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NAME:	PETER KLEWCHUK

PROSPECTOR'S ASSISTANCE GRANT REPORT

on

FLAGSHIP & PEG CLAIMS

Bootleg Mountain

FORT STEELE MINING DIVISION

NTS 82 F/9
TRIM 82F.070

UTM 5,500,000N 565,500E

By

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1.00 INTRODUCTION

This report describes a program of prospecting, geologic mapping and rock geochemistry completed on the Peg property in the St. Mary River / Matthew Creek drainage during September, 2000.

1.10 Location and Access

The Peg property, which includes the Flagship and Peg claims, is located on the southeast slope of Bootleg Mountain about10 kilometers southeast of Kimberley, B.C., north of the St. Mary River and west of Matthew Creek, and is centered approximately at UTM coordinates 565,500E, 5,500,000N on TRIM map 82F.070 (Fig. 1).

The property is readily accessible by road from Kimberley by taking the St. Mary Lake road and the Bootleg Forest Service road. Old logging roads provide access off the Bootleg road.

1.20 Physiography

The Peg property is located west of the Rocky Mountain Trench in the Purcell Range of the Columbia Mountains. Topography is moderately rugged along the south and southeast slopes of Bootleg Mountain; elevations on the claim block range from 950 to 1800 meters. Steep rocky exposures are present in Matthew Creek and in smaller south-flowing streams which drain the property. These have impeded access for logging in the past thus part of the claim block has mature, fairly open stands of timber. Forest cover consists mainly of Douglas Fir, Lodgepole Pine and Western Yellow Larch with minor birch and aspen.

1.30 Property

The Peg property includes 44 claim units in two four-post claims and 28 two-post claims and is comprised of the Flagship 1 to 6 claims and the Peg 1 to 22 claims (Fig. 2).

1.40 History of Previous Exploration

The Hellroaring Creek pegmatite stock, located about 8 km southwest of the claim block, has previously been explored for both beryllium and industrial minerals (eg. Pudifin, 1986).

Old workings are developed on the claim block on a large bedding-parallel lens of quartz on the Peg 4 & 5 claims. These workings are known as the Bulldog but no record was found of this old exploration activity. Minor galena is present in some of the quartz vein dump material associated with the workings.

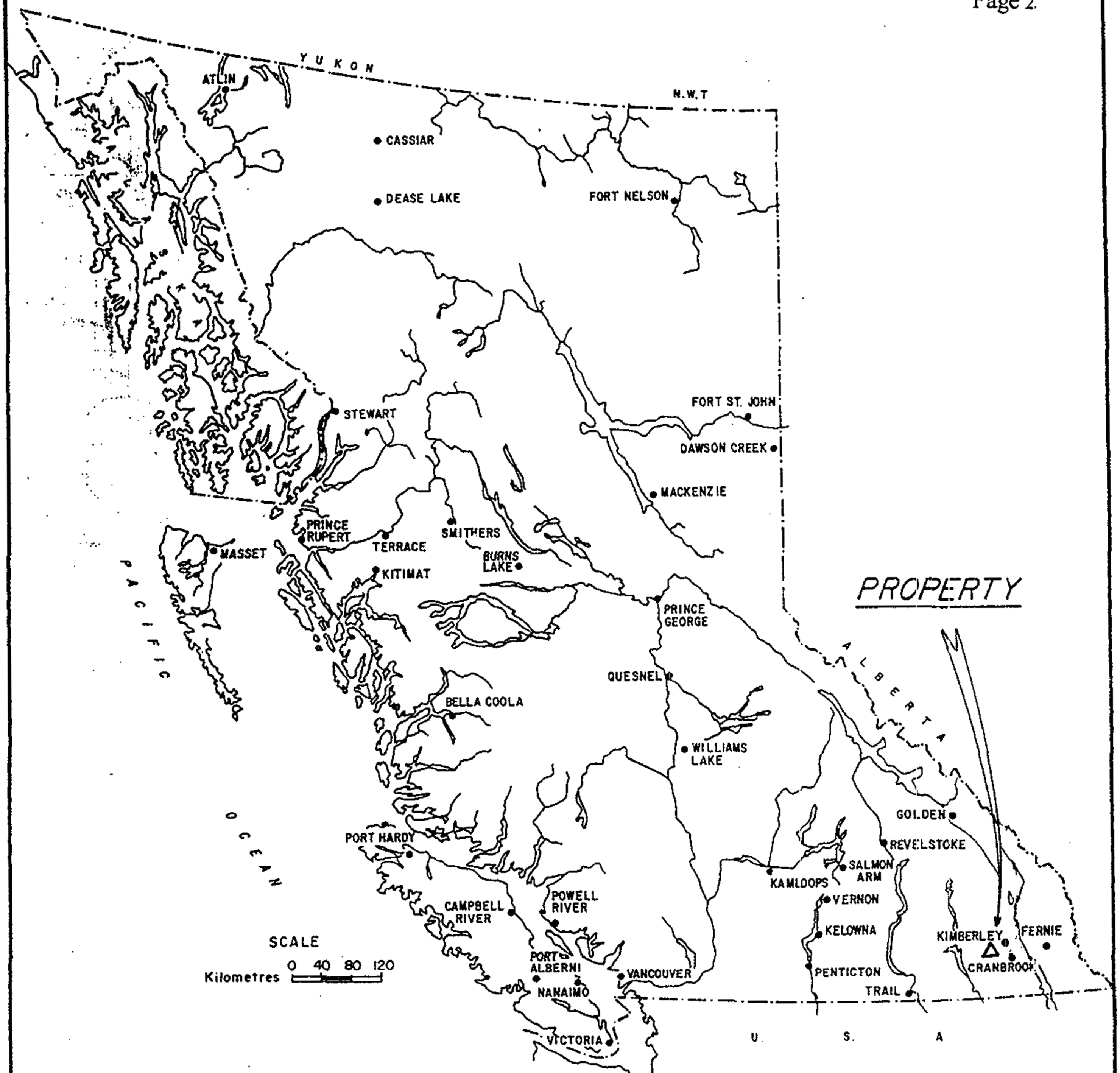

Figure 1. Peg & Flagship Claims
Property Location Map

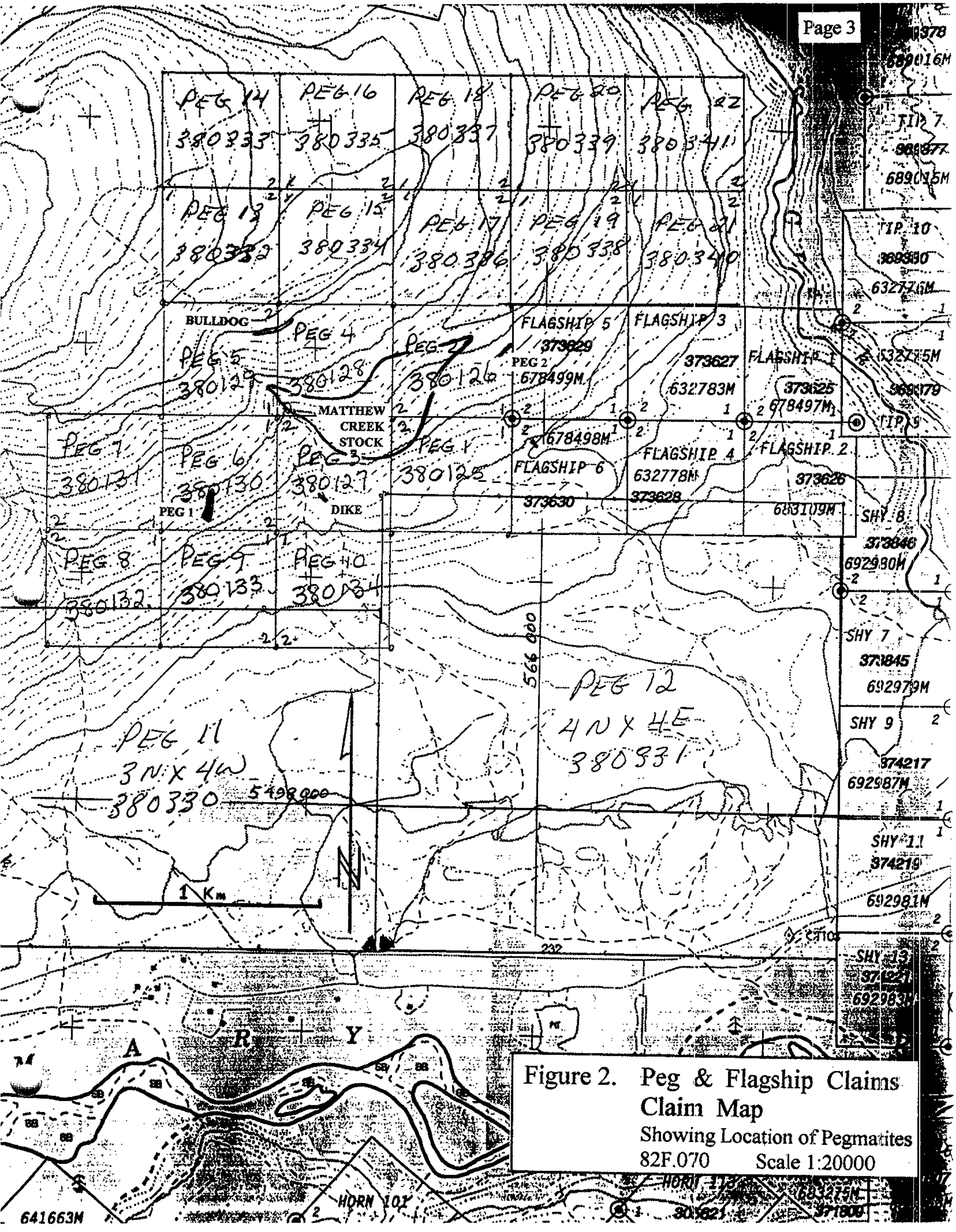

Figure 2. Peg & Flagship Claims
Claim Map
Showing Location of Pegmatites
82F.070 Scale 1:20000

McFarlane and Pattison (2000) studied the structure of the Matthew Creek Metamorphic Zone which is largely covered by the Peg property. Their work was focused on the higher grade metasedimentary rocks of the area but includes a brief description of the Matthew Creek pegmatitic stock and adjacent smaller peripheral pegmatite bodies.

The Flagship claims were originally staked for 'flagship' building stone material; the thin bedded quartzitic lower Aldridge Formation metasedimentary rocks on these claims commonly have muscovite-rich partings, producing flat thin sheets with micaceous surfaces that may be suitable for wall facing or flooring. Prospecting for suitable flagship material led to discovery of beryl-bearing pegmatites near the larger Matthew Creek Stock.

1.50 2000 Program

In September and October of 2000, reconnaissance prospecting was carried out on the Matthew Creek Stock and the immediate environs and detailed geologic mapping was completed on the beryl-bearing 'Peg 1' pegmatite sill located west of the Matthew Creek Stock. Thirty rock chip samples of pegmatite material were collected and analyzed for a rare metal / rare earth package. Sample size was about 2 kg. The smaller 'Peg 2' beryl-bearing pegmatite, located east of the Matthew Creek Stock was discovered late in the field season and briefly mapped, but not in the detail of the Peg 1. Samples of muscovite were collected from each of the three pegmatite bodies and analyzed for the same geochemical package as well as lithium.

2.00 GEOLOGY

2.10 Regional Geology

The area of the claim block was mapped by Leech (1957) and bedrock is part of the Mesoproterozoic Purcell Supergroup, a thick succession of fine-grained terrigenous clastic and carbonate sedimentary rocks exposed in the core of the Purcell Anticlinorium in southeast British Columbia. The Purcell basin was formed by block faulting in an intracratonic setting on the western margin of the Precambrian North American Craton.

The oldest known member of the Purcell Supergroup is the Aldridge Formation, a thick sequence of fine-grained siliciclastic rocks deposited largely by turbidity currents. Reesor (1958) has divided the Aldridge Formation in the Purcell Mountains into three informal units: rusty weathering siltstone, quartzitic wacke and argillite of the lower Aldridge Formation; grey weathering quartz wacke and siltstone of the middle Aldridge Formation; and laminated argillite of the upper Aldridge Formation.

The lower Aldridge Formation, whose base is not exposed, has a maximum known thickness of about 1500 meters within southeastern British Columbia. The middle Aldridge is about 2500 meters thick and includes periodic inter-turbidite intervals of thin bedded, rusty-weathering argillites some of which form finely laminated marker beds that are time stratigraphic units and which can be correlated over great distances within the Aldridge basin and equivalent stratigraphy in the United States. The upper Aldridge Formation is about 300 meters thick.

The lower and middle units of the Aldridge Formation are host to a proliferation of gabbroic to dioritic composition Moyie Intrusions, predominantly as sills. These intrusions are interpreted to be penecontemporaneous with deposition of their host sediments (Hoy, 1989).

The Aldridge Formation is gradationally overlain by shallower-water deltaic clastics of the Creston Formation. The Creston Formation is in turn overlain by predominantly dolomitic siltstones of the Kitchener Formation.

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976) and Hoy (1982) suggest a possible genetic link between sedex style base metal mineralization and syndepositional faulting.

Longitudinal faults which more closely parallel the direction of basin growth faults may have played a similar role. The world class zinc-lead-silver sedex Sullivan orebody, which occurs at the upper contact of the lower Aldridge Formation, is part of a NNE oriented structural corridor that hosts extensive evidence of disturbed sedimentation and hydrothermal vent products as well as base metal sulfides. This corridor is parallel to longitudinal basin growth faults and is probably related to such a structure.

Two large granitic pegmatite bodies intrude lower Aldridge rocks west of Kimberley. The larger Hellroaring Creek Stock occurs between the lower portions of Angus and Hellroaring Creeks while the smaller Matthew Creek Stock occurs about 10 km to the northeast, on the lower south-facing slopes of Bootleg Mountain. The Hellroaring Creek Stock contains minor white to very pale green beryl and it has also been reported to occur in the Matthew Creek Stock. The Matthew Creek Stock occurs within a limited zone of enigmatic higher grade metamorphic rocks known as the Matthew Creek Metamorphic Zone (MCMZ). In addition to the two main stocks, a number of much smaller similar composition pegmatite dikes and sills occur in the vicinity of the two larger intrusives. Some of the smaller pegmatite bodies appear to contain more beryl than the main stocks; others appear to have little or no beryl.

2.20 Property Geology

The Peg property covers most of the area of the Matthew Creek Metamorphic Zone (MCMZ) and is underlain by the lower informal member of the Aldridge Formation. Bedrock exposures include lithologies ranging from quartzites to meta-pelites. Mapping done by McFarlane and Pattison shows a series of gabbroic intrusions along the northeastern and northwestern margins of the MCMZ which appear to be mainly sills.

2.21 Matthew creek Metamorphic Zone

According to McFarlane and Pattison:

> Southwest of Kimberley, southeastern British Columbia, the Matthew Creek metamorphic zone occupies the core of a structural dome in Mesoproterozoic rocks of the Lower Aldridge formation (lower Purcell Supergroup). It comprises (1) a core zone of ductilely deformed sillimanite-grade metapelites, thin foliated mafic sills, and sheared quartz-plagioclase-tourmaline pegmatites; and (2) a thin transition zone of ductilely deformed metasediments which marks a textural and metamorphic transition between the core zone and overlying regionally extensive, brittlely deformed, biotite-grade semipelitic Lower Aldridge formation metasediments and thick Moyie sills. The core zone and transition zone in combination cover an area of 30 square kilometers. The deepest exposed rocks in the core zone have a strong foliation and lineation (D1 deformation) formed during late M1 metamorphism at conditions of 580-650° C and 3.5 +/- 0.5 kbar. The timing of this metamorphic-structural episode is constrained to the interval 1352-1341 Ma based on near-concordant U-Pb ages from monazite in pelitic schist near the mouth of Matthew Creek. Later, weaker metamorphic and deformation episodes variably overprinted the rocks of the Matthew Creek metamorphic zone. The juxtaposition of low-grade, weakly deformed rocks above high-grade, strongly deformed rocks across a zone of ductile deformation is interpreted to be due to a subhorizontal shear zone.

2.22 Pegmatites

Introduction

The Matthew Creek Stock is one of two large granitic pegmatite occurrences intruding Aldridge Formation rocks west of Kimberley, B.C. The much larger Hellroaring Creek Stock occurs about 10 kilometers southwest of the Matthew Creek Stock. Both pegmatite intrusions appear to be sill-like in character and may be lacolliths. The sill-like character is more evident with the lens-shaped Matthew Creek Stock, where more of the hangingwall contact is preserved. Both pegmatite bodies are mineralogically similar, containing mainly albite and potassium feldspar (commonly perthitic), quartz and muscovite. The Hellroaring Creek Stock is more commonly very coarse grained and has more textural variability. The Hellroaring Creek Stock contains abundant (est. 3%) coarse dark brown to black tourmaline crystals while little or no tourmaline is present in the Matthew Creek Stock. Minor pink to light orange-red garnets are also more common in the Hellroaring Creek Stock. Although beryl is generally rare in the Hellroaring Creek Stock, it is more abundant there than in the Matthew Creek Stock, based on visual estimates of surface bedrock exposures.

Lensey concentrations of massive, fine-grained dark brown to black stubby tourmaline crystals are developed near the contacts of both stocks, within the immediately adjacent host sedimentary rocks and on the margins of lensey quartz veins near the pegmatite boundaries.

Both the Matthew Creek and Hellroaring Creek Stocks are unusually large for pegmatites. The Hellroaring Creek Stock is well exposed over a strike length of more than two kilometers, a width of about one kilometer and a thickness of at least 700 meters. The Matthew Creek Stock is more poorly exposed but has a strike length of about one kilometer, an exposed thickness of about 300 meters, and unknown down-dip extent. Based on surface exposures, the Hellroaring Creek Stock is an order of magnitude larger than the Matthew Creek Stock.

The Matthew Creek Stock occurs within the MCMZ while the Hellroaring Creek Stock is about 10 km southwest of the MCMZ. Both pegmatite intrusions appear to be somewhat zoned.

The Hellroaring Creek pegmatite stock was originally dated by Ryan and Blenkinsop (1971) as Precambrian and is currently believed to be 1365 +/- 3 Ma (Mortensen, unpublished data, cited in McFarlane and Pattison, 2000). Presumably the Matthew Creek stock, which is similar in general composition and texture, is of similar age. No other granitic intrusions of this age are known in the district so there is no 'parent' granitic intrusion known for the two major stocks or their peripheral pegmatite sills and dikes. Furthermore, regional geophysical surveys do not support the presence of any large buried granitic intrusion in the vicinity of the pegmatite stocks. Thus it appears the two pegmatitic stocks are themselves the main intrusive bodies.

Granitic pegmatites are divided into two main categories; simple pegmatites are of 'normal' felsic granitic composition while complex pegmatites carry rare metals and / or rare earth elements. According to Guilbert and Park (1986), p.488:

> "Pegmatites represent the final, water-rich, siliceous melts of intermediate to silicic igneous magmas, and can be generally thought of as final residual melts rich in silica, alumina, water, halogens, alkalies, and lithophile elements not readily accommodated in the common igneous "Bowen's reaction series" minerals. They have thus been - and to some extent still are - important sources of beryllium, lithium, rubidium, cesium, tantalum, niobium, lesser sources of uranium, thorium, rare earth elements, molybdenum, tin, and tungsten, and major sources of muscovite mica, perthite-quartz for glass manufacture, high-purity silica, and a variety of gem stones and salable mineral

specimens, including emeralds, other beryls, topaz, tourmalines, and many more.

Although pegmatites can be found in almost any shape, they are most commonly dikelike or lensoid. Most pegmatites are small, but dimensions can vary from a few meters to hundreds of meters in the longest dimension and from 1 cm to as much as 200 meters in width. They rarely form extensive and continuous tabular bodies in the form of deep-seated veins; only a few exceptional deposits over 2 km long are known. Since igneous pegmatites characteristically solidify late in igneous activity, they tend to be associated with plutonic or hypabyssal intrusions from which the volatile fractions could not readily escape. The great majority of pegmatites developed in deep-seated high-pressure environments. They are rare in unmetamorphosed sediments or shallow intrusives, lavas, or tuffs. Pegmatites rarely develop conspicuous alteration halos, although some hydrolysis and silicification may occur in the walls."

Some of the complexity of rare metal pegmatites, both in texture and in mineralogy, can be attributed to a long, continuous period of crystallization during which the first-formed minerals reacted with a progressively changing residual magmatic fluid. The presence of a gaseous phase would contribute to the common very coarse textures; a variably-developed gaseous phase may partially explain rapid changes in texture and composition and could result in complex mineralogic zoning that is not necessarily related to the shape of the pegmatite.

McFarlane and Pattison (2000) described the pegmatite bodies within the Matthew Creek Metamorphic Zone:

The core zone contains lenses and pods of pegmatite ranging in thickness from <5 cm to tens of metres. Most of the pegmatite is peraluminous and is composed of plagioclase and muscovite with lesser quartz, alkali feldspar and ubiquitous black tourmaline, garnet, and white beryl. The Matthew Creek stock is the largest of these pegmatites (<5 square kilometers), cropping out in the western portion of the field area. It has a domed roof and an undulatory lower contact, both of which are concordant with the schistosity. All of the pegmatites mapped in the area have deformed margins against the schist. The contacts between the pegmatites and the surrounding schists display a cataclastic fabric defined by fractured feldspars anastomosed by lepidoblastic muscovite that is preserved up to 30 cm into the pegmatites. Many fractured porphyroclasts display domino structures suggesting they have experienced a component of simple shear. Many smaller pegmatite sills have been boudinaged and transposed into parallelism with the schist. The host rocks adjacent to the pegmatites do not display evidence of contact metamorphism.

Brown tourmalinite layers in schists along the upper contact of several pegmatitic sills suggest that boron-rich metasomatizing fluids may have accompanied their emplacement. The ubiquitous occurrence of tourmaline with green dravitic cores and brown schorl rims throughout the high-grade schist and in the margins of foliated sills suggests that addition of boron-rich fluids to the metamorphic rocks may have been significant and widespread.

They also inferred that "pegmatites were emplaced into host rocks of a similar temperature and were not the heat source for the M1 metamorphism."

Matthew Creek Pegmatite Stock

The Matthew Creek Stock is generally not as coarse-grained as the Hellroaring Creek Stock. The smaller size with an inferred proportional faster cooling period is unlikely the reason as many much smaller pegmatite sills and dikes are very coarse-grained.

The Matthew Creek Stock has an albite-rich basal zone with potassium feldspar rare or absent. The middle section is of a fairly consistent massive medium-coarse-grained granitic texture but with potassium feldspar, and the uppermost zone is notably coarser-grained with textures more similar to the Hellroaring Creek Stock. Isolated zones of graphic granite texture are common in both large stocks.

Small angular xenoliths of metamorphosed thin bedded sedimentary rock were observed in lower exposures of the Matthew Creek Stock (larger blocks of sediments and gabbro are present within the Hellroaring Creek Stock). The presence of these isolated blocks with relatively sharp contacts supports intrusion of the Matthew Creek Stock as a magmatic body. This is compatible with Guilbert and Park's (1986) observation that complex pegmatites result from igneous processes rather than from recrystallization associated with metamorphism.

Peg 1 Pegmatite

The Peg 1 pegmatite is a sill-like body located approximately 600 meters west of the Matthew Creek Stock (Fig. 2). It was discovered by prospector Craig Kennedy in August, 2000. The presence of visible beryl crystals in the pegmatite sparked an interest in the immediate area for beryl / beryllium and associated rare metals and rare earth elements.

Although not a particularly rare mineral, beryl rarely occurs in economic concentrations and the rare element beryllium is produced by only a few companies in the world. Only a few known Canadian deposits have economic potential and none are presently being mined (eg. Richardson and Birkett, 1995; Sinclair, 1995; Trueman and Pedersen, 1988). Beryllium is the second lightest metal yet has exceptional qualities which make it *the* desired metal for many specialized high-technology applications. Due to its limited production, beryllium is fairly high priced and is presently only used in 'high end' products where raw material cost is not the only significant factor; if beryllium could be produced at lower cost it would almost certainly be in more common use.

The Peg 1 pegmatite sill was mapped at a scale of 1:500 (Fig.3); it is exposed for 100 meters along strike and about 30 to 40 meters 'true' thickness along a moderately steep south-southeast facing hillside. Scattered exposures of host metamorphosed lower Aldridge sediments, part of the Matthew Creek Metamorphic Zone (MCMZ), occur around the southwestern edge of the pegmatite. Field relationships support a sill with conformable contacts; in places there is good evidence for a pinch and swell, boudined character. McFarlane and Pattison (2000) noted that pegmatite bodies they observed during mapping of the MCMZ were boudin-shaped as well.

The southern margin of the pegmatite appears to be quite abruptly terminated. There is no evidence of offset in the enclosing sediments and this abrupt termination appears to be a very sharply boudined edge. The northern edge of the pegmatite is covered by overburden and a uniform surface slope here suggests the pegmatite may continue on strike uphill under cover.

Aside from the pegmatite, massive quartz is the only readily mappable phase within the pegmatite body. In a 'normally' zoned pegmatite, quartz would be the most differentiated phase and would occupy a central location within the pegmatite. Quartz masses within the Peg 1 pegmatite display both sharp and gradational contacts and tend to be irregular in character and distribution. One large massive quartz phase extends from the hangingwall to the footwall contact. Masses of quartz with gradational contacts may represent late-stage crystallization phases whereas the quartz bodies with sharp contacts may represent late stage differentiates that have been remobilized as fracture-controlled cross-cutting features.

Texturally the pegmatite is fairly uniformly coarse-grained. Mineralogy consists of albite and potassium feldspar, quartz, muscovite and beryl. No tourmaline was noted. A significant portion of the albite is the lamellar variety cleavelandite and much of the potassium feldspar is perthite. The muscovite is typically clear and glassy but weathers to a very dark gray, almost black color which may be due to the presence of rare metal impurities. A few beryl crystals are a very pale gray-green but most are a neutral white color, generally similar to the feldspar and thus not easy to differentiate on the basis of color. Beryl crystals are unevenly distributed through the pegmatite and can be found from the hangingwall to the footwall of the sill, with no obvious evidence for zoning. They occur mainly as isolated randomly-oriented crystals ranging in size up to about 8 cm across. Most of the beryl crystals are well-formed short hexagonal prisms; some are tapered, and some terminate abruptly in masses of muscovite. Most crystals display a poor basal cleavage which is usually pronounced enough that crystals break quite easily along it. Smaller amounts of quartz and muscovite can be included within beryl crystals.

There appears to be some preference for smaller crystals of beryl to occur with larger masses of cleavelandite and with patches of more concentrated medium coarse muscovite. There is also a tendency for beryl to occur with quartz-rich phases although many of the massive quartz zones contain no obvious beryl. Beryl appears to be more preferentially developed in zones of quartz near the northern hangingwall margin of the pegmatite rather than with the internal quartz-rich phases. The presence of beryl in the more differentiated, quartz-rich phases supports the beryl being a late crystallization product.

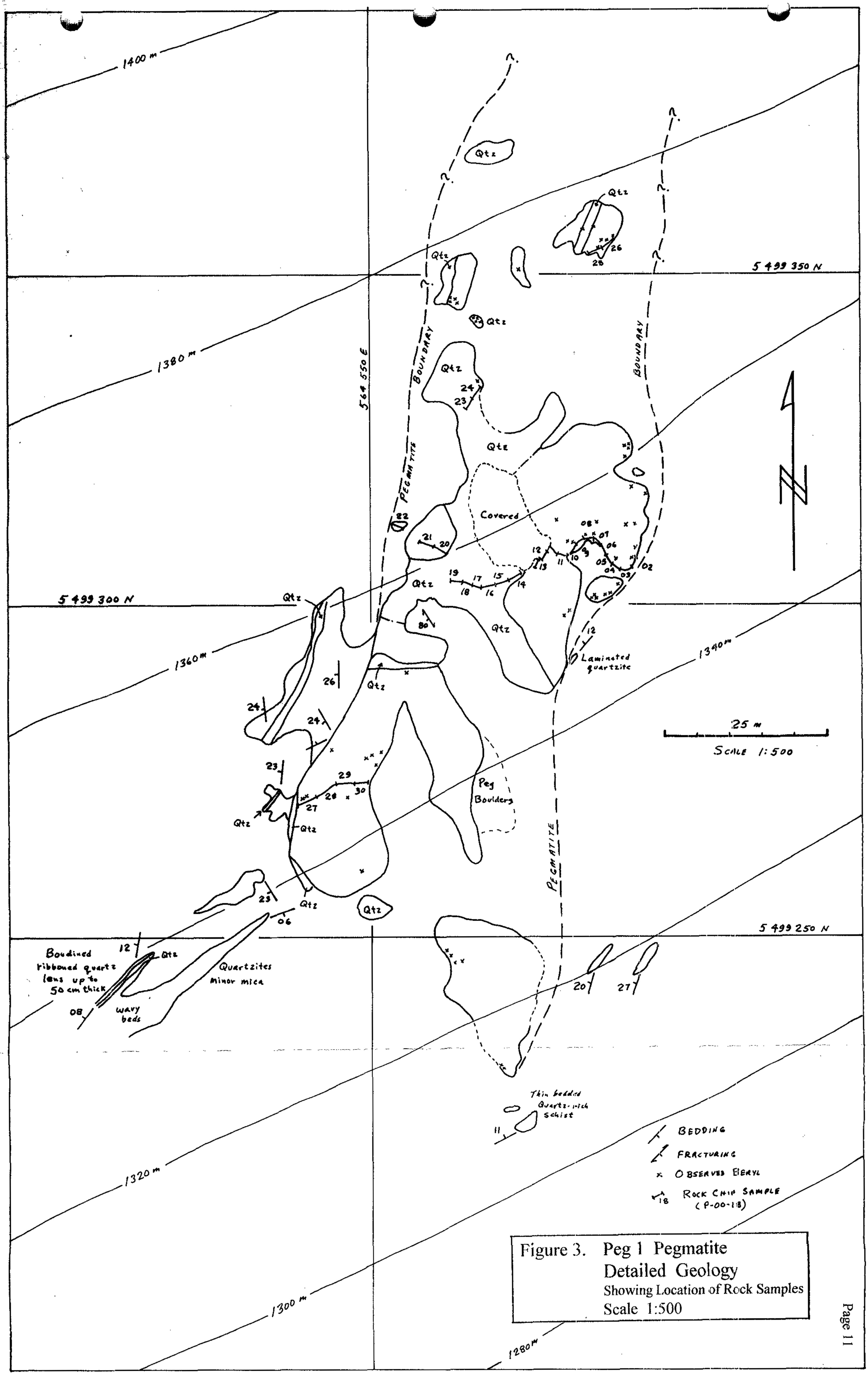

Figure 3. Peg 1 Pegmatite Detailed Geology
Showing Location of Rock Samples
Scale 1:500

Peg 2 Pegmatite

The Peg 2 pegmatite occurs about 300 meters east of the Matthew Creek Stock (patchy bedrock exposure in the area doesn't allow a clear definition of the eastern boundary of the stock). This intrusive was discovered late in the 2000 field season, also by prospector Craig Kennedy. It is intermittently exposed for about 80 meters on strike and a maximum true thickness of about 9 meters. Hangingwall contacts are not evident but overlying bedrock is proximal enough that a bedding-parallel contact can be inferred. The footwall is exposed in a few places, in apparent conformable contact with underlying schists. The eastern edge is a lensoid / boudined termination within micaceous schists of the lower Aldridge Formation. The western exposed edge is surrounded by cover and topography is uniformly sloping, suggesting a continuation of the pegmatite under cover. Thus the Peg 2 is also sill-like in character and is evidently boudined as well.

The eastern portion of the Peg 2 pegmatite is similar in texture and general composition to the Peg 1, consisting of coarse-grained feldspars (albite and perthitic Kspar), quartz, minor muscovite and white beryl. Visually, surface exposures of the Peg 2 pegmatite contain more beryl than the Peg 1. Beryl appears to be concentrated within 3 zones; along the hangingwall contact, along the footwall contact and along a narrow middle zone which is less than a meter wide and which could represent the pegmatite core. This apparent zoning, roughly parallel to the pegmatite boundaries, is somewhat compatible with zoning described for many smaller pegmatite bodies world wide.

The western extremity of the Peg 2 pegmatite is rather poorly exposed; it is quartz rich, similar to the northeastern end of the Peg 1 pegmatite and, also similarly, contains scattered coarse-grained beryl crystals.

Quartz Lenses

Bedding-parallel lenses of quartz are common within exposed lower Aldridge metamorphosed sediments in the vicinity of the Matthew Creek Stock and the Peg 1 & 2 pegmatite sills. These quartz lenses have associated with them exomorphic concentrations of fine to medium-grained, stubby dark brown tourmaline crystals. The presence of this peripheral tourmaline adjacent to both pegmatite and quartz bodies indicates they have a similar genesis.

3.00 ROCK GEOCHEMISTRY

3.10 Introduction

Rare metal pegmatites are sources of lithium, beryllium, niobium, tantalum, rubidium, cesium, tin, tungsten and zirconium, and they can also contain economic values in rare earth elements. Pegmatites are also a source of quartz and feldspar for manufacture of glass and ceramics. The Hellroaring Creek and Matthew Creek Stocks and their associated smaller pegmatite sills and dikes appear to have a very low iron content (except for the tourmaline which could be easily removed) which is favorable for glass / ceramics usage. The pegmatites west of Kimberley have long been known to contain beryl but other rare metals had not been seriously tested for prior to 2000.

Rock samples were collected from the Peg 1 pegmatite as a preliminary evaluation of the rare metal and rare earth element composition. Beryl crystals which are visible on surface are apparently quite unevenly distributed within the pegmatite and a detailed diamond drilling program would be required as a representative sampling procedure for beryllium, thus the rock chip sampling intentionally avoided beryl crystals that could be seen at the sample sites, in an attempt to not bias the samples.

Thirty 2-3 kg rock chip samples of Peg 1 pegmatite were collected from outcrop using a rock chisel and small sledge hammer. Individual samples were taken over 1.5 to 2.5 m of pegmatite. In addition one sample (P-00-1) was taken from a smaller pegmatite dike outcrop. Rock chip samples were shipped to Acme Analytical Laboratories Ltd. at 852 East Hastings Street, Vancouver, B.C., V6A 1R6 and analyzed for a rare metal, rare earth element package as well as a metallics suite. Rock chip sample locations are shown on Figure 3 and complete geochemical analyses are provided in Appendix 1. Individual samples are of either pegmatite or quartz and detailed descriptions were not taken in the field.

In addition, one sample of muscovite was collected from each pegmatite body and analyzed for the same element suite as well as lithium. Muscovite in complex pegmatites commonly carries elevated levels of certain rare metals and the analyses of muscovites from these pegmatites can indicate the possibility of economic concentrations of those metals being present somewhere within the pegmatite (eg. Heinrich, 1962, Moller and Morteani, 1987). In particular, elevated tantalum concentrations within muscovite support the probability of tantalum concentrations within that pegmatite. Tantalum is a similar rare metal to beryllium in its economic value; it has unique characteristics that cause it to be *the* desired metal for certain applications. As with beryllium, world production is limited and there are few known undeveloped global resources.

3.20 Results

Anomalous levels of Be, Cs, Ga, Nb, Rb, Sn and Ta are present in the Peg 1 pegmatite body. Beryllium analyses range up to 2136 ppm with the arithmetic average for 30 samples being 238 ppm Be (minimum "ore grade" may be considered to be in the order of 500-600 ppm although this would obviously be dependant on a number of other factors). The values of beryllium and other rare metals are high enough that further evaluation of the pegmatite is warranted, including determining which minerals the other rare metals occur within. Rare metal pegmatites can be complexly zoned and detailed work may be required to define economic concentrations of certain metals.

Anomalous levels of these same elements as well as tungsten are present in the three muscovite samples collected from the Peg 1 and 2 pegmatites and the Matthew Creek Stock. Selected results for the three muscovite samples are provided in Table 1 (complete geochemical analyses are in Appendix 1).

Sample	Location	Be	Cs	Ga	Nb	Rb	Sn	Ta	W	Li
P-00-32	Peg 1	52	229.7	86.6	201.9	2215	487	154.9	23	55
P-00-33	Peg 2	20	15.5	92.4	103.7	862	77	15.5	31	47
P-00-34	Matthew Ck St.	23	50.2	93.8	168.2	1476	190	45.6	22	41

Table 1. Selected geochemical results for muscovites.

These results indicate that economic concentrations of elements other than beryllium may occur within the Peg property pegmatites. In particular the relatively high value for tantalum (154 ppm) in the Peg 1 pegmatite is encouraging. Lithium values within the three muscovite samples are relatively low and suggest that lithium may not occur in these pegmatites in economic concentrations.

4.00 CONCLUSIONS

New discoveries of rare metal pegmatites have been made peripheral to the large Matthew Creek pegmatite stock west of Kimberley, B.C.. The pegmatites carry visually anomalous concentrations of beryl and geochemical analyses show the Peg 1 pegmatite has anomalous values of beryllium, cesium, gallium, niobium, rubidium, tin and tantalum. Geochemical sampling has shown that significantly high beryllium occurs throughout the pegmatite. The results warrant further exploration to determine whether zones of economic grade and tonnage exist.

The three single muscovite samples taken from each of three pegmatite bodies provide a good indication of potential for other rare metals, in particular tantalum.

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7.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 25 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 30th day of January, 2001.

Signed ____________________

Peter Klewchuk, P. Geo.

PROFESSIONAL
PROVINCE OF
P. KLEWCHUK
BRITISH COLUMBIA
GEOSCIENTIST

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter PROJECT PEG File # A003643 (a)
246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Ba ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	Tl ppm	U ppm	V ppm	W ppm
P-00-1	17	1.7	8.1	15.4	.6	16.5	156.3	18	8.0	7.9	1.0	.5	1.7	<5	13
P-00-2	11	.8	16.6	8.2	1.3	10.0	176.2	47	4.0	17.9	<.1	.6	.2	<5	10
P-00-3	10	.8	16.8	11.4	<.5	12.7	198.1	46	9.2	17.5	<.1	.7	.3	<5	6
P-00-4	10	.8	21.4	13.9	<.5	20.3	223.4	52	10.7	18.0	<.1	.6	.6	<5	8
P-00-5	20	1.2	13.0	10.4	<.5	12.6	165.6	36	10.3	12.9	<.1	.5	1.2	<5	7
P-00-6	15	.7	8.8	8.6	<.5	6.2	110.4	23	14.7	8.2	<.1	.3	1.8	<5	7
P-00-7	8	.9	34.5	21.1	.6	56.8	405.9	84	8.8	62.2	.2	.9	1.8	<5	9
P-00-8	8	1.1	23.6	16.3	.9	24.5	263.3	61	15.1	25.0	.1	.7	2.9	<5	9
P-00-9	29	.9	10.9	9.8	<.5	8.2	174.7	34	20.2	10.8	.1	.5	2.3	<5	8
P-00-10	49	.7	12.7	10.6	<.5	8.9	301.4	30	43.9	10.9	<.1	1.1	1.0	<5	8
P-00-11	13	1.1	14.5	10.7	<.5	12.8	199.1	32	10.4	11.7	.1	.6	1.8	<5	7
P-00-12	4	.8	15.3	9.3	.9	15.2	178.2	31	4.4	10.7	<.1	.4	.3	<5	9
P-00-13	9	1.0	19.2	10.2	<.5	18.1	233.1	48	2.7	18.0	<.1	.6	<.1	<5	8
P-00-14	24	.9	26.9	11.4	<.5	11.8	469.2	38	24.6	15.3	<.1	1.2	.6	<5	8
P-00-15	6	1.0	52.9	7.7	<.5	9.5	156.7	37	3.5	13.7	<.1	.4	<.1	<5	7
P-00-16	12	.9	14.8	8.8	<.5	10.6	248.3	41	8.8	18.6	<.1	.6	.1	<5	8
P-00-17	7	.8	17.8	4.4	<.5	5.3	83.4	20	1.2	9.4	<.1	.6	<.1	<5	7
P-00-18	6	1.0	19.4	9.0	<.5	11.3	213.8	47	3.1	17.4	<.1	.9	<.1	<5	9
P-00-19	11	1.1	16.5	10.9	<.5	9.5	229.6	48	8.0	18.4	<.1	.9	.3	<5	7
P-00-20	29	1.1	27.6	12.0	<.5	13.6	549.6	36	29.6	16.9	.1	2.0	.9	<5	7
RE P-00-20	29	1.2	27.0	12.1	<.5	15.9	548.1	36	29.6	21.1	<.1	2.0	1.0	<5	7
P-00-21	27	1.0	16.1	10.9	<.5	7.1	441.4	22	32.0	9.0	.1	1.7	1.4	<5	6
P-00-22	12	1.0	14.8	16.4	1.0	16.0	270.8	54	7.9	18.1	.2	1.0	.6	6	11
P-00-23	7	.7	1.6	1.2	<.5	<.5	43.6	2	3.0	.5	.4	.5	.4	<5	7
P-00-24	15	.7	50.6	10.7	<.5	11.4	594.3	41	15.4	16.2	<.1	2.5	.2	<5	7
P-00-25	3	.8	6.4	5.6	<.5	7.3	96.4	18	4.1	6.5	<.1	.4	.5	<5	8
P-00-26	6	.8	9.9	5.2	<.5	5.8	77.2	16	5.5	6.0	<.1	.3	.2	<5	8
P-00-27	16	.9	13.9	13.0	.7	16.5	238.8	32	14.1	8.4	.2	.7	2.4	<5	8
P-00-28	80	.7	12.8	11.6	<.5	3.5	328.3	19	54.0	4.3	<.1	1.0	1.2	<5	7
P-00-29	126	.9	8.5	11.0	<.5	4.0	259.0	24	20.5	5.2	<.1	.6	1.9	<5	7
P-00-30	26	1.0	21.7	19.4	<.5	35.4	315.5	58	12.4	18.7	<.1	.7	1.4	<5	11
P-00-31	56	1.3	17.1	16.1	<.5	17.3	295.5	46	42.9	14.1	<.1	.5	1.2	6	8
STANDARD SO-15	2055	21.3	2.8	16.6	25.8	33.0	66.0	18	390.7	2.1	24.0	.5	19.9	145	19

SAMPLE#	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Be ppm
P-00-1	13.6	8.2	3.3	7.4	.79	2.8	1.2	<.05	1.31	.28	1.51	.20	.53	.06	.44	.05	3
P-00-2	13.0	.3	<.5	<.5	.04	<.4	<.1	<.05	.07	.02	.06	<.05	<.05	<.05	<.05	<.01	10
P-00-3	1.7	.4	<.5	.6	.05	<.4	.1	<.05	.17	.01	.06	<.05	<.05	<.05	<.05	<.01	48
P-00-4	5.4	.5	<.5	.9	.08	<.4	.1	<.05	.14	.03	.07	<.05	<.05	<.05	<.05	<.01	295
P-00-5	2.2	.3	<.5	.9	.06	<.4	<.1	<.05	.11	.02	.06	<.05	<.05	<.05	<.05	<.01	113
P-00-6	3.9	.4	<.5	.7	.07	<.4	<.1	<.05	.12	.03	.08	<.05	<.05	<.05	<.05	<.01	84
P-00-7	5.4	.5	.6	1.3	.15	.6	.3	<.05	.27	.05	.11	<.05	<.05	<.05	<.05	<.01	248
P-00-8	8.3	.5	.5	1.2	.11	.5	.2	<.05	.23	.03	.11	<.05	<.05	<.05	<.05	<.01	250
P-00-9	3.2	.3	<.5	.7	.07	<.4	<.1	<.05	.15	.02	.06	<.05	<.05	<.05	<.05	<.01	50
P-00-10	1.9	.2	<.5	.8	.07	<.4	<.1	.07	.08	.01	<.05	<.05	<.05	<.05	<.05	<.01	30
P-00-11	2.8	.3	<.5	.8	.09	<.4	.2	<.05	.19	.03	.11	<.05	<.05	<.05	<.05	<.01	144
P-00-12	9.1	.2	<.5	<.5	.03	<.4	<.1	<.05	.09	<.01	<.05	<.05	<.05	<.05	<.05	<.01	134
P-00-13	3.2	.2	<.5	.5	.04	<.4	<.1	<.05	.07	<.01	<.05	<.05	<.05	<.05	<.05	<.01	97
P-00-14	4.3	.3	<.5	<.5	.08	<.4	<.1	<.05	.11	<.01	.07	<.05	<.05	<.05	<.05	<.01	256
P-00-15	2.5	.2	<.5	<.5	<.02	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	2136
P-00-16	1.9	<.1	<.5	<.5	<.02	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	89
P-00-17	2.5	<.1	<.5	<.5	<.02	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	859
P-00-18	2.8	.1	<.5	<.5	.03	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	7
P-00-19	1.8	.1	<.5	.8	.04	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	21
P-00-20	2.2	.4	<.5	.7	.07	<.4	<.1	<.05	.08	<.01	.06	<.05	<.05	<.05	.08	.02	164
RE P-00-20	3.1	.5	<.5	.6	.06	<.4	<.1	<.05	.11	.01	.06	<.05	<.05	<.05	.10	.02	167
P-00-21	5.3	.5	.6	1.1	.09	<.4	.2	<.05	.13	.02	.11	<.05	<.05	<.05	<.05	<.01	9
P-00-22	13.3	1.2	.5	1.0	.12	.5	.3	<.05	.35	.07	.26	<.05	.08	<.05	.07	<.01	24
P-00-23	3.0	.2	<.5	<.5	.04	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	28
P-00-24	1.8	.2	<.5	<.5	.03	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01	800
P-00-25	5.4	.7	<.5	<.5	.04	<.4	<.1	<.05	.16	.03	.15	<.05	<.05	<.05	<.05	<.01	20
P-00-26	3.9	.2	<.5	<.5	.04	<.4	<.1	<.05	.09	<.01	<.05	<.05	<.05	<.05	<.05	<.01	502
P-00-27	9.0	1.2	.6	1.2	.13	.4	.2	<.05	.25	.06	.26	<.05	.06	<.05	.07	<.01	191
P-00-28	2.7	.4	.5	.8	.10	<.4	.1	.11	.11	.01	.11	<.05	<.05	<.05	<.05	<.01	98
P-00-29	3.0	.3	.5	.7	.10	<.4	.1	.16	.16	.02	.08	<.05	<.05	<.05	<.05	<.01	70
P-00-30	5.2	.4	<.5	.8	.09	<.4	.1	<.05	.20	.03	.12	<.05	<.05	<.05	<.05	<.01	181
P-00-31	2.8	.5	.6	.9	.12	<.4	<.1	.15	.18	.02	.10	<.05	<.05	<.05	<.05	<.01	193
STANDARD SO-15	1030.0	22.2	29.6	59.4	6.14	24.3	4.4	1.03	3.90	.57	3.77	.77	2.39	.35	2.47	.41	<1

Appendix 1.
Geochemical Analyses
of Rock Samples

GROUP 4B - REE - LiBO2 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK R150 60C
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 19 2000 DATE REPORT MAILED: Oct 2/00 SIGNED BY.................D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter PROJECT PEG File # A003643 (b)

246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm
P-00-1	2	10	19	14	3	<2	<.2	<.5	<.5
P-00-2	5	3	7	11	3	<2	<.2	<.5	<.5
P-00-3	1	3	8	7	2	<2	<.2	<.5	<.5
P-00-4	3	2	9	7	2	<2	<.2	<.5	<.5
P-00-5	1	5	18	10	3	5	.2	<.5	<.5
P-00-6	3	6	23	10	2	8	<.2	<.5	<.5
P-00-7	1	3	73	13	2	4	.2	<.5	4.1
P-00-8	3	3	170	27	2	7	.9	<.5	<.5
P-00-9	1	4	136	18	3	5	.4	<.5	<.5
P-00-10	3	2	41	13	2	2	<.2	<.5	4.7
P-00-11	1	4	30	11	2	4	<.2	<.5	2.8
P-00-12	4	2	6	7	3	<2	<.2	<.5	<.5
P-00-13	1	2	7	3	3	<2	<.2	<.5	<.5
P-00-14	3	2	21	11	2	3	<.2	<.5	<.5
P-00-15	1	2	12	3	3	<2	<.2	<.5	<.5
P-00-16	3	1	20	4	2	2	<.2	<.5	<.5
P-00-17	1	2	<3	2	3	<2	<.2	<.5	<.5
P-00-18	4	2	7	4	2	<2	<.2	<.5	<.5
P-00-19	1	2	5	6	3	2	<.2	<.5	<.5
P-00-20	3	2	25	17	2	7	<.2	<.5	<.5
RE P-00-20	3	2	26	16	2	8	<.2	<.5	<.5
P-00-21	1	3	32	14	3	5	<.2	<.5	<.5
P-00-22	4	2	5	4	3	<2	<.2	<.5	<.5
P-00-23	1	2	7	6	3	<2	<.2	<.5	<.5
P-00-24	3	1	9	3	2	<2	<.2	<.5	1.1
P-00-25	4	2	<3	3	2	<2	<.2	<.5	<.5
P-00-26	1	2	<3	4	3	<2	<.2	<.5	<.5
P-00-27	1	4	28	15	3	7	<.2	<.5	<.5
P-00-28	2	3	210	43	2	23	<.2	<.5	<.5
P-00-29	1	26	1163	99	2	531	.7	.8	.9
P-00-30	3	9	50	34	2	25	.3	<.5	<.5
P-00-31	1	10	201	19	2	20	<.2	<.5	2.0
STANDARD C3	27	68	37	168	40	61	24.2	18.6	23.1
STANDARD G-2	2	2	3	44	8	<2	<.2	<.5	<.5

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

DATE RECEIVED: SEP 19 2000 **DATE REPORT MAILED:** Oct 2/00 **SIGNED BY** ....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter File # A004819 (a)

246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Ba ppm	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	Tl ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
P-00-32	20	52	1.4	229.7	86.6	1.1	201.9	2214.9	487	2.4	154.9	<.1	4.7	.7	8	23	6.3	.1	<.5	<.5	.02	<.4	<.1	<.05	<.05	<.01	<.05	<.05	<.05	<.05	<.05	<.01
P-00-33	9	20	.7	15.5	92.4	<.5	103.7	862.4	77	28.6	15.5	.2	1.6	4.2	<5	31	3.1	1.7	<.5	.9	.10	<.4	.1	<.05	.13	.04	.28	<.05	.11	<.05	.14	.02
P-00-34	26	23	2.1	50.2	93.8	1.3	168.2	1476.3	190	104.0	45.6	.3	3.5	3.5	12	22	14.4	.9	.6	1.4	.14	.5	.2	<.05	.20	.04	.19	<.05	.07	<.05	.09	<.01
RE P-00-34	25	25	2.0	49.3	92.6	1.3	161.3	1459.7	189	103.0	45.6	.4	3.5	3.6	11	22	14.4	.9	.6	1.4	.16	.5	.3	<.05	.20	.03	.18	<.05	.07	<.05	.08	.01
STANDARD SO-15	2101	2	21.9	2.7	17.0	27.5	29.8	64.7	17	389.8	1.9	25.0	1.2	20.8	151	19	1072.9	23.2	29.1	60.6	6.17	23.6	4.5	1.05	3.92	.61	3.85	.76	2.49	.34	2.55	.41

GROUP 4B - REE - LiBO2 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: MICA

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 1 2000 DATE REPORT MAILED: Dec 13/00 SIGNED BY. C.L. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter File # A004819R

246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Li ppm
P-00-32	55
P-00-33	47
P-00-34	41
RE P-00-34	40
STANDARD LIB-10	1313

LI - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML.
- SAMPLE TYPE: MICA

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 11 2000 DATE REPORT MAILED: Dec 18/00 SIGNED BY. C.L. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

PROSPECTORS ASSISTANCE GRANT REPORT

on

GEOLOGICAL MAPPING, ROCK GEOCHEMISTRY & VLF-EM GEOPHYSICS

GOLDYLOT PROPERTY

Lewis Creek Area
Fort Steele Mining Division

TRIM 82G.072
5515600N 595500E

NTS 82G13/E
Latitude 49° 47' N
Longitude 115° 40' W

by

Peter Klewchuk, P.Geo.

January, 2001

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1.00 INTRODUCTION

1.10 *Location and Access*

The Goldylot claims are located in southeastern British Columbia in the Fort Steele Mining Division, centered approximately at UTM coordinates 5515600N, 595500E, or 49° 47' N latitude and 115° 40' W longitude, on TRIM map 82G.072 or NTS 82G/13E (Fig. 1). Access to the claims is provided by the Lewis Creek road which crosses the claim block about 4 km west of Wasa Lake.

1.20 Property

The Goldylot property consists of four 2 post mineral claims, Goldylot 1 - 4 (tenure numbers 354031 - 34) staked by M.C. Kennedy of Kimberley, B.C. (Fig.2), to cover old workings which are developed within a strong silicic altered zone with gold and copper mineralization.

1.30 Physiography

The Goldylot property is situated at an elevation of 900 m on the immediate east side of the Rocky Mountain Trench, on the westernmost flank of the Hughes Range of the Rocky Mountains. The claims cover an area of relatively low local relief along the Lewis Creek valley, which cuts the northwest corner of the claims. Generally hummocky terrain is common in the claim area with abundant local bedrock exposure.

1.40 History

The Goldylot claims cover a number of old workings that include small trenches, shallow shafts and short adits. No recorded information on these workings was located by the author. In 1970 Texas Gulf Sulfur staked a 32 unit claim block in the area and conducted geological mapping and took 75 soil samples (Gifford, 1971, AR 3092). In 1992 INCO Exploration staked a larger claim block called the 'Lewis Creek Property', including the area of the present Goldylot claims. INCO was interested in copper mineralization, particularly low sulfur copper mineralization such as chalcocite and bornite, and their work included geological mapping and a large soil sampling grid. They apparently did not analyze the soil samples for gold. INCO's work is reported on by Rawick and Rush, 1994 (Assessment Report 23,115).

In 1997 the author mapped the Goldylot 1 - 4 mineral claims at a scale of 1:2500 (Assessment Report 25,497) to provide a framework of reference for a cluster of old workings which are developed on a zone of silicification on the Goldylot 1-3 boundary. Grab samples from the workings, taken prior to staking the claims, indicate the presence of anomalous gold and copper mineralization. Mapping was undertaken to evaluate the surrounding geology to identify controls for the alteration and mineralization. Recognition of the controls of the mineralization could in

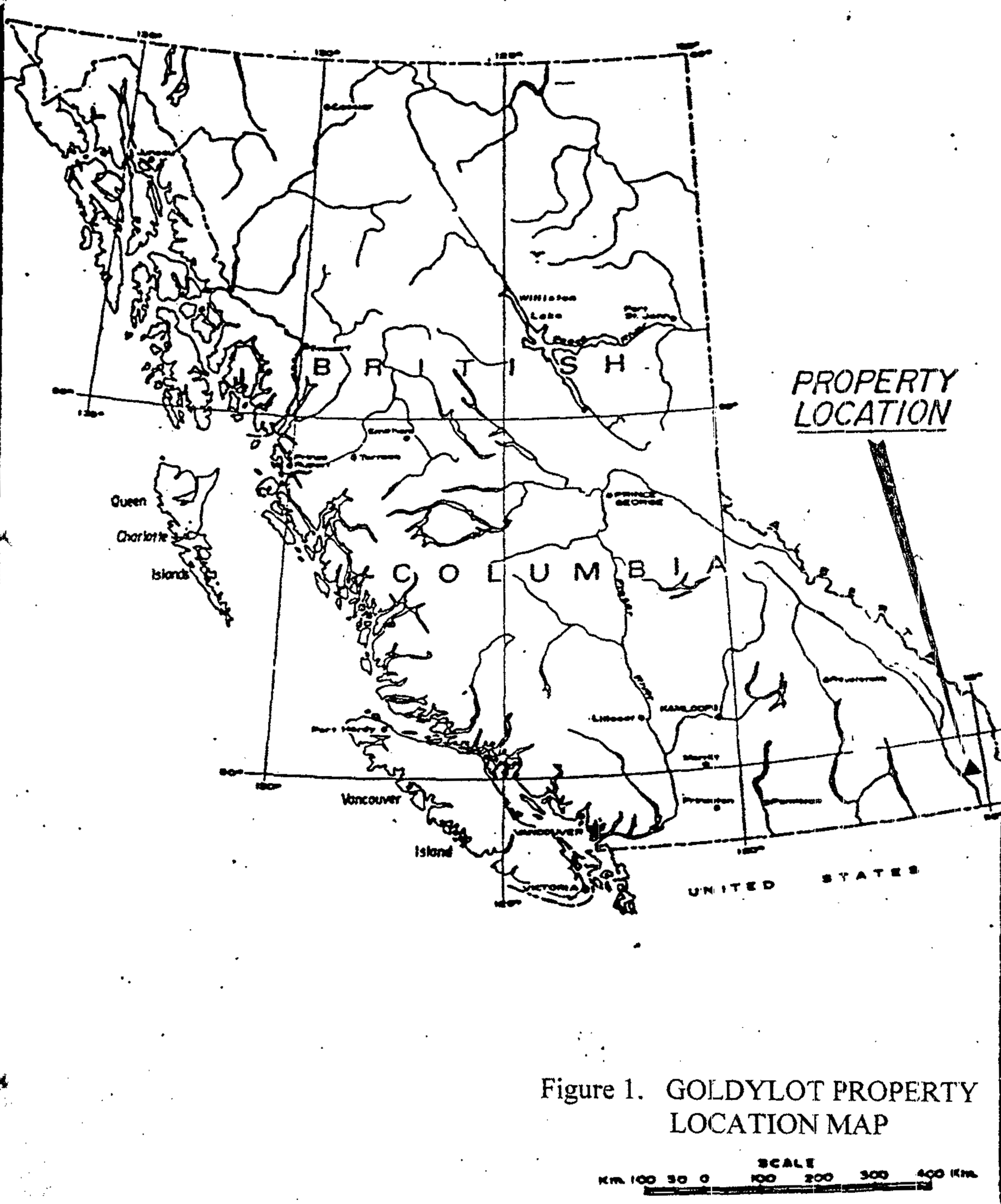

Figure 1. GOLDYLOT PROPERTY
LOCATION MAP

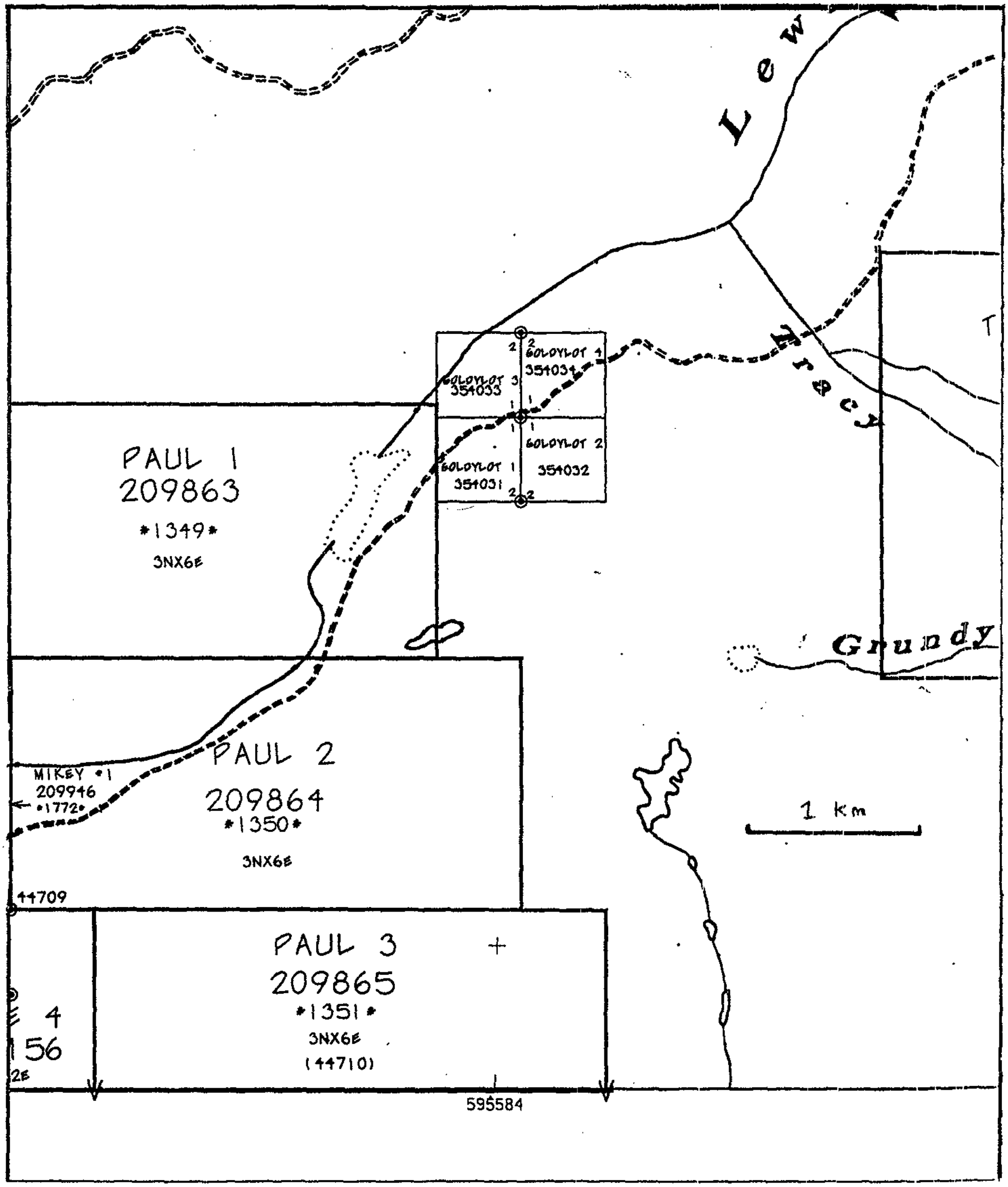

Figure 2. GOLDYLOT PROPERTY
CLAIM MAP
NTS 82 G/13 E
Scale: As shown

turn help to identify a significant exploration target, either in association with the surface alteration and mineralization or possibly distal but with the same controls.

1.50 Scope of Present Program

In 2000 the 1:2500 scale geologic mapping was continued on the western and northern edges of the claims. More detailed mapping with associated rock geochemistry was commenced in the area of the old workings and a series of VLF-EM geophysics lines were run across the area of the old workings and across the Lewis Creek Fault.

2.00 GEOLOGY

2.10 Regional Geology

The Goldylot property occurs on the east side of the Rocky Mountain Trench, within the Fernie (West Half) map sheet (Leech, 1960) and is also included in BCMEMPR Preliminary Map 36 by Trygve Hoy: Geology of the Estella - Kootenay King Area, Hughes Range, Southeastern British Columbia (1979). A portion of this map which covers the area of the Goldylot claims is reproduced here as Figure 3.

The property is underlain by the Fort Steele Formation which is the oldest unit of the Purcell Supergroup exposed in Canada. According to Hoy (1979):

> The total thickness of the exposed section is in excess of 2000m; the base is not exposed. The formation comprises at least three upward-fining sequences, several hundred metres thick, that grade from coarse, massive to crossbedded quartzites at the base to thinly laminated siltstones at the top. Within each of these megacycles are numerous smaller scale upward-fining sequences, and some coarsening upward sequences.
>
> Orthoquartzites at the base of the megacycles are generally medium to coarse grained. They commonly form discontinuous beds up to a meter thick which may thin and die out laterally. They are commonly structureless or only crudely layered and they scour the underlying unit producing broad troughs. Trough, tangential, and planar/tabular crossbedded quartzite layers are common near the base of the megacycles. These layers are generally more laterally persistent than the massive quartzite beds and their thickness is less variable.
>
> Up-section within each of the megacycles, quartzites are finer grained, less pure, thinner bedded, and more persistent laterally. The relative proportion of the siltstone/argillite component at the top of smaller, upward-fining sequences increases. Beds consisting dominantly of planar/tabular crossbedded quartzite are also common within the central

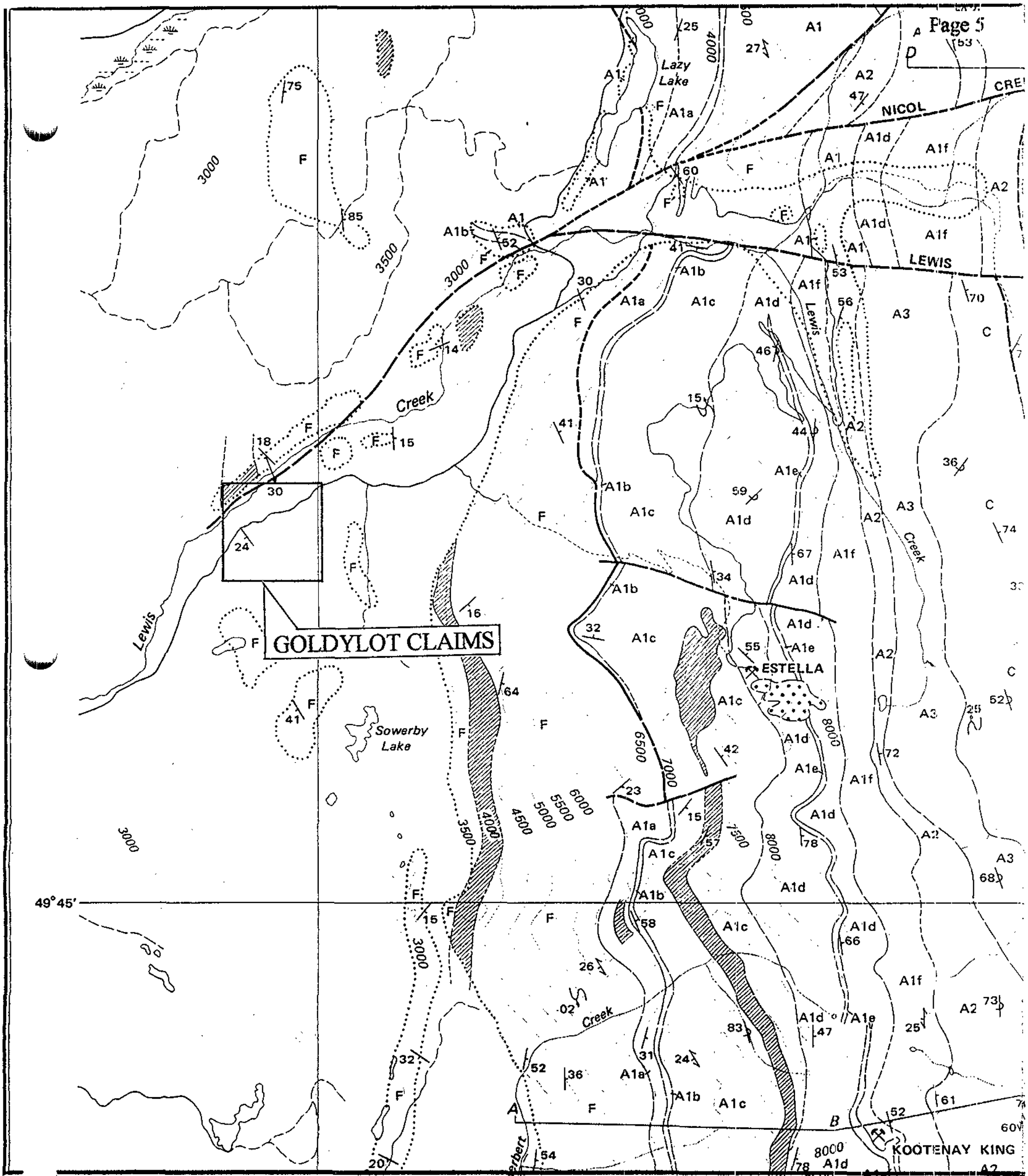

Figure 3. Part of BCMEMPR Preliminary Map 36
Geology of the Estella-Kootenay King area, T. Hoy, 1979
For legend see page 5a.

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

PRELIMINARY MAP 36

GEOLOGY OF THE ESTELLA–KOOTENAY KING AREA
HUGHES RANGE
SOUTHEASTERN BRITISH COLUMBIA

(NTS 82G/11, 12, 13, 14)

GEOLOGY BY TRYGVE HÖY, 1976–1978

LEGEND

CRETACEOUS

QUARTZ MONZONITE, SYENITE

HADRYNIAN/HELIKIAN

PURCELL SUPERGROUP

PURCELL SILLS AND DYKES

C — CRESTON FORMATION: GREEN AND PURPLE ARGILLITE AND SILTSTONE, WHITE AND GREEN QUARTZITE; MINOR DARK ARGILLITE

ALDRIDGE FORMATION

A3 — DARK GREY FINELY LAMINATED ARGILLITE; MINOR SILTSTONE

A3i — DARK GREY ARGILLITE WITH LENTICULAR BEDDING

A2 — QUARTZITE, SILTSTONE; INTERLAYERED WITH DARK ARGILLITE

A1 — FINELY LAMINATED ARGILLITE, SILTSTONE; MINOR DOLOMITE, QUARTZITE

- f MEDIUM TO DARK GREY SILTSTONE, ARGILLITE
- e THICK–BEDDED QUARTZITE; MINOR CONGLOMERATE
- d BUFF–COLOURED DOLOMITIC SILTSTONE, DOLOMITIC ARGILLITE; ABUNDANT LENTICULAR BEDDING AND RIPPLE CROSSBEDDING
- c GREY SILTSTONE, ARGILLITE; TAN SILTSTONE, BLACK GRAPHITIC ARGILLITE
- b SILTY DOLOMITE, DOLOMITIC SILTSTONE; MINOR LIMESTONE
- a GREY TO BLACK SILTSTONE AND ARGILLITE

F — FORT STEELE FORMATION: WHITE CROSSBEDDED QUARTZITE, MUD–CRACKED SILTSTONE, ARGILLITE

SYMBOLS

GEOLOGICAL CONTACT:
DEFINED, APPROXIMATE, ASSUMED ....

FAULT: DEFINED, APPROXIMATE, ASSUMED ....

ANTICLINE – AXIAL SURFACE ....

BEDDING (S_0): VERTICAL, INCLINED, OVERTURNED ....

FOLIATION, CLEAVAGE (S_1) ....

LINEATION ($S_0 - S_1$ INTERSECTION) ....

FOLD AXIS ....

MINERAL DEPOSIT ....

LIMITS OF OUTCROP (OR MAPPING) ....

Legend for Figure 3

portion of the megacycles, and thick tangentially crossbedded planar beds with high angled (to 35 degrees) foreset laminae occur occasionally.

The top of the megacycles consists of interlayered siltstone and argillite. The siltstone layers are thin (generally less than 5 centimetres thick) and horizontally laminated or ripple cross-laminated. Individual beds grade up to dark, laminated argillite that contains abundant dessication cracks. Lenticular bedding and silt scours are common. Near the top of the Fort Steele Formation the quartzite/siltstone component gradually decreases and medium to dark grey, finely laminated siltstone and argillite begin to predominate. Within this transition zone bedding is commonly defined by siltstone/argillite couplets up to several centimetres thick. Quartzites are uncommon, and dessication cracks are extremely rare. The Fort Steele/Aldridge boundary is gradational. On the map it is placed above the last occurrences of crossbedded quartzite or observed dessication cracks in argillite.

The Fort Steele Formation is overlain by the middle Aldridge Formation which is a dominantly fine grained, thick succession of wackes and siltstones of turbidite affinity.

Both the Fort Steele and Aldridge Formations are intruded by gabbroic sills and dikes of the Moyie Intrusions. They consist mainly of medium grained amphibole and plagioclase.

Hoy interprets the Fort Steele Formation at the base of the exposed Purcell sequence to predominantly be braided fluvial deposits derived from a source area to the south.

The structure of the Estella - Kootenay King area is dominated by a large, open, recumbent anticline (Hoy, 1979). Its axial plane dips to the west and bedding in its upper limb, in the western part of the area (i.e. including the Goldylot claim group), dips to the west.

Hoy (1979) shows an unnamed northeast oriented fault paralleling the lower portion of Lewis Creek and extending past Mt. Stevens to the northeast (Fig. 3). Two splay faults trending to the east from the central portion of the unnamed northeast fault are the northern Nicol Creek Fault and the southern Lewis Creek Fault. In this report, the northeast fault crossing the Goldylot property is also referred to as the Lewis Creek Fault.

The Goldylot claims are 5 km northwest of the Estella Zn-Pb-Ag vein deposit and 9 km northwest of the stratiform Zn-Pb-Ag Kootenay King deposit. Both are hosted by middle Aldridge Formation.

2.20 Property Geology

2.21 Introduction

Although only a relatively small portion of the claim block was mapped in 2000, the geology of the entire claim block is described here.

As a control for mapping, a detailed grid with station spacings as close as 25 meters was established with compass and hip chain, using the central claim post as a starting reference. A northeast trending central zone on the property, occurring immediately southeast of the Lewis Creek Fault, provides generally very good rock exposure and allows accurate detailed mapping of the surface geology which is provided as Figure 4.

2.22 Rock Units

Bedrock consists of quartzites, siltstones and argillites of the Fort Steele Formation, intruded by gabbroic sills of the Moyie Intrusions and a younger set of porphyritic mafic dikes. Bedding generally strikes northwest with shallow to moderate southwest dips.

Fort Steele Formation

Lithologies include thick, medium and thin bedded quartzites, and medium and thin bedded siltstones and argillites, typical of the Fort Steele Formation. Quartzite and siltstone are the dominant lithologies although a more argillaceous section is present just west of the old workings and at mid-slope above the Lewis Creek valley bottom.

Moyie Intrusions

At least 5 sill-like gabbro bodies are present on the claims southeast of the Lewis Creek Fault. The contacts of these gabbros with their host stratigraphy are unusually complex, with local apparent pinch and swell features and lobes and dike-like features extending into the adjacent sediments. The two narrower central sills show more uniform thickness although the southern one displays an abrupt termination within sediments and the northern one is displaced slightly along two east-northeast trending faults with minor left lateral displacement.

A gabbro exposure near the northeast limit of detailed mapping shows apparent further complexity. A narrow covered gap between two distinct gabbro bodies appears in the field to be immediately underlain by sedimentary rocks, providing an unusual relationship between the two gabbros. This local apparent gap between the two gabbros is on strike with a series of 'en echelon' north-northeast striking younger mafic dikes. The western gabbro here contains an apparent inclusion of sedimentary rock; bedding within this inclusion is northwest striking, indicating a structural rotation of the rafted block.

Young Mafic Dikes

A suite of younger, narrow, fine-grained, dark green mafic dikes occurs on the Goldylot claims. These dikes are quite similar in general character to the gabbro sills, although they tend to be porphyritic with small gray feldspar phenocrysts, and are calcareous and locally pyritic.

These mafic dikes crosscut both sedimentary rocks and the gabbro sills and they do not show any regional cleavage. They must be younger than the Laramide fold structure which regional cleavage is related to and could thus be affiliated with Cretaceous felsic intrusives. Lamprophyre dikes of known Cretaceous age are present through parts of the Aldridge (-Fort Steele) basin. Locally, individual dikes can be prominently fractured, resulting in a blocky weathering character.

A northwest trending mafic dike at 950 E 900 N has associated with it parallel trending quartz veins up to 50 cm. thick. This mafic dike and quartz vein swarm is on strike with the old workings at 1000 N 750 E where parallel-trending quartz veins are present along with strong shearing and multiple quartz veining in an orthogonal, northeast direction.

2.23 Structure

Bedding

Bedding generally strikes northwesterly (azimuths of 110° to 140°) with shallow to moderate southwest dips (typically 15° to 30°). Bedding varies from this general trend only where local minor folding is evident.

Folding

The area of the Goldylot claims is located on the western limb of a large open recumbent anticline which dominates the structure of the Estella - Kootenay King area (Hoy, 1979, Fig. 3). The axis of this large fold occurs immediately east of the claim group; most of the beds on the Goldylot claims dip to the southwest but according to Hoy's map (Fig.3) east dipping beds occur just a short distance east of the claim boundary. Cleavage which is apparently related to the large anticlinal structure is common in bedrock on the property, generally striking northwesterly at typical azimuths of 135° to 160° and dipping southwest at 30° to 55° (Fig. 4), slightly steeper than bedding. This axial plane cleavage occurs in Fort Steele Formation metasedimentary rocks and the intruded gabbro sills and dikes but is not evident in the younger mafic dikes.

Slight variations in mapped bedding attitudes attest to the presence of minor gentle folding being present. Many of these bedding variations occur adjacent to irregular gabbro contacts, suggesting that minor folding was developed during emplacement of the irregular thickness sills or, minor folding occurred later during tectonic pinch and swell deformation of the gabbros.

Drag folding is locally evident adjacent to the east northeast striking Goldylot Fault which cuts a narrow gabbro sill near 1100N 850E. Both the gabbro sill and host sedimentary rocks show folding adjacent to the fault.

Faulting

The northeast striking Lewis Creek Fault cuts the northwest corner of the Goldylot claims. This is a composite of three splay faults which coalesce about 2 km northeast of the property. Hoy's geologic map (Fig.3) shows only minor lateral displacement across these faults. In the area of the Goldylot claims, Fort Steele Formation rocks are present on both sides of the fault and the current mapping program has not identified the sense of movement.

According to Hoy (1979) the Boulder Creek Fault, which bounds the Estella - Kootenay King area to the south, was an active fault during Aldridge sedimentation. As the Lewis Creek Fault on the Goldylot claims is a parallel trending structure, it may be similar in origin to the Boulder Creek Fault and thus may also have been active during Proterozoic sedimentation. Faults which are active during sedimentation may influence the deposition of base metal mineralization. It seems plausible that the Lewis Creek Fault is a controlling structure for copper mineralization seen in the general Goldylot claim area - it may not be fortuitous that the old workings on the Goldylot claims are located just a short distance southwest of the Lewis Creek Fault.

A northeast trending fault (called the Goldylot Fault) was defined by detailed mapping on the claim block; it offsets a narrow gabbro sill in a left lateral manner at 1100N 850E on the Goldylot grid (Fig.4). Drag folding on the gabbro and host sediments is the reverse of that expected from the surface sense of movement. This may be explained by a more complex dip-slip movement on the fault. Evidence for this fault was not seen further to the northeast although it would cross an area of virtually no exposure. The southeast exposed portion of a gabbro near 1250N 1200E may be folded into this fault; adjacent sediments are more north striking, in the same manner as the drag folded sediments at 1100N 850E.

The fault trace crosses two north trending young mafic dikes with no offset. If the fault actually crosses this area then the dikes must be younger than the fault. The western mafic dike is splayed right at the fault trace, as though the fault zone influenced the emplacement of the dike and caused the splaying to develop.

To the west of the drag folded gabbro, the Goldylot Fault passes immediately north of the old workings and may well have had an influence in the development of the alteration and mineralization present there.

A zone of apparent structural weakness has been identified by the detailed mapping, trending northeasterly from the southwest corner of the claims to 1300N 1100E Although not a discrete fault zone, a number of features occur along this trend. The southernmost 2 gabbros are pinched where the trend crosses them. A north northeast striking mafic dike occurs on the immediate north side of the southern gabbro at the point of thinning and minor copper mineralization occurs in the sediments immediately to the south of the point of thinning. The next gabbro north is pinched down to less than a 2 meter width along this structural weakness trend. An intermediate gabbro which terminates in Fort Steele sediments just southwest of 600N 700E may be terminated because of the structural weakness. Two mafic dikes occur at and near the termination point of the gabbro. Further north, the next gabbro is terminated at its east end, at 850N 900E, just east of the structural weakness trend. Furthermore, a string of mafic dikes extends from 800N 800E to 1200N 1000E along the zone. Another gabbro is offset along this zone at the road, at 1000N 950E. Then at 1300N 1100E a north trending and an east trending gabbro are separated by a narrow zone of mostly covered sediments, at the northern end of mapping of the zone of structural weakness. Minor copper mineralization and rusty weathering carbonate alteration are associated with the gabbros here.

This northeast trending zone of structural weakness is sub-parallel to the Lewis Creek Fault, and may be a splay feature related to that structure. If so, then the data supports a relatively late reactivation of the Lewis Creek Fault zone, because of the young mafic dikes within the zone of structural weakness.

Brecciation

Siliceous brecciated zones, commonly with quartz veining, occur locally on and near the claim block. Two noted occurrences are at 950N 650E and 800N 1550E. Quartz vein breccia float is present at 900N 1450E. The two bedrock occurrences are near gabbro contacts and their development may be related to the competency contrast between gabbro and sediments during tectonism.

Siliceous breccias are also present along cliff faces above the Lewis Creek valley bottom. These may be related to the Lewis Creek Fault.

2.24 Alteration and Mineralization

Carbonate Alteration

There is a broad iron carbonate alteration evident in quartzites a short distance north and east of the old workings. This may be a peripheral alteration to the central zone of silification (at the old workings) or may be related to the Lewis Creek Fault. There is some possibility it is related to gabbro emplacement or mafic dike emplacement. Both types of mafic intrusives are or can be calcareous.

There may be some relationship between the carbonate alteration and copper mineralization.

Chlorite Alteration

Chlorite alteration on the property is quite widespread and much of it is likely a product of regional metamorphism. Localities with increased chlorite alteration are present; these may be due to rock composition or to local alteration effects. These details were not specifically recorded during the course of geologic mapping.

Silicification

Quartz veining and pervasive silicification of Fort Steele sediments is present at a number of localities on the property. The most intense silicification seen is at the old workings, within a northwest oriented zone adjacent to the Lewis Creek Fault. Two sets of quartz veins are present, approximately parallel and perpendicular to the Lewis Creek Fault. There is also an intense pervasive silicification of the host Fort Steele sediments. Minor fine grained pyrite occurs with the quartz veins and with the silicified sediments.

Quartz veins are developed locally adjacent to some of the gabbro intrusives on the property and were probably derived from the siliceous host sedimentary rocks during deformation.

Pyrite Mineralization

Pyrite is common with quartz veins at the old workings and is present with quartz vein float within the area of silicic alteration surrounding the workings.

Copper Mineralization

Scattered occurrences of copper mineralization were noted during the course of detailed mapping. Copper is present in the Fort Steele Formation sedimentary rocks, within the gabbroic intrusives, and at gabbro-sediment contacts. Chalcopyrite and malachite are both present.

Prospecting should be undertaken to define the extent of copper mineralization and evaluate its relative concentration; is it spatially related to the Lewis Creek Fault, to some other structure, or to the zone of silicic alteration.

Gold Mineralization

Anomalous gold mineralization within quartz veins at the old workings was evaluated by a program of detailed mapping and rock geochemistry described in sections 2.25 and 3.00.

2.25 Detailed Mapping of Old Workings

Old workings occur near the upper edge of a moderately steep bank which forms the south edge of the Lewis Creek valley. The NNW aspect results in relatively dense vegetation with substantial moss present. Scattered rubble from the old workings further degrades the bedrock exposure.

The old adits and trenches are developed on silicified zones consisting of quartz veins and quartz vein breccias which have a maximum observed thickness of about 2.5 meters. The larger quartz vein / breccia zones are northeast-striking and moderately northwest-dipping, parallel or sub-parallel to the Lewis Creek Fault and probably related to that structure. Smaller quartz veins trend north or northwest, parallel to the broader zone of silicification that hosts the old workings and roughly perpendicular to the Lewis Creek Fault.

The limited exposure prohibits establishing a strike length for the vein system but they are evidently restricted to the relatively narrow zone of silicic alteration developed approximately perpendicular to the Lewis Creek Fault and shown in Figure 4.

The northeast trending veins dip at close to the slope of the hillside; within the lowermost workings the vein dips steeper than the slope thus these vein structures may continue in the subsurface at shallow depth toward the Lewis Creek fault.

3.00 ROCK GEOCHEMISTRY

Seventeen rock samples were collected from the area of the old workings, shipped to Acme Analytical Laboratories Ltd., and analyzed for a 30 element ICP package and geochemical gold by standard analytical techniques.

Sample locations are shown in Figure 5, sample descriptions are provided in Appendix 1 and Appendix 2 contains the complete geochemical analyses.

Results

Significant gold and local anomalous copper are demonstrated by the rock geochemistry. Eight of the seventeen samples have gold values greater than 100 ppb, four are greater than 1000 ppb with the highest value at 8843 ~~ppm~~ ppb Au.

Significant anomalous gold occurs in the quartz veins (up to 2.5 m thick) which the old workings are developed on. These veins strike generally parallel to the Lewis Creek Fault. Gold occurs within pyritic quartz and within bands of vuggy quartz that contain no obvious pyrite. The highest gold value is from a narrow northeast fault gouge zone which dips moderately to the northwest. This strike is parallel to the Lewis Creek Fault and strongly suggests a relationship to

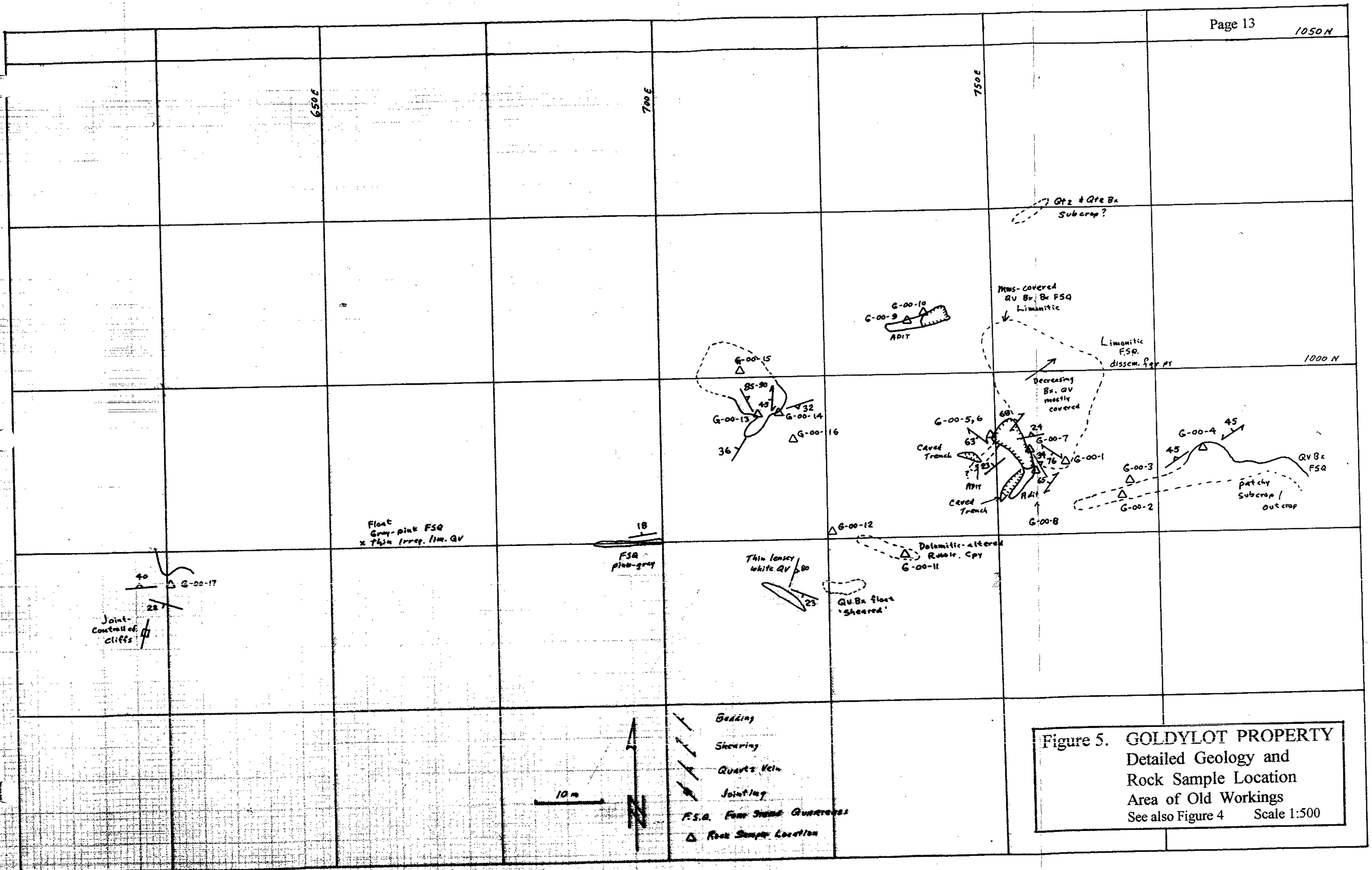

Figure 5. GOLDYLOT PROPERTY
Detailed Geology and
Rock Sample Location
Area of Old Workings
See also Figure 4 Scale 1:500

the larger fault. Gold also occurs in northeast-striking quartz veins.

4.00 VLF-EM GEOPHYSICS

4.10 Introduction

Four reconnaissance VLF-EM lines were surveyed, across the area of the old workings and the trace of the Lewis Creek Fault. Survey lines were run by compass and are oriented along north-south and east-west grid lines which were also used as control for geologic mapping. Survey lines were measured with a hip-chain with VLF-EM readings taken at 25 meter spacings.

A total of 1.665 kilometers of line was surveyed; Figure 5 shows the detailed VLF-EM data.

4.20 VLF-EM Survey

4.21 Instrumentation and Survey Procedure

The VLF-EM (**V**ery **L**ow **F**requency **E**lectro**m**agnetics) method uses powerful radio transmitters set up in different parts of the world for military communication and navigation. In radio communication terminology, VLF means very low frequency, about 15 to 25 kHz. Relative to frequencies generally used in geophysical exploration, the VLF technique actually uses very high frequencies.

A Crone Radem VLF-EM receiver, manufactured by Crone Geophysics Ltd. of Mississauga, Ontario was used for the VLF-EM survey. Seattle, Washington, transmitting at 24.8 kHz and at an approximate azimuth of 247° from the survey area, was used as the transmitting station.

In all electromagnetic prospecting, a transmitter produces an alternating magnetic (primary) field by a strong alternating current usually through a coil of wire. If a conductive mass such as a sulfide body is within this magnetic field, a secondary alternating current is induced within it, which in turn induces a secondary magnetic field that distorts the primary magnetic field. The VLF-EM receiver measures the resultant field of the primary and secondary fields, and measures this as the tilt or 'dip angle'. The Crone Radem VLF-EM receiver measures both the total field strength and the dip angle.

The VLF-EM uses a frequency range from about 15 to 28 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can detect zones of relatively lower conductivity. This results in it being a useful tool for geologic mapping in areas of overburden but it also often results in detection of weak anomalies that are difficult to explain. However the VLF-EM can also detect sulfide

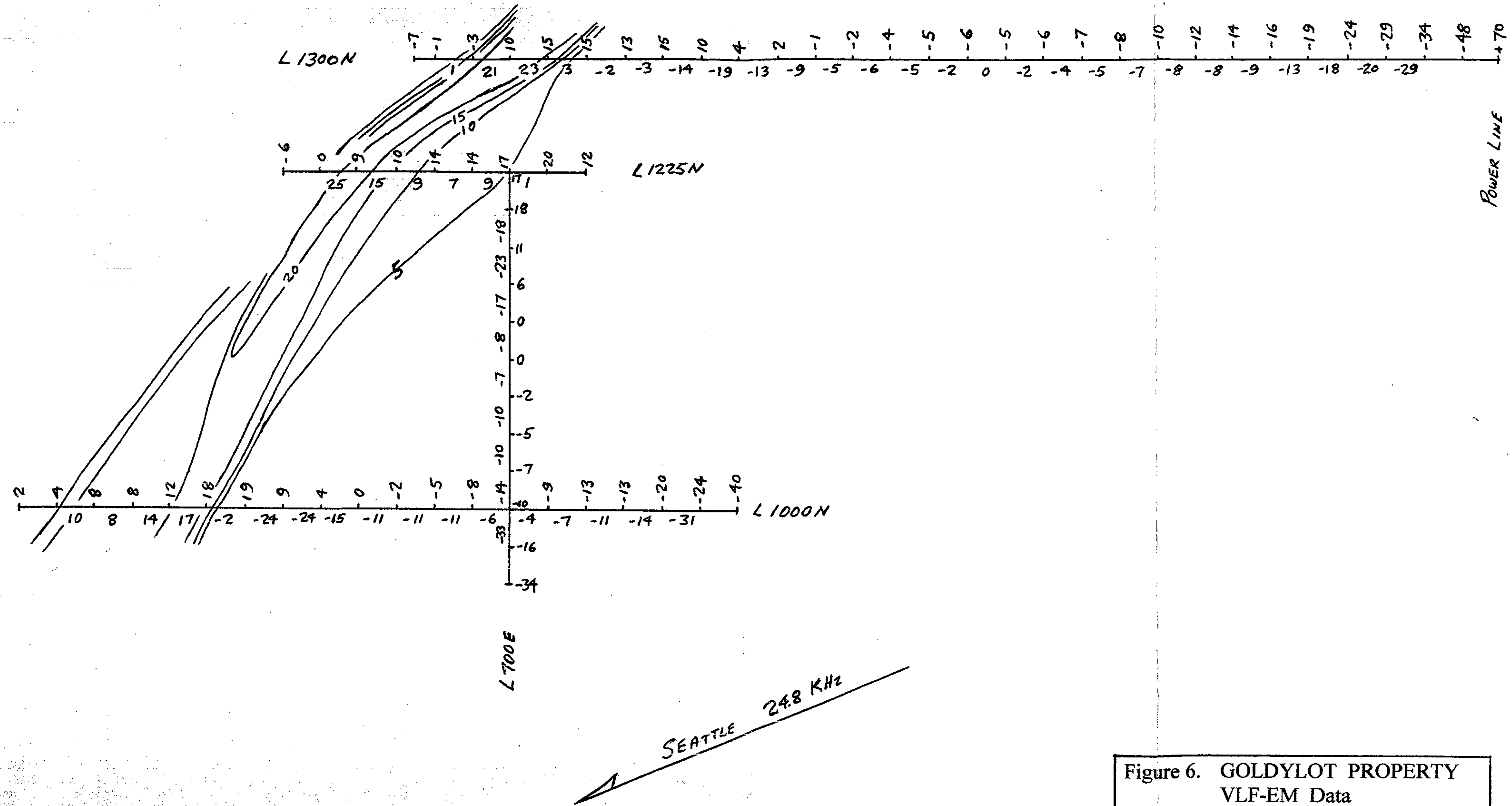

Figure 6. GOLDYLOT PROPERTY
VLF-EM Data
Dip Angle and Fraser Filter Values
For location of grid lines see Figure 4
Scale 1:2500

bodies that have too low a conductivity for other EM methods to pick up.

Results were reduced by applying the Fraser Filter; dip angle readings and the Fraser Filter values are shown in plan in Figure 5. Fraser Filter values are plotted between the dip angle readings which are at survey points. The higher Fraser Filter values (5+) are also contoured on these figures.

The Fraser Filter is essentially a 4-point difference operator which transforms zero crossings into peaks, and a low pass operator which induces the inherent high frequency noise in the data. Thus the noisy, often non-contourable data are transformed into less noisy, contourable data. Another advantage of this filter is that a conductor which does not show up as a zero crossover in the unfiltered data quite often shows up in the filtered data.

4.22 Discussion of Results

Neither of the two lines which crossed the area of silicification associated with the old workings and anomalous gold and copper mineralization detected any VLF-EM response in the vicinity of the old workings.

Each of the three lines which crossed the northeast-oriented Lewis Creek Fault show a distinct VLF-EM anomaly associated with the fault. Extended surveying could be done to trace the location of the fault zone across the claims area and beyond.

The power line which follows the main road across the property interferes strongly with the VLF-EM transmitter signals and prohibits the detection of any geologic anomalies in the vicinity of the power line.

5.00 CONCLUSIONS

1. Detailed geologic mapping of the 4 unit Goldylot claim block in the Lewis Creek area has identified a number of interesting features:

1a. Gabbros are abundant adjacent to the Lewis Creek Fault. Their emplacement may have been controlled by this structure, suggesting it was an active fault during sedimentation, and enhancing its importance as a structure along which copper and other base and precious metal mineralization were developed during active sedimentation.

1b. A zone of apparent structural weakness is developed parallel to the Lewis Creek Fault a short distance southeast of the fault. This zone has influenced the intrusion of older gabbro sills and dikes and younger mafic dikes, indicating that it has been active over a long geologic time interval. The presence of this zone of structural weakness furthermore supports the probability that the Lewis Creek Fault was reactivated as recently as Cretaceous time. The Lewis Creek Fault may therefor have influenced deposition of copper and gold mineralization known to be related to Cretaceous felsic intrusives, which occur in the general vicinity of the Goldylot claims.

2. Detailed geologic mapping of the old workings established the presence of composite quartz vein zones up to 2.5 m thick, trending approximately parallel to the Lewis Creek Fault zone. Additional northwest-striking veins support a structurally brecciated zone developed sub-parallel and perpendicular to the Lewis Creek Fault and evidently related to the fault.

3. A rock geochemistry survey in the area of the old workings established that significant gold mineralization is present in the quartz veins and quartz breccia zones that the workings are developed on. Gold occurs with both northeast and northwest striking veins. i.e. parallel and perpendicular to the Lewis Creek Fault. The northeast-striking veins appear to dip steeper than the hillside they occur on and may continue at shallow depth in the subsurface toward the Lewis Creek Fault. The highest gold value of 8843 ppm is of gouge material from a narrow fault zone that strikes parallel to the Lewis Creek Fault.

4. Reconnaissance VLF-EM surveying did not detect any anomaly within the zone of silicification which hosts the gold mineralization but three survey lines which crossed the Lewis Creek Fault readily identified that structure.

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8.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley. B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 24 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 30th day of January, 2001.

Peter Klewchuk
P. Geo.

PROFESSIONAL
PROVINCE OF
P. KLEWCHUK
BRITISH COLUMBIA
GEOSCIENTIST

Appendix 1. **Description of Rock Samples**

G-00-1	1010 N 760 E. South-dipping fracture (124/76S) in QV breccia zone in Fort Steele quartzites (FSQ). Limonitic and hematitic. Pyrite is disseminated and in small clusters. Sample includes a thin vuggy limonite vein 1-2 mm thick, along the 124° structure, which has conchoidal fracture.
G-00-2	1008 N 770 E. 'Thicker' milky white QV with dolomite (brownish oxidation, no coarse dolomite in sample). Disseminated fine to medium grained pyrite, mostly along contacts of QV. Hosted by FSQ; Breccia zone, poorly exposed.
G-00-3	1008 N 770 E. Limonitic FSQ with thin hairline limonitic fractures. Malachite staining on a few fractures, minor disseminated pyrite.
G-00-4	Small QV in outcrop (056/45N). Medium to coarse-grained disseminated pyrite occurs in QV and in adjacent phyllitic, sericitic FSQ. Mica is developed immediately adjacent to QV. Lots of small limonitic, pyritic QV through here, mostly in subcropping rubble.
G-00-5	Adit at 1015 N 750E; QV zone trending ~ 080/24N. Sample is a series of grabs/chips across north wall of thin white cm scale QV, across about 1.2 m thickness. This is the upper part of a 2.5 m thick QV zone. Host sediments in adit are silty quartzites.
G-00-6	Vuggy, somewhat rusty portion of the QV system. Vugs are angular to rounded and appear to be a primary feature of the vein rather than leaching of some included mineral such as pyrite. Vugs are mostly about 1mm to 1cm diameter and there are a series of vug filled QV within the larger QV system.
G-00-7	1015 N 755 E QV (150/34NE) on east wall of trench; vein thickens to north from ~0 to 7 cm over a length of 4m. HW contact of vein is quite vuggy and rusty; generally similar in character to sample G-00-6.
G-00-8	Sample of fault gouge material at south end of trench / beginning of adit (063/26N). Fault zone follows quartz veining.
G-00-9	Northern adit at 1035 N 740E. QV zone trends ~065/48N. Grab / chips of QV, altered seds on north wall, ~ half way in.
G-00-10	Grab of QV at portal of adit - some fine, disseminated pyrite, mottled QV.

G-00-11	Cpy-bearing, dolomitic-altered quartzite. Quartz-dolomite breccia, thin white and light gray QV mostly parallel to cleavage with some irregular lensey, cross-cutting gray QV. Cpy is locally concentrated in cross-cutting QV but within shear / cleavage -parallel zone.
G-00-12	Pinkish Fort Steele quartzite with white QV, minor limonite, rare disseminated pyrite. Sample focused on QV. Rubbly o/c; not sure of QV orientation.
G-00-13	QV (153/85-90E) + some seds. Quite vuggy, locally quite rusty; some of QV is more massive, whitish gray, moderately limonitic.
G-00-14	Thin (bedding-parallel?) Vuggy and limonitic QV on east wall (074/32S). Minor disseminated pyrite, weak Cu stain.
G-00-15	Sample from dump. Coarse-grained quartz with more abundant fresh pyrite. Pyrite is fine to very coarse and tends to be on margins of QV, adjacent to phyllitic seds but some is well within quartz, too. Includes some brown oxidized coarse-grained dolomite.
G-00-16	Float of thin (8-10 mm) limonitic QV in brown-pink altered silty quartzite. Foliated, almost phyllitic.
G-00-17	E-W striking, North dipping QV, limonitic, vuggy.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter PROJECT GOLDY File # A003645

246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

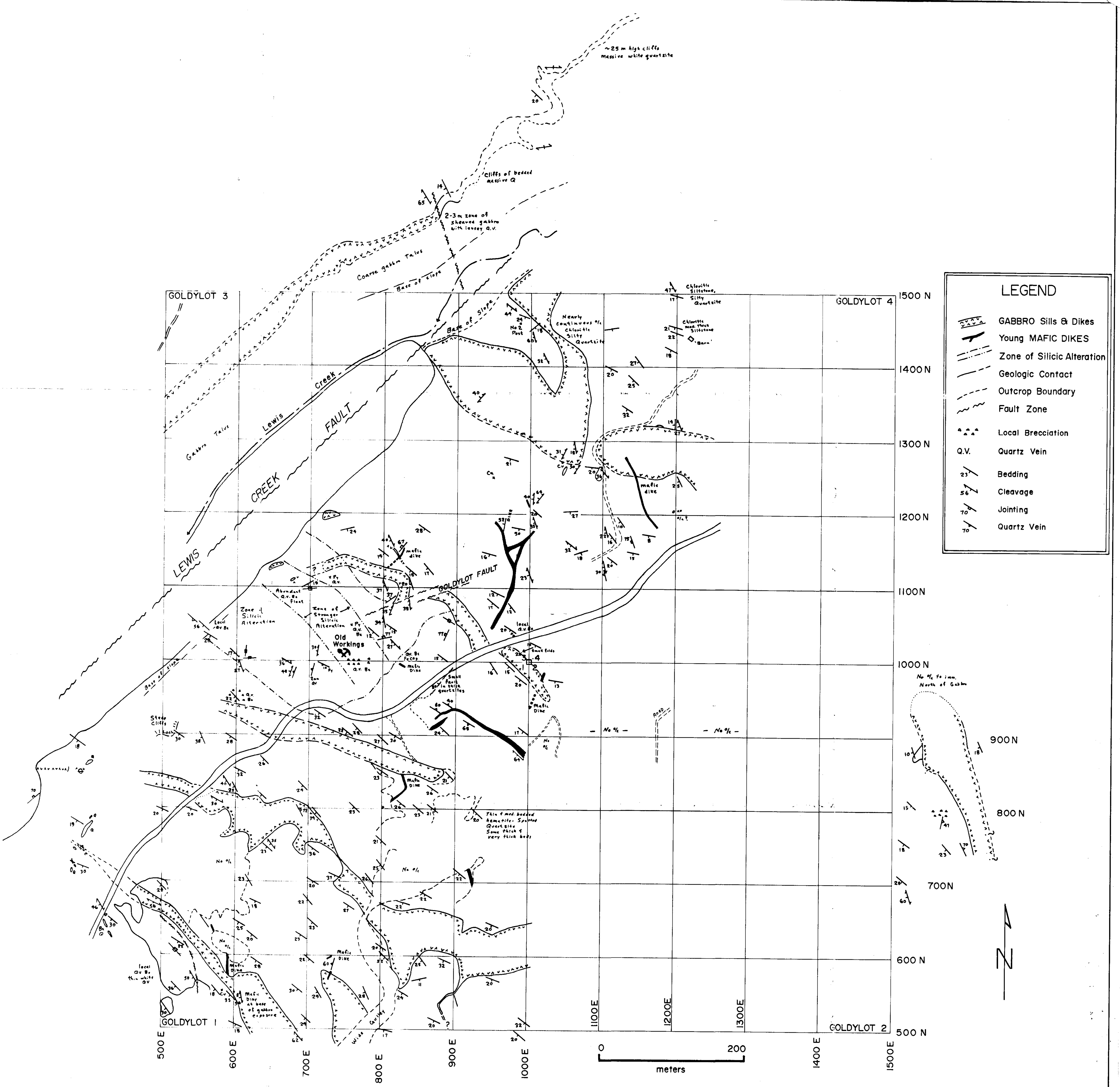
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm
G-00-1	5	6	6	3	<.3	19	94	380	3.51	6	<8	<2	2	7	<.2
G-00-2	1	2	<3	1	<.3	6	9	325	1.10	<2	8	<2	2	22	<.2
G-00-3	4	242	4	2	<.3	18	19	79	1.57	4	<8	<2	4	4	<.2
G-00-4	1	4	<3	1	<.3	5	1	32	1.16	18	<8	<2	<2	1	<.2
G-00-5	3	5	<3	1	<.3	3	12	30	.67	16	<8	<2	<2	3	<.2
G-00-6	1	3	3	1	.5	4	2	33	.95	30	13	4	2	2	<.2
G-00-7	5	3	4	1	<.3	5	7	51	2.49	42	13	<2	2	2	<.2
G-00-8	2	6	3	3	1.2	4	9	26	.90	21	<8	17	<2	5	<.2
G-00-9	3	8	3	3	<.3	16	105	742	5.37	48	<8	<2	<2	6	<.2
G-00-10	2	7	<3	2	<.3	11	39	374	3.28	12	15	<2	<2	2	<.2
RE G-00-10	2	7	<3	2	<.3	12	40	388	3.40	11	<8	<2	<2	2	.2
G-00-11	2	5948	4	6	<.3	34	20	1300	3.38	2	<8	<2	<2	41	.3
G-00-12	2	23	<3	3	<.3	7	3	73	.63	<2	12	<2	2	6	<.2
G-00-13	6	17	9	1	.6	22	32	183	2.64	27	<8	5	<2	27	<.2
G-00-14	1	4	<3	8	<.3	55	24	1032	3.84	3	<8	<2	<2	143	.4
G-00-15	5	6	<3	2	<.3	16	12	577	3.74	23	<8	<2	<2	11	<.2
G-00-16	1	1	3	12	<.3	127	176	766	4.71	4	<8	<2	<2	97	.4
G-00-17	4	9	<3	4	<.3	8	4	320	1.55	<2	<8	<2	<2	20	<.2
STANDARD C3/DS2	25	63	35	167	5.3	38	12	751	3.35	55	16	3	20	27	22.4
STANDARD G-2	1	3	<3	41	<.3	8	4	530	2.05	<2	<8	<2	6	69	<.2

SAMPLE#	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
G-00-1	<3	<3	3	.50	.016	1	25	.15	13	<.01	7	.12	.01	.06	5	4.8
G-00-2	<3	<3	<1	2.00	.019	1	12	.95	10	<.01	<3	.07	.02	.05	4	.2
G-00-3	<3	<3	1	.21	.006	6	23	.09	9	<.01	6	.14	.01	.09	6	8.4
G-00-4	<3	7	1	.01	.003	1	19	.01	8	<.01	6	.08	.01	.05	5	28.7
G-00-5	<3	<3	2	.02	.003	3	24	.01	7	<.01	<3	.10	.01	.07	4	619.7
G-00-6	<3	18	3	.01	.004	2	20	.01	6	<.01	5	.07	.01	.04	5	1345.7
G-00-7	<3	11	4	.04	.012	2	24	.01	8	<.01	7	.09	.01	.05	8	1927.4
G-00-8	<3	7	6	.04	.009	5	15	.05	19	<.01	<3	.46	.02	.17	2	8843.0
G-00-9	<3	27	<1	.27	.029	1	21	.65	46	<.01	<3	.12	.02	.08	4	994.4
G-00-10	<3	3	4	.02	.008	<1	16	.04	17	<.01	6	.07	.01	.05	6	38.9
RE G-00-10	<3	3	3	.03	.008	1	15	.04	17	<.01	3	.07	.01	.04	5	25.6
G-00-11	<3	4	<1	8.36	.006	2	9	4.08	5	<.01	<3	.07	.02	.04	3	69.9
G-00-12	<3	<3	1	.20	.007	4	26	.10	10	<.01	4	.04	.01	.03	6	3.1
G-00-13	<3	35	4	.80	.044	5	32	.26	44	<.01	<3	.15	.02	.14	4	2064.0
G-00-14	<3	<3	<1	7.32	.063	1	15	3.51	214	<.01	<3	.10	.01	.08	3	116.0
G-00-15	<3	15	<1	.17	.030	2	26	.65	6	<.01	3	.05	.02	.03	7	787.0
G-00-16	<3	<3	4	6.25	.081	1	32	2.78	28	<.01	4	.14	.01	.10	<2	19.3
G-00-17	<3	<3	<1	1.90	.009	4	27	.90	13	<.01	<3	.10	.02	.04	6	6.6
STANDARD C3/DS2	15	22	77	.56	.092	18	166	.60	140	.09	19	1.71	.04	.16	17	208.0
STANDARD G-2	<3	<3	39	.63	.103	7	77	.61	218	.13	3	.90	.07	.47	2	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 19 2000 DATE REPORT MAILED: Oct 4/00 SIGNED BY C. L. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Date ___ FA ___



GOLDYLOT CLAIMS

DETAILED GEOLOGY

80-20 PG51

Scale: 1 : 2500 | NTS 82 G/13 E | Figure 4

ASSESSMENT REPORT

on

GEOLOGICAL MAPPING, ROCK GEOCHEMISTRY
&
VLF-EM GEOPHYSICS

INTREPID & TICK CLAIMS

Angus Creek Area

FORT STEELE MINING DIVISION

NTS 82 F/9 E
TRIM 82F.060

Latitude 49° 33′ N
Longitude 116° 08′ W
UTM 5,489,000 N 563,000 E

By

Peter Klewchuk, P. Geo.

January, 2001

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1.00 INTRODUCTION

This report describes a program of geological mapping, rock geochemistry and VLF-EM geophysics completed on the Intrepid and Tick claims in the Angus Creek drainage south of St. Mary Lake in 2000.

1.10 Location and Access

The Intrepid and Tick claims are located approximately 28 kilometers southwest of Kimberley, B.C., and 6 kilometers southeast of St. Mary Lake, on the east side of Angus Creek at about 1850 meters elevation (Figs. 1 and 2). The claims are centered near 49° 33' N latitude and 116° 08' W longitude / UTM 5,489,000N, 563,000E.

Access to the property is via forest access roads from Kimberley or Cranbrook along the St. Mary River and up Angus Creek.

1.20 Property

The Intrepid and Tick claims are a contiguous block of 13 two-post claims owned by the author (Fig. 2).

1.30 Physiography

The Intrepid and Tick claims are within the Moyie Range of the Purcell Mountains, in moderately rugged mountainous terrain on the eastern slopes of Angus Creek. Mountains in the immediate vicinity of the claims range up to about 2300 meters. Forest cover is a mixed assemblage of mostly pine, fir and larch, with portions of the property clear-cut logged.

1.40 History of Previous Exploration

A narrow north to northeast trending gold- and copper-bearing quartz vein on the Intrepid 1 mineral claim has been the focus of a number of previous exploration programs. Geological Survey of Canada Memoir 76 (1915) refers to the property as the Mascot and Eclipse. B.C. Ministry of Mines reports for 1915 (p.113), 1936 (p.102) and 1950 (p.155) describe work on the property. The claims which formerly covered this area were the Wellington and Leader and the vein is commonly referred to by either of those names. A thorough review of the available assessment reports has not been made; work on the claims has included soil geochemistry, ground geophysics (VLF-EM and magnetics), road building, trenching, and diamond drilling (eg. Assessment Reports 661, 4459, 8163, 12,421, 13,011, 14,079, 14,112, 14,571, and 16,009).

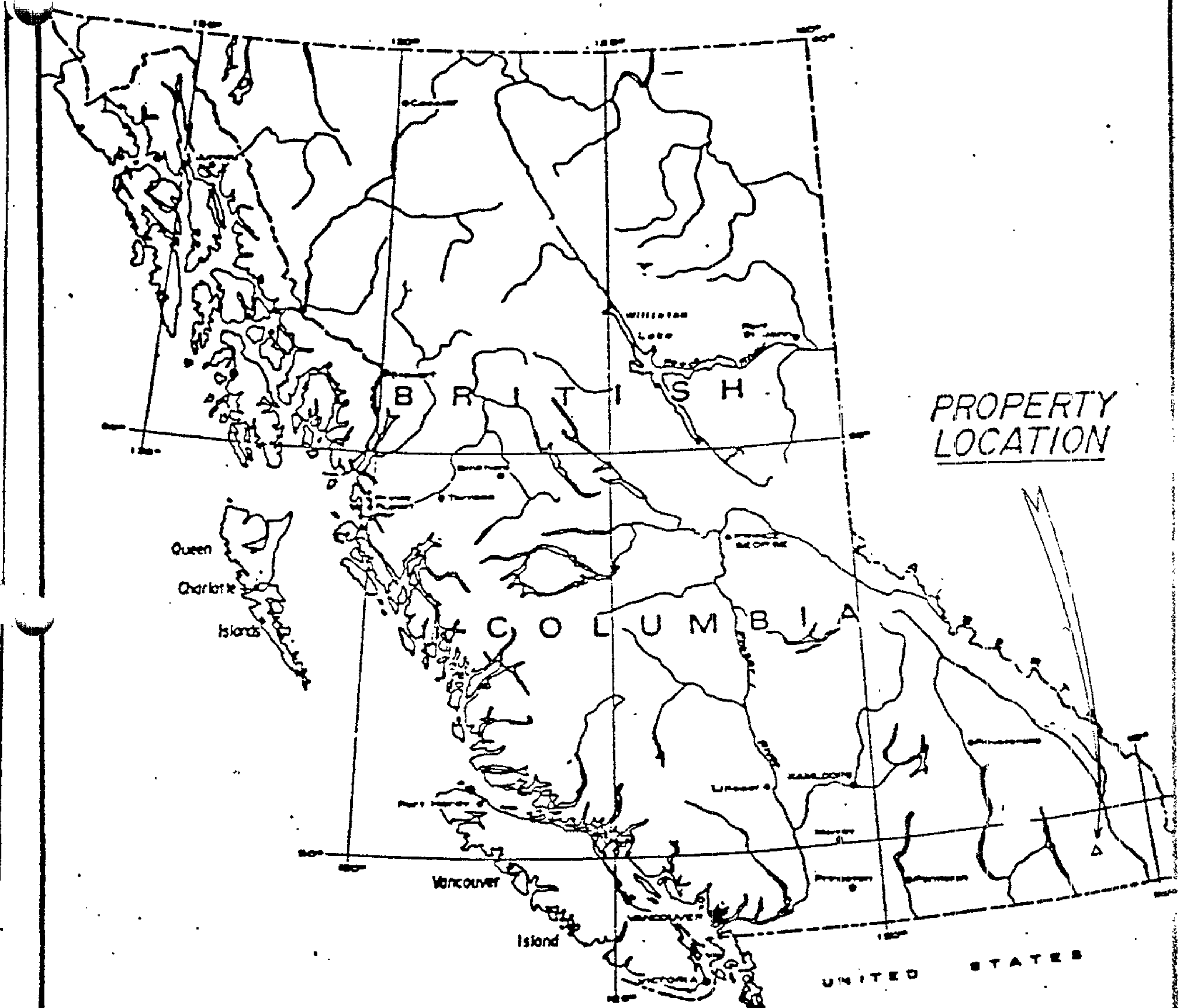
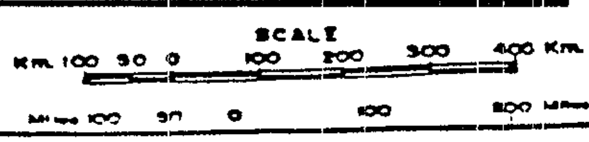


Figure 1.
INTREPID & TICK CLAIMS
PROPERTY LOCATION MAP



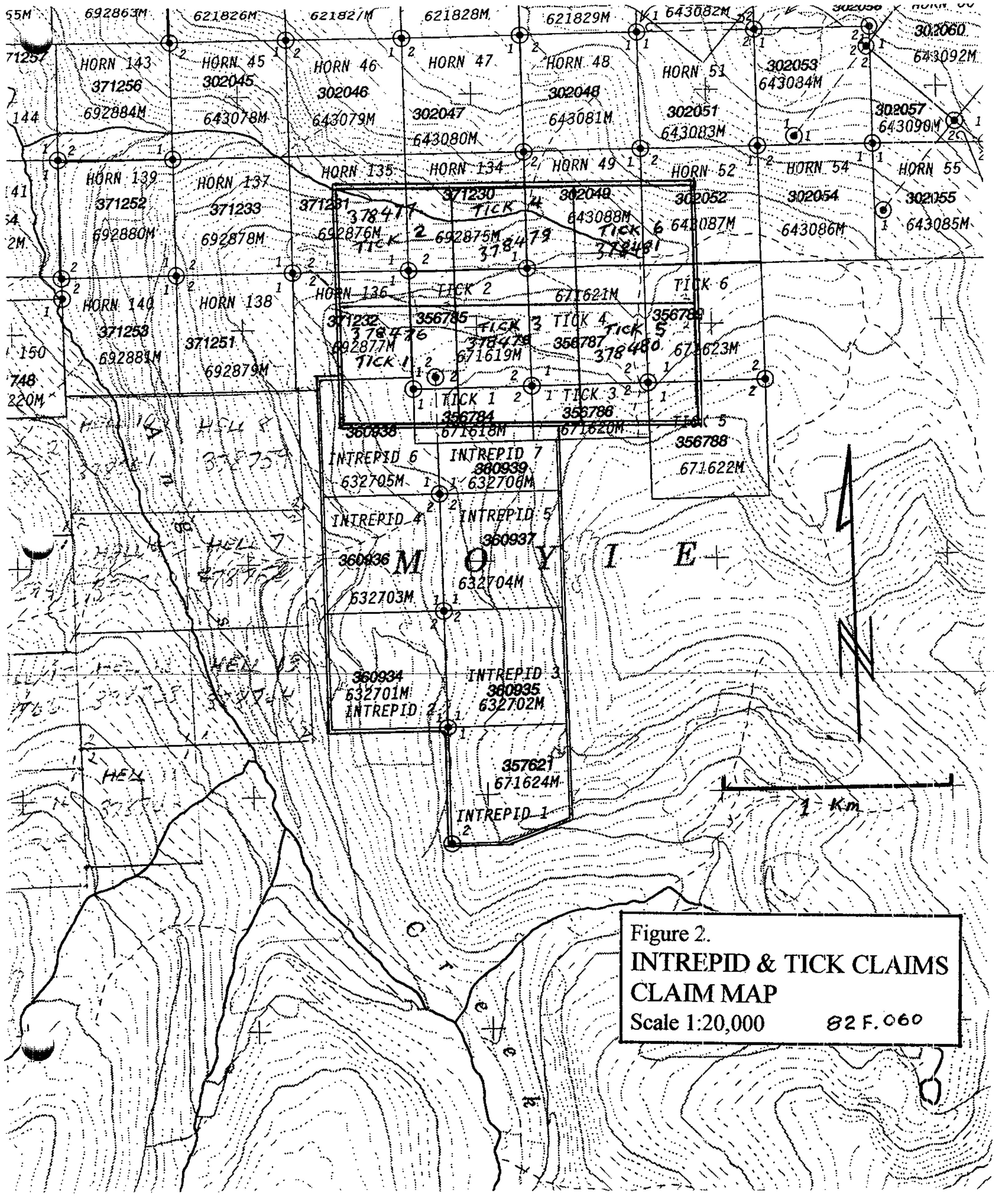


Figure 2.
INTREPID & TICK CLAIMS
CLAIM MAP
Scale 1:20,000 82F.060

1.50 Purpose of Work

The 2000 work program focused on the northern portion of the claims where the St. Mary Fault crosses the property. Mapping, rock geochemistry and geophysics were conducted to evaluate the possibility of anomalous gold, rare metals and rare earth elements being present in rocks within the fault zone.

2.00 GEOLOGY

2.10 Regional geology

The Intrepid and Tick claims are underlain by Precambrian age Purcell Supergroup rocks of the Aldridge, Creston and Kitchener Formations. The oldest rocks in the region are of the Aldridge Formation and consist predominantly of thick basinal turbidites. They are progressively overlain by shallower water quartzites and siltstones of the Creston Formation and siltstones and silty carbonates of the Kitchener Formation.

These formations are intruded by Precambrian gabbroic sills and dikes, pegmatite and aplite dikes related to the Precambrian Hellroaring Creek stock and a Cretaceous granitic stock and its associated syenitic dikes.

The regional east-west oriented St. Mary Fault is offset along a NNW trending fault which parallels Angus Creek (the 'Angus Creek Fault'; Fig. 3) a short distance west of the claim group. The pegmatitic Hellroaring Creek stock which contains rare metals such as beryllium, rubidium, cesium and tantalum, occurs immediately northwest of this fault intersection. Leech (1957) mapped the felsic intrusives of the area; later age dating has shown that the Hellroaring Creek stock is Precambrian (Ryan and Blenkinsop, 1971) while the granodiorite / quartz monzonite stocks are Cretaceous (Hoy and van der Heyden, 1988). The Cretaceous stocks typically have associated magnetic anomalies while the Precambrian, pegmatitic stocks are non-magnetic.

2.20 Property Geology

The area of the Intrepid and Tick claims is included in Geological Survey of Canada Map 15-1957 (Leech, 1957), part of which is reproduced here as Figure 3. The claims are cut by three faults with middle Aldridge Formation occurring north of the east-striking St. Mary Fault and Creston and Kitchener Formations to the south, separated by the northeast-oriented 'Leader Fault' (Figs. 3 and 4).

A narrow, northerly-striking, gold, copper and lead-bearing quartz vein exposed on the Intrepid 1 claim has been the main focus of exploration activity on the claim group. According to assessment reports, the gold-bearing quartz vein has near-surface widths of 15 cm to 1 meter and

LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

12 — Till, gravel, sand, silt, alluvium

MESOZOIC OR(?) CENOZOIC

11 — Granodiorite, quartz monzonite, pegmatite

PALAEOZOIC

CAMBRIAN
LOWER CAMBRIAN

10 — EAGER FORMATION: dark argillite, grey argillite; grey limy argillite, brown weathering sandy limestone

9 — CRANBROOK FORMATION: siliceous quartzite, grit, and conglomerate

PROTEROZOIC

PURCELL OR (?) LATER

8 — MOYIE INTRUSIONS: meta-diorite and meta-quartz diorite

PURCELL

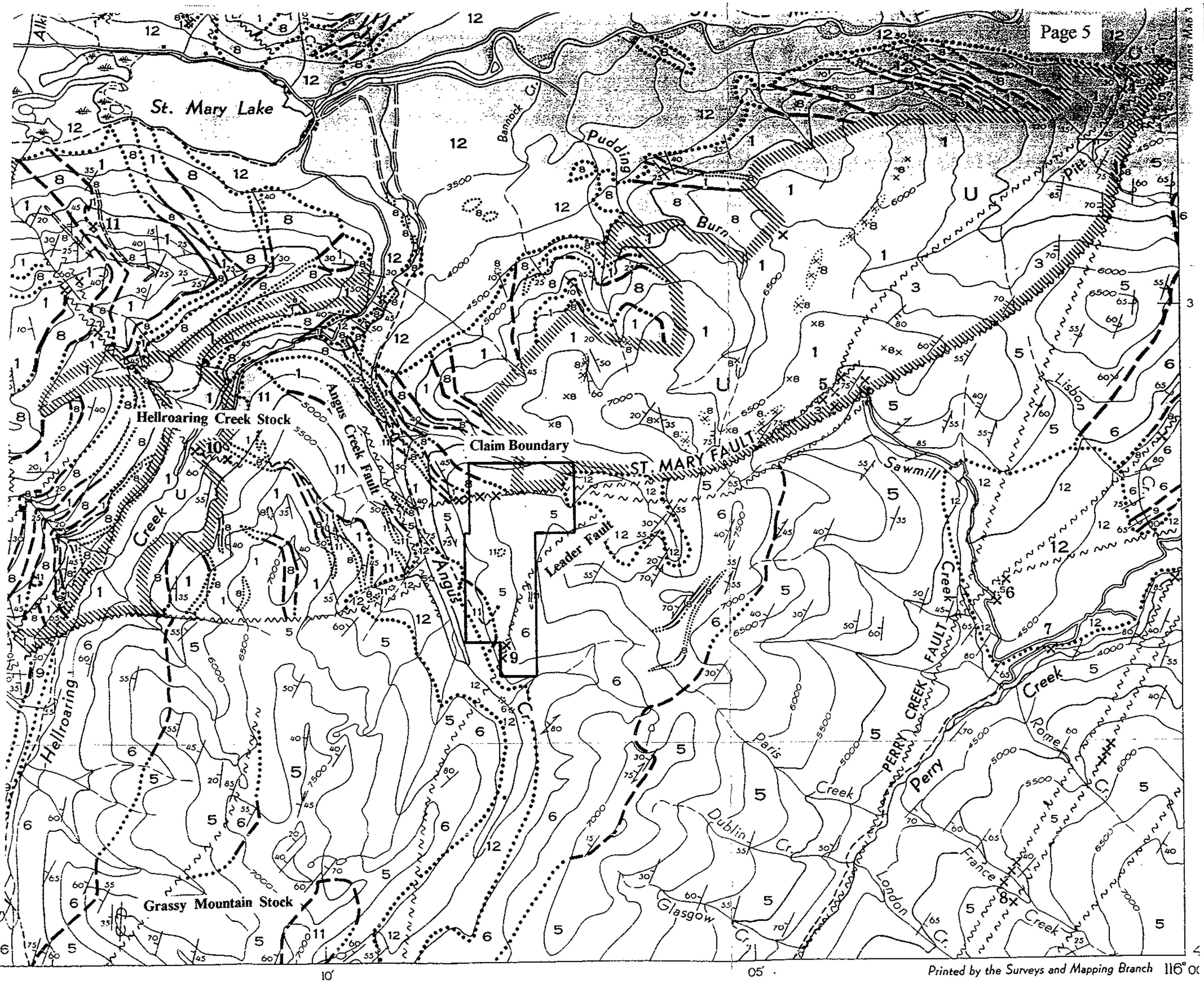
7 — DUTCH CREEK FORMATION: laminated black argillite, green argillite; quartzite, dolomite

6 — KITCHENER-SIYEH FORMATION: varicoloured argillites and dolomitic argillites, mostly buff and brown weathering; buff and brown weathering dolomite, commonly sandy

5 — CRESTON FORMATION: green and grey weathering green, grey, and purplish argillaceous quartzite, quartzite and argillite; 5a, grey weathering grey argillite and silty argillite, mud-cracked dark argillite

1 2 4 — ALDRIDGE FORMATION (1-4)
1. Lower Division: rusty weathering grey quartzite, siltstone, and argillite; grey weathering massive quartzite; metamorphosed equivalents
2. Middle Division: grey weathering massive grey quartzite and siltstone with argillite partings; rusty weathering quartzite, siltstone, and argillite
4. Upper Division: rusty weathering laminated argillite and siltstone; quartzite

3 — Middle and Lower Divisions undivided



MAP 15-1957

ST. MARY LAKE

KOOTENAY DISTRICT

BRITISH COLUMBIA

Scale: One Inch to One Mile = $\frac{1}{63,360}$

Miles: 1 ½ 0 1 2 3

Figure 3
GEOLOGY of the TICK / INTREPID PROPERTY AREA
(Leech,1957)

has been traced for about 600 m along strike. It has been exposed by a series of open cuts and subsequently by a long vein-parallel trench. An old shaft tested the vein to a depth of 16 meters and a 38 meter long adit is reported. Samples analyzed have values up to 4.8 oz/ton gold, 6.8 oz/ton Ag, 57.8% Pb, and 4.12% Cu. Diamond drilling done by Donnex Resources Ltd. in 1985 (258.5 meters in 5 holes; A.R. 14,112) tested the vein to a depth of about 50 meters with gold values up to 0.338 oz/ton over 60 cm reported.

3.00 GEOLOGICAL MAPPING

Bedrock exposure on the property is quite poor and is estimated at less than 5%; most of this is as sparse road cuts.

Creston Formation siltstones are only very poorly exposed on the claims; bedding attitudes seen are east-west striking with shallow to moderate south dips. Kitchener Formation dolomitic siltstones and quartzites are only marginally better exposed; attitudes tend to be northerly-striking with steep east dips. The 'Leader Fault' which separates Creston and Kitchener Formation rocks on the property was not seen in outcrop; its location is inferred on Figure 4.
No outcrops of middle Aldridge Formation sediments were observed on the claim block north of the St. Mary Fault.

St. Mary Fault

A part of the St. Mary Fault is exposed along the road immediately west of the Tick claims. It is a composite zone of altered sedimentary rock and quartz veining. The southern exposed edge of the fault zone is a more massive quartz, brecciated with mauve-red limonitic streaks and irregular thin (up to 1 cm wide) wavy light gray quartz veins. Sericite alteration is present. Some of the zone includes foliated to vaguely banded, vuggy quartz-sediment layers - a texture which indicates extensive hydrothermal fluid movement. The altered sediments are commonly siliceous and phyllitic. Extensive float of vuggy quartz and limonitic, altered sediments is present along the road which sub-parallels the Tick claim line, for almost one kilometer east of the western claim boundary.

A gabbro dike (?), about 70 m thick, occurs on the immediate north side of the fault. The gabbro is medium-grained, epidote-altered and contains scattered rose-colored quartz veins. The presence of this gabbro associated with the fault zone shows that the St. Mary Fault was active in the Precambrian and thus may have influenced emplacement of the Hellroaring Creek stock as well as the Cretaceous Angus Creek stock.

VLF-EM surveying along grid lines crossing the St. Mary Fault all readily detected the structure.

Angus Creek Stock

The 'Angus Creek stock' was mapped by Leech (1957; Fig. 3) as a small NNW-aligned elongate intrusion, parallel to the 'Angus Creek Fault'. It occurs less than one kilometer SE of the Precambrian pegmatitic Hellroaring Creek stock (Fig. 3).

The Angus Creek stock occurs within a small triangular-shaped, fault-bounded block of Creston Formation sedimentary rock, with the St. Mary Fault to the north, the 'Leader Fault' to the east and the 'Angus Creek Fault' to the west. The intrusive is poorly exposed on the Intrepid claims, with scattered roadcuts roughly defining an elongate northerly trend. The western edge of the stock is the most poorly defined due to more extensive overburden at lower elevation toward Angus Creek. The 'Leader Fault' strikes into the stock and may have been a factor in its emplacement (the Grassy Mountain stock occurs close to this structure about 5 km to the south).

Two government airborne geophysical surveys, in 1969-70 and 1995, have covered the Angus Creek stock area and both defined magnetic anomalies in the vicinity of the stock. This magnetic character is typical of many of the Cretaceous stocks in the district (eg. Hoy and van der Heyden, 1988).

Th Angus Creek stock appears to be of granodiorite - quartz monzonite composition. Both hornblende and biotite are present with hornblende more common. Plagioclase feldspars are white to very pale gray-green and commonly have a sericitic sheen, probably due to alteration. White potassium feldspars locally are up to 4 cm across. Minor magnetite is common and magnetite within the intrusive is probably the main cause of the magnetic anomalies associated with the stock. Disseminated pyrite is present in places and in some samples is moderately abundant.

A central western (?) portion of the intrusive is quite strongly altered. The texture and mineralogy appear unchanged but the rock is quite friable and can be crumbled by hand. A suite of quartz (-pegmatite?) dikes with minor magnetite criss-cross this altered phase of the intrusive and may be part of the alteration process. Very thin light gray glassy quartz veins also cut through the intrusive here. The alteration appears to be deuteric in nature but may be a later event. The Angus Creek stock is the only felsic intrusive in the district known to be altered in this manner.

A few narrow porhyritic dikes occur within a short distance of the Angus Creek stock and are evidently related to the stock.

Leader Vein

Since it was first discovered, the Leader vein has seen considerable exploration including trenching and diamond drilling. It has been exposed by trenching for more than 500 meters and has an arcuate trend, NNW at its northern exposure and NNE at its southern exposure.

The vein is conformable with its host Kitchener Formation sediments and dips steeply to the west. The 'Leader Fault' is present not far to the west (Fig.4) and may have been a controlling factor. A relatively thin gabbro sill (?) is exposed by trenching, in the footwall stratigraphy, not far below the vein; the gabbro may have played a role in development of the mineralized vein.

At its northern exposure the vein is about 20 to 30 cm wide and has a ribboned texture with limonitic weathering. Width increases toward the south to about one meter and a pinch and swell character is typically evident. Sulfides are irregularly distributed within the milky-white quartz and include coarse galena, locally oxidized to pyromorphite, chalcopyrite with malachite staining, and pyrite. Adjacent sediments are chloritic, micaceous and siliceous, with limonite spots. In places the vein contains trains of vugs which are aligned parallel to the strike. In places darker and thicker bands of limonite are present; these evidently represent higher concentrations of sulfides and/or iron carbonate which have weathered. Early workings on the vein include an adit near the southern extent of the vein exposure (reported to be 38 m long but now caved at surface) and a small shaft about 150 meters north of the adit.

Small peripheral quartz veins are common near the Leader Vein. These are typically less than 3 cm thick but can get up to 20 cm thickness and tend to be parallel or sub-parallel to stratigraphy. A few of these smaller quartz veins carry disseminated pyrite with a tendency for the pyrite to be concentrated along vein margins. A few of these white quartz veins are cut by thin (3-5 mm wide) light gray glassy quartz veins.

4.00 ROCK GEOCHEMISTRY

Eleven rock samples, representing different rock types and alteration on the property, were shipped to Acme Analytical Laboratories Ltd. at 852 East Hastings Street, Vancouver, B.C., V6A 1R6. Four of the samples were analyzed for a 30 element ICP package and seven samples of intrusives were analyzed for a rare metal, rare earth element package as well as a metallics suite. In addition, all samples were analyzed for geochemical gold. Field sample sites are shown on Figure 4; Appendix 1 is a description of the rock samples and Appendix 2 is the complete geochemical analysis. A previous analysis of the Angus Creek stock (sample B57982 is included in Appendix 2 with the rock geochem data. This single sample contained appreciable magnetite (Fe 23.89%) and has anomalous lead (373 ppm) and gold (56 ppb).

Results

Gold values are generally low in all samples; the highest values (19.9 and 31.0 ppb) are from brecciated, pyritic aplite dikes which also have high rare earth element values.

Copper is the most anomalous base metal with the highest values coming from quartz veins.

One pegmatite sample, T-00-8, has anomalous barium and strontium; this dike may be related to the Hellroaring Creek stock.

Two samples of sub-cropping,brecciated, pyritic aplite dike material returned anomalous yttrium and rare earth elements. This dike is probably within the St. Mary Fault zone.

5.00 VLF-EM Survey

5.10 Introduction

Because of poor bedrock exposure on the claim block, a program of VLF-EM geophysics was conducted to define structures that may have controlled the migration of mineralizing hydrothermal fluids and influenced the deposition of mineralization.

Initial surveying was done along roads as a first pass to establish whether any anomalous structures were present. Subsequently, grid lines were surveyed to further define anomalies. Surveyed grid lines are oriented north-south; they were run by compass, measured by hip-chain, with readings taken at 25 meter spacings.

A total of 9.325 kilometers of line was surveyed; Figure 4 shows the location of the VLF-EM survey lines along with the Fraser Filter data.

5.20 Instrumentation and Survey Procedure

The VLF-EM (**V**ery **L**ow **F**requency **E**lectro**m**agnetics) method uses powerful radio transmitters set up in different parts of the world for military communication and navigation. In radio communication terminology, VLF means very low frequency, about 15 to 25 kHz. Relative to frequencies generally used in geophysical exploration, the VLF technique actually uses very high frequencies.

A Crone Radem VLF-EM receiver, manufactured by Crone Geophysics Ltd. of Mississauga, Ontario was used for the VLF-EM survey. Seattle, Washington, transmitting at 24.8 kHz and at an approximate azimuth of 246° from the survey area, was used as the transmitting station.

In all electromagnetic prospecting, a transmitter produces an alternating magnetic (primary) field by a strong alternating current usually through a coil of wire. If a conductive mass such as a sulfide body is within this magnetic field, a secondary alternating current is induced within it, which in turn induces a secondary magnetic field that distorts the primary magnetic field. The VLF-EM receiver measures the resultant field of the primary and secondary fields, and measures this as the tilt or 'dip angle'. The Crone Radem VLF-EM receiver measures both the total field strength and the dip angle.

The VLF-EM uses a frequency range from about 15 to 28 kHz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can detect zones of relatively lower conductivity. This results in it being a useful tool for geologic mapping in areas of overburden but it also often results in detection of weak anomalies that are difficult to explain. However the VLF-EM can also detect sulfide bodies that have too low a conductivity for other EM methods to pick up.

Results were reduced by applying the Fraser Filter; values for which are shown in plan in Fig. 4.

The Fraser Filter is essentially a 4-point difference operator which transforms zero crossings into peaks, and a low pass operator which induces the inherent high frequency noise in the data. Thus the noisy, often non-contourable data are transformed into less noisy, contourable data. Another advantage of this filter is that a conductor which does not show up as a zero crossover in the unfiltered data quite often shows up in the filtered data.

5.30 Discussion of Results

Reconnaissance and grid VLF-EM surveying on the Tick claims in 2000 identified a number of moderately strong anomalies.

The St. Mary Fault is a fairly consistent, east-west oriented anomaly which is wider along the road immediately west of the grid but is more distinct and quite linear across the grid lines from 2800E to 3400E (Fig. 4). A short section of the main Angus Creek road, about 1 km west of the claims, was surveyed across the St. Mary Fault to define the location of the fault and to provide a comparison in geophysical responses. On the Angus Creek road the St. Mary Fault has a similar VLF-EM response to the Tick grid. A gabbro dike (?) occurs immediately north of the fault on the main road, also similar to the Tick claims.

At the south end of Road 3 a VLF-EM anomaly coincides closely with the SE contact of the Angus Creek stock; similarly at the southern end of Line 2800E a VLF-EM anomaly may reflect the north edge of the stock; further surveying detail is required to substantiate this interpretation.

Two weak anomalies on Road 1 are close to the inferred projection of the 'Leader Fault'; to the northeast an anomaly at the southern end of Line 3400E may also reflect the fault.

Two WNW-trending anomalies are defined on the grid but are not fully delineated; they may represent structures subordinate to the St. Mary Fault.

6.00 CONCLUSIONS

1. Although overburden covers a considerable portion of the Intrepid and Tick claims and allows only a rudimentary knowledge of the geology, the claims cover part of an area of complex geology with intersecting faults, different ages of felsic intrusions and extensive hydrothermal alteration, providing an area favorable for both gold and rare metal / rare earth element mineralization.

2. Anomalous gold is present in some of the samples collected as float and from bedrock from the area of the St. Mary Fault on the property. Anomalous gold is also present in the sample of altered Angus Creek stock.

3. Anomalous yttrium and REE are present in samples taken of aplite dike material associated with the St. Mary Fault zone.

4. Late stage alteration, possibly deuteric in nature, has resulted in a physical decomposition of part of the Angus Creek stock; this alteration may be favourable for gold mineralization within the stock and within its host sedimentary rocks.

5. VLF-EM surveying clearly picks up the St. Mary Fault zone and possibly detects the Leader Fault and contacts of the Angus Creek stock. Other VLF-EM anomalies detected by the survey may reflect structures related to the St. Mary Fault zone and should be further delineated.

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9.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 24 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 20th day of January, 2001.

Peter Klewchuk
P. Geo.

PROFESSIONAL
PROVINCE OF
P. KLEWCHUK
BRITISH COLUMBIA
GEOSCIENTIST

Appendix 1 Rock Geochemistry Sample Descriptions

T-00-1	Pegmatite, possible dike. Coarse-grained (quartz-feldspar-muscovite); few grains of oxidized, limonitic mineral (pyrite?).
T-00-2	Limonitic quartz breccia, vuggy. Quartz blebs common.
T-00-3	Pyritic felsic dike; white weathering, albitic. Light gray (bleached) to pale gray-green on fresh surface. Fine-grained pyrite is disseminated throughout. Fine-grained sericite is common on some surfaces. Thin hairline limonitic fractures.
T-00-4	Pyritic, siliceous, brecciated felsic dike (aplite). Albite clasts with pyrite-rich fine-grained matrix.
T-00-5	Brecciated pyritic, chloritic felsic dike (aplite). Bleached white albitized clasts. Locally very abundant fine-grained pyrite.
T-00-6	Limonitic weathered, pyritic and chloritic, fine-grained felsic dike (aplite). Fine-grained disseminated magnetite common. Some reddish oxidized grains may be pyrite. Looks siliceous - may be quartz with the feldspar.
T-00-7	Quartz-chlorite-pyrite rock, may be altered felsic dike (aplite). Fine-grained mixture of quartz-chlorite-pyrite- (feldspar?). Gray-green color, non-magnetic.
T-00-8	Pegmatite (dike?) With narrow cross-cutting quartz veins.
T-00-9	Quartz vein, to 10 cm wide. Limonitic streaks and patches - oxidized pyrite? Commonly vuggy with oxidized patches.
T-00-10	Composite sample of thin quartz veins cutting Kitchener Fm seds. with epidote and oxidized pyrite. QV are oblique to bedding.
T-00-11	Quartz breccia cut by quartz veins. Pyritic, limonitic, quartz vein / shear zone material. Some sheared, bleached limonitic sedimentary material with small, elongate, shear-parallel vugs.
B 57982	Granodiorite, crumbly, with magnetite.

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GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter File # A004820
246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
TK-02	1	29	6	22	<.3	59	87	630	30.22	11	<8	<2	17	1	<.2	<3	4	34	<.01	.101	6	23	.01	9	<.01	<3	.61	.01	.07	2	4.8
TK-09	120	99	<3	12	<.3	5	6	51	3.40	14	12	<2	4	1	<.2	<3	<3	10	<.01	.020	5	23	.06	26	.01	<3	.24	.01	.10	6	2.5
TK-10	12	116	13	31	<.3	8	17	427	4.97	2	<8	<2	6	129	.4	<3	<3	38	1.28	.037	14	25	.23	202	.10	<3	.84	.02	.10	4	.6
TK-11	5	7	22	69	.5	63	71	151	7.73	23	<8	<2	2	2	<.2	<3	<3	22	.01	.024	6	44	.28	27	<.01	<3	.37	.01	.06	7	2.3
RE TK-11	5	7	23	69	.4	63	70	151	7.70	21	<8	<2	3	2	.2	<3	<3	22	.01	.024	6	43	.28	27	<.01	<3	.37	.01	.06	7	2.9
STANDARD C3/DS2	29	67	41	168	5.8	39	12	801	3.38	59	23	2	22	29	24.2	17	25	78	.58	.087	18	180	.63	147	.09	21	1.90	.04	.16	17	190.0
STANDARD G-2	2	2	5	41	<.3	8	4	551	2.04	<2	<8	<2	4	71	<.2	<3	<3	38	.64	.094	7	78	.61	229	.14	<3	.91	.08	.45	2	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 1 2000 DATE REPORT MAILED: Dec 14/00 SIGNED BY. C. L[illegible] D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Peter Klewchuk PROJECT GUS File # 91-2022
246 Moyie St., Kimberley BC V1A 2N8

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
B 57982	1	3	373	79	.3	3	12	211	23.89	4	8	ND	3	91	.2	2	6	541	.04	.025	7	5	.03	85	.01	2	.42	.05	.20	1	56

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GEOCHEMICAL ANALYSIS CERTIFICATE

Klewchuk, Peter File # A004818 (a)

246 Moyie St., Kimberly BC V1A 2N8 Submitted by: Peter Klewchuk

SAMPLE#	Ba ppm	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	Tl ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm
TK-01	251	6	15.4	8.0	22.7	4.7	53.6	213.2	55	10.6	14.6	8.9	.6	2.7	58	13	151.8	17.2	22.0
TK-03	109	1	37.5	1.7	13.8	4.6	10.6	77.2	3	4.9	1.0	8.2	.4	1.8	54	7	150.0	30.7	24.5
TK-04	32	11	40.2	.4	18.4	6.9	94.3	9.0	8	16.2	1.4	39.3	.3	5.0	63	12	251.7	786.6	36.0
TK-05	38	12	39.8	.4	20.5	5.1	44.1	9.5	17	24.3	1.2	24.0	.2	2.8	85	10	179.7	178.2	54.5
TK-06	46	7	15.4	.2	21.3	5.1	26.1	1.7	2	22.1	1.0	11.1	.2	2.7	167	8	178.5	60.7	27.9
TK-07	18	1	28.4	.4	16.5	4.9	20.9	3.7	2	22.4	.9	10.3	.2	2.4	162	7	157.3	60.6	16.9
TK-08	4144	3	1.4	2.0	17.7	2.0	8.7	88.2	1	936.0	.5	6.1	.4	3.0	19	6	62.4	3.4	8.5
RE TK-08	4419	2	1.4	2.0	18.4	2.3	8.6	92.4	2	975.1	.5	6.2	.6	3.2	18	6	66.4	3.2	8.3
STANDARD SO-15	2093	4	22.6	3.1	18.0	25.6	31.6	65.8	17	387.3	1.8	24.0	.9	21.2	147	20	1068.4	22.5	28.7

SAMPLE#	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
TK-01	48.0	5.56	21.5	4.4	.73	3.54	.51	3.18	.60	1.87	.27	2.00	.30
TK-03	55.4	6.30	26.2	5.5	1.21	4.60	.76	4.69	1.00	3.23	.46	3.32	.46
TK-04	77.4	8.95	36.9	11.2	3.47	20.66	8.06	79.74	22.90	84.93	14.53	89.33	11.14
TK-05	120.3	13.36	50.8	10.1	2.14	8.70	2.51	22.54	5.66	20.06	3.30	20.14	2.49
TK-06	59.9	6.89	27.7	6.1	1.65	5.56	1.17	8.99	2.06	6.94	1.10	6.94	.91
TK-07	38.4	5.13	21.1	5.7	2.01	6.01	1.34	10.21	2.28	7.36	1.16	7.89	1.00
TK-08	16.1	1.33	4.6	.8	<.05	.71	.09	.74	.11	.37	.06	.42	.08
RE TK-08	15.2	1.28	4.6	.8	<.05	.73	.10	.81	.11	.35	.05	.44	.07
STANDARD SO-15	61.6	6.15	23.6	4.7	1.02	4.00	.59	3.81	.77	2.44	.34	2.56	.42

GROUP 4B - REE - LiBO2 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK R150 60C
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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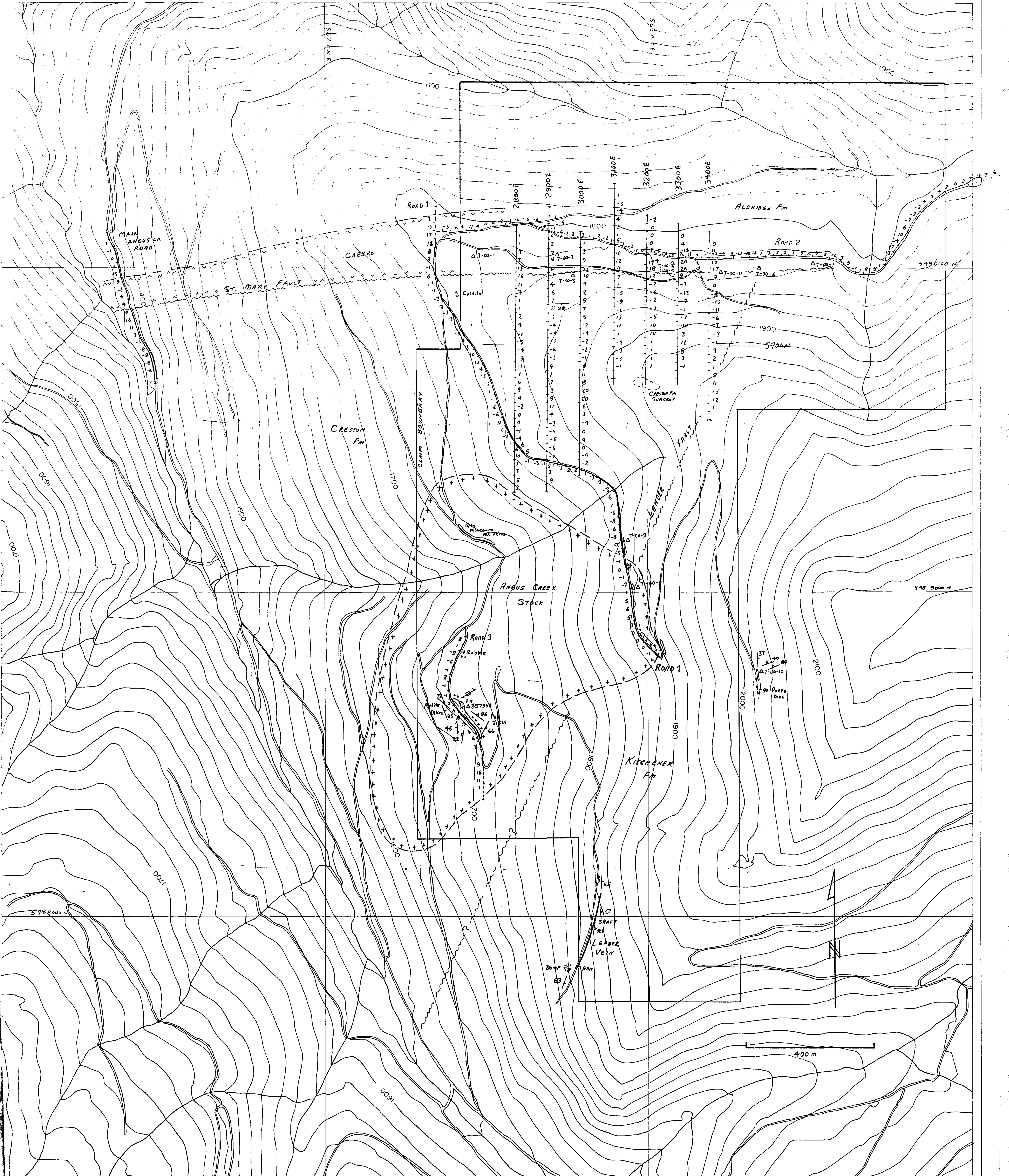
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Au* ppb
TK-01	3	4	6	25	10	<2	<.2	<.5	.6	1.3
TK-03	2	6	7	11	18	8	<.2	<.5	2.0	3.5
TK-04	4	11	11	6	21	45	<.2	<.5	2.4	19.9
TK-05	3	18	19	15	40	72	<.2	.8	6.1	31.0
TK-06	2	9	12	81	10	6	<.2	<.5	.5	6.2
TK-07	2	9	4	43	11	8	<.2	.6	<.5	5.2
TK-08	3	85	9	5	2	6	<.2	<.5	<.5	1.9
RE TK-08	3	86	9	6	3	6	<.2	<.5	<.5	1.7
STANDARD C3/DS2	28	67	37	168	38	59	24.7	15.3	23.2	192.2
STANDARD G-2	1	2	<3	41	7	<2	<.2	<.5	<.5	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 60C AU* BY ACID LEACHED, ANALYSIS BY ICP-MES. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: DEC 1 2000 DATE REPORT MAILED: Dec 14/00 SIGNED BY..........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



LEGEND

BEDDING

QUARTZ VEIN

FRACTURING

JOINTING

SEATTLE 24.8 KHz

VLF-EM: FRASER FILTER VALUES SHOWN

Figure 4
INTREPID & TICK CLAIMS
GEOLOGY
Showing location of
Rock Geochemistry &
VLF-EM Geophysics
Scale 1:5,000 TRIM 82F.060 Jan. 2001