

CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS
1979 - 1980

Compiled by M.A. Petre



OTTAWA
1979

This document was produced
by scanning the original publication.

Ce document est le produit d'une
numérisation par balayage
de la publication originale.

GEOLOGICAL SURVEY OF CANADA

CATALOGUE OF SCIENTIFIC PROJECTS

1979-80

OTTAWA
1979

CONTENTS

	Page
Department of Energy, Mines and Resources Program Activity Structure	vi
List of Abbreviations Used	x
Geological Survey of Canada Organization	xiii
Scientific Projects	1
Index by Project Leader	70
Index by Province	73

PREFACE

This catalogue of all scientific projects of the Geological Survey of Canada approved as of December 1979 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, 1979 to 31 March, 1980, and 2) the field program for the summer of 1979.

As a catalogue it lists and briefly describes active scientific projects. These total 450 and are compiled from instructions issued to project leaders for 1979-1980 via forms GSC 227, 228 and 229. Thus it comprises the current authority on such matters as project numbers, titles and objectives and supersedes previous catalogues and documents concerning scientific projects. Projects are listed in numerical order and an index by project leader and by province is provided at the end.

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

The field program for the summer of 1979 comprises the field component of those active projects marked by an asterisk after the project number. These total 203. 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
1979

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 Department Secretariat
2. Common and Special Services	2.1 Personnel Management 2.2 Official Languages Implementation 2.3 Financial Management 2.4 Computer Science Services 2.5 Information Services 2.6 Administrative Services 2.7 Technical Field Support Services

2. EARTH SCIENCE SERVICES PROGRAM

1. Geodetic Service	1.1 Geodetic Control Systems 1.2 Geodetic Data 1.3 Support Services
2. Topographic Service	2.1 New Topographic Mapping 2.2 Revision Mapping 2.3 Aerial Survey Data Base 2.4 National Topographic Data Bank 2.5 Support Services
3. Land Boundary Service	3.1 The Canadian Lands Surveys Act Administration 3.2 The International Boundary Commission 3.3 Territorial and Provincial Boundary Commission 3.4 Support Services
4. Geological Service	4.1 Geoscience Surveys .1 Reconnaissance Bedrock Surveys .2 Standard Bedrock Surveys .3 Standard Surficial Surveys .4 Offshore Bedrock Surveys .5 Offshore Surficial Surveys .6 Aeromagnetic Surveys .7 Marine Multiparameter Geophysical 4.2 Regional Analyses and Syntheses .1 Litho-Tectonic Studies .2 Surficial Studies .3 Regional Compilations 4.3 Standards and Correlations .1 Paleontology .2 Radiometric Dating .3 Quaternary Geochronology .4 Paleomagnetic Correlations .5 Physical, Chemical, Mechanical & Engineering Properties of Geological Materials .6 Petrology

	4.4	Sedimentary and Geomorphic Processes
	4.5	Environmental and Engineering Geology
	.1	Environment Geology
	.2	Urban Geology
	.3	Engineering Geology
	4.6	Identification of Resources
	.1	Oil & Gas Resources
	.2	Coal & Peat Resources
	.3	Radioactive Mineral Resources
	.4	Geothermal Resources
	.5	Metallic Mineral Resources
	.6	Industrial & Construction Minerals Resources
	4.8	Support Services
5. Earth Physics Service	5.1	Seismological Service
	5.2	Geothermal Service
	5.3	Geomagnetic Service
	5.4	Gravity Service
	5.5	Geodynamic Service
	5.6	Support Services
6. Remote Sensing Service	6.1	Applications Development
	6.2	Data Acquisition, Processing and Dissemination
	6.3	Applied Research
	6.4	Scientific and Technical Support
	6.5	Management and Administration
7. Geographic Service	7.1	National Geographic Mapping
	7.2	Toponymy
	7.3	Map Distribution
	7.4	National Air Photo Library
	7.5	Support Services
8. Polar Continental Shelf	8.1	Logistics
	8.2	Glacier and Sea Ice Physics
	8.3	Scientific and Technical Cooperation
	8.4	Support Services
9. Support to Other Agencies	9.1	Aeronautical Charting
	9.2	Property Surveys
	9.3	Mapping Support
	9.4	ICAS Secretariat
	9.5	Cartographic Support
	9.6	GSC Support – Other Programs
	9.7	Support Services
3. ENERGY PROGRAM		
1. Energy Sources; Supply, Demand and Substitution	1.1	Oil and Gas
	1.2	Coal and Peat
	1.3	Radioactive Minerals
	1.4	Electrical Energy
	1.5	Renewable Resources
	1.6	Support Services

2. Energy Conservation	2.1 Energy Industries 2.2 Transportation Sector 2.3 Domestic Farm Sectors 2.4 Commercial Sectors 2.5 Industrial Sectors 2.6 Support Services
3. Energy Research and Technology Development	3.1 Coordination 3.2 Conservation Technology 3.3 Oil and Gas 3.4 Coal and Peat 3.5 Nuclear Energy 3.6 Electricity 3.7 Renewable Resources 3.8 Energy Transportation 3.9 Support Services
4. Economic and Social Impact – ENERGY	4.1 Regional and Social Impact 4.2 Environmental Studies 4.3 Economic Growth and Development 4.4 Policy Analysis and Systems Planning 4.5 Support Services
5. Oil Import Compensation	5.1 Compensation Payments 5.2 Support Services
4. MINERALS PROGRAM	
1. Mineral Resource Determination	1.1 Identification of Resource Base 1.2 Estimation of Resources 1.3 Technical Evaluation 1.4 Support Services
2. Mineral Supply, Use and Conservation	2.1 Economic Evaluation 2.1 Exploration 2.3 Development and Mining 2.4 Processing 2.5 Transportation 2.6 Utilization 2.7 Trade 2.8 Conservation 2.9 Support Services
3. Mineral Technology Development	3.1 Discovery of Mineral Resources 3.2 Development and Mining 3.3 Processing 3.4 Utilization 3.5 Conservation 3.6 Environment, Health and Safety 3.7 Transportation 3.8 Support Services

- 4. Economic and Social Impact-Minerals
 - 4.1 Social Impact
 - 4.2 Economic Development
 - 4.3 Policy Analysis and Coordination
 - 4.4 Support Services
- 5. Administration of the Canada Explosives Act
 - 5.1 Authorization and Testing
 - 5.2 Licensing and Inspection
 - 5.3 Support Services

LIST OF ABBREVIATIONS USED

DIRECTOR GENERAL'S OFFICE – DGO

DMS – Date Management Systems Group
SP – Special Projects

ATLANTIC GEOSCIENCE CENTRE – AGC

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

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

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

PS – Program Support
– Systems Development

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
RM – -Resource Methodology

P	-	Paleontology Subdivision
	MaP	- Macropaleontology
	MiP	- Micropaleontology
	OP	- Ottawa Paleontology
RG	-	Regional Geology Subdivision
	AI	- Arctic Islands
	CTS	- Curation and Technical Services
	M	- Mainland
	SM	- Sverdrup-Mackenzie

REGIONAL AND ECONOMIC GEOLOGY DIVISION – REG

CPM	-	Cordillera and Pacific Margin Subdivision
	MG	- Marine Geology
	GR	- Geological Research
	MiP	- Micropaleontology
	B	- Bedrock Studies
	S	- Surficial Studies
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

RG	-	Regional Geophysics Subdivision
	AI	- Aeromagnetic Interpretation
	CAS	- Contract Aeromagnetic Surveys
	EAO	- Experimental Airborne Operations
	GDP	- Geophysical Data Processing
	MM	- Magnetic Methods
RGC	-	Resource (Geochemistry) Subdivision
	MD	- Method Development
	RS	- Regional Surveys

RR	-	Resource (R adioactivity) Subdivision
ADI	-	Airborne Data Interpretation
ANI	-	Analytical & Nuclear Instrumentation
EAO	-	Experimental Airborne Operations
LO	-	Laboratory Operations
RM	-	Radiation Methods
RSA	-	Remote Sensing Operations
TS	-	Theoretical Studies
UPCS	-	Uranium Program Contract Surveys
TG	-	Terrain Geophysics Subdivision
EM	-	Electrical Methods
SM	-	Seismic Methods

TERRAIN SCIENCES DIVISION – TS

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

GEOLOGICAL SURVEY OF CANADA
ORGANIZATION

Office of the Director-General

D.J. McLaren, Director-General (995-4208)
J.O. Wheeler, Deputy Director-General (995-4249)
J.E. Brindle, Chief Program Officer (995-4182)

Atlantic Geoscience Centre, Dartmouth, N.S., Director – M.J. Keen, (902)426-2367

Eastern Petroleum Geology Subdivision, G.L. Williams, (426-2730)
Environmental Marine Geology Subdivision, D.E. Buckley, (426-7730)
Regional Reconnaissance Subdivision, R.K.H. Falconer, (426-6326)
Program Support, K.S. Manchester, (426-3411)

Central Laboratories and Administrative Services, Director – J.A. Maxwell, (995-4482)

Mineralogy Section, R.J. Traill, (995-4686)
Analytical Chemistry Section, Sydney Abbey, (995-4391)

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

Institute of Sedimentary and Petroleum Geology, Calgary, Alberta,
Director – D.F. Stott, (403)284-0110)

Coal Geology Subdivision, D.K. Norris, (284-0110)
Energy Subdivision, R.M. Proctor, (284-0110)
Paleontology Subdivision, W.W. Nassichuk, (284-0110)
Regional Geology Subdivision, G.C. Taylor, (284-0110)

Regional and Economic Geology Division, Director – J.E. Reesor, (995-4314)

Cordillera and Pacific Margin Subdivision, R.B. Campbell, (604)544-1408
Correlation and Standards Subdivision, W.H. Poole, (995-4309)
Economic Geology Subdivision, G.B. Leech, (995-4093)
Precambrian Subdivision, W.F. Fahrig, (995-4793)

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

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

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

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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
380077	Analysis of rocks and minerals	Abbey, S	CLAS	-	AC	-	-
	Obj: To provide compositional data on geological materials as a contribution to the solution of geological problems.						2435
400006*	Preparation of collections of Canadian rocks and minerals for distribution to the public	Larose, JM	CLAS	-	M	NS, NB Nfld Ont Que	248
	Obj: To make available for distribution to educational institutions and the Canadian public representative collections of Canadian rocks and minerals that will assist prospectors and promote interest in the mineral industry.						2431
480191	Monograph of the Canadian <u>Buchia</u> (= <u>Aucella</u>)	Jeletzky, JA	ISPG	P	OP	-	-
	Obj: To describe and to illustrate all hitherto known Canadian representatives of this biochronologically important genus and to clarify the zonal value of its species.						2431
490001	Mesozoic and Tertiary rocks of the west coast of Vancouver Island in Quatsino Sound	Jeletzky, JA	ISPG	P	OP	BC	92 E,F,L
	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.						2431
490038*	Miscellaneous field investigation by staff at Vancouver office	Leaming, S	REG	CPM	GR	BC	<u>104 I,J,P</u>
	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.						296
500029*	Identification and biostratigraphic interpretation of referred fossils	Staff of Eastern & Western Paleontology Sections	ISPG REG AGC	P CPM EPG		NS Nfld NB Yk Mack BC ALTA	95 B,C; <u>103 G;</u> 82 E,K
	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.						2431
500038	Coal resources of Canada and studies of coal deposits in Canada	Irvine, JA	ISPG	CG	RE	-	27,62,72,82,83
	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.						312

Asterisk in first column indicates project has a field component Brackets indicate seasonal employee or other non-staff Underscoring indicates province of 1979-80 field work

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
540028	Isotopic age determinations of rocks and minerals	Wanless, RK	REG	CS	G	-	-	2432
	Obj: To determine the geological age of rock, minerals and geological events using isotopic methods.							
550004	Cretaceous and Jurassic of Richardson Mountains, Porcupine Plains and Eagle Plains	Jelletzky, JA	ISPG	P	OP	Mack Yk	117,116,106	2431
	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.							
550101*	Reference collections of minerals, rocks and ores	Steacy, HR	CLAS	-	M	<u>Yk Ont Que</u>	-	2435
	Obj: To develop, foster and curate reference collections of minerals, rocks, and ore specimens in support of Branch activities and in the national interest.							
570029*	Geology and evaluation of iron and manganese resources	Gross, GA	REG	EG	SP	Nfld Que Ont Man Sask, Alta Kee	22,23,31,32 41,42,52,53, 62,64,65,93, 103	2465
	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.							
570119*	Studies of meteorites and other extra-terrestrial material	Trail, RJ	CLAS	-	M	-	-	2435
	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.							
570148	Radiocarbon dating program	Blake, W Jr	TS	-	PG	-	-	2433
	Obj: To plan and co-ordinate the radiocarbon dating program of the Geological Survey.							
580036	Geology of titanium and titaniferous deposits of Canada	Rose, ER	REG	EG	MDG	Que Nfld Ont Man	-	2465
	Obj: To carry out comprehensive research on the geology of 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.							
580160	Catalogue of Canadian minerals	Trail, RJ	CLAS	-	M	-	-	2435
	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
580175*	Analytical services and development in geochemistry	Hall, GEM	RGG	RIE	GC	Sask	<u>74 I</u>
	Obj: To coordinate and supervise the "in-house" sample preparation and analyses of sediment, soil, rock, mineral and water samples, collected by or for the Resource Geochemistry Subdivision.						248
590457	Radiocarbon laboratory development and operation	Lowdon, JA	TS	-	PG	-	-
	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.						2433
600307	X-ray emission analysis	Lachance, GR	CLAS	-	AC	-	-
	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.						2435
600353	Dibranchiate volume of the Treatise on Invertebrate Paleontology	Jelletzky, JA	ISPG	P	OP	-	-
	Obj: To prepare an authoritative summary of the present state of knowledge of this sub-class of cephalopod mollusks. The final report is to be published as the Dibranchiate volume of the Treatise on Invertebrate Paleontology.						2431
610007*	Operation Porcupine	Norris, DK	ISPG	CG	Mack YK	<u>106 E,F,K-N;</u> <u>116 F-K,N-P</u>	2412
	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.						
610011	Taseko Lakes map-area	Tipper, HW	REG	CPM	GR	BC	92 0
	Obj: To interpret the structure, stratigraphy and geological history of the Taseko Lakes area and evaluate its mineral potential.						2412
610014	Cretaceous stratigraphy, Peace River to 60°	Stott, DF	ISPG	-	-	BC	<u>94 A,B,G,J,</u> <u>K,O,P</u>
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
610019*	Ordovician and Silurian Biostratigraphy of British Columbia, Alberta, Manitoba Yukon, Mackenzie & Franklin	Norford, BS	ISP G	P	MAP	Frank Mack Yk BC Alta	36; 37; 47-49 54; 57-59; 67-69; 82 G; 83; 85; 93 I, 94 E; 97; 104 L P; 105 I; 106; 116; 117; 120; 340
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.						2431
610269*	Petrographic examination of coking coals from the Kootenay Formation, Alberta and British Columbia	Cameron, AR	ISP G	CG	CT	Alta BC	Pts 82 G, J, O
Obj:	To determine the coking properties and to prepare seam profiles for correlation and environment of deposition studies on coals of the Kootenay Formation.						2462
620308	Electron beam microanalysis	Plant, AG	CLAS	-	M	-	-
Obj:	To conduct studies of geological materials using techniques of electron probe microanalysis and scanning electron microscopy, in support of Branch projects.						2435
630016*	Coast Mountains project	Roddick, JA	REG	CPM	GR	BC	92 F NE $\frac{1}{4}$, G W $\frac{1}{2}$, J, K, L NE $\frac{1}{4}$, M, N; 93 D; 102 P; 103 A, G, I W $\frac{1}{2}$, J, N, P, W $\frac{1}{2}$
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.						2412
630017	Operation Liard	Taylor, GC	ISP G	RG	-	BC	94 F, G, H, I, J, K, N, O, P
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.						2412
630031	Multispectral Imagery	Slaney, VR	RGG	RIE	R M	-	-
Obj:	1) To increase the utilization and improve the usefulness of imagery acquired from aircraft (e.g. colour photography, sideloop 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.						2423
630037*	Geology of Canadian nickel and platinum group deposits	Eckstrand, OR	REG	EG	M DG	BC Sask Man Ont Que	23; 31; 32 A; 41 L P; 42 A, B; 52; 53 E; 63 O, P; 64 C; 74 H; 35 G, H
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.						2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
630039	Geology of vanadium deposits in Canada	Rose, ER	REG	EG	M DG	-	-
	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.						2465
630049*	Electrical Rock Properties	Katsube, TJ	RGG	TG	EM	<u>Man Ont</u>	-
	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.						2435
640036	Geology of the Lake Panache and Collins Inlet map-areas, Ontario	Frayre, MJ	REG	P	SP	Ont	41 H,I
	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.						2421
640048	Study of mineral collecting areas of interest to collectors and tourists	Stenson, Mrs AP	CLAS	-	M	-	-
	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.						248
640048	General metallogeny of Canada	Leech, GB	REG	EG	M DG	-	-
	Obj: To study metallogenetic 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.						2465
640125	Certification of bedded and non-bedded mineral deposits	Leech, GB	REG	EG	M DG	-	-
	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.						296
640402	Geological observations at shafts of potash mines in Saskatchewan	Price, LL	ISPG	RG	SM	Sask	64 K/5, 12; 72 0/16; 62 1/16; 72 P/13,14; 73 B/1,2,3
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
650007*	Ocean aeromagnetics	Bower, ME	RGG	RG	MM	Ont Que	-
650008	Stratigraphy, sedimentology and correlation of Nonacho Group, N.W.T.	Mc Glynn, JC	REG	P	BS	Mack	75 E,F,K
650013	Quaternary geology, Aishihik Lake	Hughes, OL	TS	-	RP	Yk	1115 H; pts. 106 D,E; 1115 A,B,G,I
650015	Geology of the Mt. Edziza volcano	Souther, JG	REG	CPM	GR	BC	104 G,J
650023	Operation Bow-Athabasca	(Price, RA, Prof)	ISP G	RG	M	BC Alta	83, C,D, E _{1/2} ; 82 J E _{1/2} , N, 0
650024*	Cambrian biostratigraphy of the Canadian Cordillera	Fritz, W H	REG	CS	EP	Mack Yk BC Alta	105 I; 106 B; 105 P; 106 A; 94 C; 94 F, L; 83 C; 82 N, 0
	0 obj:	To conduct high resolution aero magnetic 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.					
	2416						
	0 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.					
	2421						
	0 obj:	To map and explain the Quaternary geology and geomorphology of Aishihik Lake area with particular reference to the nature and distribution of surficial materials and Quaternary stratigraphy and history in order to 1) improve knowledge of the glacial history of southwestern Yukon; and 2) provide areal geological information for land use planning and engineering development.					
	2421						
	0 obj:	A detailed investigation of the geology, petrology and geochemistry to determine the history and processes of evolution and relationship to contemporaneous plutons in the Stikine region.					
	2421						
	0 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.					
	2431						
	0 obj:	To identify and describe Cambrian fossils from the Canadian Cordillera, ascertain their relative stratigraphic positions, and provide faunal correlations for their enclosing strata.					

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
650027*	Quaternary of southern Alberta	Stalker, AM	TS	R P		Alta Sask	<u>72, L,M; 73, 82, 83</u>
	Obj: To gain knowledge of Quaternary Stratigraphy, chronology, environments and climates in southern Alberta.						2422
650056*	Geology of lead and zinc deposits in Canada	Sangster, DF	REG	E G	M D G	Que NS	<u>32 D,F,K;</u> <u>11 F,K</u>
	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.						2465
660006	Granite studies in the Emdai-Rankin Inlet region	Davidson, A	REG	P	SG	Kee	55 E,F,K,L, 65 H,I
	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.						2436
660009	East Arm of Great Slave Lake, District of Mackenzie	Hoffman, PF	REG	P	BS	Mack	75 E, L,K; 85 H,I
	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.						2421
660026	Stratigraphy and conodont zonation of Lower and Upper Devonian strata of southwestern Ontario	Uyeno, TT	ISP G	P	MP	Ont	30 L,M; 40 G,I,J,O,P
	Obj: To establish conodont zonations 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.						2431
670002	Operation Bylot	Jackson, GD	REG	P	NC	Frank	27; 37; 38; 47; 48
	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.						2421
670003	Anorthosite study	Emslie, RF	REG	CS	Pet	Que Nfld	13 L,M,N; 23 I
	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).						2421
670016	S.W. Ellesmere - W. Devon Islands (Operation Grinnell)	Kerr, JW	ISP G	R G	AI	Frank	49 B,C; 59 A,B; 69 A
	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.						2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
670028	Geology of rare earth deposits of Canada	Rose, ER	REG	EG	M DG	-	-
	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.						2465
670041*	Electrical mapping techniques	Scott, WJ	RGG	TG	EM	Frank Mack Sask Ont Man Que	21 M; 74 0; 107 C; 31 D,F,G,K; 68 H 85 B,J; 84 G; 52 L; <u>62 I</u>
	Obj: To assess the capabilities and limitations of using galvanic and electromagnetic techniques as a means of providing geological information, delineating faults and shear zones, and mapping permafrost occurrence and thickness.	Cook, DG	ISPG	RG	M	Mack	86 W½; 96; 97; 106 E½; 107 E½
670068	Operation Norman						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.						
670576*	Canadian Triassic Ammonoidea and Bivalvia	Fozer, ET	ISPG	P	Op BC	Frank Yk Alta	103 C,F; 104 P; 106 D; 116 B,D
	Obj: To describe and assess biochronological significance of Triassic Ammonoidea and Bivalvia in order to refine methods for dating Triassic rocks.	McGlynn, JC	REG	P	BS	Sask Kee	75 E,F; 74; 85; 86; 65, 66
680012	Paleomagnetic study of Proterozoic red beds of the western Canadian Shield						2434
	Obj: To obtain paleomagnetic pole positions from various Proterozoic red bed sequences in the western Precambrian Shield for purposes of correlation.	Christie, RL	ISPG	RG	AI	Frank	103 C,F; 104 P; 106 D; 116 B,D
680015	Geological reconnaissance of eastern Devon Island and southeastern Ellesmere Island						2411
	Obj: (a) Obtain reconnaissance data on the Precambrian rocks for 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.						
680017	Sedimentology-engineering geology laboratory development and operation	Podolak, WE	TS	-	SMT	-	-
	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.						244

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
680023	X-ray diffraction analyses and mineralogical studies	Traill, RJ	CLAS	-	M	-	-
	Obj: To provide X-ray diffraction analyses and mineralogical studies in support of Branch projects.						2435
680027	Surficial geology, Tawatinaw area Alberta	Richard, SH	TS	-	RP	Alta	83 I
	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.						2413
680031*	Quaternary stratigraphy of Old Crow Basin and Porcupine River Valley	Hughes, OL	TS	-	RP	Yk Mack	106 E,F,N; 115 P; 116 L,0,P; 117 A
	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.						2422
680047*	Geomorphic processes, Mackenzie Valley-Arctic Coast	(Mackay, JR Prof)	TS	-	GP	Mack Yk	85, 95, 96, 97 C,D,106, 107 B,D; 117 D; 96 B-F; 106 -F, I,P; 116 L,N-P
	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						244
680060*	Geology of silver and gold deposits in Canada	Thorpe, RI	REG	EG	MDG	Que Ont NS BC	52 K-N; 92 H,J; 94 E, 103 G
	Obj: To carry out comprehensive research on the geology of silver and gold deposits in order to:						2465
	(1) support or provide geologically based estimates of Canada's mineral resources;						
	(2) provide guidelines for their discovery;						
	(3) provide advice to government for mineral policy and related matters.						
680064*	Stratigraphy and Paleontology of Upper Paleozoic rocks on of Ellesmere and Axel Heiberg Islands	Nassichuck, WW	ISPG	P	Map	Frank	49 B,C,F,G,H;340 A, B,C,D;
	Obj: (a) To improve the understanding of stratigraphy and facies relationships of the marginal and axial parts of the Sverdrup Basin;						2421
	(b) to establish a biostratigraphic framework for Carboniferous and Permian rocks; and						
	(c) to evaluate the economic potential of the area.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
680066	Geology of the Cariboo Mountains, British Columbia	Campbell, R B	REG	CPM	GR	BC	83 D; 93 A, H
	Obj: To determine the tectonic movement of the Cariboo Mountains, and explain their origin, development mode of emplacement and economic potential.						2412
680071	Alkaline rocks in Canada	Currie, K L	REG	C S	Pet	-	-
	Obj: To identify and examine occurrences of alkaline rocks in Canada, and to explain their origin, development mode of emplacement and economic potential.						2421
680073	Magnetic anomaly map of Canada	McGrath, P H	R G G	R G	M	-	-
	Obj: To prepare and publish the fourth edition of the magnetic anomaly map of Canada (1:255 A) 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.						2423
680076	Geology of Southern Indian Lake, Manitoba	Davison, W L	REG	P	NC	Man	64
	Obj: To study and assess an area of scientific and economic potential, before flooding caused by construction of the Southern Indian Lake diversion dam. Particular attention will be given to the relationships of the Sickle and Wasekwan Groups to various intrusive rocks of the region. Publication scale 1:500 000.						2411
680081*	High resolution aeromagnetics (experimental surveys)	Olson, D G	R G G	R G	M M	Que Man NB NS Ont Sask BC	30 M; 52 L; 92 F, H; 93 E, L; 42 E; 31 B, K 21 A; 64 L; 74 I
	Obj: To execute, according to prescribed specifications, high resolution aeromagnetic and/or gradiometer surveys over areas selected and defined by Regional Geophysics program management.						2416
680082	Annual review, Exploration Techniques	Hood, P J	R G G	R G	M M	-	-
	Obj: To provide an annual review of new mining geophysical, geochemical, data recording and compilation techniques for the mineral exploration industry.						296
680084	Operation Smoky	Taylor, G C	ISP G	R G	-	BC	93 I, 0, P
	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.						2412
680090	Identification of unknown minerals by X-ray and chemical methods	Foscolos, A E	ISP G	E	G C	Alta	-
	Obj: Quantitative and semiquantitative analysis of layer lattice silicates, mixed layer silicates, clays, minerals and elements in samples submitted by GSC staff.						2435

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
680091	Clay and clay minerals investigation	Foscolos, AE	ISPG	E	GC	Alta	-
	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;						2435
	(1) the degree of sediment diagenesis and oil generating potential; (2) migration of fluids from source rocks which carry heavy metals.						
680093*	Upper Silurian and Devonian biostratigraphy western and northern Canada	Pedder, A EH	ISPG	P	Map	Sask Man Alta BC Yk Frank Mack	106 C,D,E,F; 116 G,H; 84 P; 85 A,B,C,F; 94 B; 95 J
	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, biostrigraphic significance. Paleoecological and biogeographic analyses of species and other taxonomic categories that have different time ranges in different geographic realms and ecologies.						2431
680096	Studies in the Seal Lake Volcanic Province	Baragar, W RA	REG	P	SP	Nfld	13 K,L
	Obj: To determine the characteristic composition, variation in composition, and stratigraphy of the Seal Lake, Croteau and Letitia volcanic successions with a view to elucidating the character of volcanism and the history of the Seal Lake belt. To provide data that may be of aid in prospecting and to expand the G.S.C. data base on volcanic terrane.						2421
680101	Conodont biostratigraphy of Siluro-Devonian rocks of the Arctic Islands	Uyeno, TT	ISPG	P	Map	Frank Kee	49, 57, 58, 59, 68, 69, 78; 89
	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, palyno morphs and brachiopods; to fix time lines in areas where strata undergo complex facies changes over relatively short distances.						2431
680102*	Rank and petrographic studies of coal and organic matter dispersed in sediments	Hacquebard, PA	AGC	EPG	-	NB Nfld NS Que PEI	12, 21, 11, 20
	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.						2462
680109	Palynological zonation of the Carboniferous and Permian rocks of Atlantic Provinces, Gulf of St. Lawrence and Northern Canada	Barss, MS	AGC	EPG	SS	NS NB Nfld PEI Yk Mack Frank	11 E; 1; 2; 11; 12; 95
	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.						

Project Number	Title	Funding Leader	Div				Subdiv	Sec	Prov	NTS	fication
			REG	EG	M DB	-					
680114*	Development and supervision of mineral deposits data bank	Anderson, F D				-					2465
	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.									
680119*	Operation Stewart	Blysson, S L	REG	CPM	GR	Mack Yk					2412
	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 Wangordia deposits on the west and south.									
690005	Structural geology of northern Yukon Territory and northwestern District of Mackenzie	Norris, D K	ISP G	C G	-	Yk Mack					2421
	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.									
690009	Smithers map-area	Tipper, H W	REG	CPM	GR	BC					2412
	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.									
690038	Probability models for estimating mineral potential	Agterberg, F P	REG	EG	GM	-					412
	Obj:	To develop a statistical method employing geological information to assess the probability of occurrence of specific types of mineral deposits in geographically-defined areas									
690043	Quaternary geology inventory, southern Labrador	Fulton, R J	TS	-	RP	Nfld					2413
	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.									
690054	Erosion in a permafrost environment	Heginbottom, J A	-	GP		Mack					244
	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.									
690061	Operation Penny Highlands	Jackson, G D	REG	P	NC	Frank					2411
	Obj:	To provide a reconnaissance geological survey of a previously unmaped area and describe and interpret the geological framework and outline areas of potential economic interest.									

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
690064	Quaternary palynology	Mott, R J	TS	-	PG	Ont Que BC NB	82 E,L; 92 G,H,I; 31 G-F; 21 G,H,I,J,N,O,P 2433
0bj:	To study the quaternary palynology of Canada and to provide a biostatigraphic and paleoecologic information service to other scientists within the Division, Branch, or Department, as well as other Government Departments and agencies and non-government institutions.						
690065	Surficial geology St. Anthony - Blanc Sablon, Newfoundland	Grant, D R	TS	-	RP	Nfld	Pts 2 M; 12 H,I,P 2413
0bj:	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.						
690072*	Federal-Provincial Aeromagnetic Survey contract No. 69-34 Labrador, Melville Peninsula, Coppermine - Great Bear Lake Areas	Ready, E E	R GG	R G	C AS	Nfld; Que; Frank; Kee	76 L,M; 86 A-C; E-P; 3 D,E; 13 A-L M,N,O; 14 D-F, L,M; 23 A,B, G-J, O,P; 24 A,H,I,P; 25 A; 46 D-G, J-P; 47 A-D 2416
0bj:	To provide the Provinces, the Geological Survey of Canada and the mining industry with aeromagnetic data as an aid to geological mapping and mineral exploration programs.						
690075*	Tertiary foraminiferal succession of Western Cordillera and Pacific Margin	Cameron, B E B	R EG	C PM	M G	BC	92 C; Pts 93; 102 I; 103 2431
0bj:	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.						
690086	1:1 million Geological Atlas Project	Douglas, R JW	D GO	-	SP	-	- 2423
0bj:	As scientific adviser and editor, to make recommendations to a steering committee concerning technical and scientific matters required to ensure publication of a suitable 1:1 million geological atlas of Canada by 1986, including recommendations on coordination, scheduling, guidelines, legend and format; and to ensure, through scientific editing of all manuscripts, that approved standards are met.						
690089	Analysis of international reference samples	Abbey, S	CLAS	-	AC	-	- 2435
0bj:	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.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
690090	Development of methods for the analysis of geological materials	Abbey, S	CLAS -	AC	-	-	2435
690095*	Properties and provenance of till	Shifts, W W	TS	-	SMT	Que Kee Frank	56 D; 55 L; 21 E; 38 B,C,- 48 D 35 L 45 J
700003	Obj: To develop, modify and improve methods for the analysis of geological materials, using chemical and instrumental methods.	(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, geomedical, and biological problems that can be defined areally.	Kootenay River (NTS 82) map area, 1:1 million Geological Atlas Program	Olkiloch, AV	REG CS	Pet BC	82
700008	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.	St. Mary's River (NTS 11) map-area. 1:1,000,000 Geological Atlas Program	Pool, W H	REG CS	A	NS PEI NB Nfld Que	11
700011	Obj: To publish a modern compilation and synthesis of the geology of the map-area as a unit of a 1:1 million geological atlas of Canada. More detailed objectives are as April 1, 1969 File 116-6-4.	St. John River (NTS 21) map-area. 1:1,000,000 Geological Atlas Program	Pool, W H	REG CS	A	NB PEI Que	21
700014	Mineral indicator tracing southern Keewatin	Shifts, W W	TS	-	SMT	-	-
700015	Obj: To develop methods of utilizing drift composition for prospecting in perennially frozen terrain; 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).	Yellowknife and Hearne Lake map-areas, District of Mackenzie	Henderson, JB	REG P	BS	Mack	85 I,J

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	N TS
700016	Plaster Rock (east half) map-area, N.B.	Skinner, R	REG	P	-	NB	21 J/14 E1/2
	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.	Christie, KW	REG	P	PMag	0nt	-
700018	Paleomagnetism and rock magnetism instrumentation and technological development						2434
	Obj: To contribute to the development of paleomagnetism as a geophysical method:						
	(a) by designing, building, testing and calibrating instrumentation required for the measurement of magnetic properties of rocks and minerals;						
	(b) by developing new techniques or systems for the routine measurement of magnetic parameters of standard samples and for the processing of data resulting from such measurements;						
	(c) by improving on the design of existing instrumentation or techniques in order to improve the efficiency of the laboratory and/or the quality of the data emanating from the laboratory.						
700037*	Geology of the southern Alberta Foothills, Highwood River to Athabasca River	Ollerenshaw, NC	ISPG	CG	CG	Alta	82 0,J; 83 B,C,F
	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.						
700045	Belcher Channel and Ballantyne Strait (NTS 59,69,79,89,99) map-area, 1:1 million Geological Atlas Program	Nassichuk, W	ISPG	P	Map	Frank	59; 69; 79; 89; 99
	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.						
700047*	Operation Finlay	Gabrielse, H	REG	C PM	GR	BC	94 C E $\frac{1}{4}$, F W $\frac{1}{2}$, E
	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.						2412
700048	Petrology and structure of the Daly Bay Complex and environs	Gordon, TM	REG	CS	Pet	Kee	56 A South half parts of 55 P and 46 D
	Obj: To determine the petrology and structure of the anorthosite-gabbro-gneiss-granite complex in the Daly Bay region in order to understand its origin, age, and stratigraphic relations.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
700055	Geology of chromium deposits of Canada	Dawson, K R	REG	EG	M D G	-	-
Obj:	To carry out comprehensive research on the geology of chromium 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.						2465
700056	Surficial geology, Cape Breton Island, NS	Grant, D R	TS	-	R P	NS	11 F, G, J, K
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.						2413
700059	Geology of copper and molybdenum deposits in Canada - I	Kirkham, R V	REG	EG	M D G	-	-
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.						2465
700061*	Seismic-Precambrian Shield	Overtón, A	R GG	RIE	SM	Frank	<u>66 B</u>
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.						2421
700073	Operation Northern Melville Peninsula	Heywood, W W	REG	P	N C	Frank	Pts. of 47 A-D
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.						2412
700092*	Surficial geology and geomorphology, Mackenzie Bay - Continental Shelf	Blaasco, S M	AGC	EMG	C GD	Frank, Yk	<u>87, 97, 107, 117</u>
Obj:	To resolve the stratigraphic and structural relationships of the unconsolidated surficial marine sediments of the Beaufort continental shelf to provide the geological framework necessary for: the delineation of permafrost; the assessment of offshore aggregate supplies; the establishment of engineering design criteria for offshore structures for petroleum exploration and production; the resolution of the Quaternary history of the shelf area; the identification of sedimentary and geomorphic processes operating on the shelf; and to continue development of the technology necessary to conduct surficial marine geological surveys in ice covered areas of the arctic and in shallow coastal waters.						2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
710013	Northern Basin Analysis Program: Peel River map-area	Pugh, D C	ISP G	R G	M	Mack Yk	95, 96
710016	Geological and Tectonic Compilations	Douglas, R J W	D G O	-	SP	Ont Que	pts 31, 41, 52
710018	Alberta Foothills	Douglas, R J W	D G O	-	SP	Alta	82 H; 83 C, F
710020	Surficial geology and land classification, Mackenzie Valley Transportation Corridor	Hughes, O L	T S	-	R P	Mack Yk	96 C-F; 106 H-N, O, P; 107 A; 97 C; 116 N, O, P
710022*	Carboniferous and Permian biostratigraphy and coral faunas, western and northern Canada	Bamber, E W	ISP G	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
710023	Granite studies in the Slave Province (Phase 1)	Davidson, A	REG	P	SG	Mack	85 I, P
	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.						2421
	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.						2421
	Obj: 1) standard 1 mile mapping with emphasis on stratigraphy and structure; revision of mapping by B.R. Mackay; oil, gas, coal potentialities.						2421
	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.						2421
	Obj: Establishment of faunal sequence within stratigraphic framework previously described for Upper Paleozoic of Alberta, British Columbia, Yukon, and District of Mackenzie, for use as a biostratigraphic reference succession in surface and subsurface exploration of these areas. Description of coral and other faunas from these areas to document the above succession and facilitate its use by other workers in industry and in other government organizations.						2421
	Obj: To classify the granitic rocks according to age, geological and chemical nature, using geophysical parameters where available, and to relate them to the regional geology and to mineral deposits.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
710033	Northern Basin Analysis Program: Great Bear, Redstone and Great Slave map-areas	Williams, GK	ISP G	R G	M	Mack	85, 95, 96
710038	Juniper (east half) map-area, NB	Skinner, R	REG	P	-	NB	21 J/11 E½
710048*	Geological and geophysical studies of the Pacific Continental Margin	Tiffin, DL	REG	CPM	MG	BC	Pts 92, 102; 103
710049	Geological and geophysical studies in the Beaufort Sea	Currie, RG	REG	CPM	MG	Mack	87, 97
710059	Stratigraphy and sedimentology of the Mesozoic and Tertiary rocks of the Atlantic continental margin	Jansa, LF	AGC	EPG	SS	-	-
710061*	Compilation of geoscientific data in the Upper Paleozoic basins of southeastern Canada	Howie, RD	AGC	EPG	-	NS NB, Nfld PEI	1, 1, 10, 11, 14, 20 E
710062	Palynostratigraphy and Paleoecology of the Mesozoic and Cenozoic rocks of the Atlantic Continental Margin	Williams, GL	AGC	EPG	SS	NS NB, Nfld PEI	1, 2, 10, 11, 14, 20 E

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
710065	Biostratigraphic zonation (Foraminifera-Ostracoda) of the Mesozoic and Cenozoic rocks of the Atlantic Shelf	Ascoli, P	AGC	EPG	SS	NS, Nfld	2431
	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.						
710091	Palynological studies of Mesozoic and Tertiary coal measures in western and northern Canada	Sweet, AR	ISPG	P	MiP	BC Alta Yk	82; 83; 92 I; 106; 117
	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.						2462
710098*	Data Systems Group	Hutchison, W W	DGO	-	DSG	-	-
	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 System S.						248
720037	Stratigraphy and structure of the Mount Ida Group southern B.C.	Okulitch, AV	REG	CS	Pet	BC	82 L, M
	Obj: To revise the stratigraphy of the Mount Ida Group and the geology of the Shuswap Metamorphic Complex.						2421
720039	Operation Nuvik	Taylor, FC	REG	P	SP	Que	25 E,F; 35 F,G,H,I,J,K
	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.						2412
720041*	Upper Paleozoic rocks of western Canadian Cordillera	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
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
720044	Reconnaissance of Mesozoic Foraminifera of Arctic Islands	Wall, JH	ISP G	P	MiP	Frank	49, 59, 69, 79, 88, 89, 98, 340
	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.						2431
720052	Geology of Indian Lake (86B)	Frith, RA	REG	P	BS	Mack	86 B
	Obj: To revise and interpret to modern standards the geology of the Precambrian terrane of the area known only through early reconnaissance and semi-detailed mapping.						2421
720056	Paleomagnetism of the dykes of West Greenland	Fahrig, WF	REG	P	-	-	-
	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.						2434
720062	Volcanic rocks of the Prince Albert Belt	Schau, M	REG	P	NC	Frank Kee	47 A,D; 56 J,K
	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.						2421
720066	Evaluation of Canada's petroleum potential	McCrossan, RG	ISP G	E	PR	-	-
	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.						311
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
	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.						2421
720071*	Airborne Gamma-Ray Spectrometry (Experimental Surveys)	Holman, PB	RGG	RR	RM	Ont Sask Que	11 D,E,F,K; 21 A,G,H,J, N,0; 31 C,D,; 74 E,I, L,M,; 72, 82; 83; 52 A, H,L; 75 K,N; 64 L; 13 M
	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 in maps. (3) Have available the technology and personnel to respond to nuclear accidents where aircraft monitoring is required.					2463

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
720072*	Paleozoic ostracodes of Canada	Copeland, M.J.	REG CS	EP	Ont <u>Que</u> <u>NB NS Nfld</u>	11 E,F,K; 12 B,L; 21 A,P; 22 A,B; 30 L,M; 40 I,P	2431
720073	Petrographic Analysis of Saskatchewan Lignites	Cameron, A.R.	ISPG CG	CT	Sask	62 E; 72 F,G,H	2462
	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.					
	Obj:	1. Petrographic characterization of Saskatchewan lignites. 2. Determination of vertical and lateral changes in petrographic composition. 3. Relation of petrographic composition to environment of deposition.					2434
720075	Paleomagnetism of the Hopeland diabase dykes	Christie, K.W.	REG MAG	P	Nfld	13	
	Obj:	To determine the paleomagnetism of three swarms of unaltered diabase dykes in the Hopeland area, Labrador.					2433
720078	Diatom analysis and paleoecological studies of Quaternary sediments	Lichti-Fedorovich, S.	TS PG	-	-	-	
	Obj:	(1) To develop diatom analysis as a paleoecological tool in conjunction with palynological and plant macrofossil analyses. (2) To provide paleoecological interpretation and biostratigraphic correlations of Recent and Quaternary sediments.					
720080*	Interpretation of aeromagnetic surveys	Kornik, L.J.	RGG RG	MM	Ont <u>Man</u> <u>Sask</u>	31 F,C; 52 E; 55, 56, 64 <u>I,N,65,66,74,I,</u> 75,76	2416
	Obj:	To express the significance of aeromagnetic data in terms of lithological structural and metamorphic patterns in support of mineral exploration, geological mapping and radioactive waste disposal programs and to integrate this information with other types of geoscience data.					
720081	Surficial geology and geomorphology of Central Ellesmere Island	Hodgson, D.A.	TS -	RP	Frank	Pts 49 C,D,E,G,H; 340 B	2413
	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.					2463
720084*	Gamma-Ray Spectrometry (Technique Development)	Grasty, R.L.	RGG RIE	RM	Ont Alta	<u>31 C</u>	
	Obj:	To develop improved methods of airborne gamma-ray spectrometry data collection, analysis and presentation.					412
720089	Quantification of geological variables and geochemical estimation of mineral potential	Fabbri, A.G.	REG EG	GM	-	-	
	Obj:	To prepare a computer-oriented data base for selected areas of Canada by the compilation, pre-coding, and coding of geological data to be obtained from maps of scales 1 inch to 4 miles and larger and other sources of information. To compile and code basic parameters for mineral deposits in the same areas. To perform geochemical analyses in order to assess regional mineral potential.					

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
		REG EG	M DG	-			
720095	Geology of barium, fluorine and strontium deposits in Canada	Dawson, KR					2466
	Obj: To carry out comprehensive research on the geology of barium, fluorine and strontium deposits in order to: 1) support or provide geologically based estimates of Canada's mineral resources; 2) provide guideline for their discovery; 3) provide advice to government for mineral policy and related matters.						2421
720098	Lower Paleozoic stratigraphy, southern Rocky Mountains	Aitken, JD	ISPG R G	M	BC Alta	82, 83	
	Obj: To determine the nature, thickness, distribution and origin of Lower Paleozoic formations of the region.						2423
720101	Bottom studies of the Beaufort Sea	Pelletier, BR	TS -	SP	Frank Mack Yk	97 C,F,G; 107 A,B,C,D	
	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.						2423
720102	Marine Science Atlas of the Beaufort Sea	Pelletier, BR	TS -	SP	Mack Frank Yk	97 C,F,G; 107 A,B,C,D	
	Obj: To compile known marine aspects of the Beaufort Sea including oceanography, biology, bathymetry, geophysics, etc., in order to present a marine science atlas of the Beaufort Sea that will include maps, sketches, photographs and graphs. This atlas will serve the public, universities, industry and various agencies of government on engineering, environmental and resource-development programs.						2423
720103	Hydrocarbon inventory of the sedimentary basins of Eastern Canada	Wade, JA	AGC EPG	RSBS	-	-	311
	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.						
720104*	Regional subsurface geology of Mesozoic and Cenozoic rocks of the Atlantic continental margin	Wade, JA	AGC EPG	RSBS	NS	<u>21 A,H</u>	
	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.						
730001*	Primary halos and metallogenetic distribution of the elements	Boyle, RW	RGG RIE	SP	Ont	-	2455
	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 metallogenetic and geochemical data in regional prospecting for mineral deposits.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
730004*	Applied EM problems	Sinha, AK	R GG	TG	EM	Sask BC Mack <u>Ont</u>	92 J; 107 C, B; 74 N; <u>31 G</u>
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.						2435
730006*	Seismic properties of earth materials in the permafrost environment	Hunter, JA	R GG	TG	SM	Frank Yk Mack Kee	107, <u>115, 106 117</u> 105
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.						2435
730008	Satellite Imagery Evaluation	Slaney, VR	R GG	R G	RM	-	-
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.						243
730012*	Federal Provincial aeromagnetic Surveys-Quebec	Knappers, WA	R GG	R G	C AS	Que	24 D-N; 25 C-F; 35 A-C, F-K; Pts 23 M; 24 A, H, I; 34 A, B; 33 O, P
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.						2416
730013	Quaternary geology inventory - Southern Keewatin	Shifts, 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
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 ~9°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.						2413
730019	Permafrost drilling and sampling service	Veillette, JJ	TS	-	RP	-	-
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.						2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
730021	Coastal erosion-sedimentation, northern Somerset Island	Taylor, RB	AGC	EMG	C GD	Frank	-
	Obj: To map the modern sedimentary environments of the coasts of northern Somerset Island and adjacent islands with particular reference to the processes controlling erosion, transportation and deposition of sediments and the role of permafrost and sea ice movement. To provide basic data that will help assess the impact of various human activities on the natural balance of processes with particular reference to gas pipeline concerns.						244
730027*	Late Cenozoic fossil insects and Late Cenozoic paleoecology	Matthews, JV Jr.	TS	-	PG	Mack Frank Yk BC 0nt Que	117 B; 116 A,B,I,J,K,N, 0,P; 115 B,G,I,J,O,P; 107 P; 106;105 D,E,K, L,M; 97 G; 98; 69 H; 56 D,B; 68 H; 31 G,H,I; 11 N
	Obj: To provide biostratigraphic and paleoecologic information on late Cenozoic terrestrial sediments as an aid to interpretation of their age and environment of deposition.						2433
730035*	Operation Mt. St. Elias	Campbell, RB	REG	CPM	GR	<u>Yk BC</u>	<u>114 P,0; 115 A-C,F,G</u>
	Obj: To determine the stratigraphy, structure, metamorphism, and relationship of intrusive and volcanic rocks, and to assess the mineral potential of the area.						2412
730036*	Geology of Victoria map-area, Vancouver Island	Muller, JE	REG	CPM	GR	<u>BC</u>	<u>92 B,C</u>
	Obj: To map the geology and study stratigraphy, structure, metamorphism and petrology of the region.						2421
730037	Stratigraphy, structure, and metallogeny of Pelly Mountains, and Yukon Plateau, Yukon Territory	Tempelman-Kluit, DJ	REG	CPM	GR	Yk	105 A, F, G, H
	Obj: To provide information on the relationship between stratigraphy, structure, sedimentary facies, and mineral deposits in Pelly Mountains and adjacent Yukon Plateau.						2421
730039	Sloan River map-area (86 K), District of Mackenzie	Hoffman, PF	REG	P	BS	Mack	86 K
	Obj:	(1) To establish the stratigraphic and intrusive relations of the Archean 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.					
730040	Archean volcanic studies in the Slave-Bear Province	Lambert, MB	REG	P	BS	Mack	76 B,C,F,G
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
730041	Calder River map-area, (86F) District of Mackenzie	McGlynn, JC	REG P	BS	Mack	86 F	2412
0bj:	(1) To define the stratigraphic and relative age relations of Aphbian (Snare, Cameron Echo Bay (Groups) sedimentary rocks and associated Aphbian plutonic rocks; (2) to determine the nature and environment of the volcanic-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 Aphbian orogen; (4) to develop models of relationship of mineral deposits with tectonic, plutonic and supracrustal history thereby providing data for resource assessment and exploration.						
730043	Volcanic rocks of the Appalachian region	Bostock, HH	REG CS	A	NB NS Nfld	Pts 2 E/12, 5; 12 H	2421
0bj:	To determine the physical volcanology, petrology, chemistry, environment, age and tectonic relations of the volcanic rocks of the Appalachian Orogen in order to relate them to the evolution of the orogen and to the formation of associated mineral deposits.						
730044*	Granite studies in the Appalachians	Currie, KL	REG CS	Pet	NS Nfld NB	2 E; 12 E 21 G, H	2421
0bj:	(1) To establish a set of criteria based on field, petrographic and chemical observations, by which granitoid rocks in the Appalachian region can be assigned to a limited number of well defined classes; (2) to establish the physical conditions of emplacement, fractionation trends, solidification history, and subsequent deformation of each of these classes; (3) to relate these classes to the tectonic development of the Appalachian region; (4) to evaluate the economic possibilities of each class, and possible factors enhancing these possibilities.						
730046*	Geochronological research and control studies	Wanless, RK	REG CS	G	Yk Mack Kee Man Frank BC 0 nt	27 A, B; 55 M, N; 56 C, D; 66 A; 65 C, O, K	2432
0bj:	To precisely establish the chronological order of rocks and events, thereby providing the fourth dimension - time--to geological mapping.					-	
730047*	Development of techniques for geochronological studies	Wanless, RK	REG CS	G	-	-	2432
0bj:	To develop methods and apparatus required to remain at the forefront of geochronological research and applications.						
730051*	Completion of reconnaissance geology, northern Ellesmere Island	Trettin, HP	ISPG RG	AI	Frank	340 A-H; 120 C-H; 49 H; 560 D,E	2412
0bj:	To prepare terminal reports accompanied by maps of the region at the scale of 1:250,000 or more detailed.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
730054	Comparative Study of Campbell, White and Barn Uplifts	Dyke, L D	TS	-	GP	Yk Mack	117 A, 116 P
	Obj: The definition of Campbell, White and Barn Uplifts in terms of their stratigraphic framework, Structural style and evolutionary history.						2421
730055	Comparative field seminar – structural prototypes	Taylor, G C	ISPG R G	-	-	-	-
	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.						2421
730057*	Heikian and Hadrynian stratigraphy Eastern Cordillera and Interior Platform	Aitken, J D	ISPG R G	M	Mack Yk	<u>95 L,M; 105 P; 106 A,B,C,F,G,H</u>	2435
	Obj: Firstly, to establish a coherent picture of Heikian 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.						
730060	Mineralogy and Chemistry of fine-grained rocks in central Sverdrup Basin	Foscolos, A E	ISPG E	G C	Frank	59 E; 69 F; 79 B, C	2435
	Obj: To compare the clay mineralogy and inorganic geochemistry of the same formation from outcrop samples and from subsurface samples.						
730062	Development of extraction, identification and correlation systems for organic compounds from sedimentary rocks and crude oils	Snowdon, L R	ISPG E	G C	-	-	2441
	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.						
730063	An automated system for petrologic analysis of metamorphic mineral assemblages	Gordon, T M	REG CS	Pet	-	-	2436
	Obj: To develop a set of computer programs to expedite the analysis of metamorphic mineral assemblages.						
730065	Palynological study of the Tertiary coals and associated clastic rocks of the Ravenscrag and Frenchman formations, Saskatchewan	Sweet, A R	ISPG P	M P	Sask	72 F, G, H; 62 E, F	2442
	Obj: To give a biostratigraphic support to the Saskatchewan lignite project.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
730067	Geothermal Energy Resources in Canada	Souther, JG	REG	CPM	GR	BC	92 J
	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.						2464
730072*	Bedrock and surficial geology- Grand Banks	King, LH	AGC	RR	SBG	Nfld	<u>1, 2, 11</u>
	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.						2414
730081*	East coast Offshore surveys	Folinsbee, RA	AGC	RR	GPS	-	-
	Obj: A detailed, systematic mapping of hydrographic and geophysical parameters on the continental shelf and margin off the Canadian east coast. (a) To measure and describe the sea floor topography and the gravity and magnetic fields in the offshore; (b) to define the broad patterns of sediment composition and distributions; (c) to disseminate this information through a variety of media; charts, reports, digital magnetic tape files, publications, etc.						2414
730085	Classification of dinocysts	Williams, GL	AGC	EPG	SS	-	-
	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.						2431
730160*	Paleomagnetism of the Circum-Ungava Belt	Schwarz, EJ	REG	P	PMag	Ont Que	<u>23, 24, 33, 34, 43</u>
	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.						2434
740003	Geological interpretation of geophysical data as an aid to basin synthesis and hydrocarbon inventory	Grant, AG	AGC	EPG	R SBS	Nfld Frank	1-16, 27, 28, 38,39
	Obj: To define the geologic structure and history of the sedimentary basins in the offshore regions of Eastern Canada.						2417
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
	Obj: To establish and maintain a comprehensive biostratigraphic and depositional environmental framework of the Mesozoic-Cenozoic sediments of Grand Banks and Labrador. Utilize North Atlantic Basin control to more clearly establish the relationship of the Eastern Canadian margin.						2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
740016	Geology of the Island Lake map-area (53 E), Manitoba and Ontario	Herd, R K	REG	CS	A	Man Ont	53 E
740017	Metamorphism in the Canadian Shield	Fraser, JA	REG	P	NC	Que, Ont Man Sask Nfld, Mack Frank Kee	2421
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
740020	Geology of the Foxe Fold belt, Baffin Island, District of Franklin	Morgan, W C	REG	P	NC	Frank	27 pts A, B, C; 37 A, pts C, D, Pts. of 25 H
740030	Boothia Peninsula and Somerset Island (Operation Boothia)	Kerr, JW	ISPG	R G	AI	Frank	57 B, C, F, G; 58 C, D
740035	Petroleum Exploration Analog Study	Procter, R M	ISPG	E	PR	-	311
	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.						
	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.						
	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.						
	Obj: To establish the stratigraphy, structure and metamorphism of the Archean 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.						
	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.						
	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, G C	ISP G	R G	-	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	ISP G	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.							
740054	Geological variability of marine deposits, Ottawa-St. Lawrence Lowland	Gadd, NR	TS	-	RP	Ont, Que	31 G,F	2453
	Obj: To evaluate the stratigraphic, geomorphic and historical factors affecting the natural and engineering behaviour of marine clays, with special reference to landslides.							
740062*	Fraser Delta Sedimentation	Luternauer, JL	REG	CPM	M G	<u>BC</u>	<u>92 G</u>	244
	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.							
740065	Surficial geology inventory, Banks Island	Vincent, J-S	TS	-	RP	Frank	88 B,C,D,F; 97 G,H; 98 A-F	2413
	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.							
740067	Surficial geology-terrain inventory, Bathurst-Cornwallis and eastern Melville Islands	Edlund, SA	TS	-	RP	Frank	68 E-H; 69 A,B; 78 E-H; 79 A,B	2413
	Obj: Map, describe and explain the surface materials, landforms, ground ice and vegetation in order to provide areal knowledge of geology, geomorphology and terrain as background information suitable for land use management and various aspects of engineering construction and to determine the Quaternary history of the region.							
740068	Surficial geology, Ottawa Valley lowlands	Richard, SH	TS	-	RP	Ont, Que	31 B,F,G	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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
740072	Surficial geology of Newfoundland	Grant, DR	TS	-	RP	Nfld	1; 2 D; 11; 12 A
	Obj:	To map, escribe 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.					2413
740081*	Environmental Geochemistry	Jonasson, IR	RGG	RIE	GC	Ont, Que <u>Frank Mack</u> <u>Yk BC</u> <u>NB NS</u>	31 B-P; 21 A,I,P,H,L; 11 F,K; 74 H,J; 64 E,L; 82 F,G; 94 F,G; 104 N; 105 A,B,C,F-K,O,P; 106 A-C,E,F; 116 G; 117 A,B
	Obj:	(1) To understand the nature of physical and chemical processes which influence the dispersion of elements in the surface environment. (2) To coordinate Section activities relating to environmental matters. (3) To provide appropriate surficial and lithochemical support to the Nahanni IMP and its objectives.		DGO -	SP	Que, NB NS Kee Ont	22 H; 12 E,F,L; 18; 22 A,B; 11 F; 45, 46; 31 G,H
740084	Silurian-Ordovician macro-biostatigraphy of Anticosti Island, Quebec	Bolton, TE	DGO -				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 contents; (2) descriptions of significant fauna for each stratigraphic unit; and (3) local and regional correlations consistent with the data.					
740085*	Borehole Geophysics (Nuclear Techniques)	Killeen, PG	RGG	RIE	RM	BC Alta <u>Sask Ont</u> <u>Que NB</u>	21 I, G; 11 D; 12 L; 31 F,G; 30 M; 41 I, J; 82 O,E, G; 74 N
	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.					2433
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, W S, Jr	ISPG	P	MiP	BC	102 O; 103 B
	Obj:	To establish preliminary biostratigraphic subdivision of the offshore continental zones that have been established farther south.					2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
740091*	Borehole Geophysics (Electrical and Magnetic Techniques)	Dyck, AV	RGG	TG	EM	BC 0nt Que NB Man	92 I; 82 B; 41 V/5,6; 21 P/5; 32 D/7; E/3; F/7; K; 52 L/4; 62 I
0bj:	(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 <i>in situ</i> .	Campbell, F HA	REG	P	BS	Frank Mack	76 J (W1/2), K (E1/2); pts. 76 E, G, O, N, L; 77 A, B; 86 H
740092	Geology of the Bathurst Inlet Area	Jackson, LE	TS	-	GP	Alta BC	241
0bj:	To establish the geology of the intrusive, extrusive and sedimentary rocks of the map-area; to compile a detailed stratigraphic-sedimentological analysis of the Goultburn Group and related overlying rocks; to relate the Goultburn Group to other depositional sequences in the Coronation Geosyncline.						
740093*	Quaternary geology - terrain inventory, Kananaskis Lakes	Dawson, KM	REG	EG	M DG	BC Yk Mack	94, 95, 96, 104, 105, 106, 114, 115, 116, 117
0bj:	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	Copeland, MJ	REG	CS	EP	-	-
0bj:	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	Fahrig, WF	REG	P	-	Frank	48 A, D; 58; 68
740104*	Paleomagnetism of Proterozoic to Devonian Strata across Boothia Arch						2434
0bj:	To measure the paleomagnetism of Upper Proterozoic, Ordovician, Silurian and Devonian strata across the Boothia Arch to determine the paleolatitude, whether these strata have been shifted relative to the North America Craton, and to contribute information on the North American polar wandering curve.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
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	-	<u>NS</u>	<u>11,21</u>
740107*	Trace elements in sulphides	Jonasson, IR	RGG	RIE	GC	<u>Yk Ont</u> <u>NS BC</u>	<u>31 A,B,O,P; 11 F,K; 82 F,G; 94 F,G; 104 N; 105 A,B,C,F-K,O,P; 106 A-C,E,F; 116 G; 117 A,B</u>
0bj:	(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.	Geldsetzer, H J	REG	CS	A	Nfld NS PEI NB Que	<u>1; 11 D,E,F,G,J,K,N,O; 21 A,H; 12 A,B,H; 22</u>
740110	Carboniferous and Triassic strata of Appalachian region						2417
0bj:	To determine the stratigraphy, sedimentology, variations in facies and external and internal basinal geometry of the Middle Devonian to Triassic strata; to reconstruct the tectonic development, provenance, current direction and environment of deposition; and to determine the distribution, controls and origin of the associated mineral deposits, all with a view to elucidating the mineral resource potential.	Haworth, R T	AGC	RR	GPS	-	-
750001*	A geophysical investigation of the submarine extension of geological zonation of Newfoundland						
0bj:	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.	Eade, K E	REG	P	GPS	-	-
750004	Geology of the Tulemalo Lake map-area						
0bj:	To interpret the Precambrian geology of the area to modern 4-mile standards and to interpret the economic potential of the area.		REG	P	NC	Kee	65 J
750005	MacQuoid Lake (W 1/2); Thirty Mile Lake (E 1/2) Map-Areas	LeCheminant, A N	REG	P	NC	Kee	55 M w/ 1/2; 65 P e/ 1/2
0bj:	To interpret the geology and mineral potential of the Precambrian rocks of the area to a standard of 1:25,000 mapping.						2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750007*	Correlation and geochronological studies in the Canadian Shield	Frahey, M.J.	REG P	SP	Ont Man Que	41 H/14, I/3	2421
	Obj: To identify, date and correlate depositional, thermal and orogenic events within the various provinces of the Canadian Shield. To integrate Shield province histories. To extend and improve the present scheme of Precambrian time-classifications.						
750008	Geology of Nose Lake and Beechey Lake	Frith, R.A.	REG P	BS	Mack	76 F (E½); 76 G (W½)	2412
	Obj: To establish the geology of the intrusive, extrusive and sedimentary rocks of the area, to provide a base for mineral prospecting, and to correlate geophysical and geochemical patterns and anomalies to the geological and mineral deposit data.						
750010*	Geology of Uranium and Thorium Resources in Canada	Ruzicka, V	REG EG	URE	Ont Que NB NS PEI Nfld Kee Sask Man Mack Frank	41 I,J,P; 42 D,J; 51 K-N; 31 C-F; 33 F; 13 I-K; 66 H; 65 H; 52-53; 74 J-P; 64 K-N; <u>21, 82, 92, 103</u>	313
	Obj: To carry out comprehensive research on the geology of uranium and thorium deposits in order to:						
	(1) support or provide geologically based estimates of Canada's uranium and thorium resources;						
	(2) provide guidelines for their discovery;						
	(3) provide advice to government for nuclear energy policy and related matters.						
750011	Geology, petrology and economic potential of the anorthosite suite in southern Labrador	Emslie, R.F.	REG CS	Pet	Nfld	13 B,C,E,F,G	2421
	Obj: (1) Comparison of rock types, rock and mineral chemistry, and structures with similar features north of the Grenville Front;						
	(2) Estimation of the grade of regional metamorphism in this part of Grenville Province,						
	(3) Determination of age of the anorthosite suite of rocks;						
	(4) Investigation of the economic mineral potential of the anorthositic rocks.						
750014	Stratigraphy and sedimentation of the Proterozoic Rapitan Group and related rocks, Mackenzie Wernecke and Ogilvie Mountains	Eisbacher, G.H.	REG CPM	GR	BC Mack Yk	95 L,M; 105 P; <u>106 A</u> , B,C,D,E,F	2421
	Obj: To determine sedimentology, structural framework and metallogenetic significance of the various facies of Hadeyan clastic successions to derive a qualitative model of relative mineral potential in Mackenzie, Wernecke and Ogilvie Mountains.						
750015*	Stratigraphy of the Takla Group, northwestern B.C.	Monger, J.W.H.	REG CPM	GR	BC Yk	94 C,D,E; <u>104 B,G</u> , <u>H,I,J,K</u> ; 105 D; 115 A	2421
	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.						
750017	Stratigraphy and correlation, lower Paleozoic subsurface	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
	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 Tower Paleozoic rocks.						
	Arctic Islands						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750018	Stratigraphic and sedimentological studies of Lower Cretaceous rocks, Rocky Mountain Foothills and Front Ranges, Alberta and British Columbia	Gibson, DW	ISPG	C G	C G	BC Alta	82 G,J,0; 83 C
	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.						2462
750019	Structure and stratigraphy of Paleozoic and lower Mesozoic rocks in Halfway River Map-area, Northeastern British Columbia	Thompson, RI	ISPG	R G	M	BC	94 B
	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.						2421
750020	Carboniferous biostratigraphy in the northern Yukon, British Columbia, and Alaska	Nassichuk, W W	ISPG	P	Map	Yk BC	116 H,I; 92 F
	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.						2431
750021	Development of programs for Kremp File and Dinofile GSC palynological data files	Hopkins, W S	ISPG	P	MiP	-	-
	Obj: Assist in the development and execution of the Kremp and other palynological computer files.						2431
750023	Methodology of petroleum resource evaluation	Recruit	ISPG	E	PR	-	-
	Obj: To provide a reliable, realistic, statistically valid methodology for estimation of resource abundance.						311
750024	Petroleum geology of Tertiary, Mesozoic and Paleozoic strata north of 70°	Recruit	ISPG	E	PR	Frank	37-39; 47-49; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560
	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.						2461

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750025	Petroleum Geology of Tertiary, Mesozoic and Paleozoic north of 68° on the NWT and Yukon mainland and offshore	Koch, NG	ISPG	E	PR	Mack, YK	97, 107, 117
750027	Diagenesis of organic matter and clay minerals in sediments in relation of petroleum generation	Powell, TG	ISPG	E	GC	Frank, Mack BC	94 M, N; 107 E; 97 B, C 72 M; 73 D, E; 82 P; 83 A, B, G, H
750031*	Obj: To provide a reliable and adequate data base for assessment by the Geological Potential Subcommittee of the areas hydrocarbon potential and to document proven and potential hydrocarbon occurrences in the area.	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.	Hood, PJ	RGG	RG	CS	-
750032	Aeromagnetic Surveys: General	Hood, PJ	RGG	RG	GDP	-	-
750033*	Digital Compilation Software Development	Holroyd, MT	RGG	RG	GDP	-	-
750034*	Obj: To improve the computational and user efficiency and increase the generality of software for the compilation and mapping of aerogeophysical data.	Duke, JM	REG	EG	MDG	Que Ont Man	31 E, L; 32 C, D; 52 B 21 E; 63 D; 64 C; 42 A
750035*	Mineralogy of nickel deposits in serpentinitized ultramafic rocks	Tipper, HW	REG	CPM	GR	BC YK	92 H, L; 93 E; 94 D; 103 C, F, G; 104 H-K; 105, 115
750036	Biostratigraphic study of Mesozoic rocks in the Intermontane and Insular Belts of the Canadian Cordillera	Mc Gregor, DC	REG	CS	EP	Atla NS	-
	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.						
	Obj: To refine palynological methods of dating and correlating Silurian and Devonian rocks of Canada, by (a) identifying and describing Silurian and Devonian spores, (b) determining their value in terms of regional and world wide biostratigraphy and (c) establishing stratigraphic reference sections and zonations for spores in Silurian and Devonian sedimentary basins in Canada.						

750037*	Radar Soundings for Geological Mapping	Davis, JL	RGG	TG	EM	Ont. Man.	31 K/3; 52 L/4, 62 I/1	2435
Obj:	To develop radar sounding methods for applications to surficial and engineering geology using surface and borehole techniques.							
750038*	Pleistocene-Holocene Basin sedimentation	Vilks, G	AGC	EMG	PEC	NS	21 B	244
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.							2445
750039	Geochemical Data Systems	Ellwood, DJ	RGG	RGC	MD	-	-	-
Obj:	To provide a liaison between the available data processing facilities and scientists within the geochemistry sub-division to design, implement and document systems to facilitate the expedited computer processing of machine readable geochemical data, and to manage the archiving of such data.							2465
750040	Uranium Reconnaissance Program (Gamma-Ray Spectrometry)	Carson, JM	RGG	RIE	RM	-	-	2463
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.							
750043*	Consulting advice on conservation and restoration of coastal environments	Reinson, GE	AGC	EMG	GCD	-	-	296
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.							
750045	Late Cenozoic Paleoceanography of the Labrador Sea	Fillion, RH	AGC	RR	LSS	-	-	2422
Obj:	Study of Hudson cores will provide information on detailed paleoclimatic fluctuations over the 100,000 to 200,000 years of Late Pleistocene-Recent sedimentation. Detailed knowledge of past changes in climate, glaciation and ocean circulation is useful for achieving several major goals. It will permit stratigraphic correlation to be made with areas outside the Labrador Sea. Stratigraphic correlation between the deep sea and the continent. To define the time sequence of glacial climatic and eustatic events on the Labrador Shelf.							
750046	Geochemical transformations and reactions of organic compounds in recent marine sediments	Rashid, MA	AGC	EMG	OCC	-	-	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 guidelines 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
750048	Multidisciplinary environmental marine geological analysis of the Miramichi Estuary and Bay	Buckley, DE	AGC	EMG	NB	21 P	244
	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 form at 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.						
750049	Mitikken Lake - Goldfields mining area, Saskatchewan	Davison, WL	REG	P	SG	Sask	74 N
	Obj: To fill in gaps outstanding in map-coverage of the Beaverlodge uranium area.						
750051*	National geochemical reconnaissance	Hornbrook, EH W	RGG	RIE	GC	NB NS Nfld Ont Sask BC Yk Frank	Pts 1-16; 23; 27; 37; 41; 42; 52 A,B; 74 J; 104; 105; 117
	Obj: To provide for industry high quality, multi-element, reconnaissance exploration data to indicate areas of highest potential for uranium and other mineral commodities; to provide governments with nationally consistent, systematic data to assist in resource appraisal for uranium and other minerals; to provide information on the natural abundance of elements, including toxic elements, in the environment.						
750053	EDP systems and applications	Holroyd, MT	RGG	RG	DC	-	-
	Obj: To carry out or supervise the design, development and documentation of various computer software for use by the division or branch, in order to efficiently and fully utilize the available computer facilities.						
750055*	Structural studies in the Mackenzie Arc, Franklin and Coleville Hills	Cook, DG	ISPG	RG	M	Yk Mack	82 N,0; 94 N; 96; 106 A,B; 95 C,K,L,M,N 105 P
	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.						
750057	Stratigraphically important cystimorph corals from the Lower Devonian of western Canada	Pedder, AEH	ISPG	P	Map	-	-
	Obj: The project will describe stratigraphically important cystimorphs from the Lower Devonian of the Yukon and also will provide new interpretations of related forms from Ontario, Tasmania and Gotland. The Yukon forms are expected to be important biostratigraphically for the Lower Devonian of that region.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750058*	Geology of Uranium Resources of Canada-2	Tremblay, L P	REG	EG	URE	Sask Que	31 J,K; 12 K,L; 32 I,P; 64 L; 74 A-P; 24 B,C,F,G,K; 23 J
0bj:	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.						313
750059	Mineralogical research on Rabbit Lake uranium deposit, Saskatchewan	Rimsaite, JYH	REG	EG	URE	Sask	64 L, 74 N
0bj:	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.						2463
750061*	Lower Paleozoic geology of Eastern Canada	Sanford, BV	REG	CS	A	Ont Que	31 F,G
0bj:	(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.						2421
750063*	Quaternary geochronology, Arctic Islands	Blake, W, JR	TS	-	PG	Frank	25-28; 29 F; 35-38; 39 B,C,E-H; 47-48; 49 A,B,D,E; 57-59; 67-69; 77-79; 87-89; 97-99; 120; 340; 560
0bj:	(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.						2433
750064	Regional synthesis, southern Superior Province and eastern Southern Province, Project I	Frahey, MJ	REG	P	SP	Ont Que	31, 32, 41, 42
0bj:	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750067*	Mesozoic biostratigraphy and Jurassic paleontology of Northern Yukon and adjacent District of Mackenzie	Poultton, TP	ISPG	P	Map	Yk Mack	106 M,L; 116 N,O,P,K, J,L,F,G; 107 A,B,C,D; 117 A,B
750069*	Geology of uranium resources of Canada 3	Bell, R T	REG	EG	URE	BC Yk Mack Alta Sask Man	82-83; 92-95; 104-106; 114-117
750070*	Synthesis of Quaternary geology, Great Plains of Canada	Stalker, A M	TS	-	RP	BC Alta Sask Man	62, 63, 64, 72, 73, 74, 82, 83, 84, 93, 94
750071*	Quaternary geology-terrain inventory, Boothia Peninsula northeast Keewatin, and Somerset and Prince of Wales Islands	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
750072*	Quaternary geology, terrain inventory, northeastern Manitoba	Dredge, LA	TS	-	RP	Man	54 E,F,I; J,K,L,M,N,O,P
750076	Quaternary geology of the Canadian Cordillera	Fulton, R J	TS	-	RP	BC Yk Alta, Mack	82-92

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750077*	Hydraulic, morphologic and morphometric studies of selected rivers along the Mackenzie Highway	Egginton, PA	TS	-	SMT	Mack	<u>95 O,J; 96 C,E; 107 B</u>
	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.						244
750078	Quaternary geology-terrain inventory, Prince Rupert-Terrace, Smithers area	Claque, JJ	TS	-	RP	BC	Pts 93 L,M; 103 F,K,G, I,J,P
	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.						2413
750079	Fluvial and mass wasting processes, Banks Island	Day, TJ	TS	-	GP	Frank	88, 97, 98
	Obj: To undertake fluvial process studies in northern areas, with supporting studies in southern rivers where data bases are more extensive. Specific topics include long term bank erosion studies, hydraulic and geomorphic variability of homogeneous river reaches, and historical effects on river channel behaviour.						244
750080	Gravel stream beds	Day, TJ	TS	-	GP	-	-
	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.						244
750082*	Structural analysis of the Fernie Basin	Ollerenshaw, NC	ISPG	CG	CG	BC	Pts 82 G
	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.						2462
750083	Mesozoic stratigraphy and Basin analysis of the Western Queen Elizabeth Islands, Arctic Archipelago	Embry, AF	ISPG	RG	SM	Frank	69, 78 G, 79, 89 G, 99
	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.						2421
750085*	Stratigraphy, sedimentology and diagenesis of Paleozoic rocks in the Mackenzie Mountains and northern Rocky Mountains	Morrow, DW	ISPG	RG	M	Yk BC Mack	<u>94; 95 K,L,M,N; 96 C, D,I,P; 105; 106 A,B,G,H</u>
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750088	Investigations concerning the optical properties of coals and dispersed organic materials	Cleaney, S	ISPG	CG	CT	-	-
	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.						2462
750089	Planning, directing and coordinating coal resource evaluation programs	Latour, BA	ISPG	CG	RE	-	-
	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						312
750092*	Mesozoic stratigraphy and basin analysis of Eastern Sverdrup Basin, Arctic Archipelago	Embry, AF	ISPG	RG	SM	Frank	29; 39; 49 H; 59 H; 69; 79 E, H; 120 F; 340 B, D; 560 D
	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.						2421
750093	Compilation and evaluation of geologically oriented data on industrial mineral resources of Canada	Moyd, P	REG	EG	-	-	-
	Obj: To marshal and appraise in-house data on industrial minerals; to keep abreast of current activity in the field of industrial minerals for the purposes of improving the bank of technical information; to maintain a watching brief and to detect subjects on which the GSC may expect demands for information and advice.						2466
750094	Development of computer-based statistical techniques applicable to regional geological and mineral deposit data	Chung, CF	REG	EG	GM	-	-
	Obj: Develop and apply statistical techniques as an input to methods for regional resource evaluation of geological data and mineral deposit data						412
750096*	To advise the Cape Breton Development Corporation on coal geology for its operation in the Sydney coalfield	Hacquebard, PA	AGC	EPG	NS	11 K, G	296
	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.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750098*	Metallogeny of the southwestern part of the Canadian Shield	Franklin, JM	REG EG	MDG	Man Sask Ont Frank Kee Mack	42, 43, 52, 53, 54, 62, <u>63</u> , 73, <u>74</u>	2465
750099	Regional Synthesis, western Superior Province, northwestern Ontario	Skinner, R	REG P	-	0nt	52; pts. of 42, 43, 53	2421
750100	Regional Synthesis — Baffin Island Project II	Morgan, WC	REG P	NC	Frank	Pts 25, 26, 36, 16, 27, 37, 47, 38, 48, 39, 49	2421
750102*	Regional syntheses, southern Keeewatin, Project I	Eade, KE	REG P	NC	Kee	<u>65 C</u>	2421
750103*	Regional Synthesis — Bear and Slave Province, Project 1	Frith, RA	REG P	BS	Mack	Pts 75, 85, <u>76 F, G, 86 B</u>	2421
750107*	Acquisition of an ocean bottom seismometer	Barrett, DL	AGC RR	OBM	-	-	2417
750108*	Marine surficial geology and sedimentation, British Columbia	Bornhold, BD	REG CPM	MG	<u>BC</u>	-	2415

- Obj: To provide a regional synthesis of the geology of a large part of the Canadian Shield south of Lat. 60° and west of Long. 25°, in order to determine the origin, setting and distribution of mineral deposits as an aid to prospecting and to the economic development of the region.
- Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.
- Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.
- Obj: To provide a single comprehensive source for all relevant data on the region; to prepare and have available for presentation broad regional and tectonic syntheses; and to have a designated "expert" who will be thoroughly familiar with the geological data and related economic aspects of the region.
- Obj: To acquire an ocean bottom seismometer for seismic refraction studies of the earth's crust and upper mantle.
- 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.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
750110	Federal-Provincial mineral evaluation liaison and co-ordination	Findlay, DC	REG EG	-	Man Sask	-	296
	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 (NR EP).						
760005	Environmental geology of eastern Arctic Coasts	McLaren, P	AGC EMG	C GD	Frank	48 C-F	244
	Obj: To investigate and describe central Arctic coasts based on consideration of bedrock stratigraphy and structure, Quaternary deposits and events, physiography and bathymetry, sediment input, sea ice dynamics, ocean tides, currents and waves, and other pertinent factors in order to establish a system for coastal description as baseline information for proposed energy/mineral resource development.						
760008*	Géologie du Quaternaire région de Bathurst-Campbellton, Nouveau Brunswick	(Gauthier, R C)	TS -	RP	NB	<u>21 O,P</u>	2413
	Obj: Cartographier, décrire et expliquer les dépôts meubles et formes de terrain, en intégrant des informations relatives à la planification territoriale, l'exploration minérale, la localisation des ressources granulaires, les eaux sous-terraines, la foresterie, le développement urbain et industriel. Le travail final comportera une synthèse de l'histoire quaternaire régionale.						
760010*	Surficial geology, geomorphology and terrain inventory of the Ringnes and adjacent islands	Hodgson, DA	TS -	RP	Frank	<u>59 C,F; 69 C,D,E,F;</u> <u>79 D,E; pts 59 B</u>	2413
	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.						
760012	Surficial geology-terrain inventory, north-central Keewatin	Thomas, RD	TS -	RP	Kee	<u>65 E,F,K,L,M,N; 66 I;</u> pt. 66 H	2413
	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.						
760014*	Geology of uranium resources of Canada-4	Dunsmore, HE	REG EG	URE	NS NB PEI Nfld	<u>11 D,F,K,L; 21 A,G-J,</u> <u>0 P; 59; 68; 69; 49</u>	313
	Obj: Comprehensive research on the geology of uranium deposits in order to: (1) support or provide geologically based estimates of Canada's uranium resources; (2) provide guidelines for their discovery; (3) provide advice to government for uranium policy and related matters.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
760015*	Eastern Baffin Island shelf bedrock and surficial geology mapping program	MacLean, B	AGC	RR	EAO	Frank	Pts 15, 16, 17, 25, 26, 27, 28, <u>38</u>
760018*	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.	McLean, JR	ISP G	C G	Alta BC		Pts 83 B, C, E, F, L; <u>93; 94</u>
760021*	Stratigraphy and sedimentology of Blairmore Group and equivalent strata in Alberta and northeastern B.C.	Thorsteinsson, R	ISP G	R G	AI	Frank	<u>48 F, G; 58 F, G, E, H;</u> <u>59 A; 49 A</u>
760022	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 Butthead Group and lower Fort St. John.	Cumming, LM	REG	C S	A	NS	21 A; 12 G, H; 22 A; 2M
760023	Structure and stratigraphy of western Devon Island and Venzon Fiord map-area, Ellesmere Island	Frisch, T	REG	P	NC	Frank	Pts. 38 B; 39 B-H; 48 E-H; 49 A, B, D, E, H
760024	To delineate the stratigraphical and structural history of Devon Island with a view to helping assess the size, grade, mode of occurrence, origin and potential of fuel or mineral deposits that may occur there.	Henderson, JB	REG	P	BS	Mack	86 H/2,3,6,7
	Keskarrah Bay map-area, District of Mackenzie, NW T						2421
	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.						44

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
760025*	Geology of Amer Lake map-area District of Keewatin, NWT	Heywood, W W	REG	P	NC	Kee	<u>66 H</u>
	Obj: To provide a comprehensive study of the Amer Lake map-area in order to refine and update the 1:6-mile reconnaissance mapping of that area.						2412
760026	Geology of Penrhyn Fold Belt, Melville Peninsula, NWT	Okulitch, A V	REG	CS	Pet	Frank	46 0,P; 47 A
	Obj: To determine the structural, metamorphic, stratigraphic and age relations between basement gneisses and migmatites, and the covering Penrhyn Group in 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.						2421
760027	Redbed sequences in Canada	Chandler, F W	REG	CS	A	-	-
	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.						2421
760028	The geology of southeast Baker Lake, NWT	Schau, M	REG	P	NC	Kee	56 C,D
	Obj: To provide information on the origin and relationships of a heterogeneous group of plutonic and metamorphic rocks.						2421
760029*	Huntec Seabed Project	King, L H	AGC	RR	SBG	-	-
	Obj: Development and application of high resolution vertical incident acoustic reflection data for the quantitative classification of marine sediments.						2415
760030	Surficial geology and paleoglaciology of Saglek Bank, Labrador Shelf	Fillion, R H	AGC	RR	LSS	-	-
	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.						2415
760037	Regional subsurface geology, continental shelf and slope, offshore Labrador, Baffin Island and related areas	Umpleby, D C	AGC	EPG	RSBS	Nfld Frank	2,3,13,14,15,16, 27,28,29,30,39,120
	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.						2421

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
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
	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.						2431
760039	Study of the structure and origin of Baffin Bay	Falconer, R K H	AGC	RR	EAO G	-	-
	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.						2417
760042*	Jurassic biostratigraphy of selected areas of western and Arctic Canada	Poulton, TP	ISPG	P	Map	BC Alta Yk Frank	82; 83; 92-94; 103 C, F, G; 104; 105 E; 115 H, I; 49; 59; 69; 79 F 89 E; 99; 340; 560
	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.						2431
760043*	Regional geochemistry Newfoundland & Labrador	Boyle, D R	RGG	RGC	RS	Nfld	-
	Obj: 1. To carry out coordinated follow-up studies, with Newfoundland staff of the 1977 and 1978 URP-NGR surveys in Labrador; 2. To illustrate the effectiveness of URP-NGR surveys in stimulating exploration and providing a data base to support mineral resource inventory studies; 3. To develop geochemical survey methodology appropriate for various types of mineral deposits and environments in Newfoundland and Labrador; 4. To complete publication of B.C. data.						2463
760044*	Regional geochemistry-Southern Canadian Shield	Coker, W B	RGG	RGC	RS	Sask Man Ont	31 C, F; 42 D, E; 52 A, H; 64 E, J, K, L, N, O
	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.						2463
760045*	Evaluation of Uranium Reconnaissance Data	Charbonneau, B W	RGG	RR	RM	Ont Frank	31 C, 47 F
	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.						2463

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
760047*	Regional geochemistry-Northern Canadian Shield	Maurice, Y	RGG	RGC	RS	Mack Kee Frank	76 H,I; 75 F-K; 46 N,O,P; 47 A,B,E,F
760047*	To determine the nature and factors affecting the distribution of trace elements within bedrock, overburden and stream and lake waters and sediments, etc. in order to:						
	(1) evaluate the effectiveness of the NGR program (project 750051) and improve the operating techniques and specifications;						
	(2) provide methodology for interpreting and following up NGR reconnaissance results;						
	(3) assess the mineral potential of various regions and rock units with emphasis on granitoid rocks.						
760048*	Radiation instrumentation	Bristol, Q	RGG	RIE	R	Ont Sask	31 C,F,J; 41 J; 40 I; 73 B
760048*	0bj:	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.					
760049	Gamma-Ray Laboratory Operations	Cameron, G W	RGG	RIE	RM	-	-
760049	0bj:	To provide analytical facilities for the determination of K, U, and Th in geological samples, and for the determination of radioactive disequilibrium in rock samples; to provide adequate standards for calibration of the lab as well as standards for the various calibration facilities constructed; to provide a data storage and retrieval system related to the analytical results produced by the laboratory.					
760053	Hydrocarbon geochemistry of Arctic Archipelago	Powell, TG	ISPG	E	GC	Frank	98, 88, 78, 68, 58, 99, 89, 79, 69, 59, 49, 560, 340
760053	0bj:	To determine presence or absence and quality of petroleum source rocks and petroleum product type so that reasonable gas/oil ratios may be determined; to calculate probable or maximum maturation levels so that maturation isopleths can be plotted and used to map probable petroleum regions; to quantitatively evaluate hydrocarbons dispersed in fine grained rocks in order to estimate relative amounts of petroleum in various regions or plays.					
760054	Hydrocarbon geochemistry of Canadian East Coast offshore	Powell, TG	ISPG	E	GC	Nfld NB NS	14, 3, 10, 11, 20
760054	0bj:	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.					
760056	Evaluation of coal deposits of western Canada	Graham, PS	ISPG	CG	RE	Alta BC	82 J; 92 O; 93 B,C,G; 83 A
760056	0bj:	To establish a coal resource base in the coal deposits of western Canada from which quantitative, qualitative, mineability and environmental studies can be made.					

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
760057*	IUGS Secretariat	Hutchison, W W	D GO	-	IUGS	-	-
	Obj:	1) To maintain communication among the 82 member countries in IUGS and the Executive Committee, Council, 6 Commissions, 5 Committees, 19 major Subcommissions and 14 Affiliated Organizations. 2) To promote the general scientific objectives of IUGS and to foster and co-ordinate activities designed to attain these objectives. 3) To co-ordinate co-operative activities or establish liaison among international organizations such as UNESCO, ICUSU and other Unions and joint programs (such as IGP). 4) To carry out directives of the Executive Committee of IUGS. 5) To compile and produce the quarterly publication, <u>EPISONDES</u> and all other official IUGS publications and brochures.					296
760058*	Vegetation distribution and relationships to surficial materials-Arctic	Edlund, SA	TS	-	RP	Frank Kee Man	<u>79 D</u>
	Obj:	To map and describe vegetation distribution and plant communities as they relate to selected areas of the Arctic Islands.	Eisbacher, GH	REG CPM	GR	Mack Yk BC	93 D; 106 C, F, 95 L, M; <u>94 F, K</u> ; 105; 116
760059*	Study of large landslides in the Western Cordillera						244
	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.					
760060	Mineral and energy resource evaluation: Probabilistic Methods	Agterberg, FP	REG EG	GM	-	-	412
	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 models of occurrence of undiscovered mineral resources.	Davidson, A	REG P	SG	Ont Que	Pts 31, 32, 41
760061	Regional synthesis of the Grenville Province in Ontario and western Quebec						2421
	Obj:	To effect a regional synthesis of the geology of the Grenville Province in Ontario and western Quebec and to interpret the synthesis in terms of the geological evolution of the area, and in cooperation with project 750062, of the Grenville Province as a whole.	Christie, RL	ISPG RG	AI	<u>Alta, BC</u> <u>Vik</u>	-
760062*	Geology of bedded phosphate deposits in Canada						2466
	Obj:	To identify Canadian phosphate resources and to develop an understanding of the regional geology relationships: patterns and occurrences, facies, paleogeography, etc.	Snowdon, LR	ISPG E	GC	Yk Mack	106, 107, 117
760063	Hydrocarbon geochemistry of northern interior plains and Beaufort Sea						2461
	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.					

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
760064*	Geology of Mineral Resources in the Ocean	Gross, GA	REG	EG	SP	-	-	2465
0bj:	(1) To provide a base of geological information for identifying and determining the kinds, distribution and possible extent of ocean mineral resources, and for evaluating their significance to Canada. (2) To provide a direct and independent national competence for evaluating these resources and for appraising implications of their development with respect to Canadian mineral policy and the use and marketing of Canadian mineral products.							
760065	Digital Compilation of Queen Air Aeromagnetic Data	Dodds, SD	RGG	RG	GDP	-	-	2416
0bj:	(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.							
770001*	Study of the Cenozoic Evolution of the Western Cordillera	Souther, JG	REG	CPM	GR	<u>BC</u> Yk		2421
0bj:	(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.					pts. of 82, 92, 93, 103, 94, 104, 95, 105, 115 A-C, 106, 116, 117, 114 0,P		
770004	Reconnaissance field study of the Mesozoic sequences outcropping on the Iberian Peninsula	Jansa, L	AGC	EPG	SSG	-	-	2421
0bj:	To provide evidence that the sedimentary sequences of the Iberian Peninsula are co-eval with similar sequences beneath the Grand Banks.							
770006*	Stratigraphy and structure of the Pacific Continental Slope and Shelf using manned and unmanned submersibles	Yorath, CJ	REG	CPM	MG	<u>BC</u>	<u>92 C, D, E, L; 102 H, I, 0,P; 103 B, C, F, G, K</u>	2414
0bj:	(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.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770010*	Development of Analytical and Theoretical Techniques for Refraction Seismology Interpretation	Keen, C E	AGC RR	OBM	-	-	2421
770012	Geology of the Coronation Gulf area	Campbell, F H A	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	Jackson, G D	REG P	NC	Frank	parts of 37 G; 38 B; C; 48 A-D	2411
770015	High Resolution Aeromagnetics (Instrumentation Development)	Sawatzky, P	RGG RG	MM	-	-	2416
770016*	Operation Dease	Gabrielse, H	REG CPM	GR	BC	104 I,J	2412
770017*	Stratigraphy, structure and metallogeny of the northern part of the Intermontane Belt (Whitehorse trough) in the Canadian Cordillera	Tempelman-Kuit, DJ	REG CPM	GR	Yk	105 C,E,I; 115 I	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.

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 Elllice River Formations; to correlate, if possible, the Hornby Bay dolomite and sandstone with the Parry Bay, Elllice and Tinney Cove; to relate tectono-depositional events in other post-Coronation Geosyncline sequences. To determine the extent of copper mineralization in the Coronation lavas, and uranium content in the Parry Bay and other sedimentary rocks.

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

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

Obj: i) To complete and update the 1:250,000 geological mapping of Cry Lake and Dease Lake map-areas and N.W. 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.

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

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770018*	Regional Seismic Surveys	Overton, A	R GG	R G	SM	-	-
	Obj: To determine the thickness, attitude and seismic velocities of sedimentary formations comprising the Lomonsov Ridge, using seismic methods.	Hoffman, PF	REG	P	BS	Mack	86 J,0
770019*	Hepburn Batholith, Hepburn Lake map-area, District of Mackenzie						2421
	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.	Woodsworth, GJ	REG	CPM	GR	BC	93 E
770020*	Kemano Project						2412
	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.	Smees, BW	R GG	-	-	Ont. Que	52 F; 42 E; 42 B; 32 D
770023*	Development and/or adaptation of mineral exploration approaches						2465
	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.	Gandhi, SS	REG	EG	URE	BC Mack	86 C,F,K,G,J,L,85 L, M,N;75 C,D,E,K,L; 82 M;46 N;76 J,N,0
770024*	Geology of uranium resources of Canada-Y						313
	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.	Goodfellow, WD	R GG	R GC	RS	Yk BC Mack	105 A,B,H,I,F,O; 106 E;116 B,L,M,N; 115 G,I,J;117 A,B,C,D; 95 J,K,N
770025*	Regional Geochemistry - Yukon						2463
	Obj: 1) To assess through orientation surveys the use of various geochemical sample media as a fundamental step towards the development of geochemical methodology appropriate to the project area; 2) To illustrate through detailed interpretation surveys the effectiveness of such surveys as a means of evaluating the mineral potential; 3) To provide a data base for the compilation of a National Geochemical Reconnaissance Map as a contribution to the mineral potential inventory of the nation.						

2421
Geology of Red Indian Lake,
west half, Newfoundland

- Obj: (1) To revise the geology and evaluate the economic mineral potential of Red Indian Lake, west half (12 A, W1/2) by mapping at 1:50,000 scale and by compilation where needed.
 (2) To monitor, assess and then absorb results of geological mapping of insular Newfoundland under the Canada-Newfoundland Mineral Development Subsidiary Agreement.

2421
Proterozoic redbeds
of Richmond Gulf

- Obj: (a) To determine the processes of formation of Proterozoic redbeds and associated metallogenesis;
 (b) To correlate Richmond Gulf sequence with sequences elsewhere on Canadian Shield.

Chandler, FW

CS
A
Nfld

12 A

2423
Regional Synthesis –
Baffin Island: Project I

- Obj: Regional synthesis of all aspects of the Precambrian geology of Baffin, eastern Devon and southeastern Ellesmere Islands in the District of Franklin, N.W.T.

Jackson, GD

REG
CS
A
Que

33 N/15
34 C/1,8

2413
Géologie du Quaternaire,
région de l'Outaouais supérieur

- Obj: Cartographier, décrire et expliquer les dépôts meubles formés de terrain, avec objectifs secondaires de:
 (1) Fournir des données relatives à l'utilisation du sol, à la prospection et localisation de sable et gravier, aux réserves d'eaux souterraines, à la prospection géochimique.

Véillette, JJ

TS
-
RP
Que Ont

31 M₂(N₁); 31 N₁(N W₁)

2413
Surficial geology and terrain
evaluation, southern Yukon

- Obj: To map, describe and explain the surficial materials and landforms and to provide areal geologic-geomorphic data and knowledge of the stratigraphy, age and history of surficial deposits to provide background information for land-use planning and engineering development.

Klassen, RW

TS
-
RP
Yk BC

94 M; 104 P; 105 A-D,
E; 115 A, H₁, 114 P

2413
Geological characterization of
Arctic lakes: sediment
properties and sedimentary
processes

- Obj: To characterize Arctic lakes by providing a framework of mineralogical and compositional data on lake sediments and watersheds, and to evaluate postglacial sedimentation and diagenetic processes to assist 1) potential construction activities, 2) environmental impact studies, and 3) mineral exploration programs.

Adshead, JD

TS
-
SMT

Kee

66 A, H; 65 A, P, I, H₁,
55 E, F, M; 56 D, E, N, K

244
Periglacial processes and
slope movement, central
Keweenaw

- 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.

Eggington, PA

TS
-
SMT

Kee

55 L; 65 I, 0, P,

244
244
244

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.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770036*	Geotechnical study of rock heave, central Arctic	Dyke, LD	TS	-	GP	Frank Kee Man	54 K,L; 57 G; 58 B; C,F,G; 65 O,P; 68 G,H; 78 G,H; 79 B
770037*	Slope processes and cryogenic movements, Arctic Islands	Heginbothom, JA	TS	-	GP	Frank	58 F,G; 68 G,H; 79 B
0bj:	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.						244
770038	A text on Canadian Geology and Natural Resources	Neale, ERW	ISPG	GI	-	-	-
0bj:	To prepare a text, at about the senior high school or introductory college level, which will summarize our present knowledge of Canada's rocks and minerals and relate them to recent hypotheses of the earth's evolution. It will be designed to provide factual background for intelligent laymen interested in world resource crises.						248
770041	Compositional Characteristics of Coals from Hat Creek, British Columbia	Marchionini, DL	ISPG	CG	CT	BC	92 I,P
0bj:	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.						2462
770042	Surface oxidation of variously ranked coals	Marchionini, DL	ISPG	CG	CT	BC Alta	82 O,G,H,P
0bj:	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.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770043	Carboniferous and Permian stratigraphy and sedimentation in the southwestern District of Mackenzie and southeastern Yukon Territory	(Richards, BC)	ISPG	R G	M	Mack Yk	95 B, C
	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.						2421
	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	R G	M	Mack BC Yk	<u>106 A,B,F,G; 94 B,F,G;</u> <u>105 O,P; 95 K,L,M,N</u>
	Obj: To contribute to the subdivision, mapping and understanding of important Lower Paleozoic basinal sequences through:						2421
	(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 mapable units in basinal sequences, on lithological, paleontological, geochemical or other criteria,						
	(d) Estimation of basinal water depths,						
	(e) Elucidation of the composition and movement of basinal fluids, as deduced from diagenetic events.						
770045	Taxonomy and biostratigraphic distribution of Mesozoic and Paleogene megaspores	Sweet, AR	ISPG	P	MP	Mack Frank Ont, NS	107 B; 88 C; 98 E; 79 B,D; 69 D; 49; 42 N; 11 E
	Obj: 1) To describe and classify megaspores from northern Canada and when necessary for comparative purposes, from southern localities.						
	2) To establish biostratigraphic zonations based on the described megaspores.						
770046	Resource Evaluation of coal deposits of western and northern Canada	Hughes, JD	ISPG	C G	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
	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.						312
770047*	Studies of coal deposits of western and northern Canada	Long, DG	ISPG	C G	GC	<u>Yk</u>	<u>106 E; 105 A,B,F,G,</u> <u>H,J,K,[L,M; 115 H,I,</u> <u>N,O,P; 116 A,B,C,</u>
	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; to 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.						2462

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	N TS
770048*	Brachiopods of the lower Upper Devonian Waterways Formation of northeastern Alberta	Norris, A W	ISPG	P	Map	Alta	<u>74 D,E,L,I; 84 I,P</u>
	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).						2431
770049	Stratigraphy and sedimentology of the Tertiary sediments of the eastern Arctic	Miall, AD	ISPG	R G	AI	Frank	38; 49, 59, 120, 340
	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.						2421
770051	The relationship between kerogen type (known petrographic rank) and chemical extract data, for the purpose of source rock evaluation	Creaney, S	ISPG	C G	C T	Kee Mack	107; 117; 99; 89; 79; 69; 59; 49; 560; 340
	Obj: To assess kerogen type and degree of maturation by three microscopic methods and correlate the results with organic chemical data in order to define the most efficient microscopic method of source rock evaluation.						2461
770053	Heavy Oil and Oil Sand Resources	Ratcar, M	ISPG	E	PR	Alta Sask	-
	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.						311
770054	Sample preparation and mineral separating	Paris, J C	CLAS	-	M	-	-
	Obj: To provide sample preparation and mineral-separating services in support of Branch projects.						248
770055*	Metallogeny of the northwestern part of the Canadian Shield	Roscoe, SM	REG	EG	M DG	Mack Kee Man Sask	<u>55, 56, 64, 65, 66, 75, 76, 85, 86</u>
	Obj: To provide a metallogenetic basis for the evaluation of the mineral resources of the northwestern part of the Canadian Shield.						2465
770060	Environmental assessment of coal resource development, Canadian Cordillera	Jackson, L E	TS	-	GP	Alta B C	-
	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.						2451

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770061*	Mineralogy of uranium deposits in granitic rocks in the Grenville Structural Province	Rimsaite, JYH	REG	EG	URE	Ont Que	31
770063*	Geology of Lead and Zinc resources of Canada - II	Lydon, JW	REG	EG	M DG	Yk Mack NS Nfld Que	11 D,E,F; 63 J,K,L; 64 B,C; 12 A,H; 21 P; D; 32 D; 34 C; 85 B; 105 I,K,M,0
	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.						2465
770066	A study of siltation within lakes in the District of Keewatin, N.W.T.	(Edwards, TWD)	TS	-	SMT	Kee	55 E,L; 65 A,H,I
	Obj: To study siltation processes within lakes and the stratigraphy of lake bottom sediments						244
770067	Western Canada Oil and Gas Pool File	Skibo, DN	ISP G	E	PR	Alta Sask BC Man	-
	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.						311
770070*	Regional Geological Synthesis, Central Superior Province	Card, KD	REG	P	SG	Ont Que	41, 42, 32
	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:						2421
	(a) to improve regional correlation in Superior Province; and (b) to further understanding of Superior-Grenville boundary. To produce geological maps for publication at 1:1,000,000 scale.						
770071*	Geology of copper and molybdenum resources of Canada - II	Sinclair, WD	REG	EG	M DG	Yk BC NS NB Que Ont Man Sask Nfld	115 F-K; 104 N; 11; 21; 22; 12; 31; 32
	Obj: The project is one of comprehensive research on the geology of copper and molybdenum deposits in order to: (1) support or provide geologically based estimates of Canada's resources of these commodities; (2) provide guidelines for their discovery; (3) provide advice to government for mineral policy and related matters.						2465

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
770072	Geological Survey representative on Steering Committee of the Kremp Palynologic Computer Research Project.	Barss, M.S.	AGC	EPG	-	-	-
	Obj: To represent the Geological Survey and present the views of GSC palynologists to the KPCRP Steering Committee with regard to the operation and management of the project.						2431
770073*	Study of the Boundaries of Lithospheric Plates	Loncarevic, B.D.	AGC	RR	-	-	-
	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 magnetic processes which lead to the accretion of new material to the edge of the lithospheric plates and possible metallogeny of sulphide ore bodies.						2421
770074	Display, Analysis, and Management of Spatially Referenced Geological Data	Gordon, T.M.	REG	CS	PET	-	-
	Obj: (1) Determine requirements for, and develop, a library of computer programs for the scientific analysis and display of geological data. (2) Develop a prototype computer processable data base of spatially referenced geological data to manage the data needed for various applications.						248
770075	Canada Basin Ocean Bottom Seismometer Equipment	Falconer, R.K.H.	AGC	RR	-	-	-
	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.						2463
770076	The geochemistry of uranium in natural waters	Coker, W.B.	RGG	RGC	RS	-	-
	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).						2431
770077*	Paleozoic conodonts of eastern Canada	Nowlan, G.S.	REG	CS	EP	Que Ont Man Kee NB NS Nfld	12 L; 11 E, F, K; 22 A, B; 21 P
	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.						312
780001	Coal Resource Data Management	Stevens, C.F.	ISPG	CG	RE	-	-
	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.						57

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
780002	Glacial erosion of the Canadian Shield	Shultz, W W	TS	-	SMT	Kee Ont	55 E,L,K; 41 I
	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.					244
780003	Petroleum Evaluation of hydrocarbon Resources of the Western Canada Sedimentary Basin South of 60°.	Recruit	ISPG	E	PR	Alta BC Sask Man	62 E,F,I,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
	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.					2461
780004*	Evaluation of Unconventional Gas Resources in the Deep Basin of Western Canada	Verhoeff, F H	ISPG	E	PR	Alta BC	83 B,C,E,F,K-N; 93 I,P; 94 A,B,G
	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					311
780005*	Geology of Mine Sites	(Bustin, M)	ISPG	C G	CG	Alta BC	82 G,O; 83 E
	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.					2462
780006*	Mineral Matter and Trace Element Content of Canadian Coals	Marchioni, D L	ISPG	C G	CT	Alta	82 G,O,P; 83 A
	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.					2462
58	780007 Operation Hyde	Fraser, JA	REG	P	NC	Kee	55 D; 55 E ($S\frac{1}{2}$); 65 A ($E\frac{1}{2}$)
	Obj:	To interpret the Precambrian geology and economic potential of the area mapped to a standard of 1:250,000 mapping.					2412

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
780008*	Geology of Thirty Mile Lake 65 P ($\frac{W}{2}$) and Tebesjuak Lake 65 O ($\frac{W}{2}$) map-areas	LeCheminant, AN	REG	P	NC	Kee	<u>65 P ($\frac{W}{2}$); 65 O ($E\frac{1}{2}$)</u>
	Obj: To interpret the geology of the area to a standard of 1:250,000 mapping, and thereby update the geological data base to improve regional tectonic syntheses. To investigate the structure and metamorphism of Aphebian and Archean gneisses and their relation to the Dubawnt group cratonic cover.	Henderson, JB	REG	P	BS	Mack	76 B
780009*	Healey Lake map-area, District of Mackenzie						
	Obj: To determine the general structural, metamorphic and age relations of rocks on each side of the Thelon Front in order to better understand the nature of the boundary between Slave and Churchill provinces. To evaluate the economic potential of the area and to map it at the scale of 1:250 000.						
780010	A study of Bear Batholith rocks and basement to the Bear Batholith	McGlynn, JC	REG	P	BS	Mack	86 D, 85 N (pts. of)
	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.						
780011*	A survey of Metamorphism in the Canadian Shield	Froese, E	REG	CS	Pet	Man	<u>63 J, K, N</u>
	Obj: To write a concise selective field oriented introduction to metamorphic petrology directed to geologists working in the precambrian Shield						
780012	Stratigraphy and geochemistry of the volcanic rocks of the Circum-Ungava Belt	Baragar, WRA	REG	P	SP	Kee	41 I, P; 34 E
	Obj: To determine the geochemical characteristics and to work out the stratigraphic relationships of volcanic and related rocks of the Circum-Ungava Belt.						
780013	Compilation of 1:1 million maps of the Canadian Shield	Eade, K	REG	P	SG	-	-
	Obj: To compile, synthesize and publish a series of 1:1 million geological maps of the Canadian Shield.						
780014*	Regional Geological Synthesis, Western Superior Province	Taylor, FC	REG	P	SP	<u>Ont. Man</u>	<u>52, 53</u>
	Obj: To compile and synthesize in the form of maps and reports, all geological work to date in NTS map-areas 52 and 53.						
780015*	Material balance of uranium series in a natural environment	Dyck, W	RGG	RGC	MD	Sask	74 I
	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.						
780016*	Drift prospecting methods and models	DiLabio, R NW	TS	-	SMT	<u>Ont. NS</u> <u>Man</u> <u>Frank</u>	<u>41 0; 42 A, B, E, I;</u> <u>11 D, E, 21 A; 31, C, E;</u> <u>92 I; 93 F, K; 64 N;</u> <u>38 B, C; 48 D</u>
	Obj: 1) To model glacial dispersal from known sources. 2) To develop drift prospecting methods for use in clay belts.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classifi- cation
780017*	Correlation of Quaternary geology; Great Lakes – St. Lawrence Valley region	Gadd, NR	TS	-	R P	Ont Que	<u>31 B,C,F,G</u> (parts of)	2422
	Obj: To resolve apparent age discrepancies in Pleistocene stratigraphic sequences of the lower Ottawa – upper St. Lawrence valleys and adjacent Lake Ontario basin. To provide a basis for regional compilation and synthesis of Quaternary geology in southern Ontario and southwestern Quebec.							
780018*	Surficial geology and Quaternary stratigraphy of north Baffin-Bylot Islands	Klassen, RA	TS	-	SMT	Frank	<u>38 B,C; 48 A-D</u>	2413
	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.							
780019*	Ocean Dumping Consultation and Study	Buckley, DE	AGC	EMG	-	-	-	296
	Obj: a) To provide advice to government concerning the feasibility of ocean dumping or disposal of waste materials. b) To test various techniques and procedures for detecting and monitoring the impact of ocean dumping.							
780021	Landsat Calibration for Suspended Sediment Concentration in Marine Coastal Environments	Amos, CL	AGC	EMG	CG	BC NS	-	244
	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.							
780022*	Sediment Dynamics at the Head of the Bay of Fundy	Amos, CL	AGC	EMG	CG	<u>NS, NB</u>	<u>21, 11</u>	244
	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 effects of a Fundy Tidal Power Development on the distribution and accretion of sediments. 3) To formulate a methodology of assessing the implications of marine constructions on sediments in macrotidal regions.							
780023*	Investigation of magnetics interpretation methods	Teskey, D	RGG	RG	MM	-	-	2416
	Obj: To establish a comprehensive capability for the interpretation of aero-magnetic survey data in order to support geological mapping and resource assessment programs.							

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
780025*	Archean Rocks of the Nain Province in Hopedale (13N), Snegamook Lake (13K), and Makkovik (13Q) maps-area, Labrador	Ermanovics, I	REG	P	SG	Nfld	<u>13 N, K, Q</u>
	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.						2412
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
	Obj; To produce a synthesis of sealevel phenomena for the Quaternary period.						2422
780027*	Coastal Geology - British Columbia	Borthold, 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
	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.						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	R P	M	BC Alta	<u>93 H, I; 83 E</u>
	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.						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
	Obj: To systematically describe and interpret Mesozoic and Cenozoic Foraminifera of the Arctic western mainland of Canada.						2431
780030*	Taxonomy, biostratigraphy and paleoecology of Mesozoic and Cenozoic palynomorph assemblages from the Mackenzie Delta Beaufort Sea and Arctic Region	Ioannides, PS	ISPG	P	Mip	Frank	<u>120</u>
	Obj: To establish a biostratigraphic zonation scheme for the Mesozoic and Cenozoic the Mackenzie Delta, Beaufort Sea and Arctic Region.						2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
780031*	The Newfoundland Continental Slope at 49°N to 50°N: Nature and magnitude of contemporary marine geologic processes	Schafer, CT	AGC	EMG	PEC	NS <u>Nfld</u>	-
	Obj:						
	(1) To discover the nature and magnitude of contemporary marine geologic processes based on sedimentologic, geochemical neontologic <i>in situ</i> sensor data.						
	(2) To develop process and environmental models for biostratigraphic, paleoecologic and environmental impact studies.						
780032	Lead isotopic studies on genesis of ore deposits	Thorpe, RI	REG	EG	MDG	-	-
	Obj:						
	1) To do lead isotopic studies of ore deposits in order to improve our understanding of the age and genesis of these deposits.						
	2) To derive a lead isotope model that will be useful in refining genetic models for many types of ore deposits.						
	3) To coordinate the obtaining of lead isotope analyses for the members of the Mineral Deposits Geology Section and the assignment of priorities for such analyses.						
	4) To aid members of the section in interpretation of analyses that have been carried out for other projects.						
780033*	Quaternary paleoecology, Great Lakes	Anderson, TW	TS	-	PG	<u>Ont Que</u>	<u>31 B-G, J-L</u>
	Obj:						
	To describe, analyze and explain unconsolidated deposits and associated organic remains in the Great Lakes in order to: 1) determine Quaternary stratigraphy, history and paleoecology; 2) identify processes operative in the lakes during the Quaternary and the factors controlling them; 3) to provide background geological information for other scientific studies in the Great Lakes.						
780035	Remote sensing applied to Quaternary geology and mineral tracing	Belanger, JR	TS	-	SMT	YK Kee	55 E,L,M; 65 H; 115 A-C,F,G,J,K
	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.						
780037*	Structural geology-geomorphology, southwest Yukon	Clague, JJ	TS	-	RP	YK	<u>105 C,D,E; 115 A,B, F,G,H,I,J,K; 114 0,P</u>
	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.						

2421

Cambro-Ordovician facies and correlation, Arctic Canada and Greenland

Obj: To improve understanding of the sedimentation and paleogeography of the Franklinian Geosyncline, specifically of Cambro-Ordovician stratigraphic sections in Canada and in northern Greenland; to provide a better understanding of Cambrian and Ordovician events along the platform and platform-m margin geosyncline junction along the edge of the Franklinian geosyncline.

Christie, RL

ISPG

G

AI

Frank

-

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

2421

Jurassic and Cretaceous Mines 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,I; 93 I,0,P;

94 B,G,J

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

2421

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

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

Srivastava, SP

AGC

RR

LSS

-

-

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

244

Coastal Reconnaissance of the Sverdrup Basin, N.W.T.

Obj: To map and analyze the coastal environments of the Sverdrup Basin, N.W.T. To provide information on the shore types, processes and the effects of massive shore ice piles which will serve as background information for the evaluation of potential marine terminal sites and the impact of such installations on the coastal zone.

Taylor, RB

AGC

EMG

G

Frank

69 B,C,D,E,F; 59 C;

79 A

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

244

Relationships between trace elements in the soil and their accumulation by plants

(Rencz, AN)

TS

-

SMT

Que Kee

21 E, 56 D, 55 K 64 L

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

2451

Debris flow hazard assessment methodology, alpine and northern upland areas

Jackson, LE

TS

-

GP

BC, Alta

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

Prov

Sec

Subdiv

Div

Project Leader

Title

Project Number

To identify and determine the relative importance of the environmental factors favouring the development of debris flows in the Rocky Mountains (40° N- 54° N), and to develop a methodology for assessing the hazards to transportation and utility facilities from this process.

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
780047*	Computer Methods and Calibration	Carson, JM	R GG	RR	R M	Sask Ont. NB	<u>21 G; 31 G; 73 B</u>
780048*	Surficial Geology of Lomonosov Ridge, Arctic Ocean	Basco, SM	AGC	EMG	C GD	-	2463
780049*	FRA M I Seismic Refraction and Reflection Experiment	Falconer, R K H	AGC	RR	EA06	-	
790002*	Geochemical data processing	Lund, NG	R GG	R GC	RS	-	2465
790003*	Regional Geochemistry - Southern Cordillera	Ballantyne, SB	R GG	R GC	RS	BC YK <u>104 N, 0 P.I.; 94 K; 105 B</u> <u>92 O,P</u>	2465
790004*	Geochemical Sampling and Resource Evaluation Studies	Garrett, RG	R GG	R GC	MD	-	2465
790005*	Quaternary geology, Mayo-McQuesten	Hughes, OL	TS	-	RP	YK	<u>105 M, 115 P</u>
790006*	Marine Delta Sedimentation, British Columbia	Luternauer, JL	REG	CPM	MG	BC	<u>92 B, G; 103 G, H,I,J</u>

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS	Dept'l Classification
790007*	Geology of Nahanni map-area (105 I) Yukon Territory	Gordley, SP	REG	CPM	-	Yk Mack	<u>105 I</u>	2412
790008*	Stratigraphy, sedimentation, structure and tectonic setting of the Windermera Supergroup	Eisbacher, GH	REG	CPM	-	Yk, Mack BC, Alta	<u>115; 105; 95; 94 K; 93 10; 83; 82 K, N, O; T16;</u>	2421
790009*	To establish the stratigraphic succession, origin and correlation and determine the role played by these rocks in the evolution of the Cordillera. To relate mineral deposits to the stratigraphic, sedimentological and structural framework of these rocks.	Kamiliukuak Lake Map-area, District of Keeatin, N.W.T.	Eade, KE	REG	P	NC	<u>65 K; 66 H</u>	2412
790011*	Fort Smith-Hill Island Lake region District of Mackenzie	Bostock, HH	REG	CS	A	Mack	<u>75 B, C, D; 85 A</u>	2411
790012	China-Canada Exchange - Hydrocarbon Geochemistry	Powell, TG	ISPG	E	GC	-	-	2411
790013*	Relationship of reflectance to chemical rank parameters of western Canadian coals	Cameron, AR	ISPG	CG	CT	Sask Alta BC	<u>73 D, 82 G, O, P; 83 E; 93 I</u>	2462
790014*	Triassic Foraminifera of the Sverdrup Basin	Wall, JH	ISPG	P	MP	Frank	<u>49 G, 59 H; 69; 79; 88; 89; 340 B, C; 560</u>	2431

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
790015*	Surficial geology and paleogeobiology of the central Labrador Shelf Nain, Makkovik and Harrison Banks	Fillion, R H	AGC	RR	-	-	2415
	Obj: To gain insight into recent sedimentary processes and hydrodynamic regime; the pattern of glaciation on the banks; the history of glaciation locally and an integration of results with those of previous Labrador Shelf projects to develop a regional picture.						
790016*	Geology of the Heilitian Sediments and Adjacent Gneisses, Fury & Hecla Strait Area	Chandler, F W	REG	C S	A	Frank	<u>47 C,D,E,F</u>
	Obj: 1) To determine the internal stratigraphy, sedimentology, structure, age, geological history of the sediments. 2) To map the gneisses underlying the sediments to the north, concentrating on those gneisses coincident with strong radiometric anomalies.						2421
790017*	Shelf Environments of Central Labrador and Ungava Bay	Reinson, GE	AGC	EMG	CGD	Nfld	<u>13 H,I,O</u>
	Obj: 1) To determine the nature and magnitude of sediment transport processes on the inner shelf. 2) To delineate Holocene stratigraphy of Inner Shelf and relate to the depositional framework of the bank-basin areas under study by Vilks and Fillion.						244
790018*	Ice Scouring of Continental Shelves	Lewis, C FM	AGC	EMG	CGD	Nfld Vik Mack Frank	-
	Obj: To investigate the geomorphology and sedimentology of ice scour tracks and their relationship to bathymetry, geology, oceanography and drift ice with a view to interpreting the dynamics and history of ice impacts on the seabed in order to provide advice for resource management.						244
790019*	Environmental Geology of Deep Ocean	Vilks, G	AGC	EMG	PEC	-	-
	Obj: 1) To investigate the capacity of the deep ocean environment to maintain normal processes under stress imposed by exploration of waste disposal. 2) Participate with the seabed working group of NEA in order to maintain awareness with the progress in feasibility studies for the disposal of high level nuclear waste in the seabed and DOMES project.						
790020*	An investigation of the semi-inert constituents of W. Canadian coals	Creaney, S	ISP G	C G	CT	<u>BC, Alta</u>	-
	Obj: To investigate the degree of participation of semi-inert macerals, of Western Canadian coals, in a heat-treatment process and to establish a reliable microscopic method for predicting the coking properties of these coals.						2422
790021*	Surficial geology, Lac Kipawa Region	Vincent, JS	TS	-	RP	<u>Que</u>	<u>31 L</u>
	Obj: To map, describe and explain the surficial materials and landforms and to provide geological-geomorphic data and knowledge of stratigraphy, age and history of surficial deposits, to provide background information pertinent to land use planning, forestry, agriculture, urban and industrial development and engineering construction.						2413

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
790022*	Stratigraphy and sedimentology of the Lower Cretaceous Gething Formation, Rocky Mountain Foothills, Alberta and British Columbia	Gibson, DW	ISP G	C G	G C	<u>Alta, BC</u>	<u>83 L; 93 I, J, 0;</u> <u>94 B, G</u>
	Obj: To describe the Lower Cretaceous stratigraphic succession; to collect samples for laboratory studies, and to collect fossil flora and fauna; to provide data on the origin, distribution and continuity of coal seams throughout the region; to attempt to determine criteria useful in determining the sub-environments in which the fluvial-deltaic sediments were deposited, and to eventually provide regional geological model that will be of assistance in determining the potential coal resources of this and other regions.						2462
790023*	Wisconsin glacial limit-surficial geology, northwest District of Mackenzie	Chatwin, SC	TS	-	R P	Mack	<u>97 A-D (all), 96 M,</u> <u>0, P, 107 A, B (parts of)</u>
	Obj: To characterize, date and correlate moraine systems between Mackenzie River and Brock Upland; to map, describe and explain the surficial materials, landforms, permafrost and ground ice; and to characterize the engineering properties of the surficial materials relevant to various aspects of land use.						2413
790024*	Geology of the Fose Fold belt (EAST HALF), Baffin Island	Henderson, JR	REG	P	N C	Frank	Pts <u>27 A-D</u>
	Obj: To establish the stratigraphy, structure and metamorphism of the Aphelian 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.						2421
790025*	Petrology, mineralogy, geochemistry and mineral potential of a Hekian non-orogenic granitic suite in central Labrador and adjacent Quebec.	Emslie, R F	REG	CS	P ET	Nfld, Que	<u>Parts of 13 M, 14 D,</u> <u>23 P, 24 A</u>
	Obj: To improve understanding of the conditions and processes that control concentrations of U, Sn, Be, W and Mo in non-orogenic granitic suites.						2421
790026*	Geological evaluation of crystalline, sedimentary and seabed terranes for radioactive waste disposal.	Sanford, BV	REG	CS	A	Ont Sask NS	-
	Obj: On behalf of AECL/EMR to manage geological research program in the evaluation of crystalline, sedimentary and seabed terranes as potential host rocks for radioactive waste disposal.						2453
790027*	Quaternary stratigraphy Yarmouth region, Nova Scotia	Grant, DR	TS	-	R P	NS	<u>20 0, 21 A, B</u>
	Obj: To document the Quaternary stratigraphy of the southeast coast of Nova Scotia in the vicinity of Yarmouth.						2413
790028	Seabed Mosaics/Mapping Engineering Development Program (COMPI)	(Desureault, JG)	AGC	PS	-	-	-
	Obj: Huntec '70 Limited is to design, produce and test various modular subsystems for use with existing AGC profiling and side scanning systems to improve their positional performance and, by 1982, design, produce and evaluate ready for marketing a full Mosaic facility for quasi-three dimensional plotting of the contours of the ocean floor.						2415

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
790029*	Gneissic basement to the Fury and Hecla Formation and the Autridge Formation	Ciezielski, A.	REG	P	SG	Frank	<u>47 D, E, F</u>
	Obj: To map the basement gneisses adjacent to the Fury and Hecla Formation and the Autridge Formation on Baffin Island at a scale suitable for publication at 1:100 000 or 1:250 000. Emphasis to be placed on basement-cover relationships and the relationship of basement geology to radioactive anomalies.						2421
790030*	Geology of Nelson Map-area E/2	Reesor, JE	REG	CPM	GR	BC	<u>82 F, E½</u>
	Obj: a) To update the geology of Nelson area to current requirements embodying new field work and scattered studies done since the original work in the late 1930's. b) To provide a 1:250,000 synthesis of stratigraphy, structure, metamorphism and mineral deposit potential.						2421
790031	Geology of the Beaufort-Mackenzie Basin	Dixon, J.	ISPG	RG	SM	Mack, Frank Yk	107 B-H; 117; 97 F, H
	Obj: (1) To integrate all available geological, biostratigraphic, geophysical, and geochemical data for the offshore areas, Beaufort Sea, in order to develop a stratigraphic-sedimentological framework and an appreciation of the petroleum potential. (2) Undertake a sedimentological and petrographic analysis of selected zones within the Tertiary in order to understand reservoir character and distribution. (3) To do detailed correlations of Lower Cretaceous-Upper Jurassic rocks, set up a stratigraphic framework and do sedimentological interpretations.						2421
790032	Identification of Mesozoic and Tertiary Continental Microfloras from Northwest Territories, Yukon Territory, British Columbia, Alberta	Hopkins, W.S., Jr.	ISPG	P	MP	Yk BC Alta	-
	Obj: To determine floral successions from scattered and widely separated Tertiary Basins in order to establish Biostratigraphic Zonations and to interpret depositional environments.						2431
790033	Geochemistry of Mineral Occurrences and their Host Rocks in the Northern Cordillera	Goodfellow, W.D.	RGG	RG	RS	Yk	<u>105 O.I.</u>
	Obj: Through geochemical studies, to assist in determining; (1) the origin of selected mineral occurrences; (2) criteria which can be used in the exploration for new and possibly deeply buried mineral deposits; (3) geochemical methodology for the identification and differentiation of stratigraphic units, thereby assisting in stratigraphic correlations.						

Project Number	Title	Project Leader	Div	Subdiv	Sec	Prov	NTS
790034*	Shallow Seismic Surveys	Gagne, RM	RGG	TG	SM	NBYK	<u>21 0/1 116 P/9</u>
	Obj: To map the thickness of surficial deposits by seismic methods for geological mapping and engineering projects.						2413
790035*	Coastal Reconnaissance of Bylot and N.E. Baffin Islands, N.W.T.	Taylor, RB	AGC	EMG	CGD	Frank	<u>27 6, 37 H, 38 A, B,C, 48 A,D</u>
	Obj: To map and analyze the coastal environments of Bylot and N.E. Baffin Islands, N.W.T. To provide information on the shore types, sediments and processes affecting the shoreline stability which will serve as background information for the evaluation of effects of offshore drilling in Lancaster Sound in the event of a well blowout.						244
790036*	Sediment Dynamics Monitor (Ralph)	Heffler, DE	AGC	PS	SD	-	-
	Obj: To design, build and test an instrument to investigate the dynamics of sediments in water depths ranging from a few metres to 200 M for bottom durations of up to 45 days.						2421
790037*	Ocean Bottom Seismometers at A.G.C.	Heffler, DE	AGC	PS	SD	-	-
	Obj: To carry on the development of the Ocean Bottom Seismometer (OBS) system now in use at AGC. Future developments will be acoustic release, better tape recorders, study of seismic coupling and response problem, improved playback facilities and other improvements which are agreed to be important. Also, to maintain existing OBSs.						2421
790038	Middle and Upper Devonian Rocks in Central B.C. and Alberta	Geldsetzer, HHJ	ISPG	RG	M	<u>B,C Alta</u>	<u>83 E, L; 93 H,I,O,P</u>
	Obj: To establish and apply conceptual models of deposition of the original sediments in terms of environment and paleogeography, their subsequent diagenesis and correlation.						
790039	Development of data management system for marine geophysical data	Martin, GM	AGC	PSS	DS	-	-
	Obj: To provide a capability for the efficient storage of potential field data collected in marine geophysical surveys. To enable portions of the data to be effectively retrieved for use by AGC (and external) personnel. To facilitate the identification and correction of errors and inaccuracies in the data values.						2417
790040	Taxonomy, biostratigraphy, paleoecology and paleobiogeography of Mesozoic-Cenozoic agglutinated foraminifera.	Gradstein, F	AGC	EPG	-	-	-
	Obj: A. To clarify the taxonomy of Late Mesozoic-Cenozoic agglutinated foraminifera. B. To establish an agglutinated foraminiferal biostratigraphy of more than local significance in Upper Mesozoic-Cenozoic strata. C. To understand the distribution in space and through time of predominantly agglutinated foraminiferal assemblages in sedimentary basins and to formulate models for this distribution.						2431
790041	Larneau map-area, B.C.	Wheeler, JG	C	-	-	<u>B.C.</u>	<u>82 K (W½)</u>
	Obj: To complete terminal report and related geological, structural and mineral deposits maps and structure sections for publication at 1:250,000 scale.						2421

INDEX BY PROJECT LEADER

Abbey, S.	380077; 690089; 690090	Davidson, A.
Adshead, J.D.	770032	Davis, J.L.
Agterberg, F.P.	690038; 760060	Davison, W.L.
Aitken, J.D.	720098; 730057*	Dawson, K.M.
Amos, C.L.	780021; 780022*	Dawson, K.R.
Anderson, F.D.	680114*	Day, T.J.
Anderson, T.W.	780033*	DiLabio, R.N.W.
Ascoli, P.	710065	Dixon, J.
Ballantyne, S.B.	790003*	Dods, S.D.
Bamber, E.W.	710022*	Douglas, R.J.W.
Baragar, W.R.A.	680096; 780012	Dredge, L.A.
Barrett, D.L.	750107*	Duke, J.M.
Barss, M.S.	680109; 770072	Dunsmore, H.E.
Belanger, J.R.	780035	Dyck, A.V.
Bell, R.T.	750069*	Dyck, W.
Blake, W., Jr.	570148; 750063*	Dyke, A.S.
Blasco, S.M.	700092*; 780048*	Dyke, L.D.
Blusson, S.L.	680119*	Eade, K.E.
Bolton, T.	740084	Eckstrand, O.R.
Bornhold, B.D.	750108*; 780027*	Edlund, S.A.
Bostock, H.H.	730043; 790011*	(Edwards, T.W.D.)
Bower, M.E.	650007*	Egginton, P.A.
Boyle, D.R.	760043*	Eisbacher, G.H.
Boyle, R.W.	730001*	Ellwood, D.J.
Bristol, Q.	760048*	Embry, A.F.
Buckley, D.E.	750048; 780019*	Emslie, R.F.
Bujak, J.P.	760038	Ermakovics, I.
Bustin, M.	780005*	
Cameron, A.R.	610269*; 720073; 790013*	Fabbri, A.G.
Cameron, B.E.B.	690075*; 500029*	Fahrig, W.F.
Cameron, G.W.	760049	Falconer, R.K.H.
Campbell, F.H.A.	740092; 770012	Fillon, R.H.
Campbell, R.B.	680066; 730035*	Findlay, D.C.
Card, K.D.	770070*	Folinsbee, R.A.
Carson, J.M.	750040; 780047	Foscolos, A.E.
Cecile, M.P.	770044*	Franklin, J.M.
Chandler, F.W.	760027; 770027; 790016*	Frarey, M.J.
Charbonneau, B.W.	760045*	Fraser, J.A.
Christie, K.W.	700018; 720075	Frisch, T.
Christie, R.L.	680015; 760062*; 780038	Frith, R.A.
Chung, C.F.	750094; 790029*	Fritz, W.H.
Ciezinski, A.	790029*	Froese, E.
Clague, J.J.	750078; 780037*	Fulton, R.J.
Coker, W.B.	760044*; 770076	Gabrielse, H.
Cook, D.G.	670068; 750055*	Gadd, N.R.
Copeland, M.J.	500029; 720072*; 740100	Gagne, R.M.
Creaney, S.	750088; 770051; 790020*	Gandhi, S.H.
Cumming, L.M.	760022	Garrett, R.G.
Currie, K.L.	680071; 730044*	
Currie, R.G.	710049	

(Gauthier, R.C.)	760008*	Lachance, G.R.	600307
Geldsetzer, H.H.J.	740110	Lambert, M.B.	730040; 740019
Gibson, D.W.	750018; 790022*	Larose, J.M.	400006*
Goodfellow, W.D.	770025*; 790033	Latour, B.A.	750089
Gorday, S.P.	790007*	Leaming, S.	490038*
Gordon, T.M.	700048; 730063; 770074	LeCheminant, A.N.	750005; 780008
Gradstein, F.M.	740004; 790040	Leech, G.B.	640125; 640402
Grant, A.C.	740003	Lewis, C.F.M.	790018
Grant, D.R.	690065; 700056; 740072; 790027*	Lichti-Fedorovich	7200078
Grasty, R.L.	720084*	Loncarevic, B.D.	770073*
Graham, P.S.	760056	Long, D.G.F.	770047*
Gross, G.A.	570029*; 760064*	Lowdon, J.A.	590457
Hacquebard, P.A.	680102*; 740106*; 750096*	Lund, N.G.	790002*
Hall, G.E.M.	580175*	Luternauer, J.L.	740062*; 790006
Haworth, R.T.	750001*	Lydon, J.W.	770063*
Heginbothom, J.A.	690054; 770037*	(Mackay, J.R.)	680047*
Henderson, J.B.	760024; 780009*	MacLean, B.	760015*
Henderson, J.R.	700015; 790024*	Marchioni, D.L.	770041; 770042; 780006*
Herd, R.K.	740016; 770026*;	Martin, G. M.	790032
Heywood, W.W.	700073; 760025*; 770022	Matthews, J.V.	730027*
Hodgson, D.A.	720081; 760010*	Maurice, Y.	760047*
Hoffman, P.F.	660009; 730039; 770019*	May, U.	750017
Holman, P.B.	720071*	McCrossan, R.G.	720066
Hohroyd, M.T.	750032; 750053	McGlynn, J.C.	650008; 680012; 780010; 730041
Hood, P.J.	680082; 750031	McGrath, P.H.	680073
Hopkins, W.S.	740090; 750021; 790032*	McGregor, D.C.	750036
Hornbrook, E.H.W.	750051*	McLaren, P.	760005
Howie, R.D.	710061*	McLean, J.R.	760018*
Hughes, J.D.	770046*	McNeil, D.H.	780029
Hughes, O.L.	650013; 680031*; 7100020; 790005*	Miall, A.D.	770049
Hunter, J.A.	73006*	Monger, J.W.H.	720041; 750015*
Hutchison, W.W.	710098*; 760057*	Morgan, W.C.	740020; 750100
Ioannides, N.S.	780030*	Morrow, D.W.	750085*
Irvine, J.A.	500038	Mott, R.J.	690064
Jackson, G.D.	670002; 690061; 770013*; 770028	Moyd, P.	750093
Jackson, L.E.	740095; 770060; 780045*	Muller, J.E.	730036*
Jansa, L.F.	710059; 770004	Nassichuk, W.W.	500029*; 680064*; 700045; 750020
Jeletzky, J.A.	480191; 490001; 550004; 600353	Neale, E.B.W.	770038
Jonasson, I.R.	740081*; 740107*	Norford, B.S.	610019*
Katsube, T.J.	630049*	Norris, A.W.	770048*
Keen, C.E.	770010*	Norris, D.K.	610007*; 690005
Kerr, J.W.	670016; 740030	Nowlan, G.S.	770077
Killeen, P.G.	740085*	Okulitch, A.V.	700003; 720037; 760026
King, L.H.	730072*; 760029*	Ollerenshaw, N.C.	700037*; 750082*
Kirkham, R.V.	700059	Olson, D.G.	680081*
Klassen, R.A.	780018*	Overtone, A.	700061*; 770018*
Klassen, R.W.	770031*	Paris, J.C.	770054
Knappers, W.A.	730012	Pedder, A.E.H.	680093*; 750057
Koch, N.G.	750025	Pelletier, B.R.	720101; 720102; 780026
Kornik, L.J.	720080*	Plant, A.G.	620308
		Podolak, W.E.	680017

Poole, W.H.	700008; 700011	Stalker, A.M.	650027*; 750070*
Poulton, T.P.	750067; 760042*	Steacy, H.R.	550101*
Powell, T.G.	750027; 760053; 760054; 790012	Stenson, A.P.	640048
Price, L.L.	640420	Stevens, C.F.	780001
(Price, R.A.)	650023	Stott, D.F.	610014; 780039
Proctor, A.M.	740035	Sweet, A.R.	710091; 730065; 770045
Pugh, D.C.	710013	Taylor, F.C.	720039; 780014*
Raicar, M.	770053	Taylor, G.C.	630017; 680084; 730055; 740041
Rashid, M.A.	750046	Taylor, R.B.	780043
Ready, E.E.	690072*	Tempelman-Kuit, D.J.	730037; 770017*
Reinson, G.E.	750043*; 790017*	Teskey, D.	780023*
Rencz, A.N.	780044*	Thomas, R.D.	760012
Richard, S.H.	680027; 740068	Thompson, R.I.	750019; 780028*
(Richards, B.C.)	770043	Thorpe, R.I.	680060; 780032
Rimsaite, J.Y.H.	750059; 770061*	Thorsteinsson, R.	760021*
Roddick, J.A.	630016*	Tiffin, D.L.	710048*
Roscoe, S.M.	770055*	Tipper, H.W.	610011; 690081; 750035*
Rose, E.R.	580036; 630039; 670028	Tozer, E.I.	670576*
Ruzicka, V.	750010*	Trail, R.J.	570119*; 580160; 680023
Sanford, B.V.	750061*; 790026*	Tremblay, L.P.	750058*
Sangster, D.F.	650056*	Trettin, H.P.	730051*
Sawatzky, P.	770015	Umpreby, D.C.	760037
Schafer, C.T.	780031*	Uyeno, T.T.	660026; 680101
Schau, M.	720062; 760028	Villette, J.J.	730019; 770030*
Schwarz, E.J.	730160*	Verhoeff, F.H.	780004*
Scott, W.J.	670041*	Viiks, G.	750038*; 790019*
Shifts, W.W.	690095*; 700014; 730013; 780002	Vincent, J.S.	740065; 790021*
Sinclear, W.D.	770071		
Sinha, A.K.	730004*	Wade, J.A.	720103; 720104*
Skibo, D.N.	770067	Wall, J.H.	720044; 740042; 790014*
Skinner, R.	700016; 710038; 750099	Wanless, R.K.	540028; 730046*; 730047*
Slaney, V.R.	630031; 730008	Wheeler, J.O.	790041*
Smee, B.W.	770023*	Williams, G.K.	710033
Snowdon, L.R.	730062; 760063	Williams, G.L.	710062; 730085
Souther, J.G.	650015; 730067; 770001*	Woodsworth, G.J.	770020*
Srivastava, S.P.	780042*		
		Yorath, C.J.	770006*

Index by Province

<u>General</u>		<u>Keewatin</u>	
730085	780019*	740098*	670068
740004	780023*	740107*	680031*
740035	780026	750014	680047*
740042	780032	750015*	680047*
740100	780042	750020	680043
500029*	740107*	750025	680030
500038	780048*	750025	680045
540028	780049*	750033*	660006
570119*	750001	790001	670006
570148	750023	790002*	670002
580160	750031	790004*	670012
590457	750032	790007*	680012
600307	750038	790012	680073
600353	750039	790015*	680101
620308	750040	790018	690072*
630031	750043*	790019*	690095*
630039	750045	790039	700048
630049*	750046	790040	700092
640048	750053	790042*	740104*
640125	750057	790044*	750010*
640402	750080	790048*	750017
670028	750088*	500029*	750045*
680017	750089	550004	750024*
680023	750093	550101*	750025*
680071	750094	580175*	750031*
680073	750097	610007*	750037*
680082	750107*	610019*	750041*
680114*	760022	650013	750047*
690038	760027	650024*	750063*
690086*	760029*	670576*	750076*
690089	760030	680031*	750081*
690090	760039	680047	750087*
690095*	760049	680093*	750093*
700008	760057*	680109	750098*
700008	760057*	680110	750098*
700011	760058	680119*	750098*
700014	760060	690005	750008
700059	760062*	700071	750010
710059	760064*	700092*	750014
710062	760065	710013	750019*
710065	770004	710020	750025
710098*	770005	710022*	750027
720056	770005	710035	750055*
720066	770018*	710036	750067*
720078	770038	710041	750073
720089	770053	720101	750077*
720095	770054	720102	750085*
720103	770072	730006*	750098*
730008	770073*	730027	750103*
730019	770074	730035*	750103*
730047*	770075	730037	760024
730055	770076	730046*	760047*
730062	780001	730054	760059*
730063	780011	730057*	760063
730081*	780013	740081*	760012
<u>Yukon</u>		<u>Franklin</u>	
670028	750001*	770001*	720102
680017	750017*	770017*	730004*
680023	750025*	770025*	730006*
680071	750031	770031*	730027*
680073	750043	770043	730039
680082	750044*	770044*	730040
680114*	770046	770046	730041
690038	760027	650027	730046
690086*	760029*	670063*	730054
690089	770071*	770071*	730054
690090	780029	780029	740017
690095*	780035	780035	740019*
700008	780037*	780037*	740081*
700008	780040	780040	740092
700011	780040	780040	740098
700014	790003*	790003*	740098
700059	790005*	790005*	750008
710059	790007*	790007*	750010
710062	790009*	790009*	750014
710065	790013	790018*	750025
710065	790031	790031	750025
710098*	790032*	790032*	750055*
720066	790033*	790033*	750067*
720078	790041	790041	750069*
720089	790053	720101	750076
720095	790054	720102	750077*
720103	770015	710035	750085*
730006	770018*	710036	750098*
730008	770038	720041	750103*
730019	770074	730035*	750103*
730047*	770075	730037	760024
730055	770076	730046*	760047*
730062	780001	730054	760059*
730063	780011	730057*	760063
730081*	780013	740081*	760012
<u>Mackenzie</u>		<u>British Columbia</u>	
740098*	670068	770019*	740017
740107*	680031*	770024*	740020
750014	680047*	770025*	740030
750015*	680093*	770043	740065
750020	680109	770044*	740067
750025	680119*	770045	740081*
750033*	690005	770050	740092
750043	690054	770051	740104*
750051*	700015	770055*	750010*
750055*	700071	770063*	750017
750057	710013	780009*	750024
750063*	710020	780010	750027
750069*	710022*	780029	750070
750076	710023	780046	750070
750085*	710033	790007*	750070
750092*	710036	790008*	750071*
750098*	710049	790011*	750071*
750099*	720101	790018*	750071*
750099*	790031	790031	750071*
750099*	790033	790033	750071*
750099*	790039	790039	750071*
750099*	790041	790041	750071*
750099*	790041	790041	750071*
750099*	790046	790046	750071*
750099*	790047*	790047*	750071*
750099*	790048*	790048*	750071*
750099*	790049*	790049*	750071*
750099*	790050	790050	750071*
750099*	790051	790051	750071*
750099*	790052	790052	750071*
750099*	790053	790053	750071*
750099*	790054	790054	750071*
750099*	790055	790055	750071*
750099*	790056	790056	750071*
750099*	790057	790057	750071*
750099*	790058	790058	750071*
750099*	790059	790059	750071*
750099*	790060	790060	750071*
750099*	790061	790061	750071*
750099*	790062	790062	750071*
750099*	790063	790063	750071*
750099*	790064	790064	750071*
750099*	790065	790065	750071*
750099*	790066	790066	750071*
750099*	790067	790067	750071*
750099*	790068	790068	750071*
750099*	790069	790069	750071*
750099*	790070	790070	750071*
750099*	790071	790071	750071*
750099*	790072	790072	750071*
750099*	790073	790073	750071*
750099*	790074	790074	750071*
750099*	790075	790075	750071*
750099*	790076	790076	750071*
750099*	790077	790077	750071*
750099*	790078	790078	750071*
750099*	790079	790079	750071*
750099*	790080	790080	750071*
750099*	790081	790081	750071*

610014*	760042*	770053	680109
610019*	740095	770055*	580036
610056	680060*	630037*	580036
610059*	680081*	630056	500051*
610062*	750018	770067	750051*
610062*	750036	770071*	710061*
610062*	750069*	770071*	760014*
610062*	770001*	780003	710062
610062*	770006*	780015*	710065
630037*	770016*	780016*	760038
630015	770016*	780047*	720071*
650015	770016*	780071*	760043*
650023	770020*	780071*	720072*
650024*	770024*	780072*	760054*
650024*	770042*	780080*	720104*
670576*	770025*	780084*	770026*
680060*	770031*	780091*	750017*
680066	770041	780094*	770077*
680081*	770042	780094*	760041*
680084	770042	780094*	720072*
680093*	770044*	780094*	770077*
680093*	770060	780095*	750010*
690009	770067	780095*	750036*
690064	770071*	780093	750038*
690075*	770075*	780094	750038*
690075*	780003	780094	750038*
700003	780004*	780095*	750038*
700047*	780005*	780096*	750038*
710022*	780016*	780096*	750038*
710048*	780021	780096*	750038*
710048*	780039	780096*	750038*
710091	780045*	780096*	750038*
720037	780028*	790008*	750038*
720041*	780039	790013*	750038*
720071*	780045*	790020*	750038*
720098	780096	790022*	750038*
730004*	790003*	790022*	750038*
730027*	790006*	790027*	750038*
730035*	790008*	790033*	750038*
730036*	790013*	790039	750038*
730046*	790020*	790045*	750038*
730057*	790022*	790051*	750038*
730067	790041*	790057*	750038*
740062*	790041*	790061*	750038*
740081*	790085*	790061*	750038*
740085*	790085*	790061*	750038*
740090	500029*	760051*	400006*
740091*	570029*	760061*	500029*
610019*	610019*	770063*	570029*
740095*	720071*	770067	750048
740098*	720073	770071*	580036
610269*	720073	770071*	760036
740107*	720080*	770077*	670003
750023	730004*	780003	680096
650024*	750014*	780011*	680102*
750027*	730065	780011*	770063*
750018	670576*	780014*	680109
750019	680027	780016*	690043
750020	680090	750010*	690065
750027	680091	750037*	720072*
750035	680093*	750049	780041*
750037*	700003	750051*	780033*
750051*	700037	750058*	780033*
750051*	700037	750058*	780033*
750059*	710018*	750059	780041*
750069*	710022*	750069*	790026*
750070*	710091	750070*	790026*
750076	720071*	750098*	790026*
750078	720071*	750098*	790026*
750082*	720084*	750110	790026*
750085*	720098	760044*	790026*
750108*	730057*	760048	790026*
750108*	740041	770018*	790026*
760018*	740041	770018*	790026*
<u>Manitoba</u>			
<u>New Brunswick</u>			
<u>Saskatchewan</u>			
<u>Alberta</u>			
<u>Ontario</u>			
<u>Newfoundland</u>			
<u>P.E.I.</u>			
<u>Nova Scotia</u>			
<u>Quebec</u>			