

Public-data File 86-37

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS
MONTHLY REPORT FOR MAY 1976

By

Ross G. Schaff¹

Alaska Division of
Geological and Geophysical Surveys

June 1986

THIS REPORT HAS NOT BEEN REVIEWED FOR
TECHNICAL CONTENT (EXCEPT AS NOTED IN
TEXT) OR FOR CONFORMITY TO THE
EDITORIAL STANDARDS OF DGGS.

794 University Avenue, Basement
Fairbanks, Alaska 99709

¹P.O. Box 7028, Anchorage, AK 99510.

RESOURCE INVESTIGATION

Comments

1. Steve Hackett's report missing because of leave status.
2. Awaiting your decision on North Slope seismic data questions.
3. Have to date received no instructions on information needs in the Forty-Mile area.

MONTHLY REPORT

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MAY 21 1976

April 25 - May 25, 1976

Gil Eakins

Div. of Geological Survey
Anchorage

A. Consultations

I. State

Div. of Planning & Policy - 4/30/76 - ADGGS programs outlined that will aid Div. of Planning in land selections - Forty mile area, Kenai Pen., N. Flank Alaska Range & Susitna Basin

II. Miscellaneous

1. John Dunbeer, Noranda, 5/3/76 - Discussed explor. in Ak.
2. Three geologists with Research Associates; 5/12/76 - Discussed uranium exploration in Ak.
3. Jim White - drilling in Copper River Basin - 5/10/76 - Discussed possibility of collaborating with ERDA on uranium studies.
4. ERDA - Several phone conversations regarding ERDA's Copper River Basin program for 1976

B. Conferences:

1. Land Policies and Mineral Devel. - 5/12-5/14 - Fairbanks

C. Research

1. Continued constructing maps for ERDA contract - uranium investigations in west-central Alaska and Copper River Basin. Cheri Carver now working full time on this and Jeff Kline and John Decker have assisted. Will not meet contract completion date of June 1, and will have to ask for an extension. Still waiting on sample analyses. Met with Dan Hawkins regarding a computer run to produce statistical analysis of U, Th, and K assays for ERDA project. Began literature study of Forty mile area.

D. Miscellaneous

1. Fairbanks staff met with Ross Schaff 5/14/76 to discuss parity with Anchorage staff.
2. Fairbanks staff met with Nola Bragg in Fairbanks 5/20-5/21 for instruction on use of State forms and SOP's.
3. Met with Dr. Bob Forbes on transfer of the Copper River Uranium program from the ADGGS to the Geophysical Inst. Also, met with Tom Smith to get geological data on Copper River Basin

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: May 27, 1976

FILE NO:

TELEPHONE NO:

SUBJECT: Monthly Report

FROM: Patrick Dobey
Chief Petroleum Geologist

A. Consultations

I. State

1. Community and Regional Affairs, Coastal Zone Management and DEC on numerous occasions during the month; topics were related to present Coastal Zone contracts -- primarily off-shore models
2. Marine Advisory Section of the University of Alaska, OCS development

II. Federal

1. FEA, NPR-4 development
2. FEA, North Slope pricing and development and miscellaneous
3. U.S. Navy, NPR-4 development and operations

III. Other

1. Resource Planning Associates on NPR-4 study
2. Husky Oil, NPR-4 development
3. E. Green - Beaufort Sea technology

B. Conferences

1. May (first week) - Houston - offshore technology

C. Reports

1. Kodiak Development Model underway -- to be completed June 15

MONTHLY REPORT

Tom Bundtzen

April 25 - May 25, 1976

- I. Consulted with J. Dunker, Division of Lands, about Delta Meetings (public). They were subsequently cancelled.
- II. Talked with Don Grybeck (USGS) about possible collaborative work this fall on information collected from respective mining districts.
- III. Helped prepare for field season with Wyatt on North Flank.
- IV. Attended 1/2 of conference on Mineral Industry versus Government, Comment: State officials immediately set up confrontation with industry
- V. Research - Open-file Report 98 on the Kantishna was finally finished, after several months of intensified research. New lead-zinc anomalies in Kantishna shed new light on mineral potential.
- VI. Miscellaneous: Several visits by individuals with fruitful discussions resulting. Noranda may look at Kantishna Hills this summer and will focus on Totatlanika schist across entire North Flank. Lead-silver lessee plans to mine underground in Kantishna this summer. Many of the past gold miners will be there again this summer.
- VII. Did some reading on 40 mile geology for up coming report due October 1st.

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MAY 25 1976

Div. of Geological Survey
Juneau, Alaska

Monthly Report

Wyatt G. Gilbert



April 25 to May 25

A. Consultations

I. State

1. Met with DNR Planning Section and ADL (4-30-76) to discuss DNR priorities and new ADGGS assignments
2. Met with ADL Delta Planning Team Committee (5-10-76) to draw up preliminary recommendations for Delta Study area.

II. Federal

1. Met with Donald Grybeck of U.S.G.S. (5-12-76) to and plan Alaska field studies.

III. Other

1. Met with Bradley C. Peek, Exploration Geologist, Cominco American (4-29-76) To discuss Alaska Range mineral resources.
2. Met with Eric Hansen, Exploration Geologist, Resources Associates of Alaska (5-6-76) to discuss Alaska Range mineral resources.
3. Met with John Dunbeer, Exploration Geologist, Noranda (5-3-76) to discuss Alaska Range mineral resources.
4. Met with Thomas Smith, Consulting Geologist, (5-19-76) to discuss southern Brooks Range mineral resources.

C. Research

- I. Finished structure and petrology of Ruby ridge area.
- II. Began working up geochemical data of Mt. Galen Volcanics.
- III. Continued Central Alaska Range compilation.

D. Status of Reports and Publications

1. Completed rough draft of Ruby ridge paper.

E. Miscellaneous

- I. Began extensive planning for 1976 field season.
- II. Critically reviewed six ADGGS report manuscripts.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: May 25, 1976

FILE NO:

TELEPHONE NO:

FROM: Frank Larson *FL*
Publications Specialist

SUBJECT: Progress Report, May 1976

The following actions were taken by the publications section this month:

EDITORIAL:

- 1) Submitted to vendor Special Report 11, "Commercial-grade mordenite deposits of the Horn Mountains," by Dan Hawkins.
- 2) Edited four contributions to "Short Notes on Alaskan Geology" geologic report.
- 3) Edited AOF-98, "Geology of the Kantishna Hills," by T. Bundtzen.
- 4) Edited AOF-100, "Gravity survey of Beluga Basin and vicinity," by S. Hackett.
- 5) Mines Bulletin effort.
- 6) Edited Conwell paper on marine mining.
- 7) Two days personal leave.

TYPING:

- 1) Mines Bulletin (composer).
- 2) AOF-98.
- 3) AOF-100.
- 4) Conwell paper.
- 5) Tables for geologic report 47, "Teklanika Formation," by W. Gilbert.
- 6) Mailed Mines & Geology Bulletin.
- 7) Miscellaneous typing, filing.

CARTOGRAPHY:

- 1) Plate for AOF-96, "Geology of south Augustine Island," by R. Buffler.
- 2) Figures for Conwell coal report.
- 3) Maps for Eakins and Carver's ERDA report.
- 4) Miscellaneous linework.
- 5) Various errands, blueline runs.

Monthly Report

Mitch Henning

May 1, 1976 to May 25, 1976

A. Consultations

II. Federal

1. Met with Irv Long and Glen Greely, Corps of Engineers (5-6-76) to discuss the Devil's Canyon dam project, concluded that project will not go until Congress approves funding.
2. Met with Mr. Wescot, NOAA (5-12-76) and discussed joint project for coastal zone management.

III. Other

1. Met with Chuck Herbert, BP Minerals (5-20-76) regarding ERTS photos. Referred him to U.S. Geological Survey.

D. Status of Reports and Publications

1. Map nearing completion of preliminary drafting for Geology and Geochronology of South-Central Talkeetna Mountains report.
2. Waiting for feedback on Haul Road Study. Comments from the mineral industry have been solicited.

Monthly Report

G. H. Pessel

April 25 to May 25, 1976

A. Consultations

I. State

1. Division of Lands, conference on evaluation problems for Arctic Slope.

II. Federal

1. USGS (Menlo), status of geochem sampling in Brooks Range, furnished maps.
2. USGS (Menlo), status of joint publication on Arctic Slope wells.
3. USGS (Anchorage), furnish geochem data and geologic map for Brooks Range evaluation.

B. Conferences

1. Bureau of Mines, attended conference on results of Bureau of Mines contract with WGM on Brooks Range resources.

E. Miscellaneous

1. Work on geochem data in Ambler River quadrangle.
2. Work on finishing geologic map of Ambler River quadrangle, still several weeks necessary.
3. Writing evaluation program for state land selection on Arctic Slope.

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MONTHLY REPORT Div. of Geological Survey
Anchorage
4/25/76 to 4/21/76

Richard D. Reger

A. Consultations

I. State

	<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1.	Division of Lands (Dave Hanson and Bob Klein)	4/30/76	Summer field programs	Agreed to evaluate surficial geology in Healy D-6, Montana Ck. and Kantishna River- Fairbanks and southern Kenai lowlands by deadlines required
2.	Division of Highways (Bill Slater)	5/7/76	Damage to Post Office Bldg., Anch.	Memo dated 5/17/76 sent to Ross Schaff describ- ing observations, con- clusions, and recommen- dations
3.	Division of Lands (Larry Dutton and Hajdys)	5/13/76	Airphotos for southern Kenai Penin- sula	Obtained photos require for mapping surficial deposits
4.	Arctic Environmental Information Data Center, University of Alaska (Patty Brommelsiek)	5/17/76	Information on water and gravel studies on North Slope	Obtain 2 reports*
5.	Division of Lands (Bill Copeland and Meg Hayes)	5/17/76	Tanana Gravel	

II. Federal

	<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1.	USGS (Florence Weber)	5/3/76	Surficial geology Big Delta area	Coordinated efforts
2.	USGS (Gordon Nelson)	5/6/76	Water and gravel	Problem Identifica- tion on North Slope*
3.	USGS (Dave Carter)	5/7/76	Water and gravel	Problem Identifica- tion on North Slope*
4.	USGS (Oscar Ferrians)	5/12/76	Water and gravel	Problem Identifica- tion on North Slope*

*Report attached

III. Other

	<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1.	Woodward-Clyde Consultants, Inc. (Duane Packer and Bert Swan)	5/5/76	Surficial geology Mt. Hayes A-4 Quad.	Provided unpublished data
2.	Woodworth-Clyde Consultants, Inc. (Dick Firth)	5/7/76	Water and gravel	Problem identification in NPR4*
3.	R and M Consultants, Inc. (Lynn Schraeder)	5/7/76	Water and gravel	Problem identification in Sag River area*
4.	Dames and Moore (Bill Pyle)	5/7/76	Water and gravel	Problem identification in NPR4*

*Report attached

B. Conferences, symposia, etc. attended

	<u>Date</u>	<u>Location</u>	<u>Topic</u>	<u>Comments</u>
1.	5/12/76	U of A Fairbanks	Land Policies and Mineral Development in Alaska	Little exchange of ideas
2.	5/17/76	U of A Fairbanks	Resource Analysis Workshop of Copper River-Wrangell Mt. Regional Study	Experimental approach to land-use planning by U of A and USFS

C. Research

I. Accomplishments

1. Photointerpretation of Delta Land-use Planning area for ADL--completed preliminary photo analysis
2. Evaluation of 4th Avenue Slide, Anchorage. Completed preliminary investigation of Cherrier King and Cherrier Building (memo dated 5/17/76 sent to Ross Schaff). Reviewing Kachedoorian comments on proposed program of preliminary evaluation
3. Status of water and gravel investigations on the North Slope, Alaska.*
4. Photointerpretation of surficial geology of Healy D-1 Quadrangle. Began photo analysis.
5. Photointerpretation of surficial geology of Healy D-6 Quadrangle. Began photo analysis. Began literature review.
6. Photointerpretation of surficial geology of Kashwitna River-Larsen Lake area, Susitna River valley. Collected published and unpublished data.

7. Photointerpretation of surficial geology of southern Kenai lowlands.
Collected airphotos and began literature review.

8. Photointerpretation of surficial

D. Status of Reports and Publications

Report (title)	<u>Transmitted to</u>	<u>Date</u>	<u>Comments</u>
1. Inspection of Downtown Station, U. S. Post Office, Anchorage	Ross Schaff	5/17/76	Final
2. Status of water and gravel investigations on the North Slope, Alaska	Ross Schaff	5/19/76	Final
3. Geology of the Delta Land- use Planning Area	John Dunker, ADL, Fairbanks	3/30/76	Field work needed to verify data

E. Miscellaneous

Help!

Monthly Report

Don McGee

May 1 to May 31, 1976

A. Consultations

1. State

1. DGGGS (5-19-76), discussed summer field work and established mode of operation.

C. Research

1. Accomplishments

1. Cook Inlet connate water, set up cross sections. Began individual well evaluation.
2. May 17, D. Reger, D. McGee and G. Pessel examined the 4th Ave. Federal Building for evidence of damage related to the possible instability of the Buttress area, downtown Anchorage.

D. Status of Reports and Publications

1. Estimated completion date and to drafting of the Cook Inlet Connate Water Salinity study is June 20, 1976. Report will consist of 7 cross section, 1 map plus text.
2. A December 1 completion date for the Resources, South Cook Inlet Peninsula project is expected. This is a report requested for use in the analysis of land traded in the three way land swap between the federal, state, and Cook Inlet Native Corporations. It includes comparative analysis of coals, building materials and oil and gas potential.

3. Miscellaneous

1. May 22-23, Dick Reger, D. McGee - two day trip to the South Kenai to establish base areas for summer field work.
2. Ross Schaff, D. McGee - join the Alaska Peninsula field party on June 29 through July 3. Object is to familiarize Ross and myself with the Mesozoic sediments.
3. Cook Inlet -- The George F. Ferris, a jackup drill platform, was unable to retract the four legs on a planned move to a drilling location for Union Oil Co. California. The rig and drill components were partially submerged at the location in Kachemak Bay near Homer. Officials have stated that the only feasible way to move the platform is by shooting off the legs. F & G refuse to allow this action because of possible damage to salmon fry at this time. It is anticipated that this action will be allowed later in the summer and that the Ferris will then return to California for repair or swapping.

3. Miscellaneous (continued)

4. ERDA has contracted to WGM Inc. for a uranium study of the Cook Inlet-Susitna Basin. Study will be a compilation and some field plus a sub-surface study of logs from wells drilled for hydrocarbons in the Cook Inlet Basin.
5. Coal -- An environmental analysis review is being proposed by the Anchorage District resource staff of the BLM, on the Cortella Coal Company's application for a coal preference right lease near Katalla, Alaska in the Chugach National Forest. Cortella (a subsidiary of Inlet Oil Corporation), has proposed a pit mining operation. The geology of the area is complex and there is no definitive evidence that the operation is feasible or will be implemented in the near future.

Monthly Report

William M. Lyle

May 1 to May 25, 1976

A. Consultation

I. State

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
Fish & Game Division of Lands	May 21 May	Game Count Land White Paper	

II. Federal

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
U.S.G.S.			
a. Division Oil/Gas	April 20	Cook Inlet	Rec. \$ 23,000
b. Conservation	May	Project	Support
c. Outer Cont. Shelf	May	Lease Schedule	None

III. Other

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
AMOCO	May 15	Pilot Qualifications	None

B. Conferences Symposia (each attended)

	<u>Date</u>	<u>Topic</u>
I. Pacific Section AAPG	April 18	New oil & gas development & exploration
II. Oil & Gas & Minerals Show	May 21	New equipment

C. Research

I. Accomplishments

All logistical problems have been solved. The maps and equipment are ready for the June 1 start.

D. Status of Reports and Publications

I. Stratigraphic study of the Gulf of Alaska

80+ copies sold and 24 distributed

II. Alaska Peninsula Report

Maps and report will be continued next field season on a priority basis. A review of the final OCS Regulations was completed.

III. Miscellaneous

Four stratigraphic tests are scheduled in OCS waters.

The Outer Continental Shelf office says there may be four lease sales in 1977. I think this will be reviewed and cut down to two or three.

The Division of Lands "White Paper on Land Status" was reviewed.

PUBLICATIONS

Comments

1. Completed "Publications: Procedures and Specifications" -- copy enclosed.
2. Reached Open File 100 (of which you have an editorial copy). About 50% of all Open Files published by the Survey were released since late 1974. Summary list enclosed.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Monthly Work Report

Month of May 1976

	Fairbanks	Anchorage	Juneau	Ketchikan	Total
1. Visitors	16	77	8	42	143
2. Annual reports	16	18	1	3	38
3. Miscellaneous papers	1	6		7	14
4. Miscellaneous publications	12		1	6	19
5. Requests for information received by mail	52	9	23	5	89
6. Requests for information received by phone	4	37		25	66
7. Rock samples	2				2
8. Bibliographies	6	14			20
9. Geologic & Geochem reports	18	17	4	7	46
10. Information circulars	65	92	21	41	219
1. Laboratory notes & reports	42	1			43
12. Aeromag maps	14	18			32
3. Special reports	7				7
14. Open file listing					
15. Letters					
16. Monthly Mines Bulletin	3,133			7	3,140
17. Xeroxing	90		80	35	205
18.					
19.					
20.					

PUBLICATIONS
PROCEDURES AND SPECIFICATIONS
DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

May 1976

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GENERAL STATEMENT

Publications and reports of the Alaska Division of Geological and Geophysical Surveys (DGGGS) are the most important means of formal communications. Publication policies and procedures are necessary to ensure that the communications are clear, accurate, and timely. This manual defines and clarifies these and is intended to serve as a guide for Survey personnel.

It is important to recognize the distinction between Survey publications and the less formal report of an individual. The essential characteristic of a publication is that it is a product of collective efforts by the Survey and that it has received the full support of the Publications section. Peer review from both inside and outside the Survey, editing for clearness of verbal and graphic expression, and a host of other steps are necessary to ensure that the final product mirrors not only the abilities and integrity of the author, but of the Survey itself. Moreover, the intrinsic qualities of the work must merit the expenditure of time and money necessary to ensure and maintain quality standards.

INDIVIDUAL REPORTS

Reports prepared primarily in response to questions from the public at large, legislators, congressmen, and so forth should not be considered as or be confused with Survey publications. Reports of this nature are often prepared during a short period of time without adequate peer review or quality control. Therefore, the author(s) must assume full responsibility for the contents of the report. Every attempt must be made to avoid any inference that the report is a publication. Covers, titles, or comments which would mislead the reader to this conclusion are not permitted. In addition, reports must contain both the following disclaimer and the author(s) name(s) on the title page. (See example, p. 2).

This report has been read by the State Geologist. It is a preliminary report and has not received official Survey publications status and should not be quoted as such. The author(s) assumes full responsibility for the contents of this report.

Reports may become official Survey publications if sufficient demand merits the expenditure of time and money of the Publications section. This determination is made by the State Geologist in consultation with the author.

If requested, the Publications section will assist individuals in the preparation of reports through editing of written materials, charts, maps, and other illustrations, and in reproducing the report. With the exception of the title page requirements (above), format is left to the discretion of the author. Peer review is recommended, but not required. Final approval of the report must be obtained from the State Geologist before duplication or reproduction.

SURVEY PUBLICATIONS

Three categories of official DGGGS publications are authorized: Open-File Reports (p. 3), Geologic Reports (p. 8), and Special Reports (p. 14).

TITLE OF REPORT IN ALL CAPS

by
A.B. Geologist,
Staff Member, Alaska Division of
Geological & Geophysical Surveys

Date

THIS REPORT HAS BEEN READ BY THE STATE
GEOLOGIST. IT IS A PRELIMINARY REPORT
AND HAS NOT RECEIVED OFFICIAL SURVEYS
PUBLICATIONS STATUS, AND SHOULD NOT BE
QUOTED AS SUCH. THE AUTHOR(S) ASSUMES
FULL RESPONSIBILITY FOR THE CONTENTS
OF THIS REPORT.

Agency Address

Open-File Reports

The Open-File Report serves two immediate functions: (1) provides the public a timely summary of research, and (2) invites reader feedback of errors of thought or fact so that corrective steps will be taken before additional funds are expended for more refined publications.

For these reasons, the Alaska Open-File Report (AOF) must be viewed as a preliminary release of data or ideas, and as an open invitation to candid criticism of the researcher's work. On the other hand, the Open-File Report is an official Survey publication. The procedure and format described below must be followed. Of especial importance is the inclusion on the title page of the following statement.

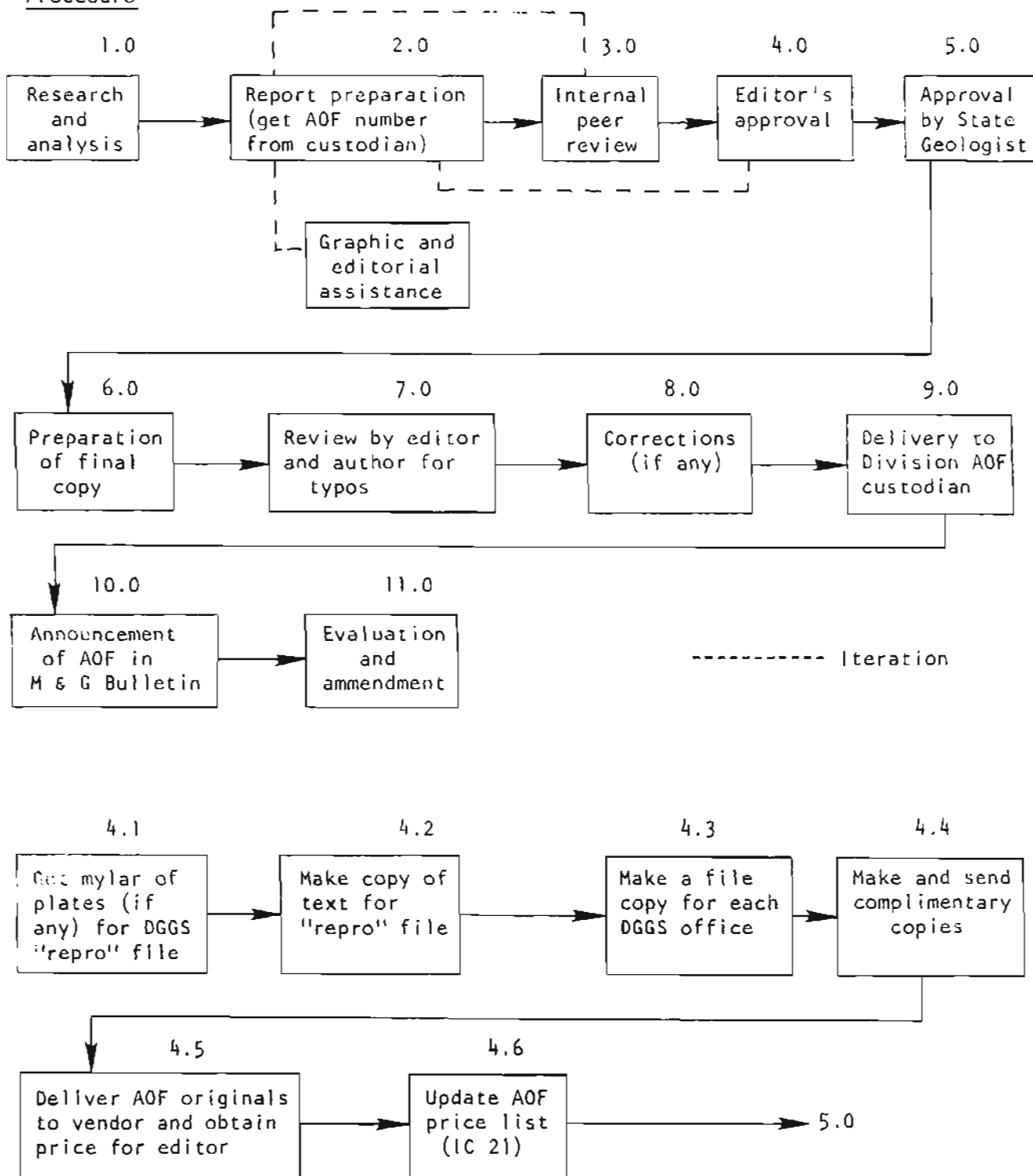
This is a preliminary publication of the Alaska Division of Geological and Geophysical Surveys and as such has not received final editing and review. It may be quoted only through permission of the author and the State Geologist. The author will appreciate candid comments on the accuracy of the data, and welcomes suggestions that will improve the report.

Specifications

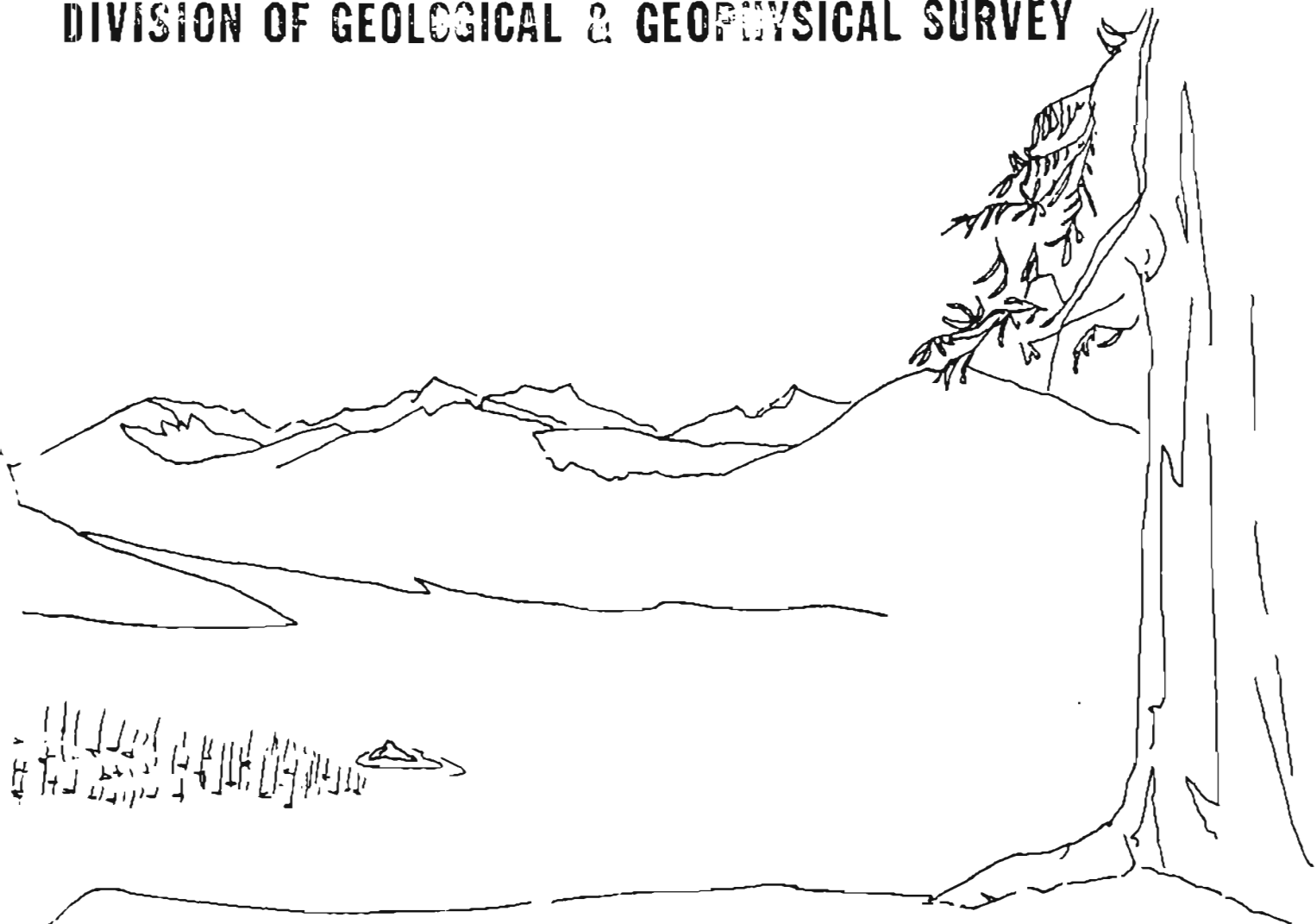
Because an Open-File Report is preliminary to a series of publication steps leading to a refined and polished document, an attempt is made to maintain expenditures at a minimum level. The following specifications are adopted to ensure this and also to promote standardization, aesthetic quality, and legibility.

1. Cover (see sample, p. 5).
2. Title page (see sample, p. 6).
3. Typical front matter (see sample, p. 7); used for long AOFs only.
4. Format. The report shall be typewritten, with the headings, text, and quotes as specified in item 5, Special Report specifications (p. 14). There is no limit to report length, but every effort must be made to keep the text brief and the number of plates to a minimum.
5. Reproduction will be by blue-line (for plates) and by Xerox-type equipment for text.
6. Plates may be hand lettered.
7. Plates will have the Division name in the upper left corner and "Alaska Open-File Report" followed by a hyphen and a Roman numeral in the upper right corner (Note: But not the redundant "Alaska Open-File Report AOF-xx").
8. Paper size for text shall nominally be 8-1/2 by 11 inches. Paper weight shall be Xerox 4024 bond, Hammermill Xerocopy, or equivalent.

Procedure



DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEY



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Guy R. Martin — Commissioner
Ross G. Schaff — State Geologist

This is a preliminary publication of the Alaska Division of Geological and Geophysical Surveys and as such has not received final editing and review. It may be quoted only through permission of the author and State Geologist. The author will appreciate candid comments on the accuracy of the data, and welcomes suggestions that will improve the report.

Alaska Open-File Report 99
TITLE OF REPORT IN ALL CAPS, CENTERED
By A.B. Geologist

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Plate 3 Cumulative Coal Map, Surface to 10,000', Scale 1" = 4 Miles.	Pocket

Geologic Reports

Geologic Reports serve to communicate new data and original ideas to professional peers. There are two cardinal characteristics of the Geologic Report. First, it is a summary of original work on a geologic problem. Second, the degree of peer review, editing, and revision is exhaustive to ensure the highest level of accuracy. "Geologic" is used in the broadest sense to include geophysics, geochemistry, and other related hybrid sciences.

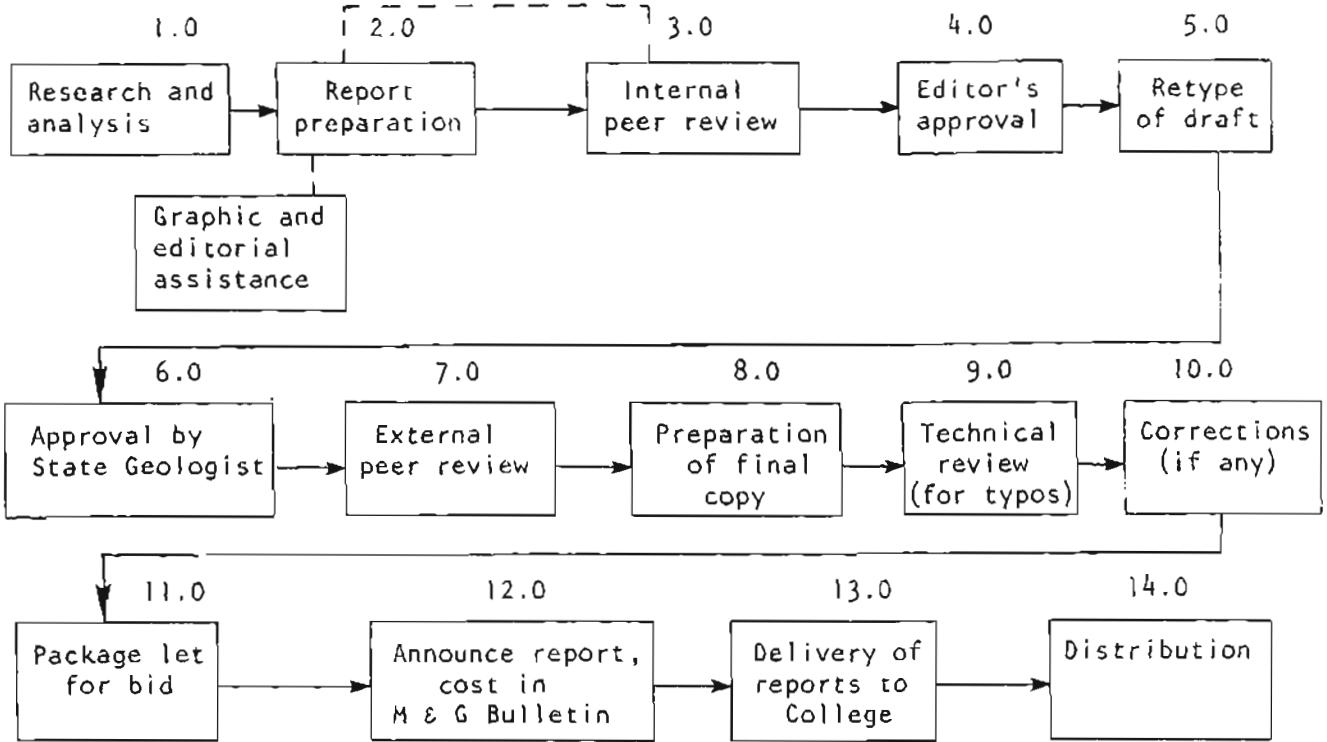
Geologic Reports may be of any length; however, for less lengthy articles, contributions will be solicited each April for an annual Geologic Report entitled "Short Notes on Alaska Geology." To be published each fall, the report will comprise short (1800 words or less) research reports which, because of their brevity, would not merit a separate volume. Procedures followed for publication of this report are the same as those of the standard Geologic Report (described below and on p. 9).

Specifications

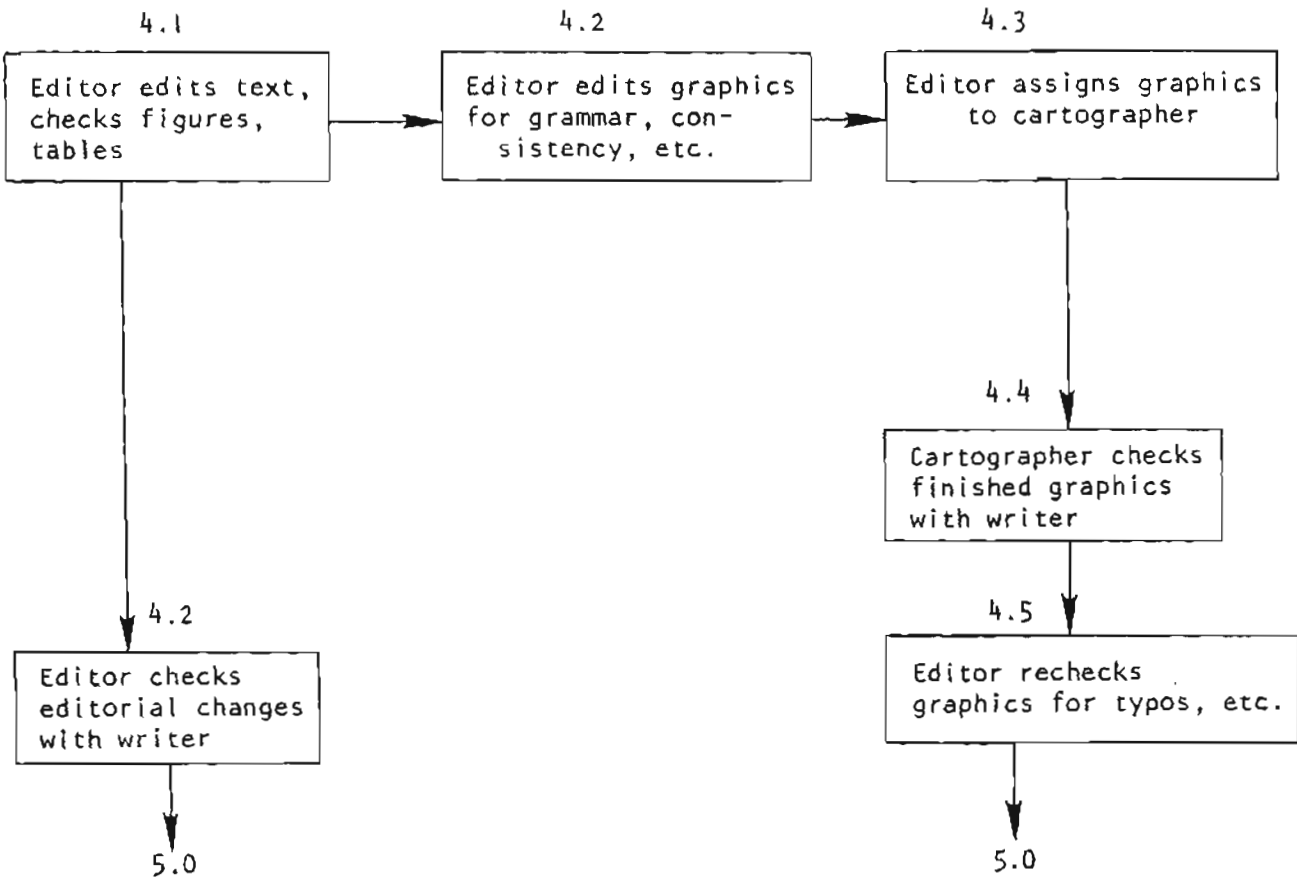
1. If possible, an appropriate photo shall be featured on the cover (sample, p. 10). Cover printing will be in bold IBM Composer fonts. Cover stock shall be 80-lb antique or equivalent.
2. Binding shall be by saddle stitching, when possible.
3. Plates shall be folded into map pockets, located on the inside of the back cover.
4. Title page format (see sample, p. 11).
5. Front matter format (see sample, p. 12).
6. The report shall be typeset on the IBM Composer and shall have the following descending order for the headings: 9-point bold, 9-point medium, 8-point bold, 8-point medium, 6-point bold, 6-point medium. Headings shall be in ALL CAPS and centered.

Text type shall be 9-point medium. Bibliographies, tables, and figure titles shall be 8-point medium. Footnotes shall be 6-point medium. Table titles are in 8-point italic.
7. The column width for text shall be 3-1/8 inches.
8. Bibliography (see sample, p. 13).
9. Reproduction will be by offset lithography.
10. Paper weight for text shall be 70-lb book, white.
11. Paper weight for plates shall be 60-lb Patina Offset (or equivalent), white.
12. Geologic reports will be available to the public at printing cost (\$5.00 maximum).

Procedure



----- Iteration



STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

URANIUM INVESTIGATIONS IN SOUTHEASTERN ALASKA

by
Gilbert R. Eakins

GEOLOGIC REPORT 44



Published by

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

COLLEGE, ALASKA
1975

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
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GEOLOGIC REPORT 44



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MINERAL PREPARATION OF ORES FROM FRIDAY CREEK,
KANTISHNA MINING DISTRICT, ALASKA

9

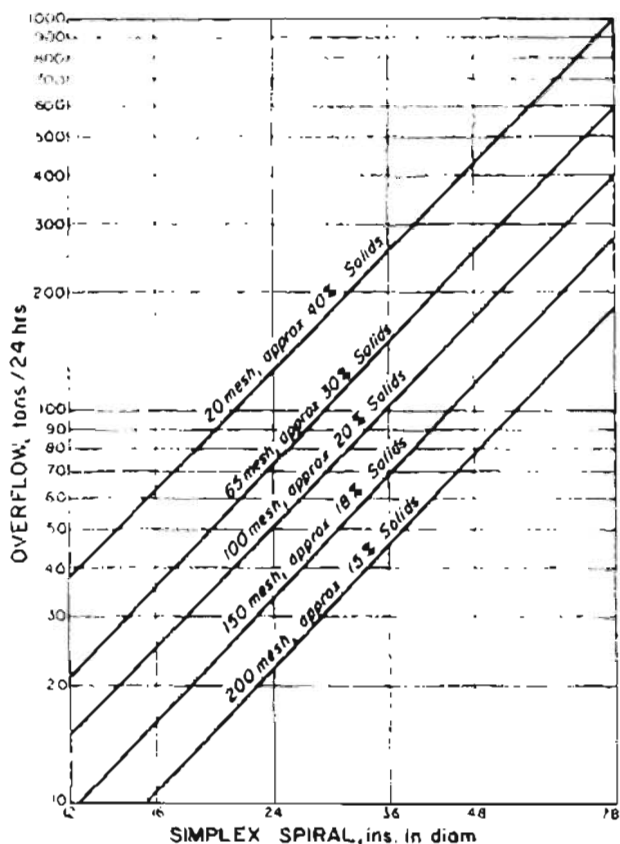


FIGURE 5 - High-weir simplex spiral classifier

Therefore, this report recommends:

1. Continuing research on the best methods of recovery.
2. Replacing the two-cell No. 12 flotation machine with a six-cell No. 12 flotation machine which will permit a rougher, a scavenger, and a cleaner circuit.
3. Setting the density of the overflow from the classifier to provide a -65 mesh feed to the flotation cells, and continuing the recovery by the jig.
4. Replacing the dithiophosphate Aerofloat-33 or -404 with a xanthate (Dow Z-11 or Cyanamide 343).
5. Trying combinations of Cyanamide 343 and 242 then a combination of Dow Z-3 or Z-4 with Dow Z-14.
6. Depressing the pyrite by operating the flotation circuit at a pH of 9-10.
7. Recovering the gold and pyrite on the tables.
8. Experimenting to see if gold can be recovered by amalgamation.
9. Keeping the jig, flotation, and table products separate for sale.
10. Experimenting by regrinding the flotation product.
11. Investigating the best marketing method.

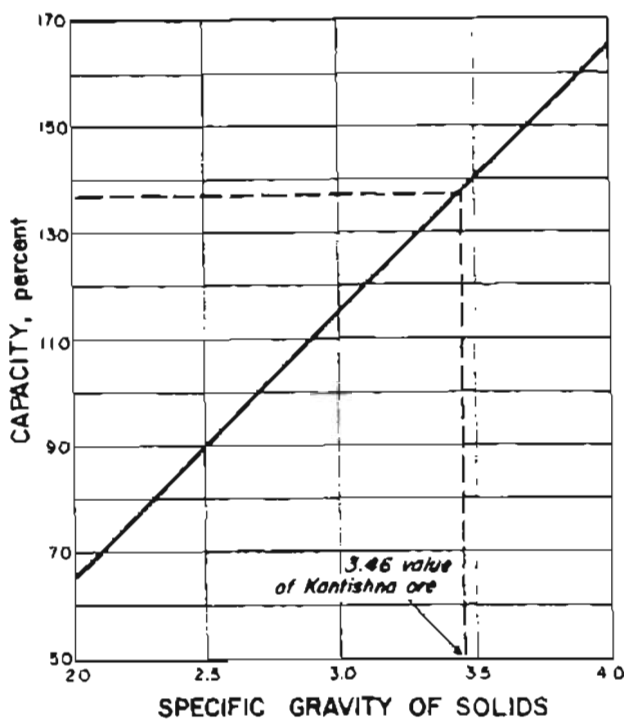


FIGURE 6 - Correction factor of solids (2.7 = 100%)

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Special Reports

One of the most useful contributions the Survey can make is to prepare summary reports and overviews of current or anticipated geologic problems that are of statewide significance. This is the primary function of the Special Report. In contrast to the Geologic Report, which is designed to communicate to a professional audience, the Special Report is designed to make cogent geological information available to a large spectrum of audiences. The distinguishing feature of the Special Report, therefore, is the combining of existing knowledge with information contained in literature into a usable document. Such a report requires the discriminating efforts of the professional and publication procedures equal in exactitude to the Geologic Report.

Specifications

1. Cover (see sample, p. 15). Typing for cover will be done in bold IBM Composer fonts. Cover stock will be 65-lb uncoated smooth finish (or equivalent).
2. Binding shall be by saddle stitching, when possible.
3. Title page (see sample, p. 16).
4. Front matter (see sample, p. 17).
5. The Special Report may be either typewritten or typeset. When typeset, the conditions listed in items 6 and 7 of the Geologic Report specifications (p. 8) shall be in effect.

When typewritten, the headings shall have the following descending order: 1) ALL CAPS, centered; 2) Initial Caps, centered, not underlined; 3) Initial Caps, underlined, flush left; 4) Initial Caps, not underlined, flush left; 5) Initial Caps, underlined, run into text; 6) Initial Caps, not underlined, run into text.

In typewritten copy, the final text is to be single spaced, with a line space between paragraphs. Quoted material is to be further indented and typed single spaced in italics. There shall be two line spaces preceding new sections (major sections do not start on fresh pages).

6. Bibliography for typewritten copy (see sample, p. 18). The bibliography for a typeset report is as shown on page 13.
7. Reproduction will be by offset lithography.
8. Text shall be printed on 60-lb offset book, white.
9. Plate stock shall be 60-lb offset, white.
10. Special Reports will be available to the public at printing cost (\$5.00 maximum).

Procedure

See Procedure for Geologic Report, p. 9.

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

SEDIMENTARY ZEOLITE DEPOSITS OF THE UPPER MATANUSKA VALLEY, ALASKA

by
D. B. Hawkins

SPECIAL REPORT 6



Published by
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
COLLEGE, ALASKA
1973

MINERAL PREPARATION OF ORES FROM FRIDAY CREEK,
KANTISHNA MINING DISTRICT, ALASKA

by
Cleland N. Conwell

SPECIAL REPORT 7



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PUBLICATIONS SECTION: AUTHORITY AND RESPONSIBILITY

The Publications section is an officially recognized budgetary unit of the Division. Personnel consist of a publications specialist, two cartographers, and two clerk-typists. A supervisor is appointed by the State Geologist.

The supervisor has authority and responsibility for the control of publication procedures. Editorial control of writing and graphics for materials published in the name of the DGGs are cardinal responsibilities, and no reports may be published without his/her authorization. In addition, as supervisor of the section, he/she is responsible for the delegation of such tasks necessary to maintain publication schedules and quality. The supervisor is directly responsible to the State Geologist, who has final authority on publication content and format.

The supervisor is also responsible for expenditures from the Publications section budget. No publication costs from this budget will be honored unless prior approval is received from the Publications supervisor. A monthly budget-expenditure report will be submitted to the State Geologist for his review.

Staff members may request cartographic assistance directly from cartographers. For projects requiring large blocks of time (or overtime), approval must be received from the Publications supervisor. It is his/her responsibility to set priorities and to schedule work for the cartographers and typists.

Three geologists-geophysicists are appointed annually to serve as an advisory committee to the Publications section. Suggestions to improve publication policy or procedure will be reviewed by them. Recommendations affecting procedure will be reviewed by the Publications supervisor; recommendations concerning policy, by the State Geologist.

Further clarification of personnel functions within the Publications section may be found in the appendix.

Miscellaneous Policies

Authorship

1. Unless it is impractical to single out an individual or individuals responsible for the significant contributions made, all Survey publications and reports will bear the name of the author(s) on the cover, title page, and first page of text.
2. Except under unusual circumstances, the number of authors is limited to three. The determining factor for authorship is the amount of significant work done in data generation, writing, and report preparation. In cases of participation by more than three researchers, it is suggested that more than one report or a series of subreports be considered.
3. Normally, geological field assistants and other support personnel should not expect to share the responsibilities of authorship, but their contribution will be acknowledged in the text of the report. The decision of authorship is primarily the responsibility of the principal investigator after consultation with the Publications supervisor or the State Geologist, or both. This policy does not preclude contributions for publication from any Survey personnel.

Complimentary Copies

Survey publications are automatically distributed to the Commissioner of Natural Resources, his Deputy, and the Directors of each division of the Department. Twenty copies will be provided the author(s) at not cost for distribution at their discretion. Additional copies may be purchased through normal channels.

Publication through other Professional Journals

1. DGGG geologists-geophysicists are encouraged to seek the widest audience for their work. Because the research has been accomplished through State funding, the Division retains the right of first option. Publication in other professional journals must be approved by the State Geologist.
2. Authors are urged to consult USGS "Suggestions to Authors of the Reports of the United States Geological Survey" for technical suggestions in report preparation. Where differences of opinion arise between the author and the publications specialist as to grammar, punctuation, and so forth, the manual will predominate.
3. The function of the Survey is to provide geologic information to the public. To this end, contributions from persons not in the employ of the Survey are regularly solicited to the extent that funds are available. In the event of financial shortfall, publications of Survey personnel will be honored first. The Survey is especially interested in outside participation in short research reports that will be published annually in the Geologic Report "Short Notes on Alaskan Geology."
4. Standardization of illustrations, maps, and charts is expected on all DGGG publications. To avoid needless revisions, authors should consult the "Suggestions to Authors" manual when preparing materials. Considerable latitude in format of Open-File Reports is expected, and the chief criterion used for acceptance or rejection will be clarity. However, graphics for Geologic Reports and Special Reports will conform to the format standards described on page 122 of the "Suggestions to Authors" manual.

Review Policies

1. Special Reports and Geologic Reports must be reviewed by two professional persons consisting of one from the DGGG and one outside the Survey. Reviewers will be acknowledged in the report. The State Geologist shall also review these reports.
2. Selection of a reviewer is the responsibility of the author(s); the reviewer should have expertise in the subject matter of the report.

APPENDIX

RESPONSIBILITIES*

PUBLICATIONS SPECIALIST II

Assists geologists and geophysicists in writing and editing departmental publications. This includes design and layout duties. The publications specialist also advises departmental personnel on the preparation, revision, and publications of printed and reproduced material. This person provides training in publications and related activity as a departmental service, and provides supervision to subordinate artistic, editorial, and clerical staff.

CARTOGRAPHER II

Performs difficult cartographic work involving the compilation, engraving, and reproduction of topographic, land use, and other types of maps.

Reviews compilation and drafting work. Edits the color-separation engraving of completed maps and charts for accuracy and conformance to standard specification, density of features and symbols and their artistic presentation as well as their placement and orientation; proportioning of size and style of lettering plus the placement; depiction of features on the appropriate color plate, and interior color registration of all features. Checks carefully to see that no deviations from the compilation have occurred during the engraving cycle. Edits the compilation manuscript, exercising extreme care to see that all features are portrayed accurately and completely and that they conform to standard procedures and specification. Does related work on all special assignments.

CARTOGRAPHER I

Is responsible for the preparation of completed topographic, land use, and other maps and diagrams, particularly those where the base map is inaccurate or incomplete.

Does difficult compilation and drafting utilizing various cartographic techniques. Considers density of map features and symbols and makes recommendations as to their inclusion or omission in areas of extreme density and recommends areas requiring enlargements. As completed maps are used throughout the state departments for varied uses, clear presentation is required as to scale, placement and orientation of features; proportioning of size and style of lettering and symbols; and symbolization according to surface type and system; shading and accentuation of features.

Does color separation in four colors. Prepares guide images from completed compilations; engraves map features utilizing various instruments and methods requiring a high degree of skill and strict adherence to prescribed linewidths. Carefully selects and separates the features appearing in each of the four colors. Maintains registration of each color plate throughout engraving phase. Performs stick-up of prepared symbols, screens, and patterns on appropriate plate. Reviews work while in progress to see that no deviations from the compilation have occurred.

*Excerpts from State Division of Personnel job descriptions.

CLERK IV

Schedules work and verifies propriety and accuracy; organizes work flow. Prepares independently or supervises the preparation of complex reports which may require interpretation of a variety of data and has responsibility for accuracy, completeness, and conformance to policy, rules and regulations. Performs other related duties as required.

CLERK-TYPIST III

Under direction, performs difficult and varied typing and clerical work which may involve "lead" responsibilities over a small group of lower level clerks and typists. Develops, revises and maintains methods and procedures necessary to maintain the unit work flow; directs work production and flow in a clerical unit. Prepares correspondence for signature of the supervisor. Prepares complex tabulations and reports covering a variety of statistical, documentary and other information. Operates office machines, and does difficult and complex typing work which may involve transcribing dictating machine records, or use of a magnetic-tape selectric typewriter with two or more stations and/or composer. Performs other related duties as required.

State of Alaska
Department of Natural Resources
Division of Geological and Geophysical Surveys

Guy R. Martin - Commissioner Ross G. Schaff - State Geologist

INFORMATION CIRCULAR 21

May 25, 1976

OPEN FILE REPORTS

The following open-file reports are available for public examination at Alaska Division of Geological and Geophysical Surveys offices at Maintenance Building, University of Alaska campus, College (Box 80007, ZIP 99708); 323 E. 4th Avenue, Anchorage 99501; State Office Building, Juneau (Pouch M, ZIP 99811); and 205 State Office Building, Ketchikan (Box 2438, ZIP 99901).

The state does not sell open-file reports. They can be purchased only from Petroleum Publications, of 409 W. Northern Lights Blvd., Anchorage, Alaska 99503. Prices quoted without postage refer to reports that are picked up at the Petroleum Publications' office.

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF- 1	AEROMAGNETIC MAP, SOUTHWESTERN PART OF SELAWIK QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 2	AEROMAGNETIC MAP, SOUTHEASTERN PART OF TELLER QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 3	AEROMAGNETIC MAP, BENDELEBEN QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 4	AEROMAGNETIC MAP, WEST HALF OF CANDLE QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 5	AEROMAGNETIC MAP, NORTHEASTERN PART OF NOME QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 6	AEROMAGNETIC MAP, NORTHERN PART OF SOLOMON QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 7	AEROMAGNETIC MAP, NORTHWESTERN PART OF NORTON BAY QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF- 8	AEROMAGNETIC MAP, SOUTHEASTERN PART OF FAIRBANKS QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF- 9	AEROMAGNETIC MAP, HEALY QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-10	AEROMAGNETIC MAP, MT. HAYES QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-11	AEROMAGNETIC MAP, TANACROSS QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-12	AEROMAGNETIC MAP, NORTHEAST CORNER OF GULKANA QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-13	AEROMAGNETIC MAP, NABESNA QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-14	AEROMAGNETIC MAP, SOUTHEAST PART OF BETHEL QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-15	AEROMAGNETIC MAP, GOODNEWS QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-16	AEROMAGNETIC MAP, NORTHEAST PART OF HAGEMEISTER ISLAND QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-17	AEROMAGNETIC MAP, NORTHWEST PART OF NUSHAGAK BAY QUADRANGLE, ALASKA, map sheet, scale 1:250,000	2/73	\$2.90	\$2.50
AOF-18	AEROMAGNETIC MAP, EAGLE QUADRANGLE, ALASKA, map sheet, scale 1:250,000	6/73	\$2.90	\$2.50
AOF-19	AEROMAGNETIC MAP, TALKEETNA QUADRANGLE, ALASKA, map sheet, scale 1:250,000	6/73	\$2.90	\$2.50
AOF-20	AEROMAGNETIC MAP, TALKEETNA MTS. QUADRANGLE, ALASKA, map sheet, scale 1:250,000	6/73	\$2.90	\$2.50
AOF-21	AEROMAGNETIC MAP, ANCHORAGE QUADRANGLE, ALASKA, map sheet, scale 1:250,000	6/73	\$2.90	\$2.50
AOF-22	Revised--GEOLOGY AND MINERAL EVALUATION OF THE ARCTIC WILDLIFE RANGE, NORTHEAST ALASKA (by D. C. Hartman, 1973), 16 p. text, figure, map sheet	2/73	\$5.20	\$4.60

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-23	GEOLOGIC AND MINERAL EVALUATION OF THE NOWITNA RIVER DRAINAGE BASIN, ALASKA (by M. W. Henning, 1973), 6 p. text, pl., 2 map sheets	3/73	\$2.80	\$2.40
AOF-24	Combined with report AOF-25	--	--	--
AOF-25	GEOLOGIC AND MINERAL REVIEW OF THE CHITINA AND BREMNER RIVER DRAINAGE BASINS (by M. W. Henning & P. L. Dobey), 20 p. text, figures, map sheet	3/73	\$3.90	\$3.50
AOF-26	GEOLOGIC AND MINERAL EVALUATION OF THE ANIAKCHAK RIVER DRAINAGE, ALASKA PENINSULA, FOR WILD AND SCENIC RIVER STUDY (by W. M. Lyle & P. L. Dobey, 1973), 10 p. text, figure, 2 appendices, map sheet	3/73	\$2.90	\$2.50
AOF-27	Omitted, superseded by AOF-37 --	--	--	--
AOF-28	GEOLOGIC AND MINERAL EVALUATION OF THE CHARLEY RIVER DRAINAGE, ALASKA (by W. M. Lyle, 1973), 6 p. text, figure, map sheet	3/73	\$2.70	\$2.30
AOF-29	Withheld temporarily -- GEOLOGIC MAP OF THE WESTERN CLEARWATER MOUNTAINS	--	--	--
AOF-30	COAL RESERVES, BELUGA AND CHUITNA RIVERS AND CAPPS GLACIER AREAS, ALASKA (by D. L. McGee, 1973), 5 p. text, geologic map and three cross-sections	8/73	\$4.90	\$4.50
AOF-31	GEOLOGY AND MINERAL RESOURCES OF KODIAK ISLAND AND VICINITY, ALASKA (by D. L. McGee, 1972), 7 p., map sheet	2/73	\$3.60	\$3.20
AOF-32	GULF OF ALASKA PETROLEUM SEEPS (by D. L. McGee, 1972), 7 p.	3/73	\$2.25	\$1.85
AOF-33	GEOLOGY AND MINERAL REVIEW OF PROPOSED WILDERNESS AREA, NUNIVAK NATIONAL WILDLIFE REFUGE, ALASKA (by P. L. Dobey, 1973), and GEOLOGY AND MINERAL REVIEW OF PROPOSED WILDERNESS AREA, CLARENCE RHODE NATIONAL WILDLIFE RANGE, ALASKA (by D. C. Hartman, 1973), 13 p. text, figure, map sheet	1/73	\$3.00	\$2.60

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-34	MINERAL EVALUATION OF D-2 LAND AREA, NABESNA QUADRANGLE, USING AEROMAGNETIC AND GEOCHEMICAL DATA (by P. L. Dobey & M. W. Henning, 1973), 10 p. text, 2 figures, table, map sheet	2/73	\$2.50	\$2.10
AOF-35	GEOLOGY OF THE CRAIG A-2 QUADRANGLE AND VICINITY, PRINCE OF WALES ISLAND, ALASKA (by Gordon Herreid, 1975), map, scale 1:63,360, 2 p. text	7/75	\$5.75	\$5.25
AOF-36	Withheld temporarily -- MAPS OF SOUTHEASTERN AMBLER RIVER AND PART OF SURVEY PASS QUADRANGLES	--	--	--
AOF-37	Withheld temporarily -- GEOLOGIC MINERAL EVALUATION OF THE AMBLER RIVER DRAINAGE, SOUTHWESTERN BROOKS RANGE	--	--	--
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 & T. C. Tribble, 1975), map, scale 1:63,360, 4 p. text	7/75	\$5.55	\$5.05
AOF-39	GEOCHEMISTRY OF PARTS OF THE BENDELEBEN A-6, A-5, A-4, B-5, and B-4 QUADRANGLES, ALASKA (by T. K. Bundtzen, 1973), 10 p. text, includes 742 stream-sediment, rock and soil samples; location plate, six data sheets, and histograms	5/74	\$4.65	\$4.25
AOF-40	PRELIMINARY INVESTIGATIONS, LIVENGOD MINING DISTRICT, ALASKA (by G. R. Eakins, 1974), analyses of 150 stream-sediment samples and 62 channel and grab samples, 10 p. text, 4 histograms and 2 location maps	10/74	\$3.00	\$2.50
AOF-41	COAL BIBLIOGRAPHY FOR ALASKA (by W. M. Lyle & N. J. Bragg, 1974), 31 p.	3/74	\$4.00	\$3.60
AOF-42	Withheld temporarily -- GENERALIZED BEDROCK GEOLOGY AND MINERALIZATION IN MT. MCKINLEY NATIONAL PARK	--	--	--
AOF-43	GRAVELS FROM THE ALASKA CONTINENTAL SHELF, BEAUFORT SEA, ARCTIC OCEAN: PETROLOGIC CHARACTER AND IMPLICATIONS FOR SEDIMENT SOURCE AND TRANSPORT (by T. C. Mowatt & A. S. Naidu, 1974), 70 p.	5/74	\$8.40	\$8.00

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-44	ESTIMATED SPECULATIVE RECOVERABLE RESOURCES OF OIL AND NATURAL GAS IN ALASKA (by R. M. Klein, W. M. Lyle, P. L. Dobey, & K. M. O'Connor, 1973), 8 p. -- see AOF-50	5/74		
AOF-45	CLAY MINERALOGY OF THE LOWER COLVILLE RIVER AND COLVILLE DELTA, NORTH ARCTIC ALASKA (by T. C. Mowatt, A. S. Naidu, & Namok Veach, 1974), 39 p.	5/74	\$4.70	\$4.30
AOF-46	PETROLOGIC STUDIES IN THE FAIRBANKS DISTRICT: MOLYBDENUM MINERALIZATION AT THE SILVER FOX MINE (by T. C. Mowatt, 1974), 29 p.	4/74	\$4.50	\$4.10
AOF-47	GEOLOGIC REPORT OF GLACIER BAY NATIONAL MONUMENT (by D. L. McGee, 1974), 16 p.	2/74	\$3.00	\$2.60
AOF-48	GEOLOGIC EVALUATION OF THE HERENDEEN BAY AREA, ALASKA PENINSULA (by W. M. Lyle & P. L. Dobey, 1974), outlines geology, geochemistry, coal and petroleum potential of a limited area around Herendeen Bay, 10 p. text, geologic map, location map, and measured sections	10/74	\$6.20	\$5.80
AOF-49	STRATIGRAPHY OF THE KENAI GROUP, COOK INLET, ALASKA - Old Special Report 5 - (by D. C. Hartman, G. H. Pessel, & D. L. McGee, 1974), 9 p. text, 4 cross-sections and 8 isopach maps	10/74	\$6.85	\$5.60
AOF-50	ENERGY AND MINERAL RESOURCES OF ALASKA AND THE IMPACT OF FEDERAL LAND POLICIES ON THEIR AVAILABILITY - OIL AND GAS -- Supersedes AOF-44 -- (by R. L. Klein, W. M. Lyle, P. L. Dobey, & K. M. O'Connor, 1974), concludes 96% of onshore oil potential land in Alaska is not leasable for oil development due to land withdrawals by federal government, 18 p. text, 6 maps (4 with colored acetate overlays)			
			<u>TEMPORARILY OUT OF PRINT</u>	
		9/74	\$14.00	\$13.60
AOF-51	MINERAL RESOURCES OF ALASKA AND THE IMPACT OF FEDERAL LAND POLICIES ON THEIR AVAILABILITY - COAL (by D. L. McGee & K. M. O'Connor, 1975), this is a compilation of the known and estimated coal resources of Alaska, determined from field observations, surface outcrops, and electrical logs from exploratory wells, 29 p. text, 7 maps (with 8 colored acetate overlays)			
			<u>TEMPORARILY OUT OF PRINT</u>	
		5/75	\$15.00	\$14.40

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-60	GEOLOGY OF THE ARCTIC CAMP PROSPECT, AMBLER RIVER QUADRANGLE, ALASKA (by Milton A. Wiltse, 1975), map, scale 1:12,000, 41 p. text	9/75	\$12.40	\$11.60
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, & T. C. Tribble, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.20	\$2.70
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, & T. C. Tribble, 1975), maps, scale 1:63,360, table, 4 p. text	7/75	\$3.20	\$2.70
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, & T. C. Tribble, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.40	\$2.90
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, & T. C. Tribble, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.65	\$3.15
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, & T. C. Tribble, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.20	\$2.70
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, & W. W. McClintock, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.75	\$3.25
AOF-67	GEOCHEMICAL ANALYSIS OF ROCK AND STREAM-SEDIMENT SAMPLES 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, & W. W. McClintock, 1975), map, scale 1:63,360, 4 table sheets, 4 p. text	7/75	\$10.30	\$9.80

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-68	SUMMARY OF ANALYSES OF STREAM-SEDIMENT SAMPLES, MT. HAYES A-4, A-5, B-4, AND B-5 QUADRANGLES, ALASKA (by James H. Stout, 1975), map, scale 1:63,360, 5 p. text, 2 p. table	9/75	\$6.70	\$6.00
AOF-69	GEOCHEMICAL SAMPLE LOCATIONS, HEALY A-2 QUADRANGLE, SOUTH-CENTRAL ALASKA (by T. E. Smith, G. L. Kline, J. T. Kline, & N. D. Coursey, 1975), map, scale 1:63,360, table	7/75	\$3.40	\$2.90
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, & N. D. Coursey, 1975), map, scale 1:63,360, table, 4 p. text	7/75	\$3.70	\$3.20
AOF-71	GEOCHEMISTRY OF STREAM-SEDIMENT SAMPLES OF THE SOUTHWESTERN AMBLER RIVER QUADRANGLE, ALASKA (by G. H. Pessel, 1976), map, scale 1:200,000, 2 foldout tables, 3 p. text	5/76	\$4.60	\$4.00
AOF-72	GEOCHRONOLOGY AND GENERALIZED GEOLOGY OF THE CENTRAL ALASKA RANGE, CLEARWATER MOUNTAINS AND NORTHERN TALKEETNA MOUNTAINS (by D. L. Turner & T. E. Smith, 1974), provides 53 K-Ar mineral ages and analytical data for intrusive rocks and metamorphites in a 5000-square mile area of south-central Alaska, 10 p. text, geologic map with age notations at 1:250,000 scale	12/74	\$4.05	\$3.65
AOF-73	AEROMAGNETIC MAP, BIG DELTA QUADRANGLE, ALASKA, map sheet, scale 1:250,000	1/75	\$2.90	\$2.50
AOF-74	COOK INLET BASIN SUBSURFACE COAL RESERVE STUDY (by D. L. McGee & K. M. O'Connor, 1975), 24 p., including 1 table (6 p.), 6 figs., 3 maps, scale 1" = 8 miles	5/75	\$10.40	\$9.80
AOF-75	AN EVALUATION OF ENERGY ALTERNATIVES, ALASKA AND THE WESTERN UNITED STATES, AND REVIEW OF ENVIRONMENTAL IMPACT STATEMENT 74-90, SECTION F (ENERGY ALTERNATIVES) (by R. M. Klein & K. M. O'Connor, 1975), 35 p., including 2 tables, 6 figs.	5/75	\$7.90	\$7.50

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-76	AEROMAGNETIC MAP, AMBLER RIVER QUADRANGLE (WESTERN TWO-THIRDS), ALASKA, map sheet, scale 1:250,000	5/75	\$2.90	\$2.50
AOF-77	AEROMAGNETIC MAP, BAIRD MOUNTAINS QUADRANGLE (EASTERN TWO-THIRDS), ALASKA, map sheet, scale 1:250,000	5/75	\$2.90	\$2.50
AOF-78	AEROMAGNETIC MAP, SELAWIK QUADRANGLE (NORTHEASTERN PART), ALASKA, map sheet, scale 1:250,000	5/75	\$2.90	\$2.50
AOF-79	AEROMAGNETIC MAP, SHUNGNAK QUADRANGLE (NORTHWESTERN PART), ALASKA, map sheet, scale 1:250,000	5/75	\$2.90	\$2.50
AOF-80	GEOLOGIC MAP AND STRUCTURE SECTIONS OF HEALY C-6 QUADRANGLE, ALASKA (by Wyatt G. Gilbert & Earl C. Redman, 1975), map, scale 1:40,000, 1 p. text	7/75	\$5.35	\$4.75
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, & T. K. Bundtzen, 1975), 17 p., including 7 figs., 2 tables	7/75	\$5.30	\$4.80
AOF-82	RADIOMETRIC AGE MAP OF ALASKA - SOUTHEASTERN ALASKA (by D. L. Turner & F. H. Wilson, 1975), map, 11 p. text	9/75	\$5.30	\$4.60
AOF-83	RADIOMETRIC AGE MAP OF ALASKA - ALEUTIAN ISLANDS (by D. L. Turner & F. H. Wilson, 1975), map, 10 p. text	9/75	\$6.55	\$5.85
AOF-84	RADIOMETRIC AGE MAP OF ALASKA - SOUTHWESTERN ALASKA (by D. L. Turner & F. H. Wilson, 1975), map, 12 p. text	9/75	\$6.75	\$6.05
AOF-85	RADIOMETRIC AGE MAP OF ALASKA - SOUTH-CENTRAL ALASKA (by D. L. Turner & F. H. Wilson, 1975), map, 12 p. text	9/75	\$6.00	\$5.30
AOF-86	RADIOMETRIC AGE MAP OF ALASKA - NORTHERN ALASKA (by D. L. Turner & F. H. Wilson, 1975), map, 11 p. text	9/75	\$6.75	\$6.05

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-87	ZEOLITE DEPOSITS OF POSSIBLE ECONOMIC SIGNIFICANCE IN THE NORTHERN ALASKA PENINSULA (by James A. Madonna, 1975), 27 p., including 5 figs., 2 tables	7/75	\$7.90	\$7.40
AOF-88	GEOCHEMISTRY OF STREAM-SEDIMENT SAMPLES OF THE SOUTHEASTERN BAIRD MOUNTAINS QUADRANGLES, ALASKA (by G. H. Pessel, 1976), map, scale 1:200,000, 5 foldout tables, 3 p. text	5/76	\$7.10	\$6.50
AOF-89	COMMERCIAL-GRADE MORDENITE DEPOSITS OF THE HORN MOUNTAINS, SOUTH-CENTRAL ALASKA (by D. B. Hawkins, 1975), 35 p., 10 figs., 2 tables	8/75	\$8.10	\$7.50
AOF-90	PRESENT AND HISTORICAL DEMAND FOR OIL AND GAS IN ALASKA (by Georgia Bewley, Kristina O'Connor, P. L. Dobey, Joanne Welch, R. M. Klein, & Charlotte Renaud, 1975), 16 p., 4 tables, 1 map	8/75	\$4.60	\$4.20
AOF-91	ALASKAN OIL DEMAND 1975-2000 (by Georgia Bewley, Kristina O'Connor, P. L. Dobey, Joanne Welch, Robert Klein, William McConkey, & Clarissa Quinlan, 1975), 32 p., 19 graphs, 2 tables	8/75	\$7.90	\$7.40
AOF-93	STRATIGRAPHIC STUDY OF THE GULF OF ALASKA TERTIARY PROVINCE, NORTHERN GULF OF ALASKA AREA (by W. M. Lyle & I. F. Palmer, 1976), Part I includes 30 p. text, 9 appendices (including 53 photos), addendums. Part II includes 23 blue-line plates	1/76	\$88.00 plus postage. Mailed Airmail/ Priority.	\$88.00
AOF-95	GEOLOGIC MAP OF THE CENTRAL HEALY QUADRANGLE, ALASKA (by Robert G. Hickman & Campbell Craddock, 1976), 3 blue-line plates	3/76	\$9.00	\$8.40
AOF-96	GEOLOGIC MAP OF SOUTH AUGUSTINE ISLAND, LOWER COOK INLET, ALASKA (by R. T. Buffler, 1976), map, scale 1" equals 2000 feet, 3 p. text	5/76	\$3.30	\$2.80

Open File No.	Title	Date Released	Price Including Postage	Price Excluding Postage
AOF-97	PRELIMINARY GEOCHEMICAL REPORT OF THE WESTERN HEALY D-1 QUADRANGLE AND VICINITY, ALASKA (by W. G. Gilbert & J. T. Kline, 1976), map, scale 1:63,360, 1 p. text	5/76	\$3.50	\$3.00
AOF-99	LODE CLAIM GROUPS OF THE SOUTHWESTERN BROOKS RANGE COPPER BELT, AMBLER RIVER AND SURVEY PASS QUADRANGLES, ALASKA (FILED PRIOR TO JANUARY 1976) (by J. T. Kline, 1976), 2 maps, scale 1 inch equals 1000 feet, 1 p. text	5/76	\$5.80	\$5.15
AOF-100	REGIONAL GRAVITY SURVEY OF BELUGA BASIN AND ADJACENT AREA, COOK INLET REGION, SOUTH-CENTRAL ALASKA (by Steve W. Hackett, 1976), 40 p. text which includes illustrations	5/76	\$12.50	\$12.00

REGULATION

Comments

1. Recommendation "a" followed.
2. Recommendation "b" under consideration.
3. Activity in the Fairbanks recording office has increased substantially over last year.

MEMORANDUM

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: May 25, 1976

FILE NO:

TELEPHONE NO:

FROM: Cleland N. Conwell
Mining Engineer

SUBJECT: Monthly report

Problem area.

One problem that should be addressed is: Obtaining factual mineral production data in Alaska. Supposedly the state, Alaska, has a joint agreement with the U. S. Bureau of Mines for the collection of such information. Until about 2 or 3 years ago, the U. S. Bureau of Mines would send the Alaska Department of Natural Resources a computer run of all producing mines in the state. I would check this list of operators against the names and addresses that we have on file, making additions or deletions. Sometime after the first of January, the U. S. Bureau of Mines would send a form to all operators requesting production information. This would also include information on current status of the operations. As the information was received and compiled, the Department of Natural Resources would receive a computer run showing production and status of each operator plus a summary by commodities. This summary would be used by the Alaska Division of Geological and Geophysical Surveys division annual report, the preprint of statistics for Alaska by the U. S. Bureau of Mines, and ultimately in the U. S. Bureau of Mines Minerals yearbook. The production records have been kept by the USBM as company confidential. The information for a district, unless it is the record for one company, would be available to the public. A knowledge of past production is important in future planning. In addition to the past volume of production and the dollar value, there is an indication of the primary commodity to be produced in the district. It is also a guide to the relative mineral potential of the area, type of mineralization and the type of mining. This should be useful as a guide in estimating possible revenues, taxes, and probable future land use. In addition, in the case of Alaska, planning for access (roads, airports, railroads or water, etc.).

My recommendations are:

- a) Determine at the division or departmental level the present status of the program with the U. S. Bureau of Mines. The two people to contact in Alaska would be Al Service in Anchorage or John Mulligan in Juneau.
- b) Decide the manner in which Alaska should proceed in collecting such information. If the decision is to have the state take a leading role, then I suggest that a card be set up for each operator and the data kept as confidential. I would also suggest that we set up a computer program to summarize commodity data and district wide data. I also suggest that we add sand, gravel and stone to the system. With the exception of sand, gravel, and stone, the state of Alaska has the regulatory authority to collect such information in section 11 AAC44.030.

Activities:

1. Prepared a letter of nominations for the Precora Reward for the governor's signature. Recommended Dr. Hoskin.
2. On May 4, had a conference with Curtis Auendo on offshore mining in Alaska and discussions with Dr.'s Hoskin, Wolff, and Rau regarding the research potentials on offshore placer mining.
3. Prepared a report on the status of offshore placer mining in Alaska.
4. Inspected the Usibelli Mine. At the time of inspection I cautioned the Usibelli Mine of a possible slump or landslide on the Lignite Creek area. Some time was spent reviewing the condition of the old Vitro lease area which Earth Resources intends to abandon.
5. Reviewed several offshore mining affidavits of labor for the Division of Lands.
6. Computed washability data on the Cape Lisburne coal.
7. Assisted Gil Eakins on Yakobi Island, west Chichagof area study.
8. Prepared a short paper for a conference on land policy and the mineral development in Alaska and attended the conference.
9. Met with the Division of Lands (Fairbanks) to discuss a possible gravel pit in the Tanana River.
10. Preparing the slugs for polished sections for a microscopic study of the Point Hope-Kukpuk River coals.
11. Inspected the Coal Creek mining operation. The Coal Creek Mining Company intends to operate one gold dredge and have one dozer operation going during the summer. On the trip I also flew over the Harrison Creek area. It would appear there would probably be about seven operators in that particular area.

RECEIVED

MAY 27 1976

Div. Of Geological Survey
Anchorage

DIVISION OF GEOLOGICAL SURVEY

MONTHLY CENTRAL RECORDING WORK SUMMARY

For Period Ending May 25, 1976

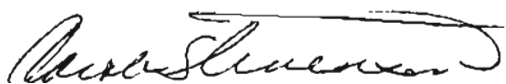
	Claim		Affidavits		Deeds	Misc.	Total	
	Loc. Notices		Of Labor				Doc.	Clms.
	Doc.	Clms.	Doc.	Clms.	Doc.	Doc.	Doc.	Clms.
Backlog	632	632	102	1,645	76	38	848	2,277
Received	409	409	27	555	26	17	479	964
Processed	0	0	0	0	0	0	0	0
Backlog	1,041	1,041	129	2,200	102	55	1,327	3,241
Cumulative received since Jan. 1	1,038	1,038	120	2,129	106	51	1,315	3,167
Cumulative processed since Jan. 1	945	945	245	4,917	100	46	1,336	5,862

REMARKS: Pat Dieterich
Carole Stevenson

Continuing work on Computer Run checking against the Kardex information. We are half way through the Kardex system. We are shooting for a date of latter part of July to be completed. Information will then be put on microfiche.

Mining Information has not processed any documents since the first of the year. We now have a backlog of 1,327 documents to process.

Have assisted 149 visitors for the month of May.



ACTIVITY REPORT

Mining Information Section

Requests answered:

Mail

15

Telephone

60

Distribution:

Information
Circulars

250

Reports

Geologic

Geochemical

Miscellaneous

Xeroxing 200 pages

Number of visitors 149

MINERALS LABORATORY

Comments

1. Began a systematic storage system for all samples which eventually can be used by the public.
2. Distributed a memorandum which describes all the capabilities of the Laboratory (copy included).
3. Space needs remain a problem -- have been working with University of Alaska with very slow response.
4. The Atomic Absorption unit is on its last legs which may mean a special equipment request on the order of \$18,000.

MEMORANDUMDEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS**State of Alaska**TO: All Geologists/Geophysicist
College & Anchorage

DATE: May 20, 1976

RECEIVED

FILE NO:

MAY 24 1976

TELEPHONE NO:

Div. Of Geological Survey
AnchorageFROM: Henry Potworowski *HSP*
Minerals Lab SupervisorSUBJECT: Minerals Laboratory
Capabilities

It has been recently brought to my attention that not all the functions of the minerals laboratory in Fairbanks are generally known and that at times some geologic materials may have been sent to industrial labs for determinations that could have been done on the premises for considerable savings in time and expenditures.

During the course of the last several years new instrumentation has been acquired by this laboratory, greatly expanding its capabilities and optimizing its functions. The following list outlines in general terms, what can be reasonably expected of this facility. Some determinations may have to be carried outside the premises of this lab, but fully under its control and supervision.

A. Spectroscopic and Elemental Analysis by Atomic Absorption for the Following Elements:

Aluminum	Cobalt	Mercury	Sodium
Beryllium	Copper	Molybdenum	Zinc
Boron	Gold	Nickel	
Bismuth	Iron	Palladium	
Cadmium	Lead	Platinum	
Calcium	Magnesium	Potassium	
Chromium	Manganese	Silver	

B. X-ray Determinations on Minerals and Rocks:

1. Qualitative X-ray analysis.

- a. Determination of mineral phases, polymorph crystalline phases and unit cell dimensions of isometric system.

2. Quantitative X-ray diffraction analysis.

- a. Determination of weight percent of quartz, K-feldspar, plagioclase, calcite and dolomite. Analysis of other minerals can be prepared by request. Determination of relative ratio weight percent of clay minerals.

3. Determination of the end-member composition and structural state in the solid solution mineral system.

4. Semi-quantitative determination of cation sub-stitution in the isomorph mineral system.

5. Semi-quantitative analysis of heavy minerals.

6. X-ray emission spectrographic determination of major oxides in rocks.

7. Qualitative determination on 79 elements by X-ray spectrometer.
8. Optical and physical determination of non-opaque minerals and ore minerals.
9. Mineral separation using magnetic separator and heavy liquids.

C. Other Determinations:

1. Elemental analysis of Uranium to 0.5 ppm.
2. Elemental analysis of Thorium to 0.1 ppm.
3. Elemental analysis of Fluoride to 10 ppb.
4. Whole rock analysis.
5. Coal analysis.
6. Bulk magnetic and electrostatic separation.
7. Wifley table separation.
8. Jig separation.
9. Hindered and free settling separation.

ADMINISTRATION

Noteworthy events and comments

1. Grievance for position parity within Division. Problem now under discussions between Jack Roderick and APEA.
2. Resignation of Milton Wiltse received May 30, 1976. Assuming Pat Dobby transfers to "Minerals Division", and hydrologist position is funded, the Survey will have 4 vacancies.
3. Have requested reclassification of stratigrapher (vacant) to Geological Engineer. WOULD APPRECIATE A PUSH!
4. Meetings with Hansen, Smith and DGGG geologists were productive.
5. Nola Bragg prepared a manual explaining procedures and policies affecting travel, purchases, and personnel.
6. Have requested promotion of Wyatt Gilbert to Mining Geologist IV. No verification from the Governor's office as yet.
7. Spent a week in Houston, Texas the first part of May attending the Offshore Technology Conference.