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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 - Pete Smith and Don Rowley shipped 25 drums of galena ore from Steamboat Creek in the Fairbanks district to Kellogg, Idaho. Pete Smith has mined and prospected the creek for several years.

Northwestern - Bear Creek Mining Company, subsidiary of Kennecott Copper Corp., purchased the Ruby Creek copper deposit near Kobuk and the parent company purchased the nearby Pardner Hill Group. The transaction totaled about three million dollars. Copper deposits were first discovered on Ruby Creek in the Shungnak District over forty years ago. In 1906, private interests prospected the deposits by tunneling, drifting, and shaft-sinking but the deposits were abandoned. Interest in the property was renewed in 1949 when Rhinehart Berg discovered radioactive rock specimens on the dump near the old shaft. Investigations by Robert Saunders, Division of Mines and Minerals' Mining Engineer, disclosed the deposit had little value as a radioactive mineral producer, but he encouraged the owners to trench for copper values. Bear Creek had the property under option for about seven years during which time an extensive drilling program was completed. Thus, after fourteen years of prospecting and development, a large ore deposit is nearly ready for mining when economic conditions permit.

Shell Oil Company has been active in Nome this winter making arrangements for drilling their offshore properties. Drilling will commence as soon as the ice is sufficiently strong to support equipment.

OIL NEWS

Since the last report, the following applications for permit to drill have been approved:

Union Texas Petroleum Co. (a Division of Allied Chemical) - Pure-Kahiltna River Unit #1 - 1500' E. of W. Line and 2640' S. of N. line, Sec. 33, T23N-8W, S.M. This location lies in the Susitna Valley about 35 miles southwest of Talkeetna.

B. P. Exploration Co. (Alaska) Inc. - East Umiat Unit #1 - 6500' from N. line 1950' from W. line, Block 4, T1S-R2E, U.P.M. This location is east of the Coleville River about 12 miles from the Umiat Oil Field.

Union Oil Company - Kenai Unit 33-1 - 1750.8' N. and 1911.5' W. of SE cor. Sec. 1, T4N-R12W, S.M. The surface location of this well is on fee land and will be directionally drilled to an objective about 450' west on an offshore State lease.

Drilling Activity:

<u>Operator</u>	<u>Well Name &amp; Number</u>	<u>Status 1/24/64</u>
Pan American	Romig Park #1	Drilling
Humble Oil & Refining Co.	Susitna State Unit #1	Drilling
Mobil Oil Company	Salmon Berry Lake Unit #1	Drilling
SOCO	Beluga River Unit #14-19	Drilling
Pan American	Tyonek State #2	Drilling
SOCO	Naptowne Unit 24-8	Location
Union Texas Petroleum	Kahiltna River Unit #1	Drilling
B.P. Exploration Co.	East Umiat #1	Drilling
B.P. Exploration Co.	Shale Wall Unit #1	Drilling
Union Oil Company	Kenai Unit #33-1	Location

Production, Swanson River Field, Hemlock Zone:

	<u>Producing Wells</u>	<u>Oil-Barrels</u>	<u>Gas (MCF)</u>
December, 1963	54	927,071	249,893
Cumulative to January 1, 1964		28,105,918	6,001,033*

Production, Kenai Gas Fields:

December, 1963	3		427,144
Cumulative to January 1, 1964			4,797,906*

Production, Sterling Gas Field:

December, 1963	1		4,094
Cumulative to January 1, 1964			70,910

Production, Swanson River Gas Field, Kenai Zone:

December, 1963	5		386,676
Cumulative to January 1, 1964			4,886,911

Gas Injection, Swanson River Field, Hemlock Zone:

December, 1963	3		475,999
Cumulative to January 1, 1964			6,568,280

Production, Beluga River Gas Field, Kenai Zone:

December, 1963	1		13,200
Cumulative to January 1, 1964			13,200

\*Cumulative errors corrected.

WELL RECORDS AND SAMPLES

Following is a list of well records to be released during 1964 and their release dates. Too large to be included in the Bulletin is a current inventory of well samples and cores, including release dates, now in our sample storage facility at our office at 329 Second Avenue, Anchorage. The sample inventory may be obtained from our offices at either Juneau or Anchorage.

<u>Well Name and Number</u>	<u>Operator</u>	<u>Release Date</u>
Swanson River Unit 41-28	SOCAL	1-4-64
Anchor River Unit #1	SOCAL	1-24-64
Soldotna Creek Unit 21-3	SOCAL	2-4-64
Bering River Unit #2	Richfield	2-20-64
Soldotna Creek Unit 34-8	SOCAL	2-28-64
Stedatna Creek State #1	Pan American	3-8-64
Soldotna Creek Unit 243-8	SOCAL	3-24-64
Chaix Hills Unit #1-A	SOCAL	4-3-64
Nenana #1	Union	4-6-64
Soldotna Creek Unit 32-5	SOCAL	4-11-64
Soldotna Creek Unit 34-16	SOCAL	4-25-64
West Foreland #1	Pan American	4-29-64
Swanson River Unit 211-15	SOCAL	5-12-64
Swanson River Unit 222-21	SOCAL	5-19-64
West Fork 233-16	SOCAL	5-26-64
Swanson River Unit 221-33	SOCAL	6-6-64
Chuit State #1	Superior	6-10-64
Pittman #1	Union	6-27-64
Malaspina Unit #1	Colorado O. & G.	6-28-64
Bell Island Unit #1	British American	6-31-64
Swanson River Unit 14-33	SOCAL	7-11-64
Sterling Unit 43-28	Union	8-7-64
Tyonek State #1	Pan American	8-25-64
Middle Ground Shoal State #1	Pan American	8-30-64
Swanson River Unit 12-22	SOCAL	9-11-64
Riou Bay #1	SOCAL	10-2-64
Chuit State #2	Superior	10-4-64
SRS State #1	Shell	10-14-64
Soldotna Creek Unit 22-32	SOCAL	10-21-64
Malaspina Unit #1-A	Colorado O. & G.	11-21-64
South Diamond Gulch Unit #1	Occidental Pet.	11-24-64
White River Unit #2	Richfield	11-25-64
Tazlina Unit #1	Union	11-29-64

PLAIN FACTS ABOUT OIL

A 34-page booklet titled "Plain Facts About Oil," compiled by the Domestic Production Section of the Office of Oil and Gas, has been published by the U. S. Department of the Interior. The purpose of the publication is to create a climate of understanding and awareness among all

American citizens of the importance of petroleum and its conservation. The publication explains in detail what oil is, its creation, exploration, drilling, production, transportation, employment, conservation, and the role of agencies of the Department of the Interior in relation to oil and gas; particularly the Office of Oil and Gas, Bureau of Land Management, Geological Survey, and the Bureau of Mines. Copies are available at 65 cents each from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20025.

#### COAL NEWS

The Defense Department has called for bids for the 1965 fiscal year coal supply for Alaska military bases. The Air Force will require 334,500 tons of coal including 140,000 for Elmendorf AFB, 125,000 for Eielson AFB, and 69,500 for Clear AFB. The Army will require 290,400 tons of coal including 122,000 for Fort Richardson and 168,000 for Fort Wainwright. The total amount is down 107,500 tons from last year's 632,000 tons.

#### BELUGA AREA LANDS AVAILABLE

The Division of Lands has announced that a large number of selections of State-owned land in the Beluga area are available for application for coal prospecting permits or other purposes. The available land lies within Townships 11 to 20 North and Ranges 10 to 13 West, Seward Meridian. For exact legal descriptions and other details, write to the State Division of Lands, 344 Sixth Avenue, Anchorage.

#### FAIRBANKS LAND SELECTION

The State of Alaska has selected lands in the Chatanika River, Cleary Summit and Gilmore Dome mining areas, pursuant to the Act of July 7, 1958. This permits the State to select and obtain patent to public lands of the United States in Alaska, without effect on any valid existing claim, location or entry under the laws of the United States for any purpose whatsoever or the rights of any such owner, claimant, locator or entryman.

The lands selected are within Township 2 North, Range 2 East; T3N R1E; T3N R2E; and T3N R1W, Fairbanks Meridian, in the Fairbanks Recording District. These lands include the Gilmore Dome lode mining area, the lode mining zone extending from Pedro Dome to Crane Gulch--a tributary of Fairbanks Creek, and the placer mining areas of Upper Gilmore Creek, Upper Smallwood Creek, Upper Fish Creek, Upper Cleary Creek, Little Eldorado Creek, Dome Creek, Lower Vault Creek, Upper Fairbanks Creek and the Chatanika River from about one mile above Chatanika to the mouth of Sargent Creek.

Formal announcement by the Fairbanks District office of the Bureau of Land Management of the selection invites the owner of any valid mining claim within this area who may wish to retain his claim under Federal control rather than under State control to initiate action to do this by filing his objections with the Land Office Manager, Bureau of Land Management, 516 Second Avenue, Fairbanks, Alaska, and by furnishing proof of service of such

protest on the Alaska State Division of Lands, Room 105, State Office Building, 6th and Barnette, Fairbanks, Alaska. Protests may be received until patent issues to the State. Notice is given that the above-described lands have been segregated since April 12, 1962, from all forms of entry, applications and appropriations under the public land laws, including settlement under the homestead and similar laws and under the mining laws. Settlements and locations initiated on or after that date are null and void.

#### NEW MINERAL OCCURRENCES

Mining Geologists of the DM&M made four new mineral discoveries of possible economic value this past season. Their reports are summarized very briefly as follows:

1. A copper occurrence at 147°09'W Long. and 63°08'N Lat. in the Healy A-1 quadrangle at the head of the south fork of Pass Creek. The occurrence is at an elevation of 4650'. The stronger mineralization replaces limestone fragments while sparser mineralization occupies fractures in the andesitic matrix. One zone measures 33 feet across strike and the other zone is 2 feet across strike. A chip sample taken across the wider exposure assayed 2.9% copper.

2. A molybdenum occurrence at 146°49'W Long. and 63°15'N Lat. in the Mt. Hayes B-6 quadrangle. An extensive iron-stained area of folded argillites intruded by a medium grained acidic rock. Talus of the intrusive contains disseminated chalcopyrite and molybdenite. A grab sample of the talus revealed 0.15 to 0.25% molybdenum. Because of the severe topography and lack of outcrop due to talus, it was not possible to properly evaluate the extent of the mineralization in the intrusive.

3. A silver-lead occurrence at 144°01'W Long. and 62°45'20"N Lat. in the Gulkana D-1 quadrangle near a small lake 2¼ miles north of Mile 58 on the Glenn Highway. A quartz vein at least 5 feet wide and poorly exposed for a length of ten feet containing crystalline galena. A 3-foot channel sample across the galena-rich portion of the vein assayed 19.8 oz. silver and 1.6% lead. Two pyritized and limonite-stained areas occur in the vicinity of the vein. A sediment sample from the lake below the vein indicated enrichment in copper and zinc. No lead was detected.

4. A geochemical anomaly of unknown origin occurs at the headwater of Willow Creek, a southeasterly flowing tributary of Ahtell Creek. Stream and lake sediment samples indicate an anomalous concentration of zinc extending over a length of 4,000 feet. One sample was also enriched in copper and lead. The area surrounds the lake located in the SW corner of the Nabesna D-6 quadrangle at 143°59'W Long. and 62°45'30"N Lat.

Copies of the brief preliminary reports are available at all offices and by mail from the Juneau office. Complete reports with maps will be available for purchase as soon as printing is complete.

## NOTICE TO MINING CLAIMANTS

Several more areas near Juneau have been designated by the U.S. Forest Service for the determination of surface rights on mining claims under Public Law 167 of July 23, 1955. These are in addition to many earlier areas within the Tongass and Chugach National Forests, all reported in earlier DM&M Bulletins. Holder of claims staked prior to the date of the Act have 150 days from the starting date of publication to file verified statements if they wish to retain exclusive surface rights to their claims. First publication will be February 5, 1964, in the Daily Alaska Empire, Juneau, Alaska.

The areas are in general: (1) Hobart Bay - all land that lies between the south shore of Hobart Bay and the north shore of Port Houghton, to and including the area of immediate drainage into the upper bay of Port Houghton; (2) Lemon Creek Glacier Area - that land drained by the headwaters of Lemon Creek, including Canyon Creek, Goat Creek and the land at the headwaters of Nugget Creek, but excluding that land within the Juneau Elimination Area; (3) Speel River-Whiting River Area - all land south of an eastwest line drawn through the northern tip of Crater Lake and extending toward Boundary Peak, including the north half of Sweetheart Lake, both sides of Whiting River, both sides of Speel Arm, and Crater Lake; (4) Mt. Sundum Area - all land immediately adjacent to the east shoreline of Endicott Arm and Holkham Bay, bounded on the southwest by Fords Terror and bounded on the north by Tracy Arm; (5) Lake Dorothy-Taku Glacier Area - all land adjacent to the east shore of Taku Inlet to Taku Point including Fall Creek, Lake Dorothy, Jaw Point, the mouth of Turner Lake, the mouth of Davidson Creek, and that land east of a north line extending from the powerhouse on Taku Inlet to a point near Hole-in-the-Wall Glacier; (6) Pelican - a narrow strip of land along the northeast shore of Lisianski Inlet that extends from Column Point on Cross Sound to the head of the Inlet near Soloma Pt.; (7) Sullivan Island Area - all of Sullivan Island, all of the Chilkat Islands, and that strip of land bordering the west shore of Lynn Canal from the mouth of Endicott River northward to a point south of Davidson Glacier; (8) Skagway-White Pass Area - all land that lies north of Skagway and east of Skagway River, and extends to the United States-Canadian Border.

First publication on the following area will be February 19 in the Daily Alaska Empire, Juneau, Alaska:

The Endicott River Area - an east-west strip of land that includes both sides of the Endicott River from near its mouth on Lynn Canal to the headwaters.

### AIME CONFERENCE

The seventh Alaska Conference of the American Institute of Mining, Metallurgical and Petroleum Engineers will be held on the University of Alaska campus March 18, 19, 20, and 21.

Dr. Sidney Chapman, advisory scientific director of the Geophysical Institute at the University of Alaska, heads the list of nearly 20 speakers. During the course of the four-day conference, Dr. Chapman will be joined by several other prominent figures who will develop in their talks the conference theme of exploration, development, and marketing of minerals in Alaska.

Among the other speakers are Thomas Elliott, Manager, British Columbia and Yukon Chamber of Mines; Sanford S. Cole, president-elect of the Society of Mining Engineers; D. D. Drowley, Manager of the Standard Oil Company of California, Kenai; Noburu Takasugi, consul-general of Japan, Seattle; Richard J. Anderson, assistant to the vice-president of the Battelle Memorial Institute, Columbus, Ohio; Charles Herbert, deputy commissioner for the Department of Natural Resources, Juneau; and George Gryc, chief of the Alaska Geology Branch of the U. S. Geological Survey.

Registration for the conference will be held March 18. A luncheon is scheduled for March 19. Technical sessions are scheduled for March 19 and 20. March 21 will be devoted to field trips.

E. AND M. J. METAL MARKET PRICES

	<u>Feb. 3,</u> <u>1964.</u>	<u>Month</u> <u>Ago</u>	<u>Year</u> <u>Ago</u>
Copper, per lb.	31¢	31¢	31¢
Lead, per lb.	13¢	12.5¢	10.5¢
Zinc, per lb.	13¢	13¢	12¢
Tin, per lb.	134.25¢	132.375¢	111.3¢
Nickel, per lb.	79¢	79.0¢	79.0¢
Platinum, per oz.	\$88	\$83	\$80-85
Mercury, per flask	\$240-244	\$225-230	\$187-190
Antimony ore, per unit	\$4.80-5.50	\$4.50-4.75	\$4.25-4.50
Beryllium ore, per unit, 10-12%	\$29-32	Domestic Prices Not Quoted	
Chrome ore, per long ton	Not Quoted	\$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.	129.3¢	129.300¢	125.60¢
Silver, U.S. Treasury, per oz.	129.29¢	129.29¢	90.5¢

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