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Petroleum Resources

MINERAL RESOURCES DIVISION
Geological Survey Branch

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VICTORIA
BRITISH COLUMBIA
CANADA

SEPTEMBER 1991

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PREFACE

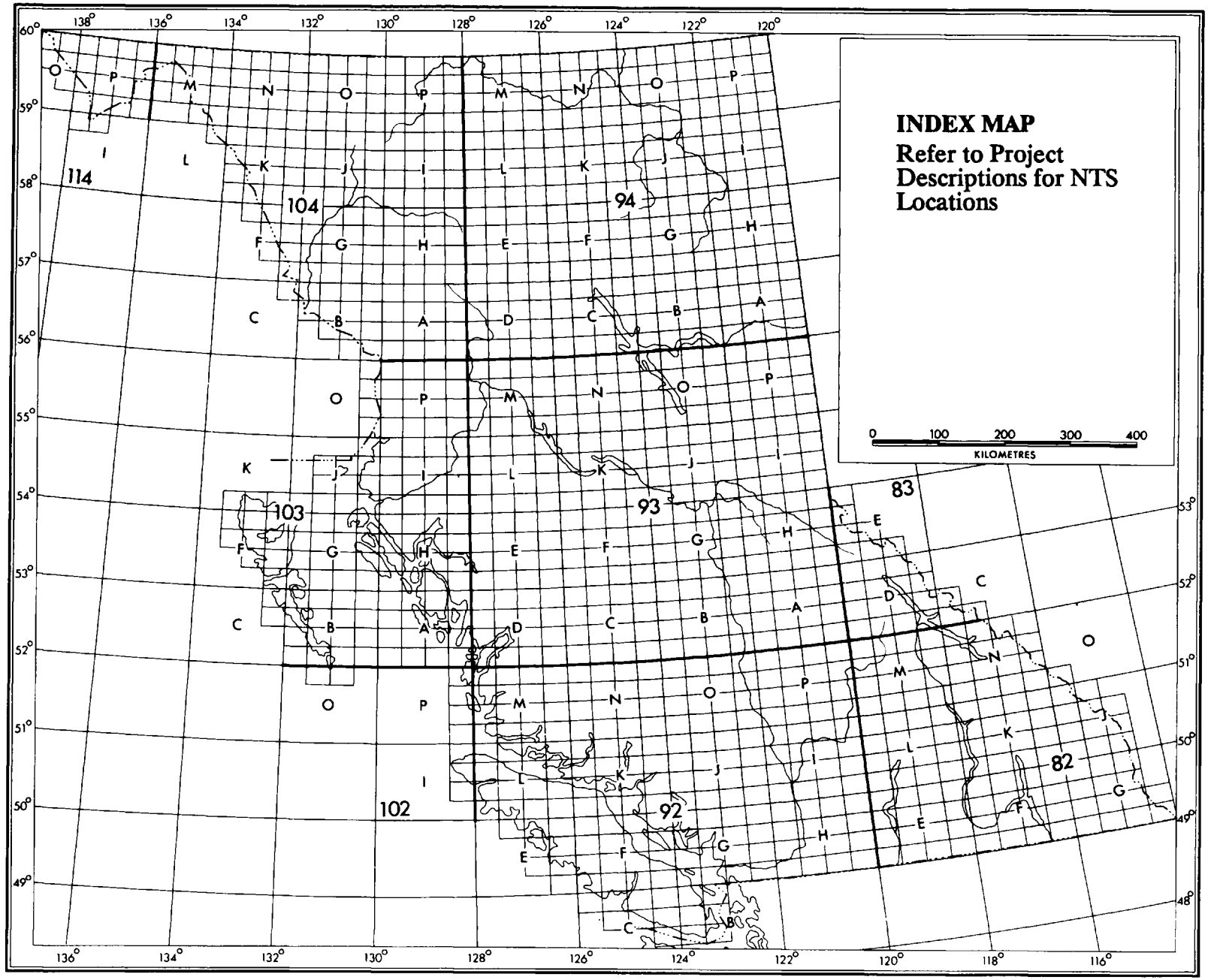
This is an inventory of major projects which the B.C. Geological Survey Branch will carry out during the 1991 field season. This publication is intended to document this current research for government, the mineral industry and the interested public.

The Branch undertook a major reorganization during the early part of the year and this is reflected in the new grouping of research activities. The new structure includes an Economic Geology section comprising coal, industrial minerals and mineral deposits researchers; The Mapping and Resource Evaluation section will focus primarily on our important 1:50 000-scale regional mapping program; the Environmental Geology Section will continue with its successful regional geochemical surveys and surficial geology research; the District Geology Section will continue its service to industry and the public through regional offices; and, the Geoscience Information Section has expanded its services to include a new Public Information Unit.

These activities are intended to provide critical information and support to industry, the public and government in order to stimulate mineral exploration and provide the geoscience database necessary for informed land use management.

Comments, suggestions and queries regarding the Geological Survey Branch's geoscience program are welcomed and encouraged.

W.R. Smyth
Chief Geologist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REGIONAL MAPPING

Section: Regional Mapping

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
1991-1994	F. Ferri **Northern Quesnel Trough**	1. 90 2. $170 000 (MDA)	93C/3

Project Statement: Since discovery of the large-tonnage, potentially bulk-mineable Mt. Milligan copper-gold deposit, the northern Quesnel Belt has become the site of aggressive exploration. The existing geologic database is inadequate to define areas of higher than average exploration potential. Targets are copper-gold porphyries and skarns through to epithermal gold deposits.

1991/92 Work Plan: Map sheet 94C/3 with strong emphasis on the Mesozoic island arc volcanic rocks and their contained mineral showings. This area includes sites of company activity during 1990.

Publications: None.

06713 1991-1993	J. Logan **Iskut North**	1. 75 2. $164 200	104G/2

Project Statement: Mineral exploration companies spent $51 million in 1990 in the Stewart-Iskut River area. One focus was the large high-grade volcanogenic massive sulphide deposit at Eskay Creek. The potential to discover similar deposits lies in mapping the distribution and facies relationships, and geochemically sampling rocks of the Eskay Creek facies. These rocks have been mapped on the Forrest Kerr sheet (1989) and continue northwards for 100 km. Additional targets included Mid-Paleozoic volcanics, VMS deposits, and structurally controlled alkaline Cu-Au porphyry and vein deposits.

1991/92 Work Plan: Continue mapping north onto More Creek Sheet, 104G/2

Publications: Paper 1989-1 pp.269-284; Paper 1990-1 pp.127-139; OF 1989-8; OF 1990-2.

06712 1991-1992	M. Mihalynuk **Tulsequah**	1. 50 2. $99 600	104K

Project Statement: The recently defined Llewellyn gold-arsenic-antimony trend and the well established Tulsequah volcanogenic massive sulphide trend form two linear belts that converge on map sheet 104K/13, the site of the newly discovered Maple Leaf property. Currently available geologic maps are 1:250 000-scale and are based on work conducted 20 to 40 years ago. This work will evaluate structural and stratigraphic controls on mineralization, extending them to the Tulsequah camp (104K/12). Potential resolution of the Stikine-Nisling terrane

Section: Regional Mapping

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

transition may greatly improve our understanding of the evolution of the northern Cordillera.

1991/92 Work Plan: Map critical portions of 104K/13, extending stratigraphy and structure into 104K/12 (Tulsequah map sheet). Focus on: (1) VMS-hosting lithologies in Stikinia, (2) Stikinia-Nisling transition (site of Au mineralization?).

Publications: None.

06711 | P. Schiarizza | 1. 0 | 92J/15, 16
1985-1992 | **Taseko - Bridge River** | 2. $66 000 | 92O/1, 2, 3

Project Statement: 1:50 000 mapping in the Warner Pass, Noaxe Creek, Big Bar Creek, Bralorne and Bridge River map areas was completed in the 1986 to 1989 field seasons. This mapping has contributed to a better understanding of the distribution and relationships of late Paleozoic through Tertiary rocks units, and of the structural/plutonic controls of the area's porphyry copper-molybdenum-gold and Listwanite-related through to epithermal precious metal deposits.

1991/92 Work Plan: Finish write-up.

Publications: Paper 1987-1, pp.157-169; Paper 1988-1, pp.105-123; Paper 1989-1, pp.115-130, pp.131-143, pp.145-151; Paper 1990-1, pp.45-51, pp.52-72, pp.278-285; Paper 1991-1, pp.75-83; OF 1987-3; OF 1988-9; OF 1989-4; OF 1989-3; OF 1990-10.

06712 | M. Mihalynuk | 1. 20 | 104N
1987-1992 | **Tagish** | 2. $79 700

Project Statement: The westernmost placer stream in the Atlin camp has its headwaters in 104N/12W. Underlaying the same area are strands of the Nahlin fault system. Mapping in the area will investigate the fault system and its relation to several historical lode gold showings. Preliminary mapping in the area has identified a volcanic sequence that may be correlative with that which hosts the Kutcho Creek volcanogenic massive sulphide deposit. Completion of mapping in 104M/12W will aid in understanding areas of anomalous mineralization and in evaluating this and adjacent areas.

1991/92 Work Plan: Complete mapping begun in 1989 by Bloodgood and Belefontaine and in 1990 by Mihalynuk *et al.* Finish final report on Tagish Project.

Publications: Paper 1988-1, pp. 217-232; Paper 1989-1, pp. 293-310; Paper 1990-1, pp.181-196; Paper 1991-1, pp.145-152; OF 1988-5; OF 1989-13; OF 1990-4; external publications in prep.

Section: Regional Mapping

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06714 1991-1994	D. Brown **Stikine**	1. 80 2. $184 200	104G/12 W, 13

Project Statement: Exploration and development successes in the Golden triangle have fuelled a sustained interest in the geology of the northwest part of Stikine terrane. Recently, exploration activity has migrated northward toward Telegraph Creek area. The Stikine Project is providing new detailed geologic maps, databases, stratigraphic correlations and interpretations, all of which are vital for effective mineral exploration and land use planning in this remote region. Locating new mineral occurrences and developing/modifying deposit models are additional contributions to the current limited geologic database. Well exposed Paleozoic and Mesozoic strata hold great and varied mineral potential, from polymetallic VMS to epithermal gold deposits.

1991/92 Work Plan: May - June 15: Prepare for field work and complete write-up of previous project. June 15 - Aug. 31: Field work based in Telegraph Creek (4-man crew). Sept. - Oct.: Write Fieldwork paper. Nov. - Jan.: Open File map production. Feb. - Mar.: Research external papers.

Publications: Paper 1989-1; pp.251-267; Paper 1990-1, pp.141-151; Paper 1990-1, pp.153-161; OF 1989-7; OF 1990-1.

06715 1990-1994	J . Nelson K. Bellefontaine **Nation Lakes**	1. 90 2. $165 386	93N/2E half and N/7E half

Project Statement: Since the discovery of the large-tonnage, potentially bulk-mineable Mt. Milligan copper-gold deposit, the northern Quesnel Belt has become the site of aggressive staking and exploration. The geologic database, except for the two 1:50 000 sheets covered last year by this project, is insufficient to provide answers to many fundamental geological questions: where are the intrusions, what structures may have controlled their emplacement, when did mineralization occur and what are its controls.

1991/92 Work Plan: Continue mapping to north and west of 1990 work, in the area of most intense company activity.

Publications: Paper 1991-1, pp.89-110; OF 1991-9.

06711 1987-1992	L. Diakow **Whitesail**	1. 0 2. $66 000	93E/6, 10, 11, 13, 14

Project Statement: The project area encompasses island arc, and continent margin arc, volcanic and plutonic rocks of Mesozoic and Cenozoic age. Copper and molybdenum porphyry and

Section: Regional Mapping

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

epithermal or deeper precious metal vein deposits occur and are exploration targets in the project area.

1991/92 Work Plan: Complete a first draft of the Whitesail manuscript. Complete four 1:50 000 geology maps and a 1:100 000 regional map. Prepare a manuscript for external publication on *Stratigraphy and Tectonic Implications of High-K Volcanism of the Eocene Whitesail Formation, Whitesail Range, West-Central British Columbia*.

Publications: Paper 1987-1, pp.171-179; Paper 1988-1, pp.155-168; Paper 1989-1, pp.183-188; Paper 1990-1, pp.83-89; OF 1987-4; OF 1988-2; OE 1989-1; OF 1990-15.

06711 | G. Nixon | 1. 0 | B.C.
1988-1992 | | 2. $66 000

Project Statement: This project has made a preliminary evaluation of the economic potential of Alaskan-type ultramafic-mafic complexes for precious metals, notably platinum-group elements, and other commodities such as Ni-Cu-Fe sulphides and chromite. The geological database has been significantly improved and geochemical/mineralogical criteria relevant to exploration for platinum group elements have been established.

1991/92 Work Plan: No field season. Completion of Bulletin summarizing the entire project results.

Publications: Paper 1989-1, pp.281-294; Paper 1990-1, pp.429-442; Paper 1991-1, pp.417-424; Paper 1991-1, pp.405-415; Paper 1991-1, pp.387-404; Paper 1991-1, pp. 353-358; OF 1988-25; OF 1989-17; OF1989-18; OF1990-12; OF 1990-13; OF 1990-14; EXPLN 1988, pp.B83-B89; CANMIN 28; pp.503-535; GSOCFIN 61, p.45.

DISTRICT GEOLOGY

Section: District Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06741 ongoing	Paul Wilton **Metallogenic Studies**	1. 70 2. $110 200	92, 102, 103 Southwest B.C.

Project Statement: To continue the investigation and documentation of the exploration trends, geology and metallogeny of southwestern British Columbia for the purpose of stimulating, assisting and influencing the direction of mineral exploration and development in the southwestern district.

1991/92 Work Plan: To visit, examine, and document as many as possible of the significant, active exploration properties and mines in the district. Special emphasis and more comprehensive field studies are planned for the northern Vancouver Island Copper Belt, the Cimadoro property on Moresby Island, the Gold River-Victoria Park area on Vancouver Island and active areas such as Tofino Creek and Flores Island within the Clayoquot Sound study area.

Publications: EXPLN85, pp.7-10; EXPLN86 pp.29-32; EXPLN88, pp.47-53, 63, 69-70, 107-109; EXPLN89, pp.141-145.

06743 ongoing	T. Schroeter R. Lane **Red Mountain** **Gambier Group** **Clisbako**	1. 12–16 2. $10 000	B.C. 103P/13 92G 93B/12E; 93C/9E

Project Statement: Metallogenic and mineral deposit studies of significant new mineral discoveries are one of several major responsibilities of the Senior Regional Geologist so that sound and accurate information may be gathered to:
- advise and contribute in the development of mineral deposit models;
- assess mineral exploration trends;
- contribute to the responsible land management Claims issues.

1991/92 Work Plan: The significant new properties will be examined in 1991-92 and will be described in appropriate Exploration '91 Part B reports.

Publications: OF 1989-22.

06745 ongoing	E.L. Faulkner	1. 35–40 2. $111 073	Northeast B.C.

Project Statement: Mineral deposit and Metallogenic studies are one of several important responsibilities of a District Geologist in order to gather timely and accurate information required to:
- assist in and contribute to the development of mineral deposit models;

Section: District Geology

Project No.	Project Leader	1. Field Days	NTS Map
Project Timing	Project Title	2. Budget (A-base)	Area

– resolve land use and Native land claims issues;
– document mineral exploration trends.
Property studies will concentrate on significant and active exploration properties.

1991/92 Work Plan: Studies of 3-5 day duration will be carried out on several significant, active properties, including: Taseko precious/base metal vein deposit; Frasergold phyllite hosted bulk Au deposit; Col, Chuchi Lake Camp, Cat Mountain, alakalic Cu-Au porphyry deposits; Clisbako epithermal Au deposit, Coordinated with T. Schroeter; Cirque/Mt. Alcock Zn-Ag strata-bound deposits. Descriptions of the deposits visited will be submitted for publication in Exploration '91 Part B, as appropriate. All major exploration projects will be monitored; an up-to-date database will be maintained, and exploration and development trends tracked. All operating mines, and projects under active MDRP will be visited at least once.

Publications: None.

06744 | D.J. Alldrick | 1. 90 | Northwest
ongoing | M.L. Mallot | 2. $161 348 | B.C.
D.V. Lefebure

Project Statement: The immediate objectives are to publish more descriptions with genetic interpretation of selected mineral deposits in northwestern British Columbia with specific reference to volcanogenic massive sulphide and porphyry deposits. An Open File map of the Ootsa Lake Group volcanics south of Burns Lake and associated mineral deposits is planned which will provide new information in a little known area. A knowledge-based analysis of the North Coast gold potential will be published as an article with associated maps. Preliminary work on the metallogeny of the Hazelton Group will be coordinated with other researchers.

1991/92 Work Plan: Field work will be completed from May to September. Properties and mining camps will be visited throughout northwestern British Columbia with a focus on volcanogenic massive sulphide and porphyry deposits and the Hazelton Group-hosed deposits. All deposits within the Mine Development Review Process and all operating mines will be visited at least once. In addition to the research efforts, exploration activity will be monitored to facilitate reporting to government industry and the public. The Smithers office will continue to be the focus of numerous client enquiries and the catalyst for meetings and talks. The geology and mineral deposits of the Iskut-Unuk River areas are to be highlighted at a field conference being organized for mid-August at Bronson Creek.

Publications: None.

Section: District Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06746 ongoing	A. Legun	1. 50 2. $44 500	Southeast B.C.

Project Statement: Item 1: The investigation and documentation of the exploration trends, geology, and metallogeny of the district will continue. Visits will be made to significant exploration properties and new showings. MINFILE descriptions will be updated as required. The following areas will be surveyed: Duncan Lake Pb/Zn deposit of Cominco; Moose Creek magnetite and sodalite; skarn and epithermal targets in the Greenwood camp (Phoenix, Tam O'Shanter); new base metal veins near Ymir; "Sullivan-type" sedex targets near Yahk; gold-bearing shears (David/Lew).
Item 2: A mineral potential study of the Upper Dunbar Wilderness proposal area will be initiated. This is a 9000 hectare area of moderate to high mineral potential in the Purcells. The area is underlain by the Proterozoic Dutch Creek and Mt. Nelson Formations. There is peripheral access by Forestry road.

1991/92 Work Plan: Item 2 would involve a field camp in late summer. Property visits will be spread out through summer and fall. A focus of the property visits will be the Moose Cr. magnetite deposit which has entered the Mine Development Review Process. Together with other duties (field school etc.) about 50 days of field time are involved.

Publications: G.S.C. of 2167, pp.5-27 1990; MEMPR Information Circular 1991-1, pp.65-70; EXPLN90 Part B (Millie Mack).

06747 ongoing	R.E. Meyers **South Central B.C.**	1. 100 2. $109 000	92I/NE; 92H/8 others

Project Statement: A continuing study of the ore deposits and metallogeny of South Central British Columbia. The project focuses on age, distribution, setting and character of mineral deposits in the region. Work completed in 1991/92 will be published separately, and, subsequently, will be incorporated with studies completed to date to produce an overall review paper and compilation map of the geology, ore deposits, and metallogeny of the district. Objectives for 1991/92 are:

1) to continue to fulfill District Geology's mandate to provide service to clients (government, industry, public);
2) to enhance the exploration database with descriptions of exploration properties, mining camps and operating mines; and
3) to publish a review paper on Mineral Deposits and Metallogeny in South Central British Columbia and a compilation map (1:50 000) of the geology and mineral deposits in the district.

Section: District Geology

Project No.	Project Leader	1. Field Days	NTS Map
Project Timing	Project Title	2. Budget (A-base)	Area

1991/92 Work Plan: The 1991 program will be carried out in two parts:
Part 1: (June-July) continuation of field work initiated in 1990/91 in the Deadman Creek (92I/NE) and Treasure Mountain (92H/6E) areas; to include property examinations and reconnaissance mapping of selected areas.
Part 2: (August) District Overview: To include visits to selected mineral deposits in the Omineca, Intermontane and Coast-Cascade Belts.

Publications: Paper 1989-1, pp.355-363; OF 1989-5; OF 1990-29; EXPLN87, pp.B5-B27; EXPLN88, pp.B1-B13, pp.B35, B38, pp.B111-B121; EXPLN89, pp.81-89, pp.95-103, pp.119-134; EXPLN90.

ECONOMIC GEOLOGY

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06720 1991-1994	D. MacIntyre E. Grunsky **Geographic Information System (GIS)**	1. N/A 2. $75 000 (MDA)	B.C.

Project Statement: Geographic Information Systems (GIS) are rapidly becoming the resource management tool of the 1990s, particularly in the geosciences. Through GIS many diverse digital datasets, including remotely sensed satellite imagery, can be combined and analysed to produce a wide range of thematic maps. such maps are invaluable in both geoscientific studies and resource management – land use decision making. Successful implementation of a GIS and integration of this technology with existing and future systems cannot be done without the assistance of a dedicated GIS project leader and commitment of funds to the ongoing development of a comprehensive GIS system. This project addresses this need and has as its primary objective the development of first class mineral information management system within the Mineral Resources Division.

1991/92 Work Plan: A GIS geologist and a technician will be hired to operate the existing Terrasoft GIS workstation. An image analysis system will be purchased and integrated with the GIS workstation to provide additional analytical capabilities.

Publications: None.

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06721 1991-1993	D. MacIntyre S. Paradis L. Pigage **Cirque**	1. 5 (DM) 2. $5 000	94F/11

Project Statement: Cirque is a world-class sedimentary-exhalative massive sulphide deposit containing over 32 million tonnes of ore grading 7.9 per cent zinc, 2.1 per cent lead and 45 grams/tonne silver. This deposit is in an advanced stage of exploration and has excellent potential for becoming a producing mine. Underground access to the orebody is now available and provides an opportunity to study the deposit in detail. A joint research project involving Susan Paradis (GSC), Don MacIntyre (BCGS) and Lee Pigage (Curragh Resources) is proposed. This work will greatly increase our understanding of this very important ore deposit and will assist explorationists in evaluating other deposits in the district.

1991/92 Work Plan: D. MacIntyre will spend 5 days working with S. Paradis underground and on surface.

Publications: None.

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06721 1987-1991	D. MacIntyre P. Desjardins **Babine-Telkwa**	1. N/A 2. $117 104	93L/3, 6, 10, 11, 14

Project Statement: The Babine and Telkwa Mountains have a long history of mining and mineral exploration. In spite of the obvious mineral potential of this area, few good geologic maps were available. With the discovery of an important new gold deposit at Dome Mountain, a long known mining camp in the Babine Range, the need for up to date geologic maps became even more important. Mapping completed from 1984 to 1991 has provided this information and has also resulted in the discovery of several new showings. Future mineral exploration and resource evaluation studies will benefit from this baseline geologic mapping.

1991/92 Work Plan: Write-up phase. Final map compilation and preparation of summary report.

Publications: Paper 1986-1; Paper 1988-1; Paper 1989-1; Paper 1990-1; Paper 1991-1.

06722 1991-1994	A. Panteleyev **Porphyry/Epithermal Transitions**	1. 30 2. $100 775	B.C.

Project Statement: Intrusive-related copper-gold-silver deposits transitional between porphyry copper and high-sulphidation epithermal types are a circum-pacific phenomenon but few deposits (*e.g.* Equity Silver) are recognized in B.C. Other deposits are likely; favourable areas and exploration targets need to be assessed and identified.

1991/92 Work Plan: Assess and compile database from literature, MINFILE and company sources. Conduct an orientation/reconnaissance field study of potentially favourable areas. Examine and sample priority target sites.

Publications: None.

06721 1986-1991	A. Panteleyev **Quesnel Mineral Belt**	1. 0 2. $36 000	93A, B

Project Statement: To establish the geological framework and depositional setting of mineral deposits in the southern Quesnel Trough.

1991/92 Work Plan: To complete preparation of a Ministry Bulletin entitled *Geology and Mineral Deposits of the Quesnel River – Horsefly map area, Quesnel Trough, Central British Columbia* by A. Panteleyev, D.G. Bailey, M.A. Bloodgood and K.D. Hancock.

Publications: OF 1990-31; OF 1989-14; OF 1989-20; OF 1987-09; PM 67; PM 20; Paper 1990-1, pp.159-166, 167-172, 173-182; Paper

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
		1989-1, pp.147-154, 139-146, 131-138; Paper 1988-1, pp.125-134, 135-142.	
06721 1991-1995	T. Höy **Volcanogenic Massive Sulphides**	1. 21 2. $10 055	82G/12
	Project Statement:	The Sullivan project is a joint GSB-GSC project to study the Sullivan deposit and the host Aldridge Succession. Reserves of the Sullivan Mine, one of the largest base metal mines in the world, are being rapidly depleted. The project will archive much data, add considerably to the database, and provide new exploration targets and deposit models.	
	1991/92 Work Plan:	Three weeks of field work in the Kimberley area, with staff of the GSC; attend a number of workshops.	
	Publications:	VMS Short Course Notes (GAC '90).	
06721 1987-1991	T. Höy K. Andrew **Rossland**	1. 0 2. $132 221	82F/SW
	Project Statement:	The Rossland camp is the second largest historical gold producer in British Columbia. It is hosted by volcanic rocks of the lower Jurassic Rossland Group which extend in a belt northeastward from Rossland to Nelson. The geology of this belt of rocks is poorly understood. This project is targeted to determine the stratigraphy, setting and tectonic events that controlled and localized these ore deposits.	
	1991/92 Work Plan:	Compilation and analyses of rock chemistry. Write-up of mineral deposits visited in 1989/90. Detailed petrography of Elise Formation. Fluid inclusion analyses of selected vein deposits. Pb-Pb, U-Pb and K-Ar analyses of mineralization and alteration. Commence writing of Rossland publication.	
	Publications:	Paper 1988-1, pp.19-30; Paper 1989-1, pp.33-43; Paper 1990-1, pp.11-17, 19-27; Paper 1991-1, pp.9-20, 21-31; OF 1988-1; OF 1989-11, OF 1990-8; OF 1990-9; OF 1991-1; EXPLN 1988, pp.B15-B19; EXPLN 1988, pp.B21-B28; EXPLN 1989, pp.73-80.	
06723 1989-1992	G. Ray I. Webster **Skarns**	1. 70 2. $168 770	B.C.
	Project Statement:	Skarns have accounted for most of the iron and tungsten production in B.C., as well as 16 per cent of the gold and 13 per cent of the copper mined. Gold skarns are receiving considerable exploration interest due to the reopening of the	

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

Nickel Plate Mine near Hedley and recent discovery of the 6.7 million tonne Mt. Buckhorn deposit just 5 km south of the B.C. – Washington State border. More data is needed on the origin, distribution, mineralogy and geological controls of the 800 known skarn occurrences in the province. Mapping and geochemical sampling is directed to areas of high mineral potential to improve our knowledge of skarn formation and deposit models.

1991/92 Work Plan: MINFILE compilation of all skarn deposits and occurrences according to belt, terrane metallogeny, age; complete skarn field studies at Greenwood camp, Craigmont, Merritt area, Rossland (Second Relief), McLymont gold skarn (Iskut River area). Also visit small tungsten and molybdenum skarns throughout the province.

Publications: Paper 1991-1, pp.257-265, pp.267-270, pp.271-277, pp.237-241; Paper 1990-1 pp.237-246; Paper 1990-1, pp.257-265; OF 1991-8; OF 1990-3.

06721 | D. Alldrick | 1. 0 | 104B
1987-1992 | J. Britton | 2. $121 000

Iskut-Sulphurets

Project Statement: The Iskut-Sulphurets gold belt is one of the most active mineral exploration camps in B.C. Two gold mines have come into production since 1981; three other properties are in advanced stages of exploration. Despite this activity, the geology of the area is not well known and parts of it have never been mapped and existing geology maps are 20 to 60 years out of date. The purpose of this project is to produce geology maps of the area and complementary mineral deposit descriptions.

1991/92 Work Plan: Write-up year. Prepare 1:20 000-scale maps of Sulphurets, Unuk, Snippaker Sheets (update 1:50 000 maps). Process geochemical data. Update mineral occurrence data. Petrography. Produce final report.

Publications: OF 1988-4; OF 1989-10; OF 1990-16; OF 1990-19; Paper 1988-1, pp.199-209; Paper 1989-1, pp.233-240, 241-250; Paper 1990-1, pp.115-125; Paper 1990-1, pp.337-341; Paper 1990-1, pp.343-346; EXPLN 1989, pp.197-223; SEG-GAC ABS 88; GAC ABS 90 (3); Paper 1991-1, pp.131-138, pp.235-243.

06735 | A. Matheson | 1. 64 | 92I/2
1982-1992 | **Thermal Coal Sampling Survey** | 2. $81 705

Project Statement: Conduct a jointly funded (GSC/BSGSB) diamond drilling programme in the Merritt coal deposits, to obtain fresh

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

samples for a variety of analyses essential to accurate definition of the coal resources of the area. In addition, surface coal samples will be collected and exposed sections will be measured. These samples will provide the means to assess the detailed coal quality variation within seams and identify any potentially environmentally sensitive features of the deposit which could have an effect on its utilization. The area has very little existing coal analysis data. The samples will be analysed and published in addition to those results obtained from the Quinsam, Telkwa and Bowron River coal deposits.

1991/92 Work Plan: Three hundred metres of drilling. Diamond drill core will be stored and logged in the field and methane desorption tests will be conducted on site.

Publications: Paper 1990-1, pp.439-443, 445-448; Paper 1991-1, pp.391-397.

06731 | W. Kilby, J. Cunningham, P. Johans | 1. 92, 2. $90 602 | 93P/12, 93O/8, 9, 10, 15, 16

Peace River Coalfield

Project Statement: Map and compile, in digital format, the geology of the Peace River Coalfield. Perform geological mapping at a scale of 1:50 000 on the Inner and Outer Foothills structural belt of the Rocky Mountains from the Alberta border to north of Peace River (93I, 93O, 93P, and 94B). Construct a spatial digital database of geology and all related information such as coal boreholes, PNG wells, mapping stations, sample sites and coal tenure information. This database will be constructed with GIS integrity and referenced to TRIM digital base maps (NAD 83, 1:20 000). Traditional paper maps as well as totally digital maps will be produced.

1991/92 Work Plan: In 1991, two crews will be mapping in NEBC. One crew of BCGS staff headed by J. Cunningham will map areas 83O/8, 15 and 16. A second crew headed by a U of A M.Sc. candidate will map areas 93P/12, 93O/9 and 10 for his thesis. W. Kilby will advance the quality of the digital database in the Tumbler Ridge area (93I/14, 15; 93P/2, 3 and 4) through work on a bulletin.

Publications: Paper 1987-1, pp.373-378; Paper 1988-1, p.466-470, 471-477; Paper 1991-1, pp.455-460; OF 1987-6; OF 1987-7; OF 1988-12; OF1988-22; OF 1991-4.

06732 | C. Kenyon, G. Bickford | 1. 65, 2. $81 575 | 92F/1, 2, 6, 7, 10, 11, 13, 14

Vancouver Island Project/COALFILE

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

Project Statement: Map and compile information of the Vancouver Island coalfields to provide an update of the critical geological relationships of these coal deposits. Provide coal rank distribution data. Perform geological mapping as a scale of 1:20 000 for the Comox and Nanaimo sub-basins on Vancouver Island. Sample all coal outcrops for a regional vitrinite reflectance study, and for proximate analysis when appropriate. Summarize exploration data from coal assessment reports, in a computer information system called COALFILE.

1991/92 Work Plan: In 1991, a consultant will complete the mapping necessary to better determine the geological correlations between the Comox and Nanaimo sub-basins, and to ascertain the remaining coal resource potential of the Nanaimo coalfield. Provide finished maps in paper or digital form.

Publications: Paper 1988-1, pp.441-450; Paper 1989-1, pp.543-552, 553-558; Paper 1990-1, pp.431-438; Paper 1991-1, pp.381-386, 387-390; Abstracts: AAPG, 1990; CSPG, 1990; COALFILE; Assessment Report listings.

06734
1990-1995

B. Ryan
Coal and Coalbed Methane Resources NWBC

1. 35
2. $81 314

93, 94, 104

Project Statement: Produce a detailed compilation and assessment of the coal and coalbed methane resources of NWBC. This report will provide a database for planning land use policies and assist exploration for new deposits. Data will be presented as hard copy and computer files with accompanying freeware to aid in analysis. Major elements of the project will include:
- coalbed methane resources of the number one seam at Telkwa;
- tertiary coal basins of NWBC, opportunities for small scale projects.

1991/92 Work Plan: Complete Telkwa Open File 1:20 000-scale map. Evaluate coalbed methane resources of the number one seam at Telkwa. Visit, map and sample coal prospects at Coal River, Rapid River and Kitsumkalum River. Extend mapping around Tuya River to complete 1:20 000-scale map.

Publications: Paper 1991-1, pp.399-406; Paper 1991-1, pp.419-429; Paper 1990-1, pp.469-471; EXPL 1991, pp.1-13.

06733
1991-1994

D. Grieve
M. Holuszko
Provincial Coal Quality Survey

1. 10
2. $135 930

82G, 82J

Section: Economic Geology

Project No.	Project Leader	1. Field Days	NTS Map
Project Timing	Project Title	2. Budget (A-base)	Area

Project Statement: Coal quality is a critical dimension of coal resource evaluation. All quality parameters are influenced by geological factors to a large degree, and our focus is on these factors and their effects. The studies are concerned with washability, sulphur, trace elements, mineral matter, utilization potential, and classification. All bear on the economic viability, marketability, and environmental implications of our coal deposits. Data comes from two sources: assessment reports and our own annual sampling/analysis programs. Annual updating of the high profile *BC Coal Specifications* brochure, and biannual revision of the *BC Coal Quality Catalog* are priorities of the project.

1991/92 Work Plan: Collect large run-of-mine samples at selected operating coal mines in southeast BC. Describe and selectively sample coal lithotypes, in conjunction with Dr. A. Cameron of the GSC, at locations corresponding to run-of-mine sample sites. Analyse samples for float-sink parameters, and other compositional properties, including sulphur. Carry out detailed petrography (reflectanee, maceral and microlithotype composition, and sulphur associations) of samples. Send subsamples of float/sink fractions to Dr. F. Goodarzi of the GSC for trace element determinations, to determine fractionation of various elements. Compile coal quality data relevant to various studies from COALFILE (assessment reports). Revise, release and distribute the projects flagship publication the *BC Coal Quality Catalog* and the general information brochure *BC Coal Specifications*.

Publications: I.C. 1989-22; I.C. 1990-5; Paper 1990-1, pp.427-430; Paper 1991-1, pp.361-370; Paper 1991-1, pp.371-380.

06724	D. Hora	1. 20	92E, F, K
1991-1992	P. Read	2. $20 000	

Residual Kaolin

Project Statement: To further evaluate the kaolin potential of the Georgia Basin region. This project will examine the contact relationships of the Nanaimo Group sediments and the basement rocks in the Comox Basin looking for residual weathering and the presence of kaolin claystones.

1991/92 Work Plan: A detailed compilation of exploration data from the Comox basin, including identification and correlation of the claystone beds, and outlining the depth to the basement rocks. Wherever possible the type or intensity of weathering and the distribution of basement formations will be identified by relogging and sampling of preserved core. A report on fireclay and kaolin potential of Georgia Basin will be prepared.

Publications: None.

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06724 ongoing	D. Hora **Industrial Minerals Operations**	1. 50 2. $126 519	B.C.

Project Statement: The activities of the Industrial Mineral Sector are monitored, including: prospecting, exploration, development, mining, transportation, marketing, usage, exports, imports, policy and legislation. Advice is provided to industry and government clients.

1991/92 Work Plan: Completion of a paper on sulphur in B.C.

Publications: Publications of reports on gypsum, feldspar, fluorspar, carbonatites, tertiary basins, olivine, chromite, limestone and wollastonite completed in 1990-91.
Open File 1987-13, 15, 16, 17, 19; Open File 1988-13, 15, 19, 26, 27, 28, 29, 30, 33; Open File 1989-21, 27; Open File 1990-23, 27; Open File 1991-9; I.C. 1988-6; 1989-2; 1990-19.

06724 1990-1991	G. Simandl **Magnesite**	1. 90 2. $134 015	82J, 82F, G, K 93J

Project Statement: Magnesite is an important industrial mineral mined from the Mount Brussilof deposit in British Columbia. At least seventeen other underdeveloped magnesite deposits hosted by sedimentary rocks are known in BC. The objectives of this mineral deposit study are to establish a MBD model to document selected undeveloped magnesite deposits and to evaluate the economic potential of these undeveloped deposits.

1991/92 Work Plan: In the second year the project will complete a study of the Mount Brussilof deposit (MBD) (stratigraphic section, core logging, better constrain geological contacts; 4 weeks). Limited mapping, core logging and sampling of selected undeveloped deposits will attempt to determine their size and development potential (8 weeks). Laboratory work will consist of petrological, chemical isotopic, stratigraphic and structural analyses. The economic potential of the deposits will be examined using computer models.

Publications: Paper 1991-1, pp.269-278; EXPLN 1991.

06721 1986-1991	N. Church **Bridge River**	1. 0 2. $34 580	92J/15

Project Statement: The Bridge River mining camp Camp remains foremost in gold production in British Columbia. The purpose of the current project is to describe the geological setting of the numerous mineral deposits of the camp.

Section: Economic Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

1991/92 Work Plan: A report is planned for the Bridge River Mining Camp with a geological map covering the Bralorne area and adjacent parts of the Noaxe and Birkinhead sheets.

Publications: EXPL 1985, pp.B10-B13; EXPLN 1986, pp.B33-B36; EXPLN 1987, pp.B35-B44; EXPLN 1988, pp.B91-B102, pp.B103-B110; EXPLN 1989, pp.135-140; Paper 1987-1 pp.23-30, pp.31-34; Paper 1988-1, pp.93-100, pp.101-104, pp.325-328, pp.329-324; Paper 1989-1, pp.105-114; OF 1987-11; OF 1988-3.

06728
1989-1992

C. Ash

Listwanite-Lode Gold, Phase II

1. 60
2. $104 000

B.C.

Project Statement: Carbonate-altered ultramafic rocks (listwanites) within accreted oceanic terranes display a close spatial and potential genetic association with mesothermal lode gold deposits worldwide. Within BC the Bralorne lode and the Atlin and Dease Lake placer gold camps serve as representative examples. The listwanite project was initiated in 1989 to assess the resource potential and develop a regional metallogenic deposit model for listwanite related lode gold occurrences throughout BC. Such a model will aid exploration companies presently exploring for this deposit type and hopefully stimulate exploration in untested areas throughout the province.

1991/92 Work Plan: Complete paper summarizing results of Listwanite Phase I. Conduct listwanite field studies at Bralorne, Rossland, Fort St. James and the Hope-Boston Bar areas. Participate in conference on placer gold in the Atlin Camp (Talk and field trip). Integrate results of present study and previous work with both the industry and public database to produce listwanite model.

Publications: Paper 1991-1, pp.359-364; Paper 1991-1, pp.365-374; OF 1990-22; GAC-MAC 90a, pp.A4; GAC-MAC90b, pp.A4; RU91.

06721
1991-1992

N. Church

1. N/A
2. $38 080

82E, 82L

Project Statement: To study the distribution and genesis of mineral occurences in the Okanagan – Boundary area with a view fo preparation of a mineral potential map for the use of industry and environmental concerns.

1991/92 Work Plan: Assemble a mineral potantial map of the Okanagan area and, in the first phase, progress towars a report on the gology and resources of Tertiary outliers in the region.

Publications: N/A.

ENVIRONMENTAL GEOLOGY

Section: Environmental Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06771 1990-1995	P. Bobrowsky **Surficial Database Program**	1. 90 2. $57 482	92H, 94A

Project Statement: The objectives of this program are to collect basic surficial geology information through field studies and archival data compilation. The 1991/92 program consists of three components: (1) stratigraphic study of Quaternary sediments in the Peace River area will be conducted to understand the types of sediment present, and their general character and distribution; (2) an environmental mapping program will be initiated in the Fraser valley; (3) contracts to compile and index existing surficial maps for the province, digitize and establish standards and criteria for computer database management of Quaternary information, and compile a drift thickness map will be initiated.

1991/92 Work Plan: Field work in NE BC will be completed in July. Results will be published in Geological Fieldwork and as an external publication. The Fraser Valley component will begin with a compilation of existing maps, literature, and drill core & well log information. Brief field research will be conducted in the fall to collect reconnaissance level surficial data and subsurface information. A contract to complete the surficial map compilation for the province will be issued in the fall and an Open file Index map will be completed for Roundup '92. A contract to digitize and establish standards and criteria for computer database management of Quaternary information will be issued in the fall. A Co-op student will begin compiling a drift-thickness map in the fall to be released as an Open File by 1993.

Publications: Paper 1991-1, pp.345-358; OF 1991-11; INQUA 91 abstracts (in press).

06771 1989-1994	V. Levson **Placer Geology Program**	1. 120 2. $85 945	104N 93A, B, G, H

Project Statement: The objectives of this project are to identify promising geologic settings for new placer deposits by collecting stratigraphic, sedimentologic and geomorphic data and to identify useful placer prospecting techniques. The 1991/92 program has three components: (1) investigate the geology of economically important placers in the Atlin mining region, an area with well exposed Pleistocene gold-bearing strata and good dating control provided by interbedded basalts; (2) provide a conference and field trip in the Atlin area for the placer industry in conjunction with District Geology and other ministry branches; (3) write-up of results from 1989-1990 Cariboo placer program on Tertiary placers,

Section: Environmental Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

buried/surface Quaternary placers, utilizing placers for locating lode gold sources, and introductory placer geology for prospectors.

1991/92 Work Plan: Six months will be required to complete papers dealing with distinct aspects of the geology of Cariboo placers. The Atlin project will require: (1) 1 month for literature review, data compilation and airphoto analysis; (2) 2 months fieldwork (sites with good stratigraphic control and geologic evidence for buried placer potential will be studied); (3) 3 months data analysis and project write-up.

Publications: Paper 1990-1, pp.519-530; Paper 1991-1, pp.331-334.

06771
1990-1995

P. Bobrowsky
Geologic Hazards Program

1. 11
2. $38 778

92B, L

Project Statement: To coordinate and collect information related to geological hazards present in the surficial environment which impact directly on the residents of B.C. The 1991/92 program has three projects: (1) field research on neotectonics; (2) development of a public information brochure on landslides; (3) publication of the proceedings of the 1990 Geologic Hazards Workshop.

1991/92 Work Plan: An Information Circular on landslides will be produced in the summer and published by the Scientific Review Office; two weeks of fieldwork on neotectonics will be conducted in the spring and late fall – a report in Paper 1992-1, a conference paper and a possible external paper will be produced; proceedings of the 1990 Geologic Hazards Workshop will be published in the fall.

Publications: Paper 1991-1, pp.307-313; CUR. RES. 90, pp.251-256; CUR. RES. 90, pp.245-250; AMQUA/CANQUA ABSTRACTS 90, p.14.

06771
1990-1995

D. Kerr
P. Bobrowsky
Drift Exploration Program

1. 60
2. $84 945

92L, 102I

Project Statement: Support drift prospecting programs in areas where mineral exploration is hampered by drift cover. The project has three components: (1) a Quaternary field mapping and sampling program on northern Vancouver Island, with three main objectives: (a) to produce surficial geology derivative maps for drift exploration of two 1:50 000 sheets (92L/12 and 102I/9) in drift covered areas with mineral potential; (b) conduct overburden geochemical sampling programs at regional, local and micro scales surrounding known

Section: Environmental Geology

Project No.	Project Leader	1. Field Days	NTS Map
Project Timing	Project Title	2. Budget (A-base)	Area

mineralized areas on the Expo property to document dispersion from the deposits; (c) describe the stratigraphy and sedimentology of Quaternary exposures and conduct fabric and boulder tracing studies to determine ice-flow history and develop a drift exploration model for coastal glaciated areas; (2) production of an annotated bibliography of drift exploration in BC (Open File), to be completed in 1991, will provide an introduction to some of the problems and solutions encountered in drift prospecting in glaciated terrain of BC; (3) organizing of a joint SGU/AGU-GSC workshop in 1991 on drift exploration in BC (course notes to be published).

1991/92 Work Plan: 2 months for literature review, air photo interpretation and data compilation; 2 months field work; 5 months data analysis and project write-up; final products will include one Open File with two 1:50 000 scale surficial geology maps, 1 report in Paper 1992-1, and 1 paper presented at CIM.

Publications: OF 1991-6; OF 1991-7; Paper 1991-1, pp.323-330; EXPLN 90 (in press).

06772	S. Sibbick	1. ??	82G, J; 92B, C
ongoing	P. Matysek	2. $102 750	92F, G, K, L,
	Geochemical Research		N, O; 102I

Project Statement: To develop and demonstrate geochemical exploration techniques which are applicable in the complex setting of BC. Work will include the write-up of a number of geochemical orientation surveys and research studies conducted in previous years and a joint sampling and mapping program with the Surficial Geology Unit as part of a drift prospecting program on Northern Vancouver Island.

1991/92 Work Plan: The Northern Vancouver Island (NTS 92L, 102I) drift prospecting case study will consist of approximately two weeks of detailed geochemical sampling over the study area. This program will include a six week Quaternary mapping program of the region by the Surficial Geology Unit. Detailed work on the study area will involve sampling of soils and drift hosting geochemical dispersion trains associated with mineralization. Samples will be analysed for a suite of elements. The resulting data will be interpreted in relation to the observed surficial deposits to develop an integrated geological-geochemical model of geochemical dispersion for the region. Existing data from previous geochemical orientation surveys (Vancouver Island, Rocky Mountain and Chilcotin) and seasonal variation studies will be compiled, interpreted and published as Open file papers or reports.

Publications: Paper 1989-1, pp.405-410; Paper 1988-1, pp.493-502, pp.503-508; Paper 1989-1, pp.579-583, pp.593-583,

Section: Environmental Geology

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

pp.593-602; Paper 1990-1, pp.503-510; Paper 1991-1, pp.323-330.

06772
ongoing

P. Matysek
W. Jackaman
S. Sibbick

1. ??
2. $155 500

92H, I, J

Project Statement: To develop a province-wide stream sediment and water geochemistry database conforming to national geochemical standards. The reconnaissance scale surveys are intended to stimulate exploration and to provide baseline data for geoscientific studies, land use assessment and environmental research. the program has been ongoing since 1976; approximately 60% of BC has been covered to date. Past releases have proven to be economic stimulators with claim staking and follow up exploration in some areas increasing over 20% as a direct result. The RGS Archive program was initiated in 1989 to provide additional analyses for over 37 000 previously collected stream sediments.

1991/92 Work Plan: Sample results are to be compiled into Open file packages comprising maps, data booklets and digital data files. The program comprises quality control verification of the data, construction of data lists, statistical evaluation and interpretation and map and table production of the data into an RGS Open file format. These products will be released for purchase in the summer of 1992. An overview of the program will be written up for publication in Paper 1992-1.

Publications: None.

06772
1991

P. Matysek
W. Jackaman

Promotion of BC Mineral Potential

1.
2. $250 000

92N

Project Statement: To develop a province-wide stream sediment and water geochemistry database conforming to national geochemical standards. The reconnaissance scale surveys are intended to stimulate exploration and to provide baseline data for geoscientific studies, land use assessment and environmental research. The program has been ongoing since 1976, approximately 60% of BC has been covered to date. Past releases have proven to be economic stimulators with claim staking and follow up exploration in some areas increasing >20% as a direct result.

1991/92 Work Plan: A reconnaissance scale stream sediment and water sampling program will be conducted over the Mt. Waddington area (92N) during the months of August and September. Approximately 1000 samples sites are anticipated, 75% of

Section: Environmental Geology

Project No.	Project Leader	1. Field Days	NTS Map
Project Timing	Project Title	2. Budget (A-base)	Area

sites will require helicopter access. Samples will be processed and analysed during the months of October to February. Sediments will be analysed for the routine 22 element suite (base metals, minor and major rock forming elements) and a 35 element Neutron Activation package which includes gold and rare earth elements. Waters will be anlaysed for pH, uranium and fluorine. Resulting data will be verified, statistically evaluated and compiled into data listing booklets, floppy diskettes and element distribution maps from March to May. Sample collection, processing and analysis will be contracted to commercial firms under the direction of the GSB staff. Open File packages will be released in the summer of 1992.

Publications: None.

06772 | M. Chaudry | 1. 30 | 102F/2

1991 | **Acid Mine Drainage Monitoring** | 2. $4 000

Project Statement: The development of an *in-situ* neutralization technique is needed for the abatement of acid mine drainage. Previous studies have shown that acidic, copper-rich surface and ground water draining the abandoned Mount Washington mine have caused a dramatic decline in the quality of the Tsolum River water. Large, short term seasonal hydrological and water chemical changes occur around the mine. The project would employ on-site sampling and analysis to recognize these changes. Data produced from the field would be used to select the most effective *in-situ* leaching method.

1991/92 Work Plan: Develop an on-site water sampling-analytical system to monitor the changes in sulphate, copper, pH, Eh, sulphur species, carbonate species and conductivity in ground and surface water; it will also measure water table elevation. The system will be tested by a monitoring program at Mount Washington to establish the size and duration of short-term season hydrological and water chemical changes. The system will also determine the effectiveness of existing diversion ditches for intercepting ground water flowing through the mine waste. Laboratory studies will be carried out to study the chemical and physical stability of the by-products of acid mine drainage neutralization. Resuhs of these studies and those from the monitoring program will be issued to develop an *in-situ*, cost effective method for neutralizing the acid pollution.

Publications: None.

GEOSCIENCE INFORMATION

Section: Geoscience Information

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06760 ongoing	G. McArthur **Geoscience Information-Management**	1. N/A 2. $177 150	B.C.

Project Statement: This operation will provide scientific leadership, management and administrative services to this new section to ensure timely cost effective delivery of MINFILE, Assessment Report and Public Information Programs.

1991/92 Work Plan: Implement new Public Information Unit. Implement systems and staffing plan for MINFILE and ARIS. Participate in Special Projects such as Tenure Maintenance.

Publications: None.

06761 Ongoing	L. Jones **MINFILE**	1. N/A 2. $407 297	B.C.

Project Statement: MINFILE is the Geological Survey Branch's computerized mineral inventory geology database of over 10 000 mineral occurrences in B.C. MINFILE/pc is a personal computer data entry, search and report program for the MINFILE database. MINFILE is used extensively by industry and government for exploration planning, resource information, land use planning, and research. Coding of the database is 70% complete, of which 50% is released.

1991/92 Work Plan: Of the approximate 3050 remaining occurrences to be coded, about 2500 will be coded and over 3000 will be edited/updated by the MINFILE team. This will complete coding for over 90% of B.C.'s mineral occurrences coded. The goal is to release a total of 19 map sheets (2630 occurrences), which will include a re-release of 2 map areas (314 occurrences). This will result in 75% of the total MINFILE being released. A major deposit open file of 400 occurrences will also be released. MINFILE/pc Version 3.0 will be released which includes a data entry and data transfer module. Along with the new software, the full provincial data set will be released, which will replace past releases. A new computer platform will be defined for the MINFILE system.

Publications: None.

06762 ongoing	T. Kalnins **Assessment Reports**	1. N/A 2. $213 990	B.C.

Project Statement: Mineral explorationists may extend tenure of their mineral claims by submitting assessment reports on the results of exploration programs in compliance with the *Mineral Tenure Act*. The Assessment Report Unit reviews and indexes these reports and makes the database available to the industry, public and government agencies.

Section: Geoscience Information

Project No. Project Timing	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area

1991/92 Work Plan: Assessment Reports processed within 60 days of receipt; off-confidential reports microfilmed monthly and fiche copies distributed to 27 government offices throughout B.C., and made available to the industry for viewing and sale; Assessment Report Index and Maps published annually; approximately 900 active and 1000 inactive Portable Assessment Credit accounts maintained; summary statistics compiled quarterly and annually.

Publications: Assessment Report Index, Paper/Microfiche/Disks; A.R. Libraries/Subscription; contribution to Exploration in B.C.

06763 | N.Massey | 1. N/A | B.C.
ongoing | **Public Information** | 2. $186,338

Project Statement: This program will foster an awareness of goescience and its improtance in understanding issues in everyday life within the province. This unit also manages the Prospector's Training Program.

1991/92 Work Plan: Participate in conventions and meetings, assist with the development of GSB headquarters displays, oversee the production of brochures for the general public, and educational materials for schools, manage the Prospector's Training Program, network with other agencies involved with Science Education and develop new programs and initatives.

Publications: Information Motherlode; Recreational Gold Panning in B.C.; Rock and Mineral Collecting in B.C.; Jade – B.C.'s Provincial Mineral; Earthquakes in B.C.; Geology of Strathcona Park; Minerals in B.C.; Landslides; Volcanoes.

SCIENTIFIC REVIEW OFFICE

Section: Scientific Review Office

Project No. Time Feature	Project Leader Project Title	1. Field Days 2. Budget (A-base)	NTS Map Area
06702 ongoing	B. Grant **Scientific Review**	1. N/A 2. $494 343	B.C.

Project Statement: The Scientific Review Office is responsible for timely and cost efficient publication of all geoscience data generated by the Geological Survey Branch. It expedites the production of approximately 100 publications during the year; promotes easier and more convenient access to publications and data from the GSB; coordinates the BC Geoscience Research Grant Program and ensures research results are made available to the public and the mining industry.

1991/92 Work Plan: Publications:
Exploration in BC; Papers – 12; Bulletins – 13; Information Circulars – 30; Geological Fieldwork, 1990; Open File Maps – 16; Open File Reports – 15; MINFILE – 10 map sheets; Regional Geochemistry Survey – 7 map sheets; Release Notifications and Promotions – 6.

Publications: NTS Author Index; Catalog of Publications; GSB Project Inventory, GSB Branch Plan.