GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS

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PROSPECTING REPORT

on the

PHANTOM 1 Mineral Claim

situated in the

FORT STEELE MINING DIVISION

NTS 82F/8E and 82G/5W

49° 23' Latitude Longitude 115° 59'

Owner / Operator: Frank O'Grady, P.Eng. 587 Wallinger Ave. Kimberley, B.C. VIA 1Z8

Work performed during September 1995

FILMED

Report by Frank O'Grady, P.Eng.

Report submitted: September 13, 1995 GEOLOGICAL BRANCH ASSESSMENT REPORT

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INTRODUCTION

The Phantom 1 claim consists of 8 units, the record number is 330704. It is situated in the Fort Stele Mining Division.

The registered owner and operator of the property is Frank O'Grady of 587 Wallinger Ave., Kimberley, B.C. VIA 128.

The PHANTOM 1 claim: is situated 20 kilometers southwest of Cranbrook B.C., and is centered near Longitude 115° 59', Latitude 49° 23' (map 1).

Access to the property is by proceeding south of Cranbrook on Highway 3 a distance of 12 kilometers to the Lumberton Road, also known as the Moyie River Road. This road is followed West a distance of 13 kilometers to the junction with the Semlin Creek Road. The Semlin Creek Road is followed South to the 4 KM. sign, during which the Moyie River is crossed. The McNiel Creek Road is then followed to the South. At the 4.4 kilometer point on the McNiel Creek road the North boundary of PHANTOM 1 is crossed 870 meters west of the northeast corner.

PHANTOM 1 claim straddles McNiel Creek. Approximately 20% of the claim lies on the West side of McNiel Creek and 80% on the East side of McNiel Creek.

The elevation ranges from 1400 meters above sea level at McNiel Creek to 1750 meters above sea level at the northeast corner of the claim.

The claim is, for the most part, on the fairly steep East slope of the McNiel Creek valley. Forest cover along McNiel Creek is Balsam and Spruce. The eastern slope is mostly covered with immature Lodgepole Pine of small diameter growing closely together. A portion of the central part of the claim as well as along the South boundary has been clear cut and replanted.

The PHANTOM 1 claim was originally part of the McNiel Creek claim group. The location of PHANTOM 1 closely corresponds to the location of the former MAR 4 claim that formed part of the McNiel Creek group.

From May 1988 to March 1989 a program of line cutting, geophysical surveying, geological mapping, soil sampling, and diamond drilling was conducted on the McNiel Creek property. The owner of the property was South Kootenay Goldfields Inc. The exploration program was directed by Bapty Research Ltd.

The exploration program conducted on behalf of South Kootenay Goldfields during 1988 and 1989 was conducted entirely on the West side of the McNiel Creek Road. The area East of the McNiel Creek Road which comprises approximately one third of the PHANTOM 1 claim group has had no exploration conducted on it. The rocks underlying the claim group are of the Aldridge Formation. The only outcrop located on the area prospected is situated at the northeast corner of Phantom 1. This outcrop is a quartzite of the Aldridge Formation. Also, the sediment boulders examined during prospecting all appear to be from the Aldridge Formation. The intrusive boulders examined during prospecting are believed to be from the Moyie Sills also contained within the Aldridge Formation.

A program of prospecting and geochemical sampling was conducted by, and under the direction of, Frank O'Grady during 1995. This program covered the northeast third of the claim situated East of the McNiel Creek Road. This area has had no previous exploration conducted on it. Also, a tributary of McNiel Creek (Danny Creek) that flows in a northwest direction from the East side of McNiel was prospected. Four days were spent prospecting, 30 soil samples were taken and 3 sediment samples were taken. The samples were analysed for Pb, Zn and As.

PROSPECTING

Four days were spent prospecting the northeast portion of the claim. Approximately 70 hectares were covered by prospecting. No economic sulphides were encountered. In fact, the only sulphide mineralization encountered were minor amounts of finely disseminated pyrite in quartzite float. Map 4 exhibits the results of the prospecting program. A description of the prospecting traverses forms appendix 1.

GEOCHEMICAL SURVEY

A total of 30 soil samples and 3 sediment samples were taken.

The soil samples were taken by following selected contours crossing the northeast portion of the claim and taking a soil sample every 50 meters. The spacing of the samples was determined by hip chain. Each sample came from the B horizon at depths of 5 centimeters to 20 centimeters, but usually about 15 centimeters. The samples were taken with a grubhoe.

Two of the sediment samples, sed 95-2 and sed 95-3, were taken at springs that were encountered during the course of work on the claim. Sed Dansed-1 was taken immediately above the bridge across Danny Creek.

The samples were sent to Chemex Labs of North Vancouver, B.C. for soil preparation and Pb, Zn and As analysis. The -80 fraction was analysed by normal geochemical techniques. The certificates of analysis form appendix 2 and appendix 3 of this report. In the Aldridge Formation, Kootenay Exploration (COMINCO), considers the following minimum soil/sediment values to be anomalous:

Pb	45	PPM
Zn	240	PPM
As	18	PPM

The maximum values from the soil/sediment samples of this survey are:

РЬ	34	PPM
Zn	181	PPM
As	8	PPM

Therefore, no substantial geochemical anomaly exists on the area surveyed by geochemical methods.

There are, however, two Zinc values above background (166 PPM, 181 PPM) present in the northeast corner of the property. In addition, there are three Pb values above background (34 PPM, 35 PPM), two near the northeast corner of the claim and one (34 PPM) on the western line of samples. Also, there are three As samples above background: one (6 PPM) in the northeast corner of the property and two (8 PPM, 6 PPM) on the western line of samples. One As sample is coincident with the 34 PPM Pb and the other is 100 meters distant.

A possible interpretation of the geochemical results is that the gully mapped on the northeast corner of the property is the surface expression of a fault. In addition to the gully, the outcrop mapped adjacent to the gully in the northeast corner of the claim is silicified and has a conchoidal fracture as well as two sets of fractures. The western portion of the gully trends towards the above background values of the western line. The above background values could be a result of hydrothermal alteration related to a fault.

A future exploration program on this portion of the claim will include a VLF-EM survey to determine if a fault and related shear zone is present in the northeast portion of the claim and to trace it to the West.

Sediment DANSED-1 (Pb 26 PPM, Zn 90 PPM, As 1 PPM) is not considered significant.

Samples sed 95-2 and sed 95-3 were taken from springs seeping from the hillside. In some cases a spring indicates a shear or faulting with hydrothermal alteration. The results of these two samples are not considered significant.



ITTEMIZED COST STATEMENT

		TOTAL COST
Frank O'Grady, P.Eng. September 1, 3-5; 4 days @ \$300/day		\$1,200:00
Field Assistant, J. O'Grady September 1 & 3; 2 days @ \$100/day		200.00
Transportation: one 4 x 4 truck September 1, 3 - 5; 4 days @ \$75/day		300.00
Geochem Assays, for Pb, Zn and As 30 soil samples @ \$12.75 3 sediment samples @ \$12.75		420.75
Delivery		15.70
Report Preparation		400.00
Air Photos		32.82
	TOTAL	\$2,569.27

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AUTHOUR'S QUALIFICATIONS

I, Frank O'Grady, address 587 Wallinger Ave., Kimberley, B.C. VIA 1Z8, 604-427-5670, hereby certify that:

- 1) I am a graduate of the University of British Columbia, B.Sc. Geology 1969.
- 2) I am a graduate of the University of Missouri Rolla (Missouri School of Mines), B.S. Mining Engineering 1977.
- 3) I am a registered Professional Engineer in the province of British Columbia since 1978.
- 4) I have practiced my profession as a Geologist since 1969 and as a Geologist Mining Engineer since 1977.



Frank O'Grady, P.Eng. 12 September 1995











TRAVERSE ONE This traverse was along a northwest flowing tributary of McNiel Creek, referred to as Danny Creek for ease of reference.

The creek was traversed for 450 meters from the bridge to the South boundary of the claim Phantom 1.

The creek has a steep gradient, therefore, there is almost no fine material in the creek suitable for sediment sampling. One stream sediment sample, DANSED 1, was taken immediately above the bridge. A few meters above this location a metal tag was encountered with the imprint: GEOLOGICAL SURVEY BRANCH, REGIONAL GEOCHEMICAL SURVEY, SAMPLE 3901005.

The exposed, boulder strewn, creek bed averages 1.5 meters wide. Most of the creek bed is covered with flowing water from a few centimeters to half a meter deep. Consequently, most of the boulders examined were removed from the creek and broken on the bank.

The creek banks are overhung with alder and snow bush. In addition, there is a large amount of down timber lying across the creek.

The rock type in the creek is mostly quartzite. The size of the material ranges from pebble size to .3 to .4 meters in diameter. The colour of the quartzite on a freshly broken surface is white, creamy white, yellowish and dark gray to black.

The occasional (less than 1%) rusty quartzite boulder is present. This unit is black on a fresh surface and contains approximately 2% very fine pyrite.

One piece of intrusive rock was encountered, a fine grain diorite.

One quartzite boulder was encountered that contained several fractures 5 centimeters to 20 centimeters exhibiting sericite alteration 1 centimeter wide.

TRAVERSE TWO

This traverse is along and within the North boundary of Phantom 1. The point of commencement is at the intersection of the McNiel Creek logging road with the North boundary of Phantom 1. This point is 350 meters West of intermediate post 3E,2N. This point on the McNiel Creek logging road is at kilometer 4.4.

The traverse covers a distance of 150 meters.

The rock type on this traverse consists of 90 to 95% intrusive with the remainder a quartzite. The intrusive consists of a fine grain diorite and a medium grain gabbro which are almost certainly derived from the Moyie Sills. The quartzite is rose coloured on a fresh surface. This rose colour could be the result of extreme heat from a forest fire as this colour quartzite has not been encountered elsewhere in the area. The quartzite is gray on the weathered surface.

TRAVERSE 3

This traverse covers a distance of 670 meters. It is along and within the North boundary of Phantom 1. It continues East from traverse 2 and terminates 35 meters West of the northeast corner of Phantom 1 (4E, 2N).

The rock on this traverse in exclusively quartzite. The quartzite is medium grain, massive, and fairly pure. It is a light gray on a fresh surface and dark gray on a weathered surface. The occasional boulder of thin bedded quartzite is present on the last few meters of this traverse. There are a few small boulders of rose coloured quartzite present. However, there are no sulphides present.

One boulder of medium grain gabbro was encountered 180 meters East of intermediate post 3E,2N. Phlogopite was present in this boulder.

TRAVERSE 4

This traverse was South along and within the East boundary of Phantom 1. The point of commencement was the northeast (4E,2N) corner of Phantom 1. This traverse covers 460 meters.

Boulders are sparse in some areas where the topography is fairly level. Boulders are more prolific in areas of steeper topography. The primary rock type is the gray quartzite encountered in the previous traverse on the North side of Phantom 1. Approximately 2/3 of the distance from the northeast corner of Phantom 1 a diorite boulder was encountered and a small boulder of rose coloured quartz was encountered in the same general location.

Traverse 5

This traverse is along and within the East claim boundary from the South end of traverse 4 to the southeast corner of Phantom 1 (4E). The traverse covers a distance of 550 meters.

The bush is very thick in this area. The bush consists almost exclusively of small diameter Lodgepole Pine closely spaced. In addition, the ground is effectively covered with downed timber.

The occasional boulder that is visible is gray quartzite.

TRAVERSE 6

This traverse is approximately 60 meters long. It is along a cat trail. The dominant rock type is the previously described gray quartzite. However, there is a quartzite that is composed of alternating layers of dark green and creamy white. The layers vary from 5 cm. to 10 cm. thick. This rock type makes up about 20% of the rocks present. One boulder of rounded diorite, probably of glacial origin, was encountered.

TRAVERSE 7

This traverse was along a logging road that had grown over and been reopened to tote road status with a bulldozer. The point of commencement is the western terminus of the cat trail described in Traverse 6. The traverse is along 200 meters of the tote road in a southerly direction.

Boulders are abundant in the overburden. They are comprised of 80% massive gray quartzite and 20% thin bedded quartzite, the beds an alternating green and creamy white colour. The green creamy white quartzite is characteristic and has only been encountered on the southeast portion of the claim.

TRAVERSE 8

This traverse is approximately 400 meters long. It is in a northwesterly direction along an old logging road that has been re-opened with a bulldozer. The terminus of this traverse is where the road joins the McNiel Creek logging road at the bridge across Danny Creek.

The main rock types along this traverse are approximately 90% gray quartzite and the remainder the layered alternating green and creamy white quartzite present on the last two traverses. The boulders are of small diameter and fairly rounded indicating a glacial origin rather than proximal bedrock. Occasional well rounded gabbro boulders are also present.

TRAVERSE 9

The point of commencement for this traverse is 200 meters West of the northeast corner of Phantom 1. The azimuth of the traverse is 155 degrees. The traverse follows the contour of the hillside.

The vegetation along this traverse consists of small diameter Lodgepole Pine growing close together. The ground is nearly completely covered with down timber.

The most common rock type encountered is quartzite boulders 5 cm. to 10 cm. in diameter. They are a medium gray colour on a fresh surface and dark gray on a weathered surface. In the centre portion of the traverse an occasional quartzite boulder was encountered that contained 1% to 2% finely disseminated pyrite. These rocks gave off a sulphide odour when broken. Along the final third of the traverse the gray quartzite boulders exhibited some bedding.

TRAVERSE 10 This traverse commences 25 meters West of intermediate claim post 3E,2N. The azimuth of this traverse is 145 degrees closely. following the contour of the hill.

The vegetation on this traverse consists of small diameter Lodge pole Pine closely spaced. The ground is almost completely covered with down timber. The northern 150 meters of the traverse are in a more mature open Lodgepole Pine forest with the ground well exposed.

The rock type is mainly gray quartzite similar to the type encountered on traverse 9. A small opening was encountered at approximately the mid point of the traverse. The hillside in this opening was strewn with rusty quartzite boulders that contained minor finely disseminated pyrite.

TRAVERSE 11 The point of commencement for this traverse is the bridge across Danny Creek. The traverse is in a northwesterly direction following Danny Creek downstream for a distance of 260 meters.

Large to very large boulders of angular to sub angular gray quartzite are present in this portion of the creek. One large flat boulder was encountered approximately 50 meters below the bridge. This boulder contained a bed of brassy pyrite approximately 1 millimeter thick. In addition, the occasional boulder of well rounded gabbro was present. Also, one small piece of diorite was encountered.

Several pieces of thin bedded quartzite were encountered that contained pyrite on bedding planes and in fractures. However, this unit made up less than 1% of the total boulders encountered.

TRAVERSE 12 The point of commencement for this traverse is the point of termination for traverse 11. The traverse is in a northwesterly direction, following Danny Creek downstream.

The rocks consist mostly of quartzite. The boulders in this portion of the creek are considerably smaller than traverse 11, ranging from 10 cm. to 15 cm. in diameter. The quartzites are gray to light gray. The absence of pyritic boulders present on the previous traverse was noted.

A large piece of gabbro, 2 meters by 1 meter, was present in the creek. This piece of gabbro is possibly bedrock. It is

difficult to ascertain as the water level made it difficult to thoroughly examine it.

TRAVERSE 13 The point of commencement for this traverse is the point of termination for traverse 12. This traverse is approximately 200 meters long.

A gray to creamy white quartzite was the main rock type encountered. One piece of gabbro about 25 cm. diameter was encountered.

TRAVERSE 14 This traverse commences at the terminus of traverse 13. It goes for approximately 200 meters along the creek.

At approximately 30 meters past the point of commencement the large gabbro boulders give way to almost 100% quartzite boulders. This quartzite is rusty on the weathered surface and dark gray on the fresh surface. They contain a minor amount of finely disseminated pyrite.

TRAVERSE 15 This traverse commences at the terminus of traverse 14. The length of this traverse is approximately 150 meters.

The rock type in the creek is large angular boulders of gray quartzite, similar to traverse 14.

An old road bed is present on the West side of the creek. It is composed of 80% quartzite and 20% gabbro. The boulders range in size up to 1 meter in diameter; they are angular indicating a near bedrock source. Also, an altered gabbro boulder was encountered in the roots of an uprooted tree. The mafics were all well chloritized.

SUMMARY TRAVERSE 11 TO TRAVERSE 15 These traverses all adjoin. They are along Danny Creek from the bridge across Danny Creek down stream in a northwest direction. The creek is fairly steep, therefore not much fine stream sediment size sample material is present in the creek.

The banks of this portion of Danny Creek are overhung with dense brush consisting of Alder and Snowbush. The creek has a large amount of down timber lying across it. The depth of water ranges from a few centimeters to more than a meter. It is swift flowing and covers much of the rocks in the creek bed. However, the exposed boulders above the water line give a good representation of the boulders present in this creek.

Frank O'Grady, P.Eng.

Ford O'Rong



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