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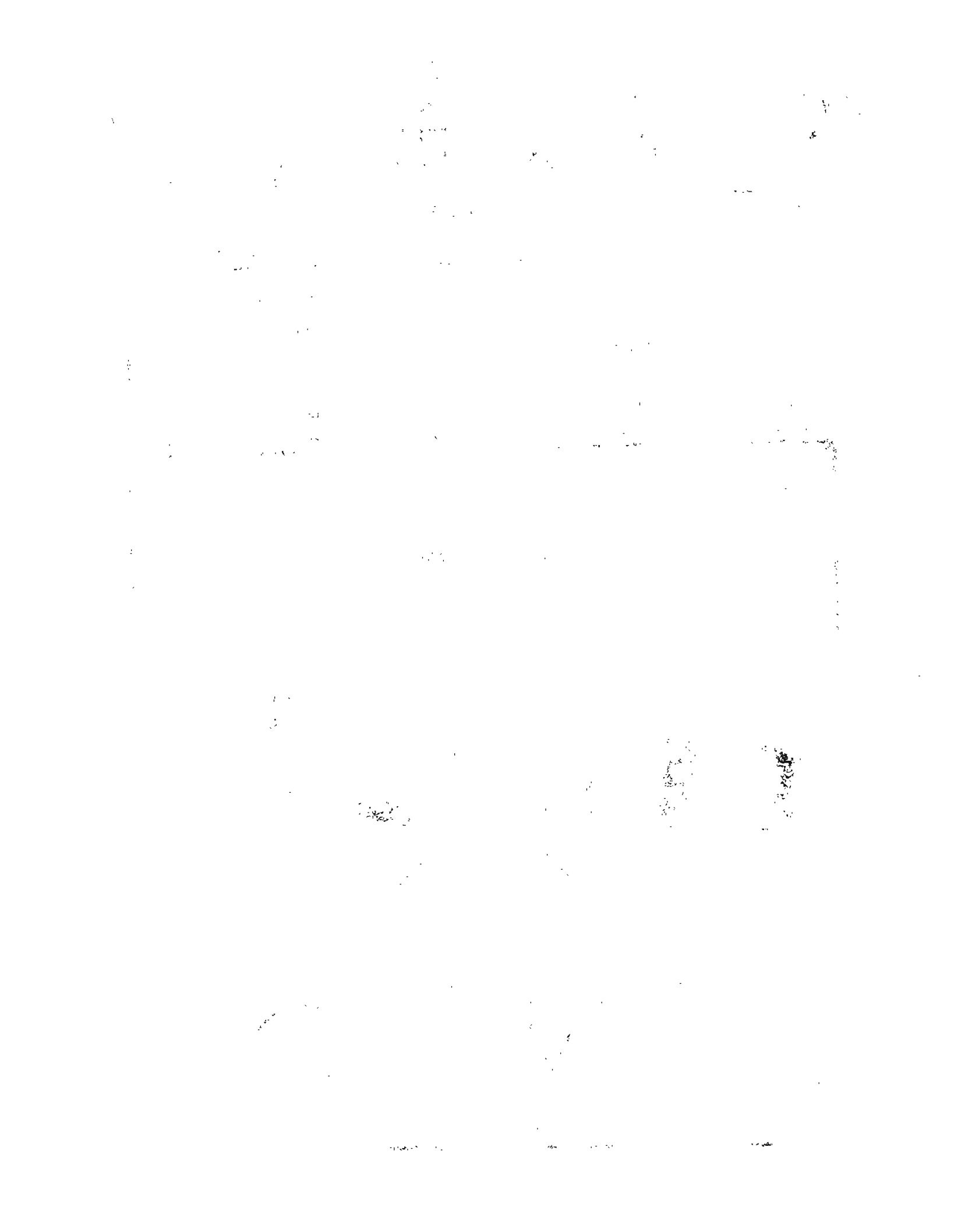


Published to Accelerate the Development of the Mining Industry in Alaska

Kelth H. Miller - Governor

Thomas E. Kelly - Commissioner

James A. Williams - Director



ANTIMONY AND MERCURY PRODUCTION INCREASES IN ALASKA

The production of mercury and antimony increased during the past summer season. The high price for antimony induced several operators in the Fairbanks area and one operator at Stampede to produce and market antimony. The Red Devil mercury mine is making a bulk sulfide concentrate of antimony and mercury. The concentrate is being sent outside Alaska for recovery of both metals. With the decline of the price of antimony in September, the mine at Stampede closed for the winter, but other mines in the Fairbanks area have continued to operate.

Our preliminary estimate is that Alaska will produce about 1400 tons of antimony metal in 1970.

The past summer was a productive year for mercury. Several field parties explored for mercury in the Kantishna district and the Kuskokwim region. At least three and possibly four mines went into production. As previously mentioned, the Red Devil mine was re-opened and the concentrator is operating at full capacity. The ore is being produced from both the underground mine and an open pit. Both of these are expected to continue to operate through the winter.

The second largest Alaska mercury producer is the Haday Mining Company at Cinnabar Creek. During the early part of the year, a small concentrator was erected near the open pit mine. With a maximum crew of eight men, the company shipped over 183,000 pounds of cinnabar concentrate from Aniak via Wien Consolidated Airlines. As the pit at Cinnabar Creek was enlarged by mining during the summer, additional areas of high grade cinnabar ore were uncovered.

With the increased activity this year, Alaska should again rank No. 3 in the production of mercury in the United States.

DR. OSBORN APPOINTED DIRECTOR OF THE BUREAU OF MINES

On October 7, 1970, President Nixon announced his intention to nominate Elbert Franklin Osborn to be Director of the U. S. Bureau of Mines. The appointment has since been confirmed. A news release provides information on his background as follows:

Dr. Osborn has been vice president for research of the Pennsylvania State University since 1959. Prior to this he served as associate dean and dean, College of Mineral Industries at the University. He is a former director of the American Geological Institute (1956-59), president of the Geochemical Society (1967-68), and president of the Mineralogical Society of America (1960-61). Dr. Osborn holds memberships in 17 professional societies.

Dr. Osborn, 59, received his B.A. at DePauw University in 1932, his master's degree at Northwestern in 1934, and his Ph.D. from California Institute of Technology in 1937. He is a member and past president of both Phi Beta Kappa, Penn State Chapter, and Sigma Xi, Penn State Chapter. He is the author of over 90 published articles.

LAND RECLASSIFIED FOR MULTIPLE USE MANAGEMENT

The U. S. Bureau of Land Management is proposing for reclassification approximately 19.5 million acres for multiple use management in the area roughly bounded by the Canadian border to the east and Livengood to the west, south of the Yukon River and north of Nabesna, south of the Alaskan Highway. The area has been divided into two units, the Fortymile Planning Unit, and the White Mountain Planning Unit.

In the Fortymile Planning Unit, over 5,000 acres are to be reserved for recreational use exclusively and will be closed to mining entry. These lands are along the Taylor Highway. In the White Mountain Planning Unit, over 1,000 acres will be reserved for recreational use and closed to mining along the Steese Highway. Other than the relatively small recreational areas, the units will not be closed to mining according to the BLM.

Detailed information in regard to the proposed multiple use management classification can be obtained from the United States Department of the Interior, Bureau of Land Management, Fairbanks District and Land Office, Fairbanks, Alaska 99701.

MINES LIAISON OFFICE OPENS IN ANCHORAGE

A new state liaison office for the U. S. Bureau of Mines will go into operation in Anchorage about November 1, according to William Eckard, chief of the Alaska Field Operation Center in Juneau. Eckard said the liaison officer will be Alfred L. Service, who is presently the supervising mining engineer with the Bureau of Mines' Spokane Field Operation Center. Service is a graduate of the University of Alaska.

The provision for the liaison post, and others like it across the country, was made during a general reorganization of the Bureau last April. Interior Secretary Walter J. Hickel has said the goal of the new job is "to further federal-state cooperation on problems of mineral supply and environmental quality."

Service will handle part of the Bureau's local-level business, as well as working for state involvement in areas of mutual interest and functioning as a primary public contact. He will conduct specific inquiries on assignment and make routine reports upon activities in the mineral industry.

LOST RIVER REPORTS PROGRESS

In a report to the Northern Miner, Mining Engineer Murray Watts, who heads both PCE Exploration and the Lost River Mining Company, stated that Lost River has established a reserve of more than 10 million tons of open pit ore. The deposit is at Lost River, about 90 miles northwest of Nome and near the Bering Sea coast. It is a multimineral deposit of fluorite-tin-tungsten, with fluorite the most important mineral. According to the Northern Miner, this will make the deposit the largest fluorite deposit in North America. Exploration is continuing with two drills that will operate through mid-November.

Work being carried out by the mineral and metallurgical processing division of the Battelle Memorial Institute has already demonstrated that the fluorite can be effectively beneficiated to a near acid grade (97% CaF_2) by flotation, with an 85% recovery. Furthermore, "it appears technically feasible to achieve tin concentrates assaying up to 70% Sn with overall recoveries as high as 80%-85% and to make tungsten concentrates of 70% WO_3 with an 80% recovery", Battelle reports.

The University of Alaska Mineral Industry Research Laboratory has worked with PCE on two occasions. A beneficiation study in cooperation with Battelle was conducted on Lost River ore, and analytical techniques were developed and samples analyzed for tin, tungsten, beryllium, and fluorine.

Fluorite is considered as particularly significant at this time due to a developing world shortage and a trend towards a doubling of consumption requirements within the near future. One of the biggest users is the aluminum industry, but another fast developing and substantial consumer is the oxygen process for making steel.

The Northern Miner also reports that at current prices a grade of 28%, which is about the grade at Lost River, is worth about \$18 per ton. The United States, which imports about 90% of its fluorite (mostly from Mexico), imposes an import duty of about \$8 per ton. Inasmuch as Alaska is part of the U.S., the Lost River ore would not be subject to this duty.

The Northern Miner states further that in a summary report submitted on September 15 by Dr. Michael Jeremic and based on drilling results to July 31 only, ore reserves are calculated at 5,974,021 tons in the No. 1 zone grading 30.80% CaF₂ and 0.30% tin, of which 5,305,500 tons grade 30.80% fluorite, 0.22% beryllium and 0.42% tin. The No. 2 zone contained 4,093,060 tons averaging 28.0% CaF₂ and 0.20% BaO (beryllium). This alone would be sufficient to supply a 2,000 ton mill for 15 years. But, as intimated above, officials are shooting very much higher.

PRICE OF COPPER FALLS

The Metals Week reported that on Wednesday, October 21, 1970, Phelps Dodge lowered the price of copper by 4¢ effective on Thursday, October 27, 1970. By Friday morning Anaconda, Inspiration, and Cities Service had followed, while Kennecott and Copper Range were still considering the move. The assumption is that they will have to follow. Inco cut its Canadian price to the equivalent of US 56¢.

Thus ended a decade of rising prices for copper. In January 1961, the US producer price was lowered from 30¢ to 29¢. Since that time, all price changes have been increases — except for the Johnson administration's forced rollback of a 2¢ hike from 36¢ to 38¢ in late 1965. The 60¢ price had been in effect since April 1.

Many trade observers have been saying that the 60¢ US price would not hold in the face of much lower foreign producer, dealer, and scrap prices. Yet when the Phelps Dodge move finally came, there was a moment of stunned surprise. Had the copper bubble really finally burst?

Apparently it has. And unless there is an upturn in demand both here and abroad, the new 56¢ price might not last long. Merchants on Friday were quoting 51-3/4¢.

One year ago, the London Metal Exchange was holding firm at 70¢ or higher; now the price has drifted below 50¢. The declining price itself is not as remarkable as are the conditions under which the decline has taken place. Chile's Chuquicamata — the world's largest — has been struck since October. Zambia's Mufilira mine — another one of the copper giants — was shut down by a disastrous cave-in and will be about 80% inoperative through all of next year. "Chuqui" represents a lost supply of 26,000 tpm and Mufilira close to 14,000 tpm.

Despite these two major supply disruptions — plus several on-again, off-again strikes in Peru — the LME has continued to sink. London warehouse stocks are at a record level of

over 53,000 tons and the Japanese reportedly have excess inventories which they may unload. In the midst of this softening market, CIPEC members -- Chile, Zambia, the Congo, and Peru -- will soon be getting together to decide what, if anything, they should do to deal with the situation.

In view of the Chuqui strike and the Mufilira cave-in, it seems quite likely that Chile and Zambia will not look favorably on additional production cutbacks, but a move away from LME pricing back to a common CIPEC price might well be their strategy.

If the US mines follow the pattern established over the past decade, 1971 will be a year for negotiations with labor unions. This has, in the past, shut down the entire industry or at least a large segment of the industry. Therefore, it would appear that the future price of copper will be subject to considerable speculation during the next year with factors to stabilize, raise, or lower the price of copper.

MINING CLAIMS

<u>NUMBER OF CLAIMS</u>	<u>CREEK OR AREA</u>	<u>QUADRANGLE</u>	<u>DATE NOTICE POSTED</u>
60	Arctic Creek	Ambler River	August, 1970
14	Klery Creek	Baird Mountains	July, 1970
7	Rainy & Arsenic Creeks	Bethel	August, 1970
2	No Grub Creek	Big Delta	August, 1970
7	Bradfield Canal	Bradfield Canal	August, September, 1970
2	Eagle Creek	Circle	September, 1970
18	Flume, Easter & Bonanza Creeks	Eagle	August, September, 1970
7	Godge Creek	Eagle	July, 1970
4	Walkers Fork Creek	Eagle	August, 1970
6	Wattamuse Creek	Goodnews	September, 1970
3	Clear Creek	Hughes	July, 1970
5	Bellows & Bear Creek	Livengood	September, 1970
2	Williams Peak	McCarthy	September, 1970
4	Smith Lake	McGrath	July, 1970
3	Utopia Creek	Melozitna	September, 1970
6	Delta River	Mt. Hayes	February, 1970
11	Red Rock Canyon	Mt. Hayes	August, 1970
6	Glacier Creek	Mt. McKinley	August, 1970
31	Bond Creek	Nabesna	June, August, 1970
12	Bishop Creek	Nulato	July, 1970
16	McKinley Creek	Skagway	September, 1970
23	Mountain Top Creek	Sleetmute	September, 1970
10	Baldry Mountain	Tanana	June, August, 1970
22	Mile 6 Taylor Highway	Tanacross	August, 1970

METAL MARKET

	<u>October 26, 1970</u>	<u>Month Ago</u>	<u>Year Ago</u>
Antimony ore, stu equivalent European ore	\$16.96-18.70	\$22.32-24.11	\$13.00-13.25
Barite (drilling mud grade per ton)	\$12-16	\$12-16	\$12-16
Beryllium powder 98% per ton	\$54-66	\$54-66	\$54-66
Chrome ore per long ton	\$31-35	\$31-35	\$31-35
Copper per lb.	56.0¢	59.6¢	52.0¢
Gold per oz.	\$38.70	\$35.90	\$40.85
Lead per lb.	15.0¢	15.0¢	15.5¢
Mercury per 76# flask	\$340-345	\$338-355	\$400-495
Molybdenum conc. per lb.	\$1.72	\$1.72	\$1.72
Nickel per lb.	\$1.33	\$1.28	\$1.03
Platinum per oz.	\$122-127	\$130-135	\$120
Silver, New York, per oz.	172.6¢	177.5¢	187.2¢
Tin per lb.	174.0¢	177.7¢	166.6¢
Titanium ore per ton	\$30-35	\$30-35	\$20-21
Tungsten per unit	\$50-53	\$50-55	\$43.00
Zinc per lb.	15.5¢	15.5¢	15.5¢

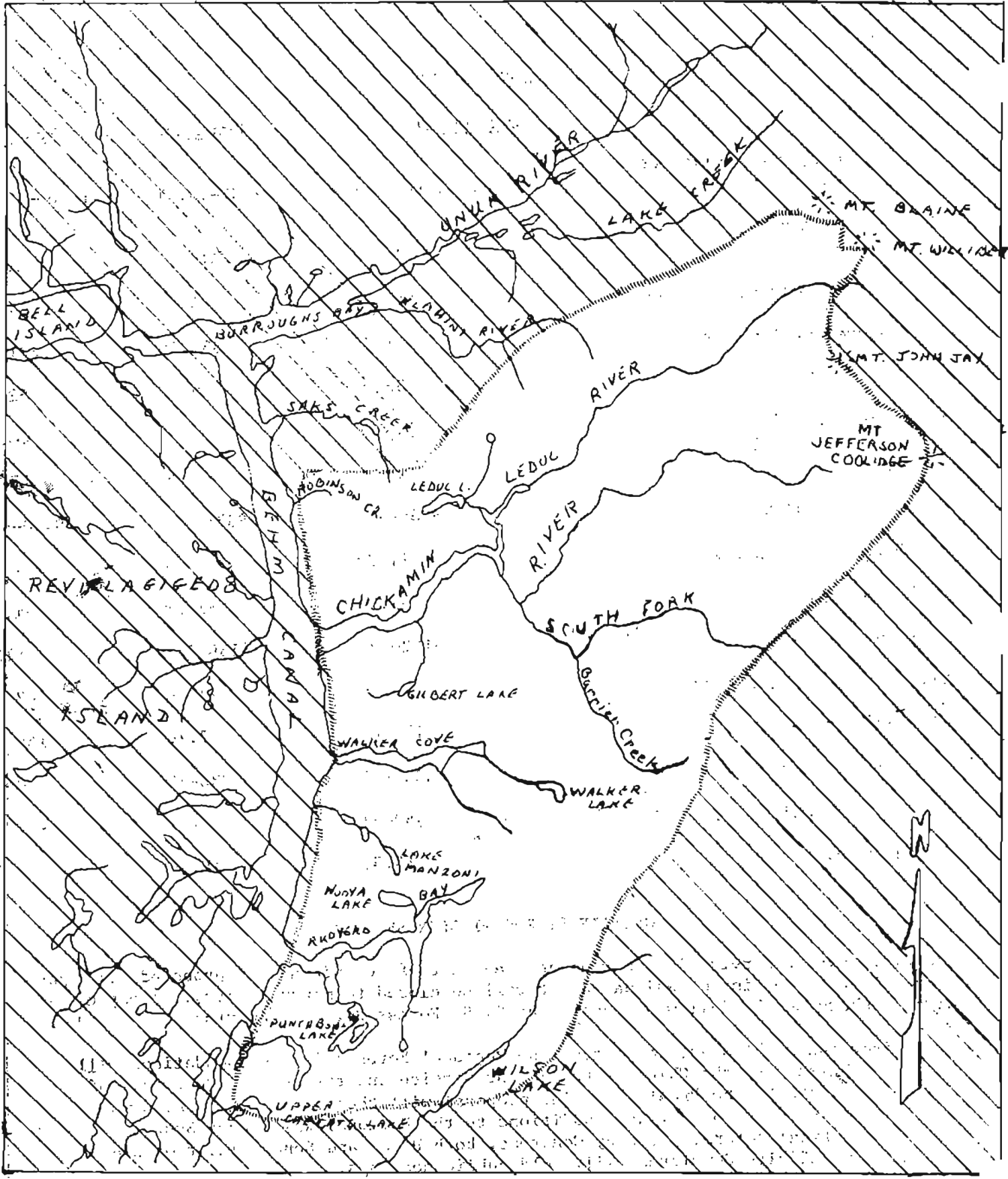
GRANITE FIORDS WILDERNESS AREA

The U. S. Forest Service is studying an area east of Ketchikan as a proposed wilderness area. If the area is so designated, it will be closed to mineral entry. A map of the area is shown on the following page. The U. S. Forest Service reports:

After the studies are completed, the Regional Forester's recommendations will be submitted to the Chief of the Forest Service and through the Secretary of Agriculture to the President. The proposal will then go to Congress, whose authority it is to designate additions to the National Wilderness System. Before final determination by Congress, both House and Senate Interior and Insular Affairs Committees will hold public hearings.

The Granite Fiords Wilderness Study area will be managed by the Forest Service to protect the wild character of the land until Congress makes its final decision.

For more information, please write to: Forest Supervisor; South Tongass National Forest, P. O. Box 2278, Ketchikan, Alaska 99901



500,000-ACRE GRANITE FIORDS WILDERNESS AREA

PROPOSED BY U. S. FOREST SERVICE NEAR KETCHIKAN, ALASKA