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LONG. 116° 32' 35" W

GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE Mg 1-7 CLAIMS,
DRIFTWOOD CREEK, BRISCO, B.C.

Golden Mining Division

by

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V8P 1X4

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

August 15, 00

26,345

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1.0 INTRODUCTION

This report summarizes geological and geochemical surveys carried out between June 30 and July 3, 2000 on the Mg 1 claim (part of the Mg 1-7 claim group). The purpose of the survey was to map and sample magnesite mineralization and interpret the relation between geology, mineralization, and rock geochemistry.

2.0 LOCATION, ACCESS AND PHYSIOGRAPHY (FIG. 2)

The Mg 1-7 claim group is located 55 km SSE of Golden, B.C. and 46 km NW of Radium Hot Springs, B.C.. The claim group is situated between Bobbie Burns and Bugaboo Creek, on the west side on the Rocky Mountain Trench. The closest village to the claim group is Brisco (on Highway 95). The property is within the Golden Mining Division on N.T.S. 82 K/15 E, latitude 51° 25'N, longitude 116° 32' W.

Elevations on the claim group range from 3,900-4,500 feet (1189- 1372 m). Slopes are gentle to moderate with some steep cliff areas on the south facing slope of the ridge located the north portion of Mg 1 (where sampling and mapping were carried out). The claim group has some abundant lodgepole/ponderosa pine, montane spruce, interior douglas fir, and common brush tree growth.

The claim group is accessed by the Bugaboo Creek road located west of Brisco, turning right (north) on the Driftwood Creek logging road at Provincial Park signpost "Bugaboos 24 km". After passing Driftwood Creek bridge (noted for beaver dam resistant culverts that have special fencing) a 4-wheel drive access road is found on the right (north) at signpost 39 km. The road extends about one km onto the Brown Bear claims, terminating at a quarry where a bulk sample was excavated in 1978 by Kaiser Resources Ltd. The Brown Bear claims are situated immediately west of the Mg 1-7 claims.

3.0 PROPERTY STATUS

The Mg 1-7 claims consists of 7 contiguous units, staked by Andris A. Kikauka. Details of the claims are as follows:

Claim Name	Record No.	Units	Record Date	Expiry Date
Mg 1	371579	1	Sept. 5, 99	Sept. 5, 04*
Mg 2	371580	1	Sept. 5, 99	Sept. 5, 04*
Mg 3	371581	1	Sept. 5, 99	Sept. 5, 04*
Mg 4	371582	1	Sept. 5, 99	Sept. 5, 04*
Mg 5	371583	1	Sept. 5, 99	Sept. 5, 04*
Mg 6	371584	1	Sept. 5, 99	Sept. 5, 04*
Mg 7	371585	1	Sept. 5, 99	Sept. 5, 04*

The Mg 1-7 claims covers an area of 175 hectares. Fieldwork carried out by the author has been credited to the claim group (*expiry date extended from Sept. 5, 00 to Sept. 5, 04).

4.0 AREA HISTORY

The first magnesite discoveries in the Brisco-Driftwood area were located in the 1960's and 1970's. These deposits include Driftwood Creek (Fish Magnesite), Red Mountain, Topaz Lake, Cleland Lake, Dunbar, Jab, and Botts Lake (Simandl, G., 91). Various programs of mapping, sampling, trenching, and drilling have been carried out on these magnesite showings, however no commercial production has resulted from these activities.

Baymag Mines Co Ltd owns and operates an open pit magnesite mine located near Mount Brussiloff, about 20 km east of Radium Hot Springs, B.C. The mine has a capacity to produce 100 ktpy of caustic magnesite in two rotary kilns, and 14 ktpy of fused magnesia in 2 electric arc furnaces. Milling of the Baymag ore takes place in Exshaw, Alberta at Lafarge's cement operation. Refractory grades of dead-burned magnesite are used in the steel, cement and other industries as a furnace or hearth lining.

5.0 DRIFTWOOD PROPERTY HISTORY

Kaiser Resources Ltd. optioned the Fish Magnesite deposit (aka Driftwood) from Al Miller, and performed a program of drilling, geological mapping and sampling. Results from the Kaiser Res. study indicated there are approximately 22,500,000 tonnes of magnesite within the Fish claim group (Morris, R.J., 78). The trend of magnesite bearing beds is 110 degrees with a near vertical dip (-80 SW). Coarse and medium grained sized magnesite occurs as lenses up to 220 feet wide (67 m).

Canadian Occidental Petroleum Ltd staked the Tam 1-8 mineral claims in 1987-88 and performed detailed geological mapping and sampling. Numerous faults were mapped in the area of the magnesite lenses. Older Mount Nelson Formation strata was thrust northeast over younger Horsethief Creek Formation resulting in two sets of cross-faults trending N-S and NE-SW. Cross sections show that the thickest part of the magnesite body is located near a topographic high (along a ridge top) where the surface exposure exceeds 200 m in width. The thickest part of the magnesite occurrence is flanked by a stratabound dolomite breccia, which is interpreted as a dissolution and collapse breccia containing trace-1% sulphides as 1-3 mm sized grains which are potential base and/or precious metal hosts (the Botts Lake showing contains enargite and the Cleland Lake has sphalerite and bornite present).

The Driftwood prospect is characterized by stratabound magnesite lenses that occur in locally thick dolomite sequences of Helikian age Purcell Supergroup Mount Nelson Formation (Simandl, G., 91). The dolomite sequence is characterized by a stromatolitic horizon which underlies the magnesite. Cherty dolomite overlies the magnesite. Quartz veins occur as stringers (1-3 cm width) sporadically throughout the entire stratigraphic column and are locally concentrated near

fault zones and/or chert bearing stratigraphy. The grade and purity of the deposit has been compared to Baymag's Mount Brussiloff deposit, but Driftwood has a higher silica content. Impurities such as chert and quartz in the Driftwood deposit vary substantially along strike, indicating that extensions of known deposits may have higher grades than outcropping portions which are open along strike and to depth (Simandl, G., 91).

6.0 GENERAL GEOLOGY

Magnesite, when pure, contains 47.8% MgO and 52.2% CO₂, which often occurs as rhombohedral crystals, commonly massive and have a vitreous luster with transparent to translucent opacity. The crystalline form has a Mohs hardness of 3.5-4.0. The colour is not a significant indicator of purity but in a given deposit an experienced person can roughly grade the magnesite by observing colour and crystallinity (Duncan, L.R., 92). Macrocrystalline deposits occur in relatively few, but generally large, deposits on the order of several million tonnes. The ore shows a marble-like crystal structure and belongs to the sedimentary or metasomatic groups of origin. The coarse granularity of macrocrystalline magnesite is attributed to later recrystallization during regional metamorphism.

Magnesite is closely associated both spatially and chronologically with intrusive activity. It has been suggested that igneous activity has been the source of the initial CO₂ bearing solutions, i.e. secondary placement of magnesite in preexisting dolomite by hydrothermal action on a volume-for-volume basis, e.g. Kilmar, Quebec, there is an occurrence of magnesite where the intermixed rock of magnesite-dolomite is thought to be the product of hydrothermal dolomitization of the limestone.

The mineralogy of magnesite deposits suggests a high temperature of formation. The world's major deposits of crystalline magnesite occur in Austria, Brazil, Canada, Australia (Tasmania), the former USSR, North Korea, China, Nepal, Czechoslovakia, Spain, and the United States.

Magnesite deposits are often restricted to a narrow stratigraphic interval near the upper section of a dolomite sequence. The Mg/Ca ratio of the basin waters progressively increased with the passage of time as a cumulative result of biogenic and organic precipitation of CaCO₃ during the aqueous stage of the sedimentary process. Accumulation of algal debris further increases the concentration of magnesium. The Mg/Ca ratio became so high that during periods of high pH attributable to prolific growth of algae, the carbonate assemblages were converted into carbonates of higher magnesium content. The development of algae within barred basins is often associated with stromatolitic-bearing dolomite.

In Canada the brucite operation at Wakefield PQ, has ceased production. The crystalline deposit at Kilmar, PQ ceased operation in 1992. The iron-bearing crystalline magnesite located near Timmins, ON is being reevaluated but there is no commercial production. There are several deposits in BC, but the only one being commercially operated now is Brussiloff Mountain.

The Brisco and Driftwood Creek deposits are situated west of the Rocky Mountain Trench fault. They are hosted by dolomites of the Helikian Mount Nelson Formation of the Purcell Supergroup within the Purcell anticlinorium (Simandl, G., 91). The upper part of the Mount Nelson Formation hosts the magnesite deposits. The Mount Nelson Formation is separated from the overlying Toby Formation of the Windermere Supergroup by an unconformity which records the East Kootenay orogenic event, consisting of regional uplift and metamorphism dated at 750-850 Ma and submarine volcanic activity within the Purcell anticlinorium (Pope, A.J., 89). The magnesite deposits are located within an area affected by low-grade regional metamorphism.

The Mount Nelson Formation is approximately 1,320 m (4,330 ft) thick and is divided into seven members as described in the following chart:

MEMBER	UNIT	WIDTH	DESCRIPTION
Upper Dolomite	Transition Sequence	50-125 m	Pale grey to beige colour, interbedded with quartz and dolomite pebble conglomerate, abundant black chert, locally brecciated blue-grey dolomite
Upper Quartzite	Conformable with Upper Dolomite	200-300 m	Cliff forming, well sorted medium to coarse grained arenite, massive bedding
Upper/Middle Dolomite		60-100 m	Grey colour, abundant allochems (oncolites, oolites, peloidal and pisolitic laminations) replaced by chert
Purple Sequence	Purple shale-Purple dolomite	120-180 m	Dolomite and dolomitic siltstone and sandstone, halite casts, minor purple argillite and green reduction spots/laminae
Middle Dolomite	White markers Orange dolomite Middle quartzite	250-350 m	Middle quartzite has apple green colour, orange dolomite has stromatolitic textures, cryptalgal laminations, chert intercalations, halite casts, solution-collapse breccias and dewatering features
Lower Dolomite	Cream marker dolomite Lower main dolomite Lower green dolomite	400-500 m	grey colour, laminated beds 20-50 cm thick, soft sediment features, cryptalgal laminations laterally linked hemispherical stromatolites, dolomite contains 1-2 cm black argillite layers
Lower Quartzite		50-150 m	White, well sorted, thin-bedded, fine-medium grained arenite

7.0 2000 FIELD PROGRAM

7.1 METHODS AND PROCEDURES

A maul and mallet were used to take 45 rock chip samples. About 3 kg of rock chips were collected from a continuous chip channel along 3 m widths for each sample. Rock chip samples were taken from an area of about 6 hectares which was mapped at a scale of 1:500 (Fig.5). Rock chip samples were bagged, tagged and shipped to Pioneer Labs, New Westminster, B.C. for multi-element whole rock geochemistry.

7.2 PROPERTY GEOLOGY AND MINERALIZATION

The Driftwood Creek magnesite deposit occurs in the middle dolomite sequence of the lower Mount Nelson Formation. Lithological units which underlie the property are summarized below:

LITHOLOGY	WIDTH	DESCRIPTION
10 Red-brown qtz sandstone	200-300 m	Massive grey-white or beige sandstone, intercalated green siltstone, local well developed planar cleavage
9 Dolomite breccia	20-40 m	Dolomitic chert and quartz arenite fragments in a matrix of fine grained dolomite
8 Heterogenous dolomite/clastic assemblage	200-250 m	Cherty dolomite, red to purple dolomite, intercalated purple-green siltstone
7 Red to green dolomites and siltstones	20-40 m	Fine grained, minor limestone, silty dolomite and dolomitic siltstone, intercalated shale characterized by brown/red pitted weathered surface
6 Cherty dolomite	20-50 m	Hangingwall of the magnesite deposit, lenses and layers of black/grey chert to 20 cm
5 Magnesite and sparry carbonate	40-250 m	Magnesite and sparry carbonate form stratabound lenses characterized by coarse to sparry crystals, vestiges of hemispherical stromatolites occur in fine grained magnesite bearing rocks. Chert & quartz (as veinlets 1-5 mm wide) are the main impurities
4 Stromatolitic dolomite	30-60 m	Footwall of the magnesite deposit, abundant 10-40 cm hemispherical stromatolites, local dissolution and collapse breccia texture, clasts are cemented by light grey/white sparry dolomite with 1-3 % pyrite

3 Grey dolomite	75-125 m	Massive, aphanitic to fine grained, weathered surface features sub-millimeter laminations
2 Dolomitic siltstone	20-50 m	Silty dolomite, green to purple to pink rainbow-like colour transitions
1 Dark grey dolomite	100-200 m	Massive, aphanitic

The magnesite horizon is interpreted as being equivalent in age as the white marker bed in the middle dolomite sequence of the Helikian Mount Nelson Formation. Typical of macrocrystalline magnesite deposits, the coarse grained textures present in the magnesite zone indicate recrystallization occurred during regional metamorphism.

7.3 GEOCHEMISTRY

North and northeast trending sample lines along exposed outcrop were taken from ten locations in a 325 X 125 m area (Fig. 6). The weighted average from rock chip sampling is given in the following table:

Sample No Series	Combined Width	% MgO	% SiO ₂	% LOI
356	3.0 m	45.1	1.6	50.6
357	3.0 m	44.8	1.4	50.9
358-363	18.0 m	44.0	3.2	49.8
364-368	15.0 m	41.6	0.4	51.4
369-379	33.0 m	44.3	1.1	50.6
380-384	15.0 m	44.9	1.7	50.4
385-387	9.0 m	41.1	8.3	47.2
388-390	9.0 m	45.5	1.1	51.0
391-392	6.0 m	44.9	1.6	51.4
393-395	9.0 m	43.1	5.5	49.1

Al₂O₃ values are generally low (i.e. below 1%). Fe₂O₃ content most often falls between 1-2%. The CaO values are generally below 1%, except for an anomalous grouping of samples near the west edge of the main cliff area outcrop. The west edge of the main cliff outcrop is cut by a 035 trending, steeply dipping fault. Adjacent to the fault, above average CaO values (>2%) correlate with higher than average Sr values (samples 364-375, 36 m out 120 m total sampled width). Sulphur, potassium and phosphorous geochemical values are low throughout the sampled area.

8.0 CONCLUSION AND RECOMMENDATIONS

The Mg 1-7 claim group (Driftwood Deposit) has potential to host an economic magnesite deposit based on the following facts:

- 1) Similar mineralization as other major deposits in the region (e.g. Mount Brusilloff).
- 2) MacrocrySTALLine magnesite deposits such as Driftwood, are the main source of raw magnesite worldwide and generally are in the order of several million tonnes in size.
- 3) Driftwood magnesite deposit contains low aluminum and iron with local concentrations of quartz veins and chert nodules. The silica may be sorted and removed after coarse crushing.
- 4) The Driftwood deposit contains suitable material for products not requiring high-purity feed.
- 5) Easy access to the property and a reasonably short distance to a mill facility are important economic factors for future development on the Mg Claim Group.

A program of detailed geological mapping, trenching, stripping and bulk sample excavation is proposed to evaluate the economical viability of the deposit. It is recommended that a 500 meter long and 4 meter wide mining access road be constructed from the existing road to the lower elevation portion of the west edge cliff outcrop following the 115 degree trending cut baseline. Stripping of exposed bedrock near the lower edge of the outcrop would facilitate access to the cliff outcrop exposure of magnesite and allow for a bulk sample of 10,000 tonnes to be removed. This program would be carried out by a crawler dozer, front end loader, 20-25 tonne ore hauling trucks and a tank drill. With support and geological report, the estimated cost of the program would be approximately \$200,000-350,000. Cost estimates fluctuate over a wide range because of the variability of logistics and preparation of ore dependant on the end use.

REFERENCES

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CERTIFICATE

I, Andris Kikauka, residing in Municipality of Saanich, Victoria, B.C., hereby certify that;

1. I am a graduate of Brock University, St. Catharines, Ont., with an Honours Bachelor of Science Degree in Geological Sciences, 1980.
2. I am a Fellow in good standing with the Geological Association of Canada.
3. I am registered in the Province of British Columbia as a Professional Geoscientist.
4. I have practiced my profession for twenty years in precious and base metal exploration in the Cordillera of Western Canada, U.S.A., South America, and for three years in uranium exploration in the Canadian Shield.
5. The information, opinions, and recommendations in this report are based on fieldwork carried out in my presence on the subject properties.

Andris Kikauka, P. Geo.,

A handwritten signature in cursive script that reads "A. Kikauka".

August 15, 2000

ITEMIZED COST STATEMENT- Mg 1-7 CLAIM GROUP, June 30-July 3, 2000

FIELD CREW:

A. Kikauka (Geologist) 4 days	\$ 1,000.00
K. Neil (Geotechnician) 4 days	800.00

FIELD COSTS:

Mob/demob	350.00
Assays 40 Whole rock 30 element ICP	580.00
Food & Accommodation	375.00

Report	475.00
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Total =	<u>\$ 3,580.00</u>
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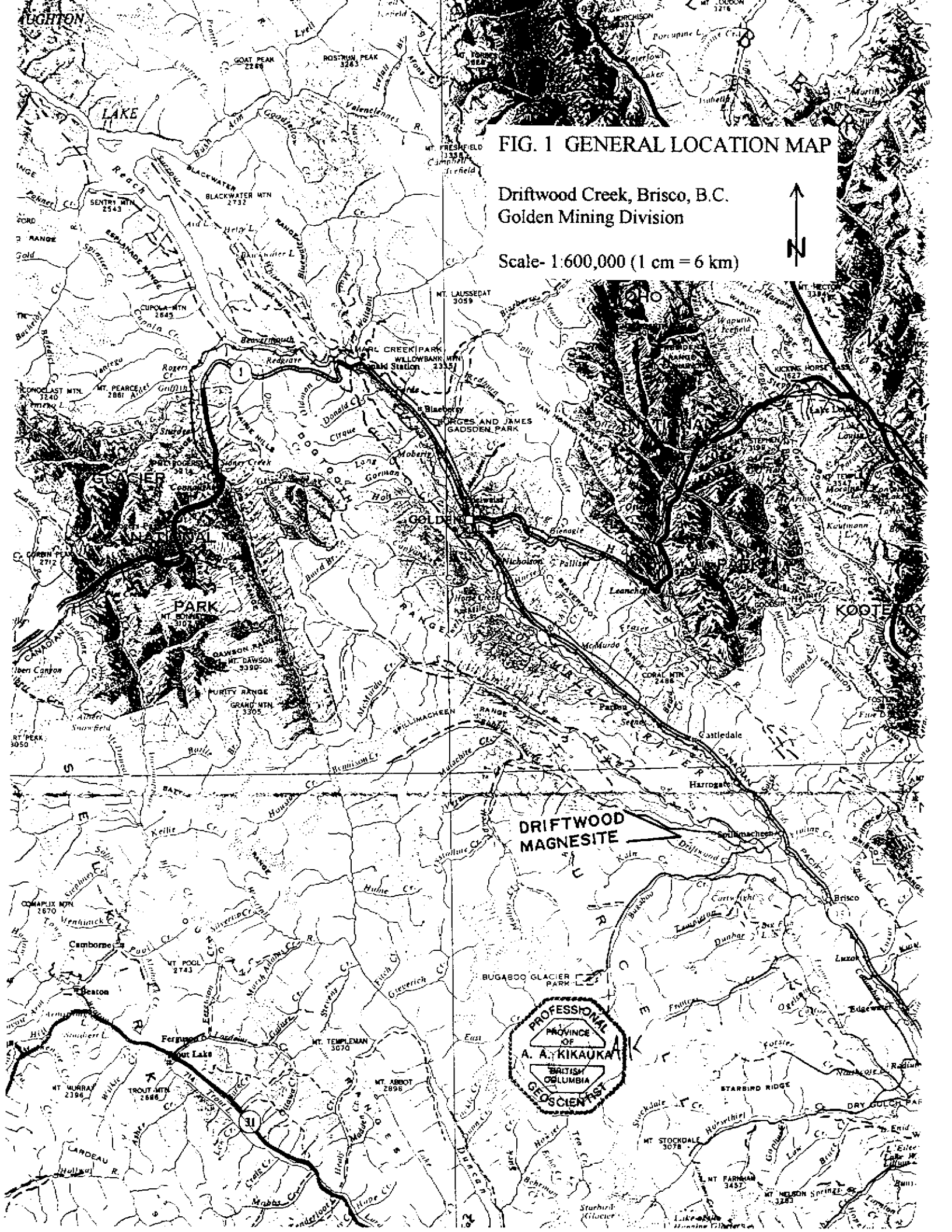
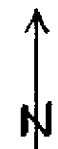


FIG. 1 GENERAL LOCATION MAP

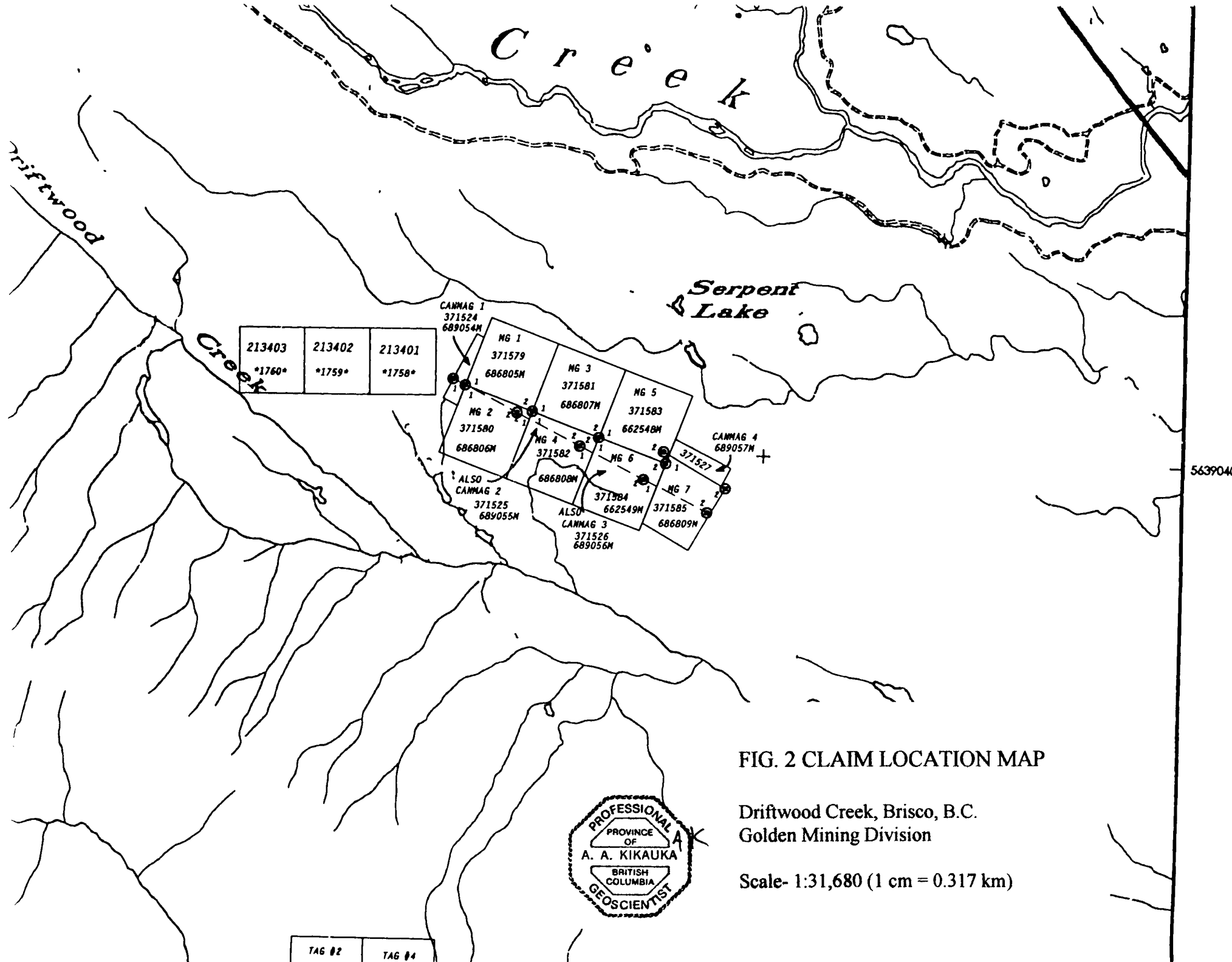
Driftwood Creek, Brisco, B.C.
Golden Mining Division

Scale- 1:600,000 (1 cm = 6 km)



DRIFTWOOD
MAGNESITE





213403 *1760*	213402 *1759*	213401 *1758*
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CANMAG 1
371524
689054M

MG 1
371579
686805M

MG 2
371580
686806M

MG 3
371581
686807M

MG 4
371582
686808M

MG 5
371583
662548M

MG 6
371584
662549M

MG 7
371585
686809M

CANMAG 2
371525
689055M

ALSO CANMAG 3
371526
689056M

CANMAG 4
689057M

FIG. 2 CLAIM LOCATION MAP

Driftwood Creek, Brisco, B.C.
Golden Mining Division

Scale- 1:31,680 (1 cm = 0.317 km)



TAG #2	TAG #4
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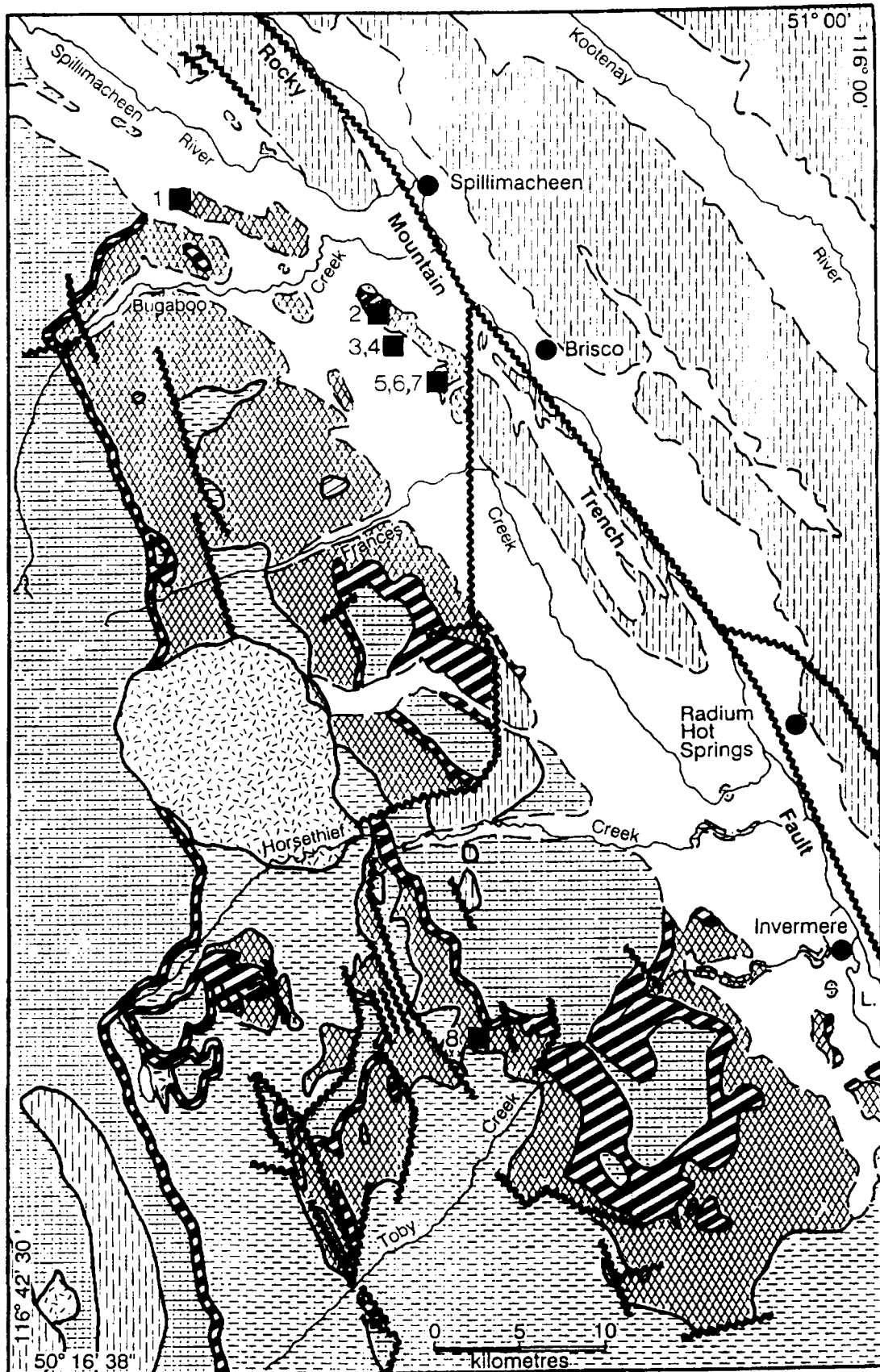


Figure 3 Regional geology and geological setting of the magnesite deposits hosted by Mount Nelson Formation. Simplified from Reesor (1973).

LEGEND



Quaternary cover

Palaeozoic and Younger



Intrusions



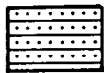
Sedimentary rocks
(undivided)

————— unconformity —————

Proterozoic

Hadrynian

Windermere
Supergroup



Horsethief Creek Group



Toby Formation

————— unconformity —————

Helikian

Purcell
Supergroup



Mount Nelson Formation



Dutch Creek-Kitchener-Siyeh
formations (undivided)

—————

————— Geological contact

~~~~~ Fault

■ Magnesite showing

1-Driftwood Ck

2-Red Mountain

3-Topaz Lake

4-Cleland Lake

5-Dunbar

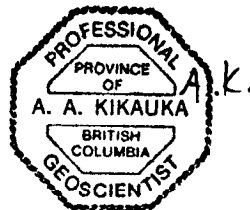
6-Jab

7-Botts Lake

FIG. 3 GENERAL GEOLOGY

Driftwood Creek, Brisco, B.C.  
Golden Mining Division

Scale- 1:400,000 (1 cm = 4.0 km)



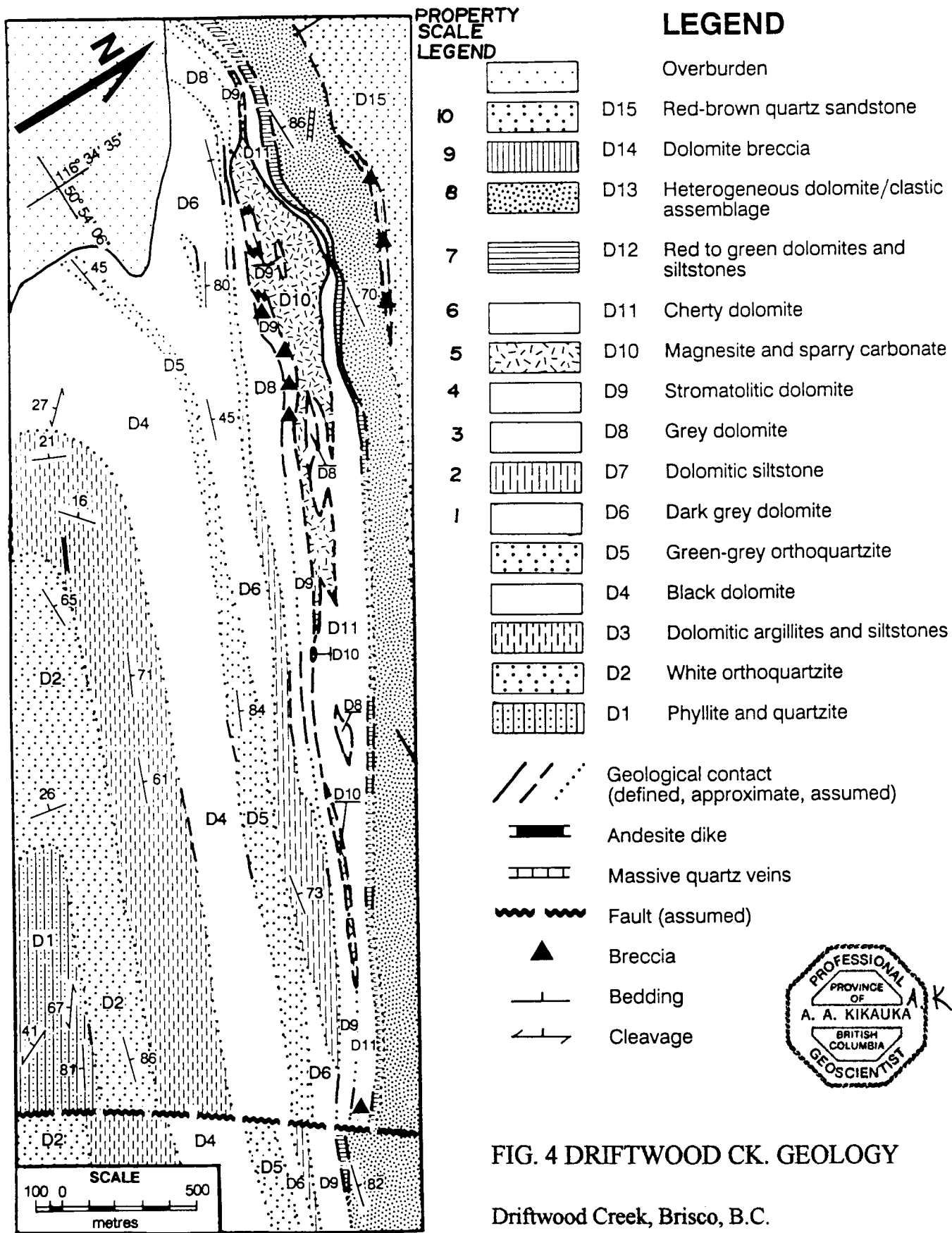


Figure 4 Geology of the Driftwood Creek deposit.



WHOLE ROCK ICP ANALYSIS

Report No. 2003326

Mr. Andris Kikauka

Pioneer Laboratories Inc. File # A002673  
Unit 103 - 2691 Viscount, Richmond BC V6V 2R5

Page 1 Project: Driftwood

| SAMPLE#        | SiO2  | Al2O3 | Fe2O3 | MgO   | CaO  | Na2O | K2O  | TiO2 | P2O5 | MnO  | Cr2O3 | Ba   | Ni  | Sr  | Zr  | Y   | Nb  | Sc  | LOI  | TOT/C | TOT/S | SUM    |
|----------------|-------|-------|-------|-------|------|------|------|------|------|------|-------|------|-----|-----|-----|-----|-----|-----|------|-------|-------|--------|
|                | %     | %     | %     | %     | %    | %    | %    | %    | %    | %    | %     | ppm  | ppm | ppm | ppm | ppm | ppm | ppm | %    | %     | %     | %      |
| 356            | 1.60  | .50   | .94   | 45.08 | .89  | <.01 | .12  | .03  | .29  | .03  | .003  | 13   | <20 | 21  | 11  | <10 | <10 | 2   | 50.6 | 14.54 | <.01  | 100.09 |
| 357            | 1.42  | .63   | 1.09  | 44.82 | .85  | <.01 | .14  | .06  | .13  | .04  | .003  | 6    | 34  | 26  | 16  | <10 | <10 | 6   | 50.9 | 13.98 | <.01  | 100.10 |
| 358            | 3.78  | 1.25  | 1.92  | 42.91 | .65  | .12  | <.04 | .10  | .11  | .06  | .006  | <5   | <20 | <10 | 19  | 20  | <10 | 6   | 49.1 | 13.16 | <.01  | 100.02 |
| 359            | 3.43  | .82   | 1.41  | 43.01 | .77  | .47  | <.04 | .05  | .17  | .04  | .005  | <5   | <20 | 11  | 16  | <10 | <10 | 4   | 49.9 | 14.17 | .01   | 100.10 |
| 360            | 3.59  | 1.19  | 1.35  | 44.04 | .41  | .02  | .05  | .13  | .19  | .04  | .006  | <5   | 20  | <10 | 14  | <10 | <10 | 2   | 49.1 | 13.06 | <.01  | 100.12 |
| 361            | 1.81  | .66   | 1.35  | 44.95 | .31  | <.01 | .07  | .08  | .12  | .04  | .004  | <5   | 30  | <10 | 15  | <10 | <10 | 2   | 50.7 | 13.98 | <.01  | 100.10 |
| 362            | 2.74  | .88   | 1.44  | 44.46 | .30  | .01  | .06  | .11  | .14  | .04  | .007  | 30   | 24  | <10 | 12  | 13  | <10 | 6   | 49.9 | 13.71 | .01   | 100.10 |
| 363            | 3.64  | .52   | 1.27  | 44.30 | .30  | <.01 | .05  | .04  | .11  | .03  | .003  | <5   | <20 | <10 | 12  | <10 | <10 | 3   | 49.8 | 13.52 | .02   | 100.07 |
| 364            | .43   | .10   | 1.63  | 42.15 | 3.59 | <.01 | .04  | .01  | .15  | .06  | <.001 | <5   | <20 | 50  | <10 | <10 | <10 | 3   | 51.7 | 14.35 | <.01  | 99.87  |
| 365            | .15   | .03   | 1.64  | 38.12 | 8.58 | <.01 | <.04 | <.01 | .12  | .07  | .003  | 8    | <20 | 238 | <10 | 12  | <10 | 4   | 50.8 | 14.08 | <.01  | 99.58  |
| 366            | .39   | .13   | 1.68  | 39.48 | 6.76 | .01  | .06  | .02  | .10  | .07  | .003  | <5   | 23  | 162 | 10  | 28  | <10 | 10  | 51.0 | 14.44 | <.01  | 99.73  |
| 367            | .32   | .09   | 1.73  | 44.28 | 1.18 | .01  | <.04 | .01  | .12  | .06  | .005  | <5   | <20 | 24  | 13  | <10 | <10 | 4   | 51.9 | 14.26 | .01   | 99.74  |
| 368            | .49   | .13   | 1.48  | 43.83 | 2.32 | <.01 | .04  | .01  | .10  | .05  | <.001 | <5   | 33  | 25  | <10 | <10 | <10 | 2   | 51.5 | 14.35 | <.01  | 99.96  |
| 369            | .21   | .11   | 1.66  | 44.59 | 1.30 | .02  | .04  | .01  | .12  | .06  | .005  | <5   | <20 | 13  | 12  | <10 | <10 | 2   | 51.5 | 14.44 | .03   | 99.63  |
| 370            | .17   | .07   | 1.33  | 42.79 | 3.96 | <.01 | <.04 | <.01 | .07  | .05  | .003  | <5   | 21  | 37  | 16  | 11  | <10 | 2   | 51.1 | 14.08 | <.01  | 99.56  |
| 371            | .69   | .28   | 1.63  | 43.59 | 3.06 | <.01 | <.04 | <.01 | .08  | .07  | .005  | <5   | 23  | 359 | <10 | <10 | <10 | 1   | 50.6 | 14.35 | <.01  | 100.08 |
| 372            | .76   | .11   | 1.79  | 44.18 | 1.66 | <.01 | <.04 | .03  | .12  | .07  | .002  | <5   | 24  | 26  | 14  | <10 | <10 | 2   | 51.3 | 13.89 | .02   | 100.07 |
| RE 372         | .73   | .11   | 1.75  | 44.17 | 1.66 | .02  | <.04 | .02  | .13  | .07  | .002  | <5   | <20 | 27  | 11  | <10 | <10 | 2   | 51.3 | 14.54 | .01   | 100.00 |
| 373            | 1.32  | .04   | 1.66  | 44.06 | 1.86 | .03  | <.04 | <.01 | .11  | .06  | .006  | <5   | <20 | 15  | 12  | <10 | <10 | 2   | 50.9 | 14.08 | <.01  | 100.09 |
| 374            | .58   | .07   | 1.75  | 44.87 | 1.27 | .01  | <.04 | .01  | .08  | .06  | .003  | <5   | 24  | 12  | 11  | <10 | <10 | 2   | 51.3 | 14.17 | .01   | 100.04 |
| 375            | 2.91  | .98   | 1.59  | 43.27 | 1.06 | <.01 | .08  | .05  | .13  | .04  | .004  | 11   | 33  | 27  | <10 | <10 | <10 | 1   | 50.0 | 13.89 | <.01  | 100.12 |
| 376            | 2.47  | .91   | 1.89  | 43.41 | .91  | .01  | .13  | .10  | .08  | .05  | .008  | 12   | <20 | 16  | 28  | <10 | <10 | 3   | 50.1 | 14.08 | <.01  | 100.08 |
| 377            | 1.11  | .74   | 2.00  | 44.63 | .75  | .02  | .06  | .04  | .05  | .08  | .005  | 11   | <20 | 15  | 35  | 20  | <10 | 4   | 50.5 | 14.17 | .02   | 100.00 |
| 378            | 1.05  | .64   | 1.92  | 45.05 | .36  | .01  | <.04 | .06  | .10  | .07  | .003  | <5   | <20 | <10 | <10 | 25  | <10 | 5   | 50.7 | 13.89 | <.01  | 100.00 |
| 379            | 1.53  | .85   | 1.16  | 46.84 | .56  | .06  | <.04 | .10  | .08  | .04  | .004  | <5   | <20 | <10 | 11  | <10 | <10 | 3   | 48.8 | 14.08 | .02   | 100.05 |
| 380            | 6.05  | 1.30  | 1.16  | 43.64 | .38  | <.01 | <.04 | .17  | .10  | .03  | .005  | <5   | <20 | <10 | 25  | 15  | <10 | 6   | 47.2 | 12.97 | .02   | 100.06 |
| 381            | 1.52  | .78   | 1.16  | 44.68 | .83  | .15  | .07  | .05  | .12  | .04  | .004  | 5    | <20 | 18  | 12  | <10 | <10 | 3   | 50.7 | 13.80 | <.01  | 100.11 |
| 382            | .37   | .56   | 1.23  | 45.52 | .54  | .03  | <.04 | .05  | .11  | .04  | .006  | <5   | <20 | <10 | 10  | <10 | <10 | 3   | 51.3 | 13.98 | .01   | 99.79  |
| 383            | .28   | .60   | 1.16  | 45.33 | .68  | .03  | .05  | .04  | .06  | .04  | .005  | <5   | <20 | <10 | 16  | <10 | <10 | 3   | 51.4 | 14.26 | .05   | 99.68  |
| 384            | .50   | .75   | 1.10  | 45.36 | .69  | .02  | .06  | .06  | .08  | .04  | .006  | <5   | 28  | <10 | 14  | <10 | <10 | 3   | 51.2 | 14.35 | <.01  | 99.87  |
| 385            | 1.35  | .99   | 1.80  | 44.51 | .48  | .02  | .18  | .08  | .12  | .06  | .004  | 15   | <20 | <10 | 10  | 15  | <10 | 4   | 50.4 | 14.08 | .02   | 100.00 |
| 386            | 5.86  | .98   | 1.76  | 42.18 | .50  | .02  | .24  | .08  | .09  | .05  | .008  | 20   | <20 | <10 | 17  | <10 | <10 | 2   | 48.2 | 13.43 | <.01  | 99.98  |
| 387            | 17.81 | .35   | 1.34  | 36.57 | .39  | .03  | .11  | .05  | .08  | .03  | .016  | 13   | <20 | <10 | 10  | <10 | <10 | 1   | 43.1 | 12.05 | .04   | 99.88  |
| 388            | .61   | .11   | 1.62  | 45.84 | .61  | .03  | .04  | .01  | .07  | .04  | .005  | <5   | <20 | <10 | <10 | <10 | <10 | 1   | 51.1 | 14.26 | .02   | 100.09 |
| 389            | .23   | .10   | 1.51  | 45.59 | .50  | .01  | <.04 | .01  | .09  | .04  | .005  | 5    | 21  | <10 | 16  | <10 | <10 | 1   | 51.5 | 14.35 | <.01  | 99.62  |
| STANDARD SO-15 | 49.43 | 11.96 | 7.35  | 7.31  | 5.90 | 2.45 | 1.82 | 1.74 | 2.71 | 1.40 | 1.066 | 1918 | 74  | 398 | 986 | 22  | 24  | 12  | 5.9  | -     | -     | 99.45  |

GROUP 4A - 0.200 GM SAMPLE BY LIBO2 FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.  
TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)  
- SAMPLE TYPE: PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 31 2000

DATE REPORT MAILED: Aug 8/00

SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Date: FA



| SAMPLE#            | SiO2<br>% | Al2O3<br>% | Fe2O3<br>% | MgO<br>% | CaO<br>% | Na2O<br>% | K2O<br>% | TiO2<br>% | P2O5<br>% | MnO<br>% | Cr2O3<br>% | Ba<br>ppm | Ni<br>ppm | Sr<br>ppm | Zr<br>ppm | Y<br>ppm | Nb<br>ppm | Sc<br>ppm | LOI<br>% | TOT/C<br>% | TOT/S<br>% | SUM<br>% |
|--------------------|-----------|------------|------------|----------|----------|-----------|----------|-----------|-----------|----------|------------|-----------|-----------|-----------|-----------|----------|-----------|-----------|----------|------------|------------|----------|
| 390                | 2.43      | .04        | 1.37       | 45.09    | .36      | <.01      | <.04     | .01       | .04       | .04      | .003       | 5         | 28        | <10       | 18        | <10      | <10       | 1         | 50.5     | 14.54      | <.01       | 99.91    |
| 391                | 1.20      | .03        | .89        | 45.44    | .95      | .01       | <.04     | <.01      | .10       | .05      | .002       | <5        | 24        | <10       | 12        | <10      | <10       | 1         | 51.2     | 14.35      | .02        | 99.90    |
| 392                | 2.02      | .06        | .84        | 44.42    | .84      | .04       | <.04     | <.01      | .06       | .04      | .004       | 7         | 20        | <10       | 21        | <10      | <10       | 1         | 51.6     | 14.08      | .02        | 99.95    |
| 393                | 2.46      | .07        | .95        | 44.57    | 1.02     | .03       | <.04     | <.01      | .07       | .04      | .005       | 6         | <20       | <10       | <10       | <10      | <10       | 1         | 50.7     | 13.98      | .04        | 99.94    |
| 394                | 8.96      | .06        | 1.36       | 41.72    | .50      | <.01      | <.04     | <.01      | .06       | .04      | .008       | <5        | 26        | <10       | 10        | <10      | <10       | 1         | 47.2     | 13.43      | .01        | 99.93    |
| 395                | 5.38      | .03        | 1.27       | 42.96    | .66      | <.01      | <.04     | <.01      | .10       | .05      | .006       | 6         | 24        | <10       | 14        | <10      | <10       | 1         | 49.4     | 13.52      | <.01       | 99.88    |
| RE 395             | 5.12      | <.03       | 1.32       | 43.28    | .64      | <.01      | <.04     | <.01      | .08       | .05      | .006       | <5        | 23        | <10       | <10       | <10      | <10       | 1         | 49.4     | 13.52      | <.01       | 99.94    |
| STANDARD SO-15/CSB | 49.93     | 12.43      | 7.19       | 7.15     | 5.78     | 2.40      | 1.85     | 1.82      | 2.66      | 1.37     | 1.044      | 1952      | 76        | 390       | 999       | 22       | 29        | 13        | 5.9      | 2.41       | 5.28       | 99.94    |

Sample type: PULP. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Mg 1-7 CLAIM GROUP- ROCK CHIP SAMPLE DESCRIPTIONS

| SAMPLE NO. | WIDTH | DESCRIPTION                                                 | % MgO |
|------------|-------|-------------------------------------------------------------|-------|
| 356        | 3.0 m | Grey/creamy white, medium/coarse grain, 25% granola texture | 45.08 |
| 357        | 3.0 m | Grey/creamy white, medium/coarse grain, 10% granola texture | 44.82 |
| 358        | 3.0 m | Grey/creamy white, medium/coarse grain, 10% granola texture | 42.91 |
| 359        | 3.0 m | Grey/creamy white, medium/coarse grain, 10% granola texture | 43.01 |
| 360        | 3.0 m | Grey/creamy white, medium/coarse grain, 25% granola texture | 44.04 |
| 361        | 3.0 m | Grey/creamy white, medium/coarse grain, 25% granola texture | 44.95 |
| 362        | 3.0 m | Grey/creamy white, medium/coarse grain, 25% granola texture | 44.46 |
| 363        | 3.0 m | Grey/creamy white, medium/coarse grain, 15% granola texture | 44.30 |
| 364        | 3.0 m | Grey/creamy white, coarse grain, 100% granola texture       | 42.15 |
| 365        | 3.0 m | Grey/creamy white, coarse grain, 100% granola texture       | 38.12 |
| 366        | 3.0 m | Grey/creamy white, coarse grain, 100% granola texture       | 39.48 |
| 367        | 3.0 m | Grey/creamy white, coarse grain, 100% granola texture       | 44.28 |
| 368        | 3.0 m | Grey/creamy white, coarse grain, 100% granola texture       | 43.83 |
| 369        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 44.59 |
| 370        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 42.79 |
| 371        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 43.59 |
| 372        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 44.18 |
| 373        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 44.06 |
| 374        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 44.87 |
| 375        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 43.27 |
| 376        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 43.41 |
| 377        | 3.0 m | Grey/creamy white, coarse grain, 95% granola texture        | 44.63 |
| 378        | 3.0 m | Grey/creamy white, coarse grain, 90% granola texture        | 45.05 |
| 379        | 3.0 m | Grey/creamy white, coarse grain, 90% granola texture        | 46.84 |
| 380        | 3.0 m | Grey/creamy white, coarse grain, 90% granola texture        | 43.64 |
| 381        | 3.0 m | Grey/creamy white, medium/coarse grain, 75% granola texture | 44.68 |
| 382        | 3.0 m | Grey/creamy white, medium/coarse grain, 75% granola texture | 44.52 |

| SAMPLE NO. | WIDTH | DESCRIPTION                                                 | % MgO |
|------------|-------|-------------------------------------------------------------|-------|
| 383        | 3.0 m | Grey/creamy white, medium/coarse grain, 75% granola texture | 45.33 |
| 384        | 3.0 m | Grey/creamy white, medium/coarse grain, 75% granola texture | 45.36 |
| 385        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 44.51 |
| 386        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 42.18 |
| 387        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 36.57 |
| 388        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 45.84 |
| 389        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 45.59 |
| 390        | 3.0 m | Grey/creamy white, medium/coarse grain, 85% granola texture | 45.09 |
| 391        | 3.0 m | Grey/creamy white, medium/coarse grain, 50% granola texture | 45.44 |
| 392        | 3.0 m | Grey/creamy white, medium/coarse grain, 50% granola texture | 44.42 |
| 393        | 3.0 m | Grey/creamy white, medium/coarse grain, 50% granola texture | 44.57 |
| 394        | 3.0 m | Grey/creamy white, medium/coarse grain, 50% granola texture | 41.72 |
| 395        | 3.0 m | Grey/creamy white, medium/coarse grain, 50% granola texture | 42.96 |

Fig. 5 PROPERTY GEOLOGY & MINERALIZATION

Mg 1-7 CLAIM GROUP, GOLDEN MINING DIVISION  
LEGEND

HELIKIAN MT. NELSON FM.

6 CHERTY DOLOMITE

5 MAGNESITE & SPARRY CARBONATE GEOLOGICAL SURVEY BRANCH  
MINING REPORT

4 STROMATOLITIC DOLOMITE

80° BEDDING

○ OUTCROP

--- FAULT

356 3m ROCK CHIP SAMPLE NO.  
46.8 % MgO

⊥ SWAMP

26,345



Mg 1-7 CLAIM GROUP. ROCK CHIP SAMPLE DESCRIPTIONS

| SAMPLE NO. | WIDTH | DESCRIPTION                                             | % MgO |
|------------|-------|---------------------------------------------------------|-------|
| 356        | 3.0 m | Grey-tan white, medium-coarse gran, 25% granule texture | 43.08 |
| 357        | 3.0 m | Grey-tan white, medium-coarse gran, 10% granule texture | 44.82 |
| 358        | 3.0 m | Grey-tan white, medium-coarse gran, 10% granule texture | 42.91 |
| 359        | 3.0 m | Grey-tan white, medium-coarse gran, 10% granule texture | 43.01 |
| 360        | 3.0 m | Grey-tan white, medium-coarse gran, 25% granule texture | 44.04 |
| 361        | 3.0 m | Grey-tan white, medium-coarse gran, 25% granule texture | 44.94 |
| 362        | 3.0 m | Grey-tan white, medium-coarse gran, 25% granule texture | 44.46 |
| 363        | 3.0 m | Grey-tan white, medium-coarse gran, 15% granule texture | 44.30 |
| 364        | 3.0 m | Grey-tan white, coarse gran, 100% granule texture       | 42.15 |
| 365        | 3.0 m | Grey-tan white, coarse gran, 100% granule texture       | 38.12 |
| 366        | 3.0 m | Grey-tan white, coarse gran, 100% granule texture       | 39.48 |
| 367        | 3.0 m | Grey-tan white, coarse gran, 100% granule texture       | 44.28 |
| 368        | 3.0 m | Grey-tan white, coarse gran, 100% granule texture       | 43.83 |
| 369        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 44.29 |
| 370        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 42.79 |
| 371        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 43.59 |
| 372        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 44.19 |
| 373        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 44.06 |
| 374        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 44.87 |
| 375        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 43.27 |
| 376        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 43.41 |
| 377        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 44.03 |
| 378        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 45.01 |
| 379        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 46.84 |
| 380        | 3.0 m | Grey-tan white, coarse gran, 95% granule texture        | 43.64 |
| 381        | 3.0 m | Grey-tan white, medium-coarse gran, 75% granule texture | 44.68 |
| 382        | 3.0 m | Grey-tan white, medium-coarse gran, 75% granule texture | 44.12 |

SCALE 1 : 500

0 50 m.



CUT BASELINE AZIMUTH 115

TAN 1-4 CLAIM POST

160m to unit 6

5639400 N

68

430 395 Mg 1  
417 389 Mg 2  
446 393 Mg 3  
444 392 Mg 4  
454 391 Mg 5

390 451  
389 45.6  
388 45.8

530400 E  
363 44.3  
362 44.5  
361 45.0  
360 44.0  
359 43.0  
358 42.9

368 43.8  
367 44.3  
366 39.5  
365 39.1  
364 42.2

369 44.6  
370 42.8  
371 43.6  
372 44.2  
373 44.1  
374 44.9  
375 43.3  
376 43.4  
377 44.6  
378 45.1  
379 46.8

387 36.6  
386 42.2  
385 44.8

384 45.4  
383 45.3  
382 44.7  
381 43.6

357 44.8

356 45.1

CLIFF

CLIFF

5639200 N

| SAMPLE NO. | WIDTH | DESCRIPTION                                             | % MgO |
|------------|-------|---------------------------------------------------------|-------|
| 383        | 3.0 m | Grey-tan white, medium-coarse gran, 75% granule texture | 43.33 |
| 384        | 3.0 m | Grey-tan white, medium-coarse gran, 75% granule texture | 41.36 |
| 385        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 44.51 |
| 386        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 42.18 |
| 387        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 36.57 |
| 388        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 45.84 |
| 389        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 45.59 |
| 390        | 3.0 m | Grey-tan white, medium-coarse gran, 85% granule texture | 45.09 |
| 391        | 3.0 m | Grey-tan white, medium-coarse gran, 50% granule texture | 45.44 |
| 392        | 3.0 m | Grey-tan white, medium-coarse gran, 50% granule texture | 44.42 |
| 393        | 3.0 m | Grey-tan white, medium-coarse gran, 50% granule texture | 44.57 |
| 394        | 3.0 m | Grey-tan white, medium-coarse gran, 50% granule texture | 41.72 |
| 395        | 3.0 m | Grey-tan white, medium-coarse gran, 50% granule texture | 42.96 |