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

Box 5-300
College, Alaska 99701

MINES AND PETROLEUM BULLETIN

April 1968

Vol XVI
No. 4

MINING NEWS

Treasury Amends Gold Regulations

Pursuant to agreements announced by the central banks of Belgium, Germany, Italy, the Netherlands, Switzerland, the United Kingdom, and the United States in Washington on March 17, 1968, the Treasury Department has issued amendments of the Treasury Gold Regulations, effective immediately.

The treasury will no longer purchase gold in the private market nor will it sell gold for industrial, professional or artistic uses. The private holding of gold in the United States or by U.S. citizens and companies abroad continues to be prohibited except pursuant to existing regulations. The regulations permit holding gold in it's natural form without a license, but not after it has been treated or melted.

The Gold Regulations have been amended to permit domestic producers to sell and export freely to foreign buyers as well as to authorized domestic users. Authorized domestic users regularly engaged in an industry, profession or art in which gold is required may continue to import gold or to purchase gold from domestic producers within the limits of their licenses or authorizations in the Gold Regulations.

Exploration By Hanna

The Hanna Mining Company is reported to be planning to have men in Alaska checking on nickel ore prospects on property secured under option from Alaska Yukon Minerals.

Bunker Hill Mining Company

Merger partners with Bunker Hill have been changing so fast it is hard to keep up with them. However, it now appears that Utah Construction lost out and Gulf Resources & Chemical Corporation emerges the victor.

U. S. Geological Survey Alaska Field Season, 1967

Projects were carried out in 13 areas of Alaska during the summer of 1967, ranging in type from detailed mapping of mineralized districts to geochemical reconnaisance and in locations from Seward Peninsula to eastern and southeastern Alaska. About 7,500 samples were collected, and most were submitted for gold determination and spectrographic analysis. Analytical data are incomplete as yet, but at least nine projects yielded significant economic results, and in at least six, gold was detected in amounts greater than 0.02 ppm. This work indicates that samples of stream sediment, soil, and spring deposits are all useful in prospecting for gold lodes and placers.

Uranium

An article on uranium in the January 1968 Western Miner states that the United States will exhaust it's present uranium reserves by 1975 and that it's productive capacity will be inadequate by 1973. The world-wide reserves are insufficient to supply world demand for more than four or five years.

Two-thirds of the world's reserves are contained in the Canadian deposit at Elliot Lake and the Rand area of South Africa. Most of the remaining one-third is in the Western United States.

It is thought that the price of uranium must be increased from $8.00 a pound to around $15.00 a pound so that large, lower-grade ore deposits can be produced. Current reserves are as follows: (Based on a price of $10.00 per pound):

Canada:	210,000 tons	Nearly all in old placer deposits in Huronian rocks of the Sudbury-Elliot Lake region.
U. S.:	195,000 tons	Nearly all in the Triassic and Jurassic rocks of the Colorado Plateau.
South Africa:	180,000 tons	In the ancient placers in the Rand.
All other countries:	97,000 tons	
Total	682,000 tons	

Alaska Uranium Potential

During the uranium boom of the 40's and 50's the US Geological Survey investigated numerous mining districts and prospects in the State. This was directed almost exclusively to exploration for hydrothermal vein-type deposits. The results indicated several areas which warrant more study. The most favorable regions were found to be the Seward Peninsula, especially the Lost River and Brooks Mountain areas, and Southeastern Alaska. The only commercial uranium mine in the State is the Ross-Adams located on the southern end of Prince of Wales Island in veins cutting granite. Other scattered showings of radioactivity in Southeastern Alaska, especially in the Hyder district, suggest that other lode deposits may be found. Favorable mineral assemblages in the Kobuk, Iliamna, Copper River, and Chandalar regions indicate that these areas also are worthy of further investigations.

However, in view of the fact that at least 80% of the known world's uranium reserves are in sedimentary beds, principally sandstones and conglomerates, it appears that most of the future discoveries will be found in rocks of this type. No systematic study of possible sedimentary-type uranium deposits has been made in Alaska. The Division of Mines and Minerals is undertaking a program to appraise the possibilities using this approach, and will encourage others to do this type of work.

OIL AND GAS NEWS

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

Permit no. 68-20. Union Oil Company of California #G-10 Trading Bay Unit, A.P.I. No. 50-133-20094. Surface location: 1829' FSL and 1483' FEL, Sec. 29, T9N, R13W, S.M. Bottom hole location: 500' FSL and 270' FWL, Sec. 29, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 68-21. Mobil Oil Corporation #22-13 Granite Point State, A.P.I. No. 50-133-20095. Surface location: 2379' FNL and 1375' FWL, Sec. 13, T10N, R12W, S.M. Bottom hole location: 1714' FNL and 2362' FWL, Sec. 13, T10N, R12W, S.M. This development location is in the Granite Point Field.

Permit No. 68-22. Atlantic Richfield Co. #5 West Foreland Unit, A.P.I. No. 50-133-20096. 1980' FNL and 1980' FEL, Sec. 27, T9N, R14W, S.M. This oil test location is offshore about four miles west of the McArthur River Field.

Permit No. 68-23. Atlantic Richfield Co. #2 Prudhoe Bay State, A.P.I. No. 50-029-20002. 1880' FNL and 550' FEL, Sec. 4, T10N, R15E. U.M. This wildcat location is on land and about six miles southeast of the #1 well, an indicated oil discovery.

Permit #68-24. Pan American Petroleum Corporation #5 Granite Point State No. 17587, A.P.I. No. 50-283-20013. Surface location: 2050' FSL and 2019' FWL, Sec. 31, T11N, R11W, S.M. Bottom hole location: 2500' FSL and 1980' FWL, Sec. 30, T11N, R11W, S.M. This development location is in the Granite Point Field.

DRILLING ACTIVITY

Operator	Well Names & Numbers	Type	Status
Atlantic Richfield Co.	Prudhoe Bay #1	E	Drilling
Atlantic Richfield Co.	Prudhoe Bay #2	E	Location
Atlantic Richfield Co.	West Foreland Unit #5	E	Location
Mobil Oil Corp.	Granite Point State #22-13	D	Location
Mobil Oil Corp.	Granite Point State #24-13	D	Completing
Mobil Oil Corp.	Granite Point State #31-23	D	Drilling
Mobil Oil Corp.	Granite Point State #33-14	D	Location
Mobil 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	Comp. oil well
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	Drilling
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 #8	D	Drilling
Pan American Petroleum Corp.	South MGS Unit #9	D	Temp. Susp.
Shell Oil Company	Bachatna Creek #1	E	Location
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	Abandoned
Union Oil Co. of Calif.	Trading Bay State A-12	D	Abandoned
Union Oil Co. of Calif.	Trading Bay Unit D-1	D	Comp. oil well
Union Oil Co. of Calif.	Trading Bay Unit D-2	D	Completing
Union Oil Co. of Calif.	Trading Bay Unit D-3	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit D-4	D	Location
Union Oil Co. of Calif.	Trading Bay Unit G-5	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-6	D	Comp. Oil Well
Union Oil Co. of Calif.	Trading Bay Unit G-8	D	Drilling
Union Oil Co. of Calif.	Trading Bay Unit G-10	D	Location

Union Oil Co. of Calif.	Trading Bay Unit K-3	D	Location
Union Oil Co. of Calif.	Trading Bay Unit K-4	D	Completing
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	Drilling

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

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

Field	Oil-Bbls	Water-Bbls	Gas-MCF	*No. of Wells	Cum. Oil	Cum. Gas
Granite Point	1,422,664	8,772	1,001,558	19	9,894,467	6,741,872
McArthur River	675,574	297	200,655	6	2,147,934	623,440
Middle Ground Shoal	1,102,862	62,342	579,625	36(2)	12,323,423	5,439,149
Swanson River	1,108,057	155,406	1,743,830	30(20)	77,245,874	35,841,282
Trading Bay	149,856	530	156,139	12(2)	1,026,408	1,026,931
TOTAL	4,459,013	227,347	3,681,807	103(24)	102,638,106	49,672,674
Kenai (includes Kenai Deep)			3,144,127	17(2)		95,927,603
Moquawkie			2,707	1		41,926
Sterling			18,294	1(1)		626,038
South Barrow			54,923	2(1)		3,490,227
Trading Bay			9,810	1		66,925
Total Dry Gas Fields (Active)			3,229,861	22(4)		100,152,719
Inactive Gas Fields				(23)		12,178,737
STATE GRAND TOTAL	4,459,013	227,347	6,911,668	125(51)	102,638,106	162,004,130

*Dual completions are included as two wells; triple, as three. (_) Number of producers shut in, standing or inactive this month.

New Petroleum Prospects, shallow and deep, Bering Sea

By D. W. Scholl,1, D. M. Hopkins,1, E. C. Buffington,2, and H. G. Greene,1

Recent geological and geophysical investigations by the United States Geological Survey and cooperating institutions have outlined three areas of possible interest for petroleum prospecting in the Bering Sea: (1) intra-shelf basins, (2) an outer-shelf sediment-draped basement high, and (3) a continental borderland, Umnak Plateau, lying seaward of the continental slope.

(1) Although the possibility of sub-shelf oil deposits has long been recognized in the thick sequence of Cenozoic sediments underlying Bristol Bay, published geophysical data seemed to indicate that elsewhere the shelf is underlain by only a thin blanket of Cenozoic sedimentary deposits overlying a basement of crystalline and deformed sedimentary rocks of Mesozoic and older age. However, our seismic reflection studies reveal that large areas of the shallow Bering Shelf are underlain by intra-shelf basins containing several thousand feet of Cenozoic deposits. For example, at least 3,000 feet of sedimentary section overlies basement in Western Norton Sound. Nunivak, St. Lawrence, and the Pribilof Islands are basin-bounding structural highs; these may be flanked by oil-bearing Cenozoic deposits.

(2) Reflection records reveal that the outer edge of the shallow Bering Shelf is underlain by a discontinuous basement high. The basement is composed in part of well-indurated sedimentary rocks of probable Mesozoic age. Cenozoic strata are draped over the shelf-edge basement high and bury the landward-facing flank which is thought to be the scarp of a normal fault in some areas. The high may be of some interest to petroleum geologists but possible stratigraphic and structural traps within the overlying Cenozoic section are more obvious locations for petroleum prospects.

(3) Deep-water drilling techniques will ultimately be required to explore adequately the petroleum possibilities of Umnak Plateau--the borderland which lies at a depth of 6,000 feet in the triangular area formed by the intersection of the Bering continental slope and the Aleutian Ridge. The plateau is underlain by at least 5,000 feet of Cenozoic deposits that have accumulated over a differentially downwarped portion of the basement platform underlying the shelf. The structure of the plateau is broadly domical, but moderate folding and faulting have deformed its edges; thus the flanks of the plateau may be the best location for future petroleum prospecting.

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E. AND M. J. METAL MARKET PRICES

	March 25 1968	Month A go	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	145.8	145.75¢	154.75¢
Nickle, per lb	94.00¢	94.00¢	85.25¢
Platinum, per oz	$109-114	$109-114	$109-112
Mercury, per flask	$560-590	$584-586	$515-525
Antimony ore, per unit	$5.00-5.95	$5.00-5.95	$4.70-570
Beryllium powder, 98% (lb)	$54-66	$54-66	$54-66
Chrome ore, long ton	$31-35	$31-35	$31-35
Molybdenum conc., per lb	$1.62	$1.62	$1.62
Titanium Ore, per ton	$21-24	$21-24	$21-24
Tungsten, per unit	$43.00	$43.00	$43.00
Silver, New York, per oz	225.00	190.00¢	129.3¢