



Report

- on the -

GBI Mineral Claims  
Yellowknife District, Northwest Territories

- for -

Great Bear Explorations Inc.  
c/o Jensen Mitchell and Co.  
300 - 125 4th Avenue  
Kamloops, B. C.

DOCUMENT NUMBER 08 147 1

THIS REPORT HAS BEEN EXAMINED AND  
ACCEPTED FOR RECORD UNDER  
SECTION 28(1) OF THE MINING ACT  
ON THE 20th day of May 1982  
VALUE OF THE CLAIM \$ 2209

DATE: 20/5/82 *JMB*

MINING RECORDER  
YELLOWKNIFE DISTRICT  
NORTHWEST TERRITORIES

Prepared by;

Kerr, Dawson and Associates Ltd.,  
#206 - 310 Nicola Street,  
Kamloops, B. C. V2C 2P5

J. M. Dawson, P. Eng.  
January 15, 1982

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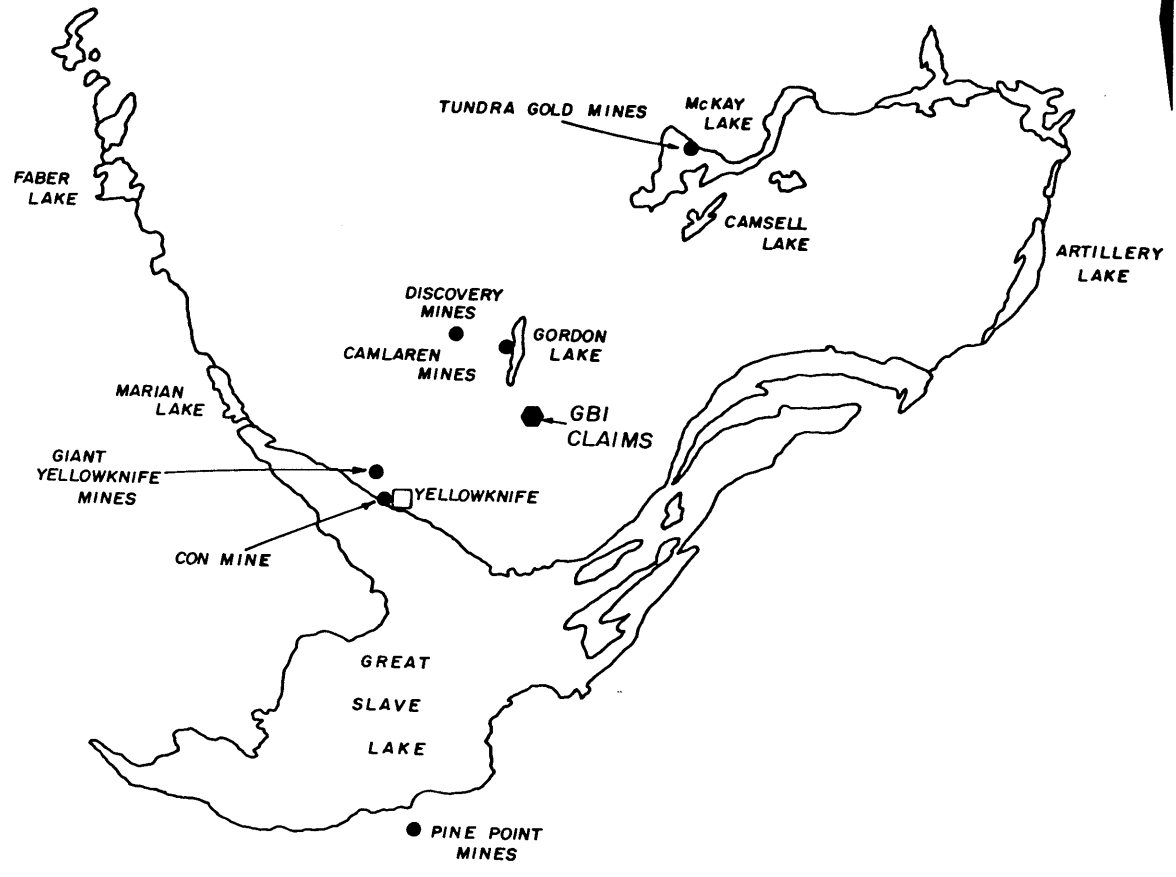
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DOCUMENT NUMBER 081471

GREAT BEAR INDUSTRIES LTD.	
LOCATION MAP	
GBI CLAIMS	
YELLOWKNIFE DISTRICT	
NORTHWEST TERRITORIES	
TECH. WORK BY: KERR, DAWSON AND ASSOC.	SCALE: 1" = 60mi.
DATE: NOV. 1981.	DWG. NO. 254-1

Introduction:

This report has been prepared at the request of Mr. John Foster, president of Great Bear Explorations Inc. It discusses the geology and mineral occurrences on the subject claims and recommends a programme of exploration.

This report is based on a personal examination of the GBI property by the writer on September 15, 1981 as well as on data from various published and private reports.

Summary and Conclusions:

1. The GBI property consists of two contiguous claims totalling 1183.9 acres located in typical shield terrain about 43 miles northeast of Yellowknife. Access is by float equipped aircraft from Yellowknife although an all weather road exists to within 20 miles of the claims.
2. Extensive exploration has been carried out in this district since the 1930's. The subject property was discovered by Dome Mines in 1938 and this company carried out extensive trenching and diamond drilling in 1938 and 1939. It was concluded that the area was too remote at that time for further work based on the results obtained. In 1967 - 68 some trenching and sampling was done by Chemalloy Minerals. In 1973 and 1974 extensive surface and underground development was done by Precambrian Shield Resources on the Dome #1 showing located about 1 mile east of the GBI claims. In 1974 a portion of the current property was acquired by Great Bear Explorations and limited exploration work was done. The claim was allowed to lapse with the fall in the price of gold. The current property was restaked by Great Bear Explorations in 1980 and 1981.
3. The property is underlain by moderately deformed clastic sedimentary rocks of the Yellowknife group cut by minor diorite dikes. Numerous occurrences of quartz are found on the property and appear to be related to folding of the sediments. Quartz occurs as veins, stockworks, saddle reefs and irregular lenses and blobs. Some quartz rich zones can be traced for hundreds of feet along strike and may be several tens of feet wide.
4. Various amounts of pyrite, chalcopyrite, galena, sphalerite, arsenopyrite and native gold are associated with some of these quartz bodies. Extensive sampling by previous workers has determined that gold values are erratic but that some local high grade sections exist. A number of the quartz bearing zones have not been sampled.

5. Given the widespread occurrence of gold on this property and the fact that some zones of economic values exist, the potential for developing selected zones of higher grade material is considered to be good and an exploration programme to test this potential is warranted.

Property:

The property consists of two contiguous claims aggregating 1183.9 acres as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>Tag No.</u>	<u>Size</u>	<u>Expiry Date</u>
GBI #1	<del>F01531</del> B39055	<del>F01531</del>	874 acres	April 21, 1982
GBI #2	<del>B39055</del> F01531	<del>N2334</del>	309.9 acres	October 2, 1983

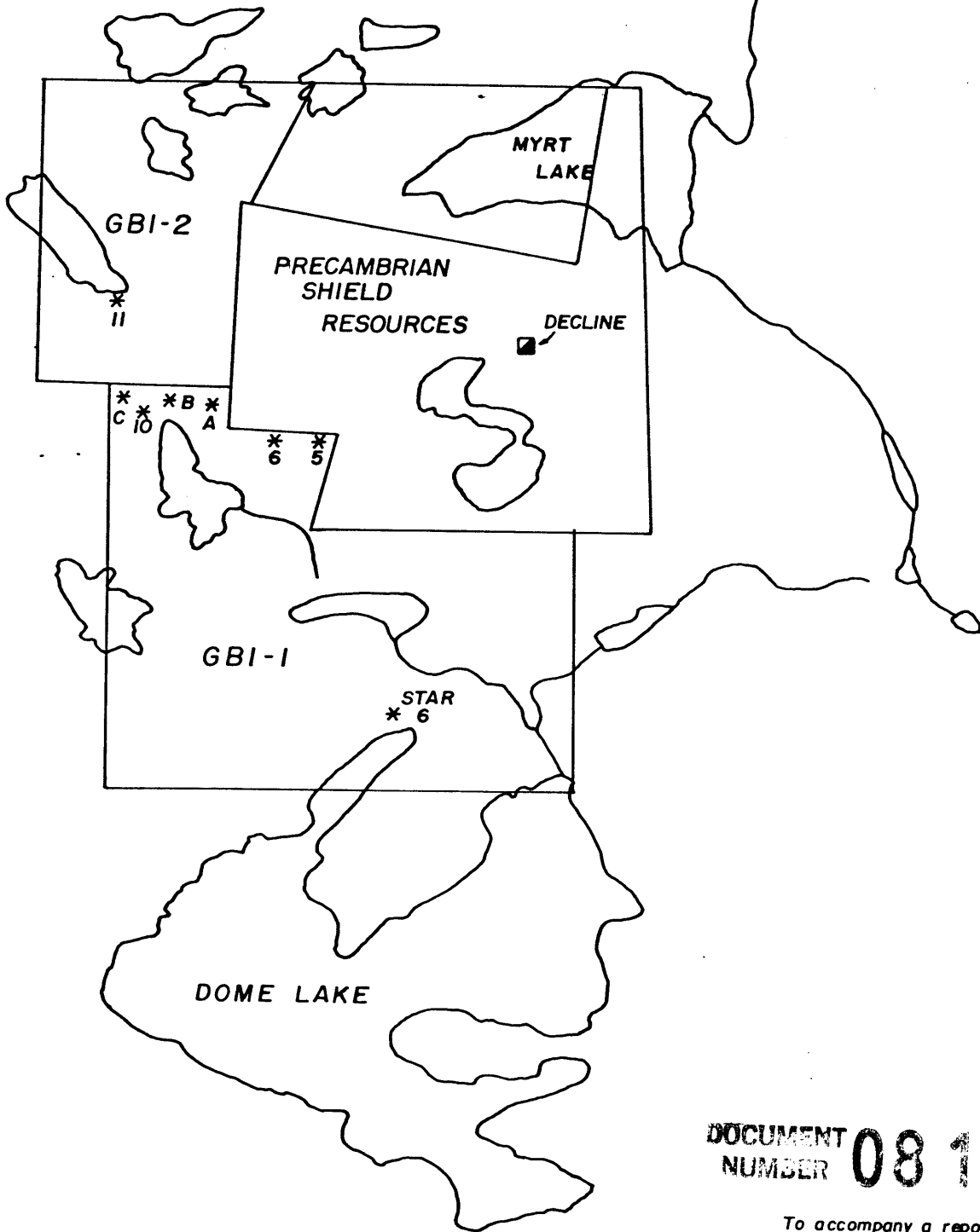
The registered owner of these claims is Great Bear Explorations Inc.

Disposition of these claims is shown on figure 254 - 2.

Location and Access:

The property is located about 43 miles northeast of Yellowknife, N.W.T. at approximately  $62^{\circ}47'$  north latitude and  $113^{\circ}15'$  west longitude.

Access to the claims can be gained by float or ski-equipped, light aircraft to Myrt Lake or Dome Lake (see figure 254 - 2). In addition there is a winter road from Yellowknife which passes through the property. The nearest all weather road from Yellowknife (Prelude Lake road) ends about 20 miles southwest of the claims at Tibbet Lake.



\* LOCATION OF OLD SHOWING

DOCUMENT NUMBER **081471**

To accompany a report by J.M. Dawson, P.Eng.

**GREAT BEAR INDUSTRIES LTD.**

**CLAIM MAP**  
**GBI CLAIMS**  
YELLOWKNIFE DISTRICT  
NORTHWEST TERRITORIES

Tech. Work By:  
Kerr, Dawson & Assoc. Ltd.

Scale: 1" = 1/2 mi.

Drawn By: W.G.

Date: November, 1981.

Approved By: J.M.D.

Fig No. 254-2

### Physiography and Vegetation;

The property lies in typical shield terrain with numerous lakes dotting a relatively flat landscape. Maximum relief is in the order of about 150 feet with high points being bare, rocky knolls and low areas either lakes or muskeg.

The area is covered by fairly dense bush interspersed with rocky knolls and lower, glacially scoured outcrops. The vegetation is typical of tundra with scrubby spruce and pine mixed with various deciduous brush. There is no timber which could be used for building or mining purposes.

### History:

Prospectors working for Dome Mines Ltd. found a number of gold occurrences south of Gordon Lake during the summer of 1938. A group of 43 claims, known as the SDC group was staked in July, 1938 and some trenching and diamond drilling was carried out.

In 1939 a detailed programme of mapping, trenching and bulk sampling was performed and Dome concluded that further work would have been warranted, had the property been in a district where average costs (for that time) prevailed. Dome estimated that grades averaging 0.5 oz per ton would be needed to make the property economic. Dome did no further work and allowed the claims to lapse in the late 1940's.

With the low price of gold which prevailed throughout the 1950's and 1960's little work was done on the property.

In 1967 - 68 the property was acquired by Chemalloy Minerals and limited trenching and sampling was carried out. The claims were allowed to lapse again because of generally low gold prices.



In 1973 - 74, Precambrian Shield Resources Ltd. acquired part of the old Dome holdings and carried out extensive exploration work around the main showing (No. 1 on Figure 254 - 2). This work included driving a decline and about 1000 feet of drifting and crosscutting as well as considerable underground drilling. The company stated that the programme had developed indicated grade of 0.15 oz Au per ton over an average width of 43 feet with a potential of about 600 tons per vertical foot (Nickerson, 1974).

The western 1/3 of the original Dome property was acquired by GBI Explorations in 1974 and an evaluation report was prepared by Dave Nickerson, P. Eng. The subsequent fall in the gold price resulted in the claims being dropped after some very preliminary evaluation.

In 1980 and 1981 GBI restaked this ground and it was examined by the writer on September 15, 1981.

#### Geology:

The property is underlain by moderately deformed, clastic, sedimentary rocks of the Archean Yellowknife group, cut by a few minor diorite dikes.

The sediments consist of interbedded, dark greenish gray graywacke and black slate or argillite. Individual beds vary from less than one foot to more than 20 feet in thickness and the whole sequence has been tightly, isoclinally folded. The strike of these beds varies widely however dips are generally steep.

The report of Dome Mines (Riddle, 1939) refers to a number of occurrences of banded iron formation which display distinctive limonitic coatings on weathered surface.

On fresh surfaces this iron formation "appears to be a dark, graphitic schist with numerous seams of disseminated pyrite along the cleavage planes .....bands are usually two to three feet in width and are continuous for long distances along strike."

Mineralization:

Numerous occurrences of quartz are found in the sediments on the property and appear to be mostly related to aspects of folding rather than major faults as in the greenstones of the Yellowknife district proper.

Quartz occurrences can be subdivided into three main types: (1) the oldest type consists of gray, glassy quartz showing minor sulphide mineralization and low values in gold; (2) a younger type of white quartz which carries spotty sulphide mineralization and gold values ---- it usually occurs as stringers cutting the gray quartz and (3) a sugary quartz with some included mica and feldspar crystals. This last type of quartz is usually found in small stringers in the graywacke. It usually carries very low gold values. The gray quartz (type 1) is by far the most abundant type found on the property.

Extensive prospecting and mapping was done by the Dome Mines crew in the late 1920's and they classified the showings into four main types:

- "(1) Quartz humps or blowouts intruded at the junction of faults and dragfolds. The quartz extends along the faults and other lines of weakness such as bedding planes, either in the form of veins or as quartz zones made up of a network of stringers.
- (2) Irregular quartz lenses and stringers along the limbs and around the noses of folded slate and slaty-graywacke beds, which in some cases are altered to dark graphitic schists.

- (3) Narrow quartz veins with fairly strong walls, occupying tension cracks cutting the graywacke beds.
- (4) Irregular quartz scattered along contacts between beds of slate or iron formation, and graywacke.

In some of the quartz bodies, varying amounts of the following sulphides are found: pyrite, arsenopyrite, galena, sphalerite and chalcopyrite. They may be found as sulphide stringers along the contact of quartz masses or along fractures in the quartz itself --- in places disseminated sulphides are found throughout the quartz."

According to Riddle (1939) gold values are "distributed widely over the property, both in the form of lower values and in erratic showings of visible gold. The visible gold has apparently been deposited at or near the contacts of the quartz and country rock. The most favourable type of country rock was found to be the dark slaty schists. In some cases, where the quartz was well fractured, specks of visible gold were found some distance in from the contacts. High values were also obtained from various types of massive sulphide mineralization such as galena, sphalerite and arsenopyrite."

At least 8 old showings are located on the present property (see figure 254 - 2). The writer has only examined two of these, however descriptions of some of the others are available from Riddle (1939), Nickerson (1974) and other assessment reports.

Showings No. 5 and 6 are located near the north boundary of GBI #1 claim. In both showings, "lenses and stringers of white and gray quartz have been intruded into beds of contorted and sheared slates and slaty graywackes. Quartz stringers and lenses form irregular zones up to 100 feet in width and up to 300 feet in length ..... these zones contain from 10% to 15% quartz ..... scattered sulphides are present at or near the contacts of quartz and country rock."

These showings were trenched and "specimens of visible gold were picked up in most of the trenches, both in association with massive arsenopyrite and in fractured quartz. Heavy pannings were obtained from cracks near the surface."

Showing No. 6 is described in more detail by Riddle (1939). "This showing consists of a narrow irregular quartz vein in a slaty graywacke. The width of the vein varies from a few inches up to two feet and it is continuous for 80 feet along strike. In places parallel lenses and stringers bring the width of the quartz zone up to 30 feet. Visible gold was found both in the main quartz vein and in the subsidiary stringers and lenses.

In 1938, six trenches were blasted across this zone at 50 foot intervals over a length of 150 feet. Channel samples from these trenches showed only two values of interest. In No. 1 trench one section assayed 42.0 dwts. (2.1 oz.) over a width of 3.0 feet and in No. 3 trench another section assayed 4.40 dwts. (0.22 oz) over a width of 3.30 feet. Specimens of visible gold and heavy surface pannings were obtained from five of the six trenches."

Showing No. 11 is located in the south-central portion of GBI #2 claim (see figure 254 - 2). The showing is "about 900 feet long and along this length stringers and veins of white and gray quartz occupy a bed of sheared, slaty graywacke, forming a quartz zone which varies up to 80 feet in width. The percentage of quartz in the zone varies from 20% to 80% and in places the stringers join to form fairly strong veins up to 4 feet in width.

Thirteen trenches were blasted across the showing at 50 foot intervals along the strike and numerous grab samples were taken. Of these only two assays of interest were obtained: one section ran 3.0 dwts. (0.15 oz) over a width of 2.0 feet. In another trench a 2.0 foot section ran 3.60 dwts. (0.18 oz)."

The Star 6 showing is located in the southern part of GBI #1 claim. This showing is not described and was not seen by the writer. An assessment report provided by Mr. John Foster states that seven grab samples were taken from this showing. Of these seven samples 4 assayed nil or trace Au and Ag. Three samples assayed 0.028 oz Au, 0.36 oz Ag; 1.438 oz Au, 1.95 oz Ag and 0.206 oz Au, 0.84 oz Ag per ton respectively.

Showing No. 10 is located near the boundary of GBI #1 and GBI #2 claims (see figure 254 - 2). It is described by Riddle (1939) as follows: "a large blow out of gray quartz has been intruded along the contact of a dark, highly sheared graphitic schist and a bed of massive graywacke. South of this main pod of quartz numerous irregular lenses and stringers of white and gray quartz occur over a length of about 200 feet. To the north of the main lense scattered quartz stringers were found along the schist bed.

A strip of gray fractured quartz on the east contact of the main quartz lense, approximately 2.0 feet wide and 20.0 feet long showed a fair amount of visible gold on surface. Some scattered sulphides were present, mainly arsenopyrite, pyrite, pyrrhotite, galena and chalcopyrite together with some feldspar crystals. In general the appearance of the high grade strip is similar to the remainder of the main quartz mass but it is apparently separated by a fault and appears to pinch out at depth."

Six trenches were blasted across this showing but "..... apart from the narrow strip of high grade no values were obtained from grab and channel samples taken from either the main quartz lense or the quartz stringers and lenses in the dark schist, although good sulphide mineralization, mainly pyrite, galena and arsenopyrite was present in many places.

Channel samples taken across the high grade shoot gave values averaging 46 dwts. (2.3 oz) gold per ton over a width of 2.1 feet and a length of 20 feet. A bulk sample, weighing about 50 pounds taken from No. 1 trench, from which about 20% of the low grade had been sorted out, averaged 10 oz Au per ton."

Showing No. 10 was also examined by Nickerson (1974) and he obtained a chip sample across the main quartz lense which assayed 0.83 oz Au and 0.18 oz Ag per ton over 7 feet. This section was described as having very little sulphides. A selected sample very rich in sulphides assayed only 0.06 oz Au and 0.40 oz Ag per ton.

This same showing was examined by the writer and a selected sample of the sulphide rich material was taken. This sample assayed 1.23 oz Au and 2.26 oz Ag per ton (see Appendix B).

#### Exploration Potential:

The subject property contains numerous quartz occurrences, many of which are gold bearing. Sampling has determined that the gold mineralization is extremely erratic with many inconsistencies between surface pannings and channel, chip and grab samples from trenches. Although many low values were obtained, there are a number of smaller, higher grade zones and the potential for other such zones in quartz occurrences as yet unsampled.

Therefore the property is considered to have potential for the development of zones of high grade material which could be selectively mined at a profit. A phased exploration programme is necessary to adequately test this potential.

Recommendations:Phase I


- (1). The property should be geologically mapped and prospected in detail.
- (2). Extensive rock chip sampling and rock geochem sampling should be carried out on all quartz showings.
- (3). Additional surface trenching and shallow diamond drilling should be done to test continuity of the main showings on surface and at depth.

Phase II

Contingent on the success of phase I a more extensive programme of diamond drilling should be done in order to fully delineate tonnage potential of the various mineralized zones.



respectfully submitted;  
Kerr, Dawson and Associates Ltd.,

  
J. M. Dawson, P. Eng.  
Geologist

Kamloops, B. C.  
January 15, 1982

Appendix A

Estimated Cost of Recommended Programme



Cost Estimate

Phase I

(a). Grid Layout, geological mapping, Sample Collection, etc.	\$8,000.00
(b). Camp Equipment and Supplies	3,000.00
(c). Transportation and freight	3,500.00
(d). Trenching	5,000.00
(e). Assays and Analysis	4,000.00
(f). 1000 feet diamond drilling @ \$50.00/foot all in	50,000.00
(g). Preparation of Final report and Project Supervision	<u>10,000.00</u>
	\$83,500.00
Contingency @ 10%	<u>8,350.00</u>
Total Cost of Phase I	<u><u>\$91,850.00</u></u>

Phase II

(a). 3000 feet of Diamond Drilling @ \$50.00/foot all in	\$150,000.00
(b). Supervision and Report	<u>10,000.00</u>
	\$160,000.00
Contingency @ 10%	<u>16,000.00</u>
Total Cost of Phase II	<u><u>\$176,000.00</u></u>

DOCUMENT  
NUMBER 08 1471

Appendix B

Assay Certificate



ENVIRONMENTAL TESTING  
GEOCHEMISTRY  
ANALYTICAL CHEMISTRY

783 Notre Dame Drive, Kamloops, B.C. V2C 5N8 — Telephone (604) 372-9700

November 10, 1981

ASSAY REPORT

CLIENT: Kerr Dawson & Associates, Kamloops, B.C.

ATTENTION: J.M. Dawson. P Eng.

SAMPLE IDENTIFICATION: Sample received October 16, 1981

CERTIFICATE NUMBER: ET - 58

<u>DESCRIPTION</u>	<u>oz/Ton Au</u>	<u>oz/Ton Ag</u>
4011	1.23	2.26

ECO-TECH LABORATORIES LTD.

Ken Swanson

Chief Assayer

FJP/ae

DOCUMENT 08 1474

Appendix C

References

## References

- Henderson, J.F. and Fraser, N.H.C. (1948): Camlaren Mine;  
-in Structural Geology of Canadian  
Ore Deposits; CIMM JUBILEE VOLUME.
- Riddle, J.E. (1939):  
Report on the S.D.C. Group,  
-Pensive Lake Area, N.W.T.,  
-Private Report to Dome Mines Ltd.
- Nickerson, D. (1974):  
Report on the G.B.I. Mineral Claims,  
-Dome Lake, N.W.T.;  
-Private Report to Great Bear  
Industries Ltd.
- Personal Communication:  
Mr. John Foster,  
Monte Lake, B. C.

DOCUMENT  
NUMBER 08 1471

Appendix D

Writer's Certificate

**JAMES M. DAWSON, P. ENG.**

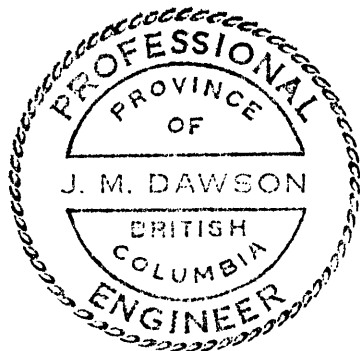
Geological Engineer

#6 NICOLA PLACE, 310 NICOLA ST., KAMLOOPS, B.C. V2C 2P5 | • TELEPHONE (604) 374-0544

Certificate

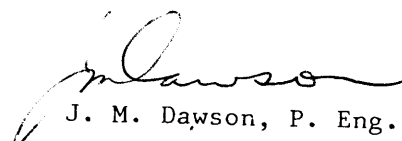
I, JAMES M. DAWSON OF KAMLOOPS, BRITISH COLUMBIA DO HEREBY CERTIFY THAT:

- (1). I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite 206, 310 Nicola Street, Kamloops, B. C.
- (2). I am a graduate of the Memorial University of Newfoundland - B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a member of the Association of Professional Engineers of British Columbia. I have practised my profession for 18 years.
- (3). I am the author of this report which is based on an examination of the subject property on September 15, 1981 as well as various published and unpublished reports.
- (4). I have no direct or indirect interest in the property discussed in this report nor do I expect to receive any.
- (5). Permission is hereby granted to use this report to satisfy requirements of the Vancouver Stock Exchange and the B. C. Securities Commission.



Kamloops, B. C.  
January 15, 1982

KERR, DAWSON AND ASSOCIATES LTD.

  
J. M. Dawson, P. Eng.  
GEOLOGIST.

**KERR, DAWSON AND ASSOCIATES LTD.**  
Consulting Geologists and Engineers