

Gold Potential of the Broulan Reef Property
Based on Cypress Core Logging Data, the Geologic Controls of the World Class
Bruce Channel Gold Deposit and the Geologic Setting of the Red Lake District

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Introduction

This report presents a collection and synthesis of observations and ideas from the logging of Broulan Reef drill core combined with district-scale data from Gold Corp and other sources acquired during the current Cypress exploration program.

The Broulan Reef property is located on the southern extension of the large, high-grade, Bruce Channel gold deposit within the western portion of the Red Lake gold camp, Northwestern Ontario.

The observations and ideas in this report include those made by Cypress and Gold Corp personnel during numerous property specific and more regional geologic discussions which have occurred in the course of the completed work.

The first two sections of this report are focused on the structural setting of the Bruce Channel gold deposit and the Red Lake gold camp. All large gold deposits in the district are structurally controlled within persistent, district-scale shear zones. A basic understanding of these structures is important as a basis for discussing and understanding the robust potential for gold mineralization on the Broulan Property.

The final section of the report details evidence from Cypress Development core logging indicating the presence of the important ore controlling geological elements on the Broulan Property.

Summary of the Geologic Setting of the Bruce Channel Gold Deposit

The Bruce Channel Gold Deposit (BCGD) is a shear hosted ore body which lies within the Archean age Balmer formation and is now known to represent the down dip continuation of the historic Cochenour ore body. The Cochenour deposit was found in outcrop in the western portion of the Red Lake district during the initial phase of prospecting/exploration in the late 1920's. The host shear zone is reported to strike N-S and dip 70° to the west.

The Balmer formation outcrops to a limited extent in the Cochenour mine area where strong alteration and local structural complexity make detailed mapping difficult. The Balmer formation rocks are dominantly massive mafic flows and largely lack good marker units. The BCGD lies under the waters of the Bruce Channel of Red Lake. No surface mapping data exists.

Drill data show that the Bruce Channel Formation, a series of younger sedimentary and volcanic rocks (including abundant magnetite iron formations), covers the Balmer at the BCGD and Broulan, further masking the geometry of the host rocks and making surface geophysical interpretations impossible. Reliable stratigraphic marker units are rare but one package has been identified in several drill holes and gives consistent east-west strikes and near vertical dip of the Balmer in the BCGD-Cochénour-Broulan area. This geometry is consistent with mapping in Balmer further east in the Campbell – Dickenson area. N-S to NNE striking, talcose, ultramafic volcanic rocks within the Balmer formation in the BCGD-Cochénour area occur within the highly sheared East Bay Deformation Zone. It is unlikely that the apparent strike of these units results from anything but structural and is the result of smearing in the shear zone and thus is completely unrelated to any pre-shear-deformation geometry. These highly deformed and altered ultra mafic rocks are thought to be very important for nearby ore deposition due to their high ductility contrast with surrounding units. Highly deformed and altered ultra mafic rocks have been intercepted within strong shear zones at Broulan.

The host shear zone at the BCGD intersects the largely east-west striking stratigraphy of the Balmer formation at approximately 90°. A very similar geometry is likely present at the Broulan property.

The main zone of the BCGD has been variously estimated to contain from 4 million to over 10 million ounces of gold at grades of around an ounce per ton. It now seems certain that production from the BCGD will easily surpass that of the historic Cochénour mine and will do so with higher head grades and with much greater continuity of the mineralization. It might be time to refer to the Cochénour deposit as the up dip extension of the spectacular BCGD rather than the other way around. The premium price paid by Gold Corp to Gold Eagle in 2008 for the BCGD makes this point as clear as possible.

Summary of the Structural Setting of the BCGD within the Red Lake District

The Campbell, Dickenson and BCGD-Cochénour are all structurally controlled gold deposits. The Campbell and Dickenson deposits are localized within a district-scale, WNW trending set of parallel structures known as the Mine Trend. High grade lodes are hosted by small-scale, N-S trending cross faults within the Mine Trend corridor. The Bruce Channel and Cochénour gold deposits are localized within a discrete, district-scale shear zone which is reported to strike N-S and dip 70° to the west. The ore body plunges to the south within the west dipping host shear. This geometry results in an apparent NNE strike to the deposit in plan view. The true strike of the plunging deposit is reported to be nearly due N-S. This geometric point is important to keep in mind when discussing the potential position of the strike extension of the controlling shear zone on the Broulan property.

The key to predicting the position of mineralization on the Broulan property largely hinges on determining the position of the strike extension of the recently identified thrust fault and the younger, intersecting, host shear zone. The thrust fault dips SW at approximately 48°. Data drilling at the BCGD and underground at Cochénour shows the thrust fault to be intruded by a rhyolite porphyry dike. These distinctive dike rocks have been positively identified in holes BR08-3D and BR08-3E at Broulan.

The extension of the very important, late, N-S shear onto the Broulan property appears certain and has likely been intersected in hole BR08-3E. The evidence showing the existence of the thrust fault and the ore host shear on the Broulan property is the most important aspect of this report and is discussed in detail in the Geological Evidence from Drill Core of the BCGD Environment at Broulan section below.

The BCGD occurs within the N-S striking, west dipping shear zone in a depth position just beneath a recently identified thrust fault. The SSW plunge of the BCGD ore body results from the plunging geometry of the structural intersection in which it is hosted. Results from core logging of Cypress drill holes strongly supports the existence of these two critical structural elements on the Broulan property. This fact is not surprising as simple projection of the structures as identified by Gold Corp in drilling to north onto the Broulan can be done.

Ore zones on the Broulan property will likely be in the same structural position and have the same SSW plunging geometry as those of the BCGD to the north. The data from the completed drilling at Broulan are beginning to show the likely position of the critical structural intersection, see section Geological Evidence from Drill Core of the BCGD Environment at Broulan below.

The controlling shear zone is thought to be a relatively late structure which offsets older structures in the district. However, offsets of the relatively late, ore controlling shear in the underground workings of the Cochenour mine are common and resulted in more difficult mining/grade control. The reported offsets appear to have mainly occurred along WNW trending structures ("Mine Trend"). A number of interesting points arise from this structural data:

1. The BCGD-Cochenour controlling shear, while termed "late", must have been active and dilatant during the time of ore formation.
2. When viewed at a district-scale, the N-S shear appears to truncate the WNW "mine trend". This is in agreement with the late timing of the structure.
3. In contrast to point 2 above however, WNW, "mine trend" offsets of ore in the N-S shear were found during mining at Cochenour. This implies at least some activity of the WNW structures after ore formation along the N-S shear at Cochenour and the BCGD.
4. The district scale control of the main Campbell and Dickenson deposits is the WNW set of structures. Ore shoot control however is in a N-S orientation. N-S trending high grade ore zones occur within a WNW trending envelope.

The above data indicates that both WNW and N-S trending shears were active at the time of main stage mineralization in the district and together resulted in the localization of the Campbell, Dickenson, Cochenour and Bruce Channel gold deposits. High grade ore trends in all these deposits are dominantly N-S which strongly suggests that N-S oriented structures were dilatant during the time of ore formation.

The N-S trending ore controlling structures within the Campbell – Dickenson deposits appear to be minor cross structures within the main WNW trend and must be contrasted with the district-scale, N-S shear which hosts the BCGD-Cochénour ore system. The minor N-S cross structures within the WNW mine trend area only host major ore within the WNW trending structural envelope. The N-S shear at the BCGD may more properly termed a break as it a district to regional scale fault zone of the highest importance in localizing gold mineralization.

The potent N-S shear or break hosting the BCGD appears to be the main strand of the NNE striking East Bay Deformation Zone (EBDZ). The EBDZ hosts ore along a zone extending from at least Rubicon's McFinley development to the Finn Zone at the north end of the Cypress Broulan Reef property. With relatively little trouble, this structural/mineralization trend can be extended all the way south to the Madsen and Starratt Olson mines. This point, while somewhat speculative, indicates that any properties along the N-S trend of the break which are not in Gold Corps hands should be strongly considered for acquisition or JV. This would include the Grand View property.

Geological Evidence from Drill Core of the BCGD Environment at Broulan

The geological logging of core from the BR08-3C, 3D and 3E drill holes in the northern portion of the Broulan property has provided Cypress with very strong evidence of the existence of the key geological elements present at the Bruce Channel Gold Deposit to the north. This evidence can be best presented in four categories; Lithology, Structure, Alteration-Veining and Geochemical (assay).

Lithology

The BCGD is hosted by mafic and ultramafic volcanic rocks of the Balmer formation. Mafic and ultramafic volcanic rocks of the Balmer formation are present at depth at Broulan in all core holes which pass through the overlying Bruce Channel sedimentary package. Gold Corp data on marker beds in the area just east of Broulan indicate an east-west strike to the rocks of the Balmer at Broulan. Gold Corp data indicates an east-west strike to the Balmer host rocks at the BCGD.

A felsic dike is commonly intercepted in BCGD drill holes within a sheared thrust fault package which overlies mineralization. Gold Corp refers to this unit as the Mottled Rhyolite Dike or MRD. These distinctive dike rocks have been positively identified in holes BR08-3D and BR08-3E at Broulan. As at the BCGD, the MRD units at Broulan have been found within a sheared package of mafic to ultramafic volcanic rocks of the Balmer formation.

Talcose, ultramafic volcanic rocks within the Balmer formation in the BCGD-Cochénour area occur within both the N-S striking shear and the thrust fault package. These highly deformed and altered ultra mafic rocks are thought to be very important for nearby ore deposition due to their high ductility contrast with surrounding units. Highly deformed and altered ultra mafic rocks have been intercepted within a strong shear zone in hole BR08-3E at Broulan.

Structure

The BCGD is structurally within the N-S striking, west dipping shear zone in a depth position just beneath a recently identified thrust fault. The SSW plunge of the BCGD ore body results from the plunging geometry of the structural intersection in which it is hosted. The thrust fault is identified by Gold Corp by the logging of a series of rocks known as the thrust package. The thrust package contains variably sheared units of felsic dike (MRD), talcose ultramafic and highly altered mafic volcanic rocks. Lamprophyre dikes are commonly seen in the package. The lamps are late and are unrelated to mineralization but have used the same structures which have helped focus the earlier mineralization.

The main units of the thrust fault package have been positively identified in holes BR08-3D and BR08-3E at Broulan. Drilling through the thrust package into the highly prospective rocks beneath has proven difficult in the current drilling at Broulan due to a highly oblique angle of attack from the drill site on the east shore of the Bruce Channel.

The evidence of the existence of the critical BCGD host shear zone at Broulan centers on a very strong zone of shearing intercepted in Broulan hole BR08-3E. The shear zone was intercepted at 2643.6m and continued to 2737.2m down hole. The zone contains multi-meter scale widths of the strongest shearing seen to date at Broulan. The zone contains a 16 meter wide zone of highly talcose ultramafic rocks from 2720.8m to 2737.2m. This is the widest and most talcose section of ultramafic rocks intersected on the property to date. No MRD units, typical of the thrust fault, occur in the shear zone. The shear contains widespread po, cpy, py and local aspy mineralization and local intense silicification, all characteristics of the N-S shear according to Gold Corp geologists.

The base of the intense shear in BR08-3E is sharp at 2737.2m, below which, a zone of non-foliated but intensely altered Balmer formation was intercepted to a depth of 2753.4m. This 16.2m interval clearly separates the shear from another structural zone which occurs below 2753.4m. The underlying zone is moderately sheared and contains abundant MRD units. This underlying zone is clearly the thrust fault and it was intercepted to a depth of at least 2818m (logging in progress). The geologically and structurally distinct upper shear is very likely the southern extension of the ore hosting N-S shear. The N-S shear was intercepted in a position just above the thrust fault, a position likely to host highly anomalous (to >5 grams) but sub-ore-grade gold mineralization (according to Gold Corp from drilling in the upper portions of the BCGD).

The implications of the structural interpretation of the two separate shear zones intercepted in hole BR08-3E must be compared to the shear zone intercepted in hole BR08-3D, located approximately 100 meters to the NNW. BR08-3D and BR08-3E are both wedge holes off the BR08-3C mother hole. The plan view distance between BR08-3D and BR08-3E in the area being discussed is approximately 100 meters with hole BR08-3D being 100 meters NNE of hole BR08-3E. A strong zone of moderate shearing was intercepted in hole BR08-3D in the interval of 2647m to 2737m down hole. The shearing is accompanied by significant widths of quartz veining and by MRD units. The presence of the MRD units labels this structure as the thrust fault. The plan map of the BR08-3C, 3D and 3E holes shows that hole 3D intersected the MRD intruded thrust fault

in a position that is vertically above and further east that the lower, MRD bearing shear intersected in hole 3E. This geometry is in agreement with Gold Corp data showing that the thrust fault dips SW.

The plan map also indicates why hole 3D did not intersect the interpreted N-S trending upper shear hit in hole 3E. Hole 3D did not cut far enough west to intersect the interpreted N-S shear of hole 3E.

Alteration and Veining

Gold Corp descriptions of alteration and veining of the mafic and ultra mafic Balmer formation host rocks in and around the BCGD-Cochénour ore system have six common themes:

1. Pervasive, fine grained biotite alteration of the Balmer in a wide (200 m, maybe more) halo around mineralization.
2. Wide-spread moderate silicification of the Balmer in a wide (200 m, maybe more) halo around mineralization.
3. Local intense silicification of the Balmer in or closely proximal to mineralization.
4. Intense sericite alteration of the MRD unit within the thrust closely proximal (within 500 feet) to mineralization. This alteration results in a waxy yellow color to the MRD.
5. Quartz-actinolite veinlets in the Balmer in or closely proximal to mineralization.
6. A wide zone of carbonate veining beneath the thrust fault closely proximal to mineralization.

Alteration and veining styles 1 thru 5 have been positively identified at Broulan in holes BR08-3D and BR08-3E. Intense sericite alteration of the MRD unit within the thrust in hole BR08-3E was very strong and appears identical to altered MRD core samples provided by Gold Corp. This alteration is known to be a very good indicator of ore within 500 feet (or less) in the old Cochénour Mine.

The lack of evidence of the important wide zone of carbonate veining beneath the thrust fault is likely explained by the lack of drilling beneath the thrust. The thrust has not been penetrated to any significant extent in the completed drilling.

Geochemical (Assay)

The lack of significant gold anomalies from the completed drilling at Broulan results from the failure to penetrate the thrust fault (due to the highly oblique angle of attack from the east shore). No conclusions on the potential for the existence of a major extension of the BCGD at Broulan can be made based on geochemistry until significant meters are drilled beneath the thrust. The moving of the rig to McKenzie Island will be a big help in getting this accomplished.

Assays from split core from the upper shear and lower thrust in hole BR08-3E are highly anticipated. If highly anomalous to multi gram gold values occur in the upper shear, the pending identification of the structure as the BCGD host structure will be largely

confirmed. If this occurs, a very high quality drill target at the projected intersection of the upper shear with the lower thrust will present itself.

Conclusions

This report is informal but does represent an honest effort to compile all available data thought to be relevant to the exploration for the down plunge extension of the world class, Bruce Channel Gold Deposit onto the Broulan Reef property. The data and ideas have come from all Cypress project personnel and management as well as from critical geologic discussions with Gold Corp.

While other interpretations can and should be made from the data used here (and from other data not used here), the overriding facts relating to the potential for the continuation of the BCGD onto Cypress ground are clear and unequivocal.

Data from the logging of the BR08-3C, 3D and 3E core holes as presented above has shown overwhelming evidence of the existence of the down plunge extension of the critical geological elements of the BCGD on to the adjoining Broulan Reef property. Geometric issues relating to drill hole orientation versus structure have prevented success thus far. The BR08-3C, 3D and 3E series of holes were excellently located and any of the three could have hit ore if drilled deeper or if the holes had deflected at slightly different angles. The change to drilling at the dipping structures from McKenzie Island will solve this issue.

The structural and lithologic controls on gold mineralization within the Bruce Channel gold deposit extend along strike and down plunge on to the Broulan Reef property of Cypress Development. This fact is clear from the compiled data from the ongoing drill program at Broulan. Additionally, the district scale data strongly suggest that the potential for shear hosted gold deposits extends through the Broulan property and continues south through the Grand View property on its way to the historic producing mines of the southern portion of the Red Lake district.

However, as with most ore deposits, drilling to within close proximity to ore does not provide assay confirmation of nearby zones. The boundaries on ore deposits are sharp, especially those of Archean lode gold deposits. Only when the dictated combination of ore controlling elements are intercepted will ore be found. The compiled data from the Cypress Broulan exploration program strongly suggests that success is very near.