GEOLOGICAL REPORT ON
SHINGWAK PROPERTY
KENORA DISTRICT
NTS 52F/05SE

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for

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SUMMARY

The Shingwak property consists of 20 claims surrounding the Roy showing and is located on a bay in the southeast corner of Shingwak Lake, approximately 80 km southeast of Kenora and 80 km north of Ft. Frances, Ontario. A total of 23 man days were spent during August and September on mapping, sampling and prospecting. Assay, geochemical and rock samples were collected. Rocks on the property consist largely of pillowed andesitic lava, massive mafic flows, hyaloclastites, minor gabbroic flows (of possible komatiitic affinity) and in the southeastern claims thin intermediate and felsic tuffs. Units trend northeasterly, dip steeply to the south, face south and occur on the monoclinal southern limb of the Shingwak Lake anticline.

Mineralization consists predominantly of more or less conformable quartz-carbonate breccia zones in pillow lavas or hyaloclastites. The mineralizing process progresses from fragmentation to cementing and silica rimming to bleaching of fragments and finally to complete carbonation of initially unaltered mafic volcanic.

A total of 44 samples were analyzed for gold. Of these 16 contained 5 ppb gold or less and 14 contained 100 ppb gold or more. All except one of eight samples containing more than 900 ppb gold are from a thin quartz breccia pyrite zone that crosscuts bedding and has been traced for over a strike length approaching 500 ft. The best assay obtained during this program is 0.061 oz/ton from a grab sample. Numerous samples gave gold values in the range 200 - 700 ppb.

A helicopter-borne magnetic and electromagnetic survey was flown over the Shingwak property and adjacent areas in the Cameron Lake-Rowan Lake areas in December 1983 by Aerodat (Hogg, 1984). All EM conductors on the Shingwak property were weak (less than 2 mhos) and were interpreted as being due to conductive layers or faults rather than sulfides or graphite.

While the exact nature of the mineralizing processes in Cameron-Shingwak-Rowan Lakes volcanics are at present imperfectly understood, there appears to be a significant component of stratigraphic control. As well, there is a close geologic and geochemical similarity between mineralization at Nuinsco's Cameron Lake deposit and showings on the Shingwak property.

The Shingwak property has excellent potential for gold mineralization with grades and tonnages similar to that presently known on Nuinsco's Cameron Lake property (about 1 million tons grading 0.20 oz/ton).

The results of the 1984 program are encouraging and further work is definitely warranted.

A program of line cutting, followed by detailed mapping on a 1" - 200 ft. grid and sampling is recommended. Permission to map and sample the Roy claim should be obtained. The estimated budget for geological work is $19,000.00 and contingent drilling of 3000 ft. is to cost $90,000.00.

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INTRODUCTION

Interest in the gold showings in the Cameron Lake - Rowan Lake area has intensified as a result of the Nuinsco-Lockwood discovery on Cameron Lake of a deposit currently estimated to contain 1 million tons averaging 0.2 oz/ton gold. (George Archibald, Nuinsco, personal communication 1984). Significant reserves have also been outlined at Nuinsco's Monte Cristo property about 12 km to the northeast of the Cameron Lake deposit. The Shingwak property is located half way between these occurrences in the same stratigraphic package, which forms the south limb of the Shingwak Lake anticline (Fig. 1). The potential for locating similar mineralization on the Shingwak property is therefore excellent.

WORK ACCOMPLISHED

A total of 23 man days were spent during August and September mapping, sampling and prospecting the Shingwak Property. Assay, rock geochemical and two whole rock samples were collected. Accommodation was at Rowan Lake Lodge and access to the claims was by boat and canoe.

All claim posts were located in the field and minor inconsistencies were rectified after permission from the mining recorder had been obtained.

Visits were made to Nuinsco's Cameron Lake and Monte Cristo properties and other properties in the area in order to place geology and mineralization in a regional context.

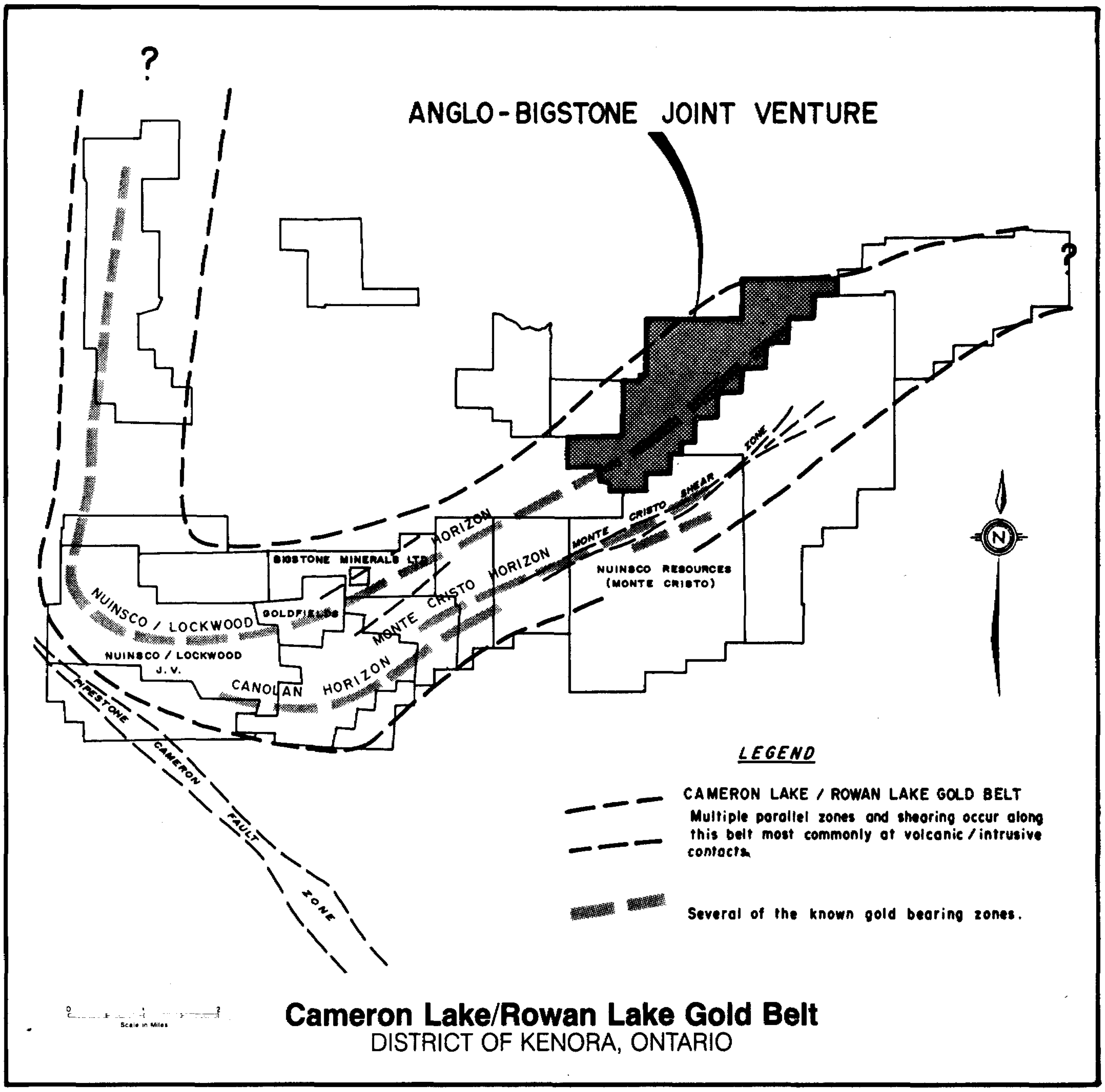

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Figure 1: Generalized Stratigraphy and Property Position in the Cameron Lake-Rowan Lake area. Shingwak Property is shown in yellow.

DISCUSSION

1. While the exact nature of the mineralizing processes in Cameron-Shingwak-Rowan Lakes volcanics are at present imperfectly understood, there appears to be a significant component of stratigraphic control. As well, there is a close geologic and geochemical similarity between mineralization at Nuinsco's Cameron Lake deposit and showings on the Shingwak property.

2. Mineralization consists predominantly of progressively brecciated and carbonated mafic pillowed basalts and equivalent hyaloclastic breccias in a sequence consisting of magnesian basalts, gabbroic komatiite flows and minor calcareous tuffs. On the scale of an outcrop, brecciation and alteration are crosscutting, but in a regional sense, the mineralizing process seems to occur most commonly in a restricted stratigraphic interval.

CONCLUSIONS

1. The Shingwak property has excellent potential for gold mineralization with grades and tonnages similar to that presently known on Nuinsco's Cameron Lake property (about 1 million tons grading 0.20 oz/ton)

2. The results of the 1984 program are encouraging and further work is definitely warranted.

RECOMMENDATIONS

1. Lines should be cut at 1" - 200 ft. spacing on claims 612311, 612303, 612301, 612300 and detailed geological mapping and sampling of quartz-carbonate breccia zones should be carried out.

2. Permission should be obtained to cut lines at 1" = 200 ft. spacing, and map and sample the Roy claim.

3. Contingent on results of above, a 3000 ft. drill program to test the gabbro-host rock contact and coincident VLF anomaly on claims 612311 and 612303 may be warranted.

4. Regional reconnaissance mapping should be done to define the stratigraphic position of the Shingwak property in relationship to Nuinsco's Cameron Lake deposit.

5. Whole rock CO_2 and trace chemical analyses should be done to define the nature of the alteration process that accompanies gold mineralization and thereby develop exploration guidelines.

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LOCATION AND ACCESS

The Shingwak property is located on a bay in the southeast corner of Shingwak Lake, approximately 80 km southeast of Kenora and 80 km north of Fort Frances, Ontario in the recording district of Kenora (Fig. 2)

Access is by float plane or by lakes and portages from Highway 71 north of Nestor Falls during the summer months and by winter roads over lakes and portages.

LAND STATUS

Twenty (20) claims were staked in the name of John O'Donnell and recorded on January 6, 1983 and are now held by Bigstone Minerals Ltd (Fig. 3). Parts of an airborne geophysical survey were applied as assessment credit; the claims are in good standing until January 6, 1986.

HISTORY OF EXPLORATION

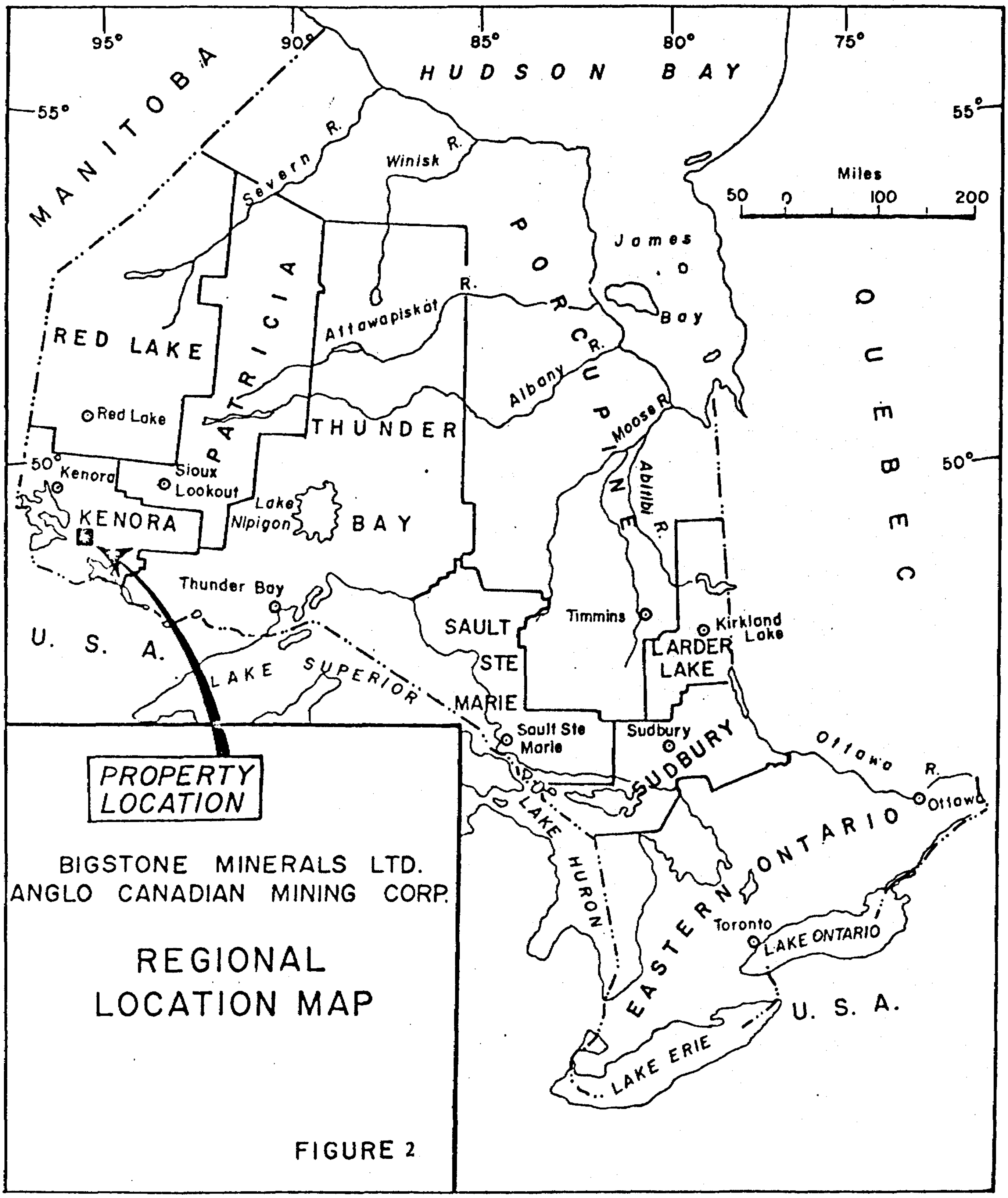
In 1894 and 1896, A. P. Coleman of the Geological Survey of Canada conducted geological reconnaissance in the area. In 1898, Anglo-Canadian Gold Estates of London, England, obtained exclusive prospecting rights on one hundred and seventeen (117) square miles on Rowan Lake and vicinity.

The first report of gold exploration was in the vicinity of the Roy Showing in 1933.

Work was done in 1960 by Noranda Mines consisting of prospecting and diamond drilling.

The Golden Phoenix Consortium drilled two holes in 1974 totalling 205 feet on the western end of the Roy Claim. Both holes intersected mafic volcanics but apparently there was insufficient encouragement for further work.

The area remained inactive until gold exploration in the Cameron Lake and Rowan Lake areas was resumed by Nuinsco Resources Ltd. As a result of encouraging results obtained from the Lockwood/Nuinsco joint venture on Cameron Lake, twenty unpatented mining claims were acquired by Bigstone Minerals in 1983 along strike in the same stratigraphic package. An airborne geophysical survey was conducted by Aerodat Ltd. in 1984 and geological mapping conducted during the Fall of 1984.



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REGIONAL LOCATION MAP

FIGURE 2

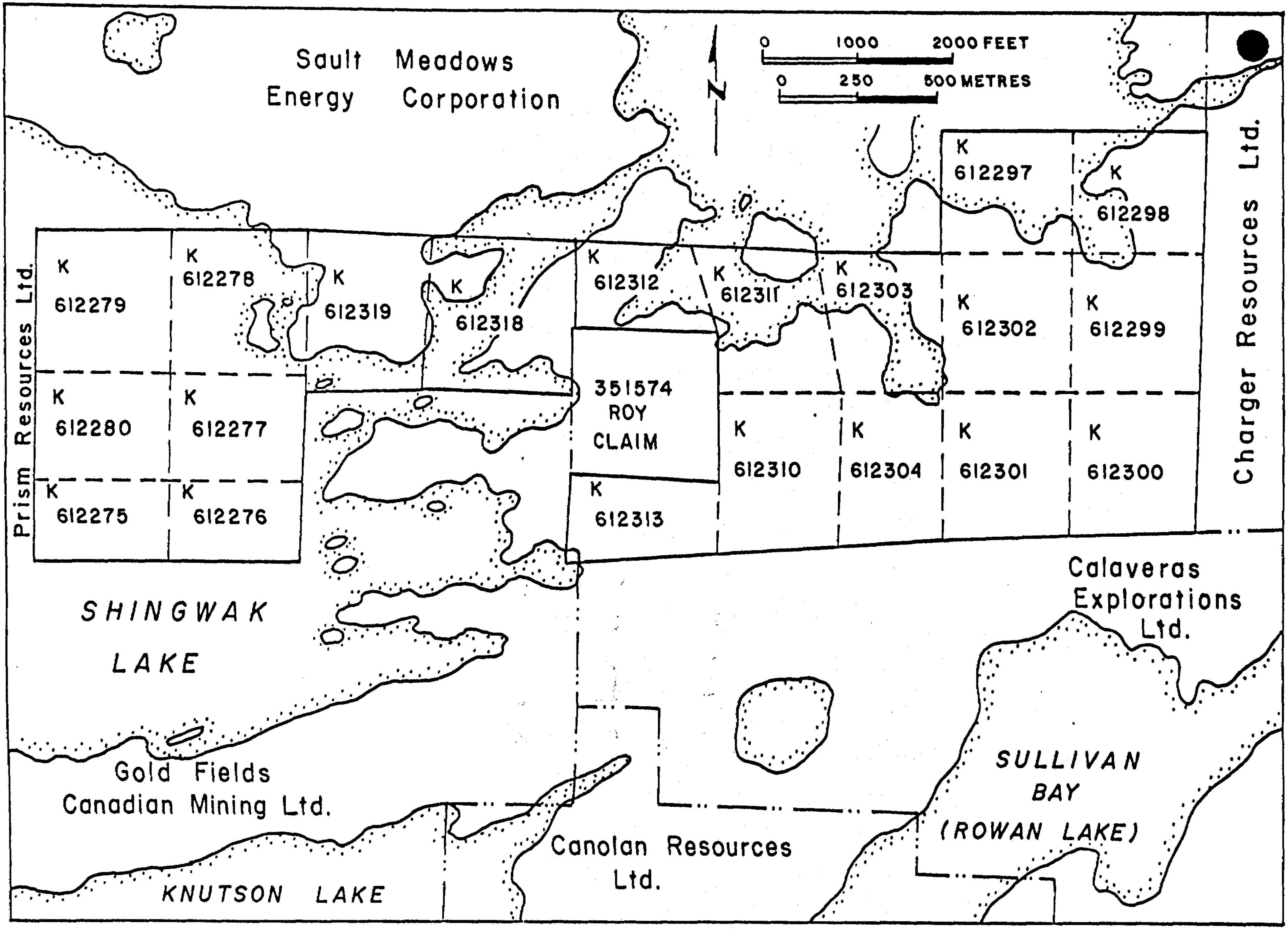


Figure 3 : Claim Map, Shingwak Property, Kenora District, NTS 52F/5E

GEOLOGY

Regional

Based on geological mapping by Kaye (1973), the Shingwak property occurs on the south limb of the Shingwak Lake anticline (Fig. 1). Units trend northeasterly and dip steeply to the south.

Abundant top determinations, mainly from pillows indicate tops everywhere to the south. The main lithologies are pillowed mafic volcanics and massive mafic flows. Gabbroic, slightly differentiated flows or sills are intercalated in this sequence, in which mafic and felsic pyroclastics also increase in abundance upwards. Faults mapped in the area trend northeasterly and do not appear to have major displacement associated with them. Also, there is no evidence of isoclinal or drag folding in the area. Terminology for volcaniclastic rocks used throughout this report is that of Fisher (1966) and Lajoie (1984).

Property

Rocks on the property consist of pillowed andesitic lavas, massive mafic flows, minor gabbroic flows or sills and in the southeastern claims and upper part of a volcanic cycle, intermediate and felsic tuffs. Units trend northeasterly, dip steeply to the south, face south and occur on the monoclinal southern limb of the Shingwak Lake anticline. The sequence exposed on the property is about 850 m (2800 ft) thick.

The trace of a northerly-trending fault occurs in a bay on Shingwak Lake. Units cannot be correlated across it. Relative displacement is unknown but based on the regional mapping by Kaye (1973) it does not appear to be of major proportions.

A geological map of the property is presented as Fig. 4 (in pocket).

Lithology

Unit 1a: Pillowed intermediate volcanics. Pillows range from fist and coconut size to 1 m diameter and in places they are larger. Margins are dark green and chloritic and interpillow material is tuffaceous and occasionally consists of quartz or carbonate. Exposure of this unit is excellent and many primary textures can be seen. Pillow and flow breccias are common (Unit 1e) and brecciation (largely by autoclastic and hyaloclastic fragmentation) is ubiquitous.

Mostly the colour on fresh surfaces is dark green, but there appears to be at least one horizon, above the Roy showing and encompassing quartz-carbonate breccia horizons (see under Mineralization) in which Unit 1a is light green in colour and has been silica and carbonate impregnated.

Unit 1b: Massive flows. These are dark green in hand specimen, weather to a light green colour and in shoreline exposure break into angular blocks. Individual flows are 30 - 60 m thick and may display gabbroic textures when they are thick. The upper portions are usually marked by flow top breccias.

Unit 1c: Plagioclase Porphyritic flows. These flows have a fine grained, dark green, matrix with euhedral to subhedral and rounded plagioclase phenocrysts, in places making up to 60 - 70% of the flow. Phenocrysts range in size from 5 mm to 2 cm. In places phenocrysts accumulated at the base of flows.

Unit 1e: Pillow and flow breccia. The upper of portion of pillowed or massive flow sequences is marked by autobreccias, flow top breccias, fragmented pillows and occasionally thin tuffs. Subsequent deformation has produced a foliation that is best displayed by these units but primary textures are preserved.

Unit 2: Felsic pyroclastics. Two thin beds of felsic pyroclastics occurs in the southeast corner of the property. These are distinctive units, the upper is about 60 m thick and the lower is 20 m thick. Near its base the upper bed consists of a lapilli tuff and lapilli breccia and grades upwards into a tuff with pyrrhotite drops in the matrix. The lower bed is a feldspar crystal tuff and feldspar crystal lapilli tuff.

Unit 3: Gabbro. May represent a coarse phase of massive mafic flows or sills. Can be subdivided into a medium grained, leucocratic massive, equigranular gabbro and a very coarse, plagioclase and hornblende-rich massive equigranular gabbro. The latter occurs as a thin, 10 - 20 feet wide unit within pillowed and massive mafic flows in the southwest corner of the property on the Roy claim and, the former as a relatively thick (estimated 60 m) unit in the northern half of the claim group.

Unit 4b: Feldspar Porphyry. Several thin cross-cutting and variously oriented feldspar porphyry dikes were observed in the northern half of the claim group. They are 3 to 7 m wide, composed of a light to dark green, fine grained matrix with 5 mm to 1 cm, euhedral to subhedral plagioclase phenocrysts, that are randomly oriented within a light green siliceous, sericitic matrix, and make up to 40 - 50% the rock. One 3 to 7 m wide unit was traceable across the north half of the property for over 2000 m. (Fig. 4)

PETROGRAPHY

Two whole rock analyses of the gabbroic flows are presented in Table 1. These analyses are plotted on a Jensen cation plot (Fig. 5).

The analyses plot in the field of basaltic komatiites, close to the boundary of this field with high iron tholeiites. From two analyses alone it is difficult to draw conclusions but the following would appear to be valid:

1. Komatiites have not been previously identified in either the Brooks Lake volcanics or the Rowan Lake volcanics. According to Blackburn and Janes (1983) nineteen gold occurrences in the Rowan Lake-Cameron Lake area occur at or near the transition between a lower mafic volcanic flow sequence (Brooks Lake) and an overlying upper, mixed to felsic, predominantly pyroclastic sequence (Rowan Lake volcanics). Our chemical analyses suggest that therefore at least the lower cycle (Brooks Lake) may contain komatiitic flows.

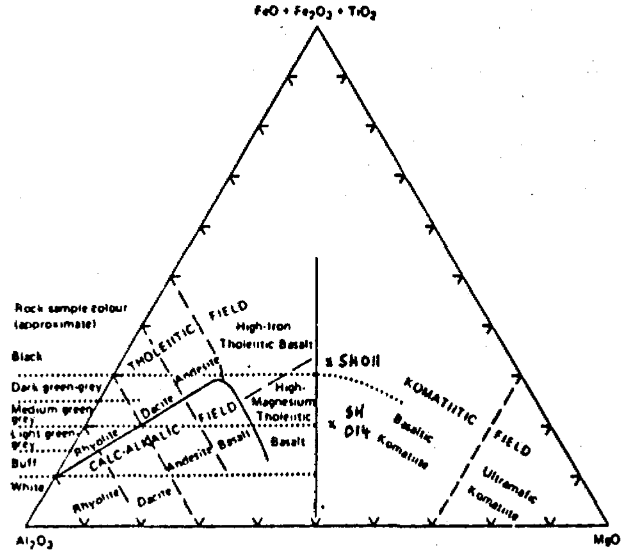
2. The coincidence of conformable field relations, komatiitic chemistry and textural evidence, such as spinifex or polygonal flow top breccias is considered unquivocal evidence of a flow origin. While all three criteria are not met on the Shingwak property, the possibility that the gabbros are flows rather than intrusives must be given serious consideration.

TABLE 1: SHINGWAK PROPERTY

WHOLE ROCK ANALYSES OF GABBRO [1]

SAMPLE NO.	SH011	SH014
ELEMENT (Wt %)		
SiO_2	49.70	49.80
TiO_2	0.67	0.95
Al_2O_3	14.00	13.60
Fe_2O_3 [2]	10.60	14.70
MnO	0.18	0.24
MgO	7.81	7.45
CaO	12.30	10.30
Na_2O	2.02	2.03
K_2O	0.05	0.05
P_2O_5	0.06	0.01
LOI	2.25	2.65
SUM	97.64	99.77
JENSEN PLOT [3] PARAMETERS		
A	34.1	30.4
F	31.3	27.7
M	34.6	41.9

NOTES:
1. Analysis by borate fusion and DC Plasma technique on-200 mesh sample, by Bondar-Clegg, Ottawa
2. Total iron as Fe_2O_3.
3. See Jensen (1976) and Fig 5.



-Classification of subalkalic volcanic rocks by Jensen cation Plot involving cation percentages of Al_2O_3, $FeO+Fe_2O_3+TiO_2$, and MgO (from Jensen 1976).

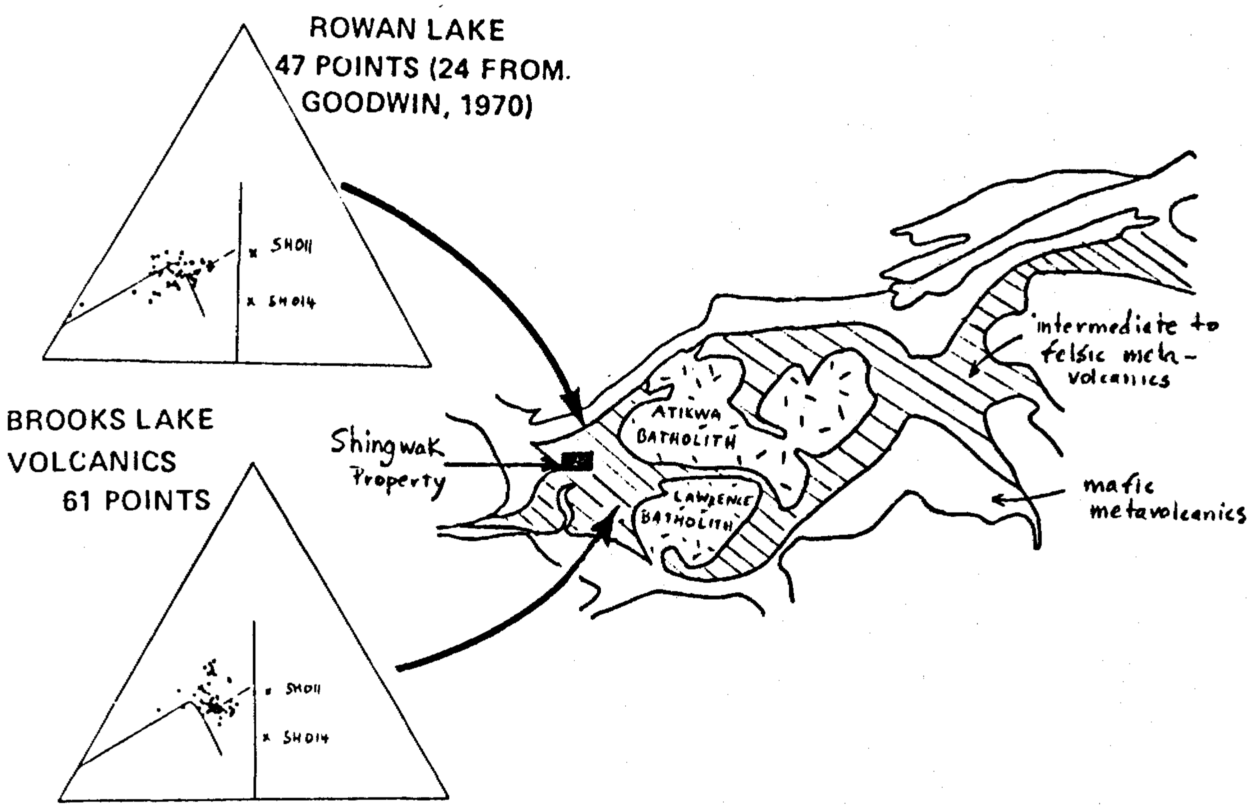
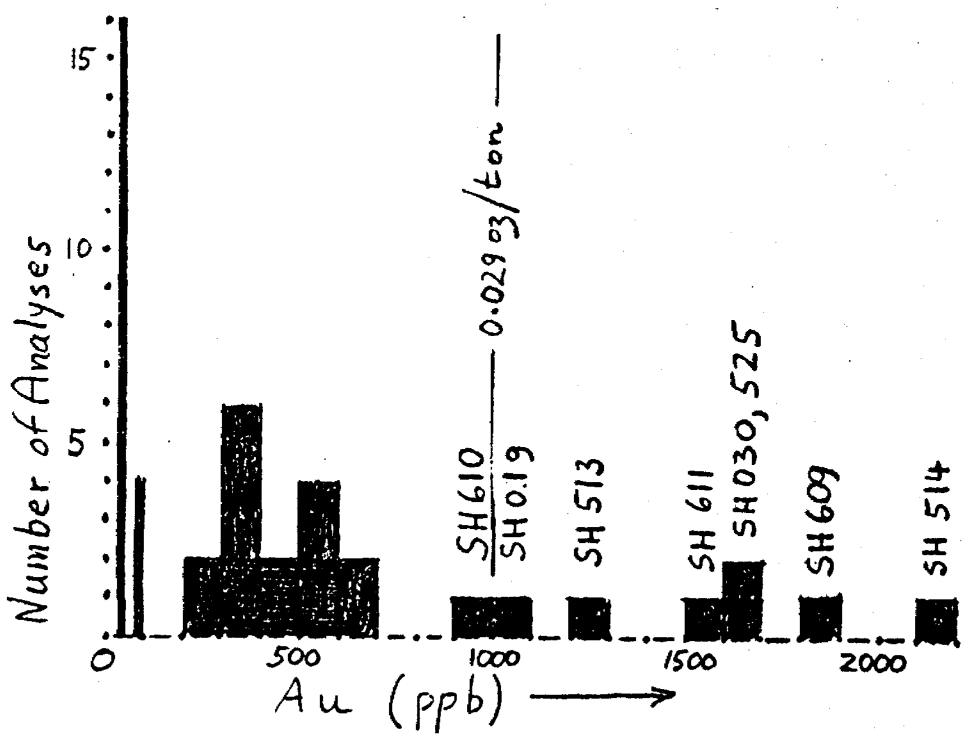


Figure 5: Classification of gabbro analyses SH011, SH014 from Shingwak Property on Jensen cation plot, and their relationship to Rowan Lake and Brooks Lake volcanics (after Trowell et. al. 1980).

GEOCHEMISTRY

Initially samples were sent to Custom Fire Assays, Cochenour. Subsequent samples were analyzed by fire assay and atomic absorption techniques by Bondar-Clegg Ltd. Ottawa. A total of 44 samples were analyzed for gold and silver and some samples were analyzed for base metals (Table A-1). Of the 44 samples, 16 contained 5 ppb gold or less and 14 contained 100 ppb gold or more.

The distribution of values is shown below.



SHINGWAK PROPERTY. DISTRIBUTION OF GOLD ASSAYS AND ANOMALOUS SAMPLES.

This graph shows that samples with greater than about 900 ppb gold can be considered anomalous and follow up should be initially in the areas from which these samples were collected. Areas of secondary interest are those in which gold values are in the 200 to 700 ppb range. These values are geochemically anomalous and follow-up is warranted as well.

MINERALIZATION

Regional

There are numerous gold showings in the northeast - trending belt of volcanics between Rowan Lake and Cameron Lake. Table 2 presents a preliminary classification of some of these based on the author's observations. A short discussion of Nuinsco's Cameron Lake deposit is also presented. No mention is made of "shear zone" related deposits, since the author was unable to find field or petrographic evidence that "shearing" or lateral secretion played a role in gold deposition in the deposits examined. A discussion of "shear zones" is presented in Appendix C.

Shingwak Property

Samples containing greater than 900 ppb gold are listed in Table 2. [see also GEOCHEMISTRY and Fig. 4 (in pocket)]. All except one of these (SH019) appear to be from a thin white brecciated quartz vein that cross-cuts stratigraphy and that has been traced over a strike length approaching 500 ft. Host rock is generally massive to foliated carbonate-altered brown weathering basalt. Minor pyrite cubes are scattered both in quartz and carbonate groundmass. Mapping of the trenches has been preliminary and the relationship between quartz veins, feldspar porphyry and altered volcanic is not clear.

TABLE 3: SHINGWAK PROPERTY, SIGNIFICANT ASSAY RESULTS

Sample	ppb Au	Au (oz/t)	Width (ft)	Description*
SH019		0.03	grab	quartz-carbonate altered mafic volcanic with 3 - 4% pyrite.
SH030	1660	0.048	grab	quartz-brecciated volcanic 1% pyrite.
SH513	1270	0.037	grab	altered ultramafic or tuff, 2% pyrite.
SH514	2110	0.061	grab	altered ultramafic or tuff, 2% pyrite.
SH525	1675	0.049	grab	carbonated volcanic, 1% pyrite.
SH609	1880	0.055	1.5	altered volcanic at porphyry contact 1% pyrite.
SH611	1580	0.046	grab	altered volcanic with 1% pyrite.

* For detailed description, identification of assay lab, see Table A-1, Appendix A. Sample locations shown on Fig. 4 (in pocket).

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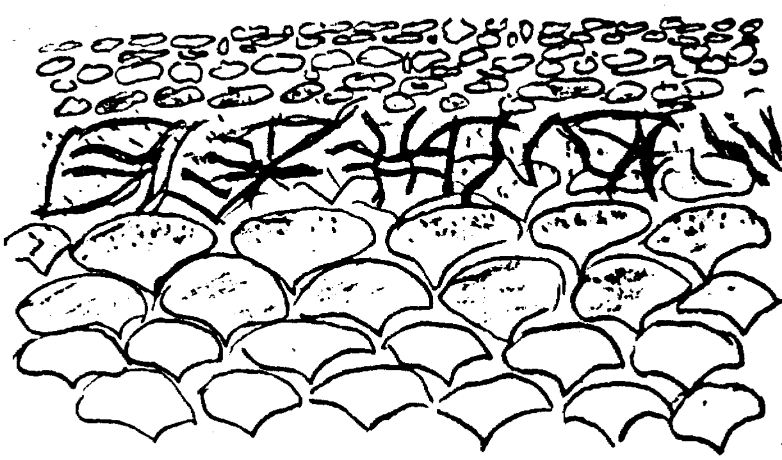
TABLE 2: Preliminary Classification of Gold Occurrences, Cameron Lake - Rowan Lake Area

Type of Occurrence	Description	Common Widths	Typical Grades (Au/oz/ton)	Example(s)
I Quartz-carbonate breccia zone	Zone is stratabound or cuts stratigraphy at small angle, apparently discontinuous along strike, sometimes spatially related to feldspar porphyry contacts. Minor pyrite. Accompanied by extensive quartz veining.	5 - 50 ft.	0.01-0.06 oz/t.	Numerous showings Shingwak L. (this report) and Rowan Lake (See Sears, 1984) ?Roy Showing, Shingwak Lake?
II Stratabound quartz beds and minor cross cutting quartz veins hosted by calcareous tuff.	Thin, conformable, discontinuous quartz-chlorite-carbonate "veins" contain pockets of native gold. Immediate host is calcareous chloritic tuff which occurs in magnesian basalts and gabbroic komatiite flows. Minor pyrite, pyrrhotite. Carbonate is calcite and ankerite.	1-2 ft. quartz grabs	0.14 oz/t over 4 ft. up to 28 oz/t.	Patmour showing Rowan Lake, Kretschmar (1984), Nuinsco Monte Cristo showing, Rowan Lake. Nuinsco's Cameron Lake deposit (see Hunter and Curtis, 1983)
III Carbonate-Silica flooded basalts	Alteration consists of several stages of progressive carbonation of pillowed magnesian basalts. Apparent enrichment of K, Ag, As, Sb, Cr. Stratabound in regional sense, but locally crosscutting.	alteration over several thousand feet	1 million tons grading about 0.20 oz/t	Nuinsco's Cameron Lake deposit (see Hunter and Curtis, 1983)
IV Not yet visited, therefore not classified but commonly classified as "shear zone" related				Sullivan Bay, Wampum, Errington

Sample SH019 is from a brecciated, quartz-flooded, carbonate-altered contact zone between feldspar porphyry and pillowed basalt.

Samples with gold contents in the range 200 - 700 ppb (see Geochemistry and Table A-1) are predominantly from the type of occurrence show below.



GENERALIZED DESCRIPTION OF BRECCIATION, QUARTZ VEINING AND CARBONATE ALTERATION ACCOMPANYING GOLD MINERALIZATION, SHINGWAK LAKE.

The mineralizing process appears to be progressive, leading to complete carbonation of initially unaltered mafic volcanics. The following steps can be recognized:

1. fragmentation of pillowed basalts; some of this may have been hyaloclastic fragmentation.

2. cementing and rimming of breccia fragments by quartz.

3. bleaching of fragments as streaming of carbonate and silica-rich solution continues.

4. complete alteration of fragments and host volcanic.

Carbonate, silica, chalcopyrite, pyrite and minor gold are the main products accompanying alteration. At present, no firm correlation can be made between the presence of gold and any of the other variables, but in general, at Nuinsco's Cameron Lake deposit, the highest grade gold mineralization is accompanied by the most intense alteration. Further work should be done to try to geochemical develop exploration guidelines.

Roy Claim

Limited work was done on this showing. Lithologic units observed were siliceous calcareous tuff, carbonate-altered leucogabbro, massive, pillowed and plagioclase porphyritic basalts and feldspar porphyry but the exact geometric relations between these units and a thick quartz vein network could not be determined in the absence of grid of lines to aid in locating outcrops.

According to assessment files:

Small pits and trenches were made on a quartz-carbonate vein, the east end of which was stripped for 250 feet, exposing a lenticular shaped vein, 29 feet at its widest part and averaging 8 to 10 feet. The vein was reported to be in a chloritic schist in the west and a sheared porphyry in the east. Mineralization was reported to occur in the quartz and brecciated material and consisting mainly of pyrite and chalcopyrite.

According to ODM Vol. 42 Pt. IV, p 86, the best assay obtained from grab samples from this showing is 0.13 oz/ton. In the Kenora Mineral Occurrence file, description of the Roy showing is as follows:

Quartz veins 6 - 8 feet wide and 250 feet long in mafic metavolcanics contain 0.03 - 0.21 Au/ton and 0.23% - 6.2% Au/ton.

Comparison to Nuinsco's Cameron Lake Deposit

Two half days were spent by the author examing the surface geology, trenches, and selected drill core at Nuinsco's Cameron Lake deposit under the guidance of George Archibald. The following summary of the geology should be considered my own opinion. Extensive work on structure and alteration is currently under way (D. Melling, Carleton U.) which will undoubtedly provide new data.

The sketch map (Fig. 6) is based on the work of Doug Hunter (Hunter & Curtis, 1983), supplemented by my own observations and extrapolations. Shown are generalized geologic relations. The importance of stratigraphy has been emphasized. Noteworthy observations are:

1. The most intense carbonate alteration and gold mineralization occurs predominantly at the top of a sequence of pillowed mafic volcanics. The alteration cross cuts bedding but is restricted to the pillowed volcanics and the footwall tuff-volcanic contact. Ore occurs in highly altered pods and lenses in less altered volcanics.

2. The ore-bearing stratigraphy is underlain by tuffs and overlain by hematitic tuffs that may reflect change to an oxidizing environment. The most intense alteration seems to occur where the pile of pillowed volcanics thin, and both footwall and hanging wall tuffs are thickest. Alteration appears to end to the east of the main ore zone, where the volcanics are thickest (up to 1500 ft.) and is patchy and apparently continuous to the west, where volcanics are thin (about 500 ft). A possible interpretation is that fluids flowing through the volcanic pile may have been focused or throttled at a constriction or thinning of the stratigraphy.

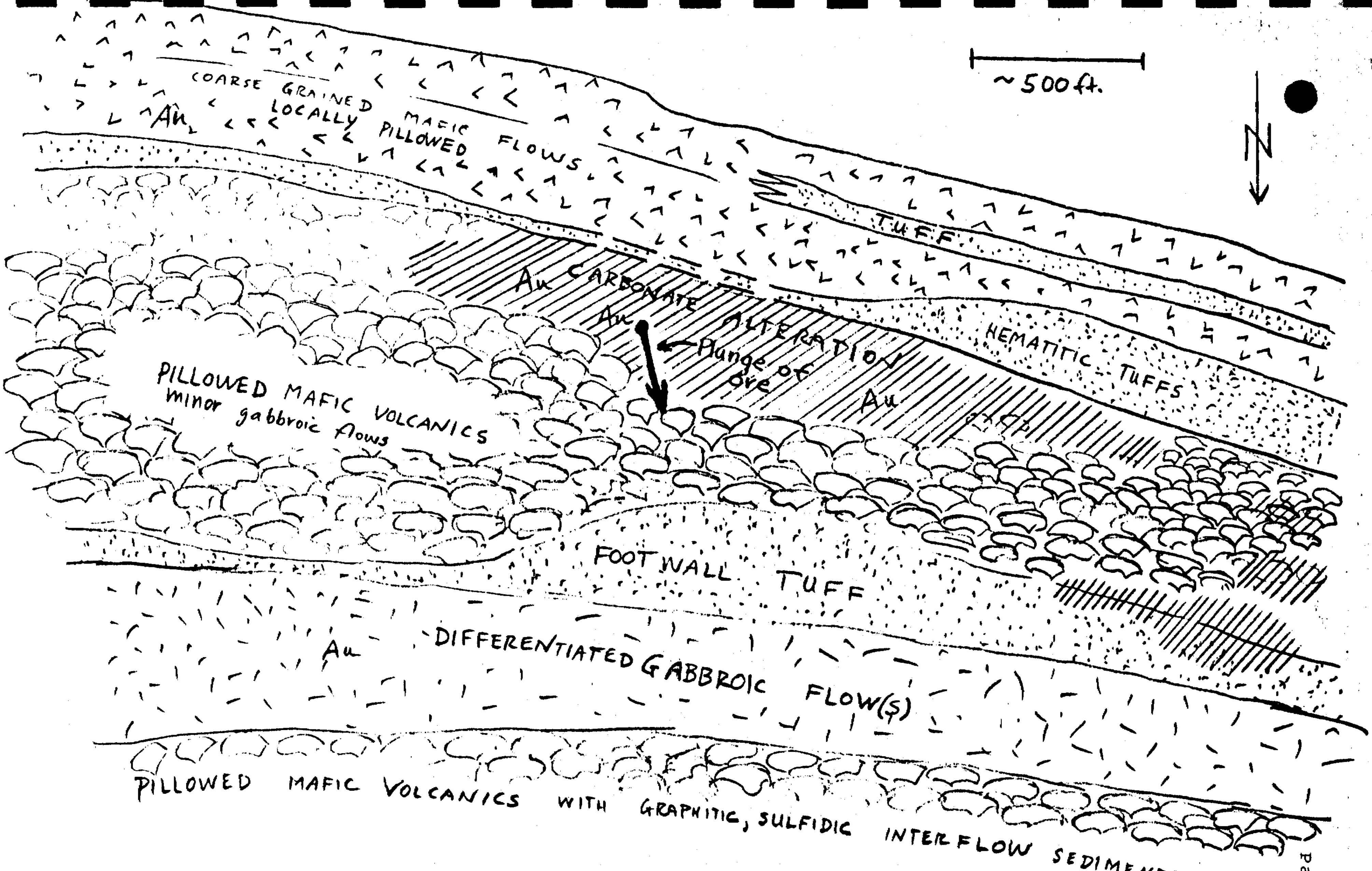


Fig. 6: Generalized Geologic Relations. Cameron Lake Deposit.

3. Gold showings apparently also occur in gabbroic flows overlying and underlying the pillowed sequence, which suggests the ore forming process was continuous for at least a period of time during which about 4000 feet of volcanics were deposited. This is based on the assumption that the ore forming process was more or less coincident with formation of the host volcanics.

Work on the Cameron Lake deposit should consist of remapping of surface exposures and relogging of selected core. Observations pertaining to lithology, alteration and structure must be kept separate so that their relative importance can be assessed. Preferrably one experienced geologist should do the work and update and synthesize all information currently available.

In my opinion, many gold showings on Shingwak Lake (and Rowan Lake) represent the low intensity end of a geological process that formed the Cameron Lake deposit in the advanced stages.

GEOPHYSICS

A helicopter-borne magnetic and electromagnetic survey was flown over the Shingwak property and adjacent areas in the Cameron Lake-Rowan Lake areas in December 1983 by Aerodat (Hogg, 1984). All EM conductors on the Shingwak property were weak (less than 2 mhos) and were interpreted as being due to conductive layers or faults rather than sulfides or graphite.

EM, VLF and magnetic anomalies found during this survey are shown on the geological map of the property (Fig. 4).

BUDGET FOR SHINGWAK PROPERTY

Stage 1*	SALARIES and FEES:		
	Sr. Geologist - mapping, supervision, reports 14 days @ $300.00/day		$ 4,200.00
	Assistant geologist - field work 21 days @ $1,800.00/month		1,350.00
	Trenching Crew 2 men @ $100.00/day		2,000.00
	FOOD, ACCOMMODATION 55 man days @ $45.00/day		2,500.00
	LINE CUTTING & CHAINING 8 line - mi @ $330.00/mi.		2,640.00
	TRANSPORTATION		
	Airfare	$1,000.00	
	Vehicle Rental 3 weeks	800.00	1,800.00
	SUPPLIES, FUEL, COMMUNICATION, REPORT PREPARATION		3,010.00
	CHEMICAL ANALYSES, ASSAYS		1,500.00
	TOTAL		$19,000.00
Stage 2:	DRILLING 3,000 ft. @ $30/ft. all inclusive		$90,000.00

TOTAL BUDGET	Stage 1	$ 19,000.00
	Stage 2	90,000.00
		$109,000.00

*Note: Stage 1 estimate should be reduced by 30% ($5,700.00) if no work is done on the Roy Claim.

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DIANNE & ULRICH KRETSCHMAR Geologists R.R.*1, Severn Bridge, Ontario, POE 1N0, Canada (705)689-6431

APPENDICES A

TABLE A-1 - SHINGWAK PROPERTY, ASSAY AND GEOCHEMICAL SAMPLES (See Fig 4 for location)

Sample No.	Assay No.	Width	Lab*	Au(ppb)	Au (oz/t)	Description
SH001	28601	grab	1		0.01	pillow breccia with interstitial carbonate and quartz, less than 1% fine pyrite cubes.
SH005	28602	grab	1		0.02	quartz-carbonate breccia possible altered tuff Roy Showing, minor py
SH006	28603	grab	1		0.01	quartz with chlorite and chert laminae Roy Showing
SH013	28604	grab	1		tr	quartz-carbonate breccia
SH015	28607	grab	1		tr	buff coloured breccia frags in quartz carbonate matrix, 1% pyrite, white weathering, maybe 4b
SH016	28608	grab	1		tr	felsic dike or completely silicified mafic volcanic
SH017	28609	grab	1		0.01	bleached, pyrite impregnated 1-2% py, fine grained, cubes
SH018	28610	grab	1		0.02	partly bleached quartz-carbonate veined volcanic with 1 - 2% fine py cubes
SH019	28611	grab	1		0.03	pyrite, quartz veined, bleached mafic volcanic with 3-4% pyrite.
SH020		grab	2	L5		quartz-carbonate-chlorite knot minor cp?,

* 1, Custom Fire Assays, Cochenour, Ontario 2, Bondar-Clegg Ltd, Ottawa, Ontario
** L5 = less than 5 ppb.

DIANNE & ULRICH KRETSCHMAR Geologists R.R.#1, Severn Bridge, Ontario, POE 1NO, Canada (705)689-6431

Table A-1 (Cont'd)

Sample No.	Assay No.	Width	Lab	Au(ppb)	Au (oz/t)**	Description
SH021		grab	2	L5		quartz-carbonate veined, brecciated bleached volcanic
SH022	28619	grab	2	L5**		quartz-carbonate-chlorite veined brecciated volcanic no pyrite
SH0023	28613	grab	2	L5		strongly foliated, carbonated crystal tuff
SH024	28612	grab				felsic crystal lapilli tuff with pyrrhotite blebs in groundmass
SH026	28614	grab	2	5		silica and carbonate flooded, bleached pillowed volcanic less than 1% py cubes
SH027		grab	2	L5		quartz-carbonate breccia, similar to 028
SH028	28616	grab duplicate 027	2 2	L5		quartz-carbonate breccia, sugary quartz, no pyrite
SH029	no tag	grab	2	L5		completely altered, silica and carbonate flooded volcanic, possibly feldspar porphyry, quartz veined. 1% finely disseminated pyrite
SH030	no tag	grab	2	1660	0.048	sugary dirty quartz breccia vein with altered carbonated volcanic fragments. Finely disseminated pyrite, 1%

** 34,285 ppb = 1 oz/ton

DIANNE & ULRICH KRETSCHMAR Geologists R.R.#1, Severn Bridge, Ontario, P0E 1N0, Canada (705)689-6431

Table A-1 (Cont'd)

Sample No.	Assay No.	Width	Lab	Au(ppb)	Au (oz/t)**	Description
S500		grab	2	5		silicified mafic (gabbro?) near contact of porphyry/gabbro
S501		grab	2	315		porphyry dike with quartz eyes and pyrite
S502		grab	2	530		quartz-carbonate zone
SH512		grab	2	250		light green, bleached volcanic with quartz vein., 1% py cubes
SH513	28622	grab	2	1270	0.037	highly silicified white schistose rock, remnant unaltered green fragments, 2% pyrite cubes, cross cutting 2 mm quartz veins
SH514	28623	grab	2	2110	0.061	
SH515	no tag	grab	2	570		buff coloured massive carbonate altered volcanic, fine disseminated pyrite cubes, orange weathering rind. Fizzes slightly
SH516	28625	grab	2	400		buff, carbonate and silica flooded brecciated volcanic; fragments in quartz vein, 1% large pyrite cubes, some finely disseminated
SH525	grab	2		1675	0.049	buff colour, carbonate altered pillowed? volcanic 1% disseminated pyrite. Some quartz veining
SH526	grab	2		305		buff colour, carbonate altered volcanic 1% disseminated pyrite

** 34,285 ppb = 1 oz/ton

DIANNE & ULRICH KRETSCHMAR Geologists R.R.#1, Severn Bridge, Ontario, POE 1NO, Canada (705)689-6431

Table A-1 (Cont'd)

Sample No.	Assay No.	Width	Lab	Au(ppb)	Au (oz/t)**	Description
SH527	grab	2		570		quartz/carbonate breccia with fine disseminated pyrite cubes 1% pyrite, mostly in breccia fragments
SH600		grab	2	70		600 - 604 N-S trending white quartz-
SH601		grab	2	45		carbonate vein. Samples are of
SH602		grab	2	305		silicified, bleached, pyritiferous
SH603		grab	2	35		pillowed volcanic 1% pyrite occurs
SH604		grab	2	505		disseminated cubes 1/2 mm in diameter
SH605		grab	2	475		quartz breccia - breccia fragments of carbonated, pyritiferous volc? fragments are angular, 1-5 cm in size, rusty weathered, contain 1% pyrite as cubes. (2mm size) Host quartz appear barren, white crystalline.
SH606		grab	2	290		carbonated volc. - buff colour, pyrite as dissem. cubes throughout 1% cubes 1 - 5 mm.
SH607		grab	2	5		silicified massive volcanic 1% dissem pyrite cubes
SH608		grab	2	5		quartz porphyry with andesite and minor dissem. pyrite cubes.
SH609		1½	2	1880	0.055	highly silicified, pyritiferous, apple green alteration zone in contact with porphyry. 1 - 2% finely disseminated pyrite throughout.

DIANNE & ULRICH KRETSCHMAR Geologists R.R.#1, Severn Bridge, Ontario, P0E 1N0, Canada (705)689-6431

Table A-1 (Cont'd)

Sample No.	Assay No.	Width(ft)	Lab	Au(ppb)	Au (oz/t)**	Description
SH610		10	2	920		chip sample in old trench. Consists of unaltered andesite, quartz porphyry (ankeritic), quartz breccia, and apple green silicified pyritic (1%) volcanic
SH611		grab	2	1580	0.046	bleached silicified volcanic with 1% disseminated pyrite cubes.
G95		grab	2	L5		quartz-carbonate zone
G96		grab	2	40		same as G95

APPENDIX B:
TABLE B-1 SHINGWAK PROPERTY HAND SAMPLE DESCRIPTIONS

Sample No.	Unit*	Description
SH002*	2b	Feldspar porphry dike, felsic composition minor quartz, medium grained.
SH003	1b	fine grained, massive, light weathering gabbroic mafic volcanic, dark green colour, minor pyrite.
SH004		light green.
SH007	1a or 1b	dark green mafic volcanic <1% pyrite cubes, some up to 4 mm.
SH008		carbonate impregnated mafic tuff? 1/2 cm thick brown weathering rind, minor disseminated pyrite.
SH009	3a?	light coloured carbonate-altered rock consisting of 3 - 4 mm talcose pyroxene constituting 30 - 40% in a leucocratic groundmass. 3 mm brown weathering rind, enigmatic orgin, very distinctive rock, probably ultramafic.
SH010	3	30 - 40% chloritized pyroxene in leucocractic groundmass diorite or gabbro.
SH011	3a	leucogabbro or peridotite with serpentinized groundmass, light green groundmass.
SH012		diorite or gabbro medium grained.
SH013	1k or 1d	
SH014	3	medium grained gabbro.
SH015		buff coloured breccia in quartz/carbonate matrix.
SH016		Felsic dyke or silicified volcanic.
SH017	1	buff coloured breccia.
SH018	1	bleached quartz carbonate veined volcanic 1-2% fine pyrite cubes.
SH019	1	Pyrite, quartz veined bleached mafic volcanic.

* see Legend on Fig. 4 (in pocket)
** 000 Series, samples collected by U.K.

APPENDIX "B" TABLE B-1 SHINGWAK PROPERY HAND SAMPLE DESCRIPTIONS (Cont'd)

Sample No.	Unit	Description
SH020		quartz/carbonate chlorite knot. minor cp.
SH021		quartz/carbonate vein. brecciated bleached volcanic.
SH022		quartz/carbonate/chlorite vein.
SH023	2	foliated, carbonated crystal lapilli tuff red tinge on weathered surface.
SH024	2b	felsic crystal lapilli tuff with pyrrhotite blebs in matrix.
SH025	2 ?	crystal lapilli tuff fragments of feldspar crystals in a more mafic matrix.
SH026) SH027) SH028)		quartz/carbonate breccia, sugary quartz
SH029	4b ?	completely altered, silica and carbonate flooded volcanic possibly feldspar porphyry, quartz veined, 1% finely disseminated pyrite.
SH030		Quartz-carbonate vein (breccia) altered carbonated volcanic fragments, disseminated Py $<1\%$.
SH031		mafic crystal lapilli tuff
SH500*	2	Finely laminated rhyolitic tuff in contact with plagioclase porphyritic flow.
SH501	1e	Pillow breccia cut by a 5 cm wide gabbro dyke.
SH502	1a	Pale green, silicified? pillowed flow with some disseminated pyrite throughout.
SH503	1b	Medium-grained, massive, gabbroic flow with minor pyrite cubes.
SH504	1b	Medium-grained, massive, gabbroic texture mafic flow.

* Note: 500 series samples collected by P.C.

APPENDIX "B" TABLE B-1 SHINGWAK PROPERY HAND SAMPLE DESCRIPTIONS (Cont'd)

Sample No.	Unit	Description
SH505	1a	Pale green, silicified? Carbonated pillowed flow with disseminated pyrite, quartz pods interstital to pillows.
SH506	1b	Dark green, massive flow, magnetic, disseminated magnetite (v. fine).
SH507	1f	Fine-grained tuff with 1 mm sized feldspar lapilli.
SH508	1b	Massive, medium grained, rusty weathering gabbroic flow.
SH509	2b	Feldspar crystal tuff.
SH510	1f	Fine-grained mafic tuff with feldspar lapilli ($<$1mm - 1 mm in size).
SH511	3	Coarse-grained, hornblende and plagioclase-rich gabbro.
SH512	1a?	Float-quartz/carbonate altered mafic volcanic with 1% pyrite cubes in the quartz and in breccia fragments of volcanic.
SH513) SH514)	quartz in 1f?	Foliated, possibly a tuff with quartz veining parallel to schistosity, pyrite rich; cubes from 1 - 5 mm $<$2% pyrite.
SH515		Quartz- carbonite vein in light green coloured volcanic, pyrite cubes disseminated throughout.
SH516		Pale, apple green, volcanic with quartz stringers and possibly carbonate; pyrite as dissem cubes.
SH517	1e	Carbonated flow top breccia - no sulfides.
SH518	1b	Massive, fine grained, dark green mafic volcanic flow with fine disseminated pyrrhotite.
SH519	2	Cherty, laminated volcanic. Fine grained felsic tuff with some areas with 1 mm sized cubes of pyrite.
SH520	2	Crystal tuff with a light-medium green colour. Fine grained matrix with plagioclase. Lapilli sized crystals

APPENDIX "B" TABLE B-1 SHINGWAK PROPERY HAND SAMPLE DESCRIPTIONS (Cont'd)

Sample No.	Unit	Description
SH521	4b	Coarse crystal feldspar porphyry with a dark green fine grained matrix and 1-1.5 mm feldspar phenocrysts. Phenocrysts are euhedral - subhedral.
SH522	1c	Medium grained, plagioclase porphyritic massive flow. Gabbroic texture 1-1.5 cm sized feldspar phenocrysts.
SH523	3	Small, 15 cm wide dyke of gabbro cross cutting feldspar porphyritic flow.
SH524	1c	Plagioclase porphyritic flow with euhedral to anhedral 1-2 cm sized plagioclase phenocrysts in a green fine grained foliated matrix.
SH525	la	Pale green, quartz/carbonate breccia zone in pillowed flow, pyrite as disseminated 1-5mm sized cubes mostly in volcanic, some in quartz <2% pyrite
SH526	la	Pale green to buff colour, pillowed flow? Orange/brown weathering rind. Carbonated with <1% dissem pyrite cubes, 1-2 mm sized.
SH527		Grab of several angular boulders of quartz carbonate breccia with 1mm sized pyrite cubes in orange/brown weathered breccia frags in quartz. Not many sulphides in quartz.

APPENDIX C: A Note On "Shear Zones"

The opinion that gold occurrences in the Cameron Lake-Shingwak Lake-Rowan Lake are related to "shear zones", is very widely held (See REFERENCES). Based on my field work, this concept needs careful and dispassionate re-examination. During my mapping I noted the following:

1. Brecciation is widespread. Most breccias are hyaloclastite flow breccias that originated during flowage of lava or extrusion into water.

2. Primary textures are well preserved in the volcanics. These include bedding, soft sediment slumps, cross and graded and foreset bedding in tuffs; undeformed pillows. Phyllosilicates are normal components of metamorphosed fine grained tuffs. Compaction during lithification and greenschist facies metamorphism inpart a planar fabric (foliation) to the rock. The volcanics in the Rowan Lake are are characterized by rapid facies changes over short distances, which makes it difficult to trace certain units along strike. This seems to be a reflection of a more proximal volcanic environment than e.g. in Shingwak Lake where there are thick piles of pillowed basalts.

3. Matamorphic grade is greenschist facies (ie low).

4. There is no evidence for significant differential movement (shearing) during deformation. No small scale drag folds, slickensides or bedding plane lineations were seen. There is no evidence of significant strike-slip movement. There is no evidence of isoclinal folding (in the portion of stratigraphy between Cameron Lake and Rowan Lake).

5. Foliation is not necessarily the result of shearing. Bedding plane foliation is well developed. Also a probable NE trending axial plane cleavage related to the Shingwak Lake anticline was noted.

The origin of the gold mineralization is more difficult to assess. First, there appear to be at least two distinctly different processes in operation. There is a clearly (in my opinion) syngenetic process where quartz-chlorite-carbonate-gold beds precipitated from hydrothermal silica-rich brines during a hiatus in pyroclastic sedimentation (e.g. Patmour showing). Breccia-related gold showings (numerous on Rowan and Shingwak Lakes) are another distinctive class. The breccias may be hyaloclastite or tectonic (or both?). Carbonate-silica-rich fluids streamed through the brecciated rock, resulting in variously altered fragments in a silica-rich matrix. At Cameron Lake carbonate-rich gold-bearing fluids progressively and pervasively altered pillowed mafic volcanics. A simple explanation (and therefore currently favoured by me) is that the heat engine necessary to drive the alteration originates in the cooling volcanic pile and that the ore forming process was more or less contemporaneous with formation of the volcanics. In these cases deformation, metamorphism and granite intrusion are all later and do not appear to have genetic importance.

The origin of gold deposits is a complex subject to which much thought has recently been given. However, neither field relations nor any other line of evidence supports the concept of "shear zones" (or lateral secretion) for mineralization in the Cameron Lake-Rowan Lake belt. An excellent summary of current thinking on this subject is presented by Kerrich (1983), Geochemistry of Gold Deposits in the Abitibi Greenstone Belt Special Volume 27, Canadian Institute of Mining and Metallurgy.

CERTIFICATE

I, Ulrich H. Kretschmar, of Severn Bridge, in the Province of Ontario, Canada, hereby certify:

1. That I am a consulting mineral exploration geologist, and have been engaged in my geological profession for approximately twenty years.

2. That the work described in this report was carried out by me or was done under my direct supervision.

3. That I am a graduate of McMaster University with a B.Sc. (1966) and M.Sc (1968) in geology, and a graduate of McGill University and University of Toronto (1973) with a Ph. D. in geology.

4. That I am a Fellow of the Geological Association of Canada, a member of the Canadian Institute of Mining and Metallurgy and other professional organizations.

5. That I have no interest either direct or indirect, nor do I expect to receive any, in the properties or securities of Bigstone Minerals Ltd.

6. I hereby consent to the use of this report to satisfy the requirements of any Securities Commission or Stock Exchange in Canada.

Dated at Severn Bridge, Ontario, this 31st day of December, 1984.

Ulrich Kretschmar

DIANNE & ULRICH KRETSCHMAR Geologists R.R.#1, Severn Bridge, Ontario, POE 1NO, Canada (705)689-6431

52F05SE0040 2.8948 ROWAN LAKE

900

Mining Lands Section

File No 2.8948

Control Sheet

TYPE OF SURVEY

____ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

✓ EXPENDITURE

MINING LANDS COMMENTS:

S. Hurst

Signature of Assessor

April 21/86

Date

May 2, 1986

Your File: #1
Our File: 2.8948

Mining Recorder
Ministry of Northern Development and Mines
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

RE: Assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980, on Mining Claims K 351574, et al, in the Rowan Lake Area

The enclosed statement of assessment work credits for assaying expenditures has been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: Bigstone Minerals Ltd
Suite 3220
33 Harbour Square
Toronto, Ontario
M5J 2G2
Attention: Wayne Whymark

Resident Geologist
Kenora, Ontario

Encl.

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

R P 28948

Mining Act

#1-86

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s)	Township or Area
EXPENDITURES	Rowan Lake Area M-2580

Claim Holder(s)	Prospector's Licence No.
BIGSTONE MINERALS LTD.	T 1703

Address: 33 HARBOUR SQ. Apt 3220 Toronto Ontario M5J 2G2

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
------------------------	Day 08 Mo. 84 Yr. – Day 09 Mo. 84 Yr.	

Name and Address of Author (of Geo-Technical report): Ulrich Kretschmar R.R. #1, Severn Bridge, Ontario POE 1NO

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
K	~~[illegible]~~	
	~~[illegible]~~	58 DAYS
	~~[illegible]~~	PER
	~~[illegible]~~	CLAIM
	~~[illegible]~~	
	~~[illegible]~~	
	612297	40
	612298	40
	612299	40
	612300	80
	612301	80
	612302	40
	612303	80
	612304	40
	612310	40
	612311	82
	612312	40
	612313	40
	612318	40
	~~[illegible]~~	

612287

RECEIVED
JAN 16 1986
MINING LANDS SECTION

KENORA MINING DIV.
RECEIVED
JAN 6 1986
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 13

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures				Total Days Credits
$ 11,317.00	÷	15	=	754.47

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
754	Jan. 6/86	[signature]
	Date Approved as Recorded: See Revised	Branch Director: Statement

Date	Recorded Holder or Agent (Signature)
Dec. 31st 1985	[signature]

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: WAYNE WHYMARK Suite 3220, 33 Harbour Square Toronto Ontario M5J 2G2

Date Certified	Certified by (Signature)
Dec. 31st 1985	[signature]

1362 (81/9)

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File
2.8948

Date	Mining Recorder's Report of Work No.
May 2, 1986	1

Recorded Holder
BIGSTONE MINERALS LTD

Township or Area
ROWAN LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$11,317.00 SPENT ON ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:
Electromagnetic ______ days	K 351574
Magnetometer ______ days	612298 to 304 inclusive
Radiometric ______ days	612310 to 312 inclusive
Induced polarization ______ days	612318-19
Other ______ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ______ days	
Geochemical ______ days	
Man days ☐ Airborne ☐	754.47 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Aluin & Muskat
CHARTERED ACCOUNTANTS

834 Danforth Avenue, Toronto, Ontario M4J 1L6
(416) 469-4186

April 16, 1986

Mining Lands Section
Ministry of Northern Development & Mining
Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sirs:

RE: BIGSTONE MINERALS LTD.
MINERAL CLAIM K 612 297 ET AL
IN THE AREA OF ROWAN LAKE

We confirm that we are the auditors for the above-mentioned corporation and have knowledge pertaining to its financial affairs.

In that regard, please be advised that the books of account of the corporation indicate that $11,317 was expended on exploration expenses regarding the Shingwak mineral claims during the period from August 2, 1984 to August 31, 1985.

Should you have any further requirements or questions regarding this matter, do not hesitate to contact the writer.

Yours very truly,

ALUIN & MUSKAT

J.L. Aluin, C.A.

cc: Mr. W. Whymark, President

JLA:ds

March 13, 1986

File: 2.8948

Bigstone Minerals Ltd
Apt #3220
33 Harbour Square
Toronto, Ontario
M5J 2G2

Dear Sirs:

RE: Data for Assaying submitted on Mining Claims
K 612297, et al, in the area of Rowan Lake

In order to complete the above-described submission, please remit (in duplicate) cancelled cheques, receipts or other verification of payment for the $11,317.00 expenditure credits claimed.

When submitting this information, please quote file 2.8948.

For further information, please contact Susan Hurst at (416) 965-4888.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: Mining Recorder
Kenora, Ontario
#1-86

Ulrich Kretschmar
R.R.#1
Severn Bridge, Ontario
POE 1NO

February 24, 1986 Report of Work #1-86

Bigstone Minerals Ltd
Suite 3220
33 Harbour Square
Toronto, Ontario
M5J 2G2

Dear Sirs:

RE: Mining Claims K 612297, et al,
in the Rowan Lake Area

I have not received the data and maps (in duplicate) for the Expenditures on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on January 6, 1986 the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on March 7, 1986.

If the material is not submitted to this office by March 7, 1986 I will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

S.E. Yundt, Director
Land Management Branch

Mining Lands Section
Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

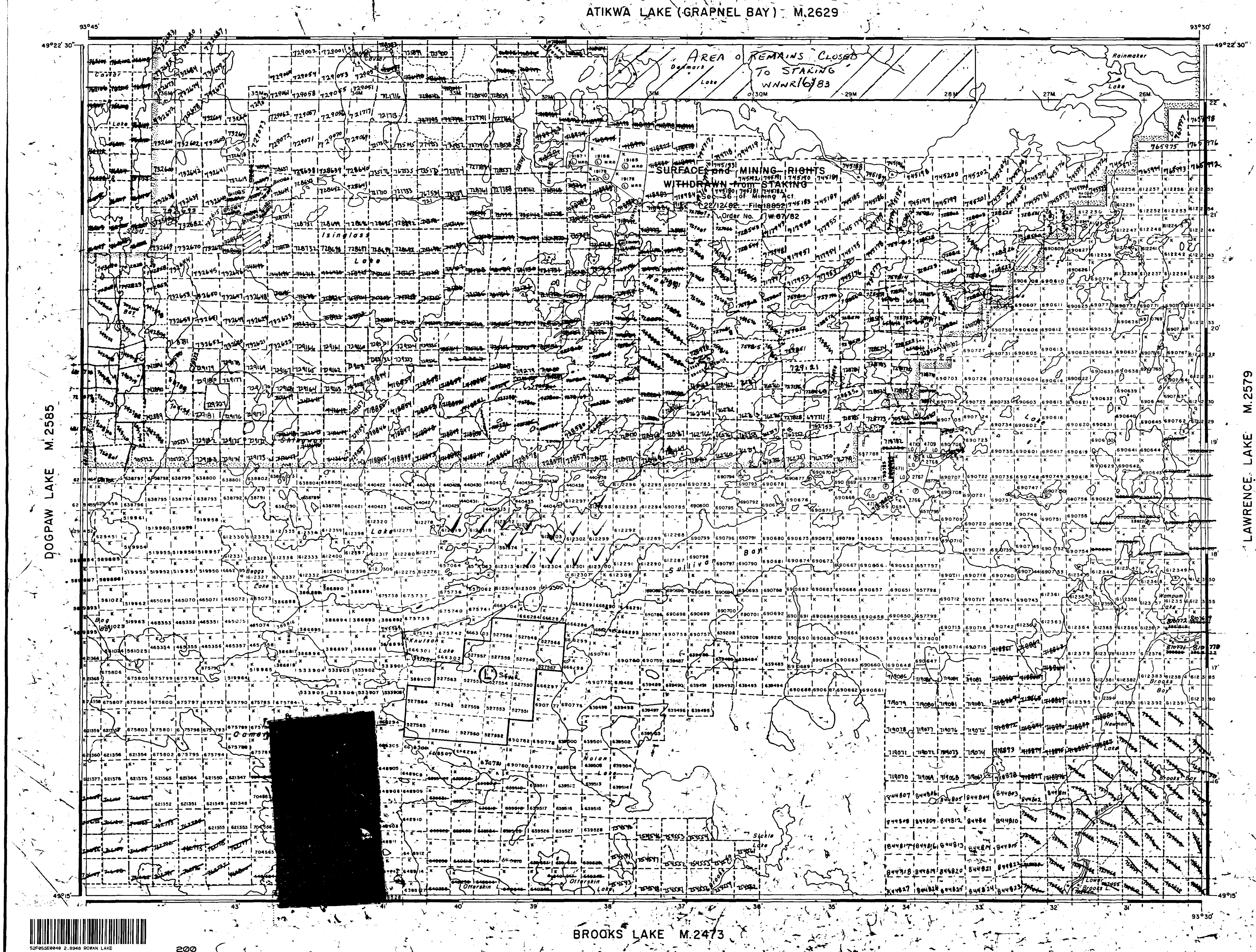
AB/mc
cc: Ulrich Kretschmar
R.R.#1
Severn Bridge, Ontario
POE 1NO

Wayne Whymark
Suite 3220
33 Harbour Square
Toronto, Ontario
M5J 2G2

Encl.

2.8948

612297	X		
98	✓		
99	✓	351574	✓
300	✓	612319	✓
1	✓		
2	✓		
3	✓		
4	✓		
10	✓		
11	✓		
12	✓		
13	X		
18	✓		



AREA OF

ROWAN LAKE

DISTRICT OF KENORA

KENORA MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.
PATENTED S.R.O.	

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

AREA WITHDRAWN UNDER ORDER W67/82, TO REOPEN JULY 25/83 AT 7:00 A.M. STANDARD TIME (8:00 A.M. LOCAL TIME), WITH THE EXCEPTION OF THE AREA INDICATED IN HATCHED LINES.

June 29/83

Effective as linen

NATIONAL TOPOGRAPHIC SERIES 52F5

PLAN NO. M.2580

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

200

493933

LEGEND
EARLY PRECAMBRIAN (ARCHEAN)
EARLY FELSIC INTRUSIVE ROCKS
4b Feldspar porphyry
KOMATIITIC METAVOLCANICS
3a Leucogabbro
3b Gabbro
FELSIC TO INTERMEDIATE METAVOLCANICS
2 Felsic pyroclastic
MAFIC TO INTERMEDIATE METAVOLCANICS
1a Pillowed
1b Massive
1c Porphyritic (plagioclase feldspar)
1e Pillow breccia
Tuff
Lapilli tuff
Pyroclastic breccia
Geological contact
Area of outcrop
Small bedrock outcrop
Sc Subcrop
Bedding
Schistosity
Foliation
Pillow lava, top (arrow) from pillow shape and packing
Fault
Drill hole
Trench
Sample location
Claim post, located
Claim post, assumed location
WP Witness post
Claim line
Surveyed claim boundary
Surveyed claim post
Airborne EM Anomaly
Q = Quartz
C = Carbonate
Py = Pyrite
QV = Quartz vein
S = Silicification
Po = Pyrrhotite
Geology by: U.Kretschmar
P. Chevalier
September 1984
SHINGWAK LAKE
Sault Meadows Energy Corporation
Charger Resources Ltd.
Prism Resources Ltd.
Goldfields Mining Corporation
Calaveras Explorations Ltd.
SHINGWAK LAKE
ROY SHOWING
Sand and Till
Boulder shoreline
Black spruce
Cedar
612279
612278
612280
612277
612275
612276
612319
612318
612312
612311
612303
612297
612298
612302
612299
612301
612300
612304
612310
612313
351574
N
SCALE
0 200 400 600 800 1000 FEET
0 100 200 300 METRES
D. & U. KRETSCHMAR
SEVERN BRIDGE ONTARIO, P0E 1N0
BIGSTONE MINERALS LTD.
SHINGWAK PROJECT
PRELIMINARY GEOLOGY OF THE SHINGWAK PROPERTY SHINGWAK LAKE, ONTARIO
28948
NTS 52F/SE
Drafted by: F.C.
Date: Oct. 23, 1984
210