# **Prospecting Report on the Tets Project**

Omineca Mining Division Tenure Numbers: 1001966 and 1020552

BC Geological Survey Assessment Report 34316

# UTM Zone 09 634000E 5969000 N (NAD 83) 53°50'47"N, 127°56'25"W, 93E/15

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# Item 1: Summary

The Tets property consists of two mineral claims (28 cells) totalling 534.03ha located 90km south of Houston. Access to the property is by a network of logging roads, which connects to the provincial highway system at Houston. Alternatively, the Property is accessible year round by helicopter from Smithers, Houston or Terrace.

The region is host to numerous porphyry copper-gold deposits and prospects near the Property. The currently producing Huckleberry mine is situated 21km to the south and is a major producer of copper, molybdenum, silver and gold. Production at the mine in 2010 was 45,510,000 pounds of copper, 3,195 oz gold, 223,557 oz silver and 84,027 pounds of molybdenum. Proven and Probable reserves as of December 31, 2010 was 11.75 million tonnes grading .359% copper (Imperial Metals website, October 27, 2011). The Berg project, 506 million tonnes grading 0.30% Cu, 0.037% Mo (Terrane Metals website, October 27, 2011) lies 30km to the west of the Property.

In the public record, the Tets prospect (Minfile 093E 084) consists of chalcopyrite, sphalerite, galena, bornite, chalcocite, native copper and pyrite in breccia zones, fractures and as open space fillings in volcanic rocks. Historic samples assayed as high as 15.4% copper and 12.8opt (439g/t) silver.

Exploration over much of the area is greatly hampered by widespread, glacial overburden. Historic B-horizon soil surveys outlined a 600m x 1300m copper anomaly with peak values of 350ppm with coincident smaller anomalies in zinc to 2200ppm, lead to 290ppm and widespread silver to 4.7ppm. A single station molybdenum value of 20ppm was returned approximately 500m to the west.

It is the author's opinion that high potential exists for significant porphyry-style copper-gold mineralization on the Property, in which bedrock exposures have been obscured by Quaternary glacial-derived sediment cover. Evidence of similarities in the Property to significant Porphyry deposits include: similar aged volcanic and intrusive rocks, through-going structure similar to that found at nearby major deposits, similar magnetic signatures and anomalous geochemical signatures.

A two-stage exploration program is recommended to test the potential of the property. Establish a grid to conduct geochemical surveys in an attempt to see through the glacial till cover and for geophysical, Induced Potential (IP) and magnetic surveys to map the areas of higher sulphide content. Contingent second-stage work will include follow-up geochemistry, trenching of areas with shallower overburden and drilling.

# Item 2: Introduction

This report is being prepared by the author for the purposes of filing assessment on the Tets property and to create a base from which further exploration will be completed.

# 2.1 Qualified Person and Participating Personnel

Mr. Kenneth D. Galambos, P.Eng., Ralph Keefe and Brian Keefe conducted the current exploration program to follow up historical prospecting and geochemical surveys conducted on the property and to make recommendations for the next phase of exploration work in order to test the economic potential of the area.

This report describes the property in accordance with the guidelines specified in National Instrument 43-101 and is based on historical information and an examination and evaluation of the property by the author, Ralph Keefe and Brian Keefe from June 24-26, 2013.

# 2.2 Terms, Definitions and Units

- All costs contained in this report are denominated in Canadian dollars.
- Distances are primarily reported in metres (m) and kilometers (km) and in feet (ft) when reporting historical data.
- GPS refers to global positioning system.
- Minfile showing refers to documented mineral occurrences on file with the British Columbia Geological Survey.
- The term ppm refers to parts per million, equivalent to grams per metric tonne (g/t).
- ppb refers to parts per billion.
- The abbreviation oz/t refers to troy ounces per imperial short ton.
- The symbol % refers to weight percent unless otherwise stated. 1% is equivalent to 10,000ppm.
- Elemental and mineral abbreviations used in this report include: arsenic (As), bismuth (Bi), cadmium (Cd), copper (Cu), gold (Au), molybdenum (Mo), silver (Ag), tellurium (Te), zinc (Zn); chalcopyrite (Cpy), pyrite (Py).

# 2.3 SOURCE DOCUMENTS

Sources of information are detailed below and include the available public domain information and private company data.

- Research of the Minfile data available for the area at <u>http://www.empr.gov.bc.ca/Mining/Geoscience/MINFILE/Pages/default.aspx</u>
- Research of mineral titles at <a href="https://www.mtonline.gov.bc.ca/mtov/home.do">https://www.mtonline.gov.bc.ca/mtov/home.do</a>
- Review of company reports and annual assessment reports filed with the government at http://www.empr.gov.bc.ca/Mining/Geoscience/ARIS/Pages/default.aspx
- Review of geological maps and reports completed by the British Columbia Geological Survey at <u>http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/MainMaps/Pages/</u> default.aspx .

- Published scientific papers on the geology and mineral deposits of the region and on mineral deposit types.
- Work on the property by K. Galambos, R. Keefe and B. Keefe from June 24-26, 2013.

# 2.4 Limitations, Restrictions and Assumptions

The author has assumed that the previous documented work in the area of the property is valid and has not encountered any information to discredit such work. The author directly supervised work on the project in June, 2013.

# 2.5 Scope

This report describes the 2013 Prospecting program, geology, previous exploration history and mineral potential of the Tets Project. Research included a review of the historical work that related to the immediate and surrounding areas including that related to the Huckleberry mine and the Berg deposit. Regional geological data and current exploration information have been reviewed to determine the geological setting of the mineralization and to obtain an indication of the level of industry activity in the area. The property was examined and evaluated by Ken Galambos, Ralph Keefe and Brian Keefe. Work consisted of limited prospecting in an effort to locate the Tets' trenches .

# Item 3: Reliance on Other Experts

Some data referenced in the preparation of this report was compiled by geologists employed by various companies in the mineral exploration field. These individuals would be classified as "qualified persons" today, although that designation did not exist when some of the historic work was done. The author believes the work completed and results reported historically to be accurate but assumes no responsibility for the interpretations and inferences made by these individuals prior to the inception of the "qualified person" designation.

# Item 4: Property Description and Location

**T** he author controls two mineral tenures (28 cells) totalling 534.03ha located 90km south of Houston, BC, in north central British Columbia. The claims are located approximately 3km southeast of Nadina Lake. The centre of the Property lies at approximately latitude 53°50' 47"N and longitude 127°56' 25"W, on mapsheet 93E/15 in the Omineca Mining Division.

A listing of the tenures covering the Pam project is contained in Table 1 below. Upon acceptance of this report for assessment purposes, the highlighted tenures will have Expiry date moved to January 11, 2016.

Tenure #	Claim name	Issue date	Expiry date	Registered Owner
1001966	Tets	2012/Jun/27	2016/Jan/11	Galambos, Kenneth D 100%
1020552	Tets	2013/Jun/26	2014/Jun/26	Galambos, Kenneth D 100%

# Table 1: Claim Data



Figure 1: Tets Property location map

The Claims comprising the Tets property as listed above are being held as an exploration target for possible hardrock mining activities which may or may not be profitable. Any exploration completed will be subject to the application and receipt of necessary Mining Land Use Permits for the activities recommended in this report. There is no guarantee that this application process will be successful.

The Claims lie in the Traditional territories of a number of local First Nations and to date no dialog has been initiated with these First Nations regarding the property. There is no guarantee that approval for the proposed exploration will be received.



Fig. 2: Tets Project Claim Map

# Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Tets project area is situated in west-central British Columbia on mapsheet 93E/15 approximately 21 km north of the Huckleberry mine site and 105km south of the community of Smithers, BC. The Property is accessible by a network of private logging roads to the west of the main access road into the area. The turnoff to the Tets property is at km 95.5 of the Huckleberry mine road. The road is at present ATV usable only due to deep ditches on the Huckleberry Road. The trail into the centre of the historic log block is very steep and is passable to a point with UTM coordinates 635078E and 5967035N. The trail becomes badly overgrown past this point and impassible over some sections. Connection from the provincial highway system is at Houston, BC, 65km east of Smithers and 307km west of Prince George. Alternatively, the Property is accessible yearround by helicopter from Smithers, Houston or Burns Lake.

The property is situated along the north flank of the Sibola Range. Relief within the claim area is gentle to moderate. Elevations range from approximately 1067m to 1432m. The property is covered mostly by mature stands of spruce, pine and balsam with interspersed swampy meadows.

Climate in the region is continental, periodically modified by maritime influences. Summers are cool and moist, and winters cold. Following climate statistics from Environment Canada are for Burns Lake. Mean January temperature is -10.5°C, and for July is 14.3°C. Extreme winter temperature may fall below -30°C for brief periods. Annual rainfall is 291.4mm and annual snowfall is 189.1mm, with mean snow accumulation of 45cm. Anecdotal evidence indicates that the area can retain more than a metre of snow depth. Snow-free field operations season for exploration spans May through October, dependant on elevation and aspect relative to the sun.

Lodging, groceries and helicopter charter are available in the small community of Houston while nearby centers such as Smithers and Terrace host regional airports serviced from Vancouver and businesses such as helicopter charter companies and building supply stores. Both communities support diamond drilling and exploration service companies and a pool of labour skilled in mining trades and professions. The immediate area to the project site contain adequate space for concentrator site, tailing ponds or waste dumps required in any contemplated mine operation. Power is available along the Huckleberry mine access road, approximately 1km to the south.



Plate 1: Google image showing the Tets claims and prospecting traverse.

# Item 6: History

Prospecting activity in the Tahtsa District dates back to the early 1900's and lead to the discovery of a number of polymetallic, precious metal vein and shear zone

occurrences which were worked intermittently into the 1960's. A few of these deposits saw limited production.

During the porphyry exploration boom in the 1960's and early 1970's, numerous companies carried out large scale, helicopter-supported, regional prospecting and stream sediment sampling programs in the Tahtsa District which lead to the discovery of a large number of deposits including Huckleberry (91 million tonnes grading 0.52% Cu. 0.014% Mo), the Berg (506 million tonnes grading 0.30% Cu, 0.037% Mo), Bergette, Troitsa, Coles Creek, Poplar Lake, Whiting Creek, Ox Lake, Red Bird, Lucky Ship and Nanika.

The original Tets claims were staked by J. Shelford, of Burns Lake, in 1969 to cover showings of copper and zinc mineralization that he had discovered north of what is now the Huckleberry mine road. The property was optioned to Sibola Copper Mines Ltd, of Burns Lake in 1970 and in turn to Granges Exploration of Vancouver in 1973. Granges completed geochemical surveys, prospecting and magnetic surveys in 1973. The company discovered anomalous base and precious metal (silver) mineralization in B-horizon soils over an area roughly 600m x 1300m and located bedrock showings assaying up to 15.4% Cu and 12.80pt (439ppm) Ag.

The following year, Granges completed road construction into the area, minor blast trenching and soil sampling prior to returning the property to Sibola Mines Ltd. That same year, Sibola completed 33 holes and pits on the Granges (zinc) Showing, stripping along the access trails, geological mapping, petrographic studies and geophysical (VLF-EM, IP, CEM) surveys. Mineralization was found in nearly all rock types on the property in breccia zones, in fractures and as open space fillings. Sulphides were often difficult to detect in similar coloured host rocks and were suspected to be deposited in several pulses. Primary pyrite was often replaced by chalcopyrite and rimmed by later sphalerite with a late galenacalcite phase cutting everything. Several resistivity and chargeability anomalies were found. One narrow north-northeast trending zone, was thought to represent disseminated metallic mineralization or magnetite, while a second anomaly was thought to be caused by semi-massive to massive mineralization Numerous. narrow, north and north-northeast trending VLF-EM anomalies were suspected to represent sub-parallel faults, primarily in the western end of the surveyed area. Magnetic data correlated well with this structural interpretation.

Between 1975 and 1979 numerous trenches and pits were blasted, stripped and sampled. A 3m x 3m trench named "Jim's Pit" is stated to have uncovered massive bornite. The "Hill Top Show" is reported to contain zinc, copper, silver and lead, replacing shattered pyrite. Blasting and trenching is noted to have uncovered native copper and chalcocite in small quartz-calcite veinlets. In 1979, 29 Winky holes for a total of 548.64m (1800') were drilled with generally disappointing results, despite drilling beneath mineralized trenches. Assays

returned values from 0.01% Cu to 0.77% Cu and 35.3ppm (1.03opt) Ag over 1.52m. Sibola Mines returned the property after the 1979 program.

From 1980 to 1988 John Shelford trenched and completed numerous small diameter drill holes into the various showings located on the Tets property. Results were generally low and ranged from nil to 0.31% Cu. One grab sample from the property assayed 754ppm (22opt) Ag.

# Item 7: Geological Setting and Mineralization

# 7.1 Regional Geology

The Property occurs within the Tahtsa Porphyry District. The district contains a number of significant calc-alkaline, porphyry Cu/Mo deposits which occur within and adjacent to small stocks which intrude Jurassic and Cretaceous volcanic and sedimentary rocks. The deposits are accompanied by extensive pyrite halos and generally well developed concentric zones of hydrothermal alteration from potassic at the core through phyllic, argillic and propylitic. Most of the deposits in the Tahtsa District have been radiometrically dated and have yielded ages of 74 Ma to 80 Ma (Late Cretaceous) with the exception of the Berg deposit which has been dated at 50.2 Ma (Eocene).

A strong north-easterly structural fabric is suggested by numerous lineaments and the northeast trend of many lakes and valleys in the Tahtsa District. Seraphim and Hollister postulate that a strong system of northeast-trending tensional faults and fracture zones developed in the Tahtsa region between major northwesterly through going shear zones and that these tensional features controlled subsequent emplacement of the porphyry intrusions.



Figure 3: Regional Geology Map

# **Geology Legend**

Bounding Box: *North: 54.018 South: 53.703 West: -127.593 East: -126.473* NTS Mapsheets: 093L, 093E

## **Eocene to Lower Miocene**

#### Endako Group

EMiE basaltic volcanic rocks

#### Eocene

EBo	Boundary Stock: granodioritic intrusive rocks
Eqp	high level quartz phyric, felsitic intrusive rocks
EEG	Goosly Lake Formation: alkaline volcanic rocks
EEBvb	Buck Creek Formation: basaltic volcanic rocks

#### Nanika Plutonic Suite



**m** quartz monzonitic intrusive rocks

#### Ootsa Lake Group

EO

EQ



rhyolite, felsic volcanic rocks

#### Quanchus Plutonic Suite



feldspar porphyritic intrusive rocks

#### **Paleocene to Eocene**



PeEs undivided sedimentary rocks

# Late Cretaceous to Paleocene



LKPedr dioritic intrusive rocks

#### Cretaceous

#### Kasalka Group



uKK andesitic volcanic rocks

#### Late Cretaceous

#### **Bulkley Plutonic Suite**

	LKBdr	dioritic intrusive rocks
	LKBfp	feldspar porphyritic intrusive rocks
]	LKBqp	high level quartz phyric, felsitic intrusive rocks
	LKBg	intrusive rocks, undivided
]	LKBqd	quartz dioritic intrusive rocks

Kasalka Plutonic Suite



LKKP granodioritic intrusive rocks

#### Lower Cretaceous

#### Skeena Group



IKS undivided sedimentary rocks

IKSN Mt. Ney Volcanics: undivided volcanic rocks

#### Jurassic



Jqm quartz monzonitic intrusive rocks

#### **Upper Jurassic**

#### Bowser Lake Group

uJBAm Ashman Formation: mudstone, siltstone, shale fine clastic sedimentary rocks

#### Middle Jurassic to Upper Jurassic

#### Hazelton Group

muJHNa Nanika Volcanics: rhyolite, felsic volcanic rocks

#### **Middle Jurassic**

mJHSms Smithers Formation: undivided sedimentary rocks

#### **Early Jurassic**

#### **Topley Plutonic Suite**



Est pgu granoulontie int

#### Lower Jurassic

#### Hazelton Group

IJHT Telkwa Formation: calc-alkaline volcanic rocks

<u>Ministry of Energy and Mines</u> <u>BC Geological Survey</u>

# 7.2 Regional Geophysics

The regional geophysics from the Quest West surveys show striking similarities between the Berg, Bergette, Sylvia, Pam and Tets properties on the 1<sup>st</sup> Vertical Derivative gravity maps. Gravity surveys reveal large gravity low areas at each of the Minfile showings with slightly more subtle gravity anomalies present flanking the Pam and Tets Properties. The gravity low anomalies are probably reflecting the specific gravity differences between lighter intrusive bodies and areas of thicker volcanic and sedimentary rocks. Areas showing less intense anomalies may represent deeper intrusive centres.



Figure 4: Regional Geophysics 1<sup>st</sup> Vertical Derivative Gravity map

Magnetic surveys conducted as part of the Quest West project also show similarities on the 1<sup>st</sup> Vertical Derivative Magnetic maps. The properties sit on the flanks of large magnetic low anomalies surrounded partially by more magnetic rocks. The areas of higher magnetism possibly reflect pyrrhotite hornfels on the margins and possibly overlying the intrusive centres outlined by the gravity low anomalies shown above. The exception to this is the Sylvia and Tets showings where intrusive rocks are not outcropping. The large magnetic low anomalies possibly reflect the same buried intrusive centres as suggested by the 1<sup>st</sup> Vertical Derivative gravity anomalies.



Figure 5: Regional Geophysics 1<sup>st</sup> Vertical Derivative Magnetic map

# 7.3 Property Geology

Government mapping shows that the Tets property covers mid-Jurassic Hazelton Group-Smithers Formation undivided sedimentary rocks as well as a small wedge of lower Cretaceous Skeena Group undivided sedimentary rocks in fault contact to the north of the Tets Minfile showing.



Figure 6: Property Geology map

Industry mapping has identified that the Tets claims overly a sequence of volcanic flows, volcanic tuffs, volcanic breccias and possible hypabyssal intrusions. All of the rocks have been subjected to an intense, low grade metamorphism with many zones of a higher alteration where the minerology is completely altered. The rocks are grouped with the Hazelton Series of Middle Jurassic age. The units strike generally 018° and dip near verticle. A central, completely altered grey-maroon porphyritic (plagioclase) flow is distinct from the other rocks and appears to be cut and dislocated by numerous faults. In contact on both sides of the porphyry are a complex mixture of highly altered tuffs, flows and breccias, light grey to dark grey and maroon with up to 50% of green alteration chlorite-montmorillonite, pumpellyite, and calcite. These rocks also exhibit a high magnetic character and dominate most of this central area. Encircling this "volcanic island" are a series of more flat lying grey to buff, highly altered tuffs with some intermixed volcanic flows. Fossils were found at three different locations and indicate a marine environment and possible volcanic venting in some of the regions. A small, highly altered gabbro "plug" was found in the north part of the property and a diabase (more centrally located) are deemed to be hypabyssal intrusions. Both rocks have been through the same regional metamorphism as the volcanic rocks. (Ager, 1979)

# 7.4 Property Geophysics

The 1<sup>st</sup> derivative magnetic data from MapPlace shows a subtle magnetic low in the northwestern quadrant of the Property and relatively flat magnetic signature through the central part of the property. The southern area on the Tets claims shows a distinct northeast trending magnetic high anomaly that is sub parallel to northeast trending faults mapped by the government geologists.



Figure 7: Property Geophysics 1<sup>st</sup> Derivative Magnetic map

# 7.5 Mineralization

Mineralization on the Tets property consists of chalcopyrite, sphalerite, galena, bornite, chalcocite, native copper and pyrite in breccia zones, fractures and as open space fillings in the volcanics. Historic samples assayed as high as 15.4% copper and 12.8opt (439ppm) silver.

The main metals present are copper, silver and zinc; also occurring are an unknown amount of lead, tungsten and cadmium. Sulphides occur in nearly all the rock types and do not seem to favour any distinct rock unit. A pulsating of the "ore" solutions has occurred; pyrite was formed first, then replaced by chalcopyrite; both of these minerals are rimmed by sphalerite; a late galenacalcite phase cuts all. Copper minerals have been found throughout the property and indicate a mineral rich source. "All rocks have undergone prehnitepumpellyite facies metamorphism and this event is probably important in concentrating copper mineralization." (P. Reid). Sulphides occur in breccia zones, in fractures and as open space fillings within a wide volcanic suite. (Ager, 1979).

# Item 8: Deposit Types

The most important mineral occurrences in the area of the Property are goldbearing porphyry copper deposits associated with the late Cretaceous Bulkley Plutonic Suite granodiorite and quartz diorite intrusive rocks and Eocene Nanika Plutonic Suite quartz monzonite intrusions. The nearby, Huckleberry mine and many major prospects are located in the same assemblage of rocks as the Property. There is also low sulphidation epithermal VMS potential with silverlead- zinc mineralization similar to that at the New Moon prospect in Lower-Middle Jurassic Hazelton Group rocks. The formerly producing Silver Queen mine is classified as a polymetallic Ag/Pb/Zn +/- Au vein and occurs in upper Cretaceous to Eocene Endako Group volcanics associated with late Cretaceous Bulkley Plutonic Suite felsic to basaltic dykes and sills.

The most important focus for exploration on the Property is for calcalkaline porphyry copper-gold deposits.

# 8.1 Calcalkaline Porphyry Copper-Gold Deposits

According to Panteleyev (1995), Volcanic-type Calcalkaline Porphyry Coppergold deposits are characterized by stockworks of quartz veinlets and veins. closely spaced fractures, disseminations and breccias, containing pyrite and chalcopyrite with lesser molybdenite, bornite and magnetite, occurring in large zones of economically bulk mineable mineralization, in or adjoining porphyritic stocks, dikes and related breccia bodies. Intrusions compositions range from calcalkaline guartz diorite to granodiorite and guartz monzonite. Commonly there are multiple emplacements of successive intrusive phases and a wide variety of breccias. The mineralization is spatially, temporally and genetically associated with hydrothermal alteration of the host rock intrusions and wallrocks. Propylitic alteration is widespread and generally flanks early, centrally located potassic alteration which is commonly well mineralized. Younger mineralized phyllic alteration commonly overprints the early mineralization. Barren advanced argillic alteration is rarely present as a late, high-level hydrothermal carapace. Ore controls include igneous contacts, both internal between intrusive phases, and external with wallrocks; dike swarms, breccias, and zones of most intense fracturing, notably where there are intersecting multiple mineralized fracture sets.

Porphyry Cu-Au deposits have been the major source of copper for British Columbia, and a significant source of gold. Median values for 40 B.C. deposits with reported reserves are: 115 Mt with 0.37 % Cu, 0.01 % Mo, 0.3g /t Au and 1.3 g/t Ag.

# 8.2 High And Low Sulphidation VMS Deposits

Analogous to epithermal precious metal deposits, volcanogenic massive sulphide (VMS) deposits are recently recognized to occur in two associations: high- and low sulphidation. High sulphidation VMS have been only recently recognized in the geological record, and are notable for their exceptionally high grades of gold and silver, in addition to their base metal content.

# 8.2.1 Low Sulphidation VMS Deposits

Based on the mineralogical classification used for epithermal deposits, the majority of volcanogenic massive sulphide (VMS) deposits, could be classified as low sulphidation. These VMS deposits formed from an ore fluid that was dominated by modified seawater, and as with low sulphidation epithermal deposits, evidence for magmatic contributions to these systems is limited.

# 8.2.2 High Sulphidation VMS Deposits

Certain VMS deposits and seafloor occurrences contain mineralogy that suggests that a high sulphidation classification is appropriate. These high sulphidation VMS deposits probably formed from magmatic hydrothermal systems that were active in submarine settings. High sulphidation deposits form in magmatic-hydrothermal systems according to Thompson (2007). In a similar manner, Dubé et al. (2007) describe a class of deposits that are a subtype of both volcanogenic massive sulphide (VMS) and lode gold deposits, namely gold-rich VMS deposits. Like most VMS deposits, they consist of semi-massive to massive, concordant sulphide lenses underlain by discordant stockwork feeder zones. They have diverse geochemical signatures dominated by Au, Ag, Cu and Zn and often accompanied by elevated concentrations of As, Sb, Pb, Te and Hg.

Figures 8 and 9 demonstrate schematically the geological and spatial characteristics of these types of VMS deposits. High-sulphidation VMS deposits can also be described as shallow submarine hot spring deposits. They are represented by stratiform Au-Ag barite deposits, pyritic Cu-Au stockworks, and auriferous polymetallic sulfides.



Figure 8: Development of high-sulphidation versus low-sulphidation hydrothermal systems in a submarine setting in relation to the depth of emplacement of associated sub-volcanic intrusions (from Dubé et al., 2007; after Hannington et al., 1999)



Figure 9: Geological setting of Au-rich high sulphidation VMS systems (from Dubé et al., 2007).

### Item 9: Exploration

# 9.1 Current Evaluation Program

The current program consisted of a one day reconnaissance survey in an effort to locate the trenches and pits dug between 1973 and 1988 by previous operators. A traverse was completed into the general area of the Tets Minfile location without success. The trail into the historic trenches was located at the end of the day.



Plate 3: Wet campsite used for June 2013 program



Plate 4: Overgrown cat trail leading from the Tets trenches.

UTM coordinates for the cat trail at this location are (Zone 9) 634511E, 5967338N. The cat trail was followed to a point where it entered the historic cut block where it soon became impassible.

#### Item 10: Drilling

No drilling was completed as part of the exploration program.

#### Item 11: Sample Preparation, Analyses and Security

No mineralization was noted during the traverse and no samples were collected during the June, 2013 program.

#### Item 12: Data Verification

No data verification of historical data was completed during the present exploration program.

#### Item 13: Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing was completed as part of the exploration program.

# Item 14: Mineral Resource Estimates

No mineral resource estimates were completed as part of the exploration program

# **Item 15: Adjacent Properties**

The following summaries are drawn from publicly available data. The author has not made any effort to verify the accuracy of the information and the summaries are provided for informational purposes only and are not indicative of the mineralization on the Troitsa property, which is the subject of this report.

# 15.1 Huckleberry

The Huckleberry mine (093E 037) has been in production since October, 1997. Published reserves for the deposit in 2010 were Proven and Probable reserves totaling 14.01 million tonnes grading 0.362% Cu, 0.005% Mo, Measured and Indicated reserves of 182.9M tonnes grading 0.321% Cu and Inferred reserves of 45.4M tonnes grading 0.288% Cu. Reserves were calculated with 0.20% Cu cut-off grade.

# 15.2 Berg

The Berg property (093 046) hosts a large porphyry deposit recently purchased by Thompson Creek Metals. The deposit has a recently published 43-101 compliant measured & indicated resource of 557.8 million tonnes, grading 0.30% Cu and 0.037% Mo and 3.77g/t Ag and an inferred resource of 159.4 million tonnes grading 0.23% Cu, 0.033% Mo and 2.5 g/t Ag using a 0.30% copper equivalent cut-off grade.

# 15.3 Poplar

The Poplar deposit (093L 239) contains an National Instrument 43-101 compliant Indicated Resource of 171.3 million tonnes grading 0.28% Cu, 0.008% Mo, .08g/t Au and 2.3g/t Ag (0.40%CuEq), plus an Inferred Resource of 209.0 million tonnes grading 0.23% Cu, 0.004% Mo, 0.06g/t Au and 3.62g/t Ag (0.33% CuEq) at 0.15% copper cut-off. The deposit occurs in a Middle-Late Cretaceous Bulkley intrusion intruding into Lower-Middle Hazelton Group volcanics.

# 15.4 Ox Lake

The Ox Lake deposit (093E 004) hosts a historical Inferred resource of 16.130M tonnes grading 0.30% Cu and 0.04% Mo in the contact zone between a Cretaceous granodiorite and overlying volcanic tuffs of the Lower-Middle Jurassic Hazelton Group

# 15.5 Seel

The Seel deposit (093 101) contains an indicated resource of 28.13 million tonnes grading 0.22% Cu, 0.21 g/t Au, 0.007% Mo and 1.1 g/t Ag (0.40% Cu Eq) plus an inferred resource of 214.78 million tonnes grading 0.17% Cu, 0.13 g/t Au, 0.017% Mo, and 2.17 g/t Ag (0.33% Cu Eq).

# 15.6 New Nanik

The New Nanik occurence (093E 055) contains a non 43-101 compliant Inferred resource of 16.5 million tonnes grading 0.437% Cu calculated in 1973 by Quintana Minerals using data from a fourteen hole diamond drill program on the property. The mineralized zone lies along a large shattered and faulted zone trending 030° and dipping 20° to 40° west along the western contact of intrusive rocks and Hazelton Group rocks.

# 15.7 Equity Silver

The Equity Silver mine (093L 001) operated from 1981-1994 and mined 33.8M tonnes with an average grade of 0.4% Cu, 64.9g/t Ag and 0.46g/t Au. The open pit and underground operation mined tabular fracture zones 30-100m thick comprised of primarily veins and with only minor disseminations of sulphides.

# 15.8 Emerald Glacier

The Emerald Glacier past producer (093E 001) operated intermittently between 1951 and 1968, contains an estimated 40,800 tonnes grading 355 grams per tonne silver, 8.23 per cent lead, 9.49 per cent zinc and 1.13 grams per tonne gold in unclassified reserves. Mineralization consisting of en echelon quartz veining with galena, sphalerite, chalcopyrite and pyrite extends for at least 1200 metres and is hosted in the transitional zone between Lower-Middle Jurassic Hazelton Group sedimentary and volcanic rocks.

# Item 16: Other Relevant Data and Information

There is no other relevant data or information included in this report.

# Item 17: Interpretation and Conclusions

Geochemical surveys completed in the early 1970's have shown that there exist highly anomalous base metal values over a 600m x 1300m area in B-horizon soils on the Tets property. The long axis of the anomaly trends in a north-northeasterly direction. Geological mapping and Geophysical surveys completed at that time also suggest a similar trend to structure and lithology on the property. There is some evidence of glacial smearing of the surficial sediments with local observations suggesting a 045° direction of transport (Ager, 1979). Geophysical data from the Quest West Surveys show that the Tets property is flanking large, subtle, gravity and magnetic low anomalies which may indicate the presence of blind felsic intrusions. Similar anomalies are also present at the Berg, Bergette, Sylvia/Tara and Pam properties. Mineralized samples collected from the property show that there is potential for significant base and precious metal enrichment in the area. Mineralization is structurally controlled and has been introduced into overlying volcanic rocks. Highest values collected to date are 15.4% Cu and 439ppm (12.8opt) Ag.

The target for the current program is to identify evidence of an underlying mineralized porphyry system similar to that found at the nearby Huckleberry mine located 21km to the south. If a mineralized system is located, it should be

developed and exploited as possible mill feed for the existing infrastructure at Huckleberry.

# Item 18: Recommendations

The logical first steps in the exploration of the Tets property should involve up to date geophysical and geochemical surveys in an attempt to see through the potentially thick blanket of glacial till present over much of the area. Magnetic surveys should be completed in an effort to outline any granodiorite intrusions and map any structural complications. Induced Potential (IP) chargeability and resistivity surveys would hope to identify areas of sulphide concentration and silicification. Geochemical Ah surveys over the claims would focus further exploration to areas of higher copper, molybdenum and gold/silver potential. Line cutting would be required to allow access for the various surveys.

Project Geologist (20 days @ 600/day)	\$12000
Prospector/sampler (20 days @ \$400/day) x 2	16000
Line-cutting (30km @\$1500/km)	45000
Geochemical Ah surveys (700 samples @ \$50/sample)	35000
Geophysical surveys mag/IP (30km @ \$2500/km)	75000
Mob/demob and vehicle rental	10000
Room and board (200 person days @ \$100/day)	20000
Reporting	10000
Contingency (15%)	<u>33450</u>
	\$256450

Dependent on the results obtained from these surveys, additional trenching or diamond drilling should target favorable anomalies.

Respectfully submitted,

Ken Galambos P.Eng. KDG Exploration Services

Victoria, BC. July 15, 2013

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### Item 20: Date and Signature Page

1) I, Kenneth Daryl Galambos of 1535 Westall Avenue, Victoria, British Columbia am self-employed as a consultant geological engineer, authored and am responsible for this report entitled "Prospecting Report on the Tets Project", dated July 15, 2013.

2) I am a graduate of the University of Saskatchewan in Saskatoon, Saskatchewan with a Bachelor's Degree in Geological Engineering (1982). I began working in the mining field in 1974 and have more than 30 years mineral exploration and production experience, primarily in the North American Cordillera. Highlights of this experience include the discovery and delineation of the Brewery Creek gold deposit, near Dawson City, Yukon for Noranda Exploration Ltd.

3) I am a registered member of the Association of Professional Engineers of Yukon, registration number 0916 and have been a member in good standing since 1988. I am a registered Professional Engineer with APEGBC, license 35364, since 2010.

4) This report is based upon the author's personal knowledge of the region, a review of additional pertinent data and a 2013 work program on the property.

5) As stated in this report, in my professional opinion the property is of potential merit and further exploration work is justified.

6) To the best of my knowledge this report contains all scientific and technical information required to be disclosed so as not to be misleading.

7) I am partners with Ralph Keefe and Shawn Turford on the Tets property and a number of other properties in British Columbia. My professional relationship is as a non-arm's length consultant, and I have no expectation that this relationship will change.

8) I consent to the use of this report by Ralph Keefe and Shawn Turford for such assessment and/or regulatory and financing purposes deemed necessary, but if any part shall be taken as an excerpt, it shall be done only with my approval.

Dated at Victoria, British Columbia this 15th day of July, 2013. "Signed and Sealed"

Ken Galambos, P.Eng. (APEY Reg. No. 0916, APEGBC license 35364) KDG Exploration Services 1535 Westall Ave. Victoria, British Columbia V8T 2G6

# **Item 21: Statement of Expenditures** for the period of June 24-26, 2013

# Personnel

Ken Galambos 2 days @ \$600/day Ralph Keefe 2 days @ \$350/day Brian Keefe 2 days @ \$200/day	\$1200.00 \$700.00 \$400.00
Transportation and Camp costs	
Truck 2 days @ \$100/day x 2	\$400.00
Mileage 1088km @ \$0.50/km	\$544.00
ATV 2 days @ \$75/day x 2	\$300.00
Transport Trailer 2 days @ \$50/day	\$100.00
Travel Trailer 2 days @ \$50/day	\$100.00
Food 6 person days @ \$35/day	\$210.00
Analysis	

<b>Report</b> 2.0 days @	\$600/day	<u>\$1200.00</u>
TOTAL	=	\$5154.00

# Item 22: Software Used in Support of This Exploration Program

Microsoft Windows 7 Microsoft Office 2010 Adobe Reader XI Adobe Acrobat 9 Internet Explorer Google Earth