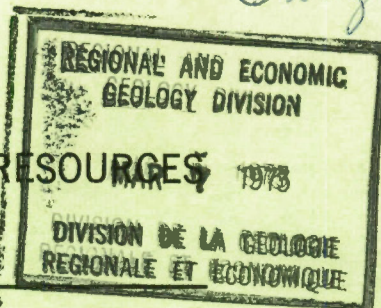


CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES



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GEOLOGICAL SURVEY OF CANADA

PRELIMINARY  
CATALOGUE OF SCIENTIFIC PROJECTS  
SCIENTIFIC PROGRAM  
FIELD PROGRAM  
1973-1974

Compiled by Gertrude E. Derry  
and Louise Dubois Rochon



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FOR GEOLOGICAL SURVEY USE

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OTTAWA  
1973

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PRELIMINARY CATALOGUE OF SCIENTIFIC PROJECTS  
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Compiled by Gertrude E. Derry and Louise Dubois Rochon  
from CG 67 forms as submitted by Divisions 1st October 1972

January 1973



F O R E W O R D

This catalogue is an interim issue of the Preliminary Catalogue of Scientific Projects for 1973 - 1974. Although GSC activity classifications have been included, descriptions of the activity system are yet to be written and published.

This Preliminary Catalogue contains 414 projects, 50 of these being new projects. 191 of these listed projects have a field component; these are indicated by an asterisk. Indexes by project leader, division and section, and province will be found at the end.

This issue is for Geological Survey use.

January 1973



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LIST OF ABBREVIATIONS

ADMINISTRATION - ADM

- DO - DIRECTOR'S OFFICE
- SP - SPECIAL PROJECTS

CENTRAL LABORATORIES AND TECHNICAL SERVICES DIVISION - CLTS

- M - Mineralogy Section
- AC - Analytical Chemistry Section

RESOURCE GEOPHYSICS AND GEOCHEMISTRY DIVISION - RGG

- G - Geochemistry Section
- EM - Electrical Methods Section
- MM - Magnetic Methods Section
- RM - Radiation Methods Section
- SM - Seismic Methods Section
- CS - Contract Surveys Section
- DC - Digital Compilation
- SP - Special Projects
- EAO - Experimental Airborne Operations

TERRAIN SCIENCES DIVISION - TS

- ADM - Administration Section
- RSP - Regional and Stratigraphic Projects Section
- PG - Paleontology and Geochronology Section
- EGG - Engineering Geology and Geodynamics Section

REGIONAL AND ECONOMIC GEOLOGY DIVISION - REG

- A - Appalachian Section



REGIONAL AND ECONOMIC GEOLOGY DIVISION (continued)

PRECAMBIRAN SHIELD Subdivision - PS

CORDILLERAN and PACIFIC MARGIN Subdivision - CPM

- C - Cordilleran Section
- MGsc - Marine Geoscience Unit
- IF - Information Services

STANDARDS and CONTROLS Subdivision - SCSd

- EP - Eastern Paleontology Section
- G - Geochronology section
- PMag - Paleomagnetism section
- Pet - Petrology section

ECONOMIC GEOLOGY Subdivision - EGSd

- SP - Special Projects
- MD - Mineral Deposits Section
- GM - Geomathematics Section
- MDB - Mineral Data Bank Section

INSTITUTE OF SEDIMENTARY AND PETROLEUM GEOLOGY DIVISION - ISPG

REGIONAL GEOLOGY SUBDIVISION - RGSd

- AI - Arctic Islands Section
- NM - Northern Mainland Section
- SM - Southern Mainland Section

PALEONTOLOGY SUBDIVISION - PSd

- MaP - Macropaleontology Section
- MiP - Micropaleontology Section
- OP - Ottawa Paleontology

INSTITUTE OF SEDIMENTARY AND PETROLEUM GEOLOGY DIVISION (continued)

ENERGY SUBDIVISION - ESd

G of P- Geology of Petroleum Section

G of C- Geology of Coal Section

CP - Coal Petrology Section

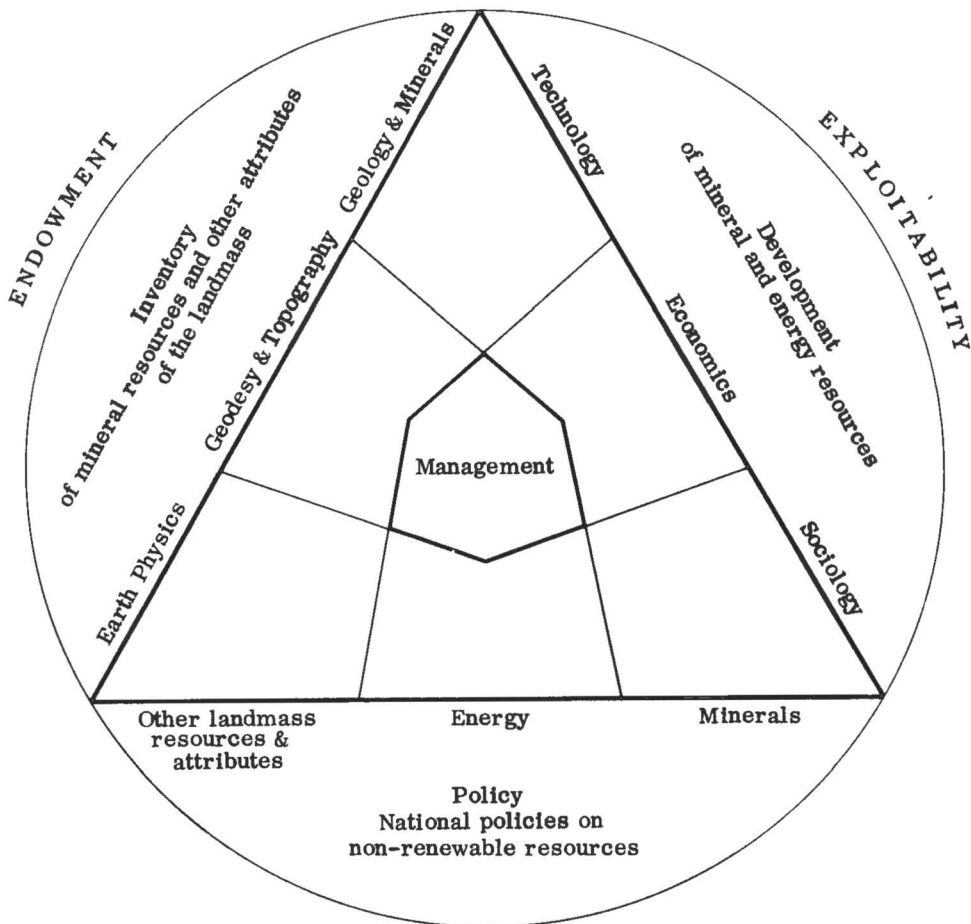
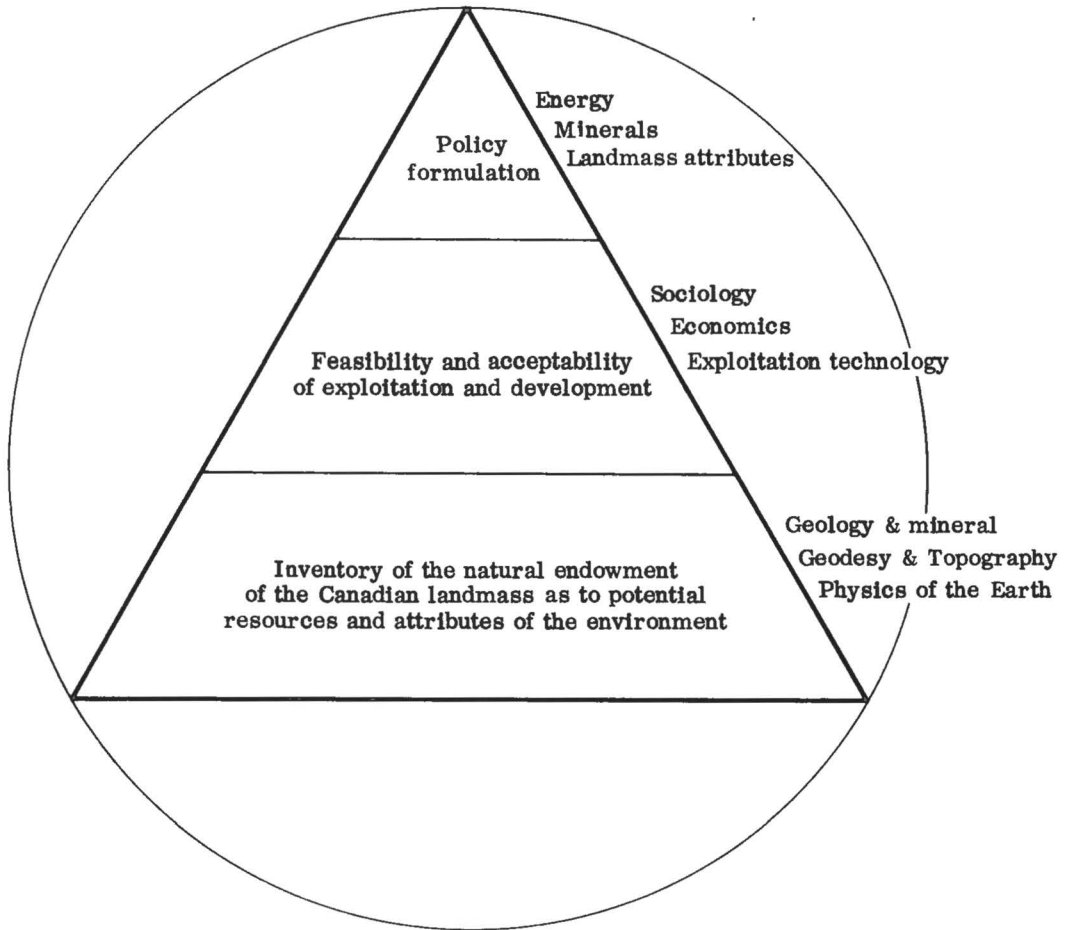
G - Geochemistry Section

ATLANTIC GEOSCIENCE CENTRE - AGC

EASTERN PETROLEUM GEOLOGY SUBDIVISION - EPG

MARINE GEOLOGY SUBDIVISION - MG

MARINE GEOPHYSICS SUBDIVISION - MGph



ACTIVITIES OF THE GEOLOGICAL SURVEY OF CANADA

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The Geological Survey of Canada surveys the materials and attributes of the landmass of Canada: its composition, forms and natural processes as

potential resources

conditioners of terrain use and development

Its program, broadly inventory in character, is directed to:

understanding of the natural resource base,

identification of resources,

appraisal of the natural resource endowment

determination of the environment of the resources

The resources to be appraised are mainly non-renewable. They range

from the extractive mineral and fossil fuel resources

to the non-extractive materials and attributes of the

terrain that condition landmass utilization and

conservation (local, urban, regional).

The Geological Survey manages a system of information that provides an input to its program, comprises a national geoscience information base and conveys the results of its surveys and appraisals.

MAJOR CLASSES OF G.S.C. ACTIVITIES

1. Geoscience survey of the Canadian landmass defined as the National Resource Base for energy, minerals and terrain attributes.
2. Geoscience Exploration Guidelines and Technology for Resource Identification.
3. Geoscience analysis, appraisal and measurement of Natural Endowment in Resources.
4. Data and information management system.
5. Supporting services.

GEOLOGICAL SURVEY OF CANADA

ACTIVITY CLASSIFICATION

with relevant project numbers where applicable

1. National Geoscience Base (Resource Base)

Geoscience survey of the Canadian Landmass defined as the National Resource Base for energy, minerals and terrain attributes.

1.1. Systematic Surveys

1.1.1. Geological Mapping

1.1.1.1. Standard bedrock

600032; 610002; 610007\*; 610011; 620019; 630003\*; 630016;  
630017; 630025\*; 630032; 650003\*; 650010; 680038; 680066;  
680084\*; 680119\*; 680130; 690009; 690010; 690017; 700015;  
700025; 700029; 700047\*; 710025; 720024\*; 720038\*; 720039\*;  
720052\*; NP\*; NP\*; NP\*; NP\*

1.1.1.2. Reconnaissance bedrock

620001; 660013; 670014\*; 670068; 690028; 690061; 700073\*;  
700074

1.1.1.3. Standard surficial

530030; 610029; 640027\*; 640029; 650131; 660031; 670061;  
680062; 690043; 690047\*; 700053; 700056; 710020\*; 710041\*;  
710047\*; 710083; 710092\*; 720004\*; 720028; 720057; 720081\*;  
NP\*; NP\*; NP

1.1.1.4. Reconnaissance surficial

620010; 680032; 690049

1.1.1.5. Standard marine bedrock and surficial

680055\*; 700092\*; 710059; 710066; 710090; 720104; NP\*; NP\*;  
NP\*

1.1.2. Geophysical surveys

1.1.2.1. Federal-Provincial aeromagnetic

690066; 690068\*; 690072\*; 690073

1.1.2.2. Reconnaissance aeromagnetic

650007\*

1.1.2.3. Marine multidisciplinary

660054\*; 710048\*; 710049\*; 720105; 720106; 720111

1.1.3. Geochemical Surveys

1.1.3.1. Airborne radiometric profile

720071\*

1.1.3.2. Grid; sediments and water

700057\*; 720063\*

1.2. Regional Analyses and Syntheses

1.2.1. Sedimentary Basins (fossil fuels)

490001; 550004\*; 610014; 630021; 630415; 640032\*; 640419;  
650023; 660026\*; 670021; 680064\*; 680081\*; 690005; 690018;  
700034\*; 700037\*; 700060; 700064; 700068\*; 710003\*; 710005;  
710010; 710011; 710013; 710018\*; 710031; 710033; 710035;  
710036; 710067; 710069\*; 710072; 710073\*; 710074\*; 710075;  
720005\*; 720040\*; 720047\*; 720049; 720050\*; 720059; 720060;  
720061; 720098\*; 720107; NP\*; NP\*; NP\*; NP\*

1.2.2. Geological Provinces (minerals)

610030; 620012; 620018; 640010; 640036; 650008; 650009;  
650044; 650288; 660002; 660042; 660050\*; 670003; 670019;  
670059\*; 670064\*; 670569; 680071\*; 680085\*; 680096; 680121;  
680135; 690023; 690025; 690032; 700026\*; 700048; 700052;  
710012; 710038; 710046; 710053\*; 710057; 720037; 720041\*;  
720048; 720053; 720054\*; 720062\*; 720070\*; 720093\*; NP\*;  
NP\*; NP\*; NP\*; NP\*; NP\*; NP\*; NP\*

1.2.3. Geographical Regions (landmass attributes)

640004\*; 650027\*; 670031; 680037\*; 680065; 700093; 710042\*;  
710055; 720082\*; 720100\*; 720101\*; 720102; 720114; 720115;  
NP; NP\*; NP\*; NP\*; NP\*; NP\*

1.3. National Compilations and Syntheses

1.3.1. Topical National Maps

640125\*; 680073; 710016

1.3.2. National Geological Atlas

680075; 690086\*; 700009; 700030; 700031; 700032; 700040;  
700042; 700043; 700045; 710008; 710026; 710027; 710028;  
710050; 710051; 710068

1.3.3. Summary National Descriptions

1.3.4. Continental Tectonic Framework

670557

1.4. Standards and Controls

1.4.1. Nomenclature and Classification

480191; 590194; 600353; 610330; 660552; 710019\*; 710060;  
720042\*

1.4.2. Time-scale and Correlation

1.4.2.1. Paleontological

600227; 610019; 650024\*; 670576; 680063; 680068\*; 680101;  
680109; 680113\*; 690006\*; 690075\*; 690083; 710015\*; 710022\*;  
710062; 710065; 720044\*; 720045; 720072; 720116; NP ; NP\*

1.4.2.2. Geochronological

500336; 650466\*; 690060; 700067\*; NP\*

1.4.2.3. Paleomagnetic

680012\*; 690042; 720046\*; 720055; 720056; 720075

1.4.3. Physical and Chemical Property Measurements

1.4.3.1. Rocks

650015; 690089; 700054\*

1.4.3.2. Terrains

660030; 680040; 680047\*; 690048; 690054\*; 690095; 710070;  
710077\*; 720079\*

1.4.3.3. Analytical measurements

NP\*

1.4.4. Reference Collections and Catalogues

1.4.4.1. Collections

550101\*; 570119\*; 580037

1.4.4.2. Catalogues

580153; 580160

1.4.5. Geological Processes

690034; 700065; 710017\*

1.4.5.1. Rocks

1.4.5.2. Terrains



## 2. Geoscience Exploration Guidelines and Technology (Resource Identification)

### 2.1. Guidelines

- 2.1.1. Geology, geophysics and geochemistry of fossil fuel reservoirs, measures, fields and basins; their relation to regional features; and their use in deriving guidelines needed for the identification of fossil fuel deposits and for regional assessment

660486; 670016; 680018\*; 680019\*

- 2.1.2. Geology, geophysics and geochemistry of mineral deposits, areas and provinces and their classification; their relation to regional features; and their use in deriving guidelines needed for the identification of mineral deposits and for regional assessment

540025; 640013; 720036\*; NP\*; NP\*

- 2.1.3. Geology, geophysics, geochemistry and geomorphology of sands, gravels, clays and placers; their relation to regional features; and their use in deriving guidelines needed for the identification of such resources and for regional assessment

- 2.1.4. Determination of geoscience attributes of rocks, soils and geomorphic features that condition resource development or identify natural hazards; the development of geoscience guidelines for appraisal of regions and sites and for prediction of hazardous events

700035; 700094\*; 710002; 710044\*; 710081\*; 710086\*; 720083\*; NP\*; NP\*; NP\*; NP\*; NP

- 2.2. Technology: development and evaluation of methods and instruments in geology, geophysics, geochemistry and geomorphology according to the requirements of the marine, Arctic, sub-surface and other field environments and of the laboratory

- 2.2.1. For the identification of:

2.2.1.1 Fossil fuels

680133; 710001\*; 710054

2.2.1.2. Sources of geothermal energy

2.2.1.3. Mineral deposits

690035; 690091\*; 700014; 700087\*; 710080\*; 720067\*; NP\*; NP

2.2.1.4. Environmental and engineering factors

NP\*

2.2.2. For the survey of the resource base in:

630049

2.2.2.1. Sedimentary basins

710029; 720112

2.2.2.2. Geological provinces

660053; 700049\*

2.2.2.3. Geographical regions

2.2.3. Of Geoscience Techniques

630031\*; 630404; 670041\*; 680089\*; 680091; 680123\*; 680132;  
680140\*; 680141\*; 690090; 700018; 700089; 700090; 710098\*;  
720080\*; 720084\*; 720110; 720113; NP\*; NP; NP

3. Determination of Resource Endowment

3.1. To analyse, appraise and measure the energy, mineral and terrain endowment on national and regional bases, by use of geological, geophysical, geochemical and geomorphological factors

3.1.1. Oil and gas

680134\*; 720066\*; 720103

3.1.2. Coal

500038\*; 610269\*; 680102\*; 680105\*; 710091\*; 720051\*;  
720073\*

3.1.3. Uranium

670029\*

3.1.4. Geothermal energy

3.1.5. Mineral commodities

530014\*; 570029\*; 580036; 630037\*; 630039; 650012; 650056\*;  
670028\*; 680060\*; 700041\*; 700059\*; 710030\*; 710043\*; 710045;  
710052; 720089\*; 720095\*

3.1.5.1. Copper

3.1.5.2. Zinc

3.1.6. Terrain capability

3.1.7. Terrain hazards

720068\*

3.2. Development and evaluation of geoscientific methods of endowment appraisal

690038\*; 720087; 720094; 720097

4. Data and Information Management System

4.1. Acquisition

4.1.1. Geological Library and map collection

4.1.2. Central Technical Files

4.1.3. Well log files

4.1.4. Project oriented E.D.P. files

680114; 710061

4.1.5. Archival E.D.P. files

4.2. Output

4.2.1. Inter and intra-departmental reports and communications

4.2.2. Branch publications

4.2.3. Open Files

4.2.4. Distribution

4.2.5. E.D.P. file of geochemical data

4.2.6. Contributions to scientific, technical and professional journals

680082

4.2.7. Lectures, talks, conferences and workshops

720043\*; NP\*

4.2.8. Professional exchanges

- 4.3. Public Relations
  - 4.3.1. Written and oral replies to public technical enquiries
  - 4.3.2. Geology for the Public
    - 4.3.2.1. Mineral and rock sets  
400006\*
    - 4.3.2.2. Mineral identification
    - 4.3.2.3. Guides to Mineral Collecting  
640048\*; NP
- 4.4. Library services
  - 4.4.1. Computerized current literature, search and dissemination (CAN/SD1)
  - 4.4.2. Search and reference enquiries
  - 4.4.3. Loans, interlibrary and individual
  - 4.4.4. Monthly accession list
- 4.5. Operation of Canada Centre for Geoscience Data
  - 4.5.1. National Index of Geoscience Data
  - 4.5.2. E.D.P. Filing and retrieval systems and technology
- 4.6. Scientific Liaison
  - 4.6.1. National Committees
  - 4.6.2. International Collaboration
    - 4.6.2.1. C.G.L.D.
    - 4.6.2.2. I.U.G.S.
- 5. Common Services to Activities
  - 5.1. Administration
    - 5.1.1. Managerial
    - 5.1.2. Administration
    - 5.1.3. Clerical

5.2. Scientific Support

680036\*

5.2.1. Mineralogical determinations

600307; 620308; 680023

5.2.2. Paleontological and biostratigraphic determinations

500029; 690064\*; 720078

5.2.3. Geochronological determinations

540028; 570148; 590457

5.2.4. Analytical determinations

380077; 580175; 680017; 680090; NP\*; NP

5.2.5. Paleomagnetic determinations

5.2.6. Scientific editorial

5.3. Technical Services

5.3.1. Cartographic

5.3.2. Technical maintenance

5.3.3. Instrument shop

5.3.4. Lapidary

5.3.5. Photographic

5.4. Geoscience Services to other agencies

490038\*; 640402\*; 680098; 700091\*; 720027\*; NP\*

LIST OF SCIENTIFIC PROJECTS IN NUMERICAL ORDER

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
380077	Analysis of rocks and minerals Obj.: To provide compositional data on geological materials as a contribution to the solution of geological problems.	Abbey, S	CL&TS	AC	-	-	5.2.4
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	CL&TS	M	-	-	4.3.2.1
480191	Monograph of the Canadian <u>Buchia</u> ( <del>= Aucella</del> ) Obj.: To describe and illustrate Canadian representatives of this stratigraphically important genus using fossil collections available at this Survey and elsewhere. To give a stratigraphical appraisal of all described species. To investigate critically the relationships of Canadian species with the American, Eurasian, and Indo-Pacific species and to elucidate the ages of the Canadian <u>Buchia</u> zones in terms of standard stages.	Jeletzky, JA	ISPG	OP	-	-	1.4.1
490001	Mesozoic and Tertiary on the west coast of Vancouver Island and in Quatsino Sound Obj.: A stratigraphic-paleontological study with special attention to the Lower Cretaceous-Jurassic contact and possibilities of Tertiary strata with respect to oil and gas.	Jeletzky, JA	ISPG	OP	BC	92 E,F,L	1.2.1
490038*	Miscellaneous field investigations by staff at Vancouver office Obj.: Varied objectives according to the particular investigations, which include supervision of Geological Survey field parties, examination of mining properties, assistance in various government engineering projects such as water power sites, dams, tunnels, and location of convenient deposits of industrial minerals and rock materials.	Gabrielse, H	REG	CPM	Yk BC	92;93;94;103;104	5.4
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.	Staff of Eastern & Western Paleontology Sections	ISPG REG	PSD (CPM EP EPG	- - - -	- - - -	5.2.2

Asterisk in first column indicates project has a field component  
 Brackets indicate seasonal employee or other non-staff  
 Underscoring indicates province of 1973-74 field work

Project Number	Project Title	Project Leader	Div	Sec	Prov	NTS	Classification
500038*	Coal reserves of Canada and studies of coal deposits in Canada	Latour, BA	ISPG	GofC	- BC, Alta Sask	-	3.1.2
5000336*	Devonian of Alberta, British Columbia and southern District of Mackenzie	Belyea, Helen R	ISPG	NM	Mack, BC Alta	Pts: <u>72</u> , <u>73</u> , <u>74</u> , <u>82</u> , <u>83</u> <u>84</u> , <u>85</u>	1.4.2.2
530014*	Geology of Canadian lithophile metals (Li, Be, Sn, W)	Mulligan, R	REG	MD	-	-	3.1.5
530030	Geology of Prince Edward Island	Prest, VK	TS	RSP	PEI	11 E/15, L; 21 I/8, 9, 16	1.1.1.3
540025	Milliken Lake area, Saskatchewan	Bell, CK	REG	PS	Sask	Pt 74 N/7	2.1.2
540028	Isotopic age determinations of rocks and minerals	Wanless, RK	REG	G	-	-	5.2.3
550004*	Cretaceous and Jurassic of Richardson Mountains, Porcupine Plains, and Eagle Plains	Jeletzky, JA	ISPG	OP	Mack Yk B S <sup>2</sup>	<u>116</u> ; <u>106 W<sup>2</sup></u> ; <u>117 A S<sup>2</sup></u>	1.2.1

Obj.: To prepare estimates on the coal reserves of Canada; to prepare for publication reports and illustrations concerning Canada's coal reserves; to advise, and prepare reports for other branches, or departments when so requested; to have up-to-date knowledge of coalfields in Canada.

Obj.: To publish a series of papers on the Devonian, discussing rock types, their diageneses and depositional environments, correlations, facies, changes, disconformities, faults, etc.; in an attempt to elucidate the reasons for Devonian facies distribution and hence designate general areas of potential hydrocarbon reservoir rocks.

Obj.: To carry out comprehensive research on the geology of lithophile metals (lithium, beryllium, tin, and tungsten) in order to provide a geological basis for exploration and assessment of such deposits in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genesis of the deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.

Obj.: To determine the character, extent, distribution, age and origin of the bedrock formations and glacial and postglacial deposits and their possible utilization. Pub Sca 1":2 mi.

Obj.: To provide detailed information on the age, structure, sequence, relationships, thickness, and origin of the bedrock formations and on the size, grade, mode of occurrence, origin and potentialities of the mineral deposits. Pub Sca 1":800ft.

Obj.: To determine the geological age of rocks and minerals and geological events using isotopic methods.

Obj.: To study the stratigraphy and paleontology of Cretaceous and Jurassic formations of the region in order to understand the most essential features of the facies pattern, sequence, and lateral extent of lithological units, paleogeography and geological history. To describe and to figure the most important elements of the faunas.

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
550101*	The curating of National and Branch mineral and ore collections and the provision of mineralogical information to the public  Obj.: To maintain and develop the National and Branch mineral and ore collections; to make standards and specimens available for comparison and identification, and for the obtaining of additional scientific data; to provide a public service in the identification of geological specimens and the provision of related information.	Steady, HR	CL&TS	M	-	-	1.4.4.1
570029*	Geology of iron and manganese deposits in Canada  Obj.: To carry out comprehensive research in the geology of iron and manganese deposits in order to provide a geological basis for exploration and assessment of iron and manganese potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of iron and manganese deposits; (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.	McLeod, R.	REG	MD	-	-	3.1.5
570119*	Studies of meteorites and other extra-terrestrial material  Obj.: To study the mineralogy, petrology, and chemistry of meteorite falls and finds in Canada, and of other extra-terrestrial material, and apply the knowledge thus gained towards a better understanding of earth science processes; and to curate Canada's national collection of meteorites.	Traill, RJ	CL&TS	M	-	-	1.4.4.1
570148	Radiocarbon dating program  Obj.: To plan and co-ordinate the radiocarbon dating program of the Geological Survey.	Blake, W Jr	TS	PG	-	-	5.2.3
580036	Geology of titanium and titanium-ferrous deposits of Canada  Obj.: To carry out comprehensive research on the geology of titanium deposits in order to provide a geological basis for exploration and assessment of Titanium potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of titanium deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of titanium deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit. Pub Sca 1:5,000,000.	Rose, ER	REG	MD	-	-	3.1.5
580037	Maintenance of the paleontological type collection  Obj.: To catalogue, store, and maintain GSC National Type Collection of Fossils so that they are readily available for research by GSC and outside personnel.	Bolton, TE	Adm	DO	-	-	1.4.4.1



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
580153	Lexicon of stratigraphic names used in Canada	Bolton, TE	Adm	DO	-	-	1.4.4.2
	Obj.: Lexicon of Stratigraphic Names in Canada production, with preparation and maintenance of files recording all stratigraphic names used in Canada.						
580160	Catalogue of Canadian minerals	Truill, RJ	CL&TS	M	-	-	1.4.4.2
	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.						
580175	Analytical services and development in geochemistry	Lynch, JJ	GGG	G	-	-	5.2.4
	Obj.: To provide the specialized analyses required by the geochemical exploration and geochemical census programmes, in requisite volume and with sufficient speed to ensure that these programmes are able to meet their objectives. As time permits, to provide limited analytical services to other Branch personnel as required.						
590194	Monograph of the Canadian belemnites in Canada	Jeletzky, JA	ISPG	OP	Frank, Mack, Yk, BC, Alta, Sask, Man	-	1.4.1
	Obj.: To describe and figure all hitherto known Canadian belemnites species and genera. The zonal value of the individual taxa concerned is to be appraised and the results incorporated in the preliminary and final reports.						
590457	Radiocarbon laboratory development and operation	Lowdon, JA	TS	PG	-	-	5.2.3
	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.						
600032	Belleoram map-area	Anderson, FD	REG	A	Nfld	1 M	1.1.1.1
	Obj.: The project is expected to provide a suitable geological map, complete descriptions of rock units, and an appropriate description and interpretation of the general structure, historical and economic geology features of the map-area. Pub Sca 1": 4 mi.						
600227	Devonian plant microfossils of eastern Canada	McGregor, DC	REG	EP	Ont, 42; 40; 32; 22; 21 Que, NB	-	1.4.2.1
	Obj.: Morphologic and taxonomic revision of the Gaspé and related spore floras which will be related to the stratigraphy of the areas. To establish the spores and other palynomorphs as correlation markers and age determinants.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
600307	X-ray emission analysis Obj.: To contribute to the knowledge of Canadian mineralogy and mineral deposits through research and development of methods and concepts of X-ray emission analysis and application of these to the analysis of geological materials. To improve the quality and rate of production of X-ray fluorescence analyses that may be applied to geological research and to provide "custom" XRF analyses in support of G.S.C. research projects.	Lachance, GR	CL&TS	M	-	-	5.2.1
600353	Dibranchiate Volume of the Treatise on Invertebrate Paleontology Obj.: To prepare an authoritative summary of the present state of knowledge of subclass Dibranchiata based on the study of literature on the global scale supplemented by results of writer's personal research of this subclass in Canada and abroad. The project is to be carried out in conjunction with the writer's monographical study of the Canadian belemnites (Project 590194) now in progress.	Jeletzky, JA	ISPG	OP	-	-	1.4.1
610002	Axel Heiberg and Ellesmere Islands Obj.: (a) To obtain information on and improve the understanding of the age, structure, stratigraphy and origin of the post-Precambrian bedrock formations, and (b) to assess the economic potential of the area. Pub Sca 1:250,000.	Kerr, JW	ISPG	AI	Frank	39 G, H; 49 C-H; 59 E-H; 120 B,C; 340 B,C; 560 A,D	1.1.1.1
610007*	Operation Porcupine Obj.: Critical evaluation of the structural geometry and stratigraphy within these map-areas of northern Yukon Territory and western District of Mackenzie for documentation of the nature, origin, and mechanics of the deformation and its bearing on the hydrocarbon and mineral potential of the region. Pub Sca as appropriate.	Norris, DK	ISPG	NM	Mack Yk	106 E,F,K,L,M,N; 116 F E <sub>1</sub> G,H,I,J,K, E <sub>2</sub> , N E <sub>2</sub> , O, P	1.1.1.1
610011	Taseko Lakes map-area Obj.: To interpret the structure, stratigraphy and geological history of the Taseko Lakes area and to evaluate the mineral potential. Pub Sca 1":4 mi.	Tipper, HW	REG	CPM	BC	92 O	1.1.1.1
610014	Cretaceous stratigraphy, Peace River to 60° Obj.: To describe the stratigraphic successions, to collect samples for laboratory studies and to collect fossil flora and fauna; to provide data on the correlation of Cretaceous strata, their lateral variations, their potentialities as sources of oil and gas, and their suitability as reservoirs for those fuels; to establish the relationships with equivalent successions studied between Peace and Smoky Rivers and in the region of Liard and Mackenzie Rivers.	Stott, DF	ISPG	RGSD	BC	94 B,G,J,K,N,O	1.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
610019	Ordovician and Silurian Biostratigraphy of British Columbia, Alberta, Yukon, Mackenzie, and Franklin	Norford, BS	ISPG	PSd	Frank Mack, 82, J,N,O; 83 Yk, BC Alta	83	1.4.2.1
	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.						
610029	Quaternary geology and bedrock topography of the Riding Mountain area, Manitoba -Saskatchewan	Klassen, RW	TS	RSP	Sask Man	62K	1.1.1.3
	Obj.: To gain areal information on Quaternary deposits and landforms; to outline buried bedrock topography including major buried valleys; to determine the Quaternary stratigraphy and history of the area; and to provide information pertinent to agriculture, forestry, groundwater and engineering construction. Pub Sca 1:250,000						
610030	Huronian rocks north of Lake Huron	Frarey, MJ	REG	PS	Ont	41 J/3,5,6,12,K/8-10	1.2.2
	Obj.: To revise the geology of the project area for publication at 1 or 2 miles to the inch, with particular emphasis on stratigraphy and correlation. In cooperation with ODM personnel, to correlate strata with those of other parts of the Huronian belt; and to standardize the nomenclature and definition of stratigraphic units. Pub Sca 1":1 or 2 mi						
610269*	Petrographic examination of coking coals from the Crowsnest coalfield, Alberta and British Columbia	Cameron, AR	ISPG	CP	BC Alta	82 G,J	3.1.2
	Obj.: To determine the coking properties and to prepare seam profiles for correlation and environmental studies of coal seams from coking coals of the Crowsnest coalfield.						
610330	Cretaceous index fossils of Western and Arctic Canada	Jeletzky, JA	ISPG	OP	Frank, Mack, Yk, BC, Alta, Man	-	1.4.1
	Obj.: To publish a series of fossil plates illustrating a selection of best known and most useful Cretaceous index fossils of the Western Cordillera and the sedimentary basins of Western and Arctic Canada.						
620001	Operation Prince of Wales	Christie, RL	ISPG	AI	Frank 57 B,C,F,G; 58 A-F H; 68 A-F	67 A,D,E	1.1.1.2
	Obj.: (a) Geological reconnaissance of the Precambrian rocks of Boothia Peninsula and region. (b) Geological reconnaissance of the Paleozoic and younger rocks of the Boothia region.						
620010	Quaternary reconnaissance, north-eastern District of Mackenzie	Blake, W Jr	TS	PG	Mack 66 E,L,M; 67 B; 77 A,B	76 E-P;	1.1.1.4
	Obj.: Reconnaissance mapping of glacial deposits, landforms, and other Quaternary features in order to provide descriptive data on the Quaternary geology and geomorphology of the region and to determine the chronology of events during deglaciation. Pub Sca 1:500,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
620012	Geochemical and petrological study of Yellowknife volcanic rocks	Baragar, WRA	REG	PS	Mack	Pts 85 J/8,9	1.2.2
	Obj.: To provide composition, petrographic, and stratigraphic data from which the volcanic character, eruptive history, and characteristic composition may be obtained.						
620018	Geological survey of NTS 82 J W $\frac{1}{2}$ (Kananaskis Lakes, W $\frac{1}{2}$ )	Leach, GB	REG	CPM	BC Alta	82 J W $\frac{1}{2}$	1.2.2
	Obj.: To determine and interpret the stratigraphic, structural and economic geological features of the region for publication at 1 inch to 2 miles and/or 1 inch to 1 mile as required.						
620019	Prince Rupert-Skeena map-areas	Hutchison, WW	REG	CPM	BC	103 I W $\frac{1}{2}$ , J E $\frac{1}{2}$	1.1.1.1
	Obj.: To determine the regional geologic relationships and the origin and evolution of the metamorphic and plutonic rocks of part of the Coast Mountains. Pub Sca 1":4 mi.						
620308	Electron probe microanalysis	Plant, AG	CL&TS	M	-	-	5.2.1
	Obj.: Operation of an electron probe microanalysis laboratory in order to provide knowledge of the distribution of various elements in minerals and mineral assemblages: (a) in support of Branch projects, (b) in direct micromineralogical research, and (c) for research and development of methods and concepts of electron probe microanalysis.						
630003*	Operation Grant Land - NE Ellesmere Island and NW Greenland	Christie, RL	ISPG	AI	Frank	120 C-G; 340 C-F,H	1.1.1.1
	Obj.: To obtain a better understanding of the geological features of an orogenic belt extending across northeastern Ellesmere Island into adjacent Greenland. Pub Sca to be decided.						
630016	Coast Mountains project	Roddick, JA	REG	CPM	BC	92 F NE $\frac{1}{2}$ G W $\frac{1}{2}$ , J, K, L NE $\frac{1}{2}$ , M, N; 93 D; 102 P; 103 A, G, I W $\frac{1}{2}$ , J, N, P W $\frac{1}{2}$	1.1.1.1
	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.						
630017	Operation Liard	Taylor, GC	ISPG	SM	BC	94 F E $\frac{1}{2}$ , G, J, K, N, O	1.1.1.1
	Obj.: To establish the stratigraphic framework of the northern Rocky Mountains and in conjunction to establish a conceptual model of the structural deformation of these rocks. Pub Sca 1":2 or 4 mi.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
630021	Mississippian physical stratigraphy sedimentology and correlation  Obj.: To determine the stratigraphic relationships and correlation of these strata including formational subdivision; their depositional diagenetic, and geochemical history; their macrofaunal and microfaunal content; and their potentialities as source rocks for oil and gas and their suitability as reservoirs for these fuels.	Macqueen, RW	ISPG	SM	BC Alta	-	1.2.1
630025*	Geological investigations across the boundary between the Churchill and Superior tectonic provinces  Obj.: To establish the stratigraphy and structure of sedimentary and volcanic rocks in this region and their relationships to adjacent gneisses and intrusive rocks; and provide data on the mineral deposits of the region with emphasis on the nature of their host rocks and the possibility of genetic relationship to the boundary between the tectonic provinces. Pub sca 1":4 and 8 mi.	Bell, CK	REG	PS	Man 63 NE, P	-	1.1.1.1
630031*	Multispectral photography  Obj.: Development of multispectral aerial photography, including high altitude and satellite photography, and methods of interpretation as a means of providing geological information.	Slaney, VR	REG	RM	-	-	2.2.3
630032	Opocopa map-area, Quebec-Labrador  Obj.: To delineate the structure and stratigraphy and to relate the mineral (iron) deposits to these parameters; to correlate if possible the matamorphosed strata of the area with those of lower metamorphic grade in the Labrador Trough. Pub Sca 1":4mi.	Jackson, GD	REG	PS	Que Nfld	23 B E½	1.1.1.1
630037*	Geology of Canadian nickel and platinum group deposits  Obj.: To carry out comprehensive research on the geology of nickel and platinum group deposits in order to provide a geological basis for exploration and assessment of nickel and platinum group potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of nickel and platinum group deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of nickel and platinum group deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.	Eckstrand, OR	REG	MD	-	-	3.1.5

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
630039	Geology of vanadium deposits in Canada Obj.: To carry out comprehensive research on the geology of vanadium deposits in order to provide a geological basis for exploration and assessment of vanadium potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of vanadium deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environments, provenance, and genetic processes of vanadium deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit. Pub Sca 1:5,000,000.	Rose, ER	REG	MD	-	-	3.1.5
630049	Electrical rock properties Obj.: To study the electrical parameters including polarization phenomena of rocks, soils, minerals and frozen soils. These electrical parameters will aid in the interpretation of electrical survey techniques.	Katsube, TJ	REG	EM	-	-	2.2.2
630404	Magnetic gradient techniques Obj.: To assess the usefulness of measuring the vertical gradient in magnetic surveys and to develop the necessary theory for the interpretation of the results.	Hood, PJ	REG	MM	-	-	2.2.3
630415	Lower Cretaceous (Albian) stratigraphy of Peel and Snake Rivers, Yukon Territory Obj.: Detailed biostratigraphic subdivision of the Lower Cretaceous (Albian) rocks of the northern Yukon and Arctic Coastal Plain based on the foraminiferal faunas recovered from the critical stratigraphic sections exposed on Peel and Snake Rivers and described by Chamney (GSC Paper 68-26). Such subdivision to provide a vital aid for the exploration of the petroleum resources of the Lower Cretaceous rocks of these regions and the western Arctic Islands.	Chamney, TP	ISPG	MiP	Mack Yk	106,116,96	1.2.1
640004*	Quaternary reconnaissance, western Arctic Islands Obj.: To map and explain Quaternary deposits, landforms, and landscape processes in order to: (1) provide areal geological information; (2) determine Quaternary stratigraphy and history; and (3) document the nature and rate of landscape development processes. The project includes investigation of the Beaufort Formation. Pub Sca 1":8 mi. or as otherwise required.	Fyles, JG	TS	RSP	Frank	Pts 49,59,69,78,79,88,89,97, 98,99,340,560	1.2.3
640010	Yellowknife and Goulburn rocks in the Contwoyto Lake area, N.W.T. Obj.: To study the metamorphic rocks of the Yellowknife Group with particular reference to petrologic, stratigraphic and/or structural control of ore deposition and to study the stratigraphy of the Goulburn Group in this area for regional comparison and correlation. Pub Sca 1":1 mi.	Tremblay, LP	REG	PS	Mack	75 E/11, 14	1.2.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
640013	Mt. Haldane and Dublin Gulch map-areas	Poole, WH	REG	CPM	Yk	105 M/13; 106 D/4	2.1.2
	Obj.: An investigation of the bedrock geology of map-area 105 M/13 and as much of 106 D/4 as is feasible as an aid to economic development in Keno Hill mining camp. Pub Sca 1":1 mi.						
640027*	Surficial geology, Kananaskis Lakes	Stalker, AM	TS	RSP	Alta	Pt 82 J	1.1.1.3
	Obj.: To map, describe and explain the Quaternary deposits and landforms in order to elucidate the glacial history of the region and to provide areal geological knowledge including data pertinent to ground-water, engineering, and forestry. Pub Sca 1": $\frac{1}{2}$ mi. or 4 mi.						
640029	Quaternary geology, Duck Mountain, Manitoba, Saskatchewan	Klassen, RW	TS	RSP	Sask Man	62 N	1.1.1.3
	Obj.: To gain areal information on Quaternary deposits and landforms; to outline buried bedrock topography including major buried valleys; to determine the Quaternary stratigraphy and history of the area; and to provide information pertinent to agriculture, forestry, groundwater, and engineering construction. Pub Sca 1:125,000; 1:250,000.						
640032*	Devonian biostratigraphy of Lake Manitoba-Lake Winnipegosis region	Norris, AW	ISPG	MaP	Man	62 I W $\frac{1}{2}$ , J, Ø: 63 B W $\frac{1}{2}$ , C, F S $\frac{1}{2}$	1.2.1
	Obj.: (a) more precise correlations of the Manitoba Devonian sequence with other areas; (b) delineation of reefs in the Winnipegosis Formation and assessment of hydrocarbon potential; (c) more precise determination of facies relationship between the Winnipegosis Formation and the in part laterally equivalent Prairie Evaporites which contains valuable deposits of potash; and (d) to show the extent of intermingling of faunal elements of the Appalachian and Cordilleran faunal provinces in Manitoba. Pub Sca 1":8 mi.						
640036	Lake Panache and Collins Inlet area, Ontario	Frarey, MJ	REG	PS	Ont	41 H/14, I/3	1.2.2
	Obj.: To revise the stratigraphy and structure of the Huronian succession as previously shown (GSC maps 220 A and 221 A); to determine the nature of the Grenville Front within the area and the effect of metamorphism on the Huronian formations; and to determine the metamorphic and structural history and the mineral potential of the map-areas. Pub Sca 1":1 mi.						
640048*	Study of mineral collecting areas of interest to collectors and tourists	Stenson, Mrs AP	CL&TS	M	Que Nfld	11 N, O, P; 12 A, B, H, I; 1 K, M, N; 2 C-F, L, M	4.3.2.3
	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.						
640125*	General metallurgy of Canada	Leech, GB	REG	EGSd	-	-	1.3.1
	Obj.: To study metallogenic concepts pertaining to the geological and tectonic regions of Canada as a whole in order to determine relationships in the distribution of economic minerals to their geological environments. Pub Sca 1:5,000,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
640402*	Certification of bedded and non-bedded mineral deposits Obj.: To act on behalf of the Director of the Geological Survey in the certification of mineral deposits as bedded or non-bedded for income tax purposes.	Whitmore, DRE	REG	MDB	-	-	5.4
640419	Studies of Cretaceous stratigraphy of the Plains of Saskatchewan, Manitoba, and eastern Alberta	Price, LL	ISPG	SM	Alta Sask Man	72,73,62,63	1.2.1
650003*	Obj.: To improve knowledge of the Cretaceous rocks of the central and eastern Plains using all available subsurface and outcrop data. Cornwallis and adjacent smaller islands Obj.: (a) To improve the understanding of the age, structure, sequence, relationship, thickness, and origin of bedrock formations with a view to helping; (b) assess the size, grade, mode of occurrence, origin, and potentialities of any fuel or mineral deposits that may occur; and (c) improve the knowledge and understanding of the morphology of the Silurian and Devonian ostracoderms of Cornwallis Island, thus aiding in the establishment of a more useful stratigraphic framework for the region, and contributing to objective (a). Pub Sca 1:250,000.	Thorsteinsson, R	ISPG	AI	Frank	58 F,G; 68 E,H	1.1.1.1
650007*	Ocean aeromagnetics Obj.: 1. To conduct high resolution aeromagnetic surveys over the Canadian continental shelves for the purpose of delineating sedimentary basins. 2. To obtain and study magnetic data over the ocean basins in order to shed light on the theories of magnetic imprinting of oceanic rocks, ocean-floor spreading, and continental drift.	Hood, PJ	REG	MM	-	-	1.1.2.2
650008	Stratigraphy, sedimentology and correlation of Nonacho Group, N.W.T. Obj.: To define the sedimentology and stratigraphy of Nonacho Group and relationships of these rocks to surrounding igneous rocks as a contribution to regional correlation and geological history of the region. Pub Sca 1":2 mi.	McGlynn, JC	REG	PS	Mack	Pts 75 E,F,K	1.2.2
650009	Petrologic and structural study of the McDonald Fault system south of Great Slave Lake Obj.: To describe and interpret the mylonites north and south of the McDonald Fault and their relationships to nearby Archean and Proterozoic rocks; to estimate the order of magnitude and sense of horizontal and vertical components of movement along the McDonald Fault system; and to evaluate the possible correlation of the Yellowknife Group with highly metamorphosed rocks southeast of the McDonald Fault. Pub sca 1:50,000.	Reinhardt, EW	REG	PS	Mack	Pts 75 E; 85 H	1.2.2



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
650010	Operation Selwyn	Blusson, SL	REG	CPM	Mack Yk BC	105 A,H,I,P; 104 O; 95 D	1.1.1.1
	Obj.: To establish the stratigraphic sequence and determine the nature of abrupt facies changes in lower Paleozoic rocks of western Mackenzie and Selwyn Mountains, and to study the relationship and distribution of formations that are host to large base metal deposits, as a contribution to the economic development of the north. Pub Sca 1":4 mi.						
650012	Metallogenic study of the Beryllium-tin province of Cassiar batholith	Mulligan, R	REG	MD	Yk BC	105 A,B; 104 O,P	3.1.5
	Obj.: To investigate occurrences of economic minerals, their relationship to the geological environment, and the distribution of special elements in igneous and other rocks and in stream sediments of the area.						
650015	Geology of the Mt. Edziza volcano	Souther, JG	REG	CPM	BC	Pts 104 G/7,10,15,16	1.4.3.1
	Obj.: A detailed investigation of the geology, petrology and petrochemistry to determine the history and processes of evolution and relationship to contemporaneous plutons in the Stikine region. Pub Sca 1:50,000.						
650023	Operation Bow-Athabasca	(Price, RA Prof)	ISPG	SM	BC Alta	83 C,D E½; 82 J E½, N E½, O W½	1.2.1
	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 of this area, and other geological data that are required to evaluate the mineral potentialities of the area and to assist exploration of oil, gas, coal and other mineral deposits in this and adjacent areas. Pub Sca 1":4 mi.						
650024*	Cambrian biostratigraphy of the Canadian Cordillera	Fritz, WH	REG	EP	Mack, Yk BC, Alta	105 P; 82 N, O; 83 C	1.4.2.1
	Obj.: To identify and describe Cambrian fossils from the Canadian Cordillera, ascertain their relative stratigraphic positions, and provide faunal correlations for their enclosing strata.						
650027*	Quaternary of southern Alberta	Stalker, AM	TS	RSP	Alta	-	1.2.3
	Obj.: To gain knowledge of Quaternary stratigraphy, chronology, environments and climates in southern Alberta.						
650044	Volcanic studies in the Noranda Region, Ont. - Que.	Baragar, WRA	REG	PS	Ont Que	32 D S½, D NW	1.2.2
	Obj.: To provide compositional, petrographic and stratigraphic data from which the volcanic character, the chemical evolution, the eruptive history and characteristic composition may be obtained.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
650056*	Geology of lead and zinc deposits in Canada	Sangster, DF	REG	MD	-	-	3.1.5
	Obj.: To carry out comprehensive research on the geology of lead and zinc deposits in order to provide a geological basis for exploration and an assessment of lead and zinc potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of lead and zinc deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of lead and zinc deposits; (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.						
650131	Quaternary geology, Snag-Kluane Lake	Rampton, V	TS	RSP	Yk	115 A, F E $\frac{1}{2}$ , G, J, K E $\frac{1}{2}$	1.1.1.3
	Obj.: To map, describe and explain the glacial deposits extending from the snout of Klutlan glacier to the limits of glaciation north of Snag, with particular reference to the development of geomorphic and other criteria for differentiating the deposits and landforms relating to the several glaciations known to have affected the area in order to: (1) differentiate the deposits of the area according to the respective glacial stages and substages during which they were deposited; and (2) develop a chronologic framework within which glacial deposits of adjacent parts of Yukon can be classified on a reconnaissance basis. Pub Sca 1:125,000.						
650288	Aiken Lake, B. C.	Irvine, TN	REG	Pet	BC	94 C W $\frac{1}{2}$ , D E $\frac{1}{2}$	1.2.2
	Obj.: To describe the petrology of the Ultramafic Complex in the Lay Range with the purpose of defining its differentiation history and mode of emplacement. Pub Sca 1:63,360.						
650466*	Isotopic study of mica-bearing rocks yielding anomalous K-Ar 'ages'	Wanless, RK	REG	G	Man Que Nfld	23 H; 13 I, J; 32 G, C, D; 31 L, M; 63 NE	1.4.2.2
	Obj.: To undertake detailed isotopic investigations in regions where 'anomalous' K-Ar age relationships have been found in order to establish the true age of the rocks, the time when the isotopic systems were disturbed, and to gain an understanding of the natural processes responsible for the disturbance.						
660002	Atlin Horst Project	Monger, JWH	REG	CPM	Yk BC	Pts 105 C, D; 104 J, K, M, N	1.2.2
	Obj.: 1. To establish a reference section for Late Paleozoic rocks in northern British Columbia. 2. To determine relationships between Permian, pre-Permian and post-Permian rocks in this area. 3. To determine the structural style of these rocks in the 'Atlin Horst'. Pub Sca 1":1 mi.						
660013	Operation Tornгат	Taylor, FC	REG	PS	Que Nfld	13 M, N, O; 14 C, D, E, F, L, M W $\frac{1}{2}$ ; 24 A, B, G, J, O, P; 23 P; 25 A	1.1.1.2
	Obj.: To determine and interpret the overall geological environment of the area east of longitude 68° and north of latitude 55° in order to ascertain its geological history and assess its mineral potential. Pub Sca 1":8 mi.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
660026*	Conodont biostratigraphy of Lower and Middle Devonian strata of southwestern Ontario	Uyeno, TT	ISPG	MIP	Ont	40 I,J,P	1.2.1
	Obj.: To establish conodont zonations of Devonian strata of southwestern Ontario, to facilitate their correlations with other sequences, such as those of the New York standard, Hudson and James Bay Lowlands, and Manitoba.						
660030	Sedimentology and morphology of eskers	McDonald, BC	TS	EGG	-	-	1.4.3.2
	Obj.: Map and describe eskers, and associated features in order to gain fundamental information regarding their classification, form, sedimentology and origin through detailed study of their morphology, internal structure, lithology, relation to nearby overburden, environment of formation, and their economic implications.						
660031	Quaternary geology of Peace River Reservoir area	Rutter, NW	TS	RSP	BC	Pts 93 N,0; 94 B,C,F	1.1.1.3
	Obj.: Reconnaissance of Quaternary geology of Peace, Parsnip and Finlay Valleys in an advance of flooding to determine chronologic sequence of Quaternary events; to study geomorphic evolution of valleys; to gather areal information including data applicable for engineering and land capability inventory. Pub Sca 1":2 mi.						
660042	Regional aeromagnetic-geologic correlation	Kornik, LJ	RGG	MM	Kee, Mack Pts 43,53,54,55,63,64,65,74, Sask, Man, Ont.	75,85	1.2.2
	Obj.: A regional study to correlate geology with magnetic patterns and anomalies by means of in situ magnetic susceptibility and remanent magnetism measurements of oriented samples. Pub Sca 1":16 mi.						
660050*	Seismic-Rocky Mountain Trench	Hobson, GD	RGG	SM	BC	82 J/4, G/13	1.2.2
	Obj.: To investigate structure beneath the west edge of Rocky Mountains to determine presence of discontinuities and identify formations. If possible to prove or disprove whether the Rocky Mountain front and adjacent part of the Trench floor may be "unrooted".						
660053	Seismic-Flin Flon, Manitoba	Hobson, GD	RGG	SM	Man	63 K/13	2.2.2.2
	Obj.: To determine whether seismic reflection and refraction seismic techniques can detect interfaces between Precambrian rock units utilizing data from the deep bore-hole at Flin Flon.						
660054*	Marine seismic-Great Lakes	Hobson, GD	RGG	SM	Ont	30 NW; 40 NE; 41 SE,NW	1.1.2.3
	Obj.: To determine water-sediment interface, stratification within the unconsolidated sediments, bedrock topography and lithology if possible and stratigraphy within bedrock.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
660486	Stratigraphy of the Blairmore Group and Kootenay Formation, southern Foothills of Alberta, Bow River to Clearwater River	Ollerenshaw, NC	ISPG	SM	Alta	82 O/6,7,10 W $\frac{1}{2}$ , 11,14	2.1.1
	Obj.: Are closely related to the coal and oil/gas assessment and development of the area, and the main result of the project should be a description of the character (lithology and petrology) and stratigraphy of the rocks forming the Blairmore Group and Kootenay Formation, with an interpretation of rock units, facies relationships, source areas, tectonic significance and economic potential						
660552	Monograph of brachiopod family Trimerellidae	Norford, BS	ISPG	PSD	-	-	1.4.1
	Obj.: Description of morphology, taxonomy, ecology, and evolution of a family of Ordovician and Silurian brachiopods that in Canada is largely found in biohermal and biostromal carbonate rocks. Completion of project will assist in the biostratigraphic and paleoecological discrimination of Ordovician and Silurian carbonate rocks.						
670003*	Anorthosite study	Emslie, RF	REG	Pet	Que	13 NW; 14 SW	1.2.2
	Obj.: To examine three large anorthosite intrusions between Michikamau Lake and Nain, Coast of Labrador for purposes of comparison with Michikamau Intrusion (including mineral potential).				Nfld		
670014*	Operation Winisk	Norris, AW	ISPG	MaP	Kee	54 A-G,K-M; 53 H N $\frac{1}{2}$ , I,J,N	1.1.1.2
	Obj.: To determine the age, thickness, distribution, facies, structure and other relevant parameters of the bedrock formation of the Hudson Bay Lowlands for evaluating the economic potential of the area. Pub Sca 1:1,000,000 and where detail warrants 1:500,000				Man	O,P; 43 B,C,D E $\frac{1}{2}$ , E-H,J-O;	
					Ont	42 F-G,H N $\frac{1}{2}$ , I-K,L E $\frac{1}{2}$ , M E $\frac{1}{2}$	
					Que	N-P; 32 L,M	
670016	S.W. Ellesmere - W. Devon Islands (Operation Grinnell)	Kerr, JW	ISPG	AI	Frank	49 B,C; 58 G,H; 59 A,B,D; 69 A	2.1.1
	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. Pub Sca 1:125,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
670019	Stratigraphy, structure, and carbonate petrography of the Marble Canyon Formation (Permian) in the Marble Range, Cariboo District, B.C.  Obj.: To clarify the understanding of the stratigraphy, structure, and carbonate petrology of the Marble Canyon Formation. Pub Sca 1:50,000.	Trettin, HP	ISPG	AI	BC	92 P/4	1.2.2
670021	Conodont biostratigraphy of Middle and Upper Devonian strata of southern and central Manitoba  Obj.: To establish conodont zonations of Middle and Upper Devonian strata of southern and central Manitoba, to facilitate their correlations with other areas, such as the Alberta subsurface, and the James Bay Lowlands.	Uyeno, TT	ISPG	MIP	Man	62 J, K, N; 63 C	1.2.1
670028*	Geology of rare earth deposits of Canada  Obj.: To carry out comprehensive research on the geology of rare earth deposits in order to provide a geological basis for exploration and assessment of rare earth potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of rare-earth deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of rare earth deposits; (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit. Pub Sca 1:5,000,000.	Rose, ER	REG	MD	-	-	3.1.5
670029*	Geology of uranium and thorium deposits of Canada  Obj.: To carry out comprehensive research on the geology of uranium and thorium deposits in order to provide a geological basis for exploration and to provide a national authority on uranium and thorium potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of uranium and thorium deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environment, provenance, and genetic processes of uranium and thorium group deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.	Little, HW	REG	ECSd	-	-	3.1.3
670031	Quaternary chronology and stratigraphy, southern Ellesmere Island  Obj.: To determine the chronology and sequence of events and environments for as much of Quaternary time as possible, including: glaciation, deglaciation, marine submergence, emergence, marginal fluctuations of glaciers and present day geologic processes. Also to test the validity of various dating techniques (radiocarbon, U-series, and amino-acids) on different types of materials. It is anticipated that the results will have a significant bearing on chronologic studies elsewhere.	Blake, W Jr	TS	PG	Frank	38 G; 39 B,C; 48 H; 49 A-D, 59 A,B,D	1.2.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
670041*	VLF mapping	Scott, WJ	RGG	EM	Mack Man Ont Que NB NS	85,95,96,106,107 Pt 63 P, 54 D; 31 D/2,3,6,7,10,11,16 W <sup>1</sup> , G/5; Pt 21 H, 11 E	2.2.3
670059*	Stratigraphy of Gog and Cariboo Groups near the Rocky Mountain Trench, McBride area, B.C.	Young, FG	ISPG	NM	BC Alta	Pts 83 E; 93 A,H,I	1.2.2
Obj.:	To assess the capabilities and limitations of using VLF radio waves as a means of providing geological information to delineate fault and shear zones, and for mapping permafrost. Pub Sca various.						
Obj.:	1. To elucidate the stratigraphy and structure of the Gog and Cariboo Groups. 2. To determine the nature and amount of possible crustal displacements associated with the Rocky Mountain Trench by means of stratigraphic mapping.						
670061	Quaternary geology, Bow River Valley	Rutter, NW	TS	RSP	Alta	Pts 82 O	1.1.1.3
Obj.:	To determine relationship of Cordilleran and Laurentide glaciation; to elucidate Quaternary chronology of the area. To map the distributions of surficial deposits of the area; to study and describe the geomorphology of the area. Pub Sca 1":2 mi.						
670064*	Cretaceous and uppermost Jurassic biostratigraphy of western Cordillera	Jeletzky, JA	ISPG	OP	BC	92; 93; 103; 104	1.2.2
Obj.:	To study the stratigraphy and paleontology of Cretaceous and upper Jurassic (Buchia-bearing beds only) formations of the region in order to work out a detailed zonal sequence of marine faunas. The biostratigraphically important elements of these faunas are to be described and figured. Project includes field and office study of Lower, Middle and Upper Jurassic rocks of Manning Park area in connection with the 24th IGC, 1972.						
670068	Operation Norman	Cook, DG	ISPG	NM	Mack	86 D,E,L,M; 87 B,C; 96; 97 A-D, F; 106 A,B,G-J,O,P; 107 A,D,E	1.1.1.2
Obj.:	To complete reconnaissance geological mapping, to conduct stratigraphic and structural studies, and to evaluate the economic potential of bedrock formations in the subject area; to embody the results of these studies in an integrated series of reports and maps, some under single authorship and others under multiple authorship according to the topic of the contribution. Pub Sca 1:250,000 and 1:500,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
670557	Stratigraphy and age of Pre-cambrian sedimentary rocks and contained sills and dykes, east coast of Canadian Arctic Islands and north and north-west Greenland	Christie, RL	ISPG	AI	Frank	120; 340; 560; 29; 39; 49; 59; 28; 38; 48; 58; 27; 37; 47; 57	1.3.4
	Obj.: (a) To correlate or distinguish Precambrian sedimentary basins and to obtain information on movement of continental masses; (b) aided by age-determinations on diabase-gabbro sill rocks and other intrusive rocks, to compare the tectonic history of the Precambrian sedimentary rocks of the region.						
670569	Clay minerals in Proterozoic sediments	(Donaldson, JA Prof.)	REG	PS	Kee Mack	-	1.2.2
	Obj.: Comparison of clay mineral content of sandstone and siltstone units of the Dubawnt Group, Goulburn Group, Athabasca Fm. and Martin Fm. based on mineralogical analyses of specimens now on hand.						
670576	Canadian Triassic Ammonoidea and Bivalvia	Tozer, ET	ISPG	QP	Frank, Yk BC, Alta	-	1.4.2.1
	Obj.: To describe and assess biochronological significance of Triassic ammonoidea and bivalvia in order to refine methods for dating Triassic rocks.						
680012*	Paleomagnetic study of Proterozoic red beds of the Western Canadian Shield	McGlynn, JC	REG	PS	Kee Mack Sask	65; 66; 74; 75 E,F; 85; 86 (Pts)	1.4.2.3
	Obj.: To obtain paleomagnetic pole positions from various Proterozoic red bed sequences in the western Precambrian Shield for purposes of correlation.						
680017	Sedimentology-engineering geology laboratory development and operation	Lawrence, DE	TS	EGG	-	-	5.2.4
	Obj.: (1) To monitor the techniques used in the sedimentology and engineering geology laboratories; to ensure their continuing and improving precision; to introduce new techniques into the laboratories; to establish additional laboratory facilities as required; and to control the flow of samples through the laboratories.						
680018*	The environment of oil and gas in western Canada	McCrossan, RG	ISPG	Esd	BC, Alta Sask, Man	-	2.1.1
	Obj.: To study the occurrence of hydrocarbon in western Canada in search of principles that will help to understand its distribution hence aid in exploration. To advise the Geological Survey on direction of future research of value to the petroleum industry.						
680019*	Non-marine Lower Cretaceous of the southeastern Canadian Cordillera	Norris, DK	ISPG	NM	BC Alta	82 G,J,O	2.1.1
	Obj.: Assist the coal industry in its search for mineable reserves of low ash, coking coals through outlining of areas in the Kootenay coal swamps favourable for prospecting and exploitation.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680023	X-ray diffraction analyses and mineralogical studies Obj.: To assist in the identification and inventory of potential mineral resources in Canada by provision of X-ray diffraction analyses and other specialized mineralogical data for use by earth scientists engaged in studies of minerals and mineral deposits.	Truill, RJ	CL&TS	M	-	-	5.2.1
680032	Quaternary reconnaissance, northwest District of Mackenzie Obj.: To map and explain Quaternary deposits and landforms in order to: (1) establish their stratigraphic sequence and age and to outline the Quaternary history of the area; and(2) provide areal geological information including data applicable to permafrost and engineering studies. Pub Sca 1:500,000.	Fulton, RJ	TS	RSP	Mack	96 N $\frac{1}{2}$ ; 97 S $\frac{1}{2}$	1.1.1.4
680036*	Sidewall sampling and geophysical service Obj.: To provide sidewall sampling and geophysical services as required, in support of Division projects, or other projects as required	RS Recruit	TS	EGG	-	-	5.2
680037*	Hammer seismic surveys Obj.: To determine thickness and nature of overburden and configuration of bedrock to assist Quaternary, geochemical, groundwater and geophysical studies. To develop new procedures in field and interpretation of shallow seismic techniques.	Hunter, JM	REG	SM	-	-	1.2.3
680038	Geology of northern Vancouver Island Obj.: To complete the reconnaissance geological mapping of the northern part of Vancouver Island, assess its mineral potential, and contribute to knowledge of the Pacific continental margin. Pub Sca 1":4 mi.	Muller, JE	REG	CPM	BC	Pts 92 E, K, L; 102 I	1.1.1.1
680040	Proglacial geomorphology, Generator Lake, Baffin Island Obj.: To map and explain glacial, lacustrine, and related landforms and deposits associated with both present and former levels of Generator Lake and to measure pertinent aspects of modern glacio-lacustrine processes in order to elucidate the geomorphology and chronology of the area as a model of the proglacial lacustrine environment.	Barnett, DM	TS	RSP	Frank	Pts 27 C; 37 D	1.4.3.2
680047*	Geomorphic processes, Mackenzie Valley-Arctic Coast Obj.: To describe, measure, and explain geomorphic features and processes related to permafrost, and to fluvial, lacustrine, coastal, eolian, and mass wasting activity in a permafrost environment.	(Mackay, JR Prof)	TS	EGG	Mack Yk	Pts <u>85,95,96,97,106,107,117</u>	1.4.3.2



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680055*	Quaternary geology, Great Lakes	Lewis, CFM	TS	RSP	Ont & adj USA	-	1.1.1.5
	<p>Obj.: To map, describe, and explain unconsolidated deposits, associated organic remains and geomorphic features of the Great Lakes in order to: (1) determine Quaternary stratigraphy, history, and paleoecology; (2) to identify processes operative in the lakes during the Quaternary and the factors controlling them; (3) to provide areal geological knowledge including background information for other scientific studies in the Great Lakes. Pub Sca to be decided.</p>						
680060*	Geology of silver and gold deposits in Canada	Thorpe, RI	REG	MD	BC	-	3.1.5
	<p>Obj.: To carry out comprehensive research on the geology of silver and gold deposits in order to provide a geological basis for exploration and assessment of silver and gold potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypotheses on geological environments, provenance and genetic processes of silver and gold deposits; (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.</p>						
680062	Quaternary geology, Kingston N $\frac{1}{2}$	Henderson, EP	TS	RSP	Ont	31 C N $\frac{1}{2}$	1.1.1.3
	<p>Obj.: To map and explain the Quaternary deposits and landforms of the area in order to elucidate the glacial history of the region and to provide areal geological knowledge including data pertinent to groundwater, engineering, agriculture, and forestry. Pub Sca 1:250,000 or 1:125,000, as warranted.</p>						
680063	Permian biostratigraphy, northern British Columbia and northern Yukon	Nassichuk, WW	ISPG	MaP	Yk BC	116 H,P; 104 N: 117 A	1.4.2.1
	<p>Obj.: To establish the relationship between Permian rocks in selected areas of northern British Columbia and those of the Sverdrup Basin and West Texas.</p>						
680064*	Stratigraphy and Paleontology of Upper Paleozoic rocks on parts of Ellesmere and Axel Heiberg Islands	Nassichuk, WW	ISPG	MaP	Frank	49 B,C,F,G,H; 340 A,B,C,D; 560 A; 40 B,C	1.2.1
	<p>Obj.: (a) To improve the understanding of the 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.</p>						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680065	Pumice on raised beaches, eastern Arctic Canada	Blake, W Jr	TS	PG	Frank Kee, Que Nfld	Pts 120,340,29,39,49,59,69, 38,48,58,68,27,37,47,57,16, 26,36,46,15,25,35,14,24,13	1.2.3
	Obj.: To locate sites where pumice occurs on raised beaches in eastern Arctic Canada and determine elevation, age, and origin of the pumice in order to: (1) correlate raised marine levels throughout the region; (2) calculate regional tilt of raised marine features, using pumice level as a guide horizon; and (3) determine the form of the last ice sheet. Pub Sca as required.						
680066	Geology of the Cariboo Mountains, British Columbia	Campbell, RB	REG	CPM	BC	83 D; 93 A,H	1.1.1.1
	Obj.: To determine the tectonic development of the Cariboo Mountains, and their relation to the development of the Rocky Mountains. Pub Sca 1":4 mi.						
680068*	Mesozoic palynology and biostratigraphy, Arctic Islands	Hopkins, WS Jr	ISPG	MIP	Frank	- 69 C-H; 59 C,F	1.4.2.1
	Obj.: Description of microfloras from Mesozoic rocks of the Sverdrup Basin. Establishment of sequence of floral zones necessary for biostratigraphic control in this region of active exploration for petroleum resources. Ultimately the project will allow description of floral evolution and migration through the Mesozoic and into the Tertiary.						
680071*	Alkaline rocks in Canada	Currie, KL	REG	Pet	- Nfld	- 13 E/15	1.2.2
	Obj.: To identify and examine occurrences of alkaline rocks in Canada, and to explain their origin, development and emplacement.						
680073	Magnetic anomaly map of Canada	Laroche, A	REG	CS	-	-	1.3.1
	Obj.: To construct a magnetic anomaly map of Canada as an aid to geotectonic studies in Canada. Pub Sca 1:5,000,000.						
680075	Cochrane River (NTS 64) map-area. 1:1 million Geological Atlas Program	Davison, WL	REG	PS	Sask Man	64	1.3.2
	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 on File 116-6-4						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680081*	Queen Air high resolution aeromagnetics Obj.: 1. To design, fabricate, install and test a high resolution rubidium vapour aeromagnetic survey system in a Queen Air aircraft. 2. To conduct high-resolution aeromagnetic test surveys with this system to evaluate its use as an aid to geological mapping.	Hood, PJ	RCG	MM	-	-	1.2.1
680082	Annual reviews, Exploration Techniques	Hood, PJ	RCG	MM	-	-	4.2.6
680084*	Operation Smoky Obj.: Establish the interdependent relationships of the structure, and stratigraphic succession between the contrasting areas of the southern Rocky Mountains and those of the northern Rocky Mountains. Pub Sca 1":4 ml or 1":2 ml.	Taylor, GC	ISPG	SM	BC Alta	94 B,N, 93 I,O, P; 83 L	1.1.1.1
680085*	Structural and stratigraphic study of the Precambrian rocks of southwestern Keewatin, N.W.T. Obj.: To determine: (1) the relationships of the known Hurwitz group rocks to other metasedimentary units, and the extent and characteristics of the original basins of deposition in order to assess their potential for mineral occurrences; (2) the petrology and mineral potential of the post-kinematic fluorite-bearing porphyritic rocks. Pub Sca 1":4 ml.	Eade, KE	REG	PS	Kee	65 A W $\frac{1}{2}$ , B.C.G W $\frac{1}{2}$	1.2.2
680089*	ARES (airborne resistivity electromagnetic system) Obj.: The development of a variable frequency airborne EM system to aid in geological mapping through the measurement of the electrical properties of the ground.	(Beeker, A)	RCG	EM	Que	31 H	2.2.3
680090	Identification of unknown minerals by X-ray and chemical methods Obj.: Quantitative and semiquantitative analysis of layer lattice silicates, mined-layer silicates, clays, minerals and elements in samples submitted by GSC staff.	Foscolos, AE	ISPG	G	-	-	5.2.4
680091	Clay mineral investigation Obj.: To improve and develop techniques for routine mineralogical and chemical analyses of clays, to develop better techniques for quantitative, semiquantitative and qualitative analyses of clays and clay minerals in sedimentary rocks; to conduct research related to the crystal lattice structure of clay minerals; with the ultimate objective of obtaining more precise analyses and a better understanding of clay minerals. These studies should also determine those parameters that may affect the migration of fluids within sedimentary rocks and also those that may be useful for the interpretation of paleoecology and paleoenvironments.	Foscolos, AE	ISPG	G	-	-	2.2.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680096	Studies in the Seal Lake Volcanic Province	Baragar, WRA	REG	PS	Nfld	13 K,L	1.2.2
	Obj.: To determine the characteristic composition, variation in composition, and stratigraphy of the Seal Lake, Croteau, and Letitia volcanic successions with a view to elucidating the character of volcanism and the history of the Seal Lake belt. To provide data that may be of aid in prospecting.						
680098	Surficial deposits and geomorphology, Central Research Forest	Bik, MJJ	TS	RSP	Ont	Pt 31 G/5 <sub>h</sub>	5.4
	Obj.: (1) To prepare a map and one or more stratigraphic sections illustrating near-surface materials and landforms within the Research Forest in order to provide geologic and geomorphic background data for forestry programs. (2) To determine history of events and environments represented by the near-surface materials and landforms in and around the Research Forest paying particular attention to the nature and rate of processes of slope degradation and colluvial accumulation that have modified the margins of abandoned channels.						
680101	Conodont biostratigraphy of Upper Ordovician to Devonian rocks of the Arctic Islands	Uyeno, TT	ISPG	MIP	Frank	49; 57; 58; 59; 68; 79; 88; 89; 560	1.4.2.1
	Obj.: To set up zonal standards for conodonts for the Arctic Islands to correlate conodont and palynomorph zones in measured sections; and to obtain fossil data of immediate use to those engaged in stratigraphic studies and geological mapping of the Arctic Islands.						
680102*	Rank studies of coal and carbonaceous matter	Hacquebard, PA	ISPG	CP	-	BC Alta NS 82 G,J	3.1.2
	Obj.: To obtain information on local and regional changes in metamorphism, with application towards structural geology, search for oil and gas, and evaluation of properties of coking coals.						
680105*	Petrography of coal seams in the Rocky Mountain Foothills Belt north of the Crownsnest area	Hacquebard, PA	ISPG	CP	-	BC Alta 83 C,D	3.1.2
	Obj.: To examine the petrography of these coals in order to determine their coking properties and prepare seam profiles for correlation purposes.						
680109	Palynological zonation of the	Barss, MS	AGC	EPC	NB NS PEI Nfld	12 B,C,D; 11 E-G,K,L,N,O; 21 A,B,G,H-J,O,P; 22 A	1.4.2.1
	Obj.: To determine the biostratigraphic zonation (palynology) of the Carboniferous and Permian rocks of Atlantic Provinces and Gulf of St. Lawrence to establish local, regional and world wide correlations and to reconstruct depositional and paleoclimatic environments, as an aid to the resource evaluation. Pub Sca 1:1,000,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680113*	Biostratigraphy study of Paleozoic palynomorphs of Arctic Islands Obj.: (1) To set up zonal standards for palynomorphs for the Arctic Islands. (2) To correlate palynomorph zones with conodont zones on measured sections. (3) To obtain fossil data of immediate use to those engaged in geological mapping of the Arctic Islands.	McGregor, DC	REG	EP	Frank	49; 58; 59; 68; 69; 78; 79; 88; 89; 560	1.4.2.1
680114	Development and supervision of mineral deposits data bank Obj.: To establish 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 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) primary documentary files of reports, maps and other published and unpublished information and (2) computer-related files.	Whitmore, DRE	REG	MDB	-	-	4.1.4
680119*	Operation Stewart Obj.: To outline and interpret the regional stratigraphy and structure in a previously unmapped part of the Selwyn Basin and to relate these features to the search for mineral deposits analogous to the Keno Hill and Vangorda deposits on the west and south. Pub Sca 1":4 mi.	Blusson, SL	REG	CPM	Mack Yk	105 N, O; 106 B,C	1.1.1.1
680121	Aeromagnetic interpretation-Appalachia Obj.: Utilization of geologic, aeromagnetic, ground magnetic, and rock magnetic data to delineate the regional crustal structure of the Canadian Appalachian region. A primary aim will be the production of a map of the pre-Carboniferous surface in the southwestern portion of the Gulf of St. Lawrence.	McGrath, PH	REG	MM	NB NS PEI Nfld	21;12;11;2;1	1.2.2
680123*	AFMAG surveys Obj.: To assess the value of airborne AFMAG surveys as aids to geological mapping of faults, shear zones and ultramafic dykes. To develop and improve present instrumentation for measuring natural EM fields.	Collett, LS	REG	EM	Sask Man Ont, NS	Pts 74 N; 63 G, I-K, N-P; 64 A; 53 M; Pts 54 D; 11 E, F; 31 G/6	2.2.3
680130	Operation Strait of Belle Isle Obj.: To determine the structure and origin of Strait of Belle Isle; for possible future engineering works and to assess petroleum and mineral potential of the operation area. Pub Sca 1:250,000 and 1:50,000.	Cumming, LM	REG	A	Que Nfld	Pts 2 M, 3D, 12 I, P, 13 A	1.1.1.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
680132	Application of mathematics to Quaternary research and geomorphology	Shimizu, K	TS	Adm	-	-	2.2.3
	Obj.: To serve as a consultant to research scientists on mathematical, statistical and computer programs; to investigate the application of mathematical and statistical techniques to geological and geomorphological problems.						
680133	Correlation and coal rank and hydrocarbon properties in Mesozoic rocks of western Canada	Snowdon, LR	ISPG	G	Alta Sask	-	2.2.1.1
	Obj.: To utilize coals from the subsurface of western Canada as a guide to the low temperature metamorphism experienced by the sedimentary rocks. The ultimate object is to utilize this information in predicting the nature of hydrocarbons present in new areas from which coal samples have been obtained.						
680134*	Regional distribution of gaseous hydrocarbons in the Northwest Territories	Snowdon, LR	ISPG	G	Frank Mack Alta Sask	-	3.1.1
	Obj.: To examine the presence of source rocks and near surface hydrocarbon accumulations in the Northwest Territories and western Canada in order to evaluate the potential for hydrocarbon occurrence in commercial quantities.						
680135	Basin analysis of the Athabasca Sedimentary Basin	Fahrig, WF	REG	PMag	Alta Sask	74	1.2.2
	Obj.: To determine the sedimentary parameters of the Athabasca sedimentary basin, including the logging and evaluation of drill hole cores, so as to develop criteria of possible use in the economic development of the basin.						
680140*	High-resolution aeromagnetic data	Holroyd, MT	REG	DC	-	-	2.2.3
	Obj.: (1) To produce high-resolution aeromagnetic maps of specified areas; (2) to evaluate the advantages/disadvantages of this type of data compared with conventional aeromag; (a) as direct total field data; (b) as source material for processed maps, eg. filtered, vertical continuation and derivative. Pub Sca 1:25,000 and larger.						
680141*	Pattern recognition	Holroyd, MT	REG	DC	-	-	2.2.3
	Obj.: To conduct research into and develop varied computer methods for visual display and enhancement of digital data in profile or map form for purpose of clarifying and extracting significant features within a highly complex background.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690005	Structural geology of northern Yukon Territory and northwestern District of Mackenzie	Norris, DK	ISPG	NM	Mack Yk	117 A, B E $\frac{1}{2}$ , C E $\frac{1}{2}$ , D; 107 B	1.2.1
690006*	Obj.: Critical evaluation of the structural geometry of Richardson, Barn and British Mountains, intervening plateaux, and adjacent coastal plain for documentation of the nature, origin and mechanics of the deformation and its bearing on the hydrocarbon potential of the region. Pub Sca as appropriate. Lower and Middle Paleozoic biostratigraphy Gaspé, Quebec, and Maritime provinces	Dean, WT	REG	EP	Que NS NB Nfld	1; 2; 11; 21; 22; 32	1.4.2.1
690009	Smithers map-area	Tipper, HW	REG	CPM	BC	93 L	1.1.1.1
690010	Berens River, Deer Lake map-area	Ermanovics, IF	REG	PS	Man Ont	63 A E $\frac{1}{2}$ , 53 D W $\frac{1}{2}$	1.1.1.1
690017	Rocky Mountain Foothills map and cross-section compilation	Ollierenshaw, NC	ISPG	SM	BC Alta	82 G-J, O; 83 B, C, F	1.1.1.1
690018	Cretaceous and Tertiary conglomerates and sandstones of the eastern Cordillera	Ollierenshaw, NC	ISPG	SM	BC Alta	82; 83	1.2.1

Obj.: The first objective is to answer some of the questions relating to the tectonic history of the eastern Cordillera, such as: the distribution, and tectonic implications of the Cretaceous and Tertiary conglomerate facies, the sequence and distribution of uplifts and the nature of the sedimentation pattern. The second objective is to provide the oil and gas industry with more facts on which to base the interpretation of the migration and present structural and stratigraphic distribution of hydrocarbons. The third objective is to analyse the relationship between tectonic activity and facies distribution in orogenic belts of the Rocky Mountains and Alpine types.

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690023	Upper Paleozoic rocks of Stikine Arch Obj.: 1. To correlate Late Paleozoic rocks in Stikine Arch with established sections in Atlin Horst. 2. To determine the existence of facies belts in Stikine Arch (comparable to those in Atlin Horst). 3. From this to establish the paleotectonic setting of the northern Cordillera, from Cassiar to Coast Mountains, in Lake Paleozoic time.	Monger, JWH	REG	CPM	BC	104 A,B,G,F,K,L	1.2.2
690025	Sedimentary geology of the Coppermine area Obj.: To define in NTS 86 O & N the units within the Coppermine sedimentary rocks, to determine their provenance, dispersal patterns, depositional environments, economic potential and correlation with similar rocks elsewhere in the Shield.	(Donaldson, JA Prof)	REG	PS	Mack	86 N,O	1.2.2
690028	Operation Coppermine and Bathurst Inlet Obj.: To provide reconnaissance geological information and assess the economic mineral potential of 120,000 square miles of mainly unmapped terrain in the northwest Canadian Shield. Pub Sca 1":8 mi.	Fraser, JA	REG	PS	Kee Mack	Pts 66,67,76,77,86,87 96,97	1.1.1.2
690032	Tectonic Framework of Sustut and Sifton Basins Obj.: To determine the late stage tectonic developments of the northern part of the eastern Cordilleran fold belt and its bearing on the environment of deposition of late Cretaceous and early Tertiary basins that are prospective regions of exploration for uranium and coal. Pub Sca to be determined.	Eisbacher, G	REG	CPM	BC	94 D,E,F; 104 H	1.2.2
690034	Petrochemical study of selected granulites Obj.: To define equilibrium conditions of granulite facies metamorphism for selected parts of the Grenville Structural Province including accurate estimates and comparisons of temperature, depth, and partial pressure of water. Through the course of this project, to develop and test a method of evaluating metamorphic grade in granulites of the Canadian Shield.	Reinhardt, EW	REG	PS	Ont Que	31	1.4.5.4
690035	Overhauser magnetometer development Obj.: Develop a high sensitivity Overhauser magnetometer system	Washkurak, S	REG	MM	-	-	2.2.1.3
690038*	Probability models for estimating mineral potential 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 thus to focus prospecting in areas of highest potential. To ascertain which geological variables are most closely correlated statistically with occurrence of mineral deposits; and thus to guide mapping and data-gathering in various Earth Sciences.	Agterberg, FP	REG	GM	Ont	-	3.2



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690042	Paleomagnetic studies of radiometrically dated igneous rocks in the Cordillera	Symons, DTA	REG	PMag	Yk BC	-	1.4.2.3
	Obj.: To establish a reliable paleomagnetic pole path with its reversal pattern and intensity variation from the Paleozoic to present for the Cordillera and thereby: (a) to provide a reference for paleomagnetic dating of units of unknown age; (b) to establish correlations between units; and (c) to check for gross tectonic movements of the Cordillera relative to the rest of North America.						
690043	Quaternary geology inventory, southern Labrador	Fulton, RJ	TS	RSP	Nfld	3; 13; Pts 23 A,B,G,H-J,0	1.1.1.3
	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". The project will involve development of a system of mapping (scale 1:500,000), designed to permit accelerated coverage and to meet particularly the need of forestry (ARDA) land capability surveys for geologic-geomorphic information. Pub Sca 1:500,000.						
690047*	Quaternary geology, Beaufort Mackenzie	Rampton, V	TS	RSP	Mack Yk	97 F; 107 B,C,D,E; 117 A, C,D	1.1.1.3
	Obj.: To map and explain Quaternary deposits and landforms in order to: (1) establish their sequence and age and outline the history of preglacial, interglacial, glacial and postglacial events; and (2) provide areal and stratigraphic geological information including data applicable to permafrost and engineering studies and petroleum development. Pub Sca 1:125,000 or 1:250,000.						
690048	Soils in glaciated and unglaciated terrain	Rutter, NW	TS	RSP	Yk	Pt 115 P	1.4.3.2
	Obj.: To characterize soils (pedology) in the central Yukon, with particular reference to the contrast between soils in glaciated and unglaciated regions; develop a technique for differentiating soils developed <u>in situ</u> from those developed on transported material.						
690049	Quaternary geology, Pine Pass-Jasper	Rutter, NW	TS	RSP	BC Alta	Pts 93 H,I,J,P,O. 83 E,L	1.1.1.4
	Obj.: To conduct a reconnaissance of Quaternary and geomorphic features of the Rocky Mountains and adjacent terrain and to map and explain the Quaternary deposits and landforms in major valleys and in other appropriate parts of your project area, in order to determine the chronological sequence of Quaternary events, to study the geomorphic evolution of the terrain, and to gather areal information including data applicable for land capability inventory and erosion prediction.						
690054*	Erosion in a permafrost environment	Heginbottom, JA	TS	EGG	Mack	Pt 107 B,C	1.4.3.2
	Obj.: To document the nature, extent, and rate of erosion in permafrost areas disturbed by activities of man, and to determine the importance of surface material, geomorphology microclimate, snow cover, vegetation, depth of active layer, ground ice distribution and other factors on controlling erosion. Pub Sca to be decided.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690060	Geochronology of the Canadian Shield	(Stockwell, CH)	REG	PS	-	-	1.4.2.2
	Obj.: To assess the geological significance of past geochronological studies of the Canadian Shield and to prepare recommendations on future requirements as well as methods of achieving them.						
690061	Operation Penny Highlands	Jackson, GD	REG	PS	Frank	Pts 16, 26, 27, 36, 37	1.1.1.2
	Obj.: A reconnaissance geological survey of a previously unmapped area to describe and interpret the geological framework and outline areas of potential economic interest. Pub Sca 1:500,000.						
690064*	Quaternary palynology	Mott, RJ	TS	PG	-	-	5.2.2
	Obj.: In connection with research projects headed by other divisional officers, to provide biostratigraphic and paleoecologic information through investigations comprising selection of sampling sites in bogs or lakes, collection of sediment cores, identification of Quaternary pollen and other fossil materials extracted from these and other samples; determination of fossil assemblages and profiles, and interpretation of age, environment of disposition, past climates, etc.						
690066	Federal-Provincial Aeromagnetic Surveys-British Columbia (Geoterrex)	Larochele, A	RGG	CS	BC	82 E,F,G W $\frac{1}{2}$ ; Pts 82 L,M; 92 H; Pts 92 I,J E $\frac{1}{2}$	1.1.2.1
	Obj.: To provide the Department of Mines and Petroleum Resources of British Columbia and the Geological Survey of Canada with adequate aeromagnetic maps over areas determined by both agencies. 2. To provide these two agencies and, more generally, the Canadian public with an aid for mineral exploration and for geological research. Pub Sca 1:63,360 and 1:253,440.						
690068*	Federal-Provincial Aeromagnetic Surveys - Keewatin and Mackenzie	Larochele, A	RGG	CS	<u>Kee</u> <u>Mack</u>	Pt 55 M,N,O,P; 56 A-D, E-L; M-P; Pt 65 F,G; 65 J-P; 66 A-P Pt 75 P	1.1.2.1
	Obj.: To provide the Geological Survey of Canada with adequate aeromagnetic maps as an aid in orienting the geological mapping program. 2. To provide the mining and oil industries with an aid in exploration and geological research. Pub Sca 1:63,360 and 1:253,440.						
690072*	Federal-Provincial Aeromagnetic Surveys- Labrador, Melville Peninsula and Coppermine areas	Larochele, A	RGG	CS	Frank <u>Kee</u> <u>Mack</u> NFLd	23 A,B,G-J, Pt O,P; Pt 24 A,H,I,P, 25 A; 14 D,E, Pt C,F, L,M; 13 A-G,J-N,Pt 13 H,I,O,P; Pt 3 D,E; 46K,L,N,O, Pts D,E, I,J,M,P; Pts 47 A-D; 86 E-I, K-N, Pts A-C,L,O,P; 76 L, Pt M	1.1.2.1
	Obj.: 1. To provide the Geological Survey of Canada with adequate aeromagnetic maps of areas selected on the basis of the needs of Regional and Economic Geology Division in relation with the mapping program. 2. To provide the mining and oil industries with basic information which could help in orienting their mineral exploration program. Pub Sca 1:63, 360 and 1:253,440.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690073	Federal-Provincial Aeromagnetic Surveys - Quebec	Laroche, A	RGG	CS	Que	23 C,E,F,K,L,N, Pt M,O, P, 24 A W <sub>1</sub> , B,C; 32 M-O; 33 B-L	1.1.2.1
690075*	Tertiary foraminiferal succession of Western Cordillera and Pacific Margin	Cameron, BEB	REG	CPM	BC	Pts 92, 93, 102, 103	1.4.2.1
690083	Investigation of Lower Jurassic genus <u>Weyla</u> as a guide fossil in the lower Jurassic successions of British Columbia	Tipper, HW	REG	CPM	BC	-	1.4.2.1
690086*	Scientific adviser and editor, Geological Atlas	Douglas, RJW	ADM	SP	-	-	1.3.2
690089	Analysis of international reference samples	Abbey, S	CL&TS	AC	-	-	1.4.3.1
690090	Development of methods for the analysis of geological materials	Abbey, S	CL&TS	AC	-	-	2.2.3
690091*	Mercury in soil gas applied to exploration for sulphide ores	Jonasson, IR	RGG	G	Mack Ont Que	31 C,F	2.2.1.3

Obj.: To provide the Department of Natural Resources of Quebec and the Geological Survey of Canada with adequate aeromagnetic maps over an area previously determined by both agencies. 2. To provide the above-mentioned government agencies, and, more generally, the Canadian public with an aid for mineral exploration and for geological research. Pub Sca 1:63,360 and 1:253,440

Obj.: To determine the foraminiferal succession within the Tertiary sedimentary rocks of the Western Cordillera and Pacific Margin in order to establish a biostratigraphic standard of reference.

Obj.: To establish the value and feasibility of using the genus Weyla as a guide fossil in the Lower Jurassic succession of British Columbia to describe and to determine the stratigraphic range of the several species believed to be present.

Obj.: To make recommendations to a steering committee concerning technical and scientific matters required to ensure the publication of a suitable 1:1,000,000 geological atlas of Canada by 1976, including recommendations on coordination, scheduling, guidelines, legend and format; and to ensure, through scientific editing of all manuscripts, that approved standards are met.

Obj.: To participate in international collaborative analysis of reference samples, prepared by geological institutions throughout the world, thereby contributing to the establishment of such samples as calibration standards and as references for checking analytical methods.

Obj.: To develop, modify and improve methods for the analysis of geological materials, using chemical and instrumental methods.

Obj.: To investigate the soil and soil gas chemistry of mercury and other related natural emanations, to help more fully exploit mercury as a pathfinder element to base metal ore deposits.

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
690095	Properties and provenance of till Obj.: To study the physical and chemical properties of till in order to identify and characterize the parameters that are significant in stratigraphy, correlation and history, engineering and mineral tracing.	Shilts, WW	TS	EGG	-	-	1.4.3.2
700009	S. Ontario (NTS 30,31,40,41) map-area. 1:1 million Geological Atlas Program 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 of File 116-6-4.	Sanford, BV	AGC	EPG	Ont Que	30;31;40;41	1.3.2
700014	Mineral indicator tracing, southern Keewatin Obj.: To determine the dispersion pattern of rock, mineral and chemical components of eskers and till relative to their source in the bedrock, with particular reference to the application of this knowledge in delineating geological bodies masked by the drift and in the search for mineral deposits.	Shilts, WW	TS	EGG	Kee	Mainly 55 E,F,K,L	2.2.1.3
700015	Yellowknife and Hearne Lake map-areas, District of Mackenzie Obj.: To revise and interpret the geology and economic potential of the Precambrian terrain of the project area known only through earlier gross reconnaissance. Pub Sca 1":4 mi.	Henderson, JB	REG	PS	Mack	85 I,J	1.1.1.1
700018	Paleomagnetism & rock magnetism instrumentation and technological development 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.	Christie, KW	REG	PMag	-	-	2.2.3
700025	Operation Snag-Yukon Obj.: To provide geological information on the age, sequence, structure, relationships, thickness and origin of the bedrock formation and on the origin, mode of occurrence and economic potential of the associated mineral deposits. Pub Sca 1":4 mi.	Tempeiman-Kiuit,D	REG	CPM	Yk	115 O W1/3, N E $\frac{1}{2}$ , H,K E $\frac{1}{2}$ ,J	1.1.1.1
700026*	Cordilleran volcanic project Obj.: To interpret data on volcanism in the Cordillera from other Survey projects and outside sources in order to advise and assist departmental geologists, other scientists and the public and industry with problems related to volcanology.	Souther, JG	REG	CPM	Yk BC	115; 105; 104; 103; 92	1.2.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700029	Operation Peel Sound: stratigraphy and structure of Prince of Wales Island and adjacent small islands Obj.: (a) To improve the understanding of the stratigraphic framework of the Paleozoic rocks of Prince of Wales Island. (b) To determine the tectonic history of the Boothia uplift. Pub Sca 1":4 mi.	Christie, RL	ISPG	AI	Frank	67 G,H; 68 A-E;	1.1.1.1
700030	Lancaster Sound (NTS 48,58) map-area. 1:1 million Geological Atlas Program 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 of File 116-6-4.	Christie, RL	ISPG	AI	Frank	48,58	1.3.2
700031	Victoria Strait (NTS 67,77) map-area. 1:1 million Geological Atlas Program 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 of File 116-6-4.	Christie, RL	ISPG	AI	Frank	67; 77	1.3.2
700032	Thomsen River (NTS 88, 98) map-area. 1:1 million Geological Atlas Program 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 of File 116-6-4.	Christie, RL	ISPG	AI	Frank	88,98	1.3.2
700034*	Devonian biostratigraphy of northern Yukon Territory and adjacent District of Mackenzie Obj.: To include: (a) delineation of facies distribution of Devonian rocks in area; (b) identifying and determining ranges of fossils for refining correlations with other areas; (c) determining distribution of faunal provinces and paleogeography of Devonian seas; and (d) obtaining more information on the Upper Silurian and Lower Devonian, an interval well represented in the southern part of the area.	Norris, AW	ISPG	MAP	Mack Yk	106 W $\frac{1}{2}$ ; 116 E $\frac{1}{2}$ ; 117 S $\frac{1}{2}$	1.2.1
700035	Erosion studies in an area of intensive petroleum exploration and development Obj.: To assess the terrain disturbance resulting from intensive petroleum exploration and development and associated deforestation; and to determine the nature, rate and controls of erosion and other processes involved in this terrain disturbance.	St-Onge, DA	TS	EGG	Alta	Pts 83 J,O	2.1.4
700037*	Geology of the southern Alberta Foothills, Highwood River to Athabasca River Obj.: Are to provide a new and 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. A secondary objective is to provide data for 1:250,000 scale map compilation (Project 690017) and regional structural syntheses.	Ollershaw, NC	ISPG	SM	Alta	82 O,J; 83 B,C,F	1.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700040	Eureka Sound-Robeson Channel (NTS 340, 560, 120) map-area. 1:1 million Geological Atlas Program 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 Apr. 1, 1969 of File 116-6-4.	Trettin, HP	ISPG	AI	Frank	340; 560; 120	1.3.2
700041*	Mineralogy of porphyry deposits of Cu and Mo in Canada Obj.: To determine the relationship of ore minerals to alteration zones and variations in alteration zones, as an aid to exploration and development; (2) to contribute mineralogically-based concepts to interpretation of genesis and provenance of these deposits, useful in identifying favourable geological environments for these deposits.	Jambor, JL	REG	MD	-	BC	3.1.5
700042	Jones Sound (NTS 29, 39, 49) map-area. 1:1 million Geological Atlas Program 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 Apr. 1, 1969 of File 116-6-4.	Kerr, JW	ISPG	AI	Frank	29; 39; 49;	1.3.2
700043	Viscount Melville Sound (NTS 68, 78) map-area. 1:1 million Geological Atlas Program 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 Apr. 1, 1969 of File 116-6-4.	Kerr, JW	ISPG	AI	Frank	68; 78	1.3.2
700045	Belcher Channel and Ballantyne Strait (NTS 59, 69, 79, 89, 99) map-area. 1:1 million Geological Atlas Program 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 Apr. 1, 1969 of File 116-6-4.	Nassichuk, WW	ISPG	MaP	Frank	59; 69; 79; 89; 99	1.3.2
700047*	Operation Finlay Obj.: To establish the stratigraphy, structure and geologic history; to establish the geological framework to which the mineral deposits may be related as an aid to regional development. Pub Sca 1":4mi.	Gabrielse, H	REG	CPM	BC	94 C E <sub>1</sub> , F W <sub>1</sub> , E	1.1.1.1
700048	Petrology and structure of the Daly Bay Complex and environs Obj.: To determine the petrology and structure of the anorthosite-gabbro-gneiss-granulite complex in the Daly Bay Region in order to provide an understanding of the origin, age, and stratigraphic relations within the complex as well as to the surrounding gneisses. Pub Sca 1":2 mi.	Gordon, TM	REG	Pet	Kee	56 A S <sub>1</sub> ; pts 55 P, 46 D	1.2.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700049*	Environmental geology prototype study - Ottawa-Hull region  Obj.: To develop methods of compiling, evaluating, and presenting geological information concerning urban growth areas to meet the needs of engineering and planning, using the Ottawa area as a prototype for this study. To prepare a comprehensive source of information (maps, report, and/or data file), designed to serve as background for planning and development in the Ottawa area, illustrating: (1) distribution, thickness and physical properties of surficial and bedrock materials; and (2) magnitude and effect of active geological processes. Pub Sca to be decided.	Scott, JS	TS	EGG	Ont Que	Pts 31 F, G, H	2.2.2.2
700052	Volcanic study in the Ennadai Belt, Keewatin  Obj.: To determine and analyse the Archean stratigraphy of the areas, and its relationship to metallogeny and mineralization. To reconstruct the depositional history and evolution of the sequences. To assess the mineral potential of the Archean terrain and establish guides for future mineral exploration. Pub Sca as required.	Ridler, RH	REG	PS	Kee	Pts 55 W $\frac{1}{2}$ , 65 E $\frac{1}{2}$	1.2.2
700053	Quaternary geology, Winnipeg (east half)  Obj.: To map, describe and explain the Quaternary deposits and landforms in order to provide (1) areal information, (2) knowledge of the Quaternary stratigraphy and chronology of the area, and (3) background information applicable to soils and mapping, engineering, groundwater, etc., bearing in mind the proximity of the project area to metropolitan Winnipeg. Pub Sca 1:250,000.	(Fenton, MM)	TS	RSP	Man	62 H E $\frac{1}{2}$	1.1.1.3
700054*	Thermomagnetism of single minerals and rocks  Obj.: To investigate magnetic properties of minerals and rocks other than the direction of the natural remanence and thereby: (1) develop generally applicable methods to obtain unique information in applied geophysical and geological work on, in particular, sulphide orebodies; and (2) provide a firmer physical base for Paleomagnetism.	Schwarz EJ	REG	PMag	-	-	1.4.3.1
700056	Surficial geology, southern Cape Breton Island  Obj.: To map, describe and explain the surficial deposits and landforms in order to provide: (1) geological information with particular reference to the needs for data required for industrial development and mineral exploration; and (2) knowledge on the stratigraphy and age of Quaternary features and of the history of Quaternary events and environments including glaciation, deglaciation, and local sea-level change. Pub Sca 1:125,000.	Grant, DR	TS	RSP	NS	Pt 11 F, G, J, K	1.1.1.3
700057*	Airborne geochemistry  Obj.: To develop methods of obtaining from the air information about the chemical composition of the ground. To select the methods most pertinent to the objectives of the Geological Survey on the basis of long term cost-effectiveness. These methods to be suitable for integration with other airborne techniques being applied by GSC.	Bristow, Q	REG	G	Ont	-	1.1.3.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700059*	Geology of copper and molybdenum deposits of Canada  Obj.: To carry out comprehensive research on the geology of copper and molybdenum deposits in order to provide a geological basis for exploration and assessment of copper and molybdenum potential in Canada. The research is to provide: (1) a systematic record and appraisal of geological data; (2) a geological classification of copper and molybdenum deposits; (3) definition of criteria for recognition of each type of deposit; (4) development of concepts and hypothesis of geological environment, provenance, and genetic processes of copper deposits; and (5) determination of regions and geological units in Canada most favourable for the occurrence of each type of deposit.	Kirkham, RV	REG	MD	-	-	3.1.5
700060	Devonian and older Paleozoic rocks, southern and central District of Mackenzie  Obj.: To resolve if possible, stratigraphic problems within carbonate rocks that are laterally equivalent to oil-producing limestones at Norman Wells and to publish and apply the results to the continuing search for hydrocarbons in nearby areas. To prepare for publication correlation charts and columnar sections of Devonian and older Paleozoic rocks in the Great Slave Plains area and to select rock units for isopach and lithofacies maps that will elucidate the tectonic and depositional history of the basin. Pub Sca 1:1,000,000.	Mackenzie, WS	ISPG	NM	Mack	85 C-F, K-N; 86 D,E,L,M; 87 B, C; 95 A-C, F-K, N-P; 96; 97 A-D,F; 106 A,B,G,H,I,J,O,P	1.2.1
700064	Foraminiferal zonation of the Mesozoic and lower Cenozoic rocks of the Mackenzie Delta and adjacent Arctic Coastal Plain  Obj.: Detailed biostratigraphic subdivision of the Mesozoic and lower Cenozoic rocks to aid exploration of the petroleum resources.	Chamney, TP	ISPG	MIP	Mack Yk	Pts 97, 106,107,116,117	1.2.1
700065	Petrological studies in the vicinity of the Kiseynew Front  Obj.: To determine the metamorphic reactions and isograds associated with the Kiseynew Front as a contribution to the understanding of metamorphism in Precambrian orogenic belts and its effect on mineral deposits. Pub Sca 1": 1/2 mi.	Froese, E	REG	Pet	Man	63 K 16 E1, J/13 W1/2	1.4.5
700067*	Mica group minerals and related silicates in Canadian mineral deposits  Obj.: To ascertain whether and how variations in characteristics of these minerals can be used to determine age and genetic relationships of mineral deposits and thus assist mineral exploration.	Rimsaite, JYH	REG	MD	-	-	1.4.2.2



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700068*	Basin analysis of exposed Mesozoic and Tertiary strata in northern Yukon Territory in relation to the subsurface stratigraphy of Mackenzie Delta-Beaufort Sea areas	Young, FG	ISPG	NM	Mack Yk	Pts 106,107,116,117	1.2.1
	Obj.: 1. To elucidate and interpret the economic, tectonic, and historical significance of Mesozoic and Tertiary stratigraphy and sedimentology of northern Yukon Territory and northwestern District of Mackenzie. 2. To determine the relationships of this stratigraphy to the subsurface Mesozoic stratigraphy of the Mackenzie River Delta, the Beaufort Sea continental shelf, the Alaskan north slope, and the Sverdrup Basin. Pub Sca 1:125,000.						
700073*	Operation Northern Milville Peninsula	Heywood, WW	REG	PS	Frank	Pts 47 A,B,C,D	1.1.1.2
	Obj.: To determine the general structural, historical, and economic geology of a previously unmapped terrain in order to aid in the future economic development of northern Canada. Pub Sca 1":8 mi.						
700074	Operations Back River and Wager	Heywood, WW	REG	PS	Frank Kee	46 D W $\frac{1}{2}$ , E, F N $\frac{1}{2}$ , G N $\frac{1}{2}$ ; 47 A S $\frac{1}{2}$ ; 56 A,B,G-K,N-P; 57 A,B,D, Pts C; Pts 67 A; 66 I-K, N-P	1.1.1.2
	Obj.: To determine the general structural, historical, and economic geologic features of this previously un-studied terrain as a basis for future economic development of this portion of northern Canada. Pub Sca 1:1,000,000.						
700087*	The development of portable instrumentation for the routine detection and measurement of elemental vapours such as mercury, arsenic and selenium both on the ground and in the air	Bristow, Q	RGG	G	-	-	2.2.1.3
	Obj.: The design, development and testing of suitable instrumentation and methodology for the detection and measurement of elemental vapours, both at ground level and in the air, as an aid to geochemical prospecting for geochemical reconnaissance studies.						
700089	Portable weather satellite receiving unit	Washkurak, S	RGG	MM	-	-	2.2.3
	Obj.: To design and construct a portable weather satellite receiving unit suitable for operation in remote areas to be used to indicate such as ice conditions, ice break-up and flying (weather) conditions in remote areas.						
700090	Holographic enhancement of geophysical data	Washkurak, S	RGG	MM	-	-	2.2.3
	Obj.: To evaluate and adapt electronic, acoustical and optical holographic processes as a means of improving and/or simplifying the reduction, presentation and/or interpretation of geophysical and geological data.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
700091*	Regional Economic Expansion Program-- Geophysics--New Brunswick, Nova Scotia, Quebec	Collett, LS	RGG	EM	Que NB NS	-	5.4
	Obj.: To advise and aid officials of the Provincial Departments on planning and supervising geophysical programs in selected areas in the province under funding by the Department of Regional Economic Expansion.						
700092*	Surficial geology and geomorphology Mackenzie Bay-Continental Shelf	Shearer, JM	TS	RSP	Frank	Pts 107 C,D,E,F; 117 D,E	1.1.1.5
	Obj.: To map, describe and explain the unconsolidated deposits, associated organic remains, geomorphic and structural features, and permafrost occurrence on the Continental Shelf, Mackenzie Canyon and offshore part of the Mackenzie Delta in order to: (1) provide areal geological knowledge including information required in connection with petroleum exploration and production; (2) determine Quaternary stratigraphy and history; and (3) identify the sedimentary and geomorphic processes operating in the area. Pub Sca as warranted.						
700093	Pleistocene geology, Lake Ontario Basin	Henderson, EP	TS	RSP	Ont	- 31 D/9; pts 31 D/10,15, E/1,2,7,8	1.2.3
	Obj.: In connection with the International Field Year for the Great Lakes (IFYGL) to prepare a map showing the distribution of the surficial deposits and geomorphic features of the Lake Ontario Basin, including the bed of the present lake. Pub Sca 1:500,000.						
700094*	Engineering geology, Mackenzie Valley Transportation Corridor	Isaacs, RM	TS	EGG	Mack Yk	Pts 85, 95,96,106,107,117	2.1.4
	Obj.: To delineate the engineering characteristics of terrain units (organic materials, surficial and bedrock geology as appropriate) in terms of engineering index properties (texture, consistency, moisture content, etc.), ground ice content, thermal conductivity and diffusivity, and performance as foundation or construction materials; to identify and evaluate the mechanism and rate of active geomorphic processes (slope movement, erosion, sediment transport); and to develop criteria for the measurement and prediction of the interrelationship between engineering construction and terrain performance. Pub Sca as appropriate.						
710001*	Origin and migration of petroleum in western Canada	McCrossan, RG	ISPG	ESd	Alta	82 E $\frac{1}{2}$ ; 83; 72 W $\frac{1}{2}$ ; 73 W $\frac{1}{2}$	2.2.1.1
	Obj.: To develop a method of relating reservoir hydrocarbons to organic material in source rocks; to reconstruct the evolutionary history of the organic material; to determine the pattern and timing of hydrocarbon migration and entrapment; and to evaluate the application of this type of geochemical investigation to the assessment of ultimate pooled hydrocarbon reserves in the study area as well as other basins.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710002	Environmental geology of northern settlements Mackenzie Valley - western Arctic (Tuktoyaktuk)	Rampton, V	TS	EGG	Mack	Pts 107 E/7,8,9	2.1.4
	Obj.: To provide basic geologic data in order to: (1) identify and describe the pertinent geologic-geomorphic aspects of northern settlements to assist in planning for future development; and (2) delineate and evaluate the sources of granular and other earth materials useful in construction in terms of location, quantity, quality and performance. Pub Sca as warranted.						
710003*	Structure and stratigraphy, Ringnes Island and nearby smaller islands	Balkwill, HR	ISPG	AI	Frank	Pts 59,69,79	1.2.1
	Obj.: (1) To establish the nature, sequence and gross structure of bedrock in the central part of the Sverdrup Basin; (2) to elucidate the nature, kinematics and chronology of tectonism in the Eureka Sound Fold Belt and its relationship with other elements of the Innuitian Orogen; and (3) through the above, to determine the significance of structure and stratigraphy of the region on the genesis and accumulation of hydrocarbons and other mineral resources. Pub Sca 1:250,000, 1:50,000 and other scales as warranted.						
710005	Northern Basins Analysis Program	Procter, RM	ISPG	GofP	Mack Yk	-	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.						
710008	Clearwater River (NTS 74) map-area. 1:1 million Geological Atlas Program	Tremblay, LP	REG	PS	Sask	74	1.3.2
	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 of File 116-6-4.						
710010	Northern Basin Analysis Program: Great Bear River map-area, (Paleozoic part)	MacKenzie, WS	ISPG	NM	Mack	86;96	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.						
710011	Northern Basin Analysis Program: Redstone River map-area	Meijer-Dress, NC	ISPG	SM	Mack	95	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basin north of the 60th parallel of latitude, stressing the relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate oil and gas potential of the region. Pub Sca 1:1,000,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710012	Study of the Ramah Group and of Proterozoic-Archean relationships in northern Labrador	Morgan, WC	REG	PS	Nfld	14 L/11,14, Pts 6,13, M/3,4	1.2.2
	Obj.: To determine the following parameters relative to the Ramah Group. (1) Stratigraphy, sedimentology and mineral potential. (2) Interactions between Ramah Group and Archean basement. (3) Nature and history of Archean-Proterozoic boundary. (4) Distribution of metamorphic facies and relationships to structures. Pub Sca 1":4 mi						
710013	Northern Basin Analysis Program: Peel River map-area	Young, FG	ISPG	NM	Mack Yk	106; 116	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.						
710015*	Jurassic Trigonidae of western British Columbia	(Poulton, TP- Thesis Project)	ISPG	MaP	BC Alta	92 H W $\frac{1}{2}$ , I W $\frac{1}{2}$ , O; 82 G 93 F, K, L, M; 103 I, P	1.4.2.1
	Obj.: Biostratigraphic, taxonomic and paleoecologic study of Jurassic pelecypods of the family Trigonidae in western British Columbia in order to determine and elucidate their usefulness for biostratigraphic and paleoecologic zonation and to prepare a monograph describing their morphology, taxonomy and evolution.						
710016	Geological and tectonic map compilations	Douglas, RJW	ADM	SP	-	-	1.3.1
	Obj.: 1. Maintain a continuing compilation of data received from 1:1 million from Atlas program 690086 for revision of Geological and Tectonic Maps at 1:2 $\frac{1}{2}$ million and 1:5 million scale. 2. Maintain data available for use as a base for compilations of other data - magnetic, gravity, mineral deposits, etc.						
710017*	Basement recognition criteria	Douglas, RJW	ADM	SP	Man Ont Que	-	1.4.5
	Obj.: To assess the validity of criteria as indications of the relative age of certain rocks; establish preferred sequences of rocks and events in Superior Provinces; and relate conclusions to the requirements of a standard for Precambrian time.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710018*	Central Foothills of Alberta	Douglas, RJW	ADM	SP	Alta	83 C/15, F/2, C/8, 9, 10 E $\frac{1}{2}$	1.2.1
	Obj.: (1) Standard 1 mile mapping with emphasis on stratigraphy and structure; revision of mapping by B.R. Mackay; oil, gas and coal potentialities. (2) To prepare for publication available geological data on 83 C/15 and F/2; and revise in light of drilling 83 C/8, 9, 10 E $\frac{1}{2}$ . Pub Sca 1":1 mi.						
710019*	Taxonomy, biostratigraphy, and paleo-ecology of Mesozoic miospore and micro-plankton assemblages from the District of Mackenzie, northwestern Canada; utilization of computer techniques	Brideaux, WW	ISPG	MIP	Mack	- Pts 106 M, 107B N $\frac{1}{2}$	1.4.1
	Obj.: To monograph Mesozoic miospore and microplankton assemblages, to determine the local ranges and their value and application in regional and world-wide biostratigraphy, and to investigate their paleoecological distribution in sedimentary basins of the District of Mackenzie and in conjunction with these objectives, to utilize computer facilities for the array and analysis of data generated.						
710020*	Surficial geology and land classification, Mackenzie Valley Transportation Corridor	Hughes, OL	TS	RSP	Mack Yk	106 E, F, I-0; 116 I, N, O, P	1.1.1.3
	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. Pub Sca 1:125,000.						
710022*	Carboniferous and Permian biostratigraphy and coral faunas, western and northern Canada	Bamber, EW	ISPG	MAP	Frank Mack Yk BC Alta	49; 59; 69; 78; 79; 82; 83; 92-95; 103-106; 115- 117; 340; 560.	1.4.2.1
	Obj.: Establishment of faunal sequence within stratigraphic framework previously described for Upper Paleozoic of Alberta, British Columbia, Yukon, District of Mackenzie, for use as a biostratigraphic reference succession in surface and subsurface exploration of these areas. Description of coral faunas from these areas and Arctic Islands 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	Sec	Prov	NTS	Classification
710025	Precambrian geology of Norway House, Grand Rapids and Berens River W <sup>1</sup> / <sub>2</sub> map-areas, Manitoba Obj.: To revise and reinterpret the geology and economic potential of a Precambrian terrain known only through gross reconnaissance done in 1936. Pub Sca 1":4 mi.	Ermanovics, IF	REG	PS	Man	63 H,G,A W <sup>1</sup> / <sub>2</sub>	1.1.1.1
710026	Sachigo River (NTS 53) map-area.1:1 million Geological Atlas Program 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 of File 116-6-4.	Ermanovics, IF	REG	PS	Man Ont	53	1.3.2
710027	Thelon River (NTS 66, 76) map-area, 1:1 million Geological Atlas Program 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 of File 116-6-4.	Fraser, JA	REG	PS	Kee Mack	66; 76	1.3.2
710028	Great Bear River (NTS 86,96) map-area. 1:1 million Geological Atlas Program 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 of File 116-6-4.	Fraser, JA	REG	PS	Mack	86;96	1.3.2
710029	Arctic Aerial Photographs Obj.: Publication of a series of short papers, each showing a small area covered by a single aerial photograph. The areas chosen are those which (a) are key areas for understanding Arctic geology, and (b) display an outstanding array of geological phenomena on the photograph. It is intended that each short paper will serve as a starting point for field and laboratory studies by industry geologists, and as well serve as teaching aids in structural geology courses at universities. Pub Sca 1":5,000 feet.	Kerr, JW	ISPG	AI	Frank	58;68;69;59;49;39	2.2.2.1
710030*	Canada-wide broad-scale statistical estimation and prediction of the occurrence of mineral deposits for selected metals, based on geological factors Obj.: To provide a nation-wide estimate of the probable occurrence and size of mineral deposits for both base and precious metals.	Kelly, AM	REG	GM	-	-	3.1.5
710031	Middle Devonian brachiopods of Arctic Islands Obj.: Refinement of biostratigraphic zonation of Middle Devonian rocks	(Brice, D Prof)	ISPG	MaP	Frank	49;59	1.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710033	Northern basin Analysis Program: Slave River map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Williams, GK	ISPG	SM	Mack	85	1.2.1
710035	Northern Basin Analysis Program: Horton River map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Yorath, CJ	ISPG	NM	Mack	87;97	1.2.1
710036	Northern Basin Analysis Program: Firth River map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Yorath, CJ	ISPG	NM	Mack Yk	107;117	1.2.1
710038	Juniper (east half) map-area-N.B.  Obj.: To determine the stratigraphy, structure and igneous, metamorphic and tectonic history of a portion of the Central Mineral Belt of New Brunswick as an aid to the economic development of the area. Pub Sca 1:50,000.	Skinner, R	REG	A	NB	21 J/11 E½	1.2.2
710041*	Surficial geology and geomorphology of Melville Island  Obj.: To map, describe and explain the surface and near surface materials, landforms, permafrost conditions and other aspects of the geomorphology on a reconnaissance scale, with particular reference to terrain information pertinent to the implementation of the Territorial Land Use Regulations, and to petroleum exploration and associated activities. Pub Sca 1:250,000.	Barnett, DM	TS	RSP	Frank	Pts 78;79;88	1.1.1.3
710042*	Terrain performance, Melville Island  Obj.: To prepare case histories of terrain performance encountered by airfields, roads and "overland" vehicles, in relation to geological materials, geomorphic setting and ground ice. Pub Sca as warranted.	Barnett, DM	TS	EGG	Frank	Pts 78;79;88	1.2.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710043*	Geology of mineral deposits of Bear-Slave Provinces, N.W.T. Obj.: To contribute to knowledge of the metallogeny and to an assessment of the mineral potential of the area. Specifically, to gather information on, and representative samples of, mineral deposits in Bear-Slave provinces and to interpret and summarize the data acquired from field work and follow-up laboratory investigations.	Thorpe, RI	REG	MD	Mack	75;76;85;86	3.1.5
710044*	Environmental geology of the New Montreal International Airport Region (NMIAP) Obj.: To map, describe and explain the surficial deposits and landforms, to investigate the geodynamic processes and to determine the bedrock surface configuration in order to evaluate the significance of the geology of the NMIAP region in relation to planning for engineering construction, industrial development and land use planning, agriculture and water supply. Pub Sca 1:50,000.	St-Onge, DA	TS	EGG	Que	Pts 31 G/8,9,16, H/5, 12,13	2.1.4
710045	Compilation of company geological data of central mineral belt of Newfoundland Obj.: To provide a systematic framework of the geology and mineral deposits in order to permit the evaluation of the mineral potential for economic and environmental development of central mineral belt of Newfoundland. Pub Sca 1":1 mi.or 1":2 mi.	Anderson, FD	REG	A	Nfld	Pts 12 A	3.1.5
710046	Structural evolution of eastern Cape Breton Island Obj.: To determine the structural evolution of Precambrian and Paleozoic rocks of eastern Cape Breton Island, and the sequence of metamorphic and metallogenic events in order to improve the geological framework and permit evaluation of the mineral potential for economic development of the region. Pub Sca. 1:25,000.	Helmstaedt, H	REG	A	NS	Pts 11 F,K	1.2.2
710047*	Surficial geology and land classification, Mackenzie Valley Transportation Corridor (southern part) Obj.: To map, describe, and explain the unconsolidated deposits, landforms, permafrost, ground ice, and organic (muskeg) cover of the Mackenzie Valley Transportation Corridor (southern part) 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. Pub Sca 1:125,000.	Rutter, NW	TS	RSP	Mack	85 D,E;95 A,B,G,H,I,J,K, N,O	1.1.1.3
710048*	Geological and geophysical studies of the Pacific Continental Margin Obj.: To establish the geological framework of the Pacific Continental Margin; determine the hydrocarbon potential of its contained sedimentary basins, and to determine the tectonic development of the Pacific Continental Margin especially its interaction with the Pacific ocean floor.	Tiffin, DL	REG	CPM	BC	Pts 92;102;103	1.1.2.3



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710049*	Geological and geophysical studies in the Beaufort Sea	Tiffin, DL	REG	CPM	Frank	Pts 107, 117	1.1.2.3
	Obj.: To produce a magnetic anomaly map and selected shallow seismic profiles of the Beaufort Sea.						
710050	Lockhart River (NTS 75) map-area. 1:1 million Geological Atlas Program	McGlynn, JC	REG	PS	Mack	75	1.3.2
	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 of File 116-6-4.						
710051	Slave River (NTS 85) map-area. 1:1 million Geological Atlas Program	McGlynn, JC	REG	PS	Mack	85	1.3.2
	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 of File 116-6-4.						
710052	Branch coordinator Mineral Potential Analysis Sub-Program Bear-Slave Province	McGlynn, JC	REG	PS	Mack	75;76;Pts 85,95,86,96, 87,97	3.1.5
	Obj.: To provide a thorough knowledge and understanding of the geology and mineral deposits of the Bear-Slave region stressing its tectonic evolution and metallogenesis and their interrelationships. To evaluate the mineral potential. Pub Sca as required.						
710053*	Penrhyn Group metamorphic complex, Melville Peninsula, District of Franklin	Reesor, JE	REG	Pet	Frank	Pts 46 J,K,N,O	1.2.2
	Obj.: To determine structural, metamorphic, stratigraphic, and age relations between 'basement' gneisses and migmatites and Penrhyn Gp. metasedimentary gneisses and schists. To elucidate the structural development of 'gneiss domes' in an area of upper amphibolite facies rocks. To provide structural-stratigraphic and isotopic age bases for regional correlation. Pub Sca 1:50,000.						
710054	The organic content of sediments from the Beaufort Sea	Snowdon, LR	ISPG	G	Mack	-	2.2.1.1
	Obj.: To examine the organic matter in Beaufort Sea sediments for various classes of compounds in order to determine what biological and chemical activity is occurring under Arctic conditions and simulate petroleum generation from organic material extracted from core and grab samples.				Yk		
710055	Glaciation and emergence, Archer Fiord	Fyles, JG	TS	PG	Frank	Pts 120 C	1.2.3
	Obj.: To map and explain surficial deposits and related landforms on the area adjacent to Archer Fiord, with special reference to raised marine deposits and beaches; to determine the history of glaciation, deglaciation, and associated changes in relative sea level.						
710057	Editing terminal maps and report on Guysborough map-area	Benson, DG	REG	A	NS	11 F/5	1.2.2
	Obj.: To revise and complete a manuscript terminal map and report by E.A. Schiller for publication by Geological Survey. Pub Sca 1":1 mi.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710059	Stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic Shelf  Obj.: To determine stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic Shelf, and the basin geometry of clastic, carbonate and evaporite sequences; delineate distribution, thickness and facies to reconstruct provenance, current direction and environment of deposition as an aid to the resource evaluation of the region. Pub Sca 1:1,000,000.	Jansa, LF	AGC	EPG	Offshore E. Canada	-	1.1.1.5
710060	Pennsylvanian and Permian conodonts of Arctic Canada  Obj.: Biostratigraphic taxonomic and paleoecologic study of conodont microfossils in order to determine and elucidate their usefulness for biostratigraphic zonation.	(Bender, KP PDF)	ISPG	MIP	Frank Yk	340 B,C; 560 A,D; 59 B; 116 B,C,H; 106 E	1.4.1
710061	Compilation of geoscientific data in the Paleozoic Basins of Eastern Canada  Obj.: To establish and maintain a data bank of all geoscientific information relating to exploration for oil and gas in the Paleozoic Basins of eastern Canada.	Howie, RD	AGC	EPG	Frank Man Ont Que Atlantic Provinces	-	4.1.4
710062	Biostratigraphic zonation (Palynology) of the Mesozoic and Cenozoic rocks of the Atlantic Shelf  Obj.: To determine the biostratigraphic zonation (palynology) of the Mesozoic and Cenozoic rocks in offshore wells to form the basis of local, regional and worldwide correlation, and to accurately reconstruct geological events and paleoclimatic environments, to aid in the economic evaluation of the region. Pub Sca 1:1,000,000.	Williams, G	AGC	EPG	Offshore E. Canada	-	1.4.2.1
710065	Biostratigraphic zonation (foraminifera) of the Mesozoic and Cenozoic rocks of the Atlantic Shelf  Obj.: To determine the biostratigraphic zonation (foraminifera) of the Mesozoic and Cenozoic rocks in offshore wells to form the basis of local, regional and worldwide correlation, and to accurately reconstruct geological events and ecological environments, to aid in the economic evaluation of the region. Pub Sca 1:1,000,000.	Ascoli, P	AGC	EPG	Offshore E. Canada	-	1.4.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710066	Paleozoic geology of the Hudson Bay region	Sanford, BV	ACC	EPG	Kee Man Ont Que	43;44;45; Pts 32,42,53,54,55, 46,35,33,34	1.1.1.5
	Obj.: To determine the stratigraphy, sedimentology, age, distribution and thickness of the Phanerozoic rocks of the Hudson Bay region in order to evaluate the economic potential of the area. Pub Sca 1:1 million						
710067	Eastern Canada sedimentary basin compilation project	Sanford, BV	ACC	EPG	Kee Man Ont, Que Atlantic Provinces & all offshore regions	-	1.2.1
	Obj.: To maintain a current and comprehensive system of basin analysis maps and diagrams in order to provide the necessary geoscientific base to determine resource evaluation, particularly in the realm of petroleum and natural gas exploration in the onshore/offshore sedimentary basins of eastern Canada. Pub Sca 1:1,000,000.						
710068	Churchill River (NTS 54) map-area. 1:1 million Geological Atlas Program	Sanford, BV	ACC	EPG	Man	54	1.3.2
	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 of File 116-6-4.						
710069*	Northern Basin Analysis Program: Belcher Channel map-area	Roy, KJ	ISPG	AI	Frank	59;69;79	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.						
710070	Equilibrium bed forms and sedimentary structures in coarse glaciofluvial sand	McDonald, BC	TS	EGG	Ont	-	1.4.3.2
	Obj.: (a) to investigate experimentally equilibrium bed forms, and the sedimentary structures generated by them, under a wide range of velocity and depth conditions. (b) To relate these experimental results to field interpretation of the sedimentary history of eskers and other glaciofluvial sediments.						
710072	Northern Basin Analysis Program: Ballantyne Strait map-area	Roy, KJ	ISPG	AI	Frank	89;99	1.2.1
	Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710073*	Northern Basin Analysis Program: Viscount Melville Sound map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Davies, GR	ISPG	AI	Frank	68;78	1.2.1
710074*	Northern Basin Analysis Program: Lancaster Sound map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Davies, GR	ISPG	AI	Frank	48;58	1.2.1
710075	Northern Basin Analysis Program: Jones Sound map-area  Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Roy, KJ	ISPG	AI	Frank	29;39;49	1.2.1
710077*	Terrain sensitivity evaluation and mapping, Mackenzie Valley Transportation Corridor  Obj.: To investigate the response of various earth and rock materials in differing situations to various types of disturbance, both from natural and man-induced causes. 2. To develop and test a terrain sensitivity mapping system that will relate the performance or sensitivity of various terrain units to the activities of man, particularly those involved in the construction and operation of pipelines. Pub Sca to be decided.	Heginbottom, JA	TS	EGG	Mack	<u>Pts, 95,96,106</u>	1.4.3.2
710080*	Application of Quaternary geology to mineral exploration, Timmins-Val-d'Or mining district  Obj.: To assess the requirements and methods of field and laboratory investigations in order to design and plan a program of surficial geology, drift prospecting and related studies to provide the background information necessary to aid mineral exploration in the area. Pub Sca as warranted.	Skinner, RG	TS	RSP	Ont <u>Que</u>	<u>31 M,N; 32 C,D; 41 O,P;</u> <u>42 A,B,C,H</u>	2.2.1.3
710081*	Distribution of marine deposits, Ottawa-St. Lawrence Basin  Obj.: To delimit the occurrence of deposits of the Champlain Sea of the St. Lawrence Lowlands and the equivalent Laflamme Sea of the Lac St-Jean area with particular reference to the distribution of marine clays within these areas; to investigate the stratigraphic and physical parameters and geomorphology of the deposits to aid in the evaluation of the causes and occurrence of landslides, particularly of the mud-flow type. Pub Sca to be determined.	Gadd, NR	TS	EGG	Ont <u>Que</u>	<u>Pts 21,22,31,32</u>	2.1.4

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
710083	Surficial geology, Sept-Iles-Cap Chat	Craig, BG	TS	RSP	Que	22 G/5,6,11,14,15 J/1,2,3 E <sub>2</sub>	1.1.1.3
	Obj.: To map, describe and explain the Quaternary deposits and landforms in order to elucidate the glacial and postglacial history of the region and to provide areal geological knowledge with particular reference to data pertinent to engineering geology. Pub Sca 1:250,000 or 1:50,000 as warranted.						
710086*	Stability of natural slopes	Scott, JS	TS	EGG	BC	Pts 92 G,H,I	2.1.4
	Obj.: 1. To provide a comprehensive summary of the occurrence of landslides in bedrock and associated surficial material in the southern Cordillera. 2. To determine and evaluate the geological, geomorphic, hydrogeological and related factors that influence the stability of natural slopes. 3. To develop modelling or other techniques appropriate for stability analysis and the prediction of natural slope stability. Pub Sca as appropriate.						
710090	Surficial geology and geomorphology, Hudson Bay	Lewis, CFM	TS	RSP	Kee Man Ont Que	Pts 55,54,45,44,43,35,34,33	1.1.1.5
	Obj.: To investigate the submarine unconsolidated deposits, geomorphic and structural features of Hudson Bay in order to: (1) provide areal geological knowledge including information relative to petroleum exploration and production; (2) determine Quaternary stratigraphy, and history; and (3) identify the sedimentary and geomorphic processes operation in the area. Pub Sca as appropriate.						
710091*	Palynological studies of Upper Jurassic and Cretaceous coal measures in western Canada	Sweet, AR	ISPG	MIP	BC Alta Sask	82 G,J;62 E	3.1.2
	Obj.: (1) To establish a palyno-stratigraphic zonation of the coal measures, as an aid to coal petrological, sedimentological and structural interpretations of coal basins. (2) To correlate coal seams of suitable rank (exceeding 25% volatile matter) by means of spore and pollen histograms.						
710092*	Quaternary geology inventory, lower Nelson River Basin	Klassen, RW	TS	RSP	Man	53 M;54 C,D;63 I,J,O,P; 64 A,G,H	1.1.1.3
	Obj.: To map, describe and explain the Quaternary deposits and landforms to provide areal geologic-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. Pub Sca 1:250,000.						
710098*	Computer based storage, retrieval and compilation of geologic field data	Hutchison, WW	REG	CPM	BC	-	2.2.3
	Obj.: The provision of computer based techniques that will facilitate the input, retrieval, processing and display of geological field data to expedite the analysis and distribution of geological information.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720004*	Co-operative terrain mapping south-central British Columbia Obj.: To map, describe and explain the unconsolidated deposits and landforms in order to provide terrain inventory maps; to determine the Quaternary history of the area; and to provide consultative advice to the British Columbia soil-land classification program. Pub Sca 1:125,000.	Fulton, RJ	TS	RSP	BC	Pts 82,92,83,93	1.1.1.3
720005*	Seismic refraction-Sverdrup Basin Obj.: To determine thickness and attitude of sediments overlying crystalline basement, to determine seismic velocities within and depth to refracting interfaces within the geological section, to provide regional information about the architecture and structural history of the Sverdrup Basin.	Hobson, GD	RCG	SM	Frank	Pts 49,59,69,79,89	1.2.1
720024*	Gibson-MacQuoid Lakes map-area, N.W.T. Obj.: To determine the geological framework as a basis for assessing further topical studies essential for an estimate of the mineral potential of the area and for future development of the region. Particularly to subdivide the large areas of gneiss and schist and to relate them to the Precambrian stratigraphy in the adjoining map-areas. Pub Sca 1":4 mi.	Reinhardt, EW	REG	PS	Kee	55 M,N	1.1.1.1
720027*	Canada-Newfoundland Mineral Development Program, Project 6: geochemical-glacial geological survey (GSC co-ordinator) Obj.: To ensure effective planning and co-ordination of scientific aspects of GSC activities in the Program and to provide liaison between GSC and both Nfld. Mineral Resources Division and EMR Mineral Resources Branch.	Poole, WH	REG	A	Nfld	Pts 1,2,11,12	5.4
720028	Canada-Newfoundland Mineral Development Program Project 6: geochemical-glacial geological survey (glacial geology phase) Obj.: To provide data and interpretation on the surficial geology as required to aid the selection of geochemical survey methods to be applied to a regional geochemical survey of large tracts of Newfoundland in 1973 and possibly 1974. Pub Sca 1:50,000 and 1:250,000.	Grant, DR	TS	RSP	Nfld	Pts 1,2,11,12	1.1.1.3
720036*	Canada-Newfoundland Mineral Development Program, Project 6: geochemical-glacial geological survey (geochemical phase) Obj.: To outline areas in Newfoundland with richer potential in metallic mineral resources in order to facilitate discovery by exploration companies and thus contribute to economic and social development.	Hornbrook, EHW	RCG	G	Nfld	Pts 1,2,11,12	2.1.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720037	Stratigraphy and structure of the Mount Ida Group, southern B.C.	Campbell, RB	REG	CPM	BC	82 M,L	1.2.2
	Obj.: To revise the stratigraphy of the Mount Ida Group and the geology of the Shuswap Metamorphic Complex.						
720038*	Hazelton map-area	Richards, T	REG	CPM	BC	93 M	1.1.1.1
	Obj.: To determine the geological framework of Hazelton map-area as a basis for estimating the potential abundance and probable distribution of mineral and fuel resources and as an aid to future development of the region. Pub Sca 1:250,000.						
720039*	Operation Nuvilik	Taylor, FC	REG	PS	Que	25 E;35 F-K	1.1.1.1
	Obj.: To determine the geological framework of the region as a basis for estimating the potential abundance and probable distribution of minerals and fuels and to aid in the future development of the region. Pub. Sca 1:250,000.						
720040*	Subsurface Cambrian stratigraphy in northeastern British Columbia	Pugh, DC	ISPG	SM	BC	93 I,P;94 A,B,G-J,O,P	1.2.1
	Obj.: To determine the extent, nature and economic potential of subsurface Cambrian strata in NE B.C.; to identify, describe and determine the distribution of formations and their various facies; to interpret these data in terms of geological history and environments; to determine their economic potential as possible hosts for oil and gas; and to publish the results as a report by structure, isopach, isolith and subcrop maps and stratigraphic cross-sections. Pub Sca 1":8 mi.						
720041*	Upper Paleozoic rocks of western Canadian Cordillera	Monger, JH	REG	CPM	Yk BC	Pts 115,92,93 M,N,94 C,D, 103,104	1.2.2
	Obj.: To determine the stratigraphy, facies, structural style and external relationships of Upper Paleozoic rocks in the western Canadian Cordillera and to establish reference sections typical of the various facies belts.						
720042*	Monograph of miospore assemblages from the Lower Colorado Group, central Alberta, and comparative studies of assemblages from south-western Alberta and adjacent British Columbia	Brideaux, WW	ISPG	MIP	BC Alta	-	1.4.1
	Obj.: To monograph miospore assemblages from the Lower Colorado Group recovered from subsurface sections, to determine their biostratigraphic value and paleoecologic distribution within the Lower Colorado Group. Further, to collect surface and subsurface samples from selected Mesozoic, primarily post-Triassic, sections for comparative study.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720043*	A.S.P.G. Field Trip and Guided Tour of Athabasca Tar Sands Area, 1973 Obj.: Main objectives include: (a) to assist in the planning and preparations in 1972 for a guided tour of the tar sands area in the fall of 1973; (b) to help prepare a guidebook on the geology of the area in which the writer's responsibility will be the Paleozoic Geology; and (c) to be one of the guides (See New Project Proposal dated 3 Sept. 1971 for further details.)	Norris, AW	ISPG	MaP	Alta	74 D	4.2.7
720044*	Reconnaissance of Mesozoic Foraminifera of Arctic Islands 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.	Sliter, WV	ISPG	MiP	Frank	98,88,89,79,69,59	1.4.2.1
720045	Upper Cretaceous benthic Foraminifera and biostratigraphy of JOIDES core samples from Rio Grande Rise, south Atlantic Obj.: To describe the Upper Cretaceous benthic Foraminifera from the Rio Grande Rise; to determine their biostratigraphic and paleoecological importance, and to compare these with those of Arctic foraminiferal faunas; to assess the diagenetic changes of the Foraminifera; and to extend continental margin interpretations of foraminiferal distribution into oceanic water depths.	Sliter, WV	ISPG	MiP	-	-	1.4.2.1
720046*	Paleomagnetic reversals in Paleozoic of the St. Lawrence Platform Obj.: To identify magnetic reversals in Paleozoic of the St. Lawrence Platform and to establish their stratigraphic position and age.	Foster, JH	REG	PMag	Ont Que	Pts 40,31,21	1.4.2.3
720047*	Stratigraphy and sedimentology of lower Paleozoic clastic formations, Canon Fiord region, Ellesmere Island Obj.: To elucidate the stratigraphy and sedimentology of the Silurian and Devonian clastic formations.	Trettin, HP	ISPG	AI	Frank	49 H;340 B	1.2.1
720048	The stratigraphy and sedimentology of the Ramah Group between Nachvak Fiord and Saglek Obj.: To determine the stratigraphy and sedimentological characteristics of this previously little known group of rocks for purposes of correlation and economic evaluation. Pub Sca 1:50,000.	(Knight, I)	REG	PS	Nfld	Pts 14 L/10,11,14,15	1.2.2
720049	Jurassic biostratigraphic (foraminiferal) studies, northeastern British Columbia and adjacent Alberta Obj.: Biostratigraphic zonation of Jurassic rocks by means of microfossils (mostly Foraminifera) in order to facilitate subdivision and correlation of both outcropping and subsurface formations.	(Brooke,MM)	ISPG	MiP	BC Alta	83 L; 94 B	1.2.1



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720050*	Stratigraphic relationships of the western edge of the Middle Cambrian facies carbonate belt, Field, British Columbia	(McIlreath, IA)	ISPG	SM	BC	82 N/7,8	1.2.1
	Obj.: To clarify the stratigraphic relationships across the carbonate to shale facies change; to determine the origin of the outer scarp in the upper Cathedral Formation; to test the facies belt concept by studying texture and sedimentary structures as they pertain to the problem of dispersal in the terrigenous clastic units; to clarify or negate the Kicking Horse Rim concept; to establish the area of provenance of the Chancellor terrigenous sediments. Pub Sca 1:50,000.						
720051*	Saskatchewan Coal Evaluation Program	Irvine, JA	ISPG	GofC	Sask	Pts 62 E,F, 72 F-H, 73 I	3.1.2
	Obj.: To determine the quantity, quality, mineability and recoverability of the coal resources of southern and central Saskatchewan to a sufficient degree of accuracy so that their relative position in the framework of Canada's energy supply and demand can be established and reasonable and knowledgeable energy policies can be formulated concerning them. Pub Sca 1:250,000 (tentative).						
720052*	Indin Lake map-area 86 B	Frith, RA	REG	PS	Mack	86 B	1.1.1.1
	Obj.: 1. To revise and interpret to present day standards the geology of the precambrian terrain of the area known only through early reconnaissance and semi-detailed mapping. 2. To provide a basis for assessment of economic potential of the metamorphic sedimentary and volcanic rocks of the area. Pub Sca 1":4 mi.						
720053	Blanket Mountain area, British Columbia	Reesor, JE	REG	Pet	BC	Pts: 82 L/16, 9	1.2.2
	Obj.: To revise and upgrade map of Blanket Mountain segment, north flank of Thor-Odin gneiss dome. Pub Sca 1:50,000.						
720054*	Sedimentary rocks of the Prince Albert Belt	Campbell, FHA	REG	PS	Frank Kee	Pts: 46 M,N,L, 47 A, B, 56 I-K,O,P	1.2.2
	Obj.: To determine the structure, stratigraphy, sedimentology and petrology of the sedimentary rocks of the Prince Albert Group; their relationship to the adjacent gneisses and to the enclosed basic and ultra-basic rocks. To evaluate their mineral potential. Pub Sca 1:250,00.						
720055	Paleomagnetism of the Lac St. Jean Anorthosite	Fahrig, WF	REG	PMag	Que	22 SW, 32 SE	1.4.2.3
	Obj.: To determine the paleomagnetism of the Lac St. Jean anorthosite and its satellite bodies; to use the paleomagnetic data to determine the rotation of this block of Grenville since the intrusion of this body.						
720056	Paleomagnetism of the diabase dykes of West Greenland	Fahrig, WF	REG	PMag	-	-	1.4.2.3
	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.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720057	Terrain mapping in mountainous areas 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. Pub Sca 1:50,000; 1:125,000.	Fulton, RJ	TS	RSP	BC	Pts: 82 M,N,K,L	1.1.1.3
720059	Northern Basin Analysis Program: Eureka Sound map-area Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Davies, GR	ISPG	AI	Frank	340,560	1.2.1
720060	Sedimentology of selected Upper Paleozoic carbonates and evaporites, Queen Elizabeth Islands, Arctic Archipelago Obj.: To clarify selected aspects of carbonate and evaporite sedimentology in Upper Paleozoic rocks of the Queen Elizabeth Islands that relate to basin development and porosity controls; specifically: 1) cementation and porosity development in Upper Paleozoic carbonate mounds (reefs); 2) identification of mound-building biota, and their role in development of carbonate build-ups. 3) depositional environment of evaporites, and their relationship to basin evolution.	Davies, GR	ISPG	AI	Frank	340 B,C; 49 C	1.2.1
720061	Northern Basin Analysis Program: Thomsen River map-area Obj.: To provide a thorough understanding of the geological history of the sedimentary basins north of the 60th parallel of latitude, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region. Pub Sca 1:1,000,000.	Miall, AD	ISPG	AI	Frank	88,98	1.2.1
720062*	Volcanic rocks of the Prince Albert Belt Obj.: To determine the structure, stratigraphy and petrology of the volcanic rocks of the Prince Albert Group; their relationship to the adjacent gneisses and the enclosed basic and ultrabasic rocks. To evaluate their mineral potential. Pub Sca 1:250,000.	Schau, Mikkel	REG	PS	Frank Kee	Pts: 46 M,N,L, 47 A,B, 56 I-K,O,P	1.2.2
720063*	Bear-Slave geochemical reconnaissance Obj.: 1) To outline areas of 20 or greater square miles that have either (a) an extremely high content of one trace element, or (b) higher than regional background levels for several trace elements, or (c) very much lower than regional background levels for several trace elements in relation to regional geology, as foci for detailed exploration by industry; 2) To differentiate large areas of similar rock type as relative economic element content; 3) To provide information of assistance to regional geological mapping; and 4) to assess the proposed logistics in relation to possible future contracted surveys of this type.	Allen, RJ	REG	G	Mack	76 A/12,13,B,C, D/9-16, E,F,G,H/4,5,12,13,86 A,B, C/9-16, D/9,10,15,16,E/1, 2,7-10,15,16,F,G,H	1.1.3.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720066*	Evaluation of Canada's petroleum potential Obj.: To provide the necessary data base in support of departmental oil and natural gas energy programs and policy; to research methods for a basin-by-basin analysis of the liquid hydrocarbon reserves and/or potential in the sedimentary basins of Canada both onshore and offshore; to create and maintain an inventory of liquid hydrocarbon deposits in Canada.	McCrossan, RG	ISPG	ESD	-	-	3.1.1
720067*	The use of simple volatile compounds and their isotope ratios in natural emanations for evaluating mineral potential Obj.: To determine the effectiveness of amounts and isotope ratios of volatile compounds such as He, SO <sub>2</sub> , and light hydrocarbons in natural emanations from faults and fracture zones, ground waters, and rock inclusions in evaluating the mineral potential of buried formations.	Dyck, W	RGG	G	Ont Que	41 J;42 A;32 C;31 C,D,F,G	2.2.1.3
720068*	The stability of natural slopes in the Mackenzie Valley Obj.: To investigate river bank failures on the Mackenzie River and its tributaries; to determine the relationships between the types and scale of failures and the geological environments, the engineering properties of soil and rock materials, the geometry of the slopes, the boundaries of permafrost and the erosional processes acting on the banks. To predict the significance of the stability of slopes with respect to future engineering activities. Pub Sea to be decided.	Code, JA	TS	EGG	Mack	85 D,E;95 H-J,N,O;96 C,D,E; 106 H	3.1.7
720070*	Gneisses of the Prince Albert Belt Obj.: To determine the feasibility of further structural, stratigraphic and petrological studies of the gneissic rocks adjacent to the Prince Albert Belt of metamorphosed sedimentary and volcanic rocks.	Frisch, T	REG	PS	Frank Kee	Pts 46 M,N,L,47 A,B,56 I, J,P	1.2.2
720071*	Gamma-ray spectrometry (experimental surveys) Obj.: Application of new developments in gamma-ray spectrometry techniques to geologic mapping and exploration by making cross country reconnaissance surveys and detailed area surveys. Geologic interpretation and evaluation of airborne gamma-ray results, with aid of ground and laboratory investigations. Investigation of radioelement distribution pattern within Canada.	Richardson, KA	RGG	RM	-	-	1.1.3.1
720072	Paleozoic Micropaleontology of Eastern Canada Obj.: To determine the stratigraphic relationships of microfossils in eastern Canada; to identify, describe, and determine their zonal affinities as an aid to correlation and assessment of economic potential.	Copeland, MJ	REG	EP	Ont,Que NB,NS Nfld	-	1.4.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720073*	Petrographic analysis of Saskatchewan Lignites	Cameron, AR	ISPG	CP	Sask	62 E	3.1.1.2
	Obj.: The overall objective of this study is the petrographic characterization of the Saskatchewan lignites on a regional basis. In terms of goals, the following may be cited: 1. To see whether or not there is a vertical pattern of petrographic change within the section. The presence or absence of lateral variation on a regional basis will also be demonstrated. 2. If such changes do exist, attempts will be made to relate them to environments of deposition. In this regard, full use will be made of all available information from the non-coal part of the Ravenscrag Formation. 3. Attempts will be made to relate data from 1 and 2 to such coal quality parameters as ash, sulphur, and thermal value.						
720075	Paleomagnetism of the Hopedale diabase dykes	Christie, KW	REG	PMag	Nfld	13	1.4.2.3
	Obj.: To determine the paleomagnetism of three swarms of unaltered diabase dykes in the Hopedale area, Labrador.						
720078	Diatom analysis of Quaternary sediments	Federovich, S	TS	PG	-	-	5.2.2
	Obj.: In connection with research projects headed by divisional officers, to provide biostratigraphic and paleoecological information through identification and investigation of diatoms in cores of Quaternary sediments and other samples, including determination of fossil and modern assemblages and interpretations of age, environment of deposition, and past climate.						
720079*	Sedimentary and geomorphic processes, Yukon coastal plain	McDonald, BC	TS	RSP	Yk	Pts 117 A,C,D	1.4.3.2
	Obj.: 1. To map the modern sedimentary environments of the coast and rivers on the coastal plain and to study the rates of the various active sedimentary processes. 2. To provide basic data that will help assess the impact of various human activities on the natural balance of processes. 3. To gather data that will elucidate the geologic history of the coastal plain, with particular references to pedimentation and deleveling.						
720080*	Interpretation of high resolution aeromagnetic surveys	Kornik, LJ	REG	MM	-	Ont 42 A; 31 F	2.2.3
	Obj.: The main objective is to evaluate the usefulness of high resolution aeromagnetic survey data to detailed geological mapping programs. A secondary objective is the field evaluation of vertical gradient aeromagnetic measurements in delineating small-scale geological features in Precambrian Shield areas.						
720081*	Surficial geology and geomorphology of central Ellesmere Island	Hodgson, DA	TS	RSP	Frank	Pts 49 D,E,G,H, 340 B	1.1.1.3
	Obj.: To provide an inventory of surficial materials, landforms, geomorphic processes (active and inactive) and permafrost conditions, on a reconnaissance scale, with particular reference to terrain information pertinent to the implementation of Territorial Land Use Regulations and to petroleum exploration and associated activities. Pub Sca 1:50,000 and 1:25,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720082*	Terrain performance, central Ellesmere Island	Hodgson, DA	TS	EGG	Frank	Pts 49 D, E, G, H, 340 B	1.2.3
	Obj.: To catalogue the effects on terrain of vehicle and aircraft operation, and construction of well sites, camps, seismic lines, access roads, etc., in relation to geological materials, geomorphic setting and ground ice conditions.						
720083*	Environmental geology - mountain coal mining	Harrison, JE	TS	EGG	BC Alta	Pts 82 G, J, O	2.1.4
	Obj.: To provide basic information to serve as a basis for coal resource development, the prediction of terrain behaviour during such development and for the sequential-use planning of coal resource lands.						
720084*	Gamma ray spectrometry (technique development)	Crasty, RL	REG	RM	-	-	2.2.3
	Obj.: Development of improved methods of airborne gamma ray spectrometry data collection, analysis and presentation. Upgrading of instrumentation, eg. recording complete gamma ray spectrum, improving background measurement, incorporating additional sensors (magnetometer, infra-red, microwave). Research into establishing parameters and correction factors for height attenuation, Compton scattering, temperature, soil moisture more accurately.						
720087	Three-dimensional evaluation of mineral potential in the vicinities of selected orebodies	Agterberg, FP	REG	GM	-	-	3.2
	Obj.: To develop 3-dimensional scale-models for vicinities of known orebodies that can be used for the prediction of local mineral potential. 2. To refine 2-dimensional models for regional estimation by considering geological features mapped locally, vertical zoning of commodities etc; to obtain a better appreciation of relation of amount of ore discovered versus amount of exploration (drilling) done in control cells.						
720089*	Quantification of geological variables and geometrical estimation of mineral potential for selected areas in Canada	Fabbri, AG	REG	GM	-	-	3.1.5
	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 or 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 geometrical analyses in order to assess regional mineral potential.						
720093*	Hare Bay klippe, Newfoundland	Poole, WH	REG	A	Nfld	Pts 2 L, M; 12 I, P	1.2.2
	Obj.: To determine the structure, stratigraphy and tectonic history, and to appraise the mineral potential of the area. Pub Sca 1":2 or 4 mi.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720094	Development of geological applications of Delphi method of consensus to determine mineral potential	Dawson, KR	REG	MD	Que NB NS, Nfld	-	3.2
	Obj.: To develop in the Geological Survey the capability to apply the Delphi forecasting technique to the problem of assessing mineral potential.						
720095*	Geology of barium, fluorine and strontium deposits in Canada	Dawson, KR	REG	MD	-	-	3.1.5
	Obj.: To prepare a comprehensive reference on current knowledge of the geology of barium, fluorine, and strontium in Canada which will provide a geological basis for future exploration and for assessment of the potential of the three elements in Canada. The report will include a review of the mineralogy and geochemistry, a review of all major types of deposits in Canada, a classification of these deposits and criteria for recognizing each type, a review of concepts of their geological environment, genesis, and provenance, and should indicate regions and geological units that are most favourable for the occurrence of each type of deposit.						
720097	Project Appalachia	Leech, GB	REG	EGSD	Que NB NS PEI Nfld	1, 2, 11, 12, 20, 21, 22, 31	3.2
	Obj.: 1. Improvement of the GSC's ability to appraise mineral resources quantitatively, by effective utilization of varied geological data and by increasing recognition of factors that govern the distribution of mineral deposits. 2. Quantitative appraisal of mineral resources in the Canadian Appalachians.						
720098*	Lower Paleozoic stratigraphy, southern Rocky Mountains	Aitken, JD	ISPG	NM	BC Alta	82, 83	1.2.1
	Obj.: To continue to study the distribution, thickness, lithologic character, depositional environment and depositional mechanisms of Lower Paleozoic strata in the southern Rocky Mountains. In particular, to continue to prepare for publication field work done in 1961-67 under old Project 610021.						
720100*	Preliminary terrain classification and sensitivity rating, Mackenzie Valley	Monroe, Robin L	TS	EGG	Mack Yk	85 E,D; 95 A,B,G-K,O,N; 96 B-E,L; 106 E-P; 107 B-E; 97 F; 116 I-K,N-P; 117 A-D	1.2.3
	Obj.: To develop a system of terrain classification and terrain sensitivity rating as background information for land use evaluations. Pub Sca 1:250,000.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720101*	Bottom studies of the Beaufort Sea Obj.: To obtain information on bottom sediments and their dispersal trends, and to make a quantitative analysis of ice-scour features on the floor of the Beaufort Sea. For this study the goals are: (1) to provide an adequate inventory on the nature of bottom sediments, and to provide data and illustrative material for those agencies undertaking engineering studies with direct reference to the construction of underwater pipelines, construction of underwater installations, coastal construction such as port facilities and as an aid to shipping with reference to anchoring sites; (2) to provide maps together with statistical and illustrative material that will provide a guidance to the petroleum industry and engineers dealing with problems related to underwater pipelines and installations to be placed on the sea floor and along coastal areas.	Pelletier, BR	AGC	MG	Frank	-	1.2.3
720102	Marine Science Atlas of the Beaufort Sea Obj.: To present an atlas containing maps, illustrative material (photos, sketches, graphs) and data on the known marine aspects of the Beaufort Sea, including oceanography, biology, bathymetry, ice, sediments, geology, and geophysics, access routes and other cultural aspects. Primarily this atlas is to serve the public as a guide to resources development in the Beaufort Sea, and will be of use to the engineering, petroleum, fishing and shipping industries; also it will provide baseline information for environmental studies; and finally will have educational value to the general public and institutions devoted to education and information dissemination. Pub Sca 1:500,000 for reduction to Atlas size of 15" x 12".	Pelletier, BR	AGC	MG	Frank	-	1.2.3
720103	Hydrocarbon inventory of the sedimentary basins of eastern Canada Obj.: To prepare the hydrocarbon inventory for sedimentary basins on the Atlantic Continental Shelf and assist in the preparation of similar inventories for Paleozoic basins of the St. Lawrence and Hudson platforms and the Carboniferous basins of the Atlantic Provinces and the Gulf of St. Lawrence. Pub Sca 1:2,000,000.	Wade, JA	AGC	EPG	-	-	3.1.1
720104	Regional subsurface geology of the Mesozoic and Cenozoic rocks of the Atlantic Continental Shelf Obj.: To provide a regional subsurface geological interpretation of the Atlantic Continental Shelf as a basis (1) for the Departmental Hydrocarbon Inventory, and (2) to establish a framework from which Resource Management & Conservation Branch may carry out more detailed geological analyses of specific prospective areas, the latter to facilitate the enforcement of Departmental regulations and conservation policies. Pub Sca 1:1,000,000.	Wade, JA	AGC	EPG	-	-	1.1.1.5
720105	Geophysical investigation of the Gulf of St. Lawrence Obj.: To provide an evaluation and interpretation of the geological and geophysical data presently available in the Gulf of St. Lawrence. Pub Sca 1:1,000,000.	Haworth, RT	AGC	MGph	Que NB,NS, PEI Nfld	Pt of 11,12	1.1.2.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720106	Geophysical investigation of the Laurentian Channel and southern Grand Banks of Newfoundland Obj.: Using the geophysical data presently available, and that which may be collected during the 1973-74 field season, to deduce the structural geology of the Grand Banks, south of Newfoundland and to relate this to its tectonic history. Pub Sca 1:1,000,000 and 1:350,000.	Haworth, RT	AGC	MGph	-	Pt of 0,1,11	1.1.2.3
720107	Natural Resource Charts contract Obj.: To define the character of the Canadian Appalachian system from its onshore expression in Quebec to its presumed termination on the continental rise northeast of Newfoundland. The contract will allow the expeditious release of gravity and magnetic field data collected on cruises originating at Bedford Institute of Oceanography between 1964 and 1971, Pub Sca 1:250,000.	Haworth, RT	AGC	MGph	-	Pt of 20,21,11,12,0,1	1.2.1
720110	Under-water diamond-drill trial and support survey northeast of Belle Isle, Newfoundland Obj.: (1) To test a newly designed electric rock-core drill; (2) to acquire an insite into the bedrock and surficial geology of the area.	Harris, IM	AGC	MG	-	3 D/2,3,6,7	2.2.3
720111	Geophysical studies of the continental slope and rise off the Canadian Eastern seabord Obj.: 1) To determine where oceanic crust as recognized in the ocean basin terminates as the continental margin is approached; 2) To look for evidence of transform faulting during the Mesozoic along the southern margin of the Grand Banks; 3) To obtain geological samples wherever possible to determine ages and composition of strata outcropping; 4) To determine the basement structure and seismic velocity; 5) To define the crustal structure near supposed continental fragments such as Flemish Cap.	Keen, CE	AGC	MGph	-	-	1.1.2.3
720112	Marine seismic data processing Obj.: 1) To improve the data gathered and used by the seismic group at AGC; 2) To develop a system which would be useful for other government groups as well as industrial offshore exploration.	Heffler, DE	AGC	MGph	-	-	2.2.2.1
720113	Geographically ordered data base Obj.: To improve the retrieval of geophysical data. To store information relating to data such as photographs, core samples, and sediment analysis.	Shih, KG	AGC	MGph	-	-	2.2.3



Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
720114	Comparative ecology of Recent planktonic foraminifera in the surface waters of Arctic, Atlantic and Pacific Oceans  Obj.: To assist in the reconstruction of paleoenvironments in the marine strata on the continental shelf of Eastern Canada and Northwest Territories. To improve on a frame of reference for paleo-oceanographic studies in the North Atlantic and Arctic Oceans. To assist in species classification by using micro-structures of Recent foraminifer tests as a criterion and possibly contribute to the general biostratigraphy of planktonic foraminifera.	Wilks, G	AGC	MG	-	-	1.2.3
720115	Foraminifer, molluscan and lithologic study of sediment cores from the Beaufort Sea and Northwest Passage  Obj.: To determine changes in marine conditions in the Arctic Basin and Northwest Passage during the Holocene or possibly during the Pleistocene times. To determine regional rates of sedimentation and changes in sea level. To assist in surveys of regional geology in the Arctic Islands.	Wilks, G	AGC	MG	-	-	1.2.3
720116	Recent benthonic foraminiferida and mollusca from the Continental Shelf, southeastern Beaufort Sea  Obj.: To study Recent benthonic foraminiferida and mollusca from the Continental Shelf, Southeastern Beaufort Sea.	Wagner, FJE	AGC	MG	-	-	1.4.2.1
NP	National Competition for Canadian semi-precious minerals  Obj.: To stimulate Public interest in, and publicize the beauty and diversity of Canada's gemstones; to publicize the interest, related publications, activities and services of the G.S.C. and E.M.R. and extend Branch activities into the aesthetic side of Canadian life; to develop close liaison with the amateur mineral and lapidary clubs in Canada.	Steacy, HR	CL&TS	M	-	-	4.3.2.3
NP*	Primary halos as an aid in the location of orebodies  Obj.: To study primary halos associated with various types of mineral deposits with the objective of using these as a method of detailed prospecting for deposits that lie deep within the rocks.	Boyle, RW	GGG	SP	-	-	2.1.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	Organic lake sediments	Allan, RJ	RGG	G	Sask Man Ont	63 N4; 73 NE4; 52 N4; 32 S4; 31 S4	2.1.2
	Obj.:						
	1.						
	2.						
	3.						
	4.						
NP*	Bear granites	Garrett, RG	RGG	G	Mack	85 N; 86 C,F,K	1.2.2
	Obj.:						
	1.						
NP*	Applied EM problems	Sinha, AK	RGG	EM	-	-	5.2.4
	Obj.:						
	1.						
NP	Borehole logging	New Recruit	RGG	RM	-	-	2.2.1.3
	Obj.:						
	1.						
NP	Seismic properties of earth materials in the permafrost environment	Hunter, JM	RGG	SM	Frank Mack	-	1.2.3
	Obj.:						
	1.						
NP*	Automated track recovery	Sawatzky, P	RGG	EAO	-	-	2.2.3
	Obj.:						
	1.						
NP	ERTS imagery evaluation	Slaney, VR	RGG	RM	-	-	2.2.3
	Obj.:						
	1.						
NP*	Quaternary geology inventory Maguse River - Dubawnt River	Shilts, WW	TS	EGG	Ke	Pt 55, 65 E	1.1.1.3
	Obj.:						
	1.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	Pipeline performance monitoring Obj.: To determine instrumentation requirement, design, data output frequency and data evaluation techniques required to evaluate pipeline /terrain interaction and performance.	(Contract)	TS	EGG	Mack	-	2.1.4
NP*	Coastal erosion-sedimentation, Arctic Islands Obj.: To determine types and rates of near shore and coastal erosional and depositional processes in the Arctic environment.	RS Recruit	TS	EGG	Frank	-	1.2.3
NP*	Offshore erosion-sedimentation, Quaternary inventory, Arctic Islands Obj.: To map, describe and explain unconsolidated deposits, geomorphic features and depositional and erosional processes in inter-island channels of the Arctic archipelago.	RS Recruit	TS	RSP	Frank	-	1.1.1.5
NP*	Coastal erosion-sedimentation, Pacific Coast Obj.: To characterize and classify the coastal zone with respect to morphology, origin and predominant geomorphic processes.	RS Recruit	TS	EGG	BC	92 G E $\frac{1}{2}$	1.2.3
NP*	Offshore erosion-sedimentation, Quaternary inventory, Pacific continental margin Obj.: To map, describe and explain unconsolidated deposits, geomorphic features and depositional and erosional processes on the west coast offshore environment.	RS Recruit	TS	RSP	BC	103 K E $\frac{1}{2}$	1.1.1.5
NP*	Arctic Island drilling Obj.: To carry out a shallow drilling program in order to provide samples of near surface materials relative to ground ice content and permafrost conditions in support of various terrain studies.	(Contract)	TS	RSP	Frank	-	1.2.3
NP	Terrain-Quaternary inventory, Lytton map-area Obj.: To map, describe and explain the unconsolidated deposits and landforms in order to provide terrain inventory maps and to determine the Quaternary history.	Fulton, RJ	TS	RSP	BC	-	1.1.1.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	Engineering properties of geological materials Obj.: To identify and assess the geological factors affecting the engineering properties and performance of significance in Canadian engineering construction.	Lawrence, DE	TS	EGG	-	-	2.1.4
NP	Quaternary fossil insects and paleoecology Obj.: To provide biostratigraphic and paleoecologic information on Quaternary sediments as an aid to interpretation of their age and environment of deposition.	(Mathews, JV, PDF)	TS	PG	-	-	1.4.2.1
NP*	Environmental geology - Northern settlements Obj.: To provide background geological information on the occurrence and properties of earth materials to assist in planning for future development of Northern communities.	Owen, EB	TS	EGG	<u>Mack</u>	-	2.1.4
NP*	Quaternary paleoecology - Central Yukon Obj.: To provide information on the age of organic and volcanic ash deposits as an aid to regional correlation.	Rampton, VN	TS	EGG	<u>Yk</u>	<u>Pts 115 H, I</u>	1.2.3
NP*	Urban geology liaison Obj.: To further cooperation and liaison between federal and provincial government agencies in the establishment and development of urban geology information systems.	St-Onge, DA	TS	EGG	-	-	5.4
NP*	Environmental geology development in an urban area Obj.: To evaluate the requirements for urban geology study techniques and information systems in varying geological and geomorphic urban settings.	St-Onge, DA	TS	EGG	-	-	2.1.4
NP*	Mineral indicator tracing and drift prospecting, Maguse River - Dubawnt River Obj.: To determine the economic potential of mineral deposits in the Ennadai - Rankin greenstone belt.	Shilts, WW	TS	EGG	<u>Kee</u>	<u>Pt 55, 65 E</u>	2.2.1.3

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP	Terrain studies, James Bay Power Development area	Skinner, RG	TS	RSP	Que	Pts 23 W $\frac{1}{2}$ , 33	2.1.4
NP*	Obj.: To assess the requirements for terrain information relative to hydroelectric power development.						
NP*	Quaternary geology inventory Amund Ringnes and Cornwall	RS Recruit	TS	RSP	Frank	59 C,F; 69 D,E	1.1.1.3
NP*	Obj.: To map, describe and explain surface and near surface materials, landforms and permafrost conditions.						
NP*	Terrain performance, Amund Ringnes and Cornwall Island	RS Recruit	TS	EGG	Frank	59 C,F; 69 D,E	1.2.3
NP*	Obj.: To catalogue the effects on the terrain of petroleum exploration activities in relation to geological materials, geomorphological setting and ground ice conditions.						
NP*	Evaluation of geophysical techniques for the detection of permafrost and segregated ground ice	(Contract)	TS	EGG	Mack	-	2.2.1.4
NP*	Obj.: To determine optimum field methods and interpretive techniques for ground ice and permafrost detection relative to engineering and construction in the Mackenzie Valley.						
NP*	Operation Mount St Elias	Campbell, RB	REG	CPM	Yk BC	Pts 114 P,O Pts 115 A,B,C,G,F	1.2.2
NP*	Obj.: To map the geology and study the stratigraphy, structure, metamorphism, intrusive and volcanic rocks, and to assess the mineral potential.						
NP*	Geology of Victoria map area	Muller, JE	REG	CPM	BC	92 B,C	1.1.1.1
NP*	Obj.: To map the geology and study stratigraphy and structure, metamorphism and petrology of the region.						
NP*	Stratigraphy structure and metallogeny of Pelly Mountains Y.T.	Templeman-Kluit, DJ	REG	CPM	Yk	105 F,G	1.2.2
NP*	Obj.: To provide information on the relationship between stratigraphy, structure, sedimentary facies, and mineral deposits in Pelly Mountains of adjacent Yukon Plateau.						
NP*	Volcanic stratigraphy and geochemistry of the Cape Smith belt; New Quebec	Baragar, WRA	REG	PS	Que	Pts 35 B,C,D,F,G,H	1.2.2
NP*	Obj.: To determine the characteristic composition, variation in composition, and stratigraphy of the volcanic succession of the Cape Smith - Wakeham Bay belt with a view to elucidating the character of volcanism and the history of the belt. To provide data that will lead to an understanding of the relationship between mineral deposits and volcanism, thus ultimately aiding in their location.						

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	Sloan River map-area Obj.: 1. To establish the stratigraphic and intrusive relations of the Apehbian plutonic, volcanic and sedimentary rocks. 2. To rationalize observed variations in chemistry, mineralogy, texture and hydrothermal alteration (including mineralization) of the igneous rocks in the form of genetic models of epizonal plutonism and volcanism. 3. To reconstruct the magmatic and structural history in light of its location in the internal part of the Coronation Geosyncline. 4. To ascertain modalities in the evolution of the crust by comparing the area with older and younger volcano-plutonic belts. 5. To provide a descriptive and conceptual framework for assessment of the mineral resources of the area. Pub Sca 1:250,000.	Hoffman, PF	REG	PS	<u>Mack</u>	<u>86 K</u>	1.1.1.1
NP*	Archean Volcanic studies in the Slave Bear Province Obj.: To determine (1) the stratigraphic and structural relations in each belt; (2) the location of volcanic centers; (3) the sequence and types of volcanic eruptions and their environment of deposition; (4) the relationship of mineral deposits to volcanic stratigraphy and volcanic processes.	Lambert, MB	REG	PS	<u>Mack</u>	<u>85 I</u>	1.2.2
NP*	Calder River Map-area Obj.: (1) To define the stratigraphic and relative age relations of Apehbian (Snare, Cameron Echo Bay Groups) sedimentary rocks and associated Apehbian plutonic rocks. (2) To determine the nature and environment of the volcanogenic-plutonic complex of the western Bear Province. (3) To define the various tectonic environments present in the Bear Province and to place them in the context of the Carnation geosyncline and its associated Apehbian Orogen. (4) To develop models of relationship of mineral deposits with tectonic plutonic and supercrustal history thereby providing data for resource assessment and exploration.	McGlynn, JC	REG	PS	<u>Mack</u>	<u>86 F</u>	1.1.1.1
NP*	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	REG	MD	-	-	1.4.3.3
NP*	Volcanic rocks of the Appalachian Orogen 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	REG	A	<u>NB</u> <u>NS, Nfld</u>	-	1.2.2
NP*	Stratigraphy, structure and metamorphism in the Penrhyn Group rocks of Barrow River area Obj.: To study the stratigraphy, metamorphism and structure along an important Apehbian belt of metasediments to provide an understanding of the belt for mineral exploration and regional correlation to Prince Albert Group and to Churchill Province as a whole.	(Brown, R, Prof)	REG	Pet	<u>Frank</u>	<u>Pts 46 J,K,N,O,P</u>	1.2.2

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	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.	Wanless, RK	REG	G	-	-	1.4.2.2
NP	Development of techniques for geochronological studies Obj.: To develop methods and apparatus required to remain at the forefront of geochronological research and application.	Wanless, RK	REG	G	-	-	2.2.3
NP*	Triassic rocks near boundary between eastern and western regions of Cordillera Obj.: To refine the biostratigraphic zonation of the Triassic rocks and to provide additional data to allow more refined synthesis of their paleoecology and paleogeography.	Tozer, ET (Smith, RE, Ph.D student)	ISPG	OP	BC Alta	94 F; 104 P; 82 K, F	1.4.2.1
NP*	Lower Devonian brachiopods Prince of Wales and Bathurst Islands Obj.: To study in detail the faunas to allow refinement of the biostratigraphic zonation of the rocks and to yield data on their paleoecology and paleogeography.	(Smith, RE, Ph.D student)	ISPG	Map	Frank	68, 69	1.2.1
NP	Routine mass spectrographic analyses for various geochemical research projects Obj.: To conduct research into and make analyses of organic compounds related to the origin, migration and occurrence of petroleum.	Wanless, GG	ISPG	G	-	-	5.2.4
NP*	Completion of Lower Paleozoic geology of northern Ellesmere Island Obj.: To prepare terminal reports accompanied by maps of the region on the scale of 1:125,000 or more detailed.	Trettin, HP	ISPG	AI	Frank	340 C, D, F	1.2.1
NP*	Geological reconnaissance of Banks Island Obj.: To investigate the stratigraphy, sedimentology, and structural framework of the island. To assist in establishing the relationships of major Mesozoic sequences which are potentially petroleum bearing, and in particular to determine the relationship of the Mackenzie Delta and Sverdrup basin.	Recruit	ISPG	AI	Frank	98 A, B, D, E; 97 G, H; 88 B, C, D, F	1.2.1

Project Number	Title	Project Leader	Div	Sec	Prov	NTS	Classification
NP*	Sub-ocean bottom bedrock studies, Lancaster Sound - Western Baffin Bay, NWT	Yorath, CJ	ISPG	NM	Frank	48 C,D,E,F; 38 F	1.1.1.5
	Obj.: To carry out marine geological investigations to determine the geological history of the "Northwest Passage Basin" (Lancaster Sound, Barrow Strait, Viscount Melville Sound, M'Clure Strait) including stratigraphic, biostratigraphic, geophysical and geochemical studies.						
NP*	Comparative study of Campbell, Barn, White and Romanzof Uplifts	(Dyke, LD, Ph.D student)	ISPG	NM	Mack Yk	107 B; 117 A	1.2.2
	Obj.: To define Campbell, Barn, White and Romanzof uplifts in terms of their stratigraphic framework, structural style and evolutionary history.						
NP*	Cretaceous stratigraphy and surface mapping, northeastern, BC	Price, LL	ISPG	SM	BC	-	1.1.1.1
	Obj.: To carry out a systematic investigation of structure and stratigraphy and surface mapping at scale of 1:250,000.						
NP*	Structural geology Field Seminar	Taylor, GC	ISPG	SM	Mack	85,86	4.2.7
	Obj.: To familiarize the participant with the types of observations that may identify specific conceptual models of structural types.						
NP	Upper Silurian and Lower Devonian biostratigraphy and coral faunas, northern Yukon and Ellesmere Island	Pedder, AEH	ISPG	MaP	Frank Yk	-	1.2.1



Abbey, S.	380077; 690089; 690090
Agterberg, F.P	690038*; 720087
Aitken J.D.	720098*
Allan, R.J.	720063*; NP*
Anderson, F.D.	600032; 710045
Balkwill, H.R.	710003*
Bamber, E.W.	710022*
Baragar, W.R.A.	620012; 650044; 680096; NP*
Barnett, D.M.	680040; 710041*; 710042*
Barss, M.S.	680109;
(Becker, A.)	680089*
Bell, C.K.	540025; 630025*
Belyea, Helen R.	500336*
(Bender, K.P. PDF)	710060
Benson, D.G.	710057
Bik, M.J.J.	680098
Blake, W.Jr.	570148; 620010, 670031; 680065;
Blusson, S.	650010; 680119*
Bolton, T.E.	580037; 580153
Bostock, H.H.	NP*
Boyle, R.W.	NP*
(Brice D. Prof)	710031
Brideaux, W.W.	710019; 720042*
Bristow, Q.	700057*; 700087*
(Brooke, M.M.)	720049
(Brown R. Prof)	NP*
Cameron, A.R.	610269*; 680106; 720073*
Cameron, B.E.B.	690075*
Campbell, F.H.A.	720054*
Campbell, R.B.	680066; 720037; NP*
Chamney, T.P.	630415; 700064
Christie, K.W.	700018; 720075
Christie, R.L.	620001; 630003*; 670557; 700029; 700030; 700031;
	700032
Code, J.A.	720068*
Collett, L.S.	680123*; 700091*
Contract	NP*; NP*; NP
Cook, D.G.	670068
Copeland, M.J.	720072
Craig, B.G.	710083
Cumming, L.M.	680130;
Currie, K.L.	680071*

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<sup>1</sup> \* This symbol indicates project has a field component for 1973-74.  
Brackets indicate seasonal or non-staff employee.

Davies, G.R.	710073*; 710074; 720059; 720060
Davison, W.L.	680075
Dawson, K.R.	720094; 720095*
Dean, W.T.	690006*
(Donaldson, J.A.)	670569; 690025;
Douglas, R.J.	690086*; 710016; 710017*; 710018*
Dyck, W.	720067*
Dyke, L.D.	NP*
Eade, K.E.	680085*
Eckstrand, R.O.	630037*
Eisbacher, G.	690032
Emslie, R.F.	670003*
Ermanovics, I.	690010; 710025; 710026
Fabbri, A.B.	720089*
Fahrig, W.F.	680135; 720055; 720056
Federovich, S.	720078
(Fenton, M.M.)	700053
Foscolos, A.E.	680090; 680091
Foster, J.H.	720046*
Frarey, M.J.	610030; 640036
Fraser, J.A.	690028; 710027; 710028
Frisch, T.	720070*
Frith, R.A.	720052*
Fritz, W.H.	650024*
Froese, E.	700065
Fulton, R.J.	680032; 690043; 720004*; 720057; NP
Fyles, J.G.	640004*; 710055
Gabrielse, H	490038*; 700047*
Gadd, N.R.	710081*
Garrett, R.G.	NP*
Gordon, T.M.	700048
Grant, D.R.	700056; 720028
Grasty, R.L.	720084*
Hacquebard, P.A.	680102*; 680105*;
Harris, I.M.	720110
Harrison, J.E.	720083*
Haworth, R.T.	720105; 720106; 720107
Heffler, D.E.	720112
Heginbottom, J.A.	690054*; 710077*
Helmstaedt, H.	710046
Henderson, E.P.	680062; 700093
Henderson, J.B.	700015
Heywood, W.W.	700073*; 700074;
Hobson, G.D.	660050*; 660053;
Hodgson, D.A.	720081*; 720082*

McCrossan, R.G.	680018*; 710001*; 720066*
McDonald, B.C.	660030; 710070; 720079*
McGlynn, J.C.	650008; 680012*; 710050; 710051; 710052; NP*
McGrath, P.H.	680121
McGregor, D.C.	600227; 680113*
(McIlreath, I.A.)	720050*
McLeod, R.	570029*
Meijer-Drees, N.C.	710011
Miall, A.D.	720061
Monger, J.W.H.	660002; 690023; 720041*
Monroe, Robin L	720100*
Morgan, W.C.	710012
Mott, R.J.	690064*
Muller, J.E.	680038; NP*
Mulligan, R.	530014*; 650012
Nassichuk, W.W.	680063; 680064*; 700045
Norford, B.S.	610019; 660552
Norris, A.W.	640032*; 670014*; 700034; 720043*
Norris, D.K.	610007*; 680019*; 690005;
Ollerenshaw, N.C.	660486; 690017; 690018; 700037*
Owen, E.B.	NP*
Pedder, A.E.H.	NP
Pelletier, B.R.	720101*; 720102
Plant, A.G.	620308
Poole, W.H.	640013; 720027*; 720093*
{Poulton, T. Thesis}	710015*
Prest, V.K.	530030
Price, L.L.	640419; NP*
(Price, R.A.)	650023
Procter, R.M.	710005
Pugh, D.C.	720040*
Rampton, V.	650131; 690047*; 710002; NP*
Recruits NEW	680036*; NP*; NP*; NP*; NP*; NP*; NP*; NP*; NP*
Reesor, J.E.	710053*; 720053
Reinhardt, E.W.	650009; 690034; 720024*
Richards, T.	720038*
Richardson, K.A.	720071*
Ridler, R.H.	700052
Rimsaite, J.Y.H.	700067*
Roddick, J.A.	630016
Rose, E.R.	580036; 630039; 670028*
Roy, K.J.	710069*; 710072; 710075;
Rutter, N.W.	660031; 670061; 690048; 690049; 710047*

Hoffman, P.F.	NP*
Holroyd, M.T.	680140*; 680141*
Hood, P.J.	630404; 650007*; 680081*; 680082;
Hopkins, W.S.Jr.	680068*
Hornbrook, E.H.W.	720036*
Howie, R.D.	710061
Hughes, O.L.	710020*
Hunter, J.M.	680037*; NP
Hutchison, W.W.	620019; 710098*
Irvine, J.A.	720051*
Irvine, T.N.	650288
Isaacs, R.M.	700094*
Jackson, G.D.	630032; 690061
Jambor, J.L.	700041*
Jansa, L.F.	710059
Jeletzky, J.A.	480191; 490001; 550004*; 590194; 600353;
	610330; 670064*
Jonasson, I.R.	690091*
Katsube, T.J.	630049
Keen, C.E.	720111
Kelly, A.M.	710030*
Kerr, J.W.	610002; 670016; 700042; 700043; 710029;
Kirkham, R.V.	700059*
Klassen, R.W.	610029; 640029; 710092*
(Knight, Ian)	720048
Kornik, L.J.	660042; 720080*
Lachance, G.R.	600307
Lambert, M.B.	NP*
Larochelle, A.	680073; 690066; 690068*; 690072*; 690073; NP*
Larose, J.M.	400006*
Latour, B.A.	500038*
Lawrence, D.E.	680017; NP*
Leech, G.B.	620018; 640125; 720097
Lewis, C.F.M.	680055*; 710090
Little, H.W.	670029*
Lowdon, J.A.	590457
Lynch, J.J.	580175
(Mackay, J.R. Prof)	680047*
MacKenzie, W.S.	700060; 710010
Macqueen, R.W.	630021
(Mathews, J.V. PDF)	NP

St. Onge, D.A.	700035; 710044*; NP*; NP*
Sanford, B.V.	700009; 710066; 710067; 710068
Sangster, D.F.	650056*; NP*
Sawatzky, P.	NP*
Schau, Mikkel	720062*
Schwarz, E.J.	700054*
Scott, J.S.	700049*; 710086*
Scott, W.J.	670041*
Shearer, J.M.	700092*
Shih, K.G.	720113
Shilts, W.W.	690095; 700014; NP*; NP*
Shimizu, K.	680132
Sinha, A.K.	NP*
Skinner, R.	710038
Skinner, R.G.	710080*; NP
Slaney, V.R.	630031*
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