

Progress Report

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**Interpretation of Orthorectified Satellite Imagery,  
Regional Geophysical and  
Stream Geochemical Surveys  
on the Natlan Property**

**Omineca Mining Division**

**Tenure Numbers:**

**839371, 839625 and 839629**

**NTS: 093M/06**

**Latitude 55° 24'N, Longitude 127° 18'W**

**UTM Zone 09 (NAD 83)**

**Easting 608000**

**Northing 6141000**

**Work performed August 15, 2011-February 20, 2012**

**For**

**Stratton Resources Inc.  
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**February 21, 2012**

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**Item 1: Summary**

The Natlan/Ace property lies approximately 70 km north of Smithers and 23 km northeast of New Hazelton in west-central B.C on mapsheet NTS 93M/06 at latitude 55° 24'N, longitude 127° 18'W. Logging roads extend from Highway 16 up the Natlan and Itzul Creek valleys and are both within the property boundaries, to within 2km to the west of the Ace showing and 5km to the east of the Natlan showing, (Minfile 093M 033).

The property covers a large Late Cretaceous Bulkley Plutonic Suite monzonite to quartz-monzonite stock intruding Middle Jurassic to Late Cretaceous Bowser Lake Group sediments. The sediments are domed away on all sides from the intrusive body and it is thought that the area represents the roof zone of a shallowly buried mineralized pluton.

The area was initially explored as part of the porphyry boom in the mid-1960s. The Ace showing is not documented in the BC Minfile but is at the approximate location of Minfile 093M 036, Babine Range. The area was explored by Mastodon-Highland Bell Mines Ltd. in 1967 following up on a regional silt sampling program. W.R. Bacon P. ENG., chief geologist for the program, stated that (in comparing) "results from thousands of silt and soil samples taken by the company in the area between Hazelton and Babine Lake, The majority of the samples taken (on the Ace property) contained abnormal amounts of copper. A lesser number returned anomalous molybdenum values." At that time, the company had outlined an open ended >500ppm copper-in-soil anomaly in excess of 1800m long and up to 800m wide. Maximum values in the 1967 geochemical survey reached 1850ppm copper and 500ppm molybdenum in soils. Exploration by Teck Corp., in 1997, confirmed the anomalous soils and identified the presence of significant porphyry style mineralization in sericite altered granodiorite. Rock sampling returned copper assays commonly 0.1-0.48%, silver values between 0.4- 578ppm and gold values from 5-910ppb, including one sample that returned 910ppb Au, 36gm/t Ag and 1169ppm Cu over 5m. A short program by Paget Resources in 2008 returned values to 0.6% Cu, 0.245% Mo, 3.27gm/t Au and 200gm/t Ag from select grab samples on the Ace target.

The Natlan showing was discovered in 1974 by Canadian Nickel Company Limited and consists of an extensive area of molybdenum mineralization primarily on the eastern margin of the large monzonite intrusion. Composite chip sampling, of unspecified widths, returned values up to 700ppm copper and 1650ppm molybdenum. All companies noted the extensive leaching of metals from the surface environment and believed that better grades could be found below the zone of oxidation.

The claims that are subject to this report are 100% owned by K. Galambos. An additional twenty-two claims were staked surrounding the core ground and are included in an option agreement dated December 13, 2011 between Stratton Resources Inc., AZ Copper Corp., the optionees and Ralph Keefe and Ken Galambos, the optionors.

It is the author's belief that previous exploration programs on the Natlan and Ace showings demonstrate the potential for significant porphyry style mineralization. These programs also failed to adequately test this potential. Additional exploration in the form

of geological, geophysical and geochemical surveys and drilling is warranted to determine if one or more economic mineralized bodies are present within the existing property boundaries.

## **Item 2: Introduction**

This report is being prepared for Stratton Resources Inc. for the purposes of filing assessment on the core claims comprising the Natlan 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. conducted the current evaluation and interpretation of data to focus further exploration expected to be completed in the summer of 2012, and to make recommendations to test the economic potential of the area. An attempt was made to access the property in August, 2011 by George Nicolson P.Geo. FRGS. and other Stratton personnel using a helicopter chartered from Smithers. Weather conditions did not allow a safe landing during the trip and as a result, no samples were collected.

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 interpretation of technical data covering the property. This evaluation was completed by the author over a time period from August 15, 2010-February 20, 2012.

### **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), copper (Cu), gold (Au), iron (Fe), lead (Pb), molybdenum (Mo), zinc (Zn), chalcopyrite (Cpy), molybdenite (MoS<sub>2</sub>) and 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 <http://www.empr.gov.bc.ca/Mining/Geoscience/MINFILE/Pages/default.aspx>
- Research of mineral titles at <https://www.mtonline.gov.bc.ca/mtov/home.do>
- 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 <http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace/MainMaps/Pages/default.aspx>.
- Published scientific papers on the geology and mineral deposits of the region and on mineral deposit types.

### 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.

### 2.5 Scope

This report describes the geology, previous exploration history, interpretation of regional geophysical, geochemical surveys and enhanced aster satellite imagery and the mineral potential of the Natlan project. Research included a review of the historical work that related to the immediate and surrounding areas. 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.

#### 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

The Natlan property consists of 25 claims covering an area of 11,186.93ha (610 cells), on Natlan Peak, 70 km north of Smithers and 23 km northeast of New Hazelton in west-central B.C. The property is located in NTS 93M/06, latitude 55° 24'N, longitude 127° 18'W. Logging roads extend from Highway 16 up the Natlan and Itzul Creek valleys onto the existing claims.

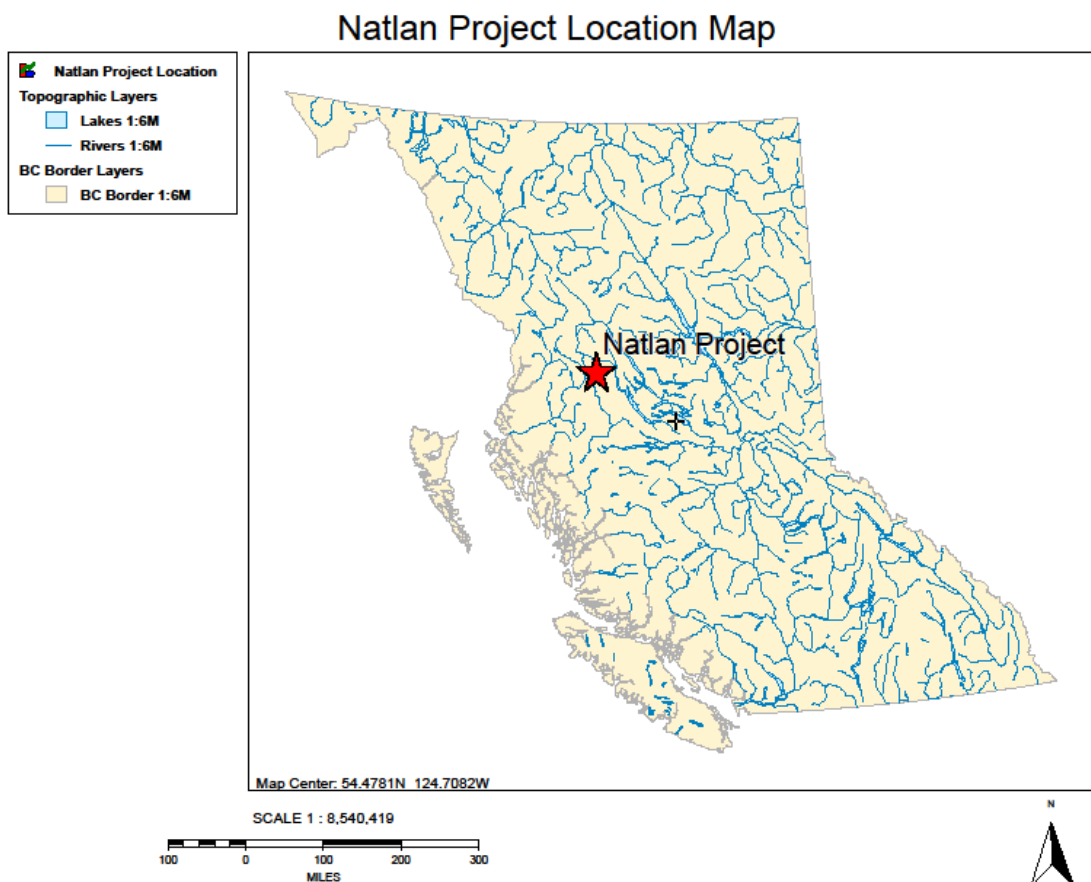


Figure 1: Property location map

Upon acceptance of this report, the highlighted mineral tenures will have their expiry dates moved to December 1, 2013.

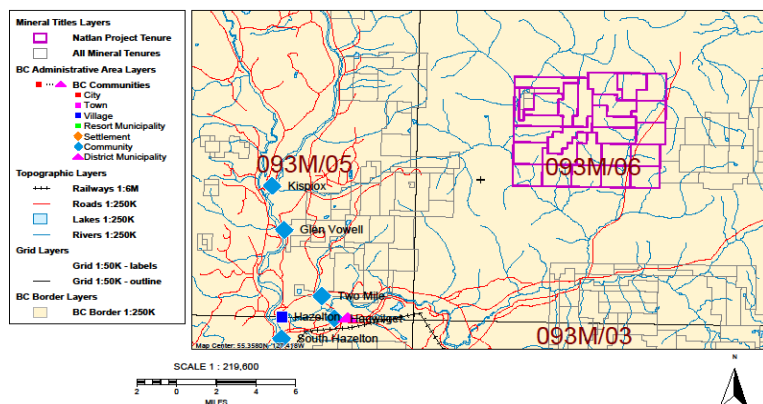
Table 1: Claim Data

Tenure #	Claim	Issue date	Expiry date	Area (Ha)	Owner
<b>839371</b>	Natlan	2010/Dec/01	<b>2013/Dec/01</b>	459.01	GALAMBOS, KENNETH D 100%
<b>839625</b>	Natlan 2	2010/Dec/03	<b>2013/Dec/01</b>	459.01	GALAMBOS, KENNETH D 100%
<b>839629</b>	Natlan 3	2010/Dec/03	<b>2013/Dec/01</b>	459.27	GALAMBOS, KENNETH D 100%
929825	Natlan 4	2011/Nov/18	2012/Nov/18	440.49	AZ Copper Corp. 100%
929826	Natlan 5	2011/Nov/18	2012/Nov/18	422.30	AZ Copper Corp. 100%
929827	Natlan 6	2011/Nov/18	2012/Nov/18	440.73	AZ Copper Corp. 100%
929828	Natlan 7	2011/Nov/18	2012/Nov/18	459.21	AZ Copper Corp. 100%
929829	Natlan 8	2011/Nov/18	2012/Nov/18	459.35	AZ Copper Corp. 100%
929830	Natlan 9	2011/Nov/18	2012/Nov/18	441.13	AZ Copper Corp. 100%
929833	Natlan 10	2011/Nov/18	2012/Nov/18	459.39	AZ Copper Corp. 100%
929835	Natlan 11	2011/Nov/18	2012/Nov/18	441.18	AZ Copper Corp. 100%
929836	Natlan 12	2011/Nov/18	2012/Nov/18	441.20	AZ Copper Corp. 100%
929837	Natlan 13	2011/Nov/18	2012/Nov/18	441.25	AZ Copper Corp. 100%

929838	Natlan 14	2011/Nov/18	2012/Nov/18	441.28	AZ Copper Corp. 100%
929839	Natlan 15	2011/Nov/18	2012/Nov/18	441.09	AZ Copper Corp. 100%
929840	Natlan 16	2011/Nov/18	2012/Nov/18	441.08	AZ Copper Corp. 100%
929841	Natlan 17	2011/Nov/18	2012/Nov/18	441.01	AZ Copper Corp. 100%
929842	Natlan 18	2011/Nov/18	2012/Nov/18	459.29	AZ Copper Corp. 100%
929843	Natlan 19	2011/Nov/18	2012/Nov/18	440.90	AZ Copper Corp. 100%
929844	Natlan 20	2011/Nov/18	2012/Nov/18	440.78	AZ Copper Corp. 100%
929845	Natlan 21	2011/Nov/18	2012/Nov/18	459.08	AZ Copper Corp. 100%
929846	Natlan 22	2011/Nov/18	2012/Nov/18	459.03	AZ Copper Corp. 100%
929847	Natlan 23	2011/Nov/18	2012/Nov/18	458.85	AZ Copper Corp. 100%
929848	Natlan 24	2011/Nov/18	2012/Nov/18	440.49	AZ Copper Corp. 100%
929849	Natlan 25	2011/Nov/18	2012/Nov/18	<u>440.52</u>	AZ Copper Corp. 100%
			Total	11186.93	

The claims listed above are subject to an option agreement between Stratton Resources Inc. and AZ Copper Corp., the optionees and Ralph Keefe and Ken Galambos, the optionors. Stratton can earn a 100% undivided interest in the property, subject to a 2% Net Smelter Royalty by making staged payments of \$200,000 and issuing 200,000 shares of Stratton and completing \$1,500,000 of eligible exploration on or before the fourth anniversary of the agreement. The agreement has an effective date of December 13, 2011.

Natlan Project Claim Map



The Claims comprising the Natlan 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.

Fig. 2: Natlan Project Claim Map

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 Natlan property. There is no guarantee that approval for the proposed exploration will be received.



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

The Natlan property is located in the Babine Range of the Skeena Mountains and is accessed with roughly 50km of logging roads. The Suskwa Forest Road exits to the north off Highway 16 at a point approximately 11km east of New Hazelton. The main haul road continues for 11km to a junction with the Itzul West Forest Service Road which eventually parallels the Shegunia River to a point within 2km to the west of the Ace showing. The Suskwa Forest Road continues through the eastern part of the claim group and comes within 5km to the east of the Natlan showing at a point 17km from the Itzul West junction.

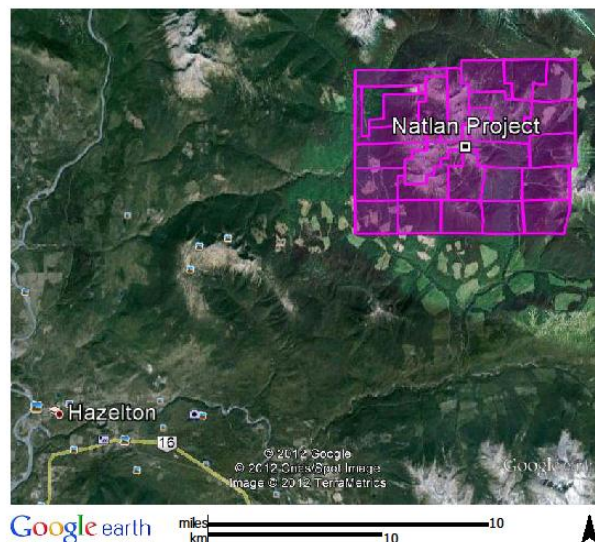


Plate 1: Satellite Image of Natlan Project

Elevations on the property range from 675m to 1872m, and topography is rugged, with steep cliff exposures and extensive talus fans in the upper reaches of Natlan Peak. Much of the property is above treeline in alpine terrain, with subalpine fir and spruce at lower elevations. The area receives moderate precipitation of 500 to 700mm, with snow cover from September to June.

Lodging and groceries are available in the small community of New Hazelton 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.

### Item 6: History

The area was explored by Mastodon-Highland Bell Mines Ltd. in 1967 following up on a regional silt sampling program. The company completed geology and geochemical surveys over an area that had been identified as having "widespread copper mineralization over a substantial area" (Bacon, 1967). At that time, the company had outlined an open ended soil anomaly, generally greater than 500ppm and up to 1500ppm Cu and up to 500ppm Mo, in excess of 1800m long and up to 800m wide.

The Natlan showing, approximately 3500m to the north, was discovered in 1974 by Canadian Nickel Company Limited and consists of an extensive area of molybdenum mineralization, primarily on the eastern margin of a large Bulkley intrusive. Composite rock-chip sampling of highly oxidized, gossanous intrusive returned Mo values to 1650ppm and Cu to 700ppm over an area 3600m x 1800m.

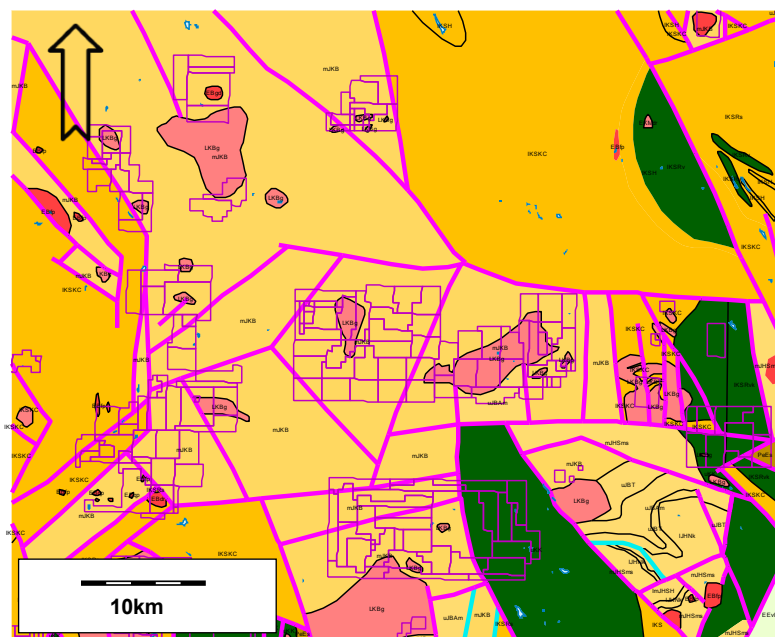
In 1997, Teck Corp. completed geological and geochemical surveys in the central part of the Ace soil anomaly. Results confirmed the anomalous soils over an area up to 500m wide and identified the presence of significant porphyry style mineralization in sericite altered granodiorite. Rock sampling returned copper assays commonly 0.1-0.48%, silver values between 0.4- 578ppm and gold values from 5-910ppb. Chip sampling returned 910ppb Au, 36gm/t Ag and 1169ppm Cu over 5m from moderately sericite altered granodiorite with moderate quartz stockwork with occasional arsenopyrite veinlets.

Paget Resources completed a two day evaluation of the Ace target in 2008 with select rock samples returning results up to 0.6% Cu, 0.245% Mo, 3.27gm/t Au and 200gm/t Ag from samples of mineralized intrusive and sedimentary rocks.

## Item 7: Geological Setting and Mineralization

### 7.1 Regional Geology

The Natlan claims lie on the Skeena arch of the Intermontane Tectonic Belt (Gidluck, 1974). Although the claims are overlain by extensive overburden, information on the regional geology of the area is available through old assessment reports done on nearby, currently lapsed claims. The driving force for mineralization in the area is the many “granitic” stocks and plutons which have intruded into host sandstones, siltstones, and greywackes of the Bowser Basin host rocks (Evans, 1998). The Bowser Basin sediments have been found to be Upper Triassic to Lower Cretaceous in age and



appear to warp upwards by the intruding pluton (Gidluck, 1974). The sediments are made up by a shallow marine-lacustrine alluvial suite which conformably overlies the younger Hazelton Group (Evans, 1998). The “granitic” intrusions are Late Cretaceous Bulkley intrusives varying in composition from granodiorite to diorite (Evans, 1998). The Bowser Basin is also invaded by Later Tertiary Nanika and Babine intrusives which take the form of small plugs (Evans, 1998).

Figure 3: Regional Geology

Table 2

## Geology Legend





**Bounding Box:** North: 55.666 South: 55.174 West: -127.948 East: -126.628

**NTS Mapsheet:** 093M


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### Eocene

#### *Babine Plutonic Suite*

-  **EBdr** dioritic intrusive rocks
-  **EBfp** feldspar porphyritic intrusive rocks
-  **EBgd** granodioritic intrusive rocks
-  **EBqp** high level quartz phyric, felsitic intrusive rocks

#### *Nechako Plateau Group*

-  **EEvl** **Endako Formation:** coarse volcanoclastic and pyroclastic volcanic rocks

### Paleocene to Eocene

-  **PeEs** undivided sedimentary rocks




### Cretaceous

#### *Kasalka Group*

-  **uKK** andesitic volcanic rocks

### Late Cretaceous

#### *Bulkley Plutonic Suite*



-  **LKBfp** feldspar porphyritic intrusive rocks
-  **LKBg** intrusive rocks, undivided
-  **LKBqm** quartz monzonitic intrusive rocks

### Early Cretaceous

#### *McCauley Island Plutonic Suite*

-  **EKMdr** dioritic intrusive rocks

#### *Skeena Group*

-  **IKSRvk** **Rocky Ridge Formation - Subvolcanic Rhyolite Domes:** alkaline volcanic rocks
-  **IKSRvf** **Rocky Ridge Formation - Subvolcanic Rhyolite Domes:** rhyolite, felsic volcanic rocks

- IKSKC** **Kitsuns Creek Formation:** undivided sedimentary rocks
- IKSRs** **Red Rose Formation:** undivided sedimentary rocks

### Lower Cretaceous

- IKSRv** **Rocky Ridge Formation:** alkaline volcanic rocks
- IKSKC** **Kitsuns Creek Formation:** coarse clastic sedimentary rocks
- IKSRs** **Red Rose Formation:** coarse clastic sedimentary rocks
- IKSH** **Hanawald Conglomerate:** conglomerate, coarse clastic sedimentary rocks
- IKSK** **Kitsumkalum Shale:** mudstone, siltstone, shale fine clastic sedimentary rocks
- IKS** undivided sedimentary rocks

### Middle Jurassic to Late Cretaceous

#### *Bowser Lake Group*

- mJKB** undivided sedimentary rocks

### Upper Jurassic

- uJBAm** **Ashman Formation:** mudstone, siltstone, shale fine clastic sedimentary rocks
- uJBT** **Trout Creek Formation:** undivided sedimentary rocks

### Middle to Late Jurassic

- uJBAmst** **Ashman Formation:** argillite, greywacke, wacke, conglomerate turbidites

### Middle Jurassic

#### *Hazelton Group*

- mJHSms** **Smithers Formation:** marine sedimentary and volcanic rocks

### Early to Middle Jurassic

- ImJHSH** **Saddle Hill Formation:** undivided volcanic rocks

### Lower Jurassic to Middle Jurassic

### Lower Jurassic

- IJHNk** **Nilkitkwa Formation:** undivided sedimentary rocks

Regional mapping to the north suggests an anticlinal structure in the sediments immediately on strike with the Bulkley Intrusive body and approximately 13 km to the northwest of the intrusion (Gidluck, 1997).

The regional structure of the Natlan Property area is dominated by block faulting, with the lower Bowser sediments and intrusives within domed portions as the horsts and the upper Bowser sediments located in the valley bottoms as grabens (Evans, 1998).

A very late structural event (possibly Eocene or later) has been noted by the author in an area that stretches from Takla Lake to the east to at least the Natlan Peak area on the west. This event is believed to be a fairly close spaced dextral shearing 800m-2km between shears with only 200-300m of right lateral offset. Evidence for this event was first noted with the Don showing, Minfile 093N 220, where a northeast-striking fault defines a 300m apparent dextral offset to the contact between the volcanic and eastern clastic units. A review of the regional 1<sup>st</sup> derivative magnetic data from MapPlace in the area of the Don showing shows a repeated dextral offset of 200-300m to a magnetic high anomaly that cuts across Takla Lake. This northeast trending late structural event is noted at many of the Minfile occurrences in the Babine and Takla Lake areas, including at the former Bell and Granisle mines and other more advanced showings in the area. In the Natlan area, mineralization is hosted in northeast trending quartz veins at American Boy (Minfile 093M 047), Mohawk (Minfile 093M 051), Babine (Minfile 093M 116) and Ellen (Minfile 093M 123) and in quartz stockworks at Mt Thomlinson (093M 080). At the Ellen showing, veins and veinlets in granites occur in association with shear zones trending between 020° and 040°, dipping steeply 70° east to west. The mineralization is late in the evolution of the granitic complex, post-dating hornfelsing and post-dating the quartz-molybdenite mineralization. The mineralization process is multi-phased, as demonstrated by the distinctive banding of quartz and sulphides (Reid, 1985). This structural event is important in that it hosts high grade base metal mineralization as at the Granisle and Bell mines and is shown to carry significant precious metal values as at the Ellen showing and the Mohawk and American Boy past producing mines.

There are a number of diverse copper (+/- molybdenum, silver, and gold) porphyry systems in the area (Huckleberry, Glacier Gulch, Ox Lake, Louise Lake, etc.) and all appear to be related to the series of Buckley intrusions in the area (Evans, 1998).

## **7.2 Property Geology**

The sediments overlying the intrusion of interest (herein to be referred to as the Bulkley Intrusion) dip away from the stock in all directions and appear to form a shallow cover over the Bulkley Intrusion's southern margin, suggesting a southward plunging intrusive body.

In the Ace showing area, a prominent gossan exists along a NE trending series of Bulkley granodiorite dyke swarms. These dykes and related hornfelsing cover an area in excess of 2.0 km's strike length over a width of 1.0+ km's. This system appears very high level with abundance and widths of dykes diminishing with increasing elevation. The sediments near the intrusives vary from strong to weak pervasive biotite hornfelsing and a doming or antiform appears developed along the NE trend likely as a result of the intrusion.

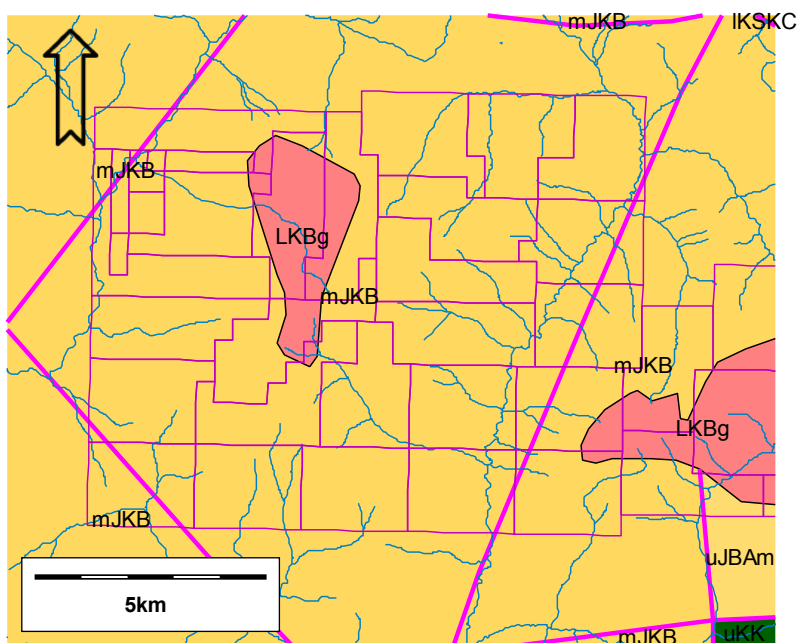


Fig. 4: Property Geology

Mineralization consists of porphyry style disseminated Cu, Ag, Au, MO within the altered dykes and Au, Ag, Pb, Zn, Sb massive sulphide veins within the hornfelsed sediments. The Bowser sediments consist of argillites, siltstone with lesser sandstone formed in a deltaic environment as demonstrated by the presence of occasional carbonaceous leaf fossils. These units are commonly bedded on a 1cm scale with graded bedding common (Evans, 1998).

Proximal to the intrusive dykes the sediments become biotite hornfelsed to varying degrees. Intensity is reflected by a darkening of the rock (increase in biotite) and the development of a conchoidal fracture. This is also accompanied by a dark limonite gossan related to the presence of 1-10% disseminated Po and Py. The various hornfels extend 200-400 meters outboard of the dyke swarm and likely reflects a larger intrusive at depth. The Bulkley Intrusion at this location is a medium-coarse grained unit that ranges from granodiorite to diorite in composition. The SE portion of the dyke swarms tends to be more mafic probably due to assimilation of the sediments (typically coarse grained biotite books). This unit is typically equigranular with minor disseminated magnetite and pyrrhotite (Evans, 1998).

Large portions of the dykes are moderately to strongly pervasively sericite altered. The alteration when intense destroys all primary texture and develops a light yellow color to the rock. Commonly disseminated pyrite (1-10%) and disseminated chalcopyrite (tr-1%) is associated with this rock. Most samples of sericite altered granodiorite also contained varying amounts of quartz stockwork. This alteration is the most widespread and contains the most obvious potential porphyry mineralization both disseminated in the sericite matrix and disseminated within the quartz stockwork. Values ranged from 5-910

ppb Au, 0.4-578.0 ppm Ag, with commonly 0.10-0.48% Cu. These results are somewhat unusual suggesting more of a Cu-Ag system rather than a Cu-Au system (Evans, 1998).

Quartz stockwork alteration is normally associated with the pervasive sericite alteration but occasionally is present with the potassic and biotite altered granodiorite which suggests a slightly different timing to this system. The quartz veinlets range from 0.5-20 cm in thickness and form true stockwork systems with a number of veinlet orientations. These milky white quartz veins comprise 10-40% of the rock mass. Normally 1-5% disseminated pyrite is present with lesser amounts of chalcopyrite, molybdenite, manganese, stibnite and sphalerite (Evans, 1998).

The southern portion of the Bulkley dyke swarm has a noticeably higher potassic alteration, possibly due to sediment contamination. This alteration forms pervasive pink orthoclase overprint to the intrusive. Less common is veinlets and masses of medium-coarse grained biotite books (Evans, 1998).

To the north, the Bulkley intrusion is an north-south aligned, oval shaped acid intrusive stock composed solely of a homogeneous relatively fresh monzonite phase, weakly porphyritic in some areas. The total quartz content increases to a "quartz monzonite" classification in some areas near the eastern meta-sediment contact. The stock is moderately fractured with the intensity increasing towards the contacts, especially the eastern margin. Although essentially multi-directional, the more prominent fracturing tends to vary between 0° and 040° azimuth with a near vertical dip. A secondary trend of steep fracturing ranges between a strike of 120° and 160° (Gidluck, 1974).

Minor amounts of widespread disseminated pyrite and chalcopyrite mineralization occur throughout most of the monzonite stock. Several zones of greater mineralization with the addition of molybdenite occur marginal to the eastern sedimentary contact. Rock-chip values reach a maximum of 700ppm Cu and 1650ppm Mo. The chalcopyrite favours thin fractures, quartz veins and veinlets. It is usually associated with pyrite and occasionally molybdenite. Normally the molybdenite occurs by itself in dry fractures or as clots with quartz veinlets. Rarely is molybdenite seen in the disseminated form at Natlan. Neither chalcopyrite nor molybdenite appears to favour one set of fracturing. Although both occur in the same outcrop they appear to be associated with two different phases or pulses of mineralizing fluids. Almost without exception chalcopyrite and molybdenite were not observed in the same fracture or quartz vein. Certainly the molybdenum in quartz veins is later than the disseminated chalcopyrite in the monzonite (Gidluck, 1974).

Associated with the meta-sedimentary "hornfels" halo is a pyritic zone especially well developed and gossaned along the eastern contact. Although pyrite was not actually observed exceeding 1 or 2% of the total volume of the rock, greater quantities probably exist. The heavy oxidation due to weathering on the surface has likely removed a large portion of the iron (and other?) sulphides (Gidluck, 1974).



## **Item 8: Deposit Types**

The most important mineral occurrences in the area of the Property are porphyry copper-molybdenite-gold deposits associated with the Late Cretaceous Bulkley intrusions and the Eocene Babine intrusions. There is also epithermal or high sulphidation VMS potential with silver-lead-zinc mineralization similar to that at the Fireweed prospect in Skeena Group rocks. Potential also exists for Besshi-type massive sulphides, volcanic redbed copper deposits, polymetallic veins with silver-lead-zinc and possibly gold, and intrusion related gold-pyrrhotite deposits. The most important focus for exploration on the Property is for calc-alkaline porphyry copper-molybdenum-gold deposits.

### **8.1 Calc-Alkaline Porphyry Copper-Gold Deposits**

According to Panteleyev (1995), Volcanic-type calc-alkaline porphyry copper-gold 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 calc-alkaline quartz diorite to granodiorite and quartz 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.

#### **8.1.1 Babine Lake District Porphyry Copper-Gold Deposits**

Common features shared by porphyry copper-gold deposits in the Babine Lake district include (Carter et al, 1995) porphyritic host lithology, concentric alteration, pyrite halo, polymetallic peripheral veins and coincident north to northwest trending regional faults.

Associated biotite-feldspar, hornblende-feldspar, or feldspar porphyry plugs and dikes are commonly less than one square kilometre. They are ubiquitously mineralized with magnetite. The cores of the deposits show a potassic alteration that is dominated by biotite, and commonly contains magnetite. Annular phyllic (quartz-sericite-pyrite)



alteration surrounds the core sections. Pyrite halos surrounding deposits are up to 300 metres wide.

Mineralization is principally chalcopyrite and pyrite, with lesser bornite, and possibly molybdenite, occurring as disseminations, fracture coatings and in fine stockworks of quartz.

Exploration guides (Carter et al, 1995) are summarized:

1. Ubiquitous magnetite in the host intrusive, and common magnetite in the central potassic alteration zone make an excellent target for magnetic surveys.
2. Pyrite halos provide a broad target for which induced polarization (IP) technique is very effective.
3. Copper signature in soil samples ranges from 100ppm to 500ppm for individual deposits.
4. Zinc signature in soils is effective in detecting the outer margin of the pyrite halo.
5. Target grades for economic deposits are 0.45% Cu and 0.23 g/t Au.

Panteleyev (1995) indicates that central zones with Cu commonly have coincident Mo, Au and Ag with possibly Bi, W, B and Sr anomalies. Peripheral enrichment in Pb, Zn, Mn, V, Sb, As, Se, Te, Co, Ba, Rb and possibly Hg is documented.

## **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 5 and 6 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.

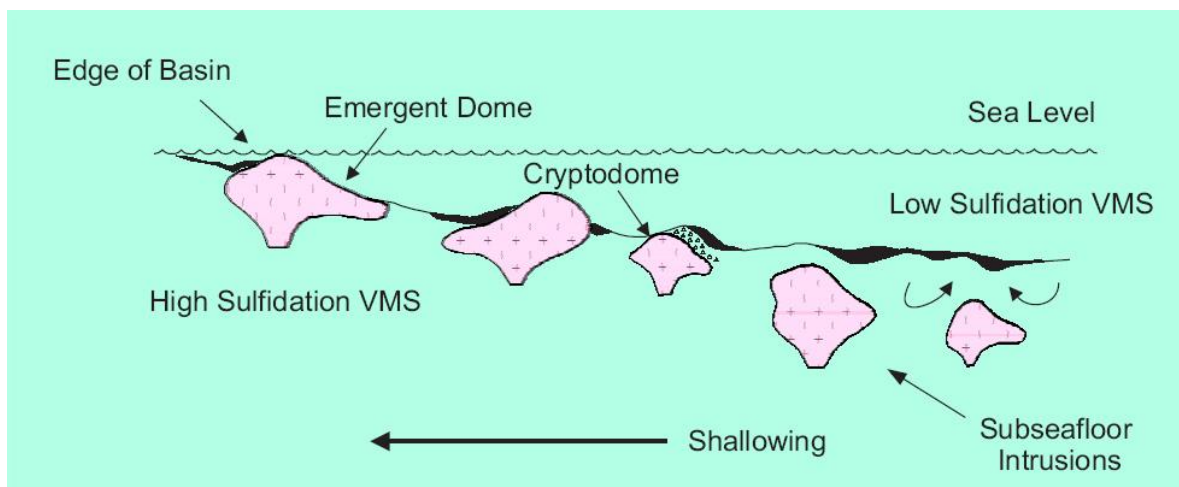


Figure 5: Development of high-sulphidation versus low-sulphidation hydrothermal systems in a submarine setting in relation to the depth of emplacement of associated sub-volcanic intrusions (from Dubé et al., 2007; after Hannington et al., 1999)

## ESKAY CREEK GOLD-SILVER-RICH VMS DEPOSIT

### Classification and Mineralization Types

In British Columbia, perhaps the best example of production from this high sulphidation subclass of volcanogenic massive sulphide deposit is the Eskay Creek deposit located 75 kilometres northwest of Stewart. At Eskay Creek, mineralization is a stratabound assemblage of volcanogenic massive sulphide mineralization and stockwork vein systems with local high-grade gold-silver replacement mineralization. The Eskay Creek deposits are examples of shallow subaqueous hot spring deposits, an important new class of submarine mineral deposits that has only recently been recognized in modern geological environments. The deposit type is transitional between subaerial hot spring Au-Ag deposits and deeper water, volcanogenic massive sulphide exhalites (Kuroko or Besshi types) and shares the mineralogical, geochemical, and other characteristics, of both.

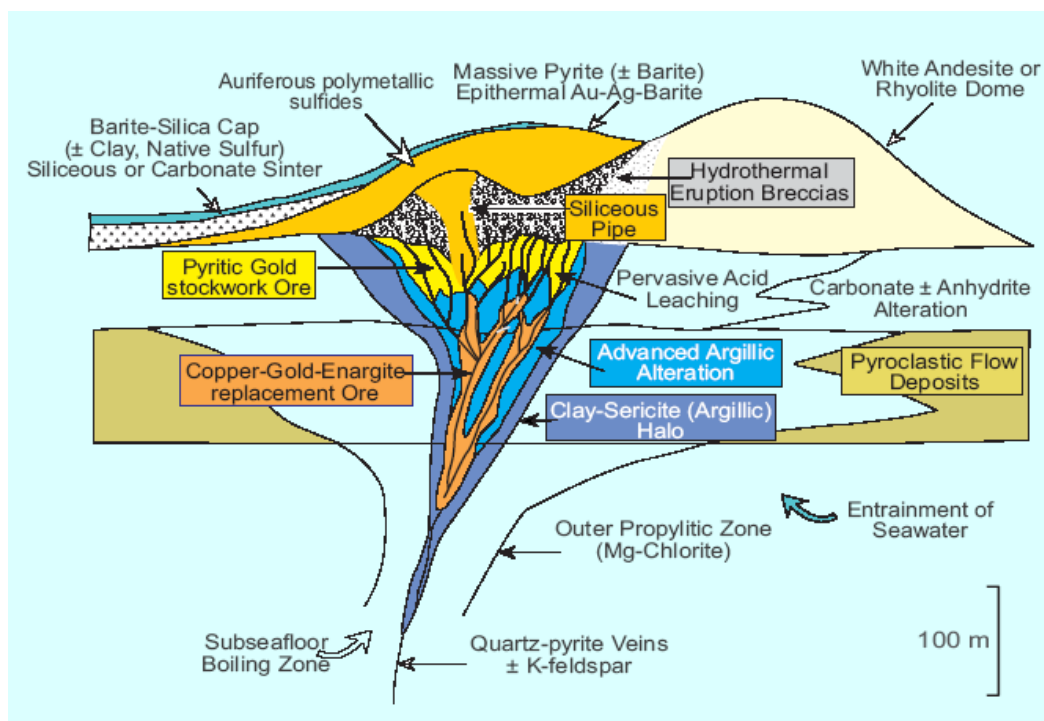


Figure 6: Geological setting of Au-rich high sulphidation VMS systems (from Dubé et al., 2007).

According to Roth (2002) and Roth et al. (1999), the mineralization is described as follows:

Stratiform mineralization is hosted in marine mudstone at the contact between underlying rhyolite and overlying basalt packages. This succession forms the upper part of the Lower to Middle Jurassic Hazelton Group. At the same stratigraphic horizon as the 21B zone are the 21A zone, characterized by As-Sb-Hg sulphides, and the barite-rich 21C zone. Stratigraphically above the 21B zone, mudstones host a localized body of base-metal-rich, relatively precious metal poor, massive sulphide (the "hanging wall" zone). Stockwork vein mineralization is hosted in the rhyolite footwall in the Pumphouse, Pathfinder and 109 zones. The Pumphouse and Pathfinder zones are characterized by pyrite, sphalerite, galena and chalcopyrite rich veins and veinlets hosted in strongly sericitized and chloritized rhyolite. The 109 zone comprises gold-rich quartz veins with sphalerite, galena, pyrite, and chalcopyrite associated with abundant carbonaceous material hosted mainly in siliceous rhyolite.

The 21B zone consists of stratiform clastic sulphide-sulphosalt beds. The ore Minerals are dominantly sphalerite, tetrahedrite and Pb-sulphosalts with lesser freibergite, galena, pyrite, electrum, amalgam and minor arsenopyrite. Sphalerite in the 21B zone is typically Fe-poor. Stibnite occurs locally in late veins and as a replacement of clastic sulphides. Rare cinnabar is associated with the most abundant accumulations of stibnite. Barite occurs as isolated clasts and in the

matrix of bedded sulphides and sulphosalts, or as rare clastic or massive accumulations, mainly in the northern portion of the deposit and in the 21C zone.

The clastic ore beds in the 21B zone show rapid lateral facies variations. Individual beds range from <1 mm to 1 m thick. The thickest beds occur at the core of the deposit and comprise sulphide cobbles and pebbles in a matrix of fine grained sulphides. These beds have an elongate trend, which approximately defines the long axis of the deposit, and which probably were deposited in a channel-like depression. Lithic clasts within the beds are mainly chloritized rhyolite and black mudstone. Angular, laminated mudstone rip-up clasts have locally been entrained within the clastic sulphide-sulphosalt beds. Both laterally and vertically, the ore beds become progressively thinner, finer grained and interbedded with increasing proportions of intervening black mudstone. Vertically successive clastic beds, either graded or ungraded, vary from well to poorly sorted. Bedded ore grades outwards from the core of the deposit into areas of very fine grained, disseminated sulphide mineralization.

### **Cumulative Gold and Silver Production**

Based on data available from the BC Geological Survey Branch MINFILE and "Exploration and Mining" reports to the end of 2006, Barrick Gold Corporation websites for 2007, and R. Boyce, P. Geo. personal communication, the authors estimate that cumulative production at Eskay Creek until closure in early 2008, was 102.00 tonnes of gold and 4,995.24 tonnes of silver (3,279,415 oz gold, 160,597,110 oz silver) from 2,238,255 tonnes of production milled.

The grade of production was an exceptional 45.57 g/t gold and 2,231 g/t silver (1.33 oz/ton gold and 65.1 oz/ton silver) over the life of the mine. These cumulative estimates have not been audited by the authors and are subject to revision when the production for the final 14 months of mine operation is publically reported.

This clearly demonstrates the exceptionally high grade nature of this style of high sulphidation VMS mineralization. While Eskay Creek was considered primarily a gold deposit, it was the fifth largest silver producer in the world during its mine life (Massey, 1999).

### **Salmon River Formation Rift Setting**

The Eskay Creek VMS mineralization is closely related to an assemblage of rift-related volcanic and sedimentary rocks and to controlling fault structures that bound and cross-cut the local rift basins. Metallogenic studies by the Mineral Deposit Research Unit (MDRU), and federal and provincial government geological survey branches have determined the Eskay Creek mine sequence is a Lower to Middle Jurassic succession of bi-modal volcanism and clastic sedimentation, termed the Salmon River Formation, a sub-division of the regional Hazelton Group.

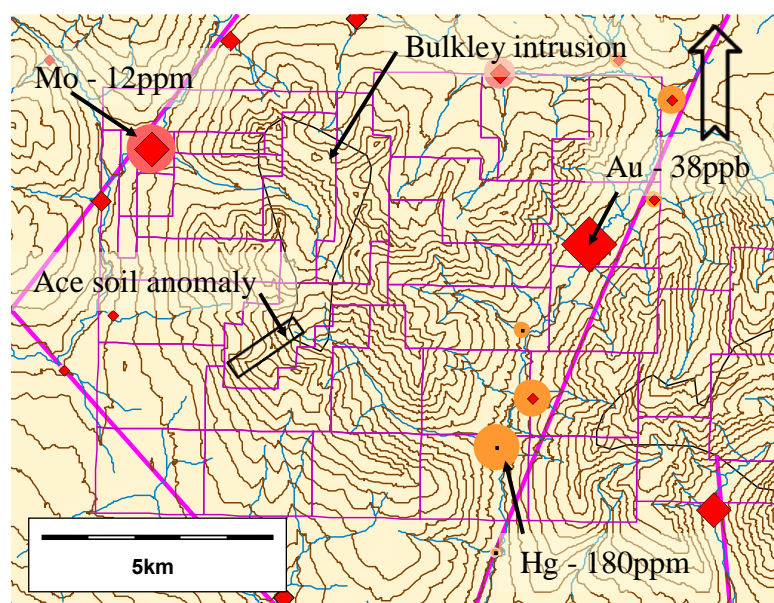
## Item 9: Exploration

### 9.1 Current Evaluation Program

An attempt was made to complete a property examination in August, 2011 but weather conditions did not allow a safe landing of the helicopter leased from Smithers, BC. As a result, no samples were collected and a decision was made to purchase satellite Aster data to use as base imagery and interpretation purposes for mineral exploration planned for the 2012 season. Images purchased included Orthorectified 14 band Aster images with enhancement to map sericite, ferrous oxide (FeO), hydroxyl alteration: probable kaolinite - probable alunite zones and silica alteration zones and included a colour image, greyscale image and vegetation cover image. Regional Geochemical Survey (RGS) data was reviewed to determine drainages containing anomalous elements commonly associated with porphyry copper-molybdenum deposits. An interpretation of the regional geophysical surveys was completed to assess the claim area for magnetic electromagnetic and gravity anomalies. Satellite imagery was studied and compared to geology and geophysical interpretations. These interpretations will be used as a basis for exploration programs planned for the 2012 exploration season.

### 9.2 Review and Interpretation of Regional Geochemical Survey Data

Review of RGS data show that the Natlan Peak area is highly anomalous in, antimony (6.9ppm), arsenic (55ppm), gold (38ppb), mercury (180ppm), and molybdenum (12ppm) and moderately anomalous in copper (70ppm). The apparent lack of copper in stream sediments is due in part to the location of the RGS sample sites away from known areas



of significant copper-in-soils and may also be a reflection of the highly oxidized nature of the mineralization found on the property to date. Creeks on the eastern part of the property away from the surface exposure of the Bulkley intrusive exhibit somewhat stronger anomalies in antimony, arsenic, gold and mercury which could be indicative of precious metals enrichment in the roof zone above a buried intrusion.

Fig 7: RGS anomalies showing precious metal enrichment to the southeast.



### 9.3 Review and Interpretation of Regional Magnetic Survey Data

Regional 1<sup>st</sup> derivative magnetic data supports the theory of a buried intrusion underlying much of the claim group with the exception of three claims to the northeast. The most magnetic areas of the anomaly are intimately associated with the surface exposure of the Bulkley intrusion or areas believed to have only thin cover rocks. The Ace showing area with its northeast trending soil anomaly is reflected in the magnetic survey data as a possible northeast trending normal fault with the southeast side dropped.

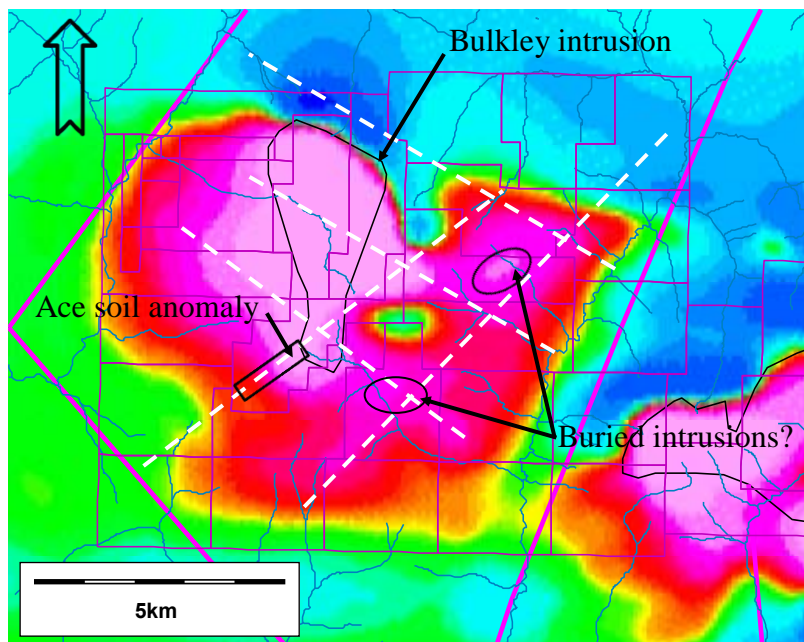


Fig 8: 1<sup>st</sup> derivative magnetics showing possible faulting and shallowly buried intrusions.

The strike length of this possible fault as indicated by the magnetic anomaly would be approximately 9km. A second parallel magnetic trend is evident approximately 2400m to the southeast. The orientation of both linear trends is between 045-050°. Blowouts on this second trend suggest the presence of a number of northwest trending structures situated roughly 2200m apart. The increased intensity of the magnetism associated with the blowouts also may indicate that an intrusive body may be closer to the surface at these locations.

### 9.4 Review and Interpretation of Satellite Imagery

PhotoSat uses Orthorectified ASTER satellite scenes as a foundation to produce a suite of alteration and colour enhanced image products for gold, silver, copper, uranium, and nickel exploration projects. The best ASTER scenes are selected from a worldwide archive to provide alteration and geological information. Available products include Colour image, Iron Oxide Alteration, Hydroxyl Alteration: Intensity, Hydroxyl Alteration: Kaolinite-Alunite, Sericite Alteration, Silica Alteration, Vegetation Intensity and Greyscale Image. Advanced Products include Spectral Matching and Lithological Enhancement.

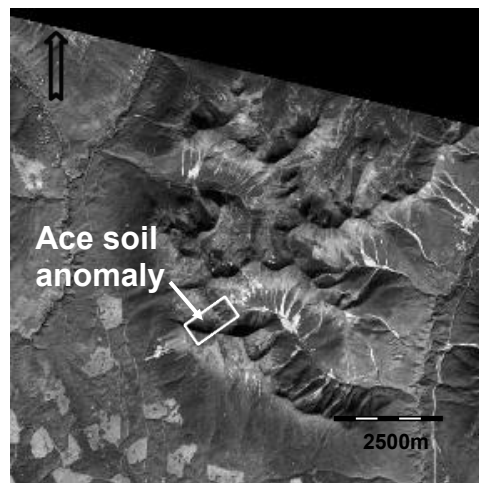


Plate 2: Greyscale image

### 9.4.1 Vegetation Intensity

Color, Greyscale and Vegetation Intensity images are produced with a resolution of 15m and a pixel size of 12.5m. The Vegetation Intensity plot is important in that in areas of heavy vegetation growth, the underlying soil is covered and as a result there is no reflectance of light from the minerals present in that soil. The satellite cannot see or measure the reflectance from the soil or rock that may be present. Data of the various alteration images below is only collected in regions with sparse vegetation cover.

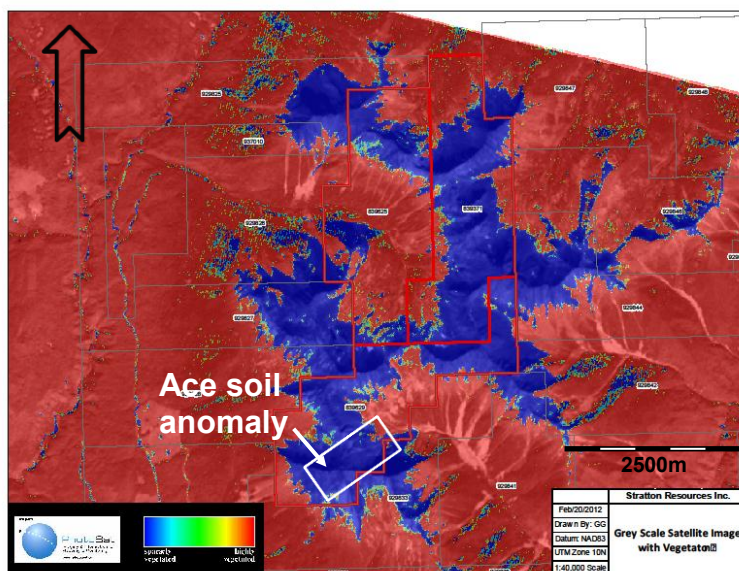


Plate 3 Vegetation Intensity

### 9.4.2 Iron Oxide Alteration

Images are produced with a resolution of 15m and a pixel size of 12.5m. As seen in the image to the right, the pyritic gossan surrounding the northeast trending dyke swarms in the Ace soil anomaly area are highlighted with numerous zones of “probable iron oxide” downslope to the southwest and within the anomaly area. Possible extensions are seen along strike a further 2km to the northeast with a second zone of probable iron oxide mapped approximately 4km to the northeast. A large zone of probable iron oxide is noted on the north contact of the Bulkley intrusion with several zones on the east contact in the vicinity of the Natlan Mo-Cu showing. A small zone of probable iron oxide is seen in the vicinity of the proposed parallel structure to the southeast of the Ace soil anomaly.

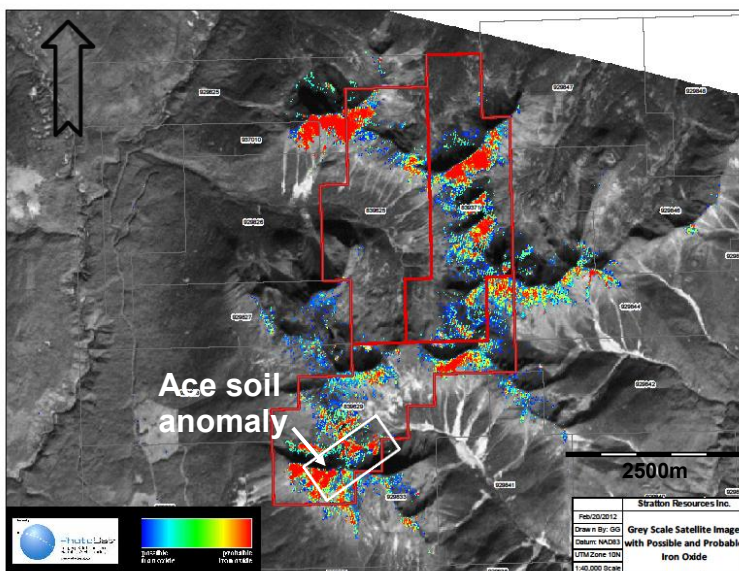
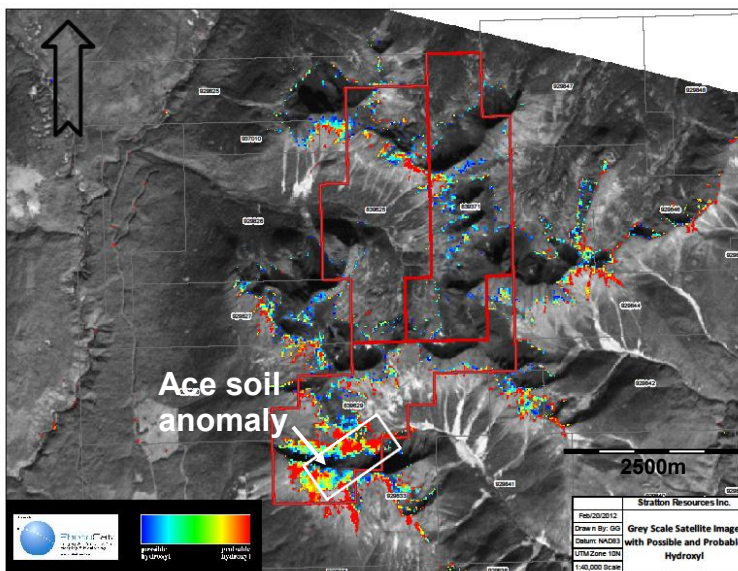


Plate 4: Iron Oxide Alteration



### 9.4.3 Hydroxyl Alteration: Intensity

Images are produced with a resolution of 30m and a pixel size of 12.5m. The image is a cumulative measure of minerals such as alunite, sericite, kaolinite, dickite, illite and montmorillonite and as such would be analogous to “clay alteration”. Of immediate note is the area within and to the southwest of the Ace soil anomaly. This area has been noted as having intense sericite and clay alteration of some of the granitic dyke swarms. Zones of probable hydroxyl



alteration are also noted along strike to the northeast and to the southeast in the general area of the proposed parallel structure.

Plate 5: Hydroxyl Alteration: Intensity

### 9.4.4 Hydroxyl Alteration: Probable Kaolinite - Probable Alunite

Images are produced with a resolution of 30m and a pixel size of 12.5m. The presence of kaolinite alteration can reflect surface oxidation processes or may be an indicator of intermediate argillic alteration. The presence of alunite alteration generally is indicative of advanced argillic alteration. Three areas of interest are noted on the Kaolinite-Alunite image. There appears to be a wide advanced argillic alteration zone in the sediments surrounding the Ace soil anomaly which may indicate the presence of a shallow buried intrusion under a wide area. A second zone of advanced argillic alteration is mapped around the eastern contact of the Bulkeley intrusion in the vicinity of the Natlan Mo-Cu

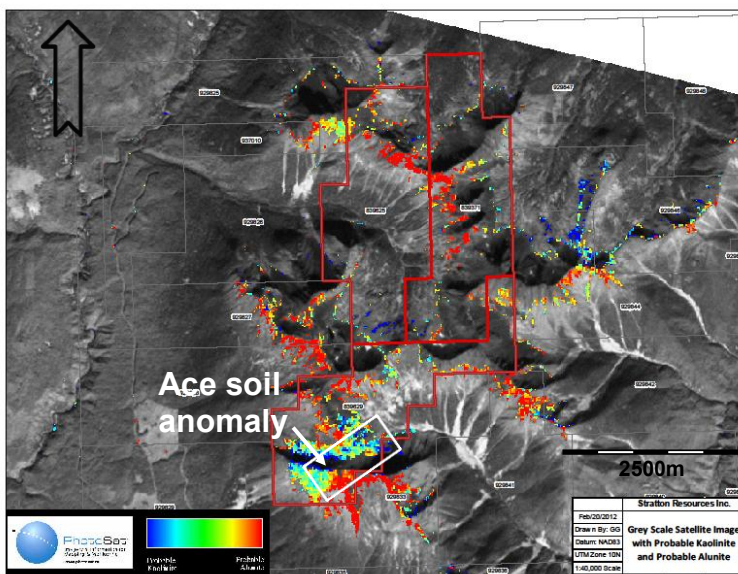


Plate 6: Hydroxyl Alteration: Probable Kaolinite - Probable Alunite



mineralization. A zone of intermediate argillic alteration is suggested to the southeast with a wide zone of “Probable Kaolinite” alteration.

### 9.4.5 Sericite Alteration

Images are produced with a resolution of 30m and a pixel size of 12.5m. In the Ace soil anomaly area, moderate to strong pervasive sericite alteration is noted over a large portion of the dykes present (Evans, 1998). Wide areas of “Probable Sericite” alteration are mapped in the vicinity of the soil anomaly as well as on the periphery of the Bulkley intrusive. Linear north-easterly trending zones are present to the east, paralleling the soil anomaly structure. Probable Sericite alteration is also noted to the southeast in the vicinity of the suspected northeast trending structure responsible in part for the blowouts of higher magnetism present there.

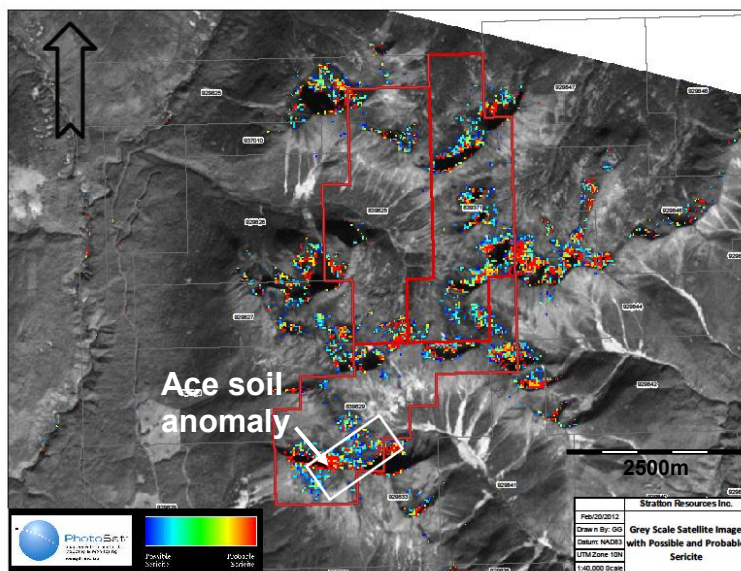


Plate 7: Sericite Alteration

### 9.4.6 Silica Alteration

Images are produced with a resolution of 90m and a pixel size of 75m. Obvious northeast trending zones are noted parallel to and on strike with the Ace soil anomaly structure. The strike length of these Probable Silica zones is approximately 4.5km. The stockwork quartz zones noted at the Ace soil anomaly are only partially mapped by the Silica Alteration image. The strike length of the proposed structure through the known Cu-in-soils anomaly to the northeastern extent of the of Possible Silica Alteration is approximately 8km.

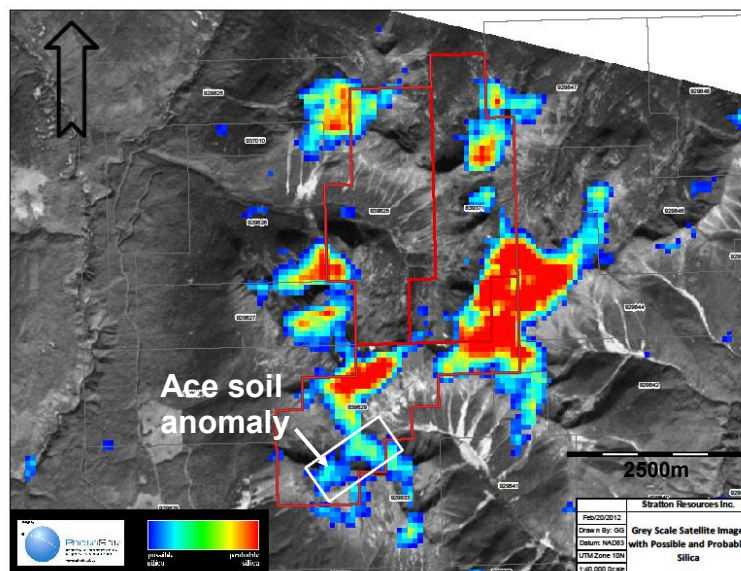


Plate 8: Silica Alteration

Probable Silica alteration is also seen on the east, north and northeastern margins of the Bulkley intrusion.

#### **Item 10: Drilling**

No drilling was completed as part of the exploration program.

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

No samples were collected as part of the exploration program.

#### **Item 12: Data Verification**

No data verification was completed as part of the 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**

Porphyry copper-gold deposits and occurrences in the Babine district, located approximately 85km to the southeast, described below, serve as analogues to the exploration model applied to the Property. The table below lists resources and production from major deposits in the district. The values from Bell and Granisle pre-date NI 43-101 reporting standards and should not be considered reliable. They are included as geological information only.

**Table 3: Resources and Production of major Babine Porphyry Deposits**

Property	Mineral Resource			Mined			Reference	Category
	Million Tonnes	Cu %	Au g/t	Million Tonnes	Cu %	Au g/t		
Bell	296	0.46	0.20	77.2	0.47	0.26	Carter et al, 1995	non NI 43-101 compliant
Granisle	119	0.41	0.15	52.7	0.47	0.20	Carter et al, 1995	non NI 43-101 compliant
Morrison	207	0.39	0.2				Simpson, 2007	measured+ indicated
Hearne Hill	0.14	1.73	0.8				Simpson, 2008	indicated

The author has been unable to verify the information on mineral occurrences and deposits detailed below. Mineralization style and metal grades described are not necessarily representative of mineralization that may exist on the subject Property, and

are included for geological illustration only. The mine and mineral occurrence descriptions described as follows are modified after the BC MINFILE occurrence descriptions and BC ARIS assessment report files.

### **15.1 Bell Copper Mine (Minfile 093M 01, rev. McMillan, 1991)**

The Bell mine is a porphyry copper deposit hosted primarily in a biotite-feldspar porphyry (BFP) stock of the Eocene Babine Intrusions. The stock is crosscut by the northwest trending Newman fault which juxtaposes the two groups that host the intrusion. These groups are the Lower Jurassic Telkwa Formation (Hazelton Group) and the Lower Cretaceous Skeena Group. Telkwa Formation rocks are primarily fine grained tuffs and andesites and the younger Skeena Group rocks are mostly fine grained greywackes. The deposit overlaps onto both of these assemblages. The mineralization has been dated at 51.0 million years (Bulletin 64).

Chalcopyrite and lesser bornite occur as disseminations in the rock matrix, in irregular quartz lenses and in a stockwork of 3 to 6- millimetre quartz veinlets which cut the feldspar porphyries and the siltstones. Molybdenite is rare, and occurs in the feldspar porphyry in the northern part of the mineralized zone. Gold occurs as electrum associated with the copper mineralization. Specular hematite and magnetite are common in quartz veinlets and hairline fractures. There is also significant supergene enrichment with chalcocite coating chalcopyrite. A supergene chalcocite zone capped the deposit and extended to depths of 50 to 70 metres. Some gypsum together with copper-iron sulphate minerals and iron oxides were also present (Open File 1991-15).

The ore zone has pervasive potassic (mainly biotitization) alteration with a surrounding concentric halo of chlorite and sericite-carbonate alteration (propylitic and argillic) which corresponds to the two kilometre pyrite halo which surrounds the deposit. A late quartz-sericite-pyrite-chalcopyrite alteration has been superimposed on part of the earlier biotite-chalcopyrite ore at the western part of the ore body. A number of late-stage breccia pipes cut the central part of the ore zone near the Newman fault and alteration associated with their intrusion has apparently depleted the copper grades in the area of the pipes. Veinlets of gypsum are present in the upper part of the ore body. Anhydrite is a significant component in the biotite chalcopyrite zone but is not present in other alteration facies. Monominerallic veinlets of anhydrite are rare (Open File 1991-15).

The copper mineralization occurs in a crescent-shaped zone along the western contact of the porphyry plug. Better grades of copper mineralization are contained in a 60 by 90-metre thick flat-lying, blanket-like deposit which is connected to a central pipe-like zone, centred on the western contact of the intrusive. The pipe-like zone of copper mineralization is 150 metres in diameter and extends to a depth of at least 750 metres.

Reserves in the open pit and in the Extension zone were (in 1990) 71,752,960 tonnes grading 0.23 gram per tonne gold, 0.46 per cent copper and 0.48 gram per tonne silver (Noranda Inc. Annual Report 1990).

**15.2 Granisle Mine (Minfile 093L 146, rev. Duffett, 1987)**

MacDonald Island is underlain by Lower-Middle Jurassic Telkwa Formation (Hazelton Group) volcanics comprised of green to purple waterlain andesite tuffs and breccias with minor intercalated chert pebble conglomerates in the central and eastern part of the island. These rocks strike northerly and dip at moderate angles to the west and are overlain in the western part of the island by massive and amygdaloidal andesitic flows and thin bedded shales.

Copper mineralization at the Granisle mine is associated with a series of Eocene Babine Intrusions which occur in the central part of the island. The oldest is an elliptical plug of dark grey quartz diorite approximately 300 by 500 metres in plan. The most important intrusions are biotite-feldspar porphyries of several distinct phases which overlap the period of mineralization. The largest and oldest is a wide north easterly trending dike which is intrusive into the western edge of the quartz diorite pluton. The contact is near vertical and several small porphyry dikes radiate from the main dike. Several of the phases of the porphyry intrusions are recognized within the pit area. Potassium-argon age determinations on four biotite samples collected in and near the Granisle ore body yielded the mean age of 51.2 Ma plus or minus 2 Ma (Minister of Mines Annual Report 1971).

The wide porphyry dike which strikes northeast is bounded by two parallel northwest striking block faults. The westernmost crosses the island south of the mine and the eastern fault extends along the channel separating the island from the east shore of Babine Lake.

An oval zone of potassic alteration is coincident with the ore zone. The main alteration product is secondary biotite. This potassic alteration zone is gradational outward to a quartz-sericite-carbonate-pyrite zone which is roughly coaxial with the ore zone. Within this zone, the intrusive and volcanic rocks are weathered to a uniform buff colour with abundant fine-grained quartz. Mafic minerals are altered to sericite and carbonate with plagioclase clouded by sericite. Pyrite occurs as disseminations or as fracture-fillings. Beyond the pyrite halo, varying degrees of propylitic alteration occurs in the volcanics with chlorite, carbonate and epidote in the matrix and carbonate-pyrite in fractured zones. Clay mineral alteration is confined to narrow gouge in the fault zones.

The principal minerals within the ore zone are chalcopyrite, bornite and pyrite. Coarse-grained chalcopyrite is widespread, occurring principally in quartz-filled fractures with preferred orientations of 035 to 060 degrees and 300 to 330 degrees with near vertical dips. Bornite is widespread in the southern half of the ore zone with veins up to 0.3 metres wide hosting coarse-grained bornite, chalcopyrite, quartz, biotite and apatite.

Gold and silver are recovered from the copper concentrates. Molybdenite occurs within the ore zone, most commonly in drusy quartz veinlets which appear to be later than the main stage of mineralization. Magnetite and specularite are common in the north half of the ore zone where they occur in fractures with chalcopyrite and pyrite. Pyrite occurs in

greatest concentrations peripheral to the orebody as blebs, stringers and disseminations.

Mining at Granisle was suspended in mid-1982. Production from 1966 to 1982 totalled 52,273,151 tonnes yielding 69,752,525 grams of silver, 6,832,716 grams of gold, 214,299,455 kilograms of copper and 6,582 kilograms molybdenum.

Unclassified reserves are 14,163,459 tonnes grading 0.442 per cent copper (Noranda Mines Ltd. Annual Report 1984).

Remaining in situ reserves, as modelled in 1992 using a 0.30 per cent copper cutoff, are estimated to be 119 million tonnes grading 0.41 per cent copper and 0.15 grams per tonne gold (CIM Special Volume 46, page 254).

### **15.3 Morrison–Hearne Hill Project (From Simpson, 2007)**

The Morrison deposit is a calc-alkaline copper-gold porphyry hosted by a multi-phase Eocene intrusive body intruding Middle to Upper Jurassic Ashman Formation siltstones and greywackes. Copper-gold mineralization consists primarily of chalcopyrite and minor bornite concentrated in a central zone of potassic alteration. A pyrite halo is developed in the chlorite-carbonate altered wall rock surrounding the copper zone.

Sulphide mineralization at Morrison shows strong spatial relationships with the underlying biotite-feldspar porphyry (BFP) plug and associated alteration zones. The central copper-rich core is hosted mainly within a potassically altered BFP plug with intercalations of older siltstone. This plug was initially intruded into the siltstone unit as a near-vertical sub-circular intrusion approximately 700 m in diameter. It was subsequently disrupted by the East and West faults and now forms an elongated body extending some 1500 metres in the northwest direction.

Chalcopyrite is the primary copper-bearing mineral and is distributed as fine grained disseminations in the BFP and siltstone, as fracture coatings or in stockworks of quartz. Minor bornite occurs within the higher grade copper zones as disseminations and associated with the quartz-sulphide stockwork style of mineralization.

Alteration is concentrically zoned with a central biotite (potassic) alteration core surrounded by a chlorite-carbonate zone. No well-developed phyllic zone has been identified.

Hearne Hill deposit lies two kilometres southeast of Morrison. The Hearne Hill Property has been extensively explored, and a comparatively small but high grade copper-gold resource has been defined in two breccia pipes within a larger porphyry system.

### **15.4 Wolf (Minfile 093M 008, rev. McMillan, 1991)**

The Wolf prospect is located on the west side of Morrison Lake, The Wolf area has been explored since 1965 when it was staked as the Bee claims.

A granodiorite stock containing phases of quartz monzonite and hornblende biotite feldspar porphyry of the Eocene Babine Intrusions cuts grey, locally graphitic siltstones of the Middle to Upper Jurassic Ashman Formation (Bowser Lake Group). A north-northwest trending block fault separates Ashman Formation rocks from volcanoclastic sandstones and tuffs of the Jurassic Smithers Formation (Hazelton Group) on the east side of the property. The Newman fault, associated with mineralization in the area, occurs just to the northeast of the claims parallel to the baseline.

At least nine copper occurrences, hosted in quartz monzonite, have been documented. Chalcopyrite occurs as disseminations and as grains and films on fracture surfaces and is occasionally accompanied by molybdenite. Minor malachite and iron-oxides have been noted.

A drill hole in biotite feldspar porphyry intersected 1.2 metres grading 4.2 per cent copper (Assessment Report 8779).

### **15.5 Huckleberry (Minfile 093E 037, rev. Meredith-Jones, 2012)**

At the Huckleberry deposit, 190km to the southwest, porphyry copper and molybdenum mineralization is associated with a near elliptical stock of Upper Cretaceous age granodiorite porphyry (Bulkley Intrusions) measuring approximately 670 by 425 metres. The stock intrudes fine-grained crystal tuff of the Lower-Middle Jurassic Hazelton Group. Tuffs adjacent to the intrusion have been hornfelsed.

Mineralization consists of chalcopyrite and minor molybdenite in fractures, principally in the hornfelsed volcanics but also in the stock. Minerals accompanying chalcopyrite are quartz, orthoclase and pyrite with probably later calcite, gypsum and zeolite. Magnetite occasionally accompanies chalcopyrite. Disseminated chalcopyrite also occurs. Molybdenite usually occurs with quartz in hairline fractures. The mineralization generally occurs around the stock contact but the extent outward from the contact and the grade vary greatly. The best mineralization occurs on the east side of the stock. Potassic, pyrite and chlorite alteration haloes surround the stock.

The ore zones at Huckleberry are enclosed by an easterly-oriented zone of alteration approximately 4 kilometres long and 1 kilometre to 2 kilometres wide. The Main zone occurs along the eastern periphery of a sub-circular stock located in the western part of the alteration zone and is further centred on an apophysis of the stock. Most of the mineralization occurs in an arc measuring 500 metres by 100 metres. The East zone occurs within and surrounding a similar porphyritic stock in the eastern part of the system and is approximately 900 metres by 300 metres and remains open at depth. The East zone appears to be centred on an apophysis of the East zone.

The Huckleberry mine 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.

**15.6 Berg (Minfile 093E 046, rev. Flower, 2009)**

The area of the Berg porphyry copper-molybdenum deposit, situated 175km to the south, is underlain by massive and clastic volcanic and sedimentary rocks of the Lower-Middle Jurassic Hazelton Group. These rocks have been intruded by an elongate body of quartz diorite and a circular quartz monzonite porphyry stock (Berg Stock) approximately 800 metres in diameter. A breccia pipe and quartz latite porphyry dikes postdate the stock. Volcanic and sedimentary rocks adjacent to the stock have been metamorphosed to biotite hornfels. Mineralization is associated with the Eocene age porphyry stock.

The most common forms of primary mineralization are fracture-controlled and disseminated pyrite and chalcopyrite with quartz stockworks of pyrite, molybdenite and chalcopyrite. Less commonly, quartz and quartz-carbonate veins contain pyrite, sphalerite, galena, chalcopyrite and sulphosalt minerals. Secondary copper sulphides, with chalcocite being the most important, are found in an enrichment blanket over most of the deposit. Primary ore minerals are most abundant in an asymmetrical annular zone around the quartz monzonite stock.

In general, the best molybdenum mineralization is within and adjacent to the stock while the highest copper values are normally 70 metres or more beyond the contact. The best developed mineralization occurs along the eastern side of the stock.

A pyrite halo extends 300 to 600 metres beyond the stock contact. Potassic, phyllic, propylitic and argillic alteration types are all present at Berg.

The deposit has a recently published 43-101 compliant measured & indicated resource of 557.8.5 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.

**15.7 Poplar (Minfile 093L 239, rev. Duffett, 1988)**

The Poplar deposit is located 155km south of the Property, where Lower-Middle Jurassic Hazelton Group volcanics are intruded by a Middle-Late Cretaceous Bulkley Intrusions. The Hazelton rocks are comprised of massive andesite, tuff, lapilli tuff, agglomerate, flow breccia with narrow bands and interbedded argillite. This group is overlain by Juro-Cretaceous sediments which are estimated to be 400 metres thick. The basal unit is comprised of gritty argillite overlain by sorted to unsorted medium to coarse-grained sandstone and conglomerate. The average bedding strikes 035 degrees and dips 60 degrees to the southeast.

The Bulkley Intrusions are comprised of a granodiorite to biotite monzonite porphyry which is aplitic near the contact margins. The stock is weakly mineralized with chalcopyrite, molybdenite and pyrite in fracture-fillings. As well, the biotite porphyry hosts an estimated 1.5 per cent of disseminated sulphides, mainly pyrite with minor chalcopyrite.

A 200-metre wide dike swarm associated with the biotite porphyry stock crosscuts the volcanics which have undergone considerable fracturing/faulting and hornfelsing throughout. Mineralization in the quartz veins and dike swarms is comprised of pyrite with minor chalcopyrite.

There is a well-developed hydrothermal alteration facies concentric to the biotite porphyry which includes potassic, phyllic, argillic and propylitic zones. There is weak hornfelsing throughout the volcanics and it is strongest near the contact with the granodiorite stock. Mineralization in the hornfelsed aureole consists mainly of disseminated pyrite with very minor chalcopyrite.

Reserves were estimated at 75,000,000 tonnes at 0.35 per cent copper, 0.06 per cent molybdenum (0.1 per cent MoS<sub>2</sub>) and 2.8 grams per tonne silver (CIM Special Volume 37, page 185).

### **15.8 Mt. Thomlinson (Minfile 093M 080, rev. Owsiacski, 1990)**

The Mount Thomlinson property is located on the north side of Mount Thomlinson Mountain Range, 5 kilometres north of Thomlinson Peak, 40 kilometres north of Hazelton and 23km northwest of the Property.

Massive black argillaceous siltstones and argillites of the Middle Jurassic to Lower Cretaceous Bowser Lake Group have been intruded by a roughly circular stock (1400 metres diameter) of leucocratic quartz monzonite porphyry of the Eocene Babine Intrusions. Near the contact, the sedimentary rocks have been deformed and metamorphosed to medium or dark grey schists in a zone 91 to 152 metres wide. Stock contacts are sharp and biotite, muscovite, cordierite and andalusite have been formed in the contact aureole. The margins of the stock are foliated parallel to the contact and to the schistosity in the intruded rocks up to 100 metres from the contact. Much of the stock is a coarse-grained porphyry with potassium feldspar phenocrysts up to 5 centimetres long. In many areas, the stock is cut by narrow (2-10 centimetres) aplite dikes. These dikes occur in swarms and occupy well-defined fractures. A potassium-argon age date from biotite from the stock resulted in an age of 54 Ma (Geological Survey of Canada Open File 2322).

Molybdenite, chalcopyrite and pyrite are associated with a system of quartz vein stockworks within the intrusive, along the contact hornfelsed zone with the argillaceous rocks. The quartz stockwork is best developed along this stock contact and post-dates the aplite dikes. The mineralized zone trends north-northeast (030 degrees) along the margin of the stock, and dips 58-65 degrees west. It is tabular and up to 100 metres wide. Molybdenite is most common as fine flakes in quartz veinlets and as smears along fracture planes. Locally it occurs as coarse flakes in quartz veins. Weathering of mineralization has been considerable, and in many areas extends from 60 to 91 metres below the surface. Limonite, ferrimolybdate, malachite and to a lesser extent, azurite, are the principal secondary minerals. Chalcopyrite, malachite and azurite also occur along fractures and veins. Although chalcopyrite is found in the same general areas as



molybdenite, the two sulphides occur independently of each other. Pyrite (1-5 per cent) is found as disseminations, fracture-fillings and patchy crystalline concentrations in the intrusive and adjacent argillites. Minor amounts of magnetite, scheelite and pyrrhotite are also evident. The better grade rock lies several metres from the contact within the intrusive rock. In general the mineralization extends farther into the intrusive than into sediments, and in many places the amount of mineralization drops off sharply at the contact.

Although mineralization has been found over a strike length of 900 metres, the width and grades vary considerably. The zone becomes more complex and less well-defined to the northeast with narrow sections of mineralized rock separated by relatively barren rock. Deposition of sulphides appears to have been largely controlled by this northwest dipping zone of fracturing and shearing.

Alteration within and close to the mineralized zone comprises substantial silicification with argillic and chloritic assemblages and sericitic overprinting.

Measured, indicated and inferred reserves are 40.82 million tonnes grading 0.071 per cent molybdenum (0.12 per cent MoS<sub>2</sub>)(CIM Special Volume 15 (1976), Table 3, page 422). Conversion to Mo using the factor 1.6681.

### **15.9 Fireweed (Minfile 093M 151, rev. Payie, 2009)**

The Fireweed occurrence is located on the south side of Babine Lake, approximately 54 kilometres northeast of Smithers. In the occurrence area, Upper Cretaceous marine to non-marine clastic sediments, of Skeena group are found adjacent to volcanic rocks of the Rocky Ridge Formation. Interbedded mudstones, siltstones and sandstones of a thick deltaic sequence, appear to underlie much of the area and were originally thought to belong to the Kisum Formation of the Lower Cretaceous Skeena Group. They are now assigned to the Red Rose Formation. The sediments commonly strike 070 to 080 degrees and dip sub-vertically. Locally the strike varies to 020-030 degrees at the discovery outcrop, the MN showing. Several diamond-drill holes have intersected sills of strongly altered feldspar porphyritic latite.

Skeena Group sediments are dominantly encountered in diamond drilling. The sediments are dark and medium to light grey and vary from mudstone and siltstone to fine and coarse-grained sandstone. Bedding can be massive, of variable thickness, changing gradually or abruptly to finely laminated. Bedding features such as rip-up clasts, load casts and cross-bedding are common. The beds are cut by numerous faults, many of them strongly graphitic. Drilling indicates Skeena Group sediments are in fault contact with Hazelton Group volcanic rocks. Strongly sericitized and carbonatized latite dikes cut the sediments.

Mineralization generally occurs in one of three forms: 1) breccia zones are fractured or brecciated sediments infilled with fine to coarse-grained massive pyrite-pyrrhotite and lesser amounts of sphalerite, chalcopyrite and galena 2) disseminated sulphides occur as fine to very fine grains which are lithologically controlled within coarser grained

sandstones, pyrite, marcasite, sphalerite, galena and minor tetrahedrite are usually found interstitial to the sand grains and 3) massive sulphides, which are finegrained, commonly banded, containing rounded quartz-eyes and fine sedimentary fragments, occur as distinct bands within fine-grained sediments. The massive sulphides generally contain alternating bands of pyrite/ pyrrhotite and sphalerite/galena. They are associated with the breccia zones and are commonly sandwiched between altered quartz latite dikes.

Alteration in the sediments occurs in the groundmass and appears associated with the porous, coarse sandstones. Common secondary minerals are quartz, ankerite, sericite, chlorite and kaolinite.

Three main zones have been identified by geophysics (magnetics, induced polarization) and are named the West, East and South zones. Three other zones identified are the 1600, 3200 and Jan zones.

#### **15.10 Equity Silver (Minfile 093L 001, rev. Robinson, 2009)**

Silver, copper and gold were produced from the Equity Silver deposit, located 150km to the southeast of the Property.

The mineral deposits are located within an erosional window of uplifted Cretaceous age sedimentary, pyroclastic and volcanic rocks near the midpoint of the Buck Creek Basin. Strata within the inlier strike 015 degrees with 45 degree west dips and are in part correlative with the Lower-Upper Skeena(?) Group. Three major stratigraphic units have been recognized. A lower clastic division is composed of basal conglomerate, chert pebble conglomerate and argillite. A middle pyroclastic division consists of a heterogeneous sequence of tuff, breccia and reworked pyroclastic debris. This division hosts the main mineral deposits. An upper sedimentary-volcanic division consists of tuff, sandstone and conglomerate. The inlier is flanked by flat-lying to shallow dipping Eocene andesitic to basaltic flows and flow breccias of the Francois Lake Group (Goosly Lake and Buck Creek formations).

Intruding the inlier is a small granitic intrusive (57.2 Ma) on the west side, and Eocene Goosly Intrusions gabbro-monzonite (48 Ma) on the east side.

The chief sulphides at the Equity Silver mine are pyrite, chalcopyrite, pyrrhotite and tetrahedrite with minor amounts of galena, sphalerite, argentite, minor pyrargyrite and other silver sulphosalts. These are accompanied by advanced argillic alteration clay minerals, chlorite, specularite and locally sericite, pyrophyllite, andalusite, tourmaline and minor amounts of scorzalite, corundum and dumortierite. The three known zones of significant mineralization are referred to as the Main zone, the Southern Tail zone and the more recently discovered Waterline zone. The ore mineralization is generally restricted to tabular fracture zones roughly paralleling stratigraphy and occurs predominantly as veins and disseminations with massive, coarse-grained sulphide replacement bodies present as local patches in the Main zone. Main zone ores are fine-grained and generally occur as disseminations with a lesser abundance of veins.

Southern Tail ores are coarse-grained and occur predominantly as veins with only local disseminated sulphides. The Main zone has a thickness of 60 to 120 metres while the Southern Tail zone is approximately 30 metres thick. An advanced argillic alteration suite includes andalusite, corundum, pyrite, quartz, tourmaline and scorzalite. Other zones of mineralization include a zone of copper-molybdenum mineralization in a quartz stockwork in and adjacent to the quartz monzonite stock and a large zone of tourmaline-pyrite breccia located to the west and northwest of the Main zone.

Alteration assemblages in the Goosly sequence are characterized by minerals rich in alumina, boron and phosphorous, and show a systematic spatial relationship to areas of mineral deposits. Aluminous alteration is characterized by a suite of aluminous minerals including andalusite, corundum, pyrophyllite and scorzalite. Boron-bearing minerals consisting of tourmaline and dumortierite occur within the ore zones in the hanging wall section of the Goosly sequence. Phosphorous-bearing minerals including scorzalite, apatite, augelite and svanbergite occur in the hanging wall zone, immediately above and intimately associated with sulphide minerals in the Main and Waterline zones. Argillic alteration is characterized by weak to pervasive sericite-quartz replacement. It appears to envelope zones of intense fracturing, with or without chalcopyrite/tetrahedrite mineralization.

The copper-silver-gold mineralization is epigenetic in origin. Intrusive activity resulted in the introduction of hydrothermal metal-rich solutions into the pyroclastic division of the Goosly sequence. Sulphides introduced into the permeable tuffs of the Main and Waterline zones formed stringers and disseminations which grade randomly into zones of massive sulphide. In the Southern Tail zone, sulphides formed as veins, fracture-fillings and breccia zones in brittle, less permeable tuff. Emplacement of post-mineral dikes into the sulphide-rich pyroclastic rocks has resulted in remobilization and concentration of sulphides adjacent to the intrusive contacts. Remobilization, concentration and contact metamorphism of sulphides occurs in the Main and Waterline zones at the contact with the postmineral gabbro-monzonite complex.

The Southern Tail deposit has been mined out to the economic limit of an open pit. With its operation winding down, Equity Silver Mines does not expect to continue as an operating mine after current reserves are depleted. Formerly an open pit, Equity is mined from underground at a scaled-down rate of 1180 tonnes-per-day. Proven and probable ore reserves at the end of 1992 were about 286,643 tonnes grading 147.7 grams per tonne silver, 4.2 grams per tonne gold and 0.46 per cent copper, based on a 300 grams per tonne silver-equivalent grade. Equity has also identified a small open-pit resource at the bottom of the Waterline pit which, when combined with underground reserves, should provide mill feed through the first two months of 1994 (Northern Miner - May 10, 1993).

Equity Silver Mines Ltd. was British Columbia's largest producing silver mine and ceased milling in January 1994, after thirteen years of open pit and underground production. Production totaled 2,219,480 kilograms of silver, 15,802 kilograms of gold

and 84,086 kilograms of copper, from over 33.8 Million tonnes mined at an average grade of 0.4 per cent copper, 64.9 grams per tonne silver and 0.46 gram per tonne gold.

#### **Item 16: Other Relevant Data and Information**

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

#### **Item 17: Interpretation and Conclusions**

Historical exploration highlights on the Ace target (Mastadon-Highland-Bell and Teck Resources) include a northeast trending, >500ppm Cu-in-soils anomaly over widths of 250-800m and with a strike length in excess of 1800m with peak values of Cu to 1500ppm, Mo to 500ppm, Ag to 22.8ppm and Au to 500ppb (from a single sample site). Rock sampling from the northeast trending sericite altered granodiorite dyke swarms returned results ranging from 5-910 ppb Au, 0.4-578.0 ppm Ag, and commonly 0.10-0.48% Cu, including one chip sample that returned 910ppb Au, 36gm/t Ag and 1169ppm Cu over 5m. Other associated anomalous elements in this rock unit include As with maximum values of >1%, Pb to 0.41%, Sb to 0.30%, Mo to 0.14% and Zn to 0.33%. Selective grab sampling by Paget Resources in 2008 returned values up to 0.6% Cu, 0.245% Mo, 3.27gm/t Au and 200gm/t Ag.

A review of Regional Geochemical data show that the Natlan Peak area is highly anomalous in antimony (6.9ppm), arsenic (55ppm), gold (38ppb), mercury (180ppm), and molybdenum (12ppm) and moderately anomalous in copper (70ppm). Creeks on the eastern part of the property away from the surface exposure of the Bulkley intrusive exhibit somewhat stronger anomalies in antimony, arsenic, gold and mercury which could be indicative of precious metals enrichment in the roof zone of a buried intrusion. The apparent lack of copper in stream sediments on the western side of the property is due in part to the location of the RGS sample sites away from known areas of significant copper-in-soils and may also be a reflection of the highly oxidized nature of the mineralization found on the property to date.

Interpretation of regional 1<sup>st</sup> derivative magnetic data in the Natlan Peak area reveals a much larger magnetic anomaly than that associated with the mapped surface extent of the Bulkley intrusion. The magnetic anomaly is believed to represent a much larger, shallowly buried intrusion now covered in its entirety by the Natlan claims with the exception of a small area covered by mineral claims owned by others on the northwestern flank of the anomaly. A number of possible faults have been identified from the magnetic data, the most important to date, correlating with the northeast trending Ace soil anomaly. This possible normal fault, with the southeast side dropped, could have a strike length in excess of 9km. A second parallel fault is thought to exist approximately 2400m to the southeast and is partially responsible for magnetic blowouts, possibly representing areas where the buried intrusion is closer to the surface. A number of northwest trending faults, spaced approximately 2200m apart, are thought to exist based on the magnetic data.

Analysis of Orthorectified ASTER satellite images reveals accumulations of “probable iron oxide”, “probable hydroxyl”, i.e. clay alteration, “probable sericite” and “probable silica” alteration immediately on strike to the southwest and up to 6km to the northeast of the Ace soil anomaly. Parallel zones of “probable silica” alteration have been recorded over a distance of 4500m, 1400m to the north of the Ace anomaly. This zone of silica alteration is much more intense and widespread than that associated with the Ace showing area. The quartz-stockwork zones, which make up 10-40% of the rock mass within the dyke swarms, at the Ace showing, only reaches the mid-range of the possible silica - probable silica scale. The strike length of the proposed structure, through the known Cu-in-soils anomaly to the northeastern extent of the Possible Silica Alteration as mapped, is approximately 8km.

Composite chip sampling at the Natlan target, by Canadian Nickel Company Limited, of highly oxidized and gossanous Bulkley intrusion, returned values of Mo to 1650ppm and Cu to 700ppm over an area 3600m x 1800m

Analysis of Orthorectified ASTER satellite images reveals accumulations of “probable iron oxide”, “probable hydroxyl”, “probable sericite” and “probable silica” alteration in the contact area of the Bulkley intrusion, especially on the northern and northeastern boundaries of the intrusion. In the vicinity of the Natlan showing these intense alterations are noted over an area approximately 3km long

On review of the historical exploration data in conjunction with the interpretations of RGS, regional magnetic and satellite reflectance data, the Natlan property presents as an intriguing exploration project with multiple target areas worthy of further exploration. The author believes that the Natlan property is a property of merit and has the potential of hosting one or more significant mineral deposits.

**Item 18: Recommendations**

The Natlan property hosts a number of significant exploration targets, some of which have received preliminary evaluation in the past. While none of the data is believed to be erroneous, most of it would be regarded as dated. As a result, a two phase program of exploration is proposed. Phase 1 would include establishing a picket grid over both the Ace and Natlan showing areas for follow up geochemical and geophysical (magnetic and Induced Potential) surveys. At the Ace target, grid should be established with an 8000m long baseline oriented at 055° with 2000m long lines spaced 200 and 400m apart. Lines should be wide spaced over the entire grid with closer spacing over areas of known or suspected mineralization. This line orientation will cross the trend of the proposed northeast fault and the general strike of the mineralized dykes. The grid would also cover the area of “probable iron oxide” alteration noted approximately 2000m to the northeast of the known area of Cu-in-soils anomaly and the large zone of “probable and possible silica” alteration. Geochemical sample spacing should initially be at 100m intervals along the lines resulting in approximately 700 samples over 64 line km of grid at the Ace target. Geophysical surveys (magnetics and Induced Potential) should be initially completed at 400m line spacing over the southwestern 4km of grid resulting in 26line km of grid being surveyed.

In the Natlan target area, grid should be established with a 3000m long north/south oriented baseline along the eastern margin of the Bulkley intrusion with east/west trending lines, initially spaced 400m apart. The Natlan showing area appears much more rugged and it is doubtful that meaningful soil geochemical data could be collected. A geophysical program of magnetics and Induced Potential is recommended over the area. With 2000m lines spaced at 400m a total of 19 line km of grid would be surveyed. A mapping/prospecting/sampling program should be conducted over areas of interest identified by the satellite imagery.

A prospecting, reconnaissance geochemical (MMI/ah/Ph) survey should also be completed over the magnetic blowouts associated with the suspected southern parallel fault. Two 5km long lines would provide the 25% of background samples required to calculate the Response Ratios for the various pathfinder elements in an MMI geochemical survey. The lines should be oriented perpendicular to the 055° trend of the suspected faulting responsible for the magnetic blowouts.

Phase 2 would be dependent on the results obtained in the geochemical and geophysical surveys and would include the drilling of 2000m of NQ core in 10 holes over the property. Samples should be assayed in 2m intervals from surface with the entire hole being analysed.

## Proposed budget for 2012

## Phase 1

Project Geologist (60 days @ \$600/day)	36,000
Geologist (60 days @ \$500/day)	30,000
Prospector/sampler x 2 (60 days @ \$300/day)	36,000
Grid layout (83 line km @ \$100/km)	8,300
Assaying (1000 samples @ \$55/sample)	55,000
Geophysical surveys mag/IP (45 line km @ 2500/km)	112,500
Helicopter (120hrs @ \$1600/hr wet)	192,000
Room and Board (440 person days @ \$150/day)	66,000
Mob/demob	5,000
Reporting	20,000
Contingency (15%)	<u>84,120</u>
Phase 1 Total	\$644,920

## Phase 2

Project Geologist (70 days @ \$600/day)	42,000
Geologist (70 days @ \$500/day)	35,000
Core cutter (70 days @ \$200/day)	14,000
Drilling NQ (2000m @ \$220/m)	440,000
Assaying (1000 samples @ \$55/sample)	55,000
Helicopter (200hrs @ \$1600/hr wet)	320,000
Room and Board (510 person days @\$150/day)	76,500
Mob/demob	15,000
Reporting	20,000
Contingency (15%)	<u>152,625</u>
Phase 2 Total	1,170,125



**Item 19: References**

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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 "Interpretation of Orthorectified Satellite Imagery, Regional Geophysical and Stream Geochemical Surveys on the Natlan Property", dated February 21, 2012.

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 27 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 and a review of additional pertinent data.

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 on the Natlan 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 Stratton Resources Inc. 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 21th day of February, 2012.

"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****Personnel (August 15, 2011)**

George Nicholson (1 day @ \$500/day)	500
Michael Moore (1 day @ \$500/day)	500
Ryan Belanger (1 day @ \$400/day)	400

**Transportation**

Helicopter (1.5 hrs @ \$1600/hr)	2400
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ASTER Satellite imagery	6804
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**Report**

Interpretation and Report (4.5 days @ \$600/day)	<u>2700</u>
	\$13304

**Item 22: Software used in the Program**

Adobe Acrobat 9

Adobe Photoshop Elements 8.0

Adobe Reader 8.1.3

ArcGIS 10

Google Earth

Internet Explorer

Microsoft Windows 7

Microsoft Office 2010