STATE OF ALASKA
Department of Natural Resources
Division of Geological Survey
MINES BULLETIN

VOL. XIX AUGUST 1971 No. 8

P. O. Box 80007 College, Alaska 99701

Published to Accelerate the Development of the Mining Industry in Alaska
William A. Egan - Governor Charles F. Herbert - Commissioner
William C. Fackler - Assistant Commissioner for Minerals

IN THIS ISSUE

NEW MINERAL CHIEF

Natural Resources Commissioner Charles F. Herbert has appointed William C. Fackler Assistant Commissioner for Minerals.

Mr. Fackler received a B.S. Degree in Geology at the University of Minnesota, an M.A. degree on a scholarship at the University of Cincinnati and did two years of further graduate work on a scholarship and teaching Fellowship at the University of Michigan. He worked several summers a geological assistant for the Minnesota Geological Survey.

His professional employment began as a geologist with the Pure Oil Company in the Illinois Division. In 1942 he joined the faculty of the University of Alaska, School of Mines, as an instructor in Mineralogy, Structural Geology, Petrography and Petrology. During a one year temporary closure of the School of Mines as a war-necessitated measure he worked for the Corps of Engineers, U.S. Army as assistant Area Engineer and Acting Area Engineer, Big Delta, Alaska, on the Big Delta Airbase (now Fort Greely) Canol Pipeline, and related facilities. He returned to the University of Alaska in 1944 as Assistant Professor of Geology and did some summer field work of the U.S. Bureau of Mines on tin prospects at Cape Prince of Wales.

In 1946 he joined Arctic Contractors in the Exploration program of the Naval Petroleum Reserve No. 4, advanced to Chief Petroleum Geologist and was closely associated with all aspects of planning and operating in the Arctic.

Mr. Fackler later worked in Mexico as Assistant General Superintendent for the Mexican American Independent Company supervising the drilling and production of oil and gas wells, returned to the United States as a consulting geologist based at Evansville, Indiana and was responsible for the discovery of several oil fields. In 1954 he helped organize the Coronado Oil Company as Vice President and Chief Geologist headquartered in Denver, Colorado. Coronado Oil discovered several oil and gas fields in the Rocky Mountain area and also managed successful secondary recovery operations.

After leaving the Coronado Oil Company he returned to Alaska as Project Manager for Paul Benedum who drilled the Nulato Unit No. 1 near Nulato in the interior of Alaska in 1959. Upon completion of this project he became Manager for the Alaska District, American Stratigraphic Company making stratigraphic studies and other geological services to the oil industry.

Joining Phillips Petroleum Company in 1963, he conducted geological studies on the North Slope and many other areas of Alaska. In 1969 Mr. Fackler resigned from Phillips Petroleum and formed a consulting geological firm with Mr. Keith Calderwood and Mr. Marvin Mangus.

Professional memberships include the American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists, American Institute of Mining and Metallurgical Engineers, Mineralogical Society of America, Certified Professional Geologist of American Institute of Professional Geologists, Registered Geologist California State Board of Registration for Geologists, Alaska Miner's Association, Alaska Geological Society, The Explorer's Club, Petroleum Club of Anchorage, and International Oceanographic Foundation.

STATE OF ALASKA AEROMAGNETIC SURVEY MAPPING

The contractor for Alaska's aeromagnetic survey has completed the flying and data acquisition of the East Alaska Range part of the survey and is continuing work in the Nome and Platinum areas. Completed maps of all or part of the East Alaska Range part of the survey may be available before completion of the remainder of the contract. The East Alaska Range aeromagnetic survey covers all or parts of 88 one-mile-to-the-inch quadrangles and includes 21,629.4 square miles along the north and south slopes of the Alaska Range from McKinley Park east to the Canadian border. Each map is at a scale of 1:63,360, or 1 mile to the inch. Map Sheets use the US Geological Survey topographic quadrangle maps as a base and show total magnetic field intensity as contours overprinted in red. When these maps are received they will be advertised for several weeks for sale at a particular time at the College office of the Division of Geological Survey. Price of the maps is $1.00 each. Advance orders accompanied by payment will be assembled and packaged for distribution or mailing at the announced sale time. Persons wishing a special notification of the time of the sale and a listing of the maps to be available at that sale should write or contact us at our College address.

DISTINGUISHED VISITORS

The office of the Division of Geological Survey at Fairbanks was visited by the following during the month of July:

Charles F. Herbert	- Commissioner, Department of Natural Resources
William C. Fackler	- Assistant Commissioner for Minerals
Elburt F. Osborn	- Director of the U.S. Bureau of Mines
William Eckard	- Chief of the Alaska Field Operations Center for the U.S. Bureau of Mines in Juneau
John Mulligan	- Research Director for the U.S. Bureau of Mines in Juneau
Al Service	- State Liaison Officer, USBM

Director Osborn and his party toured mining areas near Fairbanks, Prudhoe Bay, Barrow and Nome. Other areas for visitation included the Interior of Seward Peninsula, Anchorage, Cook Inlet, Swanson River, Kenai, Ninilchik and the Lost River Mine.

NEW OPEN FILE RELEASE

The U. S. Geological Survey has released on open file the following reports:

1. Maps showing distribution of anomalous amounts of selected elements in stream-sediment and rock samples from the Eagle quadrangle, east-central Alaska, by Helen L. Foster and Martha E. Yount. 6 p., plus 3 illus. (1 = page-size; 2 = plates), scale 1:250,000.

2. Geochemical data from the Nabesna A-1 quadrangle, Alaska, by N. A. Matson, Jr., and D. H. Richter. 10 p., 1 fig.

3. Geochemical data from the Nabesna C-4 quadrangle, Alaska, by N. A. Matson, Jr., and D. H. Richter. 6 p., 1 fig.

4. Geochemical data from the Nabesna C-5 quadrangle, Alaska, by N. A. Matson, Jr., and D. H. Richter. 10 p., 1 fig.

5. Geochemical data from the Nabesna D-5 quadrangle, Alaska, by N. A. Matson, Jr., and D. H. Richter. 8 p., 1 fig.

6. Pennsylvanian carbonates, paleoecology and stratigraphy, north flank, eastern Brooks Range, Arctic Alaska, by Augustus K. Armstrong. 25 p., 6 figs.

7. Preliminary geologic map of the Livengood quadrangle, Alaska, by Robert M. Chapman, Florence R. Weber, and Bond Taber. Map, explanation (2 sheets), scale 1:250,000.

8. Reconnaissance geologic map and geochemical analyses of stream sediment and rock samples of the Anchorage B-7 quadrangle, Alaska, by Sandra H. B. Clark and Susan R. Bartsch. 70 p., plus 2 figs.

9. Investigation of gold mineralization along a part of the Elliott Highway, Fairbanks district, Alaska, by D. B. Hawkins and R. B. Forbes. 65 p., 3 text figs., 1 pl.

10. Preliminary bedrock geologic map, Wiseman and Eastern Survey Pass Quadrangles, Alaska, by W. P. Brosge and H. H. Reiser. Map and explanation (2 sheets), scale 1:250,000.

11. (WR) Hydrologic data of the Kenai-Soldotna area, Alaska, by Gary S. Anderson and Stanley H. Jones. 1971. 57 p., 1 plate.

12. (WR) Water resources of Alaska, by A. J. Feulner, J. M. Childers, and V. W. Norman. 1971. 130 p., 18 fig.

These reports can be seen in the following listed Alaskan offices of the USGS and ADGS and certain USGS offices in the other states.

U. S. Geological Survey:	402 Brooks Building, College
	108 Skyline Building, Anchorage
	441 Federal Building, Juneau
Division of Geological Survey:	College Road and University Ave., College
	323 East 4th Ave., Anchorage
	509 Goldstein Building, Juneau

Material from which copy can be made at private expense is available at the Alaskan Mineral Resources Branch, USGS, 345 Middlefield Rd., Menlo Park, Calif., 94025.

DIVISION GEOLOGIC REPORTS

The following list includes the geologic reports of the Division of Geological Survey (DGS) to date. Out-of-print publications can be seen in certain public and University libraries. A complete file of these publications is maintained in the office of the Division of Geological Survey, University of Alaska Maintenance Building, University Avenue and College Road, College, Alaska. These publications are also maintained in DGS Mining Information Offices located at 509 Goldstein Building, Juneau; 323 E. Fourth Avenue, Anchorage; and 306 Main Street (Room 312), Ketchikan. Mail for all offices should be addressed as follows:

State of Alaska
Division of Geological Survey

Pouch M
Juneau, Alaska 99801

P. O. Box 80007
College, Alaska 99701

323 E. Fourth Avenue
Anchorage, Alaska 99501

P. O. Box 2438
Ketchikan, Alaska 99901

Geologic Reports

Note: Please do not order publications listed as out of print.

No. 1. Preliminary Report on Geologic Mapping in the Coast Range Mineral Belt, by Gordon Herreid. This report formerly included in Annual Report of the Division of Mines and Minerals for the year 1962. Price $1.00.

No. 2. Bedrock Geology of the Rainbow Mountain Area, Alaska Range, Alaska; an M.S. Thesis prepared by Larry G. Hanson of the University of Alaska in cooperation with the Division of Mines and Minerals, November 1963. Price $1.00.

No. 3. Geology of the Portage Creek-Susitna River Area, by Donald Richter, 1963. (2 large sheets). Out of print.

No. 4. Geology and Mineral Deposits of the Denali-Maclaren River Area, Alaska, by M. A. Kaufman, May 1964. (14 p. and map). Price $1.00.

No. 5. Geology of the Niblack Anchorage Area, Southeastern Alaska, by Gordon Herreid, May 1964. Out of print.

No. 6. Geology and Mineral Deposits of the Ahtell Creek Area, Slana District, Southcentral Alaska, by Donald H. Richter, May 1964. (17 p. and map). Out of print.

No. 7. Geology of the Dry Pass Area, Southeastern Alaska, by Gordon Herreid and M. A. Kaufman, June 1964. (16 p.). Price $1.00.

No. 8. Geology of the Paint River Area, Iliamna Quadrangle, Alaska, by D. H. Richter and Gordon Herreid, January 1965. (18 p. and map). Price $1.00.

No. 9. A Geologic and Geochemical Traverse Along the Nellie Juan River, Kenai Peninsula, Alaska, by Gordon Herreid, August 1965. (2 p. and map). Out of print.

No. 10. Geology of the Bluff Area, Solomon Quadrangle, Seward Peninsula, Alaska, by Gordon Herreid, June 1965. (21 p. and map). Out of print.

Geologic Reports (continued)

No. 11. Geology of the Omilak-Otter Creek Area, Bendeleben Quadrangle, Seward Peninsula, Alaska, by Gordon Herreid, June 1965. (12 p. and map). Out of print.

No. 12. Geology of the Bear Creek Area, Seward Peninsula, Candle Quadrangle, Alaska, by Gordon Herreid, May 1965. (15 p. and maps). Out of print.

No. 13. Geology and Geochemical Investigations near Paxson, Northern Copper River Basin, Alaska, by A. W. Rose and R. H. Saunders, June 1965. (35 p.). Price $1.00.

No. 14. Geology and Mineral Deposits of the Rainy Creek Area, Mt. Hayes Quadrangle, Alaska, by A. W. Rose, May 1965. (51 p. and map). Out of print.

No. 15. Geology and Mineralization of the Midas Mine and Sulphide Gulch Areas near Valdez, Alaska, by A. W. Rose, March 1965. (21 p., map, and tables). Price $1.00.

No. 16. Geology and Mineral Deposits of Central Knight Island, Prince William Sound, Alaska, by D. H. Richter, July 1965. (37 p. and maps). Out of print.

No. 17. Geology and Geochemistry of the Hollis and Twelvemile Creek Areas, Prince of Wales Island, Southeastern Alaska, by G. Herreid and A. W. Rose, April 1966. (32 p., with numerous maps and figures). Price $1.00.

No. 18. Geology of Chromite-Bearing Ultramafic Rocks near Eklutna, Anchorage Quadrangle, Alaska, by A. W. Rose, February 1966. (20 p., maps, and tables). Price $1.00.

No. 19. Geology of Part of the Amphitheatre Mountains, Mt. Hayes Quadrangle, Alaska by A. W. Rose, February 1966. (12 p., with maps and tables). Price $1.00.

No. 20. Geological and Geochemical Investigations in the Eureka Creek and Rainy Creek Areas, Mt. Hayes Quadrangle, Alaska, by A. W. Rose, June 1966. (36 p., maps, and tables). Price $1.00.

No. 21. Geology of the Slana District, Southcentral Alaska, by D. H. Richter, July 1966. (51 p. and maps). Price $1.00.

No. 22. Geology and Geochemistry of the Nixon Fork Area, Medfra Quadrangle, Alaska, by Gordon Herreid, July 1966. (29 p., map, and tables). Price $1.00.

No. 23. The Geology and Geochemistry of the Inmachuk River Map Area, Seward Peninsula, Alaska, by Gordon Herreid, November 1966. (25 p., map, and tables). Price $1.00.

No. 24. Preliminary Geology and Geochemistry of the Sinuk River Area, Seward Peninsula, Alaska, by Gordon Herreid, May 1966. (19 p., map, and tables). Price $1.00.

No. 25. Geological and Geochemical Investigation in the Metal Creek Area, Chugach Mountains, Alaska, by D. H. Richter, May 1967. (17 p., map, and tables). Price $1.00.

No. 26. Geological and Geochemical Investigations Southwest of Farewell, Alaska, by Gordon Herreid, July 1968. (15 p., maps, and tables). Price $1.00.

Geologic Reports (continued)

No. 27. Geology and Mineral Deposits of the Dolomi Area, Prince of Wales Island, Alaska, by Gordon Herreid, June 1967. (25 p., maps, and tables). Price $1.00.

No. 28. Geology of the Upper Chistochina River Area, Mt. Hayes Quadrangle, Alaska, by A. W. Rose, February 1967. (39 p., maps, and tables). Price $1.00.

No. 29. Progress Report on the Geology and Geochemistry of the Sinuk Area, Seward Peninsula, Alaska, by Gordon Herreid, July 1968. (13 p., maps, and tables). Price $1.00.

No. 30. Geology of the Upper Slana-Mentasta Pass Area, Southcentral Alaska, by D. H. Richter, May 1967. (25 p., maps, and tables). Price $1.00.

No. 31. Geology and Stream Sediment Geochemistry of Anton Larsen Bay and Vicinity, Kodiak Island, Alaska, by A. W. Rose and D. H. Richter, April 1967. (10 p. and map). Price $1.00.

No. 32. Geology of an Area on the Upper Talkeetna River, Talkeetna Mountains Quadrangle, Alaska, by A. W. Rose, February 1967. (7 p. and map). Price $1.00.

No. 33. Geologic and Geochemical Study, Solomon C-5 Quadrangle, Seward Peninsula, Alaska by R. R. Asher, April 1969. (64 p., map, and tables). Price $1.00.

No. 34. Geology and Geochemistry, Diana Lakes Area, Western Talkeetna Mountains, Alaska by R. E. Anderson, June 1969. (27 p., map, and tables). Price $1.00.

No. 35. Geology and Geochemistry, Sithylemenkat Lake area, Bettles Quadrangle, Alaska, by Gordon Herreid, June 1969. (22 p., map, and tables). Price $1.00.

No. 37. Geology and Geochemistry in the Southeastern Part of the Cosmos Hills, Shungnak D-2 Quadrangle, Alaska, by Crawford E. Fritts, June 1969. (35 p. and maps). Price $1.00.

No. 38. Uranium in Alaska, by G. R. Eakins, May 1969. (49 p. and maps). Price $1.00.

No. 39. Geology and Geochemistry of the Cosmos Hills Ambler River & Shungnak Quadrangles, Alaska, by Crawford E. Fritts, September 1970. (63 p., maps and tables). Price $1.00.

No. 41. An Experiment in Geobotanical Prospecting For Uranium Bokan Mountain Area Southeastern Alaska, by Gilbert R. Eakins, August 1970. (51 p., maps and illustrations). Price $1.00.

No. 42. Geology and Geochemistry of the Chandalar Area Brooks Range, Alaska, by E. R. Chipp, September 1970. (39 p., maps and illustrations). Price $1.00.

Next months bulletin will contain a list of all the geochemical and special publications available from the Division of Geological Survey.

HEARINGS ON PUBLIC LANDS

Chairman Henry M. Jackson of the Senate Committee on Interior and Insular Affairs announced public hearings will be conducted on September 21 and 22, on S. 921 his bill to make major revisions in public land laws. Jackson said, hearings will be conducted at 10 am each day in Room 3110 of the New Senate office.

Title I of the bill to be considered would apply to the lands administered by the Bureau of Land Management of the Department of the Interior.

Title II of the bill would repeal the Mining Law of 1872 and substitute a mineral leasing system in place of the present patenting system. Other acts it would repeal are the Homestead, Desert Land Entry, Townsites and parts of the Taylor Grazing Act.

LOST RIVER MINE

Officials of Lost River Mine on the Seward Peninsula found the late season no drawback to their feasibility work and last month, using only two diamond drills, drilled 10,600 feet in their core sampling, an amount they think may be a world's record. They are working round the clock and taking cores of from 100 feet to 250 feet in length, all in zone #1. The tin-fluorite-tungsten ore is being assayed by the Skyline Laboratory in Denver and the mining company is now into its preliminary feasibility study. They hope to have it completed by the end of the year. Estimates for the holdings now are 32 million tons of reserves of $23 ore. (Alaska from the Inside).

GOLD

Trade sources reported a growing movement to end the unreasonable U.S. regulations prohibiting U.S. Citizens from owning only gold in jewelry or coinage and not in the form of gold bullion. The United Kingdom recently lifted restrictions on British citizens holding gold and a new bill in the U.S. Congress would permit U.S. citizens to hold gold bullion. In anticipation of passage, the West Coast Commodity Exchange (Los Angeles) is reported to have prepared contract specifications for trading in gold bullion futures... U.S. gold stocks last month fell $357 million to a three year low of 10.57 billion, the U.S. Treasury reported. (Western Mining News)

ALASKA MINING CLAIMS

Number of Claims	Creek or Area	Quadrangle	Date Notice Posted
5	Knik River	Anchorage	June 1971
4	Castle Mountain	Anchorage	May 1971
5	Kugruk River	Bendeleben	June 1971
9	Black Mountain	Big Delta	June 1971
3	Tibbs Creek	Big Delta	June 1971
6	Rainy Mountain	Big Delta	May 1971
8	Tobin Creek	Chandalar	June 1971
2	Woodchuck Creek	Chandalar	June 1971
1	Sourdough Creek	Circle	May 1971
1	King Solomon Creek	Eagle	June 1971

Alaska Mining Claims (continued)

3	Fortymile River	Eagle	Apr. & May 1971
1	Bluff Creek	Eagle	June 1971
1	Yellowpup Creek	Fairbanks	June 1971
3	O'Connor Creek	Fairbanks	June 1971
8	Hattie Creek	Fairbanks	June 1971
1	Mendeltna Creek	Gulkana	May 1971
1	Crooked Creek	Livengood	May 1971
2	Elliott Highway-Mile 62	Livengood	June 1971
1	Lakina River	McCarthy	June 1971
3	Chokosna River	McCarthy	March 1971
42	Bear Creek	Mt. Hayes	June 1971
1	Davis Creek	Mt. McKinley	May 1971
1	Resurrection Creek	Seward	June 1971
1	Summit Lake	Seward	June 1971
2	Ophir Creek	Solomon	May 1971
2	Davis Gulch	Talkeetna	April 1971
10	Tok Cutoff-Mile 75	Tanacross	June 1971
9	Frankie Creek	Tanana	June 1971
2	Karshner Creek	Tanana	May 1971
50	Cinnabar Creek	Taylor Mountains	April 1971
12	Waterboot Creek	Taylor Mountains	June 1971
61	Long Glacier	Valdez	April 1971
4	Willow Creek	Valdez	May 1971
2	Tazlina Lake	Valdez	March 1971
2	Mendeltna Creek	Valdez	March 1971

METAL MARKET

Metals	July 1971	Month Ago	Year Ago
Antimony ore, stu equivalent European ore	$8.64-10.00	$10.00-11.82	$28.57-31.25
Barite (drilling mud grade per ton)	$17-20	$17-20	$12-16
Beryllium powder, 98%, per lb	$54-66	$54-66	$54-66
Chrome ore per long ton	$25-27	$25-27	$31-35
Copper per lb.	(1)	52.8¢	59.6¢
Gold per oz.	$40.68	$40.27	$35.55
Lead per lb.	14.0¢	13.5¢	15.5¢
Mercury per 76# flask	$303-312	$262-267	$410-420
Molybdenum conc. per lb.	$1.72	$1.72	$1.72
Nickel per lb.	$1.33	$1.33	$1.28
Platinum per oz.	$120-125	$120-125	$130-135
Silver, New York, per oz.	157.7¢	161.6¢	172.01¢
Tin per lb.	167.0¢	164.2¢	165.25¢
Titanium ore per ton (Ilmenite)	$30-35	$30-35	$30-35
Tungsten per unit	$55.00	$55.00	$50-55
Zinc per lb.	16.0¢	16.0¢	16.0¢

NOTE: (1) Quotation Suspended because of Copper strike.