Property Submission-(Tatlayoko Lake) 826421 92N/07 S. Cheeseman property

FILE LOTUS NTS 92N 7E

Stephen B. Cheeseman 4038 Kincaid St. Burnaby, BC V5G 1V8

July 22, 1991

Mr. Ian D. Pirie, District Geologist Minnova Inc. 3rd Floor 311 Water Street Vancouver, BC V6B 1B8



Dear Mr. Ian D. Pirie:

Please find enclosed a report on the Lotus Gold Prospect, located in the Clinton Mining District, British Columbia. This newly discovered prospect represents tremendous potential in an area that has been attracting recent attention.

The owners of the Lotus claims have uncovered high grade gold and silver within a silicified shear zone of undetermined strike length, in an area exhibiting excellent structural and geological potential.

At this stage of development, I believe that the expertise and resources of a option partner is required to determine the geometry of the high grade gold and silver shear zone, its relationship with adjacent tonalite, volcanics and the sub-parallel Blackhorn Thrust.

In this economic climate where most explorationists are concentrating their efforts on developed properties, I believe the structural and morphological potential of the Lotus Gold Prospect cannot be overlooked. Little effort is needed to determine the size of and distribution of grade within the shear zone. Additionally, the Geological Survey of Canada has scheduled to complete a regional stream sediment survey this year. By the time the results are released, Minnova Inc. will have early exploration know-how in the region, as well as a much sought after land position.

I have pictures of the exposed portion of the shear zone and if you like, hand specimens from the shear zone are available for inspection.

If you have any questions, please do not hesitate to call me at 684-6550. I look forward to your reply.

Yours truly,

Stephen B. Cheeseman, P. Geo.

Enclosures.

#### Introduction

In 1990, geologists Chris Lloyd and Stephen Cheeseman prospected an area in the northwest trending Tchaikazan Fault system, an extension of the economically important Bralorne Fault system. A significant gold and silver showing was discovered and six claims (Lotus 1-6) were staked in September 1990.

In 1991, the discovery outcrop was hand trenched and sampled across strike. It was determined that gold and silver occurred in a major shear zone oriented sub-parallel to the Blackhorn Thrust which brings metavolcanic rocks over siltstone rocks to the northeast. A unit of tonalite lies immediately south of the shear zone. Gold values up to 0.664 oz/T occur for 1.0 m across strike.

It is the intention of the owners of the Lotus claims to offer a substantial interest in the claims in return for a work commitment and monetary payments.

#### **Location and Access**

The Lotus gold prospect is located within the Clinton Mining District NTS 092 N/7E (Fig. 1). The property lies north of the Homathko River approximately 15 kilometers west of the south end of Tatlayoko Lake. The small community of Tatla Lake is located approximately 50 kilometers north of the south end of Tatlayoko Lake on highway 20, approximately midway between Bella Coola and Williams Lake.

Access is possible by foot from the south end of Tatlayoko Lake, but not recommended. Alternatively, White Saddle Air Services provides helicopter service from its base at the south end of Bluff Lake, some 35 kilometers north of the property.

## Physiography and Climate

The property is located in the eastern margin of the Pacific Coastal Mountain Range where glaciation has carved 'U' shaped valleys and left very rugged mountain peaks. Elevations range from 2,300 to 10,000 feet. Glacial terminal and marginal moraines characterize the higher elevations. Talus slopes occur in areas hosting highly jointed rock formations. Glacial remnants occur within the Lotus claim block.

The treeline fluctuates around 6,000 feet. Below the treeline, vegetation consists of alpine fir and alders. Lower elevations consist of mixed fir, white pine, spruce and large meadows.

The property is located to the northeast of two drainage systems; Nude Creek to the west and the Homathko River to the south. Nude Creek is a tributary to the Homathko River which flows southwest to the Pacific Ocean.

The climate of the area can be considered moderate. Snow comes to the area usually before November and remains until May. This year the snowpack is quite deep and will probably last until the end of July or early August in higher valleys. Summer temperatures in the mountains are characterized by warm days and cool nights. Frequent rain showers of short duration can be expected in the spring and fall.

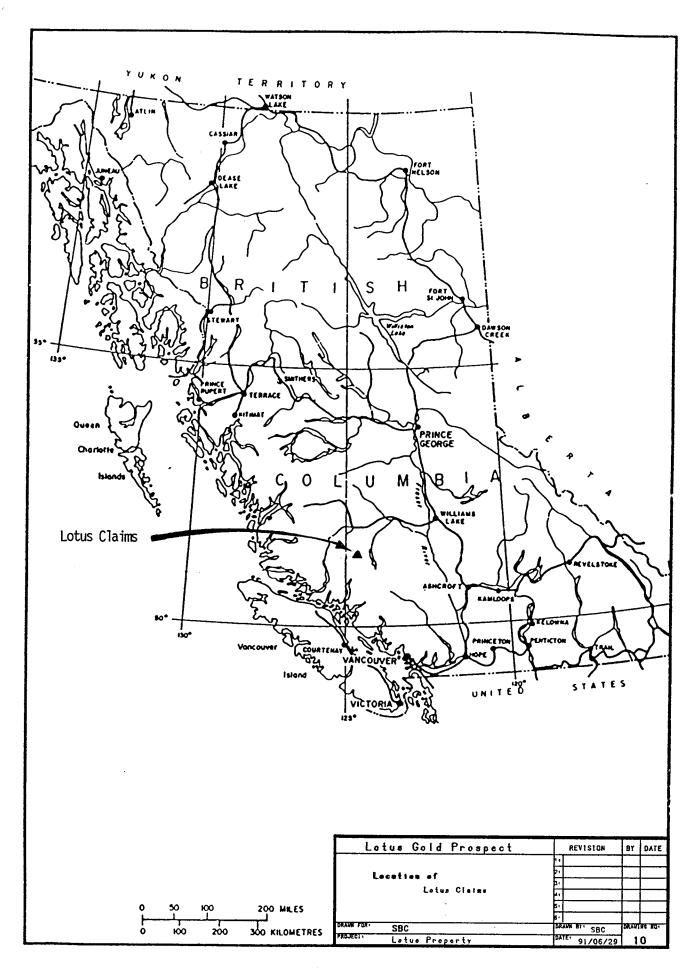


Fig 1

#### **Previous Work**

No previous work has been reported. In 1990, the Lotus claims were staked and prospected. One grab sample was taken from a quartz shear zone oriented sub-parallel to the Blackhorn Thrust and hosted by a felsic aphanite (tonalite?). The grab sample assayed at 0.338 oz/T Au and 0.420 oz/t Ag.

Subsequent work in 1991 has consisted of local mapping in the area to confirm major lithologic contacts as well as hand trenching and systematic sampling of the quartz shear zone. Gold values ranged from 0.122 oz/T to 0.664 oz/T Au across a 1.2 meter quartz shear zone with an exposed strike length of approximately 7 meters (see Drawing No. 110). Further attempt to expose more of the shear zone was hampered by the thick snowpack and lack of time. As such, it was decided to wait until mid-summer before further work is conducted.

## Geology

## Regional Geology

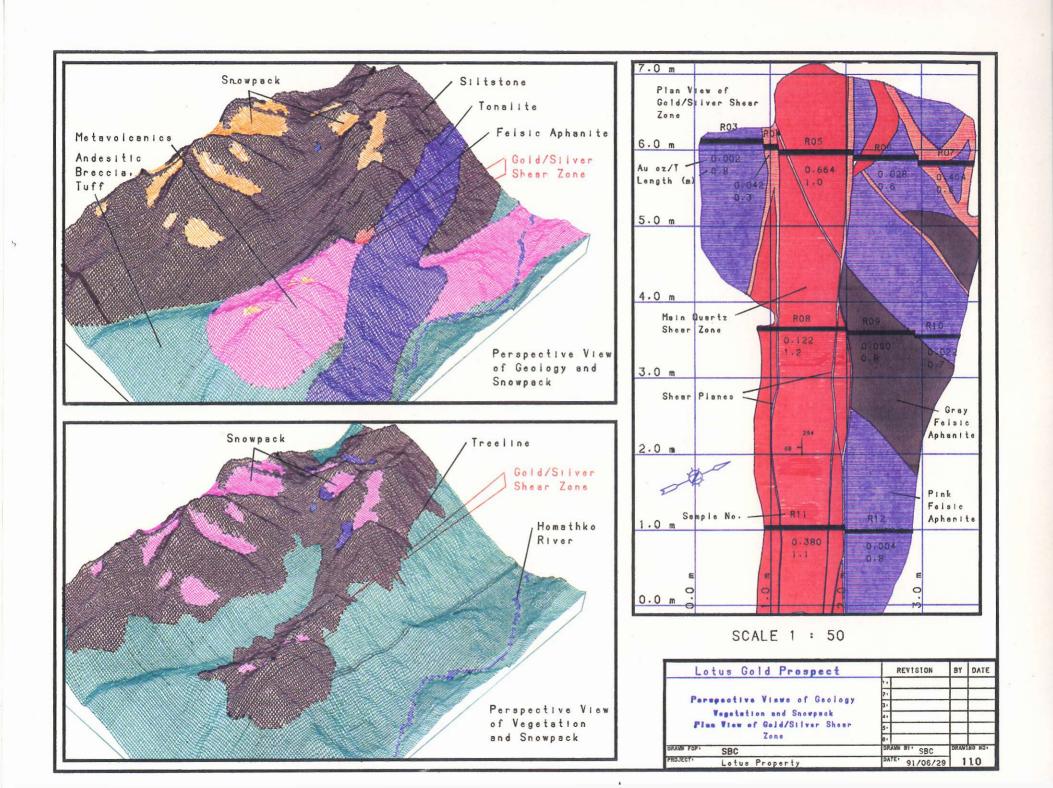
The general geology of the Mount Waddington area has been compiled by the Geological Survey of Canada and published as Open File 1163 (Roddick et al., 1985). The eastern flank of the Coast Plutonic complex consists of sedimentary and volcanic rocks that make up the Tyaughton Trough, when from Middle Jurassic to Upper Cretaceous time this northwest-trending depositional basin evolved from marine and continental conditions. In Mid-Cretaceous time the Coast Mountains were uplifted causing much disruption, intrusions of quartz diorite and later porphyritic granitic stocks of late Cretaceous and Eocene age. All rocks were overlain unconformably by Eocene volcanic and sedimentary rocks and by extensive flows of Miocene plateau basalt.

The Tyaughton strata generally trend northwest, but are locally folded, overturned and disturbed by the uplifting effects of the intrusions and by the translational effects of strong thrust faults and long regional transcurrent faults. The Tchaikazan, Yalakom and Ottarasko Faults are sub-parallel and represent the principal transcurrent faults in the area.

The Tchaikazan Fault, which trends along the eastern flank of the Coast Mountains, appears to be the northwest extension of the economically important fault system at the formerly producing Bralorne and Pioneer Mines (Glover and Schiarizza, 1987). These two mines collectively produced 4,003,000 oz of gold from 8,006,000 tons of ore with Au-Ag ratio of 5.2. The mineral potential along this trend is supported by the anomalous Au-Ag-As analyses reported from Federal and Provincial geochemical programs.

Mineral showings of the Tyaughton Trough are generally affected by intrusions. Some show mesothermal and other exhibit epithermal characteristics. The most prominent showings in the area are the Alexis property (Cu-Hg-As-Sb), 22 km southeast of the Lotus claims, the Morris Mine (Au-Ag-Sb-As), 15 km to the east, Blackhorn Mountain (Au-Ag-As-Pb-Zn-Cu), 20 km to the northwest.

Common geological features that characterize these showings are silicification, pyritization, faulting and quartz veining in sedimentary or volcanics rocks near intrusions.



## Local Geology

The Lotus claims cover three prominent geological formations mapped by the GCS in 1985 (Fig. 2). To the southwest of the property metavolcanics dominate. These rocks have been thrust upon a package of siltstone, greywacke and conglomerate to the northeast of the property along the Blackhorn Thrust. A tonalitic unit cuts through both the volcanics and the siltstone and outcrops in a northeast southwest direction.

Recent local field mapping has suggested that a felsic aphanite not mapped by the GSC, may be related to the tonalitic unit. The felsic aphanite occurs at the triple junction of the metavolcanics, tonalite and the siltstone. It is within this aphanite that the gold hosted shear zone was discovered (see Drawing No. 100). It is entirely possible that the tonalite provided a heat engine for the convection of metalliferous solutions to nearby faults, which became the nucleus for deposition.

#### Mineralization

Gold and Silver mineralization at the discovery outcrop occur in a silicified shear zone that strikes 114° and dips 68° to the southwest. The shear zone is observed to be approximately 30 feet wide. Gold and silver mineralization was found in a quartz vein within the shear zone with values of up to 0.664 oz/T Au and 1.48 oz/T Ag for 1.0 m across strike. An assay report of the sampled intervals is attached for your reference.

Pyrite is fine to course grained, disseminated and is appears to be related to the gold mineralization. The highest assayed gold interval contained up to 30% course grained pyrite (locally).

## **Property Definition**

The subject property consists of the following 7 mineral claims:

Claim	Units	Staked	Tag #	Anniversary
Lotus 1	16	06 SEP 90	222718	06 SEP 90
Lotus 2	16	06 SEP 90	222719	06 SEP 90
Lotus 3	20	06 SEP 90	222720	06 SEP 90
Lotus 4	16	06 SEP 90	222721	06 SEP 90
Lotus 5	16	05 SEP 90	222722	05 SEP 90
Lotus 6	20	05 SEP 90	222737	05 SEP 90
Lotus 7	9	02 JUN 91	222738	02 JUN 91

#### Discussion

The process that assisted in the discovery of this gold shear zone involved literary research, careful examination of available reports, geological maps and common sense. The geological setting is excellent; gold occurring in a major shear zone striking parallel to a major thrust that moved volcanics over older siltstone. The intrusion of the tonalite adjacent to the thrust could have provided the heat source for convecting mineral rich solutions into ancillary shear zones.

This is a major gold discovery that warrants the expertise and resources of mining property developers. Presently, the property is an outstanding investment for those interested in pursuing properties with extraordinary mineralogical, structural and economical potential.

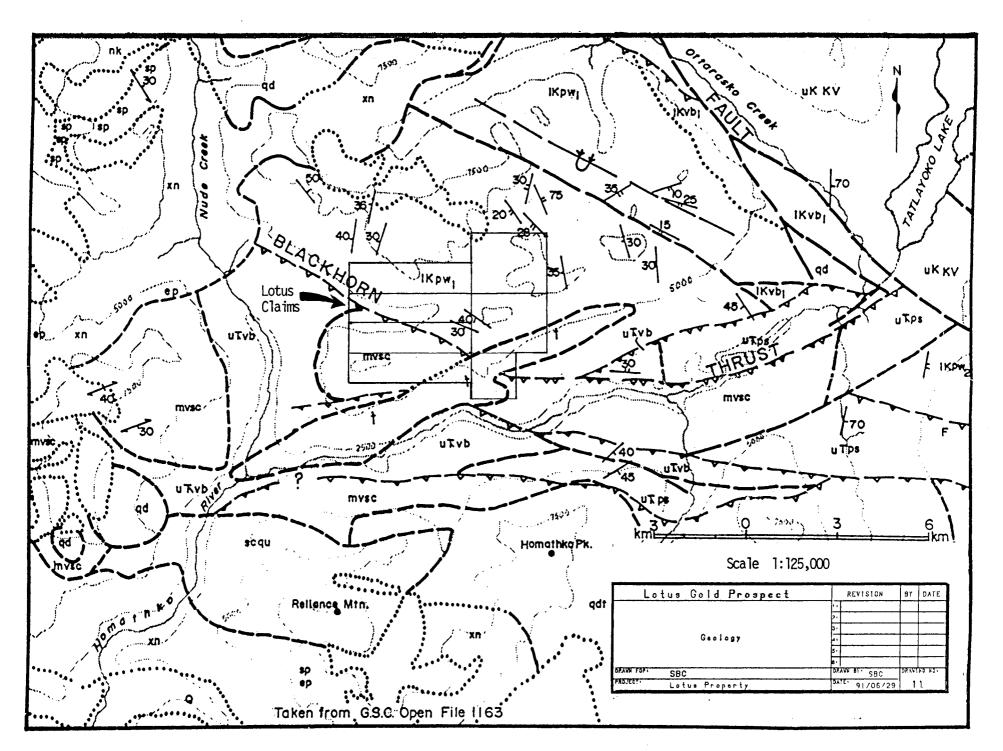
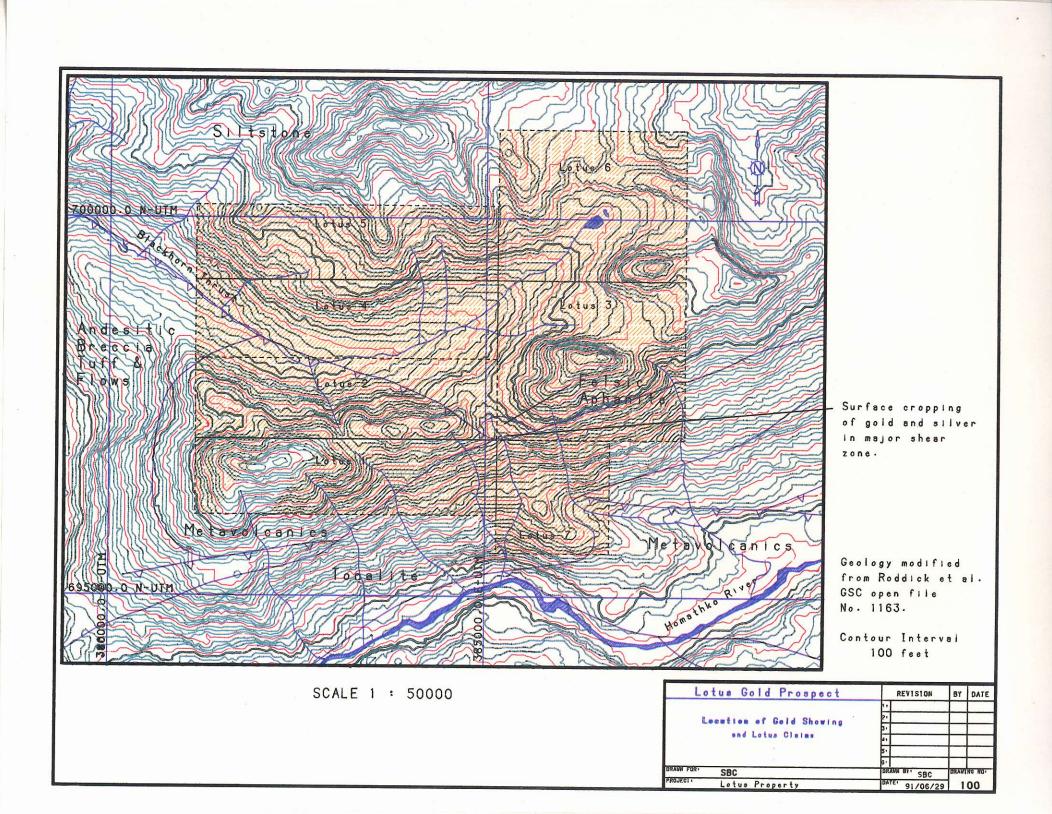


Fig 2



### References

- Albert, R. (1988). Geological and Geochemical Report for the Argo-Langara Property. British Columbia Assessment Report 17980.
- Culbert, R., Lammle, C.A.R., and Heberlein, K. (1988). Geochemical, Prospecting and Air Photo Study for the Loot 1-2 Claims. British Columbia Assessment Report 17392.
- Glover, J.K., and Schiarizza, P. (1987). Geology and Mineral Potential of the Warner Pass Map Sheet, B.C. Energy, Mines and Petroleum Resources, Geological Fieldwork, Paper 1987-1.
- Roddick, J.A., Tipper, H.W., and others (1985). Geology, Mount Waddington, 92N, GSC Open File 1163, map and marginal notes.
- Woodsworth, G.J., Pearson, D.E., and Sinclair, A.J. (1977). Metal Distribution Patterns across the Eastern Flank of the Coast Plutonic Complex, South-Central British Columbia, in Economic Geology, v. 72, p.170-183.



## **Chemex Labs Ltd.**

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A9116172

Comments:

CERTIFICATE

A9116172

CHEESEMAN, STEPHEN

Project: P.O. # :

.O. # : NONE

Samples submitted to our lab in Vancouver, BC. This report was printed on 14-JUN-91.

SAMPLE PREPARATION						
CHEMEX	NUMBER SAMPLES	DESCRIPTION				
208 294	14 14	Assay ring to approx 150 mesh Crush and split (0-10 pounds)				

ANALYTICAL PROCEDURES									
CHEMEX CODE	NUMBER SAMPLES			DESCRIPTION	METHOD	DETECTION LIMIT	UPPEF LIMIT		
398 385	14 14	Au oz Ag oz	z/T: 1 z/T: A	./2 assay ton aqua regia digestion	FA-AAS AAS	0.002 0.01	20.00		
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Project : Comments:

Page Number :1 Total Pages :1 Certificate Date: 14-JUN-91 Invoice No. : I9116172 P.O. Number :NONE

'					CERTIFICATE OF ANALYSIS			A9116172		
SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Ag oz/T							
L1-91-R01 L3-91-R02 L3-91-R03 L3-91-R04 L3-91-R05	208 294 208 294 208 294 208 294 208 294	< 0.002 < 0.002 0.002 0.042 0.664	< 0.01 < 0.01 < 0.01 0.13 1.48							
L3-91-R06 L3-91-R07 L3-91-R08 L3-91-R09 L3-91-R10	208 294 208 294 208 294 208 294 208 294	0.028 0.464 0.122 0.090 0.022	0.05 0.55 0.18 0.14 0.04							
L3-91-R11 L3-91-R12 L3-91-R13 L3-91-R14	208 294 208 294 208 294 208 294	0.380 0.004 0.002 0.004	0.59 < 0.01 < 0.01 < 0.01							
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CERTIFICATION: