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DIVISION OF MINES AND MINERALS

GEOLOGICAL SURVEY

Juneau, Alaska

MINES AND PETROLEUM BULLETIN

July, 1965

Vol. XIII

No. 7

MINING ACTIVITIES

Central - Silver Ridge Mining Company has opened an office in Fairbanks and has started shaft sinking on the Eagle Creek antimony property north of town.

Southcentral - Pan American Petroleum Corporation is developing the Chignik Bay discovery announced early this spring as well as continuing their investigation of the iron deposit announced earlier near Chenik Mountain. Both deposits are on the Alaska Peninsula southwest of Anchorage.

Across the Border - Exploration activity on a large scale is continuing on the Stikine River copper discovery at Galore Creek. It is reported that at least 15 drills are working in the area.

Trenching and development of the lead-zinc-silver deposit near Tulsequah on the Taku River is continuing.

A new large molybdenum deposit has been found near Alice Arm north of Prince Rupert and is being developed by Newmont Exploration, Ltd.

OIL NEWS

Twice the number of drilling permits have been issued so far this year as were issued for the same period last year. Nine exploratory well permits and nine development well permits have been issued compared with seven exploratory permits and one development permit for the first half of last year.

Five permits to drill were issued during the month of June. They are as follows:

Pan American Petroleum Corporation, Tyonek #1 (offshore) - 1980' N of SL, 660' E of WL, Section 6, 10N-11W, S.M. This well is about three miles south of the Moquawkie Indian Reservation. Depth of the ocean bottom is about 70'.

Shell Oil Company, S.R.S.-M.G.S. State A2-1 - 1627' N, 435' W of S.E. corner, Section 11, 8N-13W, S.M. (conductor #1). This is the

first deflected field development well to be drilled from the Shell offshore platform at Middle Ground Shoal. Shell just completed a successful field extension well from this platform drilled as a straight hole. This was the S.R.S.-M.G.S. State #A1-3 which tested 1130 barrels of oil per day on a 32/64" choke.

Wallace Mining Company, #1-A Wallace-Knutson - 720' N and 660' E of S.W. corner, Section 23, 17N-1W, S.M. This new location is 30' due north of the #1 well which was abandoned because of flowing water and drilling conditions unsuitable for cable tools. The #1-A is being drilled with rotary tools.

Union Oil Company of California, Kenai Unit 11-6 - Surface location, 415' N and 2089' W of S.E. corner, Section 31, 5N-11W, S.M. Bottom location, 500' S and 500' E of N.W. corner, Section 6, 4N-11W, S.M. This is a deviated gas development well in the Kenai Gas Field.

Union Oil Company of California - Trading Bay #2 - Surface location, 1598' W and 1929' S of N.E. corner, Section 4, 9N-13W, S.M. Bottom hole location, 600' N and 2040' W of S.E. corner, Section 33, 10N-13W, S.M. This is a confirmation well to the Trading Bay #1-A discovery.

Three new field discoveries and one field extension made during the month of June - Alaska's oil and gas development moved ahead at a record breaking rate during the month of June.

Mobil Oil Company's Granite Point #1 established the third oil field and Union Oil Company's Trading Bay #1-A established the fourth oil field on state-owned water bottoms. Both wells flowed oil to the surface at rates well over a thousand barrels per day. Shell's first well from platform A extended the Middle Ground Shoal field more than a mile south of its previously known limits. It is capable of making 1130 B.O.P.D. on a 1/2" choke. Standard Oil Company of California's Birch Hill Unit #22-25 established a new gas field about three miles north of the Swanson River Oil Field. This well is rated at 3.4 million cubic feet of gas per day on a 1/4" choke. The field produces from approximately 8000 feet.

The Trading Bay discovery of Union Oil Company of California marks the shallowest oil production yet found in the Cook Inlet area. The producing interval is less than 5700 feet deep and yields at a rate higher than 1600 barrels of oil per day. The less-than-30° gravity of this oil is the lowest yet found in the Cook Inlet area.

Mobil's Granite Point discovery flowed an average rate in excess of 1300 barrels of oil per day through a 1/2" choke. The oil is 42° API gravity and the producing interval is approximately 8700 feet. Mobil is presently drilling deeper at this offshore operation.

Pan American Petroleum Corporation placed their 2000 ton drilling and producing platform at the Middle Ground Shoal field on the 19th of June. Development drilling is to start immediately.

Drilling Activity:

<u>Operator</u>	<u>Well Name and Number</u>	<u>Status 6/25/65</u>
Standard Oil Co. of Calif.	Birch Hill Unit #22-25	Comp Gas well
Shell Oil Company	M.G. S. A1-3	Comp. Oil well
Shell Oil Company	M.G.S. A2-1	Drilling
Shell Oil Company	S.R.S. State #1	Drilling
Mobil Oil Company	Granite Point #1	Comp Oil well
Wallace Mining Company	Wallace-Knutson #1	Converted to water well
Wallace Mining Company	Wallace-Knutson #1-A	Drilling
Pan American Petroleum Corp.	West Foreland Unit #1	Abandoned
Mobil-Atlantic	Moquawkie #1	Drilling
Union Oil Company of Calif.	Trading Bay #1-A	Comp. Oil well
Union Oil Company of Calif.	Trading Bay #2	Location
Union Oil Company of Calif.	Kenai Unit #14-4	Reperf. & Comp. - suspended
Union Oil Company of Calif.	Kenai Unit #33-32	Comp. Gas well - suspended
Union Oil Company of Calif.	Kenai Unit #21-6	Comp. Gas well - suspended
Union Oil Company of Calif.	Kenai Unit #21-7	Drilling
Union Oil Company of Calif.	Kenai Unit #43-6	Drilling
Union Oil Company of Calif.	Kenai Unit #43-7	Drilling
Union Oil Company of Calif.	Kenai Unit #11-6	Drilling
Union Oil Company of Calif.	Kenai Unit #11-7	Location
Pan American Petroleum Corp.	Tyonek State 18742 #1	Drilling

Production, Swanson River Field, Hemlock Zone:

	<u>Producing Wells</u>	<u>Oil Barrels</u>	<u>Gas (MCF)</u>
May 1965	53	942,537	318,815
Cumulative to June 1, 1965		43,748,524	10,540,809

Production, Kenai Gas Field:

May 1965	2		430,430
Cumulative to June 1, 1965			11,661,645

Production, Sterling Gas Field:

May 1965	1		7,066
Cumulative to June 1, 1965			171,042

Production, Swanson River Field, Kenai Zone:

May 1965	3	205,758
Cumulative to June 1, 1965		9,775,374

Gas Injection, Swanson River Field, Hemlock Zone:

May 1965	3	381,402
Cumulative to June 1, 1965		13,870,628

1965 PROSPECTORS ASSISTANCE PROGRAM

Sixteen proposals by individuals and partners have been approved by the screening board and the Department of Natural Resources. The 1965 Prospectors Assistance Program has to date encumbered approximately \$20,000 of the \$30,000 made available by the last legislature. Several participants will be in the Fairbanks area while others will carry on their work in such places as Ruby, Talkeetna, Chicken, Port Armstrong, Noatak, Kantishna, Galena and the Chickamin River.

Participants have until the end of October to complete their programs and turn in their reports if they wish to be reimbursed as agreed upon in each approval.

DIVISION PERSONNEL OPENINGS

We have openings for a Petroleum Engineer and an X-ray Mineralogist at our Anchorage office. For information, write to the Director of Personnel, Department of Administration, Box 2420, Juneau, Alaska 99801, or to James A. Williams, Director, Division of Mines and Minerals, Box 1391, Juneau, Alaska 99801.

NEW PUBLICATIONS

U.S. Geological Survey, Bulletin 1181-R, Reconnaissance Geology of Admiralty Island, Alaska, by Lathram and others, 1965.

U.S. Geological Survey, Bulletin 1178, Stratigraphy and Petrography of the Pybus-Gambier Area, Admiralty Island, Alaska, by Robert A. Loney, 1964.

Open file report, Geologic Map and Cross Sections of the Nelchina Area, South central Alaska, by Arthur Grantz.

Preliminary Geologic Map of the Arctic Quadrangle, Alaska, by W.P. Brosge and H.N. Reiser. Open file report.

The U.S.G.S. bulletins are available from Survey offices in Washington, D.C., Denver, and Anchorage, and also from the U.S. Government

Printing Office. The open file reports are available for reading at their various offices and usually at the Division of Mines and Minerals offices. Reproductions can usually be made at private expense.

Division of Mines and Minerals, Geochemical Report No. 5, A Geochemical Investigation Between Chatanika and Circle Hot Springs, Alaska, by W.M. Burand.

Geologic Report No. 1, Preliminary Report on Geologic Mapping in the Coast Range Mineral Belt, Alaska, by G. Herreid.

Geologic Report No. 10, Geology of the Bluff Area, Solomon Quadrangle, Seward Peninsula, Alaska, by G. Herreid.

Geologic Report No. 13, Geological and Geochemical Investigations Near Paxson, Northern Copper River Basin, Alaska, by A.W. Rose and R.H. Saunders.

Geologic Report No. 14, Geology and Mineral Deposits of the Rainy Creek Area, Mt. Hayes Quadrangle, Alaska, by A.W. Rose.

Division of Mines and Minerals publications are available over the counter at its offices in Fairbanks, Anchorage, and Juneau, and available by mail from Box 1391, Juneau. Price \$1.00 each.

COAL NEWS

Vitro Minerals Corporation was awarded the coal contract for the North Star Borough Public School System for the 1965-1966 school year. Bid price was \$13.05 per ton and the total contract in excess of \$60,000.

Evan Jones Coal Company was awarded a \$2,273,468 contract to supply 126,123 tons of coal to Elmendorf Air Force Base and 119,382 tons to Fort Richardson during fiscal 1965-66 at a price of \$9.26 per ton.

The U.S. Senate Armed Services Committee rejected the military plan to convert Fort Richardson and Elmendorf Air Force Base to natural gas.

NEW POWER PLANT

The general manager of Chugach Electric Association of Anchorage recently announced that the Association will build a generating plant near the Tyonek Indian Reservation to be powered by natural gas from the Beluga Gas Field. The first stage will include two turbines of 15,000 to 20,000 kilowatt capacity each. Construction will start next winter and will require about 18 months. A 50-mile, 115,000-volt transmission line will carry the energy to Anchorage. It will cross the Knik Arm of Cook Inlet, and will be buried about 15 feet below the floor of the Arm. The

initial stage of the plant will cost about \$5 million and the transmission line about \$2 million. The second stage, tentatively set for 1970-71, will probably be a 44,000-66,000 kilowatt unit.

STAKING MINING CLAIMS ON FEDERAL LAND

In our April Bulletin we discussed the effect of a recent change in the State law relating to staking lode mining claims on Federal land, and we published a short summary of the mining laws regarding staking. Numerous questions from attorneys, prospectors and miners show that clarification is necessary. In addition, the Bureau of Land Management has reviewed and commented on the article.

The most frequently noted objection points out that State law does not require a discovery post, whereas a regulation of the Bureau of Land Management does. The pertinent regulation is 43 CFR 3414 (b), formerly designated as 43 CFR 185.14 (b). This regulation states, in part:

"...at the point of discovery or discovery shaft should fix a post, stake, or board, upon which should be designated the name of the lode, the name or names of the locators, the number of feet claimed, and in which direction from the point of discovery."

In the past, the Bureau of Land Management has not treated the absence of a discovery post as a fatal defect in a claim location. Mining claims on which no discovery post had been erected, even claims on which no discovery had been made, were considered to be lawfully held against all others except government. This practice is consonant with a principle of case law (USCA 30, Sec. 23, Note 151), which states:

"Where claim is located on public mineral land, locators are entitled, as against all save government, to pursue their work of discovery uninterrupted, though discovery is essential to a valid mining claim."

and

"Mining claims rest upon a discovery of a mineral-bearing vein giving reasonable promise of commercial value, but claim may be staked and located before discovery, and the discovery perfects the claim."

However, it is conceivable that the former State law regarding staking claims on Federal land could have been used by an intervenor to dispossess a claim locator who had not made a discovery, especially if, by posting a discovery notice, that locator could be judged to be guilty of fraud. The new State law simply eliminates that possibility.

We should like to emphasize that a mining claim to be valid against all others, including government, must include a discovery, and the point of discovery must be marked or described in a manner that will permit another person to find it. A claim may be staked by erecting only four corner posts but, as soon as a discovery is made, the point of discovery should be marked. It is also advisable to amend the certificate of location to describe the location of the discovery.

Remember, we are speaking above only of mining claims on Federal land. On State land, prospecting sites can be staked before a discovery is made, so the courts may hold that discovery is essential on a State mining claim. If no discovery is possible, the locator on State land should stake a prospecting site rather than a mining claim.

E. AND M.J. METAL MARKET PRICES

	<u>June 21</u> <u>1965</u>	<u>Month Ago</u>	<u>Year Ago</u>
Copper, per lb.	36.¢	36.¢	32.¢
Lead, per lb.	16.¢	16.¢	13.¢
Zinc, per lb.	14.5¢	14 1/2.¢	13.5¢
Tin, per lb.	185 1/8¢	197.45¢	153.25¢
Nickel, per lb.	79.¢	79.¢	79¢
Platinum, per oz.	\$97-100	\$97-100	\$87-90
Mercury, per flask	\$700-740	\$650-670	\$268-271
Antimony ore, per unit	\$7.30-8.00	\$7.80-8.50	\$7.75-8.50
Beryllium powder, 98%, per lb.	\$54-66	\$54-66	Not Quoted
Chrome ore, per long ton	\$31-35	\$31-35	Not Quoted
Molybdenum conc., per lb.	\$1.55	\$1.55	\$1.55
Titanium ore, per ton	\$23-26	\$23-26	\$23-26
Tungsten ore, per unit	\$27.25-28.25	\$25.50-26.00	\$16-18
Silver, New York, per oz.	129.3¢	129.3¢	129.3¢
Silver, U.S. Treasury, per oz.	129.29¢	129.29¢	129.29¢

U.S. GEOLOGICAL SURVEY AIRBORNE MAGNETOMETER SURVEYS

The U.S. Geological Survey will conduct airborne magnetometer surveys in the vicinity of Teller, Noatak and Kobuk Rivers, Wiseman, Old Rampart, Aniak and Marshall, Kodiak and Port Moller, Yakutat and Cordova and Juneau. Flight line spacing will vary from 1 to 10 miles.

