

GEOLOGICAL INVESTIGATION OF SOIL-GEOCHEMICAL ANOMALIES  
AND PROSPECTING SOUTH OF THE SNOWSTORM DOME

**RECEIVED**  
JUN 30 1994  
Gold Commissioner's Office  
VANCOUVER, B.C.

ON THE AMBER PROPERTY

Located Claims:

Amber 1	256357(7)
Amber 2	256358(7)
Amber 3	256359(7)
Amber 4	256360(7)

Slocan Mining Division

N.T.S. 82 K/6

50° 18' N., 117° 10' W.

Owner and Optionor:

AMBERGATE EXPLORATIONS INC.

1500-789 West Pender Street  
Vancouver, British Columbia  
V6C 1H2

Optionee:

LUMBY RESOURCES CORPORATION

1500-789 West Pender Street  
Vancouver, British Columbia  
V6C 1H2



June 28, 1994

*T.K.  
Filming copy  
- Victoria  
Bule of 5-prints  
material removed  
see AR 16433, 18135, 19149*

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

25,418

GEOLOGICAL INVESTIGATION OF SOIL-GEOCHEMICAL ANOMALIES  
AND PROSPECTING SOUTH OF THE SNOWSTORM DOME  
ON THE AMBER PROPERTY

The writer was retained by Lumby Resources Corporation of Vancouver, British Columbia through Cassiar East Yukon Expediting Ltd. to investigate soil-geochemical anomalies and prospect rocks located between the Amber Thrust and Mobbs Fault from the Snowstorm dome southward to the Lakeview showings. The project-area is in the south-central part of the Amber Property.

The Amber Property occupies the upper part of the Cascade Creek valley located in the Slocan Range of the Selkirk Mountains of southeastern British Columbia. It comprises four located claims that contain 64 claim-units covering about 1600 ha (3840 A). The property is centred on 50° 18' north latitude and 117° 10' west longitude in the Slocan Mining Division.

It is about 635 km (408 mi) from Vancouver via B.C. highways 1, 5 and 23 to Nakusp, one of the nearest adequate supply centres to the property. Direct access to the Amber Property from Nakusp is by helicopter; a 20 minute flight one way to the base camp-area at Blue Lake. Alternately, when a helicopter is available at Meadow Creek, located about 20 km (12 mi) southeast of the Amber Property, supplies can be purchased in Kaslo, trucked to Meadow Creek via B.C. Highway 31 and flown onto the property.

All major workings on the property are accessible by a series of recently renovated horse trails that radiate from the mine camp site at the northern end of Blue Lake.

The central part of the Amber Property straddles a moderately steep ridge southeast of Cascade Creek. The base-camp area is at the northern shore of Blue Lake, a glacial tarn occupying the mouth of a north-facing cirque that includes most of the southern part of the claim group. Elevations on the property range from 1365 m (4480 ft) to 2688 m (8820 ft).

A mixed forest of red cedar, hemlock and spruce extends up Cascade Creek across the northern part of the property. The southeastern part of the claim-area is above tree line.

Soils are sufficiently well-developed to produce reliable soil survey results.

The Amber Property is owned 100% by Ambergate Explorations Inc. Ambergate has an option agreement with Lumby Resources Corporation whereby Lumby can earn a 50% working interest in the claims by paying Ambergate a total of \$40,000 and by contributing \$85,000 to work on the claims by December 31, 1994.

Recently, the Amber Property has been included within the northeastern corner of the Goat Range Protected Area Strategy Study Area. Such study areas are divided into 4 classes, class 1 being most sensitive and class 4 being least sensitive. This study area is designated as a class 3 area in which new claims can be staked and property development may proceed.

The area around the Amber Property is underlain by rocks that range in age from Early Palaeozoic to Jurassic. These rocks can be divided into two provenancial groups: the Lardeau Group, a eugeosynclinal assemblage and the Milford Group, a miogeosynclinal assemblage. Both assemblages are intruded by Mesozoic-age granitic rocks.

The claims are underlain by mafic metavolcanics and metasediments of the Triassic-age Broadview Formation which forms part of the Lardeau Group. This stratigraphic sequence progresses westward and up-section from andesitic volcanics through lithic sandstones and siltstones to variably carbonaceous slates and carbonates.

These rocks were folded by as many as four phases of deformation which resulted in a series of northwest-southeasterly trending folds that were subsequently thrust in a northeasterly direction along local faults. The stratigraphy was later cut at oblique angles by long transverse faults.

Large veins were developed parallel with the dominant cleavage planes after thrusting during the second phase of deformation.

Many of these veins contain only milky quartz. However, some of them contain large amounts of sphalerite, argentiferous galena, stibnite, and auriferous pyrite. All of the known economic mineral showings on the Amber Property occur in these veins.

The thrust faults in the Cascade Creek area seem to divide economic mineralization into three discrete zones as follows:

#### ECONOMIC MINERAL ZONATION AROUND THE AMBER PROPERTY

Zone	Minerals Present	Metals Present	Showings
1. Southeast of Amber Thrust	stibnite, galena tetrahedrite	Sb, Ag, Pb minor Cu, As	North Star West Ridge Lower Juno
2. Between Amber Thrust and Mobbs Fault	sphalerite, galena pyrite	Au, Ag, Pb, Zn	White Eagle Lakeview Pine Tree Upper Juno Snowstorm Silver Sparrow
3. Northeast of Mobbs Fault	galena, sphalerite	Ag, Pb minor Zn	Upper and Lower Comstock

The thrust faults in the Cascade Creek area may have acted as major conduits facilitating the migration of mineralizing fluids of different compositions upward from various depths.

The Amber Property-area was explored extensively from 1925 until 1931 when many of the mineral showings were developed by trenches and underground workings. Previous modern exploration comprising 1:10,000 scale geological mapping, soil survey and trenching was conducted by Ambergate Explorations Inc. from 1987 to 1988.

The most prospective mineral showings on the Amber Property are as follow:

WHITE EAGLE developed 1928 to 1930

Workings; Upper Level

18 m (59 ft) long adit on vein with 10 m (33 ft) long winze located 5 m (16 ft) in from portal  
17 m (55 ft) long inclined shaft on vein located 3.5 m (10 ft) northwest of upper adit  
7 surface trenches

Lower Level (37.5 m (123 ft) vertically below Upper Level)

152 m (500 ft) long crosscut with 24 m (80 ft) raise and 21 m (69 ft) of drift on mineralized vein at the end of the adit  
mineralized veins are also cut at 143.5 m (471 ft) in lower adit and at top of raise

Mineralization;

at least two veins with massive galena-sphalerite ore shoots up to 0.6 m (2 ft) thick with pyritic margins  
galena-sphalerite mineralization assays up to 61% lead, 33.8% zinc and 33.3 oz/ton silver  
pyrite mineralization assays up to 2.182 oz/ton gold with minor silver and base metal values

LAKEVIEW discovered 1988

Workings; 2 small hand trenches

Mineralization;

two veins up to 20 cm (0.6 ft) thick separated by sparsely mineralized sandstone  
galena-sphalerite-pyrite mineralization looks similar to that at White Eagle, composite sample assays 6.04% lead, 3.47% zinc, 4.61 oz/ton silver and 4.22 oz/ton gold

SILVER SPARROW (SNOWSTORM SHAFT) developed 1930 to 1931

Workings; 6.1 m (20 ft) long inclined shaft on vein extending in from surface trench

Mineralization;

1 m (3.3 ft) thick vein with galena and pyrite in quartz assaying up to 56.2% lead, 0.55% zinc, 31.6 oz/ton silver and 0.802 oz/ton gold

PINE TREE discovered 1988 (continuation of Silver Sparrow?)

Workings; 3 hand trenches located 70 m (230 ft) west of Silver Sparrow

Mineralization;

quartz vein up to 0.5 m (1.6 ft) thick with galena and pyrite assaying up to 18.5% lead, 0.10% zinc, 13.5 oz/ton silver and 11.885 oz/ton gold

- SNOWSTORM            developed 1930 to 1931
- Workings; 26 old hand trenches, some up to 46 m (150 ft) long
- Mineralization;
- quartz veins up to 1.5 m (5 ft) thick with pyrite and galena assaying up to 22.4% lead, 0.06% zinc, 14.6 oz/ton silver and 0.082 oz/ton gold
- WEST RIDGE            developed 1928 to 1930 ?
- Workings; 2.4 m<sup>2</sup> (8 ft<sup>2</sup>) shaft that extends about 15.2 m (50 ft) ? down from the ridge crest  
150 m (492 ft) ? long adit on west slope of ridge  
7 trenches
- Mineralization;
- massive stibnite-galena in quartz assaying up to 1.58% copper, 41.1% lead, 16.1% antimony and 44.9 oz/ton silver vein width is at least 1 m (3.3 ft)
- JUNO                    developed 1925 to 1928
- Workings and Mineralization not adequately explored during 1987 and 1988 exploration

The Amber Property is still very much in the discovery stage. Two of the mineral showings, the Pine Tree and Lakeview were discovered within four days of the end of the 1988 exploration program. It seems certain that with more exploration will come the discovery of more economic mineralization.

From the crest of the Snowstorm dome to the Lakeview showings the stratigraphy comprises black carbonaceous slate conformably contained within a sequence of siltstone and fine-grained greywacke, all part of the Triassic-age Broadview Formation.

All of these rocks contain numerous quartz and carbonate segregations especially where exposed near the trace of the Mobbs Fault. Most of these segregations lie in or near the second cleavage plane and are similar in attitude and age to the economic mineral showings in the area. However, quartz and carbonate veins and segregations exposed within siltstone and fine-grained greywacke are almost invariably barren. Almost all veins and segregations containing economic mineralization are hosted by black carbonaceous slate. The one notable exception to this is the Lakeview showing, which seems to be hosted by sandstone.

6.

Exposures of black carbonaceous slate seem most likely to host new economic mineral discoveries in this area.

Completion of the 1987-1988 soil survey over the rest of the property is recommended.

**APPENDIX A**  
**CERTIFICATE OF QUALIFICATION**

I, John Ostler, of 2224 Jefferson Avenue in the City of West Vancouver, Province of British Columbia do hereby certify:

That I am a consulting geologist with business address at 2224 Jefferson Avenue, West Vancouver, British Columbia;

That I am a graduate of the University of Guelph in Ontario where I obtained my Bachelor of Arts degree in Geography (Geomorphology) and Geology in 1973 and that I am a graduate of Carleton University of Ottawa, Ontario where I obtained my *Master of Science* degree in Geology in 1977;


That I am licensed to practice as a Professional Geoscientist by the Association of Professional Engineers and Geoscientists of British Columbia and as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta, and that I am a Fellow of the Geological Association of Canada;

That I have been engaged in the study and practice of the geological profession for over 20 years;

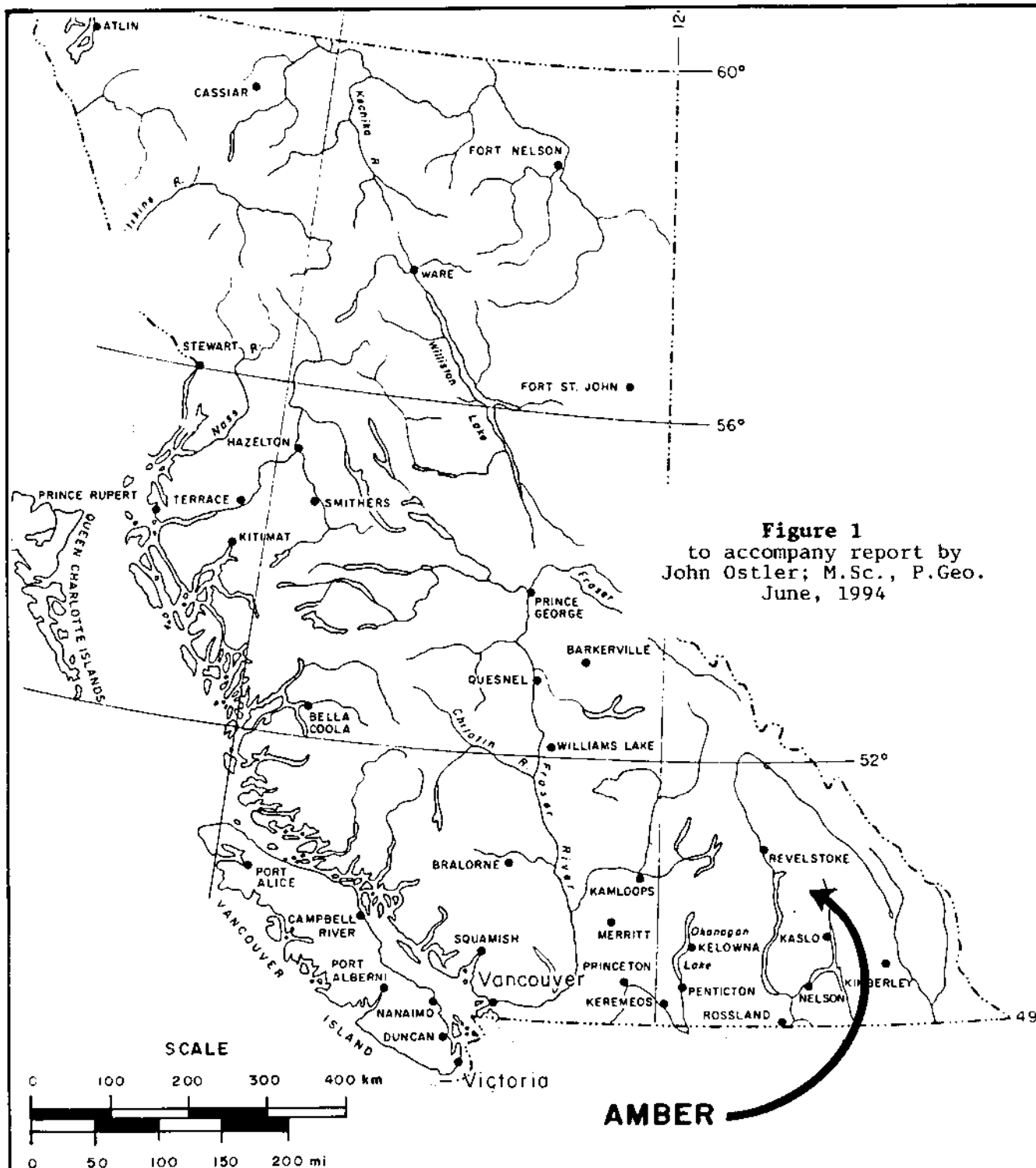
That this report is based on data in literature and exploration of the Amber Claim Group located in the Slocan Mining Division of British Columbia personally conducted from June 2 to 12, 1994;

That I have no interest in the Amber Property nor in the securities of Ambergate Explorations Inc. or Lumby Resources Corporation nor do I expect to receive any.

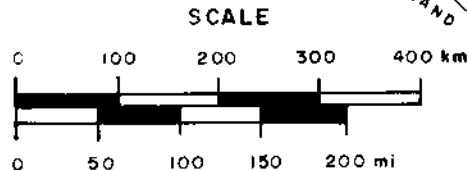
West Vancouver,  
British Columbia  
June 28, 1994


  
 JOHN D. OSTLER  
 BRITISH COLUMBIA  
 JOHN OSTLER, M.Sc., P. Geo.  
 Consulting Geologist





**Figure 1**  
to accompany report by  
John Ostler; M.Sc., P.Geo.  
June, 1994



**Figure 1**

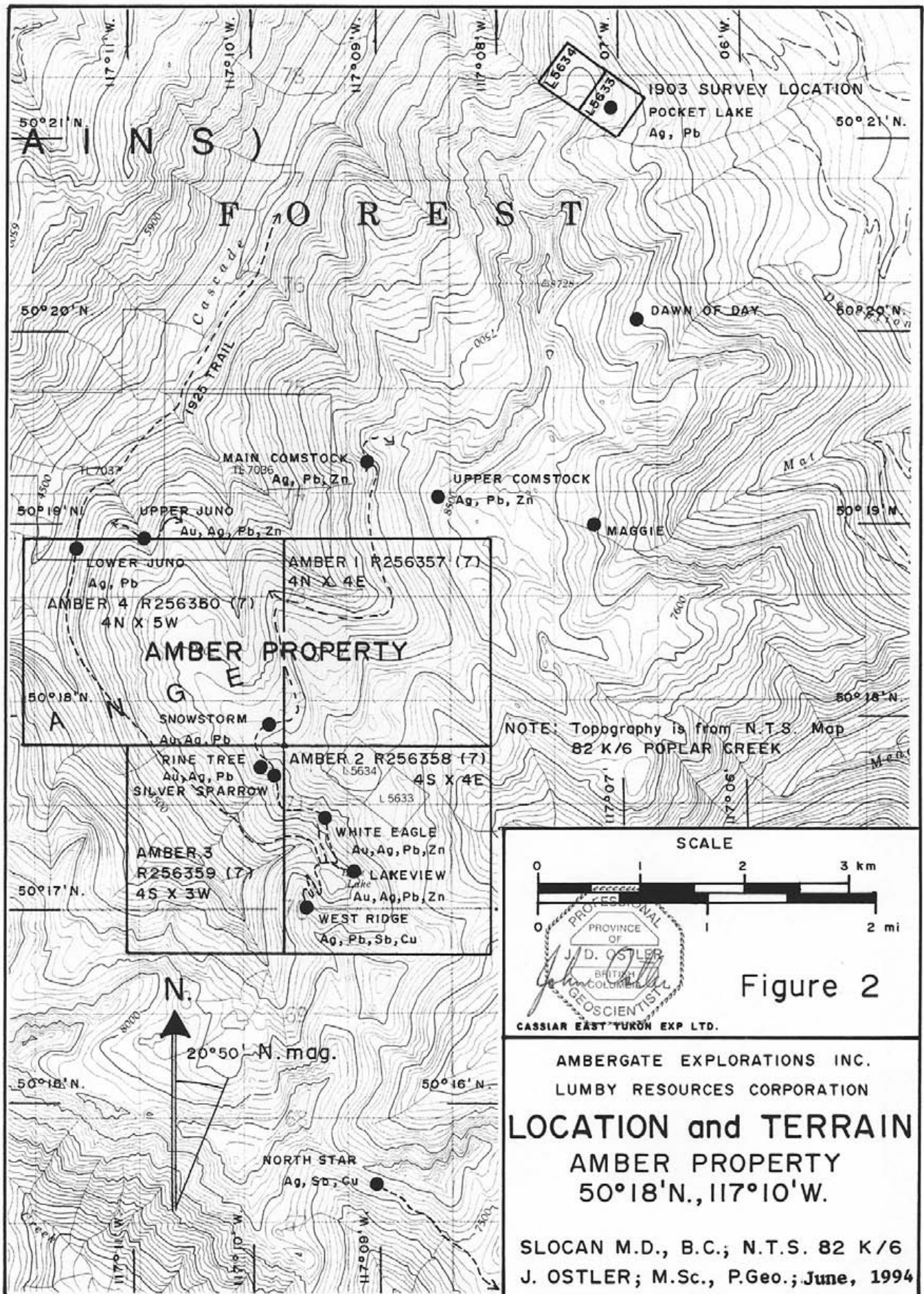
**AMBER**

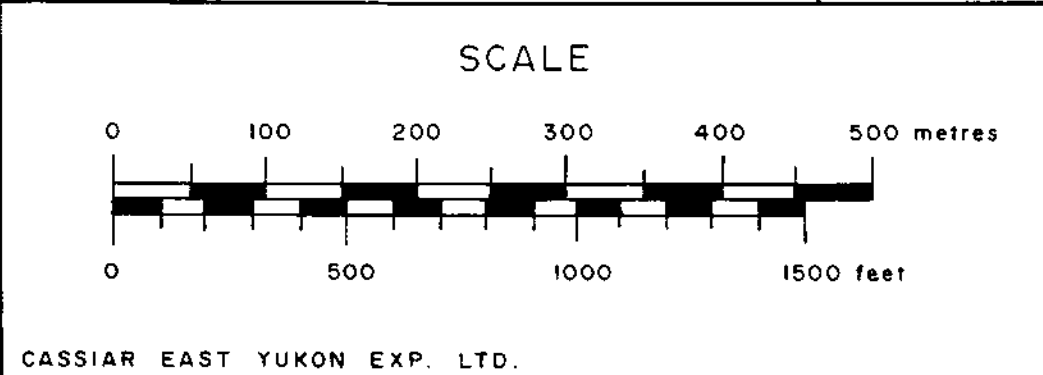
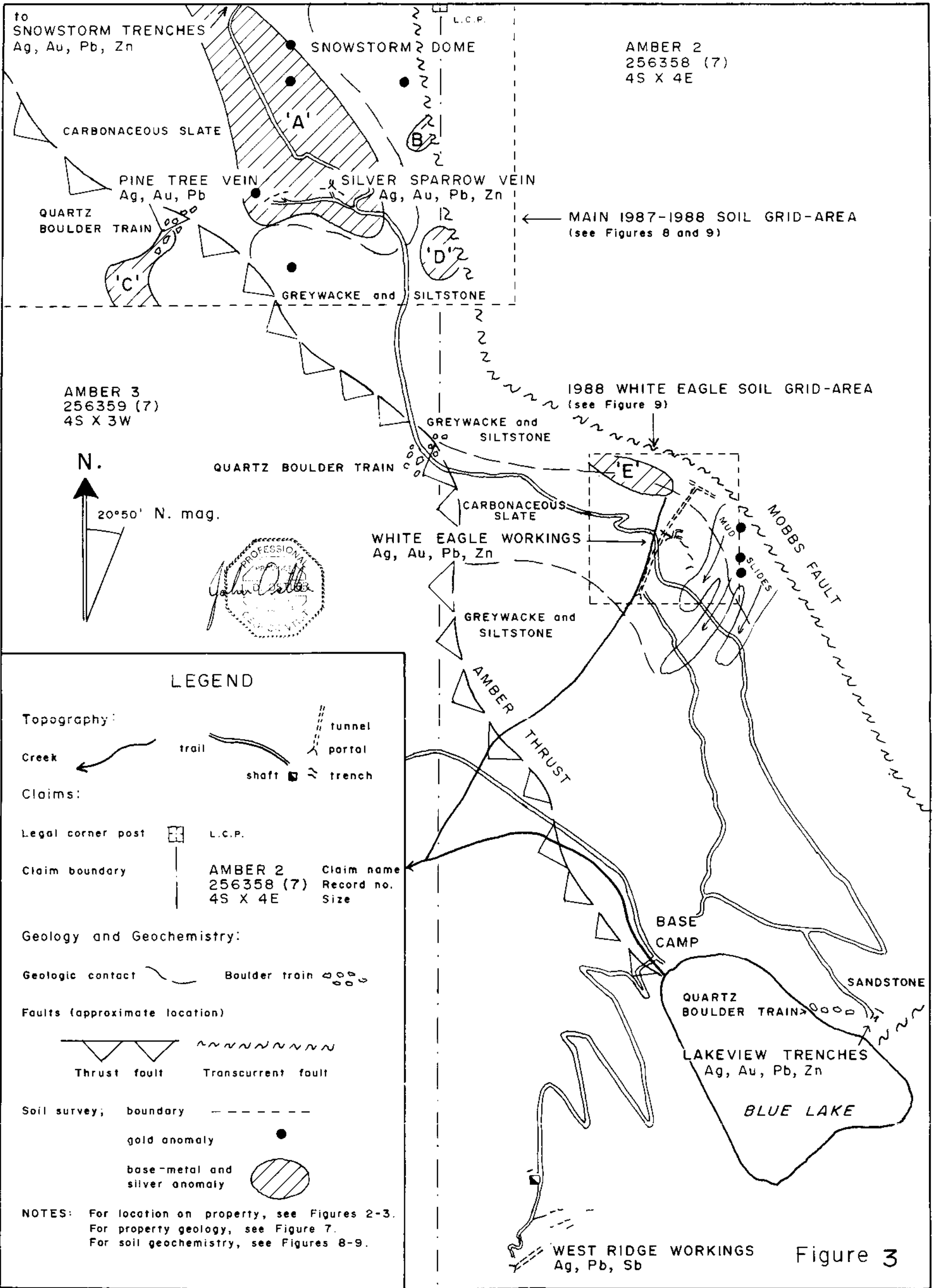
AMBERGATE EXPLORATIONS INC.

**GENERAL LOCATION**

AMBER PROPERTY  
50°18'N., 117°10'W.

SLOCAN M.D. BRITISH COLUMBIA  
C.G. SPEARING, B.Sc.(Eng.) NOVEMBER, 1988  
JOHN OSTLER; M.Sc., P.Geol.





AMBERGATE EXPLORATIONS INC.  
LUMBY RESOURCES CORPORATION

**ANOMALIES and SHOWINGS:  
SNOWSTORM DOME to LAKEVIEW  
AMBER PROPERTY  
50°18'N., 117°10'W.**

SLOCAN M.D., B.C. N.T.S. 82 K/6  
JOHN OSTLER; M.Sc., P.Geo. JUNE, 1994