



STATE OF ALASKA  
Department of Natural Resources

Division of Geological Survey  
**MINES BULLETIN**

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STATE OF ALASKA  
DIVISION OF  
GEOLOGICAL SURVEY**

VOL. XLX

March 1971

No. 3

P.O. Box 5-300

College, Alaska 99701

GEOLOGICAL SURVEY BUDGET

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Published to Accelerate the Development of the Mining Industry in Alaska

William A. Egan - Governor

Charles F. Herbert - Commissioner

James A. Williams - Director



The Mission  
**GEOLOGICAL SURVEY BUDGET AIMED AT ATTACKING RESOURCE,  
ENVIRONMENTAL PROBLEMS**

The fiscal year 1972 budget estimate for the U.S. Geological Survey, Department of the Interior, amounts to \$121,207,000 -- a gross increase of \$9,857,000 over the current fiscal year, it was announced today.

"The proposed budget," said Dr. William T. Pecora, USGS Director, "is aimed at providing a balanced program of mapping, investigations, and inventorying of the land, mineral, and water resources of the United States, and supervision of mineral leases on public and Indian lands and the Outer Continental Shelf."

"Strong emphasis," Pecora said, "will be placed on obtaining the kind of earth science knowledge that can provide a foundation for coping with burgeoning problems that reflect the dilemma of our times -- the need, on one hand, for vast amounts of natural resources, while, at the same time, the need to avoid environmental degradation."

Highlights of programs included in the proposed 1972 Geological Survey budget:

Topographic Mappings: A budget of \$92,869,000 is proposed -- an increase of \$1.8 million. The increase will provide an additional 3,500 square miles of topographic mapping at the standard scale of 1:24,000 (2,000 feet to the inch). About \$150,000 of the increase will be used for continued development and operation of the National Cartographic Information Center, begun in 1971, to provide a more complete service of dissemination of cartographic data. The topographic map is a key tool for water resource management, mineral resource investigations, land use inventories, planning and development of transportation and communication systems, and many other programs.

Geologic and Mineral Resource Studies: Proposed budget, \$31,161,000. This includes an increase of \$200,000 for earthquake research, and \$500,000 for geologic surveys, primarily, of public lands, and for reconnaissance geologic mapping of the continental shelves. Geological maps are three-dimensional maps that are critical to appraisal of the mineral resource potentials. Geologic maps also provide fundamental background for a variety of other National needs, such as engineering and land-use planning, earthquake hazard identification, waste disposal and pollution studies, and ecological investigations.

An expanded earthquake hazards program will aid in reduction of potential losses from quakes, and will include research on basic causes which can lead to more effective means of reducing losses. The program will include geologic surveys of high-risk areas, seismological and soils engineering investigations of ground motion and failure, assistance in land-use planning and pre-disaster emergency planning, and geophysical monitoring and geologic analysis of earthquake faults.

TIMBER AND MINING ACTIVITIES ON NATIONAL FOREST LANDS

The Subcommittee on Public Lands of the Senate Interior Committee will hold hearings in late February or sometime in April on timber and mining activities on national forest lands. The Forest Service is preparing proposed regulations that would impose controls on mineral activities in the national forests, but it is expected that the hearings will be held before the Forest Service publishes these regulations. A definite date for the hearings will be set soon.

DON'T FORGET TO RETURN YOUR "PINK SLIPS" !!!

## ORGANIC ACT

It is reported that Senator Henry M. Jackson, Chairman of the Senate Interior Committee, has prepared a bill which provides for an Organic Act for the Bureau of Land Management, (BLM) to manage permanently the public domain and for an all-leasing system on federal land which would, in effect, repeal the 1872 mining law permitting location of claims on public land; permit BLM to have authority to do recreation development on the public domain where needed, particularly on the Colorado River and some of its tributaries; provide authority to acquire rights-of-way, build new cities and set aside some natural areas for scientific study on public lands; modify and extend the BLM Classification and Multiple-Use Act and Public Sales Acts of 1964, both of which expired on December 31, 1970.

## MINERALS LAWS GUIDE UPDATED

From the New Mexico Miner- A concise, updated guide to the mining and petroleum laws of thirty western hemisphere countries and colonies has just been published by the Department of the Interior's Bureau of Mines and placed on sale at the Government Printing Office. The 159-page volume is the first in a five-part series that will cover the mineral laws of all nations. The complete series will update a 1961 Bureau publication and is expected to be particularly useful to government officials, businessmen, students, and others interested in mineral development throughout the world. For each country listed, the series identifies and summarizes the laws or statutes governing mineral acquisition and names the controlling administrative agency. Where pertinent, historical and administrative background is included. For countries where mineral jurisdiction rests with states or provinces, these areas are considered separately from the central government. This first volume covers all significant legislation applicable to minerals in most countries of the western hemisphere. Author of the compilation is Northcutt Ely, a private attorney and leading authority in the field of international minerals legislation. He worked closely with the Bureau of Mines, the Pan American Union, and representatives of more than twenty countries in compiling and condensing the extensive legal literature to which the volume is a reference. Bureau of Mines Information Circular 8482 is titled "Summary of Mining and Petroleum Laws of the World (In Five Parts) - 1. Western Hemisphere". Copies may be purchased at \$1.25 each from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402. Orders should specify the title and GPO Catalogue No. 128.27:8482. The publication is not sold by the Bureau of Mines.

## PUBLIC ASSAY POLICY STATEMENT

The State of Alaska Division of Geological Survey provides a public assaying service. Its function is to support prospectors and stimulating discoveries. It is not the intent of the function to support exploration, drilling, or production operations, particularly if a large number of samples is involved. Work on samples from any one person or property is done in the same chronological order as received. Geochemical analyses are not done.

It is not our intent to compete with private enterprise. A commercial laboratory exists in Anchorage as well as others in the lower 48 states and Canada which give good service on large numbers of samples, both ore-grade and geochemical.

NOTE: No charge is made for assay or analysis of Alaskan ores, minerals, and rocks. Furthermore information received and assay results are kept confidential by the Division for a period of two years. They may then be cataloged or otherwise made available to the public.

We desire to give the same rapid service to those who must mail their samples to us as to those who can hand-carry their samples to the Laboratory. To accomplish this and give the fairest and best service we can within the intent of the law the following policies must be adhered to by the prospector:

1. Fill out a request form for Assay or Identification. A sample form is included on page 6 of this bulletin. Supplies of this form will be sent on request.
2. State what elements or minerals each sample is to be assayed for. Please do not say merely "assay for anything of value", or "a complete analysis". Identifications are made when requested.
3. State any additional information that may be required by regulation which is considered beneficial to the general evaluation of the mineral resources of the State.
4. Each sample submitted should bear a number, letter, or some other identifying mark, particularly when a number of samples are submitted together. Assay results are reported in accordance with these identifying marks.
5. Samples should consist of pieces small enough to go into our 3-inch lab crusher. Samples requiring handbreaking by lab personnel are normally set aside until there are no other samples waiting for assay.
6. Samples should be dry. The home baking oven is handy for this purpose. Drying samples in the lab takes up needed space and delays the work. Samples which are too wet for processing are set aside until dry before being placed in chronological order for work.
7. Samples submitted without sufficient information on the location where they were taken will not be placed in chronological order for work until better information is submitted.

The type and quality of the analysis to be given any sample is at the discretion of the laboratory (lab.) Supervisor. Work on samples from one party or property is limited to a reasonable number of man-hours. After that, the remaining samples, together with any further samples from that person or property submitted in the meantime, are scheduled for another like amount of work following all other samples waiting for work at that time.

The choice of the analyses depends on the quality of the sample and the problem at hand. It is usually wasteful to do detailed, precise analysis on "grab" samples or samples casually taken. Approximate results are sufficient for such samples. Only samples carefully taken and precisely located which are representative of a body of mineralization, or a series of samples designed to solve a particular problem, are considered for extensive quantitative work.

Where it appears warranted, unless requested differently, samples are:

1. Given a spectrographic analysis to determine if any base metals are present in significant amounts.
2. Assayed for precious metals if this appears warranted.
3. Assayed for such base metals as can be seen and are shown by the spectrograph to be significant.

All samples are checked for radioactivity with the Lab Counter.

Our Lab personnel do not pan samples down except as a concentration method chosen by them for a specific analytical procedure. Anyone can pan and should not expect our Lab personnel to use up valuable time doing such work for them.

Lab personnel are not employed for consultation on prospecting, geology, marketing, and related matters, and their work should not be interrupted for such. Needed consulting is usually available from engineers and geologists of the Division of Geological Survey. When no engineer or geologist is available, the laboratory Supervisor provides consultation and calls on other Lab personnel if needed and available.

We have well-developed procedures for most analysis, but some elements are rarely called for or may require elaborate instrumentation for which we are not equipped. We do the best we can, consistent with sample quality. In cases where our laboratory is limited in its capability and the sample deserves more attention from another source, it is so indicated in the Lab report. We are not equipped to assay quantitatively for platinum.

Lab reports indicate estimated precision or accuracy of values reported in quantitative analysis.

Unused portions of samples are held for 60 days and sample pulps for six months, after which they are discarded. The submitter may claim the sample or pulps during these time intervals.

NEW OPEN FILE RELEASE

The U. S. Geological Survey is releasing in open file the following report, "Translation of 1964 Russian Correlations between Wrangel Island and Northern Alaska, by I. L. Tailleux. 13 pages, including 2 illustrations". Copies are available for inspection in the following locations:

U. S. Geological Survey Libraries

1033 GSA Bldg. Washington, D.C. 20242	Bldg. 25 Federal Center Denver, Colo. 80225	345 Middlefield Rd. Menlo Park, Calif. 94025
Brooks Bldg. College, Alaska 99701	678 U.S. Court House Bldg. Spokane, Washington 99201	504 Custom House San Francisco, Calif. 94111
7638 Federal Bldg. Los Angeles, Calif. 90012	108 Skyline Bldg. 508 2nd Ave. Anchorage, Alaska 99501	1012 Federal Bldg. Denver, Colo. 80202
	441 Federal Bldg. Juneau, Alaska 99801	

State of Alaska Division of Geological Survey

509 Goldstein Bldg. Juneau, Alaska 99801	323 E. 4th Ave. Anchorage, Alaska 99504	University Ave. College, Alaska 99701
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Material from which copy can be made at private expense is available in the Alaskan Mineral Resources Branch, USGS, 345 Middlefield Rd., Menlo Park, Calif., 94025.

MINING CLAIMS

<u>Number of Claims</u>	<u>Creek or Area</u>	<u>Quadrangle</u>	<u>Date Notice Posted</u>
1	Kobuk River	Ambler River	December, 1970
2	Metal Creek	Anchorage	January, 1971
4	Knik River	Anchorage	November, January, 1970
61	LaTouche Island	Blying Sound	November, 1970
28	Banded Mountain	Bradfield Canal	October, 1970
20	Salmon River	Bradfield Canal	September, 1970
1	Deadwood Creek	Circle	September, 1970
24	Virgin Bay	Cordova	September, 1970
16	Omar Creek	Craig	December, 1970
1	Double Glacier Creek	Kenai	December, 1970
70	Glacier Creek	McCarthy	October, 1970
8	Dan Creek	McCarthy	October, 1970
13	Slate Creek	Mt. McKinley	September, 1970
21	Horseshoe Bay	Seward	June, 1970
1	Canyon Creek	Seward	January, 1971
24	Stony River	Sleetmute	September, October, 1970
2	Damundtali Lake	Tanacross	October, 1970
5	Boulder Creek	Teller	November, 1970
1	Cape Creek	Teller	March, 1970
3	Goodwin Creek	Teller	March, 1970
3	Tiekel River	Valdez	October, 1970
1	Gold Creek	Valdez	August, 1970
1	Mineral Creek Canyon	Valdez	August, 1970

METAL MARKET

<u>Metals</u>	<u>February 22, 1971</u>	<u>Month Ago</u>	<u>Year Ago</u>
Antimony ore, stu equivalent			
European ore	\$11.61-14.29	\$12.05-14.73	\$36.16-37.95
Barite (drilling mud grade per ton)	\$12-16	\$12-16	\$12-16
Beryllium powder 98% per ton	\$54-66	\$54-66	\$54-66
Chrome ore per long ton	\$25.55	\$31-35	\$31-35
Copper per lb.	50.3¢	50.3¢	56.5¢
Gold per oz.	\$39.15	\$37.70	\$35.19
Lead per lb.	13.5¢	13.5¢	16.5¢
Mercury per 76# flask	\$348-355	\$348-355	\$458-465
Molybdenum conc. per lb.	\$1.72	\$1.72	\$1.72
Nickel per lb.	\$1.33	\$1.33	\$1.28
Platinum per oz.	\$105-125	\$120-135	\$130-135
Silver, New York, per oz.	161¢	158.3¢	187.7¢
Tin per lb.	163.6¢	161.2¢	175.4¢
Titanium ore per ton	\$30-35	\$30-35	\$30-35
Tungsten per unit	\$55.00	\$55.00	\$43.00
Zinc per lb.	15.0¢	15.0¢	16.0¢

**SAMPLE PROSPECTORS ASSAY AND IDENTIFICATION FORM**

State of Alaska  
Department of Natural Resources  
DIVISION OF GEOLOGICAL SURVEY  
P. O. Box 5-300  
College, Alaska 99701

**REQUEST FOR ASSAY OR IDENTIFICATION**

The State Law governing free analyses of samples sent or brought to the State Assay Laboratory requires information be furnished the Laboratory in return for our service. We will keep this information confidential for two years. Please fill in this form as completely as possible and submit it with your sample. A separate form should be sent with each sample. More forms will be supplied on request. Please print all information.

Name \_\_\_\_\_ Sample No. \_\_\_\_\_  
Permanent mailing address \_\_\_\_\_  
Street/Box \_\_\_\_\_  
Date sample is sent \_\_\_\_\_  
Name of claim or property sampled \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Name(s) of property owner(s) \_\_\_\_\_

Location of prospect:  
U.S.G.S. Quadrangle \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_  
If unable to describe by township, range, and section provide a narrative description on back of sheet. Relate to major geological or topographical features.  
Mark source of sample: lode( ) placer( ) float( ) dump( ) concentrate( )  
Indicate location of sample by sketch on back of sheet. Relate to natural land marks.  
Note: If several samples are submitted from one area provide a sketch showing length of each sample and distance to next sample. If old workings are sampled provide map or sketch of workings and indicate if workings are accessible for possible resampling.

Analyses desired:

(Signed) \_\_\_\_\_

**DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED**

Comments:

Date Report Issued \_\_\_\_\_ Report No. \_\_\_\_\_ Lab Sample No. \_\_\_\_\_