

# MINES & GEOLOGY BULLETIN



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### Lower Cook Inlet Belongs to Feds (from Alaska Business Newsletter, June 27, 1975)

Alaska has lost its lengthy battle to have lower Cook Inlet recognized as a historic bay. The battle ended when the U.S. Supreme Court ruled 6-2 this week that the state is entitled to jurisdiction only over waters and submerged lands extending three miles seaward from a line crossing Cook Inlet at Kalgin Island.

The Supreme Court, in making its decision, overturned earlier rulings by U.S. District Court Judge James A. von der Heydt and the Ninth U.S. Court of Appeals at San Francisco that Alaska had earned title to the lower inlet through the fact that Alaska land surrounds the inlet on three sides and that the state had previously exercised control over the waters through controlling foreign fishing in the inlet. In the early years of statehood, Alaska had seized Japanese fishing vessels, but the Supreme Court determined that this was not sufficient proof that foreign governments, or the U.S. itself, recognized the lower inlet as state waters. No appeal is expected on the ruling since an appeal can be filed only if there is new evidence applicable to the case, and also because of the one-sided 6-2 vote by the court.

Lower Cook Inlet is considered a major unexplored potential petroleum province. Upper Cook Inlet is al-

ready a proven province, with state leases producing more than 5 million barrels of oil per month. Cumulative production since 1962 totals more than 640 million barrels of oil. Upper Cook Inlet is also a major natural gas producer, with monthly production of more than 9.2 billion cubic feet. The natural gas supports a major urea manufacturing facility and a liquefied natural gas facility which supplies energy to the Tokyo area.

Federal offices feel bonuses for lower Cook Inlet leases could top \$1 billion, with geology in the lower inlet similar to that of upper Cook Inlet. The lower inlet is expected to become a prime target area for rapid development under the federal Outer Continental Shelf development program. This program should begin to move more rapidly if Congress approves a bill to share petroleum revenues with states which will be impacted by the development. The question of revenue sharing as well as more state input over sale areas, timing and guidelines have been factors in the building of opposition by states to federal offshore leasing.

The Supreme Court's decision on lower Cook Inlet could affect a possible state lease sale in the Beaufort Sea north of Prudhoe Bay in which considerable high-potential acreage is located between shore and a string of offshore islands. The state's three-mile zone doesn't fill the gap between the shore and the islands, leaving

acreage which is now probably firmly claimed by the federal government. The state will probably have to strike some sort of agreement with the federal government before leasing in the area. Separate sales at different times could result in a reluctance by industry to bid high unless companies could be assured of obtaining all the land they may desire in a specific location.

### Geochemistry as a Prospecting Tool by Alfred F. Trites

(Ed. note—This is the third of a series from *The Mining Record* [Dec. 18, 1974]. The author is a consulting geologist in Denver.)

#### Taking the Soil Sample

The soil sampler requires only a modest assemblage of equipment—a geology pick (preferably with a chisel-type point), a compass (for his traverse lines), a tape (for measuring distances if a greater accuracy than pacing is desired), paper sacks for the samples, a marking pen, colored flagging for marking the sample sites (a blaze may be used in timber), and a pack sack (or any suitable container for carrying the samples). He should keep notes in a field book or on a sketch map. Some companies manufacture a heavy paper sample sack which can be hung on a heavy wire hook attached to the belt. Oftentimes speed is essential in sampling and you will find it important to work out the most efficient motion to save time. Metal should not be used in tying up the samples because of the danger of contamination, especially if they are wet.

The geology pick is used to dig an elongate hole in the soil to the depth desired. After the soil interval sought is reached, a couple of jabs with the pick usually will provide the quarter pound or so usually desired. The hole can then be filled in and the site marked with a small piece of colored flagging with the sample number. The flagging is usually tied to the nearest bush or tree.

The number of samples that can be collected in a day will depend upon the terrain, the sampling depths, and the spacing of the sample locations. I have seen conditions under which 15 or so samples would represent a good day's work under difficult hiking conditions, wide spacing of holes, and deeper soils to sample. Under many conditions 50 or more samples can easily be taken day after day.

If you must ship your samples it is a good idea to dry them if possible before shipping, or at least wrap them in light plastic sacks. A number of lunch sacks on the market are suitable for wrapping. It doesn't make good sense to expend all the labor and time in collecting the samples and then lose some by damage in handling or transporting.

#### Sample Preparation

After your samples arrive at your office or home working area you may want to prepare them yourself

for the geochemical tests by an analytical laboratory. Unless the samples are extremely wet I like to dry them myself by placing the sacks in the sun or in a warm, dry place. Your lab will dry and prepare the samples for a modest charge, but I like to have a good look at each sample before they are submitted.

For most types of geochemical testing a grain size of less than 80-mesh is commonly used by analysts. It so happens that the mesh in ladies' hosiery is perfect for this. I stretch a single thickness of the hose across the end of a metal cylinder which is smooth on the inside. If nothing else is available the cardboard core of a roll of bathroom tissue will work. The hose can be secured across the end with a rubber band which permits easy change of the pieces of hose used. Be sure to clean out this homemade sieve after each sample has been run to avoid contaminating the next sample. Use a fresh piece of hose whenever you question the cleansing. The minus 80-mesh portion can then be placed in a small manila envelope with a clasp, the envelope labeled, and it is ready for the lab.

I prefer to examine a small portion of each soil sample under a 10- or 20- power hand lens or a binocular microscope. The color, grain size and variation in size, and the presence of identifiable minerals such as quartz, iron or manganese oxides, secondary copper minerals, and many others may be important and diagnostic of the soils above mineralized zones that have been crossed. When you receive the analyst's reports you may be able to correlate such distinguishable features with metal content and later use these physical features in the field to assist in delineating your target areas. Also, you may be able to reduce the number of soil samples needed in a later phase of your exploration.

### Little Squaw has Callahan as New Alaskan Operator

(from *Western Mining News*, June 27, 1975)

Little Squaw Mining Company of Spokane has announced that the Callahan Mining Corporation has replaced Noranda as operator of the Company's properties in the Chandalar district of northern Alaska. It was revealed this week.

Noranda's 1975 crew, first flown in during late April for this season's project, is continuing its work under the direction of Callahan, with general terms of the Noranda agreement remaining in effect.

Callahan is the owner of the Galena Mine, operated by American Smelting and Refining Company, Inc. Galena has recently been the second largest silver producer in the United States and is located in Idaho's famous Coeur d'Alene mining district.

## DGGS Open-Files New Reports

Fourteen new reports in the DGGS open-file series were placed on sale through Petroleum Publications. The reports, which can be reviewed at any of the DGGS mining information offices (addresses on p. 1), are for sale only through Petroleum Publications, 409 W. Northern Lights Blvd., Anchorage, AK 99503. The prices listed are postpaid; reports purchased over the counter are cheaper.

- AOF-35, Geology of the Craig A-2 quadrangle and vicinity, Prince of Wales Island, Alaska: by Gordon Herreid. Map (scale 1:63,360), 2 p. text. \$5.75.
- AOF-38, Geochemical analysis of stream-sediment samples from the Ambler River A-4, A-5, B-4, B-5, C-4, and C-5 quadrangles, Alaska: by R.E. Garland, G.H. Pessel, W.W. McClintock and T.C. Tribble. Map (scale 1:63,360), 4 p. text. \$5.55.
- AOF-61, Geochemical analysis of stream-sediment samples from part of the Survey Pass A-2 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, and T.C. Tribble. Map (scale 1:63,360), table, 4 p. text. \$3.20.
- AOF-62, Geochemical analysis of stream-sediment samples from part of the Survey Pass B-3 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, and T.C. Tribble. Map (scale 1:63,360), table, 4 p. text. \$3.20.
- AOF-63, Geochemical analysis of rock and stream-sediment samples from part of the Survey Pass C-4 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, and T.C. Tribble. Map (scale 1:63,360), table, 4 p. text. \$3.40.
- AOF-64, Geochemical analysis of rock and stream-sediment samples from part of the Survey Pass C-5 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, and T.C. Tribble. Map (scale 1:63,360), table, 4 p. text. \$3.65.
- AOF-65, Geochemical analysis of stream-sediment samples from part of the Survey Pass C-6 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, and T.C. Tribble. Map (scale 1:63,360), table, 4 p. text. \$3.20.
- AOF-66, Geochemical analysis of rock and stream-sediment samples from the Survey Pass A-3 quadrangle, Alaska: by R.E. Garland, G.R. Eakins, T.C. Tribble, and W.W. McClintock. Map (scale 1:63,360), table, 4 p. text. \$3.75.
- AOF-67, Geochemical analysis of rock and stream-sediment from the Survey Pass A-4, A-5, A-6, B-4, B-5, and B-6 quadrangles, Alaska: by R.E. Garland, G.R. Eakins, T.C. Tribble, and W.W. McClintock. Map (scale 1:63,360), 4 table sheets, 4 p. text. \$10.30.
- AOF-69, Geochemical sample locations, Healy A-2 quadrangle, south-central Alaska: by T.E. Smith,

G.L. Kline, J.T. Kline, and N.D. Coursey. Map (scale 1:63,360), table. \$3.40.

AOF-70, Analyses of stream-sediment samples, Mt. Hayes B-6 quadrangle, south-central Alaska: by T.E. Smith, G.L. Kline, J.T. Kline, and N.D. Coursey. Map (scale 1:63,360), table, 4 p. text. \$3.70.

AOF-81, Mineral occurrences in the upper Wood River, Edgar Creek, and West Fork Glacier areas, central Alaska Range: by K.W. Sherwood, C. Craddock, T.E. Smith, T.C. Tribble, and T.K. Bundtzen. Seventeen p., including 7 figures, 2 tables. \$5.30.

AOF-87, Zeolite deposits of possible economic significance on the northern Alaska Peninsula: by James A. Madonna. Twenty-seven p., including 5 figures, 2 tables. \$7.90.

## Miners Warn of Danger

*(Reprinted from the Alaska Miner)*

Federal authority to regulate the disposal of dredged or fill material in the waters of the United States will be greatly expanded under proposed regulations published in the Federal Register May 6 and would include practically all lakes, streams, rivers and wetlands in the United States.

Under some of the proposed regulations, federal permits may be required by the rancher who wants to enlarge his stock pond, or the farmer who wants to deepen an irrigation ditch or plow a field, or the mountaineer who wants to protect his land against stream erosion.

The U.S. District Court for the District of Columbia has ordered that the current U.S. Army Engineer regulations which control the disposal of dredged and fill material in NAVIGABLE WATERS be revised and expanded to include the WATERS OF THE UNITED STATES. The Corps of Engineers previously confined its permit activities to 'navigable waters of the United States', that is, those waters which are presently navigable, have been historically navigable, or which could be reasonably developed to be navigable.

On March 27, 1975 the District Court ruled that under Section 404 of the Federal Water Pollution Control Act Amendments of 1972, the responsibility and authority of the Corps of Engineers to regulate the disposal of dredged or fill material extends to 'the waters of the United States.' The Court directed that the proposed revised regulations be published.

The terms 'water of the United States' as used in the 1972 Act has not been defined by the Congress or the courts. However, the EPA defined the term in its regulations implementing its discharge permit program under section 402 of the FWPCA to include all

navigable waters of the United States and their tributaries; all interstate waters; all lakes, rivers and streams within a state which are used by interstate travellers for recreation and other purposes, or from which fish are taken and sold in interstate commerce, or which are used by industries engaged in interstate commerce, including agriculture.

However, since there is no basis in law or court edict to define the term 'waters of the United States', the Corps of Engineers is offering four alternative regulations with varying scopes of application for public comment to assist it in the implementation of the court order.

EPA also published guidelines in the Federal Register of May 6, 1975 for the disposal of dredged or fill material covered by the Corps of Engineers regulations. A brief description of the scope of the four alternatives is available from the Alaska Miners Association, Box 71, Anchorage, Alaska, 99510.

### Brooks Range Copper Deposits Found by Joint Exploration Team

(from Fairbanks Daily News-Miner, July 1, 1975)

A rich copper deposit has been discovered during preliminary exploration in northwestern Alaska, two major mining companies say.

But The Anaconda Co. and Sunshine Mining Co. said Wednesday that more exploration and testing are needed to determine whether it is feasible to mine the ore discovered through core drilling on a 50,000-acre site in the Brooks Range north of the Arctic Circle.

The 1,300 claims are in the Picnic Creek area of the Ambler District, about 300 miles northwest of Fairbanks and west of the trans-Alaskan pipeline route.

The two companies said that one drill hole recovered ore containing nearly 6.8 per cent copper. Two other drill holes produced ore with 1 to 4 per cent copper and concentrations of other precious metals, the companies said.

By contrast, Anaconda commercially mines much lower grade copper from its huge Berkeley open pit in Butte, Mont. The ore contains an average of .5 per cent copper, said Leonard C. Powell, president of Anaconda's Montana Mining Division.

Sections of one drill hole also produced "appreciable values" of lead, zinc and silver, in addition to copper, a geologist said.

Consulting geologists in Spokane said the high copper value indicated "a possible bonanza discovery."

Irwin Underweiser, board chairman of Sunshine, said it was too early to determine if the copper deposit would be developed, or how.

But Underweiser, whose company operates the nation's largest silver mine at Kellogg, Idaho, also said:

"This is the most important project our company has been associated with in more than 10 years."

"While initial results are encouraging, a substantial amount of additional drilling, geological analysis and metallurgical testing will be necessary before any conclusions can be reached as to the existence of an economically viable ore body."

### Guest Forum

Dear Dr. Schaff:

We would like to offer a suggestion for the Mines and Geology Bulletin. It would be advantageous to have a "guest forum" column where letters of interest may be given public exposure. Perhaps it would be good to have more than one letter published per issue. Opposing viewpoints could be presented simultaneously. Letters to the editor could be published as well.

Last year while preparing for the village selections we found that there is not a single source for the mining claim records. The law states that the corporations must have a copy of the location certificate and the latest certificate of annual labor in order to exclude a mining claim. Unfortunately it is very difficult to find these documents. Copies of all paperwork ca. 1969 are supposed to be sent to Fairbanks, but copies of the documents prior to that time are not available except in the individual recording offices. The records are in disarray and difficult to locate. For example, in the Anchorage recorder's office the records are very difficult to find. A given claim may have been recorded in McGrath, subsequent assessment documents filed in a later recording district's books, and perhaps even later assessment papers in a third recording district.

We recommend that complete copies of all documents be collected and filed in the College office under Mrs. Stevenson.

Sincerely,

Frank O'Connor - Phil Wallick - CALISTA CORP.

*Ed. note—The College office maintains 1) a Kardex file of all known mineral occurrences or prospects and of patented and unpatented claims staked in Alaska, especially since 1954, when this system was set up, and 2) a central recording file containing copies of all recorded location notices, assessment work affidavits, and other documents affecting claim ownership. The only way that any mining documents could "slip through a crack in the floor" is if we did not receive a monthly shipment of them from a recorder's office somewhere. We have no way of checking up on this. HELP WANTED: Writers for Guest Forum.*

## DGGS Mining Engineer to Give Paper

Cleland N. Conwell, DGGS Mining Engineer, will give a paper at the SME-AIME Fall Meeting and Exhibit, Sept. 10-12, at Salt Lake City. The title of his talk is "Reclaiming Mined Land in Alaska." His abstract follows.

"In northern regions reclaiming mined land is less difficult than reclaiming semiarid lands. In 1972, the Usibelli coal mine near Healy, Alaska initiated experimental plots to determine the proper grasses and amounts of fertilizer. The following spring, approximately 1600 acres of land disturbed by mining were seeded by low-flying aircraft. The reclamation project was evaluated by the State of Alaska and has been adjudged successful. The information gained is being used in reviewing prospecting permits and granting coal leases on state lands. In Alaska, the operator has only one state agency to deal with—Department of Natural Resources."

### The Miner and Water Quality

by James Barker, BLM Mining Engineer

Regulations concerning water quality and the demand by the public for cleaner waters has become a matter of concern for the miner. In past years, water quality was considered unimportant. There was lots of water, only a few people lived in Alaska, and since mining was the main industry, people did not worry about the mud-laden rivers and streams below mining operations.

This picture has now changed. As a result of the Water Quality Act of 1972, the Environmental Protection Agency (EPA) was authorized and required to control water pollution. Stringent regulations have been placed on heavy industry, particularly those involving petrochemical and metallurgical processes. Because of the expensive pollution control systems now required, major mining companies in the lower 48 are having to re-evaluate the economics of some of their operations.

Water discharge permits are now necessary for placer mining and according to the EPA, miners this year must begin taking whatever steps are necessary to reduce suspended solids in waters reaching natural-flowing streams.

#### New Regulations Proposed

Now being considered by the EPA are more restrictions. The EPA is currently proposing that after July 1, 1976, the permittee will have to meet the following general provisions:

1. Provide for offstream settling or filtering, or both, of all waste waters so that suspended matter does

not exceed one part per thousand.

2. Leave all mined areas in a condition so as to prevent undue erosion.
3. Provide for the safe passage of fish if normally found in the stream.

In addition, the EPA proposes monitoring where discharge water may not meet minimum requirements. This may be especially true in areas of high resource value such as sport-fishing or fish-spawning streams. Prior to officially adopting their new permit conditions, there will be a minimum 30-day period for review and comment by all interested persons and by state and federal agencies. For instance, if an operator can demonstrate to the EPA that special consideration is warranted, distinct requirements can be applied.

#### Permits Now Required

Here in Alaska, placer mining is now coming under closer scrutiny by both EPA and the Alaska Department of Environmental Conservation (ADEC). Controls on placer mining may be new to Alaska, but in areas such as California, water quality standards have been in effect since 1884. Alaskan miners have been required to apply for a water discharge permit if they intend to operate during this coming season. These permits are now being prepared by EPA in their Anchorage office. Under permit requirements, the miner this year will be required to use the "best practical technology". Lode miners having mine or milling waters draining into streams will also need a permit.

During the coming season, miners should take positive action to reduce siltation. For instance, when possible, position the sluice box so that water discharge will be into a diked area which would act as a settling pond and allow the muddy water to settle through the tailings. Miners can also experiment with a multiple series of dikes, or allow the water to seep along level ground. In these ways, still more silt may settle out before reaching the main channel. Since each locality is somewhat different, it is up to the miner's ingenuity to build an efficient system.

Miners under permit will be required to submit mining plans annually to both EPA and ADEC. Along with the plans, the operator must include a sketch of the mining area plus related topographic and stream flow information. He should also describe both the type of operation (size, equipment, water use, overburden, and the amount of yardage expected to be moved in the coming season) and the general condition of the water above and below the mine. This plan must be submitted before April each year beginning in 1976. After reviewing plans which have been submitted, EPA may require additional precautions or procedures at the mining operation. Miners have 15 days to report any

problems to EPA if they are unable to meet all of requirements of the permit.

Mining operators should submit applications for water discharge permits to: Alaska Operations Office, Environmental Protection Agency, 605 W. 4th Avenue, Room 666, Anchorage, Alaska 99501.

### Out-of-Print Documents Reissued

Five reports that have been out of print for a number of years have been reprinted. Beginning August 1st, the following reports will be available through all four DGGs mining information offices (addresses on p. 1):

Geologic Report 4, Geology and mineral deposits of the Denali-Maclaren River area, Alaska: by M.A. Kaufman, May 1964. Fifteen p., 1 plate (scale 1-1/4 inch = 2 miles). \$1.00.

Geologic Report 5, Geology of the Niblack anchorage area, southeastern Alaska: by Gordon Herreid, May 1964. Ten p., 1 plate (scale 4 inches = 1 mile). \$1.00.

Geologic Report 10, Geology of the Bluff area, Solomon quadrangle, Seward Peninsula, Alaska: by Gordon Herreid, June 1965. Twenty-one p., 1 plate (scale 1-1/2 inch = 1 mile). \$1.00.

Geologic Report 11, Geology of the Omilak-Otter Creek area, Bendeleben quadrangle, Seward Peninsula, Alaska: by Gordon Herreid, June 1965. Twelve p., 1 plate (scale 1:63,360). \$1.00.

Geochemical Report 2, Geochemical investigation of the Slana district, south-central Alaska, 1963 and 1964: by D.H. Richter, March 1965. Fourteen p. \$1.00.

### Alaska Petroleum & Industrial Directory Goes on Sale

A 300-page directory of all companies and individuals directly connected with, or engaged in Alaska industry has recently been released. The listings in the directory include oil and gas operators, pipeline, manufacturing, marketing, distribution and utilities, transportation, mining, fishing, timber, government, and native organizations.

Available through Petroleum Publications (409 W. Northern Lights Blvd., Anchorage, AK 99503), the directory costs \$18.00 plus handling and postage. Surface postage and handling rates are \$1.00 in Alaska, \$2.00 for other states, \$2.50 for Canada, and \$4.50 for other foreign. Air-mail rates are \$3.50 for Alaska and U.S., \$5.75 for Canada, and \$10.00 foreign.

"...that the world, though made, is yet being made; that this is still the morning of creation."

—John Muir

### The Little Red Hen

Once upon a time there was a Little Red Hen who scratched about and uncovered some grains of wheat. She called her barnyard neighbors and said, "If we work together and plant this wheat we will have some fine bread to eat. Who will help me plant it?"

"Not I," said the Duck. "Not I," said the Goose. "Not I," said the Cow. "Not I," said the Pig. "Then I will," said the Little Red Hen...and she did.

The wheat grew tall and ripened into golden grain. "Who will help me reap the wheat?" asked the Little Red Hen. "Not I," said the Duck. "Out of my classification," said the Pig. "I'd lose my unemployment insurance," said the Goose. Then it came time to bake the bread.

"That's overtime for me," said the Cow. "I'm a dropout and never learned how," said the Duck. "I'd lose my welfare benefits," said the Goose. "Then I will," said the Little Red Hen...and she did. She baked five loaves of fine bread and held them up for her neighbors to see. "I want some," said the Cow. "I want some," said the Duck. "I want some," said the Pig. "I demand my share," said the Goose.

"No," said the Little Red Hen. "I can rest for a while and eat the five loaves myself."

"Excess profit," cried the Cow. "Capitalistic leech," screamed the Duck. "Company fink," grunted the Pig. "Equal rights," yelled the Goose. And they hurriedly painted picket signs and marched around the Little Red Hen singing, "We shall overcome." And they did.

For when the farmer came to investigate the commotion he said, "You must not be greedy Little Red Hen. Look at the oppressed Cow. Look at the disadvantaged Duck. Look at the underprivileged Pig. Look at the less fortunate Goose. You are guilty of making second class citizens of them."

"But...but...I earned the bread," said the Little Red Hen.

"Exactly," the wise farmer said. "This is the wonderful free enterprise system; anybody in the barnyard can earn as much as he wants. You should be happy to have this freedom. In other barnyards you would have to give all five loaves to the farmer. Here you give four to suffering neighbors and keep one for yourself."

And they all lived happily ever after, including the Little Red Hen, who smiled and clucked. "I am grateful." But her neighbors wondered why she never baked any more bread.

—Old fable...author unknown. Updated by D.M. De Laporte, president, United Keno Hill Mines, for presentation at the company's annual meeting (from *The Northern Miner*, April 17, 1975).

# USGS Lists Alaska 1975 Field Season

The U.S. Geological Survey has announced its 1975 field season (albeit belatedly). The area of geological exploration and mapping, party chiefs, and dates of field parties are listed below.

Area	Party Chief	Dates
Eastern Aleutian Islands	Thomas P. Miller	6-6 to 6-27
Mt. Spurr area		6-27 to 7-4
Mt. Drum area		7-4 to 7-7
Lituya Bay	George Plafker	6-1 to 6-20
Yakutat		6-22 to 6-23
Sitka		6-25 to 6-30
Statewide heat-flow reconnaissance from Anchorage	Jackson R. Porter	6-15 to
Pipeline corridor	J.M. Childers	
Beaufort Sea	P.W. Barnes	7-15 to
Kotzebue to Flaxman I.	Erk Reimnitz	
Kukpowruk & Kokolik R. area	J.E. Callahan	
North flank, Brooks Range	Robert D. Carter	6-13 to 8-30
	Irvin L. Tailleux	
Colville R., Umiat to coast to Prudhoe Bay	L. David Carter	7-5 to 8-22
Arctic coastal plain, Prudhoe Bay to Canadian border	Oscar J. Ferrians	8-6 to 8-31
Galbraith & Chandalar Lakes area	Thomas D. Hamilton	6-25 to 7-31
Philip Smith Mts. quadrangle	Hilliard N. Reiser	5-31 to 8-10
	William P. Brosge	
Chandalar quadrangle	Sherman P. Marsh	7-1 to 8-31
Big Delta quadrangle	Helem L. Foster	6-9 to 9-8
Ruby quadrangle	Robert M. Chapman	8-13 to 9-1
Nixon Fork region	William W. Patton	7-19 to 8-12
Nome region	C.L. Hummel	6-25 to 8-13
Pribilof Is.	David M. Hopkins	6-19 to 6-27
King Salmon area		6-28 to 6-30
Nome area		7-3 to 7-5
Deering area		7-7 to 7-9
Southern Bering Sea	M.S. Marlow	
Goodnews-Hagemester Is.	W.L. Conrad	6-25 to 9-1
	J.M. Hoare	
Talkeetna quadrangle	Bruce Reed	6-5 to 8-20
Talkeetna Mts. quadrangle	Bela Csejter	6-29 to 9-10
Selected glaciers, southern Alaska	L.R. Mayo	
Seward-Blyling Sound quadrangles	R.G. Tysdal	6-15 to 8-17
Southern Alaska seismic network	Robert A. Page	
Bering River coal field	R.B. Sanders	
Gulf of Alaska outer continental shelf	George Plafker	6-1 to 7-1



Juneau	David A. Brew	6-13 to 6-21
Tracy Arm-Fords Terror		6-25 to 7-25
Glacier Bay		7-27 to 8-16
Craig quadrangle	G. Donald Eberlein	8-18 to 9-17
	Michael Churkin	
Ketchikan quadrangle	Henry C. Berg	7-1 to 8-31
Fairbanks ground-water studies	J.P. Meckel	
Cook Inlet Basin	Leslie B. Magoon	
Anchorage area	Chester Zenone	
Kenai Peninsula Borough	G.S. Anderson	
Valdez-Summit Lake area	C.E. Sloan	
Cordova area	G.S. Anderson	
Juneau area	G.O. Balding	

### Mining Claims for May, June Total 903

The DGGs mining information office in College received 903 location notices of new claims for the months of May and June, according to Carole Stevenson, mining information specialist. The claims were received from the 36 recorders' offices located throughout the state. (See *Guest Forum*, p. 4.) The claim areas, according to quadrangles, were:

May		June	
Ambler River	550	Petersburg	3
Skagway	5	Talkeetna	30
Anchorage	12	Wiseman	3
Livengood	12	Livengood	1
Talkeetna	89	McGrath	4
Eagle	5	Mt. Hayes	17
Big Delta	2	Fairbanks	15
Circle	2	Circle	10
Fairbanks	8	Big Delta	5
Mt. Fairweather	8	Healy	32
Tyonek	4	Eagle	11
Ruby	1	Ketchikan	74
Total	698	Total	205

### "Heavy" DGGs Document Delivered to ERDA

A 444-page tome, "Investigation of Alaska's Uranium Potential," was delivered to the Energy Research and Development Administration, predecessor to the Atomic Energy Commission, earlier this month. The report consists of two parts. Part I, by DGGs geologist Gil Eakins, is the text resulting from a literature search of geologic reports for information pertinent to determining the uranium potential of Alaska, with emphasis on nonmarine sedimentary rocks in structural basins. It is

392 pages long, including a 16-page bibliography.

Part II is a 1:1,000,000 scale map of the felsic rocks in Alaska with accompanying analytical data and age determinations compiled by Dr. R.B. Forbes of the University of Alaska Geophysical Institute. The two parts complement each other in judging the favorability of areas for uranium deposits.

According to Dave Parker, general manager of Petroleum Publications, this publication, including blue-line maps (five map sheets constitute 1:1,000,000 scale map), will be available this fall, probably in October, when his new press arrives. More definitive details may be obtained from him (address on p. 3).

### Information Circulars Updated

Two DGGs information circulars have been revised to incorporate the latest mining laws. They are: Information Circular 1, Proper Claim Staking in Alaska (revised from November 1970) and Information Circular 14, Mining Laws Applicable in Alaska (revised from February 1971). Both are free and can be obtained from any DGGs mining office (p. 1).

### States may Join on OCS Funds

(from Anchorage Daily News, July 16, 1975)

Alaska stands a good chance of losing out of federal revenue sharing for outer continental shelf development if the northern gulf oil and gas lease sale schedule for late this year proceeds as planned, Guy Martin, state commissioner of Natural Resources, said Tuesday.

If the northern Gulf sale is held before an OCS revenue-sharing bill makes it through Congress, "We simply aren't going to get any revenue for it," Martin said in a telephone interview. He believes the prospects of a bill making it through Congress by late this year are



"fairly low." (See OCS schedule, p. 10.)

But Martin met with California officials in Sacramento last week, and he said the two states have agreed to push for a delay in the federal government's leasing schedule unless revenue sharing and several other requests are met.

Policy-makers in California agreed with Martin that a delay of six months to two years or more is desirable, and representatives of the two states also discussed legal bases for lawsuits in the event the federal government doesn't cooperate.

"We agreed substantially that probably the root cause of the federal government being unresponsive to the states rests with the energy complex at the federal level," Martin said. The need for energy and new sources of revenue appears to be overwhelming the federal segment that might be amenable to responding to the state's objections to OCS leasing.

"Both states very firmly hope that we would never have to go to litigation, but we also agree the response of Interior so far has been very, very low," Martin said.

While the legal bases for lawsuits in California and Alaska are similar, the facts would be different in each case, Martin said. "It would be a very comprehensive kind of lawsuit," detailing federal government failures to comply with provisions of the National Environmental Policy Act, the Coastal Zone Management Act and other federal laws.

Aside from revenue sharing, California and Alaska are pushing for greater participation by the states in surveillance of OCS development, and release by the federal government of information on offshore development.

Even if revenue sharing bills now pending in Congress are approved in time for the northern Gulf sale, "they don't begin to meet the revenue needs of the state," Martin said.

Gov. Jay S. Hammond, Martin, and other state officials will testify at Interior Department hearings and a hearing by the House Select Committee on the Outer Continental Shelf early next month in Anchorage.

The hearings are scheduled to begin at 9 a.m. Aug. 12 in the Anchorage-Westward Hotel. The hearings concern the draft environmental impact statement released by the department June 27.

Separate hearings are tentatively planned Aug. 7 in Anchorage by the U.S. House select Committee on the Outer Continental Shelf, a group in a position to influence whether Alaska and other affected states will receive any federal revenues to offset impact from proposed outer continental shelf (OCS) mineral development.

The Interior Department hearings will be conducted by Robert W. Mesch, an administration law judge from Salt Lake City, with participation from Ed Hoffman, director of the Alaska OCS office, and representatives of top Interior Department officials in Washington.

Testimony from the Interior Department hearing will be considered in preparation of a final environmental impact statement on the proposed northern Gulf sale.

People wishing to testify at the Aug. 12 hearing should contact the Alaska OCS office by 4:15 p.m. Aug. 4. Written testimony on the draft impact statement will be accepted until Aug. 29. The hearing may continue through Aug. 13 if necessary.

### Our Gange.....

by Frank Larson, DGGG Editor

Greetings, fellow rock, cleavage, alluvial, and literary fans...this issue finally has some news fit to print... "Yassss indeed," as old W.C. used to wheeze, "Yassss indeed"...we have something for everybody, right down to the angling miner who is looking for a wrapper for his grayling gangle...*For instance:* A geophysical survey completed on the Cub Claims at Kendrick Bay has led to the discovery of two radiometrically anomalous areas. The company intends on drilling at least one of the anomalies this year...*Or this:* The local assembly in Juneau gave approval to a joint management plan for potential gold mining on 2,500 acres of land owned by the city and the Alaska Electric Light and Power Company. Seven mining companies have expressed interest in the Silver Bowl Basin and Preservation areas north of town, and the city is preparing for solicitation of exploration proposals. Interested firms reportedly include Homestake Mining, Inspiration Consolidated Copper, and Anaconda...*Or this:* The Seattle Port Reporter says "Natural gas from the North Slope destined for Southeastern Alaska and Puget Sound could move through the existing military pipeline between Fairbanks and Haines. The Haines Chamber of Commerce proposes liquefaction of the gas at Haines and shipment from there by tankers to consuming areas...November has tentatively been picked as the month in which Gulf of Alaska oil- and gas-lease sales could be held, according to the Department of the Interior. (See p. 10.) The area being considered is between Middleton Island and Icy Bay, and contains 1.8 million acres."...*Now for the dessert:* According to the same source, "April 1976 is the target date for production of beer at the brewery to be built in Anchorage by Prince Brau Alaska.".....*Now that's news.....Cheers.*

## Proposed OCS Planning Schedule

SALE AREA		1974				1975				1976				1977				1978													
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
SOUTH TEXAS	97																														
CENTRAL GULF	98																														
CENTRAL GULF	98A																														
SOUTHERN CALIF.	99																														
CORK ISLET	1/																														
GULF OF ALASKA	20																														
GULF OF MEXICO (GENERAL)	67																														
W-ATLANTIC	60																														
NORTH ATLANTIC	62																														
GULF OF MEXICO (BRASSIE)	64																														
SOUTH ATLANTIC	65																														
GULF OF ALASKA (INCLUDING KUSMAN)	66																														
BEHIND SEA (ST. GEORGE)	68																														
GULF OF MEXICO (DEEP)	67																														
SO. CALIFORNIA	69																														
W-ATLANTIC	60																														
BRANFORD SEA	60																														
OYSTER BRISTOL BAY	61																														
NORTH ATLANTIC	66																														
CALIFORNIA GENERAL (EXCL. WASH. & OREGON)	60																														
SOUTH ATLANTIC (BLAKE PLATEAU)	68																														
BEHIND SEA (CHOTON BAY)	60																														
GULF OF ALASKA - ALUTIAN ISLANDS	60																														
STURGEON SEA	60																														
HOPE BAY	60																														

BQ Boundary Section Indicated  
 C Call for Information  
 NO Non-Commercial Use  
 F Assessment of Threat  
 DCS Data Environmental Assessment  
 PM Final Mapping  
 PES Final Environmental Assessment  
 H Name of Sale  
 1/ Open Bay Consider Sale

Benthic studies conducted are essential upon accurate information and resources being available to protect the seabed.  
 Sales are contingent upon resources being available for sale areas and development. A decision whether to hold any of the areas listed herein will not be made until completion of all necessary studies of the environmental impact and the holding of public hearings, as a result of the environmental, technical, and economic studies completed in the interim - pending program, a decision, now, to hold, to move and to hold any sale on this schedule.



*Grant R. Barkland*

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