## ASSESSMENT REPORT

on

## DIAMOND DRILLING

MT. BIGATTINI PROPERTY<br>Negro Creek Area<br>Fort Steele Mining Division<br>NTS 82F8/E<br>Latitude $49^{\circ} 28{ }^{\circ} \mathrm{N}$<br>Longitude $116^{\circ} 01^{\prime} \mathrm{W}$

By
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### 1.00 INTRODUCTION

1.10 Location and Access

The Mt. Bigattini property is located 17 kilometers west of Cranbrook, B.C. (Figure 1), near the headwaters of Negro and Wuho Creeks, tributaries of the Moyie River. The claims are on reference map NTS $82 \mathrm{~F} 8 / \mathrm{E}$ and centered near $49^{\circ} 28^{\prime} \mathrm{N}$ latitude, $116^{\circ} 01^{\prime} \mathrm{W}$ longitude.

The property is accessed by good logging roads from Highway $3 / 95$ south of Cranbrook, B.C., up the Moyie River, Negro Creek and Wuho Creek drainages.
1.20 History

The Mt. Bigattini property is within a large area of widespread gold mineralization which trends northeasterly and extends through the drainages of the Moyie River, Perry Creek and the Wildhorse River, the three main placer gold bearing streams of the East Kootenays.

The presence of significant placer gold in these streams has attracted long-standing exploration activity for bedrock sources. Many small lode gold occurrences have been discovered, with a few seeing minor production.

More recent interest in the Mt. Bigattini claim area arose from a prospecting discovery of gold mineralization associated with hematite breccia within a major fault separating Precambrian Aldridge and Creston Formation rocks.
1.30 Property

The Mt. Bigattini property consists of 16 two-post claims, Aug 1 to 6 and Skay 1 to 10 , in one contiguous claim block which covers a portion of the upper part of Wuho and Negro Creeks (Figure 2). The claims are owned by Mike and Tom Kennedy of Kimberley, B.C. and G.M. Rodgers of Fort Steele, B.C.

### 1.40 Scope of Present Work

During late July, 1996, two diamond drill holes were completed on the Mt. Bigatinni property to evaluate a surface occurrence of gold mineralization. Both holes were drilled on the Aug 4 mineral claim.


Figure 1
Mt. Bigattini Property
Location Map



The Mt. Bigattini property claims straddle a northeast fault contact separating Helikian Creston Formation rocks on the west and Helikian Aldridge Formation rocks on the east (Figure 3). The fault zone locally consists of a breccia zone with an intensely developed hematite matrix. Wallrock fragments within the breccia zone are commonly strongly albitized.

### 3.00 DIAMOND DRILLING

In late July, 1996, two diamond drill holes were completed from one drill site in the upper part of Negro Creek (Figure 3) to test a surface occurrence of gold mineralization. Both holes were NQ in size ( 7.3 cm in diameter). Drill hole Big $96-1$ was oriented at an azimuth of $120^{\circ}$, inclined at $-45^{\circ}$ from the horizontal, and drilled to a depth of 42.68 meters. Drill hole Big 96-2 was oriented at an azimuth of $120^{\circ}$, inclined at $-60^{\circ}$ and drilled to a depth of 60.98 meters.

Both drill holes collared in quartzites, siltstones and argillites of the Precambrian Creston Formation after passing through surface overburden. In both drill holes Creston Formation rocks are altered by chlorite and albite and/or silica. In addition, narrow intervals of hematite alteration and hematite breccia are present.

Both drill holes then passed through a narrow zone of hematite breccia which is interpreted to represent a significant fault zone. This hematite breccia hosts localized gold mineralization on surface and was the prime drill target. The hematite breccia contains minor chlorite and disseminated pyrite as well as minor gold mineralization. Geochemical gold values for the core that was sampled are provided in the drill logs (Appendix 1.) And complete geochemical analyses are provided in Appendix 2.

Below and east of the hematite breccia zone both drill holes passed into altered siltstones and argillites of the Precambrian Aldridge Formation. These rocks are quite strongly chlorite altered and contain narrow zones of hematite breccia and hematite alteration, typically with minor disseminated pyrite. Healed minor fracturing is common and drill hole Big 96-2 has a number of thin, discontinuous quartz veins, many of which have associated minor disseminated pyrite.

Complete drill logs of both drill holes are provided as Appendix 1.


Two NQ diamond drill holes, Big 96-1 and Big 96-2 were completed on the Mt. Bigatinni property in late July, 1996. Drill hole Big 96-1 was drilled to a depth of 42.68 meters and drill hole Big 96-2 was drilled to a depth of 60.98 meters for a total length of 103.66 meters.

Both drill holes collared in Creston Formation, passed through a fault contact represented by a narrow, weakly gold-mineralized zone of hematite breccia, then terminated in chlorite-altered metasediments of the Aldridge Formation. Gold values encountered are low with the highest value being 44 ppb gold. Gold values in the hematite breccia zone where it was drilled by these two holes is lower than some of the gold values obtained on surface.

### 5.00 STATEMENT OF COSTS

103.66 meters diamond drilling @ $\$ 60.78$ /meter $\$ 6300.00$

Inclusive of supervision, transportation, core logging and report

### 6.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 22 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this $15^{\text {th }}$ day of September, 1997.

Drill Hole Record
Property: MT. BIGATTINI
District: Fort Steele
Hole No: ..... BIG-96-1
Length of Hole: ..... 42.68 m
Commenced: ..... July 27, 1996
Completed: July 28, 1996
General Location: Negro Creek
Co-ordinates: $116^{\circ} 01^{\prime} 19^{\prime \prime} \mathrm{W}$ longitude, $49^{\circ} 28^{\prime} 03^{\prime \prime} \mathrm{N}$ lat.547990 N., 572600 E.
Elevation: 1900 meters
Inclination: ..... $-45^{\circ}$
Azimuth: ..... $120^{\circ}$
Dip Test Results: None
Hole/Core Size: NQ
Logged By: Peter Klewchuk
Objective: Test hematite breccia zone
Location of Core/Cuttings Storage: 3380 Wilks Road, Cranbrook
Drilled By: Lone Ranger Drilling
Type of Drill: Longyear 44
WP51 File No: ..... Tplog. 10
Operator: Abitibi Mining Corp.1000675 West Hastings StreetVancouver, B.C.

Appendix 1
DDH Big 96-1
Meters Description Page 1 of 3

| 0-6.1 | CASING; NO CORE |
| :---: | :---: |
| 6.1-12.5 | SILTSTONE, SILTY QUARTZITE |
|  | Gray-green, locally gray-white. Bedding is indistinct, at $\sim 60^{\circ}$ to core axis. |
|  | limonite on fracture surfaces. At 12.0 m a 3 - 4 mm wide chlorite vein at 5 - |
|  | $10^{\circ}$ to core axis contains minor quartz and disseminated spec. hematite. 12.35 |
|  | Breccia fragments tend to be at $\sim 60^{\circ}$ to core axis. |
| 12.5-18.5 | CHLORITIC SILTSTONE, MINOR ARGILLITE |
|  | Medium to dark green, thin and medium bedded with generally indistinct bedding planes, variably chloritic. Bedding is typically at $65^{\circ}$ to core axis. |
| 18.5-26.6 | CHLORITIC SILTSTONE AND ARGILLITE, WEAKLY BRECCIATED WITH HEMATITIC FRACTURES |
|  | Similar to previous interval but with widespread thin fractures that commonly carry abundant hematite. Variably chloritic; locally bleached by |
|  | albitization and/or silicification adjacent to hematitic fractures. |
|  | Hematitic fractures range up to 1.5 mm thick; at 25.7 m hematite is locally |
|  | disseminated in a $4 \mathrm{~cm} \times 1.5 \mathrm{~cm}$ patch. Minor pyrite occurs along fractures, |
|  | with hematite and with chlorite (exclusive of hematite). Hematite fractures cut obliquely across bedding, with both at $60-65^{\circ}$ to core axis. |
| 26.6-28.6 | ALTERED BRECCIATED SILTSTONE |
|  | Chloritic siltstone, similar to previous intervals, is moderately to strongly |
|  | altered by brecciation and albitic and/or silicic alteration. Altered zones |
|  | are glassy in texture, pale gray to bluish-gray in color,. Minor |
|  | disseminated pyrite is present. Bedding is at $\sim 55^{\circ}$ to core axis. Fractures |

DDH Big 96-1
Meters Description Page 2 of 3


DDH big 96-1

Meters
33.8-42.68
42.68

## Description

SILTSTONE, QUARTZITIC SILTSTONE, MINOR ARGILLITE
Medium dark green, thin and medium bedded. Bedding is extensively disturbed by healed fracturing. Minor thin, discontinuous quartz veining is present. Disseminated pyrite occurs with some veins, as is associated with minor bleaching. Qv are sub-parallel to bedding and at high angles to bedding. Minor py also occurs disseminated on chloritic fractures. At $37.4-37.5 \mathrm{~m}$ is a 2 cm wide vein, at $30^{\circ}$ to core axis, consisting of a breccia of elongate fragments of wallrock, quartz vein matrix and disseminated pyrite. 38.1 38.4 m is rubble of normal-looking chloritic siltstone. $38.9-39.05 \mathrm{~m}$ is a minor shear zone at $35^{\circ}$ to core axis; may be weakly silicified, minor disseminated pyrite. $41.5-41.8 \mathrm{~m}$ is a more altered zone with patchy pale gray silicification and locally abundant pyrite.
Drill Hole Record
Property: MT. BIGATTINI
District: Fort Steele
Hole No: BIG-96-2
Length of Hole: 60.98 m
Commenced: ..... July 28, 1996
Completed: ..... July 29, 1996
General Location: Negro Creek
Co-ordinates: 11601"19"W. long., $49^{\circ} 28^{\circ} 03^{\prime \prime N}$ N. Lat.547990 N., 572600 E.
Elevation: 1900 meters
Inclination: ..... $-60^{\circ}$
Azimuth: ..... $120^{\circ}$
Dip Test Results: None
Hole/Core Size: ..... NQ
Logged By: Peter Klewchuk
Objective: Test hematite breccia zone
Location of Core/Cuttings Storage: 3380 Wilks Road, Cranbrook
Drilled By: Lone Ranger Drilling
Type of Drill: Longyear ..... 44
WP51 File No: ..... Tplog. 11
Operator: Abitibi Mining Corp. 1000 - 675 West Hastings Street Vancouver, B.C., V6B 1N2
Meters Description Page 1 of 2

| 0-5.5m | CASING; NO CORE |
| :---: | :---: |
| 5.5-11.5m | SILTY QUARTZITE, SILTSTONE, MINOR HEMATITE BRECCIA |
|  | Pale greenish gray; indistinct bedding suggests medium bed thickness, few |
|  | thin beds. At $5.7-5.9 \mathrm{~m}$ is a zone of pale tan-gray bleaching with a central |
|  | zone of hematite veining 3-4mm wide, at $20^{\circ}$ to core axis. A second narrow |
|  | zone of cream-gray bleaching at 8.2 m is partly in broken core. Hematite veins are at $45^{\circ}$ to core axis. Bedding at 10.6 m is $\sim 80^{\circ}$ to core axis. |
| 11.5-13.0 | BLEACHED ZONE WITH HEMATITE BRECCIA |
|  | Cream-gray-tan colored. Weakly to intensely brecciated. Hematite common as |
|  | thin fracture coatings except near 11.9 m where, over 10 cm , it forms a $25 \%$ |
|  | matrix to brecciated, bleached (albitized and/or silicified) angular clasts. |
|  | Breccia fabric is at $50^{\circ}$ to core axis. $12.6-12.8 \mathrm{~m}$ is chloritic siltstone and argillite. |
|  | SAMPLE BIG-9 11.85-12.0 0.15m <5ppb Au |
| 13.0-35.0 | SILTSTONE, MINOR QUARTZITIC SILTSTONE AND ARGILLITE |
|  | Medium to darker green, chloritic. Generally indistinctly thin and medium |
|  | . bedded with bedding at $80-90^{\circ}$ to core axis. Below 27.4 m there is local, |
|  | minor development of fracturing, bleaching and associated hematite breccia. |
|  | At 31.4 and 31.9 m are irregular patches of massive hematite with bleaching; |
|  | each zone is 5-6cm wide. Near 33.7 m a narrow band of more typical hematite |
|  | breccia with small bleached clasts is $\sim 3 \mathrm{~cm}$ wide at $50^{\circ}$ to core axis. An |
|  | irregular patch of vein quartz at 29.2 m has strongly chloritic margins with |
|  | disseminated py and minor patchy hematite. |



## Bondar Clegg Inchcape Testing Services

## Appendix 2. Geochemical Analyses

## Geochemical

Lab
Report
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DAIE PRINTED: 23-AUG-96 PAGE 3

 . $b$ Report

REPORT: V96-01244.0 ( COMPLEIE)
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