

State of Alaska
Department of Natural Resources
DIVISION OF MINES AND MINERALS

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GEOLOGICAL SURVEY

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MINING ACTIVITIES

Northwestern

Both Newmont and USSR&M have completed their exploratory work for this season on the beryllium claims in the Lost River area. The Tweets are mining at Taylor with a dredge and a sluicing operation. Martinson Brothers are dredging above the North Fork of the Kougarak River. Herb Engstrom is busy drilling and stripping on Basin Creek and has hopes of getting his dredge going. Van Chambers is mining on El Dorado Creek.

Central

The Vitro Minerals Corp. has a small crew working on equipment and building camp facilities. The Usibelli Mine is loading about 1500 tons of coal per day and will increase this substantially as winter approaches. Wiley Robinson, Coal Mine Inspector, reports that the Delta Coal Company has a good bed of coal opened up.

Southwestern

The Matanuska Coal Company has washed and stockpiled several thousand tons of coal and the Evans Jones Mine is actively loading coal and preparing for larger shipments with the coming of winter.

COAL NEWS

Safety Law Change Proposed.

Secretary of the Interior Udall has submitted to Congress proposed legislation to strengthen coal mine safety laws. The proposal would tighten Federal safety rules and also would extend these rules to some 8,000 small mines not now covered. One of the most far-reaching aspects of the proposed legislation is to include under mandatory Federal safety provisions the thousands of small coal mines, those with fewer than 15 underground employees, which represent 70 per cent of the coal mines in the United States. These are classed as Title I mines and are presently exempt from the laws covering the larger mines or Title II mines. Another proposal would eliminate the Grandfather clause in which a transition period is permitted for mines to switch from nonpermissible equipment to permissible equipment. Another proposal would require separate ventilation for each working section of a mine, regardless of its size.

Gasoline at 13.6¢ per Gallon from Coal.

At a recent meeting of the General Technical Advisory Committee of the Office of Coal Research a proposal of Consolidation Coal Company, Inc. for the conversion of coal to gasoline was discussed. Mr. J. A. Phinney, Director of Research of Consolidation Coal Co., gave a comprehensive description of the technical and economic aspects of the process including flowsheets, plant energy balances, products and an economic comparison between a coal refinery using the company's process and a new oil refinery.

The company has a process for making gasoline out of coal that has the potential of being competitive. The company and its associates have spent twelve years and \$9 1/2 million on laboratory research and on developing the process and equipment. The investigations have proceeded to the point where a pilot plant is to be the next step. The company intends to go ahead with its research but with government assistance the process would be hastened by several years. The economics are such that the first commercial plant would use about 10,000 tons of coal a day and produce 32,000 barrels a day of gasoline. The gasoline would be produced for 13.6¢ a gallon but with process and flowsheet improvements made during the course of the project it is hoped that this cost could be reduced. The cost of the project is estimated to be \$10 million. The members of the committee expressed approval of proceeding with the project up to the point of completion of bench scale work. At this time they will review the results and decide whether to go ahead with the pilot plant.

OIL NEWS

Two applications for permit to drill were approved this month as follows: (1) SOCO, Naptowne Unit 24-8, 725' N and 1723' E of SW corner of Section 8, T.6N, R.8W, SM. This location lies about 6 miles southeast of the Soldotna Creek Unit production. (2) Shell Oil Company, North Cook Inlet State #1, 1320' N and 1320' E of SW corner of Section 29, 12N., 9W., SM. This location lies in Cook Inlet about 2 miles northeast of Pan American's Cook Inlet #1 which is presently burning but which is expected to be plugged off within the coming week.

Drilling Activity:

<u>Operator</u>	<u>Well Number</u>	<u>Status 9/28/63</u>
Colorado Oil & Gas Corp.	Gubik Unit #1	Testing
Richfield	Wide Bay Unit	Drilling
Pan American	Cook Inlet #1	Burning
Pan American	Middle Ground Shoal #2	Drilling
Pan American	Cook Inlet #1A (Relief Well)	Drilling
Pan American	Tyonek State #2	Drilling
SoCal	S.C.U. 23-3	Drilling
Gulf Oil Corp.	Sandy River Federal #1	Drilling
Superior	Happy Valley Unit 31-22	Drilling

Completions:

Shell Oil Company	Middle Ground Shoal #1	Suspended oil well
Union Oil Company	Knik Arm State #1	Plugged & abandoned

Production, Swanson River Field, Hemlock Zone:

	<u>Producing Wells</u>	<u>Oil-Barrels</u>	<u>Gas (MCF)</u>
August, 1963	53	896,308	238,587
Cumulative to September 1, 1963		24,441,743	5,025,754

Production, Kenai Gas Field:

August, 1963	3	107,963
Cumulative to September 1, 1963		3,635,779

<u>Production, Sterling Gas Field:</u>	<u>Producing Wells</u>	<u>Oil-Barrels</u>	<u>Gas (MCF)</u>
August, 1963	1		3,964
Cumulative to September 1, 1963			55,109

Production, Swanson River Gas Field, Kenai Zone:

August, 1963	6	500,566*
Cumulative to September 1, 1963		3,198,023**

Correction last month: * from 375,116 to 539,363 and;
 ** from 2,533,212 to 2,697,457

Gas Injection, Swanson River Field, Hemlock Zone:

August, 1963	3	647,810
Cumulative to September 1, 1963		4,399,743

Shell Oil Company Announces Oil Discovery at Middle Ground Shoal:

For the last 5 years the oil and gas industry in Alaska has been deriving most of the encouragement for its ever increasing exploration effort from the discovery of the giant Swanson River Field.

This month the long enduring effort was tangibly rewarded at Shell Oil Company's Middle Ground Shoal #1 when a 48-hour potential test flowed oil at the rate of at least 700 barrels of oil per day through a 5/8" top hole choke from an interval 7,480 to 8,177 feet. This wildcat oil discovery was operated by Shell Oil Company with Standard Oil Company of California and the Richfield Oil Company as partners. Anyone aboard the Cuss II drilling vessel which drilled this well, can attest to the validity of the statement that Cook Inlet offshore drilling presents the most difficult problems of offshore drilling in the world because of 30 foot tides, 8 knot currents changing direction 4 times a day, silty water, floating debris and high winds. It lies in 125' of water 3 miles south of Pan American Petroleum's Middle Ground Shoal #1 which discovered gas at shallow depths last year and was plugged when it became impossible to control the well.

Rather than risk the danger of mechanical damage to submerged well head equipment and possible escape of crude oil into Cook Inlet, Shell was permitted to set a drillable plug on top of the pay and place several cement plugs in the hole. The well will be left in this state until productive capacity from additional wells will warrant large scale production and storage facilities.

Arctic Slope Development Contract Approved:

Shell Oil Company and Standard Oil Company of California will be operators of the Echoosuk River Development Contract which lies considerably east of the three other approved development contracts on the Arctic Slope. The contract contains 659,975 acres and calls for the drilling of the first exploratory well prior to July 1, 1966, following initial exploratory work.

TWELFTH COMPETITIVE OIL AND GAS LEASE SALE

The Division of Lands announces that it will hold its Twelfth Competitive Oil and Gas Lease Sale Wednesday December 11, 1963. They are anxious to consider leasing those areas

which are of special interest to the industry. Among available areas of interest are unleased Mental Health, University and School lands, and any of the Alaska coastal areas within the three mile limit from the coast line. Nominations to be considered for the December sale will be accepted from the date of this notice until the close of business at 3:00 PM, September 27. The areas nominated will be announced by October 4.

NEW GOLD BILL

The Bill (S. 2125) entitled the Gold Mine Revitalization Act would compensate producers who sell gold in the United States, yet are not compensated for the difference in cost of production of this mineral in 1963 as compared to the cost in 1940, the year the U.S.A. gold miners reached their peak production. All components of gold production costs have increased to such an extent since 1940 that most gold miners have been forced to cease operations. The new bill would leave the price of gold at the pegged price of \$35 an ounce and authorize compensation for the increase in production costs over those of 1940. It is assumed that this legislation will not be opposed by the Treasury Department since it does not create a two price gold system and should not affect the value of the U.S. dollar.

There were 4,000 men employed in the gold mining industry in Alaska in 1940 compared to about 500 in 1962.

NEW MOLY DEPOSIT IN WYOMING

A major deposit of molybdenum ore has been discovered by American Molybdenum Co. in the Bridger wilderness area of Sublette County, Wyoming. Reserves are estimated at 24 million tons of ore containing more than 1% molybdenum. Wilderness restrictions on mining have been waived because of the strategic nature of the find, the company said. The mine site is at an elevation of 11,000 feet. Dense forest and rugged terrain have kept mining operations from public notice. The company has been active in the area for the past two years.

JAPANESE MINERAL ACTIVITY

Azuma Kako Company has announced that China has expressed an interest in trading 250 tons of Japanese metallic chrome for 20,000 tons of Chinese manganese ore. Japan currently is importing manganese from India, Phillippines, and South Africa. The Japanese are also negotiating for 100,000 tons of Chinese coal.

A Japanese steel company is developing rich iron ore deposits in Pahang, Malaya. Nippon Mining Company and the Mitsui Company are developing copper deposits at Mala, south of Lima, Peru. They intend to ship 700 tons of concentrates a month.

NEW PUBLICATIONS

U.S. Geological Survey Bulletin 1142-G, Geology of the Red Devil Quicksilver Mine, Alaska, by E. M. MacKevett, Jr. and H. C. Berg. The report updates earlier geologic descriptions of the Red Devil mine and provides additional data on the size, shape, and structural control of the deposits.

AERIAL PHOTOGRAPHY

Senator Gruening, in response to a request from Governor Egan, states that he has received from the U.S. Geological Survey an explanation for frequent delays experienced

by purchasers of aerial photographs from the Survey. Delays in delivery result at times from the film being on loan to another Federal agency and not readily available to fill outside orders. Sometimes the delay results from the need for military clearance. On other occasions it is caused by large orders for reproductions. The Geological Survey has custody of nearly all of the aerial film negatives of the acceptable mapping photography of Alaska taken by Federal agencies. It is anticipated that Federally owned film not now in the Survey's custody will soon be acquired, thereby enabling the Survey to maintain a complete file of mapping photography of Alaska. Thus, in effect, there will soon exist a central library of aerial photo negatives of Alaska, and delays caused by the necessity to refer orders or borrow film will be eliminated.

E. AND M. J. METAL MARKET PRICES

	<u>Sept. 30,</u> <u>1963</u>	<u>Month</u> <u>Ago</u>	<u>Year</u> <u>Ago</u>
Copper, per lb.	31¢	31¢	31¢
Lead, per lb.	11.75¢	11.25¢	9.5¢
Zinc, per lb.	12.5¢	12.5¢	11.5¢
Tin, per lb.	117.125¢	114.750¢	108.6¢
Nickel, per lb.	79.0¢	79.0¢	79.0¢
Platinum, per oz.	\$79-82	\$77-80	\$80-85
Mercury, per flask	\$190-193	\$183-186	\$192-195
Antimony ore, per unit	\$4.25-4.35	\$4.25-4.35	\$4.25-4.50
Beryllium ore, per unit	Domestic Prices Not Quoted		
Chrome ore, per long ton	\$36-38	\$36-38	\$36-38
Molybdenum conc., per lb.	\$1.40	\$1.40	\$1.40
Titanium ore, per ton	\$23-26	\$23-26	\$23-26
Tungsten ore, per unit	\$16-18	\$16-18	\$16-20
Silver, New York, per oz.	129.300¢	129.0¢	117.20¢
Silver, U.S. Treasury, per oz.	90.5¢	90.5¢	90.5¢

