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GEOLOGICAL ASSESSMENT REPORT ON AT VICTORIA, BRITISH COLUMBIA

SURFACE MAPPING AND CHANNEL SAMPLE WORK.

JAKE MINERAL CLAIMS, SAYWARD, B. C.

(Tenure Nos. 387403, 387404, 389053, 389054, 403383, 403384, 403385, 411031, 411032, 411033, 411034 and 411035)

ADAMS RIVER, SAYWARD AREA NANAIMO MINING DIVISION N.T.S. 092L/8, 092L/1 (092L030) LONGITUDE 126 Deg. 02 Min. 30 Sec. West LATITUDE 50 Deg. 15 Min. North

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By: S. L. Gardner, P. Geo. Hillsborough Resources Ltd. M. Becherer, P. Geo. Mineral Creek Ventures Ltd.

了我对任何不能帮助。这个目 See. August, 2004





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Surface Mapping Report by Michael Becherer, P. Geo.

Introduction : The Jake claims consist of 12 two post claim units centered along a stretch of the Adams River, on the southwest side of the Adams River Intrusive, where the intrusive is in contact with Triassic limestone and the Karmutsen Fm. volcanic basement rock (basalt). The claims have been staked several times by previous operators and high grade showings of copper-gold have been known about on the claim block since the early 1920's. The Adams River runs south to north through the area, and the Adams River valley is a typical narrow, steepsided valley subjected to glacial scour in many places, with a thin layer of drift. The river flows on or near bedrock but in many places, bedrock exposures are covered by coarse gravel, boulders and cobbles. Hillsborough Resources Ltd., by way of an option agreement with the claim owners, committed to perform a limited amount of mapping and sampling of high grade exposures to confirm geology and plan out a limited diamond drill program. Hillsborough contracted Mr. Michael Becherer, P. Geo. (Mineral Creek Ventures Ltd.) to perform surface mapping in the area of the high grade exposures and investigate the best method of drilling the prospect. Following on Mr. Becherer's mapping, S. Gardner of Hillsborough conducted some channel sampling activities using a diamond saw to establish grades over a mining width. This report summarizes the 2004 activities on the Jake claims.

1.0 Location and Access: The Jake claims are accessed via Highway 19. Travel northwest from the Sayward Junction for a distance of approximately 10 km. After passing the Keta Lake Rest Stop, take the first main logging road to the right, which is the access to the overpass which crosses Highway 19 and provides access to the Adams Main. Travel south on the Adams Main for approximately 6 kilometres. The Adams Main is a good all-weather main industrial logging road managed and maintained by Weyerhaueser Canada Ltd. Figure 1 shows the Jake Claims in relation to existing roads and rivers in the area.



Figure 1. : Location Map, Jake Mineral Claims

2.0 Claim Ownership: The Jake Claims are owned by a partnership of Mr. Jake Nairn, Mr. Hunter Babcock and Mr. Dilonnie Babcock, all of Courtenay, B. C. Hillsborough Resources Ltd. has an option to acquire the claims from the owners, subject to certain terms and obligations. Figure 2 illustrates the orientation of the claim units in relation to the Adams River and the tenure numbers.

Jake Claims





FEET

- **3.0** History: Not much is known about the history of the claims, except that the showings were discovered in the early 1920's and have sporadically been held by various owners since then. Cominco drilled some diamond drill holes in the early 1950's. Hillsborough Resources Ltd. has not reviewed this information.
- 4.0 Regional Geology: The Jake Claims are located on the southwestern edge of the Adams River Intrusive (part of the Jurassic Island Intrusions), a large granitic (quartz diorite) stock that has intruded through the surrounding older basaltic basement rock (Triassic Karmutsen Fm.), as well as the Triassic Quatsino Fm. (limestone). Where the intrusive is in contact with the limestones, skarn-type mineralization occurs in the form of iron skarns (magnetite), and associated sulphide mineralization, including massive sulphide occurrences along joints and fracture planes, which can be lensoid and variable in nature. J. E. Muller, in the 1974 G. S. C. Paper 74-8 (Muller, Northcote and Carlisle, 1974), mapped the Adams River area on a 1:500,000 scale. The regional geology is represented by Muller's work and produced by the G. S. C. in 1977 as 3 map sheets entitled "Geology of Vancouver Island – O. F. 463". The Adams River area geology is shown on Sheet 1 of 3 in Muller's work. Figure 3, shown here, as taken from the B. C. Government website MapPlace, represents the main geological rock types, with the Adams River Intrusive shown in light pink, the Quatsino limestones in cream and the surrounding Triassic Karmutsen Fm. basalts in green. The Jake claims are visible on the southwestward margin of the Adams River intrusive body.

BCGS Geology





5.0 Surface Mapping: (Report by M. Becherer) Hillsborough Resources contracted Mr. Michael Becherer of Mineral Creek Ventures Ltd. to perform mapping work in the area of interest, where old workings have investigated some high grade showings of sulphide mineralization near the elevation of the river level in the Adams River valley. The zone is also exposed some 15 metres above the river level showings. Mr. Becherer's report is presented in its entirety following this summary report.

6.0 Channel Sample Work: Following Mr. Becherer's field work, Hillsborough Resources Ltd. staff undertook some channel sampling of the high grade interval and surrounding host rocks to determine what grades could be expected over a typical mining width, and whether the wall rock would carry any significant grades. Figures 4 and 5 illustrates the location of these channel samples and their general orientation in relation to the existing old workings at the river level and on the upper showing.

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FIGURE 4: River Level Adits, showing saw cuts and partial assay results.



Figure 5 : Upper Showing, Showing saw cuts and partial assay results.

7.0 Assay Results: The complete listing of assay results of the channel sample work are presented as follows:

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VA04035198 - Finalized CLIENT : "NGS - Hillsborough Resources Ltd." # of SAMPLES : 16 DATE RECEIVED : 2004-06-15 PROJECT : "Jake" CERTIFICATE COMMENTS : "" PO NUMBER : " "

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	ME-GRA2	ME-GRA21	Au-AA23	ME-ICP41											
SAMPLE	Au	Ag	Au	Ag	Al	As	В	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
DESCRIPTION	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
A-1	2.09	9		8.5	6.04	176	<10	60	<0.5	4	0.16	<0.5	47	193	2960
A-2	2.14	14		16.9	5.59	12	<10	60	<0.5	<2	0.07	1.1	30	170	8080
B-1	3.88	19		21	4	177	<10	60	<0.5	<2	0.06	<0.5	66	131	6760
B-2	0.44	<5		2.4	5.84	166	<10	60	<0.5	3	0.1	<0.5	46	204	1905
B-3	0.27	<5		1.9	6.83	76	<10	60	<0.5	4	0.25	<0.5	70	205	1775
B-4	3.04	9		10.9	5.8	98	<10	40	<0.5	<2	0.15	4.1	150	216	9330
B-5	2.24	8		9.3	4	205	<10	10	<0.5	<2	0.09	6.4	154	179	7080
B-6	3.71	8		13	0.69	388	<10	10	<0.5	<2	0.01	7.9	282	172	9300
C-1	<0.05	<5		0.3	0.06	5	<10	20	<0.5	<2	19.7	<0.5	12	50	106
C-2	0.27	19		20.2	3.77	66	<10	40	<0.5	<2	0.27	47.5	97	49	>10000
C-3	<0.05	11		4.8	4	30	<10	130	<0.5	3	0.33	10.9	35	72	4610
C-4	<0.05	<5		<0.2	3.24	7	<10	220	<0.5	<2	2.53	1.2	24	30	214
C-5	0.09	5		<0.2	3.34	43	<10	170	<0.5	<2	0.68	0.8	50	38	546
D	<0.05	<5		2.6	4.84	27	<10	90	<0.5	<2	3.02	2.6	13	82	166

TABLE 1.: CHANNEL SAMPLE ASSAY RESULTS (3 PAGES)

	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
SAMPLE	Fe	Ga	Hg	к	La	Mg	Mn	Мо	Na	Ni	Р	Pb	S	Sb	Sc	Sr
DESCRIPTION	1 %	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
A-1	13.85	10	<1	0.16	<10	2.72	3210	2	<0.01	97	640	<2	3.08	з	16	2
A-2	12.15	10	1	0.17	<10	2.79	2640	1	0.01	60	500	<2	1.28	3	13	1
B-1	16.4	10	2	0.2	<10	1.61	1835	22	<0.01	64	540	<2	2.35	4	11	2
B-2	17.4	10	1	0.12	<10	2.31	2720	2	0.01	88	720	4	1.44	4	17	2
B-3	19	10	<1	0.14	10	2.94	3190	1	0.01	122	760	12	1.56	<2	19	3
В-4	17.2	10	<1	0.08	<10	2.31	3020	3	<0.01	71	620	<2	2.66	<2	15	2
B-5	18.6	10	<1	0.08	<10	1.67	2110	2	<0.01	71	460	<2	6.98	2	12	2
B-6	21	<10	<1	0.01	<10	0.26	327	3	<0.01	53	50	20	>10.0	3	2	<1
C-1	0.32	<10	1	0.01	<10	0.05	265	1	0.01	1	30	5	<0.01	<2	<1	98
C-2	16.5	10	<1	0.27	<10	1.12	1000	8	0.01	18	790	8	5.1	5	5	4
C-3	9.58	10	2	0.28	<10	1.48	1215	3	0.01	6	940	29	1.01	2	4	5
C-4	5.16	10	<1	0.46	10	1.36	1345	1	0.09	2	1070	18	0.29	3	5	76
C-5	8.08	10	<1	0.44	10	1.3	1600	1	0.01	3	1110	8	2.07	<2	4	35
D	5.67	10	1	0.24	10	1.36	1440	3	0.58	6	1100	157	1	3	8	247

	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Cu-AA46
SAMPLE	Ti	TI	U	V	W	Zn	Cu
DESCRIPTION	%	ppm	ppm	ppm	ppm	ppm	%
A-1	0.1	<10	<10	141	<10	311	
A-2	0.12	<10	<10	128	<10	341	
B-1	0.14	<10	<10	132	<10	290	
B-2	0.11	<10	<10	159	<10	316	
B-3	0.13	<10	<10	164	<10	413	
B-4	0.08	<10	<10	134	<10	576	
B-5	0.07	<10	<10	106	<10	885	
B-6	0.01	<10	<10	22	<10	617	
C-1	<0.01	<10	<10	1	<10	40	
C-2	0.05	<10	<10	47	<10	1165	1.44
C-3	0.05	<10	<10	42	<10	492	
C-4	0.08	<10	<10	62	<10	274	
C-5	0.14	<10	<10	47	<10	226	
D	0.24	<10	<10	118	<10	887	

8.0 Conclusions : It can be concluded from the recent work that a variable zone of mineralization, consisting of some high grade intervals, is present in proximity to the contact with the intrusive body and the limestone interval. In some cases the limestone has been marbleized but it doesn't appear to carry any significant gold or copper values. The mineralized zone is variable in nature and consists of a guartz-flooded interval up to 2.4 metres thick which is vertical and striking NNW to N, in close proximity to the river. It exhibits gossany weathering and can be seen running under the river to the north of the showings. It contains chalco-pyrite and pyrite rich zones. There is possibly additional mineralization in guartz veining up to 30 cm thick, running in an east-west direction through the surface expression of a major joint fracture plane contained within the small tributary creek which joins the Adams River at the location of the old adits. Mapping work has determined that the mineralization is definitely skarnrelated. As such, great variation in ore grades can be expected. Channel sampling from the upper level showing has determined that the grades over a mining width on the mineralized zone would be in the 2 grams per tonne range for Au, with associated copper values. Channel sampling from the upper level showing indicates that the higher grades are not continuous along strike to the north. A limited amount of channel sampling at the river level showings indicates that the wall rock adjacent to the adits does not carry any significant grades. There is some benefit to additional mapping work in the immediate area, especially some more detailed mapping work on the west side of the river, where the limestone body can be traced across the river bed with no interruption. Greater benefit would be obtained by drilling at least 2 diamond drillholes, as recommended by Mr. Becherer in his report.

9.0 Cost Statement

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The following is a summary of expenditures on the Jake Mineral Claims for the 2004 period:

SUMMARY OF COSTS, JAKE CLAIMS, SAYWARD

S. GARDNER (Hillsborough Resources Ltd.)	
3 DAYS SAMPLE COLLECTION, FIELD EXAMINATION	450 \$1,350.00
ALS CHEMEX LABS (ASSAY WORK)	\$154.49
ALS CHEMEX LABS (ASSAY WORK)	\$139.17
J. PAQUET (contractor for channel sample cutting)	
14 METRES DIAMOND SAW CHANNEL CUTTING (1day)	\$350.00
MIPOZ GEOLOGICAL INC. (Michael Becherer, P. Geo.)	
FIELD MAPPING	\$1,810.44
S. GARDNER (Hillsborough Resources Ltd.)	
1 day channel sample collection	450
1 day report writing	450
TOTAL	\$4,704.10

STATEMENT OF QUALIFICATIONS

I, Stephen L. Gardner of Campbell River, British Columbia hereby certify that:

- I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia and have been a member since 1993. Prior to 1993, I was a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- I received a BSc (Geology) at the University of Alberta in 1975.
- I have been practicing my profession as a Geologist since 1977.
- I have compiled this brief report as a summary of evaluation work performed by Hillsborough Resources Ltd. and its subcontractors on the Jake claims during 2004.

Report

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on

1. Preliminary Exploration Investigations of the Jake Property 1a. Surface Geology Mapping

1b. Proposed Diamond Drilling Program

Jake Property

Nanaimo Mining Division NTS 092L/08E Latitude 50°15'N Longitude 126°03'W

-prepared for-Hillsborough Resources Limited

> -by-P.E. Michael Becherer, P.Geo. Mipoz Geological Inc.

> > June 12, 2004

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1. DISCLAIMER

This report is not meant to be to National Instrument 43-101 standards. Therefore it does not include detailed description of: location and access, physiography, previous work, regional geology, property geology, claim status, ownerships etc. This is solely a brief written report of the surface mapping carried out on the Jake claim over two days, done to determine the best approach to drill test the property. A general discussion of the Jake property is also included.

Respectfully submitted

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P.E. Michael Becherer, P.Geo.

2. SUMMARY

Hillsborough Resources Limited is conducting an exploration program on the Jake claim for the propertys copper and gold potential. As a part of the Hillsborough exploration program of the Jake property surface mapping was carried out. The purpose of this preliminary mapping program was twofold: to gain an understanding of the geological setting of the property; and, to provide sufficient information to lay out diamond drill holes for a diamond drill program.

On the Jake claim, sulphides having significant amounts of copper and gold values are present in a mineralized zone outcropping at the surface beside and in the bed of the Adam River. The mineralized zone is up to 15 meters thick (true thickness), near vertical, and can be traced along strike, over a distance of nearly 50 meters in the north/southerly direction at an average azimuth of 350°. The sulphide mineralization is present in several silica altered rock units which are likely Jurassic age Quatsino Limestone and the underlying Karmutsen Basalt of Triassic age. A copper-gold skarn ore deposit type model is suggested for the mineralization present at the Jake claim.

There is potential for visible surficial sulphide mineralization to extend over a considerable length down-dip, The continuation along strike is interpreted to be less promising. The proposed diamond drill program would provide some answers as to presence, attitude and form of the mineralized zone at depth. Two sites were selected for drill set ups; one drill hole at each local. The diamond drill necessary could be of small to moderate size but should be capable of drilling to a depth of 100 meters at least, coring AQ or BQ size core.

The surface showing is amenable to small scale open pit mining. Approximately 2000 to 3000 metric tons of the sulphide material carrying values of copper and gold appear to be available for a bulk sample. However

the mineralized zone amenable to surface mining is located immediately adjacent to the Adam River, an area considered as environmentally sensitive.

Filing a notice of work with the Ministry of Energy and Mines of British Columbia is recommended to take a bulk sample in the area beside the river. In the 1980's at Myra Falls permission was granted to move a section of Myra Creek, however the environmental regulations have changed over the last

twenty years.

Since skarn type deposits are commonly composed of several individual bodies in proximity to each other, it is worthwhile to explore other areas away from the river. Perhaps exploration work carried out at the known sulphide showing will provide guidance to find continuance of the mineralization leading away from the Adam River, or help find another nearby deposit.

3. INTRODUCTION

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The Jake property is located approximately 15 kilometers south southwest of the community of Sayward on Vancouver Island, British Columbia. The property is easily accessible as a major logging road traverses right through the claim area. On the Jake claim, sulphides carrying significant amounts of base and precious metals, are visible in several surface exposures.

Previous work on the property consisted of geological mapping and diamond drilling by Cominco in 1980. A limited amount of information of this 1980 exploration program is documented on a geology map showing the location of drill holes and assay results. Unfortunately, a detailed record of Comincolls data for the Jake property is unavailable. According to Stephen Gardner, P.Geo. of Hillsborough Resources Limited ; I it appears that Cominco did substantial drilling, even angling two diamond drill holes to intersect the sulphide zone at depth, however gold values in these drilled holes were not too encouraging due to the narrow widths intersected, and also for the proper evaluation of the property considerably more work is required.I

The precise history of ownership of the property is not known to the writer. In August of 2002, on behalf of Boliden-Westmin Resources Ltd., the writer briefly examined the Jake property for a possible source of additional mill-feed for the Myra Falls mill. Currently the Jake claim is being investigated by Hillsborough Resources Limited for the property scopper-gold resource potential.

4. SURFACE GEOLOGY MAPPING

The writer spent two days mapping on the Jake property. The purpose of the mapping was to gain an understanding of the geological setting detailed enough to construct cross sections. Two schematic cross sections were drawn, showing the proposed drill set up localities and the first drill hole layout for each section. (Fig. 1,2,3).

The focus of mapping was the outcropping sulphide showing located alongside the Adam River. The east side along the river and an area along the Upper Adam logging road were mapped. On the west side of the river sulphide mineralization outcrops as well. However, this area was not mapped in detail because active logging hindered access at the time. The more substantial looking sulphide mineralization outcrops are located on the east side of the Adam River and in the bedrock of the river. Chalcopyrite, pyrrhotite and arsenopyrite mineralization carrying significant copper and gold values are present over several meters in width and extend along strike. The mineralized zone is up to 15 meters thick (true thickness), near vertical dipping, can be traced along strikeover a distance of nearly 50 meters in the north/southerly direction at an average azimuth of 350°. (Figure; 4.5). The sulphide mineralization is present in several silica altered rock units of Jurassic age, and hosted in Quatsino Limestone and underlying Karmutsen Basalt of Triassic age. This sulphide mineralization may be of copper-gold skarn type.

4.1 Stratigraphic column, Jake property (youngest to oldest, rock sequence)

Age	Generic term	Form	Specific to Jake property
Jurassic?	Sulphides	stringers to disseminated, > semi-massive	chalcopyrite, pyrrhotite, arsenopyrite, pyrite

Jurassic	Intrusive rocks, quartz—diorites to granodiorites	plugs, dykes, sills	Feldspar porphyritic unit (dike?), and hornfelsed — diorite?
Upper Triassic	Quatsino Limestone	mainly thick bedded limestone	thin to thick bedded limestone and marble — recrystallized limestone
Triassic	Karmutsen Basalt	Pillow lava , pillow — breccia, amygdaloidal flows.	Amygdaloidal basalt, aphyric — and feldspar phyric basalt

4.2 Details from mapping and general observations

Amygdaloidal basalts appear to encompass the limestone (a faulted of block — segment?) and the associated mineralized zone on the Jake property. Outside of the mapped area, along the Upper Adam main logging road presumably on the north end of the Jake property there are limestone outcrops adjacent to the logging road.

The sequence of rock and mineralized units are described below, going from east to west. See Figures 2 and 3.

Basalt, massive to amygdaloidal, commonly large amygdules to cm size and with epidote, quartz and calcite as filling material. The basalt outcrops mapped along the east-side of the Upper Adam main road are weakly to strongly magnetic.

Limestone; thick to thin bedded, near vertical dip, strikes north-south, is from less than 1 meter to approximately 15 meters thick, topping direction is to the east, minor ripple marks and small scale folds are present, toward the mineralized zone abundant generally fine, anastomosing quartz-calcite veinlets cross the limestone east to west and dip at moderate angles SE. The limestone is also recrystallized to a light grey whitish marble, locally having

very fine stringers of pyrrhotite. It is evident the thickness of the mineralized zone is directly related to the thickness of the limestone package. Silica altered and mineralized rocks The mineralized silica altered rock units consist of;

a silica altered feldspar phyric mafic unit (basalt?), which is strongly mineralized having chalcopyrite, pyrrhotite, quartz calcite and arsenopyrite. This unit is from 1 to 4 meters thick (average width is 2 meters). Spot samples returned values between 1% to 5% Cu/t (percent copper per metric ton) and between 5 to 30 g/t Au (grams gold per metric ton). There appears to be a correlation between copper and gold, and/or arsenic with gold.

Sample type #	sampled by	Cu	As/pp m	Au/ppm	Assayer
J-03-01, grab	S.G.	>10,000 . ppm	515	34.20	ALS Chemex
J-03-02, grab	S.G.	>10,000 ppm	192	11.05	ALS Chemex
N/A, spot — grab	М.В.	5.40 %	N/A	15.10	Myra Falls •
N/A, spot- grab	М.В.	2.35 %	N/A	10.70	Myra Falls

Example:

- b) a silica altered intrusive unit, with feldspar phenocryst ghosts and amphibole or pyroxene? phenocrysts, this unit described as hornfels is approximately 5 meters thick and moderately mineralized having pyrrhotite and sparse chalcopyrite mineralization.
- c) a silica altered feldspar porphyritic unit (a dike?) which is approximately 5 to 7 meters thick and sparsely to moderately pyrrhotite mineralized.

Immediately to the west of the mineralized zone, adjacent to the feldspar porphyritic unit, lies marble that appears to continue across the Adam River. This marble unit is near vertical to very slightly west dipping and 10 to 20?

meters thick. (Please note this area was only observed generally on a familiarization visit of the property by the writer, and not mapped in detail.) On the west side of the river and in the northerly direction the marble/limestone unit apparently interfingers with the Karmutsen basalt. Α narrow sulphide zone of less than one meter thickness and of steep dipping attitude (~ $70^{\circ}/355^{\circ}E$) is found in contact with basalt and limestone. The basalt unit has some large amygdules of several centimeter size filled with coarse grained pyrite and quartz. Also within the basalt unit, several fine joint sets are stained green by malachite. In one fracture of approximately two centimeter thickness a zeolite mineral (stilbite?) was identified. Minor slickensides visible on the basalt bluff immediately beside the west river bank indicate the presence of a shear. This shear strikes east and appears to align with the creek bed across, on the east side of the Adam river. Further west, nearly parallel to the Adam River, a major fault strikes north-south having an apparent dip of 50 degrees to the East. The fault (fault-zone) has some rust stained rubble and several centimeter thick grey mud gouge slips of variable dip (anastomosing). This major fault likely marks the boundary of the limestone and the associated mineralized zone(s) to the west as well as in the down-dip direction.

5. PROPOSED DRILLING PROGRAM

Pending positive results from the surface sampling, the next step to explore the Jake property could be diamond drilling. In general skarn type deposits are commonly disjointed individual bodies of irregular shape. Hence skarn deposits are notoriously difficult to outline. The Jake property does not appear to be an exception of this general rule. Therefore a very modest drill program is advised for the first pass to drill test the property. The drill holes will test the most promising looking target area which is the down-dip extension of the surficial exposure of sulphides. Two drill set up localities were chosen for flexibility. Thus there is an alternative site, just in case one of the localities **DAD** or **DBD** prove impractical to use. (See Figure 1,2,3.) Both drill set up localities need clearing of brush and small trees. Set up **DAD** has small Alders grown in which would require approximately a day**D**s work to

clear. Set up **IBI** is located at the edge of the Upper Adam main logging road. For safety reasons widening of the road at this drill site is suggested. For set up **IAI** a relative small drill able to drill to approximately 300 feet and capable to core AQ-size core would suffice. However, for set up **IBI** a medium sized drill is recommended, capable to core BQ-size core to 400 feet. From set up **IBI** most projected contacts (see Fig.2) can be reached. However, from set up **IAI** the possible prospective contact of the limestone and the basalt unit which lie to the east cannot be tested properly as laid out. However drilling from **IAI** is past the creek fault and possible drilling problems due to the fault are not anticipated here.

For each set up locality a diamond drill hole is laid out with the purpose to test the Jake claim**1**s copper-gold surface showing at depth.

Locality, D.D.H.	Azimuth	Dip	Length/m (ft)	Core size
DAD , # 1	280°	_ 55⁰	75 m (245' ft)	AQ, (AQTK)
0 8 0 , # 1	240°	_ 50⁰	100m (330' ft)	BQ-size

5.1 Diamond drill hole layout, (refer to Fig. 1,2,3)

6. DISCUSSION

Sulphides with significant amounts of copper and gold values are found in a mineralized zone which outcrops beside and in the bed of Adam River, on the Jake claim. In the writers opinion; there is a good potential of the surficial visible sulphide mineralization to extend over a considerable length down-dip, while the continuation along strike does look less favourable. For the best scenarios; the mineralized zone could possibly have a plume to near vertical pipe like shape or as S.Gardner suggested is more or less confined to a bed on the contact to the limestone unit which could flatten out to the

east. The proposed diamond drill program would provide some answers as to presence, attitude and form of the mineralized zone at depth. On a small scale this surface showing is amenable to open pit mining. Approximately 2000 tons to 3000 tons of the sulphide material appears to be available for a bulk sample style operation. ($20m \times 12m \times 3m \times SG \sim 3.3 = 2400$ metric tons). A notice of work application to the Ministry of Energy and Mines to test mine on the Jake property should be submitted. A test mining project could provide a metallurgical understanding for a custom milling process and possibly be economically beneficial. However the major reason to apply for such a permit would be to see if one gains the permission to mine, even though on a very small scale, alongside the Adam River. After all watersheds on Vancouver Island are viewed as environmentally highly sensitive areas.

7. CONCLUSIONS AND RECOMMENDATIONS

- Establish an environmental base line; take at the very minimum some water samples from the Adam River above and below the mineralized showings as well as from the creek. Keep a diary on wildlife and fish observed while working on the property.
- Conduct prospecting (to the north east) near and at the limestone outcrops on the Jake claim and the surrounding area with the objective of finding a copper-gold showing a fair distance away from the river. Minor hand trenching would expose certain structures and mineralization present on the property
- Map the west side of the Adam River and the creek area in September when the water levels are at their lowest.
- Have some petrographic work done especially of the silica altered rock units as well as microprobe work of the sulphides in order to find out in what form(s) the gold is present (native, colloidal?) and associated with what mineral(s).
- Consider using a geophysical prospecting method (induced polarization.)
- Apply for a test mining permit; (establish a cut off grade, even though a bulk sampling project is a limited enterprise, carefully weigh the additional costs aside from mining like the transportation – and milling

costs for example).

- Apply for a diamond drilling program permit to coincide with the time when there are the least fish in the river.
- If there are insurmountable obstacles to overcome because of environmental reasons, and the desired exploration program work is seriously hindered or even prevented by various ministries, or other groups/individuals, halting the ongoing exploration program, at least temporarily, is advised.

8. REFERENCES RECOMMENDED

Ray, G.E. and Webster, I.C.L., 1997: Skarns in British Columbia; Bulletin 101, British Columbia Ministry of Employment and Investment

Meinert, L.D., 1993: Skarns and Skarn Deposits page 117: Geoscience Canada reprint series 6; Ore Deposit Models, Volume 2, edited by Sheahan P.A. and Cherry M.E.

Dawson, K.M. and Kirkham, R.V., 1995; Geology of Canadian Mineral Deposit Types; page 460..476, 20.2 SKARN COPPER, 20.2a Copper skarns not associated with porphyry copper deposits, 20.2b Copper skarns associated with porphyry copper deposits.

Dawson, K.M. ; 1995 Geology of Canadian Mineral Deposit Types; page 476...489, 20.3 SKARN GOLD

STATEMENT OF QUALIFICATION

I, P.E. Michael Becherer of Black Creek British Columbia, Canada hereby certify:

1) I am a registered PROFESSIONAL MEMBER of the Association of Professional Engineers and Geoscientists of British Columbia.

2) I have been practicing my profession as a geologist for 23 years, since 1981. I was an underground miner from 1967 to 1981.

3) I worked as a mine and exploration geologist as an employee and as a consulting geologist for major and junior mining companies involved in mining and exploration of base-precious metal and industrial mineral deposits.

4) I have a proven record in finding ore. At Myra Falls an ore lens was named, I the Becherer Zone I in honour of my achievements.

5) I have been involved with resource and reserve estimates for base metal deposits, since 1983. I prepared the Lynx Mine Reserves from 1983 to 1993 for Westmin Resources Ltd. Myra Falls Operations. I prepared and assisted in the resource estimates at several other base metal exploration properties since 1993.

6) I am the president of Mipoz Geological Inc. and of Mineral Creek Ventures Incorporated.

7) I have no interest, financial or otherwise in any of the Mineral Claims which constitute the Jake Property.

8) This report for Hillsborough Resources Limited is not to National Instrument 43-101 standard and therefore is meant for **D**in house**D** use only.

P.E.Michael Becherer, .P.Geo Dated this 12th day of June 2004 at Black Creek, British Columbia

APPENDIX List of Abbreviations used in maps and sections:

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Triassic Karmutsen Basalt TKB, Bas, basalt limestone Lst, Hfls, Hornfels overburden OVB, maf, mafic contact CT, msv, massive semi massive sms, stringers strs, disseminated diss, chalcopyrite сру, pyrrhotite po, arsenopyrite aspy, рy, pyrite malachite mal, quartz qtz, cal, calcite quartz-carbonate veinlets QCV**O**s, feldspar(s) feld, f, fine coarse с, T.Fr., tension fractures grey, gy, wh ,white black, bk, green gn, altered alt**0**d, strongly strly, mod**ū**ly, moderately thick, tk, bed**D**d, bedded Azimuth Az, meter (metre) m,







F16.6



4044 FILE ONTCROP strs - sans, to 30% 414. : OV8 "I'verrien to 151. po, to 301.2 aspy to 10%. ghz to 3'1. cal sulphides in may feld-phyric UNIT , 25% ameboid chaped Hgy-qu'ish alt'd felds < Imm size 1pm 1:250 ESSN Ading ma 11/04 P. E. M. BECHERER alictore coccession SCALE: 1:250 DW. MMS HILLS BOROUGH RESOURCES LTD. OSCIEN DATE. 2004/05 JAKE CLAIM F16.4

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