#12743
84-#740
9185

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
PROSPECTING	$4,800.00

AUTHOR(S) John Decker, Peter Howie, Robert Beaupre (Graduate Prospector) SIGNATURE(S) per

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED Sept. 18,1984 YEAR OF WORK 83/84

PROPERTY NAME(S) HELGA #1, FRS #1

COMMODITIES PRESENT Copper, Gold, Silver

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION Victoria NTS 92C9E

LATITUDE 48° 40' LONGITUDE 124° 9'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

FRS #1
HELGA #1

OWNER(S)

(1) BEAU PRE EXPLORATIONS LTD. (2)

MAILING ADDRESS

1027 PANDORA STREET,
VICTORIA, B.C. V8V 3P6

OPERATOR(S) (that is, Company paying for the work)

(1) AS ABOVE (2)

MAILING ADDRESS

AS ABOVE

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

CHALCOPYRITE, MAGNETITE (WITH SOME GOLD, SILVER VALUES) MINERALIZATION IN VEINS AND DISSEMINATIONS ALONG FRACTURES AND CONTACTS OF LIMESTONE WITH GRANODIORITE INTRUSIVES OF POSSIBLE JURASSIC AGE.

REFERENCES TO PREVIOUS WORK

(over)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area)			
Ground			
Photo			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil	18	HELGA 1 (FRS 1)	200.00
Silt			
Rock	3	HELGA 1 (FRS 1)	100.00
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralogic			
Metallurgic			
PROSPECTING (scale, area)	5000 metres by 2000 meters	HELGA #1, FRS #1	4,500.00
PREPARATORY/PHYSICAL			
Legal surveys (scale, area)			
Topographic (scale, area)			
Photogrammetric (scale, area)			
Line/grid (kilometres)			
Road, local access (kilometres)			
Trench (metres)			
Underground (metres)			
		TOTAL COST	$4,800.00

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted ..... Date	Rept. No.			Information Class

BEAU PRE EXPLORATIONS LTD.
1027 PANDORA STREET
VICTORIA, B.C. V8V 3P6
PHONE 382-1455

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84-#740

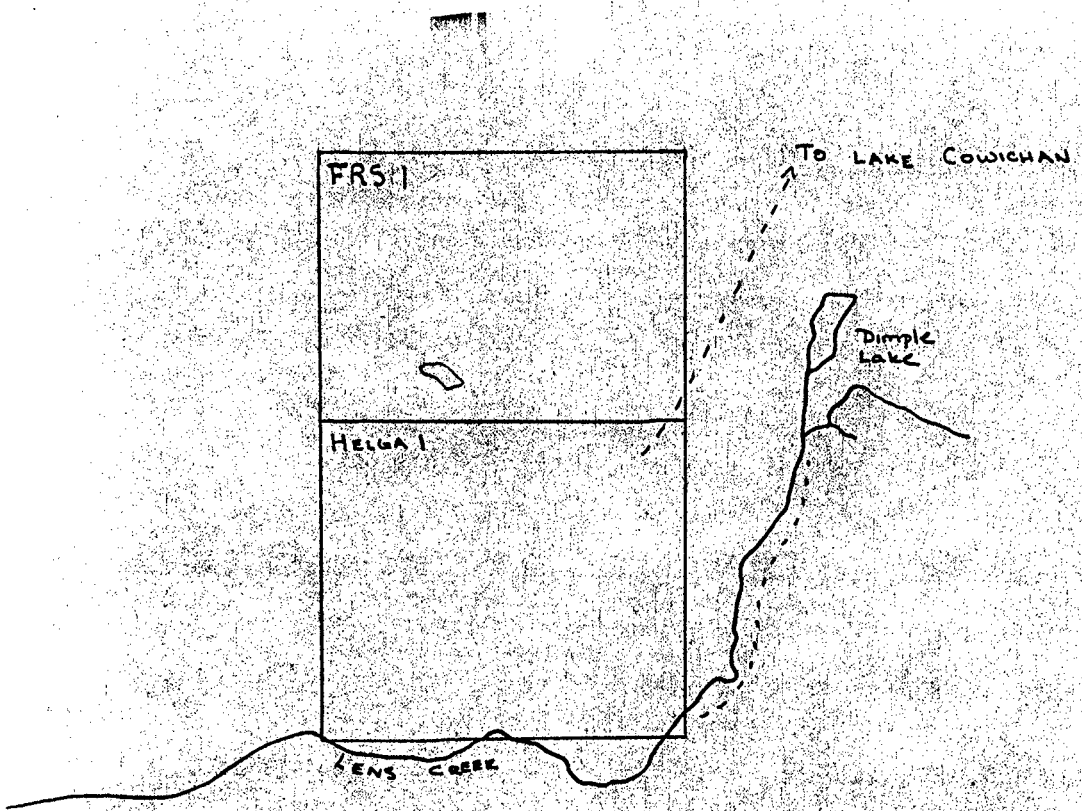
FROST (DIMPLE) LAKE

SURVEY

BEAU PRE-EXPLORATIONS LTD.

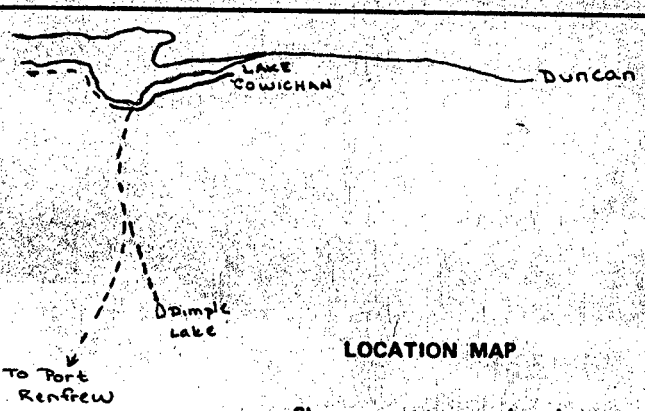
VICTORIA, B.C.

JOHN DECKER



MINING AND RECLAMATION PLAN – PLACER OPERATION

Indicate P.M.L. boundary, watercourse, operation, road, direction and distance to nearest town, and scale.



LOCATION MAP

Show nearest town and road.

PREFACE

After spending some two and a half months geologically surveying and mapping the area radiating three miles from all sides of Frost Lake, I arrived back home and started studying reports and results of geological surveys and opinions of a number of well-known geological and other learned men concerned with geology and evolution history of Vancouver Island and surrounding area.

I was extremely pleased to find that all my own field notes, maps and diagrams coincided almost verbatim with distinguished men in this field.

Two reasons for slight differences in our final decisions of what happened is that most of these learned men had been working on an overall project of the total of Vancouver Island or all of British Columbia whereas I was only working in a small area, a maximum of forty square miles.

In this small area I was able to be much more concise concerning that area. Also, the reports of these other men, being professionals, had to be in a fairly scientific manner to be understood by other men of similar training.

A lot of this scientific jargon is lost to the layman as well as many people who have spent their lives in the bush as prosectors. I have tried to convey my information to the latter in a language they can understand.

I wish to thank the geologists who took time to go into the field with me to verify or correct my "finds" so that this report would be as authentic as possible. I also wish to express my appreciation to various groups who may have not realized it but were of great help, namely:

Department of Mines, Revenue Dept.
" " " Applied Geology Dept.
" " " Library
" " " Assessment Recording Branch
" " " Gold Commissioners Office
B.C. Govovernment Air Photo and Mapping Division
Geological Society of Canada, Vancouver

For your information, whoever you may be, this writer is crowding three score and ten years of life and has spent most of it making a living in "the bush". For the past thirty years, very seriously at prospecting, and as party chief in charge of geological surveys for quite a few years for major mining companies.

Many years ago my apprenticeship was served summer and winter in such places as Pine Point, staking twelve hours a day in 60 degrees below zero weather and lower, sleeping on the snow, everything I owned in my packboard, a pair of 60" snowshoes and rifle, alone for a month to six weeks at a time. I have covered on foot and by plane much of the North West Territories, the southern half of the Yukon and damn near all of British Columbia.

In many ways I have won and lost many battles and have run into some very fine men, the guys you could call "men". I will keep going until that "Gentleman upstairs" calls, then maybe strangely to many, like an old outcast billy goat, or an old grizzly or an old wolverine, somewhere in the bush I will curl up and go to sleep.

This will not come for many years as I still have many places to go and see as yet. When I am finished with the north country I would like to look at the Pyrenne Mountains, the area around the Red Sea, Peru, Australia and Siberia, all geologically.

To all old time prospectors, may you find miles and miles of alteration, God bless you all, never give up.

JOHNNY DECKER

P.O. Box 2, R.R. #1
Cobble Hill, B.C.
January, 1984

UNDERSTANDING VANCOUVER ISLAND GEOLOGY

Many hundreds of millions of years ago the shifting of the tetonic plates in the now western hemisphere caused eruptive forces to start building up and raising the floor of the now known Pacific Ocean.

In this report what comes first is immaterial as our work need only commence with the start of the Karmutson Volcanics, some 350 - 375 million years ago.

All this volcanic activity occurred many hundreds of feet under the surface of the ocean of that time. This eruptive activity built up a bed of volcanic material up to 19,000 feet deep. This bed is now known as the Karmutson Volcanics.

As the Karmutson forces diminished, this mass of debris was still some 2,900 ft. below the surface of the ocean.

The Karmutson Volcanics extended the full length of Vancouver Island and from just west of the present island and to the east across the gulf of Georgia to the mainland.

This large bed of volcanic material was now split into many factions by a new intrusive force which conveyed large masses of quartz monzonate making materials. This latter material settled into such forms as veins, dykes, sills and large irregular circular masses as pools.

A few million years later after all this had cooled, the area was again split by intrusives which would form quartz diorite. There was not too much of this material and it generally only filled a few faults or fractures it in itself had caused by forcing its way to the surface of preceeding volcanic formations. All this activity was still deep under the surface of the ocean. This quartz diorite formed dykes and veins 5 to 50 ft. wide and of some considerable distance in length.

After the quartz diorite had cooled, the elements, which were to create the Quatsino Limestone, were starting to deposit their sediments on top of the Karmutsons, Quartz Monzonate and Quartz Diorite bodies already formed.

This latter summarization is arrived at by the fact that in several areas a direct contact has been found where Quatsino limestone is in direct contact with quartz diorite with no indication of any alteration whatsoever which would mean that the diorite had to be cooled prior to the limestone coming into contact with it.

The Quatsino limestone sediments built up into beds 950 feet deep and were a deposit of sediments in a very large underwater basin. This occurred about 125 - 140 million years ago.

Whatever the cause for these very limeousy sediments to be present or deposited in this area is apparently not quite certain by well-known geologists. There is a strong belief that a major river with headwater in the Canadian Shield of northern Ontario flowed westward across Manitoba, Saskat-

chewan and Alberta, emptying into the ocean around Revelstoke or just west of this parallel of longitude.

It was not until about 30 million years after this before the Rocky Mountains started to lift out of the earth and form.

At this time the earth was inhabited with a good population of turtles, insects, crabs, starfish, bivalves and sharks and also with considerable plant life comprising mainly conifers, ginkgos and ferns.

We must remember that at this time the shores of our now known Pacific Ocean north and south went inland into British Columbia as far east as the present towns of Castlegar, Revelstoke, Quesnel, Prince George, Hudson Hope and north.

Thus some geologists feel that this great river flowing across the prairies from sources possibly in northern Ontario brought these lime sediments. Others feel that the sediments came from near the equator, caused by a shifting of the tetonic plates northward.

Regardless of these theories the lime sediments arrived and then stopped coming.

Now a black, calcareous sediment commenced drifting into the area and settled on top of the limestone. This is now known as the Parson's Bay formation.

The Parsons's Bay formation was a fine sediment which formed as a thin banded black calcareous shale in sections up to one inch thick with (where this writer observed) laminations 1/16 to 1/4 inch thick of sandstone.

It is felt by many in the industry that these sediments in their origin contained placer gold and now these shales are sought by many to examine their potential values in this metal.

It is possible that the gold content of the Parson's Bay formation came from the Canadian Shield as placer-bearing sediments and eventually these sediments reverted back to rock through the normal process of evolution.

It may be noted that many of the gold mines in Ontario and South Africa are considered to be of some type of origin, so why not hard rock gold. outcroppings in B.C.?

Alberta, Saskatchewan and Manitoba at this time was a vast swamp area through which this river flowed. The gold mines of Ontario could be a recementing of glacier alluvials of this river, also the potash deposits of Saskatchewan could be a recementing of sedimentary deposits of this material.

This swamp area would also undoubtedly have some bearing in the oil and gas deposits of Alberta and Saskatchewan and the coal deposits for 100 miles on each side of the borders of British Columbia and Alberta.

The **QUESTION** is: what other deposits did this river with its many channels through the swamp leave? What is Canada missing as other major natural resources?

This is all somewhat difficult to mentally digest, but it is the accepted theory that our continents built up through evolution. Although it seems hard to believe, the opinion is that if you were a resident of Revelstoke, Lake Louise or Crow's Nest Pass some 125 - 135 million years ago, you could have gone a couple of hundred feet from your burrow under a tree and gathered a big mess of crabs, clams or oysters for supper. Mind you, you would have eaten them raw like a dinosaur, lizard or shark because you didn't know what fire was. And then of course it would be difficult because you didn't start to inhabit the earth until approximately 120 -121 million years later.

Other eruptive forces took over and now the Parson's Bay beds became covered by the Bonanza Volcanics. These are usually very easily recognized by their range of colors; violet, purple, reds and all inbetween colors. Where seen by the writer, they were generally fine grained and sometimes in form of conglomerate.

It was this eruptive force which finally broke the surface of the ocean, that Vancouver Island finally started to show some 80 - 100 million years ago.

It must be remembered we finally had land and we did not have land. We did not have Vancouver Island as we know it now, but only a random scattering of small volcanic "blowholes", possibly from 1/4 to 50 acres in size, with large areas of water inbetween, and some of this water was many hundreds of feet deep.

In former volcanic activities the eruptive forces were in close proximity and we might say the whole area was a seething underwater volcano.

Now at a later date some 45 - 55 million years ago, the eruptive forces were not so widespread or violent in their nature. These forces formed more veins, dykes, sills and whatever, of again quartz diorite.

This writer found that these latter bodies of quartz diorite cut through all other materials aforementioned in this report. If it did not dissect a previous element then it badly disrupted or fractured it by proximity to the area.

These later quartz diorite bodies are quite distinguishable from other quartz diorite bodies of preceding age in that not only do they cut through other bodies but they are lighter in colour, a solid mass in their entire area with no fracturing, very hard and dense.

An example is that north of Frost Lake in a body of Quatsino limestone some one mile long, one half mile wide and from altimeter readings, some 800 feet deep visible.

This body lays on strike of approximately NE by SW with a dip of about 25 degrees to the north. It is one mile north of Frost Lake. On its northern (centre) and eastern ends it is a very solid, undisturbed bed with very solid, distinct bedding planes.

On its western end, one half mile NW of Frost Lake it has been badly fractured and is in individual limestone blocks from one to one hundred tons

in size. The farther west one goes the more separation there is between the blocks and instead of a few inches it becomes many feet in distance.

In this same area one can find angular blocks of Parson's Bay formation and Bonanza volcanics intermingled with the Quatsino limestones to a depth of 700 feet vertically and recemented by Karmutson debris.

There is a large slab of limestone laying on a bearing of SE by NW approximately 350 feet wide, 1500 feet long SE by NW and visible 500 feet deep. It is approximately one and one-half miles SWS of Frost Lake. From comparing its strike, dip and bedding planes to the other major block of limestone north of Frost Lake, I would say this large slab is a pennant which broke free from the main body, rolled down and became completely embodied by Karmutson materials.

Three thousand feet west of Frost Lake is an area of great shattering and fracturing. The only materials intact are a swarm of quartz diorite veins five to twenty feet wide on an E by W strike and generally standing vertical. I feel that these last quartz diorite intrusions completed the fracturing of all other formations.

We must remember that all this happened under water. Had it occured above the surface, prevailing winds would have drifted most of the smaller particles away. Underwater the debris would have been a mud.

Most of this mud would have come from disintigration of the Karmutson which formed the larger part of all materials and also because of its constituency which would cause it to break up or semi-dissolve more readily.

The large angular blocks of Quatsino, Parson's Bay and Bonanza rocks tumbled in amongst one another then the Karmutson mud filled the gaps, recementing the whole thing together as a giant brecca.

It might also be mentioned that the original quartz monzonates were also very highly fractured in all areas. They have become fairly well oxidized, more oxidized than the elements composing their contents would warrant, i.e., biotite, pyrite, hornblend, etc. It is felt that this oxidization is really more of a seepage by hydrothermal means over thousands of years by iron elements, magnatite, hemitite, puritite and illemite, of which the area abounds.

In this area radiating over three miles from Frost Lake the Karmutsons, Quatsinos, Parson's Bay and Bonanzas by themselves appear quite barren of mineralization. All types of intrusives have been found to contain mineralization of chalco pyrite alone in amounts of .5 to 5% very equally and nicely disseminated.

It is felt that many valuable minerals; Cu, Au, Ag, Zn, etc., were brought to the surface by all granetic intrusives and then transferred to other host rocks, mainly Karmutsons, which more readily fractured and made receptive areas for rich deposits of valuable elements.

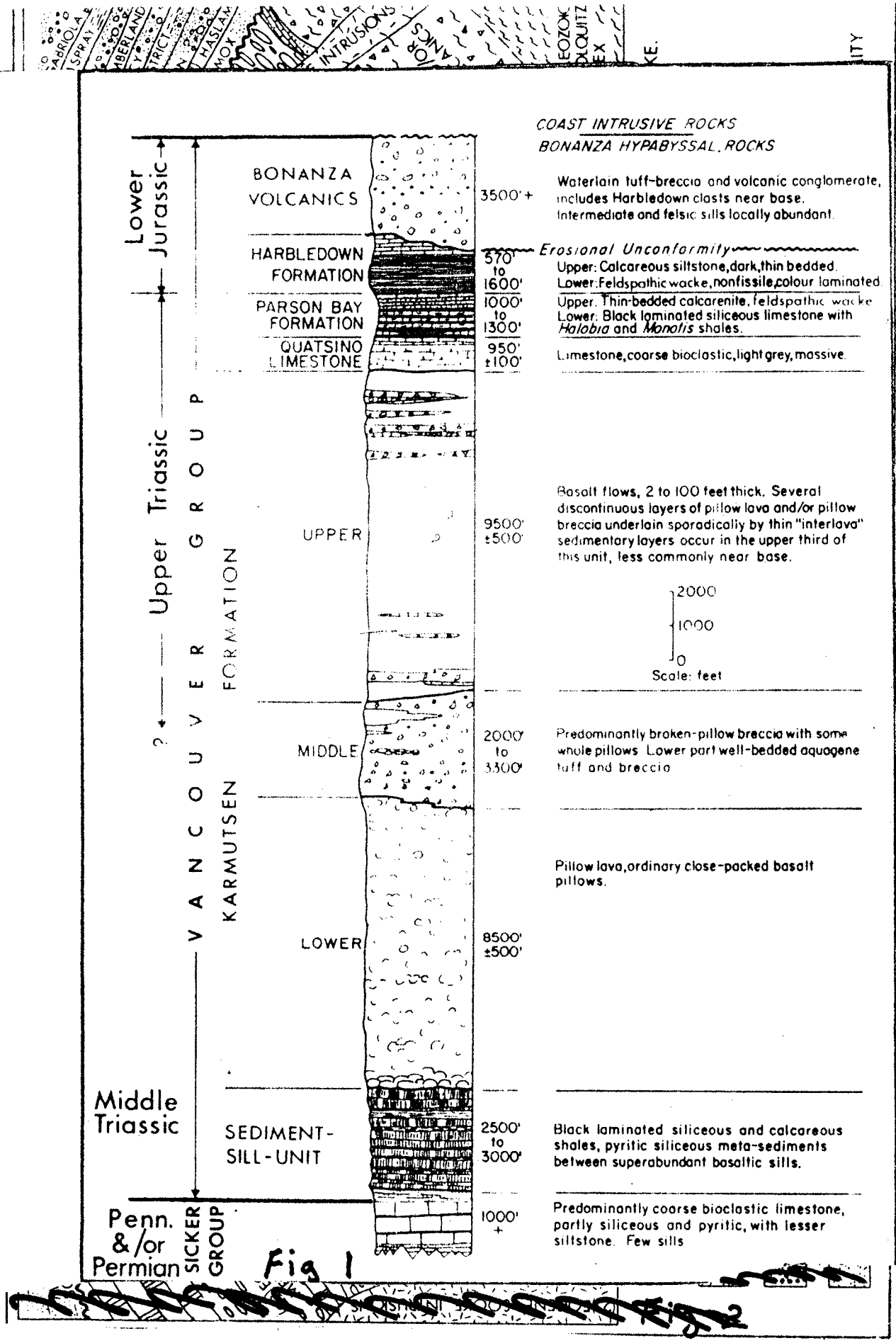

COAST INTRUSIVE ROCKS
BONANZA HYPABYSSAL ROCKS
Lower Jurassic
Upper Triassic
?
VANCOUVER GROUP
KARMUTSEN FORMATION
BONANZA VOLCANICS
3500'+
Waterlain tuff-breccia and volcanic conglomerate, includes Harbledown clasts near base. Intermediate and felsic sills locally abundant.
Erosional Unconformity
HARBLEDOWN FORMATION
570' to 1600'
Upper: Calcareous siltstone, dark, thin bedded.
Lower: Feldspathic wacke, nonfissile, colour laminated.
PARSON BAY FORMATION
1000' to 1300'
Upper: Thin-bedded calcarenite, feldspathic wacke
Lower: Black laminated siliceous limestone with Halobia and Monotis shales.
QUATSINO LIMESTONE
950' ±100'
Limestone, coarse bioclastic, light grey, massive.
UPPER
9500' ±500'
Basalt flows, 2 to 100 feet thick. Several discontinuous layers of pillow lava and/or pillow breccia underlain sporadically by thin "interlava" sedimentary layers occur in the upper third of this unit, less commonly near base.
2000
1000
0
Scale: feet
MIDDLE
2000' to 3300'
Predominantly broken-pillow breccia with some whole pillows. Lower part well-bedded aquagene tuff and breccia
LOWER
8500' ±500'
Pillow lava, ordinary close-packed basalt pillows.
Middle Triassic
SEDIMENT-SILL-UNIT
2500' to 3000'
Black laminated siliceous and calcareous shales, pyritic siliceous meta-sediments between superabundant basaltic sills.
Penn. &/or Permian
SICKER GROUP
1000' +
Predominantly coarse bioclastic limestone, partly siliceous and pyritic, with lesser siltstone. Few sills

Fig 1

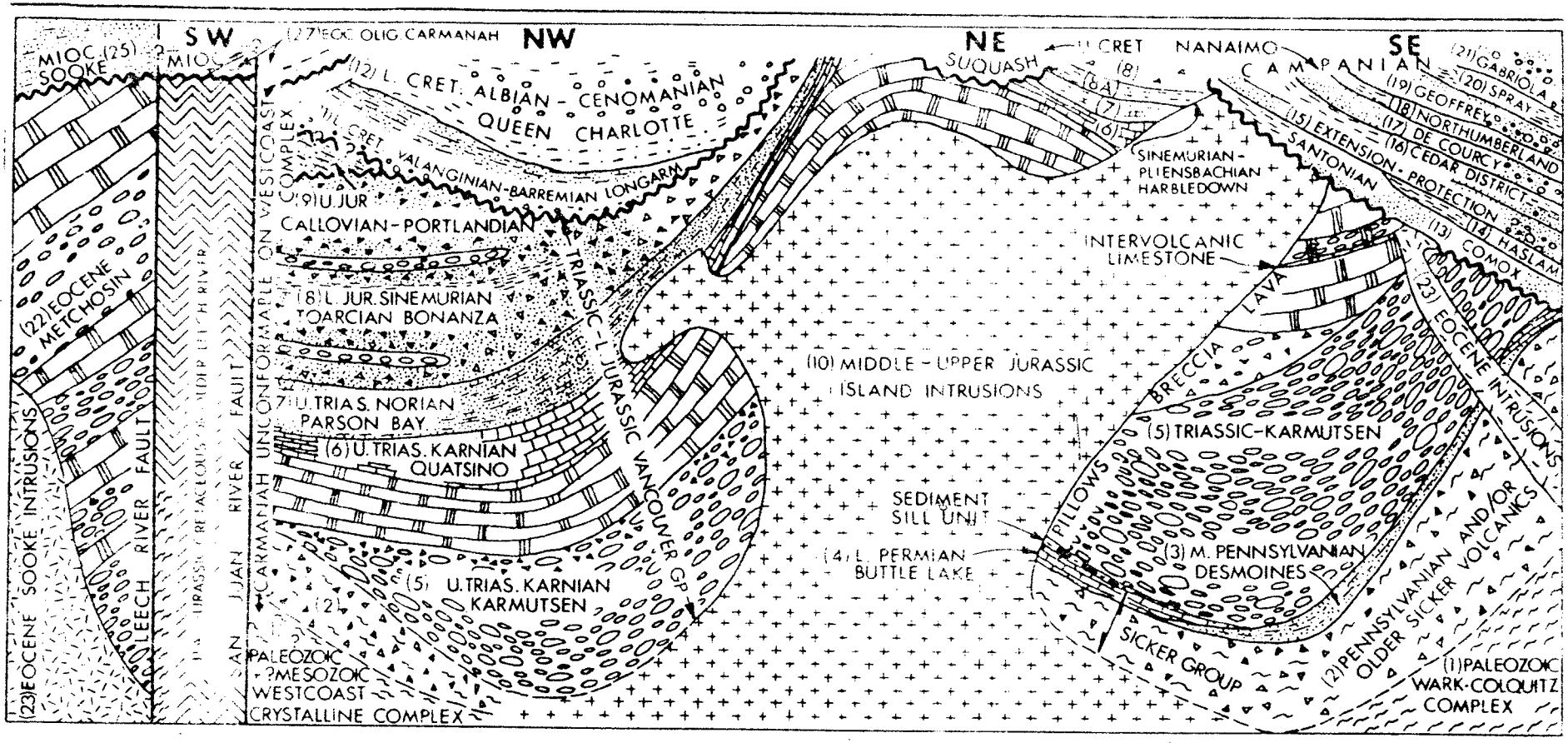

SW
NW
NE
SE
MIOC. (25) SOOKE
MIOC.
(27) EOC. OLIG. CARMANAH
(12) L. CRET. ALBIAN - CENOMANIAN QUEEN CHARLOTTE
L. CRET. VALANGINIAN-BARREMIAN LONGARM
(9) U. JUR. CALLOVIAN-PORTLANDIAN
(8) L. JUR. SINEMURIAN TOARCIAN BONANZA
(7) U. TRIAS. NORIAN PARSON BAY
(6) U. TRIAS. KARNIAN QUATSINO
(5) U. TRIAS. KARNIAN KARMUTSEN
(4) L. PERMIAN BUTTLE LAKE
(3) M. PENNSYLVANIAN DESMOINES
(2) PENNSYLVANIAN AND/OR OLDER SICKER VOLCANICS
(1) PALEOZOIC WARK-COLQUHITZ COMPLEX
PALEOZOIC ?MESOZOIC WESTCOAST CRYSTALLINE COMPLEX
CARMANAH UNCONFORMABLE ON WESTCOAST COMPLEX
TRIASSIC-JURASSIC VANCOUVER GP.
SUQUASH
NANAIMO
CAMPANIAN
SINEMURIAN-PLIENSBACHIAN HARBLEDOWN
SANTONIAN
(15) EXTENSION-PROTECTION
(14) HASLAM
(13) COMOX
(21) GABRIOLA
(20) SPRAY
(19) GEOFFREY
(18) NORTHUMBERLAND
(17) DE COURCY
(16) CEDAR DISTRICT
INTERVOLCANIC LIMESTONE
LAVA
BRECCIA
(10) MIDDLE-UPPER JURASSIC ISLAND INTRUSIONS
(5) TRIASSIC-KARMUTSEN
SEDIMENT SILL UNIT
PILLOWS
SICKER GROUP
(23) EOCENE INTRUSIONS
(22) EOCENE METCHOSIN
(23) EOCENE SOOKE INTRUSIONS
LEECH RIVER FAULT
SAN JUAN RIVER FAULT
SANDSTONE, GREYWACKE
SHALE, SILTSTONE
CONGLOMERATE
CALCAREOUS SANDSTONE, SILTSTONE
LIMESTONE
MAINLY INTERMEDIATE TO SILICIC TUFF AND VOLCANIC BRECCIA
INTERMEDIATE TO SILICIC PYROCLASTICS AND GREENSTONE
MAINLY BASALTIC FLOWS
PILLOW-BRECCIA
PILLOW-LAVA
MAINLY QUARTZ MONZONITE, GRANODIORITE
MAINLY QUARTZ DIORITE, GABBRO
SHEARFOLDED GREYWACKE, ARGILLITE, PHYLLITE
GNEISS, SCHIST
ARGILLITE, DIABASE
ANGULAR UNCONFORMITY

Fig 2

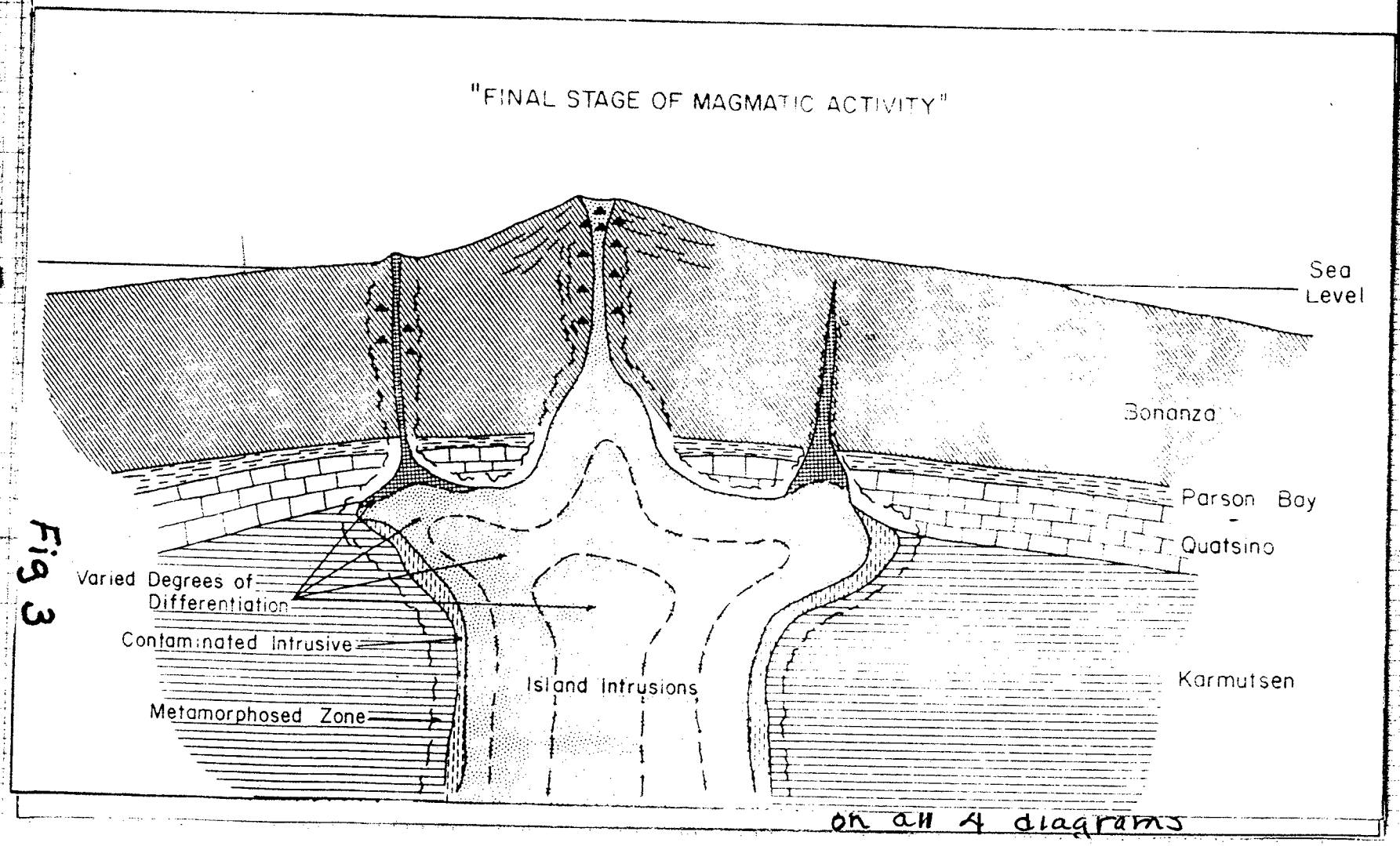
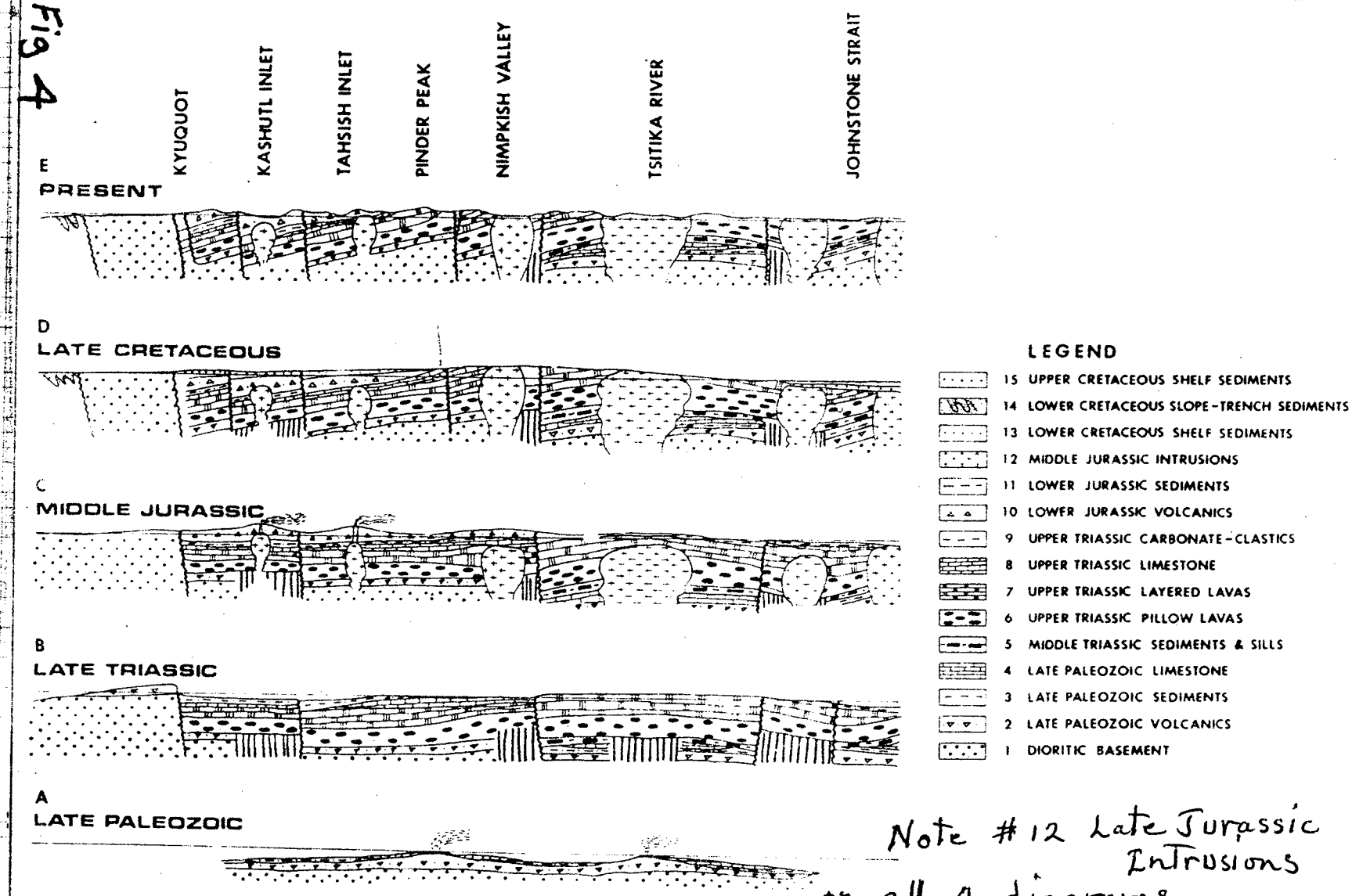


Fig 3

on all 4 diagrams

Fig 4



Note #12 Late Jurassic Intrusions on all 4 diagrams

STAGES	GROUP OR FORMATION	MAP UNIT	LITHOLOGY	THICKNESS (Feet)
Miocene?	Tertiary Volcanics, Sediments	Tv Ts	Basaltic to dacitic lava, tuff, breccia; conglomerate conglomerate	1,000
	Not in contact; disconformable?			
Eocene?	Tertiary Intrusions	Tg	Quartzdiorite.	
	Intrusive contact in Alberni map-area			
Maestrichtian? Campanian	Nanaimo Group (incl. Suquash Fm.)	uKN	Greywacke, siltstone, shale conglomerate, coal	400
	Disconformable contact?			
Cenomanian Albian	Queen Charlotte Group	uKQC	Greywacke, conglomerate, siltstone, shale, coal	1,000-3,500
	Disconformable contact			
Barremian Hauterivian Valanginian	Longarm Formation	lKL	Greywacke, conglomerate, siltstone	200-1,300
	Equal age [illegible] diverse tectonic setting			
	Pacific [illegible] Sequence	lKS	Argillite, greywacke? conglomerate	
	Unconformable contact			
	Island Intrusions	JG	Quartz diorite, granodiorite, quartz monzonite, quartz-feldspar porphyry	
	Intrusive contact			
	Vancouver Group (gradational contacts within group)			
Pliensbachian Sinemurian	Bonanza Volcanics Harbledown Fm.	lJBV JH	Andesitic to rhyodacitic lava, tuff, breccia; greywacke, argillite, tuff	1,000-18,500
Norian	Parson Bay Fm.	uTRPB	Calcareous siltstone, shale, greywacke, conglomerate, breccia	1,000-2,000
Karnian	Quatsino Fm.	uTRQ	Limestone	100-2,500
	Karmutsen Fm. includes in upper part Intervolcanic Limestone	muTRK uTRQ2	Basaltic lava, pillow lava, breccia Limestone	10,000-20,000
Ladinian	Sediment - sill unit		Diabase, argillite	2,500
	Disconformable or unconformable contact			
	Sicker Group	PS	Limestone, siltstone	700
	Migmatic contact?			
pre-Cretaceous	Westcoast Complex	PMdm	Quartz diorite, agmatite, amphibolite, gneiss	

Fig 5

REPORT ON FROST LAKE SURVEY

Between September 1st and November 15th, 1983 this writer carried out a prospecting, geological, geochemical, physical and environmental survey of a tract of land approximately 10 miles south of Mesachie Lake off the south shore of Cowichan Lake. The area of work centered around Frost Lake and radiated for many miles from that area.

Frost Lake is also known as Doe Lake and Shark Lake. Local residents of the area and B.C. Forest Products Ltd. show it and know it as Frost Lake. It is some two acres in size depending on the time of year it is seen. The outlet seeps into a swamp and then out and down a small canyon to East Lens Creek.

The area is on map M92C/9E and on topographic map, Port Renfrew 92C9 edition 4.

About one-third of the area was logged between 1948 and 1968. Another one-third was logged for many years prior to 1948 and the remains of sawmills and logging railway beds can be found. The balance of the area is very rugged. Timber in this area, because of fracturing of the wood from wind and snow, as well as lack of nutrients in the soil for good growth, in addition to inaccessability, makes it uneconomical to log. No logging has been done in this area in the past fifteen years and the maze of roads which cover this area are now badly overgrown, washed out or buried in slides, making accessability difficult.

The colouration and growth patterns of the various species of deciduous trees and evergreen bushes show a very distinct contrast on the different formations on which they grow, i.e., porphyritic blister intrusions, porphyritic dykes or veins, Karmutson Volcanics or Quatsino limestone beds.

On the Karmutson Volcanics the evergreen are very dense and a rich green with lush growth. On the Quatsino Limestones the trees are sparse, foliation is of a lighter green and the underbrush very sparse. On the intrusive areas the main vegetation is wild huckleberry with very few of the larger trees.

The larger faults have an absence of larger trees and are quite distinguishable from considerable distance.

The overall area is a complex and a very severely mixed assortment of upper, middle and lower Triassic Karmutson formations with the lower Jurassic Quatsino limestones, Parson's Bay formations, Harbledown formation and Bonanza Volcanics infringing deep into the upper Triassic time period: see considered sequence of events Fig. #1. Also see Fig. #2 showing how the Fig. #1 pattern became considerably distorted by a sequence of quartz monzonate, granodiorite and quartz diorite intrusions.

Fig. #3 shows another slight variation of accepted theory on various formations and how intrusives contorted the land mass.

Fig. #4 shows that the Karmutson, Quatsino and Parson's Bay formations were all composed under the ocean and that it was not until later in the Bonanza group period that these eruptions broke the surface and became exposed to oxygen.

Fig. #5 shows that in the Tereditary period there were intrusions of quartz diorite. There were also intrusions prior to this of hornsfels-rich flows which show as massive fine-grained hornsfels, also quartz diorite with masses of well-formed individual 1/2" - 3/4" hornsfels crystals and a brecca of quartz diorite and hornsfels.

It is considered by this writer that these diorites intruded and highly fractured the hornsfels-rich rock forming this porphyritic brecca.

This later dyke of aforementioned ingredient has an E by W bearing and was noted over 3,000 feet long and approximately 800 feet wide N and S. On the north side adjoining the Karmutson formation is the massive hornsfels and on the south side adjoining the Karmutsons is the quartz diorite. It is on this latter contact where there is a 2 ft. wide zone of quartz diorite well-filled with large, well-formed hornsfels crystals with a fair showing of well disseminated chalcopyrite.

Approximately one mile NNW of this area in a large block of Karmutson Volcanic is an area under dense underbrush of highly altered Karmutsons. Because of thick brush and earth overburden, only a few exposures were seen. Of what was seen, the Karmutsons appeared a more solid structure than other places noted and mottled a pale green, tan and whitish in 2" diameter blotches. This area was at least 40' wide and contained a good grade of disseminated chalcopyrite plus a fair showing of malachite and azurite. As this is right beside a suspicioned major fault it would classify as metramorphic.

About one half mile NNW again is a large area approximately 1,000' x 1,000' which is felt to be hydrothermal. The Karmutsons here are highly fractured and badly cut by a swarm of quartz diorite dykes of recent time which are all parallel and trending east to west. These dykes are quite visible to the naked eye for one-third of a mile where at each end they dip under the overburden. This area is quite well mineralized with chalcopyrite with spasmodic showings of malachite and azurite. There is some epidote and from float in a creek, there were indications of a seam of massive garnet not less than 12" wide. Chalcopyrite was found in the Karmutsons, disseminated in the quartz diorite dykes and in 2" quartz veins.

Some three-fifths of a mile from here on a NE bearing brings us to an area approximately 1,000 feet wide and 3,000 feet long east and west which contain ten found good exposures averaging 25' x 25' in area all with chalcopyrite in fair values, (one assay across 40 ft. was 17% cu - one assay across 20 ft. was 9% cu). Some of these exposures are 15 to 25 feet deep zones in the bedding plane for several hundreds of feet in length and are quite visible to the naked eye up to half a mile away. These fractured planes bearing sulphides are an approximate average of 40 ft. apart, one on top of the other. In this particular area there is no indication of movement and I feel this is hydrothermal seepage through the bedding planes of the Quatsinos.

In the same area but 2,000 feet east is a series of highly mineralized zones, sizes up to 60' x 60' exposures. This would be classified as a skarn zone. One large area has a fair proportion of klinkers or cinders from what is apparently an old blow hole. Approximately 800' north of this is another showing of mineral seepage coming through fractured planes which would classify as hydrothermal.

This overall area is liberally endowed with epidote as masses, veins, and on fracture planes, it is also well mineralized with garnet but the latter seems to contain itself only in veins up to two feet wide. Valuable minerals so far as could be seen with the eye were in fair quantities of chalcopyrite with quite an amount of magnetite as disseminated and in large solid bodies. Specimens sent in for spectrographs will add more to the picture and will be added to this report when received.

There are two more highly mineralized areas approximately one and one-quarter miles SE of here. Both are fairly large and highly mineralized, mainly with chalcopyrite.

Between this last zone and preceding zones mentioned, pieces of float were found in the bush of solid magnetite and chalcopyrite. Time did not permit trying to track this down to find "in place".

Geochemical background readings of 22 PPM were obtained and in many of the aforementioned places geochems where taken. Primarily, the channel sample system was used and analysis returned thus far have readings of between 200 and 800 PPM copper.

An interesting item to note is that one sample taken in over-burden beside a small swamp returned an assay of 1780 PPM Cu. It is surmised that this small swamp on bedrock on top of the mountain must be covering an old sink hole or blow hole. Also, the perimeter of Frost Lake has proven very interesting and would bear a lot more serious investigation as this lake could offer the same situation.

Five miles northeast are the old copper magnetite showings at the junction of Long Creek and Robertson River. In the intervening area covered with forest and heavy till, geochem readings of 160 PPM Cu were acquired from the overburden. Due west of Frost Lake is a large block of old claims on Gordon River, Crown granted in 1902.

It is this writer's opinion that between Gordon River and Long Creek there could be several major mineral deposits. It will take a lot of diligent work in mapping and geochemistry to bring this to light.

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Approximate costs of work to be done on FRS #1 and Hulga #1 claims south of Mesachie Lake B.C.

Total cost of job will not exceed total cost of job completed. Some items may exceed figure shown but others will be less so total will not be more and possibly less than bottom line figure of

(1) $10,000.00 — clearing roads — stripping ground for Trenching clearing drill sites — culverts — digging water bars — new 500' section of road — Road repairs along approx 18 miles

(2) $5000. — Blasting a series of Trenches approx 4' deep and or deeper across mineralized zones to expose for regular or bulk sampling.

(3) $4000.— For taking approx 250 geochem samples 10 spectrograph samples and 40 rock samples assay costs and material for taking samples

(4) $20,000 — To drill 4 approx 2200 ft X ray drill holes at $20. per foot including cost of living for drill crew — Two holes to be drilled on each of 3 major areas each area to have a hole from north on a 45° South and a hole from south on a 45° North in such a manner as to have bottoms of holes meet underground.

(5) $5000. — Wages, for hired help, and supplies — ie: 2x2x6' post, — paint — ribbons — transportation — food — wages — taking samples from blasted trenches taking geo chems — survey — rent of camper for hired help.

(6) $0,000 — Decker — claim staking cost. — survey — tools equipment — gas — truck — food — maps — other supplies — And buffer fund.

(7) $5000. — To finalize reports, air. and of season maps — air photos, blueprinting — office supplies buffer fund for assays.

(8) $4000. — For Ted Groves 4 days in field on geology and 4 days logging core from drills. making a educated geological report.

(9) ? — Value of Ted Groves wishes on number of assays from drill core.

~~$54,000.00~~ + #9 and Deckers wages.

For your consideration

JW Decker March 28 1984

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
Canada V7P 2R5
Phone: (604) 985-0681
Telex: 04-352667

BONDAR-CLEGG

Certificate of Analysis

REPORT: 423-2665 PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au OPT	As OPT	Cu PCT	Pb PCT	Zn PCT	Sn PCT	NOTES
R 13620		<0.002	0.11	2.00				Rock - massive sulfides
R 13621		0.011	0.28	17.40				
R 13622		0.005	0.30	9.91				
R 13624		<0.002						
R 13625								

SEE MAP 1 A/B/C

Parker/Shandler

R 1370

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
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Telex: 04-352667

BONDAR-CLEGG

Geochemical Lab Report

Parker/Shandler 1st geochem

REPORT: 123-2665 PROJECT: NONE GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	NOTES
S 13623-1		200	Soils / Area A/B/C
S 13623-2		740	
S 13623-3		220	
S 13623-4		265	
S 13623-5		111	
S 13623-6		91	
S 13623-7		120	
S 13623-8		78	
S 13623-9		33	

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Telex: 04-352667

BONDAR-CLEGG

Geochemical
Lab Report

REPORT: 123-2855 PROJECT: NONE GIVEN

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	As PPM	Fe PCT	Au PPB	NOTES
S W1		82		7.50		
S W2		123	<0.2		10	
S W3		183	<0.2		<5	
S W4		181	<0.2		10	
S W5		174	0.2		20	
S W6		100	<0.2		<5	SILVER LENS CREEK WEST
S W7		321	<0.2		5	
S W8		179	<0.2		<5	
S W9		23	<0.2		<5	
S W10		76	<0.2	3.70	<5	

BEAU PRE EXPLORATIONS LTD.

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PHONE 382-1455

Prospecting / Physical Work		October/1983 to May 30/84.
FRS 1	Record # 1092	September 29,1983.
HELGA 1	Record # 1103	October 14, 1983.

Personell Involved

Monthly Employees

John Decker	Field	October	1983
Forston Shandler		November	
Peter Howie	Office	January	1984
Robert Beaupre		February	
		May	

At least 20 days for field crew.
At least 10 days for office staff.

Lab analysed at least twenty samples of the one hundred or so collected (sheets attatched to prospecting reports.)

Mapping of logging roads and repair sites also potential drill sites

		Pro Rated
Use of 4 x 4 trucks with gas and repairs	=	$1,800.00
Supplies - Office	=	$ 500.00
Supplies - Field	=	$ 200.00
Analysis	=	$ 300.00
Office\Wages	=	$2,000.00
		$4,800.00

0 500 M

N

Scale 1" = 925'
Mag. declination 22° - 40'
Air photo # 30 BCC204 #027
Map # M92C/9E
Mineralization Found
Mineralization Strongly Assumed
Elevation E 0600
Elevations in foot measure

E1312
E2296
E1640
E3034
E 820
E 2604
E2296
SAMPLES W1 TO W10
E1600
FROST LAKE
E1066
WEST LENS CREEK
E656
Float found
E984
E1640
E1640
CREEK
E2706
E1312
Down
Float found
E820
E620
EAST LENS CREEK

MAP 1

0 500 M

N

Scale 1" = 925'
Mag. declination 22°-40'
Air photo # 30 BCC204 #027
Map # M92C/9E

Qwatsino Group QL
Parsons Bay
Bonanza Group
Karmutsen
Quartz Monzonal QM
Jurassic Granodiorite JG
Jurassic Quartz Diorite
Eocene Quartz Diorite
Faults
Elevation E 0000

E1312
E2296
E1640
E3034
E2604
E1600
E1066
E656
E984
E1640
E2706
E1312
E820
E620
E820

QL
JG
K
QM
QD

Fault Defined
Fault Assumed

FROST LAKE

WEST LENS CREEK

EAST LENS CREEK

MAP 2

Road to be Repaired ——

New road construction ▬

DD Holes depth and bearing ●—

Bulldoze Stripping and blasting xxxx

Water resivours ●

0 500 METRES

Scale 1" = 925'

Mag. declination 22°-40'

Air photo # 30BCC204 #027

Map # M92C/9E

N

APPROX NORTH BOUNDARY FRS#1

APPROX WEST ADV FAS#1

APPROX WEST BOUNDARY HELGA#1

APPROX EAST BOUNDARY FAS#1

APPROX SOUTH BOUNDARY FRS#1

APPROX NORTH BOUNDARY HELGA#1

APPROX SOUTH BOUNDARY HELGA#1

E1312

E2296

E1640

E3034

E2604

E2296

E820

E1600

E1066

E1640

E1312

E820

E656

E984

E1640

E2706

E820

DDH 350' 45° S

DDH 350' FAS N

DDH 365' 45° S

DDH 200' 45° S

DDH 200' 45° S

DDH 200' AS S

FROST LAKE

TSEZ 3

TSEZ 4

TSEZ 7

TSEZ 8

WEST LENS CREEK

EAST LENS CREEK

LCP

LCP

MAP 3