

**MINNOVA**

Property Submission: - Mike Hriskevich  
825362  
→ NTS  
8214/4

**Minnova Inc.**  
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Vancouver, British Columbia  
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May 9, 1989

Mr. Mike Hriskevich  
Box 111  
Winlaw, B.C.  
VOG 2J0

Dear Mike:

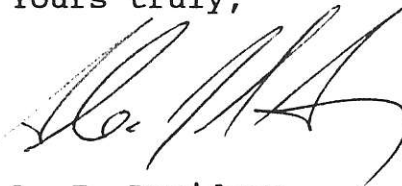
Thank you very much for your letter of April 24, 1989.

Your property certainly sounds interesting and deserves further work.

Unfortunately at this time we are completely full up with other projects and priorities and we will not be able to make an offer to participate in the exploration of your property.

Thank you again for writing us.

Yours truly,



A. J. Davidson  
Exploration Manager  
W. Canada and USA

AJD/gh

*Carl P. [unclear] + file  
NTS 82K4*

April 24, 1989

Dear Mr. Davidson,

Enclosed is the prospecting report for my claim south of Nakusp. As I mentioned in a previous correspondence Cominco Ltd. has staked 66 units around my claim, but they have withdrawn the section 35 they filed against my claim.

Economic deposits in this area include skarn deposits (Tillicum Mtn., 410 kt 11.7 gms/t Au) and transitional porphyry systems (Willa, 635 kt 6 gms/t Au, .9% Cu).

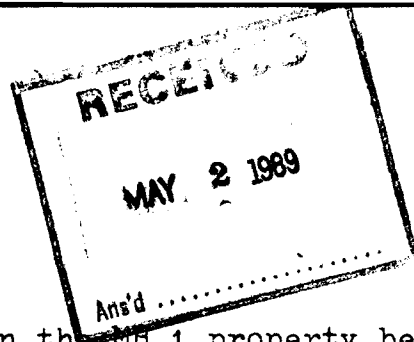
Would your company be interested in this area?

Yours truly,

*m. hriskovich*  
Mike Hriskevich  
Box 111  
Winlaw, B.C.  
VOG 2JO



*Dear Mike,  
Thank you v much for yr letter  
of April 24, 1989.  
Your property cert sounds interesting  
and deserves further work.  
Unfortunately at this time we  
are completely full up with other  
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not be able to make an offer  
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of your property.  
Thank you again for writing  
us  
YT  
ASD  
Xm  
WCSA*



## Introduction

The author undertook 7 days of field work on the MH 1 property between July 14 and July 23, 1988. The work comprised prospecting (mapping) and geochemical sampling. North-south traverses at 200 m intervals indicate that rock outcrop is generally restricted to creek beds and road cuts. A total of 11 rock and 5 silt specimens were collected to provide an appraisal of the property. All specimens taken were geochemically analysed by 30 element I.C.P.

## Location and Access

The MH 1 mineral claim is located on the north side of the divide between McDonald Creek and Summit Lake, 15 km southeast of Nakusp, B.C., N.T.S. 82 K/4. Access is via the Summit Lake forestry road (8 km). The legal corner post (96615) is located 250 m west of the 9 km sign on the first south fork, at an elevation of 1785 m.

The property described in this report was staked on April 24 and 25, 1988, record number 5681. It comprises a total of 20 units, 4 units north by 5 units east of the L.C.P.

Topography is moderate to steep, ranging in elevation from 1400 m in the northwest to 2020 m in the southeast. Because of previous logging there are numerous trails which provide access to the property.

## Previous and Current Work

Regional geology is found in G.S.C. Bulliten 161, Map 1234 A (Hyndman, 1968) and G.S.C. Open File 464 (Wheeler and Read, 1976).

Recent mineral exploration in this area has been concentrated 14 km to the south, in the vicinity of the Tillicum Mountain gold discovery. Geochemical data from two previous assessment reports covers the southern portion of the MH 1 claim (ASR 12624, 12858).

## Regional Geology

Upper Triassic to Lower Jurassic volcanic and sedimentary rocks (Slocan Group) are bounded to the northeast by the Kuskanax Batholith (Jurassic) and plutons related to the Nelson Batholith (Lower Cretaceous) to the south ( G.S.C. Map 1234 A). It has been suggested by Hyndman that these rock units form a large, northwesterly striking synclinal structure, with the volcanic rocks forming the cores of the folds. Although regional metamorphism predates the intrusions deformation by folding and faulting is related to intrusive activity.

## Property Geology

Tuffaceous andesites (7-7) and grey to black cherty argillites (7-4, 7-6, 7-8, 7-9) intercalated with grey siltstone (7-10) underlie the southwest and central portions of the property. Exposures of augite basalt (7-4A, 7-5) and porphyry flows indicate a subaqueous volcanic environment; the presence of extrusive breccia (7-11, 7-12) supports this hypothesis. Blocky tuffaceous siltstones, with minor felsic tuff, predominate in the southeast. Small outcrops of dark grey basalt (flows?) are found in the extreme northwest and eastern areas.

The observation of small scale folds, rapid dip reversals and a well defined shear zone, with rusty quartz veinlets (7-13), indicates a complex structural history. The tightest folding occurs in the dark grey argillites intercalated with grey siltstone and is most evident in the vicinity of a northwesterly striking, near vertical shear. Although not seen in outcrop, the shear zone appears close to a contact with the tuffaceous andesite unit (Figure 4). The axial planes of the folds seen in outcrop are consistent; tilted approximately seventy degrees from vertical and perpendicular to the surface trace of the shear.

Although different in physical appearance the breccia described in Appendix 1 (7-11, 7-12) is similar in composition and may be related to subaqueous rifting (750 m between outcrops, 150 m elevation difference). Specimen 7-11 represents 14 m of dark grey, vesicular, volcanic breccia, with large (>2 cm) angular fragments of andesite. Anhydrite (gypsum) is present in the matrix. Specimen 7-12 represents several small (1-3 m) outcrops of light grey, silicified, tuffaceous breccia (crystal tuff?). Angular rock fragments are smaller and more numerous.

#### Alteration and Mineralization

Pervasive chloritization and carbonatization are evident within the andesitic volcanics. Intense hematite stain and secondary carbonate are characteristic of the argillite sequences. Disseminated pyrite, pyrrhotite and arsenopyrite (2-8%) is found in all rock types; Table 1.

#### Geochemical Survey

Specimens collected were analysed for 30 elements by the Inductively Coupled Argon Plasma method, by Acme Analytical Laboratories in Vancouver. Analytical results are appended to this report and can be keyed to the numbered specimen locations shown on Figure 4.

While some specimens are moderately anomalous for Cu (>100 ppm) and Ag (>1 ppm) none is particularly outstanding. Results for five elements (Cu, Pb, Zn, Ag, As) are plotted on Figure 4.

## Conclusion

The rock geochemistry represents the surface geology. Carbonate alteration, in addition to pervasive sulfide mineralization of all rock types, is indicative of Fe metasomatism. The presence of extrusive breccia (with gypsum) indicates an active, subaqueous, volcanic environment, which may mean alteration is a result of the presence of sulfide lenses.

Deformation of the Slocan Group sedimentary rocks by folding and faulting is related to Lower Cretaceous intrusive activity. Because there is a moderate level Mo anomaly I am tending to think intrusions were causing hypogene solutions to circulate. In this case the contact zone between volcanic rocks and volcanogenic sediments would probably be the most favourable area for economic mineralization.

Appendix 1: Specimens Taken for Geochemical Analysis

Number	Rock Type and Mineralization
7-4	Black, cherty argillite, 4% pyrite.
7-4A	Grey augite basalt, 3% pyrrhotite.
7-5	Vuggy augite basalt, 3% pyrrhotite.
7-6	Black argillite, intense hematite stain, 4% pyrite.
7-7	Tuffaceous andesite, secondary carbonate, chlorite, 8% pyrite.
7-8	Black iron stained argillite, 6% pyrite.
7-9	Black argillite intercalated with grey siltstone, hematite stain, secondary carbonate, 5% pyrite/arsenopyrite.
7-10	Grey, blocky siltstone, secondary carbonate along joints, 6% arsenopyrite.
7-11	Tuffaceous, silicified breccia (crystal tuff?), 2% arsenopyrite.
7-12	Vesicular breccia, 3% pyrrhotite.
7-13	Iron stained quartz veinlet(s) within shear.

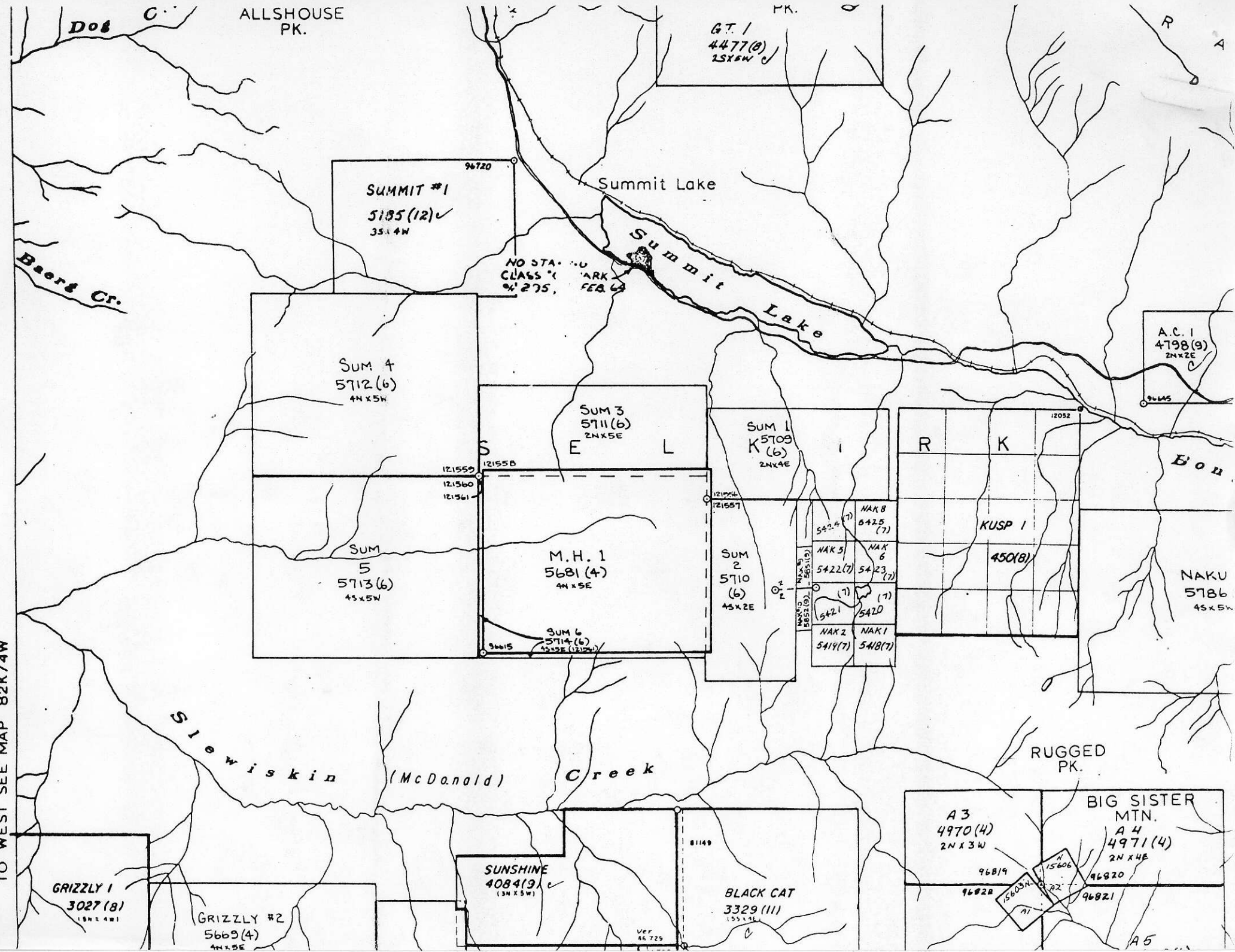
Appendix 2: Geochemical Results

Number	Cu	Pb	Zn	Ag	As
7-4	112	12	143	.8	12
7-4A	50	5	98	.5	19
7-5	59	9	102	.4	4
7-6	80	16	111	2.3	23
7-7	86	13	98	.2	11
7-8	104	15	141	1.4	43
7-9	126	12	69	.3	55
7-10	63	7	89	.1	20
7-11	91	12	68	.1	22
7-12	90	11	108	.2	23
7-13	19	4	25	.1	9
MAC 1	77	10	294	.3	23
MAC 2	59	10	244	.2	19
MAC 3	65	11	288	.3	13
MAC T1	73	12	235	.6	22
MAC T2	43	10	166	.1	8

-all results in ppm.



TO WEST SEE MAP 82K/4W



Dog Cr. ALLSHOUSE PK.

G.T. 1  
4477 (0)  
25X5W ✓

SUMMIT #1  
5185 (12) ✓  
35 X 4W

Summit Lake

SUM 4  
5712 (6)  
4N X 5W

NO STATION MARK  
CLASS 275  
FEB 62

SUM 3  
5711 (6)  
2N X 5E

SUM 1  
K 5709  
(6)  
2N X 4E

A.C. 1  
4798 (9)  
2N X 2E  
✓

SUM 5  
5713 (6)  
4S X 5W

M.H. 1  
5681 (4)  
4N X 5E

SUM 2  
5710  
(6)  
4S X 2E

KUSP 1  
450 (8)

NAKU  
5786  
4S X 5W

5424 (7)	NAK 8 5425 (7)
NAK 5 5422 (7)	NAK 6 5423 (7)
5421 (7)	5420 (7)
NAK 2 5414 (7)	NAK 1 5418 (7)

Slewiskin (McDonald) Creek

RUGGED PK.

GRIZZLY #1  
3027 (8)  
15 X 4W

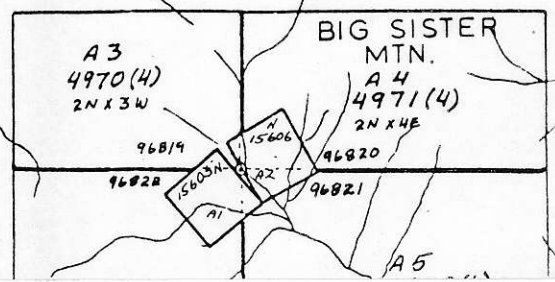
GRIZZLY #2  
5669 (4)  
4N X 5E

SUNSHINE  
4084 (9) ✓  
(3N X 5W)

BLACK CAT  
3329 (11)  
15 X 5E

A 3  
4970 (4)  
2N X 3W

BIG SISTER MTN.  
A 4  
4971 (4)  
2N X 4E



Ver. 66 725