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

Northwest District - The State's new mining regulations permitting the acquisition of offshore prospecting permits have resulted in applications for 32,318 acres of submerged lands in Norton Sound off the coast of Nome. At the time of writing, ten more applications were reported received for an unknown acreage total in the same area. The rush was apparently started when Shell Oil Company applied for 5,120 acres. The permits, when issued, will allow the prospector two years in which to determine if there are sufficient quantities of gold present to warrant mining. The Nome beaches have produced close to 100 million dollars. The type of equipment and method of sampling to be used are still unknown, but obviously must depart from traditional methods. The development of these deposits should prove to be very interesting.

Southeast District - Mr. C. O. Keller, president of Bay West, Inc., of Moab, Utah, announced that a barge with men and equipment was to leave Seattle February 26 for Kendrick Bay. This is the original Ross-Adams uranium property. Bay West mined 2500 tons of uranium ore with a crew of about six men last year and indicates that production will be greater this year. Negotiations for the sale of the uranium ore are in progress with the Texas Zinc Company.

Two more offshore prospecting permits of 5,120 acres each have been filed in the Stephens Passage area north of the John C. Williams lease announced in last month's Bulletin.

Central District - The U. S. Office of Minerals Exploration has granted the Little Squaw Mining Company of Spokane, the first matching loan for gold exploration. The contract for $167,750, calls for 2000 feet of underground work and 1700 hours of surface bulldozer trenching. The scheduled underground work includes an additional 1300 feet of drifting and crosscutting on the Mikado vein, and long-hole drilling along with driving a new lower adit on the Little Squaw lode. The properties are located about nine miles east of Chandalar Lake, which necessitates the movement of supplies and equipment by air from Fairbanks.

OIL NEWS

During the month of February, 1962, the Petroleum Branch of the Division of Mines and Minerals approved seven applications for permit to drill, of which five were exploratory wells and two were for gas wells in the Swanson River Oil field. The wells and their respective locations are as follows: (1) British-American Oil Prod. Co., Bell Island 1, Sec 12, T15N, R7W, SB&M approx: 660'E and 1980'N of the SW cor of Sec 12. El. 26' gr.; (2) Pan American Petroleum Corp., Cook Inlet-State 1, Sec. 6, T11N, R9W, SB&M approx: C-NE-SW of Sec 6; (3) Pan American Petroleum Corp., Middle Ground Shoal-State 1, Sec. 30, T9N, R12W, SB&M approx: C-NE-SW of Sec 30; (4) Union Oil Co. of Calif., Nenana 1, Sec 7, T4S, R10W, F B&M approx: 2000'N and 2000'E fr SW cor Sec 7. El. 500 ± gr; (5) Standard Oil Co. of Calif., Riou Bay 1, Sec 26, T23S, R23E, CR B&M approx: 1600'S and 2000'W fr NE cor of Sec 26 El 25' gr; (6) Standard Oil Co. of Calif., SRU 211-15, Sec 15, T8N, R9W approx: 600'E & 660'S fr NW cor of Sec 15. El 330 ± gr; Standard Oil Co. of Calif., SRU 222-21, Sec 21, T8N, R9W, approx: 1980'S & 1980'E fr NW cor of Sec 21. El 215 ± gr.

Total applications approved this year to date number nine, which equals the number at this time in 1961.

Drilling Activity

Operator	Well Name	Status
SOCAL	SCU 34-16	Drlg @ 9695'
SOCAL	SCU 243-8	TD 6143', testing
SOCAL	SCU 32-5	Drlg @ 11,080'
SOCAL	Chaix Hills 1-A	Drlg @ 10,032'
Pan American	West Foreland 1	TD 13,500', testing
Superior	Chuit-State 1	Drlg @ 6320'
Union	Nenana 1	Drlg @ 1047', prep to run surface casing
Pan American	Stedatna Creek-State 1	Completed 2/26/62; TD 7459', plugged and abandoned

Production, Swanson River Field, Hemlock Zone

	Producing Wells	Oil (barrels)	Water (barrels)	Gas (MCF)
January, 1962	47	808,752	19,047	144,729
Cumulative to February 1, 1962		7,925,596	222,675	1,536,649

Production, Kenai Gas Field

January, 1962	2	0	0	102,541
Cumulative to February 1, 1962		0	0	333,835

Barrow Residents May Receive Gas - Gas from the South Barrow Gas Field is presently used exclusively by the military. SB 2020, introduced in Congress last year to allow residents of Barrow and other nearby nonfederal communities to use the gas, is said by the Director of the Office of Emergency Planning to be "desirable from the standpoint of the national defense" as it would cause the drilling of a third well in the field.

Outpost Development Contract Approved - The USGS has announced approval of British Petroleum Exploration Co.'s (Alaska), Inc. Outpost Development Contract which covers 564,135 acres located on the Arctic slope within T2N-T8S, R-5-8W, Umiat Meridian. Date of approval - February 1, 1962.

Fish Creek Unit Approved - USGS announced approval of Union Oil Co. of California's Fish Creek Unit located in the Susitna River Valley within T15-17N, R3-4W, Seward Meridian. The unit area contains 35,167.50 acres, and date of approval was January 26, 1962.

Crosswind Lake Development Contract Approved - USGS announced approval February 8, 1962, of Union Oil Co. of California's Crosswind Lake Development Contract located in the Copper River Basin within T3-8N, R1E-R8W, Copper River Meridian. The contract area encompasses 542,720 acres.

Nenana Development Contract Approved - USGS announced approval on February 8, 1962 of Union Oil Co. of California's Nenana Development Contract located in the Middle Tanana Basin within T1-6S, R9-12W, Fairbanks Meridian. The contract area contains 197,316 acres.

IOCC Appointments Made - By letter of January 26, 1962, to the Interstate Oil Compact Commission, Governor William A. Egan designated the following committee appointments: Legal Com-

mittee - Phil R. Holdsworth, Commissioner, Alaska Department of Natural Resources; Public Lands Committee and Regulatory Practices Committee - James A. Williams, Director, Division of Mines and Minerals; Research Committee and Secondary Recovery and Pressure Maintenance Committee - Donald D. Bruce, Chief, Petroleum Branch, Division of Mines and Minerals; Engineering Committee - Richard V. Murphy, Petroleum Engineer, Division of Mines & Minerals.

Offshore Drilling - Alaska will see its first offshore drilling this summer with no less than three wells to be drilled in upper Cook Inlet. Shell will be drilling at an undisclosed location in upper Cook Inlet with CUSS II, a new drilling ship described in the following article. Pan American will start two wells at locations as described on the previous page as soon as equipment now enroute arrives. One Pan Am well will be drilled from a platform on piles and the other from a floating barge. The platform and platform tender are enroute by way of the Panama Canal from Orange, Texas, and will be joined by the drilling barge (which is just being completed) at San Diego for the trip north. Crews at both drill sites will live aboard the tender and barge while drilling proceeds. Mobilization and drilling costs for the two wells are expected to total $6,000,000, which added to the $7,296,000 Pan Am paid for the Cook Inlet leases, makes a $13,000,000 investment.

CUSS II - Since it has been reported that CUSS II, the world's largest floating drill ship, presently being constructed in Mandeville, Louisiana, will be used in the Cook Inlet this summer, the DM&M has received permission from the Petroleum Engineer Publishing Company in Dallas, Texas, to reprint the following article on the floating drill ship from the January, 1962, issue of Petroleum Engineer:

"The largest free-floating offshore drilling ship in the world will go into service for Global Marine Exploration Co. in January. Named 'CUSS II,' the 268-ft, 5500-ton vessel is being built by Equitable Equipment Co., Inc.

"Robert F. Bauer, president of Global Marine, said CUSS II will carry 15,000 ft of drill pipe initially but will be able to drill deeper when required. This ship was specifically designed for gulf operations where drilling in more than 200 ft of water and to depths of 14,000 ft and over are of increasing interest.

"It is the first major drilling vessel to be designed and built new from the hull up for open sea drilling. This fact permits equipment layouts not possible on her predecessor, CUSS I, a converted Navy barge. The latter, it will be recalled, was the drilling ship for the now-famous 'Operation Mohole' test coring off Guadalupe, Mexico, early in 1961.

"CUSS II has almost double the drilling capacity of CUSS I. An important improvement in the new craft is greater stability in heavy seas. Proper design of hull and equipment were obtained by subjecting scale models of the ship to exhaustive tank tests in which wave and other gulf sea conditions were simulated. A special anchoring system allows the ship to rotate 140 deg while drilling. The stern, too, is of special design to take seas on it as well as on the bow. Thus, it is possible to keep the bow or the stern headed into the sea and minimize roll in heavy weather.

"Better and greatly increased material handling facilities are another feature. The derrick floor is uncommonly large and the specially designed 136-ft derrick can handle triple lengths of 5½-in. drill pipe easily. Also, a 20-ton revolving crane can swing its 60-ft boom through a large radius.

"The 15,000 ft of drill pipe in 90-ft lengths are racked horizontally. In addition, the ship can also carry 12,000 ft of 9 5/8-in. casing in special racks amidship.

"Below deck storage facilities can take care of 1960 bbl of liquid mud, 4800 sacks of bulk mud, 2500 sacks of bulk cement, and 10,020 bbl of drilling water as well as 1800 bbl of fuel oil and 880 bbl of potable water.

"Diesel-electric power will be used throughout. Nearly 3000 kw of electricity will be generated to operate everything from the electric galley and air conditioning to pumps and drilling and service machinery. Provision is also made for future self-propulsion by electric motors on twin screws."

OUTDOOR RECREATION FOR AMERICA

The U. S. Senate and House of Representatives created by Public Law 85-470 the Outdoor Recreation Resources Review Commission. Their report to the President and to the Congress was published in January 1962. The report surveys the country's outdoor recreation resources, measures present and likely demands upon them over the next forty years, and recommends actions to ensure their availability.

Under Chapter 5, titled "The Needs," we find that the demand for outdoor recreation is large, and is growing larger, and that the kind of recreation people want most is "a path to walk along, an attractive road for a drive, a place to swim, a shady hillside for a picnic." They want these things where they live, close to the metropolitan areas.

Under Chapter 3, titled "Alaska," we find the following:

"Alaska is a storehouse of recreation opportunities. In this new State, with far less than 1 percent of the total national population, are 31 percent of the lands in the National Parks System, 65 percent of the wildlife refuge lands, 64 percent of the public domain, and 11 percent of the national forest acreage.

"This generous supply gives some indication of the role Alaska could play in meeting the recreation demands of the people of the other 49 States. The new State is entitled to select 102 million acres of land from the Federal domain during the next 25 years, but this selection is not expected to affect the over-all supply of recreation resources.

"There are difficult problems to be solved before this great potential can be realized. Alaska is still remote for most Americans seeking outdoor recreation; it takes time and money to get there. The prospect is that over the next 40 years, the public will have more of both and thus visit Alaska more. Advances in travel technology will also help.

"There are also problems in development. The resources are there--some of the finest in the world. Hunting and fishing are excellent. The scenic grandeur is unsurpassed. But at present there are few facilities to serve the public. Without the facilities, the recreation-seeking public will not come. Without the public demand, capital cannot afford the risk of development. Capital for development of recreation potential is thus a prime need."

INTELLIGIANT

John Miscovich reports via letter that the Stang Corporation is now the exclusive sales outlet for the Intelligiant Monitor. He is assisting in the development and sales of the giant and the development of a high pressure jet for use in coal and other types of mining. John further reports that he will return to Flat in April to continue dredging operations there.

STATUS OF BILLS, SECOND STATE LEGISLATURE, SECOND SESSION

Bills of particular interest to the minerals industries which have proceeded past the first committee assignment are House Bills 76 and 128. Both have passed the House and are in committee in the Senate. HB 76 would exclude petroleum operations from the application of the Mining License Tax. HB 128 would limit the recovery of workman's compensation to a period of four years. FLASH: As we go to press, it is reported that HB 76 has passed the Senate and is now on the Governor's desk.

A.I.M.E.

The Sixth Alaska AIME Mining, Minerals, and Petroleum Conference will be held April 26-27 in Anchorage.

The AIME-A.S.M. Pacific Northwest Minerals and Metals Regional Conference is also scheduled for April 26-27 at Seattle.

NEW U.S.G.S. BULLETIN AND MAPS

Geology of the Craig Quadrangle, Alaska, Bulletin 1108-B, W. H. Condon, is the compilation of known geologic data from maps and reports modified by geologic interpretations from aerial photographs and spot field checks. It is interesting to note that part of Prince of Wales Island is mapped both geologically and geophysically (Geophysical Investigations Map GP 135).

Geologic map and section of the Fairbanks D-3 quadrangle, Alaska, by T. L. Pewe and N. R. Rivard. I-340.

NEW UNIVERSITY PUBLICATIONS

The following is a news release received from the University of Alaska:

"COLLEGE - Revised editions of two bulletins relating to Alaska's mining prospecting and minerals are now available from the College of Earth Sciences and Mineral Industry, University of Alaska, College.

"The revised bulletins are 'Introductory Prospecting and Mining' by Leo Mark-Anthony and 'Determination Mineralogy for the Alaskan Prospector' by Albert S. Wilkerson, as revised by Mark-Anthony. Bulletin number 4 on introductory prospecting is available for $3 and bulletin number 1 on determinative mineralogy sells for $1.50."

STATE SELECTED LANDS

The Division of Lands has announced 599,040 acres in the Kantishna River area southwest of Fairbanks have been selected by the State. The BLM has given tentative approval to 158,121.75 acres selected in the Susitna Valley. The total is now 11,529,689 acres applied for, 2,165,271 acres tentatively approved, and 313,936 acres patented.

E. AND M. J. METAL MARKET PRICES

	Feb. 22, 1962	Month Ago	Year Ago
Copper, per lb.	31¢	31¢	29.0¢
Lead, per lb.	9.5¢	10¢	11¢
Zinc, per lb.	12¢	12¢	11.5¢
Tin, per lb.	121.4¢	120.9¢	101.6¢
Nickel, per ob.	81.3¢	81.3¢	74¢
Platinum, per oz.	$80-85	$80-85	$81-85
Mercury, per flask	$192-195	$190-193	$208-211
Antimony ore, per unit	$4.30-4.50	$4.30-4.50	$3.60-3.65
Beryllium ore, per unit	$46-48	$46-48	$46-48
Chrome ore, per long ton	$36-38	$36-38	$36-38
Molybdenum conc., per lb.	$1.40	$1.40	$1.25
Titanium ore, per ton	$23-26	$23-26	$23-26
Tungsten ore, per unit	$20-22	$20-22	$22-24
Silver, foreign, per oz.	102.0¢	103.8¢	91.4¢
Silver, domestic, per oz.	90.5¢	90.5¢	90.5¢