824431

MINNOVA INC.

DATE: February 10, 1991

TO: Ian Pirie

COPIES TO: Dave Heberlein, Alex Davidson

FROM: Tiro Clarke

SUBJECT: Mosquito King/Spar property examination

A property exam of claims held by the Aqua Bella Mineral Spring Company Ltd. ("Aqua Bella") was made on Thursday, August 16. 1990 The area visited included the Mosquito King and Spar claims but did not include the BC (Bowler Creek) claims in the southern part of Aqua Bella's property. The property has been examined by Echo Bay who wish to option only the claims having, in their opinion, the best gold potential.

The claims are located on the Adams Plateau, approximately 18km east of Skwaam Bay. Access to the property is via the Adams Plateau Forest Service Road which connects with the Adams West Forest Service road near the Adams Lake Lumber Mill. Much of the property lies between 1500m and 1675m (5000-5500') elevation. Topography ranges from gentle to moderate, and overburden appears to be generally less than 5m thickness. Logging is in progress north of the Spar Adit, and the roads are kept open for winter logging.

Claims:

Claim information is as follows:

Claim	Record #	Units	Due Date
Red	524	6	Sep. 16/91
Fir	562	3	Oct. 12/91
Pat	596	2	Nov. 01/91
Jim	826	6	May 18/91
Don	1082	2	Nov. 03/90
Mike	1259	6	Jun. 28/91
Goldfinger	4853	6	Oct. 17/90
MN 2-3	5955-56	6	Nov. 07/90
Zinc 1-6	437	6	Jun. 28/91
BC 1-2	539-40	18	Oct. 04/90
BC 4	1086	12	Nov. 10/90
Fox	490	4	Aug. 24/91
MK 4	568	4	Oct. 18/90
BC 3	541	16	Oct. 04/90
AD 1	6538	20	Mar. 06/91*
AD 18	3230	9	Dec. 06/90*

Lode III	5147	16	Nov. 28/90
Bee #1	2550	4	Apr. 22/91
Bee 3-10 incl.	2532-39	8	Apr. 21/91
Elk 5&8	2179	1	Oct. 10/90
MK 5	4679	4	Aug. 11/91
Cat #2	1548	2	Nov. 15/90
Cat #1 Fr.	2272	1	Nov. 14/90
MK 1	565	20	Oct. 18/90
MK 2	566	10	Oct. 18/90
MK 3	567	12	Oct. 18/90
Hiltec 1&2	114	2	Oct. 22/90
A1	128831	1	Nov. 13/91
A2	128832	1	Nov. 13/91
MN 5	6395	4	Oct. 03/90
Silver King	2267	4	Nov. 14/90
SK 1-4 incl.	2268-71	4	Nov. 14/90
Spar #1	127210	1	Nov. 05/91**
Spar #2	127211	1	Nov. 05/91**

* Subject to a 20% Net Proceeds of Production Royalty of Aqua Bella's equity to Chatwood Resources Ltd. under assignment dated July 28, 1989 of December 1, 1987 Agreement.

** Leased from Quinterra Resources Ltd. by Killick Gold Company Ltd. subject to 3% NSR which can be paid out for $300.000.00 and the lease is to be assigned to Aqua Bella (or its nominee).

The Red, Jim, Pat, Fir, and Mike claims form a 23 unit group, approximately 7km northeast from the Spar Adit, while the Goldfinger and MN 2-3 claims form a 12 unit group 5km north of the Spar Adit. The remainder of the claims form a contiguous 187 unit block.

The claims are currently held by:

Aqua Bella Mineral Spring Company Ltd.
2411 Lakeshore Road N.E.
Salmon Arm, B.C.
V1E 3X9
(604) 832-4939

Property History:

Sulphide mineralization on the Adams Plateau was first discovered in the early 1920's, since when the area has received considerable but sporadic attention. The bulk of exploration work on Aqua Bella's claims has been carried out from the early 1960's to the present, most notably by the Killick Gold Company Ltd. (1974-?), Craigmont (1977-78), and Noranda (1984-85). Work done by these and other companies includes geological mapping, geochemical sampling, IP surveys, magnetometer surveys, diamond drilling, and a Dighem survey. Most of the work was not filed for assessment and

the only comprehensive collection of data appears to be held by Aqua Bella's president, C. C. Kane. From the limited information currently available, the following comments can be made about previous work:

1. grid work has been done with a line spacing of 200m, even over mineralized zones.

2. weakest parts of previous work programs are geological mapping and diamond drilling. Much of the drilling appears to have been hastily done and/or misdirected by an incomplete understanding of surface geology (largely related to 1.)

3. Geophysical surveys have outlined many anomalous areas which lie along strike from known mineralization.

Geology:

The claims are underlain by Unit EBGs of the Eagle Bay Assemblage. These rocks are largely siliceous and/or graphitic phyllite, calcareous phyllite, limestone, and quartz-sericite schist. Felsic volcanics may be more extensive in the area than previous mapping has indicated, possibly having been called calc-silicates. An Early Cambrian age is assigned to Unit EBG on the basis of archaeocyathids found near Vavenby, 60km to the north. Hornfelsing is evident in the eastern part of the claims, reflecting proximity to Cretaceous granitic rocks similar to the Baldy Batholith.

Structurally, the area is fairly complicated and is dominated by the northerly dipping isoclinal Nikwikwaia Synform. A northeast trending fault with inferred dextral offset of approximately 3km cuts through the synform and separates the Spar occurrence from the Pet and Mosquito King occurrences. Foliations measured range from 005/70E to 170/20W but generally exhibit shallow northeasterly to northwesterly dips. Some outcrops visited were flat lying. Mesoscopic isoclinal folds in calcareous sediments near the Spar occurrence have an axial plane of 245/48NW and a horizontal fold axis trending towards 245°.

Mineralization:

A portion of the polymetallic sulphide showings on Aqua Bella's property was visited, mostly on the Spar, Bee, MK, and Fox claims. Mineralization is exposed primarily in open cuts and trenches, and consists of stratiform beds and lenses of massive sulphides ranging in thickness from 0.05m to 1.0m, often enveloped by disseminated sulphide-bearing siliceous sediments. Mineralogy appears to fall into one of two categories; the first is massive pyrrhotite, pyrite and arsenopyrite, and the second is semi-massive to massive sphalerite, galena, and pyrite with lesser pyrrhotite

and chalcopyrite.

Descriptions of some of the locations visited are as follows:

The Spar occurrence on the Spar 1 claim consists of stratiform pyrite, galena, sphalerite, and pyrrhotite. Another 10-20cm horizon of massive pyrite is also present. Host rock is predominantly interbedded and -laminated limestone and calcareous phyllite. Production from the Spar exploration adit up to 1976 was 455 tonnes containing 435 grams Au, 249 383 grams Ag, 77 967 kilograms Pb, and 14 435 kilograms Zn. A small high-grade stockpile remains near the adit. Local intense folding in the area indicates that the Spar adit may lie in the hinge of a parasitic fold related to the Nikwikwaia Synform.

Aqua Bella Trench #2 contains multiple horizons up to 0.15m thick of massive pyrrhotite with trace-5% galena and sphalerite. Units are almost flat lying. Thin (5-15cm) quartz-eye rhyolite flows with trace-3% pyrite are intercalated with the sulphides and host sediments.

Aqua Bella Trench #3 contains two northerly dipping mineralized horizons. The lower horizon consists of disseminated to semi-massive sphalerite, pyrite, and galena with a thickness of approximately 15cm. The upper horizon some 2m above consists of massive pyrrhotite, pyrite, and arsenopyrite with a thickness of 10-20cm. Concentrates of upper horizon material are reported to have contained approximately 3 oz/t Au and 45% As. Mineralization is hosted by calcareous phyllite and limestone which is tightly folded nearby.

Aqua Bella Trench #6 contains a 0.45-0.5m thick massive sphalerite-galena-pyrrhotite horizon within a siliceous quartz-eye bearing (rhyolite?) host.

Aqua Bella Trench #8, #13, & Ballpark Showing all lie in a large open area where numerous massive sulphide showings have been exposed by bulldozer stripping. At **Trench #8** is a 1.5-2m thickness of semi-massive to massive pyrite, sphalerite, galena with trace chalcopyrite. Units are gently warped but right in the trench have an attitude of 170/20W. Folds near the trench have an axial plane of 260/80N and a fold axis of 08->260. **Trench #13** contains massive pyrrhotite with lesser sphalerite and galena. Two nearby foliation=bedding measurements were 280/33NE and 320/08NE. In 1979 a bulk shipment from near the Ballpark Showing contained 8.5% Zn, 10.1% Pb, 0.07 oz/t Au, and 7.09 oz/t Ag. Some drilling has been done in this area; one hole by Craigmont penetrated a fault and returned negative results, while another hole by Killick Gold (?) oriented due south penetrated approximately 10m of massive sulphides (C. Kane, pers. comm.).

CONCLUSIONS & RECOMMENDATIONS

The Spar/Mosquito King property owned by Aqua Bella has stratiform semi-massive to massive polymetallic (Pb-Ag-Zn with minor Cu, Au) mineralization exposed in many trenches and open cuts. A strong Ag-Pb association exists. Although individual mineralized horizons seldom exceed 1.5m in thickness, there is good potential for multiple horizons and/or structural thickening in the hinges of isoclinal folds known to occur in the region. Host rocks are primarily calcareous phyllites, argillites, and limestones, although the full extent of felsic stratigraphy in the area may not yet be recognized.

The property has received considerable although disjointed work, little of which has been filed for assessment. This makes a proper compilation and property evaluation difficult - possibly explaining why the property is currently innactive.

Geophysical surveys seem to be successful in detecting mineralization, and several untested geophysical anomalies occur along strike from known showings. Potential for discovery of further mineralization is good; a new galena occurrence coincident with a geophysical anomaly was discovered in a logging roadcut during the property exam.

Potential problems which may exist with the actual land package include: a) the underlying agreements with Chatwood Resources and Quinterra Resources. These agreements affect the AD 1 & 18 and the Spar 1 & 2 claims, and b) the AD 11 claim, not owned by Aqua Bella, which covers fractional ground between the Spar, Bee, and Fox claims.

I recommend the following action be taken to more fully evaluate Aqua Bella's claims:

- a field exam of the Bowler Creek claims to determine the potential for massive sulphide mineralization in the southern region of Aqua Bella's property
- a thorough titles check on all concerned claims to both confirm claim status and establish potential fractions and strategic ground not owned by Aqua Bella.

ASSAYS FROM SELECTED TRENCHES
MOSQUITO KING/SPAR CLAIMS AREA

LOCATION	TYPE	WIDTH	Zn%	Pb%	Ag oz/t	Au oz/t
Spar Adit	chip	3.0m	8.25	36.6	24.4	0.018
Aqua Bella Trench #2	chip	1.0m	0.43	11.5	4.16	0.012
Aqua Bella Trench #3	chip	1.0m	1.65	0.72	0.38	0.152
Aqua Bella Trench #3	chip	0.4m	0.49	0.01	0.34	0.445
Aqua Bella Trench #6	chip	1.2m	16.2	5.74	3.76	0.006
Aqua Bella Trench #7	chip	1.0m	14.7	11.1	3.97	0.56
Aqua Bella Trench #7	chip	1.0m	12.24	10.83	4.51	0.081
Aqua Bella Trench #3	chip	0.5m	2.5	0.12	0.24	0.27
Aqua Bella Trench #8	chip	1.0m	7.8	6.52	2.03	------
Aqua Bella Trench #8	chip	1.0m	12.06	8.99	1.51	0.006
Aqua Bella Trench #13	chip	?	4.23	6.33	4.33	0.008
Aqua Bella Trench #13	chip	?	2.36	10.2	6.98	0.017
Noranda Trench #3	?	?	------	------	------	1300ppb