

The Quesnel Trough Project

The QUESNEL TROUGH SYNDICATE (QTS) has been formed to research and acquire the best possible grass-roots exploration properties for porphyry Cu/Au deposits in the Quesnel Trough area of central British Columbia. The syndicate is comprised of five participants, three holding 25% each, and two holding 12.5% each. The total funding commitment of the syndicate is \$40,000.

Porphyry deposits has been selected as the principle target for exploration for several reasons:

- * Copper from porphyry deposits has been the backbone of B.C.s mining industry for the past three decades.
- * The most successful gold mines in British Columbia have been as byproducts of porphyry copper deposits.
- * Porphyry Cu/Au deposits have large geological signatures, that are relatively common and easy to identify.
- * Porphyry deposits tend to cluster in localized areas, e.g. Iron Mask Batholith (Afton), and Highland Valley.
- * The exploration objectives of the QTS are well-suited to porphyry deposits as they are large and easy to discover applying early grass-roots drilling techniques.

The Quesnel Trough is selected as the the target area for property research and acquisition, the initial review having been completed from Horsefly to Mt. Milligan. Within this area, the Polley Mt. and Mt. Milligan deposits are currently under review for commercial production. On the western boundary of the Quesnel Trough, Gibraltar Mines has been a successful low-cost, large tonnage (50,000 tons per day) mining operation for over two decades. To the south Afton Mines was a successful 15 year mining operation, and to the north, the Kemess Property is currently being developed. Exploration and discovery of porphyry deposits within the selected area of the Trough has been hampered by extensive overburden. The normal procedures of exploration have dramatically failed in the development of mineral reserves because of overburden. Normal geochemical techniques have been confused by glacially transported till. Geophysical techniques have provided spurious targets for drilling. The overburden has been too deep for normal trenching methods.

The principals of QTS offer a unique exploration method that proposes to conquer the widespread overburden problems. The attached brochure outlines the procedures to be adapted. The key element in the drilling approach to grass-roots exploration is the cost and mobility of the drill. It is anticipated that drilling costs will be 50-70% the costs of normal reverse circulation drilling and 25-30% the costs of diamond drilling. It is hoped that most drilling can be accomplished without expensive drill access road construction.

Drilling at a grass-roots stage in areas of extensive overburden provides the ability of geochemical sampling the overburden in a third dimension (collecting soil samples at depth), thereby constructing meaningful soil profiles that can relate the surface manifestation of copper content in soils to a bedrock source. Careful interpretation of the direction of ice movement (glacier), together with a reasonable structural interpretation that will provide reasonable host settings for porphyry deposits, will lead to the most efficient drill program possible on at least six of the acquired properties.

Drilling through the overburden will also provide samples of bedrock, removing the speculation of the underlying geology, and providing samples of rock for assay. It is at this phase that discovery of a major porphyry deposit may occur, or at least be indicated.

The brochure outlines a hypothetical discovery of a major copper/gold porphyry reserve in areas similar to The Quesnel Trough. With diligent project management and supervision, one or more of the acquired properties will achieve similar discovery results, providing a real Case History for the drilling approach to grass-roots exploration. Although this approach to exploration has been attempted, the success has been limited due to expensive and inefficient drilling.

Grass-roots exploration is the least expensive method of acquiring a mineral deposit, and also offers the investor a very speculative, and sometimes lucrative, return to the initial investment. The property acquisition portfolio has been developed to almost assure the investor that an economic mineral reserve occurs on at least one of the acquired properties. Sound project and professional management of work programs and a sound financial source are the remaining ingredients to make these discoveries a reality.

Ten properties have been acquired by QTS, four by claim location, and six by simple option agreements. The formal agreements have not been presented to the property owners at this time, however a basic understanding of option terms have been negotiated, and accompanied by a letter of intent to enter into formal agreement. Most letters give the QTS first right of refusal to third party offers. Two additional properties are to be acquired by staking. All acquired properties are very clean, with no title challenges or other obvious encumbrances. Most claims have been located by well-respected geologists, who would not have their reputation tainted by poorly located claims.

Of the twelve properties of interest, seven meet all the parameters of the QTS objectives:

- * underlain by volcanic rocks of the Triassic/Jurassic Takla Formation.
- * an alkalic (syenite) stock or intrusion is present, or interpreted by airborne magnetics.
- * a copper/gold showing exists, or is indicated by significant geochemistry.
- * within a thirty km. distance from a known porphyry Cu/Au deposit.
- * rock alteration and/or structural preparation is apparent.
- * the property is covered by extensive overburden, and is relatively unexplored.

Properties meeting the above criteria are given a 10% probability of hosting a porphyry Cu/Au deposit that will be discovered early in exploration. The ~~four~~^{five} other properties have merits of an additional nature, that offset the criteria of the chosen objectives. One property is on the western margin of the Quesnel Trough, and may, in fact, be a Gibraltar type of setting in calc-alkalic intrusions, however is presented with a strong structural/geochemical signature over a large area. A second property has mineralization associated with it that is indicative of a skarn deposit in an older complex of rocks than the Takla Formation. A third property is very speculative and is located 80 km. from Mt. Milligan. A fourth property (yet to be staked) has no showings or geochemical signature, and the fifth property lacks the extensive overburden.

A one page description of each property with an accompanying map is appended, including specific property recommendations in two phases of exploration:

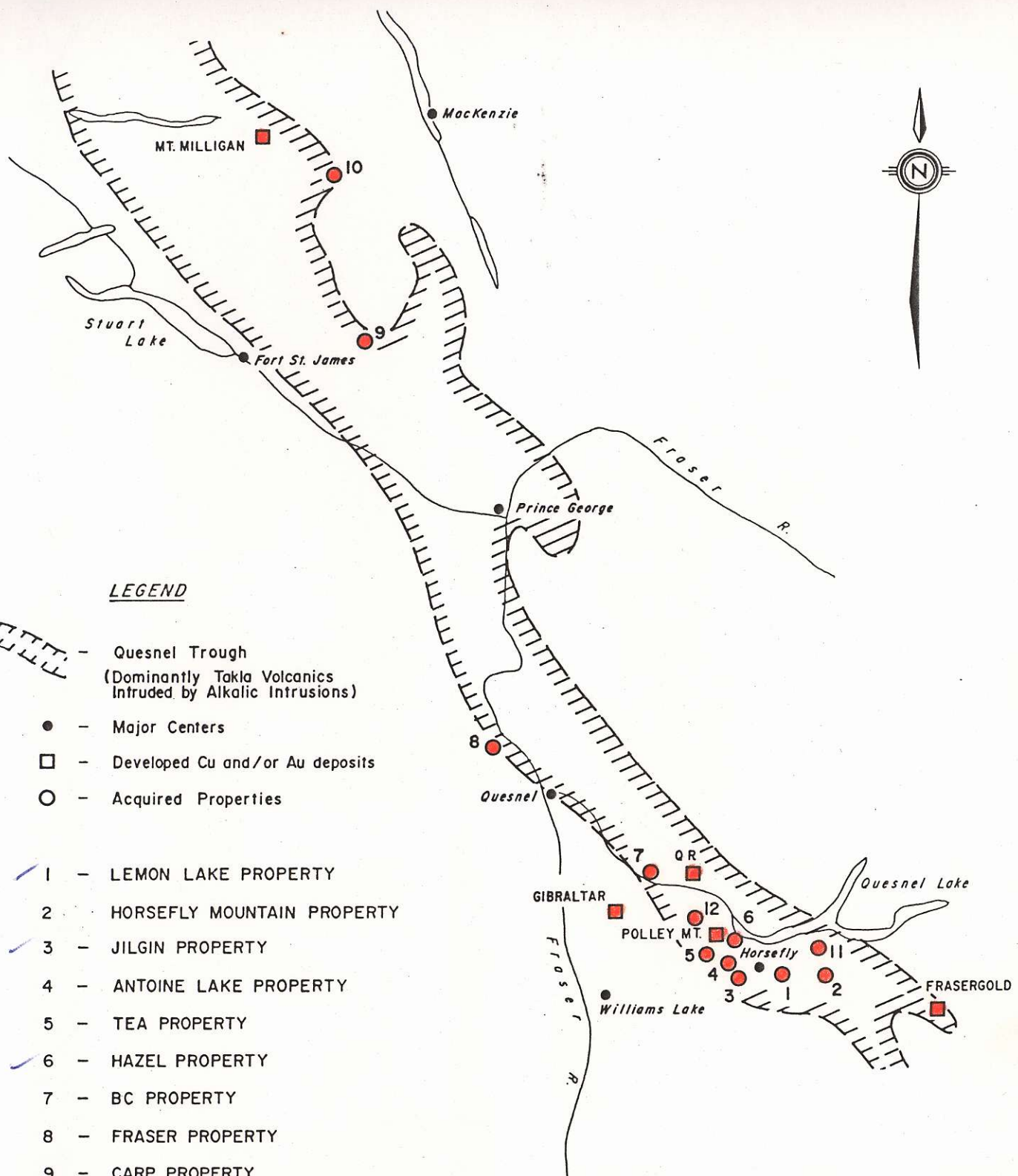
PHASE I	Surface evaluation . (12 properties)	Total Costs	- \$105,000
PHASE II	Drilling - a selection of the best six properties based on accumulated data and Phase I program.	Total Costs	- \$150,000
CONTINGENCY			\$ 45,000
TOTAL			<u>\$300,000</u>

It is with this budget that the QTS proposes a 1992 field program. The requirements will be that the total \$300,000 will have to be committed, the initial \$100,000 being deposited by April 30,1992, and the remaining \$200,000 being deposited by June 30,1992. The QTS will manage the 1992 expenditures and exploration program.


Terms for earning an interest or purchasing the project, or for participating through the creation of a new public company are open for negotiation.

Prepared and Presented on behalf of the:
QUESNEL TROUGH SYNDICATE

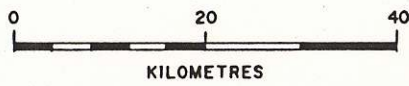
By: John R. Kerr, P. Eng.
Manager



LEGEND

-  - Quesnel Trough
(Dominantly Takla Volcanics
Intruded by Alkalic Intrusions)
- - Major Centers
- - Developed Cu and/or Au deposits
- - Acquired Properties

- ✓ 1 - LEMON LAKE PROPERTY
- 2 - HORSEFLY MOUNTAIN PROPERTY
- ✓ 3 - JILGIN PROPERTY
- 4 - ANTOINE LAKE PROPERTY
- 5 - TEA PROPERTY
- ✓ 6 - HAZEL PROPERTY
- 7 - BC PROPERTY
- 8 - FRASER PROPERTY
- 9 - CARP PROPERTY
- 10 - PO PROPERTY
- 11 - VIEW CLAIM
- ✓ 12 - BUD PROPERTY *old Mt near
manhoush.*



QUESNEL TROUGH SYNDICATE	
LOCATION MAP	
ACQUIRED PROPERTIES	
Drawn: John R. Kerr, P. Eng	Date: March, 1992
Checked: J.R.K.	Scale: 1 : 2,000,000

LEMON LAKE PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 6 km. due east of Horsefly and 60 km. east of Williams Lake in south-central British Columbia. Good all weather road access traverses the central portion of the property. Elevations range 800-1000m (asl), with considerable overburden covering flat-lying terrain in the southern portion of the Property.

CLAIMS Melon 1-3 mineral claims (34 units) located in the name of John R. Kerr, held in trust for the QTS. Horse 1-20 (2-post claims) cover the principle showing areas, and are recorded in the name of Hughes Salat of Calgary, Alta. A simple option-to purchase agreement is being negotiated. The claims expire in January and February, 1993.

HISTORY Copper mineralization was initially discovered in the early 1900s, however documented exploration work was not undertaken until the late 1960s. Work from 1970-present has been intensive soil sampling, magnetic IP and EM surveys, and 6 diamond drill holes completed in 1987. Intersections of .15 % Cu and anomalous Au are reported over core lengths of 10 - 15 meters. Additional drilling on the property may have been completed in the early 1970s, however the extent and results have yet to be obtained.

GEOLOGY The property is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation intruded by an early Jurassic syenite intrusion of unknown dimensions. Surface exposures of the intrusion indicate a mapped size of 2000 by 1400 meters, however the southern extent is terminated by deep overburden. Airborne magnetics indicate the size of the intrusion may be twice as large as exposed on surface. It is within highly altered phases of the syenite intrusion that typical porphyry style Cu mineralization exists. Copper exists as vein fillings and disseminations of chalcocite, chalcopyrite, and bornite in a highly propylitized syenite. The principle alteration mineral is epidote. Magnetite is abundant in the syenite as disseminations and massive fracture fillings, and is believed to be a remobilized primary constituent of the intrusion. The relationship of magnetite to Cu minerals is not known.

ECONOMIC POTENTIAL The mineralization observed in the Lemon Lake stock is typically porphyry copper and gold. Although exploration to date has not discovered a deposit of economic size or grade, insufficient work has been completed in the areas of the known showings to rule out the potential of such a deposit being located in these areas. In addition, the favourable syenite intrusion extends an unknown distance to the south, being covered by an extensive layer of overburden. Previous soil surveys in this area of the property has indicated erratic but strong copper anomalies. This area of the property is extremely well-suited for the overburden drilling objectives and techniques of the QTS.

RECOMMENDATIONS A two-phase exploration program is recommended on the Lemon Lake Property:

PHASE I

- Complete collection and review of historical data.
- Finalize negotiations on the Horse 1 - 20 2-post claims.
- Soil sampling program over the southern portion of property.
- Surficial and structural interpretations of the property.

COSTS PHASE I \$ 10,000

PHASE II - 600 meters of overburden drilling and sampling.

COSTS PHASE II \$ 25,000

HAZEL PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 28 km. northwest of Horsefly and 55 km. east of Williams Lake in south-central British Columbia. Logging roads provide good access to most areas of the property. Elevations range 700 - 900 meters (asl), with considerable overburden covering flat-lying terrain in the west-central portion of the property.

CLAIMS Hazel 1 - 4 mineral claims (66 units), located in the name of John R. Kerr, in trust for the QTS. The claims expire in March, 1993.

HISTORY There is minimal history of intensive exploration on the property. Soil sampling has been completed in the early 1970s, with definition of two strong copper anomalies in the areas indicated on the map. There has been no evidence of any drilling having been completed on the property. There are no reported mineral occurrences.

GEOLOGY The property is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation, intruded by four small alkalic (syenite?) stocks, the largest having mapped dimensions of 1500 meters long by 800 meters wide. The full extent of the intrusions however is masked by the widespread overburden. Airborne magnetics suggest that the stocks are considerably larger than mapped.

ECONOMIC POTENTIAL The geological setting of the Hazel Property is similar in all respects to the geological setting of the Polley Mountain porphyry Cu/Au deposit located 7 km. to the northwest. Exploration to date has been hindered by the extensive overburden that covers most of the property. Previous geochemical surveys completed on the property indicates that copper mineralization is present and is associated with the alkalic stocks, the strength sufficient to represent ore-grade porphyry mineralization. Airborne magnetic surveys indicate that the alkalic stocks, the principle hosts of porphyry Cu/Au deposits, are significantly larger than mapped from surface exposures.

The property is very well suited for the overburden drilling procedures proposed by the QTS, and resulting interpretation of copper and gold content in overburden profiles. The knowledge that copper exists in anomalous contents in soils provides assurance that copper mineralization occurs on the property, and the drilling methods should be able to locate a bedrock source.

RECOMMENDATIONS A two-phase exploration program is recommended on the Hazel Property:

- PHASE I - Reconnaissance geological mapping,
- Reconnaissance soil sampling on 200 meter grid lines at 50 and 100 meter sample intervals, analysis for copper and gold,
- Surficial study to determine the direction of glacier movement,
- Satellite tape interpretation of property to determine major lineaments.

COSTS PHASE I \$ 8,000

PHASE II - 600 meters of overburden reverse circulation drilling and sampling.

COSTS PHASE II \$ 25,000

HORSEFLY MTN. PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 20 km. due east of Horsefly and 70 km. east of Williams Lake in south-central British Columbia. Good logging road access provides access to all areas of the claim. Elevations range 1300 - 1700 meters (asl), the terrain being moderately precipitous on the northern and southern slopes of Horsefly Mtn. In general, the claim is covered by a light layer of overburden, however prior to logging, outcrop exposures were limited on the property

The logging roads and development on Horsefly Mtn. were completed in 1990 and 1991.

CLAIMS Black 1 (20 units) located in the name of John R. Kerr, held in trust for the QTS. The claim expires in February, 1993. The current records indicate no claims exist in the immediate area of the Black 1 claim and additional claims are recommended in the surrounding area. The existing claim covers the exposed area of the syenite stock and principle Cu showing. Additional claims were not located in the February staking program due to excessive helicopter costs, and poor snow conditions existing at the time.

HISTORY Interpretation of airborne magnetic data in the early 1970s led to the discovery of the alkalic (syenite?) stock on the property. Further geological mapping and prospecting of the stock led to the discovery of the reported copper showing. There is evidence of some limited geochemical surveys having been completed on the property, however the results have yet to be obtained. There has been no reported drilling completed on the property.

GEOLOGY The Black 1 claim is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation intruded by an early Jurassic alkalic (syenite?) intrusion of unknown dimensions. Surface exposures of the intrusion indicate a mapped size of 1500 by 1500 meters, however northern and southern extensions are covered by overburden. The general intrusive rock type encountered while staking is a hornblende rich, quartz deficient, medium grained "diorite" appearing rock with epidote appearing in variable contents along fracture faces. The rock is quite magnetic, which suggests that some of the black mafic minerals are in fact magnetite.

There is no documented information describing the nature of the known copper occurrence on the property, however verbal descriptions have been chalcopryite and malachite smears on fracture faces within moderately altered diorite. There was too much snow on the property at the time of staking to endeavour to examine the showing.

ECONOMIC POTENTIAL The geological setting of the Horsefly Mtn. Property is analagous to the setting for major porphyry Cu/Au deposits. Although the setting for such a deposit has been recognized for two decades, the exciting aspect of Horsefly Mtn. is the recent road access and extensive logging that has been completed in the area over the past two years. Rock exposures along road cuts and skid trails provide an excellent opportunity for a geological assessment of the area. Although limited reconnaissance geochemistry has been completed on the property with indicated success, the existing road network will provide for a detailed geochemical evaluation at reasonable costs. To the north, the extent of the intrusive stock has yet to be defined, and its size will establish the amount of staking requirements.

RECOMMENDATIONS Phase I is to consist of geological mapping, detailed geochemistry, reconnaissance magnetic survey, satellite tape interpretation, and staking of up to 40 additional claim units at a cost of \$10,000. Phase II drilling will be contingent upon results.

TEA PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 20 km. northwest of Horsefly and 35 km. east of Williams Lake in south-central British Columbia. Good logging roads provide access to most areas of the claims. Elevations range 900 - 1100 meters (asl), with extensive overburden covering flat-lying terrain in all areas of the claims, estimated to be 10 -50 meters deep. The property is located 8 km. south of the Polley Mtn. deposit.

CLAIMS Tea 1 - 5 mineral claims (100 units) located in the name of John R. Kerr, held in trust for the QTS. The claims expire in March, 1993.

HISTORY There is minimal history of exploration on this property. In the mid 1980s reconnaissance geochemistry, ground magnetics, and geological mapping were conducted over a large portion of the existing claims indicating moderately strong, but erratic, sympathetic gold and copper anomalies associated with interpreted magnetic anomalies and an interpreted alkalic intrusion. The density of sampling was insufficient to provide conclusive interpretation of results.

GEOLOGY Most of the property is covered by extensive overburden, and geological interpretation is mere speculation. The underlying rocks should dominantly be volcanics of the Triassic/Jurassic Takla Formation, as exposed in the western extremities of the property. A sedimentary unit of the Takla Formation is exposed 5 - 6 km. southeast of the property that projects northwesterly into the property, and may, in fact, underly a portion of the claims. Small outcrops and suboutcrops of alkalic intrusive rocks have been located in the Teasdale Ck. valley in the western portion of the claims confirming the presence of intrusive stock(s?) of unknown dimensions within the property boundaries. The interpreted magnetic anomalies indicate these stocks may have significant dimensions. The intrusive rocks, where exposed, are described as being moderately altered and weakly mineralized with pyrite. Copper or gold occurrences have not been discovered on the property to date.

ECONOMIC POTENTIAL The property is well-suited for the exploration objectives and overburden drilling proposed by the QTS, and all the geological ingredients appear to exist that are the basic requirements of porphyry Cu/Au deposits. The strong sympathetic copper and gold anomalies in relatively deep overburden indicates the presence of copper and gold minerals in the underlying rocks. The presence of large magnetic anomalies on the claims indicates that the potential intrusive host rocks for porphyry deposits may be large.

RECOMMENDATIONS A two phase exploration program is recommended on the Tea Property:

- PHASE I - Surficial study of the property to establish direction of glaciation.
- Satellite tape interpretation to establish major structures and geologic contacts.
- Reconnaissance soil sampling along grid lines at 200m intervals, samples collected at 50 - 100 m along all lines.
- geological mapping in areas of suspected outcrop.

COSTS PHASE I \$12,000

PHASE II - 600 meters of overburden drilling and sampling.

COSTS PHASE II \$25,000

JILGIN PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 5 km. west of Horsefly, and 45 km. east of Williams Lake in south-central British Columbia. The paved Horsefly highway traverses the property in an EW direction. Several gravel roads provide access to most areas of the claims. Elevations range 800 - 900 m(asl), with considerable overburden covering flat-lying terrain in most areas of the property.

CLAIMS Jilgin 1 - 4 mineral claims (80 units), owned by Messrs. Craig Boruck and Jack Brown-John of Williams Lake. Simple option-to-purchase negotiated with letter of intent to purchase over 5 yr. period for \$130,000 and \$300,000 work requirement, with residual 2.5% NSR. Initial work commitment of \$8,000 with first payment of \$5,000 due October 1, 1992. The claims expire in September, 1992.

HISTORY There is no recorded history of work on the property. Minfile documents a Cu prospect near Abbott Lake. Mr. Brown-John recalls the Cu showings in Gravel Ck. from childhood days, which was the basis of staking. The referenced showing may be the observed showings in Gravel Ck.

GEOLOGY The northeastern portion of the property is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation, and the western portion of the property is covered by Tertiary volcanic rocks. A small alkalic (syenite?) stock is mapped to the north of Abbott Lake, and indications of intrusive rocks to the south are expressed along road cuts to the south. Two airborne magnetic highs are interpreted in the southern and northern areas of the property, the northern anomaly possibly related to the mapped intrusion.

Three copper showings have been observed in the Gravel Ck. valley just to the north of the Horsefly highway. All occur in highly altered and sheared, maroon/brown, amygdaloidal volcanic rocks either of the Takla Formation or Tertiary volcanics. Alteration is clay, sericite, and minor epidote. The occurrences are mapped very near the base of the Tertiary volcanics, and may, in fact be blocks of Triassic rocks within the basal portion of the Tertiary volcanics. Copper occurs as veinlets of massive chalcopryrite, bornite, and possibly chalcocite, with widespread smears and disseminations of malachite. Analysis indicates 1-3% Cu, 1-2oz/T Ag, and anomalous Au over widths of 2 - 4 ft. A showing is documented near Abbott Lake, however has not been located by the vendors.

ECONOMIC POTENTIAL The mineralization observed cannot be described as porphyry style mineralization, however its presence in a favourable geological setting may be the peripheral mineralization associated with a porphyry deposit. As precious metals are associated with the copper, the property has excellent potential of hosting a porphyry Au/Cu deposit. This property is well-suited for the overburden drilling objectives of the QTS.

RECOMMENDATIONS A two phase exploration program is recommended on the Jilgin Claims:

- PHASE I - Soil sampling over the northeastern portion of the property.
- Reconnaissance mapping and silt sampling on the entire property.
- Surficial and structural interpretation.

COSTS PHASE I \$ 8,000

- PHASE II - 600 meters of overburden drilling and sampling.

COSTS PHASE II \$ 25,000

FRASER PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 30 km. northwest of Quesnel in central British Columbia, on the west side of the Fraser River. Road access is possible only to the western property boundary along the all-weather Blackwater road and thence north along logging roads a distance of 40 km. Elevations range 800 - 900 m (asl) in very flat-lying, subdued terrain. The property is extensively overburden covered, with sub-outcrop located in creek valleys.

CLAIMS Fraser 1 and 2 claims (40 units), owned by K. V. Campbell. Project presented as large area program based on regional evaluation (140 square km.). QTS has paid for the relocation of 2 claims as well as simple option-to-purchase negotiated with letter of intent for 6 year option period for total \$330,000 and \$300,000 work requirement, with residual 2.5% NSR. Initial work commitment of \$6,000 with first payment of \$5,000 due September 1, 1992. The claims expire March, 1993.

HISTORY There is no history of work on the property, prior to Campbell's initial interest since 1988.

GEOLOGY There is little direct evidence of underlying geology on the claims except for Tertiary volcanic rocks in the western area of the property, exposed as sub-outcrop in creek valleys. To the east near the Fraser River, Cache Creek sediments of Permian age outcrop along the river valley with a large alkalic or calc-alkalic intrusive mass due east of the southern end of the property. A very complex structural pattern is interpreted from satellite tapes by Campbell, with a large oval pattern accompanied by an airborne magnetic anomaly within the two located claims. This is interpreted as likely being an intrusive stock with dimensions of 2500 x 2500 meters. Silt and panned stream samples leading to the western periphery of the interpreted stock are extremely anomalous in Cu, Au, and Mo. To the south 3 km. and to the east 7 km. two additional strong magnetic anomalies exist, the eastern anomaly associated with a mapped granodiorite.

Sub-outcrop of altered (silicified) felsic volcanic rock in the western portion of the property indicated anomalous content of gold (100ppb).

ECONOMIC POTENTIAL The property lies along the western margins of the Quesnel Trough, and probably falls within the Cache Creek Terraine. The models for economic ore deposits are therefore twofold:

1) Porphyry Cu/Au/Mo deposit in calc-alkalic intrusive rocks, comparable to the Gibraltar Mine to the southeast, and the Fish Lake deposit to the south. The strong geochemical response associated with an interpreted intrusion provides the excellent geological setting for such a deposit.

2) Epithermal and/or structurally controlled gold deposit associated with altered felsic Tertiary volcanic rocks. The collected sample is direct evidence of such a deposit. There appears to be a lack of sympathy of gold to copper in panned heavy mineral content, the gold exceeding 17,000ppb. This is suggestive that some of the gold has a discrete source, and is quite coarse, not common to porphyry gold. The model would be similar to a Blackdome type of deposit.

RECOMMENDATIONS Because of the size of the project, it is recommended that 1992 work all be surface evaluation, the initial phase of \$6,000 be reconnaissance stream sediment sampling, broad scale soil sampling, reconnaissance mapping, and limited geophysical experimentation, both on and to the east of the claims. Phase II is to consist of detailed grid soil sampling, accompanied by geophysics, and contemplation of additional ground acquisition at a cost of \$12,000. Drilling in 1992 will be completed if results warrant.

BC PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 55 km. southeast of Quesnel and 35 km. northwest of Likely in south-central British Columbia. Road access to the property is possible to within 1/2 km. of the northern boundary via the QR Mine development road. There are no other roads on the property. Elevations range from 600 meters in the Quesnel River valley to over 1000 meters. The area is relatively precipitous in the valley, becoming flat-lying with extensive overburden at the higher elevations.

CLAIMS BC 1 - 4 mineral claims (58 units), owned by B.H. Kahler, due to expire in September, 1992 (1 claim) and 1993. A simple option-to-purchase has been negotiated with letter of intent for 6 year option period for total \$330,000 and \$300,00 work requirements, with residual 2.5% NSR. Initial work commitment of \$6,000 and first payment of \$5,000 due September 1, 1992.

HISTORY There is no recorded work on the property prior to 1987, except for some placer mining on the Quesnel River and southern tributary. The reported Au occurrence on the property is believed to be placer. Kahler has completed limited widespread soil geochemistry and ground magnetics in 1987/88.

GEOLOGY The property is dominantly underlain by volcanic and sedimentary rocks of the Triassic/Jurassic Takla Formation intruded by two and possibly three small alkalic and calc-alkalic (diorite to granodiorite) stocks. Tertiary volcanic rocks cover the northwest corner of the claims. There is evidence of three intrusive phases. A private regional silt sampling program of 1984 shows the small creek on BC 1 to be highly anomalous in gold and copper, and possibly originating from the small stock at the headwaters. A grid soil sampling program in this area of the claims confirms the presence of strong but erratic Cu and Au anomalies. The claim area is structurally very complicated with the north trending Chiaz Fault paralleling the anomalous creek on BC 1.

ECONOMIC POTENTIAL The complicated intrusive/structural environment provides for an ideal geological setting for a porphyry Cu/Au deposit. The anomalous copper and gold in soils substantiates this style of mineralization may be present in bedrock. At the higher elevations, the property is well-suited to the overburden drilling objectives of the QTS.

The QR deposit of QPX Minerals Ltd. lies 11 km. due west of the BC property, and this style of mineralization should not be neglected on the BC claims. Mineralization at the QR deposit is replacement gold in an interbedded volcanic breccia/sedimentary unit of the Takla Formation, near the contact of an alkalic stock. Alteration associated with the deposit is extreme propylitization (calcite/epidote) and varying contents of sulphides. The proposed exploration procedures allows for the discovery of this style of mineralization.

RECOMMENDATIONS As a preliminary surface evaluation program has partially been completed on this property, the initial phase of exploration (\$6,000) is to be expansion of the existing soil and magnetometer survey grid. Allowance is to be made for 500 meters of drilling, at a cost of \$25,000 as a second phase program.

ANTOINE LAKE PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 8 km. northwest of Horsefly, and 50 km. east of Williams Lake in south-central British Columbia. Road access is possible from the all-weather Beaver Valley road via several 4WD trails north into the claim area. Elevations range 700 - 900 m (asl) in relatively flat-lying overburden covered terrain.

CLAIMS The Mary 1 and 2 are currently owned by Asamera Minerals Ltd, and are due to expire in November, 1992. Asamera has been contacted regarding their holdings, and evidently have no record of the claims. The claims cover a portion of potential ground with open ground available for staking to the southeast. During negotiations with Asamera, it was felt unwise to stake the open ground. Should negotiations be unsuccessful, claim location is to be included with recommendations for the first phase of exploration, and claim location of the existing claims will be undertaken on expiry.

HISTORY The first interest in the property is documented in the early 1970s when interpretation of airborne magnetics resulted in identification of two small alkalic stocks. Examination of the area resulted in the discovery of the two known showings. Asamera acquired the ground in 1984 and have completed geochemistry, magnetics, and IP surveys. There is no recorded drilling.

GEOLOGY The property is underlain by volcanic and sedimentary rocks of the Triassic/Jurassic Takla Formation. Two small alkalic (syenite?) stocks intrude the Takla Formation in the southern portion of the Mary claims and to the east. It is in this area that a porphyry deposit is most likely to occur. There is very little information regarding the reported showings, and they are assumed to be in volcanic rocks.

The soil sampling programs completed by Asamera confirmed coincident copper and gold anomalies with IP targets, however their gridwork is to the west of the alkalic stocks. The presence of erratic magnetic anomalies indicate the stocks may be larger than mapped.

ECONOMIC POTENTIAL The property is very favourable to host a porphyry Cu/Au deposit in a geological setting similar to Polley Mountain. The extensive overburden is well-suited to the exploration techniques of the QTS.

RECOMMENDATIONS Advancement of this property will depend on the land status, as no drilling would be done until the Mary claims are tied up. A first Phase program costing \$5,000 is therefore recommended consisting of staking, soil sampling in the new eastern claims and geological mapping. Drilling would be contingent on results and status of land holdings.

BUD PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 50 km. northwest of Williams Lake and 12 km. southwest of Likely in south-central British Columbia. The Likely Highway transects the property in a north-south direction. Several gravel roads provide road access to most areas of the claims. Elevations range 1000 - 1200 m (asl) in generally flat-lying terrain covered by extensive overburden.

CLAIMS Bud 1 - 4 and 9 mineral claims (76 units) located in the name of Steve Todouk, due to expire in late May, 1992. A simple option-to-purchase has been negotiated with letter of intent for 5 year option period for total of \$215,000 and \$308,000 work requirements, with residual 2.5% NSR. Initial work commitment of \$8,000 with first payment of \$5,000 due before drilling or by October 1, 1992.

HISTORY Copper was discovered in the area in the early 1900s, which probably was when the ML showing was first found. Earliest recorded work was geological mapping and geophysics in the early 1960s, accompanied by two BQ diamond drill holes near the ML showing. There are no records. The property has been subjected to several periods of mapping, geochemistry, geophysics and limited trenching during the 1970s and 1980s. The owner of the property has provided a summary, documenting previous work.

GEOLOGY The property is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation, intruded by at least one alkalic (syenite?) stock 1200 meters long by 800 meters wide. Airborne magnetic anomalies indicate the possible location of two additional stocks on the property. At least six occurrences of copper are known to exist, the principle showings being located in the area of the old ML showing at the western contact of the syenite stock. Copper is reported to occur as chalcopyrite and chalcocite as fracture fillings in altered volcanic rocks and syenite/monzonite and as disseminations in altered intrusive rocks. Malachite is present as smears in surface outcrop. Alteration is dominantly propylitic in the volcanics, however is reported to be argillic or potassic in some intrusive rocks. Some evidence of skarn alteration is also reported.

Surface sampling of bedrock has mainly been chip samples, however some trench channel sampling is evident. Ore grade mineralization has been collected over short sample lengths indicating grades .2 - 1.3% Cu, anomalous to 0.15 oz/T Au and .5 - 1.0 oz/T Ag.

ECONOMIC POTENTIAL The mineralization demonstrated on the Bud Property is typically porphyry copper and gold, associated with alkalic intrusive activity. The prospected portions of the property have been confined to the limited outcrop areas with large portions of the claims unexplored. Local grids placed within specific targets on the property have identified significant unexplored geochemical anomalies. Two untested airborne magnetic anomalies exist. The claims and extensive overburden make this property well-suited for the exploration techniques of the QTS.

RECOMMENDATIONS As considerable surface work has been completed on the property, the initial phase program (\$8,000) will consist of infill geochemistry and geological mapping. A surficial and structural interpretation of the claim area should also be undertaken.

PHASE II - allow 600 meters of drilling and sampling

COSTS PHASE II - \$25,000

CARP PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 80 km. northwest of Prince George and 50 km. east of Fort St. James in central British Columbia. Good logging road access is possible to a large portion of the property. The claim area is very flat-lying with elevations approximating 800m (asl). The Salmon River valley provides the limited relief.

CLAIMS Carp 1 - 17 mineral claims (324 units) cover a large conceptual target and are owned by B.K. Bowen, P. Cartwright, and Cross Lake Minerals Ltd., all claims expiring in June, 1992. The size of the claim block is large and unmanageable, therefore the owners have agreed to a reduction to approximately 200 units on completion of initial expenditures. A simple option-to-purchase has been negotiated with letter of intent for 6 year option period totalling \$330,000 and \$410,000 work requirements with residual 2.5%NSR. Initial work commitment of \$20,000 to be spent by June 20, 1992, and initial \$5000 payment due October 1, 1992.

HISTORY Prior to 1990, there is no history of exploration. The owners interest was acquired from recent geochemical release in this area of the Province and airborne magnetic anomalies. The owners have completed limited reconnaissance IP surveys on the claims.

GEOLOGY The underlying geology is mere speculation as there are no outcrops found to date on the property. The Triassic/Jurassic Takla Formation is exposed within 3 km. of the northern boundary, and it is assumed to be the dominant underlying rock. The four interpreted magnetic anomalies are very suggestive of typical Quesnel Trough alkalic intrusions, however ultrabasic rocks are also known to intrude the Takla rocks in this area.

The strong geochemical (copper is 2-3 times background) response in four silt samples associated with the magnetic anomalies is the evidence of a potential porphyry deposit. A positive IP response is associated with the magnetic anomalies. There is an erratic Ni association in geochemical analysis of silt samples which may suggest basic to ultrabasic rocks in the area. This is not uncommon to porphyry environments as the Iron Mask Batholith has ultrabasic phases and a Ni association.

ECONOMIC POTENTIAL The model for a porphyry deposit is real however very speculative. The signatures present are very large and if they do host an economic deposit, the potential size would be large. For this reason the target cannot be ignored. Exploration techniques should advance the property as rapidly as possible to establish the certainty of the signatures and the right geological host rocks in that order. One of the main unknowns is the depth of overburden, which if prohibitive, may negate the economic evaluation methods proposed.

RECOMMENDATIONS A substantial initial phase program is recommended to establish if a geochemical signature in soil can be defined associated with any of the four magnetic anomalies, with accompanying ground magnetics, and is detailed as follows:

- PHASE I** - four soil grids established up glacial direction from magnetic anomalies.
- soil and magnetic readings on 200m lines at 100m intervals.
 - surficial and structural interpretation of area.

COSTS PHASE I \$20,000

PHASE II - drilling and quantity totally contingent on Phase I results.

PO PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 30 km. southeast of Mt. Milligan, 120 km. northwest of Prince George and 45 km. west of MacKenzie in central British Columbia. Access is possible via a complex network of logging roads from MacKenzie. Much of the claim area has been logged. The property is very flat-lying with elevations approximating 1000m (asl), and covered with extensive overburden.

CLAIMS PO 1 - 4, 6 and 7 (111 units) are owned by G. Klein of Prince George, all claims expiring in late May, 1992. The owner has agreed to a reduction of the claim holdings based on the initial work commitment of \$8,000, and a simple option-to-purchase negotiated with letter of intent for 5 year option period for total \$235,000 and \$310,000 work requirements, with residual 2.5% NSR. Initial work commitment to be spent by May 25, 1992 and initial \$5,000 payment due October 1, 1992.

HISTORY Prior to 1990, there is no recorded history of work. Gerry Klein discovered boulders in the area containing significant copper and gold which was the basis of staking claims. An airborne Magnetic/EM survey was flown and recorded as assessment work in 1990.

GEOLOGY The underlying geology is masked due to the extensive overburden, however is relatively well interpreted on the basis of mapping and prospecting of angular float. The property is underlain by highly metamorphosed rocks of the Wolverine Complex of unknown age, and volcanic rocks of the Triassic/Jurassic Takla Formation. Known intrusive batholiths are common in the area, and one has been interpreted to underly the property from float and airborne magnetics. Intrusions in the area are alkalic and calc-alkalic diorites, monzonites and granodiorites.

Coarse relatively angular boulders up to 130 kg of massive to disseminated pyrite and pyrrhotite have been found in the eastern portion of the property, down-ice from the interpreted magnetic anomaly. The rock type has been identified as probably Wolverine schists and gneisses and the mineralization is very skarn-like in nature. Chemical analysis indicates .3 - .5% Cu, .01 - .03 oz/T Au, and 1 - 2% Zn in well-mineralized boulders. These grades are similar to grades of porphyry deposits.

One outcrop of the Wolverine Complex has been found in the east-central portion of the claims indicating a flat-lying dip to the main lithologies. Because of the outcrop and angular boulders, the overburden depth is anticipated to be quite modest.

ECONOMIC POTENTIAL The direct evidence of mineralized float has removed some of the speculation from this property, however as it is of skarn in nature, the presence of a porphyry deposit remains quite speculative. There is a direct association of skarn deposits to porphyry deposits, as the basic geological parameters of each type of deposit are similar. The airborne magnetic survey indicates erratic magnetic relief over the entire property which is indicative of complex geology and structures, and does indicate the presence of a substantial intrusive host rock in the western portion of the claims for a porphyry deposit.

RECOMMENDATIONS A two phase exploration program is recommended for the PO property:

- PHASE I - Combined soil sampling and float rock-chip sampling on a 200 meter grid line interval, samples collected at 100 meter intervals.
- Surficial and structural interpretation.
- Limited ground magnetics to verify location of airborne data.

	COSTS PHASE I	\$8,000
PHASE II - allow 600 meters of drilling		\$25,000

VIEW PROPERTY

QUESNEL TROUGH PROJECT

LOCATION 20 km. northeast of Horsefly and 75 km. east of Williams Lake in south-central British Columbia. Access is possible to the western portion of the area via the Quesnel Lake all-weather road, 22 km. from Horsefly. Elevations range 1000 - 1400 meters (asl), the general area being very flat-lying, however the flanks of Viewland Mt. being moderately precipitous.

CLAIMS One claim (20 units) was proposed to cover Viewland Mt., however as snow conditions were bad at the time of staking, the claim was not located. As this property is very conceptual, it has since been decided to establish a geochemical signature for mineralization prior to staking. There are no apparent third party threats.

HISTORY There is no history of work being completed in this area.

GEOLOGY A strong magnetic anomaly covers a large area, much larger than the mapped alkalic (syenite?) stock located on the top of Viewland Mt. The flanks of the mountain are covered with extensive overburden, and therefore may cover the full extent of the stock. The remainder of the area is underlain by volcanic rocks of the Triassic/Jurassic Takla Formation.

The area has no known showings, and the knowledge of potential rock alteration is limited.

ECONOMIC POTENTIAL The basic rock-types are present to host a porphyry Cu/Au deposit, however the chemical signatures have not been discovered to date. Regional geochemical surveys were at a broad density and may not have been detailed enough to indicate the presence of economic minerals. The possible extent of the favourable host-rock gives rise to a large, virtually unexplored target.

5 - 6 km. to the north of the property (north of Jacques Lake), a known diatreme hosting copper mineralization exists in a similar geological setting. Exploration in the Viewland Mt. area should be cognisant of discovering this style of mineralization.

RECOMMENDATIONS ^{Contemporaneous with} ~~Prior to~~ staking, the area is to be subjected to regional and reconnaissance geochemistry and geological mapping to establish the presence or signature of economic minerals, and develop the structural host of an economic deposit. Costs of this work, including limited staking, are \$4,000.