.1 to 4.9 (will show up in placer concentrates if present), hardness of 5.5, and usually occurs in bands or streaks. Under the blowpipe, a borax bead will turn green upon cooling, if chromium is present.

Chromite is a common constituent of basic igneous rocks such as gabbros and peridotites, and in serpentine which is an alteration product of certain peridotites, but the occurrence is usually as disseminated grains throughout the body of rock. Occasionally in the crystallization or altering of the rock mass, conditions will be such that the chromite will be caused to concentrate in certain parts of the mass. These concentrations are usually in layers or bands, and if the bands are of sufficient size and grade, then a minable ore body is created. So in prospecting areas of basic intrusions or serpentine, one should be on the

lookout for chomite, among other minerals. (Also remember that basic intrusives are favorable to the deposition of nickel and platinum).

Alaska's best known chromite deposits are described in USGS Bulletin 931-G, Chromite Deposits of Kenai Peninsula and USGS Bulletin 936-G, Chromite Deposits of Red Bluff Bay and Vicinity, Baranof Island. U.S. Bureau of Mines RI 3885 is a good report on exploration of the Red Mountain deposits done by the Bureau.

The Kenai deposits are at Claim Point and Red Mountain. These deposits are tabular, banded bodies in dunite intrusions. The Star 4 ore body at Red Mountain is being mined, and is the source of the only Alaskan Chrome production at present. Further production at Red Mountain and Claim Point is a future probability. The Red Mountain intrusive is elliptical in shape and about 2 by 4 miles in size. As is characteristic with this type of intrusive, little vegetation grows there, and the contact with the surrounding country rock is sharply marked by the presence on one side and absence on the other of trees and brush.

The Red Bluff Bay deposits are in dunite and pyroxinite and are not so regular in shape nor as large as those on the Kenai Peninsula. With the possible exception of one deposit, there does not appear at this time to be much chance of a commercial venture in this area. Chromite also exists in the Eklutna area between Anchorage and Palmer, in the Nelchina district, in the Ketchikan district, and many other locations in Alaska.

The General Services Administration at present and for the next several years is operating a chromite purchasing program. It pays a base price at the Grants Pass, Oregon, purchase depot of \$115 per ton for ore that is 48% Cr_2O_3 and has chrome-iron ratio of 3 to 1. For each one percent above or below 48% (minimum allowed is 42%) \$3.00 is added or subtracted. The same is true for each increase or decrease (down to 2.5 to 1) of 0.1 in the chrome-iron ratio. The same price arrangement does not necessarily apply to Alaska, though, and anyone interested should contact the GSA directly. There are a number of private firms who are interested in chromite purchases, but the GSA price is much higher than can be obtained on the competitive market.

E. AND M. J. METAL MARKET PRICES

	May 26, 1955	Month Ago	Year Ago
Copper, per lb.	35.7¢	35.7¢	29.7¢
Lead, per lb.	15¢	15¢	14¢
Zinc, per lb.	12¢	12¢	10-1/4¢
Tin, per lb.	91-3/4¢	91-3/8¢	95-3/4¢
Quicksilver, per flask	\$300-302	\$315-318	\$233-235
Silver, foreign, New York	90-1/4¢	87¢	85-1/4¢
Silver, domestic, per oz.	90-1/2¢	90-1/2¢	90-1/2¢
Platinum, per oz.	\$76-79	\$76-80	\$84-87
Nickel, per lb.	64-1/2¢	64-1/2¢	60¢
Molybdenum, per lb.	\$3	\$3	\$3
Tungsten ore, per unit	\$63	\$63	#63

REMINDER: The assessment work year ends July 1st at noon.