

#### TECHNICAL REPORT GALAXY COPPER-GOLD PROJECT

Kamloops Mining District British Columbia, Canada **prepared for** 

# DISCOVERY-CORP ENTERPRISES INC.

by Christopher O. Naas *P.Geo*. CME Consultants Inc.

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# 1.0 SUMMARY

The Galaxy property (the Property) is located near Kamloops, British Columbia, seven kilometres east-southeast of the New Gold Inc.'s New Afton Mine and four kilometres northwest of KGHM Ajax Mining Inc.'s Ajax Project.

There is good access to the Property and good local infrastructure. The Property is comprised of two Crown granted mineral claims (Crown Grants) and seven two-post legacy mineral claims that cover an area of approximately 90 hectares. The legacy claims are 100% owned by Discovery-Corp Enterprises Inc. Discovery-Corp's claims are entirely surrounded by mineral claims held by others (primarily KGHM Ajax Mining Inc. and New Gold Inc.) that are being actively explored.

The Galaxy deposit is an elongate, northwest-trending fault-bounded zone of mineralization, hosted within Nicola volcanics and Sugarloaf diorite. The 600 metre long by 120 metre wide Galaxy deposit is comprised of two sections of mineralization separated by an east-west trending cross-fault. Mineralization is truncated at depth by a low-angle, west-southwest dipping thrust fault. This low-angle fault surfaces approximately 90 metres east of the Evening Star shaft, and thus also forms the eastern boundary of the deposit. A northwest-trending zone of picrite marks the position of a major steeply-dipping, northwest-trending fault and defines the western faulted contact of the deposit. The deposit reaches a maximum depth of 140 metres before it is cut-off by the western boundary fault.

Considerable exploration has been carried out on the Galaxy deposit since the late 1800's, including trenching, drilling, geophysical and geoechemical surveying. Limited production (48 tonnes) from the Evening Star shaft in 1916-1917 is also recorded.

Discovery-Corp obtained the property in 1990 and has undertaken soil sampling, rock sampling, ground magnetic surveying, reverse circulation drilling and diamond drilling. Significant intersections from the most recent drilling in 2012 include:

- GX12-04: 0.46% Cu, 0.13 g/t Au, 0.9g/t Ag over 33.63 metres (including 1.07% Cu, 0.30 g/t Au, 2.1 g/t Ag over 8.08 metres);
- GX12-05: 0.61% Cu, 0.14 g/t Au, 1.0g/t Ag over 48.28 metres (including 1.07% Cu, 0.21 g/t Au, 1.5 g/t Ag over 11.00 metres);
- GX12-06: 0.44% Cu, 0.11 g/t Au, 1.1/t Ag over 32.78 metres (including 0.62% Cu, 0.12 g/t Au, 1.7 g/t Ag over 14.52 metres).

In 2013, metallurgical test work was undertaken on a single master composite sample. In the locked cycle test, 81% of the copper, 59% of the gold and 40% of the silver was recovered into a concentrate grading 26% copper, 4.7 g/t Au and 45 g/t Ag from a head grade of 0.51% Cu, 1 g/t Ag and 0.14 g/t Au.

Additional drilling is recommended to expand the deposit size. This would be best accomplished by testing the strike extensions of the main deposit area, as well as at greater depth. The cost of the recommended work program is estimated at CDN\$250,000.



# 2.0 INTRODUCTION AND TERMS OF REFERENCE

This technical report has been prepared by CME Consultants Inc. (CME) at the request of Discovery-Corp Enterprises Inc. (Discovery-Corp). This report summarizes the exploration work carried out to date on the Galaxy project by Discovery-Corp and provides opinions on sample preparation, analyses, and security, data verification, as well as provides recommendations for future exploration.

The Galaxy property was visited by the author on several occasions since 2009, the most recent being in April 2013.

Structural orientations or Cartesian directions in this report are referenced with respect to true north.

# **3.0 RELIANCE ON OTHER EXPERTS**

In the disclosure of information relating to title and related issues, the author has relied on information provided by the British Columbia Mineral Titles Online and by Discovery-Corp. The author has relied upon audited Financial Statements of Discovery-Corp for an opinion as to the existence of underlying agreements pertaining to the Property. The disclosure represents no legal opinion of the author.

A certificate of the author is presented in Section 20.0.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

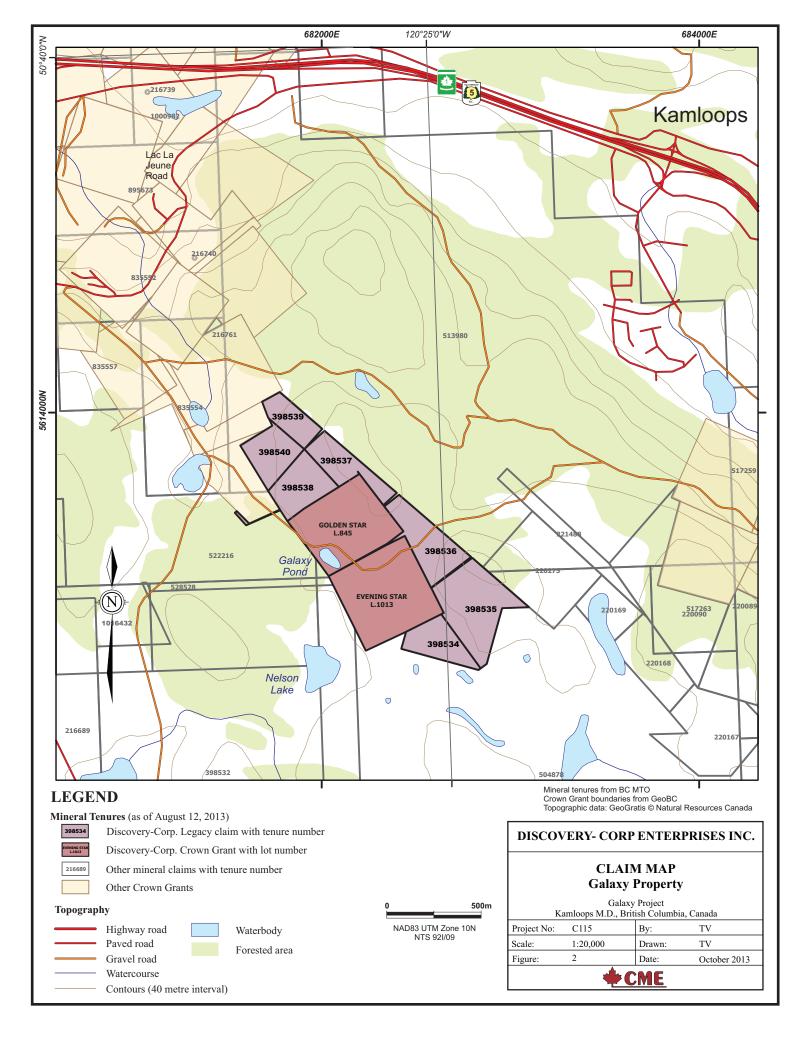
The Galaxy property (the Property) is located in the Kamloops Mining Division in southcentral British Columbia, Canada, within the city limits of Kamloops, approximately seven kilometres southwest of the city centre (Figure 1).

The Property is centered at approximately 50° 38' 39"N latitude and 120° 25' 23'W longitude, within NTS map sheet 92I/09. It is located approximately seven kilometres east-southeast of the recently commissioned New Afton copper-gold mine and four kilometres northwest of the past-producing Ajax Mine.

The 90.1 hectare Property consists of seven two-post legacy claims totalling 51.95 hectares and two Crown granted mineral claims (Crown Grants) totalling 38.15 hectares (Figure 2).

The author is not aware of any environmental liabilities on the Property.







### **4.1 TITLE**

All of the mineral tenures and the under-surface rights of the Crown Grants that form the Property are 100% owned by Discovery-Corp.

The property is situated entirely on land with privately held surface rights. The surface titles to the Evening Star and Golden Star Crown Grants are held by Waterford Holdings Ltd. of Kamloops, BC, and the surface titles to the cell claims are held by Sugarloaf Ranches Ltd., owned by KGHM Ajax Mining Inc. of Kamloops, BC.

Claim Number	Claim Name	Area (ha)	Owner (100%)	Good To Date	Claim Type
398534	Sugar 1	5.92	Discovery-Corp	2018/aug/30	Legacy-mineral
398535	Sugar 2	13.59	Discovery-Corp	2018/aug/30	Legacy-mineral
398536	Sugar 3	8.68	Discovery-Corp	2018/aug/30	Legacy-mineral
398537	Sugar 4	6.11	Discovery-Corp	2018/aug/30	Legacy-mineral
398538	Sugar 5	7.13	Discovery-Corp	2018/aug/30	Legacy-mineral
398539	Sugar 6	4.41	Discovery-Corp	2018/aug/30	Legacy-mineral
398540	Sugar 7	6.11	Discovery-Corp	2018/aug/30	Legacy-mineral
DL. 845	Golden Star	17.50	Discovery-Corp	N/A	Crown Grant
DL. 1013	Evening Star	20.65	Discovery-Corp	N/A	Crown Grant

Table 1: Mineral Tenure and Crown Grant Information

#### 4.2 PERMITTING AND OTHER AGREEMENTS

Discovery-Corp received an amendment to their Mines Act Permit (MX-4-433) on June 19, 2012 and is valid to November 30, 2014. The permit is subject to adhering to the Mines Act and the permitted program as well as the determination and account of security for reclamation.

The exploration permit allows the following activities:

- up to 8,000 metres of drilling;
- the construction of up to 20 drill sites; and
- the construction of up to 750 metres (0.23 ha) of new exploration trail.

As of the effective date of this report, 7,694.28 metres, 17 drill sites and 750 metres of new exploration trail construction remain on this permit.

On April 4 2012, Discovery-Corp entered into an agreement with the Stk'Emlupsemc Te Secwepemc Nation. The Beginning Exploration Agreement is a commitment of both parties to work together in a spirit of partnership and collaboration to build a positive, beneficial and harmonious relationship in connection with work on the Property.

Discovery-Corp received a substitution of Conditional Water Licence (24197) on June 18, 2007 (Conditional Licence 122459) from the British Columbia Ministry of Environment,



which allows the use of water for industrial (cooling) purposes from Galaxy pond. Up to 22,730 litres per day may be used at any time during a year. The water may only be used on land of the Golden Star Crown Grant (District Lot 845).

# 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

#### **5.1 ACCESSIBILITY**

The property is easily accessed from Kamloops by following Trans-Canada Highway west / Yellowhead Highway south (Routes 1 and 5, respectively) to Copperhead Drive (Exit 366) then turning right onto the paved Frontage Road/Lac Le Jeune Road for approximately 5.5 kilometres. Just south of Wallender Lake, a gated gravel road heads northwest off of Lac Le Jeune road, across Sugarloaf Ranch range land. This road is followed for approximately 2.5 kilometres to the Galaxy property.

#### 5.2 CLIMATE

The climate is semi-arid, with little rainfall and temperatures typically exceeding 30° C during summer months. Winters are relatively mild with little snowfall and average temperatures just below freezing. During the winter months, short "cold-snaps" where temperatures drop to minus 20° C are common.

#### **5.3 LOCAL RESOURCES**

The Property is located within the Kamloops city limits, providing excellent access to an experienced and skilled labour force as well as the necessary services and suppliers required to support future exploration programs.

#### **5.4 INFRASTRUCTURE**

Local infrastructure consists of two major highways in close proximity to the Property. Both the Canadian Pacific and Canadian National transcontinental railways pass through the city of Kamloops. The area has a long history of mining and exploration. All necessary services, including a full-service airport, are available in Kamloops. New Gold's New Afton Mine is presently operating approximately seven kilometres west-northwest of the Property. KGHM Ajax Mining Inc. is presently continuing to advance the Ajax deposit approximately four kilometres southeast of the Property.

Infrastructure on the Property consists of a network of gravel and dirt roads and trails. Two areas of underground workings are located on the property, one on the Evening Star Crown Grant, and the other on the Gold Star Crown Grant. The Evening Star workings are reported as an adit, shaft and drifting on at least one level. The Golden Star workings are reported as a



short adit and winze. Little detailed information on the workings is available. Fencing has been placed around both adit/shafts for safety.

#### 5.5 PHYSIOGRAPHY

The Property covers gently rolling hills, typical of the area, with little elevation change across the claims. The elevation at the Property ranges from 915 to 975 metres.

A thick layer of glacial till covers the property and rock exposure is limited, with less than 5% outcrop on average. Drilling on the Galaxy deposit has confirmed that till thickness averages 3-5 metres and commonly exceeds 10 metres.

Vegetation consists of an open forest of mixed Douglas fir and ponderosa pine with grassy undergrowth, and open areas with sagebrush and bunchgrass. A small ephemeral pond is located immediately west of the Galaxy deposit, referred to in this report as the Galaxy pond.

### 6.0 HISTORY

#### 6.1 EXPLORATION AND DEVELOPMENT BY PRIOR OWNERS

The Iron Mask-Afton area has a long history of exploration and mining, with work dating back to the late 1800's. Although early workers recognized the widespread low-grade copper mineralization in the region, they had no way of profitably mining it and as such, early work in the area focused largely on higher-grade veins and zones.

There was limited early production from a few of the showings, the principal producer being the Iron Mask Mine situated along the favorable Iron Mask-Galaxy structural trend, less than 1 kilometer northwest of the Galaxy property. The Iron Mask Mine operated from 1903 to 1928, during which time a total of approximately 165,000 tonnes of ore was produced grading 1.5 % Cu, 0.7 g/t Au and 2.8 g/t Ag (BC Minfile 092INE010).

Work on the Galaxy property dates back to the late 1890's, with the discovery of mineralization on the Evening Star claim, and at what is now known as the Galaxy deposit. The boundaries of the Galaxy property boundary have fluctuated over the years as a result of the differing ownership and periodic re-staking. The following discussion of the history of exploration is restricted to work done on ground currently part of the Property.

The first mention of work on the Galaxy property was in 1899, on the Evening Star claim. This work included two open cuts and well as two short shafts and a short tunnel.

In 1900 the Golden Star (L. 845) Crown Grant was issued to the Kamloops Copper Mg. Co. Ltd.



Between 1901 and 1906 considerable exploration and development work was done during this period, particularly on the Evening Star claim. By 1906, an adit had been run from the edge of Galaxy pond for a distance of 45 metres. A 2-compartment shaft was sunk to further explore mineralization encountered in the adit. The shaft was vertical to a depth of 17 metres and then inclined "on the dip of the vein" to a depth of 27 metres. On the Golden Star, a short adit and a winze were driven to intersect the same zone of mineralization tested by the Evening Star workings. Several shallow pits and trenches were also dug on these two claims during this period.

In 1912, a Crown Grant was issued for the Evening Star (L. 1013), to Messrs. Morrison, McArthur and Harper.

In 1913, ownership of the Golden Star Crown Grant had transferred to Messrs. McArthur and Harper, two of the owners of the adjoining Evening Star Crown Grant.

In 1916, the Granby Company held an option on the Evening Star Group, and "*a considerable amount of prospecting was done by diamond drilling*" (BC Minfile 092INE010).

Between 1916 and 1917, 48 tonnes were shipped from the Evening Star mine by the owners, returning an average grade of 5.3% Cu and 18.8 g/t Ag. No further work is documented on the roperty until 1956 when it was acquired by Galaxy Minerals Ltd. (BC Minfile 092INE007).

From 1956 to 1964, Galaxy Minerals rehabilitated the Evening Star shaft and carried out a program of underground sampling, trenching, road work and limited diamond drilling at the Galaxy deposit. From 1961 to 1964, additional work was done at the Galaxy deposit, including an induced polarization survey and considerable trenching and diamond drilling (38 holes totalling 5,225 metres). In 1964, the company changed its name to Galaxy Copper Ltd. (BC Minfile 092INE007).

Vanco Explorations optioned the Galaxy property in 1965, as part of a much larger land holding in the area. Geophysical and geochemical surveys were done by Sulmac Exploration Services, and considerable diamond drilling was completed at the Galaxy deposit (24 holes totalling 2,418 metres) between 1965 and 1966 (Preto, 1967).

In 1968, Galaxy Copper Ltd. amalgamated with Bata Resources and Stampede Oils Ltd., to form United Bata Resources Ltd. In January 1969, United Bata optioned a 50% interest in the Property to Kimberley Copper Mines Ltd (Kimberley). During 1969, Kimberley reportedly rehabilitated the Evening Star shaft and completed a total of 122 metres of underground drifting from the shaft, at the 80 foot level. Sixteen surface diamond drill holes, totalling 1,562 metres were also drilled at the Galaxy deposit. (Pasieka and Prendergast, 1969).

In 1971, Kimberley changed its name to Nor-West Kim Resources Ltd (Nor-West). Nor-West surveyed and mapped the underground workings on the Evening Star, and extended the northwest drift from shaft (at the 80 foot level), to a point some 365 metres northwest of the shaft. At this point, a 30 metre ventilation raise was put to surface. Two bulk samples were



collected from underground and metallurgical testing was reportedly done by Bethlehem Copper (Belik, 1990). In the 1971 Minister of Mines Annual report it is reported that an additional 1,333 metres of surface drilling and 327 metres of underground diamond drilling were completed on the Evening Star Crown Grant.

During 1973, Teck Corporation Ltd. (Teck) completed an IP survey on the Makaoo property, an area that included all of the current Property. A possible northwest trending chargeability anomaly was defined east of the Galaxy deposit, on the current Sugar 2 and 4 mineral claims (Hallof and Goudie, 1973).

Between 1976 and 1977, Canadian Superior Exploration optioned the Galaxy property and carried out geological mapping, topographic and ground magnetometer surveys and drilled 8 percussion holes (totalling 731 metres). The 1977 drilling was directed at magnetic lows to the southeast and northwest of the Galaxy deposit (Blanchflower, 1978).

Abermin acquired the Galaxy property in 1985. In 1987, Abermin drilled 7 percussion drill holes, totalling 367 metres. Four of these drill holes were situated on the current Property and tested the Galaxy deposit (McArthur and Girling, 1987).

In 1990 Discovery-Corp (then operating as Getchell Resources Corp.) acquired 100% interest in the Galaxy Property through an option agreement with Abermin. Through this agreement, Abermin would retain a 3% NSR if the property were placed into production by Discovery-Corp. If Discovery-Corp was reduced to a net profits or net smelter royalty interest through an arms-length transaction, then Abermin would be entitled to the first \$200,000 of Discovery-Corp's royalty payments, plus 40% of Discovery-Corp's royalty payments thereafter (Getchell News Release, January 17, 1990). In March, 1990, Abermin was assigned into bankruptcy (Abermin News Release, March 23, 1990). In November, 1990, CSA Management and Goldcorp Investments together acquired all remaining property and assets of Abermin. CSA Management and Goldcorp later formed Lexam Explorations Inc. (Lexam News Release, March 25, 1994).

Work completed on the Property since 1990 is discussed in Sections 9 and 10.

In 1996, Discovery-Corp (then operating as Getchell Resources Corp.) optioned the Property to Teck, which could earn Teck 100% interest through cash payments and exploration expenditures (Getchell News Release, January 23, 1996). Teck dropped their option on the property in April, 1996 (Getchell News Release, April 18, 1996).

In 2000, Discovery-Corp entered into an agreement with Snowfield Development Corp. (Snowfield) whereby Discovery-Corp agreed to sell a 49% interest in the Property as well as an option to purchase the remaining 51% (Discovery-Corp News Release, November 6, 2000). In 2002, Discovery-Corp. re-acquired full interest in the Galaxy property from Snowfield (Discovery-Corp News Release, August 6, 2002).



#### 6.2 HISTORICAL MINERAL RESOURCE ESTIMATES

There have been six historical resource estimates completed on the Galaxy deposit since 1969. These resource estimates cannot verified, therefore should not be relied on, and are reported only for historical interest.

These resource estimates are summarized in Table 2.

Company	Year	Resource/Category	Parameters/Key Assumptions/Methods	Source(s)
United Bata Resources Ltd./Kimberley Copper Ltd.	1969	3,628,000 tonnes @ 0.58% Cu Proven 1,814,000 tonnes @ 0.58% Cu Indicated	Unknown	BC Minfile 092INE007
United Bata Resources Ltd./Kimberley Copper Ltd.	1969	3,848,027 tons @ 0.633% Cu Proven 962,007 tons @ 0.633% Cu Indicated Including dilution, a total resource of 5,772,040 tons @ 0.56% Cu	<ul> <li>20% dilution @ 0.20%Cu</li> <li>0.5% Cu cutoff grade</li> <li>Volume-ton factor: 11.3 cubic ft</li> <li>No attempt to weight cross-sections mathematically</li> <li>Volumes calculated by multiplying half the distance between sections, or using the method of zone of influence for individual holes</li> </ul>	Pasieka and Predergast, 1969
Abermin	1985	2,267,750 tonnes @ 0.60% Cu and 0.51 g/t Au	Unknown	BC Minfile 092INE007
Abermin	1988	3,492,335 tonnes @ 0.63% Cu	Unknown	BC Minfile 092INE007; Canadian Mines Handbook, 1987-1988
Getchell Resources Corp.	1990	3,500,000 tons @ 0.65% Cu and 0.34 g/t Au	Unknown	BC Minfile 092INE007; Belik, 1990 (BC Assessment Report 20242); BC Energy and Mines Information Circular 1997-1; Canadian Mines Handbook 1991-1992
Teck	1996	1,700,000 t @ 0.39% Cu and 0.13 g/t Au, including 862,000 t @ 0.65% Cu and 0.22g/t Au	Unknown	Caron (2006b)

Table 2.	Historical	Resource	Estimates	1969-1996
1 auto 2.	instorical	Resource	Lounates,	1707-1770



# 7.0 GEOLOGICAL SETTING AND MINERALIZATION7.1 REGIONAL GEOLOGY

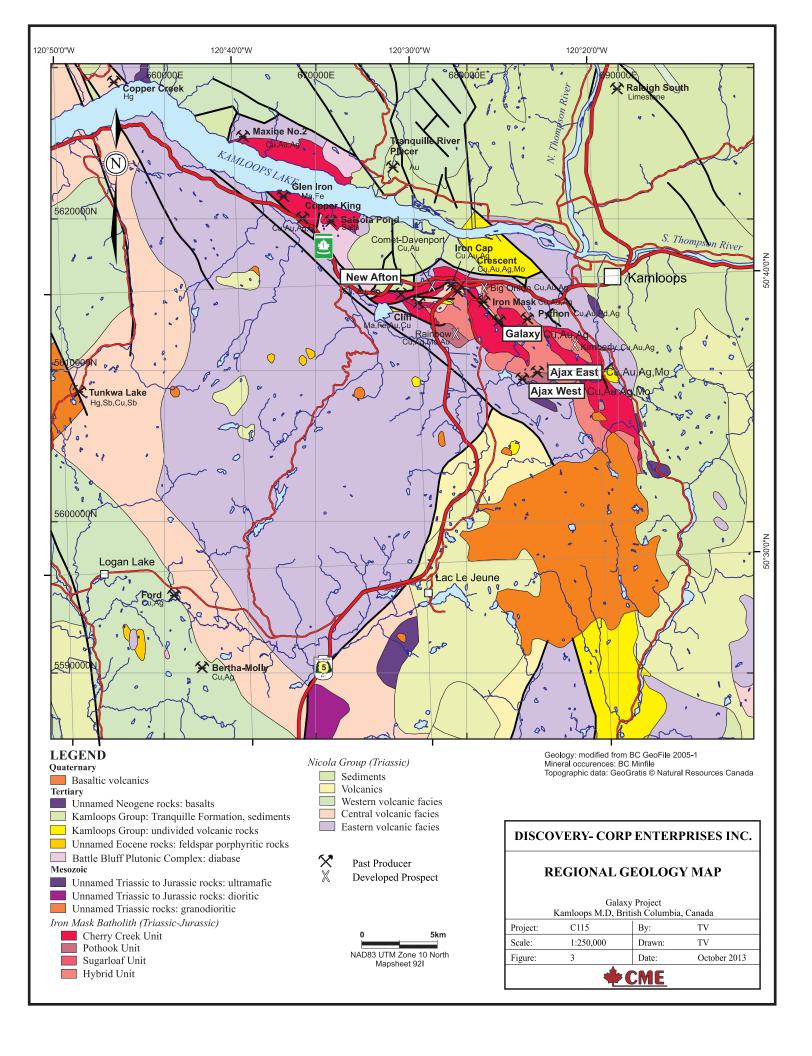
The Property is situated in the northeastern portion of the Iron Mask batholith, an elongate composite intrusion of Late Triassic age which is the host to a number of important alkalic copper-gold porphyry style deposits. The regional geology of this area is shown as Figure 3. A map of the economic setting of the deposits in this portion of the Iron Mask batholith is presented in Figure 4.

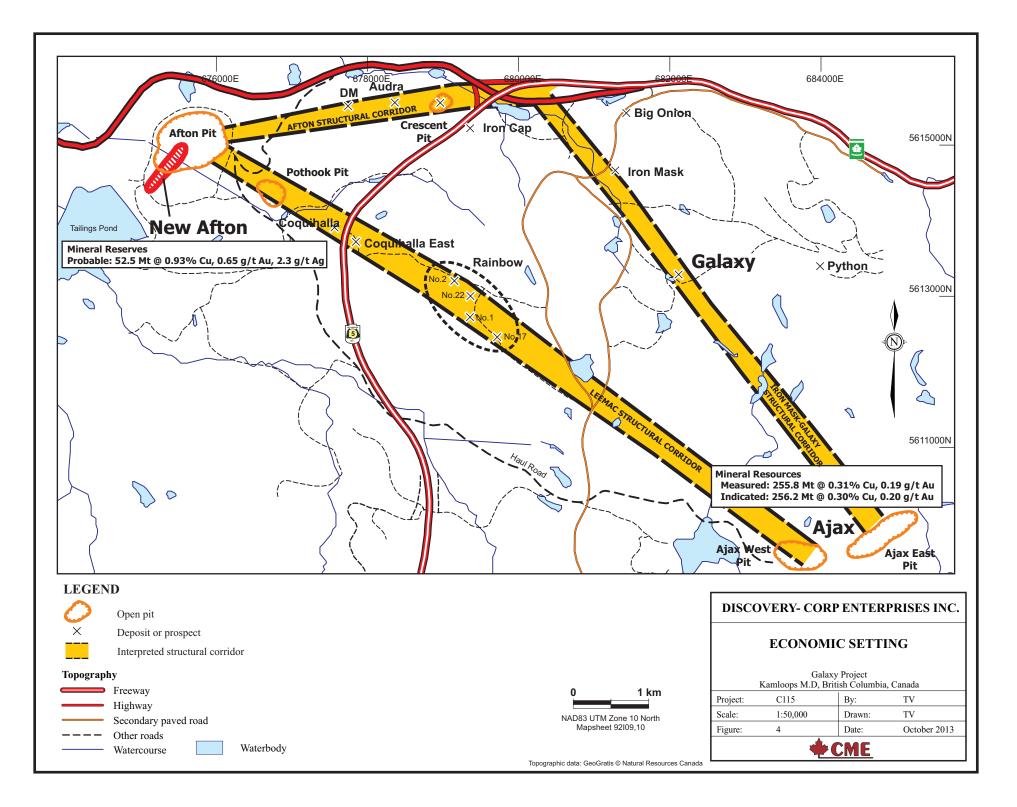
Cockfield (1948) describes the geology and mineral deposits of the Nicola map sheet, while numerous authors, including Kwong (1987), Northcote (1975, 1977), Preto (1967), Snyder and Russell (1995), Ross *et al* (1995) and Stanley *et al* (1994), describe the geology and mineralization in the Iron Mask area. Most recently, Logan and Mihalynuk (2006) have done geological mapping, in conjunction with a compilation of previous mapping, to produce an up-to-date geological map of the Iron Mask batholith. The following discussion is adapted from the above sources and from summaries of the regional geology by Darney *et al* (2005a, b).

Regionally, the Property is situated within the accreted Quesnel Terrane. The oldest rocks in the map area belong to the Devonian to Permian Harper Ranch Group, exposed northeast of Kamloops in the Heffley Creek area, as shown on Figure 3. The Harper Ranch Group consists of two members, a lower volcanic arc succession and an upper carbonate platformal succession, and forms the basement to the Quesnel Terrane in this area.

Overlying the rocks of the Harper Ranch Group is the Late Triassic Nicola Group, a thick subaqueous island arc assemblage that forms a belt some 25 kilometres wide and as much as 7.5 kilometres thick. The Nicola Group consists mainly of fine-grained and porphyritic volcanics, of dominantly andesitic composition (greenstones), and of tuffs and breccias. Minor sediments are associated with the volcanics, including limestone, argillite and conglomerate. In the Iron Mask area, Logan and Mihalynuk (2006) have separated the Nicola Group into eight distinct units. One of these units is a serpentinized basalt, known locally as a picrite, which is intimately associated with many of the known mineral deposits. The picrite has been interpreted to represent wedges of basalt that have been tectonically emplaced along major fault zones.

The Nicola rocks are intruded by the Late Triassic Iron Mask batholith, a composite alkalic intrusive that hosts a number of important copper-gold porphyry-style deposits. Figure 4 shows the locations of the larger deposits in the northern part of the batholith, in the vicinity of the Galaxy property. While most of the mineralization is hosted within the batholith, near the contact with the batholith the Nicola rocks may be foliated and may also contain copper mineralization.







The Iron Mask batholith is a northwest-trending body, comprised of two separate plutons, the southern Iron Mask pluton (22 kilometres long by 3-5 kilometres wide) and the smaller (5 by 5 kilometres) Cherry Creek pluton to the northwest. The Galaxy property is situated within the Iron Mask pluton, which also hosts the Afton, Ajax and numerous other deposits. The pluton was emplaced at the end of the Triassic, over a relatively short time interval from about 210-200 Ma (Logan *et al*, 2006a).

Snyder and Russell (1995), Logan and Mihalynuk (2006) and others subdivide the Iron Mask into three distinct mappable units, the Sugarloaf, Cherry Creek, and Pothook phases. A fourth, hybrid phase is also noted. All of these units contain magnetite, typically from 3% to 15%.

- **Pothook phase**: is a medium to coarse-grained biotite pyroxene diorite and is the earliest recognized phase of the intrusion.
- **Sugarloaf phase**: is a fine-grained, porphyritic hornblende diorite, which occurs dominantly along the western margin on the batholith.
- **Cherry Creek phase:** predominates in the northern and eastern portion of the batholith, and is a biotite monzonite to monzodiorite. Darney *et al* (2005b) note its textural similarity to the Pothook phase, and its common distinct pinkish colour due to K-feldspar alteration.
- **Hybrid phase:** is a xenolith-rich unit, which represents variable assimilation of the Nicola Group rocks by the Pothook or Sugarloaf phases. It can contain as much as 80% fragments of Nicola Group rocks within an intrusive breccia. Textural and mineralogical characteristics of the Hybrid phase vary considerably.

The Cherry Creek and Sugarloaf phases are seen only in fault contact and the age relationship between them is uncertain. Both the Cherry Creek and Sugarloaf phases postdate the Pothook phase.

Saussuritized feldspars and widespread propylitic alteration are common within the Iron Mask batholith. Albite alteration occurs in highly fractured zones in all phases of the intrusion. Similarly, K-spar alteration occurs locally in all phases, but is most widespread in the Cherry Creek phase because of its higher primary potassic content. Copper-gold mineralization is most often associated with the Cherry Creek and Sugarloaf phases of the intrusion, and with contacts between these phases and the Pothook or Hybrid phases. The mineralization is typically associated with albite and/or K-spar alteration.

Structurally, the Iron Mask batholith is dominated by northwest-trending, high and moderateangle faults. These faults have been interpreted as major deep seated structures that controlled deposition of the Nicola Group rocks and emplacement of the batholith (Logan *et al*, 2006a). As noted above, picrite is believed to have been tectonically emplaced along major fault zones within the Iron Mask batholith. The distribution of picrite defines several favourable structural corridors within batholith. Most of the deposits discovered to date are located within these favourable structural corridors, one of which passes through the Property and hosts known mineralization at the Galaxy deposit.



Regionally, Late Triassic to early Jurassic calc-alkaline intrusives of dominantly granodiorite and quartz diorite composition cut the older rocks. These include the Guichon batholith, a large composite intrusion with a surface area of 1,000 square kilometres, located west-southwest of the Iron Mask batholith, with which porphyry copper/molybdenum mineralization at Highland Valley is associated.

In the western part of the map area, the Nicola rocks are overlain by arc-derived clastics of the Jurassic Ashcroft Formation.

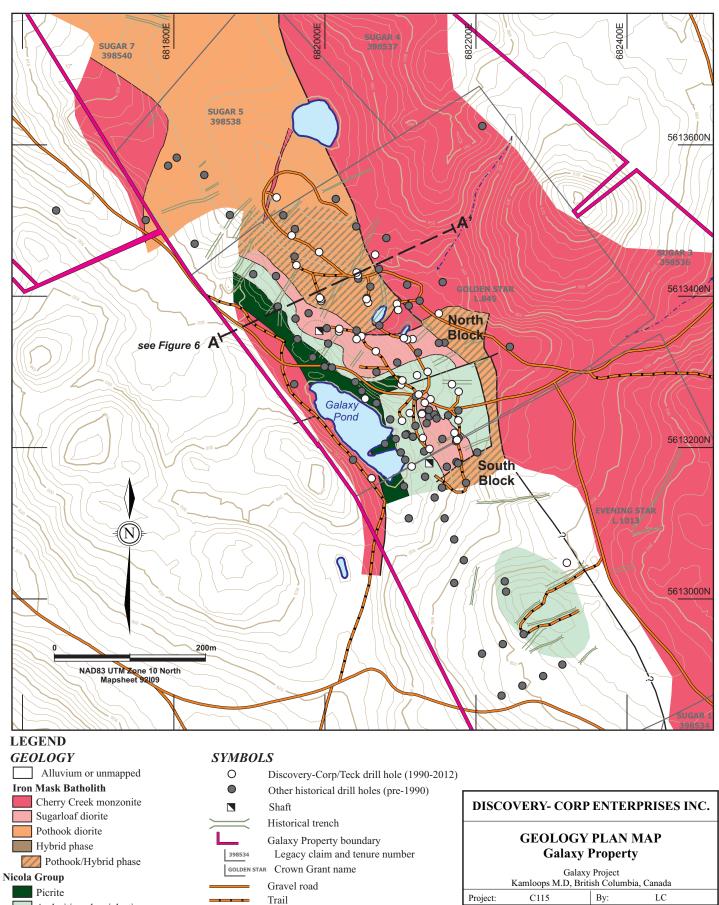
Sediments and volcanics of the Eocene-aged Kamloops Group unconformably overlie the older rocks. The base of the Kamloops Group is a sedimentary unit consisting of conglomerate, tuffaceous sandstone, siltstone, shale and minor coal seams. Overlying the sediments are andesitic and basaltic volcanic flows and agglomerates. A thick sequence of Kamloops Group rocks separates the Iron Mask pluton from the Cherry Creek pluton to the northwest, in what has been described as a graben structure.

The youngest rocks in the area are Miocene-aged vesicular olivine basalts. The Miocene basalts are flat-lying plateau and valley basalts that locally overlie the older rocks.

#### 7.2 PROPERTY GEOLOGY

The Property is situated in the northeastern portion of the Iron Mask batholith, and along the favourable Iron Mask-Galaxy structural corridor (Figures 3 and 4). In a general sense, the property covers a fault-bounded pendant of Nicola volcanics, within the batholith. A detailed understanding of the geology of the property is hampered by the lack of outcrop, however the geology in the central part of the claims, at the Galaxy deposit, is well known from drilling (McArthur and Girling, 1987; Blanchflower, 1978; Belik, 1990). The geology of this part of the property is presented Figure 5. Relatively little is known about the geology of the Property outside the main Galaxy deposit area.

A northwest trending band of picrite occurs along the western property boundary, and marks the position of a major steeply dipping, northwest-trending fault. West of the fault, Cherry Creek phase is exposed, while to the east, Nicola volcanics, Sugarloaf and Hybrid phases occur above a zone of highly foliated, red (hematitic) mylonite, which Preto (1967) describes as "*several feet thick*". The mylonite occurs along a low-angle west-dipping fault that is believed to be part of the Cherry Creek thrust (Logan *et al*, 2006a; Caron, 2006b). Albitized Cherry Creek monzodiorite, with typical hypabyssal textures, occurs at depth in the footwall of the thrust/mylonite zone, as well as on surface, east of the surface trace of the thrust fault. Preto (1967) describes the Cherry Creek phase in the vicinity of the Galaxy deposit as a medium to fine-grained, pinkish-grey, quartz-bearing porphyritic rock with widespread strong albite alteration. The altered rock is buff to light grey in colour, with a pinkish cast, and may contain veinlets of quartz and carbonate. Both K-spar and mafic minerals are typically absent. Fractures and slip planes are typically hematitic.



Andesitic volcaniclastics Fault

Contact

Intermittent creekContours (2 metre interval)Waterbody

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#### 7.3 MINERALIZATION

The main area of mineralization on the Galaxy property is the Galaxy deposit, situated on the Evening Star and Golden Star Crown Grants and just east of Galaxy pond.

The Galaxy deposit is an elongate, northwest-trending fault-bounded zone of mineralization, hosted within Nicola volcanics and Sugarloaf diorite. Modelling of the zone in 2010, indicates dimensions of mineralization to be approximately 600 metres in length by 120 metres in width. It is comprised of two sections of mineralization separated by an east-west trending cross-fault. Mineralization is truncated at depth by a low-angle, west-southwest dipping thrust fault. This low-angle fault surfaces approximately 90 metres east of the Evening Star shaft, and thus also forms the eastern boundary of the deposit. A northwest-trending zone of picrite marks the position of a major steeply-dipping, northwest-trending fault and defines the western faulted contact of the deposit. The deposit reaches a maximum depth of 140 metres before it is cut-off by the western boundary fault.

West of the western boundary fault, Cherry Creek phase is exposed, while to the east, picrite, Nicola volcanics, Sugarloaf diorite and Hybrid phase occur in the hangingwall of the low-angle thrust fault. The thrust fault zone is marked by several metres of highly foliated, red (hematitic) mylonite. Albitized Cherry Creek monzodiorite, with typical hypabyssal textures, occurs at depth in the footwall of the thrust/mylonite zone, as well as on surface, east of the surface trace of the thrust fault (Naas, 2012).

The area is complexly faulted, with numerous faults that disrupt and offset the mineralized zone. One such fault is a 070°/90° trending fault that separates the South Block from the North Block. A second northeast trending fault just south of the Evening Star shaft trends at approximately 060°/45°N and truncates the South Block to the south, placing mineralized Sugarloaf phase above unmineralized Pothook and Hybrid phases. A low-angle north-dipping fault also forms the upper boundary of the North Block to the north, with unmineralized Cherry Creek intrusive in the hanging-wall of the fault, and mineralized Sugarloaf phase in the footwall. The South Block is a near-vertical zone of mineralization, while the North Block is a keel-shaped zone that has been rotated relative to the South Block (Naas, 2012).

Sulphide mineralization within the Galaxy deposit consists primarily of pyrite, chalcopyrite and pyrrhotite, as fracture fillings and hairline to centimeter-scale veinlets, and as fine disseminations adjacent to fractures. Massive to semi-massive sulphide veins, locally exceeding one metre in width, occur within the mineralized zone. Pyrite and chalcopyrite also occur as blebs in orthoclase-albite-epidote veins with albitized and/or propylitic alteration envelopes, within intensely sheared zones. In general, mineralization appears to be best developed near the intersection of northwest and northeast fault zone (Naas, 2012).

Gold values are associated with the copper mineralization. For much of the historic drilling, gold results are unavailable. Teck noted difficulty in the 1996 drill program in duplicating gold values reported from earlier drilling (Caron, 2006b). Cross and long section produced by Teck in 1996 report only copper grade only on the 1996 compilation of drilling. Results of up to 3.53 g/t Au and 7.56% Cu over 6.09 metres were reported from the 1990 reverse circulation



drill program (hole 90-7, Belik, 1990). More typical gold values from the 1990 program are in the 0.1 to 0.9 g/t Au associated with 0.3 to 3.0% Cu. Drilling in 2006 and 2012 noted a similar range of gold grades. The highest gold grade encountered in 2006 was 1.47 g/t Au associated with 2.77% Cu (drill hole GX06-01) (Caron 2006b). In 2012, the highest gold grade encountered was 0.739 g/t Au associated with 2.74% Cu (drill hole GX12-04) (Naas, 2012).

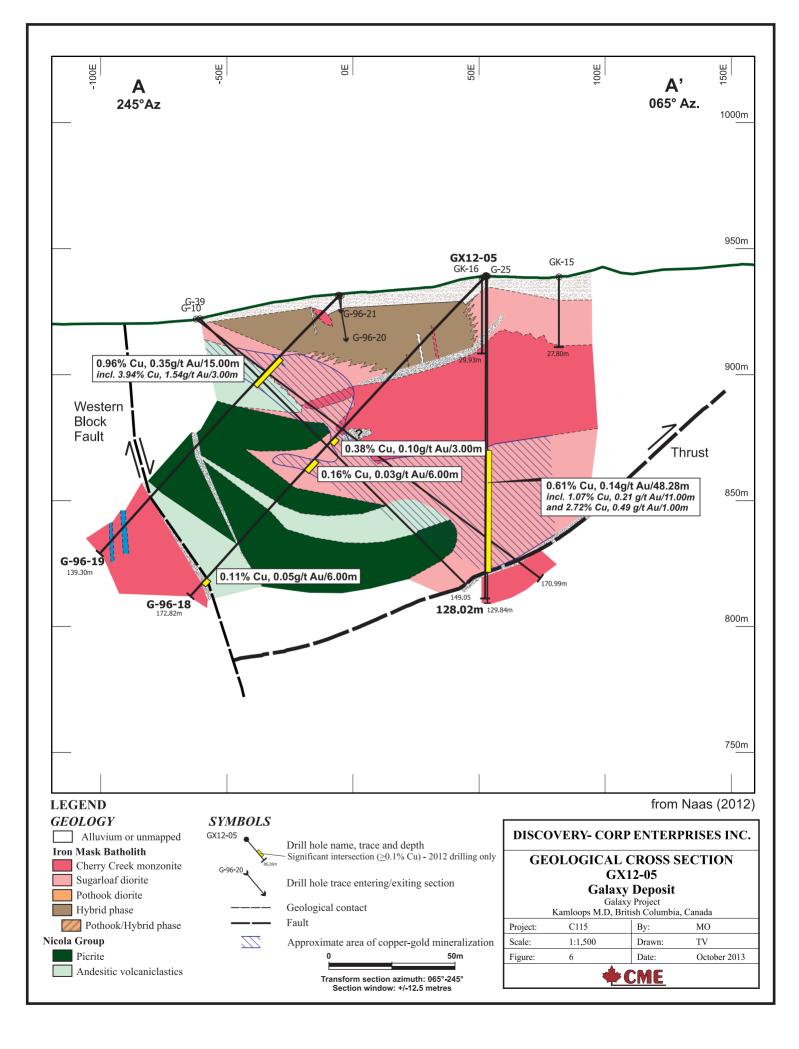
Molybdenum is noted in the geochemical data from the 2006 and 2012 drilling. Molybdenite was observed in drill core from GX12-04. Zones of molybdenum mineralization include 190 ppm Mo over 22.36 metres (GX12-04, 44.70 – 67.06m) with higher grade values of 910 ppm over 1.00 metre (44.70 – 45.70m), and 150 ppm Mo over 4.00 metres (GX12-05, 96.06 – 100.06m) (Naas, 2012)

Figure 6 presents a geological cross section through the Galaxy deposit that shows the interpreted geology, structure and mineralization based on the most recent drilling (after Naas, 2012).

### 8.0 DEPOSIT TYPE

Alkalic copper-gold porphyry style mineralization is well known within the Iron Mask batholith. Since the late 1970's, four such deposits (Afton, Ajax, Pothook and Crescent) have been mined. All four of these deposits were mined by open pit methods, and all of the ore was processed in the Afton mill. Recent exploration has delineated a number of other deposits (including a higher-grade underground bulk-mineable resource at the New Afton), as shown on Figure 4. Considerable exploration and research in the area has resulted in a well-defined deposit model (i.e. Logan *et al*, 2006a; Darney et al. 2005a,b; Currie, 2004; Lang and Stanley, 1995; Ross et al., 1995; Stanley, 1994; Stanley *et al*, 1994; Lang, 1994; Kwong, 1987; Carr and Reed, 1976; Carr, 1956). This model includes both medium to large, low to medium grade, near- surface open-pittable mineralization, such as Afton and Ajax, and small to large, medium to high-grade, underground potentially bulk-mineable mineralization, such as the New Afton deposit.

Although mineralization can occur in all phases of the Iron Mask intrusion, all of the significant mineralization discovered to date has been hosted within the Cherry Creek and Sugarloaf phases, where they are in contact with the older phases of the intrusion. Mineralization consists of fracture-controlled chalcopyrite and lesser bornite, with associated magnetite and with peripheral pyrite and pyrrhotite. Gold is associated with copper mineralization; minor molybdenite is common on fractures. Palladium and silver are important in some of the deposits. Higher-grade mineralization typically occurs in fault and hydrothermal breccias, and often in pipe-like bodies. Supergene alteration may occur, such as at the Afton deposit where much of the deposit was within a supergene alteration zone that contained significant native copper, and lesser chalcocite.





Structure is important, both in controlling the emplacement of the younger more prospective intrusive phases, and in controlling zones of sulphide mineralization. Several favourable structural corridors (the Leemac, Afton and Iron Mask-Galaxy structural corridors) are recognized within the Iron Mask batholith, as shown on Figure 4. The structural corridors are zones of brittle deformation, up to 500 metres in width. They often contain slices of picrite or of Nicola volcanics. All of the important known deposits in the Iron Mask occur within a favourable structural corridor. The Property is well situated along the Iron Mask-Galaxy structural corridor.

Alteration assemblages vary in the different deposits, however mineralization is always associated with alteration (although the converse is not true). The mineralizing event is predated by an intense albite alteration event. The early albite alteration event appears to be an important control for later faulting (due to the brittle nature of the altered rocks) and thus for focussing mineralizing fluids. Typically a broad zone of propylitic alteration encompasses areas of mineralization and potassic alteration is common in all deposits. Propylitic alteration is characterized by pyrite, chlorite and epidote, while potassic alteration involves the replacement of plagioclase by K-spar. Airborne geophysics is useful in identifying alteration associated with near surface mineralization. All of the known deposits in the Iron Mask have a low Th/K signature. Many (but not all) are associated with U/K highs, and many occur along the flanks of broad magnetic highs (Logan *et al*, 2006a,b; Darney *et al*, 2005a).

## 9.0 EXPLORATION

Since Discovery-Corp acquired the Property in 1990, there have been two different phases of field exploration (non-drilling) on the Property. In 2006, rock sampling was undertaken and in 2007, soil and ground magnetic surveying was undertaken.

In 2009, Discovery-Corp completed a 3D geological model of the deposit. No field exploration was carried out during this program.

Exploration conducted prior to Discovery-Corp's involvement in the Property in 1990 is discussed in Section 6.0, History.

#### 9.1 2006 ROCK SAMPLING

Rock sampling consisted of the collection of 19 rock samples from the Property. Elevated copper values were returned from several samples, with sample 3256, a select grab sample from one old trench returning 6,574 ppm Cu and 2.22 g/t Au (see Figure 7). Approximately 200 metres southeast of the southern limit of the Galaxy deposit, several old cat trenches poorly expose a northeast trending zone of copper mineralization on the Evening Star Crown Grant. Rocks within the mineralized zone are aphanitic, pale grey, bleached and pervasively silicified/albite altered Nicola volcanics with rusty weathering, moderate malachite staining and with disseminated patches and stringers of pyrite and chalcopyrite, to 2%. The mineralized zone is intermittently exposed over a strike length of about 85 metres and is open



on-strike in both directions. Nowhere is the eastern contact of the zone exposed and the true width of the mineralization is unknown. A minimum true width of 15 metres is exposed in the northernmost trench. Samples were collected from the zone of mineralization show consistent elevated copper values. A representative collection of chips from the dump of an old pit at the southwestern-most exposure of the zone returned 5,213 ppm Cu and 105 ppb Au (sample 3266). Three continuous chip samples were collected from the most northeastern trench across the zone. Each of these samples represented an exposed length of 8 metres, for a total exposed length of 24 metres (a minimum true width of about 15 metres). The average grade for the 24 metre sampled interval was 2,904 ppm Cu and 127 ppb Au (Caron, 2006b).

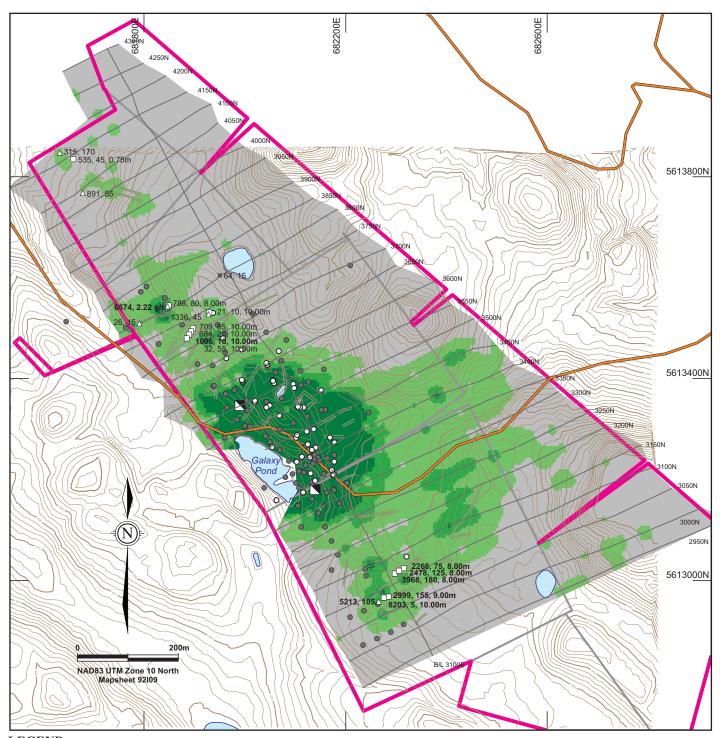
#### 9.2 2007 SOIL SAMPLING AND GROUND MAGNETICS

In 2007 Discovery-Corp conducted a soil geochemical and ground magnetics geophysical survey. A total of 15.93 line-kilometres of grid were established over the property (14.56 line-km of cross lines and 1.37 line-km of baseline). Crosslines were set at 50 metre spacing. A total of 602 soil samples were collected over the grid at 25 metres stations along the cross lines. A total of 1,284 magnetic readings were collected over the grid at 12.5 metre stations along both cross and baselines (Caron, 2007).

Most of the Property is covered by thick overburden and glacial till, with little outcrop. Soil samples were collected from near surface pits, typically 15 to 30 centimeters in depth. In order to assess the vertical distribution patterns of trace and major elements within the till, soil samples from two vertical profiles through the till were collected. This was achieved by collecting soil samples, at varying depths, from the walls of two deep, historic cat trenches through till. Where tested, there was no discernible change in gold, silver or copper values in the till, with varying depth below surface (Caron, 2007).

Soil sampling confirmed a strong, 300 meter long by 150 meter wide coincident Cu-Au soil anomaly over the Galaxy deposit (Figures 7 and 8) Silver was only weakly and sporadically elevated over the area of known mineralization. Additional coincident Cu-Au soil anomalies were defined by the soil survey, beyond the limits of the deposit. These soil anomalies occur in areas of thick till cover with minimal rock exposure and are less extensive and less well-defined than the Galaxy deposit anomaly. To the northwest of the Galaxy deposit, a Cu-Au soil anomaly occurs in the western part of the Sugar 5 claim, on-strike with the trend of the known mineralization. Several old cat trenches and very limited historic drilling has been done in this area. Approximately 150 to 200 metres east of this, a second Cu-Au anomaly occurs, in an area with no outcrop or previous work.

East-southeast of the Galaxy deposit anomaly, a large but sporadic Cu+/-Au anomaly was defined by the soil survey which measures up to 400 metres in length. The width of the anomaly is variable, ranging up to about 200 metres. The east-southeast soil anomaly covers an area with no rock exposure and spans the southeastern portion of the Golden Star Crown Grant, and the northeastern part of the Evening Star Crown Grant. While it is possible that this anomaly reflects glacial dispersion from the Galaxy deposit, the area is untested by any previous drilling and is a high priority for follow-up.



#### LEGEND

#### **SYMBOLS**

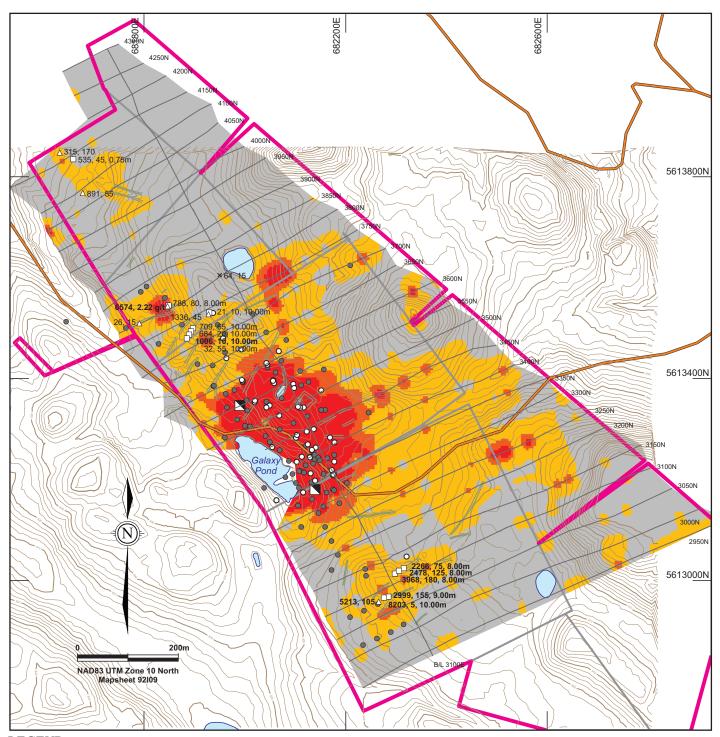
- 0 Discovery-Corp/Teck drill hole (1990-2012) Other historical drill holes (pre-1990)
  - Shaft
    - 2007 survey grid
    - Historical trench
      - Galaxy Property boundary
    - Legacy claims/Crown Grant boundaries
    - Gravel road (all roads/trails not shown)
    - Contours (2 metre interval)
      - Waterbody

#### **GEOCHEMISTRY**

- 2007 Geochemical Survey Copper < 150 ppm 150 - 263 ppm 264 - 377 ppm
  - ≥ 378 ppm
- 2006 Rock Samples □ Chip sample
- $\triangle$  Grab sample (outcrop) × Grab sample (float)
- <sup>891, 55</sup> Cu (ppm), Au (ppb, unless noted)

8203, 5, 10.00m Cu (ppm), Au (ppb), Length (m)

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		y Property	
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Project:	C115	By:	TV
Scale:	1:7,500	Drawn:	TV
Figure:	7	Date:	October 2013



#### LEGEND

#### **SYMBOLS**

- O Discovery-Corp/Teck drill hole (1990-2012)
   Other historical drill holes (pre-1990)
  - Shaft
    - 2007 survey grid
    - Historical trench
      - Galaxy Property boundary
    - Legacy claims/Crown Grant boundariesGravel road (all roads/trails not shown)
    - Graver road (an roads/traits not show
    - Contours (2 metre interval)
       Waterbody

- GEOCHEMISTRY
- 2006 Rock Samples
- □ Chip sample
- $\triangle$  Grab sample (outcrop)
- × Grab sample (float)
- <sup>891, 55</sup> Cu (ppm), Au (ppb, unless noted)

8203, 5, 10.00m Cu (ppm), Au (ppb), Length (m)

SOIL	GEOCHE	MISTRY P GOLD	LAN MAP
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Project:	C115	By:	TV
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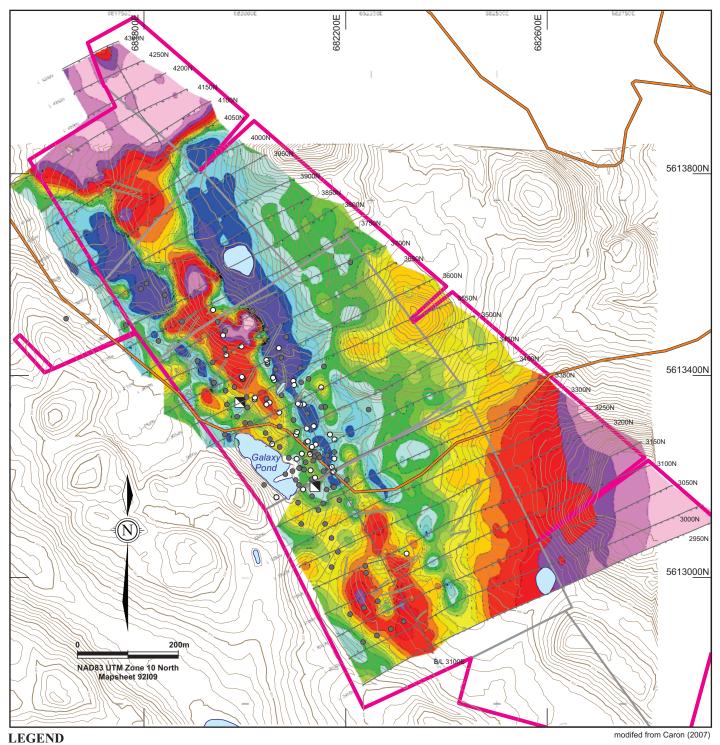
South-southeast and on-strike with the Galaxy deposit, a Cu-Au soil anomaly was defined in the vicinity of known mineralization on the Evening Star Crown Grant. Only limited historic drilling has been done in this area. Rock sampling in 2006 returned results to 0.29% Cu over 24 metres from one old trench at this zone (Caron, 2006b).

The objective of the ground magnetometer survey was to define the magnetic signature in the area of known mineralization and to test for other areas of similar magnetic signature elsewhere on the Property. The Galaxy zone is associated with a northwest trending magnetic high anomaly, and with flanking magnetic low anomalies on the eastern and western margins of the mag high. This magnetic signature continues on-strike to the northwest for 400 metres beyond the limit of the known Galaxy zone (Figure 9). The northwestern Cu-Au soil anomaly occurs along this magnetic trend. To the southeast of the Galaxy zone, the northwest trending mag high/flanking mag low magnetic signature continues, but is less well defined. The central mag high feature broadens to the south, with the flanking eastern and western mag lows become less pronounced (or in the case of the western mag low, less well defined by the survey due to the proximity to the survey boundary). Both the southern and the east-southeastern soil anomalies are associated with this southern, less well defined, portion of the mag high/low feature (Caron, 2007).

#### 9.3 2009 GEOLOGICAL MODELLING

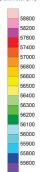
Wireframes of the mineralization and key structural features were developed using all known drill hole data. No reinterpretation of historical data or of the geological model was undertaken. (Naas, 2010).

The wireframe of the copper mineralization covers approximately 600 metres of strike length, with a maximum depth of approximately 140 metres. Figure 10 shows an example of the 3D model.

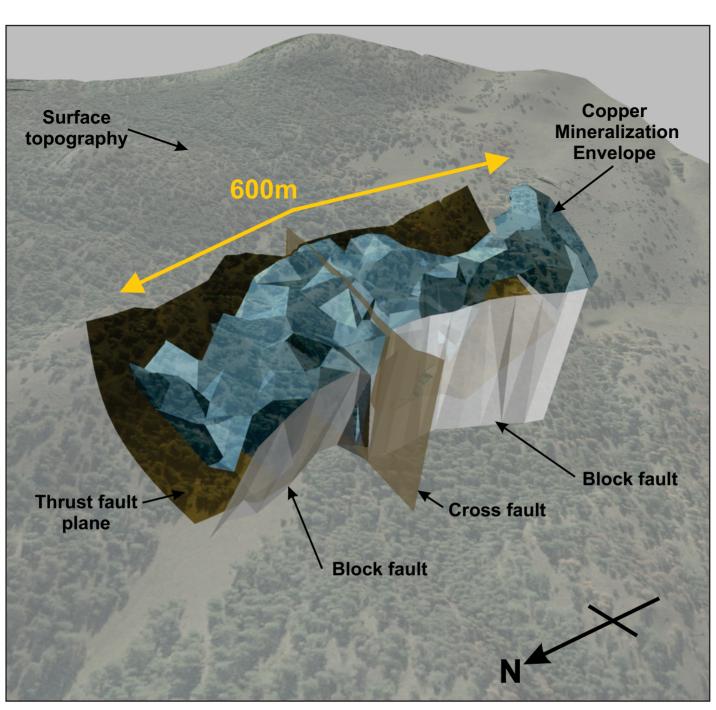


- **SYMBOLS** 0
- Discovery-Corp/Teck drill hole (1990-2012) Other historical drill holes (pre-1990)
- Shaft
  - 2007 survey grid
  - Historical trench
    - Galaxy Property boundary
    - Legacy claims/Crown Grant boundaries
    - Gravel road (all roads/trails not shown)
    - Contours (2 metre interval) Waterbody

- **GEOPHYSICS**
- 2007 Ground Magnetic Survey Magnetometer (nT)



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modified from Naas (2010)

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# **10.0 DRILLING**

Since Discovery-Corp acquired the Property in 1990, there have been four different phases of drilling testing the Galaxy deposit and its potential strike and down dip extensions. Drilling undertaken in 1996 was managed by Teck under an option agreement with Discovery-Corp. (Discovery-Corp operated as Getchell Resource Corporation from 1990 to 2000).

Drilling conducted prior to Discovery-Corp's involvement in the Property in 1990 is discussed in Section 6.0, History.

#### 10.1 1990 DRILLING

In April 1990, Discovery-Corp completed a reverse circulation (RC) drill program to verify earlier drill results and to evaluate the gold potential of the zone.

Documentation of this drilling program consisted of an assessment report which included drill logs, certificates of analysis, and a plan map. The completed work with results was made available to the author in a digital database format (Access database).

Eight (8) holes, totalling 649.22 metres were drilled; seven (90-1 to 90-7) were completed in the main Galaxy deposit area and one (90-8) tested a target area some 200 metres southeast.

Drilling was performed by Dateline Contracting Ltd.. Hole size is reported as approximately 10.5 cm in diameter (Belik, 1990). Information on drill type, collar surveys and down hole surveys is not available.

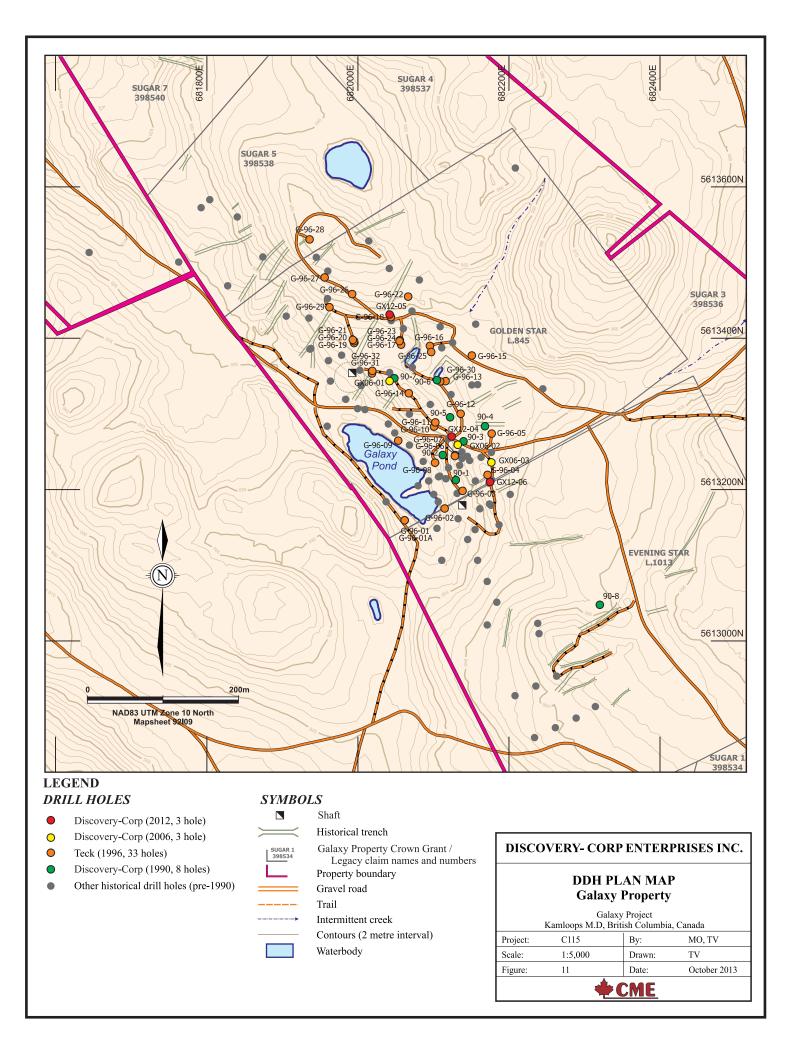
Drill hole locations are shown on Figure 11.

Hole	Location (NAD 83 UTM Zone 10 North)			Orientation (°)		Longth (m)	
	Easting	Northing	Elevation (m)	Dip	Azimuth	Length (m)	
90-1	682129.56	5613212.76	925.82	-90	0	24.39	
90-2	682112.11	5613245.45	927.11	-90	0	97.54	
90-3	682139.91	5613263.93	931.07	-55	245	88.39	
90-4	682168.19	5613283.74	934.48	-65	245	70.10	
90-5	682121.97	5613295.29	933.50	-55	245	103.63	
90-6	682104.53	5613344.53	930.56	-65	245	121.92	
90-7	682048.23	5613346.96	935.87	-45	245	73.15	
90-8	682320.11	5613047.84	948.81	-55	245	70.10	

Table 3: 1990 Drill Hole Specifications

Sampling consisted of 402 samples of chip material at 1.52 metre lengths.

Each chip sample was geologically logged and submitted to Kamloops Research and Assay Laboratories of Kamloops, BC.





#### **10.1.1 Sampling Results**

All drill holes completed within the main Galaxy deposit area (90-1 to 90-7) returned significant copper and gold values. Selected significant intersections are presented in Table 4. Intersections widths are presented as down-hole lengths as the orientation of the mineralization is not well-defined.

Hala	Interval (m)			Results		
Hole	From	From To Length		Cu (%)	Au (g/t)	
90-1	3.05	24.39	21.34	0.95	0.11	
90-2	3.05	70.10	67.05	0.38	0.05	
incl	32.00	38.10	6.10	0.66	0.09	
and	60.96	64.01	3.05	1.37	0.34	
90-3	4.57	88.39	83.82	0.95	0.18	
incl	38.10	73.15	35.05	1.79	0.37	
90-4	1.52	21.31	19.79	0.32	0.23	
incl	19.81	21.31	1.50	1.09	0.07	
90-5	6.10	12.19	6.09	0.31	0.03	
	41.15	59.94	18.79	0.25	0.04	
incl	41.15	42.67	1.52	0.81	0.17	
	67.06	74.68	7.62	0.26	0.07	
90-6	24.39	86.87	62.48	0.43	0.10	
incl	33.53	45.72	12.19	0.79	0.16	
and	50.29	57.91	7.62	0.77	0.23	
90-7	24.39	51.82	27.43	1.81	0.95	
incl	28.96	35.05	6.09	7.57	3.52	

Table 4: Selected Significant Intersections, 1990 drilling

Drilling demonstrated that there are high-grade zones within the deposit area, such as 90-7 which returned 7.57% Cu and 3.52 g/t Au over 6.09 metres. Drill hole 90-8, completed to the southeast of the main deposit area, did not return any significant results (Belik, 1990).

#### 10.2 1996 DRILLING

In 1996, Teck under an option agreement with Discovery-Corp, completed a program of delineation drilling on the Galaxy deposit.

No written report was available to the author. Documentation of this drilling program consisted of drill logs, certificates of analysis, a series of cross-sections, long sections, and a plan map. The completed work with results was made available to the author in a digital database format (Access database).

Thirty-three (33) diamond drill holes totalling 4,086.69 metres were completed (Table 5). Drilling was performed by L.D.S. Diamond Drilling Ltd. of Kamloops, BC. Drill core size is not systematically documented but noted as NQ (47.6 millimetres in diameter) on several drill logs.



Information on drill type and collar surveys is not available. Records indicate that down-hole surveying of the dip angle was performed on 29 drill holes, but the type of survey is not available. Surveyed holes had dip measured near end of hole. Longer drill holes were also surveyed at an intermediate depth. No measurement of azimuth deviation is documented.

Drill hole locations are shown on Figure 11.

	Location (NA	Location (NAD 83 UTM Zone 10 North)		Orient	tation (°)	I
Hole	Easting	Northing	Elevation (m)	Dip	Azimuth	Length (m)
G-96-01	682061.88	5613159.14	922.85	-45	65	34.10
G-96-01A	682061.88	5613159.14	922.85	-65	65	118.00
G-96-02	682114.76	5613175.12	921.53	-45	65	131.10
G-96-03	682138.56	5613198.20	926.81	-45	65	96.00
G-96-04	682171.79	5613219.21	935.62	-45	65	96.60
G-96-05	682177.10	5613273.98	934.60	-45	245	166.70
G-96-06	682128.67	5613245.45	930.41	-45	245	121.00
G-96-07	682128.18	5613244.12	930.14	-45	145	118.00
G-96-08	682102.34	5613235.25	922.75	-45	245	108.80
G-96-09	682053.58	5613264.50	920.70	-45	65	133.20
G-96-10	682101.07	5613283.33	931.13	-45	65	108.80
G-96-11	682102.44	5613288.67	932.30	-45	155	133.20
G-96-12	682136.18	5613300.26	931.00	-45	65	67.40
G-96-13	682116.13	5613343.32	931.90	-45	245	163.60
G-96-14	682067.37	5613327.20	938.41	-45	245	145.40
G-96-15	682150.65	5613376.99	934.10	-45	245	166.12
G-96-16	682095.24	5613389.66	932.44	-45	65	96.60
G-96-17	682057.34	5613391.32	933.01	-45	65	58.22
G-96-18	682043.73	5613427.66	938.96	-45	245	172.82
G-96-19	681995.17	5613393.53	931.04	-45	245	139.30
G-96-20	681994.93	5613396.16	931.33	-45	155	129.80
G-96-21	681993.26	5613397.56	931.47	-45	345	114.91
G-96-22	682066.35	5613454.67	941.87	-45	245	200.30
G-96-23	682055.71	5613397.18	933.73	-45	245	133.20
G-96-24	682055.22	5613395.85	933.63	-45	155	139.30
G-96-25	682097.05	5613381.87	931.88	-45	245	142.30
G-96-26	681992.61	5613458.12	943.22	-45	245	129.54
G-96-27	681956.00	5613480.00	944.69	-45	245	133.20
G-96-28	681935.97	5613531.09	950.95	-45	245	151.50
G-96-29	681962.30	5613440.64	936.45	-45	245	102.72
G-96-30	682108.87	5613342.62	931.44	-45	155	108.20
G-96-31	682018.66	5613353.33	931.58	-45	255	117.96
G-96-32	682019.21	5613356.89	932.26	-45	155	108.80

 Table 5: 1996 Drill Hole Specifications



A total of 459 core samples were collected and submitted to Afton Operating Corporation laboratory for copper and gold analysis. Sample lengths ranged from 2.00 to 5.74 metres, with most samples taken over a length of three metres.

Descriptive drill logs of each drill hole were completed.

#### **10.2.1 Sampling Results**

Significant copper mineralization ( $\geq 0.1\%$  Cu) was intersected in 27 drill holes. All drill holes were selectively sampled based on observed mineralization. Intersections widths are presented as down-hole lengths as the orientation of the mineralization is not well-defined. No samples were collected from G-96-28. Selected significant intersections are presented in Table 6.

	Ŭ	Interval (r	n)	Results		
Hole	From	То	Length	Cu (%)	Au (g/t)	
G-96-03	4.20	13.20	9.00	0.42	0.11	
G-96-04	7.50	25.50	18.00	0.35	0.06	
G-96-05	8.20	116.20	108.00	0.25	0.06	
incl	38.20	41.20	3.00	0.59	0.23	
G-96-06	10.36	40.36	30.00	0.52	0.15	
incl	19.36	34.36	15.00	0.72	0.20	
G-96-07	7.30	67.80	60.50	0.25	0.06	
incl	61.30	67.80	6.50	0.60	0.08	
G-96-08	75.30	78.30	3.00	1.52	0.44	
G-96-09	12.20	14.90	2.70	0.50	0.12	
	79.90	91.50	11.60	0.16	0.05	
G-96-10	50.60	63.10	12.50	0.22	0.04	
incl	56.60	59.60	3.00	0.61	0.11	
G-96-11	12.50	105.50	93.00	0.42	0.15	
incl	51.50	72.50	21.00	0.91	0.32	
G-96-12	13.00	34.00	21.00	0.40	0.11	
G-96-13	34.40	76.40	42.00	0.47	0.12	
incl	40.40	46.40	6.00	1.03	0.25	
and	67.40	73.40	6.00	0.96	0.24	
G-96-14	42.00	54.00	12.00	0.19	0.11	
G-96-15	105.80	150.80	45.00	0.24	0.09	
G-96-18	99.20	105.20	6.00	0.16	0.03	
G-96-19	33.40	48.40	15.00	0.96	0.35	
incl	33.40	36.40	3.00	3.94	1.54	
G-96-20	35.30	74.30	39.00	0.40	0.18	
incl	62.30	74.30	12.00	0.84	0.31	
G-96-21	59.44	65.55	6.11	0.30	0.07	
G-96-22	140.40	167.40	27.00	0.26	0.07	
G-96-23	65.43	77.43	12.00	0.15	0.07	

Table 6: Selected Significant Results, 1996 Drilling



Hole	Interval (m)			Results		
поте	From	From To Length		Cu (%)	Au (g/t)	
G-96-24	48.70	108.70	60.00	0.40	0.12	
incl	60.70	72.70	12.00	0.64	0.16	
and	78.70	87.70	9.00	0.80	0.16	
G-96-25	50.80	80.80	30.00	0.68	0.56	
G-96-26	103.48	109.48	6.00	0.32	0.07	
G-96-27	19.00	25.00	6.00	0.42	0.11	
G-96-29	33.90	39.90	6.00	0.26	0.15	
G-96-30	22.70	49.70	27.00	0.30	0.11	
G-96-31	13.72	40.72	27.00	0.24	0.10	
G-96-32	10.10	25.10	15.00	0.40	0.21	
incl	16.10	19.10	3.00	1.08	0.58	
	34.10	58.10	24.00	0.36	0.16	
incl	37.10	40.10	3.00	0.79	0.62	

Table 6. Selected	Significant Results	1996 Drilling (cont'd)
	Significant results,	

#### 10.3 2006 DRILLING

In 2006, Discovery-Corp drilled three diamond drill holes for a total of 286.26 metres (Table 7).

Documentation of this drilling program was included in Caron (2006a) which included a table of drill holes, with coordinates, azimuth and dip and total lengths. Certificate of analysis and sample interval details were reported in the appendices of this report.

The 2006 drill program was designed to approximately twin three of the 1990 reverse circulation drill holes (90-1, 90-3, and 90-7), in order to provide further analytical information, particularly with regards to gold content.

Drilling was performed by Atlas Drilling Ltd. of Kamloops, BC using a Longyear Super 38 drill. Drill core size for all holes was NQ (47.6 mm diameter). Information on drill type, collar surveys and down hole surveys is not available.

Drill hole locations are shown on Figure 11.

Hole	Location (NAD 83 UTM Zone 10 North)				ntation (°)	Longth (m)		
	Easting	Northing	Elevation (m)	Dip	Azimuth	Length (m)		
GX06-01	682042	5613343	936	-45	245	78.02		
GX06-02	682132	5613259	931	-60	245	89.60		
GX06-03	682176	5613236	936	-60	245	117.64		

Table 7: 2006 Drill Hole Specifications

Sampling in 2006 consisted of 17 samples selected from visibly higher-grade core and submitted to Eco Tech Laboratories Ltd (Eco-Tech) of Kamloops, BC for copper and gold assay. Core was 'quick-logged' by the on-site geologist (Caron, 2006b



## **10.3.1 Sampling Results**

Significant intersections of the initial 2006 sampling are presented in Table 8. The relationship between the drill intersection and the true thickness of the mineralization is unknown.

Tuble 6. Selected Significant Intersections, 2000 ariting						
Hole		Interval (r	Results			
поте	From	То	Length	Cu (%)	Au (g/t)	
GX06-01	23.47	35.94	12.47	0.72	0.46	
incl	24.08	26.12	2.04	2.77	1.47	
GX06-02	35.35	41.43	6.08	0.83	0.23	
GX06-03	78.02	84.10	6.08	0.49	0.17	

 Table 8: Selected Significant Intersections, 2006 drilling

Caron (2006a) reports that drilling results showed significantly lower copper and gold grades from drill core than earlier reported results from the 1990 reverse circulation drilling. Caron (2006a) notes that differences in collar location between the RC and diamond drill holes, sample intervals, and that the 2006 drill core was not sampled in entirety made it impossible to make any detailed comparisons between the two sets of drill results. It was concluded, however, that there was not especially good correlation between the results from the 1990 reverse circulation drill program and the 2006 diamond drill program.

Hole GX06-01 (twin of hole 90-7) returned significantly lower copper and gold values over a similar interval in the RC hole. Hole GX06-02 (a twin of hole 90-3) similarly had considerably lower copper and gold than the same interval in the RC hole. Hole GX06-03 was drilled as an angle hole, rather than a vertical hole as its "twin", hole 90-1, in order to avoid underground workings. As a result it tested a significantly different section of the Galaxy deposit than hole 90-1. The only interval sampled in hole GX06-03 was from the base of the Galaxy deposit, near the low-angle fault that truncates the mineralization at depth, and below the section tested by hole 90-1 (Caron, 2006).

## **10.3.2 Additional Sampling Results**

In 2007, the 2006 drill core was revisited and detail logged, although documentation of this work is limited to drill logs. All drill core not previously sampled in 2006, was sampled and submitted to Eco-Tech for multi-element analysis by ICP, and gold, platinum and palladium by fire assay. A total of 90 additional core samples were collected. The 2006 core sample pulps were also submitted to Eco-Tech for multi-element analysis by ICP.

Significant intersections from this resampling program are presented in Table 9.



Hole		Interval (r	n)	Results		
поте	From	То	Length	Cu (%)	Au (g/t)	Ag(g/t)
GX06-01	23.47	53.65	30.18	0.39	0.20	0.4
incl	23.47	26.12	2.65	2.47	1.34	2.3
GX06-02	3.66	73.90	70.24	0.32	0.07	0.4
incl	13.50	19.50	6.00	0.66	0.07	0.9
and	35.35	38.40	3.05	1.43	0.30	1.9
GX06-03	5.75	94.70	88.95	0.31	0.08	0.3
incl	11.75	17.75	6.00	0.60	0.08	1.0
and	63.60	76.30	12.70	0.60	0.08	0.5

Table 9: Selected Significant Intersections (updated), 2006 drilling

Drilling identified one short interval of 0.135 g/t Pd over 6.09 metres (GX06-02, 29.26 m to 35.35 m).

## 10.4 2012 DRILLING

During September and October 2012, Discovery-Corp completed a total of 305.72 metres of diamond drilling in 3 drill holes from 3 drill setups (Table 9). The objectives of this program were to:

- confirm presence of copper mineralization in the main body of the deposit;
- test for associated precious metals grades (gold, silver, platinum and palladium);
- test the geological model produced in 2009;
- test the potential of copper mineralization in the Cherry Creek monzonite below the (historically) mineralization-bounding thrust fault; and,
- improve and refine geological understanding of the deposit.

Drilling was performed by Atlas Drilling Ltd. of Kamloops, BC, using a Bobcat-mounted Hydracore drill rig. Drill core size for all holes was NQ (47.6 mm diameter). Coordinates for all collar locations were surveyed using a Trimble GeoExplorer XH GPS rover utilizing a Tornado survey antenna. The collected point data was not differentially corrected. A plan of the drill hole locations is presented in Figure 11.

Downhole surveying was carried out during the drilling process using a Reflex EZ-Shot single shot digital survey instrument provided by Atlas Drilling. Survey readings were taken at end of hole and near surface, approximately 6.1 metres below the end of casing.

Hole Location (NAD 83 UTM Zone 10 North)				Orientation (°)		Longth (m)
поте	Easting	Northing	Elevation (m)	Dip	Azimuth	Length (m)
GX12-04	682124	5613270	932	-89.0	327.0	86.26
GX12-05	682042	5613431	941	-89.9	200.7	128.02
GX12-06	682175	5613210	943	-89.1	358.4	91.44

Table 10: 2012 Drill Hole Specifications



Drill holes were sampled continuously from top to bottom. A total of 245 samples were collected. Drill holes were also geologically logged along with the recording of core recovery, rock quality and magnetic susceptibility measurements.

## **10.4.1 Sampling Results**

Sulphide mineralization is primarily pyrite. Pyrite is observed as disseminations within the host rocks, within veins, fracture-filling, and blebs. Each drill hole encountered one significant intersection of copper mineralization with chalcopyrite as the dominant copperbearing sulphide. Chalcopyrite is present as infilling hairline fractures and within calcite and/or quartz veinlets and veins. It is also noted to occur as fine-grained disseminations (>0.5 mm) and larger blebs (>1 mm).

Selected significant intersections for each drill hole are presented in Table 11. Intersections widths are presented as down-hole lengths as the orientation of the mineralization is not well-defined.

Hole	Interval (m)			Results			
11010	From	То	Length	Cu (%)	Au (ppm)	Ag (ppm)	Pd (ppm)
GX12-04	42.62	76.25	33.63	0.46	0.13	0.9	0.020
incl	42.62	50.70	8.08	1.07	0.30	2.1	0.023
incl	45.70	47.70	2.00	2.18	0.65	4.4	0.025
GX12-05	69.06	117.34	48.28	0.61	0.14	1.0	0.011
incl	90.06	101.06	11.00	1.07	0.21	1.5	0.008
and	106.06	107.06	1.00	2.72	0.49	6.3	0.015
GX12-06	6.50	39.28	32.78	0.44	0.11	1.1	0.019
incl	7.62	22.14	14.52	0.62	0.124	1.7	0.023

Table 11: Selected Significant Intersections, 2012 Drilling

Samples collected below the thrust from rocks of the Cherry Creek monzonite phase did not report any significant copper mineralization although only a short portion (approximately 10 metres) was tested in each hole.

## 10.4.2 Core Analysis

## **Core Recovery and Rock Quality Designator**

Core recovery ranged from 65% to 100% with an average recovery of 98%.

RQD ranged from 0.00 to 0.96 with an average of 0.37 that translates to a rock quality designation of 'poor' (Naas, 2012).

## **Magnetic Susceptibility**

Magnetic susceptibility readings for this phase of drilling range from below detection limit 0.47 to 139.90 with an average of 14.66. Very high magnetic susceptibility readings are consistent with occurrences of magnetite. Very broadly, magnetic susceptibility is more strongly associated with the Hybrid and Sugarloaf phases of the Iron Mask intrusions and less



so with the Cherry Creek phase. As the former phases host the bulk of the mineralization, this may assist with further drilling along strike coupled with the historical ground magnetic survey. Any further drilling should continue to measure magnetic susceptibility (Naas, 2012).

## **Specific Gravity**

Three core samples, one from each drill hole, were submitted to ALS for specific gravity testing. Results are presented in Table 12.

Hole	Depth (m)	Weight (kg)	SG
GX12-04	54.86	0.26	2.65
GX12-05	86.20	0.23	2.73
GX12-06	21.80	0.21	2.74

Table 12: Specific Gravity Tests

# 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

## 11.1 1990 WORK PROGRAM

## **11.1.1 Field Preparation**

The drill holes were continuously sampled except for surface overburden. Belik (1990) states that approximately 3 kg of cuttings were collected from each 1.52 metre interval and a duplicate split of about equal size was retained for backup. Additionally, three composite samples were prepared from individual samples from drill holes 90-1 (one sample 3.05 m to 15.24 m), and 90-3 (two samples, 7.62 m to 15.24 m and 36.58 m to 45.72 m). Methodology of the compositing is not documented.

## **11.1.2 Sample Preparation**

Sample preparation methodology is not documented for this drill program.

## **11.1.3 Sample Analyses**

Belik (1990) states that all chip samples were assayed for copper and gold (fire assay) by Kamloops Research and Assay Laboratories of Kamloops, BC. Specific analytical methodology is not available.

## **11.1.4 Quality Control**

Quality assurance/quality control (QA/QC) methodologies are not documented for this drill program.



## 11.1.5 Security

Security measures and sample chain of custody is not documented for this drill program.

## 11.2 1996 WORK PROGRAM

## **11.2.1 Field Preparation**

Field preparation methodology is not documented for this program.

## **11.2.2 Sample Preparation**

Sample preparation methodology is not documented for this program.

#### **11.2.3 Sample Analyses**

Drill core samples were analysed for copper and gold. Analytical methods are not documented for this program. Results are reported on signed certificates from Afton Operating Corporation and report copper in percent and gold in ounces per ton and grams per tonne. Analytical certificates are available for all samples except those from drill holes G-96-07 and G-96-26.

## **11.2.4 Quality Control**

QA/QC methodologies are not documented for this drill program however a single page document available to the author does indicate that 21 core samples were selected and submitted to a third party laboratory (Chemex Labs) for check analysis. Methodology of sample analysis by Chemex is unknown and certificates of analysis from Chemex are not available. The values as reported on this single page document demonstrate reproducibility of both the copper and gold values between the Afton laboratory and Chemex.

## 11.2.5 Security

Security measures and sample chain of custody is not documented for this drill program.

## 11.3 2006 WORK PROGRAM

#### **11.3.1 Field Preparation**

#### <u>Rock</u>

Rock samples collected during this program consisted of grab and chip samples. Detailed sampling methodology is not documented for this drill program.

## Drill Core

During the 2006 drill program, drill core was "quick-logged" and visually high-grade intervals were marked for sampling. Core was then split lengthwise in half using a core



splitter, with half of the core placed in a marked sample bag and the remaining half returned to the box. Samples were then delivered to Eco-Tech Laboratories Ltd. (Eco-Tech) in Kamloops, BC for preparation and assay for copper and gold (Caron, 2006a).

## **11.3.2 Sample Preparation**

Upon receipt at Eco-Tech, samples were catalogued and dried. Rock and core samples are two stage crushed to minus 10 mesh and a 250 gram subsample was pulverized on a ring mill pulverizer to minus 140 mesh. The subsample was rolled, homogenized and bagged in a pre-numbered bag.

## **11.3.3 Sample Analyses**

## <u>Rock</u>

Rock and soil samples were analysed for multi-elements by induced coupled plasma (ICP) and gold by geochemical analysis. Over-limit gold analyses (>1,000 ppb Au) were subsequently determined by gold assay methods. Documentation of the samples analyses methods and certificates of analysis are provided in Caron (2006b).

## Drill Core

Drill core samples collected during the 2006 drilling program were analysed by copper assay and gold fire assay at Eco-Tech (Caron 2006a).

## **11.3.4 Quality Control**

## <u>Rock</u>

QA/QC methodologies are not documented for this program.

## **Drill Core**

A QA/QC program was implemented during the 2006 drill program.

A company-inserted copper-gold certified reference material (CRM) and two blanks were included in the sample shipment for independent verification of analytical results. The CRM (CDN-CGS-5) had an expected value of 0.155% Cu (+/0.006% Cu) and 0.13 g/t Au (+/-0.02 g/t Au). The analytical result for the CRM was 0.15% Cu and 0.13 g/t Au, in agreement with the expected value. Both blank samples included in the shipment returned nil values for copper and gold. No information is available as to what was used for the blank material. In addition to control samples inserted by Discovery-Corp, the analytical laboratory routinely inserted their own control samples, which consisted of standards, blanks and sample repeats (Caron, 2006b)

## 11.3.5 Security

Drill core was removed from the property once or twice daily, and transported by pickup truck to Atlas Drilling's fenced and locked yard in Kamloops, BC where it was logged, sampled and stored). Core was subsequently moved to L. Caron's residence where it was



stored under lock and key. In 2009, the core was then moved to CME's field office's fenced and locked yard in Vavenby, BC (Naas, 2012).

## 11.4 2007 WORK PROGRAM

## **11.4.1 Field Preparation**

## <u>Soil</u>

Soil samples were collected from near surface pits, typically 15 to 30 centimeters in depth. For the most part, good soil horizons were not evident. Although there is considerable surface disturbance in the vicinity of the Galaxy zone, soil samples were collected across this area to provide information about the geochemical response over the mineralized zone (Caron, 2007).

## **Drill Core**

In 2007, the remaining 2006 drill core was split lengthwise in half using a core splitter and submitted to Eco-tech for analysis. Pulps of the 2006 drill core samples were re-submitted for additional analyses.

## **11.4.2 Sample Preparation**

## <u>Soil</u>

Soils were prepared by sieving to obtain a minus 80 mesh fraction. Samples unable to produce adequate minus 80 mesh material are screened at a coarser fraction. These samples are flagged with the relevant mesh. Rock samples are two stage crushed to minus 10 mesh and a 250 gram subsample is pulverized on a ring mill pulverizer to minus 140 mesh. The subsample is rolled, homogenized and bagged in a pre-numbered bag.

## **Drill Core**

Drill core sample preparation is the same as that reported in section 11.4.2.

## **11.4.3 Sample Analyses**

## <u>Soil</u>

Soil samples were analysed for multi-elements by induced coupled plasma (ICP) and gold by geochemical analysis.

## Geochemical Gold Analysis

The sample is weighed to 30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-limit values for rocks are re-analyzed using gold assay methods. Appropriate reference materials accompany the samples through the process allowing for quality control assessment. Results are entered and printed along with quality control data (repeats and standards).

## Multi-element ICP Analyses

A 0.5 gram sample is digested with 3 millilitres of a 3:1:2 (HCl:HN0<sub>3</sub>:H<sub>2</sub>0) which contains beryllium which acts as an internal standard for 90 minutes in a water bath at 95°C. The sample is then diluted to 10 millilitres with water. The sample is analyzed on a Jarrell Ash



ICP unit. Results are collated by computer and are printed along with accompanying quality control data (repeats and standards).

## Drill Core

Samples were analysed for multi-elements by total digestion induced coupled plasma (ICP). Samples were also analysed for gold, platinum and palladium by fire assay (gold and palladium, with an AA finish, platinum with an ICP finish, *pers comm*, L. Bruce, 2013). No documentation on the analytical methodologies is documented for this program. Certificates of analysis were only available as digital files.

## 11.4.4 Quality Control

## <u>Soil</u>

QA/QC methodologies are not documented for this program.

## **Drill Core**

QA/QC methodologies are not documented for the core submitted and analysed in 2007. Drill logs do indicate that control samples (five CRM and five blank) were included in the sample batch containing the additional core samples. The CRM used was the same as that used in 2006 (CDN-CGS-5). No information is available as to what was used for the blank material.

Results showed that three of the five CRM copper values fell outside the range of two standard deviations from the nominal value with one CRM falling outside the range of three standard deviations. All samples demonstrated a positive bias in the copper value. All gold values returned acceptable values within 2 standard deviations (Naas, 2012).

Analytical results of core samples collected in 2006 demonstrated acceptable reproducibility of the original assays. All 2006 copper results which returned greater than 1% Cu returned greater than detection limit (>10,000 ppm Cu) values of copper in the ICP analysis. No copper assay was carried out on these samples in the 2007 analysis. All 2006 copper results below the upper detection limit, returned comparable values in the ICP analysis.

Two 2006 core samples returned gold values greater than 1 g/t Au. Gold and platinum group metals (PGM) analysis in 2007 returned one value greater than detection limit (>1,000 ppb Au) and the other with a value of 890 ppb Au. No gold fire assay was carried out on the over-limit sample in the 2007 analysis. All 2006 gold results below the upper detection limit returned comparable gold values to those in the 2007 gold and PGM analyses.

## 11.4.5 Security

Security measures and sample chain of custody is not documented for this program.



# 11.5 2012 WORK PROGRAM11.5.1 Field Preparation

Initial core handling and preparation was carried out in the field at the drill site by the on-site geologist. Field core handling included measuring the start and end depths of the core box and affixing an aluminum tag inscribed with the drill hole name, box number, start and end depths and affixed onto the front of the box. Geological logging of the core, demarcating the samples for geochemical analysis, and recovery and rock quality measurements were also carried out in the field. Upon completion, core box lids were securely nailed to the core boxes prior to transport to CME's core facility in Vavenby, BC. Once received at the CME core facility, drill core was photographed, tested for magnetic susceptibility, and samples cut for submission to the analyzing laboratory.

Geochemical samples were marked out by coloured lumber crayon on the drill core based on lithology, alteration and mineralization by on-site CME geologist. The relevant lithology codes were assigned to each sample. A sample tag with sample number, corresponding bar code, and sample start and end depth was inserted for each marked sample.

Core was cut by electric motorized rock saw operated by CME personnel at CME's core facility. The rock saw utilized 10 inch diamond faced blades to split the core. Half of the core and placed into a plastic sample bag, with the remaining core returned to the core box.

Sample tags with sample number and corresponding bar code were divided into three parts. One part was stapled to the core box at the end of the sampled length and contained the start and end depth of the sample. The remaining two parts contained no sample location information. One tag was placed inside the plastic sample bag containing the core and the other stapled to the top of the same bag, exposing the bar code for later scanning.

Plastic sample bags containing cut core were passed through a heat sealer to secure the contents. For shipping, samples were ordered and scanned to record sample numbers prior to being sealed in rice sacks. The sealed rice sacks were picked up at the processing facility by ALS Minerals personnel and transported to the preparatory facilities in Kamloops (Naas, 2012).

## **11.5.2 Sample Preparation**

ALS Minerals carried out all final sample preparation of the geochemical samples at their Kamloops, BC preparation facility. Core samples were crushed through a jaw crusher and cone or roll crusher to minus 10 mesh. The sample was then split through a Jones riffle until a minus 250 gram sub sample was achieved. The sub sample was pulverized in a ring and puck pulverizer to 95% minus 140 mesh. The sample was then rolled to homogenize for analysis.



#### **11.5.3 Sample Analyses**

Prepared drill core samples were forwarded to ALS Minerals facility in North Vancouver, BC for analysis. ALS is an accredited ISO 9001:2008 facility. All sample analysis information presented below has been taken from Naas (2012).

#### Multi-element ICP Analyses

All samples were submitted for multi-element analysis (ALS Minerals code ME-ICP41). A prepared sample is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 millilitres with de-ionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). The analytical results are corrected for inter-element spectral interferences. Elements are reported in parts per million or percent.

#### Gold and PGM Analyses

All samples were submitted for gold, platinum and palladium analysis (ALS Minerals code PGM-ICP23).

A prepared sample of 30 to 50 grams is fused with a mixture of lead oxide, sodium carbonate, borax and silica, inquarted with 6 milligrams of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested for two minutes at high power by microwave in dilute nitric acid. The solution is cooled and hydrochloric acid is added. The solution is digested for an additional two minutes at half power by microwave. The digested solution is then cooled, diluted to 4 millilitres with 2% hydrochloric acid, homogenized and then analyzed for gold, platinum and palladium by ICP-AES spectrometry. Results are reported in parts per million.

#### **Copper Assay Analyses**

Core samples that returned greater than 3,000 ppm Cu from the initial multi-element ICP analysis were subsequently assayed for copper (ALS Minerals analysis code ME-OG46).

A prepared sample is digested in 75% aqua regia for 120 minutes. After cooling, the resulting solution is diluted to volume (100 ml) with de-ionized water, mixed and then analyzed by inductively coupled plasma - atomic emission spectrometry or by atomic absorption spectrometry. Results are reported in percent.

#### **Specific Gravity Analyses**

Three core samples were submitted to ALS Minerals for specific gravity tests (ALS Minerals analysis code OA-GRA08a). The rock or core section (up to 6 kg) is covered in a paraffin wax coat and weighed. The sample is then weighed while it is suspended in water. The specific gravity is calculated from the following equation.

 $S.G. = \frac{A}{B - C - [(B - A) / Dwax]}$  A = weight of sample in air B = weight of waxed sample in airC = weight of waxed sample suspended in water D = density of waxed sample sample



## **11.5.4 Quality Control**

A QA/QC program was implemented during the 2012 drill program for samples submitted for analytical work. This consisted of one standard reference and one blank material inserted with every batch of up to 33 routine drill core samples submitted to the laboratory.

Certified reference material (CRM) was obtained from CDN Resource Labs of Delta, BC prepackaged in 60 gram sample sizes. The CRM used, CDN-CGS-29 has a recommended copper value of  $0.585 \pm 0.034\%$  and gold value of  $0.228 \pm 0.030$  g/t Au. Blank material consisted of decorative aggregate rock obtained from 99 Nursery and Florists of Surrey, BC.

In addition to control samples inserted by CME, the analytical laboratory routinely inserted their own control samples, which consisted of standards, blanks and sample repeats.

All nine CRM samples returned copper values within the recommended ranges. One CRM returned a gold value that was just outside the two standard deviation range. Analysis of the blank material returned one sample with a slightly elevated copper value of 148 ppm Cu. Examination of the sample batch results does not show any obvious contamination issues. Comparison of the multi-element data of the blanks across sample batches show consistent values for the other analysed elements (Naas, 2012).

Check samples were selected and submitted to Acme Analytical Laboratories Ltd. (Acme) to test reproducibility of the gold and copper values. The check sample set consisted of two pulp samples from each sample batch submitted to ALS along with a control reference sample for a total of 19 samples. Check analysis consisted of copper and gold assays.

Results of the check analysis showed good between lab reproducibility of the copper and gold values. The control reference sample inserted with the check sample batch returned values within the acceptable ranges (Naas, 2012).

## 11.5.5 Security

During the drill shift, core was always in the presence of CME personnel. Overnight, core was left at the drill site. The Property is gated and locked when no CME personnel were on hand. Once core was logged on site, core boxes lids were securely nailed onto the core boxes. Core was picked up by CME personnel three times over the course of the drill program, usually after each hole was completed. Core was loaded onto a pick-up truck and driven the same day to CME's core facility in Vavenby for additional core processing (photography, magnetic susceptibility, core cutting and sampling).

Core boxes, prior to sampling and sampled core awaiting shipment, were stored at CME's processing facility. Security at this facility involved restricting access to CME personnel only. Visitors were under supervision of senior CME personnel at all times. All access doors, including the front gate, were locked when the area was unattended by CME personnel.



Plastic sample bags containing cut core were passed through a heat sealer to secure the contents. For shipping, samples were ordered and scanned to record sample numbers prior to being sealed in rice sacks.

Upon completion of core sampling, samples were delivered by CME personnel to ALS Minerals core preparation facility in Kamloops where sample custody was transferred to ALS. Samples were submitted in nine batches (Naas, 2012).

#### **11.6 CONCLUSIONS**

The author is of the opinion that sample preparation, analysis and security measures for the work undertaken in 2006, 2007 and 2012 were adequate for the purpose of this report. Work undertaken in 1996, due to the lack of a detailed documented QA/QC program, and the inability to locate the core, has a lower confidence level than work completed from 2006 to 2012, but is still acceptable for the purposes of this report.

It is the opinion of the author that the results from the 1990 drilling program are of low confidence due to the lack of documentation to support that a QA/QC program was undertaken during the drilling campaign.

## **12.0 DATA VERIFICATION**

## **12.1 SITE VISIT VERIFICATION**

The author has visited the Property in June and August of 2009, during the course of diamond drilling in 2012 from September 14 to October 7, 2012 and again in April 2013.

The purpose of the 2009 visits was to GPS survey all visible and labelled drill holes. The purpose of the 2012 visit was to supervise the 2012 drill program. The purpose of the April 2013 visit was to assist with a site tour.

## **12.2 DRILL HOLE LOCATIONS**

A total of 22 drill holes were identified and surveyed. Four drill sites and/or collars were located but had no identifying tags. Based on surface plan maps of the drill collars, three could be reliably identified as the 1965 drill holes S-21, S-22 and S-23. The fourth may correspond to drill hole S-19 though the post in the field shows an inclined drill direction, whereas all historical records indicate that this drill hole was drilled vertically. The GPS coordinate was not used for this drill hole. The remaining drill holes were from the 1996 (16 holes) and 2006 (2 holes) drilling programs.



#### 12.3 DRILL CORE

Drill core from the 2006 and 2012 programs are currently stored at CME's field office in Vavenby, BC. No confirmation samples were selected from the 2006 core. Visual inspection of the core confirms the presence of copper mineralization. A QA/QC program was implemented by the author during the sampling of the 2012 drill core, which is documented in Section 11.4.3.

Attempts at locating the drill chips from the 1990 drill program and core from the 1996 drill program were unsuccessful. No core or chip samples from any prior drill programs are known.

#### **12.4 GEODATABASE**

In 2009 all available data, including historical, was reviewed and subject to validation and verification by the author by comparing available source documents to the entered data, as well as routine checks for data entry errors and the field visit to survey existing drill hole collars. Details of the validation and verification process is documented in Naas (2009).

Not all of the source data (drill logs and assay certificates) for work prior to 1990 were located, so the entire database could not by fully verified. Since errors were identified during the verification and validation process using the available source data, the non-validated portions of the database could contain errors. In some cases, data will not be able to be verified (i.e. historical drill locations, down hole survey azimuths).

#### 12.5 CONCLUSIONS

The author is of the opinion that the data from 2006 onward is adequate for the purposes of this report. Due to the inability to locate 1990 drill chips and 1996 drill core, analytical results from these two drill programs could not be verified, but the author is of the opinion that this data is adequate for the purposes of this report.

In the author's opinion, the Galaxy database for work undertaken from 1990 onward is reasonably free of errors.

## **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

Metallurgical testing was carried out by ALS Metallurgy Kamloops in 2013 (Bruin and Shouldice, 2013). Testing was undertaken on a single master composite sample from the Galaxy deposit. The objectives of the testwork were to:

• assess the chemical and mineralogical characteristics of the feed composite;



- complete a Bond mill work index test on the composite to estimate energy requirements for grinding; and,
- evaluate scoping level metallurgical performance of the composite with preliminary flowsheet development testing.

## **13.1 PREPARATION OF MASTER COMPOSITE SAMPLE**

A total of 107 samples weighing 203 kilograms of minus 10 mesh assay reject material (taken from the 2012 Galaxy drill core) were received at ALS Metallurgy in Kamloops, BC. The principle objectives of the test work were defined by Iain Brown, CFO of Discovery-Corp.

A sub sample was taken from head analysis and indicated a grade of 0.51% Cu, 0.14 g/t Au and 1 g/t Ag.

## **13.2 ORE CHARACTERIZATION STUDIES**

Ore characterization studies were undertaken to identify inherent characteristics that will predispose the process design required to extract and concentration minerals of value. This includes:

- chemical and mineral content;
- mineral fragmentation; and,
- comminution testing.

#### **Results:**

Chalcopyrite was the predominant sulphide mineral present, measuring about 1.5% by mass. Most of the copper was contained in chalcopyrite with trace amounts of tennantite/tetrahedrite, bornite, chalcocite, and covellite. Pyrite was the other major sulphide mineral and measured about 0.8%.

The fragmentation characteristics of the composite, measured at  $142\mu m K_{80}$ , determined that chalcopyrite was approximately 45% liberated. Conventional rougher circuits usually target a 50 to 55% liberation feed to obtain sufficient performance. At these liberation levels, a finer primary grind size may be required.

Comminution testing involved a single Bond mill work index test using the standard closing screen size of  $106\mu m \ K80$ . The resulting index measured 15.7 kWh/tonne, indicating the material is of moderate hardness from a ball milling perspective (Bruin and Shouldice, 2013).



## **13.3 METALLURGICAL TESTING**

Three types of laboratory flotation tests were performed in this study including:

- rougher tests to evaluate primary grind sizing, reagent requirement and pH;
- batch cleaner tests to assess pH levels, depressant and concentrate production potential; and,
- single locked cycle test to determine metallurgical performance under closed circuit conditions.

## **Results**

Flotation test data determined that coarser grind size of 212  $\mu$ m K<sub>80</sub> had a negative effect on rougher copper and gold recovery. Tests utilizing 20 g/t PAX showed the best copper and gold recovery in the rougher stage.

A number of cleaner tests were conducted to optimize overall performance. For all tests, regrind sizings between 16 and  $34\mu m K_{80}$  were employed. Initial testing indicated that utilizing PAX resulted in poor final copper concentrate grades, and a regrind size of finer than 26  $\mu m K_{80}$  was required to produce high copper grade concentrates at high copper recovery. With the use of a more selective collector, 3418A, copper rougher recovery slightly decreased, but the concentrate grade improved to 26% Cu. This indicates better rejection of pyrite to the tails.

The selected copper flotation conditions were employed for the locked cycle test. In the locked cycle test, 81% of the copper, 59% of the gold and 40% of the silver was recovered into a concentrate grading 26% copper, 4.7 g/t Au and 45 g/t Ag. Additional test work was recommended to optimize the recovery.

Arsenic values in the final concentrate measured 0.054% and mercury was also analyzed in the concentrate, grading 47 g/t (Bruin and Shouldice, 2013).

# 14.0 MINERAL RESOURCE ESTIMATES

There are no current mineral resource estimates for the Galaxy property.

# **15.0 ADJACENT PROPERTIES**

Claims immediately adjacent to the Property are held by either New Gold Inc. or KGHM Ajax Mining Inc. The former currently operates the New Afton Mine and the latter is developing the past-producing Ajax deposits (Figure 4).



## 15.1 NEW AFTON

The New Afton mine went into production in early 2012. New Gold Inc's (New Gold) 2012 Annual Review reports Probable Mineral Reserves of 52.5 Mt at 0.93% Cu, 0.65 g/t Au, and 2.3 g/t Ag as of December 31, 2012. New Gold reports Measured and Indicated mineral resource estimates inclusive of Mineral Reserves. Inferred resources are exclusive of Mineral Reserves (New Gold, 2013).

Mineral Resources of the A/B Zone are:

- Measured: 33.5 Mt at 1.18% Cu, 0.86 g/t Au and 2.9 g/t Ag
- Indicated: 45.9 Mt at 0.89% Cu, 0.67 g/t Au and 2.4 g/t Ag, and,
- Inferred: 14.9 Mt at 0.65% Cu, 0.45 g/t Au and 2.0 g/t Ag.

Mineral Resources of the C Zone are:

- Measured: 0.4 Mt at 0.73% Cu, 0.60 g/t Au and 1.3 g/t Ag
- Indicated: 2.9 Mt at 0.68% Cu, 0.63 g/t Au and 1.3 g/t Ag, and,
- Inferred: 13.6 Mt at 0.76% Cu, 0.70 g/t Au and 1.5 g/t Ag.

New Gold also holds a large land package (the Ajax-Python project), located to the east of their Afton project, surrounding and north of the Ajax Crown Grants. In addition to work on the New Afton deposit, New Gold Inc. is actively exploring other targets on both their Afton and Ajax-Python properties.

The author has not verified the above stated resource estimate.

## 15.2 AJAX

KGHM Ajax Mining Inc. has continued to explore their properties and has announced significant results from ongoing deep drilling at the Ajax West pit, including one hole which returned 0.5% Cu and 0.31 g/t Au over 432 metres. As of May 26 2011, current resource estimates of the Ajax deposit at a 0.2% Cu cut-off, stands at 255.8 Mt at 0.31% Cu and 0.19 g/t Au (Measured), 256.2 Mt at 0.30% Cu and 0.20 g/t Au (Indicated) and 73.7 Mt at 0.27% Cu and 0.17 g/t Au (Inferred) (Wardrop, 2012).

The author has not verified the above stated resource estimate.

## **16.0 OTHER RELEVANT DATA AND INFORMATION**

The author is unaware of any other relevant data and information.



# **17.0 INTERPRETATION AND CONCLUSIONS**

The Galaxy property is located in the productive Iron Mask copper-gold camp, on the outskirts the city of Kamloops, BC. Notable deposits of this area include the former open pit Afton Mine and New Gold Inc.'s recently opened underground New Afton deposit located seven kilometres northwest and the KGHM Ajax Mining Inc.'s Ajax deposit located four kilometres to the southeast.

The Galaxy deposit is a copper-gold alkaline porphyry deposit, located along the Iron Mask-Galaxy Structural Corridor. This shallow deposit occurs within a complex trough-like structural environment, bounded by steep, normal block faults on the west and a shallow to moderate west-dipping thrust plane that truncates mineralization at depth. Within this trough, all phases of the Iron Mask batholith are noted as well as volcanics and a picrite unit of the Nicola Group. Copper mineralization is generally associated with the Sugarloaf phase of the Iron Mask as well as the Nicola volcanics. Chalcopyrite is the main copper-bearing sulphide mineral noted to date. Other sulphides noted include pyrite, pyrrhotite and occasional molybdenite. Mineralization typically occurs as fracture fill, fine disseminations, hairline veinlets and occasionally massive to semi-massive sulphide veins, locally exceeding one metre in width.

Considerable exploration has been carried out on the Galaxy deposit since the late 1800's, including trenching, drilling, geophysical and geoechemical surveying. Limited production (48 tonnes) from 1916-1917 is also recorded.

Exploration by Discovery-Corp has continued to advance the Property. RC drilling in 1990 identified the potential for localized very high grades of copper and gold (up to 7.57% Cu and 3.52 g/t Au over 6.09 metres). Subsequent core drilling in 1996 and 2006 continued to build a stronger geological and geochemical understanding of the deposit particularly with continued analysis for gold.

The most recent drilling in the fall of 2012 successfully identified copper mineralization in all three drill holes. Gold and silver analyses demonstrate good correlation with copper grades. Platinum and palladium analyses did not reveal any significant anomalous zones of these elements. Significant mineralized intersections encountered include:

- GX12-04: 0.46% Cu, 0.13 g/t Au, 0.9g/t Ag over 33.63 metres (including 1.07% Cu, 0.30 g/t Au, 2.1 g/t Ag over 8.08 metres);
- GX12-05: 0.61% Cu, 0.14 g/t Au, 1.0g/t Ag over 48.28 metres (including 1.07% Cu, 0.21 g/t Au, 1.5 g/t Ag over 11.00 metres);
- GX12-06: 0.44% Cu, 0.11 g/t Au, 1.1/t Ag over 32.78 metres (including 0.62% Cu, 0.12 g/t Au, 1.7 g/t Ag over 14.52 metres)

There is still little geological information available outside of the main deposit area. These areas along strike in both directions remain open and represent the best targets for increasing the size of the deposit.

In 2013, metallurgical test work was undertaken on a single master composite sample. In the



locked cycle test, 81% of the copper, 59% of the gold and 40% of the silver was recovered into a concentrate grading 26% copper, 4.7 g/t Au and 45 g/t Ag from a head grade of 0.51% Cu, 1 g/t Ag and 0.14 g/t Au.

## **18.0 RECOMMENDATIONS**

- 1. Continued drilling is recommended along strike of the Galaxy deposit to the south, outside of the main deposit area. Recommendations in Naas (2010) note that RC drilling (1977) to the south encountered mineralized material (chalcopyrite and pyrite), however no samples were geochemically analyzed. Further south, just off the Property, historical diamond drill hole G-4 encountered 0.20% Cu over 2.74 metres and 0.30% Cu over 3.05 metres. The spatial distribution and character of the mineralization in this area of the deposit is poorly understood. Three consecutive surface chip samples collected from a trench in 2006 returned copper results of 2,904 ppm Cu and 127 ppb Au over 24 metres. Approximately 50 metres southwest another chip sample from a trench yielded 2,999 ppm Cu and 155 ppb Au over 9 metres. Caron (2006b) shows an interpreted mineralized zone striking northeast-southwest, and appears to be supported by historical drilling (G-13 and G-14) in the area. One RC drill hole in 1990 also tested this area but did not return any significant results, however it was drilled oblique to apparent strike. Specific drilling recommendations include:
  - i) A series of short (100 metre) vertical drill holes are recommended to be drilled along strike from the southern end of the main deposit area (starting around historical drill hole GK-7). At a 50 metre spacing this would require seven drill holes for a total metreage of 700 metres. The mineralization-bounding thrust fault has not be included in the geological model due to the limited drilling in this area. At least one drill hole should test underneath the surface rock chip samples. Drill hole azimuth should be 120° and a total depth of 100 metres.
  - ii) Further drilling is also recommended along strike to the north. Historical diamond drill holes G-27 and G-28 encountered broad intersections of greater than 0.1% Cu. Intersections include 0.16% Cu over 70.10 metres (G-27), 0.18% Cu over 19.81 metres and 0.15% Cu over 32.00 metres (G-28). As in the south, mineralization shape is poorly defined and further drilling is required to evaluate the mineralization.
  - iii) A series of short vertical drill holes (100 m) are recommended to be drilled along strike, but offset to the west from the main strike trend of the deposit, as suggested by results in the historical holes. At 50 metre spacings this would require at least 3 drill holes for a total metreage of 300 metres. As in the south, the thrust fault has not been included in the geological model.
- 2) The 2006 Discovery-Corp drill core should be analyzed by magnetic susceptibility meter to further build up the understanding of magnetic response and any association with mineralization.



- 3) Historical soil sampling results outside of the main deposit area still require follow-up. A cluster of samples returning greater than 264 ppm Cu are found to the southeast of the main deposit, covering a strike length of at least 150 metres, with potential extension of up to another 150 metres to the north. Geological mapping and prospecting are recommended. An historical trench is noted to cross through this area but no results are known.
- 4) For all future drilling programs:
  - a QA/QC program be developed and followed;
  - continue to analyze for precious metals;
  - continue sampling all drill core to build up the multi-element geochemical database;
  - continue geotechnical measurements; and
  - density testing of the various lithologies and mineralized zones.

## **18.1 BUDGET**

The proposed exploration budget for the recommendations is presented in Table 13. This budget does not include non-exploration work such as, but not limited to, permitting, environmental and archeological studies. All costs are in Canadian dollars.

Item	Cost (\$CDN)
Diamond Drilling (1,100 m)	220,000
Magnetic Susceptibility (2006 drill core)	2,500
Mapping and Prospecting	5,000
Reporting	10,000
Contingency (5%)	12,500
Total	\$250,000

Table 13: Proposed Exploration Budget



## **19.0 REFERENCES**

Abermin Corporation News Release March 23, 1990

BC Ministry of Energy and Mines

Information Circular 1997-1: BC Mineral Exploration Review 1996. BC Minfile 092INE007, 092INE010 BC Property File

Belik, G.

1990. Percussion Drilling Report on the Evening Star (L. 1013) & Golden Star (L. 845) Mineral Claims, Kamloops Mining Division, British Columbia, for Getchell Resources Inc., August 23, 1990. Assessment Report 20,242.

Blanchflower, J.D.

1978. Topographic, Geophysical and Percussion Drilling Report on the Galaxy Property, Kamloops Mining Division, South Central British Columbia, for Canadian Superior Exploration Limited, May 31, 1978. Assessment Report 6,864.

Bruin, C. and Shouldice, T.

2013. Testing the Metallurgical Response of the Galaxy Deposit Samples, unpublished report for Discovery-Corp Enterprises Inc., June 13, 2013.

Caron, L.

- 2006a. National Instrument 43-101 Technical Report on the Galaxy Property, Located in the Afton Area, for Discovery-Corp. Enterprises Inc., July 25, 2006.
- 2006b. Assessment Report, 2006 Work Program: Geology and Rock Sampling *on the* Galaxy Property, for Discovery-Corp Enterprises Inc., November 30, 2006. Assessment Report 28674.
- 2007. Assessment Report, 2007 Work Program: Grid Work, Soil Geochemistry and Geophysics on the Galaxy Property in the Afton Area; unpublished report for Discovery-Corp Enterprises Inc., December 18, 2007. Assessment Report 29628.

Carr, J.M.

1956. Deposits Associated with the Eastern Part of the Iron Mask batholith near Kamloops, *in* BC Minister of Mines Annual Report 1956, p. 47-69.

Carr, J.M. and Reed, A.J.

1976. Afton: A Supergene Copper Deposit, *in* CIM Special Volume 15 -Porphyry Deposits of the Canadian Cordillera, p. 376-387.



Canadian Mines Handbook 1991-1992. p 166 1987-1988, pp 21-22

Cockfield, W.E.

1948. Geology and Mineral Deposits of Nicola Map Area, British Columbia. Geological Survey of Canada Memoir 249.

Currie, J.

2004. Mineral Resource Estimate for the Afton Copper/Gold Project, Kamloops B.C., prepared by Behre Dolbear & Company, Ltd., for DRC Resource Corporation, May 2003 -updated January 2004.

Darney, R., Friesen, R. andGiroux, G.

- 2005a. Summary Report on the 2003 and 2004 Exploration Program and Mineral Resource Estimate on the Rainbow Property, Afton Area, for Abacus Mining & Exploration Corp., June 13, 2005.
- 2005b. Summary Report on the 2003 and 2004 Exploration Program and Mineral Resource Estimate on the Comet-Davenport Property, Afton Area, for Abacus Mining & Exploration Corp., June 13, 2005.

Discovery-Corp.

News Release, August 6, 2002 News Release, November 6, 2000

Evans, G.

1996. Galaxy Project Drill Hole and Geology Plan (1:1000 scale) and Sections showing Geology and Cu Assays (1:500 scale). Unpublished maps and sections for Teck Exploration Ltd.

Getchell Resource Corp.

News Release April 18, 1996. News Release January 23, 1996. News Release January 17, 1990.

#### Hallof, P. and Goudie, M

1973. Report on the Induced Polarization and Resistivity Survey on the Makaoo Property, Kamloops Area, for Makaoo Development Company Limited, January 29, 1973. Assessment Report 4,317.

Kwong, Y.T.J.

1987. Evolution of the Iron Mask batholith and its Associated Copper Mineralization, BC Geological Survey Branch Bulletin 77.



Lang, J.R.

1994. Geology of the Crescent Alkalic Porphyry Copper-Gold Deposit, Afton Mining Camp, British Columbia (92I/9), *in* BC Geological Fieldwork 1993, BC Ministry of Energy, Mines and Petroleum Resources Paper 1994-1, p. 285-296.

Lang, J.R. and Stanley, C.R.

1995. Contrasting styles of Alkalic Porphyry Copper-Gold Deposits in the Northern part of the Iron Mask Batholith, Kamloops, British Columbia, *in* CIM Special Volume 46 - Porphyry Deposits of the Northwestern Cordillera of North America, p. 581-592.

Lexam Explorations Inc. News Release March 25, 1994

Logan, J.M.

2003. Iron Mask Project, Kamloops Area *in* BC Geological Fieldwork 2002, BC Ministry of Energy and Mines Paper 2003-1, p. 129-131.

Logan, J.M. and Mihalynuk, M.G.

2006. Geology of the Iron Mask batholith. BC Geological Survey Open File Map 2006-11.

Logan, J.M., Mihalynuk, M.G. and Lowe, C.

2006b. Integrated Airborne Geophysical, Geology and Mineral Occurrence Data, Iron Mask batholith, Southern British Columbia. BC Geological Survey Open File 2006-12.

Logan, J., Mihalynuk, M.G., Ulrich, T. and Friedman, R.

2006a. Geology and Mineralization of the Iron Mask batholith. BC Geological Survey Branch GeoFile 2006-5.

McArthur, G.F. and Girling, B.W.

1987. 1987 Percussion Drilling, Geological Mapping and VLF-EM Geophysics on the Galaxy Property, Kamloops Mining District, for Abermin Corporation, June 1987. Assessment Report 16,334.

New Gold Inc.

2013. 2012 Annual Review.

Northcote, K.

- 1977. Geology of the Southeast Half of Iron Mask batholith (92I/9), *in* BC Geological Fieldwork 1976, BC Ministry of Energy, Mines and Petroleum Resources Paper 1977-1, p. 41-46.
- 1975. Geology of the Northwest Half of Iron Mask batholith (92I/9), *in* BC Geological Fieldwork 1974, BC Ministry of Energy, Mines and Petroleum Resources Paper 1975-1, p. 22-26.



Pasieka, C.T. and Prendergast, J.B.

1969. Summary Report on Exploration Program on Galaxy Copper Property of United Bata Resources Limited (NPL) for Kimberley Copper Mines Limited, Kamloops Area, Kamloops Mining Divisions, British Columbia by Velocity Surveys, August 11, 1969.

Preto. V.

1967. Geology of the Eastern Part of the Iron Mask batholith, *in* BC Minister of Mines Annual Report 1967, p. 137-144.

Ross, K.V., Godwin, C.I., Bond, L. and Dawson, K.M.

1995. Geology, alteration and mineralization of the Ajax East and Ajax West copper-gold alkalic porphyry deposits, southern Iron Mask batholith, Kamloops, British Columbia, *in* CIM Special Volume 46 -Porphyry Deposits of the Northwestern Cordillera of North America, p. 565-580.

Shives, R. and Carson, J.

1995. Airborne Geophysical Survey, Iron Mask batholith, British Columbia. Geological Survey of Canada Open File 2817.

Snyder, L.D. and Russell, J.K.

1995. Petrogenetic relationships and assimilation processes in the alkalic Iron Mask batholith, south-central British Columbia, *in* CIM Special Volume 46 -Porphyry Deposits of the Northwestern Cordillera of North America, p. 593-608.

Stanley, C.R.

1994. Geology of the Pothook Alkalic Copper-Gold Porphyry Deposit, Afton Mining Camp, British Columbia (92I/9, 10), in BC Geological Fieldwork 1993, BC Ministry of Energy, Mines and Petroleum Resources Paper 1994-1, p. 275-284.

Stanley, C.R., Lang, J.R. and Snyder, L.D.

1994. Geology and Mineralization in the Northern Part of the Iron Mask batholith, Kamloops, British Columbia (92I/9,10), *in* BC Geological Fieldwork 1993, Paper 1994-1, p. 269-274.

Wardrop (A Tetra-Tech Company)

2012. Ajax Copper/Gold Project, Kamloops, British Columbia: Feasibility Study Technical Report; January 6, 2012.

Websites:

ALS. http://www.alsglobal.com/en/Our-Services/Minerals/Geochemistry



# 20.0 SIGNATURE PAGE AND CERTIFICATE

The effective date of this report, entitled "*Technical Report, Galaxy Copper-Gold Project*" is October 8, 2013. Signed by:

C. O. NAAS Christopher O. Naas, P. Geo. BRITISH President IEN CME Consultants Inc.

October 15, 2013

Date



#### CERTIFICATE

I, Christopher O. Naas, P.Geo., do hereby certify that:

- 1. I am President of CME Consultants Inc. with a business address of #2130-21331 Gordon Way, Richmond BC, V6W 1J9;
- 2. This certificate applies to the report entitled "*Technical Report, Galaxy Copper-Gold Project*", with an effective date of October 8, 2013;
- 3. I am a graduate in geology of Dalhousie University (*B.Sc.*, 1984); and have practiced in my profession continuously since 1987;
- 4. Since 1987, I have been involved in mineral exploration for precious and/or base metals in Canada, United States of America, Chile, Venezuela, Ghana, Mali, Nigeria, and Democratic Republic of the Congo (Zaire); for diamonds in Venezuela; and for rare metals in Nigeria. I have also been involved in the determination of base metal and gold resources for properties in Canada and Ghana, respectively, and the valuation of properties in Canada and Equatorial Guinea;
- 5. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Registration Number 20082);
- 6. I have visited the Galaxy Property in July and August, 2009, during the course of the 2012 drilling program discussed in this report between September 14 and October 7, 2012 and in April 2013;
- 7. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument");
- 8. I am responsible for all sections of this report;
- 9. I am not independent of Discovery-Corp Enterprises Inc. as defined by Section 1.5 of the Instrument;
- 10. As of the effective date of this report, to the best of my knowledge, information and belief, the sections of the report for which I am responsible for preparing contain all scientific and technical information that is required to be disclosed to make this report not misleading.

Signed and dated at Richmond, British Columbia, this 15<sup>th</sup> day of October, 2013.

