

GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT

ON THE

EAST CRAIGMONT MAGNETITE ZONE

NICOLA MINING DIVISION

BCGS 0921016, 0911026

50[°] 12' 27" N, 120[°] 55' 29" W

For

CRAIGMONT HOLDINGS LTD.

BY

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March 23, 2004

GEOLOGICAL SURVEY BRANCH ASSESSMENT PEPORT



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SUMMARY

The Craigmont Mine is located in the Nicola Mining Division on BCGS map sheets 0921016 and 0921026 at 50° 12' 27" North, 120° 55' 29" West. The mine is located in the Intermontane geoclimatic zone with hot dry summer and cold winters. Vegetation is interior fir, spruce, and pine. Road access to the property is excellent and surface exploration can occur from May till November.

The mine was discovered by ground magnetic surveys in the late 1950's. Open Pit mining commence in 1962 and underground mining in 1967. Mining ceased in 1982 with over 34 million tonnes of ore mined. After the mine shut down the tailings have been reprocessed for metallurgical magnetite.

In December 2003 a surface trenching program for near surface magnetite mineralization was completed on the Craigmont mine property northwest of Merritt B.C. The purpose of the program was to explore for nearby bedrock resources to augment the declining reserves within the existing tailings operation.

The orebody occurs in subaqueous bimodal volcanics and coeval marine sediments and carbonates of the upper Triassic Nicola group, a west facing island arc volcanic assemblage. Near the orebody to the north the multiphased Guichon Creek batholith intruded the volcanic-sedimentary package. The Guichon creek batholith hosts the work class Highland valley copper mine 25 kilometers north northwest of Craigmont. Intruding folded Nicola rocks adjacent to and within the orebody are dioritic dykes of similar age. The ore occurs as early magnetite skarn zones within skarnified dirty carbonate and adjacent to and near massive carbonates. The magnetite mineralization has been secondarily mineralized or replaced by veins, stockworks and breccia zones of specular hematite and chalcopyrite. Low grade sulphide mineralization also occurs as non skarn pyrite-chalcopyrite disseminations in clastic sediments underlying the ore bodies.

The program was successful as high grade magnetite mineralization covered by shallow overburden on the north east wall of the abandoned open pit was partially exposed. The mineralization is an unmined portion of the original Craigmont orebody. To date approximately 200 square meters grading about 75% magnetite has been exposed. The depth extent of the mineralization is unknown but is expected to be at least 10 meters. The zones continue to the north under overburden. More zones may occur to the east.

A multi targeted exploration program comprising ground geophysics, geological mapping, geochemical sampling, bulldozer and backhoe excavation, metallurgical testing, diamond and percussion drilling costing \$100,000 is recommended. Further exploration expenses would be made based on the success of these programs

INTRODUCTION

This report documents the geological and geochemical information obtained during a field program completed in December 2003. The writer completed this Program at the request of Mr. Richard C. Hermann, P.Eng, director and Mr. Eugene Mehr, mine manager.

LOCATION AND ACCESS

The Craigmont Minesite is located 14 kilometers northwest of Merritt, B.C.. Access from Merritt is northwest via highway 97c (Merritt-Spences Bridge highway for 9 km to the Aberdeen Road in Lower Nicola, then north on the Aberdeen Road for about 5.5 kilometers to the old mill road north of the current Craigmont tailings operation, then on the old mine access roads to the north side of the east end of the abandoned pit.

PHYSIOGRAPHY

The Craigmont mine is located on the northeast east slope of Promontory Mountain near the southeast corner of an upland plateau at an elevation about 1500 meters. The highest point on the property is a broad north trending ridge ranging from 1580 to 1633 meters elevation 2 kilometers west of the pit. The lowest point is a swampy lowland south of the Craigmont Tailings operation at 860 meters. The climate is moderately dry semi continental with less than 1 meter annual precipitation. Upper elevations are covered by interior spruce and lodgepole pine forest which grade downward to ponderosa pine forest at about 900 meters.

MINERAL TENURE

The Craigmont mine property is covered by several existing mine leases that are overlain by contiguous two and four post mineral claims that are held by Craigmont Holdings Ltd. All the leases and claims are grouped to allow for property wide application of assessment work for the mineral tenures. The mineral tenures are detailed below.

TABLE 1 Mineral Tenure CRAIGMONT HOLDINGS LIMITED

		NU.	
	TENURE	OF	
	#	UNITS	EXPIRY DATE
1	216771	18	Dec. 31, 2004*
2	384199	20	Dec. 31, 2004*
3	384200	20	Dec. 31, 2004*
4	384201	20	Dec. 31, 2004*
5	384202	20	Dec. 31, 2004*
6	386538	14	Dec. 31, 2004*
7	386539	1	Dec. 31, 2004*
8	386540	1	Dec. 31, 2004*
		114	
	1 2 3 4 5 6 7 8	TENURE # 1 216771 2 384199 3 384200 4 384201 5 384202 6 386538 7 386539 8 386540	NO. TENURE OF UNITS 1 216771 18 2 384199 20 3 384200 20 4 384201 20 5 384202 20 6 386538 14 7 386539 1 8 386540 1 114 114

*Upon acceptance for assessment credit of the exploratory work this report documents.



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HISTORY

J. F. Bristow in 1968 summarizes the early history of the Craigmont Mine;

"... The written history of the Craigmont orebodies are also short, although the Eric showing situated one mile to the east of the present open pit, was diamond drilled and trenched during or before 1935. In 1954 the fourteen key mineral claims which form the core of the present property were acquired. Prior to 1957, most of the geological and geophysical work was concentrated in the vicinity of Jackson Lake on the Payston showing approximately a mile north-west of the present open pit. Much of the initial work consisted of the investigation and evaluation of magnetic anomalies of low magnetic intensity similar to the anomalies obtained in the Bethlehem property in the highland valley area 20 mile to the north. It is interesting to note that the anomaly obtained above the Craigmont No. 1 orebody was one of high magnetic intensity."

Diamond drilling during late 1957 and 1958 outlined up to 640 feet (195 meters) averaging over 4.4 % copper. Open pit mining commenced in 1962 and underground production in 1967.

From 1977 to early 1979 a comprehensive multidisciplinary property wide exploration program was undertaken to search for additional ore grade mineralization (Morrison 1979). Although several existing zones were examined and others discovered, they were considered to small and/or low grade to warrant developing as feed for the 5000 ton per day milling complex.

When the mining stopped in 1982 34,400,000 tonnes of ore were mined. Magnetite was mined from stockpiles in dumps to 1991.

Since then1991 Craigmont Holdings Ltd. and predecessor companies have been reprocessing the tailings for magnetite for metallurgical coal cleaning and possibly hematite for pigment and other uses. Annual production is 60,000 tonnes per year of clean metallurgical grade magnetite.

Recent exploration on the mine property has focused on high grade magnetite mineralization and specifically high grade magnetite low grade copper mineralization found on the peripheries of the mined out ore body. These were left as crown pillars and were possibly uneconomic for copper mill feed.

REGIONAL GEOLOGY

Morrison 1980 page 111 states:

The Craigmont Mine lies in rocks of the Upper Triassic Nicola Group, adjacent to the southern margin of the Late Triassic Guichon Creek batholith in the Intermontane Belt of the Canadian Cordillera (Fig. I). The Nicola Group and other Upper Triassic volcanic and sedimentary rocks in central and northern British Columbia and in the Yukon are interpreted as part of a Triassic-Jurassic island arc resting on Paleozoic-Mesozoic oceanic crust (Wheeler and Gabrielse, 1972). Recent work on the Nicola Group (Preto, 1977; McMillan, 1978b) suggests it may be subdivided into a series of northerly trending fault-bounded belts, each containing a distinctive lithologic assemblage (Fig. I). The central belt contains mafic flow and pyroclastic rocks of alkaline affinity, and co genetic diorite to syenite plugs which host the diorite or alkaline-type Cu-Au porphyry deposits at Afton (Carr and Reed, 1976) and Similkameen (Fahrni et al., 1976). The eastern belt contains mafic pyroclastic and yolcano-sedimentary rocks and minor mafic flow rocks of alkaline affinity. The western belt contains calc-alkaline mafic, intermediate and felsic volcanic rocks, synvolcanic rhyolite plugs, volcaniclastic sediments and reefoid carbonates that host the Craigmont Cu-Fe skarn deposit as well as several Cu-Zn and Pb-Zn occurrences that may be volcanogenic massive sulphide deposits. Co genetic calcalkaline intrusive rocks such as the Guichon Creek batholith host the plutonic Cu-Mo porphyry copper deposits at Bethlehem (Briskey and Bellamy, 1976), Lornex, (Waldner et al., 1976) and elsewhere in the Highland Valley (McMillan, 1976). Flanking the other three belts is a marginal belt which contains interbedded greywacke and pelitic rocks that grade outward to the interbedded limestone, argillite and quartzite which host the Au-skarn deposits at Hedley (Lamb et al., 1957)."

Uncomformably overlying the Nicola Group rocks are screens of rare Mesozoic sediments and more commonly local accumulations of subaerial volcanics of late Cretaceous to Eocene, and Miocene age.

Thin to locally thick accumulations of Pliocene to Pleistocene glacial drift and related outwash covers most of the region.

Figure 3 – Regional Geology



FIGURE 1. Location and general geology of the Guichon Creek batholith showing major Highland Valley porphyry copper-molybdenum deposits (modified after McMillan, 1985).

Map from Casselman et. al., 1995. Page 162

LOCAL GEOLOGY

Morrison 1980, page 111 to 120 summarized the results of a comprehensive property and mine geological evaluation:

"The geology in the vicinity of the mine has recently been remapped by the British Columbia Department of Mines (McMillan, 1978a,b) and independently by mine personnel.

The southern margin of the Guichon Creek batholith and the adjacent steeply dipping sequence of Nicola Group volcanic and sedimentary rocks are unconformably overlain by up to 600 feet of andesitic to rhyolitic flows, breccias and tuffs assigned to the Cretaceous- Tertiary Kingsvale Group. A K-Ar. Date of 48.3 +/- 1.7 Ma. for a dyke lithologically similar to volcanic rocks of the Kingsvale Group at Promontory Hill suggests that these rocks may in fact be part of the Tertiary Kamloops Group (W .J. McMillan, pers. comm.). East of the mine plant site (Fig. 2) there is extensive cover of Pleistocene to Recent glacial alluvium.

Good exposures and detailed mapping in the Promontory Hills area (Fig. 2) have helped to resolve the stratigraphy and structure of the Nicola Group in the mine area. There is a roughly symmetrical distribution of rock types north and south of the anticlinal axis through the Basalt unit south of the Promontory Hills Lookout (Fig. 2). The sequence of Basalt, Rhyolite, Carbonate and Clastic Sediment units north of the anticlinal axis is approximately 8000 feet thick. It is characterized by flows, coarse pyroclastic and epiclastic rocks, cogenetic intrusions and reefoid carbonate rocks typical of the proximal volcanic environment in modern island arcs.

Basalt Unit

The Basalt unit forms the core of the anticline at Promontory Hills and is in sharp contact with the Rhyolite unit to the north and east and the Carbonate unit to the south. The Basalt unit consists of red to purple, massive to weakly bedded agglomerate, tuff and lapilli tuff with intercalated volcanic conglomerate and sandstone, augite-plagioclase porphyritic basalt flows and hematitized flow breccia. Chemically, the flow rocks are potassium-poor calc-alkaline basalts (W .J. McMillan, unpublished data), distinct from the alkaline basalts of the central belt of the Nicola Group (Preto, 1977).

Rhyolite Unit

The Rhyolite unit is sharp contact with the Basalt unit, but is interbedded with the Carbonate unit in its upper part. It consists of light grey to buff, massive to thickly bedded crystal tuff, tuff, lapilli tuff, lithic tuff, breccia .and minor spherulitic flows. A subvolcanic plug of quartz feldspar porphyry within the Rhyolite unit west of the Promontory Hill Lookout has a .complete textural



(

gradation into the adjacent breccia and tuffs. Chemically, the intrusive and extrusive rhyolites are indistinguishable from one another and both have calcalkaline affinities (W .J. McMillan, unpublished data).

Carbonate Unit

The Carbonate unit has gradational contacts with the adjacent Rhyolite and Clastic Sediment units. It consists of white, massive, crystalline limestone that locally includes small reefoid bodies containing solitary corals, brachiopods, algae and spongiomorphs. The massive limestone forms isolated lenses within light to dark grey, variably impure lime sandstone, siltstone and grit (lime sandstone, siltstone and grit are rocks composed of more than 50 per cent carbonate grains of sand, silt and granule size respectively) commonly mixed or interbedded with rhyolite tuffs or quartzo-feldspathic sandstone, siltstone and argillite.

Clastic Sediment Unit

The Clastic Sediment unit grades into the Carbonate unit and is intruded by the Guichon Creek batholith. It consists of siltstone, sandstone, conglomerate, grit and mudstone composed of angular fragments of rhyolitic and basaltic volcanic rocks and quartz and feldspar crystals in a biotitic, locally magnetiterich matrix. This matrix may have been an iron-rich clay originally. Some basaltic tuffs and flows may also be present.

Guichon Creek Batholith

The Border phase (Hybrid phase of Northcote, 1969) of the Guichon Creek batholith intrudes only the Clastic Sediment unit of the Nicola Group in the Promontory Hills area. It consists mainly of fine- to medium-grained maficrich diorite to quartz diorite locally containing partly digested blocks of the Clastic Sediment unit.

A diorite plug, similar to the batholith Border phase, occupies the contact between the Rhyolite and Carbonate units in the eastern boundary of the Promontory Hills area. Another plug cuts the Carbonate and intrusive Rhyolite units vest of the Promontory Hill Lookout (Fig. 2). Biotite in diorite from the eastern plug has been dated at 209 +/-1: 7 Ma. By the K-Ar method (W .J. McMillan, pers. Comm..). The composition and age suggest that the diorite plugs are offshoots of the 205 +/-10 Ma Guichon Creek batholith (Preto et al., 1979).

Structure

Complex facies relationships and a dearth of sedimentary structures suitable for top determinations make resolution of the structure of Promontory Hills

difficult. The over-all structural trend is ENE, parallel to the margin of the Guichon Creek batholith, rather than NNW, which is the regional structural trend. Carr (1961) postulated that the Nicola Group rocks are a steep-dipping, south-facing homoclinal sequence. However, McMillan (1978b) defined a large overturned, subisoclinal anticline with a northeast trend and shallow northeast plunge passing through the centre of the thick Basalt unit south of the Promontory Hill Lookout (Fig. 2). There is a general similarity between the sequence of units north and south of the anticline axis and sedimentary structures indicating facing directions in both areas. The varied plunge of minor folds and their apparent restriction to limy horizons - suggest they may be products of local deformation rather than drag folds associated with major folding (Carr, 1961). Two main fault sets have been recognized in the mine area. A single NNE-trending fault near the Promontory Hill Lookout terminates at its southern end in the Basalt unit and at its northern end in the Carbonate unit. The intervening units are of different thickness on either side of the fault. This evidence suggests that the fault is syndepositional with the enclosing rocks and hence of Upper Triassic age (McMillan, 1978b). Two faults with a northwesterly trend bound the area known as the Embayment, which separates the Mine block from Promontory Hills (Fig. 2). A thick section of Kingsvale volcanic rocks occurs within the Embayment, but is thinner or absent in adjacent areas. A dacite porphyry dyke occupies a northwest-trending fault northeast of Promontory Hill Lookout, suggesting that the northwest-trending fault set is of Kamloops age (Eocene). The east embayment fault has right-lateral displacement of 1500 feet and no vertical displacement.

MINE GEOLOGY

The sequence of units of the Nicola Group in the Mine block is comparable to that at Promontory Hills (c.f. Figs. 2, 3). Lithologically, the Carbonate unit is similar in both areas, but the Basalt, Rhyolite and Clastic Sediment units contain higher proportions of sedimentary and fine pyroclastic rocks in the Mine block. The section at the mine is approximately 1800 feet thick compared with 8000 feet at Promontory Hills. The difference in thickness and composition suggests that the mine sequence may be the distal equivalent, relative to the volcanic source, of the Promontory Hills sequence.

Figure 5 – Mine Geology



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Figure 5A – Mine Geology Legend



Structure

In the Mine block, the Nicola Group rocks strike and dip parallel to the contact of the Guichon Creek batholith (Figs. 2, 3). All Nicola Group rocks drilled within the Mine block have partly developed granoblastic texture and mineral assemblages indicative of the hornblende hornfels facies of contact metamorphism (Drummond, 1966). The batholith contact aureole is at least 1500 feet wide in the Mine block. Mapping within the major units suggests that changes in lithology along strike and down dip are better explained by interfingering of facies than by drag-folding of a single unit of uniform thickness (c.f. Fig. 3 with Bristow, 1968; Rennie et al., 1961). This interpretation is more consistent with mapping in the Promontory Hills area and with stratigraphic relationships in present-day volcano-sedimentary environments. A major anticlinal fold comparable to that at Promontory Hills may have its axis in the Basalt unit south of the mine workings, but there is insufficient data to support such a hypothesis. Minor folding within the Mine block is restricted to the Carbonate unit, where measured axes have no consistent orientation. An antiform interpreted from the distribution of a distinctive grit band on section 7415 (Rennie et al., 1961) and minor folds observed on the 3060-level drift (Drummond, 1966, p. 111 trend east and plunge 400E parallel to the diorite plug which intrudes the Carbonate unit (Fig. 4, sections 8615, 9115). These minor structures may be the result of plug emplacement. Fault sets recognized within the open pit and underground are consistent with trends recognized at Promontory Hill. The two best developed sets, striking 0800 with steep south dip and 280° with near vertical dips, are parallel to the margin of the Guichon Creek batholith and to bedding, foliation and pervasive shearing in the Nicola Group rocks. Two other sets, striking 030° and dipping 65° E. are parallel to faults that controlled deposition of Kingsvale volcanic rocks nearby.

Basalt Unit

In the mine, the Basalt unit is at least 300 feet thick. It consists of interbedded plagioclase porphyritic flows, tuffs and derived sandstones and siltstones. The pyroclastic and epiclastic rocks

from the flow rocks. Several fine grained basalt flows also occur within the Carbonate unit in the central and eastern part of the mine (fig 4, sections 8015 to 9115. Their microlitic matrix contains 5-15% magnetite.

Rhyolite Unit

The Rhyolite unit includes up to 800 feet of white, grey and buff lapilli tuff, lithic tuff, crystal tuff and tuff. All the fragments and crystals are derived from quartz-feldspar porphyritic rhyolite and the matrix is normally aphanitic rhyolite tuff with minor muscovite and chlorite. However, locally the matrix

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contains biotite and calcite and the fragments and crystals are rounded, suggesting reworking of the tuffs.

Carbonate Unit

The Carbonate unit has been subdivided into three facies that are gradational in composition and locally interbedded. In the western part of the mine (Fig. 4, section 7415), there are two discrete lenses of the Massive Limestone facies that are separated by and grade down dip into rocks of the Interbedded and Grit facies. Farther east in the mine, the two lenses merge and eventually grade out completely (Fig. 4, section 8015, 8615, 9115). The Interbedded facies consists of: thick to thin-bedded, light grey to white, impure lime sandstone thin-bedded to laminated, dark grey to black impure lime siltstone thin-bedded to laminated dark brown to black quartzofeldspathic siltstone; and thin-bedded to laminated dark grey to black argillite. The lime sandstone contains mostly quartz and feldspar as impurities but the other three lithologies contain banded and disseminated biotite, pyrite, chalcopyrite and carbon. Sixteen analyzed siltstones and argillites from the mine averaged 10.4% Fe. and 0.022% Cu. The Grit facies consists of medium- to thick-bedded, grey sandstone, grit and conglomerate. Fragments of rhyolite and sandstone up to 2 inches in diameter are characteristic of this facies, but quartz and feldspar crystals are the main constituents. The Massive Limestone facies consists of several lensoid bodies of nearly pure limestone with a few interbeds of rhyolite tuff, argillite or siltstone near their margins.

Clastic Sediment Unit

The Clastic Sediment unit is approximately 500 feet thick in the mine area. It consists of variably recrystallized massive to thick-bedded, brown to grey, quartzo-feldspathic sandstone and siltstone. A few beds containing relict pyroxene phenocrysts, magnetite, hornblende and andesine may be recrystallized basalt tuff. Much of the sandstone in this unit is recrystallized to a rock of dioritic texture. In hand specimen, it can only be distinguished from the adjacent quartz diorite by the presence of siltstone interbeds. However, in thin section the recrystallized sandstone can be distinguished by its lower total mafic content, the association of hornblende with biotite, chlorite and muscovite rather than clinopyroxene, the presence of volcanic rock fragments and the presence of metamorphic as well as detrital feldspar grains.

Guichon Creek Batholith

The contact of the Guichon Creek batholith is irregular and difficult to define because of the similarity between the Border phase quartz diorite and the recrystallized sandstone of the Clastic Sediment unit. The Border phase is

mainly grey, medium-grained, weakly foliated biotite-hornblende-quartz diorite, although near its margins it ranges from hornblendite to granodiorite (Northcote, 1969) and contains numerous partly digested inclusions of Nicola Group rocks. The Border phase is pervasively saussuritized, sericitized and chloritized, but is unmineralized in the mine.

Diorite Plugs

Diorite plugs, similar to the batholith Border phase, occur as bulbs and fingers that are elongated parallel to the stratigraphy, but which cut all the units in the mine (Figs. 2, 4). The plugs are light grey, coarse-grained diorite, occasionally with a core of quartz diorite or granodiorite. Fractures in the diorite have haloes up to 1 inch wide of saussurite and chlorite, and veins with epidote, chalcopyrite and chlorite have epidotized haloes. Late prehnitecalcite and laumontite veinlets are common.

The Distribution and Nature of Skarn Assemblages.

Several characteristics of the skarn, not emphasized previously, have important consequences for the interpretation of ore genesis at Craigmont. First, only about two-thirds of the Craigmont ore is developed in skarn, the balance being in brecciated and veined, hornfelsed clastic rocks. Second, even massive skarns contain abundant relics of the silicate and carbonate rocks within which they have developed. Third, some of the skarn assemblages are comparable to hornfels assemblages in the wall rocks. Fourth, there is no obvious zoning of skarn assemblages away from the contact of the Guichon Creek batholith. Zoning takes place along strike within the Carbonate unit, which is elongated parallel to the batholith contact. Variations in the skarn assemblages are controlled by facies variation within the Carbonate unit. Consequently, the skarn assemblages can be described by their relationship to original stratigraphy (Table 1). Bleaching is a common feature of the clastic rocks in and adjacent to skarn zones at Craigmont. In the siltstone and argillite of the Interbedded facies, bleached zones occur adjacent to skarn or carbonate-rich beds (Fig. 5B,C). The bleached zone is buff to light green in colour, cut by chlorite-pyrite-chalcopyrite veinlets and irregular in its contact with unbleached rock. It consists of relic quartz and feldspar with clinozoisite, tremolite, sericite, chlorite and sometimes garnet, diopside and magnetite. Bleached haloes are common on chlorite-pyrite-chalcopyrite vein lets in the Grit facies and on fractures in both the Interbedded and Grit facies. Detailed petrographic and chemical analysis of similar rocks from the Whitehorse Copper Belt, Yukon (Morrison, in prep.) suggest that bleaching converts original biotite to sericite or tremolite and eliminates most of the disseminated pyrite and chalcopyrite, leaving traces in vein lets or as cores in magnetite crystals. The net chemical effect is to increase Ca and Mn, which are incorporated in skarn minerals, and to decrease

total Fe to approximately half of the original content and Cu to approximately one-quarter of the original content. Presumably, the extracted metals are incorporated in the skarn. This is supported by the observation that orebearing skarn occurs adjacent to bleached biotite-pyrite-rich siltstone (Fig. 5C), whereas barren skarn occurs adjacent to bleached biotite-pyrite-poor siltstone (Fig. 58).

Two distinct stages of skarn development are recognized. Stage I skarns contain only relics of the host rocks; Stage II skarns contain relics of both Stage I skarns and of host rocks.

Stage I Skarns

Stage I skarns are characterized by abundant bleached and unaltered relics of the host rocks as well as by the following associations: magnetite with chalcopyrite in ore-bearing magnetite-rich and actinolite-epidote-magnetite skarns; epidote with garnet in barren banded epidote-garnet skarn; and barren massive garnet-epidote-calcite-pyrite skarn.

Magnetite-Rich Skarn

Fine- to medium-grained skarn containing 10 to 90% fine grained euhedral magnetite in a matrix of granular epidote and felted actinolite with interstitial quartz, calcite and chalcopyrite has developed in basaltic tuffs and flows that are intercalated with the Interbedded facies of the Carbonate unit in the central and eastern part of the mine (Fig. 4, sections 8615, 9115).

Massive to Banded Actinolite-Epidote-Magnetite Skarn

Fine-grained, dark grey-green, massive to banded actinolite-epidote-magnetite skarn occurs in the interbedded facies adjacent to the Massive Limestone facies of the Carbonate unit in the western part of the mine (Fig. 4, section 7415). The skarn consists of euhedral or granular magnetite, felted actinolite (Fe/Fe + Mg = 0.4; Drummond, 1966) and crystalline epidote (Fe/Fe+Al = 0.3; Drummond, 1966) with interstitial calcite, quartz, chalcopyrite and chlorite. The massive skarn occurs closest to the Massive Limestone replacing argillite, siltstone or lime sandstone (Fig. 5D), of which only a few relicts remain. The banded skarn occurs farther away from the Massive Limestone facies than the massive skarn. It commonly contains remnants of bleached and partly skarned siltstone and may grade into weakly mineralized rock containing alternating bands of actinolite-epidote-magnetite skarn, bleached siltstone and dark-coloured siltstone rich in biotite and pyrite (Fig. 5C). Magnetite-poor actinolite-epidote skarn occurs in the interbedded facies in the central and eastern part of the mine (Fig. 4, sections 8015,8615,9115) and locally in limy portions of the Clastic Sediment unit.

Barren, Banded Epidote-Garnet Skarn

Fine- to coarse-grained, banded epidote-garnet skarn with minor pyrite, actinolite and magnetite and abundant relics of rhyolite tuff (Fig. 5A) or limestone occurs sporadically within the interbedded facies of the Carbonate unit where it grades into the Rhyolite unit (Fig. 4, sections 7415, 8015). A similar assemblage has developed in the carbonate-rich matrix of some rhyolite lapilli tuff. Thin argillite or siltstone beds associated with thick beds of lime sandstone in the interbedded facies or in the Massive Limestone facies have been partly converted to garnet-epidote or actinolite skarn (Fig. 5B).

Barren Massive Garnet-Epidote-Calcite-Pyrite Skarn

Massive, coarse to very coarse-grained skarn consisting of garnet (Gr₇₈And₂₂, Drummond, 1966) and epidote with interstitial calcite, pyrite and locally diopside has developed in massive limestone adjacent to diorite plugs (Fig. 4, section 7415) and where the Massive Limestone facies tapers out in the central part of the mine (Fig. 4, section 8015).

Stage II Skarn

Mineralized Stage II skarn is characterized by the presence of specular hematite that either co-exists with or replaces magnetite in Stage I skarn. Barren Stage II skarn is composed of massive garnet which replaces Stage I skarn in the vicinity of diorite plugs.

Specularite-Rich Skarn

Coarse to very coarse-grained platy specular hematite co-exists with and in part veins and replaces magnetite in actinolite-epidote-magnetite skarn. The skarn locally contains angular fragments of actinolite-epidote-magnetite skarn and bleached siltstone. There is a complete gradation between massive actinolite-epidote-magnetite skarn and brecciated specularite-rich skarn in the No.2 orebody and between specularite-rich skarn and brecciated hornfels ore in the western half of the No.1 orebody (Fig. 6)

Massive Garnet Replacement Skarn

Massive, very coarse-grained garnet skarn veins and replaces actinoliteepidote-magnetite skarn in the lower and eastern parts of the mine, particularly near the diorite plug which intrudes the Carbonate unit (Fig. 4, sections 8615, 9115). The garnet ($Gr_{42-53}And_{57-47}$, Drummond, 1966) is commonly co-associated with coarse-grained epidote and vug-filling calcite, quartz, specularite, pyrite, magnetite and chalcopyrite. Relics of fine-grained epidote-actinolite and actinolite-epidote-magnetite skarn are common (Fig. 5E). Skarn and hornfels up dip from massive garnet replacement skarn invariably contain breccia and/or veins composed of specularite, quartz and calcite, locally with chalcopyrite, K-feldspar, chlorite, tourmaline and platy magnetite.

Distribution and Nature of Ore Types.

The three major ore types at Craigmont have chalcopyrite associated with magnetite, specular hematite and pyrite respectively. Chalcopyrite, magnetite and specularite are the only significant ore minerals in the mine, and only Cu and Fe are recovered in mill concentrates. Minor supergene native copper, chalcocite, malachite and azurite occur at the paleo-erosion surface beneath the Kingsvale volcanic rocks at the west end of the open pit and in limonite-stained fractures in the Nicola Group rocks. Bornite and covellite occur locally in fractures in chalcopyrite, and. inclusions of pyrrhotite, marcasite and mackinawite are found locally within pyrite (Johnson, 1973). Molybdenite locally coats fractures in marble, garnet skarn and diorite plugs.

The over-all shape of the orebody is like a giant Pterodactyl flying east (Fig. 6). The head (No. 1 East) and body (No.2) are composed of magnetite-rich and magnetite-bearing ore, the dorsal fin (No.1 Main) is specularite-magnetite and specularite ore, the wings (North Limb, Wing, No.1 South and Northwest) are magnetite ore with specularite ore tips, and the foot is stringer ore.

Magnetite Ore

Magnetite ore is composed of 5-8% disseminated and lesser vein chalcopyrite associated with variable amounts of euhedral and granular magnetite. It occurs in magnetite-rich skarn in the No.1 East orebody (Fig. 6) and in the lower part of the No.1 South orebody (Fig. 4, section 8615) as well as in the massive to banded actinolite epidote-magnetite skarn typical of the No.2 orebody (Fig. 6). The orebodies are lensoid and elongated parallel to the foliation of the skarn and to the bedding of the clastic sedimentary rocks. Where ore persists to the margin of the skarn, contacts are often sharp against the adjacent nonskarn unit (Fig. 4, section 8015). However, within the skarn zone there is a complete gradation from massive orebearing skarn to banded skarn, with or without ore that contains abundant relics of the original host rock. In the eastern and upper part of the No.2 orebody and the lower and western part of the No.1 Main orebody, specular hematite is associated with magnetite (Fig. 6). The iron oxide content of this ore is similar to that of magnetite ore, but the copper content is higher. A diamond drill hole on section 8915 intersected 640 feet of 4.4 per cent copper in specularite-magnetite ore. Specularite appears to co-exist stably with magnetite in this ore. However, some specularite and chalcopyrite occur in veins associated with quartz, calcite, K-feldspar, chlorite and platy magnetite. This assemblage is

characteristic of the specularite ore.

Specularite Ore

In the central part of the No.1 main orebody, magnetite is subordinate to specularite and much of the ore is a breccia of fine-grained actinolite-epidotemagnetite skarn and altered limy clastic rocks in a matrix of very coarse chalcopyrite and platy specularite. The western part of the No.1 orebody is also a breccia with specularite-chalcopyrite veins and matrix, but the fragments there are predominantly bleached silts tone (Fig. 5F), sandstone and rhyolitic tuffs with minor banded garnet-epidote and actinolite-epidotemagnetite skarn. Specularite-chalcopyrite veins locally have haloes of Kfeldspar-chalcopyrite replacing epidote in barren skarn (Fig. 50), and some brecciated sandstones have much of the matrix plagioclase converted to Kfeldspar and mafic minerals converted to chlorite. Quartz and calcite are always present. Very coarse-grained platy magnetite both replaces and mantles specularite in some breccia matrix. Tourmaline is a common matrix phase in some brecciated sandstones, particularly in the Northwest and Wing orebodies. In the breccia matrix, chalcopyrite is interstitial to specularite, but fractures within fragments may contain chalcopyrite alone.

Stringer Ore

The stringer ore consists of very fine-grained chalcopyrite and pyrite in stringers, veinlets, disseminations, bands and quartz-epidote-calcite-chlorite-specularite veins (Fig. 5H). It occurs in

the bleached rocks of the Interbedded and Grit facies in the No.3 orebody in the western part of the mine (Fig. 4, section 7415). The No.3 orebody, with 1.8 per cent Cu and about 8 per cent total sulphide minerals, is horseshoe shaped in cross section, with the prongs elongated parallel to bedding in siltstone-argillite horizons, and the arch a ladderwork of stringers in grit and rhyolite tuff (Fig. 4, section 7415). Locally, the No.3 orebody merges upward with the western part of the No.2 orebody. Similar mineralization is found in the rhyolite unit on section 8015 (Fig. 4), and sporadically elsewhere in the mine. The stringer ore is always in the stratigraphic footwall of the ore zones in bleached sediments and rhyolite tuff.

Genesis of Skarn and Ore

In the Craigmont deposit, two stages of skarn and ore development can be distinguished. In Stage I, host-rock strata controlled the distribution and composition of barren garnet-epidote skarn and of the mineralized magnetite and actinolite-epidote-magnetite skarns. In Stage II, diorite plugs controlled the distribution of barren garnet skarn, which replaced Stage I actinolite-

epidote-magnetite skarn and gave rise to the specularite-rich ore of the No.1 Main, No. 1 South, Northwest and Wing orebodies.

Stage I

Abundant host-rock relics, preserved bedding, fine-grained skarn minerals and mineral assemblages similar to those in the associated hornfels suggest that the actinolite-epidote-magnetite skarn developed by redistribution of elements within the Interbedded facies of the Carbonate unit, rather than by wholesale replacement of massive limestone; that is, by diffusional rather than infiltration metasomatism (Korzhinskii, 1970). Only impure zones in the Massive Limestone facies have been converted to skarn. Within the Interbedded facies there is a general correspondence between the Fe content of the derived skarn and that of the host rock. Rhyolite bands poor in Fe and Mg are converted to barren Fe-, Mg-poor skarn (grossular garnet-epidote), quartzo-feldspathic siltstone and

argillite containing approximately 10 per cent total Fe are converted to mineralized actinolite[-epidote-magnetite skarn, and Fe-rich rocks are converted to magnetite-rich skarn.

The skarn and ore of the No.2 orebody is in sharp, but interfingering, contact with either marble (Fig. 4, section 7415) or barren garnet-epidote-calcitepyrite skarn (Fig. 4, section 8015). Skarn and ore in the upper part of the orebody is more massive than the lower part, where there is a complete gradation from banded ore into weakly mineralized, partly skarned hornfels and marble. Hornfels within and down dip from the ore zone is variably bleached, reflecting a decrease in total Fe and Cu content. It is suggested that Fe and Cu liberated by bleaching are progressively concentrated up dip into the massive skarn, but are trapped by the termination of the Interbedded facies in the Massive Limestone facies. That is, the Massive Limestone is a stratigraphic and possibly a chemical ore barrier. As the Massive Limestone likely represents former reefoid bodies, the location of reef stratigraphy within the batholith contact aureole may be a guide to Craigmont magnetite-type ore elsewhere.

Stage II

There is clearly a spatial relationship between the diorite plugs which intrude the Carbonate unit in the eastern part of the mine and the development of massive barren garnet skarn. However, the massive garnet replacement is also restricted to areas of prior development of actinolite-bearing skarn, relics of which are abundant. Specularite ore is most strongly developed above areas of massive garnet replacement skarn and as vein and matrix filling in brecciated clastic rocks. The distribution of specularite is more clearly related to the development of shearing and brecciation within the carbonate unit than to Stage 1 skarn formation. The distribution of the diorite plugs is also

controlled by the principal shear direction, which is parallel to the margin of the batholith. There is a genetic relationship among the development of shearing, the emplacement of diorite plugs, and the formation of massive garnet replacement skarn and specularite ore."

2003 WORK PROGRAM

Mr. Cliff Rennie, P.Eng., a geologist familiar with the Craigmont orebody and personal observations by Mr. Richard C. Hermann, P.Eng., director of the Craigmont Joint Venture determined that the upper near surface portion of the magnetite rich upper east end of the orebody was never mined. After some deliberation it was concluded that the best approach was to excavate into the overburden north of the exposed remnants of massive magnetite ore exposed in the pit wall A D9 bulldozer was used for access creation and bulk material movement and a CAT 200C excavator to expose the bedrock. Early in the clearing a knob of massive magnetite was exposed 30 meters northeast of the pit wall on bench 6800. Further excavation uncovered a 60 plus by up to 12 meter wide northeast trending steeply southeast dipping zone of massive magnetite (Fig 7). Two smaller zones were exposed to the west between the pit wall and the large east zone. All zones extend to the north and are overburden covered. Mapping revealed that the smallest and most westerly zone is north striking about 40 cm thick and is a shallowly east dipping vein like body extending from the northeast striking more steeply dipping zone to the east. All zones appear to coalesce into one large zone partially mined in the pit wall to the south. The massive magnetite is within a non descript actinolite-chlorite-garnet skarn. Exposures beyond the massive magnetite were either overburden or snow covered limiting extended observation. The easternmost zone may still be increasing in size under the overburden cover.

Sample methodology

The magnetite zones were chip and grab sampled as outlined Fig. 7 and 8. Chip samples were continuous and representative.

Analytical procedures and sample analyses

16 chips samples were taken and the samples were sent to Ecotech Laboratories Ltd. in Kamloops for total iron assay. The results and analytical procedures are attached in Appendix 1. No field standards were used in this program. Visual observation of the samples taken coincides closely with the sample results for all samples. Selected samples were sent to Craigmont's analytical facilities in Merritt for magnetite determinations.



Figure 6 - 3D Schematic Of Craigmont Orebody

Figure from Morrison, 1980: page 118



RESULTS

Assay results of the massive and semi massive magnetite zones returned up to 72.3% iron which when calculated with the amount of iron in magnetite is over 99% magnetite. The easternmost zone is the largest known one and averages over 4 meters wide with a strike length of over 20 meters. Sample trench T1-A returned 65.6% iron (90.6% magnetite arithmetic) over 4.5 meters. (all sample lengths are true horizontal widths) The mineralized portion of sample trench T2, 8 meters northeast of T1 returned 63% iron (89.2% magnetite arithmetic) over 3 meters. The mineralized portion (>30% iron) of trench T3 returned a weighted average of 56.6% iron (78.3% magnetite arithmetic) over 9.3 meters with a higher grade core of 65.2% iron (90.1% magnetite arithmetic) over 6 meters. To verify that how much of the iron in lower grade samples were actually magnetite the

author requested magnetite determinations using Craigmonts' crushing and Davis tube facilities. The results for all Davis tube analyses of lower grade assayed samples were much higher than predicted arithmetically. (see Table 2, below) Discussion of this phenomenon was explained by Mr. Sheldon Henry, Craigmonts'' process and quality control technician was that it is extremely difficult to remove fine silicate material from the magnetite with the resulting discrepancies. Thus the iron contained in magnetite versus iron contained in silicate in lower grade mineralization remains undetermined.

AND CALCULATIONS					
	Fe	%magnetite	% Magnetic		
Tag #	(%)	calculated*	900 Gauss		
T1-A	65.56	90.60	95.10		
T1-B	22.95	31.72	61.30		
T2 0-2	9.62	13.29			
T2 2-4	67.59	93.41			
T2 4-5.1	58.40	80.71			
T3 0-2	15.34	21.20	58.20		
T3 2-4	57.60	79.60	89.10		
T3 4-6	72.30	99.92			
T3 6-8	65.60	90.66			
T3 8-10	42.05	58.11	78.60		
T3 10-11.3	39.60	54.73	71.20		
T4-A	23.53	32.52			
T4-B	39.52	54.62	71.90		
T4 29-31.5	22.54	31.15	61.50		
T4 31.5-33	18.30	25.29	60.30		
T5	10.07	13.92			

TABLE 2 MAGNETITE ASSAYS, DETERMINATIONS AND CALCULATIONS

*assuming all iron in sample is magnetite.

Tell-Fax 250-554-6887 Email joslind@telus.net



DISCUSSION

Preliminary calculations of the magnetite exposed to date reveal that an undiluted core area of high grade magnetite of 4 meters by 25 meters grading 90% magnetite. A calculated average density (90% SG of 5.5 and 10% @SG of 2.7 is 5.2 for the high grade core. A surface area of 100 square meters for the known portion of this zone calculates out to 520 metric tonnes per vertical meter. Adding the lower grade material in trench 3 an average grade of 80% magnetite over 170 square meters is obtained. The calculated density is 5. This calculates to 850 tonnes per vertical meter grading 80% magnetite This plus the smaller zones on the same bench roughly equate to 1000 tonnes per vertical meter of greater than 75% magnetite.

CONCLUSIONS

A small excavation program for unmined high grade magnetite mineralization near the Craigmont open pit was successful in partially outlining one high grade and two medium grade magnetite zones on bench 3800. All mineralization extends north under unconsolidated overburden. As exposed roughly 1000 tonnes per vertical meter grading over 75% magnetite has been outlined. Coarse grained chalcopyrite occurring as fracture veins and pods and finer disseminations is locally abundant (>5%) but overall averages less than 2%, and locally is rare.

\$	270.00	20	\$	5,400.00
\$	90.00	16	\$	1,440.00
\$	50.00	20.5	\$	1,025.00
\$	75.00	14	\$	1,050.00
			\$	270.00
	RATE/	SAMPLES	i	
S	SAMPLE			
\$	17.50	16	\$	280.00
\$	60.00	1 60	\$	3,600.00
	A	FESSION	\$	65.00
	A ST	FROVINCE	\$\$	1,100.00
		. Astonger	35	14,230.00
	\$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 270.00 \$ 90.00 \$ 50.00 \$ 75.00 RATE/ SAMPLE \$ 17.50 \$ 60.00	\$ 270.00 20 \$ 90.00 16 \$ 50.00 20.5 \$ 75.00 14 RATE/ SAMPLES SAMPLE \$ 17.50 16 \$ 60.00 60 CENTRAL PROVINCE	\$ 270.00 20 \$ \$ 90.00 16 \$ \$ 50.00 20.5 \$ \$ 75.00 14 \$ RATE/ SAMPLES SAMPLE \$ 17.50 16 \$ \$ 60.00 60 \$ \$ 60.00 5 \$ 60.00 5 \$ 60.00 5 \$ 60.00 5 \$ 50.00 5

RECOMMENDATIONS

Mine area

Based on the success of this program further exploration is definitely warranted. The existing mineralization can be easily uncovered buy removing unconsolidated overburden. Prior to excavating deep overburden immediately east and north of the current work, a detailed magnetometer should be completed extending at least 50 meters north of the pit and 200 meters east of the 2003 work area. The mineralized zones should be air track drilled for grade and to determine depth of mineralization over any mined out areas at depth. Any magnetic anomalies outlined and the magnetic survey should be excavated, and if exposed, surface sampled and drill tested. A \$50,000 program is proposed for this site.

Preliminary observations and studies suggest that little economically mineable magnetite is present within the open pit, however several colour anomalies in the northwest pit wall should be examined.

Other areas

A magnetite-chalcopyrite zone some 300 meters north of the existing pit in the pit dump area was tested by at least one drill hole in 1979. Grades approaching 20% iron (>25% magnetite) with low grade copper over 7 meters were intersected deep in the test hole, within a much larger zone of lower grade mineralization. This zone is outlined by a pronounced 200+ meter long northeast trending magnetic anomaly. A detailed magnetometer survey of this site should be completed prior to drill testing for nearer surface higher grade mineralization. Based on the preliminary drilling results a small but significant tonnage of magnetite with possible co-product copper-silver-gold sulphide mineralization may be present. A \$5000 dollar budget for magnetometer survey with \$30,000 drilling is recommended.

The Eric showing (and other historic targets) around the mine should be reexamined as new good quality logging roads have greatly improved access.

There is a large amount of core stored at the mine site. This material should be catalogued relogged and resampled for hematite and magnetite content in known unmined areas.

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TABLE 4				
RECOMMENDED EXPENDITURES				
	<u>PROPUSED</u> EXPENDITURES			
	EXPENDITORES			
MINE AREA				
MAGNETIC SURVEYS	1,500.00			
EXCAVATION	20,000.00			
DRILLING	10,000.00			
GEOLOGICAL MAPPING	2,000.00			
GEOCHEMICAL SAMPLING	4,000.00			
TRANSPORTATION	5,000.00			
REPORT	5,000.00			
CONTINGENCY	2,500.00			
TOTAL MINE AREA	50,000.00			
NORTH PIT TARGET				
MAGNETIC SURVEY	2,000.00			
DRILLING	30,000.00			
CORE LOGGING	1,500.00			
GEOCHEMICALSAMPLING	2,000.00			
TRANSPORTATION	1,000.00			
CONTINGENCY	1,500.00			
REPORT	2,000.00			
TOTAL NORTH PIT	40,000.00			
ERIC AND OTHER AREAS				
MAGNETIC SURVEYS	3,000.00			
GEOCHEMICAL SAMPLING	3,000.00			
TRANSPORTATION	1,000.00			
CONTINGENCY	1,000.00			
REPORT	// 2,000.00			
TOTAL OTHER AREAS	10,000.00			
GRAND TOTAL	100,000.00			
	CILINDINGER BRITISH COLUMBIA S SCIEN			

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STATEMENT OF QUALIFICATIONS

I, J. E.L. (Leo) Lindinger, P.Geo, hereby do certify that:

I am a graduate of the University of Waterloo (1980) and hold a BSc. degree in honours Earth Sciences.

I live at 879 McQueen Drive, Kamloops, B.C. V2B-7X8

I have been practicing my profession as a mineral exploration and mine geologist continually for the past 24 years.

I am a registered member, in good standing as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia since 1992.

I have exploration, mining experience, and knowledge of the mineral deposits types being explored for and exploration methods discussed and recommended in this report.

I have no interest, material or otherwise in the assets, or securities of Craigmont Holdings Ltd., The Craigmont Joint Venture or any of the mineral tenures and mining leases comprising the Craigmont Mine Property, nor do I expect to receive any.



J.E.L.(Leo) Lindinger. P. Geo. March 23, 2004 APPENDIX I Analytical Results and Analytical Procedures

Analytical Procedure

BASE METAL ASSAYS (Fe)

A suitable sample weight is digested in triplicates with aqua regia. The sample is allowed to cool, bulked up to a suitable volume and analysed by an atomic absorption instrument, to .01 % detection limit.

Appropriate certified reference materials accompany the samples through the process providing accurate quality control.

Result data is entered along with standards and repeat values and are faxed and/or mailed to the client.



ASSAYING GEOCHEMISTRY ANALYTICAL CHEMISTRY ENVIRONMENTAL TESTING

10041 Dallas Drive, Kamloops, BC V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 E-mail: info@ecotechlab.com www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2003-651

CRAIGMONT MINES

PO Box 3000 Merritt, BC V1K 1B8 9-Jan-04

Attention: Eugene Mehr

No. of samples received: 16 Sample type: Rock **Project #: 076 Shipment #: None Given** Samples Submitted by: Leo Lindinger

			Fe	
	ET #.	Tag #	(%)	
	1	T1-A	65.56	
	2	T1-B	22.95	
\smile	3	T2 0-2	9.62	
	4	T2 2-4	67.59	
	5	T2 4-5.1	58.40	
	6	T3 0-2	15.34	
	7	T3 2-4	57.60	
	8	ТЗ 4-6	72.30	
	9	T3 6-8	65.60	
	10	T3 8-10	42.05	
	11	T3 10-11.3	39.60	
	12	T4-A	23.53	
	13	T4-B	39.52	
	14	T4 29-31.5	22.54	
	15	T4 31.5-33	18.30	
	16	T5	10.07	

QC DATA:	_		
Repeat:	-	,	
10	T3 8-10		41.75
16	Т5		10.16

Resplit:

1 T1-A

JJ/kk XLS/03 CC: Leo Lindinger

ECO TECH LABORATORY LTD. Jutta Jealouse B.C. Certified Assayer

59.93

CERTIFICATE OF ASSAY AK 2003-651

CRAIGMONT MINES PO Box 3000 Merritt, BC V1K 188

9-Jan-04

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i.

Attention: Eugane Mehr

No. of samples received: 16 Sample type: Rock Project #: 076 Shipment #: None Given Samples Submitted by: Leo Lindinger

		Fe	% Magnetic	
ET #.	Tag #	(%)	900 Gauss	
1	T1-A	65.56	\$5.10	
2	T1-B	22.95	61.30	
3	T2 0-2	9.82		
4	T2 2-4	67.59		
5	T2 4-5.1	58.40		
6	T3 0-2	15.34	58.20	
7	T3 2-4	57.50	89.10	
8	T3 4-6	72.30		
9	T3 8-8	65.60		
10	T3 8-10	42.05	78.60	
11	T3 10-11.3	39.60	71.20	
12	T4-A	23.63		
13	T4-B	39.52	71.90	
14	T4 29-31.5	22.54	61.50	
15	74 31.5-93	18.30	6 0.30	
16	75	10.07		

QC DATA	:	
Repeat:	-	
10	T3 8-10	41.75
16	T5	10.16

Resplit:			
1	T1-A		

JJ/kk XLS/03 GC: Leo Lindinger ECO TECH LABORATORY LTD. Juita Jealouse B.C. Certified Assayer

Craigmont Mines

Page 1

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Revision #: 001



% Magnetics Analysis

- 1. Weigh 10 grams of the dried sample into a beaker, making sure to take material evenly from all areas of the sample.
- 2. Fill Davis Tube with water, just past magnets.
- 3. Turn on magnets to 900 gauss
- 4. Wash in the Davis Tube for 4 minutes, making sure to save the tailings.
- 5. Wash the magnetic material out of the Davis Tube into a beaker and decant off the water.
- 6. Shut off tube and run tailings through tube with magnet on.
- 7. Wash the tailings in the Davis Tube for 2 minutes.
- 8. Wash the magnetic material out of the Davis Tube into the same beaker and decant off the water.
- 9. Completely dry the sample in the oven.
- 10. Weigh the dried sample and record the % magnetics.

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