



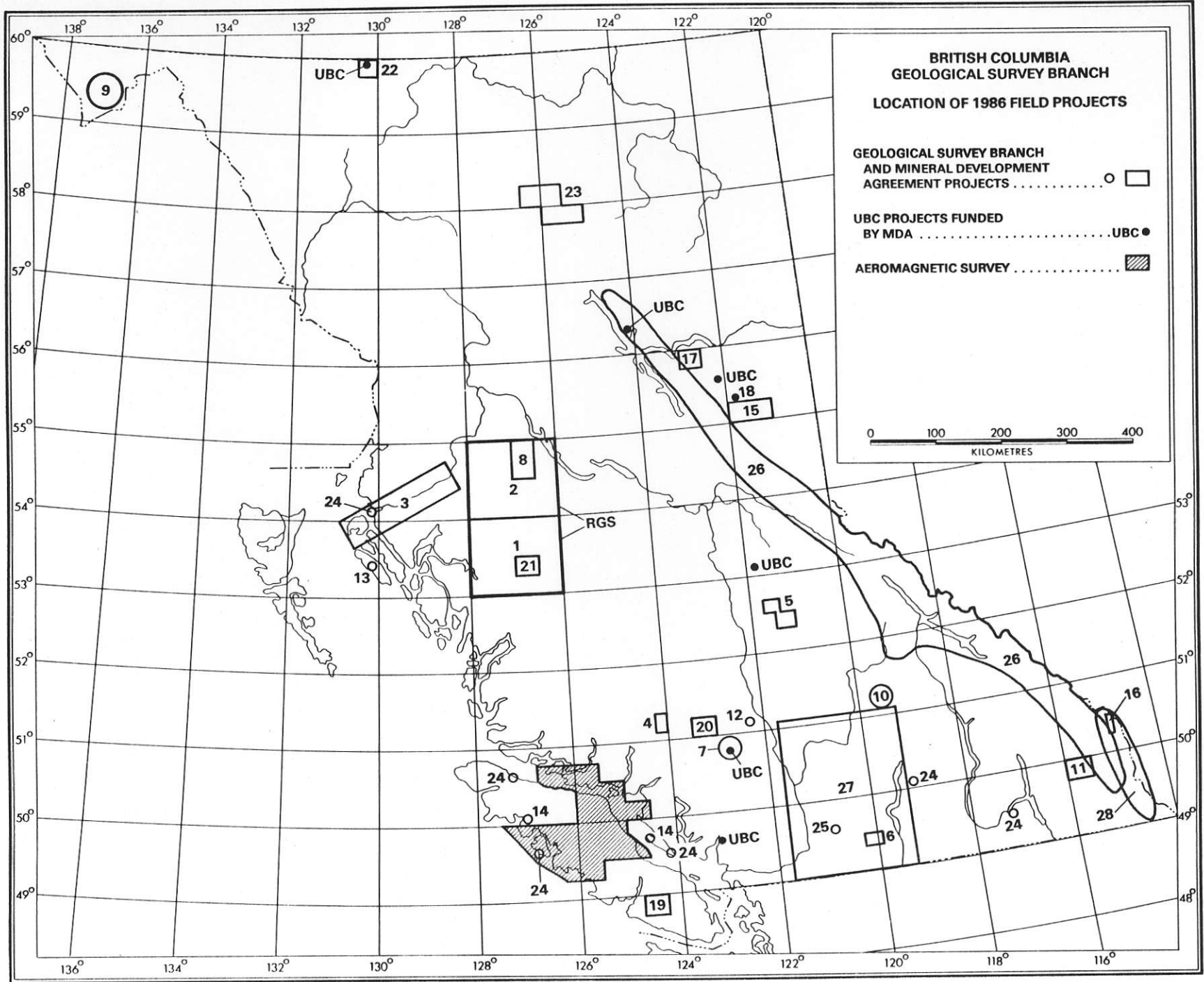
Province of
British Columbia

Ministry of
Energy, Mines and
Petroleum Resources

GEOLOGICAL SURVEY BRANCH

1986-87 PROJECT INVENTORY

May, 1986



**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Mineral Deposits & Regional Mapping
Category: **Metallogenic Mapping**

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
G1304	G. McLaren	Mineral Potential Evaluation of the Chilko-Taseko Lakes Area	To conduct 1:50,000 geological mapping and silt geochemistry survey to evaluate mineral potential and to stimulate exploration by industry of any areas that warrant further detailed examination. Studies are undertaken prior to lands being alienated from exploration and mining.	Chilko Taseko Lakes	63	\$51,700 (M)
G1317	T. Schroeter	Southern B.C. Gold Studies	To investigate the economic geology, metallogeny and mineral potential of precious metals bearing deposits in southern B.C. To understand the nature and controls of known mineralization, to classify the deposits, to assess the reserves, and to outline other areas for similar mineralization.	Southern B.C.	45	\$25,000 (M)
G1318	H.P. Wilton	Gold Metallogeny of Vancouver and Texada Islands	To examine and map several precious metal deposits in the following areas of south-western B.C.: Alberni Inlet, Kennedy River, Tofino, Flores Island, Lawn Point and Texada Island. The focus of the study is to establish an age of mineralization and examine a possible relationship to Tertiary age.	Vancouver Island, Texada Island	21	\$5,500 (M)

Metallogenic Mapping

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G1320	D. Lefebure	Regional Metallogenic Studies - Northwestern B.C.	To investigate the economic geology, metallogeny and mineral exploration potential of precious metals bearing deposits in northwestern B.C. To understand the nature and controls of known mineralization, to classify the deposits, to assess the reserves, and to outline other favourable areas for similar mineralization.	NW B.C.	45	\$16,700 (M)
G1322	A. Panteleyev	Quesnel Mineral Belt - Geological Mapping & Mineral Potential Study	1:50,000 scale geological mapping project to study the geological setting of mineral deposits in the Quesnel mineral belt of the 'Quesnel Terrane'. The focus for recent exploration is for gold and copper-gold deposits. Mapping in 1986 is intended to define stratigraphy in the main mineralized portion of the central Quesnel Terrane.	Quesnel	70	\$97,200 (M)
G1323	G. Ray	Hedley Gold Project - Mapping, Geochemical, and Mineral Potential Study	1:20,000 scale geological mapping of a 350 square kilometre area. The mapping centres around Hedley and includes numerous former gold producers: Nickel Plate, Hedley Mascot, Canty, French and Goodhope mines.	Hedley	90	\$93,200 (M)
G1324	C. Leitch (UBC - contract)	Geology and Genesis of the Bralorne - Pioneer Au Vein System, Bridge River Area, SW B.C.	Detailed geological mapping of the Bralorne-Pioneer deposit augmented by petrographic, chemical, fluid-inclusion, and isotopic analyses.	Bridge River Area	60	\$13,000 (M)

Metallogenic Mapping

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G1326	D. MacIntyre	Babine Range Metallogenic Mapping Project	To conduct 1:10,000 scale mapping in the Dome Mountain area in areas hosting newly discovered Au-Ag veins. The surrounding areas will be mapped at 1:25,000 and 1:50,000 scales in 1987 and 1988.	Babine	30	\$29,850 (M)
G1324	D. Reddy (UBC Contract)	Geology of the Indian River Extension of the Britannia Volcanogenic Belt.	To conduct detailed mapping in the Furry Creek area to determine stratigraphy structure, lithogeochemistry and setting of known volcanogenic, vein and porphyry type mineral deposits.	Southwest B.C.	90	\$13,000 (M)
G1324	J. Bradford (UBC Contract)	Detailed geology of the Silver Creek Massive Sulphide Deposit, Midway area.	To conduct detailed mapping fluid inclusion and stable isotope studies of this newly recognized in B.C. manto-type deposit.	N. B.C.	20	\$ 2,000 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87

Section: Mineral Deposits & Regional Mapping

Category: Mineral Deposits and Metallogeny

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
A1	D. MacIntyre	Metallogeny of the Alexander Terrane Northwestern B.C.	To study mineral deposits in the Alexander terrane. In 1986 the Windy Craggy deposit will be examined.	Alexander Terrane	15	\$9,375. (A)
A2	T. Hoy/ G. Carter	Purcell Supergroup Fernie W 1/2 - mineral deposits, tectonics and stratigraphy.	Regional 1:50 000 scale geological mapping and detailed mineral deposit mapping of the Skookumchuk map sheet 82G/13.	Fernie	60	\$20,000 (A)
A3	B.N. Church	Geology and Mineralization, Bridge River Mining Camp, NTS 920	To study the structural and stratigraphic setting, ore controls and camp-scale metallogeny of the Bridge River gold camp.	Bridge River	60	\$20,800 (A)
A4	T. Hoy	Regional Metallogeny of the Kootenay River Map-area, NTS 82	To compile a metallogenic map of NTS 82 at 1.1 million scale. In 1986 the mineral deposits in the Adams Plateau area will be studied.	Kootenay River	45	\$30,600 (A)

Mineral Deposits & Metallogeny

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A5	D. Alldrick	Geology and Mineral Deposits of the Salmon River Area near Stewart, B.C.	To complete research and publish results of Salmon River project. Study includes an examination of the Jurassic volcanic succession in the Salmon River area and contained mineral deposits.	Stewart	(write up phase)	-
A6	D. Alldrick	Alice Arm and Anyox Areas: Mineral Deposits & Geology	To complete research and publish results of Alice Arm and Anyox project. Study includes examination of the mineralization, structural and stratigraphic settings of Alice Arm silver and Anyox massive sulphide deposits.	Alice Arm	(write up phase)	-

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Mineral Deposits and Regional Mapping
Category: **Regional 1:50,000 Mapping**

Project	Principal Researcher	Project Title	Project Statement	Area	No. of Days	\$ Budget M = MDA A = 'A' Base
G1400	K. McClay (U. of London)	Gataga Project	The purpose of this project is to produce three 1:50,000 scale regional maps of the area which hosts the Driftpile Creek Fe-Zn-Pb-Ba deposit in northeastern B.C.	Gataga	84	\$20,000 (M) (partial support)
G1401	N. Massey	Sicker Regional Mapping Project	To produce two geologic maps and metallogenic overlays at 1:50,000 scale showing known or inferred mineral potential. The project is based over two years with the Cowichan sheet (92C/16) to be completed in 1986.	Mt. Sicker	90	\$198,000 (M)
G1402	K. Glover	Taseko Regional Mapping	To produce four geologic maps and metallogenic overlays at 1:50,000 scale. This project will take four years to complete beginning with the Warner Pass map sheet (920/3) in 1986.	Taseko & Bridge River	90	\$176,000 (M)

Regional 1:50,000 Mapping

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G1403	L. Diakow	Whitesail Regional Mapping	To produce two geologic maps and metallogenic overlays at 1:50,000 scale. The project is based over two years beginning with the Chikamin Mountain map sheet (93 E/6).	Whitesail Lake	90	\$167,800 (M)
G1404	J. Nelson	Midway Regional Mapping	To produce four geologic maps and metallogenic overlays at 1:50,000 scale. The project will take four years beginning with the Tootsee Lake map sheet (1040/16) in 1986.	Midway	90	\$180,000 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Coal Resources
Category: Coal Studies

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
A	D. Grieve	Coal Seam Correlation, south half of Elk Valley Coalfield, S.E. B.C.	This large project includes a series of minor projects with varied co-workers. - Detailed analysis of core and geophysical logs to establish correlations for the Imperial, Ewin and Banner seams over a strike length of some 17 km. - Investigation of vertical rock gradients from seven core holes and compare these to lateral rock variations.	Elk Valley		- (A)
A	W. Kilby	Altered volcanic ash marker horizons in the coal bearing strata of N.E. B.C.	To correlate tonstein and bentonite beds in the lower cretaceous Gething to Hulcross formations with examination of their stratigraphic positions, petrographic textures, mineral and chemical characteristics and ages.	N.E.Coalfield	5	\$5,000 (A)
A	W. Kilby	Character of vitrinite reflectance	To investigate the occurrence of non-uniaxial vitrinite reflectance indicatrixes in B.C. coals, to determine methodology for the investigation of this characteristic and study the implications to common coal rank measurements and quality relationships.	B.C.	-	- (A)

Coal Studies

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A	A. Legun	Geology of the Butler Ridge Area (NTS 94 B/1)	1:50,000 compilation mapping of the Butler Ridge area. Large areas of the map sheet are underlain by Gething Formation coal measures.	N.E.Coalfield	5	\$1,000 (A)
A	D. Grieve, W. Kilby	Geology and Coal Resources of the Dominion Coal Block	To summarize structural, stratigraphic and coal quality information, supplemented by minor fieldwork. Computer-based deposit models of 3 areas within the block have been generated to calculate resource tonnages and overburden ratios.	S.E.Coalfield	-	- (A)
A	W. Johnson	Hat Creek Coal Liquefaction	To evaluate the potential for for the liquefaction of Hat Creek coal subsequent to leaching using oil agglomeration techniques.	-	-	\$12,500 (A)
A	D. Grieve	Coal Rank Distribution in the Flathead Area, Southeastern B.C.	Determine coalification patterns in the area with the intention of interpreting the timing of coalification with respect to major structural events.	-	-	-

Coal Studies

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A	D. Grieve, N.C. Ollerenshaw	Stratigraphy of the Elk Formation in Crownsnest Coalfield	To produce measured sections, correlation diagrams and descriptions of focus for the Elk formation.	-	-	-
A	D. Grieve, F. Goodarzi (GSC)	Tonsteins in the Mist Mountain Formation, S.E. B.C.	To summarize the occurrence, distribution, chemistry, mineralogy and petrology of tonstein samples collected in southeast B.C.	-	-	-
A	J. Koo	Geoscientific Evaluation of the Klappan Coal Measures.	To document the stratigraphy, depositional environments, structure, coal seam characteristics and reserve potential of the Klappan coal measures. To provide coal deposit models for exploration and development in the Klappan coal measures.	Mt. Klappan	(write- up)	-
A	J. Koo	Geoscientific Evaluation of the Telkwa coal measures.	To document the stratigraphy, depositional environments, structure, coal seam characteristics and reserve potential of the Telkwa coal measures. To provide coal deposit models for exploration and development in the Telkwa coal measures.	Telkwa	(write- up)	-

Coal Studies

G1315	D. Grieve	Geology & Coal Resources of the Elk Valley Coalfield - north half	To complete geological map coverage of the Elk Valley Coalfield at 1:10,000 scale. The area adjoins to the north areas previously covered (Preliminary Maps 51 and 60).	Elk Valley Coalfield	60	\$9,400 (M)
G1316	A. Legun	Analysis of Coal Thickness Trends in the Gething Formation	To study total coal thickness trends in the Gething Formation. Data from coal and petroleum drill holes will be collected and isopached and a depositional model of the Upper Gething formation will be proposed.	N.E. B.C.	60	\$9,900 (M)
G1325	A. Legun	Geologic Compilation of the Carbon Creek Map-sheet	To complete a 1:50,000 scale compilation map of the Carbon Creek area which includes two major coal-bearing synclines. Fieldwork will focus on the west margin of the Carbon Creek syncline.	Carbon Creek	15	\$3,388 (M)
G1406	W. Kilby	Peace River Coalfield - Compilation and Mapping Study	The purpose of this project is to compile available data, field verify and map the Peace River Coalfield at a scale of 1:50,000. The mapping will concentrate on the coal bearing Jurassic and Cretaceous formations within the area from Peace River to the Alberta border. The 1986 map sheets 93P 3, 4 are addressed which include the Bullmoose and Quintette mines.	Peace River	45	\$12,000 (A)
G1324	J. Broatch (UBC Contract)	Palynological Zonation and Correlation of the Peace River Coalfield	To establish the age of the Minnes Gething, Moosebar and Gatis Formation using palynomorphs. To establish index forms for correlation purposes from Belcourt in the south to Burnt River and north to Carbon Creek.	Peace River	30	\$4,500 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Coal Resources
Category: Coal Database

Project	Principal Researcher	Project Title	Project Statement	Area	No. of Days	\$ Budget M = MDA A = 'A' Base
A	C. Kenyon	Coalfile - Information System	Coalfile is a computer-based data storage and retrieval system for coal exploration information. It provides an index to data contained in coal assessment reports. Updating and maintenance of the file is ongoing.	-	-	\$10,000 (A)
A	A. Legun	Geologic Index of Coal Core at the Charlie Lake core library.	Geologic formations intersected by each core borehole will be recorded. Borehole listings will be created for each formation.	-	-	\$4,000 (A)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Resource Data & Analysis
Category: Industrial Minerals

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA
G1600	G. White	Dimension Stone Surveys	During the late 1800's and 1900's British Columbia produced a variety of quality building stones. Today all dimension stone is imported. In this study old quarries and potential new sites will be documented, mapped, sampled, tested, and evaluated to determine their potential for development.	B.C.	40	\$8,200 (M)
G1601	J. Pell	Economic Potential of Carbonatite and Kimberlite-hosted Deposits	To map and evaluate carbonatites and diatremes along Rocky Mountain Trench to establish favourable geological environments for carbonatite-hosted deposits of rare earth elements (REE) tantalum (Ta), niobium (Nb), apatite, zircon and vermiculite and for kimberlite-hosted deposits of diamonds.	Eastern B.C.	60	\$37,800 (M)
G1602	G. White	Assessment of Olivine Deposits in B.C.	Although olivine has long been known to occur in the dunites of the Tulameen ultramafic complex, there is no production history in B.C. for this mineral. The complex will be studied to determine if 1) dunite occurs in selectively mineable bodies, 2) serpentinized zones containing olivine are of mineable size, 3) olivine in dunite will meet commercial specifications for foundry sand and refractory applications.	Southern B.C.	20	\$9,700 (M)

Industrial Minerals

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G1603	Geotex Consultants (contract)	Evaluation of Industrial Mineral Potential of Tertiary Basins	A variety of clays, diatomites and shales are known to occur in the U. Cret-Tert sedimentary- volcanic basins. The project will identify favourable areas for deposits of kaolin fireclay, ceramic clays, bentonite, zeolites, pozzolanic materials diatomite, germanium and beryllium.	S. Central B.C.	50	\$49,000 (M)
G1604	S. Butrenchuck	Evaluation of Phosphate Resource Potential in B.C.	Phosphatic horizons are known in Paleozoic and Mesozoic rocks of the Canadian Rocky Mountains and detailed study is needed of the most promising stratigraphic horizons with the best thicknesses and best mineral economics. The project will initially focus on the Fernie area.	Fernie	80	\$44,600 (M)
G1605	U. Mader (UBC contract)	The Origin of the Aley Carbonatite B.C.	The Aley Carbonatite, being explored by Cominco, contains concentrates of the rare-earth-bearing minerals burbankite, calcivancylite, fersmite, and pyrochlore. This project offers support to a Ph.D student for fieldwork and laboratory analysis.	Williston Lake area	60	\$5,500 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Resource Data and Analysis
Category: Geoscience Databases

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
G2101	G. McArthur, A. Wilcox	MINFILE	This project will update existing occurrence descriptions and initiate new descriptions for occurrences not previously recorded in MINFILE.	-	-	\$140,400 (M)
G2103	A. Sinclair (UBC - contract)	LITHCHEM	This project will continue a project to construct a computer-based file of whole rock chemical analyses for volcanic rocks in B.C. Initial evaluation of this data will emphasize alteration and relation to mineral deposits.	-	-	\$9,600 (M)
G1324	C. Godwin (UBC - contract)	Catalogue of Lead Isotope Analyses from Canadian Cordillera	To complete a file of lead isotope analyses for the Cordillera and to compile a location map. File to be published as a paper.	-	-	\$6,000 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
 Section: Analytical Sciences
 Category: **Regional Geochemical Surveys**

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
G1101	W. Johnson	Regional Geochemical Surveys 93L/E	To sample two 1:250,000 map sheets by stream & lake sediment surveys done to National Geochemical Survey standards.	Whitesail Smithers	60	\$150,000 (M) \$100,000 (A)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
Section: Mineral Deposits & Regional Mapping
Category: **Geochemical Studies**

Project #	Principal Researcher	Project Title	Project Statement	Area	No. of Days Fieldwork	\$ Budget M = MDA A = 'A' Base
G1201	P. Matysek	Analysis of Computer-Assisted Statistical and Graphical Techniques for the Interpretation of Reg. Geoc. Survey Data	A variety of computer-assisted graphical statistical methods will be examined to determine techniques which best contrasts the observed geochemical variation. The intent is to provide interpretive maps that draw attention to areas in which more detailed follow-up surveys should be carried out.	B.C.	0	\$15,000 (M)
G1202	P. Matysek	Heavy Mineral Sampling of the Whitesail Lake (93E) and Smithers (93L) Map Sheet Areas	To identify areas favourable for Au exploration, and to define prospecting methods for Au utilizing the various heavy media and analytical techniques.	Whitesail Smithers	42	\$35,000 (M)
G1203	P. Matysek	Orientation Surveys: Coast Mtn. Range, Precursor to Regional Geochemical Survey Programs	Orientation studies designed to test the response of geochemical methods of typical geological and environmental influences within the Coast Mountain Range are required. A series of orientation surveys across the CMR will be conducted over various types of mineralizations characteristic of the Coast Plutonic Complex.	Coast Mountain Range	35	\$25,000 (M)

**GEOLOGICAL SURVEY BRANCH
Project Inventory**

Year: 1986-87
 Section: Mineral Deposits and Regional Mapping
 Category: **Aeromagnetic Surveys**

Project	Principal Researcher	Project Title	Project Statement	Area	No. of Days	\$ Budget M = MDA A = 'A' Base
	G.S.C.	Regional Aeromagnetic Surveys	To continue the aeromagnetic survey program in B.C. In 1986-87 aeromagnetic coverage of Vancouver Island will be completed.	Van. Isl.		\$250,000 (M)