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

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MINES AND PETROLEUM BULLETIN

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MINING ACTIVITIES

More on Chandalar - The Wallace Miner reports that the Chandalar gold properties, leased from Eskil Anderson and others by the Little Squaw Mining Company, has been subleased from Little Squaw by Chandalar Mining and Milling Co. The properties cover an area 7x2¹/₂ miles with at least four major vein systems. Two of the vein systems have been developed to the point of production. It is reported that estimated blocked-out ore in the Mikado vein is 1.5 million tons @ \$87/ton. Ownership of the Little Squaw Company is divided among several interests.

Fairbanks - The directors of Busty Belle Mines, Inc. are planning to construct a 50 ton/day mill on their gold-quartz property 20 miles north of Fairbanks. The mill will be constructed to handle ore from 17 claims owned by the company and will also custom-mill ore from other small mines in the area.

Bunker Hill Mining Merger - In our January bulletin we stated that the Bunker Hill Mining Company was discussing a merger with Homestake Mining Company. It now appears that the Homestake deal has been rejected in favor of an offer by the Utah Construction and Mining Company. Both companies have been active in mineral exploration throughout Alaska.

OIL AND GAS NEWS

Eleven applications for drilling permits were approved by the Division's Petroleum branch as follows:

Permit No. 68-9. Pan American Petroleum Corporation #14, M.G.S. State 17595, A.P.I. No. 50-133-20084. Surface location: 1934' FNL and 544' FWL, Sec. 31, T9N, R12W, S.M. Bottom hole location: 2600' FSL and 1500' FWL, Sec. 30, T9N, R12W, S.M. This development location is in the Middle Ground Shoal Field.

Permit No. 68-10. Union Oil Company of California #G-8 Trading Bay Unit, A.P.I. No. 50-133-20085. Surface location: 1874' FSL and 1380' FEL, Sec. 29, T9N, R13W, S.M. Bottom hole location: 2300' FNL and 1580' FEL, Sec. 33, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-11. Pan American Petroleum Corporation #9, South M.G.S. Unit, A.P.I. No. 50-133-20086. Surface location: 743' FSL and 1818' FWL, Sec. 35, T8N, R13W, S.M. Bottom hole location: 660' FNL and 1980' FWL, Sec. 35, T8N, R13W, S.M. This development location is in the McArthur River Field. Note: Pan American Petroleum Corporation has changed the well number of a previously issued permit (permit No. 67-75, A.P.I. No. 50-133-20063) to #8 South M.G.S. Unit. This permit was for #9 South M.G.S. Unit also.

Permit No. 68-12. Pan American Petroleum Corporation #18, Granite Point State 18742, A.P.I. No. 50-133-20087. Surface location: 1989' FSL and 2053' FWL, Sec. 31, T11N, R11W, S.M. Bottom hole location: 660' FSL and 1980' FWL, Sec. 31, T11N, R11W, S.M. This development location is in the Granite Point Field.

Permit No. 68-13. Union Oil Company of California #K-6 Trading Bay Unit A.P.I. No. 50-133-20088. Surface location: 733' FSL and 131' FEL, Sec. 17, T9N, R13W, S.M. Bottom hole location: 1800' FWL and 1675' FEL, Sec. 16, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-14. Union Oil Company of California #D-4, Trading Bay Unit, A.P.I. No. 50-133-20089. Surface location: 684' FSL and 1217' FWL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 660' FSL and 2420' FWL, Sec. 5, T8N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-15. Union Oil Company of California #D-3, Trading Bay Unit, A.P.I. No. 50-133-20090. Surface location: 757' FSL and 1133' FEL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 1850' FWL and 400' FEL, Sec. 6, T8N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-16. Pan American Petroleum Corporation #20. Granite Point State 18742, A.P.I. No. 50-133-20012. Surface location: 2050' FSL and 2019' FWL, Sec. 31, T11N, R11W, S.M. Bottom hole location: 1980' FWL and 1980' FWL, Sec. 31, T11N, R11W, S.M. This development location is in the Granite Point Field.

Permit No. 68-17. Shell Oil Company #1, Bachatna Creek, A.P.I. No. 50-133-20091. 567' FSL and 1340' FEL, Sec. 16, T8N, R15W, S.M. This upland exploratory location is on the west side of Cook Inlet near the West Foreland.

Permit No. 68-18. Union Oil Company of California #K-5, Trading Bay Unit, A.P.I. No. 50-133-20092. Surface location: 615' FSL and 119' FEL, Sec. 17, T9N, R13W, S.M. Bottom hole location: 170' FSL and 1210' FWL, Sec. 22, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-19 Shell Oil Company #C-34-26, M.G.S., A.P.I. No. 50-133-20093. Surface location: 545' FSL and 1519' FEL, Sec. 23, T8N, R13W, S.M. Bottom hole location: 500' FSL and 1880' FEL, Sec. 26, T8N, R13W, S.M. This development is in the Middle Ground Shoal Field.

DRILLING ACTIVITY

Operator	Well Names & Numbers	Type	Status
Atlantic Richfield Co.	Prudhoe Bay #1	E	Drilling
Humble Oil & Refining Co.	Tyonek Reserve "B"	E	Abandoned
Mobile Oil Corp.	Granite Point State #24-13	D	Drilling
Mobile Oil Corp.	Granite Point State #31-23	D	Drilling
Mobile Oil Corp.	Granite Point State #33-14	D	Location
Mobile Oil Corp.	Granite Point State #44-11	D	Location
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	Testing
Pan American Petroleum Corp.	Granite Point State 18742#14	D	Temp. Susp.
Pan American Petroleum Corp.	Granite Point State 18742#16	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742#18	D	Location
Pan American Petroleum Corp.	Granite Point State 18742#19	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742#20	D	Drilling
Pan American Petroleum Corp.	Granite Point State 18742#21	D	Location
Pan American Petroleum Corp.	Granite Point State 18742#23	D	Location
Pan American Petroleum Corp.	MGS State 17595 #14	D	Drilling

Pan American Petroleum Corp.	South MGS Unit #5	D	Drilling
Pan American Petroleum Corp.	South MGS Unit #7	D.	Comp. Oil Well
Pan American Petroleum Corp.	South MGS Unit #8	D	Drilling
PanAmerican Petroleum Corp.	South MGS Unit #9	D	Temp. Susn.
Shell Oil Company	Bachatna Creek #1	E	Location
Shell Oil Company	MGS A-14-1	D	Comp. Oil Well
Shell Oil Company	MGS C-23126	D	Comp. Oil Well
Shell Oil Company	MGS C-24-26	D	Drilling
Shell Oil Company	MGS C-34-26	D	Location
Standard Oil Co. of Calif.	Lewis River Unit 13-2	E	Drilling
Texaco, Inc.	Swanson Lake #1	E	Drilling
Union Oil Co. of Calif.	Trading Bay State A-12	D	Drilling
Union Oil Co. of Calif.	Trading Bay State A-13	D	Comp Oil Well
Union Oil Co. of Calif.	Trading Bay Unit D-1	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit D-2	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit D-3	D	Location
Union Oil Co. of Calif.	Trading Bay Unit D-4	D	Location
Union Oil Co. of Calif.	Trading Bay Unit G-3	D	Comp. Oil Well
Union Oil Co. of Calif.	Trading Bay Unit G-5	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-6	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-8	D	Location
Union Oil Co. of Calif.	Trading Bay Unit K-1	D	Comp. Oil Well
Union Oil Co. of Calif.	Trading Bay Unit K-3	D	Location
Union Oil Co. of Calif.	Trading Bay Unit K-4	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit K-5	D	Location
Union Oil Co. of Calif.	Trading Bay Unit K-6	D	Drilling
U.S. Navy	South Barrow #7	D	Location

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

PRODUCTION - January 1968 (Gas now all at pressure base of 14.65 psi)

Field	Zone	Prod. Wells	Oil Bbls	Gas, MCF
Swanson River Field	Hemlock	36	1,186,397	1,721,815
	Injection Hemlock	9 (inj)	76,137.817*	34,097.451* 4,709,433 90,824,599*
Middle Ground Shoal	Hemlock & Kenai	36 (incl. 7 duals as 14 wells)	1,135,925 11,220,561*	449,461 4,841,322*
Kenai	Kenai	17 (incl. 6 duals as 12 wells)		4,508,134 92,783,476*
Sterling	Kenai	1		21,098 607,741*
Trading Bay	Kenai & Hemlock	9 (incl. 2 duals as 4 wells)	147,856 876,552*	195,625 868,656*
Trading Bay (gas Well)	Kenai	1 (dual: lower-oil upper-gas)		9,847 59,251*

Field	Zone	Prod. Wells	Oil Bbls	Gas MCF
Granite Point	Kenai	17	1,418,453	850,754 (3)
			8,471,803*	5,740,314*(3)
McArthur River	Hemlock	4(1)	723,545	202,870
			1,472,360*	422,785*
Hoquaekie	Kenai	1		4,820
				39,219*
State Total			4,612,176	7,964,434 (3)
Average Per Day			148,909	256,917 (3)

* Cumulative to February 1, 1968

- (1) Correction in December Production 3 Wells
- (2) Correction in December Production 49,404*
- (3) Mobil Oil Gas Production Estimated, Will correct next month

NEW PUBLICATIONS

The U.S. Geological Survey is releasing in open files the following report. Copies are available for consultation in the Geological Survey Libraries, 1033 GSA Bldg., Washington D.C. 20242; Bldg., 25, Federal Center, Denver, Colo. 80225; and 345 Middlefield Rd., Menlo Park, Calif. 94025. They are also available for consultation in other offices as listed:

Platinum deposits of Alaska, by John B. Mertie, Jr. 65 p., 2 black-and-white plates, 6 tables. Brooks Bldg., College, Alaska 99701; 108 Skyline Bldg., 508 2nd Ave., Anchorage, Alaska 99501; 441 Federal Bldg., Juneau, Alaska 99801; 504 Custom House, San Francisco, California 94111; 7638 Federal Bldg., Los Angeles, California 90012. A copy is available also at the Division of Mines and Minerals office at College, Alaska 99701. Reproducible material for the two plates from which copy can be made at private expense is available in the San Francisco office shown above and at the USGS offices in Menlo Park.

E. and M.J. METAL MARKET PRICES

	February 13 1968	Month Ago	Year Ago
Copper, per lb	Suspended	Suspended	38.1¢
Lead, per lb	14¢	14¢	14¢
Zinc, per lb	13.5¢	13.5¢	14.5¢
Tin, per lb	145.75¢	148.5¢	154.75¢
Nickel, per lb	94.00¢	94.00¢	85.24¢
Platinum, per oz	\$109-114	\$109-114	\$109-122
Mercury, per flask	\$584-586	\$538-540	\$515-525
Antimony ore, per unit	\$5.00-5.95	\$5.00-5.95	\$4.70-5.70
Beryllium powder, 98% (lb)	\$54-66	\$54-66	\$54-66
Chromé ore, long ton	\$31-35	\$31-35	\$31-35
Molybdenum Conc., per lb (2)	\$1.62	\$1.62	\$1.62

	February 13 1968	Month Ago	Year Ago
Titanium ore, per ton	\$21-24	\$21-24	\$21-24
Tungsten, per unit	\$43.00	\$43.00	\$43.00
Silver, New York, per oz	190.00¢	208.00¢	129.3¢

PLACER PROSPECTS IN NORTHERN BERING SEA

An abstract by David M. Hopkins, U.S.G.S., Menlo Park

Possibilities of finding gold and other placer-mineral deposits in northern Bering Sea were studied in 1967 by the U.S. Geological Survey in collaboration with the University of Washington and the U.S. Bureau of Mines. The studies included seismic profiling, ship-borne magnetometry, bottom sampling, and offshore drilling.

A regional geophysical reconnaissance indicates that, contrary to expectations, bedrock is deeply buried throughout much of northern Bering Sea. Thus thick cover of sedimentary strata insulates the sea floor from most possible local sources of lode mineralization except in nearshore areas. However, glaciers have carried detrital material from onshore mineralized areas as far as 20 miles beyond the present shoreline. Placer concentrations of gold or tin may exist where beaches and streams have crossed these drift areas during past intervals of low sea level.

Our studies indicate that detrital gold offshore near Nome is largely derived from mineralized bedrock and older placers onshore. Most of the gold encountered in the drilling and bottom-sampling program was found in or above glacial drift that, in the Nome area, extends only a few miles beyond the shore. A pronounced gold concentration is commonly encountered in a thin veneer of coarse detritus covering the sea bottom; this veneer is evidently a lag concentrate of large and heavy particles formed partly by present-day bottom currents and partly by wave action during the post-glacial rise in sea level.

Few drill holes encountered significant gold concentrations on bedrock. However, seismic profiles indicate the existence of fault scarps that displace the buried bedrock surface; at least one of these faults show evidence of mineralization. Future drilling should explore possible placer-gold concentrations on bedrock near the fault scarps.

PROSPECTOR ASSISTANCE PROGRAM

Results of the Prospector Assistance Program for the 1967 season are shown on the following page. The report is not complete as six prospectors have not been heard from and may still report.

1967 PROSPECTOR ASSISTANCE PROGRAM

As of January 12, 1968

Name	Locality Prospected	Man Days	Claims Staked	Samples Assayed	Actual Prospecting Expenditures				Expense per Man-Day	Reimbursed by State
					Travel	Food	Equipment & Misc	Total Expense		
E. Ronald Anderson	Fairbanks	37	1	15	435.00	200.00	69.96	704.96	19.05	528.72
Ed. R. Farrell & Bert Higgins	Manley Hot Springs	82		9	40.00	366.38	5,227.45	5,633.83	68.70	4,000.00
Edwin R. Hudson	Livengood	65		5		623.63	4,992.53	5,616.16	86.40	3,588.40
Robert F. Landel & Wm. R. Cotton	White Mountain	56			908.28	377.41	461.24	1,746.93	30.11	998.09
Max M. Rusaw	Matanuska	129	8	21	978.30	248.44	97.39	1,324.13	10.26	649.18
A.W. Smith	Iliamna	54			494.50	510.69	403.65	1,408.84	26.09	1,026.63
Arley R. Taylor	Kantishna	70	4		297.22	379.77	1,903.65	2,580.64	36.86	1,037.57
James A. Walper	Southeast Alaska	225	4		4,642.73	1,125.00	378.84	6,146.57	27.32	4,000.00
Ernest Wolff & Lonnie Heiner	Manley Hot Springs	90	9		651.00	406.13	3,824.98	4,882.11	54.24	3,619.87
Eddie Chipp	Kuskokwim	132		25	279.65	394.38	624.29	1,298.32	9.84	747.49
Thomas J. Norris	Talkeetna	67			201.98	102.08	219.14	523.20	7.81	392.40
Joe Thomas	Lake Clark	82			540.00	382.18	376.05	1,298.23	15.83	973.67
TOTALS		1089	26	75	9,468.66	5,116.09	18,579.17	33,163.92		21,562.02
AVERAGE PER MAN-DAY					8.69	4.69	17.06	30.45		19.79