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DIVISION OF MINES AND MINERALS

Box 5-300  
College, Alaska  
99701

MINES AND PETROLEUM BULLETIN

January 1968

Vol. XVI  
No. 1

MINING ACTIVITIES

Alaska General - The interest in State offshore prospecting permits is on the increase due to the Federal governments' heavy metals program and activity off Nome. Seventy-eight applications for permits were filed on about 120,000 acres during November which brings total acreage at the end of November to approximately 2,569,000 acres. Some 75 further applications were filed in the first week of December with 54 permits applied for by an Oklahoma City Company on the west end of Seward Peninsula. Other permits were off Unga Island and the Ketchikan area. (Offshore Prospecting Permit filings are made at the Division of Lands, not at the Division of Mines and Minerals.)

South 48 - Homestake Mining Co. and the Bunker Hill Co. have started discussions on a possible merger on a stock share-for-share basis. Bunker Hill has been active recently in mineral exploration throughout Alaska.

OIL AND GAS NEWS

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

Permit No. 67-76. Union Oil Company of California #A-10, Trading Bay State, A.P.I. No. 50-133-20064. Surface location: 1609' FSL and 571' FEL, Sec. 4, T9N, R13W, S1. Bottom hole location: 945' FSL and 2240' FWL, Sec. 4, T9N, R13W, S1. This development location is in the Trading Bay Field.

Permit No. 67-77. Pan American Petroleum Corporation #16 Granite Point State 18742, A.P.I. No. 50-133-20065. Surface location: 2009' FSL and 1948' FWL, Sec. 31, T11N, R11W, S1. Bottom hole location: 660' FNL and 1500' FEL, Sec. 1, T10N, R12W, S1. This development location is in the Granite Point Field.

Permit No. 67-78. Pan American Petroleum Corporation #5 South MGS Unit, A.P.I. No. 50-133-20066. Surface location: 678' FSL and 1765' FWL, Sec. 35, T8N, R13W, S1. Bottom hole location: 1980' FSL and 660' FWL, Sec. 2, T7N, R13W, S1. This development location is in the Middle Ground Shoal Field.

Permit No. 67-79. Shell Oil Company #A-14-1 M.G.S., A.P.I. No. 50-133-20067. Surface location: 1571' FSL and 371' FEL, Sec. 11, T8N, R13W, S1. Bottom hole location: 950' FSL and 1240' FWL, Sec. 1, T3N, R13W, S1. This development location is in the Middle Ground Shoal Field.

Permit No. 67-80. Union Oil Company of California #D-1 Trading Bay Unit. A.P.I. No. 50-133-20063. Surface location: 755' FSL and 1132' FNL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 660' FSL and 1980' FEL, Sec. 32, T9N, R13W, S.M. This development location is in the McArthur River Field and the first well from the Dolly Varden Platform.

Permit No. 67-81. Union Oil Company of California #D-2 Trading Bay Unit. A.P.I. No. 50-133-20069. Surface location: 685' FSL and 1209' FNL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 1980' FNL and 1980' FNL, Sec. 5, T8N, R13W, S.M. This is a development location in the McArthur River Field.

Permit No. 67-82. Pan American Petroleum Corporation #15 Granite Point State 18742, A.P.I. No. 50-133-20070. Surface location: 790' FNL and 600' FEL, Sec. 12, T10N, R12W, S.M. Bottom hole location: 660' FNL and 660' FNL, Sec. 7, T10N, R11W, S.M. This is a development location in the Granite Point Field.

Permit No. 67-83. Shell Oil Company #C-23-26 Middle Ground Shoal A.P.I. No. 50-133-20071. Surface location: 538' FSL and 1601' FEL, Sec. 23, T8N, R13W, S.M. Bottom hole location: 1785' FSL and 2060' FNL, Sec. 26, T8N, R13W, S.M. This is a development location in the Middle Ground Shoal Field.

Permit No. 67-84. Mobil Oil Corporation #31-23 Granite Point State, A.P.I. No. 50-133-20072. Surface location: 2380' FNL and 1371' FNL, Sec. 13, T10N, R12W, S.M. Bottom hole location: 660' FNL and 1980' FEL, Sec. 23, T10N, R12W, S.M. This is a development location in the Granite Point Field.

Permit No. 67-85. Union Oil Company of California #G-6 Trading Bay Unit, A.P.I. No. 50-133-20073. Surface location: 1879' FSL and 1385' FEL, Sec. 29, T9N, R13W, S.M. Bottom hole location: 660' FSL and 1980' FEL, Sec. 28, T9N, R13W, S.M. This is a development location in the McArthur River Field.

DRILLING ACTIVITY

<u>Operator</u>	<u>Well Names &amp; Numbers</u>	<u>Type</u>	<u>Status</u>
Atlantic Richfield Co.	Prudhoe Bay #1	E	Drilling
Humble Oil & Refining Co.	Tyonek Reserve "B"	E	Drilling
Marathon Oil Company	Beaver Creek #2	E	Testing
Mobil Oil Corp.	Granite Point State #31-23	D	Location
Mobil Oil Corp.	Granite Point State #11-24	D	Drilling
Mobil Oil Corp.	Granite Point State #44-14	D	Drilling
Mobil Oil Corp.	Granite Point State #44-11	D	Location
Pan American Petroleum Corp.	Albert Kaloa #1	E	Testing
Pan American Petroleum Corp.	Granite Point State 17586 #4	D	Comp. Oil Well
Pan American Petroleum Corp.	Granite Point State 18742 #9	D	Testing
Pan American Petroleum Corp.	Granite Point State 18742 #11	D	Temp. Susp.
Pan American Petroleum Corp.	Granite Point State 18742 #12	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #13	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #14	D	Temp. Susp.
Pan American Petroleum Corp.	Granite Point State 18742 #15	D	Drilling

<u>Operator</u>	<u>Well Names &amp; Numbers</u>	<u>Type</u>	<u>Status</u>
Pan American Petroleum Corp.	Granite Point State 18742 #16	D	Drilling
Pan American Petroleum Corp.	MGS State 17595 #13	D	Completing
Pan American Petroleum Corp.	Redoubt Shoal State 29690 #1	E	Abandoned
Pan American Petroleum Corp.	South MGS Unit #4	D	Completing
Pan American Petroleum Corp.	South MGS Unit #5	D	Drilling
Pan American Petroleum Corp.	South MGS Unit #7	D	Drilling
Pan American Petroleum Corp.	South MGS Unit #9	D	Temp. Susp.
Shell Oil Company	MGS A-14-1	D	Drilling
Shell Oil Company	MGS A-33-14	D	Comp. Oil Well
Shell Oil Company	MGS C-23-26	D	Drilling
Shell Oil Company	MGS C-31-26	D	Comp. Oil Well
Texaco Inc.	Swanson Lakes #1	E	Location
Pan American Petroleum Corp.	MGS State 17595 #10	D	Completing
Union Oil Co. of Calif.	Trading Bay State A-9	D	Drilling
Union Oil Co. of Calif.	Trading Bay State A-10	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit D-1	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit D-2	D	Location
Union Oil Co. of Calif.	Trading Bay Unit G-3	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-4	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-5	D	Location
Union Oil Co. of Calif.	Trading Bay Unit K-1	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit K-2	D	Drilling

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

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

<u>Field</u>	<u>Zone</u>	<u>Prod. Wells</u>	<u>Oil Bbls.</u>	<u>Gas. MCF</u>
Swanson River Field	Hemlock	36	1,149,681 73,805,181*(6)	1,592,627 30,669,798*
	Injection Hemlock	8(Inj)		4,048,136 81,975,916*
Middle Ground Shoal	Hemlock & Kenai	30	1,023,128	409,657
		(Incl. 6 duals as 12 wells)	9,054,447*	3,964,477*
Kenai	Kenai	17		3,684,544 (1)
		(Incl. 6 duals as 12 wells)		84,334,340*
Sterling	Kenai	1		15,955 565,097*
Trading Bay	Hemlock	7	116,690	149,822 (2)
		(Incl. 2 dual as 4 wells)	595,790	516,180*(3)
Granite Point	Kenai	14	1,314,137	937,839
		(Incl. 1 dual as 2 wells)	5,703,784	4,059,822
Trading Bay (gas well)	Kenai	1 (dual: lower-oil upper-gas)		9,906 36,757*

<u>Field</u>	<u>Zone</u>	<u>Prod. Wells</u>	<u>Oil Bbls.</u>	<u>Gas. MCF</u>
HcArthur River	Hemlock	1	338,922 (4) 397,982*	101,349 116,176*
Moquawkie	Kenai	1		4,459 (5) 25,651*
State Total			4,009,471	6,946,028
Average Per Day			133,649	231,534

\* Cumulative to December 1, 1967

(1) Correction in October Report	3,514,848
(2) Correction in October Report	104,769
(3) Correction in October Report	366,358
(4) Correction in October Report	59,010
(5) Correction in October Report	8,456
(6) Correction in October Report	72,655,500

#### AMERICAN MINING CONGRESS

For the fourth successive year the American Mining Congress' Annual meeting will be held in the Statler-Hilton Hotel January 8-9 in Washington D.C. Mining people will find the gathering a very useful and profitable occasion to discuss pressing issues confronting the industry.

#### ANOTHER CHANGE OF ADDRESS

Our College headquarters mailing address has been changed. It is now Box 5-300, College, Alaska 99701. Our College phone number remains 479-2202 and other addresses as given in the last Bulletin remain the same.

#### NEW PUBLICATIONS

The following titles were among those listed in the September, 1967 "Abstracts of North American Geology", which is put out monthly by the U.S. Dept. of the Interior, USGS: (Copies of the monthly edition, which contains abstracts of articles contained in a variety of publications, can be obtained from the U.S. Government Printing Office, Washington, D.C. 20402. Copies of the entire articles cannot be obtained from either the Government Printing Office or the USGS. Most of the publications listed can be found at specialized libraries and university libraries.)

Brosge, William P., Whittington, Charles L., Morris, Robert H.: Geology of the Umiat Maybe Creek Region, Alaska - U.S. Geol. Survey Prof. Paper 303-H.P. 501-638, illus., tables geol., map, 1966.

Campbell, Russel H.: Areal Geology in the Vicinity of the Chariot Site, Lisburne Peninsula, Northwestern Alaska - U.S. Geol. Survey Prof. Paper 395, 71p., illus., tables, geol., map, 1967.

Foster, Helen L.: Geology of the Mount Fairplay Area, Alaska - U.S. Geol. Survey Bull. 1241-B, P. B1-B18, illus., geol., map, 1967.

Foster, Robert Lutz: The Petrology and Structure of the Amy Dome Area, Tolovana Mining District, East-Central Alaska (Abs.) - Dissert. Abs., Sec. B, Sci. and Eng., V. 27, No. 8, P. 2745B, 1967.

Porter, Stephen C.: Pleistocene Geology of Anaktuvuk Pass, Central Brooks Range, Alaska - Arctic Inst. North America Tech. Paper 18, illus., geol., map, 1966.

Sainsbury, C.L.; Hamilton, J.C.: Mineralized Veins at Black Mountain, Western Seward Peninsula, Alaska - Geological Survey Research 1967, Chap. B: U.S. Geol. Survey Prof. Paper 575B, P. B21-B25, illus., table, 1967.

Scott, Richard A., Doherty, Imogen: Palynological Evidence for Devonian Age of the Nation River Formation, East Central Alaska - Geol. Survey Research 1967, Chap. B: U.S. Geol. Survey Prof. Paper 575-B, P. B45-B49, illus., 1967.

For Release December 20, 1967

The U.S. Geological Survey is releasing in open files the following reports. Copies are available for consultation at the offices listed beneath last item. Material from which copies can be made at private expense is available in the Alaskan Branch, USGS, 345 Middlefield Rd., Menlo Park, Calif. 94025:

1. Metallic mineral resources map of the Chandalar quadrangle, Alaska, compiled by Edward H. Cobb. 5 p., 1 map, scale 1:250,000.
2. Metallic mineral resources map of the Wiseman quadrangle, Alaska, compiled by Edward H. Cobb. 6 p., 1 map, scale 1:250,000.
3. Metallic mineral resources map of the Healy quadrangle, Alaska, compiled by Edward H. Cobb. 5 p., 1 map, scale 1:250,000.
4. Metallic mineral resources map of the Mount Hayes quadrangle, Alaska, compiled by Edward H. Cobb. 8 p., 1 map, scale 1:250,000.
5. Metallic mineral resources map of the Bendeleben quadrangle, Alaska, compiled by Edward H. Cobb. 9 p., 1 map, scale 1:250,000.
6. Metallic mineral resources map of the Candle quadrangle, Alaska, compiled by Edward H. Cobb. 5 p., 1 map, scale 1:250,000.
7. Metallic mineral resources map of the Solomon quadrangle, Alaska, compiled by Edward H. Cobb. 10 p., 1 map, scale 1:250,000.
8. Metallic mineral resources map of the Seward and Blying Sound quadrangles, Alaska, compiled by Edward H. Cobb. 13p., 1 map, scale 1:250,000.

USGS depositories: Libraries, 1033 GSA Bldg., Washington, D.C. 20242; Bldg. 25, Federal Center, Denver, Colo. 80225; 345 Middlefield Rd., Menlo Park, Calif. 94025; also at 108 Skyline Bldg., 508 2nd Ave., Anchorage, Alaska 99501; Brooks Bldg., College, Alaska 99701; 441 Federal Bldg., Juneau, Alaska 99801. Alaska Div. Mines and Minerals depositories: 3001 Porcupine Dr., Anchorage, Alaska 99504; University Ave., College, Alaska 99701; 509 Goldstein Bldg., Juneau, Alaska 99801.

#### E. AND H.J. METAL MARKET PRICES

	December 18, 1967	Month Ago	Year Ago
Copper, per lb.	suspended*	suspended*	36.2
Lead, per lb.	14¢	14¢	15¢
Zinc, per lb.	13.5¢	14¢	15¢

	December 18, 1967	Month Ago	Year Ago
Tin, per lb.	148.00¢	151.1¢	154.65¢
Nickel, per lb.	94.00¢	85.25¢	77.75¢
Platinum, per oz.	\$109-125	\$109-112	\$100
Mercury, per flask	\$510-520	\$498-512	\$470-490
Antimony ore, per unit	\$5.00-5.95	\$5.20-6.20	\$4.55-5.55
Beryllium Powder, 98%(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.	219.00¢	169.98¢	129.3¢

\*E. & M.J. Metals Week say the following: "With virtually all domestic copper production struck and with the pipelines now about empty, Metals Week feel that there is not a sufficient tonnage of producer copper being sold in the U.S. to calculate a meaningful weighted average. Foreign-produced and higher-priced copper would take on too great a weighting in the calculation, and consumers would be hit with an expected and unfair increase in their copper costs. Consequently, the E.&M.J. domestic average will be suspended until a representative tonnage of U.S. produced copper is again being sold."