

### MINING ACTIVITIES

FOURTH DIVISION - The U.S. Smelting Refining and Mining Company are moving their No. 5 dredge from Eldorado Creek to Dome Creek in the Fairbanks District. This is the fourth dredge move for the company in recent years. The dredge is cut into four sections, and these huge pieces are moved on a specially built bob sled that has gas heaters to heat the runners for easier starting.

The Canadian mining concern mentioned last month in connection with the DeCoursey mercury properties on the lower Kuskokwim is Brewis Red Lake Mines, Inc. They are planning to amalgamate with DeCoursey Mountain Mining Co. and operate that firm as a wholly-owned subsidiary. The new company name will be DeCoursey-Brewis Minerals, Ltd. New equipment is being moved toward the properties, and key men will soon be on hand for the resumption of exploration and development work.

### COAL MINE NEWS

After long delays in obtaining a lease and other difficulties, the Arctic Coal Company finally officially opened their Lignite Creek mine in the Healy field and started on their 6000-ton military contract. The company has built a road from the mine to the Nenana River and is freighting the coal across the river ice to the railroad with four large trucks.

### PROSPECTING EQUIPMENT

A Swedish gasoline-powered portable rock drill of the jackhammer type was developed in 1950 and appears to be doing well. It is known as the "Pionjar" drill and is handled by V. R. Shilhan, 30 Evelyn Avenue, Toronto 9, Ontario. The drill weighs 86 pounds and is powered with a 6 HP engine. Its drilling speed in medium-hard granite is reported to be 16 inches per minute with a bit diameter of 1.06 inches, and 10 inches per minute with a bit of 1.34 inches in diameter. Its drilling depth is guaranteed to be 13 feet in granite. Fuel consumption is reported to be 0.086 pints per drilled foot. An exhaust hose can be fitted to the drill to carry the exhaust away from the working place if desired. An unusual and desirable feature is a grinding attachment that is operated by the drill to sharpen the tungsten carbide bits.

### HOPE MINING BILL

Rep. Hope (Rep., Kans.) has reintroduced his bill (H.R. 110) in Congress which contains a number of measures in which Alaskan miners should be interested. The bill pertains only to national forest lands, and is being pushed by the U. S. Department of Agriculture. Some of its provisions would;

(1) Allow the locator of a mining claim "to occupy and use so much of the surface of the land covered by the location as may be reasonably necessary", but he would not acquire title to timber "now or hereafter growing thereon." The locator would be permitted to use the timber in the development and operation of a mine until the U. S. disposed of the timber.

(2) Provide "that placer mining operations shall be conducted under such rules and regulations as the Secretary of Agriculture may adopt for the minimizing of soil erosion, pollution of the water resources, and damage to watersheds, and for restoration of the surface."

(3) Require recordation in District Land Offices of existing valid mining claims within three years from the date of the bill's enactment, and failure to do so "shall constitute abandonment of the claim as to the United States."

(4) Require patenting of existing claims within five years; otherwise the claims would become "null and void unless relocated under the provisions of this Act."

(5) Require recordation of all subsequent mining claims in District Land Offices, as well as annual assessment work on such claims; failure to give notice of the performance of assessment work for two consecutive years "shall constitute abandonment of the claim as to the United States."

(6) Provide that "a mining claim hereafter made on the national forests may be determined to be invalid for failure to comply with the provisions of this Act or other laws applicable thereto, including but not limited to a showing that (1) the deposits discovered are insufficient to justify further development of a claim as a mining property, or (2) that assessment requirements have not been met,"

(7) Automatically invalidate claims located after the bill's passage "if no application for patent is made within ten years after establishment of the claim."

The Cabinet Committee on Minerals Policy has made recommendations in its report to the President which are among those long advocated by the mining industry. The Cabinet group consists of secretaries of Interior, State, and Commerce, and the Director of Office of Defense Mobilization (ODM).

The recommendations are:

1. Review all stockpile objectives and establish new long-term objectives for which materials would be purchased only at times of abundant supply and low price.
2. Evaluate the supply-demand situation by materials to establish the proper level of efficient domestic production to maintain the mobilization base.
3. Delegation of the necessary authority by ODM to Interior and Commerce to carry on mobilization planning for emergencies.
4. Eliminate tax deterrents to the sound development of our mineral resources.
5. Strengthen the program of financial assistance to private industry for exploration of new mineral sources by Defense Minerals Exploration Administration.
6. Accelerate federal topographic and geologic mapping, research, and development of geochemical, geophysical methods.
7. Expand Interior's direct exploration activities in areas beyond the scope of private industry.
8. Revise mining laws to recognize and encourage new exploration methods.
9. Strengthen and coordinate collection of mineral statistics and information.
10. Intensify Interior's program of mineral and metal research.
11. Establish, with the Secretary of Interior, an advisory industry committee for better coordination between government and industry.

### TUNGSTEN

Tungsten is one of the important ferroalloy metals, which are used in the manufacture of steel. Its chief use is as a hardening agent in high-speed tool steel. A common, but much smaller use is in electric light filaments, and a use that is on the increase is that of core material in armor-piercing projectiles. The United States imports large quantities of tungsten, most of which come from Korea, and smaller amounts from Bolivia, Spain, Brazil, Thailand, Burma, and Canada.

In view of the unsettled world conditions, many of these sources might be cut off rather quickly. U. S. consumption at present is something on the order of 8 million pounds of concentrates.

In 1953, controls were released from tungsten which had been in short supply until then, at which time domestic production increased 20% and world prices dropped 60%. A government price support program is now in effect which places a floor price of \$63 per unit on tungsten concentrates under certain conditions, but the foreign price at present is \$25 to \$28 per unit for concentrates containing 65% or more of tungsten trioxide. A unit is one percent in a ton, or 20 pounds of contained  $W_{O_3}$ . The General Services Administration has purchase depots for tungsten in the States, but shipments to them must be of a minimum tonnage.

The principal minerals of tungsten found in Alaska are scheelite and wolframite, with scheelite the most abundant. Scheelite is calcium tungstate and is a light colored mineral difficult to distinguish from the quartz or limestone in which it may occur. It can be easily identified with a mineral light under which it fluoresces with a bright blue-white color. It is much heavier than quartz or limestone and can be separated from lighter minerals by panning. Wolframite is iron manganese tungstate and is brown in color.

Tungsten is most likely to be found at or near a granitic contact, the tungsten minerals extending out into the rocks, such as limestone, schist, slate, etc., that are in contact with the granite-type intrusive. Limestone is particularly favorable. In prospecting, the light colored minerals found in the vicinity of such contacts should be carefully checked, because scheelite can be easily missed as a result of its similarity to quartz. Tungsten is found throughout the Territory in nearly all districts, and is particularly abundant, mostly in small deposits in the Fairbanks District, Seward Peninsula, Willow Creek District, and SE Alaska. It is found in many placer concentrates, but has been saved and sold lately by only one placer miner to the best of TDM's knowledge--Russel Schaefer, mining in the Aniak District. Lode production has been largely from the Stepovich property in the Fairbanks District and the Riverside Mine in the Hyder District.

E. AND M. J. METAL MARKET PRICES

	Jan. 27, 1955	Month Ago	Year Ago
Copper, per lb.	29.7¢	29.7¢	29.7¢
Lead, per lb.	15¢	15¢	13¢
Zinc, per lb.	11-1/2¢	11-1/2¢	9-1/2¢
Tin, per lb.	86-1/4¢	87-1/2¢	85-1/4¢
Quicksilver, per flask	\$322-324	\$322-324	\$188-190
Silver, foreign, New York	85-1/4¢	85-1/4¢	84-1/4¢
Silver, domestic, per oz.	90-1/2¢	90-1/2¢	90-1/2¢
Platinum, per oz.	\$78-84	\$78-84	\$90-92
Nickel, per lb.	64-1/2¢	64-1/2¢	60¢
Molybdenum, per lb.	\$3	\$3	\$3
Tungsten ore, per unit	\$63	\$63	\$63

MINERAL PRODUCTION OF ALASKA, 1952-1954

	1952		1953		1954 (1)	
	Quantity	Value	Quantity	Value	Quantity	Value
Antimony ore . . . . .	short tons	420	(2)			
Chromite . . . . .	do				3,360	\$ 146,000
Lay . . . . .	do				(2)	
Coal, bituminous . . . . .	do	686,218	\$5,779,423	861,471	\$8,451,542	8,162,500
Gold . . . . .	troy ounces	240,557	8,419,495	253,783	8,862,405	8,847,790
Lead . . . . .	short tons	1	386	9	2,240	
Mercury . . . . .	short tons	28	5,575	40	7,721	
Sand and gravel . . . . .	short tons	781,926	8,650,582	7,689,014	5,079,681	270,584
Silver . . . . .	troy ounces	32,986	29,854	35,387	32,027	5,119,710
Stone . . . . .	short tons	(2)	(2)	47,086	169,711	31,803
Tin . . . . .	long tons	82	220,956	49	105,917	176,610
Tungsten (60% concentrates) . . . . .	short tons	8	(2)	3	(2)	342,000
Undistributed (3) . . . . .			3,195,336			1,231,350
(4)						
Total . . . . .		\$26,302,000		\$24,252,000		\$24,328,000

- 1) All figures for 1954 are preliminary and subject to revision.
- (2) Value included with "Undistributed".
- (3) Includes platinum, gem stones, and other minerals whose values must be concealed to avoid disclosing individual company incomes.
- (4) No zinc produced during 1952 to 1954. An estimated four tons of copper was produced by three small operations late in 1954, but figures were not yet available.

Notes Above statistics with the exception of the 1954 coal figures prepared by William H. Kerns, Mineral Industry Division, U. S. Bureau of Mines, Region I, P. O. Box 560, Juneau, Alaska.