85-226-13621

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,621

03/86

GEOLOGICAL, GEOCHEMICAL, AND GEOPHYSICAL REPORT

RIDGE 1 and RIDGE Fractional Claims

Latitude 49°07' North
Longitude 118°42' West

N.T.S. 82E/2E

Greenwood Mining Division

British Columbia

for

REX SILVER MINES LTD.

Calgary, Alberta

by

Gordon L. Wilson, B.Sc.

TAIGA CONSULTANTS LTD.
#100, 1300 - 8th Street S.W.
Calgary, Alberta T2R 1B2

December 19, 1984

TABLE OF CONTENTS

AUTHOR'S QUALIFICATIONS

I, Gordon L. Wilson, of 60 Ranchridge Road N.W. in the City of Calgary in the Province of Alberta, hereby certify that:

1. I am a project minerals geologist with the firm of Taiga Consultants Ltd. whose offices are located at Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.

2. I am a graduate of the University of Alberta, B.Sc. Geology (1977).

3. I have worked in the field of mineral exploration since 1973.

4. I personally worked on the claims during the period September 26 to 28, 1984.

5. I have not received and do not expect to receive, directly or indirectly, any interest in the properties described herein nor in the securities of Rex Silver Mines Ltd. in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 19th day of December, A.D. 1984.

Respectfully submitted,

G. L. Wilson

Gordon L. Wilson, B.Sc.

CERTIFICATE

I, James Wilson Davis, of 116 MacEwan Drive N.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Professional Geologist with the firm of Taiga Consultants Ltd. whose offices are located at Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.

2. I am a graduate of St. Louis University, B.Sc. Geology (1967) and M.Sc. Geology (1969).

3. I have practised my profession continuously since graduation.

4. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and a Fellow of the Geological Association of Canada.

5. I personally directed the exploration work carried out on the claims and described herein, during the period September 26 to 28, 1984.

6. I have not received and do not expect to receive, directly or indirectly, any interest in the properties described herein nor in the securities of Rex Silver Mines Ltd. in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 19th day of December, A.D. 1984.

Respectfully submitted,

James W. Davis

James W. Davis, M.Sc., P.Geol., F.GAC

PERMIT TO PRACTICE
TAIGA CONSULTANTS LTD.
Signature J W Davis
Date Feb. 6, 1985
PERMIT NUMBER: P 2399
The Association of Professional Engineers, Geologists and Geophysicists of Alberta

SUMMARY

In September 1984, a seven-man crew mobilized onto the Ridge 1 claim to carry out a limited exploration program. A grid of 15.7 line km was established over the southeastern and central regions of the claim. The Liberty grid provided control for ground magnetometer and VLF-EM surveying, soil geochemical sampling (samples in storage pending additional funding), and geological mapping. Prospecting was also conducted over the claim.

The magnetometer survey was successful in delineating the contact between the Tertiary Marron Formation volcanic unit and the older Permian Knob Hill Formation. This magnetically active zone requires further evaluation, as a number of economically significant Cu/Au occurrences have been located along the unconformity.

The VLF-EM survey outlined a number of moderate strength conductors, trending northeast-southwest. These are of sufficient strength and length to warrant further detailed follow-up work.

Geological mapping and rock sampling were carried out over the grid with encouraging results. Of special note was the location of the old Standard group of workings located in the southeast area of the grid. A decline shaft was located, developed within the Marron Formation. Slumping and water prevented detailed examination; however, from the rock pile, it is evident that further development in an easterly direction encountered not only the Brooklyn Formation limestone but also extensive skarn development. Samples of massive pyrite with lesser chalcopyrite were collected and submitted for Au analyses, returning anomalous values up to 3,280 ppb Au and 26.8 ppm Ag.

Ten metres to the northwest, there is a badly slumped exploratory shaft, developed in skarn. Dump rock consisted of heavily pyritized limestone skarn. Additional detailed work is required to define the extent of this potentially economic skarn deposit. It trends northerly and has a possible width of over 15 metres.

Skarn was also observed in irregularly developed zones within the Brooklyn limestone and shartstone units which occupy much of the eastern portion of the property. Samples collected from several of these zones returned values of interest. Attention should be placed on this area where Brooklyn Formation rocks are widespread and skarn development has been observed. This skarn is known to host economic concentrations of copper and gold, as in the adjacent Motherlode deposit.

A detailed airphoto study was completed during the program, outlining several prominent circular features within the Deadwood Camp area, one of which is situated on the Ridge claim just north of the Motherlode. Upon examination, these circular features appear to represent small intrusions, probably Coryell, which have not been exposed through erosional processes. Limestone and skarn (Deadwood Mineral Zone) were observed in outcrop around the intrusions. Massive sulphide mineralization is intense adjacent to the features, and less developed away from the proposed contact. The Standard and the St. Lawrence workings, as well as a number of other unnamed workings, are developed around these features. It is proposed that the Brooklyn Formation, which has been traced northerly from the Motherlode, has been intruded by the Coryell thus explaining the regular but wide distribution of these economically important circular features. Extensive follow-up work is required to evaluate these mineralized skarn zones around the circular features.

INTRODUCTION

At the request of Mr. Stan Stricker, then Vice-President of Exploration for Rex Silver Mines Ltd., the Taiga Consultants crew undertook a field study of the Ridge claims near the Deadwood Camp at Greenwood in September 1984. The claims have been prospected thoroughly over the years due to the proximity to the Deadwood Camp. Several old workings mined for copper and silver were examined.

Location and Access

The property lies about 5 km west of the town of Greenwood (Figure 1). The geographic coordinates are approximately 49°07' North latitude and 118°42' West longitude.

Access to the claims is by good gravel road leading west from Greenwood. There are logging roads giving good access to various parts of the property.

Property and Ownership

The property is comprised of one located mineral claim and one fractional claim, in the Greenwood Mining Division. The claims are entirely owned by Rex Silver Mines Ltd. of Calgary, Alberta (Figure 2).

Claim	Units	Record	Date of Record
Ridge 1	15	3678	March 29, 1983
Ridge Fractional	-	3686	March 31, 1983

History and Previous Work

Early work on the ground appears to date back to about 1910 with regional examination of those areas in close proximity to the Deadwood Camp. From that time to the present, work has been intermittent, following the cycles of interest in the Greenwood Camp as a whole. In 1910, the nearby Motherlode Mine was the leading copper producer in British Columbia.

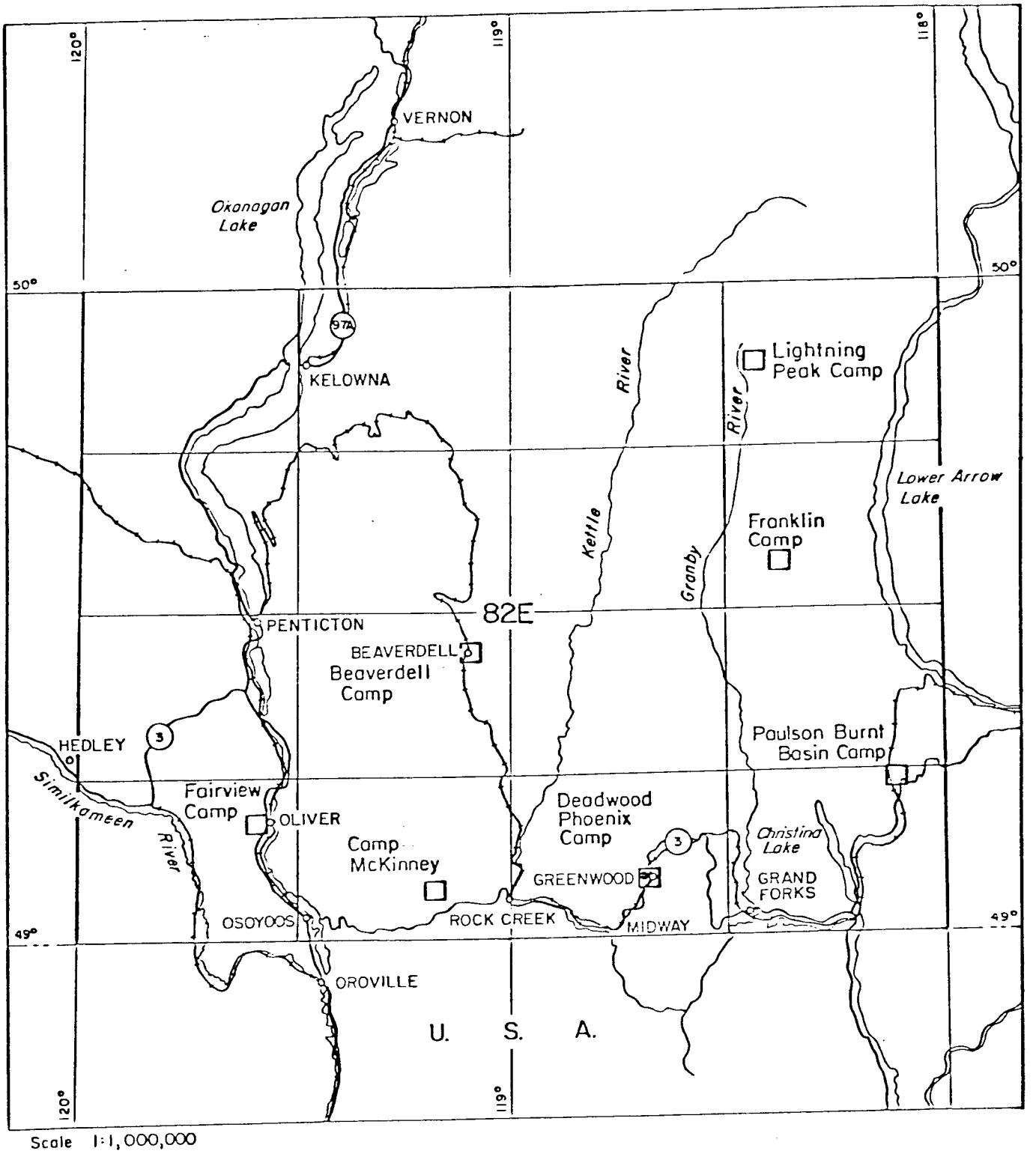
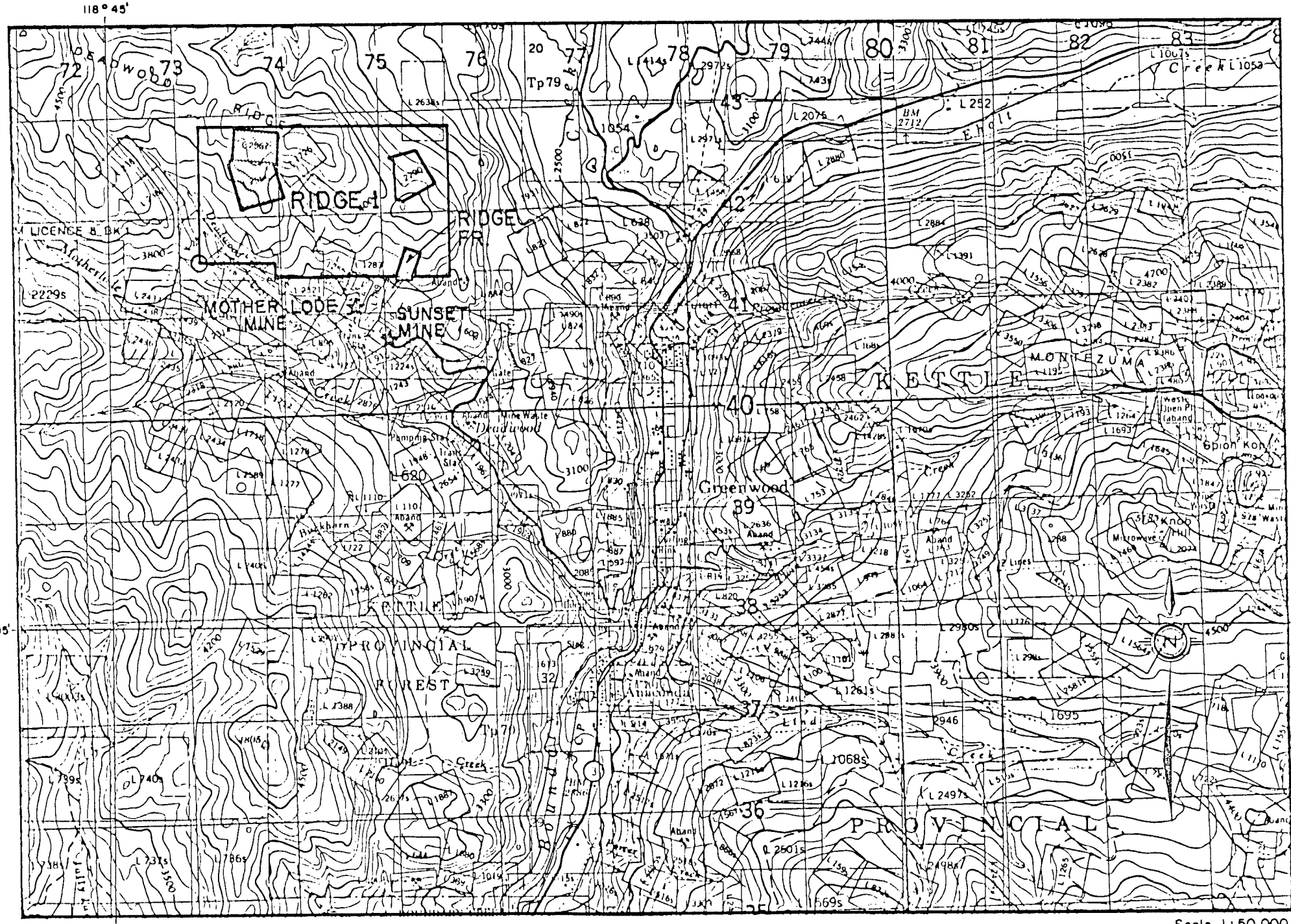


FIGURE 1

General Location Map



Area not included due to pre-existing mineral claims

PROPERTY LOCATION MAP

In 1968, the Copper Hill Mining and Exploration Ltd. held a number of claims covering the ground. A grid was established for the purpose of evaluating the ground geophysically; however, this program was never completed. In 1971, Spokane National Mines of Spokane, Washington, held the same claims and carried out limited geological mapping and geophysics to determine the extent of the Brooklyn Formation and the Knob Hill Group.

1984 Exploration Program

During September 1984, a seven-man crew carried out an exploration program consisting of grid-controlled VLF-EM and magnetometer surveying, geological mapping, and geochemical soil and rock sampling.

Approximately 15.7 line km of grid were established in a semi-permanent manner. Soil samples were collected from the "Liberty" grid, but are in storage pending additional funding. At such time, these samples will be analyzed for Au and Ag.

Additional traverses were carried out off the grid to facilitate a general tie-in of lithological contacts. For the purposes of this report, only rock samples were submitted for analyses of Au only or a suite of Au/Ag/Cu/Pb/Zn. A total of 20 samples were submitted.

REGIONAL GEOLOGY

The oldest rocks in the immediate area are the metamorphosed volcanic and sedimentary rocks (sharpstone conglomerate) of the Knob Hill Group of late Paleozoic age. The majority of the significant deposits previously developed in the Greenwood area are hosted by these rocks. Approximately 60% of the rocks are exposed at surface; the rest of the area is covered by glacial drift composed of clay, sand, and gravel, with rounded boulders. The stratigraphic sequence is briefly summarized on Table 1.

The Knob Hill portion of the assemblage consists of chert, tuffaceous chert, and greenstone. In some areas, metamorphism has remobilized silica to form extensive zones of jasperoid.

The associated sedimentary rocks of the Brooklyn Formation consist of sharpstone conglomerate, crystalline limestone, and skarn. The skarns host many of the large copper/gold orebodies of the Greenwood-Phoenix Camp. The rocks are cut by numerous intrusives of the Cretaceous Nelson series consisting of granite and granodiorite.

Unconformably overlying all units is the Marron Formation of the Penticton Group. It is the youngest unit, of Eocene age, and consists mainly of trachyandesite and minor andesite.

The area has been subjected to Tertiary block faulting, as seen along the Deadwood Ridge Fault. This event has preserved the Tertiary rocks in graben blocks to the west.

TABLE 1

TABLE OF FORMATIONS			
Quaternary			modified drift, clay, sand, gravel
Tertiary	Eocene	Marron Formation	trachyandesite
Mesozoic	Jurassic-Cretaceous	Nelson Batholith	granite, granodiorite intrusives
	Triassic	Brooklyn Formation	skarn, limestone, sharpstone conglomerate
Paleozoic	Permian	Knob Hill Group	chert, greenstone, tuff

PROPERTY GEOLOGY

Mapping was carried out on the property with the results presented at a scale of 1:5000 on Map 1 and at 1:2500 (Liberty grid) on Map 2. All of the regional units of the district were seen on the property, as well as most of the alteration patterns which are discussed under "Economic Geology".

Knob Hill Group

Rocks belonging to this group consist principally of massive white to grey chert in which bedding is poorly preserved; and of andesitic greenstone which is less abundant but strongly altered.

Chert is more abundant in most parts of the area, but limey greenstone predominates in others. In cherty sections, the remobilization of silica is common. Greenstone and tuffaceous material show pervasive chlorite alteration.

Off the southwestern part of the property on the east side of the Deadwood Ridge Fault, chert is predominant intercalated with greenstone. Beyond the southeastern region, the Knob Hill rocks are primarily massive chert, and progressing northweard up the belt, chert grades into a siliceous greenstone, into the east-central region where primarily greenstone occurs, to further north, where chert is intercalated with greenstone. The greenstone in the east-central region is of the greenschist facies. No volcanic structures or bedding were noted in the greenstones.

Brooklyn Formation

The Brooklyn Formation noted on the property consists of two members, the lower sharpstone conglomerate and the upper limestone, much of which is altered to skarn and jasperoid. The sharpstone conglomerate has been altered to jasperoid in places as well.

Most of the sharpstone conglomerate member seen on the property consists of bedded, angular fragments of white to grey chert with minor amounts of

jasper and limestone observed in the Motherlode pit. Adjacent to the Deadwood Ridge Fault just south of the property, the member consists of a pale buff, massive chert sandstone with interbeds of chert sharpstone conglomerate. Generally, the member seems to form an erosional remnant that rests unconformably on the Knob Hill Group.

The limestone member consists of a white to grey, massive, unfossiliferous, crystalline limestone. In places, it is silicified as well as replaced by lime silicates in a zone of contact metamorphism. This zone is developed in the Motherlode area and extends northward in the form of a 400 m wide belt into the Ridge property, with highly irregular dimensions. This is known locally as the Deadwood Mineral Zone. It consists of actinolite, garnet, epidote, calcite, and quartz, variably mineralized with malachite, chalcopyrite, pyrite, and minor magnetite. It weathers reddish-brown due to decomposition of the pyrite. In the south-central part of the property where this member is seen, it is cut by irregularly trending dykes of Coryell syenite.

Nelson Intrusive Rocks

Juro-Cretaceous granite and granodiorite crop out immediately northeast of the claim. These rocks range in composition from granite to monzonite; are grey and medium-grained; and contain quartz, feldspar, biotite, and hornblende. Minor pyrite was noted in places. Near the contact with the Knob Hill Group, epidote, calcite, minor chalcopyrite, and pyrite were noted, presumably from metasomatic replacement processes. Generally, these rocks show uniform low levels of propylitic alteration.

Marron Formation

The youngest rock type is represented by the Marron volcanic sequence. It forms a continuous cover over the western two-thirds of the property. It consists of a massive trachyandesite porphyry forming thick flows. It is grey, weather to a pinkish-brown. Generally, these rocks are not strongly altered, with the exception of two areas, one in the southwestern corner

around the GWG copper showing where chlorite and epidote alteration are moderate; and the other in the northwestern part near the old Winedot and Lizzie Crown-granted claims where propylitic alteration is abundant.

General Comments

Semi-detailed geological mapping was carried out over the Liberty grid, presented at a scale of 1:2500 on Map 2. In summary, Marron Formation volcanics underlie much of the central and western parts of the property. Rock types include trachyte, andesite, and volcanic agglomerate. The sequence appears to be relatively thick throughout the western region, thinning significantly eastward to where it is in contact with rocks of the Brooklyn Formation. Along L.7+00E/6+00S, a short exploratory shaft was developed for 3 metres in Marron Formation rocks, then encountering the silicified limestone unit of the Brooklyn Formation. Presumably, the thickness of the volcanic sequence is comparatively thinner further east into the contact area with the economically important Brooklyn Formation.

Underlying most of the southeastern half of the grid area and much of the eastern half of the claim is the Brooklyn Formation. Both the lower sharpstone unit and the upper limestone (skarn) unit are represented throughout the region, occurring as irregular easterly trending belts. The sharpstone unit occurs in the southeastern area and in the east-central area of the property. It uniformly consists of a chert breccia, typified by an abundance of angular chert fragments in a silica matrix. One sharpstone outcrop observed at L.13+00E/11+00S contained a narrow sheared zone of silicified and hematized material resembling the typical jasperoid of the Motherlode area. Lenses of altered limestone and jasperoid were observed in other outcrops off the grid as well. The upper limestone unit

occurs in two separate east-west trending belts, presumably erosional remnants of the continuous unit. In the extreme south-central part of the claim, the limestone is replaced by lime silicates in a zone of contact metamorphism extending north from the Motherlode into this area where it is in contact with the lower sharpstone unit. At this point, it is eroded off resulting in an easterly trending belt. Approximately 150 metres further north, the skarn zone reappears in the form of a broader, more irregular easterly trending belt. Here, silicification is stronger adjacent to the inferred fault contact with the Marron volcanics. Further west, it weakens, grading into a white, crystalline limestone.

In the northeastern part of the property, the siliceous Knob Hill rocks are represented primarily by the chert and the more abundant greenstone members. These rocks are in contact to the south with the Brooklyn sharpstone unit, and to the west in fault contact with the Marron volcanics. Along the southern boundary, chert is predominant, and the adjacent sharpstone unit contains a higher than usual amount of chert fragments.

ECONOMIC GEOLOGY

Two types of economic mineralization are recognized on the Ridge property:

1. Auriferous skarn type; mainly within the metasedimentary rocks, especially within the Brooklyn limestone/skarn sequence; gold-quartz lenses and silicified zones within the sharpstone/jasperoid sequence.

2. Auriferous veins and sheared zones within faults, fractures, bedding plane discontinuities, and shears; essentially within the Marron volcanic sequence.

The first type of mineralization is by far the most prevalent and important type to occur on the Ridge claims. For the most part, it is the prime target currently under investigation in the eastern area of the claims, as well as beneath the Marron blanket, with the second type proposed for the remaining areas of the property. The Deadwood Mineral (skarn) Zone is traceable north from the Motherlode (where it originates) into the Ridge claims for an approximate distance of 400 metres, interrupted briefly by the presence of the sharpstone unit due to erosional processes. Skarn development within the limestone varies considerably in intensity, but is more prominent when adjacent to the contact with the Marron Formation than further to the east, with the exception of the most southerly exposure, where it is fairly uniform through to the eastern claim line.

Rock geochemical sampling of various mineralized outcrops and float has returned anomalous values from 540 ppb Au (1983) to 3280 ppb (.096 oz/ton) Au (1984). Most of the gold is in pyrite, which is known to contain from .03 to .17 oz/ton Au in the Motherlode zone. The existence of a well developed skarn body immediately north of the Motherlode is supported by the work of Mascot Gold Mines Ltd. who carried out drifting in a northerly direction along this zone on the northern end of the Motherlode open pit. This work appears to have extended as far as the north boundary of the Motherlode Crown-granted claim.

The northwestern part of the property is underlain by a relatively thick volcanic sequence belonging to the Marron Formation. The volcanic pile appears to thin fairly rapidly into the southern and southeastern parts of the claims. Several workings examined in these southern areas were successful in exposing skarn and heavily pyritized limestone. Where extensive fracturing and shearing have taken place, the overlying volcanics are weakly to moderately silicified and pyritized along the core axis of the hosting structure. This latter type of mineralization represents the second type of economic importance, and should be intensively explored for where the volcanic pile is thinnest.

Several occurrences of copper mineralization have been observed throughout the Marron volcanic unit, some of which are strongly developed along zones of secondary shearing. They are characterized by moderate propylitic alteration, and weak to moderate silicification, pyritization, and malachite alteration of the enclosing volcanic rocks. Presumably, these occurrences represent a partial upward continuation of the solution replacement processes that the underlying Brooklyn and/or Knob Hill Formations were subjected to.

A broad magnetic anomaly, coincident with several VLF-EM conductors, extends from the southwestern part of the claims in a northeasterly trace to the edge of the Marron Formation as currently mapped. Presumably, this feature represents the unconformable contact between the Marron and the Brooklyn and/or Knob Hill rocks. It may also represent moderate to heavy sulphide alteration of the contact zone including magnetite, which is noted throughout most of the skarn on the property and is highly characteristic of the Motherlode ores.

A prime example is that observed in the old Standard workings (Figure 3). Here, two shafts were developed approximately 10.6 metres apart, the first in relatively unaltered Tertiary volcanic flow rocks, and the second to the northeast within the Brooklyn limestone/skarn unit. The workings were found to be largely inaccessible, but it is apparent that development commenced within a zone of highly sheared volcanics, and continued through

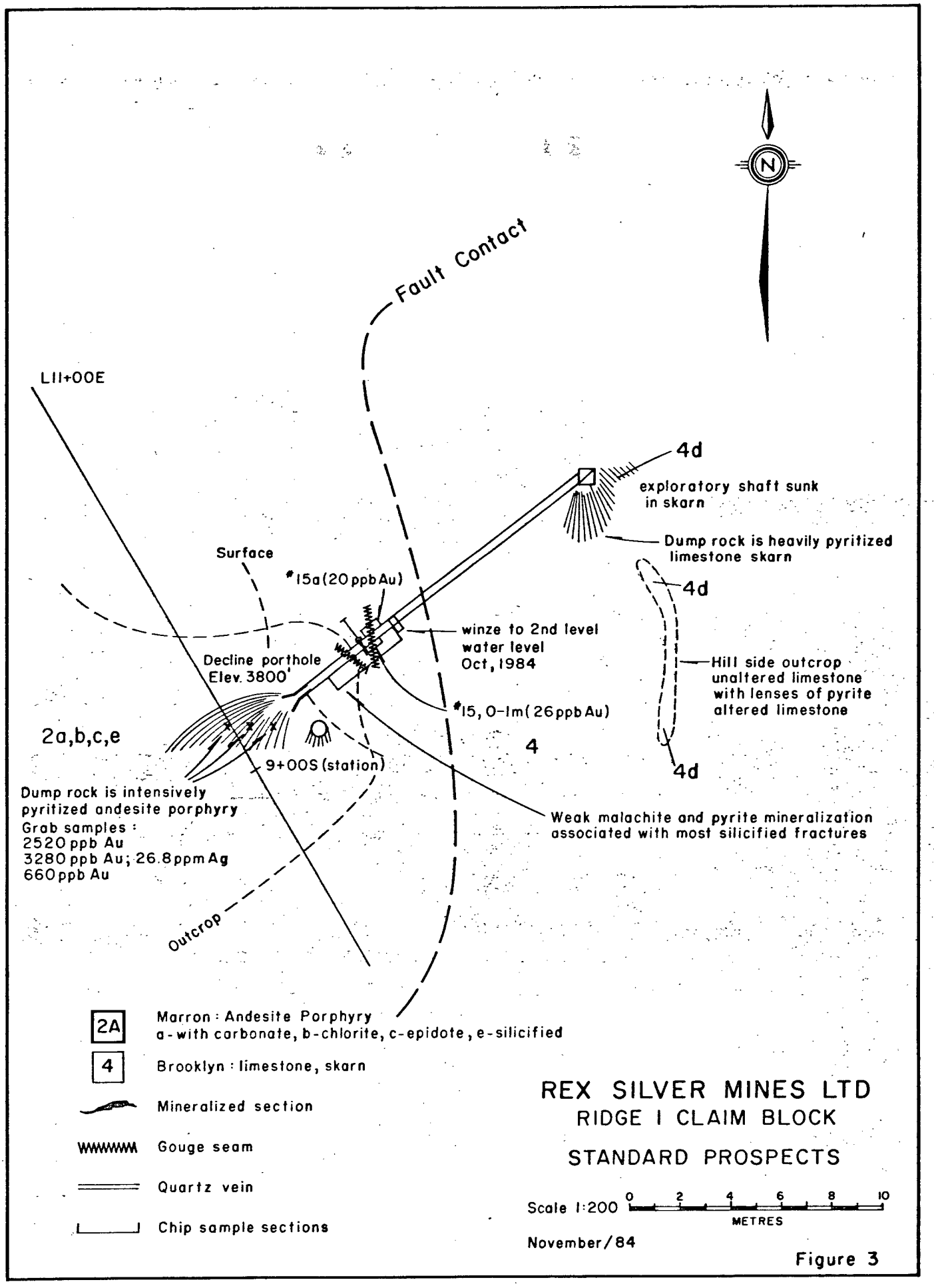

N
Fault Contact
LII+00E
4d
exploratory shaft sunk
in skarn
Dump rock is heavily pyritized
limestone skarn
Surface
#15a(20 ppb Au)
winze to 2nd level
water level
Oct, 1984
Decline porthole
Elev. 3800'
#15, 0-1m(26 ppb Au)
Hill side outcrop
unaltered limestone
with lenses of pyrite
altered limestone
2a,b,c,e
4
9+00S (station)
Dump rock is intensively
pyritized andesite porphyry
Grab samples :
2520 ppb Au
3280 ppb Au; 26.8 ppm Ag
660 ppb Au
Weak malachite and pyrite mineralization
associated with most silicified fractures
Outcrop
2A
Marron : Andesite Porphyry
a - with carbonate, b - chlorite, c - epidote, e - silicified
4
Brooklyn : limestone, skarn
Mineralized section
Gouge seam
Quartz vein
Chip sample sections
REX SILVER MINES LTD
RIDGE I CLAIM BLOCK
STANDARD PROSPECTS
Scale 1:200
0 2 4 6 8 10
METRES
November/84

Figure 3

the contact zone which is defined by an extensive zone of skarn and weakly altered limestone, to connect up with the second shaft. The rock dump near the first shaft consists of relatively unaltered volcanic flow rocks to heavily pyritized limestone and skarn. Several grab samples returned anomalous values up to 3,280 ppb Au. The rock dump around the second shaft consisted of weakly altered limestone and skarn. Thus, the skarn zone carries a possible width of at least 150 metres (inferred as well from surface examinations) and a possible strike length of 400 metres (through a northerly projection from the Motherlode).

Figure 4 presents an east-west cross section through the central portion of the property. The profile portrays an interpretation of the known geological and geophysical data. The earliest rocks indicated to have been deposited are the siliceous greenstone and massive meta-chert units of the Permian Knob Hill Group. The chert sharpstone conglomerate unit was deposited in upper Permian time simultaneously with the limestone unit of the Brooklyn Formation. As there appears to be no normal basal conglomerate, the sharpstone unit probably was deposited with rapidity on the older rocks from what probably was adjacent steep topography. Through upper Permian time, the sediments become more calcareous ending with the deposition of limestone only. In late Jurassic time, folding about north trending axes and probable faulting affected the older rocks. During this orogeny, satellite bodies of Nelson granodiorite were emplaced. In middle Eocene time, lavas began to be extruded over the region. The Coryell intrusion (coeval with Marron lavas) probably intruded a normal northerly trending fault in the Eocene lavas. Where the Coryell intrudes the chemically receptive Brooklyn limestone, local development of skarn occurs; but such has also been observed in the Knob Hill rocks at the Motherlode. The metavolcanics and metasediments may have acted as a buttress, whereby the rocks were broken to give vein structures and fractured zones. This led to local skarn development and continued replacement of the limestone. The Standard and St.Lawrence skarn deposits support this concept. It is proposed that additional skarn type mineralization has developed at depth. The potential zones have been shaded on Figure 4.

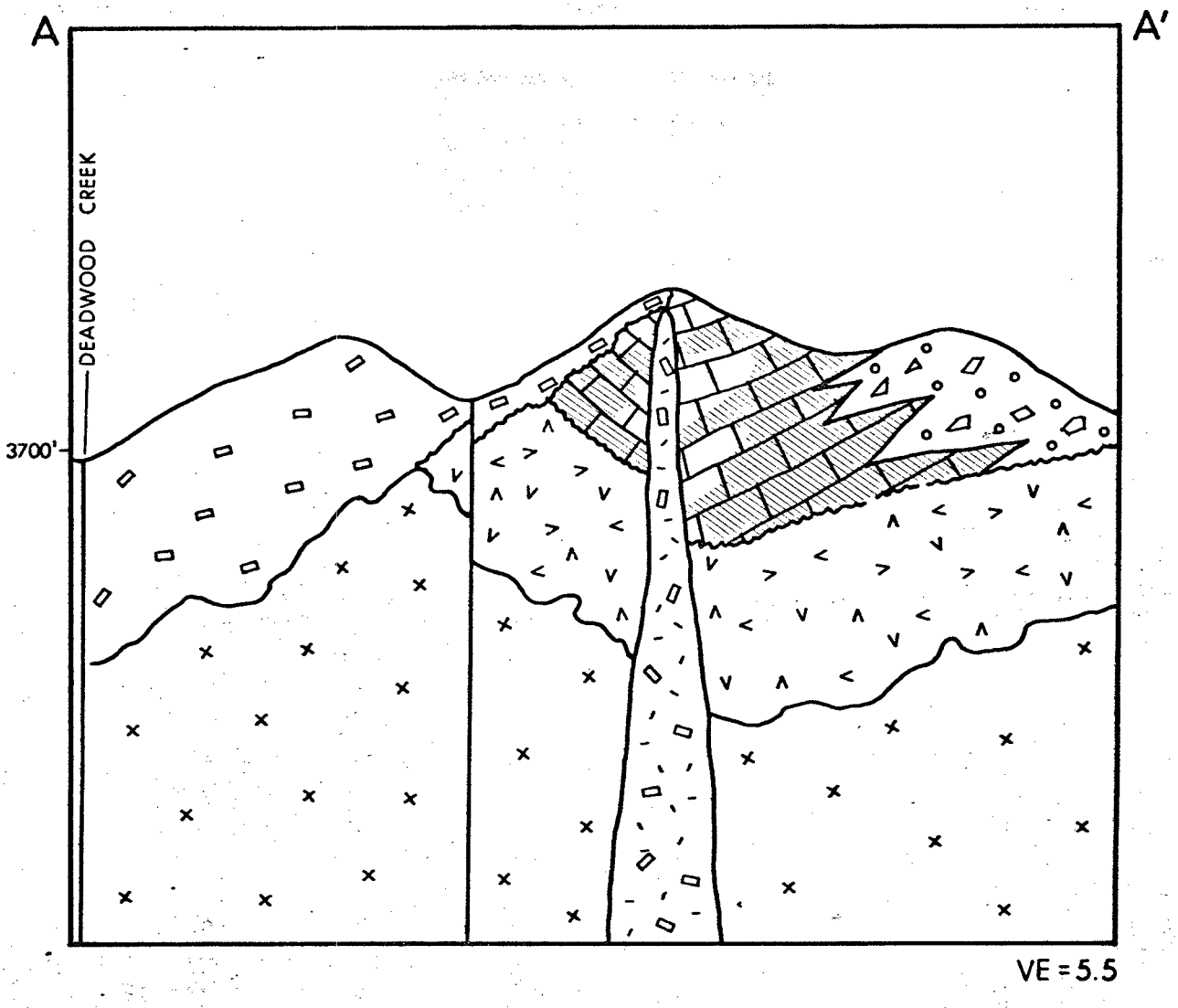


FIGURE 4
EAST-WEST CROSS-SECTION
RIDGE PROPERTY

TERTIARY — MARRON FORMATION
CORYELL INTRUSIONS

JURASSIC & CRETACEOUS — NELSON INTRUSIONS

PERMIAN — BROOKLYN FORMATION / SHARPSTONE

PERMIAN — KNOB HILL FORMATION

AREA OF POTENTIAL MINERALIZATION

GEOCHEMISTRY

During the program, a total of 20 rock samples were routinely collected and submitted to TerraMin Research Labs Ltd. in Calgary, Alberta, for Au or Au/Ag/Cu/Pb/Zn geochemical analyses by combined fire assay / atomic absorption technique.

Rock samples were routinely collected from outcrop and boulders, within certain lithological and mineralogical restraints. Firstly, a number of samples collected from the Standard group of workings returned anomalous Au-in-rock values. The background gold of the Motherlode skarn zone (i.e., gold in pyrite) is 75 ppb Au. The three samples collected from various parts of the rock dump at the porthole of the first decline shaft (see Figure 3) returned the following values:

	ppb Au	ppm Ag	
Ridge-84-01	3,280	26.8	massive pyrite and chalcopyrite
grab	2,520		actinolite-epidote-garnet-quartz, heavily mineralized with pyrite
JD-R-03	660		intensely pyritized limestone

These values represent an above-background figure of over 100 times that which is normal for the limestone/skarn unit.

Other anomalous or economically significant Au-in-rock values were obtained from samples collected from mineralized zones within the Marron volcanic unit, and the exposed Brooklyn skarn unit, from various old workings examined. On L.7+00E/5+75S, a slumped exploratory shaft was located. Development appears to have extended to a depth of over 6.7 metres. Dump rock consisted of unaltered andesite and heavily pyritized impure limestone. One sample was collected from the dump, consisting mostly of semi-massive pyrite. Sample Ridge-84-02 returned 924 ppb Au and 11.6 ppm Ag. Further to the southwest, at station 7+50S between lines 5+00E and 4+00E, two old exploratory shafts were located. On the rock pile of the northern shaft, some massive pyrite was observed in mostly andesitic flow rocks. Ten metres to the south, another shaft was located with a much larger waste pile. The rock consisted of 80% carbonate and epidote altered andesitic flow rocks and 20% altered limestone, both

of which contained much pyrite and lesser malachite. It is believed that these workings are related to the Butcher Boy Cu/Au occurrence. One sample (Ridge-84-03) collected from the second shaft's rock pile returned 744 ppb Au. Sampled material consisted of pyritized limestone. Another sample (GW-R-02 "BB) of weakly altered andesite returned a low value of 4 ppb Au. Some quartz/calcite flooding of fractured andesite was also observed.

GEOPHYSICAL SURVEYS

A baseline consisting of 1300 metres was placed to cross the centre of the Ridge property. Grid crosslines extending south to the claim line were placed at 100-metre spacings with 25-metre station intervals. The total of 15.7 km were flag-and-compass lines.

Magnetometer Survey

A magnetometer survey was conducted over the grid using a one-gamma GeoMetrics G826A proton magnetometer. Readings were taken at 25-metre station intervals along the grid lines. A base station was established at L.5+00E/B.L. in order to correct for diurnal variations in the earth's magnetic field. Crosslines were surveyed by continuously looping back to the established base station.

Variations in the earth's magnetic field during the survey were negligible, thus eliminating the need for corrections. The raw data have been plotted and contoured on Map 3.

The magnetic background for the grid area is approximately 57,500 gammas. The signature is relatively quiet throughout the southern part of the area. The northern portion of the grid is relatively magnetically active with the 8,000-gamma contour line defining the formational edge between the Marron Formation to the north and the Knob Hill Formation to the south. This magnetically active band deserves closer inspection.

This magnetically active portion of the grid is characterized by a major northeasterly trending geophysical lineament 1200 metres long. The feature is characterized and bound by two subparallel and continuous magnetic highs 120 - 170 metres apart in the southwestern part of the grid and 350 metres apart in the northeastern part of the grid. In the latter part of the grid, they widen to encompass a series of shorter, closely spaced magnetic highs, interpreted to represent a sulphide zone or a graphitic sulphide zone. Two prominent VLF-EM conductors coincide with the magnetic anomalies in orientation and length.

In the northwestern sector of the grid, an isolated magnetic high is defined to closely coincide with the "Liberty" copper showing. As observed in outcrop, weak malachite mineralization occurs disseminated throughout extensively sheared and propylitically altered Marron trachyandesite.

VLF-EM Survey

A VLF-EM survey was completed over the grid using a Geonics EM-16 employing Cutler, Maine (24.0 kHz), as the transmitting station. This survey was carried out using 25-metre station intervals along the grid lines. The results are presented in profile format on Map 4 and in Fraser-filtered contour format on Map 5.

The VLF-EM survey delineated a number of moderate strength conductors throughout the grid area. These conductors, though of apparent moderate strength (after filtering), did not give ideal profiles. The signature tends to partly reflect topographic expressions within the area. Nevertheless, a number of these conductors are of sufficient strength to warrant closer examination. These have been identified on Map 4 by a heavy line designating the conductor axis.

In the southeastern part of the grid there is a strong southwest-northeast VLF-EM conductor striking through L.12E and L.13E at station 12+00S. The conductor returned a very good profile but is not fully defined due to a lack of survey data east and west of these lines. The conductor could trace and mark the presence of massive sulphides within the Brooklyn limestone member. Several graphite-rich boulders were found near this station; however, no graphitic rock was found in outcrop anywhere on the property.

A conductor with extensive strike length occurs between L.2+00E and L.3+00E along stations 7+00S and 8+00S throughout. The feature is moderate to strong, and returned excellent profiles accordingly. The strength of the conductor points to a possible mineralized zone within the Brooklyn limestone unit, probably along a contact with the sharpstone unit.

Additional VLF-EM conductors are defined in the northwestern part of the grid, seemingly associated and coinciding with the magnetic highs in this area. All of these and the other conductors described require detailed follow-up work on a priority basis starting with those conductors located in the lower part of the grid.

CONCLUSIONS AND RECOMMENDATIONS

The program carried out in September 1984 was successful in further defining the several geological targets of economic importance to be pursued on the Ridge claims. Three targets of merit have thus far been delineated on the property: two associated with the mineralized skarn zone which originates at the Motherlode; and the third extending west to the Butcher Boy area (also a zone of alteration and mineralization of limestone, overlain by a reliatvely thin layer of Marron Formation volcanics). Significant Au- and/or Ag-in-rock values have been obtained from limited sampling of mineralized bedrock and float, which provide strong encouragement for further exploration of these areas.

To fully evaluate the economic potential of the mineralized skarn zones defined to date, it is recommended that the existing grid be extended to the east claim boundary, covering all unexplored ground in this region. Approximately 7.8 line km of grid would be required, which would provide control for further magnetometer surveys and also an I.P. survey. Soil and lithogeochemical sampling would also be carried out on this grid, as well as detailed geological mapping.

Further to the west, it is recommended that a new grid be established covering the central region of the claims. Baseline orientation would be north-south with crosslines set perpendicular to the projected structural and mineralized trends. Approximately 4.8 line km of grid is required to facilitate ground magnetometer and I.P. surveys.

PROPOSED BUDGET

Phase I eastern portion of claim

Establish approximately 7.8 line km of grid 100 m spacings, 25 m stations		4,000
Conduct grid-controlled magnetometer and I.P. surveys		4,000
Conduct grid-controlled soil geochemical sampling		5,000
Conduct geological mapping		2,000
De-water the Standard shaft; sample and map		1,000
Supervision		2,000
Contingency		3,000
	PHASE I	$ 21,000

Phase II central portion of claim

Establish approximately 4.8 line km of grid 100 m spacings, 25 m stations		2,000
Conduct grid-controlled magnetometer and I.P. surveys		2,400
Conduct geological mapping		1,600
Supervision		1,000
Contingency		1,500
	PHASE II	$ 8,500
	GRAND TOTAL	$ 29,500

APPENDIX I

Analytical Techniques

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

Rex Silver Mines Ltd.

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved to -80 mesh (approx. 200 micron).

Rock Samples:

The entire sample is crushed to approx. 1/8" maximum, and split divided to obtain a representative protion which is pulverized to -200 mesh (approx 90 micron).

TERRAMIN RESEARCH LABS LTD.
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

Rex Silver Mines Ltd.

ANALYTICAL METHOD FOR GOLD AND SILVER

Approximately 1 assay ton of prepared sample is fused with a litharge/flux charge to obtain a lead button. The lead button is cupelled to obtain a prill. The prill is dissolved in nitric/hydrochloric acids (aqua regia), and the resulting solution is analysed by atomic absorption spectroscopy.

A P P E N D I X I I

Geochemical Analyses

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 84-287-B Taiga Consultants Ltd. Date Oct.18, 1984

Client Project BC-83-2E Page 1/2

Sample No.	Au ppb	Ag ppb	Cu ppm	Pb ppm	Zn ppm
JOY-84-01 E	-2	6000	2500	2060	15200
02 J	1840	1100	180	108	108
03 H	584	20900	300	9200	2500
04 NW	62	1300	35	58	71
RICE-MOD-83-123 R	2380	360	450	8	48
-84-01 Le	14	28000	7000	29	196
RIDGE-84-01	3280	26800	3400	5500	18200
02	924	11600	1810	940	6000
03	744	6200	3000	680	2400
DDM-03	28	50	125	5	21
04	6	30	15	12	60
06	16	90	280	10	81
FC-156	6	50	7	15	8
157	40	1800	69	26	100
158	12	3500	4000	20	106
159	-2	60	18	1	10
160	6	20	86	1	119
161	8	300	43	9	52
162	8680	27100	9	400	80
163 B	1440	20200	45	730	830
165	24	5100	540	10	44000
GW-M-01	6	50	170	6	132
02	8	60	6	2	25
05	8	300	21	6	19
06	2	50	49	14	87

14, 2235 - 30th Avenue N.E., Calgary, Alberta T2E 7C7
(403) 276-8668 Telex 03-821172 CGY

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 84-269 Taiga Consultants Date Oct.18, 1984

Client Project BC-83-2 Page 1/3

Sample No.	Au ppb
C-151	-2
154	24
155	108
156	4820
157	48
158	2
FC-150 A	-2
153	100
154	176
155	680
GW-CR-01	-2
02	16
04	2
05	44
07 shaft	40
07 0-2 m	14
08	4
36	54
52 (?)	4
GW-R-01	4
02 "BB"	4
02 A outcrop	-2
03	6
04 / R "S"	2
07 A	2

14, 2235 - 30th Avenue N.E., Calgary, Alberta T2E 7C7
(403) 276-8668 Telex 03-821172 CGY

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 84-269 Date

Client Project BC-83-2 Page 2/3

Sample No.	Au ppb
GW-R-09 A	8
11	-2
11 A	-2
12	4
15 0-1 m	26
15 A St. Lawrence	20
JD-CR-01	2
05	8
06	-2
07	-2
08	10
JD-CW-02	-2
03	4
04	4
JD-R-01	6
02	2
03	660
04	-2
S1-28-9	4
S2-28-9	-2
S3-28-9	-2
S1-29-1	8
S2-29-9	16
S3-29-9	-2
S4-29-9	84

14, 2235 - 30th Avenue N.E., Calgary, Alberta T2E 7C7
(403) 276-8668 Telex 03-821172 CGY

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 84-269 Date

Client Project BC-83-2 Page 3/3

Sample No.	Au ppb
S5-29-9	534
S6-29-9	248
S7-29-9	1280
S8-29-9	62
S9-29-9	-2
St. Lawrence extra samples Iron ore piles	2520

RIDGE

14, 2235 - 30th Avenue N.E., Calgary, Alberta T2E 7C7
(403) 276-8668 Telex 03-821172 CGY

A P P E N D I X I I I

Rock Descriptions

ROCK DESCRIPTIONS

Ridge-84-01	Standard decline shaft, rock pile at the porthole. moderately pyritized and altered limestone; chalcopyrite to 3%.
Ridge-84-02	Liberty grid, short exploratory shaft, rock pile. altered limestone, mineralized with pyrite.
Ridge-84-03	short shaft rock pile, southeast area of grid. trachyandesite, weakly to moderately pyritized and silicified.
GW-R-01	Trachyandesite, highly fractured and propylitically altered, narrow breccia zones through intensely fractured sections; malachite on fracture surfaces and weakly disseminated throughout reasonably unbroken rock; primary fracture sets are silicified, resulting in development of minor vein quartz.
GW-R-02 / 02A	Andesite, highly sheared, moderately silicified, sections showing intense propylitic alteration; well mineralized with pyrite and minor malachite along most primary fracture set surfaces.
GW-R-03	Andesite, propylitic alteration, highly fractured and brecciated; disseminated malachite; several secondary fracture sets are weakly silicified.
GW-R-04 and GW-R-07	Trachyandesite, sheared and propylitically altered; weakly disseminated pyrite and malachite; weak to moderate silicification enveloping intensely fractured sections indicating upward migration of alteration and mineralizing solutions.
GW-R-09 / 09A	Skarn, mineralized with pyrite and minor chalcopyrite to 15%.
GW-R-11/11A	Andesite, propylitically altered, silicified, weakly pyritized.
GW-R-12	Trachyandesite, weakly silicified, propylitically altered; disseminated pyrite to 1%.
GW-R-15/15A	chip samples (one metre each) from narrow shear zone containing quartz and malachite; andesite host rock is rust-altered and weakly silicified; collected from the Standard exploration decline shaft.
JD-R-01	Dacite porphyry, silicified, pyritized, fractured; upper shaft at the "Butcher Boy".
JD-R-02	Dacite porphyry, sheared, hematized, weak limonite stain along fractures; fracture zone trends 005°/74°W.

JD-R-03	"St. Lawrence Shaft" altered greenstone, pyritic, chalcopyrite with secondary limonite and minor malachite, brecciated, quartz-carbonate veining.
JD-R-04	Andesite, greyish-green; L.8+00E/10+70S.
* JD-R-05	Trachy porphyry, pink with feldspar phenocrysts; strike 027° dip 46°W.
* JD-R-06	Andesite, porphyritic, weak argillic alteration, pyritic, phenocrysts of biotite and feldspar; L.9+00E/9+50S.
* JD-R-07	Trachyte, porphyritic, weak argillic alteration, biotite phenocrysts, limonite staining; L.10+00E/10+50S.
* TT-84-169	L.6+00E/4+00S. Andesite porphyry, mica phenocrysts.
* TT-84-170	L.6+00E/5+60S. Andesite porphyry, mica phenocrysts.
* TT-84-171	L.13+00E/11+50S. Grab, very graphitic.
* R-RF-1	L.13+00E/1+98S. Trachyte, carbonate altered, minor pyrite.
* R-RF-2	L.13+00E/3+25S. Trachyandesite, carbonate altered, minor Py.
* R-RF-2B	L.13+00E/3+75S. Trachyandesite, pyritized, minor malachite along fractures.
* R-RF-3	L.13+50E/5+00S. Highly siliceous.
* R-RF-4	L.13+00E/6+25S. Skarn, pyrite and chalcopyrite.
* R-RF-5	L.13+00E/8+50S. Test pit; pyritized and silicified limestone.

* not assayed

A P P E N D I X I V

Summary of Personnel and Expenditures

SUMMARY OF PERSONNEL

J. W. Davis, P.Geol. 116 MacEwan Dr. N.W. Calgary, Alberta T3K 2P7	Sep. 26 + 27
C. H. Aussant, P.Geol. 31 Templebow Way N.E. Calgary, Alberta T1Y 5B5	Sep. 26 - 28
G. L. Wilson, B.Sc. 60 Ranchridge Road N.W. Calgary, Alberta T3G 1Z9	Sep. 26 + 27
Fred Cook Brabant Lake LaRonge, Sask. S0J 1L0	Sep. 26 + 27
R. R. Fader 1516 - 23rd St. N.W. Calgary, Alberta T2N 2P5	Sep. 27
Solomon Hardlotte P. O. Box 1164 LaRonge, Sask. S0J 1L0	Sep. 26 + 27
T. J. Termuende Wild Horse Farm Fort Steele, BC V0B 1N0	Sep. 26 - 28
D. D. Dancer 5 Fraser Road S.E. Calgary, Alberta T2H 1E4	Sep. 26 + 27

SUMMARY OF EXPENDITURES

Personnel			
J. W. Davis	2 days @ $350	700.00	
C. H. Aussant	3 days @ $250	750.00	
G. L. Wilson	2 days @ $250	500.00	
F. Cook	2 days @ $230	460.00	
R. R. Fader	1 day @ $225	225.00	
S. Hardlotte	2 days @ $185	370.00	
T. J. Termuende	3 days @ $145	435.00	
D. D. Dancer	2 days @ $115	230.00	
	17 days		3,670.00
Camp and Food	17 man days @ $40/diem		680.00
Transportation (travel expenses, truck, fuel, equipment)			890.00
Disposable Supplies			130.00
Miscellaneous (maps, reproductions, phone, freight)			102.00
Geochemical Analyses			
Rocks for Au only	17 @ $ 9.25	157.25	
Rocks for Au/Ag/Cu/Pb/Zn	3 @ $12.75	38.25	195.50
Post-Field Compilation (writing, drafting, secretarial)			1,280.00
		TOTAL	$ 6,947.50

118° 44'

49° 07'

L2567

L2566

2c

2a,c,d,f

6

4

5

5e,d

5h,g

5e,d,g

4a,d,c

2

2a,c,d

malachite
GW-2601

GW-2603

malachite

GW-2602

chal, mal.

bed
GW-R-12
(4 ppb Au)

greenstone

chert

qtz stringer

GW-R-11,11a
(-2,-2 ppb Au)

Fault contact

A

A'

Magnetic signiture greater than 58,000 gammas

L0+00

L1+00E

L2+00E

L3+00E

L4+00E

L5+00E

L6+00E

L7+00E

L8+00E

L9+00E

L10+00E

L11+00E

L12+00E

L13+00E

R-RF-1

R-RF-2

R-RF-3

R-RF-5

GW-R-14

GW-R-13

GW-R-06

GW-R-05

TT-84-169

TT-84-170

JD-R-02

JD-R-03

GW-R-15,15a
15(26ppb Au)
15a(20ppb Au)

Standard shaft

GW-R-9,9a
(8ppb Au)

TT-84-171

GW-R-9

JD-R-07

JD-R-06

JD-R-05

JD-R-04

JD-R-01

GW-R-02a

R-84-03

GW-R-02

"Butcher Boy"

GW-R-03

GW-R-07

DDH Platform

Liberty showing

Deadwood Creek

qtz

Area containg a magnetic signiture greater than 58,000 gammas

Major break in VLF-EM conductors

Airphoto Lineaments

GEOPHYSICAL LEGEND

- Magnetic High
- Magnetic Low
- VLF-EM Conductors

Q Till, Sand, Gravel, Silt

TERTIARY

EOCENE

CORYELL INTRUSIONS

1 Syenite, quartz monzonite

PENTICTON GROUP

MARRON FORMATION

NIMPIT LAKE MEMBER

2 Andesite and Trachy andesite

JURASSIC

NELSON FORMATION

3 Granodiorite

PERMIAN

BROOKLYN FORMATION

4 Skarn, Limestone

5 Chert sandstone, Sharpstone conglomerate, Schist

KNOB HILL FORMATION

6 Chert, Greenstone

a With carbonate
b With chlorite
c With epidote
d With sulphides
e Silicified
f Sheared
g Porphyritic
h Brecciated
i Hematite (red altered)
j Argillite

- Geologic contact
- Fault
- Shear
- Outcrop area
- Trench
- Sample section
- Open cut
- Shaft
- Exploratory shaft
- Test pit
- Prospect
- Foliation
- Fractures
- Geochemical results Au(ppb), Ag(ppb)
- Bedding

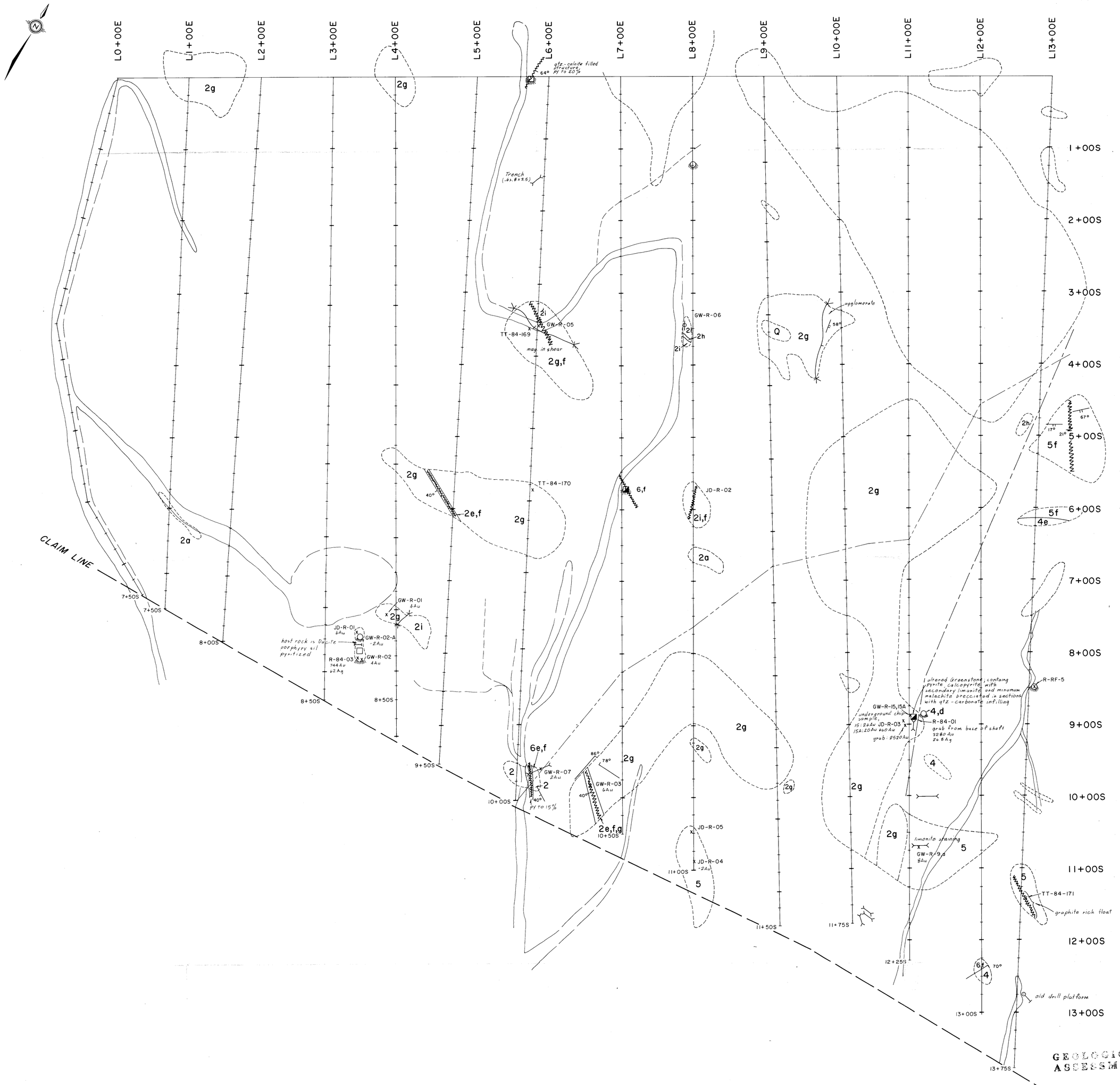
REX SILVER MINES LTD.

RIDGE 1 CLAIM

COMPILATION MAP

GEOLOGY MAP

DATE OCTOBER/84	NTS 82E/2
PROJECT BC-83-2E	MAPPED/DRAWN BY G. WILSON
SCALE 1:5000	0 50 100 150 200 METRES
TAIGA CONSULTANTS LTD	MAP 1



Q T.H., Sand, Gravel, Silt

TERTIARY

EOCENE

CORYELL INTRUSIONS

1 Syenite, quartz monzonite

PENTICTON GROUP

MARRON FORMATION

NIMPIT LAKE MEMBER

2 A Andesite and B Trachyte
C Volcanic Agglomerate

JURASSIC

NELSON FORMATION

3 Granodiorite

PERMIAN

BROOKLYN FORMATION

4 Skarn, Limestone

5 Chert sandstone, Sharpstone conglomerate, Schist

KNOB HILL FORMATION

6 Chert, Greenstone

a With carbonate
b With chlorite
c With epidote
d With sulphides
e Silicified
f Sheared
g Porphyritic
h Brecciated
i Hematite (red altered)

TRAILS

ROADS

FENCE

CLAIM LINE

geologic contact
fault
shear
outcrop area
trench
sample section
open cut
shaft
exploratory shaft
test pit
prospect
foliation
fractures

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,621

REX SILVER MINES LTD.

RIDGE CLAIM

GEOLOGY MAP

DATE NOVEMBER / 84	NTS 82E/2E
PROJECT BC-83-2	MAPPED/ DRAWN BY G. WILSON
SCALE 1:2500	0 50 100 150 METERS
TAIGA CONSULTANTS LTD	MAP

L0+00E
L1+00E
L2+00E
L3+00E
L4+00E
L5+00E
L6+00E
L7+00E
L8+00E
L9+00E
L10+00E
L11+00E
L12+00E
L13+00E

1+00S
2+00S
3+00S
4+00S
5+00S
6+00S
7+00S
8+00S
9+00S
10+00S
11+00S
12+00S
13+00S

CLAIM LINE

INSTRUMENT – PROTON MAGNETOMETER GEOMETRICS G826A

READINGS 50,000 PLUS (gammas)

CONTOUR INTERVAL

60,000	
59,000	
58,500	
58,000	
57,500	
57,000	
56,000	

TRAILS

ROADS

FENCE

CLAIM LINE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

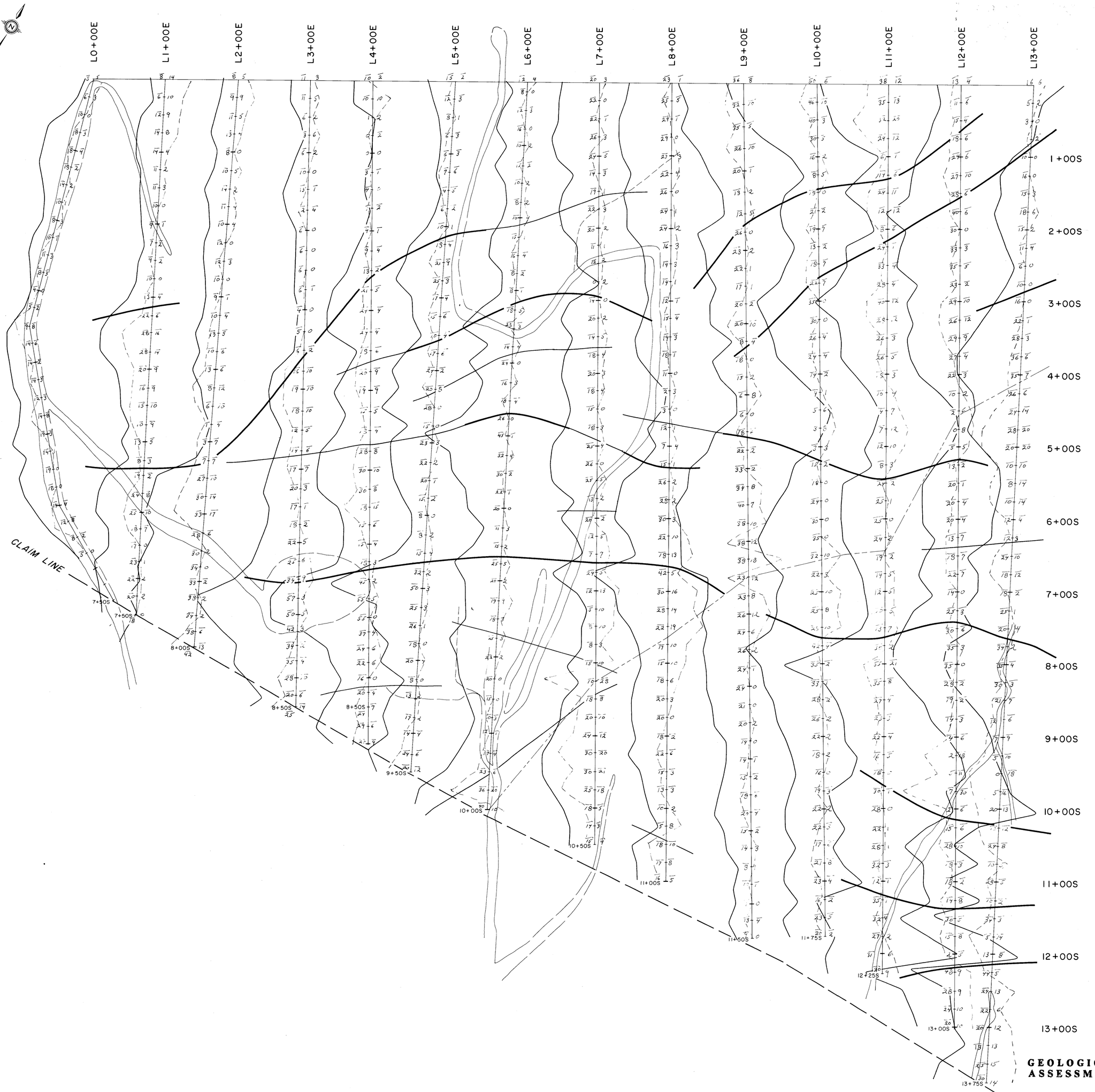
13,621

REX SILVER MINES LTD.

RIDGE CLAIMS

MAGNETOMETER SURVEY

DATE NOVEMBER/84	NTS 82E/2E
PROJECT BC-83-2	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 50 100 150 METERS
TAIGA CONSULTANTS LTD	MAP 3



TRAILS

ROADS

FENCE

CLAIM LINE

STATION - CUTLER, MAINE

INSTRUMENT VLF-EM-16

NORTH - NEGATIVE

SOUTH - POSITIVE

IN PHASE

QUADITURE

PROFILE SCALE - 1cm = 10%

IN PHASE | QUADITURE

STRONG TO MODERATE CONDUCTOR

WEAK CONDUCTOR

GEOLOGICAL BRANCH
ASSESSMENT REPORT

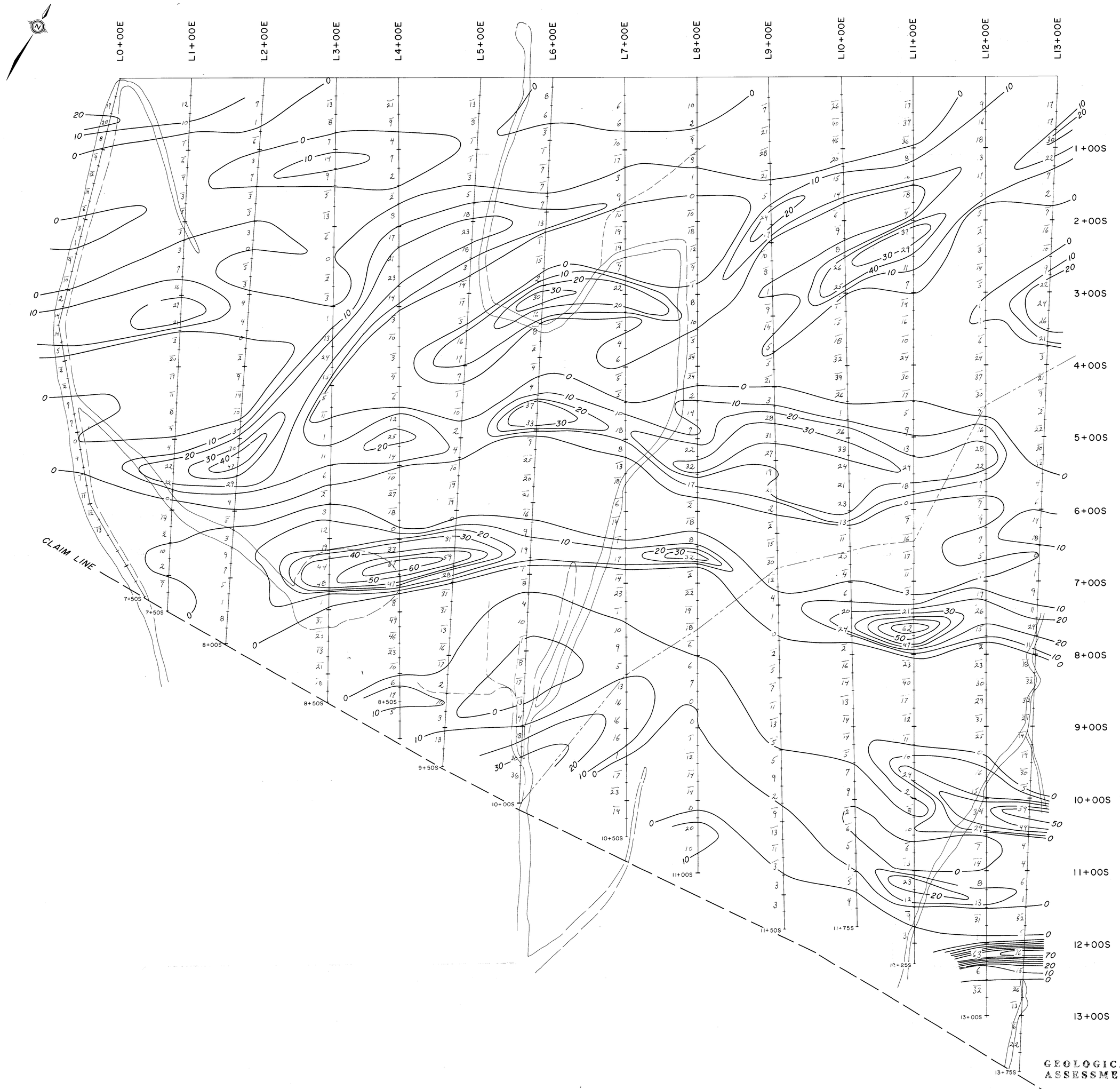
13,621

REX SILVER MINES LTD.

RIDGE CLAIMS

VLF-EM PROFILES

DATE NOVEMBER/84	NTS 82E/2E
PROJECT BC-83-2	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:2500	0 50 100 150 METERS
TAIGA CONSULTANTS LTD	MAP 4



TRAILS - - - - - - - - - -

ROADS ————————

FENCE ——— - - ——— - - ———

CLAIM LINE ——— —— ——

CONTOUR INTERVAL 10

GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,621

REX SILVER MINES LTD.

RIDGE CLAIMS

FILTERED VLF-EM

DATE NOVEMBER/84	NTS 82E/2E
PROJECT BC-83-2	MAPPED/DRAWN BY C. AUSSANT
SCALE 1:2500	0 50 100 150 METERS
TAIGA CONSULTANTS LTD	MAP 5