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April 27, 1989

F.G. Hewett  
Vice-President, Exploration Manager  
Newhawk Gold Mines Ltd.  
860-625 Howe Street  
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Dear Fred:

This letter contains GSC gold and silver lithochemical and sample location data (seen enclosed 1:5000 scale sketch map) for an area mainly south and west of the Electrum Zone. Bruce Ballantyne and Don Harris have sampled the Electrum, North Spine, and Galena Stockwork zones in detail but that information is not included here.

The main reason for this letter is to confirm the discovery of several gold-bearing quartz stringer zones (vein systems) west and south of the Electrum Zone. Perhaps the most significant quartz stringer zone, includes samples numbered KQ-87-133 (discovery sample), KQ-88-36H,I,J, and K, contains about 10 to 20 per cent quartz veinlets with minor pyrite and arsenopyrite, trends about 075 degrees, and averages about 4 to 6 metres wide. It occurs at the contact of contorted dark graphitic siltstone and arenite and altered, fine-grained plagioclase-hornblende porphyry. The vein system at sample site KQ-88-36C, about 350 m west of KQ-88-36H, might be the same vein system and the vein system at sample site KQ-88-36E might be a NNW-trending branch off the EW vein structure but I have not tried to trace these vein systems.

Samples KQ-87-132A and KQ-88-38B, also gold bearing, come from quartz stringer zones in the topographic depression south of the Electrum Zone. They serve to demonstrate that the highly silicified topographic ridges east of the Brucejack Fault, such as the Electrum, North Spine, and Galena Stockwork zones are not the only gold-bearing structures in the area.

Many vein systems occur in the area and not all contain gold. Very finely disseminated arsenopyrite within or along the walls of quartz veinlets appears to be the best indicator of gold in the area. Some of this arsenopyrite is so fine grained that it is difficult to identify in the field even with a hand lens.

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For future reference I like to put names on zones. For the area west of the Electrum Zone I suggest the name "Napoleon Zone". Josephine needs company and arsenic, thought to be the demise of Napoleon, is characteristically associated with gold in the area. An alternate name would be the "McLeod Zone" after some old guy in your office (he likes high grade so perhaps we should find something better for him). For the intensely quartz-veined and silicified rock island in the icefield about 400 metres south of the Electrum Zone I suggest the name "Bridge (or Island) Zone", after Dane Bridge and in recognition of Esso's work in the area. Dane staked some Red River claims in the area (posts on outcrop). Although not much gold and/or silver has been found in the area yet, I am sure that with more exploration (probably eventually the area will have to be drilled because of lack of outcrop) this area will prove to be another precious metal occurrence. I will let you decide on the names, these are just a few suggestions.

Although these are not high gold and silver values for the Brucejack area, they indicate significant new occurrences and that gold and silver are more widely distributed than previously thought. Moreover, they also indicate that gold and silver to the south of Brucejack Creek is not restricted to the east side of the Brucejack Fault. It extends at least 500 m west nearly to the Sulphurets Glacier. This gold-arsenic association is also present in other parts of the Brucejack area. At this time we do not know the relationship to the polymetallic mineralized zones with bonanza gold and silver grades, such as the West Zone. The gold- and arsenic-bearing quartz vein systems might be older but we have not excluded the possibility that they might also represent higher structural levels in the same hydrothermal system. Either case would be important for exploration modeling.

As I indicated previously, we had insufficient funds to analyze all samples collected last summer. Results reported here are from a group of samples that I anticipated some interesting results. When other samples are analyzed we will let you know of any values that might be of interest in exploration.

In my letter to you of November 28, 1988 I mentioned a possible significant Mo (Cu) occurrence to the west of the Iron Cap in the vicinity of Esso hole #16. Three of my lithogeochemical grab samples contained >0.3% Mo and another one contained 0.15% Mo but with some low values between. These results, plus further examination of samples from hole #16, confirm the existence of significant Mo (Cu) in this area. We do not have fluorine analyses for the area yet but fluorite (quartz, calcite ± minor chalcopyrite) veins and breccia fillings are widely distributed in core samples from hole #16 and locally in outcrop. We suspect that the Mo and Cu in the area are associated with a high fluorine content.

We appreciate your continued support and cooperation and hope that this latest information will be of interest to you.

Sincerely,



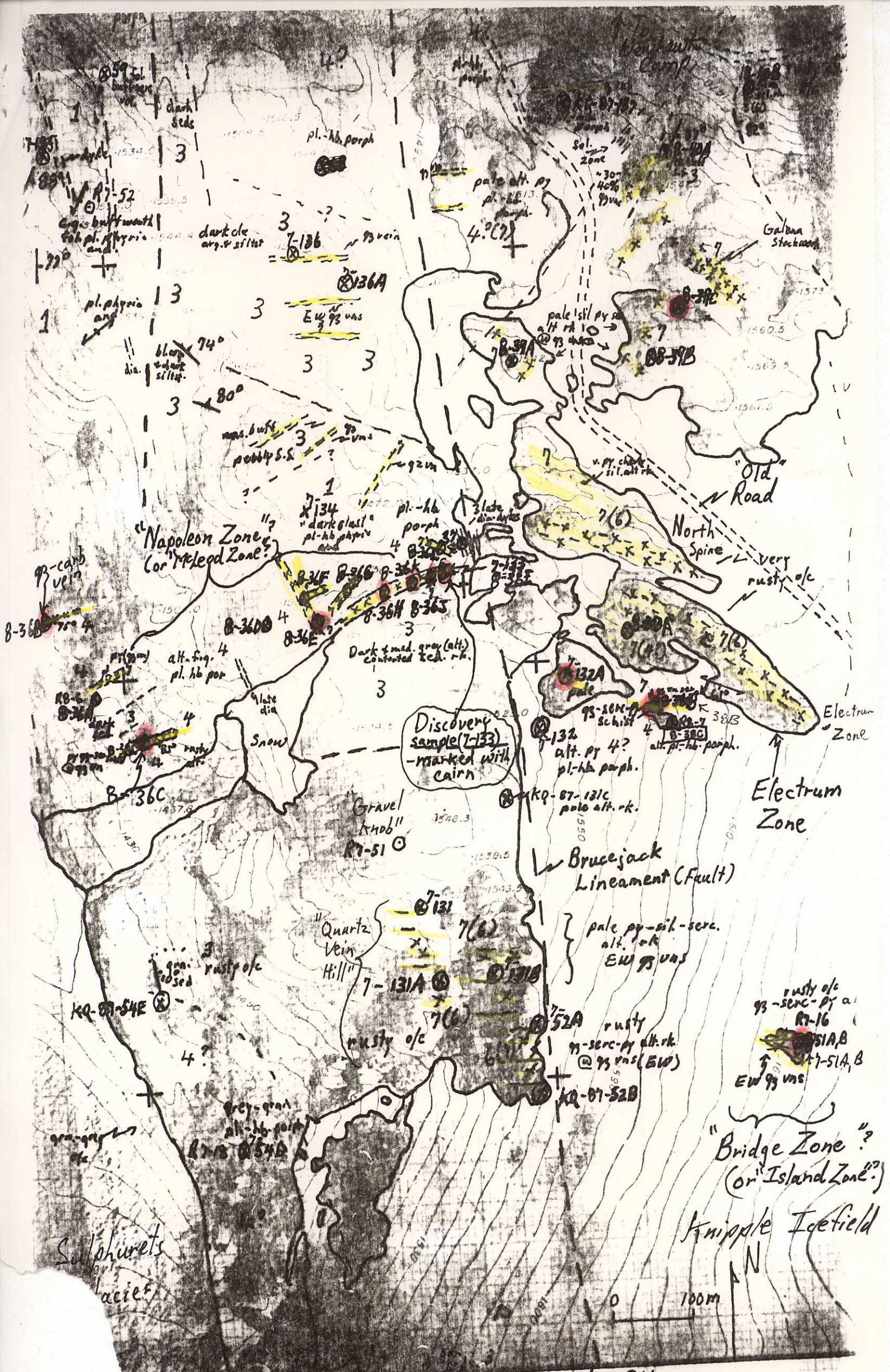
R.V. Kirkham

cc.: S.B. Ballantyne  
D.C. Harris  
R.F.J. Scoates

## Gold and Silver Analyses of "Napoleon" and Electrum Zones

(see sketch map for location)

Sample Numbers <u>RVK</u>	<u>Geochem.</u>	<u>Au ppb (oz/t)</u>		<u>Ag ppm (oz/t)</u>	
KQ-87-51A	104B879602	635	(0.024)	5	
51B	603	4930	(0.14)	120	(3.5)
52A	604	18		<2	
52B	605	237		<2	
54D	616	<2		<2	
54E	617	<2		<1	
59	625	120		<2	
131	859	64		<2	
131A	860	180		<2	
131B	862	1050	(0.03)	15	
131C	863	6		<2	
132	864	<2		<2	
132A	865	3320	(0.10)	<4	
133	868	8280	(0.24)	<2	
134	no sample?	-		-	
135	869	22		<1	
136	870	1040	(0.03)	5	
136A	872	110		<2	
137	873	27		<2	
KQ-88-36A	104B889542	11		<2	
36B	543	1990	(0.06)	79	(2.3)
36C	544	1640	(0.05)	<7	
36D	545	27		<2	
36E	546	2490	(0.07)	<5	
36F	547	1190	(0.03)	5	
36G	548	1130	(0.03)	<2	
36H	549	1040	(0.03)	<2	
36I	550	3520	(0.10)	<2	
36J	551	4030	(0.12)	<2	
36K	552	5230	(0.15)	3	
36L	553	685	(0.02)	5	
37	554	<5		4	
38A	555	23		<2	
38B	556	1900	(0.06)	<7	
38C	557	13		3	
39A	558	170		2	
39B	560	120		<2	
39C	562	2120	(0.06)	48	(1.4)
40A	563	16		<2	
40B	564	<2		<2	



Sketch Map Showing RVT Sample Sites in Vicinity of Napoleon and Electrum Zones  
 Sulphurets  
 April, 1989 scale 1:5000  
 Knipple Icefield