

**GEOLOGICAL AND BULK SAMPLING
ASSESSMENT REPORT**

FEB 12 1998

Gold Com. (sic) (sic) (sic) (sic)
V.M.P.

On The

TALC RIDGE GROUP
(GOLD RIDGE 1 & 3 and TALC RIDGE 1-4)

Located In The

**NEW WESTMINSTER & KAMLOOPS
MINING DIVISIONS**
Latitude 50° 04' Longitude 121° 38'

Prepared For

HIGHLAND TALC MINERALS LTD.
Hope, British Columbia

Prepared By

CARDINAL GEOCONSULTING LTD.
D. G. Cardinal, BSc., P.Geo.
Hope, B.C.

February 4, 1998

25,396

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

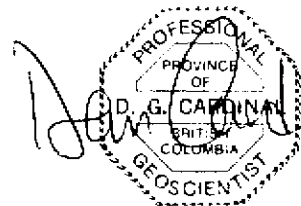


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A. INTRODUCTION

Talc is an important value added, industrial mineral. It has varied uses both as filler and as coating pigment. Its applications range anywhere from foodstuffs (e.g. gum, ice cream, etc.), medical and pharmaceuticals through to paints, plastics, and the pulp & paper industries. Talc's physical properties such as softness, smoothness, large surface area (aspect ratio), flake or lamina structure, relative good brightness and hydrophobic, organophilic properties, make it especially attractive to the paint, plastic and pulp & paper manufacturers.

For decades talc has been used extensively in countries such as Europe and Scandinavia. Finland for example, produces high quality value added talc from 3 open pit, crude talc mines. It is a leader in talc research and development and produces among other quality products, a talc coating pigment slurry used by light weight coated (LWC) paper manufacturers. It is interesting to note as well, that the Finnish pulp and paper companies use talc as a filler-fibre substitute due to the limited wood fibre supply and to reduce the cost of paper making.

British Columbia, and the Pacific Northwest in general, is beginning to experience fibre supply shortages and increasing costs in paper manufacturing. The BC pulp and paper companies are being forced to rationalize and down size in order to reduce costs and to stay globally competitive. Recently, the writer traveled to Finland with a senior representative from one of the major BC pulp and paper companies. A tour was made to a state-of-the-art paper mill where talc was used as part of the paper making process, and discussions held with leading talc paper making researchers. A tour was also made to Finland's largest talc producing mine.

Since 1990, Highland Talc Minerals Ltd. has conducted systematic exploration and developmental stage programs on its talc properties. This work is on going and to date has included geological surveys, diamond drilling, sampling and both bench scale and pilot scale testing. Currently, the company has crude talc in-situ resources (proven-probable-geological) of at least 40 millions tonnes.

The work documented in this assessment report covers the Talc Ridge Group, which straddle both the Kamloops and New Westminster mining divisions.



HIGHLAND TALC MINERALS LTD.	
<u>LOCATION MAP</u>	
TALC RIDGE GROUP	
BY:	
DATE:	MAP* 1

B. LOCATION AND ACCESS

The talc claims are located in southwestern British Columbia some 240 highway kilometers from the port city of Vancouver, and are also strategically situated within the heartland of the Pacific Northwest pulp and paper industry.

The claims are also located 100 km north of the town of Hope, the nearest major center. Direct access to claims is from Boston Bar, a logging community situated on the Trans Canada Highway, 60 km north of Hope. An all season road leads from Boston Bar across a permanent bridge and over to the west banks of the Fraser River and to the small community of North Bend. From this point the road heads northerly paralleling the river. Travelers should take caution during the summer seasons due to constant traffic by large logging trucks.

At approximately 14 km, the road then crosses the Nahatlatch River, a major tributary to the Fraser. Near 15 km, and at the junction of the Reo rafting tour sign, access is via the Nahatlatch Lookout-Forestry road. This is a seasonal logging road, which continues to head northerly, following the Fraser Canyon and gradually climbing to about 1300 meter elevation. A four-wheel drive vehicle is recommended.

The forestry-logging road enters the eastern section of the claims at about 18 km from the Reo junction. An exploration road branches off near the 20 km mark and heads southerly for about 2 km and terminates at the South talc deposit and this seasons bulk sample project site.

The northern portion of the claims and the North talc deposits can be reached by staying *on the Nahatlatch River road from the Reo junction and following the river westerly*. At Log Creek, a tributary of the Nahatlatch or at about the 24 km, is junction, a seasonal logging road heads north following the creek valley. Near 6km, the road forks to the right and crosses the creek and for another 6 km gradually climbs to about 1500 meter elevation. At this point the road enters the north and western section of the claims and another branch road, which leads to clear-cut logging at higher elevation, comes near the North talc deposits and cuts across large talc lenses (the B deposit). From the Log Creek junction to this point is about 12 km.

C. PROPERTY (CLAIMS) INFORMATION

The claims documented in this report are the Gold Ridge 3 and the Talc Ridge 1 where geological surveys and the bulk sample site are located. The Talc Ridge Group (Notice to Group - event number 3113263) makes up both the Gold Ridge 1 and 3 and the Talc Ridge 1-4 claims, which are contiguous. However, only the Gold Ridge claims have been filed for Statement of Work (event number 3113264) and for assessment work credits.

The Gold Ridge 1 and 3 are contiguous claims and are located in the Kamloops mining division, on mapsheet NTS No. 92104E and co-ordinates - Latitude 50° 04' and Longitude 121° 38'.

The pertinent claims identification data is as follows:

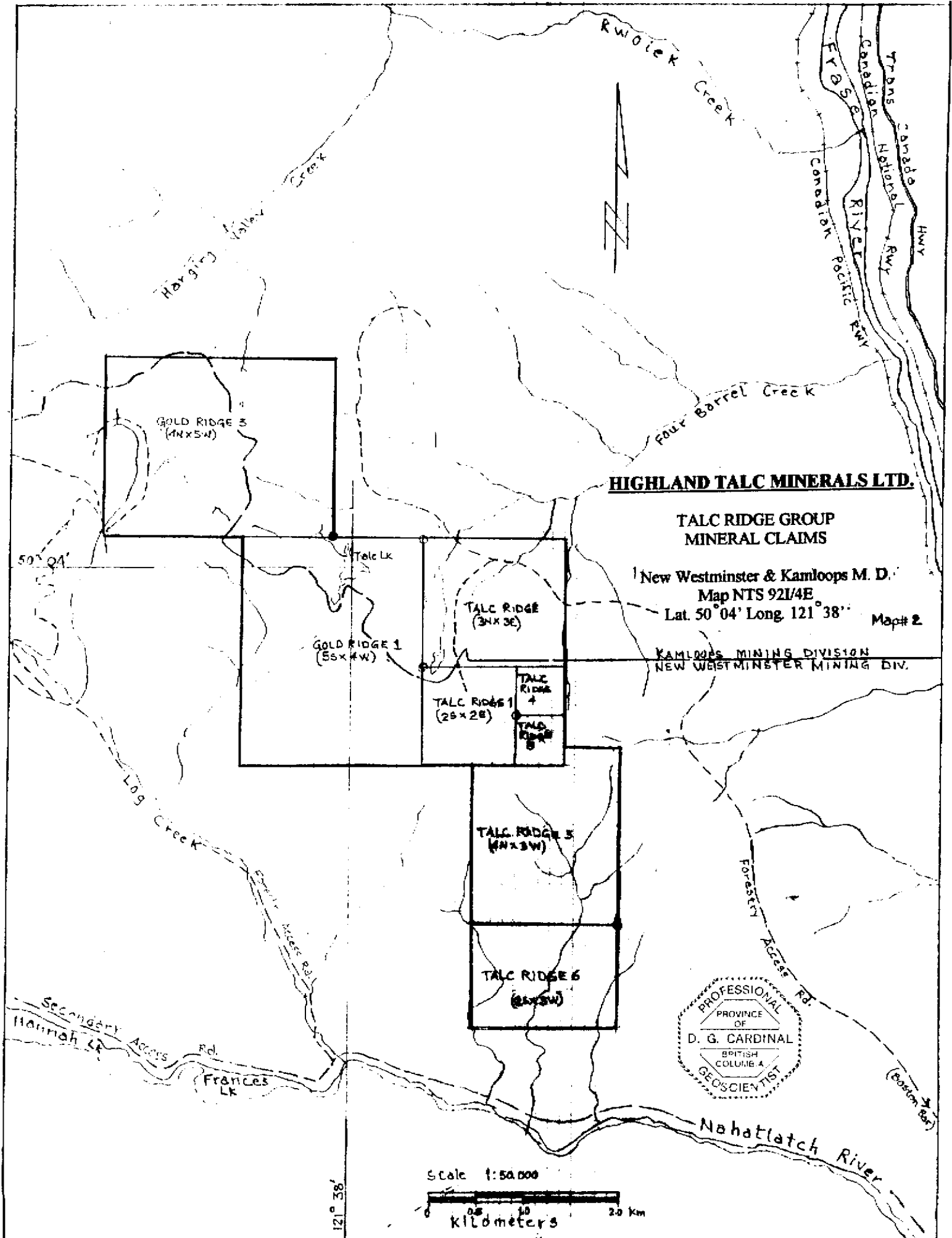
<u>Claim Name</u>	<u>Tenure Number</u>	<u>No. of Units</u>	<u>Current Expiry Date</u>
Gold Ridge 1	217695	20	November 17, 1998
Gold Ridge 3	217697	20	November 17, 1998

D. PROPERTY BACKGROUND

Talc was initially reported in the area in 1952, by the Geological Survey of Canada (Duffel and McTaggart, 1952, GSC Memoir 262). In the 1970s, a Vancouver based resource company carried out nickel exploration along the serpentine-ultramafic body which the Talc Ridge Group now cover (Chamberlain, 1973, Assessment report No. 4985).

During the surveys an outcropping of talc mineralization was noted along the shores of a small lake (referred to in this report as Talc Lake). Subsequently (1974), talc samples were collected by U.S. based company, Cyprus Industrial Minerals Ltd., and preliminary tests conducted on the samples. Cyprus concluded the crude talc to be of poor quality (62% talc and 34% magnesite) for their requirements. The writer would like to note that today, through beneficiation processes, crude talcs can be economically processed to produce value added products achieving 97%-98% pure talc.

Between 1983-85, Hudson Bay Exploration & Development Ltd. conducted a series of systematic gold exploration programs in the area. A gold-bearing structure was discovered on the Talc Ridge 5 and 6 (formerly Latch 1 and 2). Hudson Bay carried out limited exploratory diamond drilling over the structure but received mixed results. During some exploration road building Hudson Bay cut across a wide width of talc



HIGHLAND TALC MINERALS LTD.

**TALC RIDGE GROUP
MINERAL CLAIMS**

New Westminster & Kamloops M. D.
Map NTS 92I/4E
Lat. 50° 04' Long. 121° 38' Map# 2

KAMLOOPS MINING DIVISION
NEW WESTMINSTER MINING DIV.

GOLD RIDGE 3
(4N x 5W)

Talc Lk

GOLD RIDGE 1
(5S x 4W)

TALC RIDGE
(3N x 3E)

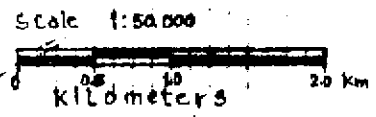
TALC RIDGE 1
(2S x 2E)

TALC RIDGE 4

TALC RIDGE 5

TALC RIDGE 3
(4N x 3W)

TALC RIDGE 6
(2S x 3W)



121° 38'

Secondary Access Rd

Hannah Lk

Frances Lk

Nahatlatch River

(Boston Bar)

mineralization, which today forms the South talc deposit. The claims subsequently expired and came open to staking.

In 1989, Highland Talc Minerals Ltd. began staking claims in the area, covering all known talc mineralization as well, staking was carried out along the serpentine for other potential deposits of talc.

Between 1991-95, Highland Talc conducted a series systematic exploration programs, which has included geological, definition drilling, bulk sampling through to predevelopment stage type projects such as laboratory bench scale tests and pilot scale tests. In 1994, both the bench and pilot scale tests were conducted in Finland, using Finnish technical expertise. These tests included beneficiation trials and successful talc coating pigment trials to produce LWC paper. In 1995, talc coating grade paper trials were then conducted with the largest paper manufacturer in B.C. These tests also proved positive.

To date, 3 significant deposits of talc and associated magnesite have been discovered on the Talc Ridge Group along with smaller associated satellite zones. The South deposit has been tested with 19 holes and has proven and probable in situ resources of 20 million tonnes of crude talc. Additionally, the Talc Lake and North deposits have a further combined, geological indicated resources in the order of 20-30 million tonnes. Overall average grade is 55%-60% talc and 30%-40% magnesite.

The objective of the 1997 field season was to conduct detail geological surveys over the North deposit in order to delineate its potential size and to prepare a bulk sample site over the South deposit for future sampling. Highland Talc Minerals hopes to pursue both beneficiation and micronizing tests in B.C. in 1998, using Canadian technology.

E. REGIONAL GEOLOGY

The geological setting is comprised of a major northwest-southeast trending structural break, which is represented by a semi-continuous belt of serpentine, hosted in a band of meta-sedimentary and meta-volcanic rocks. This regional break is referred to as the Kwoiek Creek Fault (J.W.H. Monger and W.J. McMillan, 1989, GSC).

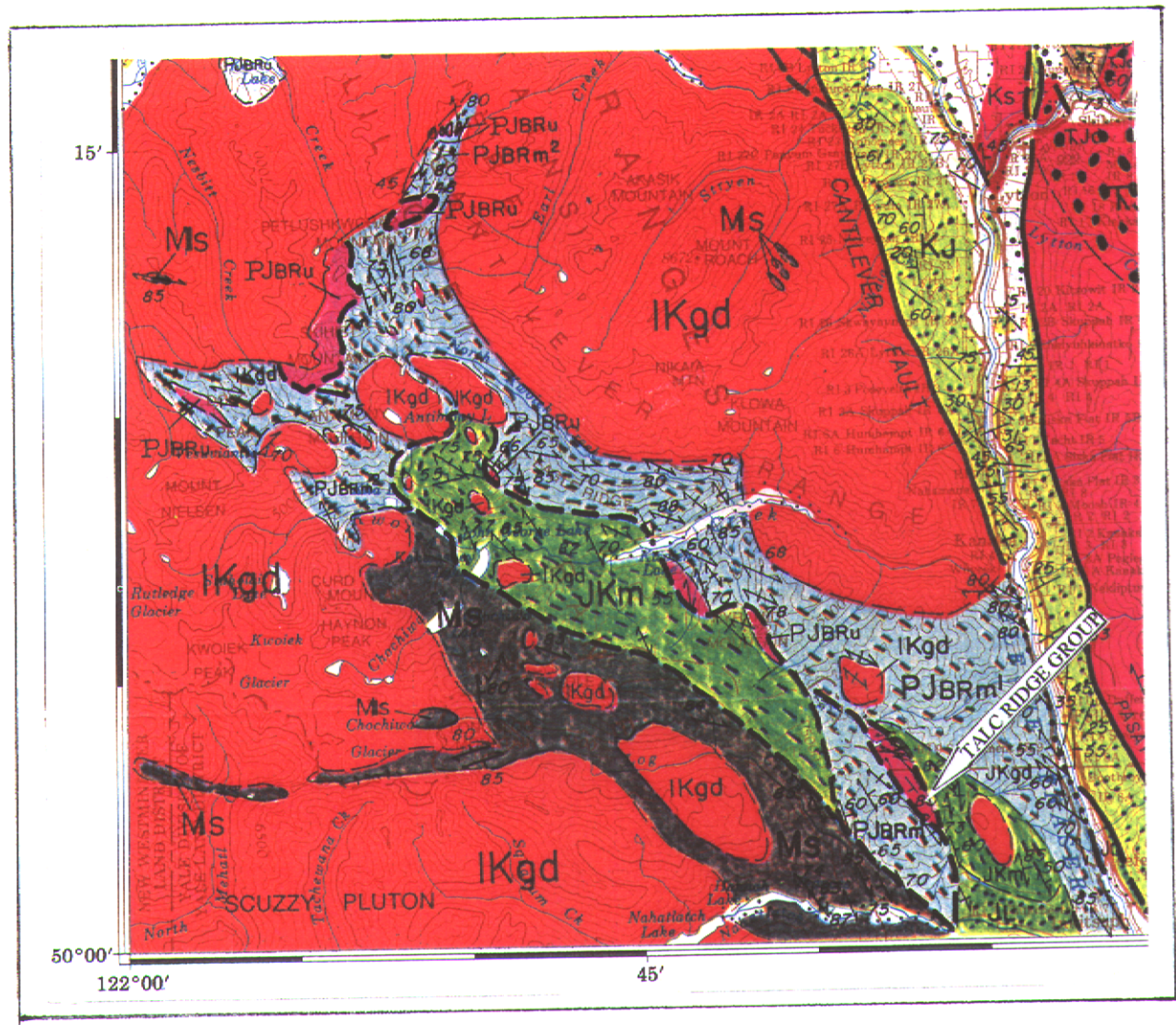
The serpentine belt can be traced for some 30 km along strike. It first can be observed just south of the Nahatlatch River, along the west side of the Fraser River canyon, trending northwest and terminating east of Skihist Mountain at the head waters of the North Kwoiek Creek. The serpentine and its associated rocks are believed to be part of, and latterly equivalent to, the Bridge River Series found to the northwest in the Lillooet and Bridge River districts.

The Kwoiek Creek Fault divides 2 lithological units (J.W.H. Monger and W.J. McMillan, 1989, GSC). The latterly equivalent Bridge River complex, of Permian age, is found to the east of the fault, and to west, is the Relay Mountain Group of early Jurassic to late Cretaceous age (Map #3). The complex is metamorphosed to upper and lower greenschist facies rocks, which consists mainly of chlorite-biotite-actinolite schist, phyllite, talcose schist and serpentine. The Relay Mountain Group is predominately composed of phyllite, argillite, shale and minor sandstone.

The Kwoiek Creek Fault-Serpentine Belt and its associated sedimentary-volcanic assemblage is in turn, intruded by Cretaceous age coast range granites such as the Scuzzy Pluton. Small, localized quartz monzonitic to quartz dioritic plugs intrude the southern section of the belt. The northern section of the belt is truncated by coast range granite.

The overall structural fabric is reflected and influence by regional movement of the Kwoiek Creek Fault. Northwest-southeast trending schistosity and foliation features dominate the bedrock and are associated with steeply dipping sub parallel shear zones. The northern portion of the fault is structurally complicated. It is splayed into at least 2 or more systems suggesting a complex series of sub paralleling, imbricated over thrusts. This in part is reflected by repetitive sequences of talcose schist and serpentine.

A number of potentially important economic minerals are spatially related to the belt. This includes a number of old gold showings and industrial minerals such as talc and magnesite. Significant deposits of talc and associated magnesite can be found along the northern and southern sections of the belt. Highland Talc holds large deposits of talc northwest of the Nahatlatch River, the Talc Ridge Group that the company is presently evaluating for future development.



Ms Garnet-biotite, kyanite and sillimanite schist, local amphibolite

CRETACEOUS
LATE CRETACEOUS

IKgd,qm Granodiorite (gd), quartz monzonite (qm)

EARLY AND MIDDLE CRETACEOUS
JACKASS MOUNTAIN GROUP

KJ Sandstone, argillite, conglomerate

JURASSIC AND CRETACEOUS
RELAY MOUNTAIN GROUP (JKm-JKR)

JKR Argillite, siltstone, sandstone, local conglomerate

JKm Phyllite, semischist, local conglomerate

PERMIAN TO JURASSIC
BRIDGE RIVER COMPLEX

PJBR Radiolarian chert, argillite, basalt, pillow basalt, local carbonate, gabbro and serpentinite; typically disrupted with broken formation

PJBRm Lower greenschist facies part of BRIDGE RIVER COMPLEX, phyllite, quartzose phyllite, siliceous and chlorite schist

PJBRm² Upper greenschist-lower amphibolite part of BRIDGE RIVER COMPLEX, siliceous schist, actinolite schist, local biotite-garnet schist, commonly containing concordant and cross-cutting Eocene felsic dykes and sills

PJBRu Ultramafic rock, local gabbro



- Geological boundary (defined, approximate, assumed)
- Bedding, tops known (inclined, vertical)
- Schistosity, gneissosity, cleavage foliation (inclined, vertical, unknown)
- Lineation, axis of minor fold, mineral/clast elongation (horizontal, inclined)
- Major fold axis (syncline, anticline, overturned fold; arrow indicates plunge)
- Lineament (from airphoto)
- Fault (defined and approximate, assumed and extension beneath drift)

HIGHLAND TALC MINERALS LTD.

TALC RIDGE GROUP

REGIONAL GEOLOGY

Map #3 Scale 1:250,000

D.G. Cardinal, P.Geo. (after J.W.H. Monger. GSC, 1989)

F. PROPERTY GEOLOGY AND TALC-MAGNESITE DEPOSITS

The Talc Ridge Group (the property) is underlain by a large, northwest trending, lenticular shaped body of serpentinized ultramafic. The serpentine is fault bounded by concordant northwest-southeast striking and steeply dipping sequence of argillite, phyllite, schist and greenstone. The faults, which bound the serpentine, merge along the northwest and southeast portions of the property to form one continuous major break which the writer believes to be part of the Kwoiek Creek Fault system (J.W.H. Monger & J.W. McMillan, 1989, GSC).

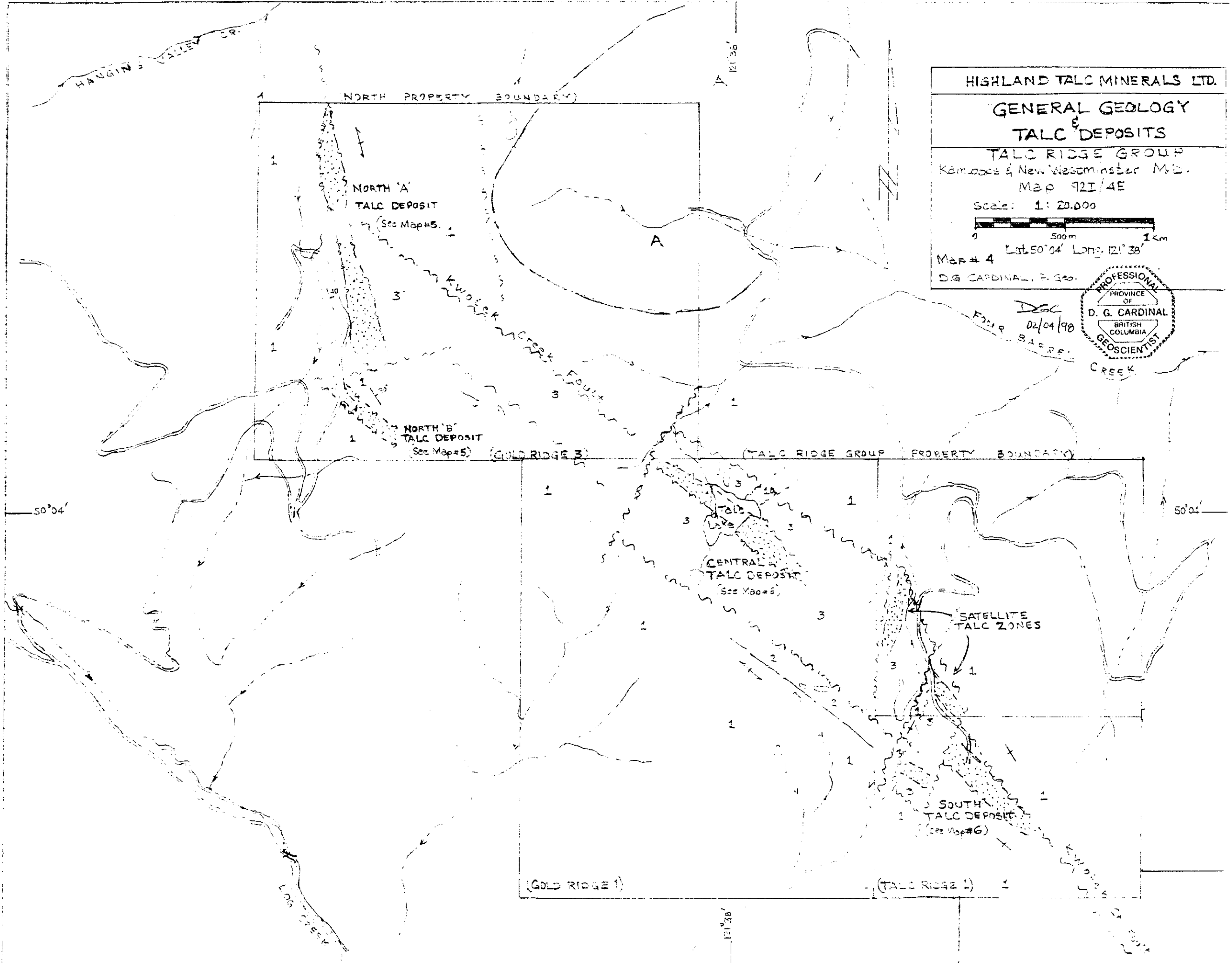
The serpentine is traceable for some 5 km to 6 km along strike and is interpreted as one large continuous lense. It is partly offset in places by a number of cross-cutting faults. Its widest section is near the center of the property, in the Talc Lake area, where it ranges between 800m to 1000m across. It narrows and gradually pinches out on the northern and southern section of the property (Map # 4).

The serpentine is associated with several important deposits of crude talc mineralization. To date, 3 large deposits have been found, which based on trenching, drilling and bulk sampling, contain on the average of 55%-60% talc and 35%-40% magnesite. These deposits are also associated several smaller, satellite talc zones. Typically, the deposits occur as lensoid shape bodies and have dimensions, which range from 500m to 1000m long and 100m to 150m wide. They are believed to be deep seated as indicated by the drilling conducted in the South deposit. It was drill tested down to a depth of 200m and remains open suggesting a considerable down depth extension.

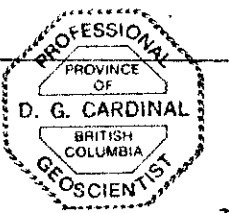
Some of the deposits and satellite zones are hosted entirely within the serpentine such as the Talc Lake (or Central) deposit. Others such as the North and the South deposits are hosted in argillite and phyllite associated with minor remanents of incipient serpentine (Map #4).

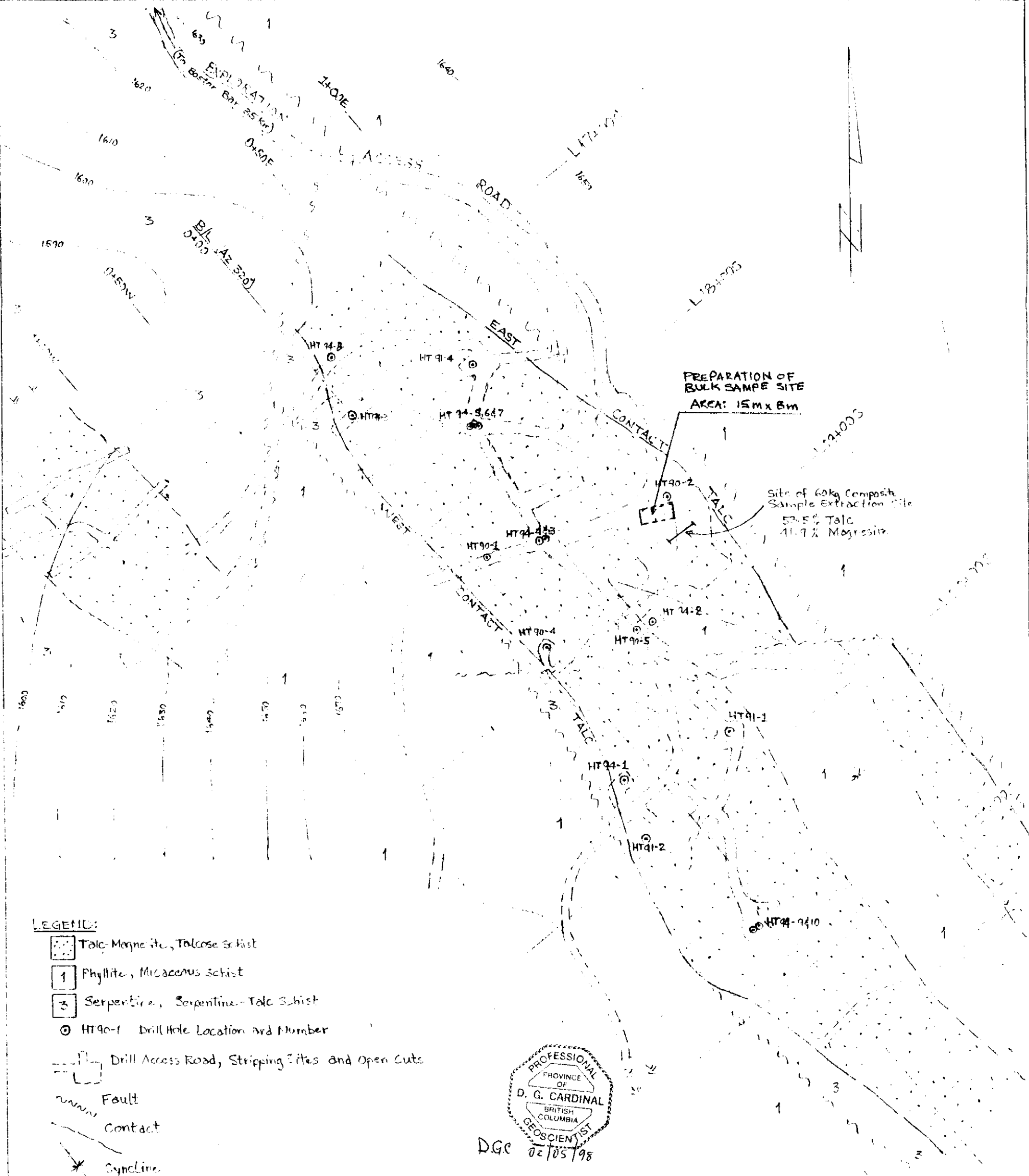
F.1 North Talc Deposits

The North deposits (A & B deposits) located on the Gold Ridge 3 claim, on the northern portion of the Talc Ridge Group (Map #4), were mapped in detail during the 1997 field season. The main, North 'A' deposit, outcrops near the north claim line boundary and extends southeast ward. It partly outcrops along a fire guard road at baseline (B/L) station 5+00N, where it is about 75m wide. From the road to 300m southeast, to B/L-2+00N, the deposit is naturally well exposed and is up to 150m wide. This area forms the main outcrop of the deposit. It is hosted within a thick sequence of the argillite and phyllite. This area was also previously tested by a number of shallow trenches and open cuts to determine the width of the deposit (Map #5).



HIGHLAND TALC MINERALS LTD.
GENERAL GEOLOGY
TALC DEPOSITS
 TALC RIDGE GROUP
 Kamloops & New Westminster M.D.
 Map 92I/4E
 Scale: 1:20,000
 0 500m 1km
 Map # 4
 Lat 50°04' Long 121°38'
 D.G. CARDINAL, P. Geo.





At station B/L-2+00N, the deposit disappears into a low lying poor drainage area masked by a dense growth of willow. However, talc mineralization can be found on strike and along a small stream at B/L-0+00, which is believed to be the extension of the main out crop. From here, the deposit is sporadically traceable for at least another 600m (B/L-6+00S) along a clear-cut logging site. It is mostly masked by shallow overburden with an occasional outcropping of oxidized talc. Log-skid roads also partly exposed talc mineralization. Exposed along a portion of the logging road is small, window-like section of the southwestern fault contact between argillite and the deposit. The road section displays a sharp argillite-talc fault contact which strikes northwest and dips 35° - 40° to the northeast. The northeastern fault contact of the deposit, which occurs along the clear-cut area, cannot be observed due to the overburden. However, reconnaissance mapping further to the east located outcroppings of serpentine, which suggests the deposit to be in fault contact with the serpentine. This fault contact is also interpreted to be part of the Kwoiek Creek Fault system (Map #5).

At the road section, the deposit appears to dip moderately northeast concordant with the attitude of the argillite. Further to the northwest however, at station B/L-5+00N, the deposit has a steeply dipping attitude and the argillite-phyllite host rock also displays near vertical dips. No serpentine can be observed along its northeastern boundary, which suggests it may have faulted off or may have altered to crude talc.

The 'A' deposit is believed to be one continuous body of crude talc extending from B/L-5+00N to B/L-6+00S, about 1,100m in length. The continuation to the deposit further to the southeast becomes uncertain because of the tree cover and limited exposure, it may also be offset by a cross-cutting fault.

Another deposit also occurs in Gold Ridge 3 claim, referred to as the North 'B' deposit, which is partly exposed along the logging road and a former log landing (Map #5). It is located about 125m east of the south end of the 'A' deposit and both are separated by a moderately dipping (40° - 45°) band of argillite and phyllite. The landing affords a good cross-section of the deposit. It is exposed across 110m and is fault bounded by argillite. The talc-argillite fault contacts dip between 40° - 50° to the northeast and strike northwest. It characteristically resembles, and may in fact be, a faulted continuation of the 'A' deposit.

Based on a 120 tonne bulk sample, which was collected from the 'B' deposit in November 1993 (D.G. Cardinal, Assessment Report, Nov., 1994) for pilot scale purposes, the analyses showed an average grade of 56% talc and 35% magnesite. This is consistent to the other 2 talc deposits - the Talc Lake and South - where the grades average between 55%-60% talc and 35%-40% magnesite.

The talc and magnesite mineralization found on the property and contained in the deposits, display certain characteristics, which can be used as guidelines in the field to help in identification.

Talc on outcrop usually exhibits a surface reddish-brown iron oxidation as a result of the iron carbonate minerals associate with it. The depth of surface oxidation can vary from only a few centimeters to 2-3 meters and sometimes deeper especially along shear zones or along fault contacts. Simple test to determine if the oxidized outcrop contains talc is run a knife blade or hammer-pick across the surface. This generally produces a white streak, which is caused by the perfect cleavage of the talc flakes. The outcrop will also normally be relatively soft, dense and massive. The density is due to the combined talc and magnesite, which produces a rock density of closer to 3.0 g/cc or about 3.0 cubic meters per tonne.

Simple, basic field guidelines for identifying talc-magnesite content or "crude talc" when examining fresh hand specimens, is by conducting and observing the following characteristics: scratch and feel test – due talc's softness of 1 in the mohs scale and its slippery or soapy feel; color – usually medium grey to light greenish-grey, which also depends on ratio of talc:magnesite content. Often fine, greenish-white, pearly lustre talc flakes can be observed along with light greyish, semi-translucent coarser grained magnesite. Also, an increase in magnesite content will produce a harder surface due to its hardness of 3. High talc content normally exhibits a very light green to white color with a high pearl lustre and leaves a soapy feels on the hands.

With a trained eye, the talc and magnesite content can be relatively be determine with good confidence in the field – normally with in + or – 5% of the actual grade anaylsis. Other associated and accessory minerals found with the crude talc in decreasing amounts include: chlorite, siderite-ankerite, pyrite and/or pyrrhotite and magnetite. Mineralogical analyses have also found trace pentlandite.

Although talc can grade anywhere from 50% to a high of 98%, based on drilling and sampling results, the average mineralogical composition of the deposits range as follows: talc 55-60%, magnesite 35-40%, chlorite 5-8%, iron carbonates/oxides (siderite/ankerite) 5-8%, and sulphides (pyrite/pyrrhotite) <2%.

G. FIELD PROCEDURES

During the field season of 1997, geological surveys were carried out on the Gold Ridge #3 claim. The objective was to map and delineate in detail, the talc (magnesite) mineralization previously discovered on the claim and to map the A & B talc deposits.

A 2-person field crew conducted the work, which consisted of a geologist (the writer) and a field assistant. Firstly, a baseline needed to be established for mapping control. A baseline 1.2 km in length was surveyed in with stations established at every 100m intervals. This was accomplished by utilizing hip chain and Brunton compass. The baseline was cleared with a chain saw and flagged stakes positioned at every station.

A 1:5,000 digital scale contour map was supplied by J.S. Jones Timber Ltd. of Boston Bar for the area and used as the field base map. The baseline grid was superimposed on to the map and all geological features as well as man-made features (e.g. logging roads, clear cuts, etc.) were surveyed and plotted on the map. A geological map at the scale of 1:5,000 showing reasonable detail was compiled.

Air photographs at a scale of 1:20,000 were also utilized to interpret geological structures and to construct a regional map. Additionally, the photos assisted in conducting geological reconnaissance surveys outside the detailed (1:5,000) area and to get control of the surrounding bedrock and structures.

H. BULK SAMPLING PREPARATIONS – SOUTH DEPOSIT

The South talc deposit was drilled in the 1992 and 1994, and contains about 20 million tonnes of crude talc. In September 1997, a site near the northeast portion of the deposit was selected for bulk sample purposes (Map #6). The site was selected because it is immediately adjacent to an access road as well, the area had previously been cleared for a drill hole location. The proposal was to extract at least 40 tonnes, or approximately 2 truck loads, for future beneficiation and micronizing test purposes.

The bulk sample site was initially surveyed and marked with ribbons and stakes. The dimension of the site is about 15m long by 8m wide. Two different contractors were hired to extract the bulk sample. A local truck and excavator contractor from Boston Bar was hired to both prepare the site and to haul the talc to a storage site near North Bend. An experienced drilling-blast contractor was hired to drill and blast the talc. The contractor supplied all the equipment including a mobile compressor unit, track mounted drill, drill steel, explosives and a drill assistant. The writer supervised all aspects of the project.

A basic 3-stage program was carried out. The first stage was by an excavator, which was utilized to remove any remaining overburden and prepare the site for drilling. The second stage was the drilling and blasting, which included removing the top 1 meter of oxidized talc by drilling and blasting. Another 1 meter (for total of 2 meters) was removed in order to get into fresh unoxidized talc. The final stage was the extraction of the fresh talc by excavator and loading onto the truck for transportation to the storage site.

Unfortunately the final stage of the program was delayed due to heavy autumn rains. Consequently, the program had to be postponed, as poor road conditions became too hazardous for any heavy hauls. It is presently proposed that the program be completed in late spring-early summer of 1998, and complete all work that needs conducted.

I. CONCLUSION AND RECOMMENDATIONS

The Talc Ridge Group covers an important geological structure 5 km along strike in which a series of crude talc deposits occur. Three (3) large deposits with associated satellite zones have been discovered to date. Resource estimate – based on the drilling and geological surveys – is in excess of 40 million tonnes of crude talc. Containing average grade of 55-60% talc and 35-40% magnesite.

The deposits are partly hosted in and spacially related to a semi-continuous belt of serpentinite. The serpentinite in part, represents a regional structural break referred to as the Kwoiek Creek Fault.

Since 1990, Highland Talc Minerals of Hope, B.C., owner of the Talc Ridge Group, has conducted a series of on going exploration and evaluation projects on the deposits. The work has included: geological surveys, trenching and sampling, drilling, bulk sampling, bench and pilot scale testing, and marketing studies.

During the 1997 field season a detailed mapping project was carried out on the north end of the property (Gold Ridge 3 claim). Previous reconnaissance surveys in this area had outlined deposits of crude talc – the North A and B talc deposits.

A bulk sampling project was also carried on the South deposit located on the Talc Ridge 1 claim. A site was selected and prepared for drilling and blasting and extraction. The project was halted due heavy autumn rains, which rendered the haul roads hazardous. It is proposed that the bulk sampling project be completed in the early summer of 1998.

It is also recommended that the bulk sample under goes a series of pilot scale tests. This would include: (1) beneficiation tests (e.g. crushing-grinding-flotation) to produce a talc concentrate, and (2) micronizing tests to produce filler and coating grade, value added talc products. These products would need to be micronized to an average particle size distribution ranging between 15 microns and down to 2 microns. Once the specifications are achieved, market development is recommended, aimed at the west coast pulp and paper and paints industries.

J. EXPLORATION COST STATEMENT

A. MAPPING PROJECT – NORTH DEPOSIT – GOLD RIDGE 3

Field Days: September 1st to 10th, 1997

Field Crew:	Cost
Geologist, 10 days @ \$350/d	\$ 3,500
Field Assistant, 10 days @ \$150/d	1,500

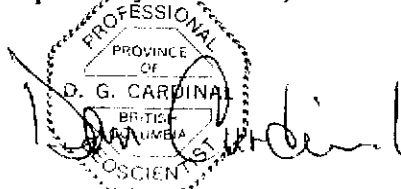
B. BULK SAMPLING – SOUTH DEPOSIT – TALC RIDGE 1

Field Days : September 20th to 24th , 1997

Geologist/Supervisor, 5 days @ \$350/d	1,750
Excavator (200), 10hrs @ \$100/hr	1,000
Mob. and Demob.	500
Compressor and Drill, 5 days @ \$300/d	1,500
Personal: Driller/Blaster and Assistant, 4 days @ \$ 400/d	1,600
Mob. and Demob.	850

Total Costs Incurred \$ 12,200

Respectfully submitted,



D.G. Cardinal, P. Geo.

K. PROFESSIONAL CERTIFICATE

I, Daniel G. Cardinal of the municipality of Hope, British Columbia, do hereby certify that:

I am Professional Geoscientist residing in Hope, B.C., address at 65661 Birch Trees Drive, P.O. Box 594, Hope, BC, VOX 1L0.

I am a graduate from the University of Alberta, Edmonton, AB, and hold a BSc. degree (1978) in Geological Sciences and a graduate from the Northern Alberta Institute of Technology, Edmonton, AB, and hold an Exploration-Geology diploma (1972).

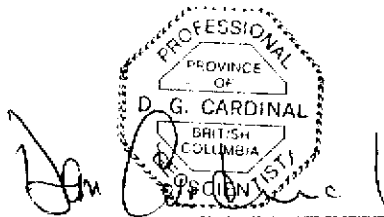
I am a member in good standing with The Association of Professional Engineers and Geoscientists of British Columbia (P.Geo. #18,455), the Association of Professional Engineers, Geologist and Geophysicists of Alberta (P.Geol. # M29405), and a Fellow of the Geological Association of Canada (#F4891).

I have been practicing my profession continuously for the past 20 years.

I have supervised the work outlined in this report and I am the author of this report.

I have direct interest in the mineral properties documented in this report and I am a principal of Highland Talc Minerals Ltd.

Signed in Hope, British Columbia this 4th day of February 1998.

A handwritten signature of Daniel G. Cardinal is written over a circular professional seal. The seal contains the text: "PROFESSIONAL PROVINCE OF BRITISH COLUMBIA GEOSCIENTISTS". The signature is written in dark ink and is partially obscured by the seal.

Daniel G. Cardinal, P. Geo., BSc.

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