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STATE OF ALASKA  
Department of Natural Resources  
DIVISION OF MINES AND MINERALS  
STATE OF ALASKA  
DIVISION OF  
GEOLOGICAL SURVEY  
Box 1391  
Juneau, Alaska

MINES AND PETROLEUM BULLETIN

Vol. XIV  
No. 6

MINING ACTIVITIES

This promises to be the best exploration season for Alaska since 1957, and may even exceed that peak year. Among the activities of which we are aware are the following: Anaconda American Brass is fielding a reconnaissance party in southeast Alaska. Bear Creek Mining Company has reconnaissance programs planned for several parts of Alaska and one substantial drilling program. Exploration will be continued at the Kasha Creek copper property by Falconbridge, which is also doing reconnaissance work looking for other possibilities. Karl Springer, a Canadian miner of wide renown, will have a crew in the State. Pan American Petroleum will continue its last year's program in the vicinity of the Alaska Peninsula. Eagle Richer has a man permanently stationed in Anchorage looking for promising properties throughout the State. Sinclair Oil Company will be exploring claims staked last year. The Silver Shield property will receive further work by "Rick" Richards and associates of Anchorage. Last year's drilling project on the Denali, or Pass Creek, copper property will reportedly be continued by Dome Mining Company or a successor. Bunker Hill Mining Company will conduct a substantial drilling project on a lead-silver property in NW Alaska. Homestake will be doing some reconnaissance work. Rhiny Berg, the discoverer of the Ruby Creek copper deposit, will be on the Seward Peninsula with dozers and a crew. Kirk Stanley will be working on his lead-silver property in the Sula District on an OME exploration loan. American Exploration and Mining Company will drill a molybdenum show. Former Division geologist "Mo" Kaufman will be in southeast Alaska with a small crew. Cyprus Mines Corporation will have geologists looking for favorable areas.

OIL AND GAS NEWS

Four applications for permits to drill were approved by the Division's Petroleum Branch during the month.

Ugashik #1 - Great Basins Petroleum Company, Operator - 639' FSL and 1962' FEL, Section 8, T32S-R52W, S.M. This well is on the Alaskan Peninsula on the eastern side of Bristol Bay.

Oldmans Bay State #1 - Hunt Oil Company, Operator - 1320' FNL and 3190' FWL, Section 2, T3N-R16W, S.M. This well is off the west side of Kalgin Island in Oldmans Bay.

Cook Inlet State 17593 #1 - Pan American Petroleum Corporation,  
Operator - 1600' FSL and 1600' FEL, Section 18, T12N-R9W, S.M.  
This well is between the Cook Inlet oil field and the Beluga  
River gas field.

Middle River State #1 - Atlantic Richfield Company, Operator -  
1980' FSL and 1980' FEL, Section 32, T10N-R13W, S.M. This  
exploratory well is northwest of the Trading Bay oil field.

New Location for Trading Bay State #1 - A new location for the Trading  
Bay State #1 has been approved for Texaco Inc. The previous location --  
990' FSL and 990' FWL, Section 34, T10N-R13W, S.M. -- has been changed  
to 990' FSL and 1750' FWL, Section 34, T10N-R13W, S.M. Since the amended  
footage does not move the location to another quarter section, a new  
permit was not necessary.

### Drilling Activity:

### Operator

Atlantic Richfield Company	Middle River State #1	Location
Atlantic Richfield Company	Susie Unit #1	Drilling
Austral Oil Company	Federal #1-3	Location
Austral Oil Company	J.M. Needham et al #1	Abandoned
Great Basins Oil Company	Ugashik #1	Location
Hunt Oil Company	Oldmans Bay #1	Location
Pan American Petroleum Corp.	Cook Inlet State 17591 #1	Drilling
Pan American Petroleum Corp.	Cook Inlet State 17593 #1	Location
Pan American Petroleum Corp.	MGS 17595 #5	Testing
Pan American Petroleum Corp.	MGS 17595 #6	Testing
Pan American Petroleum Corp.	MGS 17595 #7	Drilling
Pan American Petroleum Corp.	North Redoubt State 17579 #1	Drilling
Pan American Petroleum Corp.	Tyonek State 17588 #1	Drilling
Pan American Petroleum Corp.	West Forelands Unit #2	Location
Shell Oil Company	Forelands Channel State #1	Drilling
Shell Oil Company	MGS A-34-14	Comp. oil well
Shell Oil Company	MGS A-13-1	Drilling
Standard Oil Co. of Calif.	Naptowne #24-8	Abandoned
Texaco, Inc.	Coal Bay State #1	Location
Texaco, Inc.	Nicolai Creek State #1-A	Comp. gas well
Texaco, Inc.	Trading Bay State #1	Location
Trinity Canadian Drilling Co.	Homesteaders #1	Drilling
Union Oil Company of Calif.	Kustatan #1	Drilling
Wallace Mining Company	Wallace-Knutson #1-A	Abandoned

**Production - April, 1966**

<u>Field</u>	<u>Zone</u>	<u>Prod. Wells</u>	<u>Oil, Bbbs.</u>	<u>Gas, MCF#</u>
Swanson River Field	Hemlock	48	915,799	408,223
			53,916,763*	14,320,274*
	Kenai	2		65,936
				11,293,215*
	Injection, Hemlock	3		787,191**
				19,948,581*
Middle Ground Shoal	Hemlock	5		
	and Kenai	(Incl. 1 dual as 2 wells)	3,350	2,831
			209,267*	90,831*
Kenai	Kenai	10		1,178,648
		(Incl. 1 dual as 2 wells)		20,831,486*
Sterling	Kenai	1		13,949
				310,193*

# Swanson River gas at pressure base 15.025 psi. All other is 14.65 psi.

\* Cumulative to May 1, 1966

\*\* Includes 620,189 from Kenai Field

**GEOPHYSICS AND GEOCHEMISTRY DISCOVERIES**

The Engineering and Mining Journal, April issue, contains an interesting article by Roger H. Pemberton, who was at the time of writing Director of Resource Development for Litton Industries. The article includes a table listing 113 world-wide, important mineral finds made by or with the assistance of geophysical methods. The list includes 95 whose discovery is directly attributable to the application of one or more geophysical methods and 18 deposits where the application of geophysical methods assisted greatly in their development. Of the 95 geophysical discoveries, 39 were originally detected by airborne geophysical surveys and 56 by ground geophysical surveys; of the 56 ground discoveries, 11 were geochemical discoveries. Of the discoveries, 65 were in Canada, obviously reflecting the present intense use of geophysics.

## PROSPECTOR ASSISTANCE FUNDS EXHAUSTED

The \$30,000 appropriated for the Prospector Assistance Program has been fully committed and several qualified applicants had to be turned away. It is hoped that those who have been accepted and subsequently have found that they will not be able to prospect this summer will notify this office immediately so that these funds may be used for later proposals.

### NEW DIVISION REPORTS

Reports released during the past month by the Division of Mines and Minerals, and now available, are Geologic Report No. 17 on Hollis and Twelvemile Arm, Geochemical Report No. 10 on the Nenana Highway area, and Geochemical Report No. 12 on the Rampart Mining District. Brief descriptions of these three reports are given below. Still delayed by printing are reports on Eklutna, Eureka and Rainy Creeks, Slana, Nixon Fork, Innachuk River, Sinuk River, Southcentral Alaska, and Elliott Highway. Anyone interested in these reports may write in and request copies to be mailed as soon as they become available. Each report is priced at \$1.00.

The Hollis report (Geologic Report No. 17) covers geologic mapping and stream sediment sampling by Division of Mines and Minerals geologists in 1965. Interest in the area was generated by a Division engineer in 1964 when he found high metal content in the stream sediments there. About half of the 214 sediment samples taken during the 1965 work were found to have higher than normal zinc contents — up to 2500 parts per million compared to normal values of less than 200. Copper, lead, and molybdenum contents in nearby samples are five to twenty times normal.

Hollis, located on Prince of Wales Island, is the site of mines which produced several hundred thousand dollars in gold between 1900 and 1940. The gold was mined from quartz veins mostly along a black slate bed in a thick sequence of sandstone and slate. One group of metal-rich stream sediments is in the area of the known mines, but the sediments richest in zinc, copper, and molybdenum come from streams where no ore has been found. This area is also geologically favorable for ore.

The Nenana Highway area report (Geochemical Report No. 10) covers stream sediment sampling in the Nenana Highway area by a Division of Mines and Minerals engineer in the summer of 1965. The Nenana Highway runs from Fairbanks southwest to Nenana, a distance of about 60 miles. Five of the 62 sediment samples taken carried moderately anomalous amounts of copper, lead, and/or zinc.

The Rampart District report (Geochemical Report No. 12) covers stream sediment sampling in the Minook Creek drainage basin of the Rampart placer mining district in 1965. Because of the variety of metals found in the

placer concentrates of the district, it is considered a favorable prospecting area for lodes. Of the 120 sediment samples taken, 59 contained anomalous amounts of one or more metals. The authors conclude from the results that three parallel mineralized zones are indicated which should be prospected further.

#### OTHER NEW REPORTS

U.S. Geological Survey, Open File Report, Geologic Map and Stratigraphic Sections, Porcupine River Canyon, Alaska, by W.P. Brosge, H.B. Reiser, J.T. Dutro, Jr., and Michael Churkin, Jr.

U.S. Geological Survey, Open File Report, Map of Geologic Materials, Anchorage and Vicinity, Alaska, by Ernest Dobrovolsky and Henry R. Schmoll.

These Open File Reports are available for reading at the various offices of the U.S. Geological Survey and the Division of Mines and Minerals.

#### U.S. GEOLOGICAL SURVEY SUMMER PROGRAM

The Geologic Division of the U.S. Geological Survey has announced it will have 26 full-time geologists, assisted by seasonal professional and nonprofessional personnel, conducting geologic investigations within the State this season. Parties will be working in the following areas: Annette Island, Craig, Glacier Bay, Prince William Sound, Alaska Peninsula, Taylor Highway, Nunivak Island, Anvik, Shungnak, Kotzebue, Brooks Range, Koyukuk River, Anchorage and Fairbanks.

Topographic mapping will be mostly done on the Alaska Peninsula.

#### INDEX OF U.S. SPECIAL AND MINERALS SURVEY UPDATED

The Division of Lands has announced that it has updated the two-volume index of U.S. Special and Mineral Surveys. Purchasers of the original set will be mailed the updated set as soon as the addresses are checked for correctness. These indexes are available for public inspection at the Division office at 344 Sixth Avenue, Anchorage. The two-volume index sells for \$20.00 a set or \$10.00 for either volume.

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	May 30 1966	Month Ago	Year Ago
Copper, per lb.	36¢	36¢	36¢
Lead, per lb.	15¢	16¢	16¢
Zinc, per lb.	15¢	15¢	14.5¢
Tin, per lb.	165.875	173.375	197.45
Nickel, per lb.	77.75¢	77.75¢	79¢
Platinum, per oz.	\$100	\$97-100	\$97-100
Mercury, per flask	\$355-360	\$397-410	\$650-670
Antimony ore, per unit	\$4.90-6.00	\$5.25-6.50	\$7.80-8.50
Beryllium powder, 98% per lb.	\$54-66	\$54-66	\$54-66
Chromium ore, per long ton	\$31-35	\$31-35	\$31-35
Molybdenum Conc., per lb.	\$1.55	\$1.55	\$1.55
Titanium ore, per ton	\$21-24	\$21-24	\$23-26
Tungsten ore, per unit	\$43.00	\$43.00	\$25.50-26.00
Silver, New York, per oz.	129.3¢	129.3¢	129.3¢
Silver, U.S. Treasury, per oz.	129.29¢	129.29¢	129.29¢

[illegible][illegible]

The Division of Land Use announced that it has updated the two-volume inventory of the National Wetlands Inventory. The original wetlands inventory was published in 1983 and the updated version was published in 1993. The updated version includes information on the wetlands that have been lost since 1983 and the wetlands that have been restored. The updated version also includes information on the wetlands that have been designated as critical habitat for endangered species. The updated version is available in print and on CD-ROM. The print version is available for purchase from the National Wetlands Inventory, Department of the Interior, Bureau of Land Management, 1600 L Street, NW, Washington, DC 20546. The CD-ROM version is available for purchase from the National Wetlands Inventory, Department of the Interior, Bureau of Land Management, 1600 L Street, NW, Washington, DC 20546. The updated version is also available for download from the National Wetlands Inventory website at <http://www.blm.gov/nwmi/>.