

Public-data File 86-47

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS
MONTHLY REPORTS FOR JANUARY, FEBRUARY, AND MARCH 1978

By

Staff

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

Resource Investigations

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: ☐ Ross G. Schaff *RG*
State Geologist

DATE: March 1, 1978

FILE NO:

TELEPHONE NO.

FROM: Mark Howland *MH*
Geologist I

SUBJECT: Monthly Report, December 25,
1977 - February 25, 1978

A. Consultations and Meetings

1. Discussed Soil Conservation Service study of Susitna Basin with Brent Petrie, DNR (1-10-78).
2. Observed North Kenai data gathering stations with USGS, DNR and Collier Carbon and Chemical Corporation (2-2-78).
3. Attended USGS Training Course in Denver on Aquifer Test Analysis from 2-13-78 to 2-17-78.

B. Status of Reports and Publications

1. North Kenai open-file: USGS western region office gave final approval. Report to be cleaned up and drafted.
2. Prudhoe Bay report: finishing up details with Randy Updike.
3. Wasilla Hydrologic Quad: continued plotting ground water data on 1:63,360 scale topo maps.

C. Research

1. Calibration of North Kenai groundwater model. Still have bugs in system.

D. Miscellaneous

1. Reviewed Kramer, Chin and Mayo, Inc., draft report on water supply for U of A, Juneau at Auke Lake. Comments sent to Brent Petrie, DLWM.
2. Reviewed R & M Consultants draft report on water supply study proposals for Capitol Site. Sent comments to Brent Petrie, DLWM.
3. Evaluated possible effects of Penland Park well on municipal well #1. Sent brief report to Brent Petrie, DLWM.
4. On leave, 12-12-77 to 12-30-77 and 2-20-78 to 2-24-78.

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: ☐ Ross G. Schaff *RGS*
State Geologist

DATE: April 5, 1978

FILE NO:

TELEPHONE NO

FROM: Mark D. Howland *MDH*
Geologist I

SUBJECT:

Monthly Report Feb. 25 - March 25

A. Consultations

1. Discussed planning of Chena River Recreation Area with Sandy Rabinowitz, Division of Parks (3-3-78).

B. Status of Reports

1. North Kenai open-file (AOF #112): In final drafting stages. Final editorial review complete.
2. Prudhoe Bay report: Final text overhauled and figures to be completed. Final integration of report should be completed shortly after Randy's arrival.
3. Wasilla Hydrologic Quadrangle: Ground-water data plotted. Awaiting updated (and verified) computer print-out on ground-water data from USGS. Also awaiting water quality data print-out.
4. Ground-water hazards: getting together plan of attack.

C. Miscellaneous

1. North Kenai computer calibration and prediction at standstill. No computer help.
2. Reviewed Environmental Services, Ltd. report on Prudhoe Bay water use and planning. Sent copy to Randy Updike. Sent our comments to Division of Lands and Water Management.
3. Initiation of ground-water investigation of Chena River Recreation Area for Division of Parks.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYSTO: Ross G. Schaff
State Geologist *RG*

DATE: March 8, 1978

FILE NO:

TELEPHONE NO:

FROM: Steve W. Hackett
Geophysicist *SWH*SUBJECT: Monthly Report: January and
February, 1978

A. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1. Dept. of Admin. (Bob Link)	1/3/78	Aeromag bid	-opened up bid: Geo- metrics apparent low bidder
2. ADGGS (Ross Schaff)	1/9	Long range planning: computer; aeromag survey	-requested info. from staff members; sum- marized aeromag bid and costs
3. USGS (Tom Ovenshine)	1/10	Aeromag survey	-summarized aeromag bid results
4. USGS (Chuck Mayfield)	1/16	AMRAP-Ambler River	-received geophysical review and deadline schedule; sent mylars and re-contoured map.
5. USGS (John Cady)	1/19	Brooks Range Geo- physics	-sent gravity data and maps
6. USGS (Warren Hamilton)	1/26	Brooks Range Geology	-discussions on regional geology and geophysics
7. USGS (John Cady)	2/2-3	Brooks Range Geo- physics	-jointly work ^{ed} on gravity reduction and inte- gration of geophysical info. over Ekiek Ck. pluton
8. Dept. of Admin. (Bob Link)	2/8	Aeromag contract	-discussed budget and money transfer problems
9. ADGGS (Ross Schaff)	2/14	Trip reports	-reported on avalanche seminars and remote sensing school
10. Elliot Geophys. Company	2/15	1977 rock samples	-received analysis of 80 samples from Brooks Range 1977

- | | | | | |
|-----|---|------|--|--|
| 11. | State Hyways
State Parks
State Troopers
NFS
Alaska Railroad | 2/16 | Avalanches along
Seward Hyway | -geologic hazard
awareness along Seward
Hyway; established
open communications
and cooperative pro-
grams among respons-
ible government agen-
cies |
| 12. | ADGGS (Gil Eakins) | 2/21 | Long range planning | -organized meeting with
College staff to dis-
cuss computer needs;
date: 2/28/78 |
| 13. | USGS (Chuck Mayfield) | 2/22 | AMRAP Ambler River | -explained delay in
drafting schedule
for geophys. plates |
| 14. | ADGGS (College Staff)
UAF:
(Tim Fullman, Computer Center)
(Dan Hawkins, Geosciences) | 2/28 | Long range planning
of computer needs | -outlined and discussed
past, present, and
future concerns; es-
tablished priorities
and a time schedule
for expanding capa-
bilities |

B. Research

1. Alaska Peninsula geophysical:
 - continue re-processing 1974 gravity data
 - awaiting an up-date of regional stratigraphic and structural info. from Bill Lyle.
2. Brooks Range geophysical:
 - received analysis of 80 rock samples acquired during the 1977 field season
 - made recommendations and emphasized the importance to facilitate money transfer from USGS for a cooperative aeromagnetic survey in Central Brooks Range
 - contoured a preliminary SBA gravity map (1:250,000) for Ambler River Quadrangle; returned to USGS for comment
 - continue lineament study of LANDSTAT photo mosaic
 - attended Remote Sensing School (see trip report 2/16/78).
4. N. Flank Alaska Range geophysical:
 - need to finish reducing 1977 field data (Tonzona area)
 - need to continue integrating geology and expand 2-D modeling of geophysics data.
5. Geologic Hazards (Avalanches):
 - forwarded suggested outline for generalized report to D. Reger
 - continue collecting info. of avalanche occurrences in Alaska
 - attended two Avalanche Seminars (see trip report 2/16/78)

- starting mapping project "Regional Distribution of Avalanche activity in Alaska"

- made recommendations for HB 778 (addressing the Avalanche Hazard problem)

6. Computer projects:

- wrote memo through State Geologist to ask for input from ADGGS staff members towards long-range computer needs and solutions

- continue working on Fortran IV programming and adapting geophysical programs for State Computer System.

7. Physical Rock Properties lab:

- need to review contract outline between ADGGS and UAF (Solid Earth Science Dept) with State Geologist and College Lab supervisor

- received preliminary results from Elliot Geophysical Co (1977 Brooks Range samples); plotted Natural Remanent Magnetism data on equal area net and outlined tentative interpretations.

C. Publications

1. Geologic Report 58 --- still in press.

2. AOF 107G and 107H --- need final drafting by Charlotte (was scheduled to be released with the other AOF 107 plates in January).

3. Aeromag Interp. of Ambler River Quadrangle --- need final drafting by Charlotte.

4. Need AOF number assigned for Brooks Range (Wiseman) geophysical maps.

D. Miscellaneous

1. Need technical assistance with computer programming and handling geophysical data.

SH/plc

STATE
of ALASKA**MEMORANDUM**DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYSTO: ☐Ross G. Schaff *RG*
State Geologist

DATE:

April 3, 1978

FILE NO:

TELEPHONE NO:

FROM:

Steve Hackett *SH*
Geophysicist

SUBJECT:

Monthly Report: March 1978

A. Consultations

	<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1.	Mackay School of Mines, Reno Nevada	3-1-78	Geophysical data along Castle Mtn. Fault	-sent available information
2.	USGS (Don Grybeck) Anchorage	3-8	Survey Pass Aeromagnetic data	-discussions integrating regional geophysical & geological data
3.	ADGGS (Anchorage Staff)	3-9	Computer requirements	-outlined computer capabilities defined needs
4.	ADGGS (H. Potworowski) College	3-13	Geophys. Lab	-discussed concerns and FY-79, -80 budget proposal
5.	USGS (D. Dansereau) Denver Colorado	3-14	data storage systems	-requested input on storing & processing geophysical data
6.	Geometrics (B. Fowler)	3-20	Aeromagnetic contract	-assisted in obtaining preliminary topo sheets over Aeromag survey area
7.	U.S. Bureau of Mines (T. Mowatt) Anchorage	3-21	Brooks Range Geophysics	-discussed ultramafic belt location and tectonic significance
8.	USGS (Chuck Mayfield) Menlo Park, Calif.	3-21	Ambler River Geophysics	-requested base map for Aeromag plate
9.	DOGS (J. Baxandall) Anchorage	3-22	ADGGS Computer needs	-summarized staff comments and make recommendations to R. Schaff
10.	Soil Conservation (Dept. of Agriculture) Anchorage	3-22	Geophys. data in Susitna Basin	-sent all available data and references

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|--|------|------------|---|
| 11. Div. of State
(M. Roder)
Anchorage | 3-30 | Avalanches | -compiled and documented
known avalanche paths in
Chugach State Park. |
|--|------|------------|---|

B. Research

1. Alaska Peninsula:
 - re-doing elevation control for 1974 gravity station
 - tabulating reference elevations and reducing 1977 gravity data
 - awaiting an up-date of regional stratigraphic and structural information from Bill Lyle.
2. Brooks Range:
 - starting to re-write Ambler River Aeromagnetic report after formal review by USGS in Menlo Park (geology and geophysics need to be integrated)
 - continue reducing 1977 gravity data
 - planning for 1978 field season
 - monitoring 1978 Aeromagnetic Contract (Geometrics)
3. N. Flank Alaska Range
 - working on Tonzona River field data
(some tares in gravity base)
 - need to integrate geophysics and geology with College Staff geologists
(Healy quadrangle)
4. Geologic Hazards (Avalanches)
 - compiled and wrote five articles on Avalanche phenomena-awareness
 - continue collecting data and information
 - started compiling occurrences for State-wide avalanche potential map
5. Computer projects:
 - organized meetings with College and Anchorage staff members to discuss ADGGS needs
 - compiled and synthesis' written input and recommendations from staff
 - met with J. Baxandall, DNR Computer Analyst, and made recommendations to R. Schaff about immediate and future needs
 - continue studying Fortran IV and programming systems
6. Physical Rock properties lab:
 - made recommendations --- awaiting on Lab Supervisor and State Geologists review of proposed contract
 - need to process 1975 and 1977 Brooks Range samples; 1978 Wiseman samples returned from Elliot Geophysical (want to open-file this data in June)

C. Publications

1. Geologic Report 58 --- still in press?
2. AOF #107G and #107H --- to be released soon.
3. AOF #107I and #107J --- need final drafting.

4. Ambler River Quadrangle Aeromagnetic Interpretation
 ---need to integrate recent geologic input from Mayfield and Tailleux, also
 need resolve ambiguity between geophysical data and current geologic
 concepts.
 ---plate 1 and 2 need to be completed by Charlotte A.
5. Short Notes - 1978 --- outlining potential articles for the April deadline.
6. AOF numbers assigned for Wiseman Geophysical Maps: AOF 117A, B....

D. Miscellaneous

1. Need technical assistance with computer programming and handling geophysical data reduction.
2. Recommend the ADGGS utilize funds to contract: Programming and Data Processing analysis for Geophysical Investigations FY-79, 80.
3. Need to spend 4-6 weeks working in the College office (May 1st - June 15th). Time will be spent working with J. Dillon, Wyatt Gilbert, Frank Larson and UAF computer staff. I'm hoping to put a big dent in the following projects: Wiseman geophysical maps open-filed, N. Flank geophysics and geology synthesized, editorial and drafting assistance with Ambler River geophysical report, and utilize UAF computer system to process and start digitizing data for modeling.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: *GRE*
Gilbert R. Eakins
Chief Mining GeologistSUBJECT: Monthly report
December 26, 1977 thru January 25, 1978

I. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
1. Diane Nielson (Anaconda Co.)	1/11	Uranium	Anaconda planning on starting a U program in Alaska.
2. Gene Rutledge (State Div. of Energy & Power)	1/19	Uranium	Request for information on U in southeastern Alaska.

II. Conferences

1. Ross Schaff	1/12	Budget and programs	Briefing on budget and projects.
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III. Research

1. Industry survey - Several days compiling information received from questionnaires sent to mining people and making additional contacts.
2. Seldovia State Land trade - 1/3-1/10 - - Did a mineral potential study of a portion of the Kenai Peninsula for DMEM. Submitted maps and report.
3. Statewide mineral potential study - 1/20 - - Received 3 maps from three separate industry groups on favorability of mineral areas in Alaska and began compiling this data for a new DGGs study.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Gil Eakins *G/E*
Chief Mining Geologist
College

SUBJECT: Monthly Report - February 1978

A. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>
1. Ernie Wolff (MIRL)	2/8	Discussed use of information from mineral industry survey
2. Barry Hoffman (Resource Associates)	2/23	Discussed uranium potential on the Seward Peninsula
B. Conferences-Seminars-Meetings		
1. DGGGS publications committee meeting	1/31	Discussed DGGGS publications and editing procedures
2. Seminar at University of Alaska	1/31	Talk on the geology of the Kandik Basin by Bruce Clarity with LL & E
3. DGGGS staff and R. Schaff	2/1	Discussed procedures for a new mineral resource study of the state
4. Met with Nola Bragg and Jay Newgaard in Fairbanks	2/23	Discussed office procedures, purchasing and field work budgets
5. DGGGS geologists	Several	Several meetings to develop criteria for use in making a state-wide mineral resource study.
6. Sen. Jackson - d-2 land hearings in Anchorage	2/14	Testimony being given on south-western Alaska and the Alaska Peninsula

C. Research

1. Have mailed out a new questionnaire to contact all miners and active mining companies not contacted by first survey.
2. Work began on state-wide mineral potential compilation, jointly with Dillon, Bundtzen and Gilbert.
3. Began working out schedules for 1978 field programs.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: Gilbert R. Eakins *G/E*
Chief Mining GeologistSUBJECT: Monthly report
March 1978

A. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>
1. John Young & Don McDonald (Vancouver geologists)	3/1	Prospects in Big Delta area.
2. Don Triplehorn (U of A)	3/2	Discussed possibility of publishing map and report by Bruce Clardy.
3. Eric Twilker (Resource Associates)	3/23	Exploration in Southeastern Alaska.
4. Resource Associates	3/17	Provided references on uranium.
5. Bendix	3/14	Procedures in performing contract for U analyses.

B. Conferences - meetings

1. Steve Hackett et.al.	2/28	Computer applications.
2. DNR Planning & Research meeting	3/13	Hearing on State land selections.
3. Jim Wickes & Lloyd Eagan	3/13	Criteria for mineral resource inventory.

C. Research

1. Statewide mineral re-source inventory	- - -	Most of the month.
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D. Miscellaneous

1. First aid classes twice a week.	Jeff Kline is doing an excellent job of instruction.
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MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: Thomas K. Bundtzen
Mining GeologistSUBJECT: Monthly report
December 26 thru January 25, 1978

TRB

Research and reports

- 1/3-1/10 - Worked on state-Seldovia Native land exchange with Gil Eakins; wrote a short report and plotted resource locations on a map.
- 1/15-1/19 - Reviewed Tongass Plan's minerals inventory for the U.S. Forest Service.
- 1/1-1/25 - Continued research on Yukon-Tanana Upland's mineral trends. Completed three tables and several figures for upcoming paper.
- 1/18-1/20 - Briefly reviewed Amex "status" report on plans to mine coal in Beluga coal field. I recommended that DGGs hydrology people should begin detailed base line studies on streams draining the area including the commercially significant fish tributaries of the Chuitna river.
- 1/17-1/18 - Briefly researched the status of mining and marketing barite in Alaska.
- 1/12 - Conference with Ross Schaff about budget and programs for fiscal 78-79.

Consultations with government agencies

- 12/20 & 1/19 - Carl Harmon - U.S. Forest Service, about Tongass Plan mineral inventory.
- 1/17 - Hoyle Hamilton - Division of Oil and Gas about information on barite marketing in the state.
- 1/22 - Don Turner, Geophysical Institute, University of Alaska, about publishing radiometric age dating summary of work done in the Kantishna Hills. I was pleased with the Prince of Wales summary in the 1977 Short Notes; Kantishna material will get out in 1978 Short Notes.
- 1/4 - D.K. Norris, Geological Survey of Canada, he thanked DGGs for resource map and requested additional information on Alaska's coal resources.

Consultations with public and industry sector

- 12/26 - Terry Gill, Mulchatna gold miner, thanking DGGs for assay results.
- 12/29 - Jim Kelly, Getty Oil Co., about AOF-98 on Kantishna Hills which he requested. Sent the report.
- 12/29 - John Dunbier, Noranda, about results of polished section examination from Big Sore prospect on Admiralty Island which they sent me samples of.
- 1/3 - Howard Willett, independent prospector, about mineral potential of various portions of Alaska.
- 1/10 - Harriet Small, Fairbanks Environmental Center, about mineral potential of Ambler mineral belt and published reserves.
- 1/3 - Bruce Castle, WGM, Inc., about stratiform deposits of southeastern Alaska.
- 1/3 & 1/16 - John Anthony, evaluation engineer for Noranda. He sent me papers given on their prospects on Admiralty Island.
- 1/10 & 1/22 - Eskil Anderson about magnetite-copper deposits of Prince of Wales Island for Herreid report.

Ross G. Schaff

- 2 -

January 26, 1978

- 1/13 - Ted Drown, EnCo Services, about barite marketing in Alaska.
- 1/18 - Tom Butler, Baroid Corp., about barite marketing in Alaska.
- 1/13 - Ken Kendricks, Dresser-Atlas-Macubar, about barite marketing in Alaska.
- 1/11 - Diane Nelson, Anaconda, about southeastern Alaska's uranium potential;
including Craig quadrangle.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Tom Bundtzen
Mining Geologist
College

SUBJECT: Monthly report - February 1978

Major Work Efforts

- 2/1-2/20 - Wyatt, Gil, John and myself have been attempting to come up with criteria for a mineral evaluation of Alaska for state land selection needs; 8 criteria were sent to Ross for approval.
- 1/26-2/25 - Wrote sections of paper concerning interior Alaska minerals trends.
- 2/13 - Attended U.S. Senate 'staffer' hearings in Anchorage as state resource consultant, heard testimony on southwest and southeastern Alaska areas.
- 2/22-2/25 - Reviewed a mineral assessment of southeastern Alaska which was done on contract by a private company for the U.S. Forest Service.

Correspondence with Government Agencies

- 1/30,2/25 - Carl Harmon, U.S. Forest Service; about Tongass land management plans and mineral evaluation.
- 2/18 - Carol Allison, University of Alaska Museum, about fossil identification from last summer. Bonanza Hills fossil locality yielded upper Silurian to lower Devonian fauna.
- 2/15-2/20 - Paul Metz, University of Alaska's Mineral Industry Research Lab, about mineral feasibility study of Arctic Camp deposit; various consultations about mineral resources of the state of Alaska.
- 1/28 - Nell Davis, University of Alaska's Geophysical Institute; about light phenomena and reports near Iliamna and on the Kenai Peninsula.

Correspondence with Public

- 2/3 - Xeno Kelling, 40 mile placer miner, about mining potential of Ladue River area within Yukon Territory.
- 2/6 - Sumner Putnam, bush pilot; he sent me an account of lights he saw near Nondalton, Alaska.
- 2/15 - Bill Wagner, Light Engineering Assoc.; about a paper and article he will write concerning light phenomena in United States of America.
- 2/18 - Bell Heffner, University of Alaska's Dept. of Continuing Studies; concerning articles on clays of the Fairbanks area which she was interested in.
- 2/24 - Florence Collins, concerning permission to quote material from AOF-98, which she was given.
- 2/23 - Howard Bowman, Iliamna; sending him gold fineness results and thanking him for information on light phenomenon in Iliamna area.
- 2/23 - Tom Butler, Noranda Co.; about obtaining samples for Admiralty Island for isotopic analyses.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: Thomas K. Bundtzen *TKB*
Mining Geologist

SUBJECT: Monthly report
February 26 thru March 24

A. Major work activities

1. 2/26-3/25 - Have spent most of my time on the DNR land selection study. All the Fairbanks DGGs mining geologists came up with a set of criteria for evaluating the entire state for hard minerals on the township level. My job has been to score the entire state for reserves (1977 dollar values) and past production plus evaluating 'geologic terrane' and 'mineral indicators' for southeastern Alaska.
2. 3/18-3/24 - Final corrections of Herreid et.al. manuscript which has been set up on the composer.
3. 3/9 - Attended land selection meeting sponsored by DNR here in Fairbanks.
4. 3/23 - Gave a talk to a group of University of Alaska history students on the activities of the FE Company in Nome and Fairbanks.
5. 3/9-3/24 - Have been attending Jeff Klines first aid short course which has been well designed and valuable for field preparation.
6. 3/13 - Collaborating with Bob Forbes on minerals paper that we are attempting to put together.
7. 2/26-3/10 - Discussed with G11 and Wyatt the logistical needs of the 1978 field projects which Ross needs for budget considerations.
8. Assisted Frank on March Bulletin contributions.

B. Correspondence with government agencies

1. 3/8-3/9 - Jim Wickes and Lloyd Eagan, Division of Planning and Research, about minerals criteria for land selection process.
2. 3/18 - Don Turner, Geophysical Institute, about K-Ar data from last years field season and last minute corrections of Herreid et.al. manuscript.
3. 2/27 - Dave Snarski, Alaska Division of Parks, about mining history of Richardson district.

C. Correspondence with public

1. 2/28 - Phil Mangus, about commercial viability of Kenai Peninsula diatomaceous earth deposits and their suitability as a cement base.
2. 3/20 - Bob McArthur, about history of Red Top Mining Company in Kantishna district. Bob is a relative of a miner that was active there.
3. 3/9, 3/22 - Bill Wagner, about 'earthquake lights' and history of observations in USA. Bill has sent us a manuscript suggesting the possibilities of this phenomenon in Alaska which I'll review and edit. It could be used in the June Mines and Geology Bulletin.
4. 3/8 - John Young - British Columbia exploration geologist, about Alaska geology.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

SUBJECT: Monthly report
December 23 thru January 25, 1978

RECEIVED

JAN 30 1978

Division of Geological Survey
Admiralty

FROM: John Dillon
Mining Geologist

A. Consultations
I. State

Agency
University of Alaska, Fairbanks
Geology Dept. (Dave Stone)

Topic
Presented Dave with two saw blades in return for use of Department Rock Sawing room to cut about 1,000 samples collected in the Brooks Range.

II. Federal

U.S. Geological Survey
(A.T. Ovenshine & Joe Zlony)

Discussed problems of mutual interest, particularly radiometric dating in the Brooks Range.

III. Other

Dr. George Tilton (U.C.S.B.)

Dr. Tilton explained details of mineral separation procedures for zircons.

Crevise Creek (Bill Fickus)

Letter regarding logistics for field camp during the coming summer and disposition of fuel barrels.

B. Research

1. Completed cutting of 1,000 Brooks Range rocks for thin sections, major oxide analysis, etc.
2. Identified "Phillipsastrea" (sp.), an upper Middle Devonian coral in fossils collected during this summer. Fossils were submitted to the U. of A. museum for curation and a letter was sent to A.E.H. Pedder asking if he would have a closer look at them.
3. Completed Wilfley table separation of eight samples for zircon. Sonicated samples to remove grains that were stuck together. Used heavy liquids (Bromoform & Meth. Iodide) to remove minerals less than specific gravity of 3.3.

Used Don Turner's magnetic separators to remove magnetic minerals and prepared ore minerals for X-ray identification. Sieved the remaining material in the eight zircon separates to 200 mesh and optically determined purity to be 85 to 95% zircon.

4. Learned to operate our X-ray equipment.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: John Dillon
Mining Geologist
College

SUBJECT: Monthly report - February 1978

A. Consultations

I. State

Agency	Date	Summary or Results
Gar Pessel (DGGGS)	2/2	Obtained about 200 Brooks Range major oxide analyses from Gar's files.
Steve Hackett (DGGGS)	2/6	Letter regarding Brooks Range project and suggestions for DGGGS use of computers to archive information.
Ross Schaff (DGGGS)	2/3 to 2/24	Phone conversation and memo regarding helicopter requirements.
Carol Allison (U of A Museum)	2/9-2/15	Several phone calls and a letter transmitting our fossils through Carol to A.E.H. Pedder for identification.
Loyd Egan and Jim Wickes	2/10, 2/16, 2/22	Several phone calls and a conference regarding criteria for and data input to a computerized mineral resource evaluation of the state. Emphasis was on methods of evaluation, data presentation, and best use of geologist time. A tentative agreement was reached that Division of Lands would find a contractor to evaluate geographic factors including transportation.
Ross Schaff (DGGGS)	2/24	Memo requesting a sole source contract for U/Pb dates on zircons.

II. Federal

Davey Jones (USGS)	2/2	Angayucham belt chert samples sent to him with a request to date them using radiolaria from the cherts.
Warren Hamilton (USGS)	2/6	Angayucham belt carbonate samples sent to him with a request to have coccolith populations analysed to obtain a fossil age.
Don Grybeck (USGS)	2/6	Thirty Brooks Range mineral deposit samples sent to Don to be made into polished sections. Letter discussing significance of small structure data from Arrigetch pluton
	2/2	Phone request for newly open-filed data regarding Brooks Range mineral potential. Reports were received.
Miles Silberman (USGS)	2/2, 2/8	Phone conversations regarding administrative hang-ups in the USGS funding (\$4,000)
A.T. Ovenshine	2/9, 2/22	for our zircon dates.

Federal (cont.)

<u>Agency</u>	<u>Date</u>	<u>Summary or Results</u>
U.S. Bureau of Land Management	2/9, 2/14	Request for mineral resource evaluation materials. Researched BLM manuals.
Don Henninger (Alaska OCS)	2/7	Letter regarding new data on volcanic hazards in lower Cook Inlet.
John Cathrall (USGS)	2/24	Letter regarding data presentation format for our geochem data.

III. Other

Bill Block (Noranda Co.) Milt Wiltse	2/6-2/15	Several meetings, phone calls, and a letter required to obtain field data from Milt for use by Noranda. Data was accumulated while Milt worked for DGGs.
James Ellis (University of New York)	2/17	Several days spent researching data requested by Ellis. Summary of data transmitted by letter, reports sent separately.

B. Research

1. Researched federal agency mineral resource potential evaluations.
2. Three fossil collections have been farmed out for identification:
 - a) Cherts (radiolaria) to Davey Jones.
 - b) Limestones (coccoliths) to Warren Hamilton.
 - c) Marble (corals) to A.E.H. Pedder.
3. Sent out 300 rock chips to be thin sectioned.
4. Worked up some criteria for mineral resource evaluation of the state.
5. Provided summaries of meetings of mineral resource evaluation team.
6. Evaluated geochemical analyses of our pan concentrate samples. Some spectacular anomalies.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS


State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM:  John Dillon
Mining GeologistSUBJECT: Monthly report
March 1978

A. Consultations

<u>Agency</u>	<u>Date</u>	<u>Summary or results</u>
1. State		
a. Jim Wickes & Lloyd Eagan (Div. of Lands)	3/13	Meeting to review our criteria for mineral resource evaluation of state. Generally the criteria were accepted with little modification. Industry nominations map was stressed as important to use for modification of 45 m acre land pool. Transportation criteria to be completed by MURL.
b. Hearing regarding 45 m acre land pool	3/13	Observed and testified briefly regarding the use of the Industry Nominations Map.
c. Jim Wickes & Lloyd Eagan	3/14	Telephone conversation regarding criteria, Industry Nominations Map, and land pool. Advised them of our intent to use the collated industry map as the basis of a separate criteria. He advised me that the boundaries of the 45 m acre land pool are flexible.
2. Federal		
a. Bill Silberman (USGS)	3/7 & 3/9 & 3/16	Silberman arranged for Tom Stearn to date some of our samples but the timing and amount of zircon required is a problem. He has analysed the chert samples from the Angayucham trend. Only one had a diagnostic radiolarian population and it is Mississippian. Other Triassic and Permian fauna occur in the belt. He advised me to chip sample many horizons next time.
b. Davey Jones (USGS)	3/9	

B. Other

1. D.F. Schultz (President, Teledyne Isotopes)	3/1	He confirmed that Teledyne and other commercial outfits do not date zircons.
2. George Tilton (UCSB)	3/14, 3/17, & 3/21	Resolved conflicts over transfer of funds from DGGS to UCSB. Requires only that statement regarding unrestricted nature of funds be put on Purchase Request.
3. Ross Schaff (DGGS)	3/17	Memo requesting bid waiver for U/Pb dating.
4. Roy Wilkerson (Comminco)	3/21	Discussion of Brooks Range mineral potential.

C. Research

1. Worked on criteria for statewide mineral resource potential evaluation and began application of geologic criteria to state.
2. Reviewed 100 thin sections.
3. Hand picked one zircon separate.

4. Read several reports.
5. Described the mineralogy and texture of 26 Purkeypile thin sections for Conwell and submitted a 1 1/4 page report to him.
6. Prepared 130 samples for major oxide analysis.
7. Repaired ball mill and reviewed crushing procedures.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Wyatt Gilbert
Mining Geologist
College

SUBJECT: Monthly report - February 1978

A. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>	<u>Results</u>
I. Federal			
1. Energy Committee stuff	2/14	Mineral potential of the Lake Clark and McKinley areas	Attended staff hearing in Anchorage
2. USGS	2/8	Corresponded with Ed Mackevett about Alaska Range mineral potential	
II. Other			
1. Stevens Exploration	2/16	Alaskan Geology	
2. A. Sisson	1/31	Discussed A.G.S. Symposium	

B. Research (accomplishments)

1. Participated in discussions setting up criteria for Alaska mineral resource inventory.
2. Chose and submitted samples for K/Ar dating
3. Petrology and petrography of central Alaska Range metamorphic rocks.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYSTO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: Richard D. Reger *RDR*
GeologistSUBJECT: Monthly report
December 27, 1977 thru January 25, 1978

A. I was involved in the following consultations during the period December 27 through January 25:

1. (1/9) - Discuss palynology of Anc 54 archeological site with Rena MacFarlane (UAF).
2. (1/10) - Discuss geology of new capital site with Jim Brown (R and M Consultants).
3. (1/13) - Discuss Pillar Mountain stability problem with Ross Schaff and Bill Slater (ADH).
4. (1/25) - Discuss evaluation of Division of Parks plan for developing Chugach State Park with Sandy Rabinowitch (ADP).

B. I conducted research on the following projects during the period December 27 through January 25:

1. Mapping surficial geology of new capital site,

C. Status of reports and publications

1. AOF-107A - Reconnaissance geology of the Talkeetna-Kashwitna area, Susitna River basin, Alaska by R.D. Reger has been completed and turned over to the Publications Section for release.
2. AOF-107B - Reconnaissance map of geologic materials in the Talkeetna-Kashwitna area, Susitna River basin, Alaska by R.D. Reger and C.L. Carver has been completed and turned over to the Publications Section for release.
3. AOF-107C - Slope map of the Talkeetna-Kashwitna area, Susitna River basin, Alaska by J.T. Kline is being drafted and should be released by mid-February.
4. AOF-113A - Reconnaissance geology of the new capital site and vicinity, Anchorage quadrangle, Alaska by R.D. Reger is still in preparation. The photointerpretation is completed and the geology is 99% plotted on 1:63,360-scale maps. After completion of the plotting, another map must be made at a scale of 1:24,000. Release in late January is anticipated.
5. AOF-113B - Reconnaissance map of geologic materials in the new capital site and vicinity, Anchorage quadrangle, Alaska by R.D. Reger and C.L. Carver is in preparation. Anticipated release date is mid-February.
6. Continuing preliminary editing of landform atlas of TAPS corridor and vicinity by R.A. Kreig and R.D. Reger,

D. Miscellaneous

1. Continuing to work on publication of report on surficial geology and hydrology of the Prudhoe Bay field, Alaska by R.G. Updike and M. Howland.
2. Jeff Kline continues to map surficial geology in the Lake Clark area.
3. Cheri Carver is now helping Gil Eakins with petrographic study of thin sections.
4. Reviewed AOF-107E for Don McGee.
5. On vacation from 12/27/77 through 1/3/77.

Ross G. Schaff

- 2 -

March 28, 1978

4. Cheri Carver is now drafting AOF-113B and will commence photointerpretation of surficial deposits in Willow Creek valley shortly.
5. Took a day of sick leave on March 18, 1978. Will be on sick leave for the next 3 to 4 weeks.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: February 27, 1978

FILE NO:

TELEPHONE NO:

FROM: Richard D. Reger *RDR*
Geologist

SUBJECT: Monthly report
January 26 thru February 24

- A. I was involved in the following consultations during the period January 26 through February 24, 1978.
1. (2/2) Talked with Jim Brown (R and M Consultants) about our studies of Castle Mountain fault.
 2. (2/17) Talked with Glenn McGee (U.S. Army Corps of Engineers, Anchorage) re possible riprap sources in Homer and Fairbanks areas.
 3. (2/22) Talked with Jim Brown (R and M Consultants) about surficial geology of Nancy Lake area, Susitna River valley.
- B. I conducted research on the following project during the period January 26 through February 24, 1978.
1. Geology of the capital site and vicinity.
- C. Status of reports and publications.
1. AOF-113A is in final drafting. Have decided to publish at 1:63,360 instead of 1:24,000 because of problems changing scale. Should be released in one week.
 2. AOF-113B is being drafted and will be published at a scale of 1:63,360 in two weeks.
 3. Continuing preliminary editing of landform atlas of TAPS corridor and vicinity.
- D. Miscellaneous.
1. Reviewed NSF proposal by T.L. Péwé for a study of active cryoplanation terraces in Spitsbergen.
 2. Continuing to coordinate with R.G. Urdike on his Prudhoe Bay oil field report.
 3. Reviewed report by R.L. Bruhn on Holocene movements along the Castle Mountain fault.
 4. Wrote GMB article on DGGs geologic hazards program with Jim Riehle.
 5. Jeff Kline is swamped mapping Lake Clark surficial geology (over 6 15-minute quads), preparing for his first aid short course, inventorying DGGs first aid gear, and mapping in the Hatcher Pass area.
 6. Cheri Carver has completed the petrographic work for Gil Eakins and is now drafting AOF-113A and AOF-113B.
 7. On vacation 2/1/78.

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: *RC* *for*
Richard D. Reger
Geologist

SUBJECT: Monthly report
February 25 thru March 24

A. I was involved in the following consultations during the period February 25 thru March 24, 1978:

1. (2/28) - Talked with Sandy Rabinowitch (Alaska Div. Parks) re color photo coverage of Chugach State Park.
2. (2/28) - Talked with Tony Gasparro (UAF) re U.S. Forest Service regional study of Yukon-Porcupine area.
3. (3/8) - Talked with Dave Simpson (MatSu Borough) about DGGs mapping in MatSu Borough.
4. (3/17) - Discuss geologic hazards evaluation of Chugach State Park Development Plan with Sandy Rabinowitch (ADP).
5. (3/20) - Talked with Hank Schmoll (USGS) re summer mapping program in Susitna River basin.
6. (3/31) - Discussed extent of DGGs mapping program in Susitna River basin with (3/23) Howard Smith (Soil Conservation Service).

B. I conducted research on the following project during the period February 25 thru March 24, 1978.

1. Geologic hazards evaluation of Chugach State Park Development Plan.

C. Status of reports and publications.

1. With Jim Riehle authored GMB article on DGGs geologic hazards program (published in spring issue).
2. AOF-113A - Reconnaissance geology of the new capital site and vicinity, Anchorage quadrangle, Alaska has been completed and released.
3. AOF-113B - Reconnaissance geologic materials map of the new capital site and vicinity, Anchorage quadrangle, Alaska is in the final drafting stage and will be released next week.
4. An individual report entitled "Geologic hazards evaluation of Preliminary Development Plan for Chugach State Park," by R.D. Reger and C.L. Carver was completed March 24, 1978.
5. Continuing preliminary editing of landform atlas of TAPS corridor and vicinity.

D. Miscellaneous.

1. Have received excellent class instruction this period on first aid techniques from Jeff Kline.
2. Supplied information to T.L. Pewé (Arizona State University) on thermokarst pits and icings in the Fairbanks area.
3. Jeff Kline is drafting AOF-107C, "Slope map of the Talkeetna-Kashwitna area, Susitna River basin, Alaska." He should be done in 2-3 weeks.

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: ☐

Ross G. Schaff
State Geologist

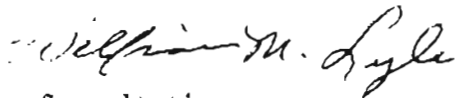
DATE: February 2, 1978

FILE NO:

TELEPHONE NO:

FROM: William M. Lyle
Petroleum Geologist

SUBJECT: Monthly Report for January 1978



1. Consultations

<u>Agency/Visitor</u>	<u>Date</u>	<u>Topic</u>
Kelvin Brodensen	Jan. 2	Rock Identification
USGS, Bob McDonald	Jan. 2	Blue line work
USGS, Irv Palmer, John Bolm	Jan. 3	Discuss next seasons field work
Sabra Atwood	Jan. 9	Employment
Fish & Game, Mike Nishimoto, Daniel Boon		Planning for impact, use of maps
APGS	Jan. 18	Registration

2. Report Status

Open File #114, Tertiary formations in the Kodiak Island area Alaska and their petroleum reservoir and source rock potential. This report was released January 15 after all of the review was completed.

Open File #___, Tertiary formations on the Alaska Peninsula and their petroleum reservoir and source rock potential. We hope to complete this report before the new field season. (Priority III)

3. Other Projects

We are presently trying to upgrade the petroleum land selection for the state. (Priority I)

A petroleum compilation map is in progress. (Priority II)

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: ☐

Ross G. Schaff
State Geologist

DATE: February 16, 1978

FILE NO.

TELEPHONE NO.

FROM:

William Long
Hydrologist

SUBJECT Monthly Report for January 1978

A. Consultations

- Jan. 10 Discussion with Consumer Protection Division regarding Knik River flooding.
- Jan. 11 Meet with Susitna Basin Study group regarding Hydrological Studies for Susitna Basin program.
- Jan. 25 Consult with Lance Grolla, Mat Su Borough planner regarding Mat Su studies.
- Jan. 25 Discuss with Larry Dearborn, USGS regarding Pennland Park water well.
- Jan. 26 Meet with Brent Petrie regarding water policy organizations.
- Jan. 31 Attend meeting of Interagency Hydrological committee regarding Federal-State water research plans.

B. Status of Reports and Publications

Data Storage and Retrieval Project - well log form about ready for printing.

Wasilla Hydrological Atlas - reviewed computer data and waiting USGS verification of computer data.

Alaskan River Data - gathered data for summary paper of Alaskan Rivers.

Alaskan River Suspended Sediment analysis, reviewed and compiled data for suspended sediment transport by Alaskan streams.

C. Research

No active field research or field data collection. Library research accomplished for projects above.

D. Miscellaneous

Reviewed Report #58. Edited a review of above. Attended meeting of American Institute of Professional Geological Scientists.

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

Nola

TO: Ross G. Schaff *RGS*
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: Jim Riehle *JRR*
Geological Engineer

SUBJECT: Monthly Report: January 1978

A. Consultations

1. Federal: Abbey Sallenger, USGS Menlo Park (telephone discussion about existing baseline data, coastal zone of Norton Sound, and immediate data gaps).
Dean Davidson, USFS Anchorage (discussed existing Forest Service research on Alaskan landslides, and availability of literature).
2. State: DNR Planners (scope of geologic hazards to be included in draft of Coastal Management Policy Guidelines).
3. Other: Pat Wennekens, AEIDC (discussed potential for submarine landslides in Kachemak Bay, based on Pat's data from ADFG seismic survey there and my analysis of boat sheets).

B. Conferences

K. Emmel and I attended the BLM-OCS meeting in Anchorage, on the subject of Lower Cook Inlet geo-environmental hazards.

C. Research

1. Began literature searching, to compile baseline data, for this summer's field work in Norton Sound and west side of Lower Cook Inlet.
2. Acquired copies of ADFG seismic profiles from Kachemak Bay, for purposes of looking for active faults and submarine landslides.
3. Completed, with D. Reger, brief analysis of potential construction materials sites in areas of potential land exchanges between State and Seldovia natives.

STATE
of ALASKA

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: [Ross G. Schaff
State Geologist

DATE: March 29, 1978

FILE NO:

TELEPHONE NO.

FROM:

Jim Riehle
Geological Engineer

SUBJECT:

Monthly Report: February 1978

A. Consultations

1. Federal: Joe Dygas, BLM-OCS Office, Anchorage (told him of our plans for future coastal fieldwork, and gave him copies of all past coastal reports).
Corps of Engineers (Lieutenant requested available information on Kenai Peninsula construction materials; told him what I knew and passed him on to D. Reger).
2. State: DNR Planners (working sessions to begin our contribution is in geologic hazards).
Christi Miller (?) of AK. Diaster Office (exchanged information on the nature of the products our respective offices are working on, in area of natural and geologic hazards).

B. Conferences

NOAA-BLM conference on Geologic Hazards of the OCS and Coastal Zones of the Gulf of Alaska and Bering Sea; Jan. 31 - Feb. 2, 1978, in Menlo Park, California.

C. Research

1. Continuing literature search, western Lower Cook Inlet and Norton Sound regions.
2. Expanded literature base for Bird Point debris flows, to make a more comprehensive report on earth movements for the Geologic Hazards series.
3. Lower Cook Inlet air photos arrived; began preliminary air photo interpretation, West Forelands south to Texedni Bay.

D. Reports

"Geology and Geologic Hazards of the Coastal Zone from Valdez Arm to Yakutat, Alaska", was completed for the Office of Coastal Managements, under the CZM Grant.

Publications

MEMORANDUM

State of Alaska

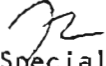
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: Frank Larson 
Publications Specialist

SUBJECT: Monthly report

The following progress was made in January 1978.

EDITORIAL

- Sent Geologic Report 58, "Geology of Ruby Ridge" (Gilbert and others) to printer.
- Edited annual report for Division and rest of Department.
- Began reedit of Geologic Report 48, "Geology of Craig A-2 quadrangle" (Herreld, Bundtzen).

TYPING

- Helped distribute Mines & Geology Bulletin.
- Typeset Special Report 8, "Chignik Bay coals" (Conwell, Triplehorn).
- Typeset miscellaneous map information for Schell, Reger, USBM.
- Retyped Geologic Report 48.
- Typed DGGs input for DNR annual report.
- Typed numerous correspondence, xeroxed, and sold publications.

CARTOGRAPHY (College)

- Selected colors, patterns for Geologic Report 48 plate.
- Drafted titles, legends for AOF-107 series (Reger and others).
- Drafted map of industry recommendations of mineral land for state selection (Eakins).
- Miscellaneous consultations, errands, etc.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS


State of Alaska

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Frank Larson 
Publications Specialist, College

SUBJECT: Monthly Report - February 1978

The following was achieved during February 1978.

Editorial

- . Completed reedit of geologic report 48, "Geology and geochemistry of Craig A-2 quadrangle" (Bundtzen and others).
- . Started pasteup of special report 8, "Chignik coals" (Conwell, Triplehorn).
- . Compiled and pasted up March Mines Bulletin.
- . Inaugurated, with Cheri Carver, central filing system and depository for AOF and individual-report originals.

Typing

- . Typeset special report 8.
- . Typeset Mines Bulletin.
- . Typeset miscellaneous map labels, legends.
- . Typed text for D-2 land study (Eakins and others).
- . Typed numerous letters, drafts, memos.

Cartography (College)

- . Continued drafting plate for geologic report 48.
- . Made corrections to plate for geologic report 58, "Geology of Ruby Ridge" (Gilbert and others).
- . Drafted land-status map for D-2 study.
- . Drafted legends, etc. for AOFs 113A, 113B, "Geology, geologic materials maps of new capital site and vicinity" (Reger, Carver).

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: March 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Frank Larson *FL*
Publications Specialist

SUBJECT: Monthly report
March 1978

Progress for March 1978 includes the following:

EDITORIAL

- Completed paste-up of March Mines & Geology Bulletin.
- Completed paste-up of Special Report 8, "Herendeen Bay - Chignik coals" (Conwell and Triplehorn).
- Began proof of galleys of and sized figures for Geologic Report 48, "Geology of Craig A-2 quadrangle" (Herreld, Bundtzen, and Turner).
- Proofed tables to Geologic Report 53, "Copper mineralization in the Chandalar quadrangle" (Wiltse).

TYPING

- Typeset Geologic Report 48.
- Completed typesetting Mines Bulletin.
- Typed talks for Conwell and Gilbert.
- Typed letters, xeroxed, sold reports, etc.

CARTOGRAPHY (College)

- Continued effort on plate for Geologic Report 48.
- Completed linework for Special Report 8.
- Drafted legends, titles for AOFs 113A, 113B (Rager and Carver).
- Drafted State Land Selection map (Eakins and others).
- Miscellaneous errands, linework, etc.

Mineral Laboratory

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: Henry Potworowski
Minerals Lab Supervisor
College

SUBJECT: Monthly Report

1. Due to continuous delays in having the University of Alaska install a new venting system in the old X-ray room, which is needed for the Perkin Elmer AA unit, I have decided to retire the Varian and set up the new AA unit in its place. We may be looking at starting to use the new AA, hopefully by March 1, 1978.
2. I have requested Jay Newgaard to repurchase another MHS-1 Mercury Hydride System on a PR since, according to a memo from Gene Waid, Perkin Elmer will not accept partial payment of purchase order 60223. The state will be reimbursed at some time in the distant future, when the Transfer Company involved in the loss will have agreed to compensate us as per claim we lodged against it.
3. The ventilating system in the lab is slowly deteriorating. Fumes from acid digestions of samples are gradually seeping into the lab because of poor draw by the fans on the roof. This is a slowly worsening condition brought on by overload on the fans and aging ducts. I told this to Staples Brown but I am not expecting any changes to occur that might benefit us within the foreseeable future. However, the poor quality of air to which the laboratory staff is exposed daily could constitute a serious health hazard to state employees, and I believe this should be brought to your attention.
4. Am planning to attend the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy at the Cleveland Convention Center, February 27-March 3, 1978.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: *JS*
Henry Potworowski
Minerals Lab Supervisor
College

SUBJECT: Monthly report - February 1978

1. The installation of the new Perkin Elmer AA unit has been postponed to March 15.
2. The missing MHS-1 Mercury Hydride System was reordered and has arrived already. It will be installed with the main unit on March 15.
3. Don Stein has caught up with most of the backlog and is taking annual leave until June 1.
4. Jay Newgaard and Nola Bragg were here February 23 and 24 and have audited some of the outstanding bills of Don Tuner. I think before we commit ourselves to paying them, the 1977 contract with Don Turner should be studied a little more thoroughly. We should make sure we are not making double payments, also have some of these funds been encumbered?
5. Am leaving for the Pittsburgh Conference on Spectroscopy and Analytical Chemistry which will be held in Cleveland, February 27-March 3. I will then take annual leave and return on March 13.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: Henry Potworowski
Minerals Lab Supervisor
College

SUBJECT: Monthly Report - March 1978

1. The new AA unit, the graphite furnace and the MHS hydride system have been installed on March 24 and are now operational, except for the MHS-1 hydride system. Some parts are still missing and will be sent to us promptly from the factory.
2. Dave Collins and Bruce Reed, two engineers from the E.O.I. labs in Anchorage, have inspected the minerals lab and tested for air pollution following a request by Bill Mears from Juneau, to determine whether there is a real health hazard to the lab staff. They will submit a report on their findings by the end of this week.
3. Following the acceptance of the ERDA contract by the Legislature, a new temporary lab assistant was hired to do work on thorium and uranium analyses.
4. Have contacted Neil Davis regarding possible laboratory space at the Geophysical Institute. He said he would contact you in Anchorage during his visit there the week of March 20.
5. A report on the Pittsburgh Conference on spectroscopy will follow shortly.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

RECEIVED

WEEKLY LABORATORY WORK SUMMARY

for the week of 1-5 to 1-16

JAN 26 1978

Div. of Geological Survey
Washington, D.C.

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	107		713	
Submitted during week	1		0	
Completed during week	1	8	97	194
Cumulative completed since January 1	1	8	97	194
Backlog at end of week	107		616	

Remarks:

Signed Mona J. Hector Date January 16, 1978

*Division and other samples or special investigations not formally reported.

**Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

RECEIVED

FEB 3 1978

Div. of Geological Survey
Washington

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

WEEKLY LABORATORY WORK SUMMARY

for the week of 1-17 to 1-31

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	108		616	
Submitted during week	40		0	
Completed during week	47	788	54	312
Cumulative completed since January 1	48	796	151	506
Backlog at end of week	101		562	

Remarks:

Signed Mona J. Bector Date January 31, 1978

*Division and other samples or special investigations not formally reported.

**Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

WEEKLY LABORATORY WORK SUMMARY

for the week of 2-1 to 2-15

RECEIVED
FEB 21 1978
Div. of Geological Survey

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	101		562	
Submitted during week	9		0	
Completed during week	40	640	0	0
Cumulative completed since January 1	88	1,436	151	506
Backlog at end of week	70		562	

Remarks:

Signed Mona J. Bector Date February 17, 1978

- *Division and other samples or special investigations not formally reported.
 **Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

WEEKLY LABORATORY WORK SUMMARY

for the week of 2-16 to 2-28

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	70		562	
Submitted during week	3		132	
Completed during week	42	605	202	1,616
Cumulative completed since January 1	130	2,041	353	2,122
Backlog at end of week	31		492	

Remarks:

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MAR 3 1978

Div. of Geological Survey
Washington

Signed Mona J. Rector Date February 28, 1978

- *Division and other samples or special investigations not formally reported.
 **Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

WEEKLY LABORATORY WORK SUMMARY

for the week of 3-1 to 3-15

7-10-78

MAR 20, 1978

Division of Geological and Geophysical Survey
Washington, D.C.

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	31		492	
Submitted during week	9		0	
Completed during week	1	1	5	17
Cumulative completed since January 1	131	2,042	358	2,139
Backlog at end of week	39		487	

Remarks:

Signed Mona J. Rector Date March 17, 1978

*Division and other samples or special investigations not formally reported.
**Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

WEEKLY LABORATORY WORK SUMMARY

for the week of 3-16 to 3-31

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1 APR 3 1978
U.S. Geological Survey

	Public** Samples	Determin- ations	Division* Samples	Determin- ations
Backlog from last week	39		487	
Submitted during week	0		0	
Completed during week	0	0	0	0
Cumulative completed since January 1	131	2,042	358	2,139
Backlog at end of week	39		487	

Remarks:

Signed Mona J. Rector Date March 31, 1978

*Division and other samples or special investigations not formally reported.
**Individual determinations, including optical emission spectrography, X-ray diffraction and emission, microscopic work, etc.

Regulation and Information

MEMORANDUM

State of Alaska

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

TO: Ross G. Schaff
State Geologist

DATE: January 26, 1978

FILE NO:

TELEPHONE NO:

FROM: Cleland N. Conwell *en*
Mining Engineer

SUBJECT: Monthly report
December 26, 1977 thru January 25, 1978

I. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>
A. Federal		
1. U.S. Forest Service (John Sandar)	1/12	U.S. Borax road permit application and Noranda conference.
B. State		
1. D. of Economic Enterprises (E.O. Bracken)	1/12	U.S. Borax permit and Beluga coal,
2. Dept. of Transportation (Lou Sturgis)	1/12	Nome airport
3. Dept. Natural Resources (Fred Boness)	1/12	U.S. Borax road permit.
C. Other		
1. Randy Berry	1/6	Number of underground mines in Alaska,

II. Conferences

A. Beluga Coal Development Conference in Juneau - January 11, 1978.

III. Research

A. Talkeetna (D-5) quadrangle,
B. Mineral preparation on a lead-zinc ore,
C. Mineral preparation on an antimony ore,

IV. Status of reports

A. Chignik-Herenden Bay. In final typing,
B. Anchorage quadrangle coal - - Preparing text,

V. Mine inspection

A. Usibelli Coal Mine - January 17, 1978

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist
Anchorage

DATE: February 24, 1978

FILE NO:

TELEPHONE NO:

FROM: Cleland Conwell *CC*
Mining Engineer
College

SUBJECT: Monthly report - February 1978

I. Consultations

<u>Agency</u>	<u>Date</u>	<u>Topic</u>
A. Federal		
1. Federal Aviation Admn. (Sid Stone)	1/25	Helicopter safety and number of fatalities.
2. MESA (Wally Meyers)	2/7	Under new regulation, all exploration drilling will have to be reported and require safety inspections.
B. State		
1. DMEM (J. Green, J. Roderick, R. Schaff)	1/25	Mined land reclamation.
2. DGGs (R. Schaff and Don McGee)	2/1	Coal land evaluation
3. DMEM-DLWM (Bruce Burgess)	2/7	Mine file system
C. Other		
1. University of Alaska (E. Beistline)	2/7	Surface strip Mining bill

II. Conference - none

III. Research

A. Alaska mineral potential

IV. Status of Reports

A. Chignik-Herenden Bay - typeset

B. Anchorage quadrangle coal - preparing text

V. Mine Inspections

A. Usibelli Coal Mine - 2/15/78

VI. Other

A. Reviewing regulation for Surface Mining Control and Reclamation Act.

B. Reviewed mining and exploration plan

1. Usibelli Coal Mine.

2. U.S. Borax-Quartz Hill.

3. Noranda-Greens Creek.

MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

State of Alaska

TO: Ross G. Schaff
State Geologist

DATE: March 28, 1978

FILE NO:

TELEPHONE NO:

FROM: Cleland N. Conwell *✓*
Mining EngineerSUBJECT: Monthly report
February 25 thru March 25

I. Consultation

<u>Agency</u>	<u>Date</u>	<u>Topic</u>
A. Federal		
1. USGS (Bruce Reed)	3/7	Talkeetna quadrangle.
B. State		
1. DGGG (Steve Hackett)	2/28	Computer applications.
2. Dept. of Transportation (James E. Sandberg, S.S. Davis, Harold Cameron)	3/2	Review reports on Nome airport.
3. Dept. of Transportation (Harold Cameron)	3/9	Nome airport.
4. Div. Power Development (Dee Lane, Carol Bennett)	3/9	Energy Development Report.
5. Dept. of Transportation (James E. Sandberg, S.S. Davis, Harold Cameron), Frank King (Real estate appraiser)	3/13	Nome airport.
C. Others		
1. Montana Tech (Bob Matson)	3/24	Request for paper and attend a coal conference.

II. Conferences - None

III. Research

A. Nome airport.

IV. Status of report.

- A. Chignik coals - final editing.
- B. Anchorage quadrangle coal - preparing text.
- C. Reclaiming mined land in Alaska - complete.
- D. Preliminary review of old reports - complete.

V. Mine inspection

A. Usibelli coal mine - March 8, 1978.

DIVISION OF GEOLOGICAL SURVEY
MONTHLY CENTRAL RECORDING WORK SUMMARY
For Period Ending 1-25-78

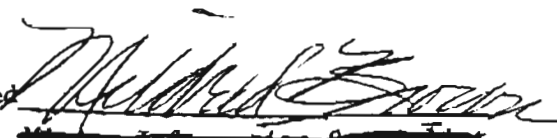
	Claim Loc. Notices		Affidavits of Labor		Deeds	Misc.	Total	
	Doc.	Clms	Doc.	Clms	Doc.	Doc.	Doc.	Clms
Backlog	2	2	8	37	5	4	19	39
Received	1,633	1,633	224	4,383	20	488	2,365	6,016
Processed	1,633	1,633	220	4,399	9	486	2,348	6,032
Backlog	2	2	12	21	16	6	36	23
Cumulative Received Since Jan. 1	1,633	1,633	224	4,383	20	488	2,365	6,016
Cumulative Processed Since Jan. 1	1,633	1,633	220	4,399	9	486	2,348	6,032

REMARKS:

In addition to processing above documents, sorted and filed all 1976 mining documents into permanent files and made cover sheets in preparation for microfilming. The Bureau of Mines is now copying new claims for 1978, we will sort these as soon as they are finished. Also did roughdraft typing for C. Conwell.

Carole returned from vacation January 9 - in addition to assisting with processing of mining documents, her duties included ordering of supplies and personnel work.

Miscellaneous activities as per attached listing.

Signed 
Mining Information Specialist
Geological Survey of Montana

Mining Information Section

1-25-78

Requests answered:

Mail

Telephone

3

40

Distribution:

Information
Circulars

Reports

27

Geologic

Geochemical

27

Miscellaneous

Xeroxing 150 pages


Number of Visitors 97

DIVISION OF GEOLOGICAL SURVEY
MONTHLY CENTRAL RECORDING WORK SUMMARY
For Period Ending 2/25/78

	Claim Loc. Notices		Affidavits of Labor		Deeds	Misc.	Total	
	Doc.	Clms	Doc.	Clms	Doc.	Doc.	Doc.	Clms
Backlog	2	2	8	37	5	4	19	39
Received	730	730	57	178	25	270	1,082	908
Processed	730	730	57	178	25	270	1,082	908
Backlog	2	2	8	37	5	4	19	39
Cumulative Received Since Jan. 1	2,363	2,363	281	4,561	45	758	3,447	6,924
Cumulative Processed Since Jan. 1	2,363	2,363	277	4,577	34	756	3,430	6,940

REMARKS: Processed all documents for month (1,082) sorted and filed all the 1977 documents into permanent files (1953 thru 1976) made cover sheets for preparation in micro-filming. Assisted Gil Eakins in up dating the Information Circular with Name & Addresses of active miners. Sorted out all lead and placer locators. Mailed out form letter for Gil (250 copies) to miners which will be used in his report. Answered phone for lower office while Mona has been filling in for Roberta Mann on the ridge, and assisting customers for Publications.

Mildred Brown on vacation.

Signed 
Mining Information Specialist

Mining Information Section

2/25/78

Requests answered:

Mail

6

Telephone

55

Distribution:

Information
Circulars

40

Reports

Geologic

Geochemical

20 Miscellaneous

Xeroxing 85 pages

Number of Visitors 95

Caves 79
Mining info

DIVISION OF GEOLOGICAL SURVEY
MONTHLY CENTRAL RECORDING WORK SUMMARY
For Period Ending 3-24-78

	Claim Loc. Notices		Affidavits of Labor		Deeds	Misc.	Total	
	Doc.	Clms	Doc.	Clms	Doc.	Doc.	Doc.	Clms
Backlog	2	2	8	37	5	4	19	39
Received	410	410	19	166	23	20	472	576
Processed	411	411	21	197	25	24	481	608
Backlog	1	1	6	6	3	0	10	7
Cumulative Received Since Jan. 1	2,773	2,773	300	4,727	68	778	3,919	7,500
Cumulative Processed Since Jan. 1	2,774	2,774	298	4,774	59	780	3,911	7,548

MARKS:


Activities:

Processing of above mining documents, filing plus finished sorting all current documents into older files to prepare for microfilming when our camera arrives. Our visitors include representatives of Cominco America, WGM and Resource Associates of Alaska; updating their files and checking on current stakings in preparation for their field seasons.

I returned from vacation on March 13 and in my absence Carole Stevenson had emergency leave; she also returned on March 13; the mining information office was closed for most of the first part of March.

Miscellaneous activities as per attached listing.

Signed


Mining Information Specialist

Mining Information Section

3-24-77

Requests answered:

Mail

Telephone

5

14

Distribution:

Information
Circulars

Reports

6

4

Geologic

Geochemical

2

Miscellaneous

Xeroxing 75 pages

Number of Visitors 115

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JAN 27 1978

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Div. of Geological Survey
AnchorageMonthly Work ReportMonth of January 1978

	Fairbanks	Anchorage	Juneau	Ketchikan	Total
1. Visitors	120	81	25	27	253
2. Annual reports	12	0	3	0	15
3. Miscellaneous papers	3	15	5	0	23
4. Miscellaneous publications	14	24	8	13	59
5. Requests for information received by mail	128	41	56	4	229
6. Requests for information received by phone	10	31	22	18	81
7. Rock samples	2	0	0	0	2
8. Bibliographies	9	8	12	0	29
9. Geologic & Geochem reports	56	37	18	3	114
10. Information circulars	153	127	116	13	409
11. Laboratory notes & reports	5	17	36	1	59
12. Aeromag maps	0	43	0	0	43
13. Special reports	4	2	4	0	10
14. Alaska Open File Reports	5	27	0	0	32
15. Letters	3	1	9	7	20
16. Monthly Mines Bulletin	2,839	0	5	1	2,845
17. Xeroxing (pgs.)	82	220	160	8	470
18. Energy Maps	52	18	0	1	71
19. Satellite Maps	4	20	0	1	25
20. Inqua Guidebooks	3	0	0	0	3

RECEIVED

MAR 1978

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Monthly Work Report

Geological Survey
Anchorage

Month of February 1978

	Fairbanks	Anchorage	Juneau	Ketchikan	Total
1. Visitors	110	105	14	31	260
2. Annual reports	16	0	6	0	32
3. Miscellaneous papers	1	4	3	1	9
4. Miscellaneous publications	8	7	3	7	25
5. Requests for information received by mail	98	66	36	6	206
6. Requests for information received by phone	10	51	15	63	139
7. Rock samples	0	0	0	0	0
8. Bibliographies	0	2	0	5	7
9. Geologic & Geochem reports	69	12	5	4	90
10. Information circulars	91	64	35	11	201
11. Laboratory notes & reports	0	1	0	0	1
12. Aeromag maps	0	32	0	0	32
13. Special reports	9	3	8	0	20
14. Alaska Open File Reports	7	39	0	1	47
15. Letters	4	0	6	16	26
16. Monthly Mines Bulletin	4	0	11	2	17
17. Xeroxing (pgs.)	0	120	140	12	272
18. Energy Maps	66	20	0	1	87
19. Satellite Maps	9	78	0	0	87
20. Inqua Guidebooks	1	0	0	0	1

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MAR 2 1978
DIV. OF GEOLOGICAL AND GEOPHYSICAL SURVEYS
FAIRBANKS, ALASKA

DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

Monthly Work Report

Month of March 1978

	Fairbanks	Anchorage	Juneau	Ketchikan	Total
1. Visitors	139	111	4	16	270
2. Annual reports	7	0	4	0	11
3. Miscellaneous papers	0	3	0	0	3
4. Miscellaneous publications	8	21	2	0	31
5. Requests for information received by mail	149	49	23	10	231
6. Requests for information received by phone	15	46	7	12	80
7. Rock samples	28	0	0	0	28
8. Bibliographies	2	0	0	0	2
9. Geologic & Geochem reports	49	12	0	1	62
10. Information circulars	196	93	24	6	319
11. Laboratory notes & reports	2	0	0	0	2
12. Aeromag maps	120	106	0	0	226
13. Special reports	7	1	1	0	9
14. Alaska Open File Reports	27	28	0	0	55
15. Letters	12	0	3	5	20
16. Monthly Mines Bulletin	2,898	0	3	1	2,902
17. Xeroxing (pgs.)	42	187	200	0	429
18. Energy Maps	68	2	0	0	70
19. Satellite Maps	5	5	0	0	10
20.					