

CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS
1978 - 1979

Compiled by M.A. Petre



ECONOMIC GEOLOGY
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GÉOLOGIE ÉCONOMIQUE

OTTAWA
1978

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PREFACE

This catalogue of all scientific projects of the Geological Survey of Canada approved as of August, 1978 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, 1978 to 31 March 1979, and 2) the field program for the summer of 1978.

As a catalogue it lists and briefly describes active scientific projects. These total 456 and are compiled from instructions issued to project leaders for 1978-1979 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 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 1978 comprises the field component of those active projects marked by an asterisk after the project number. These total 212. No distinction has been made between a minor field component, such as a few days, and a major component requiring the entire field season.

John E. Brindle
Chief Program Officer

Ottawa
1978

DEPARTMENT OF ENERGY, MINES AND RESOURCES
PROGRAM ACTIVITY STRUCTURE

1. ADMINISTRATION PROGRAM

<u>ACTIVITIES</u>	<u>SUB-ACTIVITIES</u>
1. Executive	1.1 Minister's Office 1.2 Deputy Minister's Office 1.3 Corporate Planning and Evaluation 1.4 Departmental 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
 - 2.2 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

- DS – Data Systems Group
- SP – Special Projects

ATLANTIC GEOSCIENCE CENTRE – AGC

- EPG – Eastern Petroleum Geology Subdivision
- RSBS –Regional Stratigraphy Basin Synthesis
- SS –Stratigraphy Sedimentology

- EMG – Environmental Marine Geology Subdivision
- CGD –Coastal Geodynamics
- IGC –Inorganic Geochemistry
- OGC –Organic Geochemistry
- PEc –Paleoecology

- 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
- DRC –Data Retrieval and Compilation

CENTRAL LABORATORIES AND ADMINISTRATIVE SERVICES – CLAS

- M – Mineralogy
- AC – Analytical Chemistry

INSTITUTE OF SEDIMENTARY AND PETROLEUM GEOLOGY – ISPG

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

- E – Energy Subdivision
- GC –Geochemistry
- PR –Petroleum Resources

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

- RG – Regional Geology Subdivision
- AI –Arctic Islands
- CTS –Curation and Technical Services
- M –Mainland
- SM –Sverdrup-Mackenzie

REGIONAL AND ECONOMIC GEOLOGY DIVISION – REG

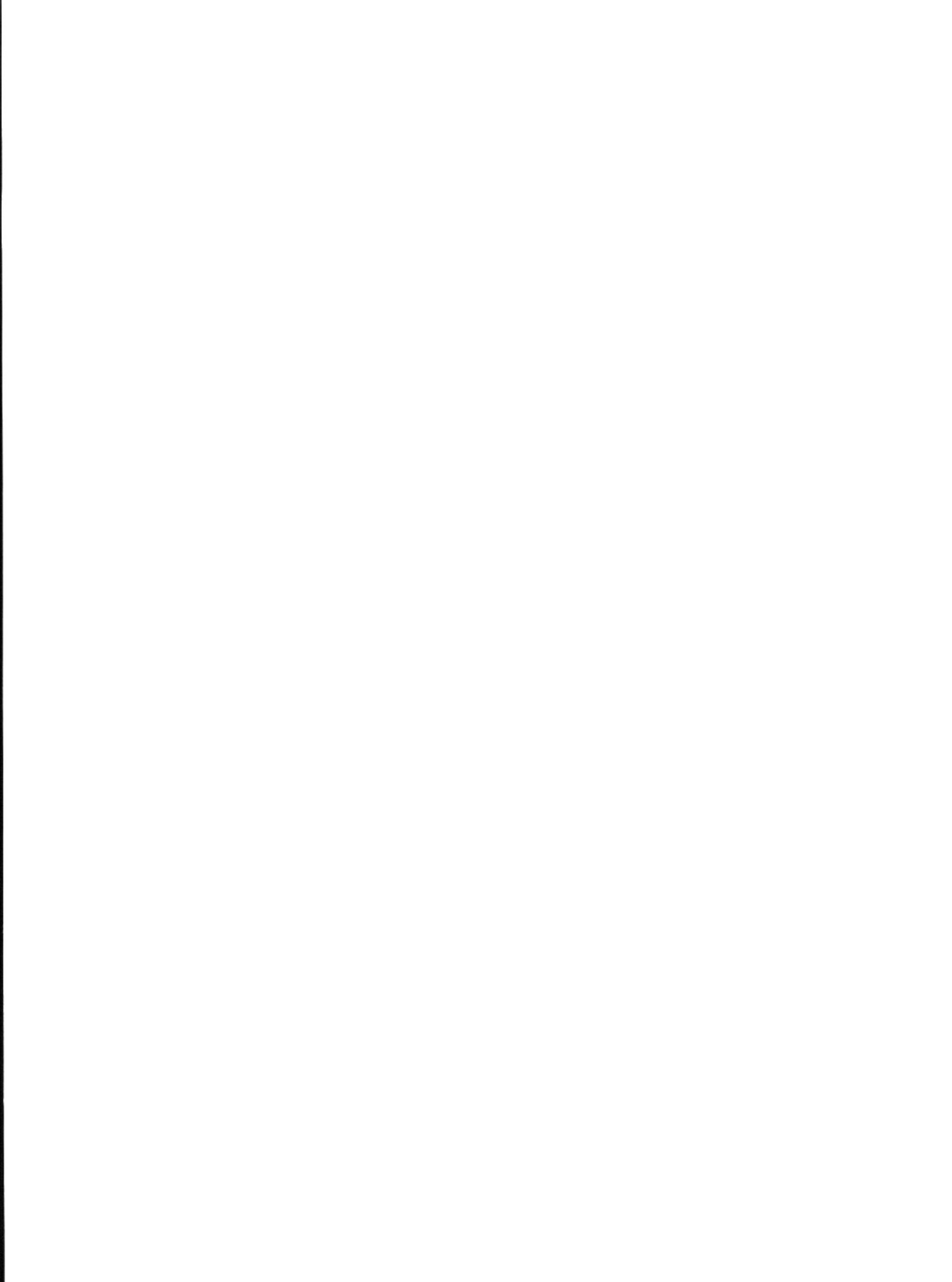
CPM	–	Cordillera and Pacific Margin Subdivision
MG		-Marine Geology
GR		-Geological Research
CS	–	Correlation and Standards Subdivision
A		-Appalachian
EP		-Eastern Paleontology
G		-Geochronology
PET		-Petrology
EG	–	Economic Geology Subdivision
GM		-Geomathematics
MDB		-Mineral Data Bank
MDG		-Mineral Deposits Geology
URE		-Uranium Resources Evaluation
SP		-Special Projects
P	–	Precambrian Subdivision
BS		-Bear-Slave
NC		-Northern Churchill
PMag		-Paleomagnetic
SG		-Superior-Grenville
SP		-Special Projects

RESOURCE GEOPHYSICS AND GEOCHEMISTRY – RGG

R	–	Radiation
ANI		-Analytical and Nuclear Instrumentation
RG	–	Regional Geophysics
CS		-Contract Surveys
DC		-Digital Compilation
EAO		-Experimental Airborne Operations
MM		-Magnetic Methods
SM		-Seismic Methods
RIE	–	Resource Identification and Evaluation
GC		-Geochemistry
RM		-Radiation Methods
SM		-Seismic Methods
SP		-Special Projects
TG	–	Terrain Geophysics
EM		-Electrical Methods
SM		-Seismic Methods

TERRAIN SCIENCES DIVISION – TS

EEG	–	Engineering and Environmental Geology
MC	–	Marine and Coastal
PG	–	Paleoecology and Geochronology
RP	–	Regional Projects
SMT	–	Sedimentology and Mineral Tracing
SP	–	Special Projects



Project Number Title Project Leader Div Subdiv Sec Prov NTS Dept'l Classification

380077	Analysis of rocks and minerals Obj: To provide compositional data on geological materials as a contribution to the solution of geological problems.	Abbey, S	CLAS	-	AC	-	-	2435
400006*	Preparation of collections of Canadian rocks and minerals for distribution to the public Obj: To make available for distribution to educational institutions and the Canadian public representative collections of Canadian rocks and minerals that will assist prospectors and promote interest in the mineral industry.	Larose, JM	CLAS	-	M	BC Alta Sask Man Ont Que	-	248
490001	Mesozoic and Tertiary rocks of the west coast of Vancouver Island and in Quatsino Sound Obj: A stratigraphical-paleontological study of the Mesozoic and Tertiary rocks of the area. Special attention is to be paid to the biochronological dating of volcanic units, the stratigraphy and paleontology of the Jurassic-Cretaceous contact, and the potential of Tertiary strata with respect to oil and gas.	Jeletzky, JA	ISPG	P	OP	BC	92 E,F,L	2431
490038*	Miscellaneous field investigation by staff at Vancouver office 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.	Leaming, S	REG	CPM	GR	BC	104 I,J,P	296
500029*	Identification and biostratigraphic interpretation of referred fossils Obj: By the study of fossils collected by officers of the Geological Survey of Canada, members of other organizations and the general public, to provide identifications and ages vital to correlation of the host rocks and to the dating of geological events. To describe important fossils from these collections to further knowledge of paleontology and biostratigraphy of Canada.	Staff of Eastern & Western Paleontology Sections	ISPG REG AGC	P CPM, CS EPG		Yk Mack BC	95 B,C 103 G, 82 E,K	2431

Asterisk in first column indicates project has a field component
 Brackets indicate seasonal employee or other non-staff
 Underscoring indicates province of 1978-79 field work

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
500038	Coal resources of Canada and studies of coal deposits in Canada 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.	Irvine, JA	ISPG	CG	RE	-	27,62,72,82,83	312
540028	Isotopic age determinations of rocks and minerals Obj: To determine the geological age of rocks, minerals and geological events using isotopic methods.	Wanless, RK	REG	CS	G	-	-	2432
550004	Cretaceous and Jurassic of Richardson Mountains, Porcupine Plains and Eagle Plains Obj: To study the stratigraphy, paleontology, paleogeography and depositional tectonics of Cretaceous and Jurassic formations of the region. To describe and to figure the most important elements of their macroinvertebrate faunas.	Jeletzky, JA	ISPG	P	OP	<u>Mack Yk</u>	117,116,106	2431
550101*	Reference collections of minerals, rocks and ores Obj: To develop, faster and curate reference collections of minerals, rocks, and ore specimens in support of Branch activities and in the national interest.	Steady, HR	CLAS	-	M	<u>Yk Ont Que</u>	-	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.	Douglas, RJW	D60	-	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	REG	EG	SP	<u>Nfld Que Ont</u>	-	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.	Trail, RJ	CLAS	-	M	-	-	2435

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
570148	Radiocarbon dating program Obj: To plan and co-ordinate the radiocarbon dating program of the Geological Survey.	Blake, W Jr	TS	-	PG	-	-	2433
580036	Geology of titanium and titaniferous deposits of Canada Obj: To carry out comprehensive research on the geology to titanium and titaniferous 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.	Rose, ER	REG	EG	MDG	Que Nfld Ont Man	-	2465
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.	Traill, RJ	CLAS	-	M	-	-	2435
580175*	Analytical services and development in geochemistry Obj: To coordinate and supervise the sample preparation and analysis of sediment, soil, rock, mineral and water samples, collected by or for the geochemistry section program. These services are provided both in Ottawa and in the field either by G.S.C. staff with in-house facilities and to a lesser extent by commercial laboratories under standing offer agreements.	Hall, GEM	RGG	RIE	GC	Ont	52 A,H	248
590194	Monograph of the Canadian belemnites Obj: To describe and figure all hitherto known Canadian belemnite species, genera and higher taxa. The zonal value of the individual taxa concerned is to be appraised and the results incorporated in the preliminary and final reports.	Jeletzky, JA	ISPG	P	OP	-	-	2431
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
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	CLAS	-	AC	-	-	2435

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	MTS	Dept'l Classification
600353	Dibranchiate volume of the Treatise on Invertebrate Paleontology Obj: To prepare an authoritative summary of the present state of knowledge of this subclass of cephalopod mollusks. The final report is to be published as the Dibranchiate volume of the Treatise on Invertebrate Paleontology.	Jeletzky, JA	ISPG	P	OP	-	-	2431
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
610014	Cretaceous stratigraphy, Peace River to 60 Obj: To describe the stratigraphic successions, to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the correlation of Cretaceous strata, their lateral variations, their potentialities as sources of oil and gas, and their suitability as reservoirs for those fuels; to establish the relationships with equivalent successions studies between Peace and Smoky Rivers and in the region of Liard and Mackenzie Rivers.	Stott, DF	ISPG	-	-	BC	94 A,B,G,J,K,O,P	2421
610019*	Ordovician and Silurian Biostratigraphy of British Columbia, Alberta, Manitoba Yukon, Mackenzie & Franklin Obj: Establishment of sequence of biochronological zones for Ordovician and Silurian time. Such sequence of zones to provide necessary time control for exploration of natural resources of Ordovician and Silurian rocks in northern and western Canada.	Norford, BS	ISPG	P	MaP	Frank Mack Yk BC Alta	36, 37, 47-49, 54, 57-59 67-69 82 J, 83, 85, 94 E-97, 104-106, 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, 0	2462
620012	Volcanology of the Yellowknife Group Obj: To obtain surface and subsurface data about sequences of volcanic rocks in a known mineral area.	Baragar, WRA	REG	P	SP	Mack	85 J; pts of 76, 86	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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	REG	EG	MDG	BC	82 J W 1/2	2412
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	CLAS	-	M	-	-	2435
630003	Operation Grant Land - NE Ellesmere Island and N Greenland Obj: To obtain a better understanding of the geological features of an orogenic belt extending across northeastern Ellesmere Island into adjacent Greenland.	Christie, RL	ISPG	RG	AI	Frank	120 C-G; 340 C-G	2412
630016	Coast Mountains project 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.	Roddick, JA	REG	CPM	GR	BC	92 F NE ₂ , G W ₂ , J, K, L, NE $\frac{1}{2}$, M, N; 93 D; 102 P; 103 A, G, I W ₂ , J, N, P W ₂	2412
630017*	Operation Liard 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.	Taylor, GC	ISPG	RG	-	BC	94 F, G, H, I, J, K, N, O, P	2412
630031	Multispectral Imagery 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.	Slaney, VR	RGG	RIE	RM	-	-	2423
630037*	Geology of Canadian nickel and platinum group deposits 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.	Eckstrand, OR	REG	EG	MDG	BC Sask Man Ont Que	23; 31; 32 A; 41 I, P; 42 A, B; 52; 53 E; 63 O, P; 64 C; 74 H; 35 G, H	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
630039	Geology of vanadium deposits in Canada Obj: To carry out comprehensive research on the geology of vanadium 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.	Rose, ER	REG	EG	MDG	-	-	2465
630049*	Electrical Rock Properties 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.	Katsube, TJ	REG	TG	EM	Ont NB	41 I; 31 F; 21 P	2435
640036	Geology of the Lake Panache and Collins Inlet map-areas, Ontario 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.	Frarey, MJ	REG	P	SP	Ont	41 H, I	2421
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	CLAS	-	M	-	-	248
640125*	General metallogeny 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	REG	EG	MDG	-	-	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	REG	EG	MDG	-	-	296

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
640420	Geological observations at shafts of potash mines in Saskatchewan	Price, LL	ISPG	RG	SM	Sask	62 K/5, 12; 72 O/16; 62 I/16; 72 P/13,14; 73 B/1,2,3	2421
	Obj: To record geological data and obtain fossil and rock specimens from the rocks exposed in large-diameter potash mine shafts in the eastern Plains; to interpret these observations and material within the stratigraphic framework.							
650003	Cornwallis and adjacent smaller islands	Thorsteinsson, R	ISPG	RG	AI	Frank	58 F,G; 68 E,H; 59 B	2412
	Obj: 1. 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, and 3. Improve the knowledge and understanding of the morphology of the Silurian and Devonian ostracoderms of Cornwallis Island, thus aiding in the establishment of a more useful stratigraphic framework for the region and thereby contributing to (1).							
650007*	Ocean aeromagnetics	Bower, ME	REG	RG	MM	-	-	2416
	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.							
650008	Stratigraphy, sedimentology and correlation of Nonacho Group, N.W.T.	McGlynn, JC	REG	P	BS	Mack	75 E,F,K	2421
	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.							
650013*	Quaternary geology, Aishihik Lake	Hughes, OL	TS	-	RP	Yk	115 H, pts. 106 D,E; 115 A,B,G,I	2413
	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 area geological information for land use planning and engineering development.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'l Classification
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	REG	CPM	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, O	2412
650024*	Cambrian biostratigraphy of the Canadian Cordillera Obj: To identify and describe Cambrian fossils from the Canadian Cordillera, ascertain their relative stratigraphic positions, and provide faunal correlations for their enclosing strata	Fritz, WH	REG	CS	EP	Mack Yk BC Alta	105 I; 106 B; 105 P; 106 A; 94 C; 94 F, K, L 83 C 82 N, O	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, 73, 82, 83	2422	
650056*	Geology of lead and zinc deposits in Canada Obj: To carry out comprehensive research on the geology of lead and zinc 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.	Sangster, DF	REG	EG	MDG	Que NS	32 D, F, K 11 F, K	2465
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	REG	P	SG	Ke	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	REG	P	BS	Mack	75 E, L, K; 85 H, I	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	MTS	Dept'l Classification
660026	Stratigraphy and conodont zonation of Lower and Upper Devonian strata of southwestern Ontario	Uyeno, TT	ISPG	P	MP	Ont	30 L,M; 40 G,I,J,O,P	2431
	Obj: To establish conodont zonation of Devonian strata of southwestern Ontario, and to facilitate the more precise correlations of these strata with other sequences, such as the North America standard in New York State, and the mondial standards of France, Belgium and Germany. To give a brief history of the Devonian rocks of this area, to describe the rock units in modern terminology, and to provide a general geological setting to the discussion on conodont biostratigraphy.							
670002	Operation Bylot	Jackson, GD	REG	P	NC	Frank	27, 37; 38, 47; 48	2411
	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.							
670003	Anorthosite study	Emslie, RF	REG	CS	Pet	Que Nfld	13 L,M,N; 23 I	2421
	Obj: To examine three large anorthosite intrusions between Michikamau Lake and Nain, Coast of Labrador for purposes of comparison with Michikamau Intrusion (including mineral potential).							
670016	S.W. Ellsemere - W. Devon Islands (Operation Grinnell)	Kerr, JW	ISPG	RG	AI	Frank	49 B,C; 59 A,B; 69 A	2412
	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.							
670019*	Stratigraphy, structure, and carbonate petrology of the Marble Canyon Formation	Trettin, HP	ISPG	RG	AI	BC	92 I,O,P/4	2421
	Obj: To clarify the understanding of the stratigraphy, structure, and carbonate petrology of the Marble Canyon Formation.							
670028*	Geology of rare earth deposits of Canada	Rose, ER	REG	EG	MDG	-	-	2465
	Obj: To carry out comprehensive research on the geology of rare earth deposits in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guidelines for their discovery; 3) to provide advice to government for mineral policy and related matters; 4) development of practical and inexpensive field tests for the detection of rare-earth elements.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept '1 Classi- fication
670041*	Electrical mapping techniques	Scott, WJ	REG	TG	EM	Mack Sask Ont Man Que	21 M, 74 G; 107 C; 31 D, F, G, K; 85 B, J; 84 G, 52 L; 62 I	2435
	Obj: To asses the capabilities and limitations of using galvanic and electromagnetic techniques as a means of providing geological information, delineating faults and shear zones, and mapping permatrost occurrence and thickness.							
670064	Cretaceous and Upper Jurassic biostratigraphy of Western Cordillera	Jeletzky, JA	ISPG	P	OP	BC	92, 93, 103, 104	2431
	Obj: To study the stratigraphy, paleontology, paleogeography, and depositional tectonics of the Cretaceous and Upper Jurassic (Buchia-bearing beds only) formations of the region. To describe and to figure the most important elements of their marine macroinvertebrate faunas.							
670068	Operation Norman	Cook, DG	ISPG	RG	M	Mack	86 M ₂ ; 96; 97; 106 E ₂ ; 107 E ₂	2411
	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							
670557	Stratigraphy and age of Precambrian sedimentary rocks and contained sills and dykes, Thule Basin	Christie, RL	ISPG	RG	AI	Frank	120; 340; 560; 29; 39 B, C, E; 49; 59; 28; 38; 48; 58; 27; 37; 47; 57	2421
	Obj: (a) To correlate or distinguish Precambrian sedimentary basins and to obtain information on movement of continental masses; (b) aided by age-determinations on diabase-gabbro sill rocks and other intrusive rocks, to compare the tectonic history of the Precambrian sedimentary rocks of the region.							
670576*	Canadian Triassic Ammonoidea and Bivalvia	Tozer, ET	ISPG	P	OP	Frank Yk BC Alta	103 C, F; 104 P; 106 D; 116 B, D	2431
	Obj: To describe and assess biochronological significance of Triassic Ammonoidea and Bivalvia in order to refine methods for dating Triassic rocks.							
680012	Paleomagnetic study of Proterozoic red beds of the western Canadian Shield	McGlynn, JC	REG	P	BS	Sask Kee	75 E, F; 74; 85; 86; 65; 66	2434
	Obj: To obtain paleomagnetic pole positions from various Proterozoic red bed sequences in the western Precambrian Shield for purposes of correlation.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	MTS	Dept'l Classification
680015	Geological reconnaissance of eastern Devon Island and southeastern Ellesmere Island Obj: (a) Obtain reconnaissance data on the Precambrian rocks for the correlation with the Precambrian rocks of Baffin and Ellesmere Island and of Greenland; (b) obtain reconnaissance data on the sedimentary rocks so that the stratigraphy of the Ellesmere-Devon-Baffin region may better be understood.	Christie, RL	ISPG	RG	AI	Frank	38 F; G; 48 E-H, 39 B,C, F,H, 49 A,B,D	2412
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.	Podoljak, WE	TS	-	SMT	-	-	2444
680023	X-ray diffraction analyses and mineralogical studies Obj: To provide X-ray diffraction analyses and mineralogical studies in support of Branch projects.	Traill, RJ	CLAS	-	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,N; 115 P; 116 I,O,P 117 A	2422
680037*	Hammer seismic surveys Obj: To determine thickness and nature of overburden and configuration of bedrock, as requested in specific urban geology and Uranium Waste Disposal programs.	Hunter, JM	RGG	TG	SM	Man Mack Yk Ont	52 L; 62 I; 105; 106; 107; 31 F	2453

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
680038	Geology of northern Vancouver Island Obj: To complete the reconnaissance geological mapping of the northern part of Vancouver Island, assess its mineral potential and contribute to the knowledge of the Pacific continental margin.	Muller, JE	REG	CPM	GR	BC	Pts 92 E,K,L, 102 I	2412
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 E-F, I,P; 116 I,N-P	244
680055	Quaternary geology, Great Lakes Obj: To map, describe, analyze and explain unconsolidated deposits, associated organic remains and geomorphic features of the Great Lakes in order to: (1) determine Quaternary stratigraphy, history and paleoecology; (2) to identify processes operative in the lakes during the Quaternary and the factors controlling them; (3) to provide areal geological knowledge including background information for other scientific studies in the Great Lakes.	Anderson, TW	TS	-	PG	-	-	2415
680060*	Geology of silver and gold deposits in Canada Obj: To carry out comprehensive research on the geology of silver and gold deposits in order to: (1) support or provide geologically based estimates of Canada's mineral resources; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.	Thorpe, RI	REG	EG	MDG	Que Ont NS BC	52 K-N; 92 H,J; 94 E, 103 G	2465
680064	Stratigraphy and Paleontology of Upper Paleozoic rocks on parts of Ellesmere and Axel Heiberg Islands Obj: (a) To improve the understanding of stratigraphy and facies relationships of the marginal and axial parts of the Sverdrup Basin; (b) to establish a biostratigraphic framework for Carboniferous and Permian rocks; and (c) to evaluate the economic potential of the area.	Nassichuck, WW	ISPG	P	MaP	Frank	49 B,C,F,G,H; 340 A, B,C,D; 560 A	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
680066	Geology of the Cariboo Mountains, British Columbia Obj: To determine the tectonic movement of the Cariboo Mountains, and explain their origin, development made of emplacement and economic potential.	Campbell, RB	REG	CPM	GR	BC	83 D; 93 A,H	2412
680071*	Alkaline rocks in Canada Obj: To identify and examine occurrences of alkaline rocks in Canada, and to explain their origin, development made of emplacement and economic potential.	Currie, KL	REG	CS	Pet	Nfld	13 E,L	2421
680073	Magnetic anomaly map of Canada Obj: To prepare and publish the fourth edition of the magnetic anomaly map of Canada (1255A) in order to portray the major magnetic patterns and to interpret the resultant map and associated data in terms of the regional geology, tectonics, metamorphism and metallogeny of Canada.	McGrath, PH	REG	RG	M	-	-	2423
680081*	High resolution aeromagnetics (experimental surveys) Obj: To execute, according to prescribed specifications, high resolution aeromagnetic and/or gradiometer surveys over areas selected and defined by Regional Geophysics program management.	Olson, DG	REG	RG	MM	Que Man NB NS Ont Sask BC	30 M, 52 L, 92 F,H, 93 E,L; 42 E; 31 B,K	2416
680082	Annual review, Exploration Techniques Obj: To provide an annual review of new mining geophysical, geochemical, data recording and compilation techniques for the mineral exploration industry.	Hood, PJ	REG	RG	MM	-	-	296
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	-	BC	93 I,0,P	2412
680090	Identification of unknown minerals by X-ray and chemical methods Obj: Quantitative and semiquantitative analysis of layer lattice silicates, mixed layer silicates, clays, minerals and elements in samples submitted by GSC staff.	Foscolos, AE	ISPG	E	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	E	GC	Alta	-	2435

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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; 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 GSC data base on volcanic terrane.	Baragar, WRA	REG	P	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.	Uyeno, TT	ISPG	P	MiP	Frank	49; 57; 58; 59; 68; 69; 78; 89	2431
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 Que	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	11 E, 1, 2, 11, 12, 95	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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	REG	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	REG	CPM	GR	Mack Yk	105 N; 0; 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	REG	CPM	GR	BC	93 L	2412
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	REG	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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
690054*	Erosion in a permafrost environment Obj: To document the nature, extent, and rate of erosion in permafrost areas disturbed by activities of man, and to determine the importance of surface material, geomorphology, microclimate, snow cover, vegetation, depth of active layer, ground ice distribution and other factors on controlling erosion.	Heginbottom, JA	TS	-	GP	Mack	<u>107 B, C</u> (parts of)	244
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	REG	P	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	<u>Ont Que</u> <u>BC NB</u>	82 E, L; 92 G, H, I; <u>31 G, F</u> <u>21 G, H, I, J, N, O, P</u>	2433
690065	Surficial geology St. Anthony - Blanc Sablon, 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
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	REG	CPM	MG	BC	<u>92 C</u> ; Pts 93, <u>102 I</u> , 103	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
690086	1:1 million Geological Atlas Projects 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.	Douglas, RJW	DGO	-	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	CLAS	-	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	CLAS	-	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, MW	TS	-	SMT	Que Kee	56 D, 55 L, 21 E	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	REG	CS	Pet	BC	82	2423
700008	St. Mary's River (NTS 11) map-area, 1:1,000,000 Geological Atlas Program Obj: To publish a modern compilation and synthesis of the geological 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.	Poole, WH	REG	CS	A	NS PEI NB NFLd Que	11	2423

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept's Classification
700011	St. John River (NTS 21) map-area. 1:1,000,000 Geological Atlas Program Obj: To publish a modern compilation and synthesis of the geological 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.	Poole, WH	REG	CS	A	NB PEI Que	21	2423
700014	Mineral indicator tracing, southern Keewatin 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).	Shilts, WM	TS	-	SMT	-	-	244
700015	Yellowknife and Hearne Lake map-areas, District of Mackenzie Obj: To revise and interpret the geology and economic potential of the Precambrian terrain of the project area known only through earlier gross reconnaissance.	Henderson, JB	REG	P	BS	Mack	85 I, J	2412
700016	Plaster Rock (east half) map-area, N.B. 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.	Skinner, R	REG	P	-	NB	21 J/14 E1/2	2421
700018	Paleomagnetism and rock magnetism instrumentation and technological development Obj: To contribute to the development of paleomagnetism as a geophysical method: (a) by designing, building, testing and calibrating instrumentation required for the measurement of magnetic properties of rocks and minerals; (b) by developing new techniques or systems for the routine measurement of magnetic parameters of standard samples and for the processing of data resulting from such measurements; (c) by improving on the design of existing instrumentation or techniques in order to improve the efficiency of the laboratory and/or the quality of the data emanating from the laboratory.	Christie, KW	REG	P	PMag	Ont	-	2434

Number	Title	Leader	Div	Subdiv	Sec	Prov	MTS	Classification
700027*	Comparative studies of ancient and modern sedimentary environments Obj: The objective is to familiarize the participants with the types of observation 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.	Taylor, GC	ISPG	RG	-	Alta BC	-	2421
700029	Operation Peal Sound - stratigraphy and structure of Prince of Wales Island and adjacent small islands Obj: (a) To improve the understanding of the stratigraphic framework of the Paleozoic rocks of Prince of Wales Island. (b) To determine the tectonic history of the Boothia Uplift.	Christie, RL	ISPG	RG	AI	Frank	67 D, E, G, H; 68 A, E; 78 D, 58 B, C, F,	2421
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.	Norris, AW	ISPG	P	MaP	Alta Mack Yk	116, 117, 106, 74 M 84 P 85 B, C	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	82 O, J; 83 B, C, F	2421
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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
700047	Operation Finlay Obj: To establish the stratigraphy, structure and geologic history; to establish the geological framework to which the mineral deposits may be related as an aid to regional development.	Gabrielse, H	REG	CPM	GR	BC	94 C E ₁ , F W ₂ , 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	REG	CS	Pet	Kee	56 A South half parts of 55 P and 46 D	2436
700055	Obj: not available	Dawson, KR	REG	EG	MDG			
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 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. The work entails: development of systematic records and appraisals of geological data; use of these to classify types of deposits of economic commodities and to determine criteria for their recognition; development of understandings of the relationships between deposit types and their geological environments; development of concepts on genetic processes that govern these relationships; application of the foregoing to determine regions and geological units favourable for the occurrence of each type of deposit, and estimates of mineral resources therein. The work further entails transmitting information and advice through consultations, reports and maps to government agencies and others.	Kirkham, RV	REG	EG	MDG	-	-	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	RGG	RIE	SM	Que NB	21 E; 32 C,G	2421
700071	Redstone River Sheet 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.	Douglas, RJW	DGO	-	SP	Mack Yk	95	2423
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, WM	REG	P	NC	Frank	Pts. of 47 A-D	2412
710012	Study of the Ramah Group and of Proterozoic-Archean relationships in Northern Labrador Obj: To determine the following parameters relative to the Ramah Group. (1) Stratigraphy, sedimentology and mineral potential. (2) Interactions between Ramah Group and Archean basement. (3) Nature and history of Archean-Proterozoic boundary. (4) Distribution of metamorphic facies and relationships to structures.	Morgan, WC	REG	P	NC	Nfld Que	14 L,M	2421
710013	Northern Basin Analyses 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 interrelationships of tectonics sedimentation, biostratigraphy, geochemistry and hydrocarbon distribution. To evaluate the oil and gas potential of the region.	Pugh, DC	ISPG	RG	M	Mack Yk	106; 116	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.	Douglas, RJW	DGO	-	SP	Ont Que	pts 31, 41, 52	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
710018	Alberta Foothills Obj: 1) standard file mapping with emphasis on stratigraphy and structure; revision of mapping by B.R. Mackay; oil, gas, coal potentialities.	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
710022*	Carboniferous and Permian biostratigraphy and coral faunas, western and northern Canada Obj: Establishment of faunal sequence within stratigraphic framework previously described for Upper Paleozoic of Alberta, British Columbia, Yukon, District of Mackenzie, for use as a biostratigraphic reference succession in surface and subsurface exploration of these areas. Description of coral 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.	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
710023	Granite studies in the Slave Province (Phase I) 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.	Davidson, A	REG	P	SG	Mack	85 I,P	2421
710033	Northern Basin Analysis Program: Great Bear, Redstone and Great Slave map-areas 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 mineral potential of the region.	Williams, GK	ISPG	RG	M	Mack	85, 95, 96	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
710036	Northern Basin Analysis Program: Firth River and Horton River map-areas 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.	Young, FG	ISPG	RG	SM	Mack Yk	107; 117; 87; 97	2421
710038	Juniper (east half) map-area, NB 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.	Skinner, R	REG	P	-	NB	21 J/11 E½	4421
710048*	Geological and geophysical studies of the Pacific Continental Margin Obj: To establish the geological framework of the Pacific Continental Margin; determine the hydrocarbon potential of its contained sedimentary basins, and to determine the tectonic development of the Pacific Continental Margin especially its interaction with the Pacific ocean floor.	Tiffin, DL	REG	CPM	MG	BC	Pts 92; 102; 103	2417
710049*	Geological and geophysical studies in the Beaufort Sea Obj: To produce a magnetic anomaly map and selected shallow seismic profiles of the Beaufort Sea.	Currie, RG	REG	CPM	MG	Mack	87, 97	2417
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	1, 2, 10, 11, 14, 20	2423

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
710062	Palynostratigraphy and Paleocolony 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 cores 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	-	-	2431
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 areal geological knowledge with particular reference to data pertinent to engineering geology.	Dredge, L	TS	-	RP	Que	22 G/5, 6, 11, 14, 15; 22 J/1, 2, 3, E $\frac{1}{2}$	2413
710091*	Palynological studies of Mesozoic and Tertiary coal measures in western and northern Canada Obj: (1) To establish palyno-stratigraphic zonations of coal measures and contiguous strata as an aid to petrological, sedimentological and structural interpretations of coal basins. (2) Where applicable to correlate coal seams by means of spore and pollen histograms.	Sweet, AR	ISPG	P	MiP	BC Alta Yk	82, 83; 92 I 106, 117	2462

Number	Title	Leader	Div	Subdiv	Sec	Prov	NTS	Classification
710092	Quaternary geology inventory, lower Nelson River Basin Obj: To map, describe and explain the Quaternary deposits and landforms to provide areal geologic-geomorphic data and knowledge of the stratigraphy age and history of deposition of surficial materials with particular reference to: (1) terrain information required for land use (forestry) and engineering development; and (2) background information for geochemical and related surveys. 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,J O,P; 64 A,G,H,B	2413
710098	Data Systems Group Obj: 1) To act as specialist consultants to Divisions as required; 2) to undertake general feasibility studies; 3) as advisers to Branch Management on computer use in GSC; 4) continuing administration of operation of Branch Systems.	Hutchison, WM	DGO	-	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.	Okulich, AV	REG	CS	Pet	BC	82 L,M	2421
720038*	Hazelton map-area Obj: To determine the geological framework of Hazelton map-area as a basis for estimating the potential abundance and probable distribution of mineral and fuel resources and as an aid to future development of the region.	Richards, T	REG	CPM	GR	BC	93 E,M	2412
720039	Operation Nuvilik Obj: To determine the geological framework of the region as a basis for estimating the potential abundance and probable distribution of minerals and fuels and to aid in the future development of the region.	Taylor, FC	REG	P	SP	Que	25 E,F; 35 F,G,H,I,J,K	2412
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	REG	-	CPM	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, 69, 79, 88, 89, 98, 340	2431
720051	Saskatchewan Coal Evaluation Program Obj: To determine the quantity, quality, mineability and recoverability of the coal resources of southern and central Saskatchewan to a sufficient degree of accuracy so that their relative position in the framework of Canada's energy supply and demand can be established and reasonably knowledgeable energy policies can be formulated concerning them.	Irvine, JA	ISPG	CG	RE	Sask	62 E,F; 72 F,G,H	312
720052	Geology of Indin Lake (868) 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	REG	P	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	REG	P	-	-	-	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	REG	P	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.	McCrossan, RG	ISPG	E	PR	-	-	311

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
720067*	Ground water geochemistry applied to uranium exploration	Dyck, W	REG	RIE	GC	Ont Que Sask NB Yk BC	31 F,G; 21 H,I; 11 E,L, 72 F,K; 74 H 32 D <u>104 N,O,P; 105 B,F; 21 J</u>	2463
	Obj: (1) To determine the effectiveness of dissolved constituents in ground waters in detecting uranium mineralization. (2) To determine the geochemical relationships of dissolved constituents in ground waters to overburden, bedrock, and mineralization.							
720070	Gneisses of the Prince Albert Group	Frisch, T	REG	P	NC	Frank Kee	Pts. of 46 M,N,L; 47 A,B; 56 I,J,P	2421
	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.							
720071*	Airborne Gamma-Ray Spectrometry (Experimental Surveys)	Holman, PB	REG	RIE	RM	Ont Mack NB NS	11 D,E,F,K; 21 A,G,H,J, M,O; 31 C,D,F; 74 E,L,M; <u>72; 82; 83 52 A,L 75 K,N</u>	313
	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 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	REG	CS	EP	Ont Que NB NS Nfld	<u>11 E,F,K; 12 B,L 21 A,P;</u> <u>22 A,B; 30 L,M; 40 I,P</u>	2431
	Obj: By means of microfaunas 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 H,G,F	2462
	Obj: (a) Petrographic characterization of Saskatchewan lignites; (b) Determination of vertical and lateral changes in petrographic composition; (c) Relation of petrographic composition to environments of deposition.							
720075	Paleomagnetism of the Hopeland diabase dykes	Christie, KW	REG	MAG	P	Nfld	13	2434
	Obj: To determine the paleomagnetism of three swarms of unaltered diabase dykes in the Hopeland area, Labrador.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept.'s Classification
720078	Diatom analysis and paleoecological studies of Quaternary sediments Obj: (1) To develop diatom analysis as a paleoecological tool in conjunction with palynological and plant megafossil analyses. (2) To provide paleoecological interpretation and biostratigraphic correlations of Recent and Quaternary sediments.	Federovich, S	TS	PG	-	-	-	2433
720080*	Interpretation of aeromagnetic surveys Obj: To express the significance of aeromagnetic data in terms of lithological structural and metamorphic patterns in support of mineral exploration, geological mapping and radioactive waste disposal programs and to integrate this information with other types of geoscience data.	Kornik, LJ	REGG	RG	MM	Ont. Man Sask	31 F, C; 55, 56, 64 N, 65, 66, 74, 75, 76	2416
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	REGG	RIE	RM	Ont. Alta	31 C	2463
720089	Quantification of geological variables and geomathematical estimation of mineral potential for selected areas in Canada 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 and scales 1 inch to 4 miles and larger and other sources of information. To compile and code basic parameters for mineral deposits in the same areas. To perform geomathematical analyses in order to assess regional mineral potential.	Fabbri, AG	REG	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 geological 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	REG	EG	MDG	-	-	2466

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
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 resources-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
720103	Hydrocarbon inventory of the sedimentary basins of Eastern Canada Obj: To prepare and maintain a geological appraisal of the potential oil and gas resources of the sedimentary basins of Eastern Canada, including those on the Atlantic continental margin and in Baffin Bay, the Atlantic Provinces and Gulf of St. Lawrence and the St. Lawrence and Hudson Platforms.	Wade, JA	AGC	EPG	RSBS	-	-	311
720104*	Regional subsurface geology of Mesozoic and Cenozoic rocks of the Atlantic continental margin Obj: To provide a regional subsurface geological interpretation of the Atlantic continental margin of Canada as a basis for (1) the Departmental Hydrocarbon Inventory, (2) to establish a framework for other specific studies such as lithostratigraphy, biostratigraphy, geochemistry, plate tectonics, etc.	Wade, JA	AGC	EPG	RSBS	NS	21 A,H	2461
730001*	Primary halos and metallogenic distribution of the elements Obj: (1) To demonstrate that data of trace and major element profiles transversal and vertical to primary halos and zonation of ores about intrusive centres may be used as a guide to prospecting for various types of epigenetic mineral deposits. (2) To demonstrate the effective use of metallogenic and geochemical data in regional prospecting for mineral deposits.	Boyle, RW	GGG	RIE	SP	Ont BC	-	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
730004*	Applied EM problems Obj: To develop theories for new e.m. exploration techniques with special reference to ground and airborne mapping of permafrost and unfrozen ground. To develop methods for quantitative interpretation of e.m. data. To assess various e.m. systems, analyze their deficiencies, if any, and suggest suitable remedies.	Sinha, AK	RGG	TG	EM	Sask BC Mack	92 J; 107 C, B 74 N	2435
730006*	Seismic properties of earth materials in the permafrost environment Obj: To identify and delineate permafrost in continuous and discontinuous zones in the various geomorphological environments found in northern Canada; to obtain acoustic and elastic properties of permafrost and correlate these with lithology, moisture content, temperature, etc; to investigate the applicability of shallow seismic techniques in permafrost areas; to design and test new instrumentation relating to these problems.	Hunter, JA	RGG	TG	SM	Frank Yk Mack Kee	107, 115, 106 117 105	2435
730008	Satellite Imagery Evaluation 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.	Slaney, VR	RGG	RG	RM	-	-	2423
730012*	Federal Provincial aeromagnetic Surveys-Quebec Obj: To provide GSC and Quebec Department of Natural Resources with aeromagnetic data as an aid to geological mapping programs and to provide a data base for the Magnetic Anomaly Map of Canada. To provide the mining industry with aeromagnetic survey data for use in mineral exploration programs.	Knappers, WA	RGG	RG	CS	Que	24 D-N, J-N; 25 C-F; 35 A-C, F-K; PEs 23 M; 24 A, H, I 34 A, B 33 O, P	2416
730013*	Quaternary geology inventory - Southern Keewatin 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.	Shilts, WW	TS	-	SMT	Kee	65 A-C, F-K, N-P; 55 D, E, F, L, K, N, O; 66 A-C, F-K, N-P; 56 D	244
730019	Permafrost drilling and sampling service 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.	Veillette, JJ	TS	-	RP	-	-	2413

Project Number	Project Leader	Title	Div	Subdiv	Sec	Prov	NTS	Classification
730027*	Matthews, JV Jr.	Late Cenozoic fossil insects and Late Cenozoic paleoecology	TS	-	PG	Mack Frank Yk BC Ont Que	117 B; 116 A,B,I,J,N,O,P; 115 B,G,I,J,O,P; 107; 106; 105 D,E,K,L,M; 97 G; 98; 69 H; 56 D,B; 68 H; 31 G,H,I; 11 N	2433
730029	Morin, FJ	Environment Geology - Hamilton-Ontario urban area	TS	-	EG	Ont	30 M	2452
		Obj: To compile, evaluate, and present geological information concerning the Hamilton area to meet the needs of engineering and planning. To prepare a comprehensive source of information (maps, report and/or data file), designed to serve as background for planning and development in the area, illustrating (1) distribution, thickness, and physical properties of surficial and bedrock materials, and (2) magnitude and effect of active geological processes.						
730035*	Campbell, RB	Operation Mt. St. Elias	REG	CPM	GR	Yk BC	114 P,O; 115 A-C,F,G	2412
		Obj: To determine the stratigraphy, structure, metamorphism, and relationship of intrusive and volcanic rocks, and to assess the mineral potential of the area.						
730036*	Muller, JE	Geology of Victoria map-area, Vancouver Island	REG	CPM	GR	BC	92 B,C	2421
		Obj: To map the geology and study stratigraphy and structure, metamorphism and petrology of the region.						
730037*	Tempelman-Kluit, D	Stratigraphy, structure, and metallogeny of Pelly Mountains, and Yukon Plateau, Yukon Territory	REG	CPM	GR	Yk	105 A, F, G, H	2421
		Obj: To provide information on the relationship between stratigraphy, structure, sedimentary facies, and mineral deposits in Pelly Mountains and adjacent Yukon Plateau.						
730038	Baragar, WRA	Volcanic stratigraphy and geo-chemistry of the Cape Smith belt, New Quebec	REG	P	SP	Que	Pts 35 B,C,D,F,G,H	2421
		Obj: To determine the characteristic composition, variation in composition and stratigraphy of the volcanic succession of the Cape Smith-Wakeham Bay belt with a view to elucidating the character of volcanism and the history of the belt. To provide data that will lead to an understanding of the relationship between mineral deposits and volcanism, thus ultimately aiding in their location.						

730039*	Sloan River map-area (86K), District of Mackenzie	Hoffman, PF	REG	P	BS	Mack	86 K	2412
730040	Archean volcanic studies in the Slave-Bear Province	Lambert, MB	REG	P	BS	Mack	76 B,C,F,G	2421
730041	Calder River map-area, (86F) District of Mackenzie	McGlynn, JC	REG	P	BS	Mack	86 F	2412
730043	Volcanic rocks of the Appalachian region	Bostock, HH	REG	CS	A	NB NS Nf1d	Pts 2 E/12, 5; 12 H	2421

Obj: (1) To establish the stratigraphic and intrusive relations of the Apehebian plutonic, volcanic, and sedimentary rocks;
 (2) to rationalize observed variations in chemistry, mineralogy, texture and hydrothermal alteration (including mineralization) of the igneous rocks in the form of genetic models of epizonal plutonism and volcanism;
 (3) to reconstruct the magmatic and structural history in light of its location in the internal part of the Coronation Geosyncline;
 (4) to ascertain modalities in the evolution of the crust by comparing the area with older and younger volcano-plutonic belts;
 (5) to provide a descriptive and conceptual framework for assessment of the mineral resources of the area.

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.

Obj: (1) To define the stratigraphic and relative age relations of Apehebian (Snare, Cameron Echo Bay (Groups) sedimentary rocks and associated Apehebian 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 Apehebian orogen;
 (4) to develop models of relationship of mineral deposits with tectonic, plutonic and supercrustal history thereby providing data for resource assessment and exploration.

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.

Project Number Project Leader Div Subdiv Sec Prov NTS Dept'l Classification

730044*	Granite studies in the Appalachians Obj: (1) To establish a set of criteria based on field, petrographic and chemical observations, by which granitoid rocks in the Appalachian region can be assigned to a limited number of well defined classes; (2) to establish the physical conditions of emplacement, fractionation trends, solidification history, and subsequent deformation of each of these classes; (3) to relate these classes to the tectonic development of the Appalachian region; (4) to evaluate the economic possibilities of each class, and possible factors enhancing these possibilities.	Currie, KL	REG	CS	Pet	NS <u>Nfld NB</u>	2 E <u>12 E</u>	2421
730046*	Geochronological research and control studies Obj: To precisely establish the chronological order of rocks and events, thereby providing the fourth dimension -- time--to geological mapping.	Wanless, RK	REG	CS	G	Yk Mack Kee Man, <u>Frank BC</u> Ont	27 A,B; 55 M,N; <u>56 C,D;</u> <u>66 A</u>	2432
730047	Development of techniques for geochronological studies Obj: To develop methods and apparatus required to remain at the forefront of geochronological research and applications.	Wanless, RK	REG	CS	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-G; 49 H; 560 D,E	2412
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.	Taylor, GC	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	<u>Mack Yk</u>	95 L; <u>106 A,B,C,F,G,H</u>	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
730060	Mineralogy and Chemistry of fine-grained rocks in central Sverdrup Basin Obj: To compare the clay mineralogy and inorganic geochemistry of the same formation from outcrop samples and from subsurface samples.	Foscolos, AE	ISPG	E	GC	Frank	59 E, 69 E,F; 79 B,C	2435
730062	Development of extraction, identification and correlation systems for organic compounds from sedimentary rocks and crude oils Obj: (1) 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. (2) 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	E	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	REG	CS	Pet	-	-	2436
730065	Palynological study of the Tertiary coals and associated clastic rocks of the Ravenscrag and Frenchman formations, Saskatchewan Obj: To give a biostratigraphic support to the Saskatchewan lignite project.	Sweet, AR	ISPG	P	MiP	Sask	72 F,G,H; 62 E,F	2462
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	REG	CPM	GR	BC	92 J	2464
730069	Metallogeny of Selwyn Basin Obj: To determine the stratigraphy, facies, structural style and metallogeny of Paleozoic strata in Selwyn Basin as a basis for evaluating the economic potential of the region.	Blusson, SL	REG	CPM	GR	Yk Mack	105 I,J,N,O,P; 106 B,C,D	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	<u>1, 2, 11</u>	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 distribution; (c) to disseminate this information through a variety of media; charts, reports, digital magnetic tape files, publications, etc.	Folinsbee, RA	AGC	RR	GPS	-	-	2414
730083	Structural and stratigraphic synthesis of Phanerozoic rocks in Eastern Canada Obj: To prepare reports with emphasis on Paleozoic evolution of the North Atlantic region.	Harris, IM	AGC	EPG	RSBS	-	-	2421
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
730098	Hydrocarbon geochemical analysis of eastern offshore well samples - heavy hydrocarbons as source and maturity indicators Obj: The research efforts of this project are aimed at developing complete and comprehensive geochemical information for the frontier areas of exploration and major hydrocarbon provinces located on the Labrador Shelf, Scotian Shelf and Grand Banks, in order to assist in the preparation of realistic inventories of oil and gas resources of the Atlantic seaboard.	Rashid, MA	AGC	EMG	OGC	-	-	2461
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	REG	P	PMag	Ont Que	<u>23, 24, 33, 34, 43</u>	2434

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	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, 30,39	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 move clearly establish the relationship of the Eastern Canadian margin.							
740016	Geology of the Island Lake map-area (53 E), Manitoba and Ontario	Herd, RK	REG	CS	A	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	REG	P	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	REG	P	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	Classification
740020*	Geology of the Foxe Fold belt, Baffin Island, District of Franklin	Morgan, WC	REG	P	NC	Frank	27 pts A,B,C; 37 A, pts C,D Pts. of 25 H	2421
	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.							
740024	Petrological studies in the Sherridon Area, Man.	Froese, E	REG	CS	Pet	Man	63 N/2,3	2421
	Obj: To determine the metamorphic environment of mineral deposits in the Sheridan area and to study the behavior of sulphide-silicate assemblages at high-grade metamorphic conditions.							
740030	Boothia Peninsula and Somerset Island (Operation Boothia)	Kerr, JW	ISPG	RG	AI	Frank	57 B,C,F,G; 58 C,D	2412
	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.							
740035	Petroleum Exploration Analog Study	Procter, RM	ISPG	E	PR	-	-	311
	Obj: To study the geological setting and characteristics of hydrocarbon accumulations on a worldwide basis to establish valid analog 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.							
740041*	Comparative studies of geological types	Taylor, GC	ISPG	RG	-	Alta	-	2421
	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.							
740042	GSC Workshop travel - Micropaleontology Section	Wall, JH	ISPG	P	MiP	-	-	2431
	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
740052	<p>Geotechnical investigation of soils in the Ottawa Valley</p> <p>Obj: To assess the variability of the sensitive clay deposits and relate this variability to the probability of slope failure along rivers in the Ottawa Valley. To aid regional planners and engineers in determining the behaviour of the sensitive clay, hence, to help determine suitable sites for the location of engineering structures.</p>	Fransham, PB	TS	-	GP	Ont, Que	31 G, F	2453
740054	<p>Geological variability of marine deposits, Ottawa-St. Lawrence Lowland</p> <p>Obj: To evaluate the stratigraphic, geomorphic and historical factors affecting the natural and engineering behaviour of marine clays, with special reference to landslides.</p>	Gadd, NR	TS	-	RP	Ont, Que	31 G, F	2453
740062*	<p>Fraser Delta sedimentation</p> <p>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.</p>	Luternauer, JL	REG	CPM	MG	BC	<u>92 G</u>	244
740063	<p>Quaternary geology, northern Strait of Georgia</p> <p>Obj: To develop, in part, a stratigraphic framework and paleoenvironmental reconstruction of the unconsolidated Quaternary deposits in northern Strait of Georgia as a basis for an understanding of coastal/subaqueous terrain materials and landforms by: compiling existing onshore and offshore geological and geophysical information pertinent to Strait of Georgia; conducting sedimentological investigations of onshore exposures of Quaternary and related Quaternary sediments around the Strait of Georgia; seismic profiling, sampling coring, interpretation and correlation of offshore sediments in northern Strait of Georgia.</p>	Clague, JJ	TS	-	RP	BC	<u>92 B, C, F, G, K, L</u>	2415
740065	<p>Surficial geology inventory, Banks Island</p> <p>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.</p>	Vincent, J-S	TS	-	RP	Frank	88 B, C, D, F; 97 G, H; 98 A-F	2413

740068*	Richard, SH	Surficial geology, Ottawa Valley lowlands	TS	-	RP	Ont, Que	<u>31</u> B, F, <u>G</u>	2413
		Obj: To map, describe and explain the unconsolidated deposits and landforms of the Ottawa Valley lowlands (31 G, 31 F (parts of) and 31 B (parts of) in order to provide geology and terrain information pertinent to land use planning, agriculture, urban and industrial development, forestry and engineering construction and to determine the Quaternary history of the region.						
740072	Grant, DR	Surficial geology of Newfoundland	TS	-	RP	Nfld	1; 2 D; 11; 12 A	2413
		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.						
740081*	Jonasson, IR	Environmental Geochemistry	RG6	RIE	GC	Ont, Que Frank NB NS	31 B-P; 42 A, B; pts 68 G, H; 69 A, B, G, F; 78 F, G, H; 79 E, F, H; 88 E, G, H; 89 A; 340 C, D, E, F; 560 A; 59 E, F, G, H 21 A, I, P	2451
		Obj: (1) To understand the nature of physical and chemical processes which influence the dispersion of elements in the surface environment. (2) To ensure that the geochemical data obtained by the Geochemistry Section are disseminated in appropriate form to environmental scientists. (3) To coordinate Section activities relating to environmental matters						
740084*	Bolton, TE	Silurian-Ordovician macro-biostratigraphy of Anticosti Island, Quebec	D60	-	SP	Que, NB NS Que 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*	Killeen, PG	Borehole Geophysics (Nuclear Techniques)	RG6	RIE	RM	Alta Sask Ont NB Que NB BL	21 I, G; 11 D; 12 L; 31 F, G; 30 M 41 I, J; 82 O, E, G 74 N	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.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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 subdivisions into the marine foraminiferal zones that have been established farther south.							
740091*	Borehole Geophysics (Electrical and Magnetic Techniques)	Dyck, AV	RGG	TG	EM	BC Ont Que NB	92 J; 82 B; 41 I/5,6; 21 P/5; 32 D/7; 31 F/7	2465
	Obj: (1) To improve and develop instrumentation, methods of operation and interpretation aids for the electric and magnetic methods of exploration geophysics for use in boreholes. (2) To investigate the application of these methods to problems of mineral exploration and geological mapping. (3) To include techniques for measurement of rock properties in situ.							
740092	Geology of the Bathurst Inlet Area	Campbell, FHA	REG	P	BS	Frank Mack	76 J (W1/2), K (E1/2); pts. 76 E, G, O, N, L; 77 A, B; 86 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	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	REG	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	REG	CS	EP	-	-	248
	Obj: To present to the Canadian public, particularly students, information dealing with earth science topics of general interest and of educational importance.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
740104	Paleomagnetism of Proterozoic to Devonian Strata across Boothia Arch Obj: To measure the paleomagnetism of Upper Proterozoic, Ordovician, Silurian and Devonian strata across the Boothia Arch.	Fahrig, WF	REG	P	-	Frank	48 A,D	2434
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 elements, definition of geochemical and metallogenic provinces, establishment of environment baseline levels. (3) To provide a systematic geochemical inventory for N.G.R. and U.R.P. surveys.	Jonasson, IR	RGG	RIE	GC	Ont Que	31 B-P	2465
740110*	Carboniferous and Triassic strata of Appalachian region Obj: To determine the stratigraphy, sedimentology, variations in facies and external and internal basinal geometry of the Middle Devonian of Triassic strata; to reconstruct the tectonic development, provenance, current direction and environment of deposition; and to determine the distribution, controls and origin of the associated mineral deposits, all with a view to elucidating the mineral resource potential.	Geldsetzer, HHJ	REG	CS	A	Nfld NS PEI NB Que	1; 11 D,E,F,G,J,K,N,O; 21 A,H; 12 A,B,H; 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	-	-	2417
750003	Organic geochemistry related to the petroleum potential -- Atlantic Coast of Canada Obj: To integrate all hydrocarbon geochemical data into EPG's basin analysis program to aid in defining the hydrocarbon potential of each basin.	Purcell, LP	AGC	EPG	-	-	-	311

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750004	Geology of the Tulemalu Lake map-area Obj: To interpret the Precambrian geology of the area to modern 4-mile standards and to interpret the economic potential of the area.	Eade, KE	REG	P	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	REG	P	NC	Kee	55 M w/ 1/2; 65 P e/ 1/2	2412
750006	Stratigraphy and petrology of the Natkusiak Basalts, Victoria Island Obj: To determine the variation in chemical composition and petrography of the lavas with stratigraphic level, to obtain representative bulk compositions of the flows, to determine relationships between the composition of the flows and associated copper prospects and between the flows and accompanying sills, and to obtain contributory information towards and understanding of late Precambrian tectonic history in the northwestern Canadian Shield.	Baragar, WRA	REG	P	SP	Frank	Pts 77 G, 78 B; 87 E,F,G,H; 88 A,B	2421
750007*	Correlation and geochronological studies in the Canadian Shield Obj: To identify, date and correlate depositional, thermal and orogenic events within the various provinces of the Canadian Shield. To intergrade Shield province histories. To extend and improve the present scheme of Precambrian time-classifications.	Frarey, MJ	REG	P	SP	<u>Ont Man</u> Que	41 H/14 1/3	2421
750008	Geology of the Hackett River - Back River area 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.	Frith, RA	REG	P	BS	Mack	76 F (E½), 76 G (W½)	2412
750010*	Geology of Uranium and Thorium Resources in Canada Obj: To carry out comprehensive research on the geology of uranium and thorium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium and thorium resources; (2) provide guidelines for their discovery; (3) provide advice to government for nuclear energy policy and related matters.	Ruzicka, V	REG	EG	URE	Ont Que NB NS PEI Nfld Kee Sask Man Mack	41 I,J,P; 42 D,J; 51 K-N; 31 C-F; 33 F; 13 I-K; 66H; 65 H 52-53; 74 J-P; 64 K-N	313

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750011	Geology, petrology and economic potential of the anorthositic suite in southern Labrador Obj: (1) Comparison of rock types, rock and mineral chemistry, and structures with similar features north of the Grenville Front; (2) Estimation of the grade of regional metamorphism in this part of Grenville Province; (3) Determination of age of the anorthositic suite of rocks; (4) Investigation of the economic mineral potential of the anorthositic rocks.	Emslie, RF	REG	CS	Pet	Nfld	13 B,C,E,F, G	2421
750012	Salt basins in Canada Obj: To provide general information on all onshore-offshore salt basins including their regional distribution, thickness, age stratigraphic relationships, depth and tectonic setting. To also determine additional parameters (economic potential, geochemistry, hydrology and geometry) of selected basins.	Sanford, BV	REG	CS	A	NS NB Ont. Sask	<u>11, 21, 40, 41, 62, 72, 73</u>	2466
750014*	Stratigraphy and sedimentation of the Proterozoic Rapitan Group and related rocks, Mackenzie, Wernecke and Ogilvie Mountains 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.	Eisbacher, GH	REG	CPM	GR	BC Mack Yk	84 E,K; 94 E,K; 95 L,M; <u>105 P; 106 A,B,C,F 116</u>	2421
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	REG	CPM	GR	BC Yk	94 D,E; 104 B,G,H,I,J,K <u>94 C; 105 D; 115 A</u>	2412
750016*	Geology and Mineral Deposits of McConnell Creek map-area, B.C. Obj: To determine the geological framework of the map-area as a basis for estimating the potential abundance and probable distribution of mineral and fuel resources and as an aid to future development of the region.	Richards, TA	REG	CPM	GR	BC	94 E,D <u>104 A,N</u>	2412
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

Project Number Title Project Leader Div Subdiv Sec Prov NTS Dept. Classification

750018* Stratigraphic and sedimentological studies of Lower Cretaceous rocks, Rocky Mountain Foothills and Front Ranges, Alberta and British Columbia
 Gibson, DW ISPG CG CG BC Alta 82 G,J,O; 83 C 2462

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.

750019* Structure and stratigraphy of Paleozoic and Lower Mesozoic rocks in Halfway River Map-area, Northeastern British Columbia
 Thompson, RJ ISPG RG M BC 94 B 2421

Obj: To revise Halfway River map-area (94B) at 1:250 000 scale (including subdivision of Triassic strata); to map 94 B/3, 4, 5, 6, 11, 12, 13, 14 at 1:50 000 scale and to study in detail the structure and stratigraphy of this area and its relation to adjacent areas; to determine the regional stratigraphic and structural setting of Pb-Zn mineralization in the area; to help develop models for the stratigraphic and structural evolution of this portion of the Rocky Mountains.

750020 Carboniferous biostratigraphy in the northern Yukon, British Columbia, and Alaska
 Nassichuk, WW ISPG P MaP Yk BC 116 H,I; 92 F 2431

Obj: To extend the Carboniferous biostratigraphy of the Sverdrup-Basin, utilizing ammonoids, into northern Yukon, Alaska, Alberta and British Columbia in order to better interpret regional stratigraphy and paleoenvironments.

750021 Development of programs for Kremp File and Dinofile GSC palynological data files
 Sweet, AR ISPG P MiP - 2431

Obj: Assist in the development and execution of the Kremp and other palynological computer files.

750023 Methodology of petroleum resource evaluation
 Dahlberg, EC ISPG E PR - 311

Obj: To provide a reliable, realistic, statistically valid methodology for estimation of resource abundance.

750024 Petroleum geology of Tertiary, Mesozoic and Paleozoic strata north of 70
 Haimila, NE ISPG E PR Frank 37-39; 47-49; 57-59; 67-69, 77-79; 87-89; 97-99; 120; 340; 560 2461

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.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750025	Petroleum Geology of Tertiary and Mesozoic and Paleozoic north of 68° on the NWT and Yukon mainland and offshore	Koch, NG	ISPG	E	PR	Mack, Yk	97, 107, 117	2461
	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.							
750027	Diagenesis of organic matter and clay minerals in sediments in relation to petroleum generation	Powell, TG	ISPG	E	GC	Frank, Mack BC	94 M,N; 107 E, 97 B,C	2461
	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.							
750028*	Measurements of Dielectric Properties of Geologic Materials <u>in situ</u>	Davis, JL	RG6	TG	EM	Que Sask Ont Mack	31 G/5,8,9; 24 K; 73 B <u>107 C</u>	2435
	Obj: (1) To determine the dielectric properties of geologic materials <u>in situ</u> . (2) To determine the dependence of the dielectric properties of soils with soil water content (3) To develop techniques and an instrument to measure dielectric constant of geologic materials <u>in situ</u> . (4) To provide dielectric properties as 'ground truth' for other projects.							
750030*	Federal/Provincial aeromagnetic Surveys: British Columbia	Knappers, WA	RG6	RG	CS	BC	104 A,G,H,I,J; Pt. 103 O,P; <u>104 B</u>	2416
	Obj: To carry out an aeromagnetic survey of a portion of northern British Columbia and publish the resulting data in the form of total field maps and digital data files for use in geological mapping and mineral exploration programs.							
750031*	Aeromagnetic Surveys: General	Hood, PJ	RG6	RG	CS	-	-	2416
	Obj: To provide general support services for the GSC aeromagnetic survey program and those overseas aeromagnetic surveys undertaken on behalf of and funded by CIDA.							
750032	Digital Compilation Software Development	Holroyd, MT	RG6	RG	DC	-	-	2416
	Obj: To improve the computational and user efficiency and increase the generality of software for the compilation and mapping of aerogeophysical data.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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	REG	EG	MDG	Que Ont Man	31 E, L; 32 C, D; 52 B 21 E; 63 D; 64 C	2465
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	REG	CPM	GR	BC Yk	92 H, L; 93 E; 94 D; 103 C, F, G; 104 I, 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 (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	REG	CS	EP	Alta NS	-	2431
750037*	Radar sounding in geological environments Obj: (1) Evaluate existing ground probing radar systems. (2) Define geophysical and geologic problems where radar methods may provide a solution. (3) Establish design criteria for ground probing radar systems. (4) Develop methodology for utilizing radar for sounding geologic environments.	Annan, AP	REG	TG	EM	Sask Que Ont BC Yk	-	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 Data Systems Obj: To investigate and develop efficient means of acquiring, storing, processing, interpreting and presenting exploration, and applied, geochemical data.	Garrett, RG	REG	RIE	GC	Yk	116 A	2463

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750040*	Uranium Reconnaissance Program (Gamma-Ray Spectrometry)	Carson, JM	GGG	RIE	RM	Mack Kee Sask Man Ont Frank Que NB	21; 31 M; 32 D; 41 O, P; 42 A, B; 43; 46-48; 52 I, O, P; 53 A, B, G; 54; 55; 56 C, D; 57; 58; 62; 63 L-P; 64 A, B, H; 65; 66 A, B, C, F, G, H; 67; 68; 73-76; 77 G; 78 B; 85; 86 I-P; 87 B; 88; 96; 97 A, D; 98	2463
750043*	Obj: To provide for industry high quality reconnaissance exploration data to indicate areas of highest potential for new uranium deposits, and to provide for government nationally consistent systematic data to serve as basis for uranium resource appraisal. Consulting advice on conservation and restoration of coastal environments	Reinson, GE	AGC	EMG	CGD	-	-	296
750045	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. Late Cenozoic Paleooceanography of the Labrador Sea	Fillon, RH	AGC	RR	LSS	-	-	2422
750046	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, glacierization 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. Geochemical transformations and reactions of organic compounds in recent marine sediments	Rashid, MA	AGC	EMG	OGC	-	-	244
	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750048	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.	Buckley, DE	AGC	EMG		NB	21 P	244
750049	Milliken Lake - Goldfields mining area, Saskatchewan Obj: To fill in gaps outstanding in map-coverage of the Beaverlodge uranium area.	Davison, WL	REG	P	SG	Sask	74 N	2421
750051*	National geochemical reconnaissance 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.	Hornbrook, EHW	RGG	RIE	GC	NB NS Nfld Ont Sask BC Yk Frank	Pts 1-16; 23; 27; 37; 41; 42; 74; 104; 105; 117	2463
750053	EDP systems and applications 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.	Holroyd, MT	RGG	RG	DC	-	-	2463
750055*	Structural studies in the Mackenzie Arc, Franklin Mountains and Coleville Hills 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.	Cook, DG	ISPG	RG	M	Yk Mack	82 N,0; 94 N; 96, 106 A,B; 95 C	2421
750057	Stratigraphically important cystimorph corals from the Lower Devonian of western Canada Obj: The project will describe stratigraphically important cystimorphs from the Lower Devonian of the Yukon and also will provide new interpretations of related forms Ontario, Tasmania and Gotland. The Yukon forms are expected to be important biostratigraphically for the Lower Devonian of that region.	Pedder, AEH	ISPG	P	MaP	-	-	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750058*	Geology of Uranium Resources of Canada-2 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.	Tremblay, LP	REG	EG	URE	Sask Que	31 J,K; 12 K,L; 32 I,P; 64L; 74 A-P; 24 B,C,F,G,K; 23 J	313
750059	Mineralogical research on Rabbit Lake uranium deposit, Saskatchewan Obj: To develop research procedures for study of complex uranium deposits at Rabbit Lake which could be applied to other Precambrian deposits in Saskatchewan and elsewhere in the Canadian Shield.	Rimsaite, JYH	REG	EG	URE	Sask	64 L, 74 N	2463
750061*	Lower Paleozoic geology of Eastern Canada 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.	Sanford, BV	REG	CS	A	Ont Que	31 F,G	2421
750062	Regional synthesis of the Grenville Province in Quebec and Labrador Obj: To effect a regional synthesis of the geology of the eastern Grenville Province in Labrador and eastern Quebec and immediately adjacent areas and to interpret this synthesis in terms of the geological evolution of the area.	Bourne, JH	REG	P	SG	Que Nfld	31 K,N,G; 12 H,I,K,M,N,P; 13 A-K; 23 A,B,G,H	2421
750063*	Quaternary geochronology, Arctic Islands 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.	Blake, W, JR	TS	-	PG	Frank	25-29; 35-38; 39 E,F; 47-49; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560	2433

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	MTS	Classification
750064	Regional synthesis, southern Superior Province and eastern Southern 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 economic aspects of the region.	Frarey, MJ	REG	P	SP	Ont Que	31, 32, 41, 42	2421
750067*	Mesozoic biostratigraphy and Jurassic paleontology of Northern Yukon and adjacent District of Mackenzie Obj: A detailed and comprehensive biostratigraphic, lithostratigraphic, paleoecologic, and paleogeographic scheme of the Triassic to Lower Oxfordian (Upper 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.	Poulton, TP	ISPG	P	MaP	Yk Mack	106; 116 N, O, P, K, J, I; 117 A, B, C, D; 107 B	2431
750068*	CIDA Liaison and Project Coordination Obj: Execution of requests from CIDA under two EMR-CIDA Memoranda of Understanding.	Manistre, BE	REG	-	-	-	-	296
750069*	Geology of uranium resources of Canada 3 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.	Bell, RT	REG	EG	URE	BC Yk Mack Alta Sask Man	82-83; 92-95 104-106; 114-117	313
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	-	SP	BC Alta Sask Man	62, 63, 64, 72, 73, 74, 82 83, 84, 93, 94	2422

Project Number	Project Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750071*	Quaternary geology-terrain inventory, Boothia Peninsula northeast 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, 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,O, P,K,N	2413
750074	Uranium drift prospecting techniques, 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 L,M,N; 56 C,D; 65 P,I, O; 66 A	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	-	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.	Eggington, PA	TS	-	SMT	Mack	95 O, 96 C, 107 B	244
750078*	Quaternary geology--terrain inventory, Prince Rupert--Terrace - Smithers area Obj: To map, describe and explain the unconsolidated deposits and landforms in order to provide areal knowledge of geology and terrain as background information relative to forestry, land use planning, urban and industrial development and various aspects of engineering construction and to determine the Quaternary history of the region.	Clague, JU	TS	-	RP	BC	Pts 93 L,M; 103 F,K,G,I,J,P	2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	-	MC	-	-	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.	Ollershaw, NC	ISPG	CG	CG	BC	<u>Pts 82 G</u>	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	SM	<u>Frank</u>	69, <u>78 G</u> , 79 <u>89 G</u> , 99	2421
750084	Phanerozoic stratigraphy and sedimentology of Somerset Island and northern Boothia Peninsula Obj: Compilation of stratigraphy and sedimentology, principally of the Cambrian to Devonian rocks.	Miall, AD	ISPG	RG	AI	Frank	57, 58	2421
750085*	Stratigraphy, sedimentology and diagenesis of Paleozoic rocks in the southern Mackenzie Mountains and northern Rocky Mountains Obj: Revision of Silurian, Devonian and Carboniferous stratigraphy of this area leading to an understanding of the regional sedimentologic and tectonic setting. Analysis of diagenetic events that have affected this sequence and how these may have affected mineralization and the production of hydrocarbons.	Morrow, DW	ISPG	RG	M	<u>Yk BC Mack</u>	94; 95; 96; 105; <u>106 A,B,G,H</u>	2421
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.	Creaney, S	ISPG	CG	CT	-	-	2462

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	SM	Frank	29; 39; 49; 59; 69; 79 E,H; 120; 340 560 D	2421
750093*	Compilation and evaluation of geologically oriented data of industrial mineral resources of Canada Obj: Marshalling and appraisal of in-house data on industrial minerals; keeping abreast of current activity in industrial minerals for the purposes of improving the bank of technical information and of maintaining a watching brief that will detect subjects on which the GSC may expect demands for information and advice.	Moyd, P	REG	EG	-	-	-	2466
750094	Development of computer-based statistical techniques applicable to regional geological and mineral deposit data Obj: The design or adaptation of statistical techniques for analysis (e.g. classification analysis) and the application of such techniques and related computer programs to the presently available computerized geological and mineral deposit data, specifically the data for Project Appalachia.	Chung, CF	REG	EG	GM	-	-	412
750096*	To advise the Cape Breton Development Corporation on coal geology for its operations 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	NS	<u>11 K,G</u>	296

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
750097*	Engineering geology in Canada Obj: To provide engineering and environmental geology consultation and service as requested by other government or outside agencies; to undertake topical studies in engineering or environmental geology for the Geological Survey of Canada and to synthesize and compile existing information which is contained in preliminary reports prepared in the past.	Owen, EB	TS	-	EG	-	-	2453
750098*	Metallurgy 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	REG	EG	MDG	Man Sask Ont Frank Kee Mack	42, 43; 52, 53, 54, 62, 63, 64, 73, 74	2465
750099	Regional Synthesis, western Superior Province, northeastern Ontario 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.	Skinner, R	REG	P	-	Ont	52, pts. of 42, 43, 53	2421
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 "experts" who will be thoroughly familiar with the geological data and related aspects of the region.	Morgan, WC	REG	P	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	REG	P	NC	Kee	-	2421
750103	Regional Synthesis - Bear and Slave Province, Project 1 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	REG	P	BS	Mack	Pts 75, 76, 85, 86	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
750107*	Acquisition of an ocean bottom seismometer Obj: To acquire an ocean bottom seismometer for seismic refraction studies of the earth's crust and upper mantle.	Barrett, DL	AGC	RR	OBM	-	-	2417
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	REG	CPM	MG	<u>BC</u>	-	2415
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	REG	EG	-	<u>Man Sask</u>	-	296
760004	Mineral 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
760008*	Geologie du Quaternaire, region de Bathurst-Campbellton, Nouveau Brunswick Obj: Cartographier, decrire et expliquer les depots meubles et formes de terrain, en integrant des informations reliees a la planification territoriale, l'exploration minerale, la localisation des ressources granulaires, les eaux sous-terraines, la foresterie, le developpement urbain et industriel. Le travail final comportera une synthese de l'histoire quaternaire regionale.	(Gauthier, RC)	TS	-	RP	<u>NB</u>	<u>21 0, P</u>	2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	59 C,F; 69 C,D,E,F; 79 E; pts 59 B	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	Kee	65 E,F,K,L,M,N; 66 I; pt. 66 H	2413
760014*	Geology of uranium resources of Canada-4 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.	Dunsmore, HE	REG	EG	URE	NS NB PEI Nfld Frank	11 D,F,K,L; 21 A,G-J,O,P; 59; 68; 69, 49	313
760015*	Eastern Baffin Island shelf bedrock and surficial geology mapping program 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.	MacLean, B	AGC	RR	EAO	Frank	Pts 15, 16, 17, 25, 26, 27, 28, 38	2414
760016	Geochemical technology development 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.	Bristow, Q	RGG	RIE	GC	Ont	31 F	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept. Classification
760018*	Stratigraphy and sedimentology of Blairmore Group and equivalent strata in Alberta and northeastern B.C. 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.	McLean, JR	ISPG	CG	CG	Alta BC	Pts 83 B,C,E,F,L, 93, 94	2462
760019	Structure and stratigraphy, western Queen Elizabeth Islands, Dist. of Franklin Obj: To elucidate the nature, sequence, and structure of Mesozoic and Cenozoic bedrock in the western part of Sverdrup Basin, Innuition Province; to ascertain the style, kinematics, and chronology of Mesozoic and Cenozoic tectonism, and the relationships of tectonism to Sverdrup Basin evolution and sedimentation; and through the foregoing, to determine the significance of stratigraphy, structure and tectonism for assessment of hydrocarbon and other mineral deposits in western Sverdrup Basin.	Balkwill, HR	ISPG	RG	SM	Frank	Pts 69, 79, 89	2421
760020	Operation Olomane Obj: To carry out reconnaissance mapping in the eastern Grenville Province of Quebec, for publication. Scale of 1:250 000.	Bourne, JH	REG	P	SG	Que	12 M (E½), N. (E½) J (W½), K (E½)	2411
760021*	Structure and stratigraphy of western Devon Island and Vendom Fiord map-area, Ellesmere Island Obj: (1) To delineate the stratigraphical and structural history of Devon Island with a view to helping: (2) Assess the size, grade, mode of occurrence, origin and potential of fuel or mineral deposits that may occur there.	Thorsteinsson, R	ISPG	RG	AI	Frank	48 F,G; 58 F,G,E,H; 59 A; 49 A	2412
760022*	Earth science inventory of National Parks Obj: To provide an inventory of earth science data to: a) enable Park planners to design to 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	REG	CS	A	NS	21 A, 12 G,H, 22 A, 2M	296

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	MTS	Dept'l Classification
760023*	Precambrian geology of south-east Ellesmere, Devon and Cobourough Islands Obj: To complete the reconnaissance geological mapping of the northern Churchill Province.	Frisch, T	REG	P	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	REG	P	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	REG	P	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	REG	CS	Pet	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	REG	CS	A	-	-	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	REG	P	NC	Kee	56 C/4 D/1	2421
760029*	Huntec Seabed Project Obj: Development and application of high resolution vertical incident acoustic reflection data for the quantitative classification of marine sediments.	Ross, DI	AGC	RR	-	-	-	2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
760030	Surficial geology and paleogeology of Saglek Bank, Labrador Shelf	Fillon, RH	AGC	RR	LSS	-	-	2415
	Obj: To understand recent sedimentary processes and hydrodynamic regime, and iceberg 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.							
760033	Sedimentologic study and basin analysis of the eugeoclinal sedimentary rocks (Cambrian to early Devonian) of southern N.S.	Harris, IM	AGC	EPG	RSBS	NS	11 D, E, F; 21 A, B; 20 O, P	2421
	Obj: (1) To obtain field and petrographic data and reappraise the results of previous work in order to describe the sedimentology of these rocks and construct a sedimentologic model. (2) To interpret the Paleozoic evolution of the southeastern Canadian Appalachians on the basis of this work.							
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
	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.							
760038	Biostratigraphy and paleoecology (palynology) of Mesozoic and Cenozoic of the Atlantic Shelf	Bujak, J	AGC	EPG	SS	NS Nfld	1, 2, 3, 10, 11, 12	2431
	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.							
760039*	Study of the structures and origin of Baffin Bay	Falconer, RKH	AGC	RR	EA06	-	-	2417
	Obj: Analysis of bathymetric, gravity, magnetic, seismic reflection and refraction, bedrock samples and sediment sample data from offshore and geological and geo-physical data from onshore to determine the structure and origin of Baffin Bay.							

Project Number	Project Leader	Title	Div	Subdiv	Sec	Prov	NTS	Classification
760042*	Poulton, TP	Jurassic biostratigraphy of selected areas of western and Arctic Canada	ISPG	P	Map	BC Alta Yk Frank	82, 83, 92-94, 103 C,F,G 104, 105, 49, 59, 69, 79 F, 89 E 99, 340, 560	2431
		Obj: (1) To provide detailed biostratigraphic and lithostratigraphic data on Jurassic rocks of selected parts of British Columbia, Alberta, Yukon Territory and Arctic Islands; to collect samples for lithologic and paleontologic study. (2) This project is intended to support and complement the work of regional mapping geologists in the areas concerned, by field studies. In this context, the scope and objectives of the project will vary somewhat from year to year.						
760043*	Maurice, YT	Regional geochemistry-Eastern Canadian Shield	RGG	RIE	GC	Que Nfld Frank	3 E, 13 B,F,G,H,I,J,O	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 Geochemical Reconnaissance Map as a contribution to the mineral potential inventory of the nation.						
760044*	Coker, WB	Regional geochemistry-Southern Canadian Shield	RGG	RIE	GC	Sask Man Ont	31 C,F; 42 D,E; 52 A,H 64 J,K,N,O	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*	Charbonneau, BW	Evaluation of Uranium Reconnaissance Data	RGG	RIE	RM	Man Ont Que BC Alta	31 C-F,J,L; 41 H,I; 52 I,N,O; 53 A,B,G; 64 N,O; 93 J 82; 83	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*	Maurice, Y	Regional geochemistry-Northern Canadian Shield	RGG	RIE	GC	Mack Kee Frank	76 H,I 75 F-K 46 N,O,P; 47 A,B	2463
		Obj: To determine the factors affecting the distribution of trace elements within bedrock, overburden and stream and lake waters and sediments, etc. in order to: (1) determine a set of guidelines for the organization, support and operation of geochemical reconnaissance surveys (NGR) for use in mineral appraisal; (2) evaluate the effectiveness of the NGR (project 750051) program and improve the operating techniques and specifications; (3) provide a basis for interpreting NGR reconnaissance results in order to explain to industry how to use NGR data for resource evaluation purposes.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
760048*	Radiation instrumentation 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 licensing of technology so developed for rapid and effective transfer to industry.	Bristow, Q	RGG	RIE	R	Ont	Que NB 31 C,F,J; 21 G,I	2463
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	RIE	RM	-	-	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	E	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	E	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	E	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; 83 A	312

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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 Subcommittees 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, MW	DGO	-	IUGS	-	-	296
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	-	-	2413
760059*	Study of large landslides in the Western 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	REG	CPM	GR	<u>Mack YK BC</u>	93 D; 106 C,F; 95 L,M 94 F,K; 105; 116	244
760060	Mineral and energy resource evaluation: Probabilistic Methods Obj: Preparation of a book to bring together and provide a perspective for those mathematical methods which, in one way or another, aim to predict the places and modes of occurrence of undiscovered mineral resources.	Agterberg, FP	REG	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 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	REG	P	SG	<u>Ont Que</u>	<u>Pts 31, 32, 41</u>	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 of occurrences, associations, facies, paleogeography, etc.	Christie, RL	ISPG	RG	AI	-	-	2466

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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	E	GC	Yk Mack	106, 107, 117	2461
760064	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.	Gross, GA	REG	EG	SP	-	-	2465
760065	Digital Compilation of Queen Air Aeromagnetic Data Obj: (1) To compile with the existing software system or adaptation thereof the digitally recorded data resulting from the Queen Air survey operations, including the backlog data accumulated over the past. (2) To provide user's guides to programs within the software system to allow their effective application by other personnel. (3) To maintain the digital data bank catalog to Queen Air data.	Dods, SD	RGG	RG	DC	-	-	2416
770001*	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.	Souther, JG	REG	CPM	GR	BC Yk	pts. of 82, 92, 93, 103, 94, 104, 95, 105, 115 A-C, 106, 116, 117 114 O, P	2421
770004*	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.	Jansa, L	AGC	EPG	SSG	-	-	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770006*	Stratigraphy and structure of the Pacific Continental Slope Shelf using manned and unmanned submersibles	Yorath, CJ	REG	CPM	MG	BC	92 C, D, E, L; 102 H, I, O, P; 103 B, C, F, G, K	2414
	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.							
770007	Sediment Transport and Dispersal Patterns in the vicinity of tidal Inlets, Northeast New Brunswick	Reinson, GE	AGC	EMG	CGD	NB NS	21 I	244
	Obj: 1) To determine the factors which control shoal and channel morphology in tidal Inlets of New Brunswick. 2) To interpret these findings in terms of developing an overall framework of inlet evolution in relation to present-day longshore, offshore and onshore sediment-transport rates.							
770008*	Morphology and Dynamics of the Barrier Island systems in the Southern Gulf of St. Lawrence	McCann, SB	AGC	EMG	CGD	NB PEI	11 L; 21 I	244
	Obj: (1) To explain the morphology and recent developments of the barrier islands. (2) To monitor and analyse beach, nearshore and inlet processes, and to define littoral drift patterns and establish sediment budgets within each barrier system. (3) To provide a basis for environmental assessment and for planning harbour conservation, dredging operations, and resource development.							
770010*	Development of Analytical and Theoretical Techniques for Refraction Seismology Interpretation	Keen, CE	AGC	RR	OBM	-	-	2421
	Obj: (1) To analyze refraction data by the inversion of travel time data. (2) To analyze refraction data using synthetic seismograms. (3) To interpret refraction record sections particularly the converted S phases using synthetic travel time plots.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	WTS	Classification
770011	Symposium on the Analysis of Geological Materials ("Analysis '78") Obj: To provide a forum for the exchange of information among specialists in the analysis of geological materials.	Maxwell, JA	CLAS	-	-	Ont	-	2435
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.	Campbell, FHA	REG	P	BS	Mack Frank	77 A,B,D,E; 76 G,J,K,M N,O (parts of) 86 O,P	2421
770013*	Operation Borden Obj: A study of the stratigraphy, sedimentology, and economic potential of the upper Proterozoic rocks (EQUALLIK 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 strata of west Greenland and Arctic Canada.	Jackson, GD	REG	P	NC	Frank	parts of 37 G; 38 B,C; 48 A-D	2411
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.	McCann, SB	AGC	MG	CG	NS	-	244
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.	Sawatzky, P	RGG	RG	EAO	-	-	2416

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770016*	Operation Dease Obj: i) To complete and update the 1:250,000 geological mapping of Cry Lake and Dease Lake map-areas and N $\frac{1}{2}$ 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.	Gabrielse, H	REG	CPM	GR	BC	104 I, J	2412
770018*	Regional Seismic Surveys Obj: To determine the thickness, attitude and seismic velocities of sedimentary formations comprising the Lomonosou Ridge, using seismic methods.	Overton, A	RGG	RG	SM	-	-	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	REG	P	BS	Mack	86 J, O	2421
770020*	Kemano Project Obj: To produce a report and geological map of Whitesail Lake (W $\frac{1}{2}$) map-area, on a scale of 1:250,000, with one or more 1:50,000 maps of the most critical areas.	Woodsworth, GJ	REG	CPM	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, WM	REG	P	NC	Kee	Pts. of 46, 47, 56, 57, 66	2423
770023*	Development and/or adaptation of mineral exploration approaches in clay covered areas. Obj: To develop and/or adapt effective exploration methods and approaches which will aid industry in the discovery of anomalous base metal and uranium concentrations in clay covered areas.	Smee, BW	RGG	RIE	GC	Ont Que	52 F; 42 E 42 B; 32 D	2465
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	REG	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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770025*	Regional Geochemistry - Yukon	Goodfellow, WD	REG	RIE	GC	Yk BC <u>Mack</u>	105 A,B,H,I,F; 106 E <u>116 B,L,M,N</u> <u>115 G,I,J; 117 A,B,C,D</u>	2463
	Obj: (1) To determine through U.R.P. geochemical surveys the mineral potential of 20,000 mi ² of the Yukon; (2) To assess through regional orientation surveys the use of various geochemical sample media as a fundamental step towards the development of geochemical methodology appropriate to the project area; (3) To illustrate through detailed interpretation surveys the effectiveness of such surveys as a means of evaluating the mineral potential; (4) 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.							
770026*	Geology of Red Indian Lake, west half, Newfoundland	Herd, RK	REG	CS	A	<u>Nfld</u>	<u>12 A</u>	2421
	Obj: (1) To revise the geology and evaluate the economic mineral potential of Red Indian Lake, west half 12 A, W/2 by mapping at 1:50,000 scale and by compilation where needed. (2) To monitor, assess and absorb results of geological mapping of insular Newfoundland under the Canada-Newfoundland Mineral Development Subsidiary Agreement.							
770027*	Proterozoic red beds of Richmond Gulf	Chandler, FW	REG	CS	A	<u>Que</u>	33 N/15 <u>34 C/1,8</u>	242
	Obj: (a) To determine the processes of formation of Proterozoic red beds and associated metallogenesis; (b) To correlate Richmond Gulf sequence with sequences elsewhere on Canadian Shield.							
770028	Regional Synthesis - Baffin Island: Project I	Jackson GD	REG	P	NC	Frank	56-59; 45-49; 34-38; 24-27 14-16	2423
	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.							
770030*	Geologie du Quaternaire, region de l'Outaouais superieur, Quebec	Veillette, JJ	TS	-	RP	<u>Que Ont</u>	<u>31 M,N²; 31 N,NW²</u>	2413
	Obj: Cartographier, decire et expliquer les depots meubles formes de terrain, avec objectifs secondaires de: (1) Fournir des donnees relatives a l'utilisation du sol, a la prospection et localisation de sable et gravier, aux reserves d'eaux souterraines, a la prospection geochimique. (2) Determiner les proprietes physiques et mechaniques de certain depots.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
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	<u>Yk BC</u>	94 M; 104 P; 105 A-D,E; <u>115 A,H 114 P</u>	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	<u>Ke</u>	66 A,H; 65 A,P,I,H; 55 E,F,M; 56 D	244
770033*	Glacial sedimentation studies Obj: To study the mechanics of glacier sedimentation to determine the mechanism by which rock fragments are entrained, moved and deposited by glaciers in order to increase the understanding of the relationship between mineralized bedrock and glacial drift and associated sediments.	DiLabio, RNW	TS	-	SMT	<u>Frank</u>	Parts of 38 B,C; 48 A,D	244
770035*	Periglacial processes and slope movement, central Keewatin 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.	Egginton, PA	TS	-	SMT	<u>Ke</u>	55 L; 65 I,P	244
770036*	Geotechnical study of rock heave, central Arctic 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.	Dyke, LD	TS	-	GP	<u>Frank</u> <u>Ke</u>	57 G; 58 B,C,F,G; 68 G,H; 78 G,H; 79 B; 65 P	2453

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770038	A text on Canadian Geology and Natural Resources Obj: To prepare a text, at about the senior high school or introductory college level, which will summarize our present knowledge of Canada's rock 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.	Neale, ERW	ISPG	GI	-	-	-	248
770039	Joint Canada-USSR evaluation of petroleum resource assessment methodologies Obj: 1. To compare resource appraised systems and discern areas in which our methods might be improved. 2. To test EMR-GSC methodology using Russian data with which we are unfamiliar. 3. To exchange appropriate technical information.	Dahlberg, EC	ISPG	E	PR	-	-	311
770040	Studies of coal-bearing Upper Cretaceous and Paleocene formations, central Alberta Foothills Obj: Establish the stratigraphic framework of the Upper Cretaceous and Paleocene formations of the central Foothills of Alberta as a basis of further qualitative, quantitative, mineability and environmental studies leading to an evaluation of their coal resource potential.	McLean, JR	ISPG	CG	CG	Alta	83 F,C	2462
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	<u>BC</u>	<u>92 I,P</u>	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	<u>BC</u> <u>Alta</u>	-	2462

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
770043	Carboniferous and Permian stratigraphy and sedimentation in the southwestern District of Mackenzie and southeastern Yukon Territory	(Richards, BC)	ISPG	RG	M	Mack Yk	95 B, C	2421
	Obj: The principle objective of this project is to determine the depositional environments of the Mississippian to Permian Yohin, Clausen, Flett, Etanda (=Besa River), and Mattson Formation (Sensu Harker, 1963), and investigate the lithofacies relationships within and between these formations. A second objective is to revise the stratigraphic nomenclature of Mississippian surface and subsurface units in the project area.							
770044*	Lower Paleozoic basin-to-platform relationships in the Cordillera.	Cecile, MP	ISPG	RG	M	Mack BC	106 A, B, F, G; 94 B, F, G	2421
	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.							
770046*	Resource Evaluation of coal deposits of western and northern Canada	Hughes, JD	ISPG	CG	RE	Alta, Yk	83 H/2 and 83 H/7 105 A, B, F, G, L, K, M; 115 I, O, P; 116 B, C	312
	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.							
770047*	Studies of coal deposits of western and northern Canada	Long, DGF	ISPG	CG	GC	Yk	106 E 105 A, B, F, G, H, J, K, L, M; 115 N, O, P, 116 A, B, C	2462
	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Classification
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, L, I; 84 P	2431
770049*	Stratigraphy and sedimentology of the Tertiary sediments of the eastern Arctic Obj: Determine the stratigraphic and sedimentary history of the Eureka Sound and Beaufort Formations and their relationship to the tectonic evolution of the eastern Arctic fold belt. An analysis of coal resources will be performed.	Miall, AD	ISPG	RG	AI	Frank	38; 49, 59, 120, 340	2421
770050*	Cenozoic geology of the Beaufort-Mackenzie Basin Obj: To develop an understanding of the geologic framework and hydrocarbon potential of the Beaufort-Mackenzie Basin through the establishment of biostratigraphic subdivisions, a stratigraphic correlation framework and appropriate nomenclature depositional models, tectonic and burial histories, and the study of kerogen maturation.	Young, FG	ISPG	RG	SM	Mack Frank	107 B, C, D, E, parts of; 117 A, D parts of	2421
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.	Creaney, S	ISPG	CG	CT	Kee Mack	107; 117; 99; 89; 79; 69; 59; 49; 560; 340	2461
770053	Heavy Oil and Oil Sand Resources Obj: To determine the extent of in-place oil resources; the recoverable portion of that resource; and, to make projections of the impact of this resource on Canada's oil supply.	Recruit	ISPG	E	PR	Alta Sask	-	311
770054	Sample preparation and mineral separating Obj: To provide sample preparation and mineral-separating services in support of Branch projects.	Paris, JC	CLAS	-	M	-	-	248
770055*	Metallogeny 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	REG	EG	MDG	Mack Kee Man Sask	55, 56, 64, 65, 66, 75, 76, 85, 86	2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770057*	Collection and analyses of borehole fracture data in potential radioactive waste disposal areas. Obj: To determine from boreholes the geometrical characteristics of the fracture systems; to provide the basic data for the calculation of the directional permeabilities of the geological systems; and to establish a data system to record, store and process all field data and computer programs to update, retrieve and analyse the data and programs to present the data in appropriate formats.	Lau, JSO	TS	-	EG	Ont Man	31 K/3, 61 I/1	2453
770058*	Drilling investigations of test areas and potential radioactive waste storage areas. Obj: To meet the drilling needs of the geotechnical, geological, geophysical and, in parts, the hydrogeological components of the EMR Radioactive Waste Disposal Program. To ensure that control will be maintained on the type and quality of the data obtained from drilling. To provide information on the subsurface occurrence structural features of bedrock. To develop field and laboratory techniques for analysis of structural geological information obtained from drill core.	Dugal, JJB	TS	-	EEG	Ont Man	-	2453
770059*	Geological (hard rock) investigations of potential areas for the disposal of radioactive wastes Obj: To develop a rationale for the selection of potential areas, to investigate various plutonic bodies with particular emphasis on the geologic history and the geologic controls on fracturing and faulting and to assess and differentiate potential areas with a view of the selection of a prime site.	Brown, PA	TS	-	EEG	Ont	31 K/3	2453
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	-	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	REG	EG	URE	Ont Que	31	2463

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770062	Regional Syntheses - New Quebec; Project I Obj: To compile and interpret data for the New Quebec component of the metamorphic map of the Canadian Shield.	Herd, RK	REG	P	SG	Que	23, 24, 25; 33, 34, 35	2423
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 to their discovery; (3) provide advice to government for mineral policy and related matters.	Lydon, JW	REG	EG	MDG	Yk Mack NS Nfld Que	11 D,E,F; 63 J,K,L; 64 B,C 12 A,H,I; 21 P,D; 32 D; 34 C; 85 B; 105 I,K,M,O	2465
770065	Surficial and Quaternary geology of Cumberland Peninsula, Baffin Island Obj: Complete preparation of maps and prepare a paper for publication by the Geological Survey of Canada.	Dyke, AS	TS	-	RP	Frank	26 P,O,I,J; 16 L and K	2413
770066	A study of siltation within lakes in the District of Keewatin, N.W.T. Obj: To study siltation processes within lakes and the stratigraphy of lake bottom sediments.	(Edwards, TWD)	TS	-	SMT	Kee	55 E,L, 65 A,H,I	244
770067	Western Canada Oil and Gas Pool File Obj: Compilation of all parameter values considered 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	E	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 area's hydrocarbon potential. To document proven and potential hydrocarbon occurrence in the area.	Recruit	ISPG	E	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	2461
770070*	Regional Geological Synthesis, Central Superior Province 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.	Card, KD	REG	P	SG	Ont Que	41, 42, 32	2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
770071*	Geology of copper and molybdenum resources of Canada - II	Sinclair, WD	REG	EG	MDG	Yk BC NS NB Que Ont Man Sask Nfld	115 F-K; 104 N 11; 21; 22; 12; 31; 32	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 to 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 KPCR Steering Committee with regard to the operation and management of the project.							
770073	Study of the Boundaries of Lithospheric Plates	Loncarevic, BD	AGC	RR	-	-	-	2421
	Obj: To determine the crustal structure of the Reykjanes Ridge by seismic refraction gravity and magnetic methods in order to extend our understanding of the magmatic processes which lead to the accretion of new material to the edges of the lithospheric plates and possible metallogeny of sulphide ore bodies.							
770075*	Canada Basin Ocean Bottom Seismometer Equipment	Falconer, RKH	AGC	RR	-	-	-	2421
	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	RIE	GC	BC Yk Kee Frank Mack Sask Man Ont Que Nfld	31 C,F; 42 D,E; 52 A,H	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	Project Leader	Title	Div	Subdiv	Sec	Prov	NTS	2431
770077*	Nowlan, GS	Paleozoic conodonts of eastern Canada	REG	CS	EP	Que Ont Man Kee NB NS Nfld	12 L; 11 E,F,K; 22 A,B; 21 P	2431
780001	Stevens, CF	Coal Resource Data Management	ISPG	CG	RE	-	-	312
780002*	Shilts, HW	Glacial erosion of the Canadian Shield	TS	-	SMT	Ke	55 E,L,K	244
780003	Wilson, DG	Petroleum Evaluation of hydro-carbon Resources of the Western Canada Sedimentary Basin South of 60°	ISPG	E	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*	Verhoeff, FH	Evaluation of Unconventional Gas Resources in the Deep Basin of Western Canada	ISPG	E	PR	Alta BC	82 H,I,O,P; 83 B,C,E,F,L; 93 I,P; 94 A,B,G,J,K,N,O	311

Obj: To determine biostratigraphic zonal standards of conodonts in eastern Canada, to determine provincialism and environmental effects and to describe the faunas as an aid to correlation and assessment of economic potential of strata.

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 hydrocarbon 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 quantities of gas that may be recoverable from low quality, relatively low permeable sandstone reservoirs in the Deep Basin of western Canada

Project Number	Project 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 southeastern 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	REG	P	NC	Ke	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 Archean and Archean gneisses and their relation to the Dubawnt group cratonic cover.	LeCheminant, AN	REG	P	NC	Ke	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 Theilon 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	REG	P	BS	Mack	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	REG	P	BS	Mack	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	REG	CS	Pet	-	-	2436
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	REG	P	SG	-	-	2423
780014*	Regional Geological Synthesis, Western Superior Province Obj: To compile and synthesize in the form of maps and reports, all geological work to date in NTS map-areas 52 and 53.	Taylor, FC	REG	P	SP	Ont Man	52, 53	2421
780015*	Material balance of uranium series in a natural environment 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	GGG	RIE	GC	Ont Que	31 G,F	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	Ont NS Man	41 O; 42 A,B,E; 52 G; 11 D,E; 31,C,F; 92 I; 93 F,K; 64 N	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 southeastern Ontario and southwestern Quebec.	Gadd, NR	TS	-	RP	Ont Que	31 B,C,F,G (parts of)	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
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	BC 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 mac-otidal regions.	Amos, CL	AGC	EMG	CG	NS, NB	<u>21, 11</u>	244
780023	Aeromagnetic interpretation Obj: To establish a comprehensive capability for the interpretation of aeromagnetic survey data in order to support geological mapping and resource assessment programs.	Recruit	GGG	RG	MM	-	-	2416
780024*	Coordination of Geochemical Sample preparation and analytical services Obj: The objective of this project is to specify, arrange and co-ordinate all aspects of geochemical analysis and sample preparation activities on behalf of the Resource Exploration (Geochemistry) Program. These activities involve both GSC staff and equipment as well as those of various commercial laboratories in Canada and possibly elsewhere.	Lynch, JJ	GGG	RIE	G	-	-	248
780025*	Archean Rocks of the Nain Province in Hopedale (13N), Snegamook Lake (13K), and Makkovik (13O) maps-areas, Labrador 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.	Ermanovics, I	REG	P	SG	Nfld	<u>13 N,K,O</u>	2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept '1 Classi- fication
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	REG	CPM	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
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	ISPG	RP	M	BC Alta	931, 93 H, 83 E	2421
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
780030	Taxonomy, biostratigraphic and paleoecology of Mesozoic and Tertiary miospore and microplankton assemblage from the Mackenzie Delta, Beaufort Sea regions	Ioannides, NS	ISPG	P	MiP	Mack	-	2431

Obj: To produce a synthesis of sealevel phenomena for the Quaternary period.

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.

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.

Obj: To establish a biostratigraphic zonation scheme for the Mesozoic and Tertiary of the Mackenzie Delta - Beaufort Sea regions.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept '11 Classi- fication
780031	The Newfoundland Continental Slope at 49°N to 50°N: Nature and magnitude of contemporary marine geologic processes Obj: (1) To discover the nature and magnitude of contemporary marine geologic processes based on sedimentologic, geochemical neontologic and in situ sensor data. (2) To develop process and environmental models for biostratigraphic, paleoecologic and environmental impact studies.	Schafer, CT	AGC	EMG	PEC	NF1d	-	244
780032	Lead isotopic studies on genesis of ore deposits 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 member 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.	Thorpe, RI	REG	EG	MDG	-	-	2465
780033	Quaternary paleoecology, Great Lakes Obj: To describe, analyze and explain unconsolidated deposits and associated organic remains in the Great Lakes in order to: 1) determine Quaternary stratigraphy, history and paleoecology; 2) identify processes operative in the lakes during the Quaternary and the factors controlling them; 3) to provide background geological information for other scientific studies in the Great Lakes.	Anderson, TW	TS	-	PG	-	-	2433
780034*	Backwater investigations, Yukon River Obj: To evaluate a method for determining the frequency of backwater events resulting from ice jamming on northern rivers.	Egginton, PA	TS	-	SMT	Yk	<u>105 D, 116 C</u>	244
780035*	Remote sensing applied to Quaternary geology and mineral tracing 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.	Belanger, JR	TS	-	SMT	Yk Kee	<u>55 E, L, M; 65 H</u> <u>115 A-C, F, G, J, K</u>	2422
780036*	URP Interpretation studies (I) Obj: To obtain field gamma-ray spectrometer data across selected French Hercynian granites associated with uranium mineralization to enable a comparison to be made with Canadian granites of above normal uranium content, to see if there are criteria for recognizing potential for mineralization.	Darnley, AG	RGG	-	A	-	-	2463

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	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
780040	Stratigraphy and composition of surficial materials, proposed Polargas pipeline route Obj: To carry out laboratory study of samples supplied by Polargas in order to determine stratigraphic relationships and vertical and lateral compositional parameters of surficial material along the route, Melville Island to Longlac.	Podolak, WE	TS	-	SMT	Ont Kee Frank	-	2423

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