STATE OF ALASKA
Department of Natural Resources
DIVISION OF MINES AND MINERALS

Pouch M
Juneau, Alaska 99801

MINES AND PETROLEUM BULLETIN

July 1967

U.S. BUREAU OF MINES RESEARCH PLANS

The U.S. Bureau of Mines, Mining Research Branch, will establish an office and laboratory at the present headquarters of the Minerals Resource Branch on Juneau Isle, Douglas, Alaska. The research will begin with permafrost drilling by a newly perfected sonic drill that is expected to cut present drilling costs. Other studies of mining problems in permafrost will be pursued.

COAL CONTRACTS

Coal contracts totalling $2,840,000 for 522,000 tons of coal have been let to Usibelli Coal Company and Vitro Minerals Corporation, both situated in the Nenana coal field. The coal will be used on military bases in the Fairbanks area. The Evan Jones Coal Mine contract for the Anchorage military bases is in the sum of $2,704,800 for 210,000 tons. The awarding of the latter contract indicates that conversion of the military bases near Anchorage to natural gas is off for at least another year.

OIL AND GAS NEWS

Six applications for drilling permits were approved by the Division's Petroleum Branch as follows:

Union Oil Company of California #A-6 Trading Bay State, API #50-133-20020. Surface location: 1620' FSL and 568' FEL, Sec. 4, T9N-R13W, S.M. Bottom hole location: 1980' FNL and 1980' FEL, Sec. 4, T9N-R13W, S.M. This development location is just west of the discovery well in the Trading Bay Field.

Marathon Oil Company #2 Beaver Creek, API #50-133-20021, 590' FNL and 1979' FEL, Sec. 3, T6N-R10W, S.M. This location is about three quarters mile southeast of the #1 Beaver Creek which blew out during the drilling operations.

Pan American Petroleum Corporation #2 South Middle Ground Shoal Unit, API #50-133-20022. Surface location: 633' FSL and 1818' FWL, Sec. 35, T8N-R13W, S.M. Bottom hole location: 1980' FSL and 660' FWL, Sec. 35, T8N-R13W, S.M. This is the location for the first development well in this Unit and is in the same quarter section as the successful wildcat, the #1 MGS 18746, drilled in 1965.

Pan American Petroleum Corporation #3 South Middle Ground Shoal Unit, API #50-133-20023. Surface location: 678' FSL and 1765' FWL, Sec. 35, T8N-R13W, S.M. Bottom hole location: 660' FNL and 660' FWL, Sec. 2, T7N-R13W, S.M. This location is the south offset to the #1 MGS 18746, drilled in 1965.

Pan American Petroleum Corporation #1 Forelands State Unit API #50-133-20024. 660' FNL and 132' FEL, Sec. 22, T7N-R13W, S.M. This location is for the first Unit well and is about three and one half miles south of the platform in the South Middle Ground Shoal Unit.

Pan American Petroleum Corporation #1 Turnagain Arm Unit, API #50-283-20005. 1980' FSL and 1980' FEL, Sec. 9, T11N-R5W, S.M. This offshore wildcat location is about six miles south of Fire Island or about ten miles southwest of Anchorage.

Drilling Activity

Operator	Well Name and Number	Type*	Status (5/25/67)
Atlantic Richfield Co.	Prudhoe Bay #1	E	Temp. Suspended
Atlantic Richfield Co.	Trading Bay State #1	E	Drilling
Cities Service Oil Co.	Painter Creek #1	E	Drilling
Hunt Oil Co.	Kalgin Island State #2	E	Location
Marathon Oil Co.	Beaver Creek #1	E	Abandoned
Marathon Oil Co.	Beaver Creek #1-A	E	Testing
Marathon Oil Co.	Beaver Creek #2	E	Location
Mobil Oil Corp.	Tower #2	E	Location
Mobil Oil Corp.	Granite Point State #13-13	D	Location
Mobil Oil Corp.	Granite Point State #33-13	D	Drilling
Mobil Oil Corp.	Granite Point State #31-14	D	Drilling
Pan American Petroleum Corp.	Albert Kaloa #1	E	Location
Pan American Petroleum Corp.	Cook Inlet State 17593 #1	E	Location
Pan American Petroleum Corp.	Forelands State Unit #1	E	Location
Pan American Petroleum Corp.	Granite Point State 17586 #3	D	Drilling
Pan American Petroleum Corp.	Granite Point State 17587 #4	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #5	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #6	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #7	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #9	D	Drilling
Pan American Petroleum Corp.	MGS State 17595 #10	D	Drilling
Pan American Petroleum Corp.	MGS State 17595 #11	D	Drilling
Pan American Petroleum Corp.	North MGS State 18745 #2	E	Drilling
Pan American Petroleum Corp.	Redoubt Shoal State #1	E	Drilling
Pan American Petroleum Corp.	South MGS Unit #2	D	Location
Pan American Petroleum Corp.	South MGS Unit #3	D	Location
Pan American Petroleum Corp.	Turnagain Arm Unit #1	E	Location
Placid Oil Co.	State 17580 #1	E	Drilling
Shell Oil Co.	MGS #A-33-1	D	Testing
Shell Oil Co.	MGS #A-42-11	D	Drilling
Shell Oil Co.	MGS #A-11-13	D	Comp. Oil Well
Standard Oil Co. of Calif.	Beluga River Unit #14-3	D	Drilling
Superior Oil Co.	Three Mile Creek State #1	E	Location
Texaco, Inc.	Point Possession Unit #1	E	Testing
Texaco, Inc.	Trading Bay State #2	E	Location
Texaco, Inc.	Trading Bay State #3	E	Location
Union Oil Co. of Calif.	Trading Bay State #A-3	D	Suspended
Union Oil Co. of Calif.	Trading Bay State #A-4	D	Comp. Oil Well
Union Oil Co. of Calif.	Trading Bay State #A-5	D	Comp. Oil Well
Union Oil Co. of Calif.	Trading Bay State #A-6	D	Drilling

* "E" indicates an exploratory well, and "D" a development well.

Production - May 1967 (Gas now all at pressure base of 14.65 psi)

Field	Zone	Prod. Wells	Oil, Bbls.	Gas, MCF
Swanson River Field	Hemlock	32	1,042,237	843,462
			67,274,406*	23,292,695*
	Hemlock injection	7		3,790,716
				59,209,460*
Middle Ground Shoal	Hemlock and Kenai	17 (incl. 4 duals as 8 wells)	481,659	223,196
			5,061,524 (1)	2,267,868*
Kenai	Kenai	16 (incl. 6 duals as 11 wells)		3,865,950
				63,435,025*
Sterling	Kenai			14,432
				488,112*
Trading Bay	Hemlock	3 (2 duals)	22,977	24,989
			103,878*	62,295*
Granite Point		3	340,825	197,197
			435,417*	241,716*

* Cumulative to May 1, 1967

(1) Correction last month - 4,579,865

MOVE OF THE DIVISION TO COLLEGE

The details and reasons for our move were explained in last month's Bulletin. It is progressing as rapidly as possible. We have submitted preliminary plans for the necessary office and laboratory facilities to the University. Following agreement on these plans between an architect, the University, and the Division, the University will construct the facilities. Division personnel will be moved or recruited as rapidly as the facilities are ready. Recruiting for clerical help will be necessary. No time schedule is possible at present, but the move should be completed by this fall. Please note if an issue or two of this Bulletin is missed, it will be because of interruptions caused by the move.

U.S. GEOLOGICAL SURVEY 1967 FIELD PROGRAM

The U.S. Geological Survey announed that its Office of Marine Geology and Hydrology will have parties in the vicinities of Nome, Bering Sea, Glacier Bay-Yakutat Bay, and Southeastern Alaska. The U.S.G.S. will be working together with the U.S. Bureau of Mines and its vessel "Virginia City". The Topographic Division will have parties in the Fairbanks area and Alaska Peninsula. The Geologic Division will have parties at or near Nuka Bay, Kenai Peninsula, Slana, Juneau, Kosciusko Island, Glacier Bay, Annette Island, Yakutat Bay, Kamishak Bay, Tonzona River, Kulik Lake, Chulitna River, McCarthy, Tanacross Quadrangle, Livengood, Bettles, Hogatza River, Chandalar Lake, Teller, and Charley River.

NEW PUBLICATIONS

Division of Mines and Minerals Geochemical Report No. 8, Geochemical and Geological Investigation of Admiralty Island, Alaska, by William H. Race, and Arthur W. Rose. Reconnaissance geology and geochemistry of Admiralty Island with 65 square miles of detailed geology and stream sediment sampling in the vicinity of Hasselborg Lake. Several areas worthy of additional investigation are pointed out. Price $1.00.

Division of Mines and Minerals Geochemical Report No. 15, Geochemical Investigation along the Valdez to Chitina Highway in Southcentral Alaska, 1966, by Martin W. Jasper. Twenty pages and maps. Price $1.00.

Division of Mines and Minerals publications are available through the mail from the Juneau Office, Pouch M, Juneau, Alaska, 99801, or over the counter at offices in Anchorage or Fairbanks.

The U.S. Geological Survey has published four nontechnical pamphlets entitled "Gold", "Prospecting for Gold", "Suggestions for Prospectors", and "Exploration Assistance." The four pamphlets are available free from the Information Office, U.S. Geological Survey, Washington, D.C. 20242.

The following open file reports, which may be seen in the various U.S.G.S. and DM&M offices, have been released during the past month:

Open File Report, Surficial Deposits of the Iliamna Quadrangle, Alaska, by Robert L. Detterman and Bruce L. Reed. 1 map, explanation (2 sheets), scale 1:200,000.

Open File Report, Metallic Mineral Resources Map of the Fairbanks Quadrangle, Alaska, by Edward H. Cobb. 8 pages, 1 pl., scale 1:250,000.

Open File Report, Four preliminary Gravity Maps of Parts of Alaska, by David F. Barnes. Four maps and Index Map (5 sheets). Scale, approximately 1:5,000,000.

Open File Report, Copper Analyses of Selected Samples, Southwestern Brooks Range, Alaska, by W.P. Brosge, H.N. Reiser, and I.L. Tailleur. One sheet.

Open File Report, Location and Description of Lode Prospects in the Livengood Area, East-Central Alaska, by Robert L. Foster, and Robert M. Chapman. Three pages, 1 figure, 2 tables.

Open File Report, Geologic Map of the Mount Gallaghan Quadrangle, Lander County, Nevada, by J.H. Stewart and E.H. McKee. One map and explanation, scale 1:62,500.

Map I-492, Regional Geological Map of the Candle Quadrangle, Alaska, by William W. Patton, has been published in final form and is for sale by the U.S. Geological Survey for $1.00.

U.S. Geological Survey Professional Paper 512, Geology of the Iniskin-Tuxedni Region, Alaska, by Detterman and Hartsock is now available from the Superintendent of Documents, Washington, D.C. and appropriate offices of the U.S.G.S. Price is not known.

U.S. Geological Survey Professional Paper 575-B, price $2.25, contains an article "Mineralized veins at Black Mountain, western Seward Peninsula, Alaska," by C.L. Sainsbury and J.C. Hamilton.

QUOTED FROM E. & M.J. "METALS WEEK"

"The Interior Department has thrown cold water on the hopes of Alaskans who are trying to attract an aluminum reduction plant to their state. Secretary Stewart Udall rejected a proposal to build Rampart Dam on the Arctic Circle, a project that would have created a 10,000-sq-mi lake with annual electricity output of nearly 35-billion kv. This was the largest power project ever studied in the US.

"The dam would make sense only if it could attract industry to Alaska. Aluminum, with its need for cheap power, was the prime target, but the best projections couldn't get power costs from Rampart Dam below 4 to 6 mills per kwh. Power costs in the Pacific Northwest already are down to 4 mills, and those in the industrial Ohio Valley are about 2 mills. An Interior Department study showed that Rampart power wouldn't be cheap enough to attract other industry either.

"Even though Rampart is dead, the idea of Alaskan aluminum is still alive - though just barely. Alcoa has said it is interested in a proposed Tidewater power project in Miles Canyon. And Harvey Aluminum might be interested in a site some 180 mi east of Anchorage if a proposed power project at the head of Copper River Canyon ever becomes a reality."

GLACIER BAY NATIONAL MONUMENT SITUATION

The results of last summer's mineral investigation by the U.S. Geological Survey in the Glacier Bay National Monument have not been released to date. The report is known to have been completed. The purpose of the project was to determine mineral possibilities in the monument. A brief paper presented at the 1967 Alaska Purchase Centennial Minerals Conference by Charles Hawley of the U.S. Geological Survey indicated that several anomalous areas were found in which additional prospecting was warranted. It is reported that over thirty mineral locations were found, about half of which are sufficiently high in mineral content to justify immediate investigation.

Lately it has been learned that the U.S. Park Service is in the process of purchasing all privately owned land, including patented mineral claims, in the Monument. One promising property, the Alaska Chief, has already been purchased. Newmont Mining Company owns several patented mineral claims on the Brady Glacier which cover a large low-grade nickel-copper deposit in which they had recently expressed a desire to open up by road and tunnel from the west coast. It is understood that this company has also been approached by the Park Service.

The U.S. Geological Survey has a two-week oceanographic investigation programmed for Glacier Bay and the west coast adjacent to the Monument. The purpose is to investigate the possibility of mineral concentrations in Glacier Bay, and on the outer coast from Lituya Bay to Yakutat Bay. In addition to the mineral investigation, various types of research will be carried on.

E. AND M.J. METAL MARKET PRICES

	June 26 1967	Month Ago	Year Ago
Copper, per lb.	38.1¢	38¢	36¢
Lead, per lb.	14¢	14¢	15¢
Zinc, per lb.	14¢	14¢	15¢
Tin, per lb.	154.6¢	153.9¢	160.1¢
Nickel, per lb..	85.25¢	85.25¢	77.75¢
Platinum, per oz.	$109-112	$109-112	$100
Mercury, per flask	$475-491	$450-455	$355-360
Antimony ore, per unit	$5.20-6.20	$5.20-6.20	$4.90-6.00
Beryllium powder, 98¢ per lb.	$54-66	$54-66	$54-66
Chrome ore, per long ton	$31-35	$31-35	$31-35
Molybdenum Conc., per lb.	$1.62	$1.62	$1.55
Titanium ore, per ton	$21-24	$21-24	$21-24
Tungsten, per unit	$43.00	$43.00	$43.00
Silver, New York, per oz.	130.10¢	130.10¢	129.3¢
Silver, U.S. Treasury, per oz.	129.29¢	129.29¢	129.29¢