**PROPERTY OF
LIBRARY
STATE OF ALASKA
DIVISION OF
GEOLOGICAL SURVEY**

State of Alaska
Department of Natural Resources
DIVISION OF MINES AND MINERALS

P. O. Box 1391
Juneau, Alaska

MINES AND PETROLEUM BULLETIN

July 1963

Vol. XI
No. 7

MINING ACTIVITY

Northcentral District - The Mining Record reports that Federal Resources Corp. of Salt Lake City has agreed to help Grandview Mines, Inc., and Metaline Mining and Leasing Co. of Spokane in the development of Little Squaw Mining Co.'s Chandalar property. The agreement provides for financial aid on a step-by-step basis and depends on the result of this years exploration.

Supplies have been flown in to Chandalar Lake and work is progressing on the road and airstrip. Completion of the exploration program started last year under a participating loan agreement with the OME is expected this year.

Central District - Keystone Mines, Inc. is working on the Fairbanks-Wolf Creek divide. They are currently mining on a small scale while awaiting approval of their OME participating loan application.

COAL CONTRACTS

Coal contracts for the coming year have been announced and indicate an increase in consumption by the military. Production this year will be higher than any previous year of record if the domestic market holds as well as it has in the past. The Usibelli Mine was again awarded the largest single contract of 378,522 tons. A brief compilation of coal contracts follow:

Mine	1960		1961		1962		1963	
	tons	\$/ton	tons	\$/ton	tons	\$/ton	tons	\$/ton
Usibelli (& Suntrana)	236,000		382,000	5.96	359,120		378,522	6.13
Cripple Creek or Arctic Coal Co.	50,000		20,000	7.00	---		20,000	6.45
Evan Jones	130,000		130,000	9.90	160,000		180,000	7.95
Mrak	90,000		45,000	11.50	60,000		74,362	8.00
	506,000		577,000		579,120		652,884	

OIL NEWS

Two permits to drill have been issued since the last report. They are as follows: Standard Oil Company of California, Soldotna Creek Unit #23-3 - Surface location: 1980' N and 1050' E of the SW Corner, Section 3, T7N R9W SM. Projected bottom hole location: Approximately 2212' N and 1763' E of SW Corner, Section 3, T7N R9W SM or approximately 750' N 72°E of the surface location. This directional hole is a field development well.

Colorado Oil & Gas Corporation - Gubik Unit #1, 1900' FWL, 3125" FSL. Protracted Block 5 T1N R3E UPM. (This location falls in protracted section 21). Sinclair Oil and Gas and B. P. Exploration Company (Alaska) Inc. are also interest holders in the Gubik Unit. This operation represents the first well drilled as a commercial oil and gas enterprise

north of the Arctic Circle in Alaska. The rig which will drill this hole was formerly used in the Navy's Arctic slope exploration.

Drilling Activity:

<u>Operator</u>	<u>Well Number</u>	<u>Status 6/27/63</u>
Richfield	Wide Bay Unit	Drilling
Pan American	Cook Inlet #1	Burning
Pan American	Middle Ground Shoal #2	Drilling
Pan American	Cook Inlet #1A (Relief well)	Drilling
Pan American	Moose Creek #1	Drilling
Shell	Middle Ground Shoal #1	Drilling
British Petroleum	WRU #3	Drilling
SoCal	SRU 21-16	Drilling
Union	Kenai Unit 43-9	Drilling

Production, Swanson River Field, Hemlock Zone:

	<u>Producing Wells</u>	<u>Oil-Barrels</u>	<u>Gas (MCF)</u>
May 1963	49	892,244	217,466
Cumulative to June 1, 1963		21,771,380	4,326,755

<u>Production, Kenai Gas Field:</u>	<u>Producing Wells</u>	<u>Gas (MCF)</u>
May 1963	1	243,924
Cumulative to June 1, 1963		3,232,069

Production, Sterling Gas Field:

May 1963	1	3,872
Cumulative to June 1, 1963		43,932

Production, Swanson River Gas Field, Kenai Zone:

May 1963	4	378,262
Cumulative to June 1, 1963		1,694,598

Gas Injection, Swanson River Field, Hemlock Zone:

May 1963	3	535,667
Cumulative to June 1, 1963		2,424,595

Petroleum Engineer Resigns:

Kenneth Davison, State Petroleum Engineer, has resigned for health reasons. A replacement has not yet been named. "Ty" is a "top hand" and his shoes will be hard to fill.

NEW REPORTS

One of the projects financed by the DM&M under its cooperative graduate student mapping program with the University of Alaska was the study and mapping of an area of the Fairbanks Mining District. The project resulted in a Master's Thesis by the worker, Jim M. Brown, entitled "Bedrock Geology and Ore Deposits of the Pedro Dome Area, Fairbanks Mining District, Alaska". Brown's work and his thesis have made a definite

contribution to the economic geology of the area, and when funds permit we hope to publish this thesis. In the meantime, it is available for study at the DM&M offices in Room 105, Alaska State Office Building, Fairbanks; 329 Second Avenue, Anchorage; and Room 404, Capitol Building, Juneau.

MINING COMPANY RECEIVES SMALL BUSINESS LOAN

The Small Business Administration has approved a bank-participating loan to Flat Creek Placers of \$40,000. If not the first, this is one of the very few loans by the SBA to mining companies in Alaska.

INTERNAL REVENUE SERVICE AND LEASING

The Internal Revenue Service has announced that it would not follow the decision of the U.S. Court of Appeals for the 10th Circuit which held that a mineral conveyance in return for a lump-sum payment and future royalties payable out of production resulted in a capital gains transaction. IRS contends that the lump sum or down payment is income whereas the court held that it was subject to capital gains treatment. The case will eventually have a Supreme Court review.

NEWMONT MINING CORPORATION ELECTS NEW VICE PRESIDENT

Robert B. Fulton, ME, well known in Alaskan mining and exploration circles, has been elected a Vice President of Newmont Mining Corporation. Bob has been very active in nearly all parts of Alaska in recent years as Engineer in Charge of Newmont's various exploration and development programs.

ALASKA FIELD PROGRAM FOR THE SEASON OF 1963 BY THE U.S.G.S.

The Geological Survey has published its booklet that describes the Alaska Field Program for 1963. A brief summary follows.

Topographic Division

Under the direction of George D. Whitmore, Chief Topographic Engineer, this division will have six men in the field under the supervision of Arthur Gervais, Jr., Resident Engineer. They will map 11,700 square miles from Unimak to Ugashik, including the off-shore islands. Much of the topographic mapping of Alaska in Fiscal Year 1964 will consist of cartographic finishing and photogrammetric surveys. A continued effort is being made to replace the present reconnaissance maps with a newer series.

Water-Resources Division

A total of 22 persons will be actively engaged in making surface-water, ground-water, quality-of-water, and streamflow investigations. The Division has programmed work in the Anchorage, Palmer, Big Delta, Nenana, Chitina, Rampart, Chugiak, Homer, Cordova, Katmai, and permafrost areas. Many of these projects are in cooperation with other Federal and State Agencies.

Conservation Division

The Branch of Mining Operations, under the supervision of L. H. Saarela, supervises mining operations on Federal lands in accordance with the Mineral Leasing Act of 1920. The Branch of Oil and Gas Operations, under the supervision of M. H. Soyster, is responsible for oil and gas operations on Federal lands.

Branch of Mineral Classification

This branch under the supervision of Miss Ruth A. M. Schmidt with the assistance of one other geologist conducts routine on-the-spot investigations relative to oil and gas problems and serves as geologic consultants to the Oil and Gas and Mining Supervisors.

Branch of Waterpower Classification

This Branch appraises the water-power potential of selected streams and lakes. One field party under Gordon Giles, will measure ablation and movement of the Barrier Glacier at outlet of Lake Chakachamna. They will also map reservoir and dam sites on the Jack River. Another party, under Jack Dugwyler, will traverse and map the stream from Grace Lake and Tyee Lake.

Geologic Division

During the 1963 season, 21 full-time geologists, assisted by seasonal professional and nonprofessional personnel, will conduct field geologic investigations throughout Alaska. G. Donald Eberlein, Chief, Branch of Alaskan Geology, will visit field parties and examine areas for planning future work.

Regional synthesis and topical studies will be made at various places including Haines, Tanana, Copper River lowland, Prince William Sound, Kivalina, Baranof Island, Kendrick Bay, Kodiak Island, Russell Fiord, Wrangell Mountains, Illiamna, Charley River, Elliot Highway, Kobuk Marshall, Brooks Range, and several other places.

Branch of Base and Ferrous Metals

C. L. Sainsbury, Project Chief, will continue geologic mapping in the York Mountains. This is in the general area in which he found two beryllium deposits last year.

Branch of Geophysics

Rex Allen, Geophysicist, will begin a gravity survey of the upper Yukon and Porcupine drainage areas.

Branch of Military Geology

Three field parties under William E. Davis, Helen L. Foster, and Henry Schmoll, party chiefs, will map along the Steese and Taylor Highways.

PROSPECTOR ASSISTANCE PROGRAM

To date (July 1), a total of 25 applications on the prescribed PAP application form have been received. Ten applications have been approved by the screening boards and Department of Natural Resources, five have been disapproved, and the remainder are either being processed by the Division or screening boards, or are waiting for further information requested from the applicants to clarify points not made clear in their applications. Of the \$50,000 appropriation for PAP, a total of \$35,787 has thus far been requested, but only approximately \$14,000 has been committed for the programs approved to date.

From the above statistics, it can be seen that there is still money (and time) available for more applications for prospecting assistance under PAP. Application forms should be requested directly from the Juneau office of the DM&M at Box 1391, Juneau, Alaska, though your local DM&M representative will send in your request for you. Alaskan residence, though preferred, is not mandatory. Numerous requests for forms and regulations have been received from residents of other states but to date none

has been completed and returned for screening. Applications from ~~Alaskan residents~~ continue to come in regularly, but somewhat more slowly than was anticipated.

Processing of applications will be greatly accelerated if the questions on the application form are answered properly. It is important that the dates of each proposed trip are known since the applicant must plan to spend thirty days in the field or no compensation can be authorized. It is also important that an estimate of expenses be detailed in order that an estimate of the total reimbursement can be kept on the program. The disapproved applications have been refused by the screening boards or the Department because of lack of experience of the applicant or because the proposed program appeared to be more of an application for a partly paid vacation.

We have been quite pleased at the way most applicants have conscientiously tried to estimate their expenses closely and to keep the total requested assistance from the State as low as possible.

Basically, the program is one of financial assistance by reimbursement for up to 75% of expenses incurred for certain items and transportation by qualified prospectors on approved prospecting ventures. The reimbursement will be made only after the prospecting is finished and reports and maps are submitted. The prospector, his proposal, and his proposed expenditures must be approved before he starts out. He receives his financial assistance after the work is done.

E. AND M. J. METAL MARKET PRICES

	<u>June 27, 1963</u>	<u>Month Ago</u>	<u>Year Ago</u>
Copper, per lb.	31¢	31¢	31¢
Lead, per lb.	10.5¢	10.5¢	9.5¢
Zinc, per lb.	11.5¢	11.5¢	11.5¢
Nickel, per lb.	117.0¢	115.0¢	112.3¢
Iron, per lb.	79¢	79¢	79¢
Platinum, per oz.	\$77-80	\$77-80	\$80-85
Mercury, per flask	\$182-185	\$183-186	\$192-195
Antimony ore, per unit	\$4.25-4.35	\$4.25-4.35	\$4.50-4.75
Domestic prices not quoted.			\$46-48
Chromite ore, per long ton	\$36-38	\$36-38	\$36-38
Molybdenum conc., per lb.	\$1.40	\$1.40	\$1.40
Titanium ore, per ton	\$23-26	\$23-26	\$23-26
Tungsten ore, per unit	\$16-18	\$16-18	\$20-22
Silver, New York, per oz.	127.800¢	128.280¢	103.6¢
Silver, U. S. Treasury, per oz.	90.5¢	90.5¢	90.5¢