

CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES

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GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS  
1982-1983

Compiled by M.A. Petre



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OTTAWA  
1982

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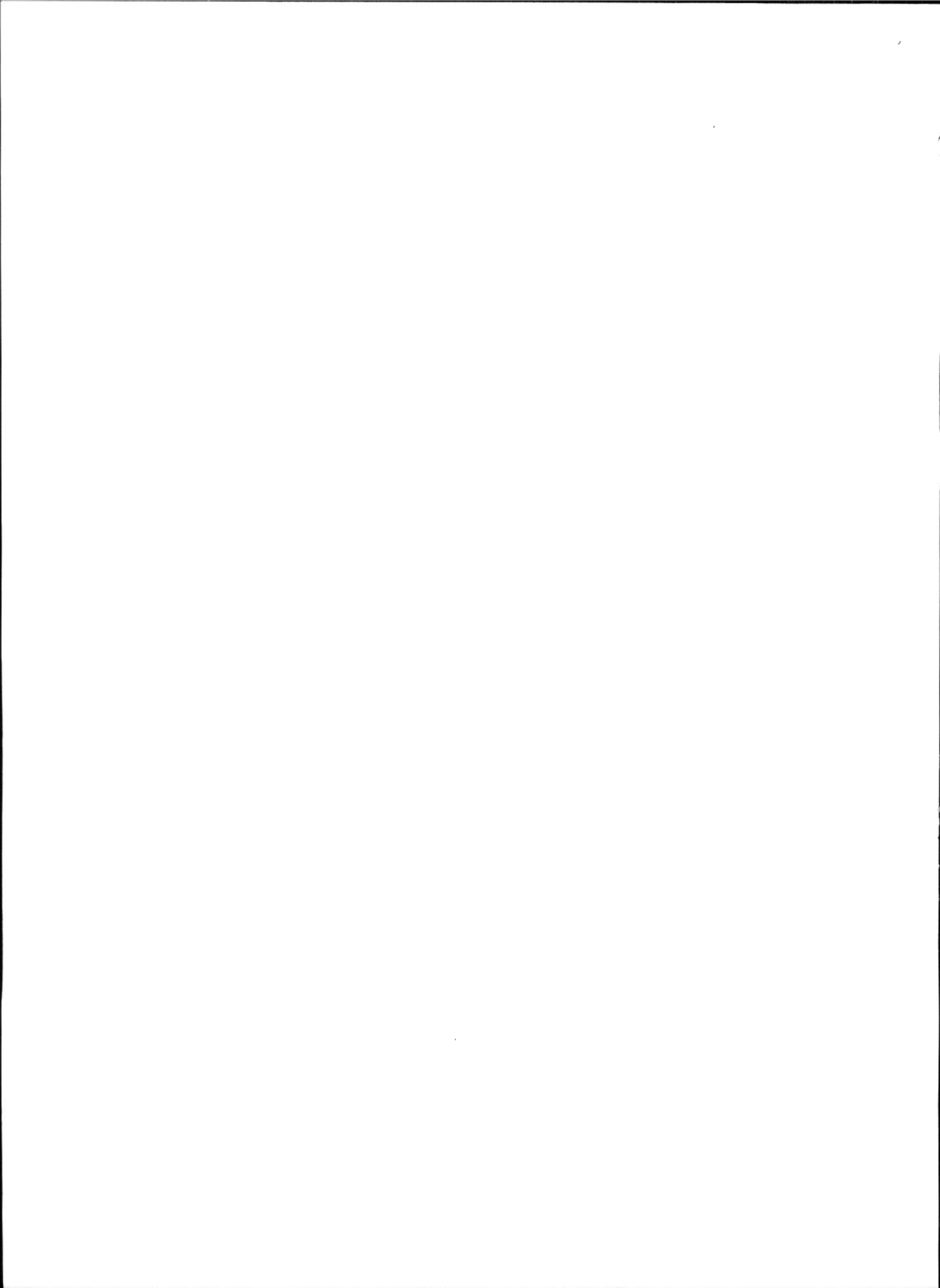
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GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS

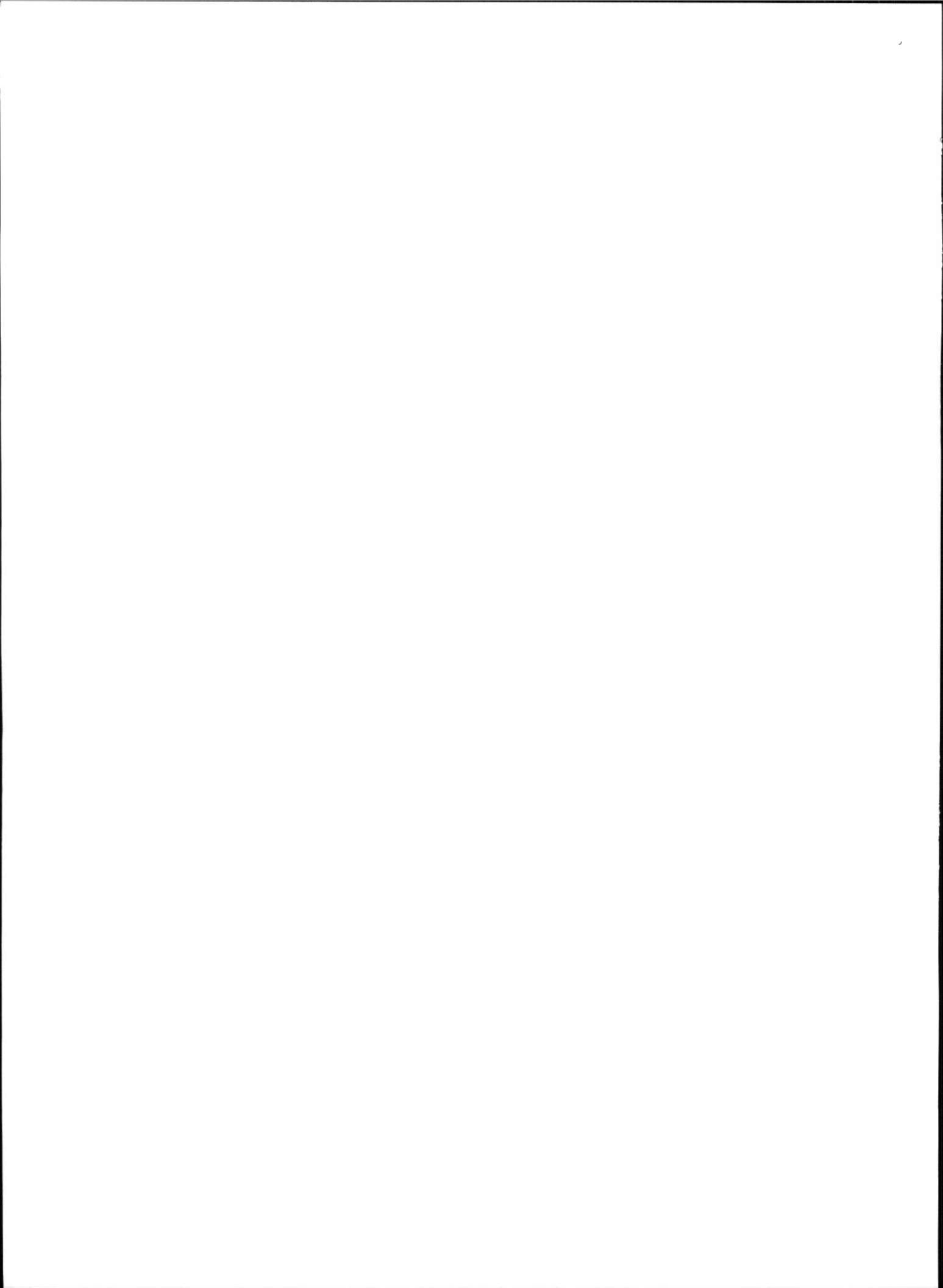
1982-83

OTTAWA  
1982



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## PREFACE

This catalogue of all scientific projects of the Geological Survey of Canada approved as of December 1982 has been compiled by M.A. Petre of the Geological Survey Program Office. It is arranged to indicate: 1) the total scientific program of the Survey for the period 1 April, 1982 to 31 March, 1983, and 2) the field program for the summer of 1982.

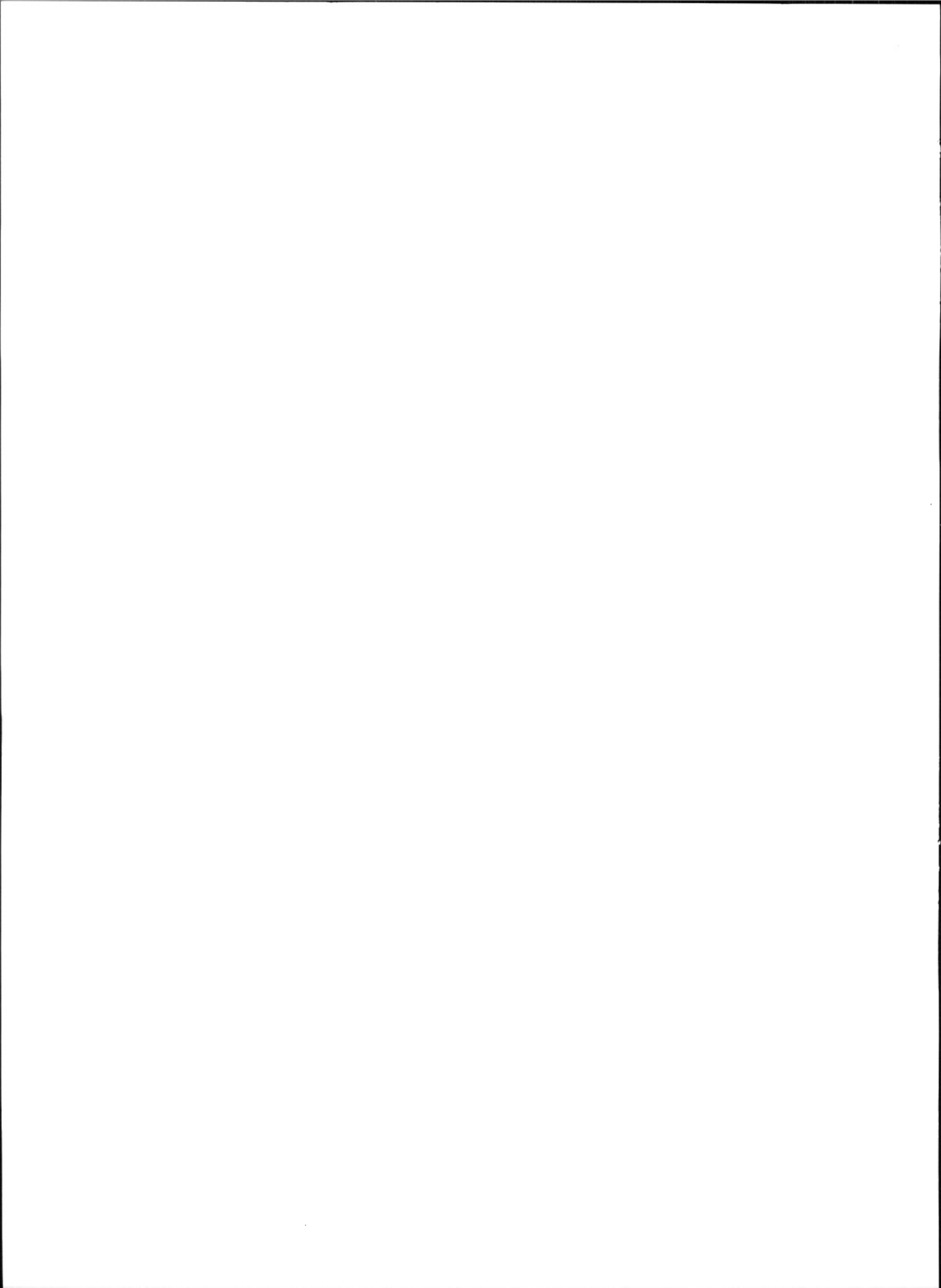
As a catalogue it lists and briefly describes all scientific projects. These total 466 (23 inactive) and are compiled from project annual instructions (GSC 229). Thus it comprises the current authority on such matters as project numbers, titles and objectives and supersedes previous catalogues and documents concerning scientific projects. Projects are listed in numerical order and an index by project leader and by province is provided at the end.

All projects are classified in the Program/Activity structure now in use throughout the Department, this classification appearing in the column "Departmental Classification". Details of this classification follow this preface.

The field program for the summer of 1982 comprises the field component of those active projects marked by an asterisk after the project number. These total 216. No distinction has been made between a minor field component, such as a few days, and a major component requiring the entire field season.

D.G. Benson  
Chief Program Officer

Ottawa  
1982



DEPARTMENT OF ENERGY, MINES AND RESOURCES  
PROGRAM ACTIVITY STRUCTURE

1 ADMINISTRATION PROGRAM

ACTIVITIES

SUB-ACTIVITIES

- .1 Corporate Management
- .2 Common Services

2 MINERAL & EARTH SCIENCES PROGRAM

- .1 Mineral Development
- .2 Administration of the Canada Explosives Act
- .3 Minerals Technology
- .4 Energy Technology
- .5 Geological Surveys
  - .1 Cordilleran Geology
    - .1 Cordilleran Regional Geology
    - .2 Pacific Marine Geology
    - .0 General
  - .2 Sedimentary & Petroleum Geology
    - .1 Sedimentary Regional Geology
    - .2 Paleontology
    - .3 Petroleum Geology
    - .4 Coal Geology
    - .5 Sedimentary Geology Information
    - .6 Petroleum Resources Appraisal Secretariat
    - .0 General
  - .3 Precambrian Geology
    - .1 Precambrian Regional Geology
    - .2 Precambrian Laboratory Geology
    - .0 General
  - .4 Atlantic Geoscience
    - .1 Atlantic Regional Geology
    - .2 Environmental Marine Geology
    - .3 Eastern Petroleum Geology
    - .4 Marine Geoscience Technology
    - .0 General
  - .5 Terrain Sciences
    - .1 Regional Terrain Geology
    - .2 Terrain Use Geology
    - .0 General
  - .6 Economic Geology
    - .1 Mineral Deposits Geology
    - .2 Uranium Resource Evaluation
    - .3 Mineral Deposits Data Analysis
    - .0 General
  - .7 Resource Geophysics & Geochemistry
    - .1 Regional Geophysics
    - .2 Resource Geochemistry
    - .3 Resource Radioactivity
    - .4 Terrain Geophysics
    - .0 General
  - .8 Geological Information
  - .9 Central Laboratories & Technical Services
  - .10 Activity Management & Support
- .6 Earth Physics
- .7 Polar Continental Shelf
- .8 Remote Sensing Service
- .9 Surveying and Mapping
- .10 Minerals & Earth Sciences Public Information
- .11 Program Management and Support



LIST OF ABBREVIATIONS USED

DIRECTOR GENERAL'S OFFICE - DGO

SP - Special Projects BS-Bear Slave

ATLANTIC GEOSCIENCE CENTRE - AGC

EPG - Eastern Petroleum Geology Subdivision  
 CG -Coal Geology  
 LBG -Labrador-Baffin Group  
 PBG -Paleozoic Basin Group  
 SGBM -Scotian Grand Banks Margin Group

EMG - Environmental Marine Geology Subdivision  
 CGD -Coastal Geodynamics  
 G -Geomorphology  
 IGC -Inorganic Geochemistry  
 MA -Methods & Analysis  
 OGC -Organic Geochemistry  
 PEc -Paleoecology  
 SD -Sediment Dynamics

RR - Regional Reconnaissance Subdivision  
 EAOG -Eastern Arctic Offshore Geology  
 GPS -Geophysical Surveys  
 LSS -Labrador Sea Studies  
 OBM -Ocean Basins and Margins  
 SBG -Surficial and Bedrock Geology

PS - Program Support  
 SD -Systems Development

CENTRAL LABORATORIES AND TECHNICAL SERVICES - CLTS

M - Mineralogy  
 AC - Analytical Chemistry

CORDILLERAN GEOLOGY DIVISION - C

BG - Bedrock Geology  
 MG - Marine Geology

ECONOMIC GEOLOGY DIVISION - EG

GM - Geomathematics  
 MDB - Mineral Data Bank  
 MDG - Mineral Deposits Geology  
 URE - Uranium Resources Evaluation  
 SP - Special Projects

INSTITUTE OF SEDIMENTARY AND PETROLEUM GEOLOGY - ISPG

CG - Coal Geology Subdivision  
 CG -Coal Geology  
 CT -Coal Technology  
 RE -Resource Evaluation

PG - Petroleum Geology Subdivision  
 GC -Geochemistry  
 PR -Petroleum Resources  
 RM -Resource Methodology

P - Paleontology Subdivision  
 MaP -Macropaleontology  
 MiP -Micropaleontology  
 OP -Ottawa Paleontology

RG - Regional Geology Subdivision  
AI -Arctic Islands  
CTS -Curation and Technical Services  
M -Mainland

PRAS - Petroleum Resource Appraisal Secretariat

PRECAMBRIAN GEOLOGY DIVISION - P

G -Geochronology  
PET -Petrology  
PMag -Paleomagnetic  
SP -Special Projects

RG - Regional Geology Subdivision  
BS -Bear Slave  
NC -Northern Churchill  
SG -Superior Grenville  
SP -Special Projects

RESOURCE GEOPHYSICS AND GEOCHEMISTRY - RGG

RG - Regional Geophysics Subdivision  
AI -Aeromagnetic Interpretation  
CAS -Contract Aeromagnetic Surveys  
EAO -Experimental Airborne Operations  
GDP -Geophysical Data Processing  
MM -Magnetic Methods

RGC - Resource (Geochemistry) Subdivision  
ER -Exploration Research  
GL -Geochemical Laboratories  
MD -Method Development  
RS -Regional Surveys

RR - Resource (Radioactivity) Subdivision  
ADI -Airborne Data Interpretation  
ARO -Airborne Radiometric Operations  
ANI -Analytical & Nuclear Instrumentation  
CMC -Computer Methods and Calibration  
RM -Radiation Methods  
RSA -Remote Sensing Applications

TG - Terrain Geophysics Subdivision  
EM -Electrical Methods  
SM -Seismic Methods

TERRAIN SCIENCES DIVISION - TS

EG - Engineering Geology  
GP - Geomorphic Processes  
PG - Paleocology and Geochronology  
RP - Regional Projects  
SMT - Sedimentology and Mineral Tracing

GEOLOGICAL SURVEY OF CANADA

ORGANIZATION

Office of the Director-General

R.A. Price, Director-General (995-4208)  
J.G. Fyles, Chief Geologist (995-4249)  
D.G. Benson, Chief Program Officer (995-4122)

Atlantic Geoscience Centre, Dartmouth, N.S., Director - M.J. Keen, (902)426-2367)  
Eastern Petroleum Geology Subdivision, G.L. Williams, (426-2730)  
Environmental Marine Geology Subdivision, D. Piper, (426-7730)  
Regional Reconnaissance Subdivision, R.T. Haworth, (426-3448)  
Program Support, K.S. Manchester, (426-3411)

Central Laboratories and Technical Services, Director - J.A. Maxwell, (995-4482)  
Mineralogy Section, A.G. Plant, (995-4686)  
Analytical Chemistry Section, G.R. Lachance, (995-4391)

Cordilleran Geology Division, Director - R.B. Campbell, (604)544-1408)  
Marine Geology, C.J. Yorath, (604)656-8418)

Economic Geology Division, Director, D.C. Findlay, (995-4093)  
Geomathematics Section, F.P. Agterberg, (996-3413)  
Mineral Data Bank Section, (995-4670)  
Mineral Deposits Geology Section, R.I. Thorpe, (995-4137)  
Uranium Resources Evaluation Section, V. Ruzicka, (995-4558)

Geological Information Division, Director - R.G. Blackadar, (995-4089)

Institute of Sedimentary and Petroleum Geology, Calgary, Alberta,  
Director - W.W. Nassichuk, (403)284-0110)  
Coal Geology Subdivision, D.K. Norris, (284-0110)  
Information Subdivision, E.R.W. Neale, (284-0110)  
Paleontology Subdivision, E.W. Bamber, (284-0110)  
Petroleum Geology Subdivision, T.G. Powell, (284-0110)  
Regional Geology Subdivision, D.G. Cook, (284-0110)  
Petroleum Resource Appraisal Secretariat, R.M. Proctor, (284-0110)

Precambrian Geology Division, Director - J.C. McGlynn, (995-4314)  
Geochronology Section, O. van Breemen, (995-4354)  
Petrology Section, K.L. Currie, (995-4972)  
Paleomagnetic Section, E.J. Schwarz, (995-4085)  
Regional Geology Subdivision, W.H. Fahrig, (995-4793)

Resource Geophysics and Geochemistry Division, Director - A.G. Darnley, (995-4909)  
Regional Geophysics Subdivision, P.J. Hood, (995-4913)  
Resource Geochemistry Subdivision, E.M. Cameron, (995-4521)  
Resource Radioactivity Subdivision, K.A. Richardson, (995-4436)  
Terrain Geophysics Subdivision, L.S. Collett, (993-5964)

Terrain Sciences Division, Director - J.S. Scott, (995-4938)  
Engineering Geology Section, E.B. Owen, (993-6093)  
Geomorphic Processes Section, J.A. Heginbottom, (993-6083)  
Paleoecology and Geochronology Section, W. Blake, (995-4583)  
Regional Projects Section, R.J. Fulton, (993-6094)  
Sedimentary and Mineral Tracing Section, W.W. Shilts, (995-4523)

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept '1 Classi- fication
380077	Analysis of rocks and minerals by established methods Obj: To provide the scientific staff of the Branch, and others on occasion, with comprehensive compositional analyses using the established methods of the Section, in support of Branch scientific projects.	Lachance, GR	CLTS	-	AC	-	-	259
400006*	Preparation of collections of Canadian rocks and minerals for distribution to the public Obj: To make available for distribution to educational institutions and the Canadian public representative collections of Canadian rocks and minerals that will assist prospectors and promote interest in the mineral industry.	Larose, JM	CLTS	-	M	BC, Alta. Sask. Man Ont Que	-	259
500029	Identification and biostratigraphic interpretation of referred fossils Obj: By the study of fossils collected by officers of the Geological Survey of Canada, members of other organizations and the general public, to provide identifications and ages vital to correlation of the host rocks and to the dating of geological events. To describe important fossils from these collections to further knowledge of paleontology and biostratigraphy of Canada.	Bamber, EM	ISPG C AGC	P MG EPG	-	NS Nfld NB Yk Mack BC Alta Pacific Offshore	95 B,C; 12 D; 103 G; 82 E,K; 83 C; 93 I	2522 2512 2543
540028	Isotopic age determinations of rocks and minerals Obj: To determine the geological age of rock, minerals and geological events using isotopic methods.	van Breemen, O	P	-	G	-	-	2532
550101*	Reference collections of minerals, rocks and ores Obj: To develop, foster and curate reference collections of minerals, rocks, and ore specimens in support of Branch activities and in the national interest.	vice-Steacy, HR	CLTS	-	M	-	-	259
570029*	Geology and evaluation of iron and manganese resources Obj: To conduct comprehensive study and research on the geology of iron and manganese deposits to provide a geological basis for exploration, evaluation and development of iron and manganese resources in Canada.	Gross, GA	EG	-	SP	Nfld NB Que Ont Man Sask Alta Kee BC Frank	21 G,P; 22,23,31,32 41 I,42,46,47,52, 53,62,63,64,65, 93,103	256

\* in first column indicates project has a field component.  
- in first column indicates project is inactive.  
Brackets indicate seasonal employee or other non-staff.  
Underscoring indicates province of 1981-82 field work.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'l Classi- fication
570119	Studies of meteorites and extra-terrestrial material Obj: To study the mineralogy, petrology, and chemistry of Canadian meteorites, and of other extra-terrestrial material, and to apply the knowledge thus gained towards a better understanding of earth science processes; and to foster, develop and curate Canada's National Meteorite Collection.	Plant, AG	CLTS	-	M	-	-	259
570148	Radiocarbon dating program Obj: To plan and co-ordinate the radiocarbon dating program of the Geological Survey.	Blake, W Jr	TS	-	PG	-	-	2551
580160	Catalogue of Canadian minerals Obj: To assist in the identification and inventory of potential mineral resources in Canada by compilation and publication of a Catalogue of Canadian Minerals that provides reference material for direct use by earth scientists, the mining industry and the general public.	Plant, AG	CLTS	-	M	-	-	259
580175*	Analytical services and development in geochemistry Obj: To provide for the present and future analytical services requirements of the Resource Geochemistry Subdivision.	Hall, GEM	GGG	RGC	GL	-	-	2572
590457	Radiocarbon laboratory development and operation Obj: 1) To determine the age of carbonaceous matter using radiocarbon dating techniques; to ensure continuing and improving precision of existing techniques; and to keep abreast of current research on new techniques. 2) To conduct research on variations in the radiocarbon content of modern organic material and its application to age determinations on fossil material.	McNeely, RN	TS	-	PG	-	-	2551
610007	Operation Porcupine Obj: Critical evaluation of the structural geometry and stratigraphy within the project area of northern Yukon Territory and western District of Mackenzie for the documentation of the nature, origin, and mechanics of the deformation and its bearing on the hydrocarbon and mineral potential of the region.	Norris, DK	ISPG	CG	-	Mack Yk	106 E, F, K-N; 116 F-K, N-P	2524
610019*	Ordovician and Silurian Biostratigraphy of British Columbia, Alberta, Manitoba Yukon, Mackenzie & Franklin Obj: Establishment of sequence of biochronological zones for Ordovician and Silurian time. Such sequence of zones to provide necessary time control for exploration of natural resources of Ordovician and Silurian rocks in northern and western Canada.	Norford, BS	ISPG	P	MaP	Frank Mack Yk BC Alta	36; 37; 47-49 54; 57-59; 67-69; 82 J; 83; 85; 94; 95; 96; 97; 104 I, P; 105 I; 106; 116; 117; 120; 340	2522

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
610269	Petrographic examination of coking coals from the Kootenay Group, Alberta and British Columbia	Cameron, AR	ISPG	CG	CT	Alta BC	82 G, J, O	2524
	Obj: To determine the coking properties, and to prepare seam profiles for correlation and environment of deposition studies, of coals of the Kootenay Group.							
620018*	Geological Survey of NTS 82 J W <sub>2</sub> (Kananaskis Lakes, W <sub>2</sub> )	Leech, GB	EG	-	-	BC	82 J W <sub>2</sub>	2561
	Obj: To determine and interpret the stratigraphic structural and economic geological features of the region.							
620308	Electron beam microanalysis	Plant, AG	CLTS	-	M	-	-	259
	Obj: To conduct studies of geological materials using techniques of electron probe microanalysis and scanning electron microscopy, in support of Branch projects.							
630016*	Coast Mountains project	Roddick, JA	C	-	BG	BC	92 F, G, H, J, K, L M, N; 93 D; 102 P; 103 A, G, I W <sub>2</sub> , J, N, P, W <sub>2</sub>	2511
	Obj: A geological reconnaissance of the Coast Mountains between southeast Alaska and Vancouver for publication on a scale of 1 inch equals 4 miles. The investigation is expected to reveal the main events in the geological history of the Coast Crystalline Belt and to develop an understanding of the processes governing the formation of plutonic rocks in such orogenic belts.							
630037*	Geology of Canadian nickel and platinum group deposits	Eckstrand, OR	EG	-	MDG	BC Sask Man Ont Que	23; 31; 32 C, D; 42 A; 44 P; 63 J, O, P	2561
	Obj: To carry out comprehensive research on the geology of the Canadian nickel and platinum group deposits in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guidelines for their discovery; 3) provide advice to government for mineral policy and related matters.							
640048*	Study of mineral collecting areas of interest to collectors and tourists	Stenson, Mrs AP	CLTS	-	M	Que	31 H	259
	Obj: To meet the needs of mineralogists and non-professional Canadian and foreign visitors for information on the accessibility, location, and nature of occurrences of minerals and rocks.							
640402	Certification of bedded and non-bedded mineral deposits	Findlay, DC	EG	-	-	-	-	256
	Obj: To act on behalf of the Director-General of the Geological Survey in the certification of mineral deposits as bedded or non-bedded for income tax purposes.							

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
640420	Geological observations at shafts of potash mines in Saskatchewan	Price, LL	ISPG	RG	SM	Sask	62 K/5, 12; 72 O/16; 62 I/16; 72 P/13,14; 73 B/1,2,3	2521
	Obj: To record geological data and obtain fossil and rock specimens from the rocks exposed in large-diameter potash mine shafts in the eastern plains; to interpret these observations and material within the stratigraphic framework.							
650003	Cornwallis and adjacent smaller islands	Thorsteinsson, R	ISPG	RG	AI	Frank	58 F, G; 68 E, H; 59 B	2521
	Obj: 1. To improve the understanding of the age, structure, sequence, relationship, thickness of bedrock formations with a view of helping. 2. Assess the size, grade, mode of occurrence, origin and potentialities of any fuel or mineral deposit that may occur; 3. Improve the knowledge and understanding of the morphology of Silurian and Devonian ostracoderms of Cornwallis Island, thus aiding in the establishment of a more useful stratigraphic framework for the region and thereby contributing to No. 1 above.							
650007*	Ocean aeromagnetics	Bower, ME	RG6	RG	MM	-	-	2571
	Obj: 1. To delineate sedimentary basins on the Canadian and adjacent continental shelves. 2. To investigate the validity of theories postulating the magnetic imprinting of oceanic rocks, ocean floor spreading and continental drift. 3. To obtain aeromagnetic data to support the compilation of the Magnetic Anomaly Map of North America. 4. To contribute to the development of high resolution airborne magnetometry.							
650023	Operation Bow-Athabasca	Price, RA,	D60	-	-	BC Alta	83, C, D E $\frac{1}{2}$ ; 82 J E $\frac{1}{2}$ , N E $\frac{1}{2}$ , O W $\frac{1}{2}$	2521
	Obj: To complete the systematic reconnaissance geologic study of the Rocky Mountains south of lat. 53°N; to obtain information on the character, structure, distribution, age, stratigraphic relationships, and origin of the bedrock and other geological data that are required to evaluate the mineral potential of the area and to assist exploration of oil, gas, coal and other mineral deposits in this and adjacent areas.							
650024*	Cambrian biostratigraphy of the Canadian Cordillera	Fritz, WH	ISPG	P	OP	Mack Yk BC	82 N, O; 83 C; 94 C; 104 P; 105 I, P; 106 A, B, C; 95 L; 93 J	2522
	Obj: To describe and assess biochronological significance of Cambrian trilobites in order to refine methods for dating Cambrian strata.							
650027*	Quaternary of southern Alberta	Stalker, AM	TS	RP		Alta Sask	72, L, M; 73, 82, 83	2551
	Obj: To gain knowledge of Quaternary Stratigraphy, chronology, environments and climates in southern Alberta.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
6500056*	Geology of lead and zinc resources in Canada Obj: To carry out comprehensive research on the geology of lead and zinc resources in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guidelines for their discovery; 3) provide advice to government for mineral policy and related matters.	Sangster, DF	EG	-	MDG	-	-	256
660006	Granite studies in the Ennadai-Rankin Inlet region Obj: To classify the granitic rocks according to age, geological and chemical nature, using geophysical parameters where available and to relate this classification to the regional geology and mineral deposits.	Davidson, A	P	-	SG	Kee	55 E, F, K, L, 65 H, I	253
660009-	East Arm of Great Slave Lake, District of Mackenzie Obj: To refine existing stratigraphic descriptions and relationships of the sedimentary and volcanic rocks; to determine source regions and dispersal patterns in the sedimentary fill; to determine depositional environments and reconstruct the Paleogeographic history of the sedimentary basin.	Hoffman, PF	P	-	BS	Mack	75 E, L, K; 85 H, I	253
670002	Operation Bylot Obj: To provide a reconnaissance geological survey of a previously unmapped area and describe and interpret the broad geological framework and outline areas of potential economic interest.	Jackson, GD	P	-	NC	Frank	27; 37; 38; 47; 48	253
670016	S.W. Ellesmere - W. Devon Islands (Operation Grinnell) Obj: To improve the understanding of the stratigraphy and structure of the region, which is a key area for information in both of these fields; a primary purpose is to aid in evaluation of the resource potential - particularly petroleum and base metals - of this part of the north.	Morrow, DW	ISPG	RG	AI	Frank	59 A, B	2521
670576*	Canadian Triassic Ammonoidea and Bivalvia Obj: To describe and assess biochronological significance of Triassic Ammonoidea and Bivalvia in order to refine methods for dating Triassic rocks.	Tozer, ET	ISPG	P	OP	Yk BC Alta	94 B, K; 106 D; 116 B, C 92 0; 93 0	2522
680012-	Paleomagnetic study of Proterozoic red beds of the western Canadian Shield Obj: To obtain paleomagnetic pole positions from various Proterozoic red bed sequences in the western Precambrian Shield for purposes of correlation.	McGlynn, JC	P	-	BS	Sask Kee	75 E, F; 74; 85; 86; 65; 66	253
680017	Sedimentology-engineering geology laboratory development and operation Obj: To standardize, develop, and/or bring into use various testing and/or analytical procedures available to the geoscientist; to develop new techniques and instrumentation; to ensure efficient operation of the sedimentology laboratories.	Shilts, WW	TS	-	SMT	-	-	2552



Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680023*	X-ray diffraction analyses and mineralogical studies Obj: To provide X-ray diffraction analyses and mineralogical studies in support of Branch projects.	Harris, DC	CLTS	-	M	Ont BC Mack	-	259
680027	Surficial geology, Tawatinaw area Alberta Obj: To map, describe and explain the unconsolidated deposits and landforms of the Tawatinaw map-area (83 I) in central Alberta in order to provide geology and terrain information pertinent to land use planning, agriculture, urban and industrial development, forestry and engineering construction and to determine the Quaternary history of the region.	Richard, SH	TS	-	RP	Alta	83 I	2551
680031	Quaternary stratigraphy of Old Crow Basin and Porcupine River Valleys Obj: Through investigation of Quaternary deposits and associated organic remains, to gain knowledge of the Quaternary stratigraphy and history of the region and to provide a geological framework for current vertebrate paleontology and archeology studies by National Museum scientists.	Hughes, OL	TS	-	RP	Yk Mack	106 E,F; 115 P; 116 I, N E <sub>2</sub> , O, P; 117 A	2551
680047*	Geomorphic processes, Mackenzie Valley-Arctic Coast Obj: To investigate the processes involved in the growth of permafrost and ground ice under present day conditions, in order to understand better the processes associated with the past growth of permafrost in northern Canada	(Mackay, JR Prof)	TS	-	GP	Mack Yk	85, 95, 96, 97 C, D, 106, 107 B, D; 117 D; 96 B-F; 106-F, I, P; 116 I, N-P	2552
680060*	Geology of silver and gold deposits in Canada Obj: To carry out comprehensive research on the geology of silver and gold deposits in order to: (1) support or provide geologically based estimates of Canada's mineral resources; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.	Thorpe, RI	EG	-	MDG	Ont Que Mack BC	32 C, D; 42 A, B, C, E; 41 P; 76 E; 86 H 103 F, G	2561
680064*	Stratigraphy and Paleontology of Upper Paleozoic rocks on of Ellesmere and Axel Heiberg Islands Obj: (a) To improve the understanding of stratigraphy and facies relationships of the marginal and axial parts of the Sverdrup Basin; (b) to establish a biostratigraphic framework for Carboniferous and Permian rocks; and (c) to evaluate the economic potential of the area.	Nassichuck, WW	ISPG	P	MaP	Frank	49 B, C, F, G, H; 340 A, B, C, D; 560 A	2520

Project  
Number

Project  
Leader

Title

Div  
Subdiv

Sec

Prov

NTS

Classi-  
fication

680066

Geology of the Cariboo Mountains, British Columbia

Campbell, RB

C

-

BC

83 D; 93 A,H

2511

Obj: 1. To complete compilation of final maps and prepare final reports of Quesnel Lake (93 A) and Canoe River (83 D).  
2. To study in the field and report on the "Snowshoe problem".

680071

Alkaline rocks in Canada

Currie, KL

P

-

PET

-

2531

Obj: To identify and examine occurrences of alkaline rocks in Canada, and to explain their origin, development mode of emplacement and economic potential.

680073

Composite magnetic anomaly maps of Canada

McGrath, PH

RG

AI

-

-

2571

Obj: To produce a 1:5,000,000 composite magnetic anomaly map of Canada (1255A), and a similar 1:3,500,000 map of Arctic Canada (1512A), and to explain the main features on these two regional compilations in terms of the major structural and geological units of the country.

680081\*

High resolution aeromagnetics (experimental surveys)

Olson, DG

RG

EA0

-

-

2571

Que Man  
NB NS MFld  
Ont Sask  
BC

Pts. 63 C, J, K, N;  
30 M, N; 31 C, D  
11 D, E, F; 25 A, K, L

Obj: To execute, according to prescribed specifications, high resolution experimental aeromagnetic and/or gradiometer surveys, over areas selected and defined by management, as a means of testing the effectiveness of the GSC aeromagnetic system in different geological contexts.

680090

Identification of unknown minerals and elemental analysis of sedimentary rocks by X-ray analysis and chemical techniques

Foscolos, AE

ISPG

PG

GC

Alta

-

2523

Obj: Quantitative and semiquantitative analysis of layer lattice silicates, mixed layer silicates, clays, minerals and elements submitted by GSC staff, university professors and various government agencies.

680091

Clay and clay minerals investigation

Foscolos, AE

ISPG

PG

GC

Alta

-

2523

Obj: To improve and develop techniques for routine mineralogical and chemical analyses of clays and Canadian coals; to develop better techniques for quantitative, semi-quantitative and qualitative analyses of clays and clay minerals in sedimentary rocks and coals; to conduct research related to the crystal lattice structure of clay minerals. These studies also determine those parameters that affect:  
(1) the degree of sediment diagenesis and oil generating potential;  
(2) migration of fluids from source rocks which carry heavy metals.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept / Classification
680093*	Upper Silurian and Devonian biostratigraphy western and northern Canada	Pedder, AEH	ISPG	P	MaP	Sask Man Alta BC Yk Frank Mack	106 C,D,E,F,G,H; 116 G,H; 84 P; 85 A,B,C,D,F; 94 B; 95 A,B,G,H,J,K; 96 E	2522
Obj:	Elucidation of the sequence of Upper Silurian and Devonian faunas, especially corals, of western and northern Canada so that correlations of strata of these ages can be achieved. Description and illustration of fossils that have, or are expected to have, biostratigraphic significance. Paleogeological and biogeographic analyses of species and other taxonomic categories that have different time ranges in different geographic realms and ecologies.							
680101*	Conodont biostratigraphy of Siluro-Devonian rocks of the Arctic Islands	Uyeno, TT	ISPG	P	MiP	Frank Kee Que	49, 57, 58, 59, 68, 69, 78; 89 31 H	2522
Obj:	To set up conodont biostratigraphic framework for the Siluro-Devonian rocks of the Arctic Islands; to integrate this framework with zonations based on other fossil groups, such as graptolites, palynomorphs and brachiopods; to fix time lines in areas where strata undergo complex facies changes over relatively short distances. To determine the thermal maturity of the enclosing rocks with the use of conodonts.							
680102	Rank and petrographic studies of coal and organic matter dispersed in sediments	Hacquebard, PA	AGC	EPG	-	-NB Nfld NS Que PEI	12, 21, 11, 20	2543
Obj:	To obtain information on local and regional changes in organic metamorphism, with application towards economic geology, search for oil and gas, and evaluation of properties of coking coals.							
680109	Palynological zonation of the Carboniferous and Permian rocks of Atlantic Provinces, Gulf of St. Lawrence and Northern Canada	Barss, MS	AGC	EPG	SS	NS NB Nfld PEI Yk Mack Frank	11 E; 1; 2; 11; 12; 95	2543
Obj:	To establish a comprehensive biostratigraphic framework of the Carboniferous and Permian succession and to reconstruct geological events and ecological environments, assist other disciplines to carry out stratigraphic, sedimentological and geophysical studies, facilitating a determination of the three dimensional geometry of the Carboniferous basins for resource evaluation.							
680114	Development and supervision of mineral deposits data bank	Picklyk, DO	EG	-	MDB	-	-	2563
Obj:	To develop files of data on mineral deposits and to supervise their operation in ways effective for the needs of the Geological Survey of Canada and, as far as it is practical, compatible with related files within the Department and with a National System for storage and retrieval of geological data. Two main types of files are involved: (1) documentary files of reports, maps and other published and unpublished information and (2) computer processable files.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
690005	Structural geology of northern Yukon Territory and northwestern District of Mackenzie	Norris, DK	ISPG	CG	-	Yk Mack	117 A,B,C,D, 107 B,C 116 N,O	2524
	Obj: Critical evaluation of the structural geometry of Richardson, Barn and British Mountains, intervening plateaux, and adjacent coastal plain for the documentation of the nature, origin and mechanics of the deformation and its bearing on the hydrocarbon potential of the region.							
690038	Probability models for estimating mineral potential and geoprocessing	Agterberg, FP	EG	-	GM	-	-	2563
	Obj: To develop a statistical method employing geological information to assess the probability of occurrence of specific types of mineral deposits in geographically delineated areas and to design quantitative methods for the integration and processing of various types of geoscience data.							
690043	Quaternary geology inventory, southern Labrador	Fulton, RJ	TS	-	RP	Nfld	12 P; 13 A-K; pts 13 L,N,O; 23 H	2551
	Obj: To map and explain Quaternary deposits and landforms in order to provide: (1) areal geologic and geomorphic data; and (2) knowledge of stratigraphy, age and history of Quaternary features.							
690061	Operation Penny Highlands	Jackson, GD	P	-	NC	Frank	16 E, K-M; 26 H,P; 27 A,B; 36 P; 37 A,B	2531
	Obj: To provide a reconnaissance geological survey of a previously unmapped area and describe and interpret the geological framework and outline areas of potential economic interest.							
690064*	Quaternary palynology	Mott, RJ	TS	-	PG	NS NB <u>Que</u>	11 D,E,F,K,N; 20 P; 21 A,H	2551
	Obj: To study the quaternary palynology of Canada and to provide a biostratigraphic and paleoecologic information service to other scientists within the Division, Branch, or Department as well as other Government Departments and agencies and non-government institutions.							
690065	Surficial geology, St. Anthony-Blanc Sablon map-areas, Newfoundland	Grant, DR	TS	-	RP	Nfld	2 M; 12 P	2551
	Obj: To map, describe, and explain the Quaternary deposits and landforms in order to provide: (1) areal geological information including data applicable to land inventory surveys, engineering development, and geochemical mineral exploration surveys; and (2) knowledge of stratigraphy and age of Quaternary features and of history of Quaternary events and environments including glaciation, deglaciation, local sea-level change.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
690075	Foraminiferal Biostratigraphy of the Pacific Margin	Cameron, BEB	C	-	MG	BC	92; 102; 103	2512
	Obj: 1. To prepare publications on the taxonomy and biostratigraphic significance of Mesozoic and Cenozoic Foraminifera of the onshore and offshore rocks of the Pacific Margin. 2. To prepare publications on the geology of specifically significant areas of the Pacific Margin.							
690086	1:1 million Geological Atlas Projects	Okulitch, A	D60	-	SP	-	-	250
	Obj: As scientific adviser and editor, to make recommendations to a steering committee concerning technical and scientific matters required to ensure publication of a suitable 1:1 million geological atlas of Canada by 1986, including recommendations on coordination, scheduling, guidelines, legend and format; and to ensure, through scientific editing of all manuscripts, that approved standards are met.							
690089	Analysis of international reference samples	Abbey, S	CLTS	-	AC	-	-	259
	Obj: To participate in world-wide collaborative analysis of reference samples prepared by geologically-related institutions thereby contributing to the establishment of such samples as calibration and reference standards.							
690090	Development of methods for the analysis of geological materials	Lachance, GR	CLTS	-	AC	-	-	259
	Obj: a) to develop new methods in order to: i) meet demands when analyses are requested on materials for which the Section does not have prescribed methods; ii) meet demands when analyses are requested for elements or constituents for which the Section does not have prescribed methods; iii) extend the range of concentration and/or improve accuracy and/or improve productivity. b) the objectives outlined in a) may be oriented towards: i) the analysis of a specific need such as the submission of a suite of unusual samples; ii) providing a detailed procedure that is made available to the analytical services component of the Section.							
690095*	Properties and provenance of till	Shilts, WW	TS	-	SMT	Man Ont Que	42 A I, J; 43; 53 I, P; 54; 21 E	2552
	Obj: (1) To build a data bank comprising chemical, petrologic, and geotechnical properties of till in Canada. (2) To define till provenance regions based on data from objective 1. (3) To clarify mechanisms and scale of glacial dispersal of rocks, minerals and trace elements. (4) To relate regional chemical and petrologic properties of till to engineering, geomaterial, and biological problems that can be defined areally.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
700003	Kootenay River (NTS 82) map area, 1:1 million Geological Atlas Program	Okulich, AV	ISPG	RG	AI	Alta BC	82	2521
	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as of April 1, 1969 File 116-6-4.							
700008	St. Mary's River (NTS 11) map-area, 1:1,000,000 Geological Atlas Program	Poole, WH	EG	-	SP	NS PEI NB Nfld Que	11	2561
	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 File 116-6-4.							
700011	St. John River (NTS 21) map-area, 1:1,000,000 Geological Atlas Program	Poole, WH	EG	-	SP	NB PEI Que	21	2561
	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 File 116-6-4.							
700014	Mineral indicator tracing southern Keewatin	Shilts, WW	TS	-	SMT	-	-	2552
	Obj: (1) To develop methods of utilizing drift composition for prospecting in perennially frozen terrain; (2) to define glacial and postglacial processes that affect regional and local variations in till mineralogy and chemistry; (3) to define the relationship of till compositions to compositions of bedrock or to those of higher order derivations (eskers, modern lake sediment, marine sediment etc).							
700015	Yellowknife and Hearne Lake map-areas, District of Mackenzie	Henderson, JB	P	-	BS	Mack	85 I,J	2531
	Obj: To revise and interpret the geology and economic potential of the Precambrian terrain of the project area known only through earlier gross reconnaissance.							
700018	Paleomagnetism and rock magnetism instrumentation and technological development	Christie, KW	P	-	PMag	Ont	-	2532
	Obj: To contribute to the development of paleomagnetism as a geophysical method: (a) by designing, building, testing and calibrating instrumentation required for the measurement of magnetic properties of rocks and minerals; (b) by developing new techniques or systems for the routine measurement of magnetic parameters of standard samples and for the processing of data resulting from such measurements; (c) by improving on the design of existing instrumentation or techniques in order to improve the efficiency of the laboratory and/or the quality of the data emanating from the laboratory.							

2521

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ISPG RG

Cook, DG

Comparative studies of structural prototypes and/or sedimentary environments.

700027\*

Obj:

The objective is to familiarize the participants with the types of observations that may identify specific conceptual models of depositional environments to enable the participants to both recognize such environments and to critically evaluate the models proposed.

2522

116 (E 3/4); 117 (S<sub>2</sub>); 106 (W<sub>2</sub>); 74 M; 84 P; 85 A, B, C, F, G

Yk Mack Alta

MaP

ISPG P

Norris, AW

Devonian biostratigraphy of the northern Yukon Territory and adjacent District of Mackenzie and Alberta

700034

Obj:

(a) delineation of facies distribution of Devonian rocks in northwestern Canada; (b) identifying and determining ranges of fossils for refining zonation and correlation with other areas; (c) determining distribution of faunal provinces and paleogeography of Devonian seas; and (d) obtaining more information on the Upper Silurian/Lower Devonian, Lower/Middle and Middle/Upper Devonian boundaries in Canada.

2524

82 O, J; 83 B, C, F

Alta

CG

ISPG CG

Ollerenshaw, NC

Geology of the southern Alberta Foothills, Highwood River to Athabasca River

700037\*

Obj:

To provide an improved basis for mineral evaluation and oil and gas development of the region, through the publication of new and revised geological maps and cross sections, on a scale of 1:50,000; integrated analyses of surface and sub-surface geology; the description, correlation and facies relationships of all major rock units; and the description, genetic analysis and relationships of the major structural elements; to provide data for 1:250,000 scale map compilations and regional structural syntheses.

2520

59; 69; 79; 89; 99

Frank

MaP

ISPG P

Nassichuk, WW

Belcher Channel and Ballantyne Strait (NTS 59, 69, 79, 89, 99) map-area. 1:1 million Geological Atlas Program

700045

Obj:

To publish a modern compilation and synthesis of the geology of the map-area as a unit of the 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 of File 116-6-4.

2511

94 C, E, F

BC

BG

C

Gabrielse, H

Operation Finlay

700047\*

Obj:

To establish the stratigraphy, structure and geological framework to which the mineral deposits may be related as an aid to regional development.

2551

11 D, E, F, K, N; 21 A, H

NB NS

RP

TS

Grant, DR

Surficial geology, Cape Breton Island, Nova Scotia

700056\*

Obj:

To map, describe and explain the surficial deposits and landforms in order to provide: (1) areal geological information with particular reference to the needs for data required for industrial development and mineral exploration, (2) knowledge of the stratigraphy and age of Quaternary features and of the history of Quaternary events and environments including glaciation, deglaciation and local sea level change.

Geology of copper and molybdenum deposits in Canada - I

Obj: To carry out comprehensive research on the geology of copper and molybdenum deposits in order to:

- (1) support or provide geologically based estimates of Canada's mineral resources;
- (2) provide guidelines for their discovery;
- (3) provide advice to government for mineral policy and related matters.

Surficial geology and geomorphology, Mackenzie Bay - Continental Shelf

Blasco, SM

AGC EMG

CGD

Arctic Offshore

87, 97, 107, 117

Obj: To resolve the stratigraphic and structural relationships of the unconsolidated surficial marine sediments of the Beaufort continental shelf to provide the geological framework necessary for: the delineation of permafrost; the assessment of offshore aggregate supplies; the establishment of engineering design criteria for offshore structures for petroleum exploration and production; the resolution of the Quaternary history of the shelf area; the identification of sedimentary and geomorphic processes operating on the shelf; and to continue development of the technology necessary to conduct surficial marine geological surveys in ice covered areas of the arctic and in shallow coastal waters.

Surficial geology and land classification, Mackenzie Valley Transportation Corridor

Hughes, OL

TS -

RP

Mack Yk

96 C-F; 106 H-K, L, M, N, O, P; 107 A; 97 C; 116 N, O, P

Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice, and organic (muskeg) cover of the Mackenzie Valley Transportation Corridor in order to:

- (1) provide areal knowledge of geology and terrain, bearing particularly in mind the needs of government for terrain information in connection with land use planning, pipeline proposals and other aspects of petroleum development, and engineering construction; and
- (2) determine the Quaternary history of the region.

Carboniferous and Permian biostratigraphy and coral faunas, western and northern Canada

Bamber, EW

ISPG P

MaP

Frank Mack Yk BC Alta

49; 59; 69; 78; 79; 82 G, H, J, M, N, O; 83 B, C, D, F, G; 92; 93 I, O; 94-95; 103-106; 115-117; 340; 560

Obj: Establishment of faunal sequence within stratigraphic framework previously described for Upper Paleozoic of Alberta, British Columbia, Yukon, and District of Mackenzie, for use as a biostratigraphic reference succession in surface and subsurface exploration of these areas. Description of coral and other faunas from these areas to document the above succession and facilitate its use by other workers in industry and in other government organizations.



Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
710023	Granite studies in the Slave Province (Phase 1)	Davidson, A	P	-	SG	Mack	85 I,P	2531
710033	Northern Basin Analysis Program: Redstone and Great Slave Lake map-areas	Williams, GK	ISPG	RG	M	Mack	85, 95, 96	2521
	Obj: 1. To maintain an up-to-date inventory of subsurface data, mainly in the form of maps, cross-sections and lithologic logs within the Great Slave Lake and Redstone Map-areas. 2. To provide an improved understanding of the geological history of the northern Canadian mainland. 3. To compile, in a form suitable for publication (primarily Open File format) all data and ideas so far accumulated.							
710059*	Stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic continental margin	Jansa, LF	AGC	EPG	SS	-	-	2543
	Obj: To determine stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic continental margin and the basin; delineate distribution of clastic, carbonate, evaporite sequences, their thickness, composition, provenance, current patterns, depositional environment and porosity development as an aid to the resource evaluation of this region.							
710061*	Compilation of geoscientific data in the Upper Paleozoic basins of southeastern Canada	Howie, RD	AGC	EPG	-	NS NB NFLD PEI	<u>1, 2, 10, 11, 12,</u> <u>14, 20</u>	2543
	Obj: Compile data for a detailed study of the petroleum potential of the Magdalen and Sydney basins.							
710065	Biostratigraphic zonation (Foraminifera-Ostracoda) of the Mesozoic and Cenozoic rocks of the Atlantic Shelf	Ascoli, P	AGC	EPG	SS	Atlantic Offshore		2543
	Obj: To determine the biostratigraphic zonation (Foraminifera and Ostracoda) of the Mesozoic and Cenozoic in offshore wells of the Atlantic Shelf, to form the basis of local, regional and world wide correlation, and to accurately reconstruct geological events and ecological environments, to aid in the economic evaluation of the region.							

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
710091*	Palynological studies of Mesozoic and Tertiary coal measures in western and northern Canada	Sweet, AR	ISPG	P	MIP	BC Alta Yk	82 B,C; 83 C,E,F; 106 E; 117 A;	2422
	Obj: (a) To establish palyno-stratigraphic zonations of coal measures and contiguous strata as an aid to petrological, sedimentological and structural interpretations of coal basins. (b) Where applicable to correlate coal seams by means of spore and pollen histograms. (c) To describe and classify recovered pollen and spores as necessary to accomplish the above objectives.							
710092	Quaternary geology inventory, lower Nelson River basin	Klassen, RW	TS	-	RP	Man	53 M; 54 C,D; 63 G,I,O,J,P; 64 A,B,G,H	2551
	Obj: To map, describe and explain the Quaternary deposits and landforms to provide a geological-geomorphic data and knowledge of the stratigraphy, age and history of deposition of surficial materials with particular reference to (1) terrain information required for land use (forestry) and engineering development, and (2) background information for geochemical and related surveys. To study short term performance of organic and unconsolidated terrain units along selected roads and at chosen construction sites with particular emphasis on mass-wasting and effects of permafrost.							
720044*	Reconnaissance of Mesozoic Foraminifera of Arctic Islands	Wall, JH	ISPG	P	MIP	Frank	49, 59 E, 69, 79, 88, 89, 98, 340 B	2522
	Obj: To assess the assemblage composition, paleoecology and biochronological significance of Mesozoic Foraminifera in the Arctic Islands in order to better define Mesozoic subsurface and outcrop stratigraphy.							
720052	Geology of Indin Lake (86 B)	Frith, RA	P	-	BS	Mack	86 B	2531
	Obj: To revise and interpret to modern standards the geology of the Precambrian terrane of the area known only through early reconnaissance and semi-detailed mapping.							
720056	Paleomagnetism of the dykes of west Greenland	Fahrig, WF	P	-	PMag	-	-	2531
	Obj: To determine the paleomagnetism of the diabase dyke swarms of west Greenland in order to examine the possible correlation of the rocks of this area with those of Baffin Island and the coast of Labrador.							
720057	Terrain mapping in mountainous areas	Fulton, RJ	TS	-	RP	BC	Pts of 82 M,N,K,L	2551
	Obj: 1. To devise terrain mapping units which can be used to adequately define mountainous country. 2. To map the terrain in several small, mountainous, pilot-areas.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
720062	Volcanic rocks of the Prince Albert Belt	Schau, M	P	-	NC	Frank Kee	47 A,D; 56 J,K	2531
720066	Evaluation of Canada's petroleum potential	Procter, RM	ISPG	PG	PR	-	-	2526
720071*	Airborne Gamma-Ray Spectrometry (Experimental Surveys)	Holman, PB	GGG	RR	ARO	Man NB Ont Que Sask Nfld NS	31F; 41 A; 42 C-F; 11 P,D; 12 A; 21 A,G,J; 62 E,F	2573
720072*	Paleozoic ostracodes of Canada	Copeland, MJ	ISPG	P	OP	Ont Que NB NS Nfld	11 E,F,K; 12 B,E,L; 21 A,P; 22 A,B,H; 30 L,M; 40 I,P	2522
720073	Petrographic Analysis of Saskatchewan Lignites	Cameron, AR	ISPG	CG	CT	Sask	62 E; 72 F,G,H	2524
720075	Paleomagnetism of the Hopedale diabase dykes	Christie, KW	P	-	PMag	Nfld	13	2532
	Obj: To determine the structure, stratigraphy and petrology of the volcanic rocks of the Prince Albert Group and relationship to the adjacent gneisses and the enclosed basic and ultrabasic rocks; to evaluate the mineral potential of the belt.							
	Obj: To create and maintain an inventory of oil and gas resources of all regions of Canada, both discovered (reserves) and undiscovered (potential); to provide data for the analysis of costs and supply of oil and gas; to develop methods of predicting size, rate of discovery, quality, reservoir character and other attributes of the resource base in order to assist in the development and analysis of energy policy.							
	Obj: (1) Provide acceptable standards for the acquisition and compilation of airborne gamma-ray spectrometric data. (2) Demonstration of suitability of airborne gamma-ray spectrometry methods in various parts of Canada by: i) conducting orientation surveys in advance of U.R.P. contract surveys. ii) conducting reconnaissance surveys maps. iii) conducting detailed follow-up surveys of areas of interest located by URP program. (3) Have available the technology and personnel to respond to nuclear accidents where aircraft monitoring is required.							
	Obj: By means of microfossils and non-trilobite Arthropoda to determine the zonation and correlation of strata among the Paleozoic sedimentary basins of Canada and thus aid in assessing the economic potential of these rocks.							
	Obj: 1. Petrographic characterization of Saskatchewan lignites. 2. Determination of vertical and lateral changes in petrographic composition 3. Relation of petrographic composition to environment of deposition.							
	Obj: To determine the paleomagnetism of three swarms of unaltered diabase dykes in the Hopedale area, Labrador.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
720078*	Diatom analysis and paleoecological studies of Quaternary sediments Obj: (1) To develop diatom analysis as a paleoecological tool in conjunction with palynological and plant megafossil analyses. (2) To provide paleoecological interpretation and biostratigraphic correlations of Recent and Quaternary sediments.	Lichti-Federovich, S	TS	-	PG	Frank Ont.	38, 39, 48, 49, 59, 340, 560, 41 I, 31 E	2551
720080*	Interpretation of aeromagnetic surveys Obj: To express the significance of aeromagnetic data in terms of lithological structural and metamorphic patterns in support of mineral exploration, geological mapping and radioactive waste disposal programs and to integrate this information with other types of geoscience data.	Kornik, LJ	RGG	RG	MM	Ont Man Sask	52 B, E; 74 I	2571
720081	Surficial geology and geomorphology of Central Ellesmere Island Obj: To provide an inventory of surficial materials, landforms, geomorphic processes (active and inactive) and permafrost conditions, with particular reference to terrain information pertinent to the implementation of territorial Land Use Regulations and to the effects of the terrain on petroleum exploration and related activities.	Hodgson, DA	TS	-	RP	Frank	Pts 49 C, D, E, G, H; 340 B	2551
720084*	Gamma-Ray Spectrometry (Technique Development) Obj: To develop improved methods of airborne gamma-ray spectrometry data collection, analysis and presentation.	Grasty, RL	RGG	RR	ARO	Ont	31 C	2573
720089	Quantification of geological variables and geomathematical estimation of mineral potential Obj: To prepare a computer-oriented data base for selected areas of Canada by the compilation, pre-coding, and coding of geological data to be obtained from maps of scales 1 inch to 4 miles and larger and other sources of information. To compile and code basic parameters for mineral deposits in the same areas. To perform geomathematical analyses in order to assess regional mineral potential.	Fabbri, AG	EG	-	GM	-	-	2563
720098	Lower Paleozoic stratigraphy, southern Rocky Mountains Obj: To determine the nature, thickness, distribution and origin of Lower Paleozoic formations of the region.	Aitken, JD	ISPG	RG	M	BC Alta	82, 83	2521
720101	Bottom studies of the Beaufort Sea Obj: To obtain information on bottom sediments and their dispersal trends, and to describe bottom morphology with reference to ice-scour and pingo-like features in order to provide data for engineering works and environmental programs, and to provide maps and other illustrative material to support such programs.	Pelletier, BR	TS	-	SP	Frank Mack Yk	97 C, F, G; 107 A, B, C, D, F; 117 A, B, C, D	2550

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
720102	Marine Science Atlas of the Beaufort Sea Obj: To compile known marine aspects of the Beaufort Sea including oceanography, biology, bathymetry, geology, geophysics, etc., in order to present a marine science atlas of the Beaufort Sea that will include maps, sketches, photographs and graphs. This atlas will serve the public, universities, industry and various agencies of government on engineering, environmental and resource-development programs.	Pelletier, BR	TS	-	SP	Mack Frank YK	97 C, F, G; 107 A, B, C, D, E; 117 A, B, C, D	2550
720103	Hydrocarbon inventory of the sedimentary basins of Eastern Canada Obj: To prepare and maintain a geological appraisal of the potential oil and gas resources of the sedimentary basins of Eastern Canada, including those on the Atlantic continental margin and in Baffin Bay, the Atlantic Provinces and Gulf of St. Lawrence and the St. Lawrence and Hudson Platforms.	Wade, JA	AGC	EPG	RSBS	Atlantic Offshore	-	2543
720104	Regional subsurface geology of Mesozoic and Cenozoic rocks of the Atlantic continental margin Obj: To provide a regional subsurface geological interpretation of the Atlantic continental margin of Canada as a basis for (1) the Departmental Hydrocarbon Inventory, (2) to establish a framework for other specific studies such as lithostratigraphy, biostratigraphy, geochemistry, plate tectonics, etc.	Wade, JA	AGC	EPG	RSBS	Atlantic Offshore	21 A, H	2543
730001*	Geochemistry of metallogenesis and primary halos Obj: (1) To ascertain the trend of metallogenesis from the Precambrian to the present. (2) To ascertain the nature of primary halos of various elements e.g. Ag, Au, U, Li, Rb, Cs, As, and Sb in various epigenetic deposits. (3) To study the geochemistry of the platinum metals.	Boyle, RW	GGG	RG	SP	Ont NB NS	31 C, F; 40 P; 41 A; 21 A, O, P; 11 D, E	2572
730006*	Permafrost seismic Obj: To identify and delineate permafrost in continuous and discontinuous zones in the various geomorphological environments found in northern Canada; to obtain acoustic and elastic properties of permafrost and correlate these with lithology, moisture content, temperature, etc; to investigate the applicability of shallow seismic techniques in permafrost areas; to design and test new instrumentation relating to these problems.	Hunter, JA	GGG	TG	SM	Frank Mack Ont Que	37 A; 40 I; 58; 95; 96; 105; 107 C; 117; 23 J; 30 M	2574
730012	Federal Provincial aeromagnetic Surveys-Quebec Obj: To provide GSC and Quebec Department of Natural Resources with aeromagnetic data as an aid to geological mapping programs and to provide a data base for the Magnetic Anomaly Map of Canada. To provide the mining industry with aeromagnetic survey data for use in mineral exploration programs.	Knappers, WA	GGG	RG	CAS	Que	24 D-N; 25 C-F; 35 A-C, F-K; Pts 23 M; 24 A, H, I; 34 A, B; 33 O, P	2571

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
730013	Quaternary geology inventory - Southern Keewatin	Shilts, MW	TS	-	SMT	Kee	65 A-C, F-K, N-P; 55 D, E, F, L, K, N, O; 66 A-C, F-K, N-P; 56 D	2552
	Obj: (1) To produce a map of southern Keewatin showing surficial geology at a scale of 1:500,000 from Chesterfield Inlet south to Manitoba and east of ~97°00'. (2) To produce maps for open filling at scales of 1:125,000 based on 1:250,000 NTS sheets. (3) To collect regional samples of till to describe its sedimentology, geotechnical properties, and geochemistry. (4) To elucidate the history of the south and central portions of the Keewatin Ice Divide.							
730019	Portable drilling and sampling equipment, development and service	Veillette, JJ	TS	-	RP	-	-	2551
	Obj: To develop equipment and techniques suitable for shallow drilling and sampling in surficial materials and to provide drilling and sampling services in support of other projects.							
730027	Late Cenozoic fossil insects and Late Cenozoic paleoecology	Matthews, JV Jr.	TS	-	PG	Mack Frank Yk BC Ont Que	117 A,B; 116 A,B,I,J,K, L,N,O,P; 115 B,G,I,J, O,P; 107 P; 106 E,L; 105 D,E,K,L,M; 97 G; 98; 69 H; 56 D,B; 68 H; 31 G,H,I; 11 N	2551
	Obj: To provide biostratigraphic and paleoecologic information on late Cenozoic terrestrial sediments as an aid to interpretation of their age and environment of deposition.							
730035	Operation St. Elias	Campbell, RB	C	-	-	Yk BC	114 P,O; 115 A-C,F,G	2511
	Obj: To determine the stratigraphy, structure, metamorphism, and relationship of intrusive and volcanic rocks, and to assess the mineral potential of the area.							
730037	Stratigraphy, structure, and metallogeny of Pelly Mountains, and Yukon Plateau, Yukon Territory	Tempeelman-Kluit, DJ	C	-	BG	Yk	105 A, F, G, H	2511
	Obj: To provide information on the relationship between stratigraphy, structure, sedimentary facies, and mineral deposits in Pelly Mountains and adjacent Yukon Plateau.							
730040	Archean volcanic studies in the Bear-Slave Province	Lambert, MB	P	-	BS	Mack	76 B,C,F,G	2531
	Obj: To determine 1) stratigraphic and structural relations; 2) location of volcanic centres; 3) sequence and types of volcanic eruptions and their environment of deposition; 4) relationship of mineral deposits to volcanic stratigraphy and volcanic processes.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
730042	A study of certain accessory elements in Canadian Sulphide assemblages and minerals Obj: To determine the concentration ranges and averages of certain elements in selected Canadian Sulphide ores and sub-ores.	Sangster, DF	EG	-	MDG	-	-	2561
730043	Volcanic rocks of the Appalachian region Obj: To determine the physical volcanology, petrology, chemistry, environment, age and tectonic relations of the volcanic rocks of the Appalachian Orogen in order to relate them to the evolution of the orogen and to the formation of associated mineral deposits.	Bostock, HH	P	-	NC	NB NS Nfld	Pts 2 E/12, 5; 12 H	2531
730044*	Granite studies in the Appalachians Obj: (1) To establish a set of criteria based on field, petrographic and chemical observations, by which granitoid rocks in the Appalachian region can be assigned to a limited number of well defined classes; (2) to establish the physical conditions of emplacement, fractionation trends, solidification history, and subsequent deformation of each of these classes; (3) to relate these classes to the tectonic development of the Appalachian region; (4) to evaluate the economic possibilities of each class, and possible factors enhancing these possibilities.	Currie, KL	P	-	PET	NS Nfld NB	2 E; 12 A, E 21 G, H	2531
730046*	Geochronological research and control studies Obj: To precisely establish the chronological order of rocks and events, thereby providing the fourth dimension -- time--to geological mapping.	Van Breemen, O	P	-	G	-	-	2532
730047	Development of techniques for geochronological studies Obj: To develop methods and apparatus required to remain at the forefront of geochronological research and applications.	van Breemen, O	P	-	G	-	-	2532
730051*	Completion of reconnaissance geology, northern Ellesmere Island Obj: To prepare terminal reports accompanied by maps of the region at the scale of 1:250,000 or more detailed. To compile the Eureka sound sheet (NTS 340, 560, 120) of the 1:1 million geological atlas program.	Trettin, HP	ISPG	RG	AI	Frank	340 A-F, H 120 B, C, F, G; 49 H; 560 D, E, F, G, H	2521
730057*	Helikian and Hadrynian stratigraphy Eastern Cordillera and Interior Platform Obj: Firstly, to establish a coherent picture of Helikian and Hadrynian events in western and northwestern Canada, and secondly, to emphasize study of those events that may have created exploitable mineral and/or hydrocarbon deposits.	Aitken, JD	ISPG	RG	M	Mack Yk	95 L, M; 106 A, B, C, F, G, H; 105 P	2521

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'1 Classi- fication
730062	Development of extraction, identification and correlation systems for organic compounds from sedimentary rocks and crude oils  Obj: To develop, improve and adapt analytical techniques in organic geochemistry in order to facilitate the identification of petroleum source rocks and to assist in source rock-oil correlations. To develop and/or apply statistical methods to the geochemical data generated in the GSC labs and from outside organizations in order to correlate crude oils into genetic families or groups and to improve data handling and storage systems.	Snowdon, LR	ISPG	PG	GC	-	-	2523
730063	An automated system for petrologic analysis of metamorphic mineral assemblages  Obj: To develop a set of computer programs to expedite the analysis of metamorphic mineral assemblages.	Gordon, TM	P	-	PET	-	-	2532
730067*	Geothermal Energy Resources in Canada  Obj: To make an inventory of the distribution, nature and geological setting of hot springs in Canada and the chemistry of their waters. To provide a base of geological information and expertise for geothermal results.	Souther, JG	C	-	BG	BC	92 J	2511
730072*	Bedrock and surficial geology-Grand Banks  Obj: To contribute to our knowledge and understanding of the surface and subsurface geology, geologic history, and broad tectonic setting of the Grand Banks; and to aid in the economic evaluation of the region.	King, LH	AGC	RR	SBG	Atlantic Offshore	1, 2, 11	2541
730081*	East coast Offshore surveys  Obj: A detailed, systematic mapping of hydrographic and geophysical parameters on the continental shelf and margin in the Canadian offshore. (a) To measure and describe the sea floor topography and the gravity and magnetic fields in the offshore; (b) to define the broad patterns of bedrock and sediment composition and distribution; (c) to disseminate this information through a variety of media; charts, reports, digital magnetic tape files, publications, etc.	Macnab, RF	AGC	RR	GPS	Atlantic Offshore	-	2541
740003	Geological interpretation of geophysical data as an aid to basin synthesis and hydrocarbon inventory  Obj: To define the geologic structure and history of the sedimentary basins in the offshore regions of Eastern Canada.	Grant, AG	AGC	EPG	RSBS	Atlantic Offshore	1-16, 27, 28, 38, 39	2543



Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740004	Biostratigraphic history of the Mesozoic-Cenozoic sediments of the Grand Banks, Northeast Newfoundland and Labrador Shelves (based on Foraminifera and Ostracoda)	Gradstein, FM	AGC	EPG	SS	Atlantic Offshore	1, 2, 3, 11, 12	2543
740016	Obj: To establish and maintain a comprehensive biostratigraphic and depositional environmental framework of the Mesozoic-Cenozoic sediments of Grand Banks and Labrador. Utilize North Atlantic Basin control to more clearly establish the relationship of the Eastern Canadian margin.  Geology of the Island Lake map-area (53 E), Manitoba and Ontario	Herd, RK	P	-	SG	Man Ont	53 E	2531
740017	Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks of the map-area; and provide a tectonic synthesis suitable for resource evaluation.  Metamorphism in the Canadian Shield	Fraser, JA	P	-	NC	Que, Ont Man Sask NFLd, Mack Frank Kee	-	2531
740019	Obj: To provide suitable maps and studies on metamorphism of the Shield which will focus on this parameter in such a way as to make a unique contribution to the understanding of the development of the Shield; and to provide regional and local information on metamorphic grade and history which will be of use in evaluating mineral resource potential of the Canadian Shield.  Archean felsic volcanic complex near Regan Lake, District of Mackenzie, NWT	Lambert, MB	P	-	BS	Mack	Pts of 76 B,C,F,G	2531
740030	Obj: (1) To map in detail the felsic volcanic belt; (2) To establish criteria for the identification and interpretation of metamorphosed felsic volcanic in the Slave Province; (3) To establish a model for the history, environment and processes of volcanism that relate to this part of the Slave Province to provide a basis for resource exploration in this area.  Boothia Peninsula and Somerset Island (Operation Boothia)	Cook, DG	ISPG	RG	AI	Frank	57 C,F,G; 58 A-F; 67 E,H	2521
	Obj: To improve the understanding of the stratigraphy and structure of the region, which is a key area for information in both of these fields. The purpose is two fold: (1) to aid in evaluation of the resource potential, particularly petroleum and base metals, of this part of the North; and (2) to provide background knowledge and maps to assist in future natural gas pipeline construction.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740041*	Comparative studies of geological types Obj: To examine field occurrences of local geological phenomena in order to familiarize the staff of the Institute with the local geology and the interpretation thereof, so that general principles so elucidated may inform and communicate the role of the Institute to all levels of staff.	Cook, DG	ISPG	RG	-	-	-	2521
740042	GSC Workshop travel - Micropaleontology Section Obj: To exchange information on current projects and techniques relating to palynology, foraminifers and other microfossils, during workshops of GSC's specialists; to plan programs in these fields and generally improve communication between the specialists in different Divisions.	Wall JH	ISPG	P	MIP	-	-	2522
740054	Geological variability of marine deposits, Ottawa-St. Lawrence Island Obj: To evaluate the stratigraphic, geomorphic and historical factors affecting the natural and engineering behaviour of marine clays, with special reference to landslides.	Gadd, NR	TS	-	RP	Ont Que	Pts. of 31 G	2551
740062	Fraser Delta sedimentation Obj: To provide a geological/sedimentological knowledge base about the active delta of the Fraser River for general land and waterfront planning and environmental management.	Luternauer, JL	C	-	MG	BC	92 G	2512
740065	Surficial geology inventory, Banks Island Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover, and undertake geomorphic process studies in order to provide areal knowledge of geology and terrain that will: (a) aid in the implementation of the Territorial Land Use Regulations; (b) be pertinent to engineering construction, petroleum exploration and related activities; (c) provide data relative to terrain sensitivity rating; and (d) elucidate the Quaternary history of the region.	Vincent, J-S	TS	-	RP	Frank	88 B,C,D,F; 97 G,H; 98 A-F	2551
740067	Surficial geology-terrain inventory, Bathurst-Cornwallis and eastern Melville Islands Obj: Map, describe and explain the surface materials, landforms, ground ice and vegetation in order to provide areal knowledge of geology, geomorphology and terrain as background information suitable for land use management and various aspects of engineering construction and to determine the Quaternary history of the region.	Edlund, SA	TS	-	RP	Frank	68 E-H; 69 A,B; 78 E-H; 79 A,B	2551

740068*	Surficial geology, Ottawa Valley lowlands	Richard, SH	TS	-	RP	Ont	Pts. <u>31 B, C, F, G</u>	2551
Obj: To map, describe and explain the unconsolidated deposits and landforms of the Ottawa Valley lowlands (31 G, 31 F (parts of) and 31 B (parts of) in order to provide geology and terrain information pertinent to land use planning, agriculture, urban and industrial development, forestry and engineering construction and to determine the Quaternary history of the region.								
740072*	Surficial geology of Newfoundland	Grant, DR	TS	-	RP	Nfld	1; 2; Pts. <u>11, 12</u>	2551
Obj: To map and describe and explain the unconsolidated deposits and landforms in order to provide areal knowledge of geology and terrain as background information relative to land-use planning, mineral exploration, location of granular deposits, community water-supply problems, forestry, urban and industrial development, and various aspects of engineering construction, and to determine the Quaternary history of the region.								
740081*	Environmental Geochemistry	Jonasson, IR	GGG	GGC	ES	Yk Mack BC Alta Sask Ont Que	<u>31 B-P; 74 H, I; 64 E, L; 82 F, G; 92 F; 94 F, G; 104 N; 105 A-P; 106 A-F; 116 G, P; 103 B, G; 117 A, B</u>	2572
Obj: (1) To understand the nature of physical and chemical processes which influence the dispersion of elements in the surficial environment. (2) To coordinate subdivision activities relating to environmental matters. (3) To provide appropriate surficial chemical and lithochemical support to the Nahanni IMPP and its objectives.								
740084*	Silurian-Ordovician macro-biostratigraphy of Anticosti Island, Quebec	Bolton, TE	DGO	-	SP	Que, NB NS Kee Ont	<u>22 H; 12 E, F, L; 18; 22 A, B; 11 F; 45, 46; 31 G, H</u>	250
Obj: To obtain data on the Silurian and Ordovician rocks of Anticosti Island, St. Lawrence platform and Maritime regions to provide: (1) precise descriptions for all appropriate stratigraphic units of their succession, thickness, lithology, facies change, faunal content; (2) descriptions of significant fauna for each stratigraphic unit; and (3) local and regional correlations consistent with the data.								
740085*	Borehole Geophysics (Nuclear Techniques)	Killeen, PG	GGG	RR	RM	Alta Sask Man Ont Que NS NB Nfld	<u>21 G; 22 A, B; 31 C, F, H; 32 D, O; 40 I; 41 I, J; 52 L; 64 C, L; 73 B; 74 I; 12 A</u>	2573
Obj: To contribute to geophysical exploration technology by maximizing the useful information obtained from boreholes by: (1) investigation, implementation and evaluation of new developments and improvements in nuclear borehole logging, and (2) establishment of calibration and standardization as a routine procedure in nuclear logging operations.								

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
740091*	Borehole Geophysics (Electrical and Magnetic Techniques)	Dyck, AV	RGG	TG	EM	BC Ont Que NB Man Sask Nfld	41 I, J; 52 B; 31 F, K; 74 H, I; 64 C, L; 62 I; 32 D, E, 12 A	2574
740092	Obj: To contribute to the development of borehole mining geophysics technology as a means of improving the efficiency and effectiveness of mineral exploration practices, geophysical techniques applied to engineering and geological mapping.  Geology of the Bathurst Inlet Area	Campbell, FHA	P	-	BS	Frank Mack	76 J (W <sub>2</sub> ), K (E <sub>2</sub> ); pts. 76 E, G, O, N, L; 77 A, B, D, E, G, H; 86 G, H	2531
740095	Quaternary geology - terrain inventory, Kananaskis Lakes	Jackson, LE	TS	-	GP	Alta BC	82 J	2552
740098*	Obj: To map, describe, and explain the unconsolidated deposits and the landforms and their susceptibility to modern processes in order to provide areal knowledge of surficial geology and terrain as background information relative to mineral exploration and exploitation, land use planning, forestry, agriculture, urban and industrial development and various aspects of engineering construction and to determine the Quaternary history of the area.  Metallogeny of the northern Canadian Cordillera	Dawson, KM	EG	-	MDG	BC Yk Mack	93 A; 94 E, F; 95, 96, 104 H; 105, 106, 114, 115, 116, 117	2561
740100	Obj: To integrate present mineral commodity and regional geological studies in order to: (1) examine the large scale geological controls and distribution of known mineral deposits; (2) assist in planning of future geological mapping; (3) assess the area with regard to its mineral potential.  Preparation of popular earth science education literature	Copeland, MJ	ISPG	P	OP	-	-	2522
740104*	Obj: To present to the Canadian public, particularly students, information dealing with earth science topics of general interest and of educational importance.  Paleomagnetism of Proterozoic to Devonian Strata across Boothia Arch	Fahrig, WF	P	-	PMag	Frank	48 A, D; 58; 68, 39	2531
	Obj: To measure the paleomagnetism of Upper Proterozoic, Ordovician, Silurian and Devonian strata across the Boothia Arch to determine the paleolatititude, whether these strata have been shifted relative to the North America Craton, and to contribute information on the North American polar wandering curve.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Depl't Classification
740106*	Geological assistance with provincial coal drilling project in Nova Scotia Obj: In co-operation with provincial authorities to prepare an inventory of remaining coal resources in Nova Scotia.	Hacquebard, PA	AGC	EPG	-	NS	11, 21	2543
740107*	Trace elements in sulphides Obj: (1) To determine the typical contents and ranges of trace elements, including metals, metalloids and non-metals in ores and ore minerals. (2) To assess the value of such data with regard to classification of ores, estimates of ore reserves of rare metals, definition of geochemical and metallogenetic provinces, establishment of environment baseline levels. (3) To provide a systematic geochemical inventory for regional surveys.	Jonasson, IR	RGG	RGC	ER	Ont BC Yk Mack Que	31 A,B,C,F,P; 94 F,G; 104 N; 105 A-C, F-J, K,O,P; 106 A,B,C,E,F; 116 G; 117 A,B; 32 D; 41 I	2572
740110	Carboniferous and Triassic strata of Appalachian region Obj: To determine the stratigraphy, sedimentology, variations in facies and external and internal basinal geometry of the Middle Devonian to Triassic strata; to reconstruct the tectonic development, provenance, current direction and environment of deposition; and to determine the distribution, controls and origin of the associated mineral deposits, all with a view to elucidating the mineral resource potential.	Geldsetzer, HHJ	ISPG	RG	M	Nfld NS PEI NB Que	1; 11; 12; 21; 22	2521
750001	A geophysical investigation of the submarine extension of geological zonation of Newfoundland and Obj: An interpretation of the offshore extension of the zonation of Newfoundland, to include (1) tracing offshore all recognizable onshore features; (2) building a developmental model for the tectonic pattern observed; (3) assessing the compatibility of that model with others proposed for the same and adjacent regions.	Haworth, RT	AGC	RR	GPS	Atlantic Offshore	-	2541
750004	Geology of the Tulemalu Lake map-area Obj: To interpret the Precambrian geology of the area to modern 4-mile standards and to interpret the economic potential of the area.	Eade, KE	P	-	NC	Kee	65 J	2531
750006	Stratigraphy and petrology of the Natkusiak Basalts, Victoria Island Obj: To determine the variation in chemical composition and petrography of the lavas with stratigraphic level, to obtain representative bulk compositions of the flows, to determine relationships between the composition of the flows and associated copper prospects and between the flows and accompanying sills, and to obtain contributory information towards an understanding of late Precambrian tectonic history in the northwestern Canadian Shield.	Baragar, WRA	P	-	SP	Frank	Pts. of 77 G; 78 B; 87 E,F,G,H; 88 A,B	2531

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750008	Geology of Nose Lake and Beechey Lake Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks in the area, to aid mineral prospecting; to correlate geophysical and geochemical patterns and anomalies with geological and mineral deposit data.	Frith, RA	P	-	BS	Mack	76 F (E $\frac{1}{2}$ ); 76 G (W $\frac{1}{2}$ )	2531
750010*	Geology of Uranium and Thorium Resources in Canada Obj: To carry out comprehensive research on the geology of uranium and thorium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium and thorium resources; (2) provide guidelines for their discovery; (3) provide advice to government for nuclear energy policy and related matters.	Ruzicka, V	EG	-	URE	Ont <u>Sask</u> Kee <u>Mack</u> Que <u>NS</u> NFLD <u>NB</u>	41 I, J, O, P; 31 C-F; 64 L; 74 G, I-K, N-P; 66; 75; 85; 12 A, H; 21 A, G, H; 23 D; 32 P; 33 A; 13	2562
750011	Geology, petrology and economic potential of the anorthosite suite in southern Labrador Obj: (1) Comparison of rock types, rock and mineral chemistry, and structures with similar features north of the Grenville Front; (2) Estimation of the grade of regional metamorphism in this part of Grenville Province. (3) Determination of age of the anorthosite suite of rocks; (4) Investigation of the economic mineral potential of the anorthositic rocks.	Emslie, RF	P	-	PET	Nfld	13 B, C, E, F, G	2531
750017	Stratigraphy and correlation, lower Paleozoic subsurface, Arctic Islands Obj: (1) Comparison and correlation of different sets of nomenclature; (2) Outline of regional facies changes and paleogeography; (3) Outline areas with hydrocarbon potential in lower Paleozoic rocks.	Mayr, U	ISPG	RG	AI	Frank	49 C; 58 D-H; 68 D, E, G, H; 78 E-H; 88 E-H;	2521 89 B, C
750018	Stratigraphic and sedimentological studies of Lower Cretaceous rocks, Rocky Mountain Foothills and Front Ranges, Alberta and British Columbia Obj: To describe the Lower Cretaceous stratigraphic succession, to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the distribution and continuity of coal seams throughout the region; to attempt to determine criteria useful in determining the sub-environments in which deltaic sediments were deposited and eventually to provide a regional geological model that will be of assistance in determining the potential coal resources of these and other regions.	Gibson, DW	ISPG	CG	GC	BC Alta	82 G, J, O	2524

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750019	Structure and stratigraphy of Paleozoic and Lower Mesozoic rocks in Halfway River Map-area, Northeastern British Columbia	Thompson, RI	C	-	BG	BC	94 B	2511
	Obj: To revise Halfway River map-area (94B) at 1:250 000 scale (including subdivision of Triassic strata); to map 94 B/3, 4, 5, 6, 11, 12, 13, 14 at 1:50 000 scale and to study in detail the structure and stratigraphy of this area and its relation to adjacent areas; to determine the regional stratigraphic and structural setting of Pb-Zn mineralization in the area; to help develop models for the stratigraphic and structural evolution of this portion of the Rocky Mountains.							
750020	Carboniferous biostratigraphy in the northern Yukon, British Columbia, and Alaska	Nassichuk, MW	ISPG	P	MaP	Yk BC	116 C,I; 92 F	2520
	Obj: To extend the Carboniferous biostratigraphy of the Sverdrup-Basin, utilizing ammonoids, into northern Yukon, Alaska, Alberta and British Columbia in order to better interpret regional stratigraphy and paleoenvironments.							
750021	Development of programs for Kremp File and Dinofile GSC palynological data files	Hopkins, WS	ISPG	P	MiP	-	-	2522
	Obj: Assist in the development and execution of the Kremp and other palynological computer files.							
750023	Methodology of petroleum resource evaluation	Lee, PJ	ISPG	PRAS	-	-	-	2526
	Obj: To provide a reliable, effective and statistically valid methodology for estimation of resource abundance.							
750024*	Petroleum geology of Tertiary, Mesozoic and Paleozoic strata north of 70°	Densmore, AA	ISPG	PG	PR	Frank	37-39; 47-49; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560	2523
	Obj: To provide a reliable and adequate stratigraphic framework and Petroleum, Geology data base for assessment by the Energy Subcommittee for the areas of hydrocarbon potential To document proven and potential hydrocarbon occurrences in the area.							
750025	Petroleum Geology of Tertiary, Mesozoic and Paleozoic north of 68° on the NWT and Yukon mainland and offshore	Dietrich, JR	ISPG	PG	PR	Mack, Yk	97, 107, 117	2523
	Obj: To provide a reliable and adequate data base for assessment by the Geological Potential Subcommittee of the area's hydrocarbon potential and to document proven and potential hydrocarbon occurrences in the area.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750027	Diagenesis of organic matter and clay minerals in sediments in relation of petroleum generation  Obj: To correlate the various methods of determining the diagenesis of sediments in relation to oil and gas potential so that the accuracy of each can be determined. To define the ranges in which petroleum generation can be expected in each method. To examine the relationship between clay diagenesis, oil migration and cementation of petroleum reservoirs.	Foscolos, AE	ISPG	PG	GC	Frank, Mack BC Alta	94 M,N; 107 E; 97 B,C; 72; 73 E; 82; 83 B,G,H	2523
750032*	Regional Airborne Data Processing Methods  Obj: To adapt digital data enhancement and display techniques and to develop new techniques, as required, in relation with the general utilization and interpretation of regional airborne magnetometer and VLF-EM survey data.	Teskey, DJ	RG	RG	GDP	Ont	31 C	2571
750035*	Biostratigraphic study of Mesozoic rocks in the Intermontane and Insular Belts of the Canadian Cordillera  Obj: To determine the biostratigraphic succession of the Mesozoic strata, particularly Jurassic, and to define a geological history and paleogeography in the evolution of the Mesozoic model.	Tipper, HW	C	-	BG	BC Yk	92 H,L; 93 E; 94 D; 103 C,F,G; 104 H-K; 105; 115	2511
750036*	Silurian and Devonian spores of Canada  Obj: To refine palynological methods of dating and correlating Silurian and Devonian rocks of Canada, by (a) identifying and describing Silurian and Devonian spores, (b) determining their value in terms of regional and world wide biostratigraphy and (c) establishing stratigraphic reference sections and zonations for spores in Silurian and Devonian sedimentary basins in Canada.	McGregor, DC	ISPG	P	OP	-	-	2522
750038	Pleistocene-Holocene Basin sedimentation  Obj: (1) Describe the Pleistocene-Holocene sedimentary history of the continental shelves of eastern Canada using paleontological and geochemical evidence of sedimentary basins. (2) Improve the understanding of the genesis of gaseous hydrocarbons in sediments. (3) Establish geological environments favorable for the preservation of microfossils.	Vilks, G	AGC	EMG	PEC	Atlantic Offshore	21 B	2542
750039	Geochemical Information Systems  Obj: To provide a liaison between the available data processing facilities and scientists within the geochemistry sub-division to design, implement and document systems to facilitate the expeditious computer processing of machine readable geochemical data, and to manage the archiving of such data.	Ellwood, DJ	RG	RG	MD	-	-	2572



2542

-

GCD

EMG

AGC

AGC

Taylor, RB

Consulting advice on physical environmental problems in the coastal zone

750043

Obj: To provide consultation and expertise on environmental problems in the coastal zone of the Maritimes. This advice is to be provided in response to specific requests.

2542

Atlantic Offshore

OGC

EMG

AGC

AGC

Rashid, MA

Geochemical transformations and reactions of organic compounds in recent marine sediments

750046

Obj: a) To determine the influence of depositional environment in the quantitative and qualitative distribution of organic compounds so as to decipher the physical and chemical history of sedimentation. b) To isolate, identify and characterize various chemo-taxonomic constituents so as to develop guide lines for the interpretations of major geological events. c) To determine and correlate early diagenetic transformations with long-term diagenesis resulting in the evaluation of oil and gas. d) To understand the role and influence of organic compounds on solubility, mobility and recycling of trace metals. e) To collect and compile geochemical data on sedimentary organic matter to write a book for the benefit of geologists, geochemists and other disciplines related to organic geochemistry.

2572

NB NS  
Nfld Ont  
Sask BC  
Yk Frank

RS

RGG

RGG

RGG

Hornbrook, EHW

National geochemical reconnaissance

750051

Obj: 1. To provide for governments and industry nationally consistent, systematic, multi-element, reconnaissance data to indicate areas of mineral commodity potential for exploration and resource appraisal purposes and to provide information on the natural abundance of elements in the environment.  
2. To investigate geochemical variability in lake surveys in various terrains.

Pts 1-16; 23; 27;  
31 C,F; 37; 41; 42;  
52 A,B; 74 J; 104;  
105; 117

2521

Mack

M

ISPG

RG

ISPG

Cook, DG

Structural studies in the Mackenzie Arc, Franklin Mountains and Coleville Hills

750055

Obj: To conduct detailed examinations of typical structures and thus obtain a clearer understanding of the geometry and kinematics of deformation within the study area. To remap those areas within the Mackenzie Arc and Franklin Mountains that are considered to have been inadequately mapped in initial reconnaissance stages.

96 B,C,E,F

2562

Sask Que

URE

EG

EG

Tremblay, LP

Geology of Uranium Resources of Canada-2

750058\*

Obj: To carry out comprehensive research on the geology of uranium deposits in order to:  
(1) support or provide geologically based estimates for Canada's uranium resources;  
(2) provide guidelines for their discovery;  
(3) provide advice to government for uranium policy and related matters.

73; 74; 22; 23; 24;  
31; 32; 33

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750061*	Lower Paleozoic geology of Eastern Canada	Sanford, BV	P	-	SP	Ont Que	pts 31, 41, 52	2531
	Obj: (1) To continue detailed and regional studies of Lower Paleozoic terrain of eastern Canada, i) in northern and eastern offshore regions, reconnaissance mapping on an opportunity basis and ii) in the southern regions, detailed mapping when required for terrain studies. (2) To study all data that become available from petroleum exploration for purposes of hydrocarbon evaluation of the frontier basins.							
750063*	Quaternary geochronology, Arctic Islands	Blake, W, JR	TS	-	PG	Frank	25-28; 29 F; 35-38; 39 B, C, E-H; 47-48; 49 A, B, D, E, H; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560	2551
	Obj: (1) To establish a chronostratigraphic framework for Quaternary time in the Arctic Archipelago. (2) To investigate the suitability of other methods of age determinations, especially those beyond the range of <sup>14</sup> C. (3) To determine rates of crustal movement. (4) To reconstruct environments and events for as much of Quaternary time as possible.							
750068	CIDA Liaison and Project Coordination	Manistre, BE	RRG	-	SP	-	-	2570
	Obj: To provide assistance in technical matters to CIDA in connection with Geoscience Aid Projects under the terms of the EMR/CIDA Memorandum of Understanding. Liaison with the EMR liaison branch Planning and Evaluation and with the Commonwealth Science Council through the interdepartmental CSC committee.							
750069*	Geology of uranium resources of Canada 3	Bell, RT	EG	-	URE	BC Yk Mack Alta Sask Man	93 K, L, M, N; 94 C, D, E; 104-F, G, H, J, K; 105 B, C; 115 N, O; 116 B, C	2562
	Obj: To carry out comprehensive research on the geology of uranium deposits in sedimentary basins in Canada west of the Canadian Shield in order to: (1) provide or support geologically based estimates of Canada's uranium resources; (2) provide guidelines for discovery of deposits; (3) provide advice to government for uranium policy and related matters.							
750071*	Quaternary geology - terrain inventory, Boothia Peninsula, northeastern Keewatin, and Somerset and Prince of Wales Islands	Dyke, AS	TS	-	RP	Frank Kee	57 A-D, F, G; 58 A-D; 67 E, H; 68 A-E	2551
	Obj: To map, describe, and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover in order to provide areal knowledge of geology and terrain as background information relative to land use planning and various aspects of engineering construction, to gather information pertinent to the Quaternary history of the area.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
750072	Quaternary geology, terrain inventory, northeastern Manitoba Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover in order to provide areal knowledge of geology and terrain as background information relative to land use planning and engineering construction, to provide data relative to terrain sensitivity rating and to determine the Quaternary history of the region.	Dredge, LA	TS	-	RP	Man	54 D, E, F, K, L, M; 64 I, J, K, L, M, N, O, P	2551
750074	Uranium drift prospecting techniques; Klassen, RA Lower Kazan River area Obj: To study glacial and postglacial processes that can affect the geochemical properties of till and other sediments and to investigate the use of till in mineral exploration for uranium and other metals.	Klassen, RA	TS	-	SMT	Ke	55 M, N, L; 56 C, D; 65 P, I, O; 66A	2552
750076*	Quaternary geology of the Canadian Cordillera Obj: To gather and synthesize information regarding Quaternary deposits, stratigraphy, geomorphology and chronology of the Canadian Cordillera.	Fulton, RJ	TS	-	RP	BC Yk Alta, Mack	82; 92 G; 93; 103 105 M; 115 P	2551
750077	Hydraulic, morphologic and morphometric studies of selected rivers along the Mackenzie Highway Obj: To identify and assess natural change through time in the channel and hydraulic characteristics of selected gravel streams along Mackenzie Highway, and to identify and assess the impact of Mackenzie Highway construction on the channel and hydraulics characteristics of the same rivers.	Eggington, PA	TS	-	SMT	Mack	95 N, O, J; 96 C, E; 107 B	2552
750078*	Quaternary geology-terrain inventory, Prince Rupert-Terrace - Smithers area Obj: To map, describe and explain the unconsolidated deposits and landforms in order to provide areal knowledge of geology and terrain as background information relative to forestry, land use planning, urban and industrial development and various aspects of engineering construction and to determine the Quaternary history of the region.	Claque, JJ	TS	-	RP	BC	Pts 93 L, M; 103 B, C, F, G, J, K, I, P	2551
750082	Structural analysis of the Fernie Basin Obj: To establish a detailed structural model of the Fernie Basin, and in particular to elucidate the structural behaviour of coal as an element of the sedimentary succession as an aid to the evaluation of the coal resources of the Fernie Basin.	Ollershaw, NC	ISPG	CG	CG	BC	Pts 82 G	2524
750083*	Mesozoic stratigraphy and Basin analysis of Sverdrup Basin, Arctic Archipelago Obj: 1. To determine regional stratigraphic relationships within the Mesozoic strata. 2. To determine environments of deposition of the strata. 3. To determine the geologic history of the Sverdrup Basin during the Mesozoic. 4. To assess the economic potential of the Mesozoic strata.	Embry, AF	ISPG	RG	AI	Frank	29, 39, 49, 59, 69, 79, 87, 99, 120, 340, 560	2521

Stratigraphy, sedimentology and diagenesis of Paleozoic rocks in the Mackenzie Mountains and northern Rocky Mountains

Obj: 1. Revision of Silurian, Devonian and Carboniferous stratigraphy of the Mackenzie Mountains and northern Rocky Mountains leading to an improved understanding of shelf, slope and basinal facies and their potential for base metal mineralization.  
2. The determination of a more precise location for the shelf-to-basin transition in these rocks which may, in itself, provide a guide to mineralization.  
3. Analysis of diagenetic events reflecting burial and post-burial fluid movements that have affected this sequence, both with respect to mineralization and hydrocarbon generation and emplacement.

Investigations concerning the optical properties of coals and dispersed organic materials

Obj: To provide information on metamorphism and petrographic properties of coal and dispersed organic matter for the GSC geologists, the data to be used for establishing metamorphic regimes for correlation of coal seams and other rock bodies and for estimating paleotemperatures and burial depths. Largely a service project.

Development of computer-based statistical techniques applicable to regional geological and mineral deposit data

Obj: Develop and apply statistical techniques as an input to methods for regional resource evaluation of geological data and mineral deposit data

Microscopic study of pyrite in main seams of Sydney coalfield, Nova Scotia

Obj: Determine the mode and distribution of pyrite in coal, and if possible, establish geological trends that may permit prediction of high sulphur areas ahead of present (submarine) workings.

To advise the Cape Breton Development Corporation on coal geology for its operation in the Sydney coalfield

Obj: To provide geological information as an input in the planning of new mines, and to interpret geological features in present underground workings as an aid to continued mining developments.

82 G; 93 O,P

BC

CT

ISPG CG

Kalkreuth, WD

Morrow, DW

2563

-

-

GM

EG

Chung, CF

Development of computer-based statistical techniques applicable to regional geological and mineral deposit data

2543

11 K,G

NS

-

AGC EPG

Hacquebard, PA

Microscopic study of pyrite in main seams of Sydney coalfield, Nova Scotia

2543

-

NS

EPG

AGC EPG

Hacquebard, PA

To advise the Cape Breton Development Corporation on coal geology for its operation in the Sydney coalfield

2543

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750098*	Metallurgy of the southwestern part of the Canadian Shield	Franklin, JM	EG	-	MDG	Man Sask Que Ont Frank Kee Mack	32, 41, 42, 43, 52, 53, 54, 52, 63, 64, 73, 74	2561
750102	Regional syntheses, southern Keewatin, Project I	Eade, KE	P	-	NC	Kee	65 C	2531
750108*	Marine surficial geology and sedimentation, British Columbia	Bornhold, BD	C	-	MG	Pacific Offshore	-	2512
750110	Federal-Provincial mineral evaluation liaison and co-ordination	Findlay, DC	DGO	-	SP	-	-	2560
760004*	Mineralogy and geochemistry of the unconsolidated cover - central Arctic	Adshead, JD	TS	-	SMT	-	-	2552
760005	Environmental geology of eastern Arctic Coasts	McLaren, P	C	-	MG	Frank	38 B	2512

Obj: To provide a regional synthesis of the geology of a large part of the Canadian Shield south of Lat. 60° and west of Long. 25°, in order to determine the origin, setting and distribution of mineral deposits as an aid to prospecting and to the economic development of the region.

Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic synthesis; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.

Obj: In order to provide the sedimentological framework and geological perspective for environmental concerns and landmass description:  
 (1) map, describe and explain in a systematic manner the physiography, surficial deposits, processes and history of the Pacific continental shelf, slope, deep sea, straits, and fiords of British Columbia;  
 (2) determine the composition, distribution, transport mechanisms and flux of suspended particulate matter in the marine waters off the British Columbia coast.

Obj: To provide technical advice and liaison on the Geological Survey's involvement in the design and monitoring of joint federal-provincial actions in mineral resource evaluation and development; to participate, as required in the co-ordination, implementation, and management of such projects and specifically in the Non-Renewable Resource Evaluation Program (NREP).

Obj: 1. To use mineralogical and chemical criteria to define weathering in the active layer of surficial deposits in Arctic regions.  
 2. To relate information on weathering products and processes to problems in i) geochemical prospecting, ii) northern construction, and iii) waste disposal.

Obj: To investigate and describe central Arctic coasts based on consideration of bedrock stratigraphy and structure, Quaternary deposits and events, physiography and bathymetry, sediment input, sea ice dynamics, ocean tides, currents and waves, and other pertinent factors in order to establish a system for coastal description as baseline information for proposed energy/mineral resource development.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept- Classification
760008	Geologie du Quaternaire region de Bathurst-Campbellton, Nouveau Brunswick	(Gauthier, RC)	TS	-	RP	NB	21 N, O, P	2551
	Obj: Cartographie, decire et expliquer les depots meubles et formes de terrain, en integrant des informations reliees a la planification territoriale, l'exploration minerale, la localisation des ressources granulaires, les eaux sous-terraines, la foresterie, le developpement urbain et industriel. Le travail final comportera une synthese de l'histoire quaternaire regionale.							
760010*	Surficial geology, geomorphology and terrain inventory of the Ringnes and adjacent islands	Hodgson, DA	TS	-	RP	Frank	59 B, C, F; 69 C, D, E, F; 79 D, E	2551
	Obj: To map, describe and explain surficial materials, landforms, vegetation and active processes, in order to provide base data necessary for land management, for engineering studies and to determine the Quaternary history of the region.							
760014*	Geology of uranium resources of Canada-4	Dunsmore, HE	EG	-	URE	NS NB PEI Nfld Frank Que	11 D, E, F, G, J, K, L, N, O; 12 A, B, H; 20 O, P; 21 A, B, G, H, I, J, N, O, P	2562
	Obj: Comprehensive research on the geology of uranium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium resources; (2) provide guidelines for their discovery; (3) provide advice to government for uranium policy and related matters.							
760015*	Eastern Baffin Island shelf bedrock and surficial geology mapping program	MacLean, B	AGC	RR	EAO	Arctic Offshore	Pts 15, 16, 17, 25, 26, 27, 28, 38	2541
	Obj: To investigate and map the geology and near surface structure of the rocks occurring at the pre-Pleistocene unconformity on the eastern Baffin Island shelf and adjoining areas. To obtain geophysical data to put bedrock and surficial data in a regional context and to check the validity of geophysical interpretation against bedrock sample data. To investigate the distribution and geological history of the unconsolidated sediments on the eastern Baffin Island shelf and adjoining shelf areas.							
760021*	Structure and stratigraphy of Devon Island	Thorsteinsson, R	ISPG	RG	AI	Frank	48 F, G; 58 F, G, E, H; 59 A; 49 A	2521
	Obj: To delineate the stratigraphy and structural history of Devon Island and Vandom Fiord map-area with a view to helping assess the size, grade, mode of occurrence, origin and potential of mineral deposits that may occur there.							
760023*	Precambrian geology of south-east Ellesmere, Devon and Cobourg Islands	Frisch, T	P	RG	NC	Frank	Pts. 38 B; 39 B-H; 48 E-H; 49 A, B, D, E, H	2531
	Obj: To complete the reconnaissance geological mapping of the northern Churchill Province.							

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
760024	Keskarrah Bay map-area, District of Mackenzie, NWT Obj: To determine the extent and significance of Archean basement rocks in the area; to identify stratigraphic control of base metal mineralization to improve understanding of iron formations and their significance in the region; and to obtain a better understanding of the evolution of an Archean basin in the Slave Province.	Henderson, JB	P	-	BS	Mack	86 H/2,3,6,7	2531
760025	Geology of Amer Lake map-area District of Keewatin, NWT Obj: To provide a comprehensive study of the Amer Lake map-area in order to refine and update the 16-mile reconnaissance mapping of that area.	Tella, S	P	-	NC	Kee	66 H	2531
760026	Geology of Penrhyn Fold Belt, Melville Peninsula, NWT Obj: To determine the structural, metamorphic, stratigraphic and age relations between basement gneisses and migmatites, and the covering Penrhyn Group metasedimentary gneisses and schists. To elucidate the structural development of polyphase folds in an area of high-grade metamorphic rocks. To provide structural-stratigraphic and isotopic age bases for regional correlation.	Henderson, JR	P	-		Frank	46 O,P; 47 A	2531
760027*	Redbed sequences in Canada Obj: To determine the origin and sedimentological and tectonic processes that yield redbed sequences; to determine the influences of climate, topography, weathering, sedimentation and diagenesis on their origin; and to determine the processes which contribute to the concentration of economic minerals in redbed sequences.	Chandler, FW	P	-	PET	Man NS Ont Nfld	63 K; 11 K 42 D,E; 52 A,H; 12 A, H; 2 E	2531
760042*	Jurassic biostratigraphy and paleontology of selected areas of western and Arctic Canada Obj: To provide detailed biostratigraphic and lithostratigraphic data on Jurassic rocks of selected parts of British Columbia, Alberta, Yukon Territory and Northwest Territories, by field work and study of submitted fossils. To describe taxonomically the most important faunal elements.	Poulton, TP	ISPG	P	MaP	BC Alta Yk Frank Mack	82 G, J, O; 83; 92 H, O; 93 O; 94 B; 103; 104; 105 D; 106 D, M; 107 M; 115; 116 A, B, C, N, O, P; 49; 59; 69; 79; 89; 340 D; 560	2522
760043	Regional geochemistry Newfoundland & Labrador Obj: 1. Illustrate the effectiveness of MGR regional geochemical surveys in providing a data base adequate for mineral exploration and mineral inventory studies. 2. Develop a geochemical survey methodology appropriate to the Newfoundland and Labrador geological contexts.	Boyle, DR	GGG	RGC	RS	Nfld	13 J, K, N	2572

760045\* Evaluation of Uranium Reconnaissance Data Charbonneau, BW RGG RR ADI Ont Frank 21 A; 11 D; 104 N; 65 B, C; 74 O, 75 A, 31 C, F NS BC, Sask 2573

Obj: (1) To develop guidelines for interpretation of Uranium Reconnaissance Program data;  
(2) to identify features in reconnaissance data that are diagnostic of mineralization;  
(3) to maximize the usefulness of URP data;  
(4) to correlate URP data with uranium resource potential.

760047\* Regional geochemistry-Northern Canadian Shield Maurice, Y RGG RGC RS Mack Kee 76 H, I; 75 E, F-K; 74 H; 46 N, O, P; 47 A, B, E, F Frank Sask 2572

Obj: To determine the nature and factors affecting the distribution of trace elements within bedrock, overburden and stream and lake waters and sediments, etc. in order to:  
(1) evaluate the effectiveness of the NGR program (project 750051) and improve the operating techniques and specifications;  
(2) provide methodology for interpreting and following up NGR reconnaissance results;  
(3) assess the mineral potential of various regions and rock units with emphasis on granitoid rocks.

760049 Gamma-Ray Laboratory Operations Cameron, GW RGG RR CMC 2573

Obj: To provide analytical facilities for the determination of K, U, and Th in geological samples, and for the determination of radioactive disequilibrium in rock samples; to provide adequate standards for calibration of the lab as well as standards for the various calibration facilities constructed; to provide a data storage and retrieval system related to the analytical results produced by the laboratory.

760053 Hydrocarbon geochemistry of Arctic Archipelago Powell, TG ISPG PG GC Frank 98, 88, 78, 68, 58, 99, 89, 79, 69, 59, 49, 560, 340 2523

Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product type so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.

760054 Hydrocarbon geochemistry of Canadian East Coast offshore Powell, TG ISPG PG GC Atlantic Offshore 14, 3, 10, 11, 20 2523

Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product type so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.



Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
760056*	Evaluation of coal deposits of western Canada Obj: To establish a coal resource base in the coal deposits of western Canada from which quantitative, qualitative, mineability and environmental studies can be made.	Kamenka, LA	ISPG	CG	RE	Alta BC	82 J; 92 O; 93 B,C,G; 83 A	2524
760058*	Vegetation distribution and relationships to surficial materials--Arctic Obj: To map and describe vegetation distribution and plant communities as they relate to selected areas of the Arctic Islands.	Edlund, SA	TS	-	RP	Frank Kee	54; 56; 57; 58; 68; 69; 78 F,G; 79; 88; 87	2551
760059*	Study of large landslides in the Cordillera Obj: To determine the setting and mechanisms of major slope failures in selected parts of the Cordillera to establish criteria for assessing potential landslide regions and specific localities.	Eisbacher, GH	C	-	BG	Mack YK BC	92 G; 93 D; 106 C,F; 95 L,M; 94 F,K; 105; 116	2511
760060	Mineral and energy resource evaluation; Probabilistic Methods Obj: Preparation of a book to bring together and provide a perspective for those mathematical methods which, in one way or another, aim to predict the places and modes of occurrence of undiscovered mineral resources.	Agterberg, FP	EG	-	GM	-	-	2563
760061*	Regional synthesis of the Grenville Province in Ontario and western Quebec Obj: To effect a regional synthesis of the geology of the Grenville Province in Ontario and western Quebec and to interpret the synthesis in terms of the geological evolution of the area, and in cooperation with project 750062, of the Grenville Province as a whole.	Davidson, A	P	-	SG	Ont Que	31 E,F; 41 H; 32; 42; 21	2531
760062*	Geology of bedded phosphate deposits in Canada Obj: To identify Canadian phosphate resources and to develop an understanding of the regional geology relationships: patterns and occurrences, associations, facies, paleogeography, etc.	Christie, RL	ISPG	RG	AI	Alta, BC YK Mack Kee	-	2521
760063	Hydrocarbon geochemistry of northern interior plains and Beaufort Sea Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product types so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.	Snowdon, LR	ISPG	PG	GC	YK Mack	106, 107, 117	2523

760064	Gross, GA	Geology of Mineral Resources in the Ocean	EG	-	SP	-	-	2561
		Obj: (1) To provide a base of geological information for identifying and determining the kinds, distribution and possible extent of ocean mineral resources, and for evaluating their significance to Canada. (2) To provide a direct and independent national competence for evaluating these resources and for appraising implications of their development with respect to Canadian mineral policy and the use and marketing of Canadian mineral products.						
760065	Butt, I	Digital Compilation of Queenair Aeromagnetic Data	RG	RG	GDP	-	-	2571
		Obj: (1) Production of total field and vertical gradient aeromagnetic contour maps relating to the yearly GSC Queenair airborne survey operations; (2) Improved modes of presentation of the above data as new computer facilities develop; (3) Maintain an up-to-date bank of the data described above for ready retrieval for interpretation purposes. (4) Processing and presentation of VLF-EM data						
770001*	Souther, JG	Study of the Cenozoic Evolution of the Western Cordillera	C	-	BG	BC	Yk	pts. of 82, 92, 93, 103, 2511 94, 104, 95, 105, 115 A-C, 106, 116, 117, 114 O,P
		Obj: (1) To compile and publish a review of existing data on the Cenozoic geology of the Cordillera. (2) To obtain data from selected areas where additional data are required or which illustrate typical relationships. (3) To publish a series of topical papers based on selected field studies leading to a synthesis of the Cenozoic evolution of the Cordillera.						
770004*	Jansa, L	Reconnaissance field study of the Mesozoic sequences outcropping on the Iberian Peninsula	AGC	EPG	SSG	-	-	2543
		Obj: To provide evidence that the sedimentary sequences of the Iberian Peninsula are co-eval with similar sequences beneath the Grand Banks.						
770006*	Yorath, CJ	The Canadian Pacific Continental Margin	C	-	MG	BC, Alta		82 O,N,L; 92 I,H,G 2512
		Obj: To describe the stratigraphy, sedimentology, and structure of the Canadian Pacific Continental Margin both in the offshore and, as appropriate, within the Insular Belt. To determine the tectonic history of the region and to contribute to the realization of its economic potential.						

2531

77 A, B, D, E; 76 G, J, K, M, N, O (parts of); 86 O, P

Mack  
Frank

BS

P

Campbell, FHA

Geology of the Coronation Gulf area

To establish the geology of the extrusive and sedimentary rocks of these areas; to compile a detailed stratigraphic-sedimentologic analysis of the Parry Bay and Kanuyak Formations, and the Coppermine River Group, and to relate these rocks to the underlying Tinney Cove and Elllice River Formations; to correlate, if possible, the Hornby Bay dolomite and sandstone with the Parry Bay, Elllice and Tinney Cove; to relate tectono-depositional events in other post-Coronation Geosyncline sequences. To determine the extent of copper mineralization in the Coronation lavas, and uranium content in the Parry Bay and other sedimentary rocks.

parts of 37 G; 38 B, C; 48 A-D

Frank

NC

P

Jackson, GD

Operation Borden

770013\*

A study of the stratigraphy, sedimentology, and economic potential of the upper Proterozoic rocks (EQUULIK and ULUKSAN GROUPS) of northern Baffin and Bylot Islands, and of the relationships between these strata and the underlying basement gneisses. A basin analysis will supply data for comparison and possible correlation with strata of west Greenland and Arctic Canada.

2571

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MM

RG

Sawatzky, P

High Resolution Aeromagnetics (Instrumentation Development)

770015

To improve the performance of the GSC experimental high resolution/gradiometer survey system, in terms of sensitivity, precision, reliability, efficiency and endurance.

2511

104 H, I, J

BC

BG

C

Gabrielse, H

Operation Dease

770016

To complete and update the 1:250,000 geological mapping of Cry Lake and Dease Lake map-areas and N<sub>2</sub> Spatzizi.  
To publish reports of field activities and papers on specific aspects of the geology of the region.  
To complete and publish a final map and memoir on Cry Lake map-area and a final map and paper on Dease Lake map-area.

2511

105 C, E, I; 115 I

Yk

BG

C

Temelman-Kluit, DJ

Stratigraphy, structure and metallogeny of the northern part of the Intermontane Belt (Whitehorse trough) in the Canadian Cordillera

770017\*

To provide data on, and extend our understanding of, the relationships between stratigraphy, structure, sedimentary facies and mineral deposits on the northern Intermontane Belt of central Yukon.

2531

86 J, O

Mack

BS

P

Hoffman, PF

Hepburn Batholith, Hepburn Lake map-area, District of Mackenzie

770019\*

To provide an analysis of the deposition and deformation within a eugeosyncline, and describe the plutonic and metamorphic character of the batholith, in order to reconstruct the tectonic history and understand the significance of the batholithic-eugeosynclinal belt as a whole, including its mineral deposits.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770020	Kemano Project Obj: To produce a report and geological map of Whitesail Lake (W <sub>2</sub> ) map-area, on a scale of 1:250,000, with one or more 1:50,000 maps of the most critical areas.	Woodsworth, GJ	C	-	BG	BC	93 E	2511
770024*	Geology of uranium resources of Canada-V Obj: To carry out comprehensive research on the geology of uranium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium resources; (2) provide guidelines for their discovery; (3) provide advice to government for uranium policy and related matters.	Gandhi, SS	EG	-	URE	BC Mack	<u>75, 76, 85, 86</u>	2562
770025	Regional Geochemistry - Yukon Obj: 1) To assess through orientation surveys the use of various geochemical sample media as a fundamental step towards the development of geochemical methodology appropriate to the project area; 2) To illustrate through detailed interpretation surveys the effectiveness of such surveys as a means of evaluating the mineral potential; 3) To provide a data base for the compilation of a National Geochemical Reconnaissance Map as a contribution to the mineral potential inventory of the nation.	Goodfellow, WD	RGG	RGC	RS	Yk BC Mack	105 A, B, H, I, F, O; 106 E; 116 B, L, M, N; 115 G, I, J; 117 A, B, C, D; 95 J, K, N	2572
770026	Geology of Red Indian Lake, west half, Newfoundland Obj: (1) To revise the geology and evaluate the economic mineral potential of Red Indian Lake, west half (12 A, W <sub>2</sub> ) by mapping at 1:50,000 scale and by compilation where needed. (2) To monitor, assess and then absorb results of geological mapping of insular Newfoundland under the Canada-Newfoundland Mineral Development Subsidiary Agreement.	Herd, RK	P	-	SG	Nfld	12 A, B	2531
770027	Proterozoic redbeds of Richmond Gulf Obj: (a) To determine the processes of formation of Proterozoic redbeds and associated metallogenesis; (b) To correlate Richmond Gulf sequence with sequences elsewhere on Canadian Shield.	Chandler, FW	P	-	PET	Que	34 B, C	2531
770028	Regional Synthesis - Baffin Island: Project I Obj: Regional synthesis of all aspects of the Precambrian geology of Baffin, eastern Devon and southeastern Ellesmere Islands in the District of Franklin, N.W.T.	Jackson, GD	P	-	NC	Frank	56-59; 45-49; 34-38; 24-27; 14-16	2531

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770030*	Géologie du Quaternaire, région de l'Outaouais supérieur Québec	Veillette, JJ	TS	-	RP	Que Ont	31 M, L, 2	2551
	Obj: Cartographier, décrire et expliquer les dépôts meubles formés de terrain, avec objectifs secondaires de: (1) Fournir des données relatives à l'utilisation du sol, à la prospection et localisation de sable et gravier, aux réserves d'eaux souterraines, à la prospection géochimique. (2) Déterminer les propriétés physiques et mécaniques de certain dépôts.							
770031	Surficial geology and terrain evaluation, southern Yukon	Klassen, RW	TS	-	RP	Yk BC	94 M; 95 D; 104 P; 105 A-D, E, J, K, L; 115 A, H, I; 114 P	2551
	Obj: To map, describe and explain the surficial materials and landforms and to provide areal geologic-geomorphic data and knowledge of the stratigraphy, age and history of surficial deposits to provide background information for land-use planning and engineering development.							
770032	Geological characterization of Arctic lakes: sediment properties and sedimentary processes	Adshead, JD	TS	-	SMT	Kee	66 A, H; 65 A, P, I, H; 55 E, F, M; 56 D, E, N, K	2552
	Obj: To characterize Arctic lakes by providing a framework of mineralogical and compositional data on lake sediments and watersheds, and to evaluate postglacial sedimentation and diagenetic processes to assist 1) potential construction activities, 2) environmental impact studies, and 3) mineral exploration programs.							
770035	Periglacial processes and slope movement, central Keewatin	Eggington, PA	TS	-	SMT	Kee Man	54 L; 55 L; 65 I, O, P,	2552
	Obj: (1) To determine the rates of slope mass movement; (2) to determine the processes involved in mudboil development and their rate of development; (3) if possible relate slope movement to mudboil development and morphology. The study area straddles the proposed Polar Gas pipeline route and hence will provide terrain data for the assessment of that route as well as information that could be used for future development projects.							
770037*	Slope processes and cryogenic movements, Arctic Islands	Heginbottom, JA	TS	-	GP	Frank	58 F, G; 68 G, H; 79 B	2552
	Obj: To document the nature, extent and rate of slope processes and cryogenic movements in a high-arctic, permafrost environment, and to determine the importance of surficial material, geomorphology, ground ice distribution, soil thermal and moisture regime, and other factors on them.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770038	A text on Canadian Geology and Natural Resources	Neale, ERW	ISPG	GI	-	Frank BC Ont NS	49 C,D; 93 I/2,7; J/4; K/8; 103 I/2, J/8; 92 F/8, I/2; 82 M/5, F/5,6	2525
770041*	Compositional Characteristics of Coals from Hat Creek, British Columbia	Goodarzi, F	ISPG	CG	CT	BC	92 I,P	2524
	Obj: i) To determine the petrographic character of the coals of the Hat Creek deposit ii) To determine the suitability of vitrinite reflectance as a rank parameter in these low rank coals (lignite to sub-bituminous) and if suitable, to use this parameter as the basis of determination of the relative timing of coalification and deformation iii) To examine the nature, vertical and lateral variation of associated clastics in boreholes and to combine these data with those of the petrographic study and a literature survey to interpret the depositional and post depositional environment of the deposit.							
770044*	Lower Paleozoic basin-to-platform relationships in the Cordillera	Cecile, MP	ISPG	RG	M	Mack BC Yk Alta	106 A,B,E,F,G,L; 94 B, F,G; 105 I,O,P; 116 H,I; 82; 83; 92; 93; 95, 96	2521
	Obj: To contribute to the subdivision, mapping and understanding of important Lower Paleozoic basinal sequences through: (a) Tracing of time-rock units from platform to basinal sequences, (b) Correlation of events on the platform with responses in the basin, (c) Identification of mappable units in basinal sequences, on lithological paleontological, geochemical or other criteria, (d) Estimation of basinal water depths, (e) Elucidation of the composition and movement of basinal fluids, as deduced from diagenetic events.							
770045	Taxonomy and biostratigraphic distribution of Mesozoic and Paleogene megaspores	Sweet, AR	ISPG	P	MIP	Mack Frank Ont, NS	107 B; 88 C; 98 E; 79 B,D; 69 D; 49; 42 N; 11 E	2522
	Obj: 1) To describe and classify megaspores from northern Canada and when necessary for comparative purposes, from southern localities. 2) To establish biostratigraphic zonations based on the described megaspores.							

Project Number Title Project Leader Div Subdiv Sec Prov NTS Classification

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770047*	Studies of coal basins of western and northern Canada	Ricketts, BD	ISPG	CG	GC	Alta Yk BC Mack	82 G, J, O; 107 B; 117 S; 116, F, G; 106 E, F	2524
770048*	Obj: To provide geologic data for the evaluation of late Paleozoic, Mesozoic and Tertiary coal resources of western and northern Canada; to prepare suitably illustrated geological reports for publication; to provide resource data for the National Coal Inventory.  Brachiopods of the Lower Upper Devonian Waterways Formation of northeastern Alberta	Norris, AW	ISPG	P	Map	Alta	74 D, E; 84 P	2522
770051	Obj: To describe and illustrate the rich brachiopod fauna of early Frasnian (early Late Devonian) age that occurs in the Firebag, Calumet, Christina, Moberly and Mildred Members of the Waterways Formation outcropping along the Clearwater and Athabasca Rivers of northeastern Alberta (see GSC Memoir 313 by Norris).  The relationship between Kerogen (type and rank) and chemical extract data, for the purpose of source rock evaluation	Kalkreuth, WD	ISPG	CG	CT	Kee Mack	107; 117; 99; 89; 79; 69; 59; 49; 560; 340	2524
770053	Obj: To assess kerogen type and degree of maturation by microscopical methods and correlate the results with organic chemical data.  Evaluation of Canada's Potential of Heavy Oil and Oil Sands Resources	Raicar, M	ISPG	PRAS	-	Alta Sask	-	2526
770054	Obj: To determine the extent of in-place resources; to evaluate various processes to recover these resources; to determine the recoverable portion of these resources; to evaluate the impact of price changes on the potential supply of these resources in Canada.  Sample preparation and mineral separating	Delabio, RN	CLTS	-	M	-	-	259
770055*	Obj: To provide sample preparation and mineral-separating services in support of Branch projects.  Metallogeny of the northwestern part of the Canadian Shield	Roscoe, SM	EG	-	MDG	Mack Kee Man Sask	46, 55, 56, 64, 65, 66, 75, 76, 85, 86	2561
770060	Obj: To provide a metallogenic basis for the evaluation of the mineral resources of the northwestern part of the Canadian Shield.  Environmental assessment of coal resource development, Canadian Cordillera	Jackson, LE	TS	-	GP	Alta BC	82 G, J; 83 C, E, F, L; 92 I	2552
770066	Obj: Assessment of the geologic and hydrologic impact of open pit coal mining and emplacement of coal spoil and the investigation of geotechnical problems attendant with the reclamation of lands disturbed by coal mining operations in the Canadian Cordillera.							

Project Classification

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770061	Mineralogy of uranium deposits in granitic rocks in the Grenville Structural Province	Rimsaite, JYH	EG	-	URE	Ont Que	12, 31	2562
	Obj: To determine the mineralogy of selected uranium deposits in pegmatitic and other granitic rocks as an input to the evaluation of uranium resources in these deposits and in related terranes.							
770063*	Geology of Lead and Zinc resources of Canada - II	Lydon, JW	EG	-	MDG	Yk Mack Que Man Frank	32 D, F, J; 63 K-N; 105 I, O; 48, 68	2561
	Obj: (1) support or provide geologically based estimates of Canada's resources of these commodities; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.							
770067	Canada Oil and Gas Pool data file	Nairn, KN	ISPG	PRAS	-	-	-	2526
	Obj: To incorporate and maintain a data base of all parametric data relevant to the accumulation and exploitation of oil and gas pools in western, frontier and offshore regions of Canada. To provide a data base suited to reserves calculation, resources estimation, input to economic (costing and project development) studies and for application of an research on statistical methodologies for the evaluation of undiscovered hydrocarbon resource potential in all petroliferous regions of Canada.							
770068	Petroleum Evaluation of Mainland Territories	Recruit	ISPG	PG	PR	Yk Frank	85, 86, 95, 96, 97 A, B, C, D, F; 105 P; 106 A, B; 106 H-P; 107 A-E; 116 F-P; 117 A-D	2523
	Obj: To provide a reliable and adequate data base for assessment by the Geological Potential Subcommittee of the project's hydrocarbon potential. To document proven and potential hydrocarbon occurrence in the area.							
770070*	Regional Geological Synthesis, Central Superior Province	Card, KD	P	-	SG	Ont Que	41, 42, 32	2531
	Obj: To compile and synthesize in the form of maps and reports, all geological work to date in NTS map-areas 42 and parts of 32 and 41. To outline areas requiring more coverage or updating and to evaluate what problem-oriented work can be undertaken: (a) to improve regional correlation in Superior Province; and (b) to further understanding of Superior-Grenville boundary. To produce geological maps for publication at 1:1,000,000 scale.							



2561

105 C,D,M; 106 D;  
115 O,P; 116 C;  
21 G,H,J

NS NB  
Que Ont  
Yk

MDG

EG

Sinclair, WD

Geology of copper and molybdenum resources of Canada - II

770071\*

Obj: The project is one of comprehensive research on the geology of copper and molybdenum deposits in order to:  
(1) support or provide geologically based estimates of Canada's resources of these commodities;  
(2) provide guidelines for their discovery;  
(3) provide advice to government for mineral policy and related matters.

2543

AGC EPG

Barss, MS

Geological Survey representative on Steering Committee of the Kremp Palynologic Computer Research Project.

770072

Obj: To represent the Geological Survey and present the views of GSC palynologists to the KPCR Steering Committee with regard to the operation and management of the project.

2522

12 A, E,L; 11 E,F,K;  
22 A,B; 21 A,G,H,I,J,O,P  
41 G,H; 31 C,F,G

Que Ont  
Man Kee  
NB NS  
NFLD

OP

ISPG P

Nowlan, GS

Paleozoic conodonts of eastern Canada

770077\*

Obj: To describe and assess biochronological significance of early Paleozoic conodonts in order to refine methods for dating the rocks in which they are found.

2524

ISPG CG RE

Mottershead, K

Coal Resource Data Management

780001

Obj: To plan and conduct investigations of the methodologies for coal resource assessment in undisturbed and disturbed coal measures. To establish and maintain coal resource data computer files of various coal deposits in Canada and apply, adapt or develop computer programs for the analysis and display of geological data and the compilation of coal resource estimates.

2552

55 E,L,K; 41 I  
21 E,L; 31 D,E

Kee Ont  
Que

SMT

TS

Shilts, WW

Glacial erosion of the Canadian Shield

780002\*

Obj: A - To define and summarize ways of quantifying rates, depths and volumes of glacial erosion;  
B - Define parameters that are most influential in controlling glacial erosion on the Shield;  
C - To measure glacial erosion in selected test areas;  
D - To evaluate recently developed differences of opinion on efficacy of glacial erosion on the Shield.

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
780003	Petroleum Resource Evaluation of Western Canada	Powell, TG	ISPG	PG	PR	Alta BC Sask Man	62 E, F, L, K; 72 E-P; 73 C, D, E, F, K, L, M; 74 D, E; 82 H, I, J, O, P; 83; 84; 93 I, P; 94 A, B, G-K, N, O, P	2523
780004	Evaluation of Unconventional Gas Resources in the Deep Basin of Western Canada	Fuglem, MO	ISPG	PG	GC	Alta BC	83 B, C, E, F, K-N; 93 I, P; 94 A, B, G, H	2523
780006*	Mineral Matter and Trace Element Content of Canadian Coals	Goodarzi, F	ISPG	CG	CT	Alta BC	82 G, O, P; 83 A	2524
780008	Macquoid Lake (W <sub>2</sub> ), Thirty Mile and Tebesjuak Lake map-areas	LeCheminant, AN	P	-	NC	Kee	65 P (W <sub>2</sub> ); 65 O (E <sub>2</sub> ) 55 M (W <sub>2</sub> )	2531
780009	Healey Lake map-area, District of Mackenzie	Henderson, JB	P	-	BS	Mack	76 B	2531
780011	A survey of Metamorphism in the Canadian Shield	Froese, E	P	-	PET	Man	63 J, K, N	2531

Obj: To evaluate the resource potential for hydrocarbons in western Canada. This includes a knowledge of reserves discovered, appreciation of reserves, degree to which those reserves may be conducive to enhanced recovery, the determination of parameters required to estimate the cost and timing of future supply, the probable extent of undiscovered resources.

Obj: To determine the quantity of gas in low porosity, low permeability sandstone reservoirs in the Deep Basin of western Canada.

- Obj: 1) To determine if coal basins and seams within basins are specific in terms of mineral matter and trace element content.  
 2) To enlarge the data base for the interpretation of the depositional regimes within coal basins.  
 3) To relate mineral matter and trace element content to other compositional parameters.  
 4) To provide a data bank on environmental and utilization aspects of these coals.

Obj: To interpret the geology of the area to a standard of 1:250,000 mapping, and thereby update the geological data base to improve regional tectonic syntheses. To investigate the structure and metamorphism of Archean and Archean gneisses and their relation to the Dubawnt group cratonic cover.

Obj: To determine the general structural metamorphic and age relations of rocks on each side of the Thelon Front in order to better understand the nature of the boundary between Slave and Churchill provinces. To evaluate the economic potential of the area and to map it at the scale of 1:250 000.

Obj: To write a concise selective field oriented introduction to metamorphic petrology directed to geologists working in the precambrian Shield

Number Title Project Leader Div Subdiv Sec Prov NTS Classification

780012*	Stratigraphy and geochemistry of the volcanic rocks of the Circum-Ungava Belt Obj: To determine the geochemical characteristics and to work out the stratigraphic relationships of volcanic and related rocks of the Circum-Ungava Belt.	Baragar, WRA	P	-	SP	Ke Que	44 I,P; 35 D	2531
780015*	Disequilibrium in the uranium series Obj: To determine the usefulness of disequilibrium in the U series in predicting the existence of U mineralization.	Dyck, W	RGG	RGC	MD	Sask Ont NS	31 G; 64 L; 74 H,I; 24 O,P; 11 E	2572
780016	Drift prospecting methods and models Obj: 1) To model glacial dispersal from known sources. 2) To develop drift prospecting methods for use in clay belts.	Dilabio, RNW	TS	-	SMT	Ont Que Nfld	14 D; 24 A; 23 J; 32 C,D; 42 C	2552
780017*	Correlation of Quaternary geology; Great Lakes - St. Lawrence Valley region Obj: To resolve apparent age discrepancies in Pleistocene stratigraphic sequences of the lower Ottawa - upper St. Lawrence valleys and adjacent Lake Ontario basin. To provide a basis for regional compilation and synthesis of Quaternary geology in southern Ontario and southwestern Quebec.	Gadd, NR	TS	-	RP	Ont Que	31 B,C,F,G,H,L; 21 E,L,M	2551
780018	Surficial geology and Quaternary stratigraphy of north Baffin-Bylot Islands Obj: To provide information on the history and mode of deposition and the distribution and origin of Quaternary sediments in the northern part of Baffin Island and of Bylot Island, for use by environmental and development groups that may require knowledge of the area, and to provide data applicable to drift prospecting techniques.	Klassen, RA	TS	-	SMT	Frank	38 B,C; 48 A,D	2552
780019	Ocean Dumping Consultation and Study Obj: a) To provide advice to government departments concerning the feasibility of disposal of materials in the marine environment. b) To test various techniques and procedures for detecting and monitoring the impact of ocean dumping.	Forbes, DL	AGC	EMG	PEC	Atlantic Offshore	21, 22	2542
780021	Landsat Calibration for Suspended Sediment Concentration in Marine Coastal Environments Obj: 1) To initiate cooperative research between A.G.C., C.C.R.S. and other marine agencies abroad, with a view to extending a calibration of Landsat radiance vs. suspended sediment concentration. Originally applied to the Minas Basin. 2) To extend the Minas Basin calibration. 3) To relate the available Seasat program to Landsat measures.	Amos, CL	AGC	EMG	CG	-	-	2542

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780022	Sediment Dynamics at the Head of the Bay of Fundy	Amos, CL	AGC	EMG	CG	NS NB	21, 11	2542
	Obj: 1) To determine the mass input, transfer and removal of sediments to Chignecto Bay, inclusive of Shepody Bay and Cumberland Basin. 2) To develop a numerical model to assess the affects of a Fundy Tidal Power Development on the distribution and accretion of sediments. 3) To formulate a methodology of assessing the implications of marine constructions on sediments in macrotidal regions.							
780024*	Analytical control and standardization of methodology	Lynch, JJ	GGG	RGC	-	Ont Que	31 C, F, G	2572
	Obj: 1. To obtain sample preparation and a variety of analytical services from commercial sources under contract for the subdivision and the NGR. 2. To provide analytical methodology, the use of which will permit the acquisition of accurate, precise and regionally compatible analytical data for the subdivision and NGR surveys under Federal and/or Provincial jurisdiction. 3. To provide various types of international geochemical reference samples and to provide certified values for a large number of elements for these samples.							
780025*	Archean Rocks of the Main Province in Hopedale (13 N), Snegamook Lake (13 K), and Makkovik (13 O) map-areas, Labrador	Ermanovics, I	P	-	SG	Nfld	13 N, K, O	2531
	Obj: 1. To produce maps (suitable for publications at 1:100,000) and comprehensive reports on the geology and economic mineral potential of the Archean rocks in these areas. 2. To monitor, compile and synthesize results of the geological mapping of Labrador to be carried out under the Canada - Newfoundland Mineral Development Subsidiary Agreement.							
780026	Quaternary paleo-sealevel map of Canada	Pelletier, BR	TS	-	SP	NS NB PEI Nfld Que Ont Man BC Yk Mack Kee Frank	1-2, 11, 13-16, 20-22, 24-29, 32-39, 42-43, 45-49, 54-59, 66-69, 76-79, 86-89, 92, 98-99, 102-103, 107, 114, 117, 120, 340, 350, 360	2550
780027*	Coastal Geology and processes of British Columbia	McLaren, P	C	-	MG	BC	92 B, C, E, F, G, K, L, M; 93 D; 102 I, P; 103 A, B, C, F, G, H, I, J, K, O, P	2512
	Obj: i) To analyze the coast of British Columbia with respect to geomorphology, sedimentology, processes and Quaternary/tectonic evolution. ii) To utilize the data base for oil spill contingency planning and cleanup, coastal industrial management and coastal recreation. iii) To research the meaning of grain size distributions both in coastal and shelf environments to establish process models fundamental to the understanding necessary to meet the above two objectives.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
780028	Detailed Geological study of selected areas within the Foothills and Rocky Mountain Belts of the Monkman Pass map area -- with emphasis on the structure	Thompson, RI	C	-	BG	BC Alta	93 H, I; 83 E	2511
	Obj: To map at 1:50,000 scale: map sheets 93 I/1, 2E $\frac{1}{2}$ , 8 and adjacent parts of map areas 93 H/16 and 83 E/13W $\frac{1}{2}$ as a data base for the preparation of structural interpretations across the area.							
780029	Mesozoic and Cenozoic Foraminifera of the Arctic Western mainland of Canada	McNeil, DH	ISPG	P	MiP	YK Mack	95, 96, 97, 105, 106, 107, 115, 116, 117	2522
	Obj: To establish the biostratigraphic distribution and significance of Mesozoic and Cenozoic foraminifers in the Arctic western mainland of Canada, with particular emphasis on the Mackenzie Delta-Beaufort Sea area.							
780030	Taxonomy, biostratigraphy and paleoecology of Mesozoic and Cenozoic palynomorph assemblages from the Mackenzie Delta Beaufort Sea and Arctic Region	Recruit	ISPG	P	MiP	Frank Mack	120 F; 340 D, B; 107; 117; 49 G; 59 H	2522
	Obj: To establish a biostratigraphic zonation scheme for the Mesozoic and Cenozoic the Mackenzie Delta, Beaufort Sea and Arctic Region.							
780031	Continental Slope Geologic Processes off Newfoundland and Labrador	Schafer, CT	AGC	EMG	PEC	Atlantic Offshore	-	2542
	Obj: To identify faunal and sedimentologic parameters that reflect on-going processes, and to investigate variations in geologic processes on the slope and rise during the Holocene. To develop faunal and textural models for biostratigraphic, paleo-ecologic and environmental impact studies.							
780032	Lead isotopic studies on genesis of ore deposits	Thorpe, RI	EG	-	MDG	-	-	2561
	Obj: 1) To do lead isotopic studies of ore deposits in order to improve our understanding of the age and genesis of these deposits. 2) To derive a lead isotope model that will be useful in refining genetic models for many types of ore deposits. 3) To coordinate the obtaining of lead isotope analyses for the members of the Mineral Deposits Geology Section and the assignment of priorities for such analyses. 4) To aid members of the section in interpretation of analyses that have been carried out for other projects.							

780033\*

Quaternary paleoecology,  
Great Lakes

Anderson, TW

TS

PG

Ont Que

21 E; 31 B, C-G, H-L  
41 H-K

2551

Obj: To describe, analyze and explain unconsolidated deposits and associated organic remains in the Great Lakes in order to: 1) determine Quaternary stratigraphy, history and paleoecology; 2) identify processes operative in the lakes during the Quaternary and the factors controlling them; 3) to provide background geological information for other scientific studies in the Great Lakes.

780035\*

Remote sensing applied to  
Quaternary geology and  
mineral tracing

B $\frac{1}{2}$ langer, JR

TS

SMT

Yk Kee  
Que Frank  
Mack

66 M; 67 A-C;  
87 A-F; 88 A-B

2552

Obj: To evaluate the potential use of remotely sensed, multispectral data for terrain evaluation, terrain mapping, Quaternary geology and mineral tracing. To apply appropriate processing techniques for remotely sensed data to Quaternary geology and related terrain studies in selected test areas in Canada.

780039\*

Jurassic and Cretaceous  
Minnesota, Alberta and  
British Columbia

Stott, DF

ISPG

-

Alta BC

83 E, L; 93 I, O, P;  
94 B, G, J

2521

Obj: To describe the stratigraphic succession and petrography to document fossil flora and fauna; to provide data on correlation of these strata, their lateral variation, their potentialities as sources of oil and gas, and their suitability as reservoirs for those fuels.

780042

Comparative studies of the  
continental margins of the  
Labrador Sea and of the North  
Atlantic

Srivastava, SP

AGC RR

LSS

Atlantic  
Offshore

2541

Obj: 1) To delineate subsurface structure across Labrador and west Greenland margins.  
2) To determine the transition from the continental to oceanic crust across the margins.  
3) To discuss the subsidence history of the margin as obtained from well data and to relate it to the subsurface structures.

780045

Debris flow hazard assessment  
methodology, alpine and northern  
upland areas

Jackson, LE

TS

GP

BC Alta

82 G, J, N, O; 83 C, D, E

2552

Obj: To identify and determine the relative importance of the environmental factors favouring the development of debris flows in the Rocky Mountains (49°N-54°N), and to develop a methodology for assessing the hazards to transportation and utility facilities from this process.

780046

Metamorphic Map of the  
Canadian Cordillera

Woodsworth, GJ

C

BG

BC Yk

116, 115, 105, 95, 114,  
104, 94, 103, 93, 83,  
92, 82

2511

Obj: To compile a metamorphic map of the Cordillera on a scale of 1:2,000,000 depicting areas underlain by rocks representing particular grades of regional metamorphism.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
780047	Computer Methods and Calibration	Carson, JM	RGG	RR	CMC	Sask Ont NB Alta	21 G; 31 G; 73 B; 82 O,P	2573
	Obj: 1) To develop computer methods for compilation of radiometric data. 2) Develop data base for airborne, ground, laboratory and borehole gamma ray spectrometric data. 3) To standardize and coordinate the calibration of radiometric systems.							
780048	Surficial Geology of Lomonosov Ridge, Arctic Ocean	Blasco, SM	AGC	EMG	CGD	Arctic Offshore	-	2542
	Obj: 1) To describe the morphology, structure and history of the surficial sediments of the Lomonosov Ridge in the vicinity of the EMR LOREX site (near North Pole). 2) To contribute to Earth Physics Branch's LOREX to define continental (?) origin of Lomonosov Ridge. 3) To adapt technology and to gain experience in working on frozen seas. 4) To establish working contacts with other groups concerned with Arctic Ocean geology.							
780049	Arctic Ocean: Seismic Refraction and Related Geophysical Measurements	Jackson, HR	AGC	RR	OBM	-	-	2541
	Obj: To collect seismic refraction, reflection and related geophysical data in the Arctic Ocean and interpret them at both a regional and global scale to provide: (a) a tectonic history of the Arctic, (b) a model for development of slow spreading ridges and relationship to other spreading centres such as those in Baffin Bay and the Labrador Sea, (c) a crustal cross-section of the Eurasian Basin to be compared and contrasted to other basins.							
790002*	Geochemical data processing	Lund, NG	RGG	RG	RS	Ont Nfld	31 C,F 13 C-O	2572
	Obj: 1) To compile and store, in digital form, all geochemical data generated for the subdivision. 2) To improve data management and processing support for the subdivision. 3) To produce open file material for Federal NGR and provincial open file releases of geochemical data. 4) To investigate geochemical variability of trace elements and other constituents in lake sediment and water surveys.							
790003*	Regional Geochemistry - Southern Cordillera	Ballantyne, SB	RGG	RG	RS	BC Yk NB NS	104 N,O,P,I; 11 F; 94 F,K,L; 105 B-F; I,M; 92 O,P; 106 D	2572
	Obj: 1) To develop and test geochemical exploration methods for concealed ore deposits in a variety of geological and surficial environments. 2) To assess the effective performance of geochemical reconnaissance surveys.							
790004	Geochemical Sampling and Resource Evaluation Studies	Garrett, RG	RGG	RG	ER	-	-	2572
	Obj: To develop and document methods of utilizing geochemical data in mineral resource evaluation studies. Particular attention will be paid to assessing the reliability of such studies through measurement of the variabilities associated with all stages of sample and data acquisition and processing.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790005	Quaternary geology, Mayo-McQuesten Obj: To map, describe and explain the surficial materials and landforms and to provide areal geologic-geomorphic data and knowledge of stratigraphy, age and history of surficial deposits to provide background information for land use planning, engineering and mineral development.	Hughes, OL	TS	-	RP	Yk	105 M, 115 P	2551
790006*	Marine Delta Sedimentation, British Columbia Obj: To provide geological/sedimentological data base for delta systems in coastal British Columbia for general land and waterfront planning and environmental management.	Luternauer, JL	C	-	MG	BC	92 B,G; 103 G,H,I,J	2512
790007	Geology of Nahanni map-area, Yukon and Northwest Territories Obj: To update geological mapping in Nahanni map-area with emphasis on the distribution of stratigraphic units of the economically important Road River Formation and Earn Group.	Gordey, SP	C	-	BG	Yk Mack	105 I	2511
790008	Stratigraphy, sedimentation, structure and tectonic setting of the Windermere Obj: To establish the stratigraphic succession, origin and correlation and determine the role played by these rocks in the evolution of the Cordillera. To relate mineral deposits to the stratigraphic, sedimentological and structural framework of these rocks.	Eisbacher, GH	C	-	BG	Yk, Mack BC Alta	115; 105; 95; 94 K; 93 I,O; 83; 82 K,N,O; 116; 106	2511 116; 106
790009	Kamilukuak Lake Map-area, District of Keewatin, N.W.T. Obj: To map the bedrock geology of the area at a standard of modern 1:250 000 scale mapping. Emphasis will be placed on the Dubawnt Group rocks, their extent, lithology, and relationship to the basement rocks.	Tella, S	P	-	NC	Ke	65 K,L; 66 H	253
790012	China-Canada Exchange - Hydrocarbon Geochemistry Obj: To exchange information on methods of geochemical investigations of oil, gas and organic matter and application of their results to exploration and resource assessment. To gain a broader knowledge of geochemical criteria for petroleum generation and accumulation in various geological settings.	Powell, TG	ISPG	PG	GC	-	-	2523
790013*	Relationship of reflectance to chemical rank parameters of western Canadian coals Obj: 1) To establish reference curves relating rank as determined by reflectance to rank as determined by chemical means. 2) To determine the relationship of varying maceral compositions on rank as determined chemically.	Cameron, AR	ISPG	CG	CT	Sask Alta BC	62 E; 72 H,G,M; 82 G,H, J,O,P; 83 A,C,E,F,G,M; 93 I,O,P	2524



790014	Triassic Foraminifera of the Sverdrup Basin	Wall, JH	ISPG P	MIP	Frank	49 C, 59 H; 69; 79; 88; 89; 340 B,C; 560	2522
	Obj: To investigate the feasibility of using foraminifera as a means of refining biostratigraphic zonation within the Triassic System and of establishing criteria for the dating and correlation of potentially petroliferous sequences within and adjacent to the boundaries of the system.						
790016	Geology of the Helikian Sediments and Adjacent Gneisses, Fury & Hecla Strait Area	Chandler, FW	P	PET	Frank	47 C,D,E,F	2531
	Obj: 1) To determine the internal stratigraphy, sedimentology, structure, age, geological history of the sediments. 2) To map the gneisses underlying the sediments to the north, concentrating on those gneisses coincident with strong radiometric anomalies.						
790018*	Ice Scouring of Continental Shelves	Lewis, CFM	AGC	EMG	CGD	Atlantic Offshore	2542
	Obj: To investigate the geomorphology and sedimentology of ice scour tracks and their relationship to bathymetry, geology, oceanography and drift ice with a view to interpreting the dynamics and history of ice impacts on the seabed in order to provide advice for resource management.						
790019*	Environmental Geology of Deep Ocean	Buckley, DE	AGC	EMG	IGC	Atlantic Offshore	2542
	Obj: 1) To investigate the capacity of the deep ocean sediments to maintain normal processes and environmental quality under conditions of stress imposed by waste disposal practices and resource exploration and exploitation. 2) To participate in the Seabed Working Group of NEA in order to maintain awareness of progress in feasibility studies for the disposal of high level nuclear waste in the seabed. 3) To participate in studies of the environmental effects of deep ocean mining.						
790020	An investigation of the semi-inert constituents of Western Canadian coals	Kalkreuth, WD	ISPG	CG	CT	BC Alta	2524
	Obj: To investigate the degree of participation of semi-inert macerals, of Western Canadian coals, in a heat-treatment process and to establish a reliable microscopic method for predicting the coking properties of these coals.						
790022*	Stratigraphy and sedimentology of the Lower Cretaceous Gething Formation, Rocky Mountain Foothills, Alberta and British Columbia	Gibson, DW	ISPG	CG	GC	Alta, BC	2524
	Obj: To describe the Lower Cretaceous stratigraphic succession; to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the origin, distribution and continuity of coal seams throughout the region; to attempt to determine criteria useful in determining the sub-environments in which the fluvial-deltaic sediments were deposited, and to eventually provide a regional geological model that will be of assistance in determining the potential coal resources of this and other regions.					83 L; 93 I, J, O; 94 B, G	

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790024	Geology of the Foxe Fold belt (EAST HALF), Baffin Island Obj: To establish the stratigraphy, structure and metamorphism of the Aphebian sedimentary, volcanic and plutonic rocks in the Piling Group and their relationship to the rocks of the Mary River Group. The structural evolution of Archean "gneiss domes" in the area is also to be studied, and the economic mineral resource potential of the region evaluated.	Henderson, JR	P	-	NC	Frank	A, B, C, D	2531
790025*	Petrology, mineralogy, geochemistry and mineral potential of a Helikian non-orogenic granitic suite in central Labrador and adjacent Quebec. Obj: To improve understanding of the conditions and processes that control concentrations of U, Sn, Be, W and Mo in non-orogenic granitic suites.	Emslie, RF	P	-	PET	<u>Nfld Que</u>	Parts of 13 M, I, J, 14 D; 23 P, 24 A	2531
790027-	Quaternary stratigraphy Yarmouth region, Nova Scotia Obj: To document the Quaternary stratigraphy of the southeast coast of Nova Scotia in the vicinity of Yarmouth.	Grant, DR	TS	-	RP	NS	20 0, 21 A, B	2551
790029	Gneissic basement to the Fury and Hecla Formation and the Aultridge Formation Obj: To map the basement gneisses adjacent to the Fury and Hecla Formation and the Aultridge Formation on Baffin Island at a scale suitable for publication at 1:100 000 or 1:250 000. Emphasis to be placed on basement cover relationships and the relationship of basement geology to radioactive anomalies.	Ciesielski, A	P	-	SG	Frank	47 D, E, F	2531
790030*	Geology of Nelson Map-area E/2 Obj: a) To update the geology of Nelson area to current requirements embodying new field work and scattered studies done since the original work in the late 1930's. b) To provide a 1:250,000 synthesis of stratigraphy, structure, metamorphism and mineral deposit potential.	Reesor, JE	C	-	BG	<u>BC</u>	82 F, E $\frac{1}{2}$	2511
790031*	Geology of the Beaufort-Mackenzie Basin Obj: (1) To integrate all available geological, biostratigraphic, geophysical, and geochemical data for the Tertiary in the Beaufort-Mackenzie Basin, in order to develop a stratigraphic-sedimentological framework and an appreciation of the petroleum potential. (2) Undertake detailed stratigraphic, sedimentological and petrographic analysis of selected zones within the Cretaceous and Tertiary in order to understand reservoir character and distribution. (3) To do detailed correlations of Lower Cretaceous-Upper Jurassic rocks in the subsurface, set up a stratigraphic framework and do sedimentological interpretations.	Dixon, J.	ISPG	RG	M	Mack Frank Yk	107 B-H; 117; 97 F, H 106 L, M; 116 I, P	2521

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
790032	Identification of Mesozoic and Tertiary Continental Microfloras from Northwest Territories, Yukon Territory, British Columbia, Alberta	Hopkins, WS, Jr.	ISPG	P	MP	Yk BC Alta	92 I	2522
	Obj: To determine floral successions from scattered and widely separated Tertiary basins in order to establish biostratigraphic zonations and to interpret depositional environments.							
790033*	Geochemistry of Mineral Occurrences and their Host Rocks in the Northern Cordillera	Goodfellow, WD	RG	RG	RS	Yk	105 O, I; 106 B	2572
	Obj: Through geochemical studies, to assist in determining; (1) the origin of selected mineral occurrences; (2) criteria which can be used in the exploration for new and possibly deeply buried mineral deposits; (3) geochemical methodology for the identification and differentiation of stratigraphic units, thereby assisting in stratigraphic correlations.							
790034*	Shallow Seismic	Gagne, RM	RG	TG	SM	Atlantic Offshore	-	2574
	Obj: To map the velocity structure of surficial deposits by engineering seismic methods for geological mapping and site analyses.							
790036	Sediment Dynamics Monitor (Ralph)	Heffler, DE	AGC	PS	SD	-	-	2544
	Obj: To design, build and test an instrument to investigate the dynamics of sediments in water depths ranging from a few metres to 200 M for bottom durations of up to 45 days.							
790037	Ocean Bottom Seismometers at A.G.C.	Heffler, DE	AGC	PS	SD	-	-	2544
	Obj: To carry on the development of the Ocean Bottom Seismometer (OBS) system now in use at AGC. Future developments will be acoustic release, better tape recorders, study of seismic coupling and response problem, improved playback facilities and other improvements which are agreed to be important. Also, to maintain existing OBS's.							
790038*	Middle and Upper Devonian Rocks in east-Central B.C. and west-central Alberta	Geldsetzer, HHJ	ISPG	RG	M	BC Alta	83 E, L; 93 H, I, O	2521
	Obj: To establish and apply conceptual models of deposition of the original sediments in terms of environment and paleogeography, their subsequent diagenesis and correlation.							
790039	Development of data management system for marine geophysical data	Sherin, AG	AGC	PS	-	-	-	2544
	Obj: To provide a capability for the efficient storage of potential field data collected in marine geophysical surveys. To enable portions of the data to be effectively retrieved for use by AGC (and external) personnel. To facilitate the identification and correction of errors and inaccuracies in the data values.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790040	Taxonomy, biostratigraphy, paleoecology and paleobiogeography of Mesozoic-Cenozoic agglutinated foraminifera.	Gradstein, F	AGC	EPG	-	-	-	2543
	Obj: A. To clarify the taxonomy of Late Mesozoic-Cenozoic agglutinated foraminifera. B. To establish an agglutinated foraminiferal biostratigraphy of more than local significance in Upper Mesozoic-Cenozoic strata. C. To understand the distribution in space and through time of predominantly agglutinated foraminiferal assemblages in sedimentary basins and to formulate models for this distribution.							
790041*	Lardeau map-area, B.C.	Wheeler, JO	C	-	BG	BC	82 K (W <sub>2</sub> )	2511
	Obj: To complete terminal report and related geological, structural and mineral deposits maps and structure sections for publication at 1:250,000 scale.							
790042	Stratigraphy, structure and Tectonics; Innuitian Fold Belt, Ellesmere Island, N.W.T.	Okulitch, AV	ISPG	RG	AI	Frank	49 A,B,C,D,E,F, 59 E	2521
	Obj: To map and describe structures of the fold belt, their evolution and the tectonic history of that part of the belt on Ellesmere Island.							
790044	Nahanni IMPP - Coordinator	Reesor, JE	C	-	-	Yk	105 I	2511
	Obj: To provide coordination for participants from 5 divisions in a multidisciplinary study of Nahanni map area (105 I) and environs involving bedrock, surficial deposits, geochemistry and mineral deposits to ensure that various disciplinary studies are undertaken such that maximum interaction takes place in the field and in follow-up laboratory and office investigations. To judge ultimately the efficacy of such studies in GSC 1:250,000 systematic mapping.							
790045	NEA/IAEA Athabasca Basin Study	Cameron, EM	RGG	RG	-	Sask	64 L, 74 I	2572
	Obj: 1. To provide administrative coordination and logistical support for this integrated study. 2. The study has the objective of evaluating a wide range of exploration techniques for uranium mineralization present at depth.							
800001*	Quaternary geology and terrain inventory, Nahanni-Sheldon Lake-Finlayson Lake	Jackson, LE	TS	-	GP	Yk Mack	105 I, J(S <sub>2</sub> ), G	2552
	Obj: To map, describe and explain the surficial deposits, terrain conditions, active geomorphic processes and Quaternary history with specific reference to the significance of Quaternary geology for mineral exploration.							
800002	Cretaceous and Upper Jurassic Paleontology and biostratigraphy, Western and Arctic Canada	Jeletzky, JA	ISPG	P	OP	BC Alta Yk Mack Frank Kee	-	2522
	Obj: To describe and illustrate important Cretaceous and Upper Jurassic (Buchia-bearing beds only) molluscan faunas (Ammonoidea and Pelecypoda) and to formulate final reports on Cretaceous stratigraphy in selected areas of Western and Arctic Canada. To prepare reports pertaining to final completion of the Dibranchiata volume of the Treatise on Invertebrate Paleontology.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800003	Subsurface Geology of Great Bear River map-area Obj: To provide a thorough understanding of the pre-Mesozoic geological history of the Great Bear River map-area, emphasizing the interrelationships of sedimentation stratigraphy, tectonics and economics. To evaluate the economic mineral potential of the area.	Pugh, DC	ISPG	RG	M	Mack	96 C	2521
800004	Geology of Whitehills Lake Obj: To map 66 A/9 and 66 A/16 S½ at a scale suitable for publication at 1:50,000, in order to determine: whether or not supracrustal strata in the Whitehills Lake district belong to two or three rock units, their sequence, age and structure; to ascertain the relationship between stratigraphy and uranium mineralization; to delineate komatiite zones in volcanic rocks.	Taylor, FC	P	-	SP	Kee	66 A	2531
800005*	Metamorphism and structure in northeast Superior Province Obj: 1. To understand the geological evolution of the higher grade metamorphic region of the northeastern Superior Province, and in particular, the relationship between greenstone and granulite terrains. 2. To contribute, through field studies, to compilation of a geological map at 1:1,000,000 scale for NTS 33.	Ciesielski, A	P	-	SG	Que	33	2531
800006	Geology of Beechey-Duggan Lakes area Obj: 1. Map for 1:250,000 published scale. 2. Understand the nature of the Thelon Front. 3. Produce final maps and a report.	Frith, RA	P	-	BS	Mack	76 G(E½), H(W½)	2531
800007*	Metamorphism in the Kisseynew Subprovince Obj: To study the metamorphic zonation in the Kisseynew Subprovince, from the low grade margin to the granulite facies in the centre, and to determine its relationship to the development of alternating volcanic and sedimentary subprovinces.	Froese, E	P	-	PET	Man Sask	63 J,K,L,M,N,O	2531
800008	Geology of the Baker Lake map-area Obj: To refine and upgrade the 16-mile reconnaissance, with emphasis on the structure and stratigraphy of Archean metavolcanics and Aphebian(?) metasediments, and relationship to gneissic and granitic rocks. The economic potential will be evaluated.	Schau, M	P	-	NC	Kee	56 D	2531

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
8000009	Geology of Fort Smith, District of Mackenzie Obj: To complete mapping of Precambrian rocks at 1:250,000 scale in Fort Smith (75 D) and east part of Little Buffalo River (85 A).	Bostock, HH	P	-	NC	Mack	75 D E½, 85 A (E½)	2531
800010*	Marine magnetic surveys Obj: To measure and interpret the earth's magnetic field over the Pacific margin of Canada to extend our knowledge of the geology and economic potential of the area.	Currie, RG	C	-	MG	<u>Pacific Offshore</u>	92 B, C, E, F, G, L, K, M; 93 D; 102 I, P; <u>103 A, B, C, F, G, H, I, J, K</u>	2512
800011*	Rock Magnetism Obj: To investigate the relationships between rock magnetism, rock type and associated magnetic anomalies to enhance the usefulness of magnetic surveys as a tool in geological mapping and resource evaluation.	Currie, RG	C	-	MG	Yk BC	92 B, C, E, F, G, L, K, M; 93 D; 102 I, P; 103 A, B, C, F, G, H, I, J, K; 105 C, D, E, L; 115 A, F, G, H, I, J, K, N, O, P	2531
800012	Geology of Woodburn Lake map area, District of Keewatin Obj: To upgrade the 16-mile geological reconnaissance survey made in 1953, in particular to refine interpretations of the stratigraphy and structure of the Proterozoic(?) supracrustal rocks, and to determine their relationship to the granitic basement. To assess the economic potential of the area.	Fraser, JA	P	-	NC	Keew	56 E	2531
800013	Vertical Movements of the Precambrian Shield Obj: To determine vertical movements for structural provinces in the Precambrian Shield from remanent magnetism. The method is quantitative and would allow estimating the net amount of uplift or tilting of the Shield since the Archean.	Buchan, KL	P	-	PMag	Ont Que	23, 24, 34 C	2532
800014*	Metamorphism of volcanic rocks, Crowduck Bay, Manitoba Obj: Conduct a detailed field and petrologic study of a belt of volcanic and associated sedimentary rocks in order to provide correlation criteria for mapping amphibolites and gneisses equivalent to volcanic belts and elucidate the chemical processes which limit the economic potential of metamorphic rocks.	Gordon, TM	P	-	PET	Man	63 J, K, N, O, P <u>64 A, B, C</u>	2531

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
800015	Coastal Morphology and Sediment Dynamics, Southeast and East Cape Breton Island, N.S. Obj: A. To provide a map of shoreline features and sediment along SE and E Cape Breton Island. B. To examine two well developed barrier beaches with different aspect, geological setting and sediment availability in order to determine seasonal changes in beach-nearshore morphology and sediment characteristics and to document the historic changes and response of these beaches to changing environmental conditions.	Taylor, RB	AGC	EMG	CGD	NS	11 F, G, K	2542
800018*	High Resolution Seismic (Equipment Development) Obj: To assemble a high resolution seismic reflection system by matching commercially available components including an inexpensive microcomputer and developing the ancillary software for shallow sounding (<500 m).	Hunter, JA	RGG	TG	SM	Ont Que Man Alta BC Sask YK	31 F, G; 40 I, P, J 41 I; 32 D; 62 G; 73 B; 84 C; 103 I 105 D	2574
800019*	Surficial geology, Cobden area (Quebec part) Obj: To map, describe and explain the unconsolidated deposits and landforms of the Quebec part of the Cobden area (31 G 10) in order to provide geology and terrain information pertinent to agriculture, urban and industrial development and engineering construction and to determine the Quaternary history of the region.	Fulton, RJ	TS	-	RP	Que	31 G 10 (Quebec part)	2551
800020*	The Recent Paleoclimatic and Paleogeologic Records in Fjord Sediments Obj: To relate documented climatic excursions that have occurred over the past several centuries to the geological record in unbioturbated fjord sediments recovered from distinctive climatic regimes throughout Canada with a view to the development of predictive models for climatic trends on a 3 to 10-year scale.	Schafer, CT	AGC	EMG	PEC	Que BC	22, 2, 3, 11, 12	2542
800021	Lead and zinc in carbonate rocks - joint research with Esso Minerals Canada Obj: To obtain a better understanding of Canadian carbonate-hosted lead-zinc deposits, particularly concerning recognition of areas favourable for their occurrence and mechanisms for their formation; to make resultant information generally available.	Sangster, DF	EG	-	MDG	-	-	2561
800022*	Stratigraphy and structure of Dawson, Larsen Creek and Nash Creek map areas Obj: To update the 1:250,000 geologic maps of Dawson, Larsen Creek and Nash Creek as a framework for the stratigraphic and structural analysis of the region and its bearing on the geological evolution of the northern Cordillera.	Thompson, RI	C	-	BG	YK	116 A, B, C; 106 D	2511

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800023	Special assignments on eastern and northern Canada	Poole, WH	EG	-	SP	Que NB NS NF1d	-	2561
	Obj: To contribute to the mineral resource data base and the evaluation of regional resources.							
800024	Quaternary geology-terrain inventory, northwestern Manitoba	Dredge, LA	TS	-	RP	Man	64 J,K,N,O	2551
	Obj: Map, describe and explain the surficial materials and landforms, thermal conditions and active processes to provide knowledge of stratigraphy, age and Quaternary history and areal geologic data with particular reference to engineering construction and mineral exploration.							
800025*	Chromium resources in Canada	Duke, JM	EG	-	MDG	Man Ont	32 G-J; 42 A,H; 52 E,F,I	2561
	Obj: Survey of available information on Canadian chromite occurrences. Determinations of potential for chromite (and associated platinum group metals) in mafic/ultramafic intrusive rocks in selected greenstone belts of the Canadian Shield.							
800027*	Sensitivity of surficial sediments to effects of acid precipitation	Shilts, WW	TS	-	SMT	Ont Que NB	31 D,C,E,F,G,K,L 21 E,N; 41 5	2552
	Obj: (1) To establish baseline data on natural variations of buffering capacities of surficial sediments, with respect to possible loading by acid precipitation in an area of predominantly non-carbonate bedrock. (2) To establish magnitude of natural area variation of chemical (trace and minor element) components that might be mobilized by loading by acid precipitation. (3) To determine the extent that glacial dispersal has modified the physical and chemical properties of surficial sediments from those that would be expected based on bedrock lithologies alone.							
800028*	Eastern Margin of the Coast Plutonic Complex	Woodsworth, GJ	C	-	BG	BC	92 J,N; 93 D; 103 I,P,J	2511
	Obj: (1) To examine the stratigraphy, structure, and plutonism of the eastern Coast Plutonic Complex and to correlate metamorphic rocks with unmetamorphosed rocks to the east. (2) To produce reports and geologic maps of Bella Coola (93 D), Terrace (103 I), Pemberton (92 J) and Nass River (103 O) map-areas.							
800029*	Geology of the Ashcroft and Hope map-areas	Monger, JWH	C	-	BG	BC	92 I,H	2511
	Obj: To produce Geological maps of Ashcroft (92 I) and Hope (92 H) map-areas.							
800030	Geochemical provinces	Cameron, EM	RGG	RG	-	Mack Ont	42, 52, 41, 86	2572
	Obj: To outline possible causes for major, regional variations of selected elements in the crust within Canada; to relate these variations to the distribution of mineral deposits and to concepts of the geological history of Canada; and to ascertain any facts which might assist mineral exploration.							



Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
800031	Geological reconnaissance, southeastern margin of Franklinian Geosyncline  Obj: To improve understanding of the sedimentation and paleogeography of the Franklinian Geosyncline, particularly late Precambrian to lower Paleozoic stratigraphy; to provide better understanding of late Precambrian to Silurian events along the platform and platform-miogeosyncline junction along the edge of the Franklinian Geosyncline.	Christie, RL	ISPG	RG	AI	Frank	-	2521
800033*	Geology and Economic Minerals of Canada 6th Edition  Obj: To coordinate the preparation of a new edition of Geology and Economic Minerals of Canada and related charts and thematic maps for publication by the end of 1988.	Wheeler, JO	DGO	C	BC	-	-	2511
800034	Rift Processes and the Development of Passive Continental Margins  Obj: To investigate consequences (i.e. subsidence history, stratigraphy, crustal thicknesses, heat flow, and gravity anomalies) of various processes perhaps responsible for initial rifting. These processes include extension, intrusion, erosion and phase changes in the lower crust. Models of the processes allow predictions of the above observations which can be compared to real data. This allows elimination of models which do not fit the observations and hopefully will lead to a better geological model of the rift-processes.	Keen, CE	AGC	RR	OBM	Atlantic Offshore Arctic Offshore	-	2541
800035	Seismic studies of continental margins and ocean basins of the North Atlantic  Obj: To study the variations in crustal structure across passive continental margins; To study the deep structure of the lithosphere using data resulting from the Lesser Antilles Deep Lithosphere Experiment (LADLE); To relate seismic structure to other geological and geophysical data and to models of continental margin evolution.	Keen, CE	AGC	RR	OBM	Atlantic Offshore	-	2541
800036*	Stability and Transport of Sediments on Continental Shelves  Obj: The scientific objectives of this project are: (1) to determine the sediment stability under waves and currents on continental shelves, because of a serious lack of experimental data in this highly-disputed field; (2) to apply the above predictively to problems related to ice scouring of seabeds, offshore oil production activities, the differentiation of modern and relict features and the dispersal of materials across the continental shelf; (3) to develop a generalized, programmed strategy for application by other users to solve similar problems of sediment stability at other shelf sites.	Amos, CL	AGC	EMG	CGD	Atlantic Offshore	-	2542



Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
810004	Quaternary geology - terrain inventory, Frances Lake Obj: To map, describe and explain the landforms and Quaternary deposits in order to understand the Quaternary evolution of the area and to provide information relevant to land-use planning and mineral information.	Dyke, AS	TS	-	RP	Yk	105 H	2551
810005*	Relationship of flood frequency and heavy metal uptake in growth rings of trees Obj: To develop and evaluate a proxy method of determining flood frequency of rivers.	Eggington, PA	TS	-	GP	Ont Mack	31 F, K, L; 42 H, P	2552
810006*	Quaternary Geology, upper Fraser River Basin Obj: To describe, map and establish the stratigraphy of unconsolidated deposits in order to: 1) reconstruct the upper Fraser River drainage development as an aid to explaining the distribution of placer deposits, 2) provide information pertinent to forestry, land-use planning, urban and industrial development, and 3) to determine the Quaternary history of the region.	Clague, JJ	TS	-	RP	BC	93 A, B, G, H	2551
810007*	Quaternary geology-terrain inventory, western Victoria Island Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover, and undertake geomorphic process studies in order to provide areal knowledge of geology and terrain that will: a) aid in the implementation of the Territorial Land Use Regulations; b) be pertinent to engineering construction, petroleum exploration and related activities; c) provide data relative to terrain sensitivity rating; and d) elucidate the Quaternary history of the region.	Vincent, JS	TS	-	RP	Frank	87 A, C, D, E, F, G, H; 88 A, B, C, D; Pts of 77 B, C, F, G; 78 B	2551
810008*	Nuclear and Analytical Instrumentation Obj: Adaptation of advanced technology, and development of new technology (both in-house and under contract) for improved acquisition of conventional geophysical and geochemical data and for the measurement of other new parameters which are not at present generally measured. Publication of results and/or licencing of products for the rapid and effective transfer of technology to industry.	Bristow, Q	RG	RG	ANI	-	-	2573
810009	Remote Sensing Applications Obj: a) To maintain up-to-date a Landsat imagery file for the use of the GSC staff and to be in a position to advise geologists adequately on the potentials and limitations of Landsat imagery in the solution of specific problems. b) To develop and to demonstrate new methods or to adapt existing methods in relation with the task of integrating imagery (satellite and airborne) with geochemical, geophysical and geological data for the purpose of geological mapping and/or mineral exploration. c) To evaluate geological applications of Synthetic Aperture Radar and to provide the Interdepartmental Committee on Space with requirements for RADARSAT project.	Slaney, VR	RG	RG	RM	-	-	2573

Project Number      Title      Project Leader      Div      Subdiv      Sec      Prov      NTS      Classification

810010\*      Detailed geological study of selected areas within the Foothills and Rocky Mountain Belts between Peace River and Smoky River with emphasis on structure      McMechan, ME      ISPG      RG      M      BC      Alta      93 H(NE), I(SE), 07/11-14; 83 E(NW), L(SW)      2521

Obj: To map at 1:50,000 scale:  
 1) Northern area-map sheets 93 0/11, 12E, 14, and the parts of 93 0/13 E and 13 W east of Williston Lake,  
 2) Southern area-map sheets 83 L (S.W. corner), 83 E (N.W. corner) and in conjunction with R.I. Thompson parts of 93 I (SE corner) and 93 H (N.E. corner). As a data base for the preparation of structural interpretations across both areas, and the delineation of coal bearing sequences in the southern area.

810011\*      Carboniferous stratigraphy and sedimentology of northeastern British Columbia and north-western Alberta      Richards, BC      ISPG      RG      M      BC      Alta      83 E, L, M, N; 84 C, D, E; 93 I, J, O, P; 94 A, B, G, H, I, J, K, N, O, P      2521

Obj: a) Revision of the stratigraphic nomenclature of subsurface and surface Carboniferous stratigraphic units.  
 b) To solve subsurface and surface stratigraphic problems.  
 c) To determine the characteristics, distributions, and depositional environments of lithofacies in the surface and outcrop belt.  
 d) To summarize region's Carboniferous depositional history.  
 e) Evaluation of hydrocarbon potential.  
 f) To tie in with Richard's work in S.W. District of Mackenzie (GSC 770043) and Bamber's work in N.E., B.C. (GSC 710022).

810012      Structural and stratigraphic studies of Northeast British Columbia      Taylor, GC      ISPG      RG      M      BC      93 I, O, P; 94 F, G, J, N, O;      2521

Obj: To provide a synthesis of the geology of the northern Rocky Mountains in terms of the tectonic response of the stratigraphic record.

810013      Syntheses of Mesozoic and Cenozoic rocks of Eastern Cordillera and Plains      Stott, DF      ISPG      RG      M      Man Sask      Mack Alta      2521

Obj: To provide regional syntheses, including maps and correlations concerning sedimentary sequences, particularly of Mesozoic clastic sequences in Western Canada.

810014\*      Resource evaluation and geology of Canada's coal deposits      Hughes, JD      ISPG      CG      RE      BC      Alta      Sask      83 A, G, H, I, J; 93 O, P; 72 F, G, H; 62 E      2524

Obj: To conduct resource evaluation programs required for the National Coal Inventory and to recommend the office and/or field studies to be undertaken to meet the requirements of the inventory program. To acquire industry and provincial government data on Canada's coal deposits. To study the geological framework within which these coals occur. To provide authoritative advice to senior Departmental officials and to scientists in government and industry on the resource potential of Canada's coal deposits. To maintain an up-to-date knowledge of coal fields in Canada.

Number  
810015  
810016\*  
810017  
810018\*  
810019\*

Title  
Evaluation of Liquefaction Potential of low rank coals and peats  
Paleozoic stratigraphy of central and southern Ellesmere Island and northern Devon Island  
Middle and Upper Devonian rocks in the subsurface of west-central Alberta  
Regional Coal Rank Variations in the Kootenay Formation and their relationship to the structural history of the Southern Canadian Rocky Mountains  
Regional coalification studies in the Minnes, Bullhead and Fort St. John Groups, N.E. British Columbia

Leader  
Kalkreuth, W  
Mayr, U  
Meijer-Drees, NC  
Cameron, AR  
Kalkreuth, W

Div  
ISPG CG  
ISPG RG  
ISPG CG  
ISPG CG

Subdiv  
CT  
AI  
M  
CT  
CT

Prov  
-  
Alta  
Alta  
BC Alta  
BC Alta

NTS  
-  
59 A; 49 A, B, C, D, E, G, F, H  
83 B, C, E-G, J-N  
82 G, J,  
83 E; 93 I, P

Classification  
2524  
2521  
2521  
2524  
2524

Obj: Determine the composition of raw coals and their liquefaction residues to give insight into:  
 1) the efficiency of the liquefaction process in converting the coal;  
 2) behaviour of the different micro-components of coal during liquefaction;  
 3) the relationship between liquefaction yields and the petrographic composition of feed coal;  
 4) the occurrence and behaviour of mineral components during liquefaction;  
 5) the utilization of residues from liquefaction processes.

Obj: Investigation of Cambrian to Devonian stratigraphic succession in southern and central Ellesmere Island, Kent Island and northeastern Devon Island; description and interpretation of map units in conjunction with regional mapping program.

Obj: To establish the depositional environment and paleogeography of the original sediments and their subsequent diagenesis for the purpose of correlating the depositional framework (sedimentological history) with that of the Middle and Upper Devonian sediments in the Rocky Mountains to the west investigated under Project 790038.

Obj: 1) To delineate vertical and lateral coal rank variation (by vitrinite reflectance) in the Kootenay Formation of the southern Rocky Mountains and Foothills.  
 2) To utilise this and stratigraphic/structural data to interpret the relative timing of deformation and the relative contribution to total loading of structural and sedimentological components.

Obj: 1) To determine the regional coalification pattern of the lower Cretaceous Bullhead, Fort St. John and Minnes Groups in the foothills belt of northeastern British Columbia and west central Alberta.  
 2) To determine the petrographic composition of coal seams in the region to provide further data on coal quality and utilization and on depositional environments of seam formation.  
 3) Coal rank data and petrographic profiles of seams will contribute to stratigraphic correlations.

Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
810020*	Thrust-Fold Belt of Wopmay Orogen - Internal Zone Obj: To extend the study of metamorphism, plutonism and structure resulting from collisional orogeny affecting an early Proterozoic continental margin.	St-Onge, MR	P	-	BS	<u>Mack</u>	<u>86 E, F, G</u>	2531
810021*	Externides of Wopmay Orogen Obj: To extend the stratigraphic and structural study of an early Proterozoic passive continental margin and its destruction by collisional orogeny.	Hoffman, PF	P	-	BS	<u>Mack</u>	<u>86H, I, M, O, P, 76 M</u>	2531
810022*	Permafrost and ground ice map of Canada Obj: To compile a revised permafrost and ground ice map of Canada at a scale of 1:5M.	Heginbottom, JA	TS	-	GP	<u>Yk, Mack</u>	<u>106, 107, 116</u>	2552
810023*	Quaternary geologic compilation (EG-1 revision) Obj: 1) Prepare a volume describing the Quaternary geology of Canada. 2) Prepare a map depicting the surficial materials of Canada at a scale of 1:5 000 000.	Fulton, RJ	TS	-	RP	-	-	2551
810024*	Metallogeny of the Baker Lake-Thelon region, N.W.T. Obj: To determine the relationship of uranium and other mineralization to intrusive and extrusive igneous activity, metamorphism and sedimentary processes in the Archean basement and overlying Aphebian and Helikian rocks in the Baker Lake-Thelon region.	Miller, AR	EG	-	URE	<u>Kee Mack</u>	<u>55 M; 56 D, E; 65(NE); 66 A, B, G, H</u>	2562
810025*	Organization and preparation of mineral resources component of Economic Geology Series Volume 1 - 6th Edition Obj: To produce descriptive-interpretative accounts of the mineral deposits of Canada, integrated as appropriate with the regional geological accounts, and to produce summaries of deposit types, metallogenic syntheses and inter-regional comparisons of the character and distribution of mineral resources.	Thorpe, RI	EG	-	MDG	-	-	2561
810026*	Radwaste Geophysics Obj: To establish the suitability of standard geophysical logging tools in crystalline rock mass to meet the requirements of AECL's radioactive waste management program. To coordinate the other AECL's geophysical projects in the Resource Geophysics Subdivision.	Collett, LS	RGG	RG	SP	<u>Ont Man</u>	31 K, 52 B, 62 H	2573
810027*	Development of Geophysical Standards Obj: To establish test sites for electrical, radar and seismic methods of airborne, surface, borehole and marine geophysics for testing and calibration of instrumentation and presentation of results in standardized form. To develop specifications for use of test sites.	Collett, LS	RGG	RG	SP	<u>Ont</u> <u>Que</u>	<u>31 F, G</u> <u>42 A</u>	2573

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
810028*	Conodont biostratigraphy and biogeography in the Canadian Cordillera Obj: To collect and document conodont faunas and associated biotas to provide and refine a biostratigraphic framework for the interpretation of Cordilleran geological evolution.	Orchard, MJ	C	-	-	BC YK	-	2511
810029	Micropaleontological analysis of referred samples Obj: To provide microfossil-based relative ages to Cordilleran geologists for their use in the solution of geological problems.	Orchard, MJ	C	-	-	BC YK	-	2511
810031*	Evaluation of Kss-30 Sea Gravimeter Obj: To acquire, field test, and implement operational use of the new sea gravimeter (Model Kss-30).	Loncarevic, BD	AGC	RR	OBM	Atlantic Offshore	-	2541
810032	D.S.D.P. Dinoflagellates Obj: Establish a dinoflagellate zonation scheme for the Upper Cretaceous-Cenozoic of the Atlantic. Describe new taxonomy where relevant. Correlate and date this scheme relative to the standard plankton microfossil zonations and Circum-Atlantic onshore stratotypes. Determine stratigraphic-regional distribution of taxa and paleo-environmental/altitude significance of these distributions relative to the history of the Atlantic and related areas. Assess hydrocarbon source potential of sediments beneath the Atlantic using visual kerogen analysis techniques.	Bujak, JP	AGC	EPG	-	Atlantic Offshore	-	2543
810033	Biostratigraphy of the Atlantic Shelf and Relevant areas Obj: 1. To assist in the petroleum inventory of offshore eastern Canada through furnishing a detailed chronostratigraphic framework. 2. To establish, develop and utilize the palynological zonations for the Mesozoic-Cenozoic of offshore eastern Canada and to compare these with other North Atlantic regions and the Arctic.	Davies, EH	AGC	EPG	-	Atlantic Offshore	-	2543
810034	Maturation Studies Obj: To develop predictive models for maturation of the organic matter in east coast offshore wells, and hence highlight potential oil and gas provinces and prospective horizons.	Williams, GL	AGC	EPG	-	Atlantic Offshore	-	2543

2543

-

-

AGC EPG

AGC

EMG

CGD

Nfld

Atlantic  
Offshore

Obj: Taxonomy: To erect new palynomorph taxa and amend the diagnoses of existing taxa where necessary in east coast offshore Canadian wells and relevant areas. Phylogeny: To describe evolutionary lineages of palynomorphs in order to increase biostratigraphic resolution and erect a phylogenetically oriented zonation (phylozones) for eastern Canada. Ecology: To plot the ecological ranges of palynomorph taxa in order to help determine the paleoenvironmental history of the offshore eastern Canadian basins and other relevant areas.

Morphology, sedimentology, and dynamics of Newfoundland coast

Obj: A. To describe and interpret the geomorphology, sedimentary materials, and stability of the Newfoundland coast, with attention to problems of coastal resource management and oil-spill contingency planning.  
B. To investigate the sedimentary facies and physical processes characteristic of selected coastal types and, in particular, of gravel barrier and associated lagoon systems, for which little information is available.

Surficial geology, geomorphology, and glaciology of the Labrador Shelf

Obj: To gain an understanding of the post glacial sedimentary processes, hydrodynamic regime and iceberg dynamics across the Labrador Shelf; to define the style of glaciation across the shelf; to relate these findings to world wide glacial events; to determine the paleoceanography of the Labrador Sea; to map the surficial geology of the region between Hamilton and Saglele Banks; to assist the offshore industry by providing regional geological data and up-to-date synthesis; to determine the existence and density of seabed hazards.

Palynology of Carboniferous, Permian and Triassic Rocks of northern and western Canada

Obj: (a) To establish a palynological zonation for Carboniferous, Permian and Triassic rocks of northern and western Canada and to apply this zonation to local, regional and worldwide biostratigraphic correlations.  
(b) Taxonomic description of palynological taxa to provide bench marks substantiating the zonation.  
(c) Completion of related studies on Carboniferous rocks in eastern Canada previously initiated by J. Utting before joining the Survey.

Study of coal-bearing Upper Cretaceous and Paleocene formations, central Alberta Foothills

Obj: Establish the stratigraphic framework of the Upper Cretaceous and Paleocene formations of the central Foothills of Alberta as a basis of further qualitative, quantitative, mineability and environmental studies leading to an evaluation of their coal resource potential.

1 K, L, M, N; 2 C, D, E, F, M; 2542  
II O, P; 12 A, B, G, H, I, M, P

3, 13, 14

Atlantic  
Offshore

LSS

AGC RR

HW

DL

EMG

CGD

Nfld

Atlantic  
Offshore

2522

560 A, D; 340 A, B, C, D;  
59 E, H; 49 E, F, G, H

Frank

MiP

ISPG P

J

Utting, J

ISPG

CG

Alta

83 F, C

2524

83 F, C

Alta

GC

ISPG CG

T

Jerzykiewicz, T

ISPG

CG

Alta

83 F, C



Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
810040*	Surficial Geology and Crustal Structure of the Alpha Ridge, Arctic Ocean	Jackson, HR	AGC	RR	OBM	<u>Arctic Offshore</u>	-	2541
	Obj: 1) To describe the morphology, structure and history of the surficial sediments of the Alpha Ridge in the vicinity of EMR CESAR site (84°N 120°W); 2) To describe the crustal structure of the ridge using OBSs in a refraction experiment done jointly with EPB; 3) To adapt and develop new technology in working in frozen seas; 4) To provide a base line survey for the use of the "RISP" drill for obtaining continuous core and bedrock samples of the Alpha Ridge.							
810041*	The physical behaviour of suspended particulate matter (spm) in natural aqueous environments	Syvitski, JPM	AGC	EMG	CGD	<u>Atlantic Offshore</u> <u>Arctic Offshore</u> <u>Pacific Offshore</u>	-	2542
	Obj: To discover the physical forms and dynamic behaviour of spm so that the vertical flux of spm can be understood for a variety of environments.							
810042*	Sedimentology of Fjords	Syvitski, JPM	AGC	EMG	CGD	<u>BC Frank</u>	<u>27 A, F; 26 I, J;</u> <u>37 H; 92 K, L</u>	2542
	Obj: To complete a comprehensive study on the climatology, hydrography, physical oceanography, sediment dynamics, sedimentological history, and animal sediment relationships of west coast fjords (completion of previous NSERC project) and Arctic fjords.							
810043*	Pore structure in crystalline rocks	Katsube, TJ	RGG	RG	SP	<u>Man Ont</u>	<u>52 B, L; 41 J; 31 K</u>	2573
	Obj: To develop methods to determine pore structure and radionuclide isolation capacity of various types of crystalline rocks. To apply these methods on rock samples from Pinawa, Chalk River, Atikokan and other Radwaste test sites.							
810044*	Quaternary geology-terrain inventory, Prince of Wales Island, King William Island and adjacent mainland Keewatin	Dyke, AS	TS	-	RP	<u>Frank Kee</u>	<u>66 O, P; 57 B, C;</u> <u>67 A, D, H; 68 A-D</u>	2551
	Obj: To map, describe and explain the Quaternary deposits and landforms in order to understand the Quaternary evolution of the area and to provide information relevant to land-use planning and mineral exploration.							
810045	An Earth Science Atlas of the Continental Margin of Eastern Canada	Srivastava, SP	AGC	RR	LSS	-	-	2541
	Obj: To provide a means of releasing information generated or compiled by AGC in a standardized form suitable for regional studies.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
810046	Biostratigraphic Data-Processing Development Obj: Provide a data-processing system for Biostratigraphic and related geological information.	Fricker, A	AGC	PSS	SD	NS	11	2544
810047*	Quaternary geologic processes on Continental slopes Obj: To determine why different areas of continental slopes off Eastern Canada have such different surface morphology and surficial geology; to relate this variability to contemporary and Pleistocene processes and paleo-environmental configurations; and to thus develop predictions on subsurface surficial sediment distribution and slope stability and the flux of sediment from the continental shelf to the deep sea.	Piper, DJW	AGC	EMG	-	<u>Atlantic Offshore</u>	-	2542
810048	Canada-Nova Scotia Cooperative Mineral Program 1981-84 Obj: To ensure that the Cooperative Mineral Program with Nova Scotia Department of Mines and Energy is properly designed and that the GSC component is properly managed and productive	Poole, WH	DGO	-	-	NS	-	250
820001*	Completion of outstanding Foothills mapping projects Obj: To prepare for final publication geological maps and reports on Blaimore (82G/9), Carbondale River (82G/8), Livingstone River (82J/1) and Beehive Mountain (82J/2) areas in the Foothills of southwestern Alberta.	Norris, DK	ISPG	CG	GC	<u>Alta</u>	<u>82 G,J</u>	2524
820002*	Structural Geometry and Tectonic History of the Aklavik Range Obj: Investigate the stratigraphy, structure and tectonic setting of Aklavik Range; assess the economic potential of the Lower Cretaceous coal-bearing sequence and the importance of major, strike-slip faults in controlling the structural geometry of potential oil and gas reservoirs beneath the Mackenzie Delta.	(Bardoux, M)	ISPG	CG	GC	<u>Mack</u>	<u>106 M; 107 B</u>	2524
820003	Geology of the Atlantic Margin: Canada Obj: Preparation of a volume with the above title as a contribution to a 25 volume series on the geology of North America celebrating the decade of North American geology.	Haworth, RT	AGC	RR	-	Atlantic Offshore	-	2541
820004*	Geology of Aberdeen Lake and parts of adjoining map areas, District of Keewatin Obj: To interpret the geology of the area to produce a 1:250,000 geological map that will contribute to a regional geological synthesis. Emphasis is to be placed on study of Proterozoic volcanic-plutonic complexes and the stratigraphic and sedimentologic history of the Thelon Formation.	LeCheminant, AN	P	-	NC	<u>Ke</u>	<u>66 B; pts 65 O,N, 66 A,G</u>	2531

Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820005*	Paleomagnetism of Nipissing diabase and Abitibi dykes. Obj: To study the magnetic characteristics of the Nipissing diabase and Abitibi dykes and the rocks which they intrude in order to establish the relative ages of observed paleomagnetic components.	Buchan, KL	P	-	PMag	Ont, Que	<u>31, 32, 41, 42</u>	2532
820006*	Regional Geological Synthesis, Western Superior Province Obj: To compile and synthesize, in the form of maps and reports, all geological work to date in NTS 52. To outline areas requiring more coverage or update and to evaluate potential problem-oriental studies in order to: a) improve regional correlation; b) improve understanding of Superior Province tectonics, and c) to produce geological maps for publication at 1:1,000,000	Percival, JA	P	-	SG	Ont Man	<u>52</u>	2531
820007*	Deep Rose Lake and parts of adjoining map areas, District of Keewatin Obj: To map the bedrock geology at a scale of 1:250,000 in order to determine the tectonic and metamorphic history of the basement complex and that of the supracrustal rocks, and to assess the economic potential of the region. Emphases will be placed on the study of cataclastic to mylonitic zones in the region to determine their distribution and tectonic significance.	Tella, S	P	-	NC	Ke	65 O, N; <u>66 B, G</u>	2531
820008*	Geology of Montresor River and Lower Hayes River map areas, District of Keewatin Obj: The mapping of the supracrustal Chantry Belt, its extensions and its environs at a scale of 1:250,000.	Frisch, T	P	-	NC	Ke	<u>66 I</u> ; pts 66 P, <u>76 L, M</u>	2531
820009*	Hottah Terrane Obj: To identify and characterize rocks of the Hottah Terrane, establish their relation to the Great Bear Magmatic Zone, and interpret their role in the Tectonic Evolution of Wopmay Orogen.	Hildebrand, RS	P	-	BS	Mack	<u>86 D, E</u>	2531
820010*	Precambrian Shield Volume "Decade of North American Geology" Obj: To produce an up-to-date volume (approx. 300 printed pages), and geological and tectonic maps on the geology of the Canadian Precambrian Shield, (as part of a 20 volume work on the geology of North America - GSA centennial project).	Hoffman, PF	P	-	BS	Alta Sask Man Ont Que Nfld		2531
820011	Geology of the Hill Island Lake Area, District of Mackenzie Obj: To provide a 1:250 000 scale map and description and discussion of the geology of the Hill Island Lake Area (75C). This would include particular objectives outlined on the attached sheet.	Bostock, HH	P	-	BS	Mack	75 C	2531

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820012*	Geological and geoscience studies in support of the Nuclear Fuel Waste Management Program Obj: To provide leadership and direction in scientific and technical matters to AECL staff seconded to GSC for purposes of geoscience studies pertaining to the NFWM Program.	Ermanovics, I	P	-	SG	Man Ont	-	2531
820013*	Meguma Gold in the Ecum Secum-Liscomb area, Nova Scotia Obj: To determine the origin and distribution of gold mineralization in deformed metaturbidites of the Meguma Group in eastern Nova Scotia.	Henderson, JR	DGO	-	-	NS	<u>11 D/16, E/1</u>	250
820014*	Stratigraphy and tectonics of the western margin of the southern Omineca Belt Obj: To determine the stratigraphy, age and correlation of the rocks in the area underlain by the Snowshoe Formation and therefrom determine the stratigraphic and structural history of the western margin of the southern Omineca Belt.	Struik, LC	C	-	-	BC	<u>82 M; 92 P; 93 A,H,G</u>	2511
820015*	Geology of Sheldon Lake (105 J) and Tay River (105 K) map area, east central Yukon Obj: To update geological mapping and understanding of stratigraphy and structure in Sheldon Lake (105 J) and Tay River (105 K) map areas. Available preliminary edition geologic maps lack details useful in mineral exploration. An attempt will be made to extend the stratigraphy defined to the east in Nahanni map area (105 I) into these areas.	Gordey, SP	C	-	-	YK	<u>105 J,K</u>	2511
820016*	Geology of Skagway (104 M) map-area, British Columbia Obj: To update geological mapping in Skagway (formerly Bennett) map-area.	Dodds, CJ	C	-	-	BC	<u>104 M</u>	2511
820017	The Geology of the Strait of Georgia Obj: To examine and describe the geology of the Georgia Depression including: structures, stratigraphy and sedimentology. To determine the relative importance of glacio-marine and tectonic processes in shaping the constituent basins particularly with respect to the late Cenozoic. To determine the tectonic sequence of events in the Strait of Georgia as they relate to the evolution of the western Canadian Continental margin.	Hamilton, TS	C	-	MG	BC	<u>92 B,F,G,K</u>	2512

Number Title Leader Div Subdiv Sec Prov NTS Classification

820018*	Volcanic Rocks of the Insular Belt and Adjacent Deep Ocean	Hamilton, TS	C	-	MG	BC	103 C, F, K; 92 B, C, E, F, K, L	2512
820019*	Obj: To examine the volcanic sequences of the western Canadian Continental Margin and describe their: stratigraphy, physical forms and depositional/extrusive modes, age relationships with adjacent formations, petrography, mineralogy, geochemistry, petrology and genesis. To interpret the geologic significance and economic potential of each of the various volcanic units and their roles in the tectonic and geodynamic evolution of the region.  Quaternary geology and till geochemistry, northern Nova Scotia	(Stea, RR)	DGO	-	-	NS	pts 21 H(E <sub>1/2</sub> ); 11 E, F	250
820020	Federal Mineral Program in Newfoundland 1982-84	Poole, WH	DGO	-	-	Nfld	-	250
820021	Obj: To ensure that the Federal Mineral Program in Newfoundland is properly designed and that the GSC component is properly managed and productive.  Borehole Geophysics Applications to Coal	Mwenifumbo, CJ	RG	-	-	-	-	2573
820022*	Obj: To improve borehole methods for the detection and evaluation of coal.  Borehole Geophysics (Seismic Techniques)	Overton, A	RG	-	-	Nfld Ont	12 A; 41 I	2573
820023*	Obj: Apply borehole seismic methods to the location and delineation of massive sulphide ore bodies and coal deposits.  Operation CESAR	Overton, A	RG	-	-	Arctic Offshore	-	2573
820024*	Obj: To participate in a multidisciplinary Canadian Arctic geoscience expedition to investigate the nature and origin of the Alpha Ridge, a major subsea mountain range in the Polar Basin.  Magnetic Anomaly Maps of Canada	Dods, SD	RG	-	GDP	-	-	2571

Obj: A. To produce a series of composite magnetic anomaly maps in colour at a scale of 1:1,000,000 to be issued by the Geological Survey of Canada;  
B. To produce a 1:5,000,000 composite magnetic anomaly map of Canada (1255A)  
C. To provide a bank of digital aeromagnetic data.

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820025*	Geochemistry of stream sediments, Nova Scotia Obj: To determine the regional variation in geochemistry of stream sediments in Cape Breton Island and northern Nova Scotia as an aid to mineral exploration and environmental studies.	(Rogers, DJ)	D60	-	-	NS	Pts 11 E, F, G, J, K, N, O; 21 H	250
820026*	Geology of eastern North Bay Batholith, insular Newfoundland Obj: To map and describe the plutonic rocks and adjacent wall rocks suitable for publication at 1:50,000 scale, to determine the geological evolution, and to evaluate the potential for mineralization.	(Dickson, WL)	D60	-	-	Nfld	11P/15, 16; pts 11P/9 1M/13	250
820027*	Development of Regional Geophysical Data Processing and Interpretation Obj: To adapt digital data enhancement, display and interpretation techniques and to develop new techniques as required, in relation with the general utilization and interpretation of regional airborne geophysical data.	Teskey, DJ	RGG	RG	GDP	NS	11	2573
820028*	Geology of Sagtek Fiord area, Nain and Churchill Provinces Obj: To map and describe the gneisses and plutonic rocks and the Ramah Group sedimentary and volcanic rocks suitable for publication at 1:100,000 scale, to determine the geological evolution with particular attention to the Nain - Churchill province boundary, and to evaluate the potential for mineralization.	(Ryan, AB)	D60	-	-	Nfld	14 L	250
820029*	Geology of the Atikonak River area, Grenville Province Obj: To map and describe the gneisses and plutonic rocks suitable for publication at 1:100,000 scale, to determine the geological evolution, and to evaluate the potential for mineralization.	(Nunn, GAG)	D60	-	-	Nfld	23 H, 5k	250
820030*	Geology of the Lake Melville area, Grenville Province Obj: To map and describe the gneisses, plutonic rocks and Double Mer sediments suitable for publication at 1:100,000 scale, to determine the geological evolution, and to evaluate the potential for mineralization.	(Erdmer, P)	D60	-	-	Nfld	13 F, G	250
820031	Petroleum Resource Evaluation Interchange Obj: To provide a firm basis for petroleum resource evaluation by the analysis of the geological setting and characteristics of hydrocarbon accumulations on a worldwide basis; by establishing and quantifying valid analogs applicable to Canadian basins; and by comparison of method and approaches to resource evaluation used by other governments.	Taylor, GC	ISPG	PRAS	-	-	-	2526

Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820032	Enhanced Oil Recovery Research Obj: To undertake research leading to a better understanding of the technology required and the resulting supply related to enhanced recovery methods; to assist in development of improvements in the technology; and to prepare estimates of future supply from enhanced oil recovery in Canada.	Procter, RM	ISPG	PRAS	-	-	-	2526
820033*	Stratigraphy and Sedimentology of the Mannville Group, Southern Alberta Obj: 1. Regional correlation of the Lower Cretaceous strata in southern Alberta. 2. Construction of a facies model for the Mannville Group from stratigraphic and sedimentological data. 3. Environmental reconstruction of the Mannville Group and delineation of the regional paleogeography of the period.	Banerjee, I	ISPG	RG	M	Alta, Sask, BC	72; 73; 74 D; 82 O, P; 83; 84 A; 93	2521
820034*	Stratigraphic and Sedimentological investigation of the Waterton and Altyn Formations (Purcell Supergroup), southwestern Alberta Obj: To study facies variations and stratigraphic continuity within the pre-Appexkunny carbonate sequence (Waterton and Altyn Formations) in Waterton (82 H4), Beaver Mines (82 G8 E/2) and Carbondale River (82 G8 W/2) map-areas, southwestern Alberta.	Hill, R	ISPG	RG	M	Alta	82 H/4, 6/8	2521
820035*	Upper Mesozoic and Cenozoic Palynology of Western and Northern Canada Obj: To establish the biostratigraphic succession, areal distribution, ecologic significance and taxonomy of Upper Mesozoic and Cenozoic palynomorphs of western and northern Canada, with particular emphasis on Mackenzie Delta-Beaufort Sea area.	McIntyre, DJ	ISPG	P	MP	Yk Mack Frank Alta	95, 96, 97, 105, 106, 107, 115, 116, 117; 49, 59, 69, 79, 89, 98, 99, 340 560, 83 E, F	2522
820036*	Geology of the Winokapau Lake area, Grenville Province. Obj: To map and describe the gneisses and plutonic rocks suitable for publication at 1:100,000 scale, to determine the geological evolution, and to evaluate the potential for mineralization.	(Thomas, A)	D60	-	-	Nfld	13 E (S $\frac{1}{2}$ )	250
820037	Oil Shale Resources of Canada Obj: To investigate the geology and geochemistry of kerogen-rich sedimentary rocks ("oil shales") across Canada. Studies of the geological structure, stratigraphy, sedimentology, mineralogy, catagenesis and organic geochemical properties of Canadian oil shales will establish a data base from which resource potential will be determined.	Snowdon, LR	ISPG	PG	CG	-	-	2523

Project Classification

Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820038*	Measurements of dynamic elastic moduli of frozen and unfrozen surficial materials	Kurfurst, PJ	TS	-	EG	Mack	107 C	2552
	Obj: To relate dynamic elastic constants of frozen and unfrozen surficial (unconsolidated) materials measured in situ to static measured ones (either in situ in the laboratory) to relate these to standard in situ borehole geotechnical parameters (i.e. shear vane, standard penetrometer) and lithological descriptions of soils tested. Should meaningful relationships be established, to correlate these with the NRC or other permafrost classification in order to allow its easier practical applications in the fields of engineering and permafrost geology.							
820039*	Drift prospecting, east-central Labrador	Klassen, RA	TS	-	SMT	Nfld	13 J,K	2552
	Obj: To develop methods for determining the source of uraniferous boulders contained within or associated with glacial deposits.							
820040*	Aeromagnetic Survey: Gulf of Maine-Georges Bank and Adjoining Continental Margin	Ready, EE	RGG	RG	CAS	Atlantic Offshore	-	2571
	Obj: To complete the aeromagnetic coverage of the above areas as an aid to a geological study and off-shore exploration of the continental margin. The area entails approximately 80,000 line kilometres of survey flying and covers an area of approximately 165,000 square kilometres.							
820041	Information Data Base, Offshore East Coast Wells	Williams, GL	AGC	EPG	-	Atlantic Offshore	-	2543
	Obj: To develop computer data base of all geographical, geological and engineering information on offshore east coast wells. To use the data base for handling queries by management on resources. To facilitate research by allowing comparison of data and directing the researcher to more sophisticated data bases.							
820042	Coastal Information System development	Fricker, A	AGC	PS	-	-	-	2544
	Obj: To overcome the problems of organizing large quantities of coastal information and to develop methods for inspection and manipulation of this information. To establish a procedure for description, in varying detail as information permits, of all sections of the coast. To develop a computer-based system for efficient output and release of coastal information in the form of new or updated maps, figures, tables.							
820043	Coastal Environments and Processes in the Canadian Arctic Archipelago	Taylor, RB	AGC	EMG	SD	Frank	-	2542
	Obj: To map and analyze the coastal environments of the Arctic Archipelago. To determine the frequency and magnitude of processes affecting coastline stability across the Arctic Islands. To provide information on the physical characteristics of shore types and the processes affecting coastal stability which will serve as background information for the evaluation of man's activities in the coastal zone and in case of an environmental emergency, e.g. oil spill.							



Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820044	Quantitative Quaternary Paleocology, Eastern Canada	Mudie, PJ	AGC	EMG	PEC	Atlantic Offshore	-	2542
	Obj: 1. To quantify the relationship between present microfossil assemblages and the climate/oceanography of the eastern Canadian margins. 2. To apply these quantitative data to analysis of past climatic and oceanographic conditions, e.g. Quaternary glacial-interglacial cycles. 3. To correlate the E. Canadian paleocological records and relate them to models of global ocean-atmosphere interaction during the Quaternary.							
820045	Implementation and Maintenance of data management system for geophysical Data	Sherin, AG	AGC	PS	-	-	-	2544
	Obj: To load and perform quality checks on geophysical data being entered into the GEOFFREY Data Management System. To implement modifications to improve efficiency and data integrity resulting from the final review of the development project (790039). To monitor the performance of the system, and to make appropriate changes to the system and procedures to ensure a reliable and accurate source of geophysical data.							
820046*	Sediment Dynamics and Depositional Processes in the Coastal Zone	Forbes, DL	AGC	EMG	SD	-	-	2542
	Obj: To further our understanding of the dynamics of sediment entrainment, transport, and deposition in the coastal zone; of the sedimentology of coastal deposits; and of long-term trends in the development of coastal sedimentary systems.							
820047	The tectonics of the intersection of a mid-ocean ridge and a transform fault	Loncarevic, BD	AGC	RR	-	Atlantic Offshore	-	2541
	Obj: To determine the structure at the intersection of the Vema Fracture Zone and the mid-Atlantic ridge on the basis of an intensive study using reflection and refraction profiling, gravity and heat flow measurements and a study of microearthquake activities.							
820048	Temperature history of Lower Paleozoic rocks, determined by optical study of dispersed organic materials	Goodarzi, F	ISPG	CG	CT	-	-	2524
	Obj: i) To determine optical and morphological character of dispersed organic materials (D.O.M.) in lower Paleozoic rocks. ii) To examine vertical variation of D.O.M. in boreholes and determine the paleo-temperature. iii) To classify the D.O.M. of Lower Paleozoic rocks. iv) To study the influence of a) time of burial (age), b) rate of subsidence (rate to heating), c) genera of specific D.O.M., d) petrological and sedimentological environment.							
820049	Structural Fabric of Coal Measure Rocks	ex-011erenshaw	ISPG	CG	GC	-	-	2524
	Obj: To define the structural fabric of coal measure rocks on a mesoscopic scale where they are being excavated and on a megascopic scale adjacent to these excavations. To project will embrace both deformed and undeformed strata throughout Canada.							

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
820050*	Near-Surface Geology of the Arctic Island Channels Obj: 1. To map surficial sediment distribution, both by outcrops of lithostratigraphic units and by textural parameters in sufficiently many and varied areas to have a predictive capability elsewhere. 2. To establish a litho-, bio- and chronostratigraphy in the soft-sediment accumulating basins, and if possible in other parts of the surficial sediment sequence. 3. To define the principal contemporary sediment dispersal processes. 4. To define the distribution of principal lithologic types of till.	Piper, DJW	AGC	EMG	-	Arctic Offshore	-	2542
820051*	Metallogeny of marine environments, including active spreading ridges Obj: 1. In collaboration with other scientists to investigate and document seafloor sulphide and other metalliferous occurrences in Canadian waters, with particular emphasis on the Juan de Fuca-Explorer-Dellwood-Tuzo Wilson ridges and adjacent seafloors. 2. To conduct research on hydrothermal systems and products in seafloor environments and to assist in the design, coordination and implementation of Canadian research programs in these areas.	Franklin, JM	EG	-	MDG	Pacific Offshore	91, 101, 102	2561
820052	Metallogenic processes in sedimentary-diagenetic environments Obj: To understand how various commodities of economic interest are, or were, concentrated by sedimentary-diagenetic processes, particularly those operating in evaporitic environments. An understanding of these processes is necessary for development of metallogenic models applicable to mineral exploration and resources evaluation.	Dunsmore, HE	EG	-	URE	-	-	2562

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780028	770060	570029*	770045	780002*	680102
780039*	780003	630037*	770061	780012*	680109
780045	780004*	680081*	770070*	780016	690043*
780046*	780006*	680093*	770071*	780017*	690065
790003*	780028	690095*	770077*	780024*	700008*
790006*	780039*	710092	780002*	780026	710061*
790008	780045	720071*	780015*	780033*	720071*
790013*	780047	720080*	780016	780035*	720072*
790020*	790008	740016	780017*	790025*	720075*
790022*	790013*	740017	780024*	800005*	730043
790030*	790020*	740085*	780026	800013	730044*
790032	790022*	740091*	780033*	800018*	740017
790038*	790032	750069*	780047	800019*	740072*
790041*	790038*	750072	790002*	800020*	740085*
800002	800002	750098*	800013	800023	740091*
800011*	800018*	760027*	800018*	800025*	740110
800018*	810010*	770035	800025*	800027*	750010*
800020*	810011*	770055*	800027*	810002*	750011
800028*	810013	770063*	800030	810027*	750051*
800029*	810014*	770077*	800038	820005*	760014*
810006*	810017	780003	810003*	820010*	760027*
810010*	810018*	780011	810005*		760043
810011*	810019*	780026	810026*	<u>Nova Scotia</u>	770026
810012	810039*	800007*	810027*		770077*
810013	820001*	800014*	810043	500029	780016
810014*	820010*	800018*	820005*	680081*	780025*
810018*	820033*	800024	820006*	680102	780026
810019*	820034*	800025*	820010*	680109	790002*
810028*	820035*	810003*	820012*	690064*	790025*
810029		810013	820022*	700008*	800023
810042*	<u>Saskatchewan</u>	810026*		700056*	810002*
820014*		810043	<u>Quebec</u>	710061*	810003*
820016*	400006*	820006*		720071*	810036*
820017	570029*	820010*	400006*	720072*	820010*
820018*	630037*	820012*	570029*	730001*	820020
820033*	640420		630037*	730043	820022*
	650027*	<u>Ontario</u>	640048*	730044*	820026*
<u>Alberta</u>	680012*		680060*	740084*	820028*
	680081*	400006*	680081*	740085*	820029*
400006*	680093*	570029*	680101*	740106*	820030*
500029	720071*	630037*	680102	740110	820036*
570029*	720073	680023*	690064*	750010*	820039*
610019*	720080*	680060*	690095*	750051*	
610269	740017	680081*	700008*	750095	<u>New Brunswick</u>
650023	740081*	690095*	700011*	750096*	
650027*	740085*	700018	720071*	760014*	500029
670576*	740091*	720071*	720072*	760027*	570029*
680027	750010*	720072*	730006*	760045*	680081*
680090	750051*	720078*	730012	770038	680102
680091	750058*	720080*	730027	770045	680109
680093*	750069*	720084*	740017	770071*	690064*
700003	750098*	730001*	740054	770077*	700008*
700034	760045*	730006*	740068*	780015*	700011*
700037*	760047*	730027	740081*	780022	700056*