

CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS
1980 - 1981

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Compiled by M.A. Petre



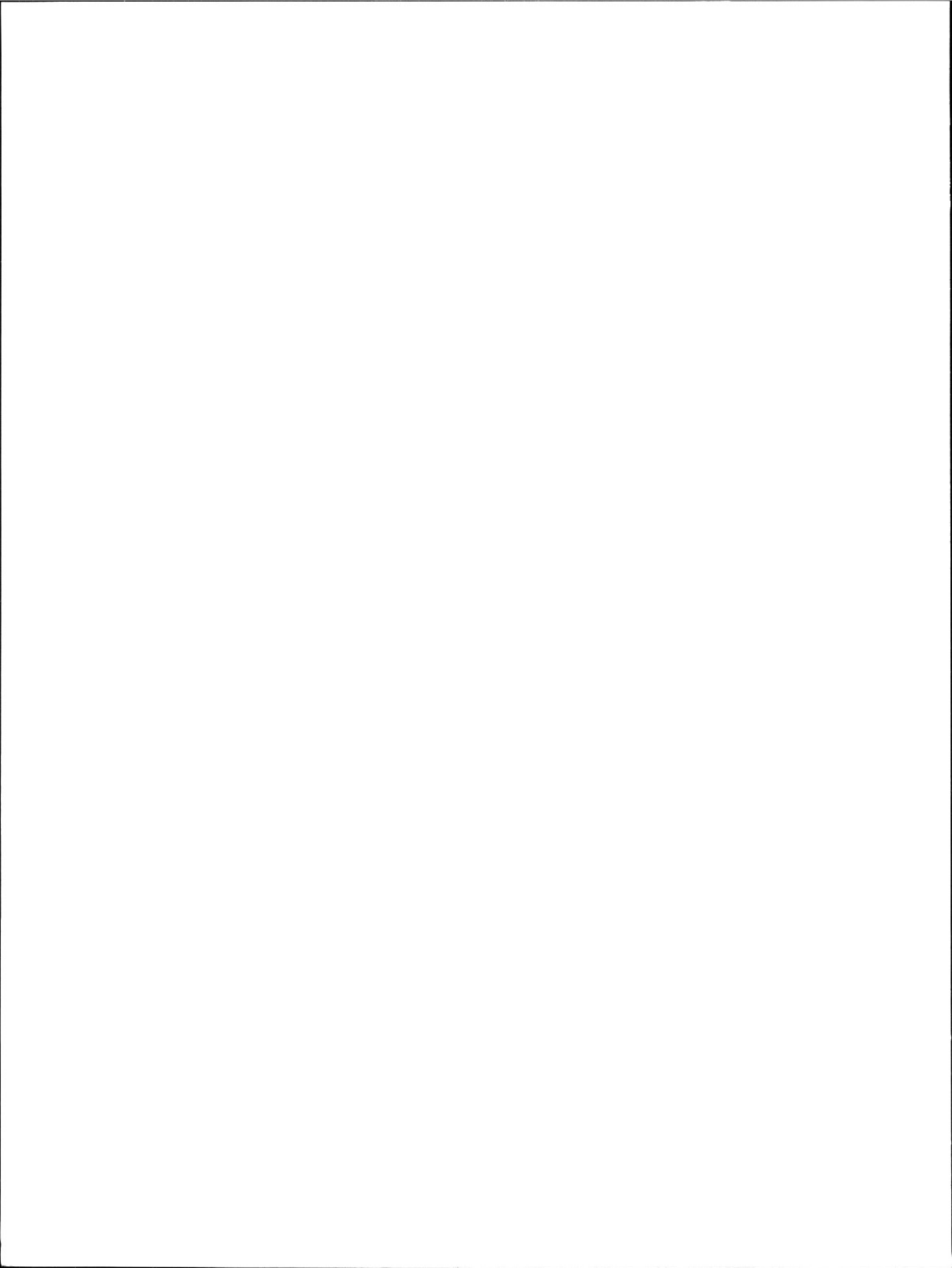
OTTAWA
1980

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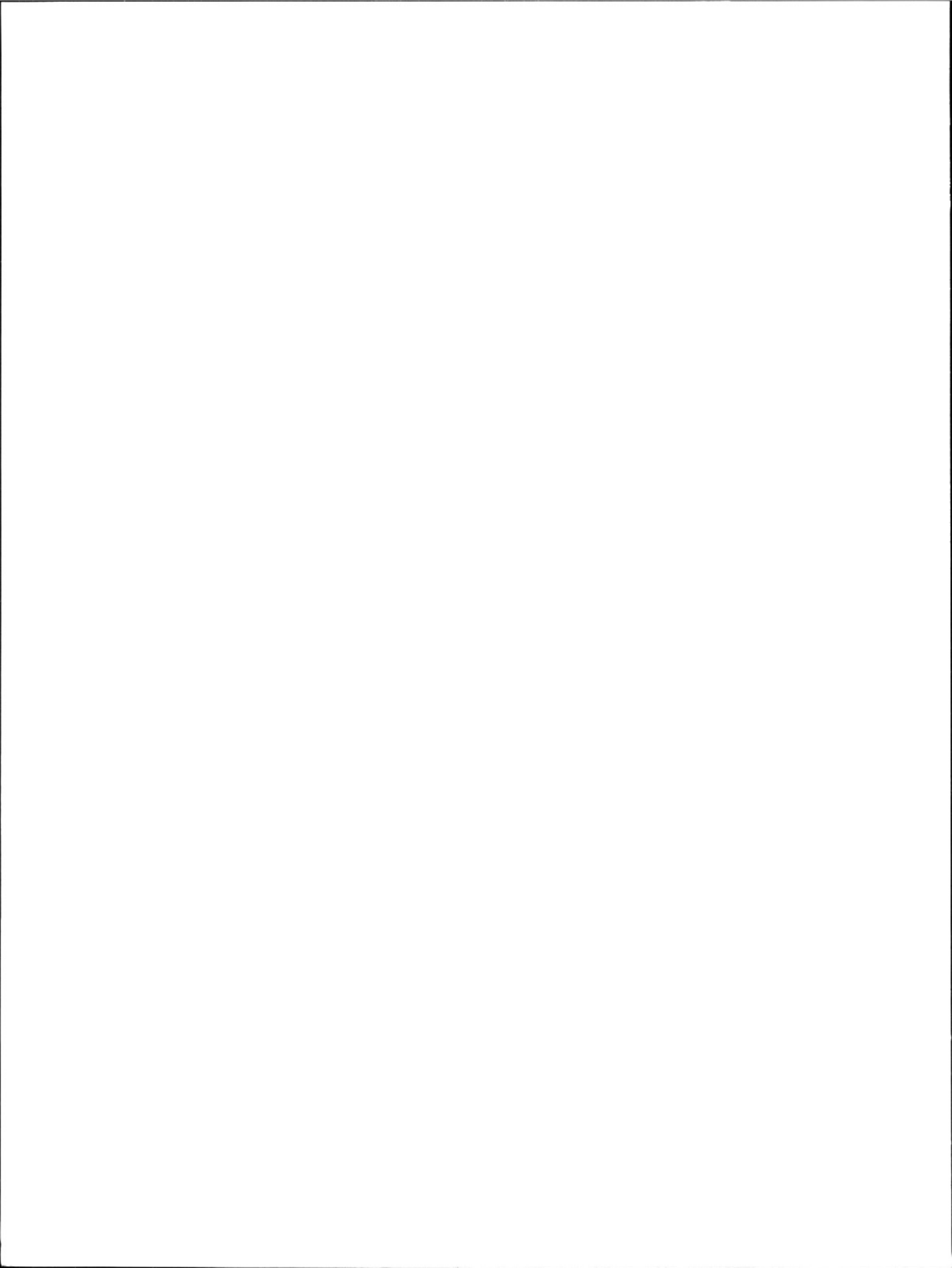
1980-81

OTTAWA
1980



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PREFACE

This catalogue of all scientific projects of the Geological Survey of Canada approved as of August 1980 has been compiled by M.A. Petre of the Geological Survey Program Office. It is arranged to indicate: 1) the total scientific program of the Survey for the period 1 April, 1980 to 31 March, 1981, and 2) the field program for the summer of 1980.

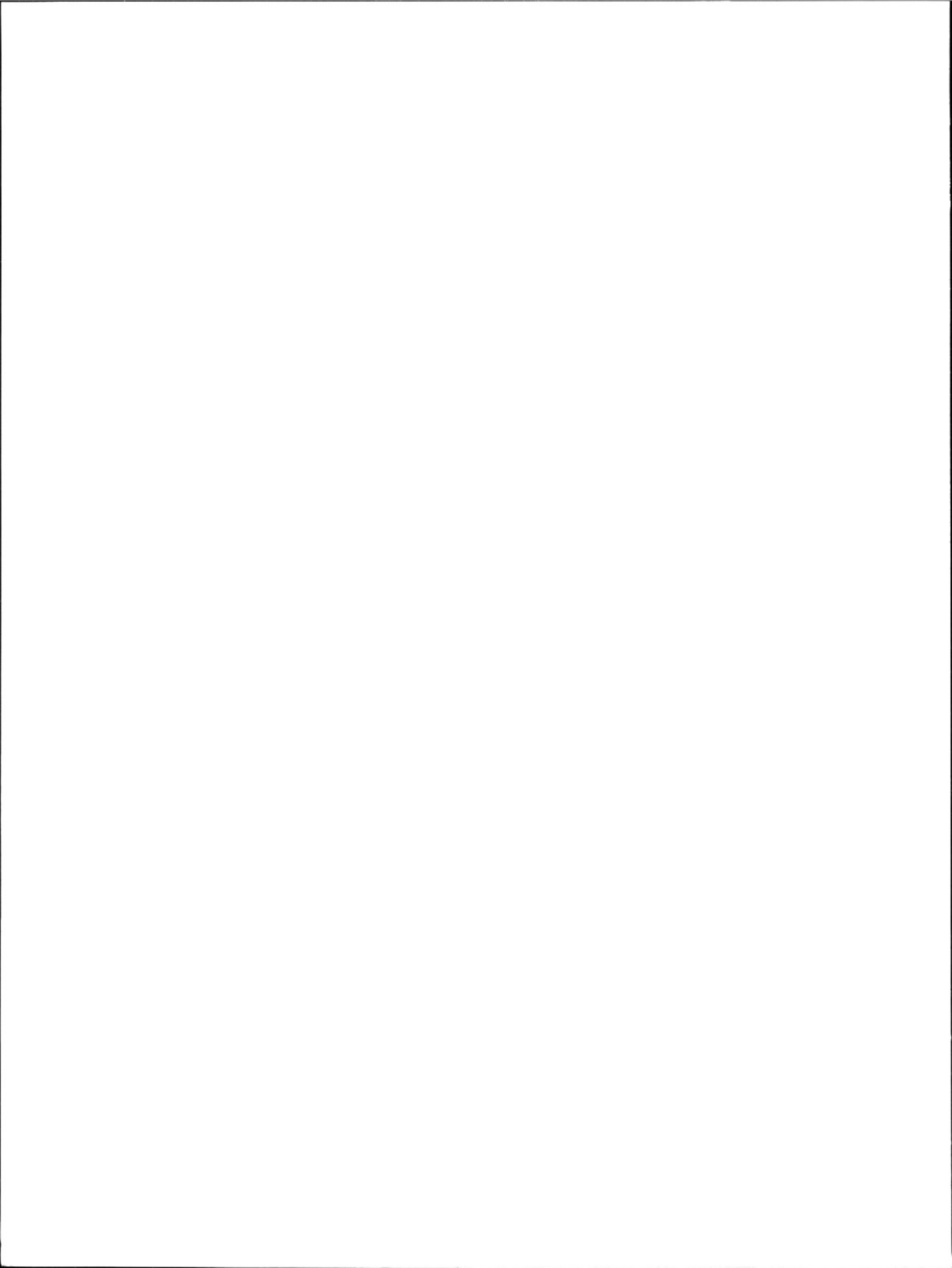
As a catalogue it lists and briefly describes all scientific projects. These total 490 (34 inactive) and are compiled from instructions issued to project leaders for 1980-1981 via forms GSC 227, 228 and 229. Thus it comprises the current authority on such matters as project numbers, titles and objectives and supersedes previous catalogues and documents concerning scientific projects. Projects are listed in numerical order and an index by project leader and by province is provided at the end.

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

The field program for the summer of 1980 comprises the field component of those active projects marked by an asterisk after the project number. These total 211. No distinction has been made between a minor field component, such as a few days, and a major component requiring the entire field season.

D.G. Benson
A/Chief Program Officer

Ottawa
1980



DEPARTMENT OF ENERGY, MINES AND RESOURCES
PROGRAM ACTIVITY STRUCTURE

1. ADMINISTRATION PROGRAM

ACTIVITIES

SUB-ACTIVITIES

- | | |
|--------------------------------|---------------------------------------|
| 1. Executive | 1.1 Minister's Office |
| | 1.2 Deputy Minister's Office |
| | 1.3 Corporate Planning and Evaluation |
| | 1.4 Department Secretariat |
| 2. Common and Special Services | 2.1 Personnel Management |
| | 2.2 Official Languages Implementation |
| | 2.3 Financial Management |
| | 2.4 Computer Science Services |
| | 2.5 Information Services |
| | 2.6 Administrative Services |
| | 2.7 Technical Field Support Services |

2. EARTH SCIENCE SERVICES PROGRAM

- | | |
|--------------------------|--|
| 1. Geodetic Service | 1.1 Geodetic Control Systems |
| | 1.2 Geodetic Data |
| | 1.3 Support Services |
| 2. Topographic Service | 2.1 New Topographic Mapping |
| | 2.2 Revision Mapping |
| | 2.3 Aerial Survey Data Base |
| | 2.4 National Topographic Data Bank |
| | 2.5 Support Services |
| 3. Land Boundary Service | 3.1 The Canadian Lands Surveys Act Administration |
| | 3.2 The International Boundary Commission |
| | 3.3 Territorial and Provincial Boundary Commission |
| | 3.4 Support Services |
| 4. Geological Service | 4.1 Geoscience Surveys |
| | .1 Reconnaissance Bedrock Surveys |
| | .2 Standard Bedrock Surveys |
| | .3 Standard Surficial Surveys |
| | .4 Offshore Bedrock Surveys |
| | .5 Offshore Surficial Surveys |
| | .6 Aeromagnetic Surveys |
| | .7 Marine Multiparameter Geophysical |
| | 4.2 Regional Analyses and Syntheses |
| | .1 Litho-Tectonic Studies |
| | .2 Surficial Studies |
| | .3 Regional Compilations |
| | 4.3 Standards and Correlations |
| | .1 Paleontology |
| | .2 Radiometric Dating |
| | .3 Quaternary Geochronology |
| | .4 Paleomagnetic Correlations |
| | .5 Physical, Chemical, Mechanical & Engineering Properties of Geological Materials |
| | .6 Petrology |
| | 4.4 Sedimentary and Geomorphic Processes |
| | 4.5 Environmental and Engineering Geology |
| | .1 Environment Geology |
| | .2 Urban Geology |
| | .3 Engineering Geology |
| | 4.6 Identification of Resources |
| | .1 Oil & Gas Resources |
| | .2 Coal & Peat Resources |
| | .3 Radioactive Mineral Resources |
| | .4 Geothermal Resources |
| | .5 Metallic Mineral Resources |
| | .6 Industrial & Construction Minerals Resources |
| | 4.8 Support Services |

- 5. Earth Physics Service
 - 5.1 Seismological Service
 - 5.2 Geothermal Service
 - 5.3 Geomagnetic Service
 - 5.4 Gravity Service
 - 5.5 Geodynamic Service
 - 5.6 Support Services

- 6. Remote Sensing Service
 - 6.1 Applications Development
 - 6.2 Data Acquisition, Processing and Dissemination
 - 6.3 Applied Research
 - 6.4 Scientific and Technical Support
 - 6.5 Management and Administration

- 7. Geographic Service
 - 7.1 National Geographic Mapping
 - 7.2 Toponymy
 - 7.3 Map Distribution
 - 7.4 National Air Photo Library
 - 7.5 Support Services

- 8. Polar Continental Shelf
 - 8.1 Logistics
 - 8.2 Glacier and Sea Ice Physics
 - 8.3 Scientific and Technical Cooperation
 - 8.4 Support Services

- 9. Support to Other Agencies
 - 9.1 Aeronautical Charting
 - 9.2 Property Surveys
 - 9.3 Mapping Support
 - 9.4 ICAS Secretariat
 - 9.5 Cartographic Support
 - 9.6 GSC Support – Other Programs
 - 9.7 Support Services

- 3. ENERGY PROGRAM
 - 1. Energy Sources; Supply, Demand and Substitution
 - 1.1 Oil and Gas
 - 1.2 Coal and Peat
 - 1.3 Radioactive Minerals
 - 1.4 Electrical Energy
 - 1.5 Renewable Resources
 - 1.6 Support Services

 - 2. Energy Conservation
 - 2.1 Energy Industries
 - 2.2 Transportation Sector
 - 2.3 Domestic Farm Sectors
 - 2.4 Commercial Sectors
 - 2.5 Industrial Sectors
 - 2.6 Support Services

 - 3. Energy Research and Technology Development
 - 3.1 Coordination
 - 3.2 Conservation Technology
 - 3.3 Oil and Gas
 - 3.4 Coal and Peat
 - 3.5 Nuclear Energy
 - 3.6 Electricity
 - 3.7 Renewable Resources
 - 3.8 Energy Transportation
 - 3.9 Support Services

 - 4. Economic and Social Impact – ENERGY
 - 4.1 Regional and Social Impact
 - 4.2 Environmental Studies
 - 4.3 Economic Growth and Development
 - 4.4 Policy Analysis and Systems Planning
 - 4.5 Support Services

 - 5. Oil Import Compensation
 - 5.1 Compensation Payments
 - 5.2 Support Services

4. MINERALS PROGRAM

- | | |
|--|--------------------------------------|
| 1. Mineral Resource Determination | 1.1 Identification of Resource Base |
| | 1.2 Estimation of Resources |
| | 1.3 Technical Evaluation |
| | 1.4 Support Services |
| 2. Mineral Supply, Use and Conservation | 2.1 Economic Evaluation |
| | 2.1 Exploration |
| | 2.3 Development and Mining |
| | 2.4 Processing |
| | 2.5 Transportation |
| | 2.6 Utilization |
| | 2.7 Trade |
| | 2.8 Conservation |
| | 2.9 Support Services |
| 3. Mineral Technology Development | 3.1 Discovery of Mineral Resources |
| | 3.2 Development and Mining |
| | 3.3 Processing |
| | 3.4 Utilization |
| | 3.5 Conservation |
| | 3.6 Environment, Health and Safety |
| | 3.7 Transportation |
| | 3.8 Support Services |
| 4. Economic and Social Impact-Minerals | 4.1 Social Impact |
| | 4.2 Economic Development |
| | 4.3 Policy Analysis and Coordination |
| | 4.4 Support Services |
| 5. Administration of the Canada Explosives Act | 5.1 Authorization and Testing |
| | 5.2 Licensing and Inspection |
| | 5.3 Support Services |

LIST OF ABBREVIATIONS USED

DIRECTOR GENERAL'S OFFICE -- DGO

SP -- Special Projects

ATLANTIC GEOSCIENCE CENTRE -- AGC

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

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

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

PS -- Program Support
SD --Systems Development

CENTRAL LABORATORIES AND TECHNICAL SERVICES -- CLTS

M -- Mineralogy
AC -- Analytical Chemistry

CORDILLERAN GEOLOGY DIVISION -- C

GR -- Geological Research
MG -- Marine Geology

ECONOMIC GEOLOGY DIVISION -- EG

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

INSTITUTE OF SEDIMENTARY AND PETROLEUM GEOLOGY -- ISPG

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

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

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

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

PRECAMBRIAN GEOLOGY DIVISION — P

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

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

RESOURCE GEOPHYSICS AND GEOCHEMISTRY — RGG

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

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

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

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

TERRAIN SCIENCES DIVISION — TS

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

GEOLOGICAL SURVEY OF CANADA
ORGANIZATION

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Regional Reconnaissance Subdivision, R.K.H. Falconer, (426-6326)
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Regional Geology Subdivision, W.H. Fahrig, (995-4793)

Resource Geophysics and Geochemistry Division, Director - A.G. Darnley (995-4909)

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

Terrain Sciences Division, Director - J.S. Scott, (995-4938)

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

Project Number	Project Leader	Title	Div Subdiv	Sec	Prov	NTS	Dept'l Classification
380077	Abbey, S	Analysis of rocks and minerals	CLTS	AC	-	-	2435
		Obj: To provide compositional data on geological materials as a contribution to the solution of geological problems.					
400006*	Larose, JM	Preparation of collections of Canadian rocks and minerals for distribution to the public	CLTS	M	BC, Alta Sask Man Ont Que	-	248
		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.					
490038*	Leaming, S	Miscellaneous field investigation by staff at Vancouver office	C	GR	BC	104 I, J, P	296
		Obj: Various 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.					
500029*	Staff of Eastern & Western Paleontology Sections	Identification and biostratigraphic interpretation of referred fossils	ISPG C AGC EPG	P MG EPG	NS Nfld NB Yk Mack BC Alta	95 B, C; 103 G, 82 E, K	2431
		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.					
500038	Irvine, JA	Coal resources of Canada and studies of coal deposits in Canada	ISPG CG	RE	-	27, 62, 72, 82, 83	312
		Obj: To prepare estimates on the coal reserves of Canada; to prepare for publication reports and illustrations concerning Canada's coal resources; to advise and prepare reports for other Branches or Departments when so requested; to have up-to-date knowledge of coal fields in Canada.					
540028	Wanless, RK	Isotopic age determinations of rocks and minerals	P	G	-	-	2432
		Obj: To determine the geological age of rock, minerals and geological events using isotopic methods.					

* in first column indicates project has a field component.
 - in first column indicates project is inactive.
 Brackets indicate seasonal employee or other non-staff.
 Underscoring indicates province of 1980-81 field work.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classi- fication
550101*	Reference collections of minerals, rocks and ores Obj: To develop, foster and curate reference collections of minerals, rocks, and ore specimens in support of Branch activities and in the national interest.	Steady, HR	CLTS	-	M	Nfld	13	2435
570001*	Operation Mackenzie Obj: To acquire stratigraphic information on the sequence of bedrock formations, to effect their correlation and study their variations and mode of origin; to prepare geological maps of the plains areas at 1 inch to 8 miles and of the mountains at 1 inch to 4 miles; to assess the economic possibilities of the area as a source of oil, gas, coal and minerals.	(vice-Douglas, RJW)	DGO	-	SP	Mack	85,95	2412
570029*	Geology and evaluation of iron and manganese resources Obj: To conduct comprehensive study and research on the geology of iron and manganese deposits to provide a geological basis for exploration, evaluation and development of iron and manganese resources in Canada.	Gross, GA	EG	-	SP	Nfld Que Ont Man, Sask Alta Kee	22,23,31,32 41,42,52,53, 62,63,64,65, 93,103	2465
570119*	Studies of meteorites and other extra-terrestrial material Obj: To study the mineralogy, petrology, and chemistry of Canadian meteorites, and of other extra-terrestrial material, and to apply the knowledge thus gained towards a better understanding of earth science processes; and to foster, develop and curate Canada's National Meteorite Collection.	Plant, AG	CLTS	-	M	-	-	2435
570148	Radiocarbon dating program Obj: To plan and co-ordinate the radiocarbon dating program of the Geological Survey.	Blake, W Jr	TS	-	PG	-	-	2433
580160	Catalogue of Canadian minerals Obj: To assist in the identification and inventory of potential mineral resources in Canada by compilation and publication of a Catalogue of Canadian Minerals that provides reference material for direct use by earth scientists, the mining industry and the general public.	Plant, AG	CLTS	-	M	-	-	2435
580175	Analytical services and development in geochemistry Obj: To coordinate and supervise the "in-house" sample preparation and analyses of sediment, soil, rock, mineral and water samples, collected by or for the Resource Geochemistry Subdivision.	Hall, GEM	RGG	RGC	GL	Sask	74 I	248
590457	Radiocarbon laboratory development and operation Obj: 1) To determine the age of carbonaceous matter using radiocarbon dating techniques; to ensure continuing and improving precision of existing techniques; and to keep abreast of current research on new techniques. 2) To conduct research on variations in the radiocarbon content of modern organic material and its application to age determinations on fossil material.	Lowdon, JA	TS	-	PG	-	-	2433

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l 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	CLTS	-	AC	-		2435
610007	Operation Porcupine Obj: Critical evaluation of the structural geometry and stratigraphy within the project area of northern Yukon Territory and western District of Mackenzie for the documentation of the nature, origin, and mechanics of the deformation and its bearing on the hydrocarbon and mineral potential of the region.	Norris, DK	ISPG	CG	-	Mack Yk	106 E,F,K-N; 116 F-K, N-P	2412
610011	Taseko Lakes map-area Obj: To interpret the structure, stratigraphy and geological history of the Taseko Lakes area and evaluate its mineral potential.	Tipper, HW	REG	CPM	GR	BC	92 0	2412
610019*	Ordovician and Silurian Biostratigraphy of British Columbia, Alberta, Manitoba Yukon, Mackenzie & Franklin Obj: Establishment of sequence of biochronological zones for Ordovician and Silurian time. Such sequence of zones to provide necessary time control for exploration of natural resources of Ordovician and Silurian rocks in northern and western Canada.	Norford, BS	ISPG	P	MaP	Frank Yk BC Alta	36; 37; 47-49 54; 57-59; 67-69; 82; 83; 85; 94; 95; 96; 97; 104 I,P; 105 I; 106; 116; 117; 120; 340	2431
610269	Petrographic examination of coking coals from the Kootenay Formation, Alberta and British Columbia Obj: To determine the coking properties and to prepare seam profiles for correlation and environment of deposition studies on coals of the Kootenay Formation.	Cameron, AR	ISPG	CG	CT	Alta BC	Pts 82 G, J, O	2462
620018	Geological Survey of NTS 82 J W ₂ (Kananaskis Lakes, W ₂) Obj: To determine and interpret the stratigraphic structural and economic geological features of the region.	Leech, GB	EG	-	-	BC	82 J W ₂	2412
620019	Prince Rupert - Skeena map-areas Obj: To determine the regional geologic relationships and the origin and evolution of the metamorphic and plutonic rocks of part of the Coast Mountains.	Hutchison, WW	DGO	-	-	BC	103 I, J	2421
620308	Electron beam microanalysis Obj: To conduct studies of geological materials using techniques of electron probe microanalysis and scanning electron microscopy, in support of Branch projects.	Plant, AG	CLTS	-	M	-	-	2435

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
630016*	Coast Mountains project	Roddick, JA	C	-	GR	BC	<u>92 F, G, H, J, K, L</u> <u>M, N; 93 D; 102 P;</u> <u>103 A, G, I W₂, J, N, P,</u> <u>W₂</u>	2412
	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	RG	M	BC	<u>94 F, G, H, I, J, K, N, O, P</u>	2412
	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.							
630031	Multispectral Imagery	Slaney, VR	RG	RR	RSA	-	-	2423
	Obj: 1) To increase the utilization and improve the usefulness of imagery acquired from aircraft (e.g. colour photography, sidelook radar, gamma-ray spectrometry) by the development and application of techniques for analysis of such data. 2) To study the feasibility of establishing a Canadian Training Centre in Remote Sensing.							
630037*	Geology of Canadian nickel and platinum group deposits	Eckstrand, OR	EG	-	MDG	BC Sask Man Ont Que	<u>23; 31; 32 C, D; 42 A;</u> <u>44 P; 63 O</u>	2465
	Obj: To carry out comprehensive research on the geology of the Canadian nickel and platinum group deposits in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guidelines for their discovery; 3) provide advice to government for mineral policy and related matters.							
630049	Electrical Rock Properties	Katsube, TJ	RG	TG	EM	-	-	2435
	Obj: To determine the frequency spectral characteristics of the electrical properties related to rock, mineral and soil types, and to rock texture, dissemination, pore structures and pore water structures, for development of new electrical and electromagnetic sounding methods, to solve specific problems of mineral exploration and/or geotechnical engineering.							
640036	Geology of the Lake Panache and Collins Inlet map-areas, Ontario	Frarey, MJ	P	RG	SG	Ont	41 H, I	2421
	Obj: To revise the stratigraphy and structure of the Huronian succession as previously shown (GSC maps 220A and 221A); 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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
640048*	Study of mineral collecting areas of interest to collectors and tourists 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.	Stenson, Mrs AP	CLTS	-	M	-	-	248
640125	General metallurgy of Canada 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 and thus to more completely understand Canada's present and potential mineral resources.	Leech, GB	EG	-	-	-	-	2465
640402	Certification of bedded and non-bedded mineral deposits Obj: To act on behalf of the Director-General of the Geological Survey in the certification of mineral deposits as bedded or non-bedded for income tax purposes.	Leech, GB	EG	-	-	-	-	296
640420	Geological observations at shafts of potash mines in Saskatchewan Obj: To record geological data and obtain fossil and rock specimens from the rocks exposed in large-diameter potash mine shafts in the eastern plains; to interpret these observations and material within the stratigraphic framework.	Price, LL	ISPG	RG	SM	Sask	62 K/5, 12; 72 O/16; 62 I/16; 72 P/13,14; 73 B/1,2,3	2421
650003	Cornwallis and adjacent smaller islands Obj: 1. To improve the understanding of the age, structure, sequence, relationship, thickness of bedrock formations with a view of helping; 2. Assess the size, grade, mode of occurrence, origin and potentialities of any fuel or mineral deposit that may occur; 3. Improve the knowledge and understanding of the morphology of Silurian and Devonian ostracoderms of Cornwallis Island, thus aiding in the establishment of a more useful stratigraphic framework for the region and thereby contributing to No. 1 above.	Thorsteinsson, R	ISPG	RG	AI	Frank	58 F, G; 68 E, H; 59 B	2412
650007*	Ocean aeromagnetism 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 investigate theories of magnetic imprinting of oceanic rocks, ocean floor spreading and continental drift. 3. To develop and modify instrumentation and techniques for the improvement of airborne magnetometry, navigation, and data acquisition, processing and analysis.	Bower, ME	RG	RG	MM	Frank	340, 560	2416

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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.	McGlynn, JC	P	RG	BS	Mack	75 E, F, K	2421
650013	Quaternary geology, Aishihik Lake Obj: To map and explain the Quaternary geology and geomorphology of Aishihik Lake area with particular reference to the nature and distribution of surficial materials and Quaternary stratigraphy and history in order to 1) improve knowledge of the glacial history of southwestern Yukon; and 2) provide areal geological information for land use planning and engineering development.	Hughes, OL	TS	-	RP	Yk	115 H; pts. 106 D, E; 115 A, B, G, I	2413
650015	Geology of the Mt. Edziza volcano 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.	Souther, JG	C	-	GR	BC	104 G, J	2421
650023	Operation Bow-Athabasca Obj: To complete the systematic reconnaissance geologic study of the Rocky Mountains south of lat. 53°N; to obtain information on the character, structure, distribution, age, stratigraphic relationships, and origin of the bedrock and other geological data that are required to evaluate the mineral potential of the area and to assist exploration of oil, gas, coal and other mineral deposits in this and adjacent areas.	(Price, RA, Prof)	ISPG	RG	M	BC Alta	83, C, D E ₂ ; 82 J E ₂ , N E ₂ , O W ₂	2421
650024*	Cambrian trilobites and Cambrian biostratigraphy of Canada Obj: To describe and assess biochronological significance of Cambrian trilobites in order to refine methods for dating Cambrian strata.	Fritz, WH	ISPG	P	OP	Mack Yk BC	82 N, O; 83 C; 94 C; 104 P; 105 I, P; 106 A	2431
650027*	Quaternary of southern Alberta Obj: To gain knowledge of Quaternary Stratigraphy, chronology, environments and climates in southern Alberta.	Stalker, AM	TS	RP	Alta Sask	72, L, M; 73, 82, 83	2422	
650056*	Geology of lead and zinc resources in Canada Obj: To carry out comprehensive research on the geology of lead and zinc resources in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guidelines for their discovery; 3) provide advice to government for mineral policy and related matters.	Sangster, DF	EG	-	MDG	NB Man Que NS Yk	11 D, F; 21 O, P; 32 D; 63 J, L, N; 64 C; 105 I, J, K; 48 C	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
660006	Granite studies in the Ennadai-Rankin Inlet region Obj: To classify the granitic rocks according to age, geological and chemical nature, using geophysical parameters where available and to relate this classification to the regional geology and mineral deposits.	Davidson, A	P	RG	SG	Kee	55 E, F, K, L, 65 H, I	2436
660009*	East Arm of Great Slave Lake, District of Mackenzie Obj: To refine existing stratigraphic descriptions and relationships of the sedimentary and volcanic rocks; to determine source regions and dispersal patterns in the sedimentary fill; to determine depositional environments and reconstruct the Paleogeographic history of the sedimentary basin.	Hoffman, PF	P	RG	BS	<u>Mack</u>	<u>75 E, L, K; 85 H, I</u>	2421
670002	Operation Bylot Obj: To provide a reconnaissance geological survey of a previously unmapped area and describe and interpret the broad geological framework and outline areas of potential economic interest.	Jackson, GD	P	RG	NC	Frank	27; 37; 38; 47; 48	2411
670003	Anorthosite study Obj: To examine three large anorthosite intrusions between Michikamau Lake and Main, Coast of Labrador for purposes of comparison with Michikamau Intrusion (including mineral potential).	Emslie, RF	P	-	PET	Que NF1d	13 L, M, N; 23 I	2421
670016	S.W. Ellesmere - W. Devon Islands (Operation Grinnell) Obj: To improve the understanding of the stratigraphy and structure of the region, which is a key area for information in both of these fields; a primary purpose is to aid in evaluation of the resource potential - particularly petroleum and base metals - of this part of the north.	Kerr, JW	ISPG	RG	AI	Frank	49 B, C; 59 A, B; 69 A	2412
670068	Operation Norman 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 contribution.	Cook, DG	ISPG	RG	M	Mack	86 W ₂ ; 96; 97; 106 E ₂ ; 107 E ₂	2411
670576*	Canadian Triassic Ammonoidea and Bivalvia Obj: To describe and assess biochronological significance of Triassic Ammonoidea and Bivalvia in order to refine methods for dating Triassic rocks.	Tozer, ET	ISPG	P	OP	<u>Yk BC</u>	<u>94 B; 106 D; 116 B, C</u>	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680012	Paleomagnetic study of Proterozoic red beds of the western Canadian Shield Obj: To obtain paleomagnetic pole positions from various Proterozoic red bed sequences in the western Precambrian Shield for purposes of correlation.	McGlynn, J.C.	P	RG	BS	Sask Kee	75 E,F; 74; 85; 86; 65; 66	2434
680017	Sedimentology-engineering geology laboratory development and operation Obj: To standardize, develop, and/or bring into use various testing and/or analytical procedures available to the geoscientist; to develop new techniques and instrumentation; to ensure efficient operation of the sedimentology laboratories.	Podolak, WE	TS	-	SMT	-	-	244
680023	X-ray diffraction analyses and mineralogical studies Obj: To provide X-ray diffraction analyses and mineralogical studies in support of Branch projects.	Plant, AG	CLTS	-	M	-	-	2435
680027	Surficial geology, Tawatinaw area Alberta Obj: To map, describe and explain the unconsolidated deposits and landforms of the Tawatinaw map-area (83 I) in central Alberta in order to provide geology and terrain information pertinent to land use planning, agriculture, urban and industrial development, forestry and engineering construction and to determine the Quaternary history of the region.	Richard, SH	TS	-	RP	Alta	83 I	2413
680031*	Quaternary stratigraphy of Old Crow Basin and Porcupine River Valley Obj: Through investigation of Quaternary deposits and associated organic remains, to gain knowledge of the Quaternary stratigraphy and history of the region and to provide a geological framework for current vertebrate paleontology and archaeology studies by National Museum scientists.	Hughes, OL	TS	-	RP	Yk Mack	106 E,F; 115 P; 116 I,N,O,P; 117 A	2422
680047*	Geomorphic processes, Mackenzie Valley-Arctic Coast Obj: To investigate the processes involved in the growth of permafrost and ground ice under present day conditions, in order to understand better the processes associated with the past growth of permafrost in northern Canada	(Mackay, JR Prof)	TS	-	GP	Mack Yk	85, 95, 96, 97 C,D,106, 107 B,D; 117 D; 96 B-F; 106-F, I,P; 116 I,N-P	244

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680060*	Geology of silver and gold deposits in Canada	Thorpe, RI	EG	-	MDG	Que Ont NS BC Mack	52 K-N; 92 H,J; 94 E, 103 G; 76	2465
	Obj: To carry out comprehensive research on the geology of silver and gold deposits in order to: (1) support or provide geologically based estimates of Canada's mineral resources; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.							
680064*	Stratigraphy and Paleontology of Upper Paleozoic rocks on of Ellesmere and Axel Heiberg Islands	Nassichuck, MW	ISPG	P	MaP	Frank	49 B,C,F,G,H; 340 A, B,C,D; 560 A	2421
	Obj: (a) To improve the understanding of stratigraphy and facies relationships of the marginal and axial parts of the Syverdrup Basin; (b) to establish a biostratigraphic framework for Carboniferous and Permian rocks; and (c) to evaluate the economic potential of the area.							
680066*	Geology of the Cariboo Mountains, British Columbia	Campbell, RB	C	-	-	BC	83 D; 93 A,H	2412
	Obj: To determine the tectonic movement of the Cariboo Mountains, and explain their origin, development mode of emplacement and economic potential.							
680071	Alkaline rocks in Canada	Currie, KL	P	-	PET	-	-	2421
	Obj: To identify and examine occurrences of alkaline rocks in Canada, and to explain their origin, development mode of emplacement and economic potential.							
680073	Magnetic anomaly maps of Canada	McGrath, PH	RG	RG	AI	-	-	2423
	Obj: To publish regional magnetic anomaly maps of Canada (1255A and 1512A), and to interpret the resultant anomaly patterns in terms of the geological framework of Canada.							
680076	Geology of Southern Indian Lake, Manitoba	Davison, WL	P	RG	SG	Man	64	2411
	Obj: To study and assess an area of scientific and economic potential, before flooding caused by construction of the Southern Indian Lake diversion dam. Particular attention will be given to the relationships of the Sickle and Wasekwan Groups to various intrusive rocks of the region. Publication scale 1:500 000.							
680081*	High resolution aeromagnetics (experimental surveys)	Olson, DG	RG	RG	EAO	Que Man NB NS Ont Sask BC	32 C; 73 G; 63 K; 52 F; 20 O,P; 21 A,B	2416
	Obj: To execute, according to prescribed specifications, high resolution experimental aeromagnetic and/or gradiometer surveys, over areas selected and defined by management, as a means of testing the effectiveness of the GSC aeromagnetic system in different geological contexts.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680084	Operation Smoky Obj: To 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.	Taylor, GC	ISPG	RG	M	BC	93 I, O, P; 83 L	2412
680090	Identification of unknown minerals and elemental analysis of sedimentary rocks by X-ray analysis and chemical techniques Obj: Quantitative and semi-quantitative analysis of layer lattice silicates, mixed layer silicates, clays, minerals and elements submitted by GSC staff, university professors and various government agencies.	Foscolos, AE	ISPG	PG	GC	Alta	-	2435
680091	Clay and clay minerals investigation Obj: To improve and develop techniques for routine mineralogical and chemical analyses of clays and Canadian coals; to develop better techniques for quantitative, semi-quantitative and qualitative analyses of clays and clay minerals in sedimentary rocks and coals; to conduct research related to the crystal lattice structure of clay minerals. These studies also determine those parameters that affect: (1) the degree of sediment diagenesis and oil generating potential; (2) migration of fluids from source rocks which carry heavy metals.	Foscolos, AE	ISPG	PG	GC	Alta	-	2435
680093*	Upper Silurian and Devonian biostratigraphy western and northern Canada Obj: Elucidation of the sequence of Upper Silurian and Devonian faunas, especially corals, of western and northern Canada so that correlations of strata of these ages can be achieved. Description and illustration of fossils that have, or are expected to have, biostratigraphic significance. Paleogeological and biogeographic analyses of species and other taxonomic categories that have different time ranges in different geographic realms and ecologies.	Pedder, AEH	ISPG	P	Map	Sask Man Alta BC Yk Frank Mack	106 C, D, E, F; 116 G, H; 84 P; 85 A, B, C, F; 94 B; 95 J	2431
680096	Studies in the Seal Lake Volcanic Province 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 and to expand the G.S.C. data base on volcanic terrane.	Baragar, WRA	P	RG	SP	Nfld	13 K, L	2421
680101	Conodont biostratigraphy of Siluro-Devonian rocks of the Arctic Islands Obj: To set up conodont biostratigraphic framework for the Siluro-Devonian rocks of the Arctic Islands; to integrate this framework with zonations based on other fossil groups, such as graptolites, palynomorphs and brachiopods; to fix time lines in areas where strata undergo complex facies changes over relatively short distances. To determine the thermal maturity of the enclosing rocks with the use of conodonts.	Uyeno, TT	ISPG	P	MIP	Frank Kee	49, 57, 58, 59, 68, 69, 78; 89	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680102*	Rank and petrographic studies of coal and organic matter dispersed in sediments Obj: To obtain information on local and regional changes in organic metamorphism, with application towards economic geology, search for oil and gas, and evaluation of properties of coking coals.	Hacquebard, PA	AGC	EPG	-	NB Nfld NS Que PEI	12, 21, 11, 20	2462
680109	Palynological zonation of the Carboniferous and Permian rocks of Atlantic Provinces, Gulf of St. Lawrence and Northern Canada Obj: To establish a comprehensive biostratigraphic framework of the Carboniferous and Permian succession and to reconstruct geological events and ecological environments, assist other disciplines to carry out stratigraphic, sedimentological and geophysical studies, facilitating a determination of the three dimensional geometry of the Carboniferous basins for resource evaluation.	Barss, MS	AGC	EPG	SS	NS NB Nfld PEI Yk Mack Frank	11 E; 1; 2; 11; 12; 95	2431
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) documentary files of reports, maps and other published and unpublished information and (2) computer-related files.	Anderson, FD	EG	-	MDB	-	-	2465
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.	Blusson, SL	C	-	GR	Mack Yk	105 I, N, O, P, 106 A, B, C	2412
690005*	Structural geology of northern Yukon Territory and northwestern District of Mackenzie Obj: Critical evaluation of the structural geometry of Richardson, Barn and British Mountains, intervening plateaux, and adjacent coastal plain for the documentation of the nature, origin and mechanics of the deformation and its bearing on the hydrocarbon potential of the region.	Norris, DK	ISPG	CG	-	Yk Mack	117 A, B, C, D, 107 B, C	2421
690009	Smithers map-area Obj: To interpret the structure, stratigraphy, and geologic history of Smithers map-area and to provide a regional structural, stratigraphic and plutonic framework to which the mineral deposits can be related.	Tipper, HW	C	-	GR	BC	93 L	2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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	Agterberg, FP	EG	-	GM	-	-	412
690043	Quaternary geology inventory, southern Labrador 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.	Fulton, RJ	TS	-	RP	Nfld	12 P; 13 A-K; pts 13 L,N,O; 23 H	2413
690061	Operation Penny Highlands Obj: To provide a reconnaissance geological survey of a previously unmapped area and describe and interpret the geological framework and outline areas of potential economic interest.	Jackson, GD	P	RG	NC	Frank	16 E, K-M; 26 H,P; 27 A,B; 36 P; 37 A,B	2411
690064	Quaternary palynology Obj: To study the quaternary palynology of Canada and to provide a biostratigraphic and paleoecologic information service to other scientists within the Division, Branch, or Department as well as other Government Departments and agencies and non-government institutions.	Mott, RJ	TS	-	PG	Ont Que BC NB	82 E,L; 92 G,H,I; 31 G-F; 21 G,H,I,J,N,O,P	2433
690065	Surficial geology St. Anthony - Blanc Sablon map-areas, Newfoundland Obj: To map, describe and explain the Quaternary deposits and landforms in order to provide: (1) areal geological information including data applicable to land inventory surveys, engineering development, and geochemical mineral exploration surveys; and (2) knowledge of stratigraphy and age of Quaternary features and history of Quaternary events and environments including glaciation, deglaciation, local sea level change.	Grant, DR	TS	-	RP	Nfld	Pts 2 M; 12 H,I,P	2413
690072*	Federal-Provincial Aeromagnetic Survey contract No. 69-54 Labrador, Melville Peninsula, Coppermine - Great Bear Lake Areas Obj: To provide the Provinces, the Geological Survey of Canada and the mining industry with aeromagnetic data as an aid to geological mapping and mineral exploration programs.	Ready, EE	RG	RG	CS	Nfld; Que; Frank; Kee	23 I,J,O	2416

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
690075	Tertiary foraminiferal succession of Western Cordillera and Pacific Margin 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.	Cameron, BEB	C	-	MG	BC	92 C; Pts 93; 102 I; 103	2431
690086	1:1 million Geological Atlas Project Obj: As scientific adviser and editor, to make recommendations to a steering committee concerning technical and scientific matters required to ensure publication of a suitable 1:1 million geological atlas of Canada by 1986, including recommendations on coordination, scheduling, guidelines, legend and format; and to ensure, through scientific editing of all manuscripts, that approved standards are met.	(vice-Douglas, RJW)	DG0	-	SP	-	-	2423
690089	Analysis of international reference samples Obj: To participate in world-wide collaborative analysis of reference samples prepared by geologically-related institutions thereby contributing to the establishment of such samples as calibration and reference standards.	Abbey, S	CLTS	-	AC	-	-	2435
690090	Development of methods for the analysis of geological materials Obj: To develop, modify and improve methods for the analysis of geological materials, using chemical and instrumental methods.	Abbey, S	CLTS	-	AC	-	-	2435
690095	Properties and provenance of till Obj: (1) To build a data bank comprising chemical, petrologic, and geotechnical properties of till in Canada. (2) To define till provenance regions based on data from objective 1. (3) To clarify mechanisms and scale of glacial dispersal of rocks, minerals and trace elements. (4) To relate regional chemical and petrologic properties of till to engineering, geomaterial, and biological problems that can be defined areally.	Shilts, WW	TS	-	SMT	Que Kee Frank NS	56 D; 55 L; 20 O; 21 A,B,E; 38 B,C; 48 D; 35 L; 45 J	244
700003	Kootenay River (NTS 82) 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 of April 1, 1969 File 116-6-4.	Okulitch, AV	ISPG	RG	AI	Alta BC	82	2423

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
700008	St. Mary's River (NTS 11) map-area. 1:1,000,000 Geological Atlas Program	Poole, WH	EG	-	SP	NS PEI NB Nfld Que	11	2423
	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 File 116-6-4.							
700011	St. John River (NTS 21) map-area. 1:1,000,000 Geological Atlas Program	Poole, WH	EG	-	SP	NB PEI Que	21	2423
	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 File 116-6-4.							
700014	Mineral indicator tracing southern Keewatin	Shilts, WW	TS	-	SMT	-	-	244
	Obj: (1) To develop methods of utilizing drift composition for prospecting in perennially frozen terrain; (2) to define glacial and postglacial processes that affect regional and local variations in till mineralogy and chemistry; (3) to define the relationship of till compositions to compositions of bedrock or to those of higher order derivations (eskers, modern lake sediment, marine sediment etc).							
700015	Yellowknife and Hearne Lake map-areas, District of Mackenzie	Henderson, JB	P	RG	BS	Mack	85 I,J	2412
	Obj: To revise and interpret the geology and economic potential of the Precambrian terrain of the project area known only through earlier gross reconnaissance.							
700016	Plaster Rock (east half) map-area, N.B.	Skinner, R	P	RG	SG	NB	21 J/14 EI/2	2421
	Obj: To determine the stratigraphy, structure, and igneous metamorphic and tectonic history of a part of the Central Mineral Belt of New Brunswick, as an aid to the economic development of the region.							
700018	Paleomagnetism and rock magnetism instrumentation and technological development	Christie, KW	P	RG	PMag	Ont	-	2434
	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
700027*	Comparative studies of ancient and modern sedimentary environments. Obj: The objective is to familiarize the participants with the types of observations that may identify specific conceptual models of depositional environments to enable the participants to both recognize such environments and to critically evaluate the models proposed.	Cook, DG	ISPG	RG	-	-	-	2421
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 166-6-4.	Christie, RL	ISPG	RG	AI	Frank	48, 58	2423
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	RG	AI	Frank	67, 77	2423
700034*	Devonian biostratigraphy of the northern Yukon Territory and adjacent District of Mackenzie Obj: (a) delineation of facies distribution of Devonian rocks in northwestern Canada; (b) identifying and determining ranges of fossils for refining zonation and correlation with other areas; (c) determining distribution of faunal provinces and paleogeography of Devonian seas; and (d) obtaining more information on the Upper Silurian Lower Devonian and Lower/Middle Devonian boundaries.	Morris, AW	ISPG	P	MaP	Yk Mack Alta	116 (E 3/4); 117 (S $\frac{1}{2}$); 106 (W $\frac{1}{2}$); 74 M; 84 P; <u>85 A, B, C, F, G</u>	2421
700037*	Geology of the southern Alberta Foothills, Highwood River to Athabasca River Obj: To provide an improved basis for mineral evaluation and oil and gas development of the region, through the publication of new and revised geological maps and cross sections, on a scale of 1:50,000; integrated analyses of surface and sub-surface geology; the description, correlation and facies relationships of all major rock units; and the description, genetic analysis and relationships of the major structural elements; to provide data for 1:250,000 scale map compilations and regional structural syntheses.	Ollerenshaw, NC	ISPG	CG	CG	Alta	<u>82 O, J; 83 B, C, F</u>	2421
700040~	Eureka Sound-Robeson Channel (NTS 340, 560, 120) map-areas; 1:1 million Geological Atlas Program Obj: To publish a modern compilation and synthesis of the geology of the map-areas as unit of 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969, of File 116-64.	Trettin, HP	ISPG	RG	AI	Frank	340, 560, 120	2423

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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 the 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 of File 116-6-4.	Nassichuk, WW	ISPG	P	MaP	Frank	59; 69; 79; 89; 99	2423
700047*	Operation Finlay -Obj: To establish the stratigraphy, structure and geological framework to which the mineral deposits may be related as an aid to regional development.	Gabrielse, H	C	GR	BC		94 C Ek, F Wk, E	2412
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 understand its origin, age, and stratigraphic relations.	Gordon, TM	P	PET	Kee		56 A; pts 55 P, 46 D	2421
700056	Surficial geology, Cape Breton Island, NS Obj: To map, describe and explain the surficial deposits and landforms in order to provide: (1) areal geological information with particular reference to the needs for data required for industrial development and mineral exploration; 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.	Grant, DR	TS	RP	NS		11 F,G,J,K	2413
700059*	Geology of copper and molybdenum deposits in Canada - I Obj: To carry out comprehensive research on the geology of copper and molybdenum deposits in order to: (1) support or provide geologically based estimates of Canada's mineral resources; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.	Kirkham, RV	EG	MDG	NS		11	2465
700061*	Seismic-Precambrian Shield Obj: To apply seismic refraction and reflection methods to solution of geological problems in the Precambrian Shield. To apply sonic methods to downhole environments. To apply sonic methods to such problems as subsurface structure, boundaries between geological provinces, interfaces between geological formations, definitions of orebodies, delineation of Conrad discontinuity, etc.	Overton, A	GGG	TG	SM	Frank	66 B	2421
700071*	Redstone River (NTS 95), 1:1 million Geological Atlas Projects Obj: To publish a modern compilation and synthesis of the geology of the sheet as a unit of the 1:1 million Geological Atlas of Canada.	(vic-Douglas, RJW)	DGO	SP	Mack Yk		95	2423

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
700073	Operation Northern Melville Peninsula Obj: To determine the general structure, historical and economic geology of a previously unmapped terrain in order to aid future economic development of northern Canada.	Heywood, WW	P	RG	NC	Frank	Pts. of 47 A-D	2412
700092*	Surficial geology and geomorphology, Mackenzie Bay - Continental Shelf Obj: To resolve the stratigraphic and structural relationships of the unconsolidated surficial marine sediments of the Beaufort continental shelf to provide the geological framework necessary for: the delineation of permafrost; the assessment of offshore aggregate supplies; the establishment of engineering design criteria for offshore structures for petroleum exploration and production; the resolution of the Quaternary history of the shelf area; the identification of sedimentary and geomorphic processes operating on the shelf; and to continue development of the technology necessary to conduct surficial marine geological surveys in ice covered areas of the arctic and in shallow coastal waters.	Blasco, SM	AGC	EMG	CGD	Frank, Yk	87, 97, 107, 117	2415
710013	Northern Basin Analysis Program: Peel 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.	Pugh, DC	ISPG	RG	M	-	-	2421
710016 ⁻	Geological and Tectonic Compilations Obj: 1) Maintain a continuing compilation of data received from 1:1 million Geological Atlas (project 690086) for revision of Geological and Tectonic Maps at 1:2 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.	(vice-Douglas, RJW)	DGO	-	SP	Ont Que	pts 31, 41, 52	2421
710018 ⁻	Alberta Foothills Obj: 1) standard 1 mile mapping with emphasis on stratigraphy and structure; revision of mapping by B.R. Mackay; oil, gas, coal potentialities.	(vice-Douglas, RJW)	DGO	-	SP	Alta	82 H; 83 C,F	2421
710020	Surficial geology and land classification, Mackenzie Valley Transportation Corridor 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.	Hughes, OL	TS	-	RP	Mack Yk	96 C-F; 106 H-N, O, P; 107 A; 97 C; 116 N,O,P	2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
710022*	Carboniferous and Permian biostratigraphy and coral faunas, western and northern Canada	Bamber, EW	ISPG	P	MaP	Frank Mack Yk BC Alta	49; 59; 69; 78; 79; 82 G,H,J,M,N,O; 83 B,C, D,F,G; 92; 93 I, 94-95; 103-106; 115-117; 340; 560	2431
	Obj: Establishment of faunal sequence within stratigraphic framework previously described for Upper Paleozoic of Alberta, British Columbia, Yukon, and District of Mackenzie, for use as a biostratigraphic reference succession in surface and subsurface exploration of these areas. Description of coral and other faunas from these areas to document the above succession and facilitate its use by other workers in industry and in other government organizations.							
710023	Granite studies in the Slave Province (Phase 1)	Davidson, A	P	RG	SG	Mack	85 I,P	2421
	Obj: To classify the granitic rocks according to age, geological and chemical nature, using geophysical parameters where available, and to relate them to the regional geology and to mineral deposits.							
710033	Northern Basin Analysis Program: Redstone and Great Slave Lake map-areas	Williams, GK	ISPG	RG	M	Mack	85, 95, 96	2421
	Obj: (1) To maintain an up-to-date inventory of subsurface data, mainly in the form of maps, cross-sections and lithologic logs within the Great Slave Lake and Redstone map-areas. (2) To provide an improved understanding of the geological history of the northern Canadian mainland. (3) To test an hypothesis that may provide criteria, in addition to fossils, for long distance correlation (the hypothesis being that certain dynamic events (subsidence, eustatic) simultaneously affected the northwestern part of the American craton).							
710038	Juniper (east half) map-area, NB	Skinner, R	P	RG	SG	NB	21 J/11 Ek	2421
	Obj: To determine the stratigraphy, structure and igneous, metamorphic and tectonic history of a part of the Central Mineral Belt of New Brunswick as an aid to the economic development of the region.							
710048*	Geological and geophysical studies of the Pacific Continental Margin	Tiffin, DL	C	-	MG	BC	Pts 92; 102; 103	2417
	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.							
710049*	Geological and geophysical studies in the Beaufort Sea	Currie, RG	C	-	MG	Mack	87, 97	2417
	Obj: To produce a magnetic anomaly map and selected shallow seismic profiles of the Beaufort Sea.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
710050*	Lockhart River (NTS 75) 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.	McGlynn, JC	P	RG	BS	Mack	75	2423
710051*	Slave River (NTS 85) 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.	McGlynn, JC	P	RG	BS	Mack	85	2423
710059*	Stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic continental margin Obj: To determine stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic continental margin and the basin; delineate distribution of clastic, carbonate, evaporite sequences, their thickness, composition, provenance, current patterns, depositional environment and porosity development as an aid to the resource evaluation of this region.	Jansa, LF	AGC	EPG	SS	-	-	2421
710061*	Compilation of geoscientific data in the Upper Paleozoic basins of southeastern Canada Obj: Compile data for a detailed study of the petroleum potential of the Magdalen and Sydney basins.	Howie, RD	AGC	EPG	-	NS NB NFld PEI	<u>1, 2, 10, 11, 12,</u> <u>14, 20</u>	2423
710062	Palynostratigraphy and Paleoeology of the Mesozoic and Cenozoic rocks of the Atlantic Continental Margin Obj: Application and refinement of the Palynological zonation now established for the Mesozoic and Cenozoic of the Scotian Shelf, Grand Banks and Labrador Shelf. Correlation with coeval assemblages from European stratotypes, and DSDP coreholes in the Atlantic Ocean, and eastern U.S. surface sections. Determine paleoecological value, paleoclimatological fluctuations of the dinocysts. Undertake visual kerogen analysis for resource evaluation. Produce (four issues of) Geolog.	Williams, GL	AGC	EPG	SS	NS NB, NFld PEI	1, 2, 10, 11, 14, 20 E	2431
710065	Biostratigraphic zonation (Foraminifera-Ostracoda) of the Mesozoic and Cenozoic rocks of the Atlantic Shelf Obj: To determine the biostratigraphic zonation (Foraminifera and Ostracoda) of the Mesozoic and Cenozoic in offshore wells of the Atlantic Shelf, to form the basis of local, regional and world wide correlation, and to accurately reconstruct geological events and ecological environments, to aid in the economic evaluation of the region.	Ascoli, P	AGC	EPG	SS	NS, NFld		2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
710083	Surficial geology: Sept Iles-Cap Chat 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 area geological knowledge with particular reference to data pertinent to engineering geology.	Dredge, LA	TS	-	RP	Que	22 G, J	2413
710091*	Palynological studies of Mesozoic and Tertiary coal measures in western and northern Canada Obj: (a) To establish palyno-stratigraphic zonation of coal measures and contiguous strata as an aid to petrological, sedimentological and structural interpretations of coal basins. (b) Where applicable to correlate coal seams by means of spore and pollen histograms. (c) To describe and classify recovered pollen and spores as necessary to accomplish the above objectives.	Sweet, AR	ISPG	P	MiP	BC Alta Yk Mack	82; 83; 92 I; 96 C; 106 E; 117	2462
710092	Quaternary geology inventory, Lower Nelson River basin Obj: To map, describe and explain the Quaternary deposits and landforms to provide area geological-geomorphic data and knowledge of the stratigraphy, age and history of deposition of surficial materials with particular reference to (1) terrain information required for land use (forestry) and engineering development, and (2) background information for geochemical and related surveys. To study short term performance of organic and unconsolidated terrain units along selected roads and at chosen construction sites with particular emphasis on mass-wasting and effects of permafrost.	Klassen, RW	TS	-	RP	Man	53 M; 54 C,D; 63 G, I,O,J,P; 64 A,B,G,H	2413
710098	General Data Systems Obj: 1) To act as specialist consultants to Divisions as required; 2) to undertake general feasibility studies; 3) to advise Branch Management on computer use in GSC; 4) to provide continuing administration of operation of Branch Systems.	Martin, GM	GID	-	DSG	-	-	248
720037	Stratigraphy and structure of the Mount Ida Group southern B.C. Obj: To revise the stratigraphy of the Mount Ida Group and the geology of the Shuswap Metamorphic Complex.	Okulitch, AV	ISPG	RG	AI	BC	82 E,L,M; 92 I,P	2421
720041*	Upper Paleozoic rocks of western Canadian Cordillera 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.	Monger, JWH	C	-	GR	BC Yk	pts. of 92, 93, 94, 115; 103 H, I; 104 A, G,I,J,K,N,P; 115 B,C, F,G	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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.	Wall, JH	ISPG	P	MiP	Frank	49, 59 E, 69, 79, 88, 89, 98, 340	2431
720052	Geology of Indin Lake (86 B) Obj: To revise and interpret to modern standards the geology of the Precambrian terrane of the area known only through early reconnaissance and semi-detailed mapping.	Frith, RA	P	RG	BS	Mack	86 B	2421
720056	Paleomagnetism of the dykes of west Greenland 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.	Fahrig, WF	P	RG	PMag	-	-	2434
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.	Fulton, RJ	TS	-	RP	BC	Pts of 82 M,N,K,L	2413
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 and relationship to the adjacent gneisses and the enclosed basic and ultrabasic rocks; to evaluate the mineral potential of the belt.	Schau, M	P	RG	NC	Frank Kee	47 A,D; 56 J,K	2421
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 hydrocarbon deposits in Canada.	Procter, RM	ISPG	PG	PR	-	-	311
720070	Gneisses of the Prince Albert Group 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	P	RG	NC	Frank Kee	Pts. of 46 M,N,L; 47 A,B; 56 I,J,P	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
720071*	Airborne Gamma-Ray Spectrometry (Experimental Surveys)	Holman, PB	RGG	RR	ARO	NS NB Ont Que Nfld	31 B,G,K; 52 A-D,H; 13 M; 21 G; 11 F	2463
	Obj: (1) Provide acceptable standards for the acquisition and compilation of airborne gamma-ray spectrometric data. (2) Demonstration of suitability of airborne gamma-ray spectrometry methods in various parts of Canada by: i) conducting orientation surveys in advance of U.R.P. contract surveys. ii) conducting reconnaissance surveys maps. iii) conducting detailed follow-up surveys of areas of interest located by URP program. (3) Have available the technology and personnel to respond to nuclear accidents where aircraft monitoring is required.							
720072	Paleozoic ostracodes of Canada	Copeland, MJ	ISPG	P	OP	Ont Que NB NS Nfld	11 E,F,K; 12 B,L; 21 A,P; 22 A,B; 30 L,M; 40 I,P	2431
	Obj: By means of microfauanas and non-trilobite Arthropoda to determine the zonation and correlation of strata among the Paleozoic sedimentary basins of Canada and thus aid in assessing the economic potential of these rocks.							
720073	Petrographic Analysis of Saskatchewan Lignites	Cameron, AR	ISPG	CG	CT	Sask	62 E; 72 F,G,H	2462
	Obj: 1. Petrographic characterization of Saskatchewan lignites. 2. Determination of vertical and lateral changes in petrographic composition 3. Relation of petrographic composition to environment of deposition.							
720075	Paleomagnetism of the Hopeland diabase dykes	Christie, KW	P	RG	PMag	Nfld	13	2434
	Obj: To determine the paleomagnetism of three swarms of unaltered diabase dykes in the Hopeland area, Labrador.							
720078	Diatom analysis and paleoecological studies of Quaternary sediments	Lichti-Federovich, S	TS	-	PG	-	-	2433
	Obj: (1) To develop diatom analysis as a paleoecological tool in conjunction with palynological and plant megafossil analyses. (2) To provide paleoecological interpretation and biostratigraphic correlations of Recent and Quaternary sediments.							
720080*	Interpretation of aeromagnetic surveys	Kornik, LJ	RGG	RG	MM	Ont Man Sask	31 F,C; 52 B,E; 55, 56, 64 L,N, 65, 66, 74 I, 75, 76	2416
	Obj: To express the significance of aeromagnetic data in terms of lithological structural and metamorphic patterns in support of mineral exploration, geological mapping and radioactive waste disposal programs and to integrate this information with other types of geoscience data.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
720081	Surficial geology and geomorphology of Central Ellesmere Island Obj: To provide an inventory of surficial materials, landforms, geomorphic processes (active and inactive) and permafrost conditions, with particular reference to terrain information pertinent to the implementation of territorial Land Use Regulations and to the effects of the terrain on petroleum exploration and related activities.	Hodgson, DA	TS	-	RP	Frank	Pts 49 C, D, E, G, H; 340 B	2413
720084*	Gamma-Ray Spectrometry (Technique Development) Obj: To develop improved methods of airborne gamma-ray spectrometry data collection, analysis and presentation.	Grasty, RL	ROG	RR	ARO	Ont Alta	31 G	2463
720089	Quantification of geological variables and geomathematical estimation of mineral potential Obj: To prepare a computer-oriented data base for selected areas of Canada by the compilation, pre-coding, and coding of geological data to be obtained from maps of scales 1 inch to 4 miles and larger and other sources of information. To compile and code basic parameters for mineral deposits in the same areas. To perform geomathematical analyses in order to assess regional mineral potential.	Fabrizi, AG	EG	-	GM	-	-	412
720095	Geology of barium, fluorine and strontium deposits in Canada Obj: To carry out comprehensive research on the geology of barium, fluorine and strontium deposits in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guideline for their discovery; 3) provide advice to government for mineral policy and related matters.	Dawson, KR	EG	-	MDG	-	-	2466
720098*	Lower Paleozoic stratigraphy, southern Rocky Mountains Obj: To determine the nature, thickness, distribution and origin of Lower Paleozoic formations of the region.	Aitken, JD	ISPG	RG	M	BC Alta	82, 83	2421
720101	Bottom studies of the Beaufort Sea Obj: To obtain information on bottom sediments and their dispersal trends, and to describe bottom morphology with reference to ice-scour and pingo-like features in order to provide data for engineering works and environmental programs, and to provide maps and other illustrative material to support such programs.	Pelletier, BR	TS	-	SP	Frank Mack Yk	97 C, F, G; 107 A, B, C, D, F; 117 A, B, C, D	2453
720102	Marine Science Atlas of the Beaufort Sea Obj: To compile known marine aspects of the Beaufort Sea including oceanography, biology, bathymetry, geology, geophysics, etc., in order to present a marine science atlas of the Beaufort Sea that will include maps, sketches, photographs and graphs. This atlas will serve the public, universities, industry and various agencies of government on engineering, environmental and resource-development programs.	Pelletier, BR	TS	-	SP	Mack Frank Yk	97 C, F, G; 107 A, B, C, D, E; 117 A, B, C, D	2423

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
730008	Satellite Imagery Evaluation	Slaney, VR	GGG	RR	RSA	-	-	2423
	Obj: 1) To identify the potential geological applications of satellite imagery. 2) To maintain on file, a collection of Landsat imagery for use by GSC staff. 3) To provide advice and assistance to geologists in the use of Landsat imagery.							
730012	Federal Provincial aeromagnetic Surveys-Quebec	Knappers, WA	GGG	RG	CS	Que		2416 24 D-N; 25 C-F; 35 A-C, F-K; Pts 23 M; 24 A, H, I; 34 A, B; 33 O, P
	Obj: To provide GSC and Quebec Department of Natural Resources with aeromagnetic data as an aid to geological mapping programs and to provide a data base for the Magnetic Anomaly Map of Canada. To provide the mining industry with aeromagnetic survey data for use in mineral exploration programs.							
730013	Quaternary geology inventory - Southern Keewatin	Shilts, WW	TS	-	SMT	Ke		2413 65 A-C, F-K, N-P; 55 D, E, F, L, K, N, O; 66 A-C, F-K, N-P; 56 D
	Obj: (1) To produce a map of southern Keewatin showing surficial geology at a scale of 1:500,000 from Chesterfield Inlet south to Manitoba and east of ~97°00'. (2) To produce maps for open filing at scales of 1:125,000 based on 1:250,000 NTS sheets, (3) To collect regional samples of till to describe its sedimentology, geotechnical properties, and geochemistry. (4) To elucidate the history of the south and central portions of the Keewatin Ice Divide.							
730019*	Permafrost drilling and sampling service	Veillette, JJ	TS	-	RP	NB		2413 <u>21 O, N</u>
	Obj: To carry out a shallow drilling and sampling program in permafrost areas in support of various Division projects and to provide the Division with a developmental and operational capability in light drilling equipment.							
730021	Coastal erosion-sedimentation, northern Somerset Island	Taylor, RB	AGC	EMG	CGD	Frank		244
	Obj: To map the modern sedimentary environments of the coasts of northern Somerset Island and adjacent islands with particular reference to the processes controlling erosion, transportation and deposition of sediments and the role of permafrost and sea ice movement. To provide basic data that will help assess the impact of various human activities on the natural balance of processes with particular reference to gas pipeline concerns.							
730027*	Late Cenozoic fossil insects and Late Cenozoic paleoecology	Matthews, JV Jr.	TS	-	PG	Mack Frank Yk BC Ont Que		2433 117 B; 116 A, B, I, J, K, L, N, O, P; 115 B, G, I, J, O, P; 107 P; 106; 105 D, E, K, L, M; 97 G; 98; 69 H; 56 D, B; 68 H; 31 G, H, I; 11 N
	Obj: To provide biostratigraphic and paleoecologic information on late Cenozoic terrestrial sediments as an aid to interpretation of their age and environment of deposition.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
730035	Operation Mt. St. Elias Obj: To determine the stratigraphy, structure, metamorphism, and relationship of intrusive and volcanic rocks, and to assess the mineral potential of the area.	Campbell, RB	C	-	-	Yk BC	114 P, O; 115 A-C, F, G	2412
730036*	Geology of Victoria and Cape Flattery map-areas, Vancouver Island, B.C. Obj: To map the geology and study stratigraphy, structure, metamorphism and petrology of the region.	Muller, JE	C	-	GR	<u>BC</u>	<u>92 B, C</u>	2421
730037	Stratigraphy, structure, and metallogeny of Pelly Mountains, and Yukon Plateau, Yukon Territory Obj: To provide information on the relationship between stratigraphy, structure, sedimentary facies, and mineral deposits in Pelly Mountains and adjacent Yukon Plateau.	Tempeiman-Kluit, DJ	C	-	GR	Yk	105 A, F, G, H	2421
730039*	Sloan River map-area (86K), District of Mackenzie Obj: (1) To establish the stratigraphic and intrusive relations of the Aphebian plutonic, volcanic, and sedimentary rocks; (2) to rationalize observed variations in chemistry, mineralogy, texture and hydrothermal alternation (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.	Hoffman, PF	P	RG	BS	<u>Mack</u>	<u>86 K</u>	2412
730040	Archean volcanic studies in the Slave-Bear Province Obj: To determine 1) stratigraphic and structural relations; 2) location of volcanic centres; 3) sequence and types of volcanic eruptions and their environment of deposition; 4) relationship of mineral deposits to volcanic stratigraphy and volcanic processes.	Lambert, MB	P	RG	BS	Mack	76 B, C, F, G	2421

730041

Calder River map-area, (86F)
District of Mackenzie

McGlynn, JC

P RG

BS

Mack

86 F

2412

- 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 Coronation 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.

730042

A study of certain accessory elements in Canadian Sulphide assemblages and minerals

Sangster, DF

EG

MDG

-

-

2465

- Obj: To determine the concentration ranges and averages of certain elements in selected Canadian Sulphide ores and sub-ores.

730043

Volcanic rocks of the Appalachian region

Bostock, HH

P RG

NC

NB NS
Nfld

Pts 2 E/12, 5; 12 H

2421

- 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.

730044*

Granite studies in the Appalachians

Currie, KL

P

PET

NS Nfld
NB

2 E; 12 E 21 G,H

2421

- Obj: (1) To establish a set of criteria based on field, petrographic and chemical observations, by which granitoid rocks in the Appalachian region can be assigned to a limited number of well defined classes;
(2) to establish the physical conditions of emplacement, fractionation trends, solidification history, and subsequent deformation of each of these classes;
(3) to relate these classes to the tectonic development of the Appalachian region;
(4) to evaluate the economic possibilities of each class, and possible factors enhancing these possibilities.

730046*

Geochronological research and control studies

Wanless, RK

P

G

Yk Mack
Kee Man
Frank BC
Ont

27 A,B;
55 M,N;
56 C,D;
66 A; 65 C,O,K

2432

- Obj: To precisely establish the chronological order of rocks and events, thereby providing the fourth dimension -- time--to geological mapping.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
730047	Development of techniques for geochronological studies Obj: To develop methods and apparatus required to remain at the forefront of geochronological research and applications.	Manless, RK	P	-	G	-	-	2432
730051*	Completion of reconnaissance geology, northern Ellesmere Island Obj: To prepare terminal reports accompanied by maps of the region at the scale of 1:250,000 or more detailed.	Trettin, HP	ISPG	RG	AI	Frank	340 A-H; 120 C-H; 49 H; 560 D,E,F,G,H	2412
730054	Comparative Study of Campbell, White and Barn Uplifts Obj: The definition of Campbell, White and Barn Uplifts in terms of their stratigraphic framework, Structural style and evolutionary history.	Dyke, LD	TS	-	GP	Yk Mack	117 A, 116 P	2421
730055	Comparative field seminar - structural prototypes Obj: The objective is to familiarize the participants with the types of observations that may characterize specific models of structures to enable the participants to both recognize such features and to critically evaluate the models proposed.	Cook, DG	ISPG	RG	-	-	-	2421
730057	Helikian and Hadrynian stratigraphy Eastern Cordillera and Interior Platform Obj: Firstly, to establish a coherent picture of Helikian and Hadrynian events in western and northwestern Canada, and secondly, to emphasize study of those events that may have created exploitable mineral and/or hydrocarbon deposits.	Aitken, JD	ISPG	RG	M	Mack Yk	95 L,M; 106 A,B,C,F,G,H	2421
730062	Development of extraction, identification and correlation systems for organic compounds from sedimentary rocks and crude oils Obj: To develop, improve and adapt analytical techniques in organic geochemistry in order to facilitate the identification of petroleum source rocks and to assist in source rock-oil correlations. To develop and/or apply statistical methods to the geochemical data generated in the GSC labs and from outside organizations in order to correlate crude oils into genetic families or groups and to improve data handling and storage systems.	Snowdon, LR	ISPG	PG	GC	-	-	2461
730063	An automated system for petrologic analysis of metamorphic mineral assemblages Obj: To develop a set of computer programs to expedite the analysis of metamorphic mineral assemblages.	Gordon, TM	P	-	PET	-	-	2436

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
730067*	Geothermal Energy Resources in Canada Obj: To make an inventory of the distribution, nature and geological setting of hot springs in Canada and the chemistry of their waters. To provide a base of geological information and expertise for geothermal results.	Souther, JG	C	-	GR	BC	92 J	2464
730072*	Bedrock and surficial geology-Grand Banks Obj: To contribute to our knowledge and understanding of the surface and subsurface geology, geologic history, and broad tectonic setting of the Grand Banks; and to aid in the economic evaluation of the region.	King, LH	AGC	RR	SBG	Nfld	1, 2, 11	2414
730081*	East coast Offshore surveys Obj: A detailed, systematic mapping of hydrographic and geophysical parameters on the continental shelf and margin off the Canadian east coast. (a) To measure and describe the sea floor topography and the gravity and magnetic fields in the offshore; (b) to define the broad patterns of sediment composition and distributions; (c) to disseminate this information through a variety of media; charts, reports, digital magnetic tape files, publications, etc.	Folinsbee, RA	AGC	RR	GPS	-	-	2414
730085	Classification of dinocysts Obj: 1) A revised generic and specific index. 2) A generic key. A study of provincialism in fossil dinocysts. Examination of extant cyst populations of continental shelves.	Williams, GL	AGC	EPG	SS	-	-	2431
730155*	Surficial geology, Fraser Lowland Obj: To map, describe and explain the Quaternary deposits and landforms to provide geologic-geomorphic data on stratigraphy, thickness, age and history of deposition of surficial materials, and to determine the thickness and distribution of Tertiary rocks with particular reference to information pertinent to urban and rural land use planning, groundwater investigations, engineering development and soils mapping.	(Armstrong, JE)	TS	-	RP	BC	Pts of 92 G/1-3, 6-8; H/4-6	2413
730160*	Paleomagnetism of the Circum-Ungava Belt Obj: To determine: (1) whether the curved nature of the belt is due to differential rotation and, if so, to movements of parts of the Shield (i.e. Churchill and Superior Provinces) and (2) to arrive at time-stratigraphic correlations between various parts of the Belt.	Schwarz, EJ	P	RG	PMag	Ont Que	23, 24, 33, 34, 43	2434

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740003	Geological interpretation of geophysical data as an aid to basin synthesis and hydrocarbon inventory	Grant, AG	AGC	EPG	RSBS	Nfld Frank	1-16, 27, 28, 38,39	2417
	Obj: To define the geologic structure and history of the sedimentary basins in the offshore regions of Eastern Canada.							
740004	Biostratigraphic history of the Mesozoic-Cenozoic sediments of the Grand Banks, Northeast Newfoundland and Labrador Shelves (based on Foraminifera and Ostracoda)	Gradstein, FM	AGC	EPG	SS	NS Nfld	1, 2, 3, 11, 12	2431
	Obj: To establish and maintain a comprehensive biostratigraphic and depositional environmental framework of the Mesozoic-Cenozoic sediments of Grand Banks and Labrador. Utilize North Atlantic Basin control to more clearly establish the relationship of the Eastern Canadian margin.							
740016	Geology of the Island Lake map-area (53 E), Manitoba and Ontario	Herd, RK	P	RG	SG	Man Ont	53 E	2421
	Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks of the map-area; and provide a tectonic synthesis suitable for resource evaluation.							
740017	Metamorphism in the Canadian Shield	Fraser, JA	P	RG	NC	Que, Ont Man Sask Nfld, Mack Frank Kee	-	2421
	Obj: To provide suitable maps and studies on metamorphism of the Shield which will focus on this parameter in such a way as to make a unique contribution to the understanding of the development of the Shield; and to provide regional and local information on metamorphic grade and history which will be of use in evaluating mineral resource potential of the Canadian Shield.							
740019	Archean felsic volcanic complex near Regan Lake, District of Mackenzie, NWT	Lambert, MB	P	RG	BS	Mack	Pts of 76 B,C,F,G	2421
	Obj: (1) To map in detail the felsic volcanic belt; (2) to establish criteria for the identification and interpretation of metamorphosed felsic volcanic in the Slave Province; (3) to establish a model for the history, environment and processes of volcanism that relate to this part of the Slave Province to provide a basis for resource exploration in this area.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740020	Geology of the Foxe Fold belt (west half), Baffin Island, District of Franklin Obj: To establish the stratigraphy, structure and metamorphism of the Aphebian sedimentary, volcanic and plutonic rocks in the Piling Group and their relationship to the rocks of the Mary River Group. The structural evolution of Archean "gneiss domes" in the area is also to be studied, and the economic mineral resource potential of the region evaluated.	Morgan, WC	P	RG	NC	Frank	27 pts A,B,C; 37 A, pts C,D, Pts. of 25 H	2421
740030	Boothia Peninsula and Somersset Island (Operation Boothia) Obj: To improve the understanding of the stratigraphy and structure of the region, which is a key area for information in both of these fields. The purpose is two fold: (1) to aid in evaluation of the resource potential, particularly petroleum and base metals, of this part of the North; and (2) to provide background knowledge and maps to assist in future natural gas pipeline construction.	Kerr, JW	ISPG	RG	AI	Frank	57 C,F,G; 58 A-F; 67 E,H	2412
740035	Petroleum Exploration Analog Study Obj: To study the geological setting and characteristics of hydrocarbon accumulations on a worldwide basis. To establish valid analogs and their attendant parameters that may be applicable to the Canadian basins. This will help in the evaluation and understanding of the petroleum potential of Canada.	Procter, RM	ISPG	PG	PR	-	-	311
740041*	Comparative studies of geological types Obj: To examine field occurrences of local geological phenomena in order to familiarize the staff of the Institute with the local geology and the interpretation thereof, so that general principles so elucidated may inform and communicate the role of the Institute to all levels of staff.	Cook, DG	ISPG	RG	-	Alta	82 B	2421
740042	GSC Workshop travel - Micropaleontology Section Obj: To exchange information on current projects and techniques relating to palynology, foraminifers and other microfossils, during workshops of GSC's specialists; to plan programs in these fields and generally improve communication between the specialists in different Divisions.	Wall JH	ISPG	P	MiP	-	-	2431
740054	Geological variability of marine deposits, Ottawa-St. Lawrence Lowland Obj: To evaluate the stratigraphic, geomorphic and historical factors affecting the natural and engineering behaviour of marine clays, with special reference to landslides.	Gadd, NR	TS	-	RP	Ont, Que	31 G,F	2453

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740062*	Fraser Delta sedimentation Obj: To provide a geological/sedimentological knowledge base about the active delta of the Fraser River for general land and waterfront planning and environmental management.	Luternauer, JL	REG	CPM	MG	BC	92 G	244
740065	Surficial geology inventory, Banks Island Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover, and undertake geomorphic process studies in order to provide areal knowledge of geology and terrain that will: (a) aid in the implementation of the Territorial Land Use Regulations; (b) be pertinent to engineering construction, petroleum exploration and related activities; (c) provide data relative to terrain sensitivity rating; and (d) elucidate the Quaternary history of the region.	Vincent, J-S	TS	-	RP	Frank	88 B,C,D,F; 97 G,H; 98 A-F	2413
740067	Surficial geology-terrain inventory, Bathurst-Cornwallis and eastern Melville Islands Obj: Map, describe and explain the surface materials, landforms, ground ice and vegetation in order to provide areal knowledge of geology, geomorphology and terrain as background information suitable for land use management and various aspects of engineering construction and to determine the Quaternary history of the region.	Edlund, SA	TS	-	RP	Frank	68 E-H; 69 A,B; 78 E-H; 79 A,B	2413
740068*	Surficial geology, Ottawa Valley lowlands Obj: To map, describe and explain the unconsolidated deposits and landforms of the Ottawa Valley lowlands (31 G, 31 F (parts of) and 31 B (parts of) in order to provide geology and terrain information pertinent to land use planning, agriculture, urban and industrial development, forestry and engineering construction and to determine the Quaternary history of the region.	Richard, SH	TS	-	RP	Ont	31 B,E,G	2413
740072*	Surficial geology of Newfoundland Obj: To map, describe and explain the unconsolidated deposits and landforms in order to provide areal knowledge of geology and terrain as background information relative to land use planning, mineral exploration, location of granular deposits, community water supply problems, forestry, urban and industrial development, and various aspects of engineering construction, and to determine the Quaternary history of the region.	Grant, DR	TS	-	RP	Nfld	1; 2; 11; 12 G,H,I	2413

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740081*	Environmental Geochemistry	Jonasson, IR	RGG	RGC	MD	Yk Mack BC Alta Sask Ont Que	31 B-P; 74 H, I; 64 E, L; 82 F, G; 94 F, G; 104 N; 105 A-P; 106 A-F; 116 G;	2451
	Obj: (1) To understand the nature of physical and chemical processes which influence the dispersion of elements in the surface environment. (2) To coordinate Section activities relating to environmental matters. (3) To provide appropriate surficial and lithochemical support to the Nahanni IMPP and its objectives.							
740084*	Silurian-Ordovician macro-biostratigraphy of Anticosti Island, Quebec	Bolton, TE	DGO	-	SP	Que, NB NS, Kee Ont	22 H; 12 E, F, L; 18; 22 A, B; 11 F; 45, 46; 31 G, H	2431
	Obj: To obtain data on the Silurian and Ordovician rocks of Anticosti Island, St. Lawrence platform and Maritime regions to provide: (1) precise descriptions for all appropriate stratigraphic units of their succession, thickness, lithology, facies change, faunal content; (2) descriptions of significant fauna for each stratigraphic unit; and (3) local and regional correlations consistent with the data.							
740085*	Borehole Geophysics (Nuclear Techniques)	Killieen, PG	RGG	RR	RM	Alta Sask Man Ont Que NS NB	21 G; 22 A, B; 31 F, H; 40 I; 41 J; 52 L; 73 B; 74 I	2463
	Obj: To contribute to geophysical exploration technology by maximizing the useful information obtained from boreholes by: (1) investigation, implementation and evaluation of new developments and improvements in nuclear borehole logging, and (2) establishment of calibration and standardization as a routine procedure in nuclear logging operations.							
740089*	Glacially displaced megablocks of the Canadian Prairies	Stalker, AM	TS	-	SP	Alta	72, 82, 73, 83, 74, 84	2422
	Obj: To investigate the gigantic bedrock blocks found included in the drift of the southwest Prairies; to determine size, location, and time of emplacement of the largest of these blocks, their value as a marker horizon, and to develop theory as to how they were deposited.							
740090	Palynological study of the Shell Anglo Harlequin D-86, Murrelet L-15, Auklet G-14, and Osprey D-36 wells, offshore British Columbia	Hopkins, WS, Jr	ISPG	P	MIP	BC	102 O; 103 B	2431
	Obj: To establish preliminary biostratigraphic subdivision of the offshore continental Tertiary and to tie the palynological subdivision into the marine foraminiferal zones that have been established farther south.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
740091*	Borehole Geophysics (Electrical and Magnetic Techniques)	Dyck, AV	RG	TG	EM	BC Ont Que NB Man Sask	41 I; 52 B; 31 F,K; 74 I; 64 L; 62 I	2465
	Obj: To contribute to the development of borehole mining geophysics technology as a means of improving the efficiency and effectiveness of mineral exploration practices, geophysical techniques applied to engineering and geological mapping.							
740092*	Geology of the Bathurst Inlet Area	Campbell, FHA	P	RG	BS	Frank Mack	76 J (W1/2), K (E1/2); pts. 76 E,G,O,N,L; 77 A,B,D,E,G,H; 86 G,H	2421
	Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks of the map-area; to compile a detailed stratigraphic-sedimentological analysis of the Goulburn Group and related overlying rocks; to relate the Goulburn Group to other depositional sequences in the Coronation Geosyncline.							
740095	Quaternary geology - terrain inventory, Kananaskis Lakes	Jackson, LE	TS	-	GP	Alta BC	82 J	2413
	Obj: To map, describe, and explain the unconsolidated deposits and the landforms and their susceptibility to modern processes in order to provide areal knowledge of surficial geology and terrain as background information relative to mineral exploration and exploitation, land use planning, forestry, agriculture, urban and industrial development and various aspects of engineering construction and to determine the Quaternary history of the area.							
740098*	Metallogeny of the northern Canadian Cordillera	Dawson, KM	EG	-	MDG	BC Yk Mack	94, 95, 96, 104, 105, 106, 114, 115, 116, 117	2465
	Obj: To integrate present mineral commodity and regional geological studies in order to: (1) examine the large scale geological controls and distribution of known mineral deposits; (2) assist in planning of future geological mapping; (3) assess the area with regard to its mineral potential.							
740100	Preparation of popular earth science education literature	Copeland, MJ	ISPG	P	OP	-	-	248
	Obj: To present to the Canadian public, particularly students, information dealing with earth science topics of general interest and of educational importance.							
740104	Paleomagnetism of Proterozoic to Devonian Strata across Boothia Arch	Fahrig, WF	P	RG	PMag	Frank	48 A,D; 58; 68	2434
	Obj: To measure the paleomagnetism of Upper Proterozoic, Ordovician, Silurian and Devonian strata across the Boothia Arch to determine the paleolatitude, whether these strata have been shifted relative to the North America Craton, and to contribute information on the North American polar wandering curve.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'l Classification
740106*	Geological assistance with provincial coal drilling project in Nova Scotia Obj: In co-operation with provincial authorities to prepare an inventory of remaining coal resources in Nova Scotia.	Hacquebard, PA	AGC	EPG	-	NS	11, 21	296
740107*	Trace elements in sulphides Obj: (1) To determine the typical contents and ranges of trace elements, including metals, metalloids and non-metals in ores and ore minerals. (2) To assess the value of such data with regard to classification of ores, estimation of ore reserves of rare metals, definition of geochemical and metallogenic provinces, establishment of environment baseline levels. (3) To provide a systematic geochemical inventory for regional surveys.	Jonasson, IR	RG	GG	MD	Ont BC Yk Mack	31 A,B,C,F,P; 94 F,G; 104 N; 105; 106 A,B,C; E,F; 116 G; 117 A,B	2465
740110	Carboniferous and Triassic strata of Appalachian region Obj: To determine the stratigraphy, sedimentology, variations in facies and external and internal basal geometry of the Middle Devonian to Triassic strata; to reconstruct the tectonic development, provenance, current direction and environment of deposition; and to determine the distribution, controls and origin of the associated mineral deposits, all with a view to elucidating the mineral resource potential.	Geidsetzer, HHJ	ISPG	RG	M	Nfld NS PEI NB Que	1; 11; 12; 21; 22	2421
750001*	A geophysical investigation of the submarine extension of geological zonation of Newfoundland Obj: An interpretation of the offshore extension of the zonation of Newfoundland, to include (1) tracing offshore all recognizable onshore features; (2) building a developmental model for the tectonic pattern observed; (3) assessing the compatibility of that model with others proposed for the same and adjacent regions.	Haworth, RT	AGC	RR	GPS	Nfld	-	2417
750004	Geology of the TulemaTu Lake map-area Obj: To interpret the Precambrian geology of the area to modern 4-mile standards and to interpret the economic potential of the area.	Eade, KE	P	RG	NC	Kee	65 J	2421
750005	MacQuoid Lake (W 1/2), Thirty Mile Lake (E 1/2) Map-Areas Obj: To interpret the geology and mineral potential of the Precambrian rocks of the area to a standard of 1:250,000 mapping.	LeCheminant, AN	P	RG	NC	Kee	55 M w/ 1/2; 65 P e/ 1/2	2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750006	Stratigraphy and petrology of the Natkusiak Basalts, Victoria Island	Baragar, WRA	P	RG	SP	Frank	Pts. of 77 G; 78 B; 87 E,F,G,H; 88 A,B	2421
	Obj: To determine the variation in chemical composition and petrography of the lavas with stratigraphic level, to obtain representative bulk compositions of the flows, to determine relationships between the composition of the flows and associated copper prospects and between the flows and accompanying sills, and to obtain contributory information towards an understanding of late Precambrian tectonic history in the northwestern Canadian Shield.							
750007*	Correlation and geochronological studies in the Canadian Shield	Frarey, MJ	P	RG	SG	Ont Que	41 H/14, I/3	2421
	Obj: To identify, date and correlate depositional, thermal and orogenic events within the various provinces of the Canadian Shield. To integrate Shield province histories. To extend and improve the present scheme of Precambrian time-classifications.							
750008	Geology of Nose Lake and Beechey Lake	Frith, RA	P	RG	BS	Mack	76 F (E½); 76 G (W½)	2412
	Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks of the area, to provide a base for mineral prospecting, and to correlate geophysical and geochemical patterns and anomalies to the geological and mineral deposit data.							
750010*	Geology of Uranium and Thorium Resources in Canada	Ruzicka, V	EG	-	URE	Ont Que NB NS PEI Nfld Keew Sask Man Mack Frank	41 I,O,P; 31 C-F; 13; 74 G,I; 64 L; 74 N,O; 25; 21; 65	313
	Obj: To carry out comprehensive research on the geology of uranium and thorium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium and thorium resources; (2) provide guidelines for their discovery; (3) provide advice to government for nuclear energy policy and related matters.							
750011	Geology, petrology and economic potential of the anorthositic suite in southern Labrador	Emslie, RF	P	-	PET	Nfld	13 B,C,E,F,G	2421
	Obj: (1) Comparison of rock types, rock and mineral chemistry, and structures with similar features north of the Grenville Front; (2) Estimation of the grade of regional metamorphism in this part of Grenville Province, (3) Determination of age of the anorthositic suite of rocks; (4) Investigation of the economic mineral potential of the anorthositic rocks.							
750014	Stratigraphy and sedimentation of the Proterozoic Rapitan Group and related rocks, Mackenzie and Wernecke and Ogilvie Mountains	Eisbacher, GH	C	-	GR	BC Mack Yk	95 L,M; 105 P; 106 A, B,C,D,E,F	2421
	Obj: To determine sedimentology, structural framework and metallogenic significance of the various facies of Hadrynian clastic successions to derive a qualitative model of relative mineral potential in Mackenzie, Wernecke and Ogilvie Mountains.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750015	Stratigraphy of the Takla Group, northwestern B.C. Obj: To determine the sedimentology, stratigraphy, structural style, and metallogeny of the Lower Mesozoic rocks as a basis for evaluating the tectonic evolution and the relationship of the metal deposits to stratigraphy.	Monger, JWH	C	-	GR	BC Yk	94 C,D,E; 104 B,G, H,I,J,K; 105 D; 115 A	2421
750017	Stratigraphy and correlation, Lower Paleozoic subsurface, Arctic Islands Obj: (1) Comparison and correlation of different sets of nomenclature; (2) Outline of regional facies changes and paleogeography; (3) Outline areas with hydrocarbon potential in lower Paleozoic rocks.	Mayr, U	ISPG	RG	AI	Frank	49 C; 58 D-H; 68 D,E, G,H; 78 E-H; 88 E-H; 89 B,C	2421
750018	Stratigraphic and sedimentological studies of Lower Cretaceous rocks, Rocky Mountain Foothills and Front Ranges, Alberta and British Columbia Obj: To describe the Lower Cretaceous stratigraphic succession, to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the distribution and continuity of coal seams throughout the region; to attempt to determine criteria useful in determining the sub-environments in which deltaic sediments were deposited; and to eventually provide a regional geological model that will be of assistance in determining the potential coal resources of these and other regions.	Gibson, DW	ISPG	CG	CG	BC Alta	82 G,J,O; 83 C	2462
750019	Structure and stratigraphy of Paleozoic and Lower Mesozoic rocks in Halfway River Map-area, Northeastern British Columbia Obj: To revise Halfway River map-area (94B) at 1:250 000 scale (including subdivision of Triassic strata); to map 94 B/3, 4, 5, 6, 11, 12, 13, 14 at 1:50 000 scale and to study in detail the structure and stratigraphy of this area and its relation to adjacent areas; to determine the regional stratigraphic and structural setting of Pb-Zn mineralization in the area; to help develop models for the stratigraphic and structural evolution of this portion of the Rocky Mountains.	Thompson, RI	C	-	GR	BC	94 B	2421
750020*	Carboniferous biostratigraphy in the northern Yukon, British Columbia, and Alaska Obj: To extend the Carboniferous biostratigraphy of the Sverdrup-Basin, utilizing ammonoids, into northern Yukon, Alaska, Alberta and British Columbia in order to better interpret regional stratigraphy and paleoenvironments.	Nassichuk, WW	ISPG	P	Map	Yk BC	116 C,I; 92 F	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750021	Development of programs for Kremp File and Dinoflora GSC palynological data files Obj: Assist in the development and execution of the Kremp and other palynological computer files.	Hopkins, WS	ISPG	P	MiP	-	-	2431
750023	Methodology of petroleum resource evaluation Obj: To provide a reliable, effective and statistically valid methodology for estimation of resource abundance.	Lee, PJ	ISPG	PG	PR	-	-	311
750024	Petroleum geology of Tertiary, Mesozoic and Paleozoic strata north of 70° Obj: To provide a reliable and adequate data base for assessment by the Energy Subcommittee of the area's hydrocarbon potential and to document proven and potential hydrocarbon occurrences in the area.	Densmore, AA	ISPG	PG	PR	Frank	37-39; 47-49; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560	2461
750025	Petroleum Geology of Tertiary, Mesozoic and Paleozoic north of 68° on the NWT and Yukon mainland and offshore Obj: To provide a reliable and adequate data base for assessment by the Geological Potential Subcommittee of the area's hydrocarbon potential and to document proven and potential hydrocarbon occurrences in the area.	Recruit	ISPG	PG	PR	Mack, Yk	97, 107, 117	2461
750027	Diagenesis of organic matter and clay minerals in sediments in relation of petroleum generation Obj: To correlate the various methods of determining the diagenesis of sediments in relation to oil and gas potential so that the accuracy of each can be determined. To define the ranges in which petroleum generation can be expected in each method. To examine the relationship between clay diagenesis, oil migration and cementation of petroleum reservoirs.	Foscolos, AE	ISPG	PG	GC	Frank, Mack BC Alta	94 M,N; 107 E; 97 B,C; 72; 73 E; 82; 83 B,G,H	2461
750032	Digital Compilation Software Development Obj: To improve the computational and user efficiency and increase the generality of software for the compilation and mapping of aerogeophysical data.	Holroyd, MT	RG	GG	GDP	-	-	2416
750034*	Mineralogy of nickel deposits in serpentinitized ultramafic rocks Obj: To supplement the study of the geology of nickel deposits by carrying out comprehensive research on the mineralogy and petrology of serpentinitized ultramafic rocks known to contain low grade nickel deposits.	Duke, JM	EG	-	MDG	Que Ont Man	31 E,L; 32 C,D; 52 B 21 E; 63 D; 64 C; 42 A	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750035*	Biostratigraphic study of Mesozoic rocks in the Intermontane and Insular Belts of the Canadian Cordillera Obj: To determine the biostratigraphic succession of the Mesozoic strata, particularly Jurassic, and to define a geological history and paleogeography in the evolution of the Mesozoic model.	Tipper, HW	C	-	GR	BC Yk	92 H,L; 93 E; 94 D; 103 C,F,G; 104 H-K; 105; 115	2421
750036	Silurian and Devonian spores of Canada Obj: To refine palynological methods of dating and correlating Silurian and Devonian rocks of Canada, by (a) identifying and describing Silurian and Devonian spores, (b) determining their value in terms of regional and world wide biostratigraphy and (c) establishing stratigraphic reference sections and zonations for spores in Silurian and Devonian sedimentary basins in Canada.	McGregor, DC	ISPG	P	OP	Frank	-	2431
750037*	Radar Sounding for Geological Mapping Obj: To develop radar sounding methods for applications to surficial and engineering geology using surface and borehole techniques.	Recruit	RGG	TG	EM	Ont Man	31 K/3; 52 L/4, 62 I/1	2435
750038	Pleistocene-Holocene Basin sedimentation Obj: (1) Describe the Pleistocene-Holocene sedimentary history of the continental shelves of eastern Canada using paleontological and geochemical evidence of sedimentary basins. (2) Improve the understanding of the genesis of gaseous hydrocarbons in sediments. (3) Establish geological environments favorable for the preservation of microfossils.	Vilks, G	AGC	EMG	PEC	NS	21 B	244
750039	Geochemical Information System Obj: To provide a liaison between the available data processing facilities and scientists within the geochemistry sub-division to design, implement and document systems to facilitate the expeditious computer processing of machine readable geochemical data, and to manage the archiving of such data.	Eilwood, DJ	RGG	RGC	MD	-	-	2465
750043*	Consulting advice on conservation and restoration of coastal environments Obj: To provide consultation and expertise on environmental problems in the coastal zone of the Maritimes. This advice is to be provided in response to specific requests.	Reinson, GE	AGC	EMG	GCD	-	-	296

2422

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LSS

AGC RR

Fillon, RH

Late Cenozoic Paleooceanography
of the Labrador Sea

Obj: Study of Hudson cores will provide information on detailed paleoclimatic fluctuations over the 100,000 to 200,000 years of Late Pleistocene-Recent sedimentation. Detailed knowledge of past changes in climate, glaciation and ocean circulation is useful for achieving several major goals. It will permit stratigraphic correlation to be made with areas outside the Labrador Sea. Stratigraphic correlation between the deep sea and the continent. To define the time sequence of glacial climatic and eustatic events on the Labrador Shelf.

244

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OGC

AGC EMG

Rashid, MA

Geochemical transformations and
reactions of organic compounds
in recent marine sediments

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

244

21 P

NB

EMG

AGC

Buckley, DE

Multidisciplinary environmental
marine geological analysis of
the Miramichi Estuary and Bay

Obj: To examine, understand and portray the links between physical, biological and chemical processes in the marine geological setting of a coastal environment; to compile this information in a format which provides a basis for environmental assessment and planning of resource development; to develop interdisciplinary research methods which contribute to improved scientific methods and technology.

2421

74 N

Sask

SG

P RG

Davison, WL

Milliken Lake - Goldfields
mining area, Saskatchewan

Obj: To fill in gaps outstanding in map-coverage of the Beaverlodge uranium area.

Project Number Title Project Leader Div Subdiv Sec Prov NTS

750051* National geochemical reconnaissance Hornbrook, EHW RGG RGC RS NB NS
Mfld Ont
Sask BC
Yk Frank
Pts 1-16; 23; 27; 37;
41; 42; 52 A,B; 74 J;
104; 105; 117
2463

Obj: To provide for industry high quality, multi-element, reconnaissance exploration data to indicate areas of highest potential for uranium and other mineral commodities; to provide governments with nationally consistent, systematic data to assist in resource appraisal for uranium and other minerals; to provide information on the natural abundance of elements, including toxic elements, in the environment.

750053 EDP systems and applications Holroyd, MT RGG RG GDP - 2463
Obj: To carry out or supervise the design, development and documentation of various computer software for use by the division or branch, in order to efficiently and fully utilize the available computer facilities.

750055* Structural studies in the Mackenzie Arc, Franklin Mountains and Colleville Hills Cook, DG ISPG RG M Yk Mack
82 N,O; 94 N; 96 E;
106 A,B; 95 C,K,L,M,N
105 P
2421

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

750058* Geology of Uranium Resources of Canada-2 Tremblay, LP EG - URE Sask Que
73; 74; 22; 23; 24;
31; 32; 33
313

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

750061 Lower Paleozoic geology of Eastern Canada Sanford, BV P - SP Ont Que
31 F,G
2421

Obj: (1) To continue detailed and regional studies of Lower Paleozoic terrain of eastern Canada,
i) in northern and eastern offshore regions, reconnaissance mapping on an opportunity basis and
ii) in the southern regions, detailed mapping when required for terrain studies.
(2) To study all data that become available from petroleum exploration for purposes of hydrocarbon evaluation of the frontier basins.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750063*	Quaternary geochronology, Arctic Islands	Blake, W, JR	TS	-	PG	Frank	25-28; 29 F; 35-38; 39 B, C, E-H; 47-48; 49 A, B, D, E; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560	2433
	Obj: (1) To establish a chronostratigraphic framework for Quaternary time in the Arctic Archipelago. (2) To investigate the suitability of other methods of age determinations, especially those beyond the range of ^{14}C . (3) To determine rates of crustal movement. (4) To reconstruct environments and events for as much of Quaternary time as possible.							
750064	Regional synthesis, southern Superior Province and eastern Southern Province, Project I	Frarey, MJ	P	RG	SG	Ont Que	31, 32, 41, 42	2421
	Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and economic aspects of the region.							
750067	Jurassic stratigraphy, bio-stratigraphy and paleontology of northern Yukon and adjacent District of Mackenzie	Poulton, TP	ISGP	P	MaP	Yk Mack	106; 107; 116 P; 117	2431
	Obj: A detailed and comprehensive biostratigraphic, lithostratigraphic, paleoecologic, and paleogeographic scheme of the pre-Upper Oxfordian Jurassic rocks of the Yukon Territory north of 65°N, and adjacent areas of District of Mackenzie, and a rigorous description of the most important faunal elements of the Jurassic.							
750068	CIDA Liaison and Project Coordination	Manistre, BE	RG	-	SP	-	-	296
	Obj: To provide assistance in technical matters to CIDA in connection with Geoscience Aid Projects under the terms of the EMR/CIDA Memorandum of Understanding. Liaison with the EMR Liaison Branch Planning and Evaluation and with the Commonwealth Science Council through the interdepartmental CSC committee.							
750069*	Geology of uranium resources of Canada 3	Bell, RT	EG	-	URE	BC Yk Mack Alta Sask Man	93 K, L, M, N; 94 C, D, E; 104-G, H, K; 105 B, C; 115 N, O; 116 B, C	313
	Obj: To carry out comprehensive research on the geology of uranium deposits in sedimentary basins in Canada west of the Canadian Shield in order to: (1) provide or support geologically based estimates of Canada's uranium resources; (2) provide guidelines for discovery of deposits; (3) provide advice to government for uranium policy and related matters.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750070*	Synthesis of Quaternary geology, Great Plains of Canada Obj: To coordinate and oversee publication of a project to synthesize present knowledge of the Quaternary of the Great Plains of Canada, including surficial deposits, geomorphology, historical geology, chronology and stratigraphy, invertebrate and vertebrate paleontology, tephra, soils, pollen, archeology.	Stalker, AM	TS	-	RP	BC Alta Sask Man	62, 63, 64, 72, 73, 74, 82, 83, 84, 93, 94	2422
750071	Quaternary geology-terrain inventory, Boothia Peninsula northeastern Keewatin, and Somerset and Prince of Wales Islands Obj: To map, describe, and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover in order to provide areal knowledge of geology and terrain as background information relative to land use planning and various aspects of engineering construction to gather information pertinent to the Quaternary history of the area.	Dyke, AS	TS	-	RP	Kee Frank	57 A,B,C,D,F,G; 67 E,H; Pts 58 A,B,C, D,F; 68 A-E	2413
750072	Quaternary geology, terrain inventory, northeastern Manitoba Obj: To map, describe and explain the unconsolidated deposits, landforms, permafrost, ground ice and organic cover in order to provide areal knowledge of geology and terrain as background information relative to land use planning and engineering construction, to provide data relative to terrain sensitivity rating and to determine the Quaternary history of the region.	Dredge, LA	TS	-	RP	Man	54 E,F,K,L, M; 64 I, J,K,L,M,N,O,P	2413
750074*	Uranium drift prospecting techniques; Klassen, RA Lower Kazan River area Obj: To study glacial and postglacial processes that can affect the geochemical properties of till and other sediments and to investigate the use of till in mineral exploration for uranium and other metals.	Klassen, RA	TS	-	SMT	Kee	55 M,N,L; 56 C,D; 65 P,I,O; 66A	244
750076*	Quaternary geology of the Canadian Cordillera Obj: To gather and synthesize information regarding Quaternary deposits, stratigraphy, geomorphology and chronology of the Canadian Cordillera.	Fulton, RJ	TS	-	RP	BC Yk Alta, Mack	82; 92 G; 93; 103	2422
750077	Hydraulic, morphologic and morphometric studies of selected rivers along the Mackenzie Highway Obj: To identify and assess natural change through time in the channel and hydraulic characteristics of selected gravel streams along Mackenzie Highway, and to identify and assess the impact of Mackenzie Highway construction on the channel and hydraulics characteristics of the same rivers.	Egginton, PA	TS	-	SMT	Mack	95 O,J; 96 C,E; 107 B	244

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750078*	Quaternary geology-terrain inventory, Prince Rupert-Terrace, Smithers area Obj: To map, describe and explain the unconsolidated deposits and landforms in order to provide a real knowledge of geology and terrain as background information relative to forestry, land use planning, urban and industrial development and various aspects of engineering construction and to determine the Quaternary history of the region.	Clague, JJ	TS	-	RP	BC		Pts 93 L,M; 103 B,C,F, G,J,K,I,P 2413
750079	Fluvial and mass wasting processes, Banks Island Obj: To undertake fluvial process studies in northern areas, with supporting studies in southern rivers where data bases are more extensive. Specific topics include long term bank erosion studies, hydraulic and geomorphic variability of homogeneous river reaches, and historical effects on river channel behaviour.	Day, TJ	TS	-	GP	Frank	88, 97, 98	244
750080	Gravel stream beds Obj: To study the formation of an armour, or surface pavement, on coarse sediment mixtures under known flow conditions, to define the relationships between the imposed hydraulics and parent sediment properties to the morphology, fabric and size distribution of the armour layer, and to evaluate the hydraulic resistance properties of the stabilized channel bed.	Day, TJ	TS	-	GP	-	-	244
750082*	Structural analysis of the Fernie Basin Obj: To establish a detailed structural model of the Fernie Basin, and in particular to elucidate the structural behaviour of coal as an element of the sedimentary succession as an aid to the evaluation of the coal resources of the Fernie Basin.	Ollerenshaw, NC	ISPG	CG	CG	BC	Pts 82 G	2462
750083	Mesozoic stratigraphy and Basin analysis of the Western Queen Elizabeth Islands, Arctic Archipelago Obj: 1. To determine regional stratigraphic relationships within the Mesozoic strata. 2. To determine environments of deposition of the strata. 3. To determine the geologic history of the western Sverdrup Basin during the Mesozoic. 4. To assess the economic potential of the Mesozoic strata.	Embry, AF	ISPG	RG	AI	Frank	69, 79, 87, 99	2421
750085	Stratigraphy, sedimentology and diagenesis of Paleozoic rocks in the Mackenzie Mountains and northern Rocky Mountains Obj: 1. Revision of Silurian, Devonian and Carboniferous stratigraphy of the Mackenzie Mountains and northern Rocky Mountains leading to an improved understanding of shelf, slope and basinal facies and their potential for base metal mineralization. 2. The determination of a more precise location for the shelf-to-basin transition in these rocks which may, in itself, provide a guide to mineralization. 3. Analysis of diagenetic events reflecting burial and post-burial fluid movements that have affected this sequence, both with respect to mineralization and hydrocarbon generation and emplacement.	Morrow, DW	ISPG	RG	M	Yk BC Mack	94; 95 K,L,M,N; 96 C, D,I,P; 105; 106 A,B,G,H	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750088*	Investigations concerning the optical properties of coals and dispersed organic materials Obj: To provide information on metamorphism and petrographic properties of coal and dispersed organic matter for the GSC geologists, the data to be used for establishing metamorphic regimes for correlation of coal seams and other rock bodies and for estimating paleotemperatures and burial depths. Largely a service project.	Kalkreuth, WD	ISPG	CG	CT	BC	82 G; 93 O,P	2462
750089	Planning, directing and coordinating coal resource evaluation programs Obj: To develop and maintain resource evaluation systems for Canadian coal deposits upon which authoritative advice and information can be based, and to perform administrative duties as Head of the Resource Evaluation Section	Latour, BA	ISPG	CG	RE	-	-	312
750092*	Mesozoic stratigraphy and basin analysis of Eastern Sverdrup Basin, Arctic Archipelago Obj: To provide a thorough understanding of the geological history of the Eastern Sverdrup Basin, stressing the inter-relationships of tectonics, sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region.	Embry, AF	ISPG	RG	AI	Frank	29; 39; 49 C,F,H; 59 D, E,H; 69; 79 E,H; 120 F; 340 B,D; 560 D	2421
750093	Compilation and evaluation of geologically oriented data on industrial mineral resources of Canada Obj: To marshal and appraise in-house data on industrial minerals; to keep abreast of current activity in the field of industrial minerals for the purposes of improving the bank of technical information; to maintain a watching brief and to detect subjects on which the GSC may expect demands for information and advice.	Moyd, P	EG	-	SP	-	-	2466
750094*	Development of computer-based statistical techniques applicable to regional geological and mineral deposit data Obj: Develop and apply statistical techniques as an input to methods for regional resource evaluation of geological data and mineral deposit data	Chung, CF	EG	-	GM	-	-	412
750095	Microscopic study of pyrite in main seams of Sydney coalfield, Nova Scotia Obj: Determine the mode and distribution of pyrite in coal, and if possible, establish geological trends that may permit prediction of high sulphur areas ahead of present (submarine) workings.	Hacquebard, PA	AGC	EPG	-	NS	11 K,G	2462

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classi- fication
750096*	To advise the Cape Breton Development Corporation on coal geology for its operation in the Sydney coalfield Obj: To provide geological information as an input in the planning of new mines, and to interpret geological features in present underground workings as an aid to continued mining developments.	Hacquebard, PA	AGC	EPG		NS	11 K,G	296
750098*	Metallogeny of the southwestern part of the Canadian Shield Obj: To provide a regional synthesis of the geology of a large part of the Canadian Shield south of Lat. 60° and west of Long. 25°, in order to determine the origin, setting and distribution of mineral deposits as an aid to prospecting and to the economic development of the region.	Franklin, JM	EG	-	MDG	Man Sask Ont Frank Kee Mack	42, 43; 52, 53, 54, 62, 63, 64, 73, 74	2465
750100	Regional Synthesis - Baffin Island Project II Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.	Morgan, WC	P	RG	NC	Frank	Pts 25, 26, 36, 16, 27, 37, 47, 38, 48, 39, 49	2421
750102	Regional syntheses, southern Keewatin, Project I Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.	Eade, KE	P	RG	NC	Kee	65 C	2421
750103	Regional Synthesis - Bear and Slave Province, Project I Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related aspects of the region.	Frith, RA	P	RG	BS	Mack	Pts 75, 85; 76 F,G, 86 B	2421
750108*	Marine surficial geology and sedimentation, British Columbia Obj: In order to provide the sedimentological framework and geological perspective for environmental concerns and landmass description: (1) map, describe and explain in a systematic manner the physiography, surficial deposits, processes and history of the Pacific continental shelf, slope, deep sea, straits, and fiords of British Columbia; (2) determine the composition, distribution, transport mechanisms and flux of suspended particulate matter in the marine waters off the British Columbia coast.	Bornhold, BD	C	-	MG	BC	-	2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750110	Federal-Provincial mineral evaluation liaison and co-ordination Obj: To provide technical advice and liaison on the Geological Survey's involvement in the design and monitoring of joint federal-provincial actions in mineral resource evaluation and development; to participate, as required in the co-ordination, implementation, and management of such projects and specifically in the Non-Renewable Resource Evaluation Program (NREP).	Findlay, DC	EG	-	SP	Man Sask	-	296
760004	Mineralogy and geochemistry of the unconsolidated cover - central Arctic Obj: 1. To use mineralogical and chemical criteria to define weathering in the active layer of surficial deposits in Arctic regions. 2. To relate information on weathering products and processes to problems in i) geochemical prospecting, ii) northern construction, and iii) waste disposal.	Adshead, JD	TS	-	SMT	-	-	244
760005	Environmental geology of eastern Arctic Coasts Obj: To investigate and describe central Arctic coasts based on consideration of bedrock stratigraphy and structure, Quaternary deposits and events, physiography and bathymetry, sediment input, sea ice dynamics, ocean tides, currents and waves, and other pertinent factors in order to establish a system for coastal description as baseline information for proposed energy/mineral resource development.	McLaren, P	AGC	EMG	CGD	-	-	244
760008*	Géologie du Quaternaire région de Bathurst-Campbellton, Nouveau Brunswick Obj: Cartographier, décrire et expliquer les dépôts meubles et formes de terrain, en intégrant des informations reliées à la planification territoriale, l'exploration minérale, la localisation des ressources granulaires, les eaux sous-terraines, la foresterie, le développement urbain et industriel. Le travail final comportera une synthèse de l'histoire quaternaire régionale.	(Gauthier, RC)	TS	-	RP	NB	21 N,O,P	2413
760010	Surficial geology, geomorphology and terrain inventory of the Ringnes and adjacent islands Obj: To map, describe and explain surficial materials, landforms and active processes, in order to provide base data necessary for land management, for engineering studies and to determine the Quaternary history of the region.	Hodgson, DA	TS	-	RP	Frank	49, 59, 69, 79, 560	2413
760012	Surficial geology-terrain inventory, north-central Keewatin Obj: To map, describe and explain the surficial materials, landforms, permafrost and ground ice to provide areal knowledge of geology and terrain as background information relevant for land management and engineering studies and to determine the Quaternary history of the area.	Thomas, RD	TS	-	RP	Keew	56 E,F,K,L,M,N; 66 I; pt. 66 H	2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760014*	Geology of uranium resources of Canada-4	Dunsmore, HE	EG	-	URE	NS NB PEI Nfld Frank Que	11 D, E, F, G, J, K, L, N, O; 12 A, B, H; 20 O, P; 21 A, B, G, J, N, O, P	313
	Obj: Comprehensive research on the geology of uranium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium resources; (2) provide guidelines for their discovery; (3) provide advice to government for uranium policy and related matters.							
760015*	Eastern Baffin Island shelf bedrock and surficial geology mapping program	MacLean, B	AGC	RR	EA0	Frank	Pts 15, 16, 17, 25, 26, 27, 28, 38	2414
	Obj: To investigate and map the geology and near surface structure of the rocks occurring at the pre-Pleistocene unconformity on the eastern Baffin Island shelf and adjoining areas. To obtain geophysical data to put bedrock and surficial data in a regional context and to check the validity of geophysical interpretation against bedrock sample data. To investigate the distribution and geological history of the unconsolidated sediments on the eastern Baffin Island shelf and adjoining shelf areas.							
760016	Geochemical Technology Development	Bristow, Q	RGG	RR	ANI	-	-	2465
	Obj: The adaptation and development of advanced technology both in-house and under contract for more rapid and accurate acquisition of conventional forms of geochemical data and the measurement of new parameters, hitherto difficult or impossible by conventional techniques. The publication and/or licencing of technology so developed for rapid and effective transfer to industry.							
760018*	Stratigraphy and sedimentology of Blairmore Group and equivalent strata in Alberta and northeastern B.C.	Recruit	ISPG	CG	CG	Alta BC	Pts 83 B, C, E, F, L; 93; 94	2462
	Obj: Evaluation of the regional lithostratigraphy and sedimentology of the Blairmore Group with emphasis on the correlation and origin of coal seams and their relationship to associated sediments. The project is being expanded into northeastern British Columbia to include similar studies of the Bullhead Group and Lower Fort St. John.							
760021*	Structure and stratigraphy of Devon Island and Vendom Fiord map-area, Ellesmere Island	Thorsteinsson, R	ISPG	RG	AI	Frank	48 F, G; 58 F, G, E, H; 59 A; 49 A	2412
	Obj: To delineate the stratigraphy and structural history of Devon Island and Vendom Fiord map-area with a view to helping assess the size, grade, mode of occurrence, origin and potential of mineral deposits that may occur there.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760022*	Earth science inventory of National Parks Obj: To provide an inventory of earth science data to: a) enable Park planners to design the infrastructure of the parks (e.g. roads, paths, buildings, and water supply) and b) to provide information on interesting scientific aspects of development for visitors.	Cumming, LM	EG	-	-	NS	21 A; 12 G,H; 22 A; 2M	296
760023*	Precambrian geology of south-east Ellesmere, Devon and Cobourg Islands Obj: To complete the reconnaissance geological mapping of the northern Churchill Province.	Frisch, T	P	RG	NC	Frank	Pts. 38 B; 39 B-H; 48 E-H; 49 A,B,D,E,H	2411
760024	Keskarrah Bay map-area, District of Mackenzie, NWT Obj: To determine the extent and significance of Archean basement rocks in the area; to identify stratigraphic control of base metal mineralization to improve understanding of iron formations and their significance in the region; and to obtain a better understanding of the evolution of an Archean basin in the Slave Province.	Henderson, JB	P	RG	BS	Mack	86 H/2,3,6,7	2421
760025	Geology of Amer Lake map-area District of Keewatin, NWT Obj: To provide a comprehensive study of the Amer Lake map-area in order to refine and update the 16-mile reconnaissance mapping of that area.	Heywood, WW	P	RG	NC	Kee	66 H	2412
760026	Geology of Penrhyn Fold Belt, Melville Peninsula, NWT Obj: To determine the structural, metamorphic, stratigraphic and age relations between basement gneisses and migmatites, and the covering Penrhyn Group metasedimentary gneisses and schists. To elucidate the structural development of polyphase folds in an area of high-grade metamorphic rocks. To provide structural-stratigraphic and isotopic age bases for regional correlation.	Okulitch, AV	ISPG	-	AI	Frank	46 O,P; 47 A	2421
760027*	Redbed sequences in Canada Obj: To determine the origin and sedimentological and tectonic processes that yield redbed sequences; to determine the influences of climate, topography, weathering, sedimentation and diagenesis on their origin; and to determine the processes which contribute to the concentration of economic minerals in redbed sequences.	Chandler, FW	P	-	PET	Man NS	63 K; 11 K	2421
760028	The geology of southeast Baker Lake, NWT Obj: To provide information on the origin and relationships of a heterogeneous group of plutonic and metamorphic rocks.	Schau, M	P	RG	NC	Kee	56 C,D	2421
760029*	Huntec Seabed Project Obj: Development and application of high resolution vertical incident acoustic reflection data for the quantitative classification of marine sediments.	King, LH	AGC	RR	SBG	-	-	2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760030	Surficial geology and paleogeology of Sagtek Bank, Labrador Shelf	Fillon, RH	AGC	RR	LSS	-	-	2415
760037	Regional subsurface geology, continental shelf and slope, offshore Labrador, Baffin Island and related areas	Umpleby, DC	AGC	EPG	RSBS	Nfld Frank	2, 3, 13, 14, 15, 16, 27, 28, 29, 30, 39, 120	2421
760038	Biostratigraphy and paleoecology (paleontology) of Mesozoic and Cenozoic of the Atlantic Shelf	Bujak, J	AGC	EPG	SS	NS Nfld	1, 2, 3, 10, 11, 12	2431
760039	Study of the structure and origin of Baffin Bay	Falconer, RKH	AGC	RR	EA0G	-	-	2417
760042*	Jurassic biostratigraphy of selected areas of western and Arctic Canada	Poulton, TP	ISPG	P	MaP	BC Alta YK Frank	82 J; 83; 92 H; 93; 94; 103; 104; 105 D; 106 D; 107; 115; 116 A, B, C; 49; 59; 69; 79; 89; 340; 560	2431

Obj: To understand recent sedimentary processes and hydrodynamic regime, and iceber movement across bank; to learn pattern of glacial movement across onto bank and history of sedimentary processes (post-glacial); to delineate separate phases of glacial cycles as recorded in cross sectional structure; to relate findings to glacial history of Canada, and findings to worldwide glacial-deglacial cycle; to relate findings to the problem of whether an ice sheet-ice shelf complex ever existed in Baffin Bay-Labrador Sea and when, and to paleo-oceanography of Labrador Sea, North Atlantic and Arctic Ocean.

Obj: To investigate the geological framework of the Labrador Sea-Baffin Bay areas; to analyse the sedimentary sequences off Labrador and Baffin Bay; to assess the hydrocarbon potential of this area.

Obj: Refinement of the Mesozoic-Cenozoic palynological zonation, already established for the Scotian Shelf Grand Banks, and Labrador Shelf. Comparison of palynomorphs from offshore Eastern Canadian wells with coeval assemblages from other Atlantic margins, the Atlantic Basin and other related areas. Determination of the environmental significance of dinoflagellate cyst distributions and the biogeography through time. Studies of organic type (kerogen) and maturation where relevant.

Obj: Analysis of bathymetric, gravity, magnetic, seismic reflection and refraction, bedrock samples and sediment sample data from offshore and geological and geophysical data from onshore to determine the structure and origin of Baffin Bay.

Obj: (1) To provide detailed biostratigraphic and lithostratigraphic data on Jurassic rocks of selected parts of British Columbia, Alberta, Yukon Territory and Arctic Islands where other geologists are conducting field work.
 (2) This project is intended to support and complement the work of regional mapping geologists by field studies in the areas concerned. In this context, the scope and objectives of the project will vary somewhat from year to year.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760043*	Regional geochemistry Newfoundland & Labrador	Boyle, DR	RGG	RGC	RS	Nfld	13 J, K, N	2463
	Obj: 1. Illustrate the effectiveness of NGR regional geochemical surveys in providing a data base adequate for mineral exploration and mineral inventory studies. 2. Develop a geochemical survey methodology appropriate to the Newfoundland and Labrador geological contexts.							
760044*	Regional geochemistry-Southern Canadian Shield	Coker, WB	RGG	RGC	RS	Sask Man Ont	31 C, F; 42 D, E; 52 A, H; 64 E, J, K, L, N, O; 74 I	2463
	Obj: (1) To assess, through regional orientation surveys, the use of various geochemical sample media, as a fundamental step in the development of geochemical survey procedures appropriate to the project area; (2) to illustrate through detailed surveys, interpretation and follow up activities, the effectiveness of such survey apparatus, as a means of stimulating mineral exploration within the project area; (3) to provide a data base for the compilation of a National Geochemical Reconnaissance Map as a contribution to the mineral potential inventory of the nation.							
760045*	Evaluation of Uranium Reconnaissance Data	Charbonneau, BW	RGG	RR	ADI	Ont Frank NS	42; 31; 21; 11	2463
	Obj: (1) To develop guidelines for interpretation of Uranium Reconnaissance Program data; (2) to identify features in reconnaissance data that are diagnostic of mineralization; (3) to maximize the usefulness of URP data; (4) to correlate URP data with uranium resource potential.							
760047*	Regional geochemistry-Northern Canadian Shield	Maurice, Y	RGG	RGC	RS	Mack Kee Frank	76 H, I; 75 E, F, K; 46 N, O, P; 47 A, B, E, F	2463
	Obj: To determine the nature and factors affecting the distribution of trace elements within bedrock, overburden and stream and lake waters and sediments, etc. in order to: (1) evaluate the effectiveness of the NGR program (project 750051) and improve the operating techniques and specifications; (2) provide methodology for interpreting and following up NGR reconnaissance results; (3) assess the mineral potential of various regions and rock units with emphasis on granitoid rocks.							
760048*	Radiation instrumentation	Bristow, Q	RGG	RR	ANI	Ont Sask	31 C, F, J; 41 J; 40 I; 73 B	2463
	Obj: The adaptation and development of advanced technology, both in house and under contract for more rapid and comprehensive acquisition of radiometric data in various portions of the electromagnetic spectrum, in both laboratory, airborne, surface and subsurface situations. The publication and/or licencing of technology so developed for rapid and effective transfer to industry.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760049	Gamma-Ray Laboratory Operations Obj: To provide analytical facilities for the determination of K, U, and Th in geological samples, and for the determination of radioactive disequilibrium in rock samples; to provide adequate standards for calibration of the lab as well as standards for the various calibration facilities constructed; to provide a data storage and retrieval system related to the analytical results produced by the laboratory.	Cameron, GW	RGG	RR	CMC	-	-	2463
760053	Hydrocarbon geochemistry of Arctic Archipelago Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product type so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.	Powell, TG	ISPG	PG	GC	Frank	98, 88, 78, 68, 58, 99, 89, 79, 69, 59, 49, 560, 340	2461
760054	Hydrocarbon geochemistry of Canadian East Coast offshore Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product type so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.	Powell, TG	ISPG	PG	GC	Nfld NB NS	14, 3, 10, 11, 20	2461
760055	USSR/Canada Exchange - Hydrocarbon Geochemistry Obj: To exchange information on methods of geochemical investigations of oil, gas and organic matter and application of their results to explorations and resource assessment. To gain a broader knowledge of geochemical criteria for petroleum generation and accumulation in various geological settings.	Powell, TG	ISPG	PG	GC	-	-	2461
760056	Evaluation of coal deposits of western Canada Obj: To establish a coal resource base in the coal deposits of western Canada from which quantitative, qualitative, mineability and environmental studies can be made.	Graham, PS	ISPG	CG	RE	Alta BC	82 J; 92 O; 93 B,C,G;	312 83 A
760057*	IUGS Secretariat Obj: 1) To maintain communication among the 82 member countries in IUGS and the Executive Committee, Council, 6 Commissions, 5 Committees, 19 major Subcommissions and 14 Affiliated Organizations. 2) To promote the general scientific objectives of IUGS and to foster and co-ordinate activities designed to attain these objectives. 3) To co-ordinate co-operative activities or establish liaison among international organizations such as UNESCO, ICSU and other Unions and joint programs (such as ICGP). 4) To carry out directives of the Executive Committee of IUGS. 5) To compile and produce the quarterly publication, <u>EPISODES</u> and all other official IUGS publications and brochures.	Hutchison, WW	D60	-	IUGS	-	-	296

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760058*	Vegetation distribution and relationships to surficial materials-Arctic Obj: To map and describe vegetation distribution and plant communities as they relate to selected areas of the Arctic Islands.	Edlund, SA	TS	-	RP	Frank Kee Man	54; 56; 57; 58; 68; 69; 78 F,G; 79; 88 E	2413
760059*	Study of large landslides in the Cordillera Obj: To determine the setting and mechanisms of major slope failures in selected parts of the Cordillera to establish criteria for assessing potential landslide regions and specific localities.	Eisbacher, GH	C	-	GR	Mack Yk BC	93 D; 106 C,F; 95 L,M; 94 F,K; 105; 116	244
760060	Probability models for estimating mineral potential and for geoprocessing Obj: To develop statistical methods employing geological information to assess the probability of occurrence of specific types of mineral deposits in geographically delineated areas and to design quantitative methods for the integration and processing of various types of geoscience data.	Agterberg, FP	EG	-	GM	-	-	412
760061*	Regional synthesis of the Grenville Province in Ontario and western Quebec Obj: To effect a regional synthesis of the geology of the Grenville Province in Ontario and western Quebec and to interpret the synthesis in terms of the geological evolution of the area, and in cooperation with project 750062, of the Grenville Province as a whole.	Davidson, A	P	RG	SG	Ont Que	31 E,F; 41 H; 32	2421
760062*	Geology of bedded phosphate deposits in Canada Obj: To identify Canadian phosphate resources and to develop an understanding of the regional geology relationships: patterns and occurrences, facies, paleogeography, etc.	Christie, RL	ISPG	RG	AI	Alta, BC Yk	-	2466
760063	Hydrocarbon geochemistry of northern interior plains and Beaufort Sea Obj: To determine presence or absence and quality of petroleum source rocks and petroleum product types so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.	Snowdon, LR	ISPG	PG	GC	Yk Mack	106, 107, 117	2461

2465

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SP

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EG

Gross, GA

Geology of Mineral Resources in the Ocean

Obj: (1) To provide a base of geological information for identifying and determining the kinds, distribution and possible extent of ocean mineral resources, and for evaluating their significance to Canada.
(2) To provide a direct and independent national competence for evaluating these resources and for appraising implications of their development with respect to Canadian mineral policy and the use and marketing of Canadian mineral products.

2416

32 C; 63 K; 30 L, M, N;
40 G-J

Que Man
Ont NS

GDP

Dods, SD

Digital Compilation of Queenair Aeromagnetic Data

Obj: (1) Production of total field and vertical gradient aeromagnetic contour maps relating to the yearly GSC Queenair airborne survey operations;
(2) Improved modes of presentation of the above data as new computer facilities develop;
(3) An up-to-date bank of the data described above for ready retrieval for interpretation purposes.

2421

pts. of 82, 92, 93,
103, 94, 104, 95, 105,
115 A-C, 106, 116, 117,
114 O, P

BC Yk

.GR

C

Souther, JG

Study of the Cenozoic Evolution of the Western Cordillera

Obj: (1) To compile and publish a review of existing data on the Cenozoic geology of the Cordillera.
(2) To obtain data from selected areas where additional data are required or which illustrate typical relationships.
(3) To publish a series of topical papers based on selected field studies leading to a synthesis of the Cenozoic evolution of the Cordillera.

2421

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SSG

EPG

AGC

Jansa, L

Reconnaissance field study of the Mesozoic sequences outcropping on the Iberian Peninsula

Obj: To provide evidence that the sedimentary sequences of the Iberian Peninsula are co-eval with similar sequences beneath the Grand Banks.

2414

92 C, D, E, L; 102 H, I,
0, P; 103 B, C, F, G, K

BC

MG

C

Yorath, CJ

Stratigraphy and structure of the Pacific Continental Slope and Shelf using manned and unmanned submersibles

Obj: (1) To describe the stratigraphy, biostratigraphy, sedimentology, structure and geochemistry of the stratigraphic successions exposed on the continental slope.
(2) To map the distribution, structure, facies and stratigraphic relationships of rock units beneath the continental shelf.
(3) To incorporate (1) & (2) in the interpretation of geophysical information to obtain an understanding of the tectonic history of the offshore Pacific continental margin.
(4) To determine the petroleum potential of the region.

770012 Geology of the Coronation Gulf area

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

770013 Operation Borden

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

770014 Conference and Publication on the Coast of Canada; littoral processes and shore morphology

Obj: 1. To provide a forum for Canadian scientists studying the morphology, sediments and dynamics of the coastal zone in Canada.
2. To present in a series of formal sessions, results of recent research on the Canadian coastline.
3. To publish the collected papers as a single volume to provide the first overall synthesis of the coastline of Canada.

770015 High Resolution Aeromagnetism (Instrumentation Development)

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

770016 Operation Dease

Obj: i) To complete and update the 1:250,000 geological mapping of Cry Lake and Dease Lake map-areas and N¹/₂ Spatzizi.
ii) To publish reports of field activities and papers on specific aspects of the geology of the region.
iii) To complete and publish a final map and memoir on Cry Lake map-area and a final map and paper on Dease Lake map-area.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770017*	Stratigraphy, structure and metallogeny of the northern part of the Intermontane Belt (Whitehorse trough) in the Canadian Cordillera Obj: To provide data on, and extend our understanding of, the relationships between stratigraphy, structure, sedimentary facies and mineral deposits on the northern Intermontane Belt of central Yukon.	Tempelman-Kluit, DJ	REG	CPM	GR	Yk	105 C,E,L; 115 I	2421
770018*	Regional Seismic Surveys Obj: To determine the thickness, attitude and seismic velocities of sedimentary formations comprising the Lomonsov Ridge, using seismic methods.	Overton, A	RGG	RG	SM	Mack	86 K,M,N,O	2421
770019*	Hepburn Batholith, Hepburn Lake map-area, District of Mackenzie Obj: To provide an analysis of the deposition and deformation within a eugeosyncline, and describe the plutonic and metamorphic character of the batholith, in order to reconstruct the tectonic history and understand the significance of the batholithic-eugeosynclinal belt as a whole, including its mineral deposits.	Hoffman, PF	P	RG	BS	Mack	86 J,O	2421
770020	Kemano Project Obj: To produce a report and geological map of Whitesail Lake (Wk) map-area, on a scale of 1:250,000, with one or more 1:50,000 maps of the most critical areas.	Woodsworth, GJ	C	-	GR	BC	93 E	2412
770022	Regional Synthesis - Northern Keewatin; Project 1 Obj: Regional synthesis of all aspects of the geology of an area in Northern Keewatin. Purpose will be to: (1) compile and evaluate geological data; (2) File supporting data - geological, geophysical, age, air photography, ERTS, geochemistry, etc. (3) File data on exploration activity in region; (4) To have a designated "expert" on this area of the Shield available to Government and Industry.	Heywood, WW	P	RG	NC	Kee	46, 47, 56, 57, 66	2423
770024*	Geology of uranium resources of Canada-V Obj: To carry out comprehensive research on the geology of uranium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium resources; (2) provide guidelines for their discovery; (3) provide advice to government for uranium policy and related matters.	Gandhi, SS	EG	-	URE	BC Mack	86 C,F,K,G,J,L, 85 I, M,N; 75 C,D,E,K,L; 82 M; 46 N; 76 J,N,O	313
770025*	Regional Geochemistry - Yukon Obj: 1) To assess through orientation surveys the use of various geochemical sample media as a fundamental step towards the development of geochemical methodology appropriate to the project area; 2) To illustrate through detailed interpretation surveys the effectiveness of such surveys as a means of evaluating the mineral potential; 3) To provide a data base for the compilation of a National Geochemical Reconnaissance Map as a contribution to the mineral potential inventory of the nation.	Goodfellow, WD	RGG	RGC	RS	Yk BC Mack	105 A,B,H,I,F,O; 106 E; 116 B,L,M,N; 115 G,I,J; 117 A,B,C,D; 95 J,K,N	2463

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770026*	Geology of Red Indian Lake, west half, Newfoundland Obj: (1) To revise the geology and evaluate the economic mineral potential of Red Indian Lake, west half (1/2 A, W ₂) by mapping at 1:50,000 scale and by compilation where needed. (2) To monitor, assess and then absorb results of geological mapping of insular Newfoundland under the Canada-Newfoundland Mineral Development Subsidiary Agreement.	Herd, RK	P	RG	SG	Nfld	12 A	2421
770027*	Proterozoic redbeds of Richmond Gulf Obj: (a) To determine the processes of formation of Proterozoic redbeds and associated metallogenesis; (b) To correlate Richmond Gulf sequence with sequences elsewhere on Canadian Shield.	Chandler, FW	P	-	PET	Que	33 N/15 34 C/1,8	2421
770028	Regional Synthesis - Baffin Island: Project I Obj: Regional synthesis of all aspects of the Precambrian geology of Baffin, eastern Devon and southeastern Ellesmere Islands in the District of Franklin, N.W.T.	Jackson, GD	P	RG	NC	Frank	56-59; 45-49; 34-38; 24-27; 14-16	2423
770030*	Géologie du Quaternaire, région de l'Outaouais supérieur Obj: Cartographe, décrire et expliquer les dépôts meubles formes de terrain, avec objectifs secondaires de: (1) Fournir des données relatives à l'utilisation du sol, à la prospection et localisation de sable et gravier, aux réserves d'eaux souterraines, à la prospection géochimique. (2) Déterminer les propriétés physiques et mécaniques de certain dépôts.	Veillette, JJ	TS	-	RP	Que Ont	31 M ₂ (N ₂); 31 N ₂ (NW ₂)	2413
770031*	Surficial geology and terrain evaluation, southern Yukon Obj: To map, describe and explain the surficial materials and landforms and to provide areal geologic-geomorphic data and knowledge of the stratigraphy, age and history of surficial deposits to provide background information for land-use planning and engineering development.	Klassen, RW	TS	-	RP	Yk BC	94 M; 95; 104 P; 105 A-D, E, J, K, L; 115 A, H, I; 114 P	2413
770032	Geological characterization of Arctic lakes: sediment properties and sedimentary processes Obj: To characterize Arctic lakes by providing a framework of mineralogical and compositional data on lake sediments and watersheds, and to evaluate postglacial sedimentation and diagenetic processes to assist 1) potential construction activities, 2) environmental impact studies, and 3) mineral exploration programs.	Adshead, JD	TS	-	SMT	Kee	66 A, H; 65 A, P, I, H; 55 E, F, M; 56 D, E, N, K	244

770035* Periglacial processes and slope movement, central Keewatin Egginton, PA TS - SMT Kee Man 54 L; 55 L; 65 I, O, P, 244

Obj: (1) To determine the rates of slope mass movement;
(2) to determine the processes involved in mudboil development and their rate of development;
(3) if possible relate slope movement to mudboil development and morphology.
The study area straddles the proposed Polar Gas pipeline route and hence will provide terrain data for the assessment of that route as well as information that could be used for future development projects.

770036* Geotechnical study of rock heave, central Arctic Dyke, LD TS - GP Frank Kee Man 54 K, L; 57 G; 58 B, C, F, G; 65 O, P; 68 G, H; 78 G, H; 79 B 2453

Obj: To study and describe the process of rock heave in massive rocks in the central Arctic along the proposed route of the Polar Gas pipeline and its effect on the pipeline.

770037 Slope processes and cryogenic movements, Arctic Islands Heginbottom, JA TS - GP Frank 58 F, G; 68 G, H; 79 B 244

Obj: To document the nature, extent and rate of slope processes and cryogenic movements in a high-arctic, permafrost environment, and to determine the importance of surficial material, geomorphology, ground ice distribution, soil thermal and moisture regime, and other factors on them.

770038* A text on Canadian Geology and Natural Resources Neale, ERW ISPG GI - Alta BC 82, 92, 93, 103 248

Obj: To prepare a text, at about the senior high school or introductory college level, which will summarize our present knowledge of Canada's rocks and minerals and relate them to recent hypotheses of the earth's evolution. It will be designed to provide factual background for intelligent laymen interested in world resource crises.

770039 Joint Canada/USSR Evaluation of Petroleum Resource Assessment Methodologies Lee, PJ ISPG PG PR - 311

Obj: 1. To compare resource appraisal systems and discern areas in which our methods might be improved.
2. To test EMR-GSC methodology using Russian data with which we are familiar.
3. To exchange appropriate technical information.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770041*	Compositional Characteristics of Coals from Hat Creek, British Columbia Obj: i) To determine the petrographic character of the coals of the Hat Creek deposit ii) To determine the suitability of vitrinite reflectance as a rank parameter in these low rank coals (lignite to sub-bituminous) and if suitable, to use this parameter as the basis of determination of the relative timing of coalification and deformation iii) To examine the nature, vertical and lateral variation of associated clastics in boreholes and to combine these data with those of the petrographic study and a literature survey to interpret the depositional and post depositional environment of the deposit.	Marchioni, DL	ISPG	CG	CT	BC	92 I, P	2462
770042*	Surface oxidation of variously ranked coals Obj: i) To determine the effects of oxidation, due to natural weathering processes, on the optical (macro- and microscopic), chemical and physical properties of variously ranked coals. ii) To examine the relationships between the properties of naturally oxidized coals and unaltered equivalents. iii) To determine relationships between degree of oxidation effects and coal rank.	Marchioni, DL	ISPG	CG	CT	BC Alta	-	2462
770044*	Lower Paleozoic basin-to-platform relationships in the Cordillera Obj: To contribute to the subdivision, mapping and understanding of important Lower Paleozoic basinal sequences through: (a) Tracing of time-rock units from platform to basinal sequences, (b) Correlation of events on the platform with responses in the basin, (c) Identification of mappable units in basinal sequences, on lithological paleontological, geochemical or other criteria, (d) Estimation of basinal water depths, (e) Elucidation of the composition and movement of basinal fluids, as deduced from diagenetic events.	Cecile, MP	ISPG	RG	M	Mack BC Yk	106 A, B, E, F, G, L; 94 B, F, G; 105 I, O, P; 95 K, L, M, N; 116 H, I	2421
770045	Taxonomy and biostratigraphic distribution of Mesozoic and Paleogene megaspores Obj: 1) To describe and classify megaspores from northern Canada and when necessary for comparative purposes, from southern localities. 2) To establish biostratigraphic zonations based on the described megaspores.	Sweet, AR	ISPG	P	MIP	Mack Frank Ont, NS	107 B; 88 C; 98 E; 79 B, D; 69 D; 49; 42 N; 11 E	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770046	Resource Evaluation of coal deposits of western and northern Canada Obj: To establish a coal resource base from which quantitative, qualitative, mineability and environmental studies can be made by other government scientists. To advise scientists and engineers in industry on geological conditions relating to the coal deposits of Canada in order to assist them in the exploration for coal. To collaborate, on behalf of the Department, with geologists and engineers from various provincial government agencies as part of coal resource studies. To provide basic data required for the evaluation of the coal resources of these deposits.	Hughes, JD	ISPG	CG	RE	Alta Yk	83 A,G,H,I,J	312
770047*	Studies of coal deposits of western and northern Canada Obj: To provide basic data required for the evaluation of the coal resources of western and northern Canada; to prepare suitably illustrated geological reports either for publication or for internal use; advise scientists and engineers in industry and government on geological conditions relating to the coal deposits of Canada in order to assist them in the exploration and exploitation of coal.	Long, DGF	ISPG	CG	GC	Yk BC	93 B; 106 E; 105 A,B, F,G,H,J,K,L,M; 115 H, I,N,O,P; 116 A,B,C	2462
770048	Brachiopods of the lower Upper Devonian Waterways Formation of northeastern Alberta Obj: To describe and illustrate the rich brachiopod fauna of early Frasnian (early Late Devonian) age that occurs in the Firebag, Calumet, Christina, Moberly and Mildred Members of the Waterways Formation outcropping along the Clearwater and Athabasca Rivers of northeastern Alberta (see GSC Memoir 313 by Norris).	Norris, AW	ISPG	P	Map	Alta	74 D,E; 84 P	2431
770051	The relationship between kerogen type (known petrographic rank) and chemical extract data, for the purpose of source rock evaluation Obj: To assess kerogen type and degree of maturation by three microscopical methods and correlate the results with organic chemical data in order to define the most efficient microscopical method of source rock evaluation.	Kalkreuth, W	ISPG	CG	CT	Kee Mack	107; 117; 99; 89; 79; 69; 59; 49; 560; 340	2461
770053	Heavy Oil and Sand Resources Obj: To determine the extent of in-place resources; the recoverable portion of that resource; and, to make projections of the impact of these resources on Canada's oil supply.	Raicar, M	ISPG	PG	PR	Alta Sask	-	311
770054	Sample preparation and mineral separating Obj: To provide sample preparation and mineral-separating services in support of Branch projects.	Machin, DB	CLTS	-	M	-	-	248

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770055*	Metallurgy of the northwestern part of the Canadian Shield Obj: To provide a metallogenic basis for the evaluation of the mineral resources of the northwestern part of the Canadian Shield.	Roscoe, SM	EG	-	MDG	Mack Kee Man Sask	55, 56, 64, 65, 66, 75, 76, 85, 86	2465
770060	Environmental assessment of coal resource development, Canadian Cordillera Obj: Assessment of the geologic and hydrologic impact of open pit coal mining and emplacement of coal spoil and the investigation of geotechnical problems attendant with the reclamation of lands disturbed by coal mining operations in the Canadian Cordillera.	Jackson, LE	TS	-	GP	Alta BC	82 G, J; 83 C, E, F, L; 92 I	2451
770061*	Mineralogy of uranium deposits in granitic rocks in the Grenville Structural Province Obj: To determine the mineralogy of selected uranium deposits in pegmatitic and other granitic rocks as an input to the evaluation of uranium resources in these deposits and in related terranes.	Rimsaite, JYH	EG	-	URE	Ont Que	12, 31	2463
770063*	Geology of Lead and Zinc resources of Canada - II Obj: (1) support or provide geologically based estimates of Canada's resources of these commodities; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.	Lydon, JW	EG	-	MDG	Yk Mack NS Nfld Que Man	32, D, F, J; 63 K-N; 105 I, O	2465
770067	Western Canada Oil and Gas Pool File Obj: Compilation of all parametric data relevant to the accumulation and exploitation of oil and gas pools in western Canada for basis of statistical methods in evaluation of undiscovered resources, resource estimates for heavy oils and unconventional gas.	Skibo, DN	ISPG	PG	PR	Alta Sask BC Man	-	311
770068*	Petroleum Evaluation of Mainland Territories Obj: To provide a reliable and adequate data base for assessment by the Geological Potential Subcommittee of the project's hydrocarbon potential. To document proven and potential hydrocarbon occurrence in the area.	Recruit	ISPG	PG	PR	Yk Frank	85, 86, 95, 96, 97 A, B, C, D, F; 105 P; 106 A, B; 106 H-P; 107 A-E; 116 F-P; 117 A-D	311

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770070*	Regional Geological Synthesis, Central Superior Province	Card, KD	P	RG	SG	Ont Que	41, 42, 32	2421
	Obj: To compile and synthesize in the form of maps and reports, all geological work to date in NTS map-areas 42 and parts of 32 and 41. To outline areas requiring more coverage or updating and to evaluate what problem-oriented work can be undertaken: (a) to improve regional correlation in Superior Province; and (b) to further understanding of Superior-Grenville boundary. To produce geological maps for publication at 1:1,000,000 scale.							
770071*	Geology of copper and molybdenum resources of Canada - II	Sinclair, WD	EG	-	MDG	Yk BC NS NB Que Ont Man Sask Nfld	31 F; 32 C,D; 42 A; 63 K,N; 104 O; 105 B,C,D,E,F,L	2465
	Obj: The project is one of comprehensive research on the geology of copper and molybdenum deposits in order to: (1) support or provide geologically based estimates of Canada's resources of these commodities; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.							
770072	Geological Survey representative on Steering Committee of the Kremp Palynologic Computer Research Project.	Barss, MS	AGC	EPG	-	-	-	2431
	Obj: To represent the Geological Survey and present the views of GSC palynologists to the KPCRP Steering Committee with regard to the operation and management of the project.							
770075	Canada Basin Ocean Bottom Seismometer Equipment	Falconer, RKH	AGC	RR	-	-	-	248
	Obj: Obtain experience in geophysical work on arctic ice. Develop techniques for operation of ocean bottom seismometers in ice covered waters. Establish joint working relationships with major U.S.A. arctic research groups: ONR, MIT, Lamont, and Woods Hole. Obtain measurements of the velocity of the seafloor to a sub-bottom depth of about 200 m, the zone which much affects acoustic propagation. Obtain crustal refraction data in the Canada Basin - presumed oceanic but there is no published refraction data.							
770076	The geochemistry of uranium in natural waters	Coker, WB	GGG	RGC	RS	-	-	2463
	Obj: To provide a set of guidelines for the collection, preservation, storage and analysis for uranium of waters in relation to the National Geochemical Reconnaissance Program (Project 750051).							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770077*	Paleozoic conodonts of eastern Canada	Nowlan, GS	ISPG	P	OP	Que Ont Man Kee NB NS NF1d	12 L; 11 E,F,K; 22 A, B; 21 A,G,H,I,J,O,P	2431
780001	Coal Resource Data Management	Recruit	ISPG	CG	RE	-	-	312
780002*	Glacial erosion of the Canadian Shield	Shilts, WW	TS	-	SMT	Que	55 E,L,K; 41 I 21 E,L	244
780003	Petroleum Resource Evaluation of Western Canada	Recruit	ISPG	PG	PR	Alta BC Sask Man	62 E,F,L,K; 72 E-P; 73 C,D,E,F,K,L,M; 74 D,E; 82 H,I,J,O,P; 83; 84; 93 I,P; 94 A,B, G-K,N,O,P	2461
780004	Evaluation of Unconventional Gas Resources in the Deep Basin of Western Canada	Fuglem, FO	ISPG	PG	PR	Alta BC	83 B,C,E,F,K-N; 93 I,P; 94 A,B,G	311

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

Obj: To establish and maintain coal resource data computer files of various coal deposits in Canada and to apply, adapt or develop computer programs for the analysis and display of geological data and the compilation of coal resource estimates.

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

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

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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780005	Geology of Mine Sites Obj: 1) To examine the stratigraphy, sedimentology and structure of the Jurassic and Lower Cretaceous coal measures of southwestern Alberta and south-eastern British Columbia on the scale of active and potential underground and/or surface mines. 2) To evaluate the structural fabric of the coal measures, their petrography, and mechanical properties and the petrographic make up of the coal. 3) To produce suitable geological maps of the coal measures with appropriate text and other illustrative materials.	(Bustin, M)	ISPG CG	CG	Alta BC	82 G, 0; 83 E	2462	
780006*	Mineral Matter and Trace Element Content of Canadian Coals Obj: 1) To determine if coal basins and seams within basins are specific in terms of mineral matter and trace element content. 2) To enlarge the data base for the interpretation of the depositional regimes within coal basins. 3) To relate mineral matter and trace element content to other compositional parameters. 4) To provide a data bank on environmental and utilization aspects of these coals.	Marchioni, DL	ISPG CG	CT	Alta	82 G, 0, P; 83 A	2462	
780007	Operation Hyde Obj: To interpret the Precambrian geology and economic potential of the area mapped to a standard of 1:250,000 mapping.	Fraser, JA	P	RG	NC	55 D; 55 E (S ₂); 65 A (E ₂)	2412	
780008*	Geology of Thirty Mile Lake 65 P (W ₂) and Tebesjuak Lake 65 O (W ₂) map-areas Obj: To interpret the geology of the area to a standard of 1:250,000 mapping, and thereby update the geological data base to improve regional tectonic syntheses. To investigate the structure and metamorphism of Aphebian and Archean gneisses and their relation to the Dubawnt group cratonic cover.	LeCheminant, AN	P	RG	NC	65 P (W ₂); 65 O (E ₂)	2412	
780009*	Healey Lake map-area, District of Mackenzie Obj: To determine the general structural metamorphic and age relations of rocks on each side of the Thelon Front in order to better understand the nature of the boundary between Slave and Churchill provinces. To evaluate the economic potential of the area and to map it at the scale of 1:250 000.	Henderson, JB	P	RG	BS	76 B	2412	
780010	A study of Bear Batholith rocks and basement to the Bear Batholith Obj: To define basement rocks of the Bear Batholith, and to establish the stratigraphy and distribution of the lowest parts of the Bear Batholith supracrustal rocks.	McGlynn, JC	P	RG	BS	86 D, 85 N (pts. of)	2421	

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780011	A survey of Metamorphism in the Canadian Shield Obj: To write a concise selective field oriented introduction to metamorphic petrology directed to geologists working in the precambrian Shield	Froese, E	P	-	PET	Man	63 J,K,N	2436
780012*	Stratigraphy and geochemistry of the volcanic rocks of the Circum-Ungava Belt Obj: To determine the geochemical characteristics and to work out the stratigraphic relationships of the Circum-Ungava Belt.	Baragar, WRA	P	RG	SP	<u>Kee</u>	<u>44 I,P</u>	2421
780013	Compilation of 1:1 million maps of the Canadian Shield Obj: To compile, synthesize and publish a series of 1:1 million geological maps of the Canadian Shield.	Eade, K	P	RG	NC	-	-	2423
780015*	Material balance of the uranium series in natural environments Obj: To establish the usefulness of studying the material balance of uranium and its decay products as a means of estimating uranium ore potential of a region.	Dyck, W	RGG	RGC	MD	<u>Sask Ont</u>	31 G; <u>64 L</u> ; <u>74 I</u>	2463
780016*	Drift prospecting methods and models Obj: 1) To model glacial dispersal from known sources. 2) To develop drift prospecting methods for use in clay belts.	Dilabio, RNW	TS	-	SMT	<u>Ont NS</u> <u>Man Sask</u> <u>Frank</u>	41 O; 42 A,B,E,L; 52 G; 11 D,E; 21 A; 31, C,F; 92 I; 93 F,K; <u>64 L,N</u> ; 38 B,C; 48 D; <u>74 I</u>	244
780017*	Correlation of Quaternary geology; Great Lakes - St. Lawrence Valley region Obj: To resolve apparent age discrepancies in Pleistocene stratigraphic sequences of the lower Ottawa - upper St. Lawrence valleys and adjacent Lake Ontario basin. To provide a basis for regional compilation and synthesis of Quaternary geology in southern Ontario and southwestern Quebec.	Gadd, NR	TS	-	RP	<u>Ont Que</u>	<u>31 B,C,F,G,J,K</u>	2422
780018	Surficial geology and Quaternary stratigraphy of north Baffin-Bylot Islands Obj: To provide information on the history and mode of deposition and the distribution and origin of Quaternary sediments in the northern part of Baffin Island and of Bylot Island, for use by environmental and development groups that may require knowledge of the area, and to provide data applicable to drift prospecting techniques.	Klassen, RA	TS	-	SMT	Frank	38 B,C; 48 A-D	2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780019*	Ocean Dumping Consultation and Study Obj: a) To provide advice to government concerning the feasibility of ocean dumping or disposal of waste materials. b) To test various techniques and procedures for detecting and monitoring the impact of ocean dumping.	Buckley, DE	AGC	EMG	PEC	NB	<u>21, 22</u>	296
780021*	Landsat Calibration for Suspended Sediment Concentration in Marine Coastal Environments Obj: 1) To initiate cooperative research between A.G.C., C.C.R.S. and other marine agencies abroad, with a view to extending a calibration of Landsat radiance vs. suspended sediment concentration. Originally applied to the Minas Basin. 2) To extend the Minas Basin calibration. 3) To relate the available Seasat program to Landsat measures.	Amos, CL	AGC	EMG	CG	NS	-	244
780022*	Sediment Dynamics at the Head of the Bay of Fundy Obj: 1) To determine the mass input, transfer and removal of sediments to Chignecto Bay, inclusive of Shepody Bay and Cumberland Basin. 2) To develop a numerical model to assess the affects of a Fundy Tidal Power Development on the distribution and accretion of sediments. 3) To formulate a methodology of assessing the implications of marine constructions on sediments in macrotidal regions.	Amos, CL	AGC	EMG	CG	NS NB	<u>21, 11</u>	244
780023*	Development and application of magnetic interpretation methods Obj: To establish a comprehensive capability for the interpretation of aero-magnetic survey data in order to support geological mapping and resource assessment programs.	Teskey, D	RG	RG	MM	Sask Que	<u>64 L; 74 I; 32 C</u>	2416
780024*	Analytical control and standardization Obj: 1. Arrange, direct and coordinate the utilization of all the subdivision's analytical and sample preparation resources. 2. Provide specifications for all analytical and sample preparation requirements. 3. Where feasible, analytical methodology is to be standardized; quality control procedures are to be devised and implemented to monitor output of both commercial and "in house" laboratories when this output relates to the activities of the subdivision.	Lynch, JJ	RG	RG	-	Ont	<u>31 G</u>	248

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780025*	Archean Rocks of the Main Province in Hopedale (13 N), Snegamook Lake (13 K), and Makkovik (13 O) map-areas, Labrador	Ermanovics, I	P	RG	SG	Nfld	13 N, K, O	2412
	Obj: 1. To produce maps (suitable for publications at 1:100,000) and comprehensive reports on the geology and economic mineral potential of the Archean rocks in these areas. 2. To monitor, compile and synthesize results of the geological mapping of Labrador to be carried out under the Canada - Newfoundland Mineral Development Subsidiary Agreement.							
780026	Quaternary paleo-sealevel map of Canada	Pelletier, BR	TS	-	SP	NS NB PEI Nfld Que Ont Man BC Yk Mack Kee Frank	1-2, 11, 13-16, 20-22, 24-29, 32-39, 42-43, 45-49, 54-59, 66-69, 76-79, 86-89, 92, 98-99, 102-103, 107, 114, 117, 120, 340, 350, 360	2422
780027*	Coastal Geology - British Columbia	Bornhold, BD	C	-	MG	BC	92 B, C, E, F, G, K, L, M; 93 D; 102 I, P; 103 A, B, C, F, G, H, I, J, K, O, P	244
	Obj: To carry out both inventory and process studies of coastal and nearshore geology in British Columbia in order to: provide a data base for coastal management; be able to respond to requests for information and advice from other government agencies; and understand better the Quaternary evolution of the west coast of Canada.							
780028	Detailed Geological Investigation of selected areas within the Foothills and Rocky Mountains of the Monkman Pass map area - with emphasis on the structure	Thompson, RI	C	-	GR	BC Alta	93 H, I; 83 E	2421
	Obj: (i) To assist in the completion of reconnaissance studies within the Monkman Pass map sheet; (ii) to proceed with selected, more detailed studies aimed at a clearer understanding of structural relationships across this part of the Rocky Mountain Belt; and to begin a preliminary analysis of fracture fabrics within some upper Paleozoic and Mesozoic stratigraphic units.							
780029	Mesozoic and Cenozoic Foraminifera of the Arctic Western mainland of Canada	McNeil, DH	ISPG	P	MIP	YK Mack	95, 96, 97, 105, 106, 107, 115, 116, 117	2431
	Obj: To establish the biostratigraphic distribution and significance of Mesozoic and Cenozoic foraminifers in the Arctic western mainland of Canada, with particular emphasis on the Mackenzie Delta-Beaufort Sea area.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780030	Taxonomy, biostratigraphy and paleoecology of Mesozoic and Cenozoic palynomorph assemblages from the Mackenzie Delta Beaufort Sea and Arctic Region	Ioannides, NS	ISPG	P	MIP	Frank Mack	120 F; 340 D,B; 107; 117; 49 G; 59 H	2431
	Obj: To establish a biostratigraphic zonation scheme for the Mesozoic and Cenozoic the Mackenzie Delta, Beaufort Sea and Arctic Region.							
780031	The Newfoundland Continental Slope at 49°N to 50°N: Nature and magnitude of contemporary marine geologic processes	Schafer, CT	AGC	EMG	PEC	NS NFLd	-	244
	Obj: (1) To discover the nature and magnitude of contemporary marine geologic processes based on sedimentologic, geochemical neontologic <u>in situ</u> sensor data. (2) To develop process and environmental models for biostratigraphic, paleoecologic and environmental impact studies.							
780032	Lead isotopic studies on genesis of ore deposits	Thorpe, RI	EG	-	MDG	-	-	2465
	Obj: 1) To do lead isotopic studies of ore deposits in order to improve our understanding of the age and genesis of these deposits. 2) To derive a lead isotope model that will be useful in refining genetic models for many types of ore deposits. 3) To coordinate the obtaining of lead isotope analyses for the members of the Mineral Deposits Geology Section and the assignment of priorities for such analyses. 4) To aid members of the section in interpretation of analyses that have been carried out for other projects.							
780033*	Quaternary paleoecology, Great Lakes	Anderson, TW	TS	-	PG	Ont Que	<u>21 E; 31 B-G, J-L</u>	2433
	Obj: To describe, analyze and explain unconsolidated deposits and associated organic history in the Great Lakes in order to: 1) determine Quaternary stratigraphy, the Quaternary and paleoecology; 2) identify processes operative in the Lakes during the Quaternary and the factors controlling them; 3) to provide background geological information for other scientific studies in the Great Lakes.							
780035*	Remote sensing applied to Quaternary geology and mineral tracing	Belanger, JR	TS	-	SMT	Yk Kee Que	55 E,L,M; 65 H; 115 A-C,F,G,J,K; <u>21 E</u>	2422
	Obj: To evaluate the potential use of remotely sensed, multispectral data for terrain evaluation, terrain mapping, Quaternary geology and mineral tracing. To apply appropriate processing techniques for remotely sensed data to Quaternary geology and related terrain studies in selected test areas in Canada.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780037	Structural geology-geomorphology, southwest Yukon Obj: To determine the nature and scope of late Quaternary tectonic activity along the Denali Fault and to identify and interpret landslides and other potential terrain hazards in southwest Yukon Territory in order to provide information pertinent to industrial development, including pipeline and road construction and maintenance, and to determine the history of faulting in the region.	Clague, JJ	TS	-	RP	Yk	105 C, D, E; 115 A, B, F, G, H, I, J, K; 114 O, P	244
780039*	Jurassic and Cretaceous Minnes Group, Alberta and British Columbia Obj: To describe the stratigraphic succession and petrography to document fossil flora and fauna; to provide data on correlation of these strata, their lateral variation, their potentialities as sources of oil and gas, and their suitability as reservoirs for those fuels.	Stott, DF	ISPG	-	-	Alta BC	83 E, L; 93 I, O, P; 94 B, G, J	2421
780042	Comparative studies of the continental margins of the Labrador Sea and of the North Atlantic Obj: 1) To delineate subsurface structure across Labrador and west Greenland margins. 2) To determine the transition from the continental to oceanic crust across the margins. 3) To discuss the subsidence history of the margin as obtained from well data and to relate it to the subsurface structures.	Srivastava, SP	AGC	RR	LSS	-	-	2421
780043*	Coastal Reconnaissance of the Sverdrup Basin, N.W.T. Obj: To map and analyze the coastal environments of the Sverdrup Basin, N.W.T. To provide information on the shore types, processes and the effects of massive shore ice piles which will serve as background information for the evaluation of potential marine terminal sites and the impact of such installations on the coastal zone.	Taylor, RB	AGC	EMG	G	Frank	59, 69	244
780044	Environmental assessment through remote sensing and vegetation analysis Obj: To study factors affecting the uptake of various trace elements into plant organs, in order to understand the movement of potentially toxic elements from the geochemical environment to biological systems; to process digitized land satellite data from various regions of Canada to provide a classification of major surficial features.	(Rencz, AN)	TS	-	SMT	Ont Que Kee	31 B, C, F, G, M; 42 C; 56 D, K	244
780045	Debris flow hazard assessment methodology, alpine and northern upland areas Obj: To identify and determine the relative importance of the environmental factors favouring the development of debris flows in the Rocky Mountains (49°N-54°N), and to develop a methodology for assessing the hazards to transportation and utility facilities from this process.	Jackson, LE	TS	-	GP	BC Alta	82 G, J, N, O; 83 C, D, E	2451

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
780046*	Metamorphic Map of the Canadian Cordillera	Woodsworth, GJ	C	-	GR	BC Yk	116, 115, 105, 95, 114, 104, 94, 103, 93, 83, 92, 82	2421
	Obj: To compile a metamorphic map of the Cordillera on a scale of 1:2,000,000 depicting areas underlain by rocks representing particular grades of regional metamorphism.							
780047*	Computer Methods and Calibration	Carson, JM	RGG	RR	CMC	Sask Ont NB Alta	21 G; 31 G; 73 B; 82 P	2463
	Obj: 1) To develop computer methods for compilation of radiometric data. 2) Develop data base for airborne, ground, laboratory and borehole gamma ray spectrometric data. 3) To standardize and coordinate the calibration of radiometric systems.							
780048	Surficial Geology of Lomonosov Ridge, Arctic Ocean	Blasco, SM	AGC	EMG	CGD	-	-	2415
	Obj: 1) To describe the morphology, structure and history of the surficial sediments of the Lomonosov Ridge in the vicinity of the EMR LOREX site (near North Pole). 2) To contribute to Earth Physics Branch's LOREX to define continental (?) origin of Lomonosov Ridge. 3) To adapt technology and to gain experience in working on frozen seas. 4) To establish working contacts with other groups concerned with Arctic Ocean geology.							
780049*	FRAM I Seismic Refraction and Reflection Experiment	Falconer, RKH	AGC	RR	EAOG	-	-	2421
	Obj: To collect seismic refraction and reflection data and study natural seismicity during the drift of the U.S. ice camp FRAM I adjacent to the Nansen Ridge in order to determine representative crustal sections of the Arctic Ocean Basin as an indicator of its development.							
790002*	Geochemical data processing	Lund, NG	RGG	RGC	RS	-	-	2465
	Obj: 1) Document and store, in digital form, all geochemical data (descriptive and analytical) generated by the geochemistry subdivision staff; 2) Provide data processing support for the specific needs of the subdivision staff; 3) Provide data management of GSC-NGR and/or Provincial survey data; 4) Release N.G.R. data to the public.							
790003*	Regional Geochemistry - Southern Cordillera	Ballantyne, SB	RGG	RGC	RS	BC Yk	104 N,O,P,I; 94 F,K,L; 105 B,M 92 O,P; 106 D	2465
	Obj: 1) To develop and test geochemical exploration methods for concealed ore deposits in a variety of geological and surficial environments. 2) To assess the effective performance of geochemical reconnaissance surveys.							
790004*	Geochemical Sampling and Resource Evaluation Studies	Garrett, RG	RGG	RGC	MD	-	-	2465
	Obj: To develop and document methods of utilizing geochemical data in mineral resource evaluation studies. Particular attention will be paid to assessing the reliability of such studies through measurement of the variabilities associated with all stages of sample and data acquisition and processing.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790005	Quaternary geology, Mayo-McQuesten Obj: To map, describe and explain the surficial materials and landforms and to provide areal geologic-geomorphic data and knowledge of stratigraphy, age and history of surficial deposits to provide background information for land use planning, engineering and mineral development.	Hughes, OL	TS	-	RP	Yk	105 M, 115 P	2413
790006*	Marine Delta Sedimentation, British Columbia Obj: To provide geological/sedimentological data base for delta systems in coastal British Columbia for general land and waterfront planning and environmental management.	Luternauer, JL	C	-	MG	BC	92 B,G; 103 G,H,I,J	244
790007*	Geology of Nahanni map-area, Yukon and Northwest Territories Obj: To update geological mapping in Nahanni map-area with emphasis on the distribution of stratigraphic units of the economically important Road River Formation and Earn Group.	Gordey, SP	C	-	GR	Yk Mack	105 I	2412
790008*	Stratigraphy, sedimentation, structure and tectonic setting of the Windermere Supergroup Obj: To establish the stratigraphic succession, origin and correlation and determine the role played by these rocks in the evolution of the Cordillera. To relate mineral deposits to the stratigraphic, sedimentological and structural framework of these rocks.	Eisbacher, GH	C	-	GR	Yk, Mack BC Alta	115; 105; 95; 94 K; 93 I,O; 83; 82 K,N,O; 116; 106	2421
790009*	Kamilukuak Lake Map-area, District of Keewatin, N.W.T. Obj: To map the bedrock geology of the area at a standard of modern 1:250 000 scale mapping. Emphasis will be placed on the Dubawnt Group rocks, their extent, lithology, and relationship to the basement rocks.	Eade, KE	P	RG	NC	Ke	65 K,L; 66 H	2412
790012	China-Canada Exchange - Hydrocarbon Geochemistry Obj: To exchange information on methods of geochemical investigations of oil, gas and organic matter and application of their results to exploration and resource assessment. To gain a broader knowledge of geochemical criteria for petroleum generation and accumulation in various geological settings.	Powell, TG	ISPG	PG	GC	-	-	2461
790013*	Relationship of reflectance to chemical rank parameters of western Canadian coals Obj: 1) To establish reference curves relating rank as determined by reflectance to rank as determined by chemical means. 2) To determine the relationship of varying maceral compositions on rank as determined chemically.	Cameron, AR	ISPG	CG	CT	Sask BC	62 E; 72 H,G,M; 82 G,H, J,O,P; 83 A,C,E,F,G,M; 93 I,O,P	2462
790014	Triassic Foraminifera of the Sverdrup Basin Obj: To investigate the feasibility of using foraminifera as a means of refining biostratigraphic zonation within the Triassic System and of establishing criteria for the dating and correlation of potentially petroliferous sequences within and adjacent to the boundaries of the system.	Wall, JH	ISPG	P	MiP	Frank	49 C, 59 H; 69; 79; 88; 89; 340 B,C; 560	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790015	Surficial geology and paleo-glaciology of the central Labrador Shelf Nain, Makkovik and Harrison Banks	Fillion, RH	AGC	RR	-	-	-	2415
	Obj: To gain insight into recent sedimentary processes and hydrodynamic regime; the pattern of glaciation on the banks; the history of glaciation locally and an integration of results with those of previous Labrador Shelf projects to develop a regional picture.							
790016	Geology of the Helikian Sediments and Adjacent Gneisses, Fury & Hecla Strait Area	Chandler, FW	P	-	PET	Frank	47 C,D,E,F	2421
	Obj: 1) To determine the internal stratigraphy, sedimentology, structure, age, geological history of the sediments. 2) To map the gneisses underlying the sediments to the north, concentrating on those gneisses coincident with strong radiometric anomalies.							
790017	Shelf Environments of Central Labrador and Ungava Bay	Reinson, GE	AGC	EMG	CGD	Nfld	13 H,I,O	244
	Obj: 1) To determine the nature and magnitude of sediment transport processes on the inner shelf. 2) To delineate Holocene stratigraphy of Inner Shelf and relate to the depositional framework of the bank-basin areas under study by Vilks and Fillion.							
790018	Ice Scouring of Continental Shelves	Lewis, CFM	AGC	EMG	CGD	Nfld Yk Mack Frank	-	244
	Obj: To investigate the geomorphology and sedimentology of ice scour tracks and their relationship to bathymetry, geology, oceanography and drift ice with a view to interpreting the dynamics and history of ice impacts on the seabed in order to provide advice for resource management.							
790019*	Environmental Geology of Deep Ocean	Vilks, G	AGC	EMG	PEC	-	-	244
	Obj: 1) To investigate the capacity of the deep ocean environment to maintain normal processes under stress imposed by exploration of waste disposal. 2) Participate with the seabed working group of NEA in order to maintain awareness with the progress in feasibility studies for the disposal of high level nuclear waste in the seabed and DOMES project.							
790020	An investigation of the semi-inert constituents of W. Canadian coals	Kalkreuth, WD	ISPG	CG	CT	BC Alta	-	2462
	Obj: To investigate the degree of participation of semi-inert macerals, of Western Canadian coals, in a heat-treatment process and to establish a reliable microscopic method for predicting the coking properties of these coals.							
790021	Surficial geology, Lac Kipawa Region	Vincent, JS	TS	-	RP	Que	31 L	2413
	Obj: To map, describe and explain the surficial materials and landforms and to provide geological-geomorphic data and knowledge of stratigraphy, age and history of surficial deposits, to provide background information pertinent to land use planning, forestry, agriculture, urban and industrial development and engineering construction.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790022*	Stratigraphy and sedimentology of the Lower Cretaceous Gething Formation, Rocky Mountain Foothills, Alberta and British Columbia Obj: To describe the Lower Cretaceous stratigraphic succession; to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the origin, distribution and continuity of coal seams throughout the region; to attempt to determine criteria useful in determining the sub-environments in which the fluvial-deltaic sediments were deposited, and to eventually provide a regional geological model that will be of assistance in determining the potential coal resources of this and other regions.	Gibson, DW	ISPG	CG	GC	Alta, BC	83 L; 93 I, J, O; 94 B, G	2462
790024	Geology of the Foxe Foid belt (EAST HALF), Baffin Island Obj: To establish the stratigraphy, structure and metamorphism of the Aphebian sedimentary, volcanic and plutonic rocks in the Piling Group and their relationship to the rocks of the Mary River Group. The structural evolution of Archean "gneiss domes" in the area is also to be studied, and the economic mineral resource potential of the region evaluated.	Henderson, JR	P	RG	NC	Frank	Pts 27 A-D	2421
790025	Petrology, mineralogy, geochemistry and mineral potential of a Helikian non-orogenic granitic suite in central Labrador and adjacent Quebec. Obj: To improve understanding of the conditions and processes that control concentrations of U, Sn, Be, W and Mo in non-orogenic granitic suites.	Emslie, RF	P	-	PET	Nfld Que	Parts of 13 M, 14 D, 23 P, 24 A	2421
790026*	Geological evaluation of crystalline, sedimentary and seabed terranes for radioactive waste disposal. Obj: On behalf of AECL/EMR to manage geological research program in the evaluation of crystalline, sedimentary and seabed terranes as potential host rocks for radioactive waste disposal.	Sanford, BV	P	-	SP	Ont Sask Man NS	-	2453
790027*	Quaternary stratigraphy Yarmouth region, Nova Scotia Obj: To document the Quaternary stratigraphy of the southeast coast of Nova Scotia in the vicinity of Yarmouth.	Grant, DR	TS	-	RP	NS	20 O, 21 A, B	2413
790028	Seabed Mosaics/Mapping Engineering Development Program (COPI) Obj: Huntec '70 Limited is to design, produce and test various modular subsystems for use with existing AGC profiling and side scanning systems to improve their positional performance and to, by 1982, design, produce and evaluate ready for marketing a full Mosaic facility for quasi-three dimensional plotting of the contours of the ocean floor.	(Dessureault, JG)	AGC	PS	-	-	-	2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790029	Gneissic basement to the Fury and Hecla Formation and the Aultridge Formation Obj: To map the basement gneisses adjacent to the Fury and Hecla Formation and the Aultridge Formation on Baffin Island at a scale suitable for publication at 1:100 000 or 1:250 000. Emphasis to be placed on basement cover relationships and the relationship of basement geology to radioactive anomalies.	Ciezielski, A.	P	RG	SG	Frank	47 D, E, F	2421
790030*	Geology of Nelson Map-area E/2 Obj: a) To update the geology of Nelson area to current requirements embodying new field work and scattered studies done since the original work in the late 1930's. b) To provide a 1:250,000 synthesis of stratigraphy, structure, metamorphism and mineral deposit potential.	Reesor, JE	C	-	GR	BC	82 F, E $\frac{1}{2}$	2421
790031	Geology of the Beaufort-Mackenzie Basin Obj: (1) To integrate all available geological, biostratigraphic, geophysical, and geochemical data for the offshore areas, Beaufort Sea, in order to develop a stratigraphic-sedimentological framework and an appreciation of the petroleum potential. (2) Undertake a sedimentological and petrographic analysis of selected zones within the Tertiary in order to understand reservoir character and distribution. (3) To do detailed correlations of Lower Cretaceous-Upper Jurassic rocks, set up a stratigraphic framework and do sedimentological interpretations.	Dixon, J.	ISPG	RG	M	Mack, Frank Yk	107 B-H; 117; 97 F, H	2421
790032*	Identification of Mesozoic and Tertiary Continental Microfloras from Northwest Territories, Yukon Territory, British Columbia, Alberta Obj: To determine floral successions from scattered and widely separated Tertiary Basins in order to establish Biostratigraphic Zonations and to interpret depositional environments.	Hopkins, WS, Jr.	ISPG	P	MP	Yk BC Alta	92 I	2431
790033*	Geochemistry of Mineral Occurrences and their Host Rocks in the Northern Cordillera Obj: Through geochemical studies, to assist in determining; (1) the origin of selected mineral occurrences; (2) criteria which can be used in the exploration for new and possibly deeply buried mineral deposits; (3) geochemical methodology for the identification and differentiation of stratigraphic units, thereby assisting in stratigraphic correlations.	Goodfellow, WD	GGG	RG	RS	Yk	105 O, I; 106 B	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790034*	Shallow Seismic Surveys Obj: -To map the thickness of surficial deposits by seismic methods for geological mapping and engineering projects.	Gagne, RM	RGG	TG	SM	NB Yk	21 O/1 116 P/9	2413
790035*	Coastal Reconnaissance of Bylot and N.E. Baffin Islands, N.W.T. Obj: To map and analyze the coastal environments of Bylot and N.E. Baffin Islands, N.W.T. To provide information on the shore types, sediments and processes affecting the shoreline stability which will serve as background information for the evaluation of effects of offshore drilling in Lancaster Sound in the event of a well blowout.	Taylor, RB	AGC	EMG	CGD	Frank	27 G, 37 H, 38 A, B, C, 48 A, D	244
790036*	Sediment Dynamics Monitor (Ralph) Obj: To design, build and test an instrument to investigate the dynamics of sediments in water depths ranging from a few metres to 200 M for bottom durations of up to 45 days.	Heffler, DE	AGC	PS	SD	-	-	244
790037*	Ocean Bottom Seismometers at A.G.C. Obj: To carry on the development of the Ocean Bottom Seismometer (OBS) system now in use at AGC. Future developments will be acoustic release, better tape recorders, study of seismic coupling and response problem, improved playback facilities and other improvements which are agreed to be important. Also, to maintain existing OBS's.	Heffler, DE	AGC	PS	SD	-	-	2421
790038*	Middle and Upper Devonian Rocks in east-Central B.C. and west-central Alberta Obj: To establish and apply conceptual models of deposition of the original sediments in terms of environment and paleogeography, their subsequent diagenesis and correlation.	Geldsetzer, HHJ	ISPG	RG	M	BC Alta	83 E, L; 93 H, I, O, P	2421
790039	Development of data management system for marine geophysical data Obj: To provide a capability for the efficient storage of potential field data collected in marine geophysical surveys. To enable portions of the data to be effectively retrieved for use by AGC (and external) personnel. To facilitate the identification and correction of errors and inaccuracies in the data values.	Martin, GM	AGC	PSS	DS	-	-	2417
790040	Taxonomy, biostratigraphy, paleoecology and paleobiogeography of Mesozoic-Cenozoic agglutinated foraminifera. Obj: A. To clarify the taxonomy of Late Mesozoic-Cenozoic agglutinated foraminifera. B. To establish an agglutinated foraminiferal biostratigraphy of more than local significance in Upper Mesozoic-Cenozoic strata. C. To understand the distribution in space and through time of predominantly agglutinated foraminiferal assemblages in sedimentary basins and to formulate models for this distribution.	Gradstein, F	AGC	EPG	-	-	-	2431
790041*	Lardeau map-area, B.C. Obj: To complete terminal report and related geological, structural and mineral deposits maps and structure sections for publication at 1:250,000 scale.	Wheeler, JO	C	-	GR	BC	82 K (W&Z)	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790042*	Structure and Tectonics; Innuitian Fold Belt, Ellesmere Island	Okulitch, AV	ISPG	RG	AI	Frank	49 C,D,E,E, 59 E	2421
	Obj: To map and describe structures of the fold belt, their evolution and the tectonic history of that part of the belt on Ellesmere Island.							
790043	Depositional Environments and Diagenesis of Viking Sandstone Reservoirs, Alberta	Reinson, GE	ISPG	RG	M	Alta	72, 73, 82, 83	2461
	Obj: 1. To develop models of the depositional framework, facies, geometry, and sequence of diagenesis within subsurface Viking reservoir sandstones. 2. To investigate the relationship between depositional environment and diagenetic trends in specific reservoirs, and to determine the relative role of burial metamorphic versus depositional controls on sandstone diagenesis and resultant reservoir quality.							
790044*	Nahanni IMPP - Coordinator	Reesor, JE	P	-	-	Yk	105 I	2421
	Obj: To provide coordination for participants from 5 divisions in a multidisciplinary study of Nahanni map area (105 I) and environs involving bedrock, surficial deposits, geochemistry and mineral deposits to ensure that various disciplinary studies are undertaken such that maximum interaction takes place in the field and in follow-up laboratory and office investigations. To judge ultimately the efficacy of such studies in GSC 1:250,000 systematic mapping.							
790045*	NEA/IAEA Athabasca Basin Study	Cameron, EM	RG	RG	-	Sask	64 L, 74 I	2463
	Obj: 1. To provide administrative coordination and logistical support for this integrated study. 2. The study has the objective of evaluating a wide range of exploration techniques for uranium mineralization present at depth.							
800001*	Quaternary geology and terrain inventory, Nahanni	Jackson, LE	TS	-	GP	Yk	105 I	2413
	Obj: To map, describe and explain the surficial deposits, terrain conditions, active geomorphic processes and Quaternary history of the Nahanni map area with specific reference to the significance of Quaternary geology for mineral exploration.							
800002*	Cretaceous and Upper Jurassic Paleontology and biostratigraphy, Western and Arctic Canada	Jeletzky, JA	ISPG	P	OP	BC Alta Yk Mack Frank Kee	-	2431
	Obj: To describe and illustrate important Cretaceous and Upper Jurassic (Buchia-bearing beds only) molluscan faunas (Ammonoidea and Pelecyopoda) and to formulate final reports on Cretaceous stratigraphy in selected areas of Western and Arctic Canada. To prepare reports pertaining to final completion of the Dibranchiata volume of the Treatise on Invertebrate Paleontology.							
800003	Subsurface Geology of Great Bear River map-area	Pugh, DC	ISPG	RG	M	Mack	96 C	2421
	Obj: To provide a thorough understanding of the pre-Mesozoic geological history of the Great Bear River map-area, emphasizing the interrelationships of sedimentation stratigraphy, tectonics and economics. To evaluate the economic mineral potential of the area.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800004*	Geology of Whitehills Lake Obj: To map 66 A/9 and 66 A/16 S ₂ at a scale suitable for publication at 1:50,000, in order to determine: whether or not supracrustal strata in the Whitehills Lake district belong to two or three rock units, their sequence, age and structure; to ascertain the relationship between stratigraphy and uranium mineralization; to delineate komatiite zones in volcanic rocks.	Taylor, FC	P	RG	SP	Kee	66 A	2421
800005*	Metamorphism and structure in northeast Superior Province Obj: 1. To understand the geological evolution of the higher grade metamorphic region of the northeastern Superior Province, and in particular, the relationship between greenstone and granulite terrains. 2. To contribute, through field studies, to compilation of a geological map at 1:1,000,000 scale for NTS 33.	Ciesielski, A	P	RG	SG	Que	33 N, O, P	2421
800006*	Geology of Beechey-Duggan Lakes area Obj: 1. Map for 1:250,000 published scale. 2. Understand the nature of the Thelon Front. 3. Produce final maps and a report.	Frith, RA	P	RG	BS	Mack	76 G(E ₁), H(W ₂)	2412
800007*	Metamorphism in the Kisseynew Subprovince Obj: To study the metamorphic zonation in the Kisseynew Subprovince, from the low grade margin to the granulite facies in the centre, and to determine its relationship to the development of alternating volcanic and sedimentary subprovinces.	Froese, E	P	-	PET	Man Sask	63 J, K, L, M, N, O	2421
800008*	Geology of the Baker Lake map-area Obj: To refine and upgrade the 16-mile reconnaissance, with emphasis on the structure and stratigraphy of Archean metavolcanics and Archean(?) metasediments, and relationship to gneissic and granitic rocks. The economic potential will be evaluated.	Heywood, WW	P	RG	NC	Kee	56 D	2412
800009*	Geology of Fort Smith, District of Mackenzie Obj: To complete mapping of Precambrian rocks at 1:250,000 scale in Fort Smith (75 D) and east part of Little Buffalo River (85 A).	Bostock, HH	P	RG	NC	Mack	75 D, 85 A(E ₂)	2412
800010*	Marine magnetic surveys Obj: To measure and interpret the earth's magnetic field over the Pacific margin of Canada to extend our knowledge of the geology and economic potential of the area.	Currie, RG	C	-	MG	BC	92 B, C, E, F, G, L, K, M; 93 D; 102 I, P; 103 A, B, C, F, G, H, I, J, K	2417

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'l Classification
800011*	Rock Magnetism	Currie, RG	C	-	MG	Yk BC	92 B, C, E, F, G, L, K, M; 93 D; 102 I, P; 103 A, B, C, F, G, H, I, J, K; 105 C, D, E, L; 115 A, F, G, H, I, J, K, N, O, P	2417
	Obj: To investigate the relationships between rock magnetism, rock type and associated magnetic anomalies to enhance the usefulness of magnetic surveys as a tool in geological mapping and resource evaluation.							
800012	Geology of Woodburn Lake map area, District of Keewatin	Fraser, JA	P	RG	NC	Ke	56 E	2412
	Obj: To upgrade the 16-mile geological reconnaissance survey made in 1953, in particular to refine interpretations of the stratigraphy and structure of the Proterozoic(?) supracrustal rocks, and to determine their relationship to the granitic basement. To assess the economic potential of the area.							
800013*	Vertical Movements of the Precambrian Shield	Schwarz, EJ	REG	P	PMag	Ont Que	23, 24	2434
	Obj: To determine vertical movements for structural provinces in the Precambrian Shield from remanent magnetism. The method is quantitative and would allow estimating the net amount of uplift or tilting of the Shield since the Archean.							
800014*	Metamorphism of volcanic rocks, Crowduck Bay, Manitoba	Gordon, TM	P	-	PET	Man	63 J/13	2436
	Obj: Conduct a detailed field and petrologic study of a belt of volcanic and associated sedimentary rocks in order to provide correlation criteria for mapping amphibolites and gneisses equivalent to volcanic belts and elucidate the chemical processes which limit the economic potential of metamorphic rocks.							
800015*	Coastal Morphology and Sediment Dynamics, Southeast and East Cape Breton Island, N.S.	Taylor, RB	AGC	EMG	CGD	NS	11 F, G, K	244
	Obj: A. To provide a map of shoreline features and sediment along SE and E Cape Breton Island. B. To examine two well developed barrier beaches with different aspect, geological setting and sediment availability in order to determine seasonal changes in beach-nearshore morphology and sediment characteristics and to document the historic changes and response of these beaches to changing environmental conditions.							
800016*	Tracked vehicle - terrain relationships, central Keewatin	Dyke, LD	TS	-	GP	Ke	65 J, 66 A	2451
	Obj: To determine the relationship and significant geotechnical properties involved in the traction-reaction forces of tracked vehicle operation in permafrost terrain and to assist DIAND Land Use Inspectors in predicting what levels of terrain disturbance may result from a given level of industrial field activity in the Keewatin section of the Canadian Shield.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800017*	Quaternary geology - terrain inventory, Dundas Peninsula Obj: To map, describe and explain the surficial materials, landforms, permafrost and ground ice to provide areal knowledge of geology and terrain as background information relevant for land management and engineering studies and to determine the Quaternary history of the region.	Hodgson, DA	TS	-	RP	Frank	<u>78 F, G, 88 E</u>	2413
800018*	High Resolution Seismic (Equipment Development) Obj: To assemble a high resolution seismic reflection system by matching commercially available components including an inexpensive microcomputer and developing the ancillary software for shallow sounding (<500 m).	Hunter, JA	RGG	TG	SM	Ont Que	<u>31 F, G; 40 P</u>	2421
800019*	Surficial geology, Cobden area (Quebec part) Obj: To map, describe and explain the unconsolidated deposits and landforms of the Quebec part of the Cobden area (31 G/10) in order to provide geology and terrain information pertinent to agriculture, urban and industrial development and engineering construction and to determine the Quaternary history of the region.	Fulton, RJ	TS	-	RP	Que	<u>31 G</u>	2413
800020*	The Recent Paleoclimatic and Paleogeologic Records in Fjord Sediments Obj: To relate documented climatic excursions with periods of 1 to 300 years to the sedimentological and paleogeological record in unbioturbated fjord sediments.	Schafer, CT	AGC	EMG	PEc	Que BC Frank	<u>22, 27</u>	244
800021	Lead and zinc in carbonate rocks - joint research with Esso Minerals Canada Obj: To obtain a better understanding of Canadian carbonate-hosted lead-zinc deposits, particularly concerning recognition of areas favourable for their occurrence and mechanisms for their formation; to make resultant information generally available.	Sangster, DF	EG	-	MDG	-	-	2465
800022*	Stratigraphy and structure of Dawson, Larsen Creek and Nash Creek map areas; Ogilvie Mountains Project Obj: To reassess and update the geology of Dawson, Larsen Creek and Nash Creek map areas as a basis for providing data and concepts applicable to the exploration for metal deposits as well as further input into the ongoing synthesis of Yukon geology.	Thompson, RI	C	-	GR	Yk	<u>116 A, B, C; 106 D</u>	2421
800023*	Special assignments on eastern and northern Canada Obj: To contribute to the mineral resource data base and the evaluation of regional resources.	Poole, WH	EG	-	SP	Que NB NS NFD	-	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800024*	Quaternary geology-terrain inventory, northwestern Manitoba Obj: Map, describe and explain the surficial materials and landforms, thermal conditions and active processes to provide knowledge of stratigraphy, age and Quaternary history and areal geologic data with particular reference to engineering construction and mineral exploration.	Dredge, LA	TS	-	RP	Man	64 J,K,N,O	2413
800025*	Chromium resources in Canada Obj: Survey of available information on Canadian chromite occurrences. Determinations of potential for chromite (and associated platinum group metals) in mafic/ultramafic intrusive rocks in selected greenstone belts of the Canadian Shield.	Duke, JM	EG	-	MDG	Que Ont	21 E,L; 32 D; 42 A	2465
800026*	Cretaceous biostratigraphy in the Cordillera, western plains and Arctic regions of Canada Obj: To study the paleontology, stratigraphy, paleogeography and depositional environments and to develop a biostratigraphic framework for Cretaceous formations in the area. To describe and illustrate Cretaceous molluscan faunas (ammonites, bivalves) for publication in GSC and other professional journals.	Riccardi, AC	ISPG	P	OP	BC Alta Yk	82 H,I	2431
800027*	Sensitivity of surficial sediments to effects of acid precipitation Obj: (1) To establish baseline data on natural variations of buffering capacities of surficial sediments, with respect to possible loading by acid precipitation in an area of predominantly non-carbonate bedrock. (2) To establish magnitude of natural areal variation of chemical (trace and minor element) components that might be mobilized by loading by acid precipitation. (3) To determine the extent that glacial dispersal has modified the physical and chemical properties of surficial sediments from those that would be expected based on bedrock lithologies alone.	Shilts, MW	TS	-	SMT	Ont	pts. 31 B,C,E,F,G,K,L	2451
800028*	Eastern Margin of the Coast Plutonic Complex Obj: (1) To examine the stratigraphy, structure, and plutonism of the eastern Coast Plutonic Complex and to correlate metamorphic rocks with unmetamorphosed rocks to the east. (2) To produce reports and geologic maps of Bella Coola (93 D), Terrace (103 I), Pemberton (92 J) and Nass River (103 O) map-areas.	Woodsworth, GJ	C	-	GR	BC	92 J,N; 93 D; 103 I,P	2421
800029*	Geology of the Ashcroft and Hope map-areas Obj: To produce Geological maps of Ashcroft (92 I) and Hope (92 H) map-areas.	Monger, JWH	C	-	GR	BC	92 I,H	2412
800030*	Geochemical provinces Obj: To outline possible causes for major, regional variations of selected elements in the crust within Canada; to relate these variations to the distribution of mineral deposits and to concepts of the geological history of Canada; and to ascertain any facts which might assist mineral exploration.	Cameron, EM	RGG	RGC	-	Nfld Que Ont	23 J,O; 41 J; 52 A,B	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800031	Geological reconnaissance, southeastern margin of Franklinian Geosyncline Obj: To improve understanding of the sedimentation and paleogeography of the Franklinian Geosyncline, particularly late Precambrian to lower Paleozoic stratigraphy; to provide better understanding of late Precambrian to Silurian events along the platform and platform-miogeosyncline junction along the edge of the Franklinian Geosyncline.	Christie, RL	ISPG	RG	AI	-	-	2421
800032*	Structure and stratigraphy of Mount Selwyn 93 O-13-E½ and Point Creek 93 O-14 map-areas Obj: To produce for publication 1:50,000 scale geological maps of the designated areas in order to resolve outstanding problems of the structure and stratigraphy of a complex terrain lying geologically on the westward termination of the Peace River Arch. This detailed study will also contribute towards the completion of the 1:250,000 scale geological map of Pine Pass (93 O) map-area.	McMechan, M	ISPG	RG	M	BC	93 O	2421
800033	Coordinator, Geology and Economic Minerals of Canada, 6th Edition Obj: To coordinate the preparation of a new edition of Geology and Economic Minerals of Canada and related charts and thematic maps for publication by 1988.	Wheeler, JO	DGO	-	-	-	-	248
800034	Rift Processes and the Development of Passive Continental Margins Obj: To investigate consequences (i.e. subsidence history, stratigraphy, crustal thicknesses, heat flow, and gravity anomalies) of various processes perhaps responsible for initial rifting. These processes include extension, intrusion, erosion and phase changes in the lower crust. Models of the processes allow predictions of the above observations which can be compared to real data. This allows elimination of models which do not fit the observations and hopefully will lead to a better geological model of the rift processes.	Keen, CE	AGC	RR	OBM	-	-	2421
800035*	Seismic studies of continental margins and ocean basins of the North Atlantic Obj: To study the variations in crustal structure across passive continental margins; To study the deep structure of the lithosphere using data resulting from the Lesser Antilles Deep Lithosphere Experiment (LADLE); To relate seismic structure to other geological and geophysical data and to models of continental margin evolution.	Keen, CE	AGC	RR	OBM	-	-	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
800036	Stability and Transport of Sediments on Continental Shelves Obj: The scientific objectives of this project are: (1) to determine the sediment stability under waves and currents on continental shelves, because of a serious lack of experimental data in this highly-disputed field; (2) to apply the above predictively to problems related to ice scouring of seabeds, offshore oil production activities, the differentiation of modern and relict features and the dispersal of materials across the continental shelf; (3) to develop a generalized, programmed strategy for application by other users to solve similar problems of sediment stability at other shelf sites.	Amos, CL	AGC	EMG	CGD	Nfld	-	244
800037	Fluid Rock Interaction in Sandstones Obj: To study the effects of fluid pH and temperature on the stability of authigenic clays in sandstone reservoirs with special reference to hydrocarbon reservoir exploitation.	Foscolos, AE	ISPG	PG	GC	-	-	2461
800038	Regional distribution of marine Mollusca (Gastropoda and Pelecypoda) in Eastern Canada Obj: To determine the areal distribution and ecological requirements of individual species of marine gastropods and pelecypods of the Eastern Canadian littoral and slope as an aid to paleoecological and stratigraphic interpretations of Pleistocene and Holocene occurrences.	Wagner, FJE	AGC	EMG	PEC	Ont NB NS	Pts of 31 C, F, G, K; 20 I, N, O, P; 21 B, C, G, H; 10 M, N; 11 B-6, J, K	2431
800039*	CO-CRUST-1980 Obj: To assist the West Coast Marine Group (PGC) to obtain seismic refraction data at sea. The overall objective for the project is to determine the deep crustal and upper mantle structure beneath Vancouver Island and adjacent areas, and in particular the structure of the zone where oceanic crust is being underthrust beneath the continent.	Loncarevic, BD	AGC	RR	OBM	BC	92	2421

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Olson, D.G.	680081*	Wanless, R.K.	540028; 730046*; 730047
Overton, A.	700061*; 770018*	Wheeler, J.O.	790041*; 800033
		Williams, G.K.	710033
Pedder, A.E.H.	680093*	Williams, G.L.	710062; 730085
Pelletier, B.R.	720101; 720102; 780026	Woodsworth, G.J.	770020*; 780046 ⁻ ; 800028*
Plant, A.G.	570119*; 580160; 620308;		
	680023	Yorath, C.J.	770006*
Podolak, W.E.	680017		

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<u>General</u>	760030	730057	710022*	670002	770037
	760039	740081*	710023	670016	770045
380077	760049	740098*	710033	670576*	770068-
500029*	760055-	740107*	710049*	680064*	780016*
500038	760057*	750014	710050-	680093*	780018
540028	760060	750015-	710051-	680101	780030
570119*	760064	750020*	710091*	680109	780043
570148	760065*	750025	720052	690061	790014
580160	770004	750035*	720101	690072*	790016
590457	770010*	750051*	720102	690095	790018
600307	770015	750055*	730004*	700030-	790024
620308	770038*	750067	730006*	700031-	790029
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630049	770054	750076*	730039*	700042-	790035*
640048*	770072	750085	730040	700043-	790042*
640125	770075	760042*	730041	700045	800002*
640402	770076	760059*	730046*	700061*	800017*
680017	780001	760062*	730054	700073	800020*
680023	780013-	760063	730057	700092*	
680071	780026	770001*	740017	710022*	<u>Keewatin</u>
680073	780032	770017-	740019	710049*	570029*
680114*	780042	770025*	740081*	720044*	660006
690038*	780048	770031*	740092*	720062	680012
690086-	780049*	770044*	740098*	720070	680101
690089	790002*	770046	740107*	720081	690072*
690090	790004*	770047*	750008	720101	690095*
700008	790012	770063*	750010*	720102	700048
700011	790015	770068-	750014	730006*	720062
700014-	790018	770071*	750025	730021	720070
700027	790019	780029	750027	730027*	730013
700059*	790028	780035*	750055*	730046*	730046*
710013	790036*	780037	750067	730051*	740017
710059*	790037*	780046-	750069*	740003	740084*
710098	790039	790003*	750076*	740017	750004
720056	790040	790005	750077	740020	750005
720066	800021	790007*	750085	740030	750010*
720078	800031	790008	750098*	740065	750051*
720089*	800033	790018	750103	740067	750071
720095	800034	790031	760024	740092*	750074-
720103	800035*	790032*	760047*	740104	750098*
730008	800037	790033*	760059*	750006	750102
730042-		790034*	760063	750010*	760012
730047	<u>Yukon</u>	790044*	770012	750017	760025
730055-		800001*	770018*	750024	760028
730062	500029*	800002*	770019*	750027	760047*
730063	550101*	800011*	770024*	750036	760058*
730081*	610007	800022*	770025*	750051*	770022
730085	610019*	800026*	770044*	750063*	770032
740035-	650013	800037	770045	750071	770035*
740042	650024*		770051	750079	770036*
740100	670576*	<u>Mackenzie</u>	770055*	750083	770051
750021	680031*		770063*	750092*	770055*
750023	680093*	500029*	780009*	750098*	770077*
750032	680109	570001-	780010	750100	780002*
750038	680119	610007	780029	760010	780007
750039	690005*	610019*	790007*	760014*	780008*
750043*	700034*	650008	790008-	760015*	780012*
750045	700071-	650024*	790018	760021*	780035*
750046	700092*	660009*	790031	760023*	780044
750053	710020	670068	800002*	760026	790009*
750068	710022*	680031*	800003	760037	800002*
750080	710091*	680047*	800006*	760042*	800004*
750088*	720041	680093*	800009*	760045*	800012
750089	720101	680109	800016*	760047*	800016*
750093*	720102	680119		760053	
750094*	730027*	690005*	<u>Franklin</u>	760058*	
760004-	730035	700015		770012	
760016	730037-	700034*	610019*	770013	
760022-	730046*	700071-	650003-	770028	
760029*	730054	710020	650007*	770036*	

<u>British Columbia</u>	770016	760042*	<u>Manitoba</u>	750010*	770030*
	770020*	760056		750034	770061*
	770024*	760062*	570029*	750037*	770063*
490038*	770025*	770038*	630037*	750051*	770070*
500029*	770031*	770042*	680076	750061	770071*
610011	770038*	770046	680081*	750064	770077*
610019*	770041*	770048	680093*	750098*	780002*
610269	770042*	770053	710092	760044*	780017*
620018	770044*	770060	720080*	760045*	780023*
620019-	770060	770067	730046*	760048*	780033*
630016	770067	780003	740016	760061*	780035*
630017*	770071*	780004	740017	760065*	780044
630037*	780003	780005	740085*	770030*	790021-
650015	780004	780006*	740091*	770045	790025
650023	780005	780028	750007*	770061*	800005*
650024*	780027*	780039*	750010*	770070*	800013*
670576*	780028	780045	750034	770071*	800018*
680060*	780039*	780047*	750037*	770077*	800019*
680066*	780045	790008-	750069*	780002*	800020*
680081*	780046-	790013*	750070*	780014*	800023*
680084	790003*	790020-	750072	780015*	800025*
680093*	790006*	790022*	750098*	780016*	800030*
690009	790008-	790032*	750110*	780017*	
690064	790013*	790038*	760027*	780024*	<u>Nova Scotia</u>
690075*	790020-	790043	760044*	780033*	
700003	790022*	800002*	760058*	780047*	400006*
700047*	790030*	800026*	760065*	790026*	500029*
710022*	790032*		770036*	800013*	650056*
710048*	790038*	<u>Saskatchewan</u>	770055*	800018*	680060*
710091*	790041*		770063*	800025*	680081*
720037	800002*	570029*	770067	800027*	680102*
720041	800010*	580175	770071*	800030*	680109
720057-	800011*	630037*	770077*	800038	700008
720071*	800020*	640420	780003		700056
720098*	800026*	650027*	780011	<u>Quebec</u>	710061*
730004*	800028*	680012	780016*		710062
730027*	800029*	680081*	790026*	400006*	710065
730035	800032*	680093*	800007*	550101*	720071*
730036*	800039*	720071*	800014*	570029*	720072
730046*		720073	800024*	650056*	720104
730057*	<u>Alberta</u>	720080*		670003	730001*
730067*		730004*	<u>Ontario</u>	680060*	730043
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740081*	570029*	740081*	400006*	680102*	740004
740090	610019*	740085*	550101*	690064	740084
740091*	610269	740089-	570029*	690072*	740085*
740095	650023	740091*	630037*	690095	740106*
740098*	650027*	750010*	640036	700008	740110
740107*	670576*	750049	680060*	700011	750010*
750014	680027	750051*	680081*	710016-	750038*
750015-	680090	750058*	690064	710083	750051*
750018	680091	750069*	700018	720071*	750096*
750019	680093*	750070*	710016-	720072	760014*
750020*	700003	750098*	720071*	730012	760027*
750027	700034*	750110*	720072	730027*	760038
750035*	700037*	760044*	720080*	730160*	760045*
750051*	710018-	760048*	720084*	740017	760054
750069*	710022*	770053	730001*	740081*	760065*
750070*	710091*	770055*	730004*	740084*	770045
750076*	720084*	770067	730006*	740085*	770063*
750078*	720098*	770071*	730027*	740091*	770071*
750082*	730057	780003	730046*	740110	770077*
750085	740041	780015*	730160*	750007*	780016*
750088*	740081*	780016*	740016	750010*	780021*
750108*	740085*	780023*	740017	750034	780022*
760018-	740089-	780047*	740068*	750037*	780031*
760042*	740095	790013*	740081*	750058*	790026*
760056	750018	790026*	740084*	750061	790027*
760059*	750069*	790045*	740085*	750064	800015*
760062*	750070*	800007*	740091*	760061*	800023*
770001*	750076*		740107*	760065*	800038
770006*	760018-		750007*	770027*	

<u>Newfoundland</u>	720075	760054	<u>New Brunswick</u>	730043	790018*
	730043	770026*		730044*	790026*
400006*	730044*	770063*	400006*	740084*	790034*
500029*	730072*	770071*	500029*	740085*	800023*
570029*	740003	770077*	680081*	740091*	800038
670003	740004	780025*	680102*	740110	
680096	740017	780031*	680109	750010*	<u>P.E.I.</u>
680102*	740072*	790017	690064	750048	
680109	740110	790018	700008	750051*	680102*
690043	750001*	790025	700011	760008*	680109
690065	750010*	790027*	700016	760014*	700008
690072*	750011	800023*	710038	760045*	700011
700008	750051*	800030*	710061*	760054	710061*
710061*	760014*	800036	710062	770071*	710062
710062	760037		720071*	770077*	740110
710065	760038		720072	780019*	750010*
720072	760043*		730001*	780022*	760014*
			730019*	780047*	