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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

Central: Vitro Minerals Corporation has announced acquisition of A. Ben Shallit's Cripple Creek coal operation. Vitro drilled the lease last winter and completed negotiations with Shallit during the ensuing months. They had hoped to obtain a contract which would have enabled them to commence operations this season. Plans call for establishing a camp, continuance of exploration and preparatory production work. They hope to start production next spring. Vitro Minerals Corporation is owned 50% by Rochester and Pittsburgh Coal Company and 50% by Vitro Corporation of America. The company is also interested in exploration of other metallic and nonmetallic deposits.

Southeastern: Bay West, Incorporated, which has been mining uranium at the Kendrick Bay Mine, has changed its corporate structure and now is known as Standard Metals Corporation. The small crew, under Superintendent Tac Matsomota, has experienced no difficulty in shipping their allotment of 5,000 tons to Mexican Hat, Utah. Their present buyer, Texas Zinc, has sold its plant to Atlas Corporation. Atlas will continue to operate the mill.

DM&M NEWS

The Juneau DM&M Office has mimeographed a summary of "Some High Calcium Limestone Deposits in Southeastern Alaska" by J. C. Roehm. The deposits are at Waterfall Bay, Cleve Bay, View Cove, Coco Harbor, Breezy Bay, Wadleigh Island, Port Alice, Heceta Island, Calder, Exchange Cove, Mud Bay, Piledriver Bay, Saginaw Bay, Towers Arm. The summary includes analysis, description, geological and topographical relations, accessibility and other pertinent facts on each deposit. Mr. Roehm, a mining engineer with the Territorial Department of Mines, wrote the original report in 1946.

An inquiry from Senator Bartlett as to the quality and extent of available pumice resulted in samples of pumicite being brought in by two of the DM&M geologists returning from a field trip on the Alaska Peninsula. The samples will be tested by the U. S. Bureau of Mines. The University of Alaska College of Earth Sciences and Mineral Industry is also conducting research on the use of industrial minerals. Pumice will be one of the minerals studied. Pumice (depending upon physical composition) is used as a lightweight aggregate and abrasive. Price ranges from about \$2 to \$160 per ton, the higher price being paid for high-grade abrasive.

DM&M PERSONNEL NEWS

Mr. Aldon E. Gooch of Anchorage has been appointed Assayer for our Ketchikan office. Mr. Gooch replaces Mr. Denny, who resigned to accept a position with the Eagle-Picher Company at Galena, Illinois. He is a graduate of Anchorage High School, and of the University of Washington with a B.S. in Mining Engineering. His mining experience has been with the Bunker Hill Co. at Kellogg, Idaho, and the Anaconda Co. at Butte, Montana. After a short period of orientation at the Anchorage assay office, he will reopen the Ketchikan office, probably about the middle of September.

OIL NEWS

One permit to drill has been approved this month. It is as follows:

Superior Oil Company - Happy Valley Unit 31-22, 2634' west and 535' south of N.E. corner, sec. 22, T.2S.-R.13W., S.M. This location lies approximately 7 miles southeast of Ninilchik. Drilling is expected to start about September 1, 1963.

Drilling Activity:

<u>Operator:</u>	<u>Well Number</u>	<u>Status 8/28/63</u>
Colorado Oil & Gas Corp.	Gubik Unit #1	Drilling
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
Shell	Middle Ground Shoal #1	Drilling
SoCal	S.C.U. 23-3	Drilling
Gulf Oil Corp.	Sandy River Federal #1	Rigging-up
Union	Knik Arm State #1	Drilling

Completions:

SOCO	SCU 21-16	Producing Oil Well
Union Oil Company	Kenai Unit 43-9	Shut in gas well

Production, Swanson River Field, Hemlock Zone:

	<u>Producing Wells</u>	<u>Oil-Barrels</u>	<u>Gas (MCF)</u>
July, 1963	53	907,343	246,701
Cumulative to August 1, 1963		23,545,435	4,787,167

Production, Kenai Gas Field:

July, 1963	3		93,666
Cumulative to August 1, 1963			3,527,816

Production, Sterling Gas Field:

July, 1963	1		3,466
Cumulative to August 1, 1963			51,145

Production, Swanson River Gas Field, Kenai Zone:

July, 1963	6		375,118
Cumulative to August 1, 1963			2,533,212

Gas Injection, Swanson River Field, Hemlock Zone:

July, 1963	3		721,397
Cumulative to August 1, 1963			3,751,933

Standard Oil Refinery at Nikiski Beach, Alaska, Dedicated August 24, 1963.

The establishment of a modern integrated oil industry in Alaska became history when the Alaskan Refinery officially went on stream August 24, 1963.

Governor William A. Egan and H. G. Vesper, president of Standard's Western Operations, Inc., were featured speakers at a dedication ceremony at the Nikiski refinery site at which time an authentic 36' red cedar totem pole was also unveiled. Construction work on the refinery started in June, 1962, by the Ralph M. Parsons Construction Company. Special design was necessary to insure continuous operation at sub-arctic temperatures. Exposed electrical switchgear and instrumentation are protected by individual heated housings. Air cooling is used wherever possible and all water using equipment is housed in a heated building. High viscosity oil lines are steam heated. The 17 tank, 800,000 barrel tank farm is surrounded by a spill dike and oil water separator to protect against any possible escape of oil to waters outside the refinery.

The refinery operates entirely on Swanson River Field crude which is transported by a 22-mile pipeline from the field.

Initial through-put of the refinery will be approximately 20,000 barrels of oil per day with provision for expansion. The 481-acre refinery site was purchased from the State for \$250,000.00 in October, 1961. The finished products are diesel, stove, and furnace oils, and jet fuels.

Although the refinery will not produce finished gasoline at this time, Standard has announced a wholesale 1¢ per gallon price reduction on all motor fuels, diesel, furnace, and stove oil effective September 1 at all Alaska points. The unfinished gasoline and residual oils are tankered to California for further refining. Union and Texaco announced comparable reductions.

Unit Terminated:

The Anchor Point Unit, on the south western portion of the Kenai Peninsula, terminated July 31, 1963. Standard Oil Company of California drilled a dry hole on this unit during the summer of 1962.

PROSPECTING ODDS ARE BETTER

A prospector gambles time and money on the chance that he may make a fortune. The Alaska Prospector's Aid Program and income tax laws improve the odds by drastically reducing the cost of prospecting.

A single man who earns between \$8,000 and \$10,000 a year may be able to accomplish \$2,600 worth of prospecting at a net cost to him of less than \$400.

If that man qualifies for the Prospector's Aid Program and spends at least a month in search for a mineral deposit he would be reimbursed by the State for 75% of his costs, up to a total reimbursement (to one man) of \$2,000. The remaining 25% of the cost is deductible from his taxable income. If, for example, the actual cost of a month's prospecting should be \$2,600, the actual out-of-pocket cost would be figured as follows:

Total prospecting cost	\$2,600
75% of cost reimbursed by State	<u>1,950</u>
Remaining cost (deductible from taxable income)	650
34% saving on Federal income tax (the surcharge income between \$8,000 and \$10,000)	

Saving on Alaskan income tax (16% of Federal) 35

Total tax saving 256

ACTUAL COST OF PROSPECTING FOR OVER A MONTH \$394

A strong note of caution must be sounded here. We do not want anyone to get the idea from this discussion that he can take a camping vacation with a pick and gold pan and then deduct the expenses from his taxable income. The U. S. Internal Revenue Service will have to be convinced that the expenses were for bona fide prospecting for profit. Like other ventures for which taxpayers seek to deduct expenses, the prospecting must be entered into as a business venture for profit, and not as a hobby or for pleasure. That is the criterion by which the U. S. Internal Revenue Service will judge each case.

#### PROCEEDINGS OF THE SECOND GOLD AND MONEY SESSION

Hollis M. Dole, State Geologist, Department of Geology and Mineral Industry, State of Oregon, announced that copies of the Proceedings of the Second Gold and Money Session are available for \$1.50 from the above Department at 1069 State Office Building, Portland, Oregon.

The publication contains the following chapters which were presented at the session: "The Cost of Producing Gold", by Evan Just, Western Vice President of the Society of Mining Engineers; "Gold--The Only Alternative to Inflation", by Henry Hazlitt, Contributing Editor and writer of the Business Times column for Newsweek; "Chrysophiles and Chrysophobes or Should the Price of Gold be Raised or Lowered", by William J. Busschau, Chairman of Gold Fields of South Africa, Limited; "Gold Losses and the Domestic Economy or Is There a Conflict between Economic Policies Good for the Domestic Economy and Those Good for the Dollar Internationally?" by John Exter, Senior Vice President, First National Bank of New York; "Gold and Gold Mining" by Donald H. McLaughlin, Chairman of the Board of Homestake Mining Co.

Needless to say the publication is of great interest to anyone concerned in gold mining and the fixed price of gold.

#### FEDERAL MINE (NONCOAL) SAFETY LAWS

Several bills have been introduced in the House of Representatives and one in the Senate (S. 1949) that would direct the Secretary of Interior "to promulgate and enforce a code of reasonable standards, rules, and regulations necessary to the protection of life, health, and safety of employees in metallic and nonmetallic mines and quarries". The measures' principal provisions would: 1) Direct the Secretary of the Interior, acting through the U. S. Bureau of Mines, to promulgate and enforce a health and safety code for metallic and nonmetallic mines and quarries. 2) Grant right of entry for inspection purposes. 3) Require submission of accident and occupational disease reports as may be prescribed. 4) Empower the Secretary of the Interior to order withdrawal of all persons from an unsafe place except for the purpose of making it safe. 5) Provide criminal penalties for obstruction or failure to comply with orders. 6) Create an advisory committee with equal representation of labor and management. 7) Define metallic and nonmetallic mines and quarries as including all types of mine and mining operations other than coal and lignite mines, and specified related processing operations, including milling, smelting, and refining, and other enumerated operations performed by the mine operator at or adjacent to the mine site or at places located in relation to the mine site with regard to economic factors.

## U. S. BUREAU OF MINES TO TEST COAL-FIRED GAS TURBINE

The U. S. Bureau of Mines started testing a coal-fired gas turbine this month at Morgantown, West Virginia. The turbine will be tested as a means of increasing the efficiency of steam turbines. The gas turbine will use the higher temperature gasses that are now wasted by the steam turbine. If the tests are successful, the turbines could be added to present steam turbine installations and would result in lower cost electrical power. This will promote more effective use of the Nation's vast coal reserves.

### NEW PUBLICATIONS

U. S. Geological Survey has released Professional Paper 475-B, Short Papers in Geology and Hydrology. The publication contains several articles that deal with Alaska:

- Article 16. "Potassium-argon and lead-alpha ages for Stratigraphically bracketed Plutonic rocks in the Talkeetna Mountains, Alaska", by Arthur Grantz, Herman Thomas, T. W. Stern, and N. B. Sheffey.
- Article 27. "Aerial reconnaissance of the outer Shumagin Island, Alaska", by Arthur Grantz.
- Article 28. "Structural influence on development of linear topographic features, Southern Baranof Island, Southeastern Alaska", by D. A. Brew, R. A. Loney, J. S. Pomeroy, and L. J. P. Muffler.
- Article 38. "Influence of snow cover on frost penetration", by D. B. Krinsley.
- Article 48. "Waterpower investigations of lakes in Alaska", by Arthur Johnson.

The publication may be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402 at \$1.75 per copy. It also may be purchased over-the-counter (but not by mail) at the Geological Survey Public Inquiries Office, 503 Cordova Building, Anchorage, Alaska.

U. S. Bureau of Mines, Mobile Diesel-Powered Equipment for Non-Coal Mines Approved by the Bureau of Mines, Information Circular 8183. The publication lists diesel-powered mobile equipment approved by the U. S. Bureau of Mines for the use underground in non-coal mining applications. The I.C. may be obtained without charge from the Publications-Distribution Section, Bureau of Mines, 4800 Forbes Avenue, Pittsburgh, 13, Pa.

### E. AND M. J. METAL MARKET PRICES

	<u>Aug. 26,</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.	11.5¢	11.25¢	9.5¢
Zinc, per lb.	12.5¢	12.0¢	11.5¢
Tin, per lb.	114.750¢	113.875¢	107.9¢
Nickel, per lb.	79.0¢	79.0¢	79.0¢
Platinum, per oz.	\$77-80	\$77-80	\$80-85
Mercury, per flask	\$183-186	\$182-185	\$192-195
Antimony ore, per unit	\$4.25-4.35	\$4.25-4.35	\$4.50-4.75
Beryllium ore, per unit	Domestic Prices 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	\$16-18	\$16-18	\$23-26
Silver, New York, per oz.	129.0¢	127.800¢	109.25¢
Silver, U. S. Treasury, per oz.	90.5¢	90.5¢	90.5¢

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