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

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THE DIVISION OF MINES AND MINERALS ANNUAL REPORT

The annual report this year will again contain reports of various investigations made by its staff. The Division's engineers, as in the past, made property examinations at the request of prospectors and miners. Some of these reports are released to the public and others are kept confidential at the request of the property owner.

It is anticipated that the annual report will be received from the printer about the 15th of March. This is a little later than in the past but the delay is necessary in order that the field reports can be properly written for presentation in the report.

Because of the later date of publication, some of the more pertinent data are presented as follows:

Production Major Commodities  
Dollar Value (Thousands)

<u>Year</u>	<u>Gold</u>	<u>Mercury</u>	<u>Coal</u>	<u>Oil and Gas</u>	<u>Sand and Gravel</u>
1950	\$ 10,125	\$	\$ 3,033	\$	\$ 2,377
1951	8,387		3,767		3,538
1952	8,420	6	5,779		8,651
1953	8,882	8	8,452		5,080
1954	8,699	277	6,442		6,302
1955	8,725	12	5,759		8,242
1956	7,325	853	6,374		5,880
1957	7,541	1,349	7,296		8,799
1958	6,525	774	6,931		3,871
1959	6,262	851	6,869	311	5,265
1960	5,887	940	6,318	1,496	5,483
1961	3,998	816	5,868	17,776	4,185
1962	5,600	710	7,365	28,424	3,497
	<u>\$96,376</u>	<u>\$6,596</u>	<u>\$80,253</u>	<u>\$40,007</u>	<u>\$71,170</u>

Mineral production as determined by the U. S. Bureau of Mines was presented last month.

Mineral exploration in the State decreased during 1962. It is estimated that \$1,300,000 was spent in exploration and prospecting during the year. This is a decrease of about \$400,000 from the previous year.

There were a total of 181 Offshore Prospecting Permits granted during the year.

During 1962, there were 2,306 documents filed at the Juneau office bringing the total number of documents on file to 25,468.

A total of 1,172 claims were staked as compared to 923 last year. Included were a total of 286 placer gold claims, 158 iron claims, 82 limestone claims, and 81 copper

claims. The balance were claims for various other metallic and nonmetallic minerals. Affidavits of annual assessment for 6,133 claims were filed.

Presently estimated expenditures of the petroleum industry in Alaska for exploration, development and production for the year were \$60,500,000. Estimated value of oil and gas produced was \$28,424,000.

#### Employment and Accident Statistics

	No. of Mines(1)		No. of Men Employed (1)		No. of Accidents			
	1961	1962	1961	1962	1961		1962	
					Fatal	Nonfatal	Fatal	Nonfatal
Placer Mines								
Dredges	21	21	260	262		29		16
Nonfloat	72	72	216	188		2		1
Hydraulic	10	18	21	13		0		0
Coal Mines								
Underground	1	1	13	18	1	12		1
Strip	4	3	279	233		34		22
Lode Mines								
Metal (2)	4	4	50	56		8		11
Nonmetal	3	3	24	25		1		1
Petroleum								
Production & exploration	(?)	(?)	598	658		98	4	109
Exploration								
Metal	91	78	243	279	1	4		6
TOTALS	206	200	1,695	1,766	2	188	4	167

(1) Estimated from various reports.

(2) Lode mines in 1961 include lode, prospector and intermittent operation and exploration projects, excluding sand, gravel and stone operations.

NOTE: Estimated average monthly insured employment in the Alaska Mining Industry for 1962 is 1,239.

Two of the fatalities were as a result of an explosion aboard a boat doing geophysical work, one fatality was the result of a runaway vehicle on geophysical work, one fatality was the result of a drilling accident.

Only one fatality, the result of a coal mine accident, was indicated by last year's annual report, but in checking the records we found that the U. S. Bureau of Mines also included under metal exploration the death of a skin diver who was reportedly searching for mineral.

#### MINING ACTIVITIES

Mining activities in the State during January, as in the past, were very limited. Weather and the holidays resulted in the closure of the placer mines and curtailment of underground and development activities.

Production Swanson River Field, Hemlock Zone

	<u>Producing Wells</u>	<u>Oil (Barrels)</u>	<u>Water (Barrels)</u>	<u>Gas (MCF)</u>
December 1962	50	905,621	24,926	143,580
Cumulative to Jan. 1, 1963		17,375,954	498,196	3,258,196

Production Kenai Gas Field

December 1962	2	0	0	267,792
Cumulative to Jan. 1, 1963		0	0	1,691,113

Production Sterling Gas Field

December 1962	1	0	0	4,277
Cumulative to Jan. 1, 1963		0	0	25,186

Production Swanson River Gas Field, Kenai Zone

December 1962	4	0	0	141,539
Cumulative to Jan. 1, 1963		0	0	153,212

Gas Injection, Swanson River Field, Hemlock Zone

	<u>Injection Wells</u>	<u>Injection (MCF)</u>
December 1962	2	219,450
Cumulative to Jan. 1, 1963		252,160

The monthly rate of oil and gas production were at new highs for the month of December.

A new gas injection well, SCU 41-4, was converted during December. Three additional wells are to be converted to gas injection.

NEWS RELEASES

The 16th annual Pacific Northwest Metals and Mineral Conference is to be held in Portland, Oregon, April 25-27, 1963. The conference is sponsored by the American Institute of Mining, Metallurgical and Petroleum Engineers, the American Society for Metals, the American Welding Society and the National Association of Corrosion Engineers. More than 600 delegates and wives are expected to attend. Among the many topics of interest planned is "The Second Gold and Money Session," at which time miners, bankers, and economists will be heard.

U. S. GEOLOGICAL SURVEY PUBLICATIONS

The Preliminary Geologic Map of the Valdez-Tiekel Belt, Alaska by H. W. Coulter and E. B. Coulter, Map I-356 has been released. This map is now available at the various USGS offices and available for study at the offices of the DME&M.

Placer Tin Deposits in Central Alaska by R. M. Chapman, R. R. Coats, and T. G. Payne is available at the various USGS offices and will shortly be available for reading at the offices of the DME&M.

Bay West, Inc., operator of the Kendrick Bay Mine in Southeastern Alaska, ceased work for a few weeks but is back again now doing exploratory diamond drilling and shaft raising in preparation for mining uranium again this coming season.

The Red Devil Mine, on the lower Kuskokwim, is reportedly preparing for its development work under contract with the Office of Mineral Exploration.

Mr. Sam Pekovich has received a Federal permit to survey and make preliminary plans for obtaining hydroelectric power from the Sweetheart Lakes near Snettisham. It is believed that between 15 and 20 thousand kilowatts of power are available. The availability of power should enhance the possibility of producing iron from Mr. Pekovich's Snettisham magnetite deposit.

### OIL NEWS

Three permits to drill have been approved by the Petroleum Branch since the date of the last bulletin. They are as follows: (1) B. P. Exploration Company (Alaska) Inc.; Wasilla State #1, 1,200' N of S line, 600' W of E line; Sec. 33, T17N, R1W S. M. This well is a projected 6,000 ft. test, 4 1/2 miles south of Wasilla on the flats near Palmer Slough. (2) Standard Oil Company of California; Beluga River Unit 242-27; 1,980' South and 660' West of Northeast corner of Sec. 27 T13N-R10W S. M. This will be a development gas well to the west of the discovery well. (3) Pan American Petroleum Corporation #1, Proposed Moose Creek Unit; 207' South of the North line and 1,852' West of the E line Sec. 29 T4N-R3W C.R.M. This is a proposed test about 10 miles west of Glennallen.

#### Drilling Activity

<u>Operator</u>	<u>Well Number</u>	<u>Status 1/29/63</u>
Aledo	Eureka #2	Running csg. 6,696'
B. P. (Alaska)	Wasilla State #1	Drlg. 1,000'
Richfield	Wide Bay Unit #1	Drlg. 2,559'
Pan American	Tyonek State #1	Testing
Pan American	Cook Inlet #1	Burning TD 12,000'
Pan American	Moose Creek #1	Location
Sinclair	Mystery Creek #1	Drlg. 3,510'
SoCal	BRU 232-4	Drlg. 5,300'
SoCal	BRU 242-27	Location
SoCal	SCU 21-8	Drlg. 10,675'
SoCal	SCU 22A-32	Drlg. 12,715'
SoCal	SCU 43-9	Location
SoCal	SRU 14-9	Drlg. 13,832'
SoCal	SRU 14-22	Waiting on cement

#### Completions

SoCal	BRU #1	Shut-in gas well
SoCal	BRU #212-25	Shut-in gas well

Development Contracts Terminated - As of December 31, 1962, the Pure Oil Company's Nushagak Bay Development contract automatically terminated. The contract area covered 476,824 acres in the Dillingham area of Bristol Bay. On the same date SoCal's St. Elias Development contract on 247,000 acres in the Gulf of Alaska area terminated. SoCal had drilled three holes in the contract area.

Development Contract Approved - The Eureka Unit covering 73,466.23 acres lying in the western Copper River Basin was approved January 11, 1963 with Aledo Oil Company as operator. Currently the operator is drilling the Eureka #2 in this unit area.

## U. S. BUREAU OF MINES PUBLICATIONS

Mercury Occurrences in Alaska by Kevin Malone, IC 8131. The publication describes all known mercury deposits in Alaska, and contains maps of the seventeen most important ones. One section is devoted to a discussion of the Red Devil Mine near Sleetmute. Copies are available for reading at the offices of the Bureau of Mines and at offices of the DM&M. A copy of the report can be obtained from the Publications Distribution Section, Bureau of Mines, 4800 Forbes Avenue, Pittsburgh 13, Pennsylvania.

Analyses of Tipple and Delivered Samples of Coal (Collected During the Fiscal Year 1961), RI 6086. Copies can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. for 30 cents each. The publication is not sold by the Bureau of Mines.

Washability of Coals from the Matanuska Valley and Beluga River Fields, Alaska, by M. R. Greer and F. D. Fennessy, RI 6017. This publication is available for reading at the offices of the Bureau of Mines and DM&M offices. Inquiries for purchase should be addressed to the Bureau.

The U. S. Bureau of Mines press release of January 7 revealed that the nation's mineral output for 1962 is estimated to be \$18.7 billion worth of metals, nonmetals, and fuels. This is an increase of about \$600 million over 1961.

Mine production of gold in the United States again declined in 1962, but silver output increased for the second successive year. The fall-off in gold production was attributed principally to lower output in Washington, Utah, and Montana not fully offset by production gains in Alaska and South Dakota. The release did not elaborate on gold production but estimated 1962 production at \$53.5 million compared with \$54.2 million in 1961.

### STUDENT PROGRAM AT PENN STATE

Penn State's student-trainee program in mining engineering entered its third year as a new group of 17 freshmen commenced schooling or on-the-job training this fall. A five year work-study plan, combining on-the-job training with the students' college career, allows the student to acquire actual experience and helps to finance his career. The student alternates six months of training with six months of education on the Penn State campus. Mining companies sponsor the program and provide employment.

### RAMPART WITHDRAWAL

The U. S. Geological Survey has filed an application for about 9 million acres in the Rampart area. It is assumed that this is for the purpose of a power site, and it is not known whether or not exploration or prospecting will be allowed if the application is approved. There are presently several mineral claims, and oil and gas leases near Rampart that would likely be included in a withdrawal of this magnitude. It is believed that a power site withdrawal is a means of protecting the Federal government against future claims in the event the site is eventually flooded. Details are soon to be released by the Bureau of Land Management. See sketch on last page.

### GOLD AND MONETARY POLICY DISCUSSED

The American Mining Congress News Bulletin, issued January 4, reports as follows: "In a recent speech on monetary policy, William McC. Martin Jr., chairman of the Board of Governors of the Federal Reserve System, said that a persistent decline in U. S. gold holdings is harmful not only because it affects the American international liquidity position, but also 'because of our long-established domestic reserve requirements, a declining gold stock fosters uneasiness about a curtailed Federal Reserve flexibility to

pursue domestic monetary policies otherwise regarded as appropriate and desirable.' The gold outflow, however, cannot be halted by means of an embargo, he stated, since this 'would terminate the convertibility of the dollar at fixed rates.'

"If the U. S. gold stock should fall below the 25 percent minimum gold certificate reserve requirements of the Federal Reserve Act, he added, 'the Board of Governors would have full authority to suspend the Reserve Bank gold certificate reserve requirements.'

"Martin also said that 'our progress this year in rectifying our international payments disequilibrium has fallen short of our target. . . Hence, we must now intensify our efforts to re-establish payments balance. And until we have regained equilibrium, we shall have to be prepared to settle some part of any deficits experienced through sales of gold.'"

#### DM&M ASSAYERS REPORT TROUBLESOME SAMPLES

Several of the assay offices have reported that they are experiencing trouble with samples received. Wet samples mailed in paper sacks arrive with part or all of the sample missing, or if more than one sample was shipped in a package, it arrives mixed. Samples with paper labels arrive without the label resulting in confusion and delay, and often erroneous results. It is suggested that plastic freezer bags and felt-ink pens be used for wet samples. It is also recommended that the shipper's address and identification marks be placed inside and outside each sample bag.

Placer sand samples that are to be fire assayed, should be first reduced by panning or some other means of concentration since the assay labs are not equipped for bulk concentration. It should also be remembered that unless requested to do otherwise, the assayer will report the results of fire assaying in dollars per ton. This, of course, means dollars per ton of material received, and does not represent the value per ton of the entire field sample unless the sample received is truly representative of the entire field sample.

#### PERMA FROST BIT

We have just learned of a rotary auger bit that has been successfully used on the DEW Line and other northern areas of Alaska and Canada in places where permafrost is encountered. Their bits have also been used in augering and drilling coal, concrete, limestone and various other rock types. The bit differs from other bits in that the cutters are so placed that more of a chipping action takes place. The inserts or teeth are staggered so each cuts on a different horizontal plane.

#### U. S. GEOLOGICAL SURVEY MERCURY FIND

J. M. Hoare and W. H. Condon found rhyolite containing crystals of cinnabar and blebs of stibnite during the course of their mapping of the Holy Cross Quadrangle. While the specimens found did not contain commercial quantities of mercury or antimony, they do indicate a favorable surrounding in which to prospect.

The new occurrence was discovered about 2 miles northwest of Wolf Creek Mountain near the head of Little Lockwood Creek, about 200 miles southeast of Nome.

PERSONNEL CHANGE AT JUNEAU OFFICE

Friends of Miss Anna Mueller will be interested to know that she has accepted the Secretary's position vacated by Mrs. Endell at the Juneau office of the DM&M.

Miss Mueller was born and raised at Nenana and graduated from the University of Alaska in 1953.

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E. AND M. J. METAL MARKET PRICES

	<u>Jan. 28, 1963</u>	<u>Month Ago</u>	<u>Year Ago</u>
Copper, per lb.	31¢	31¢	31¢
Lead, per lb.	10.5¢	10¢	10¢
Zinc, per lb.	12¢	11.5¢	12¢
Tin, per lb.	111.3¢	110.8¢	120.9¢
Nickel, per lb.	79¢	79¢	81.3¢
Platinum, per oz.	\$80-85	\$80-85	\$80-85
Mercury, per flask	\$187-190	\$186-189	\$190-193
Antimony ore, per unit	\$4.25-4.50	\$4.25-4.50	\$4.30-4.50
Beryllium ore, per unit	Domestic price not quoted.		\$46-48
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	\$16-20	\$16-20	\$20-22
Silver, foreign, per oz.	125.60¢	120.33¢	103.8¢
Silver, domestic, per oz.	90.5¢	90.5¢	90.5¢

Sketch of Rampart Withdrawal  
 Overlay of U.S.G.S. Map E<sup>2</sup>  
 Scale 1" 40 Miles

