010

DIAMOND DRILLING

Area: Rowan Lake

Report No: 36

WORK PERFORMED FOR: Bigstone Minerals Ltd.

RECORDED HOLDER: SAME AS ABOVE [x]

: OTHER [ ]

CLAIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
K 697711	BR-1-84	90'	Oct/84	(1)(2)
	BR-2-84	150'	Oct/84	(1)(2)
	BR-3-84	80'	Oct/84	(1)(2)
	BR-4-84	110'	Oct/84	(1)(2)
	BR-5-84	90'	Oct/84	(1)(2)
	BR-6-84	110'	Oct/84	(1)(2)
	BR-7-84	90'	Oct/84	(1)(2)
	BR-8-84	110'	Oct/84	(1)(2)
	BR-9-84	100'	Oct/84	(1)(2)
	BR-10-84	80'	Nov/84	(1)(2)
	BR-11-84	120'	Nov/84	(1)(2)
	11	1130'		

NOTES: (1) #157-84
(2) Also submitted under O.M.E.P., program #OM84-3-JV-168.

Assessment files

REPORT ON 1984 DRILL PROGRAM

PATMOUR SHOWING
ROWAN LAKE, ONTARIO
N.T.S. 52F

by ULRICH KRETSCHMAR, PH.D.

Prepared for

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December 1984

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SUMMARY

During mapping on the Allister option claims (Patmour showing) at the south end of Rowan Lake, a quartz vein hosted by tuffaceous rocks and showing grab assays of 20.24 and 26.88 oz/t gold was discovered. Ten holes (BR-1-84 through BR-11-84) totalling 1130 ft. of 42 mm core were drilled in October and November 1984 to test this showing.

Nuggety native gold occurs with minor pyrite, pyrrhotite, and chalcopyrite in conformable bedded quartz-chlorite-carbonate veins (or Quartz Units). There are three separate calcareous tuff horizons 10 to 50 ft. thick, interbedded with differentiated gabbroic flows and carrying quartz units. Geologic units trend east-west and dip steeply.

The best results obtained from drilling are 0.126 oz/t Au over 3 ft. and 0.105 oz/t Au over 4 ft. The gold-bearing horizon has been drill tested over 200 ft. and is exposed for at least 700 ft. on the surface. The units disappear under water to the east and under thin overburden to the west.

Results of programs to date are extremely encouraging and further work is definitely warranted.

Stage 1 ($30,000) should consist of mapping, stripping, trenching and sampling of the gold bearing horizon, especially to the west of Trenches 1 and 2. Regional remapping is also warranted. The second phase ($90,000) should consist of drilling the down-dip and western strike extension of the Patmour showing from the ice to the south of the showing. The economics of a small scale crushing and jigging operation should be investigated.

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INTRODUCTION

During mapping on claims at the south end of Rowan Lake, in September 1984 a quartz vein hosted by tuffaceous rocks and showing very high gold assays and spectacular visible gold was discovered in old trenches by Patrick Chevalier and Seymour Sears (hereafter named Patmour showing). This is a report on the drill program that tested this showing.

LOCATION AND ACCESS

The Patmour property is located on a peninsula in the south central part of Rowan Lake, approximately 80 km southeast of Kenora and 80 km north of Ft. Frances, Ontario in the recording district of Kenora (Fig. 1). 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.

WORK ACCOMPLISHED

The 1984 drill program to test high grade surface mineralization consisted of eleven drill holes BR-1-84 through BR-11-84 totalling 1130 ft. (Table 1). Core diameter was 42 mm (BD BGM core - closest similar core is BX or BW) and drilling was carried out by Ultra Mobile Drilling Ltd, Surrey, B.C. in the period October 21 to November 4, 1984.

Core from holes BR-1 to BR-5 was split on a core splitter by Michael Angus. Core from holes BR-6 to BR-11 was sawed with a diamond saw in order to obtain better assay samples.

A limited amount of surface mapping was done before outcrops were covered by snow.

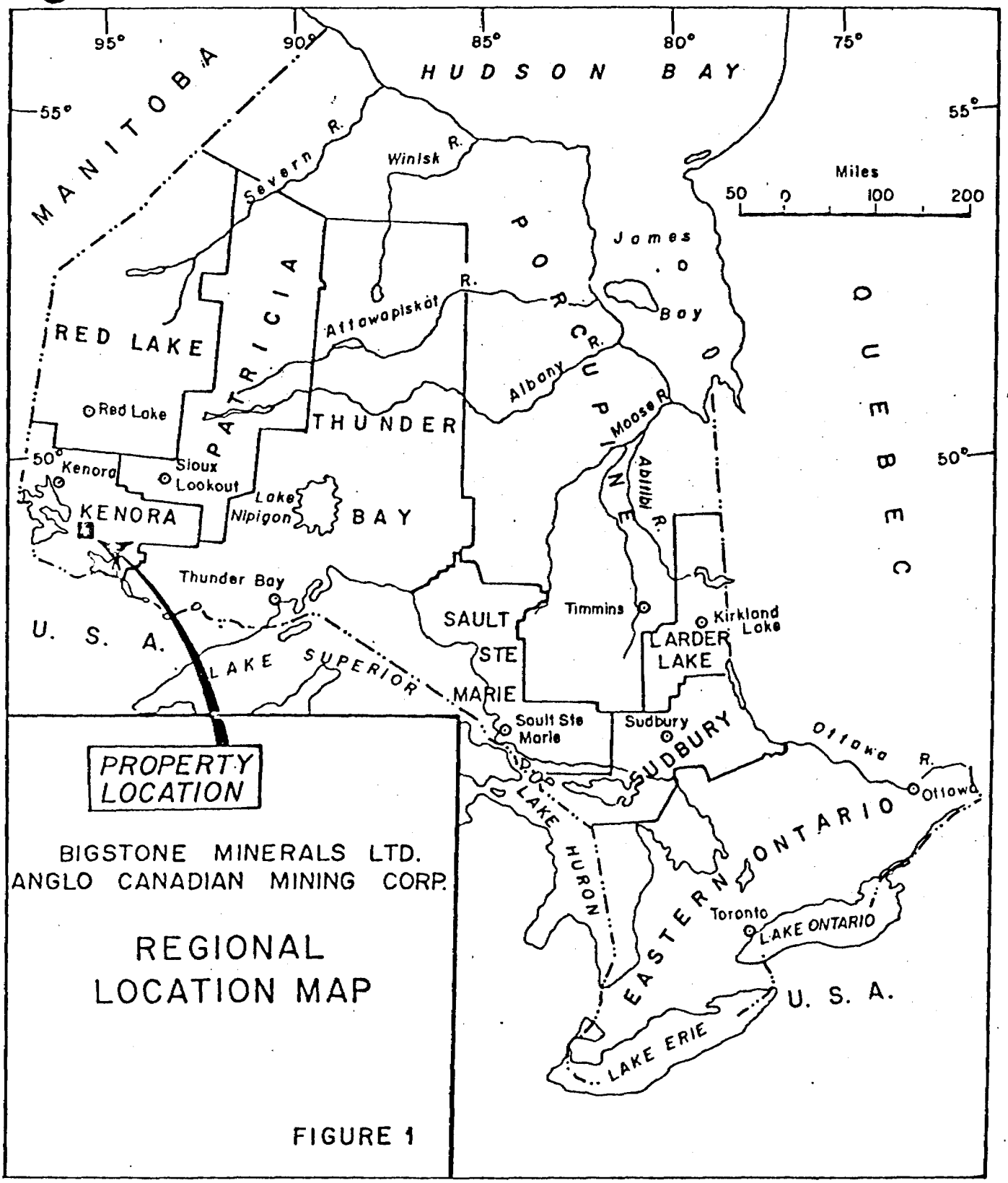

95°
90°
85°
80°
75°
55°
HUDSON BAY
MANITOBA
Severn R.
Winisk R.
Miles
50 0 100 200
PATRICIA
POPLAR
Attawapiskat R.
James Bay
RED LAKE
Red Lake
Albany R.
ONTARIO
Moose R.
Abitibi R.
THUNDER BAY
50°
Kenora
Sioux Lookout
Lake Nipigon
KENORA
Thunder Bay
U. S. A.
SAULT STE MARIE
Timmins
Kirkland Lake
LARDER LAKE
LAKE SUPERIOR
Soult Ste Marie
Sudbury
SUDBURY
Ottawa R.
Ottawa
LAKE HURON
EASTERN ONTARIO
Toronto
LAKE ONTARIO
U. S. A.
LAKE ERIE
PROPERTY LOCATION
BIGSTONE MINERALS LTD.
ANGLO CANADIAN MINING CORP.
REGIONAL LOCATION MAP
FIGURE 1

TABLE 1: 1984 DRILL HOLE DATA

Hole No.	Azimuth	Inclination	Length (ft)
BR-1-84	000°	-45°	90
BR-2-84	000°	-65°	150
BR-3-84	000°	-40°	80
BR-4-84	000°	-55°	110
BR-5-84	000°	-40°	90
BR-6-84	000°	-55°	110
BR-7-84	000°	-40°	90
BR-8-84	000°	-55°	110
BR-9-84	000°	-40°	100
BR-10-84	000°	-40°	80
BR-11-84	000°	-55°	120
		Total	1,130

RECOMMENDATIONS

The following programs should be implemented.

1. Stripping and trenching of the gold-bearing tuff horizon especially to the west of trenches 1 and 2.

2. Channel sampling with a rock saw and bulk sampling of the horizons with visible gold.

3. Geological mapping of the showings and the claim group on a grid with 100 ft. spacing.

4. Drilling of holes from the ice to the south of the showing to test the down dip and western strike extension.

5. Reconnaissance and detailed mapping to try to locate the area where 10 ft. of 0.28 oz/ton Au was reported from a 1930s drill hole.

6. Investigation of the economics of a small scale crushing and jigging operation at the Patmour Showing.

DISCUSSION

1. Since gold is in its native state at the Patmour showing, it can be readily beneficiated, perhaps on a small scale by simply crushing and jigging.

2. The nugget effect can be expected to be pronounced and therefore low assays are not necessarily discouraging. As well, gold seems to occur in high grade pockets.

3. On the property scale, as well as over the 200 ft. distance tested by drilling, rock units are characterized by variability, both along strike and across strike.

CONCLUSIONS

1. At the Patmour showing, native gold appears to occur as pockets in conformable quartz-chlorite-carbonate beds hosted by tuffs and ash-sized pyroclastics.

2. Spectacular assay results obtained from grab samples bearing visible gold in a surface trench have been confirmed by drilling, although grades were not as high as on the surface.

3. Results of programs to date have been extremely encouraging and further work is definitely warranted.

LAND STATUS

The Patmour showing is located on Claim No. 69771 (Fig. 2) at the western end of a claim group held jointly by Anglo Canadian Mining Corp. and Bigstone Minerals Ltd. (Fig. 3). Details about land holdings are presented in a report by Sears (1984). The Patmour showing occurs on one of four claims constituting the "Allister option".

HISTORY OF EXPLORATION

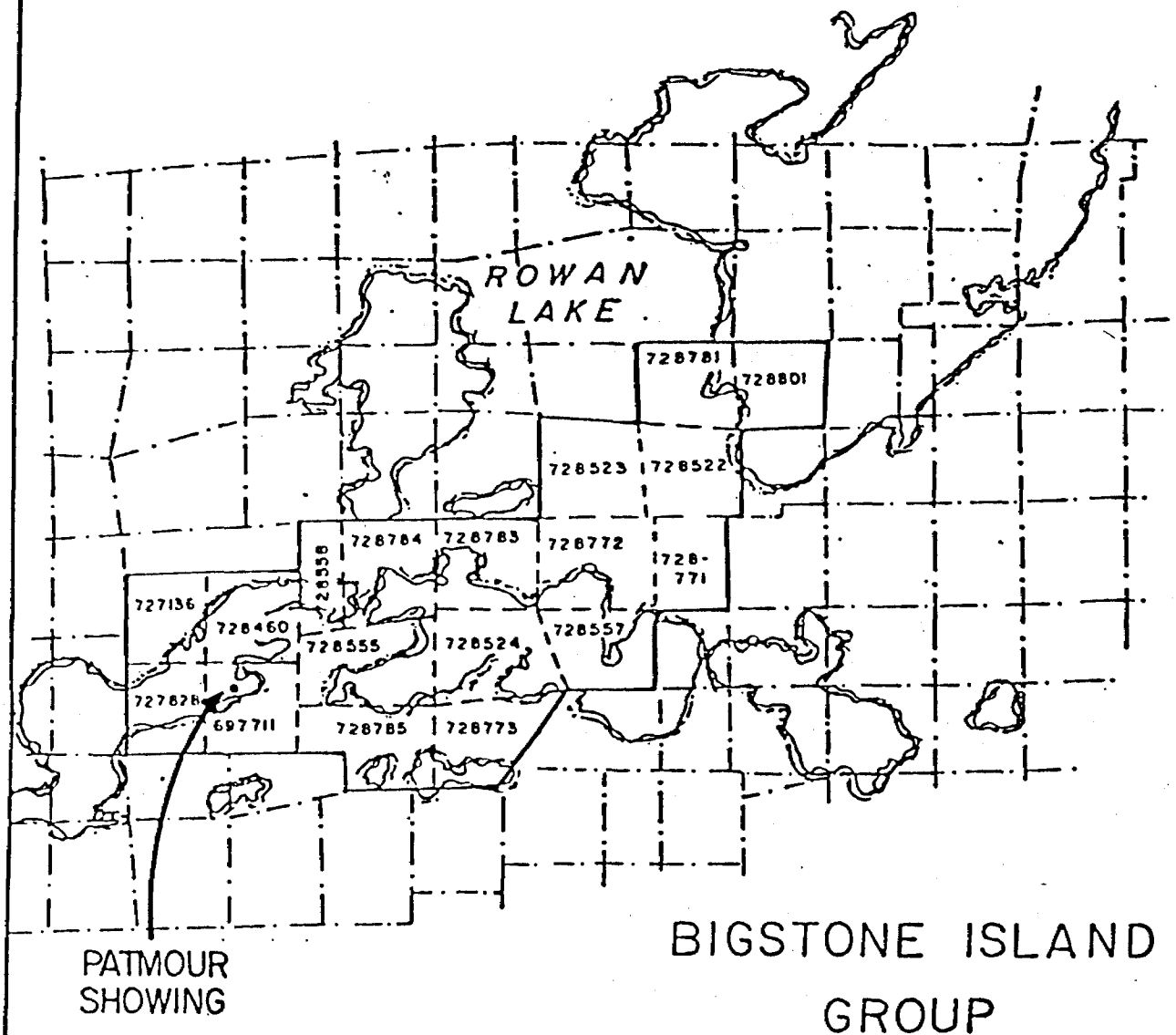
In 1894 and 1896, A.P. Coleman of the Geological Survey of Canada conducted geological reconnaissance in the area. In 1898, Anglo-Canadian Gold Estates of London, England, obtained exclusive prospecting rights on one hundred and seventeen (117) square miles on Rowan Lake and Vicinity.

The first report of gold exploration was in the vicinity of the Roy Showing on Shingwak Lake in 1933 and there are verbal reports that 10 ft. of 0.28 oz/ton Au was intersected when a showing near the Patmour occurrence was drilled.

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 on Shingwak Lake. Both holes intersected mafic volcanics but apparently there was insufficient encouragement for further work.

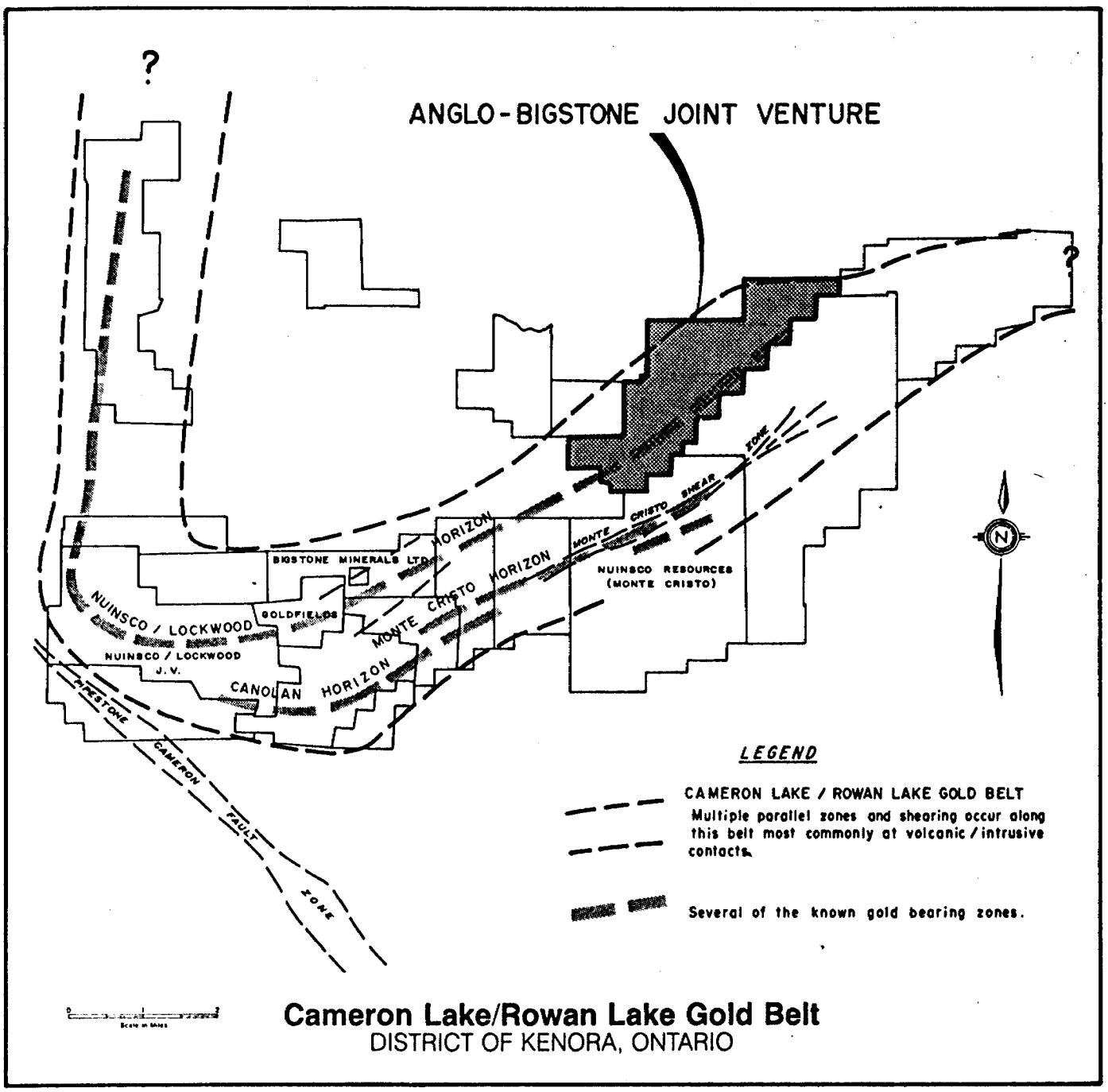
The area remained inactive until gold exploration in the Cameron Lake and Rowan Lake areas was resumed by Nuinsco Resources Ltd. As a result of encouraging results obtained from the Lockwood/Nuinsco joint venture on Cameron Lake, twenty unpatented mining claims were acquired by Bigstone Minerals in 1983 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.



Data from: Rowan Lake
M-2580

Scale 1" = ½ mile

ANGLO / BIGSTONE J. V.	
ROWAN LAKE, KENORA	
PATMOUR SHOWING	
Nov. 22, 1984 .	Fig. No. 2



ANGLO CANADIAN MINING CORPORATION (ANP-V)
BIGSTONE MINERALS LTD. (BIG-V)

Fig. 3: Generalized Stratigraphy and Property Position in the Cameron Lake-Rowan Lake area. Patmour Showing is a red dot.

GEOLOGY

General

Based on geological mapping by Kaye (1973), the area in the vicinity of the Patmour showing occurs on the south limb of the Shingwak Lake anticline (Fig. 3). Units trend east to northeasterly and dip steeply to the south.

Top determinations, mainly from pillows indicate tops everywhere to the south and there is no evidence of isoclinal repetition of units. 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 increase upwards. Faults mapped in the area trend northeasterly and do not appear to have major displacement associated with them. Metamorphic grade is greenschist facies, except at the contact of later granitoid intrusions where it is higher. There is no evidence of isoclinal or drag folding in the area. Terminology for volcaniclastic rocks throughout this report is that of Fisher (1966) and Lajoie (1984). Regional geology and chemistry of volcanics is discussed by Trowell et. al. (1980), Blackburn (1983), Blackburn et. al. (1983). A report on a geophysical survey carried out in the Rowan Lake area is presented by Hogg (1984).

Property

A geological map of the peninsula on which the Patmour showing occurs is shown as Fig. 4. This map represents a compilation of work, mainly by Sears, supplemented by my own observations and interpretations.

From the base upwards (north to south), the stratigraphy consists of massive and pillowed andesites and andesitic hyaloclastite breccias. Particularly near the top of this sequence, but also throughout, there are thin interflow chert beds and quartz-carbonate-fuchsite alteration zones. Stratigraphic Section 3 (Fig. 4 and Table 2) shows that there is significant variability in a restricted stratigraphic interval near the contact with a well-defined feldspar porphyritic crystal lapilli tuff. The latter is overlain by a sequence of differentiated gabbroic flows that contain two interbedded tuff and ash tuff beds. There is some possibility that the

gabbros may be differentiated komatiites. A discussion of the geochemistry of volcanics in the Rowan-Cameron Lake areas is presented in Kretschmar (1984). The gabbro-tuff sequence is about 450 ft. thick. The upper tuff bed, which hosts the Patmour showing is described below. The gabbroic flows are overlain by pillowed andesites and hyaloclastite breccias at least 150 ft. thick.

Geology from Drilling

Three separate tuff horizons were encountered during the drilling (Fig. 6). The northernmost is 30 to 60 ft. thick and has interbedded near its upper contact a 10 to 15 ft. thick grey, locally bleached ash tuff. The central tuff horizon is from 8 to 20 ft. thick but the thickness of the southern horizon, encountered only near the surface in holes BR-10 and 11 is unknown.

Interbedded with the tuffs is massive andesite that locally displays pyroclastic as well as gabbroic textures. Contacts with tuffs are gradational. The northern horizon encountered is from 0 - 15 feet thick. The southern about 15 ft. thick. The distinction between pyroclastic and massive flows is sometimes difficult to make on the basis of textures and colour, but tuffs are invariably calcareous (fizz with 10% HCl), whereas the flows are not calcareous.

A generalized stratigraphic section based on drilling (Section 2), is shown in Table 2. It compares favourably with the eastern strike extension (Section 1, Table 2) measured 600 ft. to the east of the Patmour Showing. Therefore the gold-bearing tuff horizon has a minimum strike length of 720 ft.

TABLE 2: STRATIGRAPHIC SECTIONS, PATMOUR AREA

	Section 1[1]	Estimated Thickness (ft)	Section 2[2]	Estimated Thickness (ft)	
S	gabbroic andesite flow with hyaloclastite flow top	4	tuff with conformable quartz	?	S
	argillaceous cherty tuff with soft sediment slumps	6	massive andesite	15	
	tuff	12	tuff with conformable quartz, minor sulfides, Au	8-20	
	variolitic andesite with epidote bombs at base,	6-10	massive andesite	0-15	
	tuff with disseminated pyrite and conformable quartz veins	25	tuff with conformable quartz, minor pyrite, ash tuff bed, Au	30-60	N
	indistinct flow top, tuff, quartz knots, minor pyrite	12			
N	massive gabbroic flow, minor pyrite as cubes and veins	>100	massive gabbroic flow	>20	

	Section 3[3]	Estimated Thickness (ft)
S	feldspar crystal lapilli tuff	~80
	calcareous sericite schist	6-10
	pyritic cherty tuff	2
	porphyritic epidote bombs in tuffaceous matrix	1
	tuff	1-2
N	pillowed andesite, hyaloclastite	Very thick

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1 600 ft. E. of BR 1/2 drill site on shore of peninsula, see Fig. 4.

2 Generalized from Fig. 6.

3 See Fig. 4 for location

MINERALIZATION

Regional

There are numerous gold showings in the northeast - trending belt of volcanics between Rowan Lake and Cameron Lake. Table 3 is a preliminary classification of some of these based on the author's observations. 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 brief discussion of "shear zones" and lateral secretion is presented in Appendix C.

Patmour Showing

A sketch geological map of the area from Sears (1984) encompassing trenches 1 and 2 is shown in Fig. 5. A preliminary geological map of the area, based mainly on work by S. Sears and P. Chevalier with minor modifications by the author is shown as Fig. 4. A drill plan is shown as Fig. 6.

The conformable bedded nature of the quartz-chlorite-carbonate veins is shown in Photos 1 to 4.

Trench 1, Trench 2

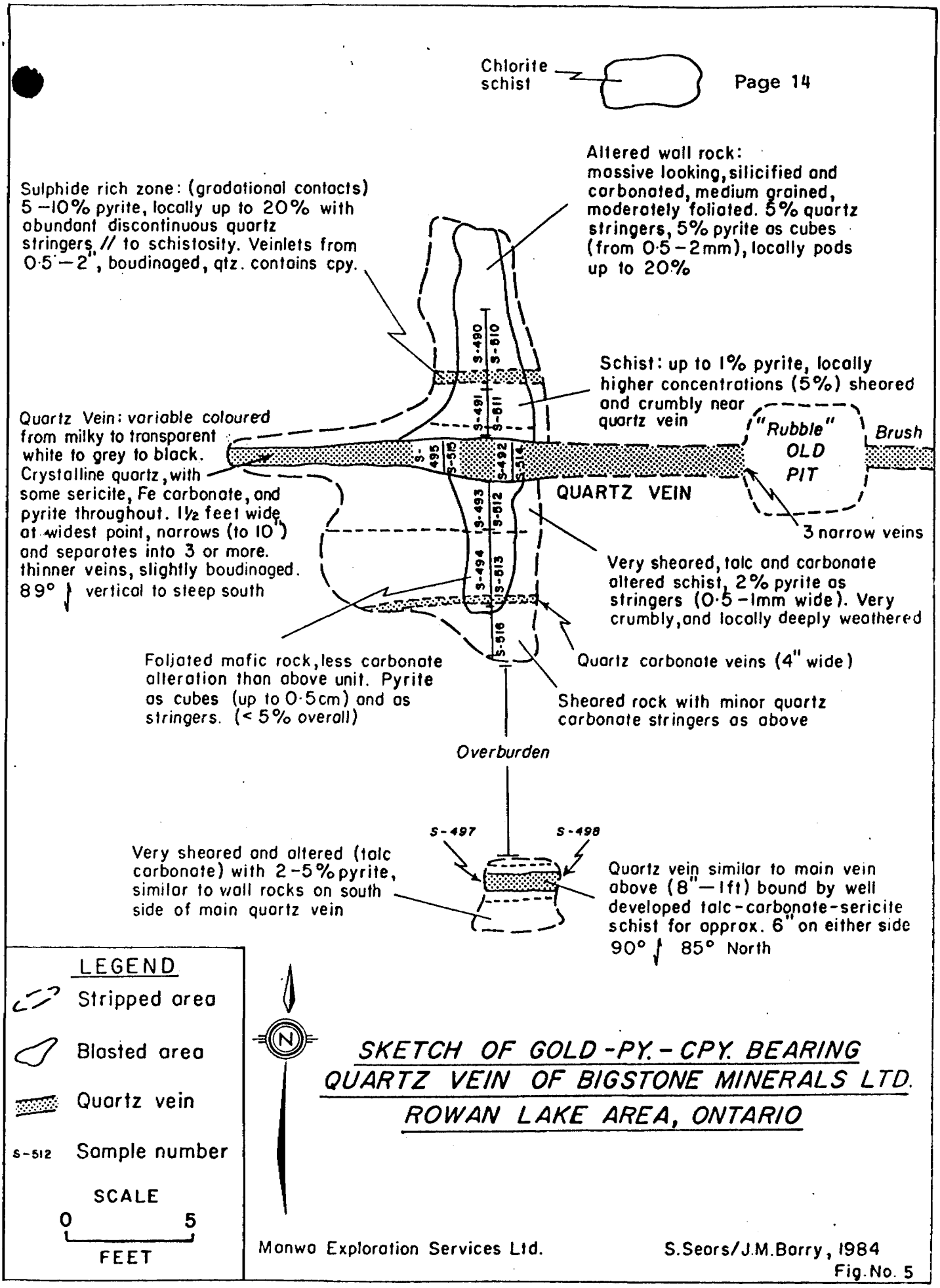
In Trench 1, where grab assays of 20.24 and 26.88 oz/t were obtained by S. Sears (Fig. 5, Table 4) a 1 ft. vein of massive white to grey quartz outcrops for about 30 ft. Scattered euhedral calcite and ankerite crystals (10 - 20%) and minor light green chlorite can be seen on weathered surfaces. In places carbonate patches comprise up to 50% of the vein. Pinhead and matchhead sized flecks of native gold are disseminated throughout the quartz and occur as flakes in chloritic wall rock to the quartz vein. Native gold appears to correlate with carbonate, pyrite and minor chalcopyrite. The host rock is a moderately foliated calcareous tuff.

In Trench 2, several thinner white quartz veins with minor calcite and a dark green chlorite can be seen. The green chloritic host tuff is locally finer grained than in Zone 1 trench and may be an ash tuff. No visible gold was seen. The main carbonate is calcite. Minor pyrite occurs in both host tuffs and in the quartz veins.

TABLE 3: 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.(Kretschmar, 1984) 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, Nuinsco Monte Cristo showing, Rowan Lake.
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 or 1.287 million tons grading 0.154 oz/t.	Nuinsco's Cameron Lake deposit (see Hunter and Curtis, 1983) Canadian Mining Journal, Dec. 1984, p. 12
IV Not yet visited, therefore not classified but commonly classified as "shear zone" related				Sullivan Bay, Wampum, Errington

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



SKETCH OF GOLD-PY.-CPY. BEARING QUARTZ VEIN OF BIGSTONE MINERALS LTD. ROWAN LAKE AREA, ONTARIO

Monwa Exploration Services Ltd.

S.Seors/J.M.Borry, 1984

Fig. No. 5

Table 4: SIGNIFICANT ASSAY RESULTS, Patmour Showing, Rowan Lake

Sample No.	Drill Hole No	Footage	Core Length	Au (oz/ton)
44	BR-4-84	82.0-86.0	4.0	0.105
208	BR-8-84	6.5- 9.5	3.0	0.121, 0.12, 0.138

NOTES ON SAMPLE 208

Initial assay gave 0.121 oz/t. Reassay gave 0.12 oz/t Au. A third assay of the rejects was then done by Bondar-Clegg as follows: Sieve 215.72 g sample into -150 and +150 mesh sizes. Weigh and assay each sample separately. -150 mesh (215.5 g) assayed 0.114 oz/ton. +150 mesh (0.22 g) assayed 23.9 oz/t. Weighted average of third assay is thus: 0.138 oz/ton.

Surface Samples

Trench No. 1

20.24 oz/t gold	grab samples
26.88 oz/t gold	grab sample

TABLE 5: ANALYTICAL RESULTS, Patmour Showing*

Sample No.	Width (ft)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
Trench 1:						
S490						
S491						
S492						
S493						
S494						
S495						
S510		41	7	66	0.1	10
S511		100	5	112	0.1	5
S512		96	3	109	0.1	5
S513		106	5	105	0.1	5
S514		30	3	29	0.1	130
S515		43	3	48	0.1	1235
S516		113	5	97	0.1	10
Trench 2:						
S497		4	5	56	0.1	5
S498		5	3	41	0.1	5

* Samples collected by P. Chevalier, S. Sears; data from Sears (1984)

PATMOUR SHOWING, ROWAN LAKE

TABLE 6: ASSAY RESULTS FROM 1984 DRILL HOLES

Sample No.	Footage	Core Length (ft.)	Oz/t Au	Oz/t Ag
BR-1-84				
43581	11.3 - 14.5	3.2	<0.001	<0.01
43571	14.5 - 15.8	1.3	0.03	nil
43572	16.25 - 17.5	1.25	trace	nil
43582	17.5 - 20.0	2.5	<0.001	<0.01
43583	36.0 - 39.8	3.8	<0.001	<0.01
43573	40.0 - 41.0	1.0	trace	nil
43584	42.0 - 44.0	2.0	<0.001	<0.01
43574	44.0 - 46.5	2.5	trace	nil
43585	46.5 - 49.6	3.1	<0.001	0.02
43586	57.8 - 61.5	3.7	<0.001	<0.01
43575	61.5 - 63.5	2.0	trace	nil
BR-2-84				
43577	21.5 - 23.5	2.0	trace	nil
43589	23.5 - 25.7	2.2	<0.001	<0.01
43590	75.0 - 79.0	4.0	<0.001	<0.01
43578	79.0 - 80.0	1.0	trace	nil
43591	80.0 - 84.0	4.0	<0.001	<0.01
43592	85.5 - 89.5	4.0	<0.001	<0.01
43593	106.8 - 110.2	3.4	<0.001	<0.01
43580	110.2 - 111.0	0.8	trace	nil
43594	111.0 - 112.0	2.0	<0.001	<0.01
43576	112.0 - 113.5	1.5	trace	nil
43595	113.5 - 116.0	2.5	<0.001	<0.01
BR-3-84				
01	19.0 - 22.5	2.5	0.012	0.02
02	36.8 - 41.8	5.0	<0.001	<0.01
03	41.8 - 45.5	3.7	<0.001	0.00
04	60.0 - 62.8	2.8	<0.001	<0.01
05	62.8 - 65.8	3.0	0.002	<0.01
06	65.8 - 68.0	2.2	<0.001	<0.01
BR-4-84				
41	23.0 - 25.5	2.5	0.007	<0.01
42	30.0 - 32.8	2.8	<0.001	<0.01
43	67.0 - 70.5	3.5	<0.001	<0.01
44	82.0 - 86.0	4.0	0.105	<0.01
45	101.0 - 105.0	4.0	<0.001	0.02

PATMOUR SHOWING, ROWAN LAKE

TABLE 6: ASSAY RESULTS FROM 1984 DRILL HOLES (Cont'd)

Sample No.	Footage	Core Length (ft.)	oz/t Au	oz/t Ag
BR-5-84				
51	29.0 - 32.7	3.7	< 0.001	< 0.01
52	44.0 - 47.3	3.3	< 0.001	< 0.01
53	73.6 - 76.3	2.7	< 0.001	0.12
BR-6-84				
201	37.6 - 42.8	5.2	0.005	0.12
202	87.0 - 89.0	2.0	< 0.001	0.02
203	92.0 - 95.0	3.0	< 0.001	< 0.01
204	98.5 - 101	2.5	< 0.001	0.02
BR-7-84				
214	31.0 - 33.0	2.0	< 0.001	< 0.01
205	46.5 - 49.5	3.0	< 0.001	< 0.01
206	51.0 - 54.0	3.0	< 0.001	< 0.01
207	55.5 - 59.0	3.5	< 0.001	< 0.01
215	70.5 - 72.3	1.8	< 0.001	< 0.01
BR-8-84				
208*	6.5 - 9.5	3.0	0.121	< 0.01
209	40.8 - 42.5	1.7	< 0.001	< 0.01
210	58.5 - 60.9	2.4	< 0.001	< 0.01
211	64.7 - 67.2	2.5	< 0.001	< 0.01
216	67.2 - 70.0	2.8	< 0.001	
212	80.0 - 81.7	1.7	< 0.001	
BR-9-84				
217	14.0 - 18.2	4.2	< 0.001	
218	37.5 - 40.0	2.5	< 0.001	
219	42.0 - 45.2	3.2	< 0.001	
220	55.0 - 58.2	3.2	< 0.001	
222	75.8 - 78.5	2.7	< 0.001	

* See Table 4

PATMOUR SHOWING, ROWAN LAKE

TABLE 6: ASSAY RESULTS FROM 1984 DRILL HOLES (Cont'd)

Sample No.	Footage	Core Length (ft.)	oz/t Au	oz/t Ag
BR-10-84				
223	5.0 - 6.5	1.5	<0.001	
224	30.0 - 33.2	3.2	0.003	
225	33.2 - 36.6	3.4	0.008	
226	48.0 - 50.0	2.0	<0.001	
227	50.0 - 52.4	2.4	<0.001	
228	60.5 - 63.8	3.3	0.005	
229	70.0 - 71.5	1.5	<0.001	
230	74.3 - 77.3	3.0	<0.001	
231	77.3 - 80.0	2.7	<0.001	
BR-11-84				
232	5.0 - 7.0	2.0	<0.001	
233	40.7 - 45.7	5.0	0.006	
234	45.7 - 49.6	3.9	<0.001	
235	60.0 - 62.0	2.0	0.002	
236	63.7 - 66.5	2.8	<0.001	
237	85.0 - 88.0	3.0	<0.001	
238	88.0 - 91.3	3.3	<0.001	
239	100.0 - 103.0	3.0	<0.001	
240	110.0 - 112.3	2.3	0.003	
241	116.0 - 117.9	1.9	<0.001	

TABLE 7: GEOCHEMICAL RESULTS FROM 1984 DRILL HOLES

Sample No.	Footage	Core Length (ft.)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
BR-1-84							
43581	11.3 - 14.5	3.2	109	5	57	0.2	5
43571	14.5 - 15.8	1.3					
43572	16.25- 17.5	1.25					
43582	17.5 - 20.0	2.5	81	3	57	0.1	5
43583	36.0 - 39.8	3.8	167	5	185	0.2	10
43573	40.0 - 41.0	1.0					
43585	42.0 - 44.0	2.0	29	5	34	0.1	5
43574	44.0 - 46.5	2.5					
43585	46.5 - 49.6	3.1	117	3	109	0.2	5
43586	57.8 - 61.5	3.7	158	4	92	0.3	5
43575	61.5 - 63.5	2.0					
BR-2-84							
43587	21.5 - 23.5	2.0	140	5	148	0.1	5
43589	23.5 - 25.7	2.2	130	5	64	0.3	20
43590	75.0 - 79.0	4.0	35	10	230	0.1	5
43578	79.0 - 80.0	1.0					
43591	80.0 - 84.0	4.0	45	6	169	0.2	5
43592	85.5 - 89.5	4.0	140	7	240	0.2	5
43593	106.8 -110.2	3.4	144	5	87	0.2	5
43580	110.2 -111.0	0.8					
43594	111.0 -112.0	2.0	195	5	182	0.3	5
43576	112.0 -113.5	1.5					
43595	113.5 -116	2.5	106	4	132	0.2	5
BR-3-84							
01	19.0 - 22.5	2.5	128	7	61	0.2	715
02	36.8 - 41.8	5.0	46	4	80	0.3	15
03	41.8 - 45.5	3.7	53	5	117	0.2	5
04	60.0 - 62.8	2.8	77	6	128	0.1	5
05	62.8 - 65.8	3.0	123	5	128	0.4	90
06	65.8 - 68.0	2.2	137	4	106	0.3	5
BR-4-84							
41	23.0 - 25.5	2.5	102	3	59	0.2	180
42	30.0 - 32.8	2.8	97	3	57	0.1	5
43	67.0 - 70.5	3.5	75	4	60	0.1	5
44	82.0 - 86.0	4.0	129	3	149	0.2	4810*
45	101.0 -105.0	4.0	85	5	85	0.1	5

* 0.140 oz/ton (34,285 ppb = 1 oz/ton)

TABLE 7: GEOCHEMICAL RESULTS FROM 1984 DRILL HOLES (Cont'd)

Sample No.	Footage	Core Length (ft.)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
BR-5-84							
51	29.0 - 32.7	3.7	101	5	64	0.2	40
52	44.0 - 47.3	3.3	92	3	74	0.1	20
53	73.6 - 76.3	2.7	126	4	101	0.2	25
BR-6-84							
201	37.6 - 42.8	5.2	103	2	60	0.2	420
202	87.0 - 89.0	2.0	132	3	90	0.1	5
203	92.0 - 95.0	3.5	143	5	79	0.1	5
204	98.5 -101	2.5	98	3	60	0.2	35
BR-7-84							
214	31.0 - 33.0	2.0	55	3	55	0.1	10
205	46.5 - 49.5	3.0	77	5	91	0.1	5
206	51.0 - 54.0	3.0	99	4	126	0.1	5
207	55.5 - 59.0	3.5	101	2	128	0.1	5
215	70.5 - 72.3	1.8	54	4	54	0.1	5
BR-8-84							
208	6.5 - 9.5	3.0	77	2	47	0.1	2845*
209	40.8 - 42.5	1.7	139	2	44	0.1	5
210	58.5 - 60.9	2.4	54	2	94	0.1	5
211	64.7 - 67.2	2.5	46	2	58	0.1	15
216	67.2 - 70.0	2.8	98	3	126	0.4	5
212	80.0 - 81.7	1.7	77	2	141	0.1	5
BR-9-84							
217	14.0 - 18.2	4.2	130	12	65	0.2	5
218	37.5 - 40.0	2.5	500	4	73	0.6	15
219	42.0 - 45.2	3.2	395	5	37	0.7	10
220	55.0 - 58.2	3.2	101	4	93	0.4	5
221	70.7 - 70.8	0.1	118	5	3810	0.3	5
222	75.8 - 78.5	2.7	112	4	107	0.3	5

* 0.083 oz/ton (34,285 ppb = 1 oz/ton)

TABLE 7: GEOCHEMICAL RESULTS FROM 1984 DRILL HOLES (Cont'd)

Sample No.	Footage	Core Length (ft.)	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au ppb
BR-10-84							
223	5.0 - 6.5	1.5	129	6	59	0.3	5
224	30.0 - 33.2	3.2	58	6	56	0.4	175
225	33.2 - 36.6	3.4	117	5	66	0.3	345
226	48.0 - 50.0	2.0	93	7	80	0.2	10
227	50.0 - 52.4	2.4	117	7	57	0.3	5
228	60.5 - 63.8	3.3	122	4	152	0.2	150
229	70.0 - 71.5	1.5	119	2	126	0.2	25
230	74.3 - 77.3	3.0	117	4	121	0.4	5
231	77.3 - 80.0	2.7	94	6	72	0.2	5
BR-11-84							
232	5.0 - 7.0	2.0	63	5	46	0.1	15
233	40.7 - 45.7	5.7	83	4	63	0.4	280
234	45.7 - 49.6	3.9	116	5	78	0.3	20
235	60.0 - 62.0	2.0	80	6	93	0.2	5
236	63.7 - 66.5	2.8	103	4	126	0.4	5
237	85.0 - 88.0	3.0	125	6	110	0.3	5
238	88.0 - 91.3	3.3	97	7	91	0.3	25
239	100.0 -103.0	3.0	150	5	77	0.3	65
240	110.0 -112.3	2.3	995	3	315	0.2	20
241	116.0 -117.9	1.9					

Photo 1 BR-4-84 83-84 ft.

One foot section of core showing typical features of conformable quartz units:

83.0 ft. fine grained pyrite blebs on bedding plane in argillaceous tuff.

83.1-83.3 interbedded quartz, chlorite, calcite and tuff with slightly disrupted bedding.

83.3-83.6 massive grey to white quartz with minor calcite (white mineral), chlorite and a thin argillaceous tuff bed.

83.6-83.7 well bedded argillaceous tuff

83.7-84.1 complex grey quartz-chlorite carbonate bed with carbonate segregation (white patches)

Stratigraphic tops to right ie 83 ft. is below 84 ft.

Photo 2 BR-6-84 41 ft.

Cut section of core illustrating:

1. bedded nature of sericite (light coloured in black argillaceous, chloritic tuff bed)
2. intimate intergrowth of quartz and sericite
3. nature of carbonate (white dots in black argillaceous tuff)
4. "dirty" quartz

Photo 3 BR-6-84 41 ft.

Cut section of core illustrating:

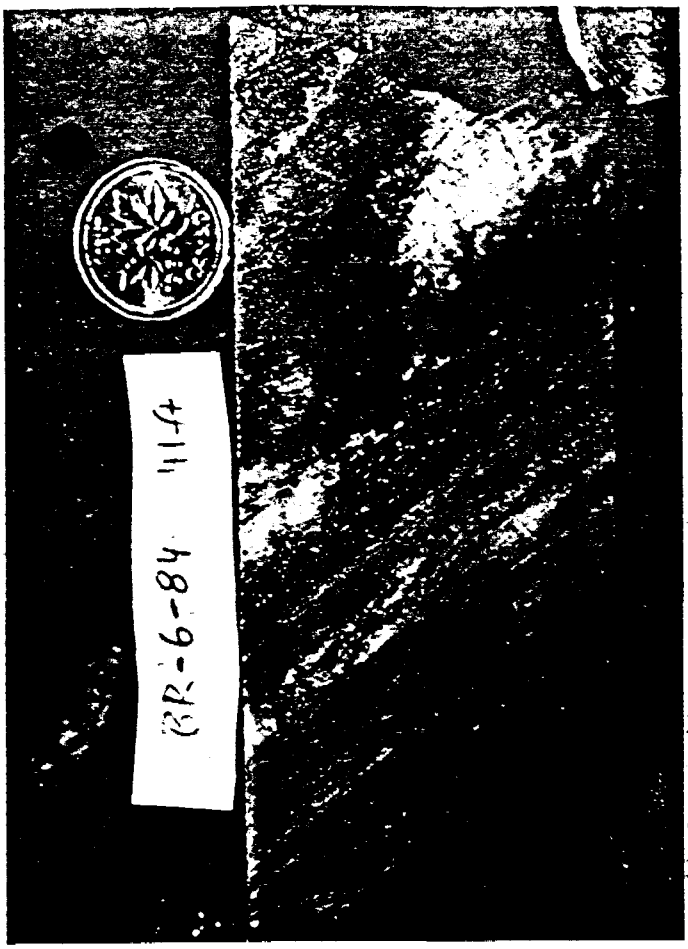
1. nature of quartz and carbonate intergrowth.
2. "dirty" nature of quartz

Photo 4 BR-6-84 41 ft.

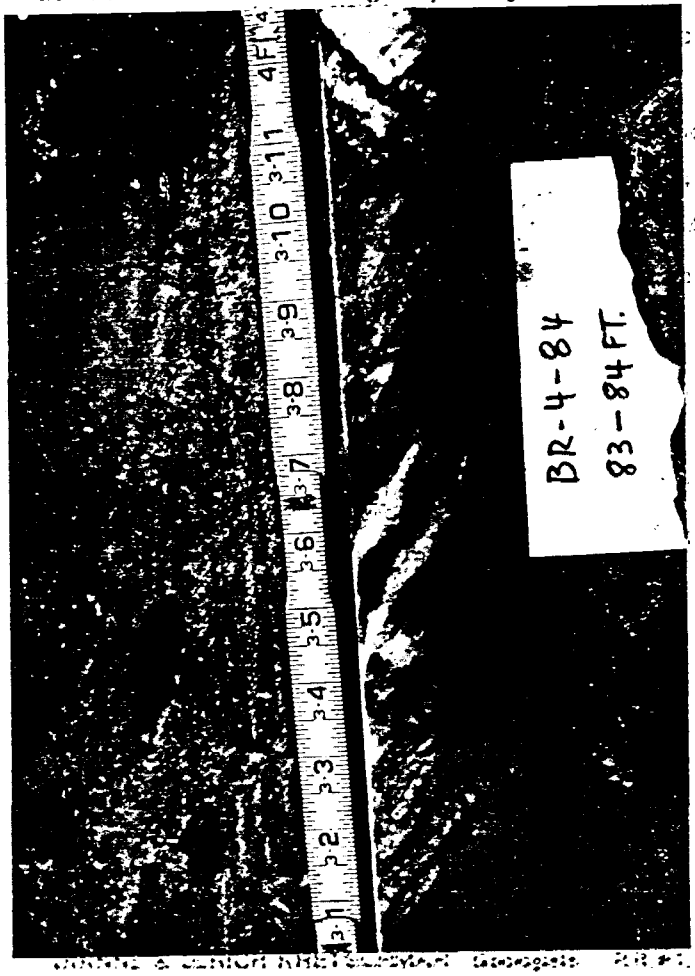
Cut section of core illustrating:

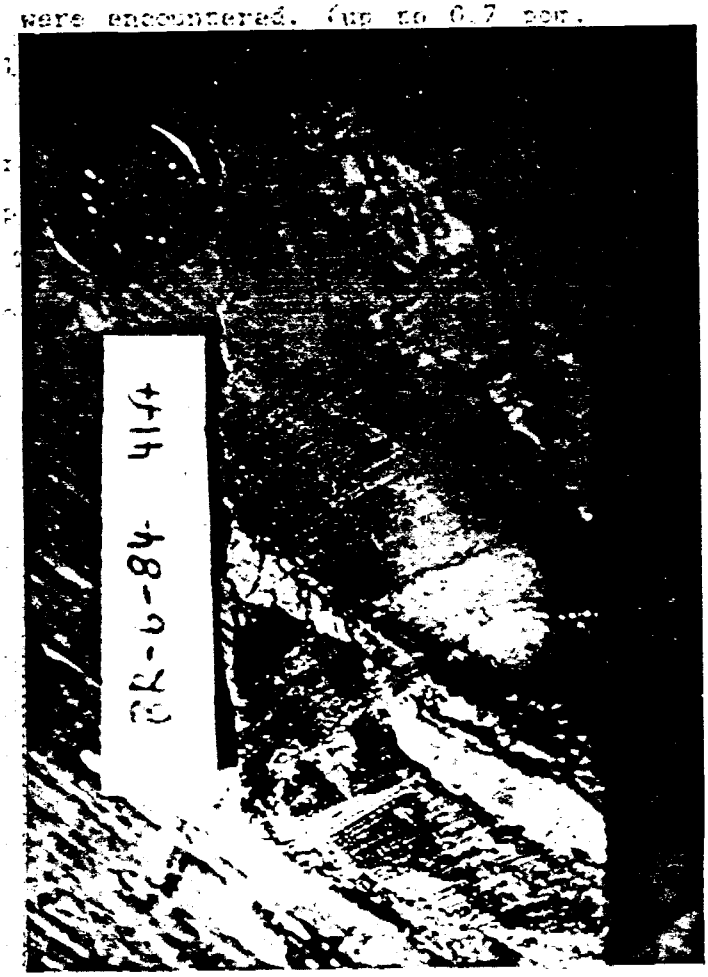
1. conformable nature of quartz-carbonate-chlorite beds
2. green coloured chloritic tuff host
3. that thick QU appear to represent thicker accumulations of quartz than thin QU ie the process is constant
4. slightly asymmetric nature of some QU.

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



4. Silver contents are commonly 0.1 ppm or less, but in holes BR-9, BR-10 and BR-11 slightly higher contents were encountered, (up to 0.7 ppm.





Geochemistry

Trace element analyses of sections of split core are presented in Tables 4 and 6. Statistical treatment of the data does not appear warranted at this time but the following observations appear to be valid:

1. Copper contents are commonly in the range 1 - 200 ppm. The maximum encountered is 995 ppm (Sample 240, Table 6). There is no obvious correlation with Au e.g. the highest Au content is 4810 ppb (55, Table 6) but Cu is only 129 ppm.

2. Lead contents are less than 12 ppm.

3. Zinc contents are commonly in the range 1 - 200 ppm. The highest (.38% Zn, Sample 221, Table 6) has a low Au value ($<$5 ppb) so there is no apparent Au-Zn correlation.

4. Silver contents are commonly 0.1 ppm or less, but in holes BR-9, BR-10 and BR-11 slightly higher contents were encountered, (up to 0.7 ppm, Sample 219, Table 6) which suggests possible lateral metal zoning.

5. Gold contents are variable and range from below detection limit to 715 ppb. The two highest values are 2845 ppb (0.083 oz/ton, Sample 208, Table 6) and 4810 ppb (0.140 oz/ton, Sample 44, Table 6). Gold values appear to be sporadically distributed and there is no halo apparent around quartz veins.

PRELIMINARY EXPLORATION GUIDE LINES

The following seem currently to be the most favourable indications for gold in this kind of environment:

1. Calcareous tuff beds with thin well bedded ash horizons in gabbroic (Komatiitic?) flow sequences.

2. Significant amounts of more or less conformable quartz-chlorite-carbonate concentrations in tuff. Quartz should be grey or dark in colour.

3. Sulfides consisting of pyrite, pyrhotite and chalcopyrite in trace to minor amounts in tuff and in quartz.

4. Presence of both ankerite and calcite in the quartz and sericite in the wall rock or as beds in host tuff.

5. Visible gold.

6. In a regional sense, the coincidence of distal volcanic conditions and proximal hydrothermal environment should be sought. This would consist of thick sequences of silica, carbonate and sulfide-rich tuffs and ash tuffs or epiclastic volcanics. (locally known as "shear zones" see Appendix C).

BUDGET FOR PATMOUR SHOWING[1]

Stage 1:	EXPLORATION			
	Line cutting:	3.3 miles @ $300/mile	$ 1,000	
	Trenching:	2 men @ $100/day each for 21 days	4,200	
	Mapping:	Sr. Geologist 21 days @ $300/day	6,300	
		Ass't. Geologist 21 days @ $1,800/mo.	1,350	
	Bulldozer[2]	1000 hours @ $50/hr.	5,000	
	Pump rental for hydraulicking		500	
	Food, Accommodation 84 man days at $45/day		3,780	
	Transportation to field: airfare, vehicle rental		2,000	
	Assays, shipping		1,500	
	Channel saw, blades		500	
	Supplies, fuel, communication, report		3,870	
			$30,000	$30,000
Stage 2:	DRILLING			
	3000 ft. @ $30/ft. all inclusive			90,000
Stage 3:	Crushing and jigging operation			?

TOTAL BUDGET	Stage 1	$ 30,000.00
	Stage 2	90,000.00
		$120,000.00

NOTE: [1] This estimate is for work on the four claim Allister option only.

[2] Costs for getting a bulldozer from Cameron Lake (nearest road) to Rowan Lake are additional.

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C E R T I F I C A T E

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 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.

3. That I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.

4. That my knowledge of the properties described was acquired during work carried out in October and November 1984 and from a study of the publications and reports cited in the References.

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 5th. day of February, 1985.

Ulrich Kretschmar

Ulrich Kretschmar

APPENDIX A: DRILL LOGS FOR 1984

APPENDIX A: DRILL LOGS FOR 1984

DRILL HOLES BR-1-84 through BR-11-84

PATMOUR SHOWING, ROWAN LAKE, ONTARIO

Notes on Logging:

1. QU - bedding parallel accumulation consisting of mainly quartz, minor carbonate, chlorite, pyrite, pyrrhotite, chalcopyrite and native gold.

2. Foliation commonly parallels bedding

3. Abbreviations:

py	pyrite
po	pyrrhotite
cp	chalcopyrite
V.G.	visible gold

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Rowan Lake
HOLE NO. BR-1-84 LENGTH 90
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH 000 DIP -45°
STARTED October 23, 1984 FINISHED October 23, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-1-84 SHEET NO. 1 of 2
REMARKS

U. Kretschmar
LOGGED BY

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	3.5	Casing									
3.5	10	massive dark green gabbroic textured andesite, fine grained									
10	25	chloritic foliated andesitic tuff, light green fine grained, foliation (probable bedding) at 50°									
		14.5-15.8 30 - 40% quartz as thin 1-2 cm. conformable beds, up to 5% py as cubes up to 5 mm both in quartz and in wallrock. Orientation of quartz parallels foliation.	43581		11.3	14.5	3.2			<0.001	0.01
			43571		14.5	15.8	1.3				
		16.25-17.5 similar to 14.5-15.8 slightly more chloritic	43572		16.25	17.5	1.25				
			43582		17.5	20.0	2.5			<0.001	0.01
25	37	massive, gabbroic, fine grained dark green volcanic	43583		36.0	39.8	3.8			<0.001	0.01
37	77	at 37 gradational contact to bleached argillitic greyish tuff fine grained, increasing amounts of pyrite, sericite and bleaching.	43573		40.0	41.0	1.0				
			43584		42.0	44.0	2.0			<0.001	0.01
		- pyrite in cubes up to 8 mm and also very fine grained and disseminated throughout	43574		44.0	46.5	2.5				
		- variable amounts of thin quartz stringers with minor carbonate	43585		46.5	49.6	3.1			<0.001	0.02
		- these locally increase in thickness and amount	43586		57.8	61.5	3.7			<0.001	0.01

)IAMOND DRILL RECO[D

NAME OF PROPE _____

HOLE NO. _____ BR-1-84 SHEET NO. _____

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE SULPH IDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS ¢	ASSAYS %	ASSAYS oz TON	ASSAYS oz TON
		44-46.5 sample 43574 (Photo BR-1-84 45 ft.) argillaceous, black muddy horizon. Several conformable quartz horizons interbedded with varying amounts of chlorite, minor sericite and pyrite as cubes and finely disseminated (1-5%)									
		61.5-63.5 Sample 43575 (photo BR-1-84 62ft) main quartz horizon several OU	43575		61.5	63.5	2.0				
77	90	gradational contact to massive medium grained dark green gabbroic volcanic 1-2% scattered irregular pyrite blebs 3 - 4 mm in diamter.									
	90	End of Hole Core stored at Nuinsco Monte Cristo Camp Rowan Lake									

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DIAMOND DRILL RECORD

NAME OF PROPERTY Patpour, Rowan Lake
HOLE NO. BR-2-84 LENGTH 150
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH 000 DIP -65°
STARTED October 23, 1984 FINISHED October 23, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-2-84 SHEET NO. 1 of 3
REMARKS

LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	2.5	Casing									
2.5	20	fine-grain light green volcanic v. thin quartz in foliation									
20	35	v. thin quartz lying in plane of foliation, foliation at 27 - 37° to core	43577		21.5	23.5	2.0				
			43589		23.5	25.7	2.2			0.001	0.01
		21.5-23.5 Sample 43577 increased amounts of quartz, with chlorite, sericite and 1-2% fine grained pyrite and pyrrhotite.									
		- pyrite occurs as cubes, pyrrhotite as drops									
		21.5 - 22 about 80% quartz 22 - 23.5 about 40% quartz									
		- angle of quartz to core axis is 40°									
		- thin cross-cutting quartz veins form roots to thicker quartz which is comformable with bedding plane foliation.									
35	65	massive gabbroic andesite									

)IAMOND DRILL RECO(D

NAME OF PROPE:

HOLE NO. BR-2-84 SHEET NO. 2 of 3

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE %RUEPH IDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS	ASSAYS %	ASSAYS oz ton	ASSAYS oz ton	
65	130	light greenish grey massive tuff with sericite pyrite beds (66-68)										
		increasing density of Qu, up to 40%.	43590		75.0	79.0	4.0			<0.001	0.01	
		76-88 bleaching, sericitization, light coloured tuff										
		79-80 Sample 43578	43578		79.0	80.0	1.0					
		intensely bleached, sericitic tuff with 1-2 mm quartz stringers	43591		80.0	84.0	4.0			<0.001	0.01	
		parallel to bedding plane foliation.	43592		85.5	89.5	4.0			<0.001	0.01	
		- 1-2 mm pyrite cubes constitute up to 70% of thin quartz carbonate veins										
		79-90 intense bleaching										
		81-85 intense bleaching										
		81-84 Sample 43591										
		70-80% py cubes in thinly bedded tuff										
		84-85.5 Sample 43579										
		50% thin 1-2 cm quartz veins lying in place of foliation (at	43593		106.8	110.2	3.4			<0.001	0.01	
		30° to core), containing 50% carbonate	43580		110.2	111.0	0.8					
		- bleached, brown weathering	43594		111.0	112.0	2.0			<0.001	0.01	
		- grey chloritic argillaceous matrix										
		110.2 - 111.0 Sample 43580 main horizon										
		80% carbonate - quartz veins with 2 - 3% pyrite in a bleached argillaceous tuff										
		locally white sugary quartz with chlorite partings										
		112-113 Sample 43576										
		chloritic sericitic tuff with disseminated pyrite	43576		112	113.5						
		and minor pyrrhotite										
			43595		113.5	116				<0.001	0.01	

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)IAMOND DRILL RECO(D

NAME OF PROPE

HOLE NO. RR-2-86 SHEET NO. 3 of 3

FOOTAGE		DESCRIPTION	SAMPLE					ASSAYS				
FROM	TO		NO.	% SULPH IDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	%	%	OZ TON	OZ TON	
135	150	gradational contact to massive dark green fine grained volcanic, no gabbroic texture 1-5% pyrite cubes END OF HOLE										

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Rowan Lake
HOLE NO. BR-3-84 LENGTH 80
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH 000 DIP -40°
STARTED October 26, 1984 FINISHED October 26, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-3-84 SHEET NO. 1 of 2
REMARKS

U. Kretschmar
LOGGED BY

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS %	%	OZ/TON Au	OZ/TON Ag
0	5	Casing									
5	10	weathered massive light green volcanic, disseminated pyrite cubes up to 1-2%									
10	68.5	massive greyish tuff, <1mm diameter composite quartz carbonate drops up to 40% of rock	01		19.0	22.5	2.5			0.012	0.02
		foliated, foliation and thin quartz in plane of foliation at 45-50° to core axis	02		36.8	41.8	5.0		<	0.001	0.01
			03		41.8	45.5	3.7		<	0.001	0.01
		19.8-20.2 quartz up to 2 cm thick typically quartz with carbonate on outside	04		60.0	62.8	2.8			0.001	0.01
		at 20 ft. quartz is 60% of core over 2 ft.	05		62.8	65.8	3.0			0.002	0.01
		pyrite cubes up to 3mm									
		22-29 more greenish coloured with fewer quartz carbonate droplets.									
		32.0 1 cm. quartz vein with epidote alteration									
		37-45 greyish fine-grained tuff with bleached sections prominent	06		65.8	68.0	2.2		<	0.001	0.01
		65-66 main horizon (photo BR-3-84 65 ft.) 80% quartz with carbonate chlorite, sericite, minor bedded pyrite, drop shaped pyrrhotite.									

DIAMOND DRILL RECORD

NAME OF PROPE. _____

HOLE NO. BR-1-84 SHEET NO. _____

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS oz TON	ASSAYS oz TON	
68.5	80.0	at 88.5 gradational contact to massive fine grained dark green andesite with locally gabbroic texture; scattered pyrite cubes 1-2%, up to 5 mm diameter 76.5 cross cutting pyrite vein with quartz, pyrite as cubes										
	80	End of Hole										

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Roman Lake
HOLE NO. BR-4-84 LENGTH 110
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP -55°
STARTED October 23, 1984 FINISHED October 23, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-4-84 SHEET NO. 1 of 3
REMARKS

LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	4	casing									
4	15	massive greenish grey volcanic									
15	32.5	at 15 indistinct gradational contact to grey fine grained tuff with mm size quartz and carbonate droplets									
		24-26.5 complex quartz bearing section (main horizon) with 5 - 6 mm thick horizons, and quartz carbonate horizons up to 10 cm thick	41		23	25.5	2.5			0.007	0.01
		minor disseminated pyrite as cubes	42		30	32.8	2.8			<0.001	0.01
		31.8 - 32.2 quartz carbonate chlorite bed with chalcopyrite main horizon									
32.5	50	massive fine grained gabbroic andesite, thin tuffs interbedded 43-44 possible lapilli textures gradational into tuff down section (down hole)									
50	105	greyish tuff, foliated, foliation at 45° to core axis. 66.5 - 69.0 main horizon accumulation of quartz, chlorite, carbonate also larger number of thin quartz - carbonate horizons	43		67	70.5	3.5			<0.001	0.01
		Sample 44 83-84 main horizon massive sugary quartz, carbonate, chlorite horizon pyrite, as cubes, pyrrhotite and chalcopyrite as blebs in quartz up to 2 - 3% locally.	44		82.0	86.0	4.0			0.105	0.01

LANGMUIR CONSULTANTS TORONTO

DIAMOND DRILL RECORD

NAME OF PROPE: _____

HOLE NO. BR-4 84 SHEET NO. 2 of 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON
		85 - 96 greenish gray, fine grained possibly flow									
		96 - 105 tuff greenish, well foliated, foliation at 45° to core axis, 1-2% pyrite cubes up to 5 mm thin quartz carbonate beds in foliation plane.	45		101.0	105.0	4.0			<0.001	0.02
		104.5 - 105.0 quartz, carbonate, chlorite, no visible sulfides									
105	110	massive gabbroic textured andesite									
	110	End of Hole									

DIAMOND DRILL RECORD

NAME OF PROPERTY: Patmour, Rowan Lake
HOLE NO.: BR-5-84 LENGTH: 90 ft
LOCATION: 75 ft. w of BR-1, BR-2
LATITUDE: DEPARTURE:
ELEVATION: AZIMUTH: DIP: -40°
STARTED: October 28, 1984 FINISHED: October 28, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-5-84 SHEET NO. 1 of 2
REMARKS:
LOGGED BY: U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON	
0	5	Casing										
5	25	massive fine grained andesite										
25	32	30.5 - 31.7 main horizon complex quartz carbonate chlorite zone quartz up to 10 cm minor chalcopyrite	51		29.0	32.7	3.7			<0.001	0.01	
32	43	massive andesite with gradational upper contact ie up hole										
43	84	tuff with numerous thin quartz carbonate horizons	52		44.0	47.3	3.3			<0.001	0.01	
		46.7 - 46.9 7 cm. thick, quartz and carbonate knot										
		43-53 very fine grained grey, slightly bleached tuff										
		53-70 zone of prominent very small quartz carbonate drops elongated and parallel to foliation which is at 55° to core axis.										
		- locally lapilli size fragments										
		- thin pyrite beds common, also some 2-3 mm scattered pyrite cubes										
		75-76 main horizon complex interbedded sugary white quartz, carbonate, light green chlorite, darker argillaceous (carbonaceous?) partings and finely disseminated pyrite. Small scale cross-cutting and "erosional" ? features	53		73.6	76.3	2.7			<0.001	0.01	

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 88-584 SHEET NO. 2 of 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE - SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS oz/ton	ASSAYS oz/ton	
84	90	interbedded tuff and gabbroic textured andesite but predominantly andesite - some 1/2 to 1 cm quartz veins cross cutting - comformable carbonate beds 1 cm thick at 89.0 ft.										
	90	End of Hole										

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Roman Lake
HOLE NO. BR-6-84 LENGTH 110 ft
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH 000 DIP -40°
STARTED October 28, 1984 FINISHED October 28, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-6-84 SHEET NO. 1 of 2
REMARKS

LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON	
0	5	Casing										
5	36	massive green gabbroic textured andesite 15.5 thin tuff horizon (10 cm) and 2 cm composite quartz vein with chlorite partings, foliation = bedding at 60° to core axis										
36	48	at 36 gradational contact to greyish green fine grained tuff 38 - 42.8 main horizon complex quartz-rich horizon (3 photos, BR-6-84 40 ft) many thin conformable quartz beds maximum 15 cm thickness some carbonate beds 1% f.g. disseminated pyrite cubes, chalcopyrite commonly in mm thick beds 39.0 2 cm thick cross-cutting quartz vein	201		37.6	42.8	5.2			0.005	0.12	
48	60	more massive and darker, fine grained volcanic maybe gabbroic flow but some sections have lapilli textures										
60	73	very fine grained greyish argillaceous tuff (ash tuff) thin quartz carbonate stringers in foliation plane at 30° to core axis Not calcareous. Minor pyrite.										
73	100	greyish tuff and lapilli tuff thin beds of pyrite totalling 1-2% common, also scattered euhedral pyrite up to 2 mm.	202		87	89	2.0			<0.001	0.02	

DIAMOND DRILL RECORD

NAME OF PROPERTY BR-6-84 2 of 2

HOLE NO. ________ SHEET NO. ________

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON	
		Sample 202 massive white to translucent quartz and carbonate 17 cm thick minor chlorite. Foliation in quartz at 10° to core axis defined by black chlorite with "suture" texture bedding place foliation in host tuff at 30° to core axis. No visible sulfides.	203		92	95	3.0			<0.001	<0.01	
		Sample 203 about 20% quartz - carbonate, mainly bedding parallel but some thin quartz cross-cutting at shallow angles to bedding. Minor chalcopyrite and pyrrhotite both in thin quartz and in tuff. Also 8 cm thick quartz-carbonate bed at 92 ft.										
		Sample 204 - 50% quartz, carbonate, light green chlorite minor pyrite, chlorite pyrite as cubes	204		98.5	101	2.5			0.001	0.02	
		81 ft. petrographic sample (BR-6-84 84 ft.) tuff with quartz carbonate drops and minor pyrite										
		110 gradational contact greenish grey massive volcanic or tuff. Some quartz carbonate veins cross-cutting										
		Pyrite cubes with carbonate shadows up to 7 mm also thin pyrrhotite, pyrite and quartz-carbonate beds										
		110 End of Hole										

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Roman Lake
HOLE NO. BR-7-84 LENGTH 90 ft
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH 000 DIP -40°
STARTED October 29, 1984 FINISHED October 29, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-7-84 SHEET NO. 1 of 2
REMARKS

LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON
0	8	Casing									
8	17	greyish green very fine calcareous tuff with quartz carbonate drops and conformable v. thin quartz carbonate layers									
		8-10 >60% quartz - carbonate - chlorite in conformable lenses (Qu) with pyrite up to 5mm and minor chalcopyrite blebs in one quartz layer									
17	30	darker green, more massive gabbroic textured volcanic 28-30 gradational contact with tuff									
30	74	fine grained grey tuff increased amounts of quartz - carbonate in following: 31.0-33.0, 46.5-49.5, 51-54, 55.5-59.0									
		214 6" section of quartz-carb-chlorite and bedded cubic pyrite	214		31.0	33.0	2.0			0.001	0.01
		205 30% quartz - carbonate									
		206 40% quartz - carbonate									
		207 bedded sulfidic tuff sections w. py, po, minor cp, 20% quartz-carbonate									
		215 20% quartz - carbonate	205		46.5	49.5	3.0			0.001	0.01
		43-45 intense bleaching, carbonate alteration silicification confined to 1/2 to 1 cm thick beds	206		51	54	3.0			0.001	0.01
			207		55.5	59.0	3.5			0.001	0.01

DIAMOND DRILL RECORD

NAME OF PROP _____

HOLE NO. 88-7-84 SHEET NO. 2 of 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON	
		minor pyrite, occasional cross cutting quartz-carbonate vein.										
		70.5 - 72.3 thick pure white quartz with dark green chlorite, minor pyrite, chalcopyrite, pyrrhotite overlain by increasingly thinner quartz - carbonate beds.	215		70.5	72.3						
74	90	massive dense green gabbroic textured volcanic gradational contact at 74.										
	90	End of Hole										
		Core stored at Nuinsco Monte Cristo camp Rowan Lake.										

LANGPROCES – FORM 113 – 356 11M

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Roman Lake

HOLE NO. BR-8-84 LENGTH 110 ft.

LOCATION

LATITUDE DEPARTURE

ELEVATION AZIMUTH DIP -55°

STARTED October 30, 1984 FINISHED October 30, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-8-84 SHEET NO. 1 of 2

REMARKS

U. Kretschmar

LOGGED BY

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON
0	5.5	Casing									
5.5	20	greenish grey tuff. Bedding plane foliation at 50° to core axis Sample 208 Significant quartz (about 60%) mainly as conformable beds up to 5 cm thick. Quartz is generally white, contains some chloritic argillaceous material. VG, five pinheads Au is associated with white carbonate (calcite?) and grey carbonate (ankerite?)	208		6.5	9.5	3.0	Reassay		0.12 0.121	<0.01
20	37	at 20 grades into gabbroic textured volcanic, both upper and lower contact (may be a lapilli tuff)									
37	95	greyish tuff, or ash fall tuff both upper and lower contacts are gradational and indistinct. Thin pyrite and quartz - carbonate beds common throughout. Sample 209 Greyish quartz chlorite bed up to 8 cm thick (true). no visible sulfides Host is chloritic tuff with 1 - 2% euhedral pyrite cubes up to 2 mm diameter Sample 210 pyrite-quartz beds in a v.f.g. greyish ash fall tuff. Pyrite as cubes up to 2mm thick, some with quartz shadows foliation at 30° to core axis	209		40.8	42.5	1.7			<0.001	<0.01

LANGFORDS - TORONTO - 366 1168

DIAMOND DRILL RECORD

NAME OF PROPE /

HOLE NO. BR-8-84 SHEET NO. 2 of 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON
		Sample 211 Main horizon 65-66.5 massive quartz - carbonate - chlorite-pyrite. Pyrite occurs on irregular fracture planes. Sample contains 60 - 70% quartz	210		58.5	60.9	2.4			<0.001	<0.01
		Sample 216 similar to above but less quartz. Also more cubic pyrite as thin beds. Well bedded tuff with quartz - carbonate beds and 3 types of chlorites. Dark green, pale green, rusty.	211		64.7	67.2	2.5			<0.001	<0.01
			216		67.2	70.0	2.8			<0.001	
		Sample 212 similar to above, but more chemical sediment consisting of thin pyrrhotite-pyrite carbonate quartz beds with chlorite	212		80.0	81.7	1.7			<0.001	
95	110	massive darker green volcanic occasional quartz veins (cross-cutting foliation) Vague gabbroic textures locally scattered euhedral pyrite cubes.									
	110	End of Hole									

DIAMOND DRILL RECORD

NAME OF PROPERTY Patapour, Roman Lake

HOLE NO. BR-9-84 LENGTH 100 ft

LOCATION

LATITUDE DEPARTURE

ELEVATION AZIMUTH DIP -40°

STARTED October 23, 1984 FINISHED October 24, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-9-84 SHEET NO. 1 of 2

REMARKS

LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON	
0	8	Casing										
8	18	greenish chloritic tuff with numerous quartz stringers and quartz carbonate droplets. Bedding plane foliation at 45°	217		14.0	18.2	4.2			<0.001		
		Sample 217 30 - 40% quartz-carbonate Stringers up to 1.5 cm thick Minor scattered pyrite. Host is a dark green chloritic tuff. Quartz is pure white and chlorite is green. Also one 2.5 cm cross cutting quartz vein, cutting at shallow angle. This is same sequence as Sample 208 with V.G.										
18	35.5	massive green volcanic, probably tuff but locally gabbroic textures. 23.1 - 23.5 60% quartz beds also chlorite 30 epidote stringers with quartz 1 cm quartz veins (cross-cutting) at 29.2 and 27.5										
		35.5 - 36.0 quartz - chlorite accumulation with minor chalcopyrite at top of thick tuff section										
35.5	45	grey tuff with quartz-carbonate droplets, thin beds and 1% pyrite cubes throughout.										
		Sample 218 mainly tuff										
		38.5 - 39.4 50% quartz carbonate beds with cubic pyrite	218		37.5	40.0	2.5			<0.001		
		- one 1.5 cm quartz vein										

LANGMUIR'S - (CONTINUED) - 366 HIGH

DIAMOND DRILL RECORD

NAME OF PROPE. _____

HOLE NO. BR-9-84 SHEET NO. 2 of 2

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPH IDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS oz TON	ASSAYS oz TON	
		Sample 219 mainly tuff includes 44.0 - 44.4 1mm thick pyrrhotite 44.0 - 44.4 1 mm thick pyrrhotite - chalcopyrite - pyrite bed or vein. Seems to be slumped or folded.	219		42.0	45.2	3.2			<0.001		
		45-49 ash fall tuff with good bedding at 40° to core axis 47.4 - 47.7 petrographic sample showing sedimentary textures in quartz, carbonate - chlorite beds. Also 1 cm cross-cutting quartz vein.										
		Sample 220 mainly tuff with v. fine quartz-carbonate droplets but includes 1 cm quartz-carbonate pyrite bed at 56.2 and 4 cm white quartz carbonate cross-cutting vein at 56.0 ft.	220		55.0	58.2	3.2			<0.001		
		60 slight increase in amount of pyrite as cubes and as thin beds in grey tuff										
71	85	gradational contact to green massive volcanic, probably tuff 71.0 1/2 cm thick pyrrhotite - pyrite - chalcopyrite - quartz bed with interstitial brown weathering carbonate. Geochem. Sample 221	221 geochem. only		70.7	70.8	0.01					
85	110	massive fine grained greenish volcanic not very different from 71-85. Contacts are gradational and indistinct but from 90 - 100 becomes increasingly coarse grained and at 100 is definitely gabbroic.										
	100	End of Hole	222		75.8	78.5	2.7			<0.001		

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Rowan Lake
HOLE NO. BR-10-84 LENGTH 80 ft
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP
STARTED November 3, 1984 FINISHED November 3, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-10-84 SHEET NO. 1 of 2
REMARKS

U. Kretschmar
LOGGED BY

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON	
0	5	Casing										
5	6.5	green chloritic tuff with many quartz stringers, several specks of chalcopyrite	223		5	6.5	1.5					
		Sample 223: clear quartz crystals in a sugary white quartz matrix but stringers are OU. Minor chalcopyrite specks. Also carbonate matrix.										
6.5	24	massive green volcanic with locally gabbroic locally lapilli textures. Also thin tuff beds										
24	27	gradational contact from massive volcanic to grey tuff										
27	80	grey tuff with many quartz stringers, thin pyritic beds and thin green or bleached sections										
		Sample 224 31.5 - 32.5 massive sugary white quartz, minor black chloritic partings perpendicular to bedding. Overlain by disrupted quartz beds, green chlorite layers. Quartz has 1% v.f.g. pyrite as cubes and overlying chlorite has thin pyrite beds. Tuff also has v.f.g. disseminated pyrite cubes with quartz shadows No chalcopyrite seen.	224		30	33.2	3.2			0.003		
		Sample No. 225 60-70% quartz beds, bleached tuff beds and at 34.2 argillite beds, disrupted	225		33.2	36.6	3.4			0.008		

DIAMOND DRILL RECORD

NAME OF PROPE

HOLE NO. BR-10-84 SHEET NO. 3 of 3

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPH IDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON
		31.5 - 36.6 large amount of quartz, almost quartzite in groundmass, with chlorite beds. Carbonate rhombs have segregated									
		Sample 226 several thin pyrite beds with v.f.g. cubic pyrite. Quartz, carbonate and bleached chlorite-sericite sections 47.5 - 52.5 grey fine grained ash tuff, locally well bedded and slightly bleached.	226		48	50	2.0			<0.001	
		Sample 227 A distinct 3 - 4 mm thick beds of quartz-carbonate with cubic pyrite. Also one thicker bed of quartz-carbonate (5 cm)	227		50.0	52.4	2.4			<0.001	
		Sample 228 61.1 - 61.6 thick quartz chlorite bed underlain at 63 by numerous thinner beds up to 2 cm. Some thin po-rich beds. Also po blebs in tuff. Very po-rich, minor cp.	228		60.5	63.8	3.3			0.005	
		Sample 229 one 6 cm thick (true) quartz unit from 71.2 - 71.4 with 50% carbonate, minor pyrrhotite, chalcopyrite in QU and host tuff	229		70	71.5	1.5			<0.001	
		Sample 230 main horizon 75.8 - 76.4 in this sample massive white quartz - irregular minor py in tuff Q is sugary quartz-chlorite. Very thin pyrrhotite - chalcopyrite drops in 1 - 2 mm quartz - carbonate beds.	230		74.3	77.3	3.0			<0.001	
		Sample 231 76.1 - 78.4 main quartz - carbonate bed also several thinner in interval. Minor pyrrhotite blebs in one QU. top of thickest QU is indented and filled in with carbonate-chlorite. - bottom may show cross-cutting or erosional features. Hole ends in tuff	231		77.3	80	2.7			<0.001	
	80	End of Hole									

DIAMOND DRILL RECORD

NAME OF PROPERTY Patmour, Rowan Lake
HOLE NO. BR-11-84 LENGTH 120 ft
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP -55°
STARTED November 3, 1984 FINISHED November 3, 1984

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. BR-11-84 SHEET NO. 1 of 3
REMARKS
LOGGED BY U. Kretschmar

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON	
0	5	Casing										
5	7	Zone 2 carbonate-quartz accumulation in green chloritic tuff										
		Sample 232 white quartz and calcite in green chloritic tuff. Some XC veins. Abundant calcite. Minor pyrite cubes	232		5.0	7.0	2.0			<0.001		
7	12.5	green tuff with quartz carbonate drops. Massive. Vague grading upwards from 12.5										
12.5	29.2	massive gabbroic volcanic thin tuffaceous quartz-rich interval at 17 ft. cross-cutting quartz-carbonate vein at 18.0 bleached epidote, quartz-chlorite knot at 22.0 lower contact is downhole contact gradational 29.2 - 29.4 massive quartz chlorite knot. Not bedded. May represent disrupted quartz unit.										
29.2	40	massive greenish tuff with quartz-carbonate drops and finer grained, well-bedded tuff.										
40	50	grey tuff with many quartz units, some thin bleached beds	233		40.7	45.7	5.0			0.006		
		Sample 233 60 - 70% quartz in a 5 ft. section including massive quartz-carb. from 41.6 - 42.6. Some argillaceous irregular chloritic inclusions. Quartz-carbonate droplets very abundant in entire section. Only minor pyrite seen as euhedral scattered crystals. 1 speck of chalcopyrite in massive quartz. Also black "chlorite" ? in massive quartz.										

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPE /

HOLE NO. RR-11-84 SHEET NO. 2 of 3

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE * SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS				
								%	%	oz Toa	oz Toa	
		Sample 234 Similar to 233 but only 20 - 30% quartz in green chloritic tuff	234		45.7	49.6	3.9			<0.001		
		Sample 235 v.f.g. greyish green tuff with thin quartz-carbonate beds and minor pyrite. Petrographic sample shows asymmetric bleaching and draping of overlying tuff over quartz carbonate bleb. Minor pyrite in quartz.	235		60	62	2.0			0.002		
		63 soft sediment slump or deformation										
		Sample 236 Mainly f.g. bleached greyish to buff tuff with pyrite rich beds 2 - 3 mm thick. No other sulfides.	236		63.7	66.5	2.8			<0.001		
		66.5 - 70.0 some pyritic quartz-carbonate beds 2 - 3 mm thick 70 - 80 coarser very calcareous tuff grey, spotted with 1-2% pyrite cubes and occ. thin beds.										
		Sample 237 85-88 50% quartz in green grey calcareous tuff. No sulfides other than pyrite	237		85	88.0	3.0			<0.001		
		Sample 238 similar to 237, pyrite cubes 1 - 2% up to 5 mm diameter. No sulfides other than pyrite	238		88.0	91.3	3.3			<0.001		
		bedding place foliation at 35° to core axis										
		Sample 239 50 - 60% quartz in green chloritic tuff at 102.1 - 102.4 quartz-carbonate bed with pyrrhotite, minor pyrite.	239		100	103	3.0			0.001		
		Sample 240 20 - 30% quartz, mainly two 5 & 6 cm quartz veins at 110.3 and 111.5. Thin chalcopyrite-rich pyritic bed at 111.0	240		110	112.3	2.3			0.003		

DIAMOND DRILL RECORD

NAME OF PROPERTY BR-11-84 3 of 3

HOLE NO. ______ SHEET NO. ______

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ TON	ASSAYS OZ TON	
		Sample 241 116.3 - 117.1 60 - 70% quartz - carbonate in green chloritic tuff. This section looks good. There is a 5 cm section with 10 - 20% finely disseminated chalcopyrite and also some above (up hole).	241		116.0	117.9	1.9			<0.001		
117.5	118.5	gradational contact and graded bedding fining up hole										
118.5	120	massive green medium grained gabbroic volcanic										
	120	End of Hole										

LANGRIDGES - TORONTO

APPENDIX B
ORIGINAL ASSAY AND GEOCHEMICAL DATA

PAUL'S CUSTOM FIRE ASSAYING LTD.

Phone: Bus. (807) 662-
Res. (807) 662-

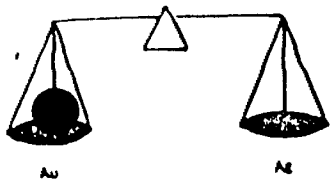
PAUL OKANSKI, Assayer
Box 253, Cochenour, Ontario P0V 1L0

Eigstone Minerals Ltd. **ASSAY CERTIFICATE** Date: Dec. 28-84

	Sample No.	Description	oz/ton Au	oz/ton Ag
1	GY-51		Trace	
2	55		"	
3	56		"	
4	59		.02	
5	60		Trace	
6	S-452	Patmore	"	
7	54		"	
8	65		"	
9	43574 ✓		"	.IL
10	43577 ✓		"	"
11	78 ✓		"	"
12	79		"	"
13	80		"	"
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

AN 7 385

Assayer Paul Okanski



PAUL'S CUSTOM FIRE ASSAYING LTD.

Phone: Bus. (807) 662-8
Res. (807) 662-3

PAUL OKANSKI, Assayer
Box 253, Cochenour, Ontario P0V 1L0

Bigstone Minerals

ASSAY CERTIFICATE

Date: Oct. 29-84

	Sample No.	Description	oz/ton Au	oz/ton Ag
1	43571		.03	NIL
2	72		Trace	"
3	73		"	"
4	74		"	"
5	75		"	"
6	76		"	"
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
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22				
23				
24				
25				

Rotunda

JAN 18 1985

Assayer Paul O Okanski

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada [illegible] 8X5
Phone [illegible] 749-2220
Telex 053-3233

BONDAR-CLEGG

Certificat of Analys

3249

REPORT: 414-3185 3303

PROJECT: PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au O/T	Ag O/T	NOTES
01		0.012	0.02	
02		<0.001	0.01	
03		<0.001	0.01	
04		0.001	0.01	
05		0.002	0.01	
06		<0.001	0.01	
41		0.007	0.01	
42		<0.001	0.01	
43		<0.001	0.01	
44		0.105	0.01	
45		<0.001	0.02	? Ag Cu Pb Zn
43581		<0.001	0.01	1.95 95 95 95
43582		<0.001	0.01	
43583		<0.001	0.01	
43584		<0.001	0.01	
43585		<0.001	0.02	
43586		<0.001	0.01	
43587		<0.001	0.01	
43588		<0.001	0.01	
43589		<0.001	0.01	
43590		<0.001	0.01	
43591		<0.001	0.01	
43592		<0.001	0.01	
43593		<0.001	0.01	
43594		<0.001	0.01	
43595		<0.001	0.01	
51		<0.001	0.01	
52		<0.001	<0.01	

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Telex: [redacted]

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Geochemic
Lab Repo

PATMONT Resources

REPORT: 914-5160

PROJECT:

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPB	NOTES
01		138	7	61	0.2	715	
02		46	4	80	0.3	15	
03		53	5	117	0.2	<5	
04		77	6	126	0.1	5	
05		123	5	126	0.4	90	
06		157	4	106	0.3	<5	
41		102	3	59	0.2	180	
42		97	3	57	<0.1	5	
43		75	4	60	0.1	<5	
44		129	3	149	0.2	4210	
45		85	5	85	0.1	5	
51		101	5	64	0.2	40	
52		92	3	74	0.1	20	
43581		109	5	57	0.2	5	
43582		81	3	57	0.1	<5	
43583		167	5	185	0.2	10	
43584		29	5	34	<0.1	<5	
43585		117	3	109	0.2	5	
43586		158	4	92	0.3	<5	
43587		140	5	148	0.1	<5	
43588		126	3	235	0.2	<5	unknown to us
43589		130	5	64	0.3	20	
43590		35	10	230	0.1	<5	
43591		45	6	169	0.2	<5	
43592		140	7	240	0.2	5	
43593		144	5	87	0.2	<5	
43594		195	5	182	0.3	5	
43595		106	4	132	0.2	<5	

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Telex: 053-[illegible]

BONDAR-CLEGG

Geochemica
Lab Repor

REPORT: 014-3185

FROM: GIBSTORE MINERALS LIMITED
DATE: 16-NOV-84 PROJECT:

SUBMITTED BY: D. KRETCHMAR

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200	PREPARED PULP	AS RECEIVED, NO SP
02	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
03	Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
04	Ag	.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
05	Au	5 PPB	AQUA REGIA	Fire Assay AA	-200		

REPORT COPIES TO: WAYNE WHYMARK
D. KRETCHMAR

INVOICE TO: WAYNE WHYMARK

REMARKS: C.C. READ [illegible] FOR INFO

NOTE:
SAMPLE WEIGHT OF 30 GRAMS USED FOR
GOLD DETERMINATION UNLESS OTHERWISE
STATED.
CHECK CONCENTRATION/SAMPLE WEIGHT
RATIO FOR EFFECTIVE DETECTION LEVEL.

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
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Telex [redacted]233

BONDAR-CLEGG

Certificat
of Analysi

Patmore

REPORT: 414-3249

PROJECT:

SAMPLE NUMBER	* ELEMENT UNITS	Au O/T	Ag O/T	NOTES
53		<0.001	0.02	
201		0.005	0.01	
202		<0.001	0.02	
203		<0.001	0.01	
204		0.001	0.01	
205		<0.001	0.01	
206		<0.001	0.01	
207		<0.001	0.01	
208		0.121	0.01	
209		<0.001	0.01	
210		<0.001	<0.01	
211		<0.001	<0.01	
212		<0.001	0.01	
214		<0.001	0.01	
215		<0.001	0.01	

R. Dalton

Bondar-Clegg & Company Ltd.
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Ottawa, Ontario,
Canada [illegible] 8X5
Phone [illegible] 749-2220
Telex [illegible] 233

BONDAR-CLEGG

Certificate of Analysis

REPORT: 414-3249

FROM: PIGSTONE MINERALS LIMITED
DATE: 07-AUG-84 PROJECT:

SUBMITTED BY: U. KRETSCHMAR

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
01	Au	.001 O/T				DRILL CORE	Sample Preparation
02	Ag	.01 O/T					

REPORT COPIES TO: U. KRETSCHMAR,

INVOICE TO: U. KRETSCHMAR,

REMARKS: < MEANS LESS THAN.

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada [redacted]X5
Phone: [redacted]49-2220
Telex: 053-3243

BONDAR-CLEGG

Geochemic
Lab Repo

GEOCHEM / PATMOUR

REPORT: 014-3249

PROJECT: PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB	NOTES
53 ✓		126	4	101	0.2	25	
201		163	<2	60	0.2	420	
202		152	3	90	0.1	5	
203		143	5	79	0.1	<5	
204		98	3	60	0.2	35	
205		77	5	91	<0.1	5	
206		99	4	126	0.1	<5	
207		101	<2	128	<0.1	<5	
208		77	2	47	0.1	2845	
209		139	2	44	0.1	5	
210		54	2	94	<0.1	<5	
211		46	<2	58	<0.1	15	
212		77	2	141	0.1	5	
214		55	3	55	0.1	10	
215 ✓		54	4	54	0.1	5	

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Phone: [redacted] 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemi
Lab Rep

REPORT: 81A-5249

FROM: SILVERADO MINERALS LIMITED SUBMITTED BY: U. KRETSCHMAR
DATE: 14-NOV-84 PROJECT:

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARAT
01	Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200	PREPARED PULP	AS RECEIVED, NO SP
02	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
03	Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
04	Ag	.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
05	Au	5 PPB	AQUA REGIA	Fire Assay AA	-200		

REPORT COPIES TO: WAYNE WAYNARK
V. PEETOOM

INVOICE TO: U. KRETSCHMAR,

* SIGNIFICANT RESULTS LESS THAN

NOTE:
SAMPLE WEIGHT OF 30 GRAMS USED FOR GOLD DETERMINATION UNLESS OTHERWISE STATED.
GOLD CONCENTRATION/SAMPLE WEIGHT RATIO FOR EFFECTIVE DETECTION LEVEL.

6

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Certificate of Analysis

Patterson

REPORT: 414-3303 | PROJECT: | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au O/T	NOTES
216		<0.001	
217		<0.001	
218		<0.001	
219		<0.001	
220		<0.001	
222		<0.001	
223		<0.001	
224		0.003	
225		0.008	
226		<0.001	
227		<0.001	
228		0.005	
229		<0.001	
230		<0.001	
231		<0.001	
232		<0.001	
233		0.006	
234		<0.001	
235		0.002	
236		<0.001	
237		<0.001	
238		<0.001	
239		0.001	
240		0.003	
241		<0.001	

Ken Cantlon

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Ottawa, Ontario,
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Telex: 053-[redacted]

BONDAR-CLEGG

Geochemic[al]
Lab Repo[rt]

PATMOUR

REPORT: 014-3303

PROJECT:

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB	NOTES
216 ✓		96	3	126	0.4	<5	
217		130	12	65	0.2	<5	
218		500	4	73	0.6	15	
219		395	3	37	0.7	10	
220		101	4	93	0.4	<5	
222		112	4	107	0.3	<5	
223		129	6	59	0.3	5	
224		58	6	56	0.4	175	
225		117	5	66	0.3	345	
226		93	7	80	0.2	10	
227		117	7	57	0.3	5	
228		122	4	152	0.2	150	
229		119	2	128	0.2	25	
230 ✓		117	4	121	0.4	<5	
231 ✓		74	6	72	0.2	5	
232		63	5	46	0.1	15	
233		63	4	63	0.4	280	
234		116	5	76	0.3	20	
235		55	7	79	0.1	70	
236		86	6	93	0.2	<5	
237		103	4	126	0.4	<5	
238		125	6	110	0.3	<5	
239		97	7	91	0.3	25	
240		150	5	77	0.3	65	
241 ✓		975	3	315	0.2	20	

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Telex: 053-[illegible]

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Geochemical Lab Report

REPORT 84-3303

FROM: BIGSTONE MINERALS LIMITED
DATE: 16-NOV-84 PROJECT:

SUBMITTED BY: D. KRETSCHMAR

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
01	Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200	PREPARED PULP	AS RECEIVED, NO SP)
02	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
03	Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
04	Ag	.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
05	Au	5 PPB	AQUA REGIA	Fire Assay AA	-200		

REPORT COPIES TO: WAYNE WHYMARK
D. KRETSCHMAR

INVOICE TO: WAYNE WHYMARK

REMARKS: < MEANS LESS THAN

NOTE:
SAMPLE WEIGHT OF 20 GRAMS USED FOR GOLD DETERMINATION UNLESS OTHERWISE STATED.
CHECK CONCENTRATION/SAMPLE WEIGHT RATIO FOR EFFECTIVE DETECTION LEVEL.

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BONDAR-CLEGG

Geochem
Lab Rep

PATMOUR Rowan

REPORT: 014-3307

PROJECT:

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB	NOTES
221		118	5	3810	0.3	<5	

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Phone: (61[illegible] 2220
Telex: 053-[illegible]

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 014-3307

FROM: BIGSTONE MINERALS LIMITED
DATE: 12-NOV-84 PROJECT:

SUBMITTED BY: U. KRETSCHMAR

ORDER	ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
01	Cu	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200	DRILL CORE	CRUSH,PULVERIZE -200
02	Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
03	Zn	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
04	Ag	.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-200		
05	Au	5 PPB	AQUA REGIA	Fire Assay AA	-200		

REPORT COPIES TO: U. KRETSCHMAR,
8 KING STREET EAST,

INVOICE TO: 8 KING STREET EAST,

REMARKS: < MEANS LESS THAN

NOTE:
SAMPLE WEIGHT OF 20 GRAMS USED FOR GOLD DETERMINATION UNLESS OTHERWISE STATED.
CHECK CONCENTRATION/SAMPLE WEIGHT RATIO FOR EFFECTIVE DETECTION LEVEL.

APPENDIX C

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, 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 area 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 <u>low</u>).

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. There appear to be at least two 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) appear to reflect another distinctive process. 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. This suggests that 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 particular subject from Kerrich (1983, p.64) is presented below:

> The possibility of lateral secretion of material into veins from their enclosing volcanic rocks (Hurst, 1935; Boyle, 1961, 1976) may be evaluated with reference to the rate equations which describe possible independent mechanisms of chemical transport. Chemical transport through the crust may occur by means of: (1) solid-state diffusion through crystalline structures; (2) grain-boundary diffusion; and (3) hydrothermal transport in solution.
>
> An approximation of the characteristic transport distance ($\bar{X}$) in a diffusive process is given by: $\bar{X} = (2Dt)^{0.5}$, where D is the coefficient of diffusion at a specified temperature and t is time in seconds. The coefficients of solid-state diffusion, and grain-boundary diffusion through an inter-granular fluid, at temperatures of 500°C are of the order of 10^{-20} cm^2s^{-1} and 10^{-6} cm^2s^{-1}, yielding characteristic transport distances of 800 μm and 80 m respectively over a time interval of 10^6 years (Fletcher and Hofmann, 1974; Fisher and Elliott, 1974; Ildefonse and Gabis, 1976). This distance of

grain-boundary diffusion is too small by a factor of 100 in view of the calculations on gold transport given by Helgeson and Garrels (1968), Fyfe and Henley (1973), and Kerrich and Fryer (1979). The driving force for lateral diffusion is presumed to be gradients of chemical potential from wall rocks into dilatant zones of lower pressure and chemical potential. However, as discussed in a previous section, it can be deduced from structural relations that many auriferous vein systems underwent incremental opening under conditions of anomalously high fluid pressure, where $P_{fluid} > P_{wall\ rock}$. If the inferred hydraulic pressure relations are correct, then the very basis of lateral secretion is invalidated for the case of auriferous veins. Anomalously high fluid pressures in veins, with limited penetration into wall rocks, is entirely consistent with the gradients in element abundances, redox and $\delta^{18}O$ in a direction orthogonal to the vein boundaries.

The 'lateral diffusion' or 'lateral secretion' mechanism has been supported by Wanless et al. (1960), and independently advanced by Roslyakova and Roslyakov (1972) to account for a large number of Russian lode gold deposits. However, Ames (1964) and Ridge (1968) argue that none of the data reported by Boyle (1961) in support of 'lateral diffusion' are incompatible with a hydrothermal origin for the deposits.

In addition, the hypothesis of lateral diffusion is difficult to reconcile with the following observations: (a) Adjacent to vein margins the profiles of gold and silica abundances, representing the putative chemical potential gradients to drive diffusion, are opposed according to the diagrams of Boyle (1961, 1979), and yet these two components are both interpreted to have diffused into the veins. (b) The inferred depletion of Al_2O_3 in dilatant zones would require diffusion of this low-mobility component out of the system coupled with diffusion of silica in (c) Lateral diffusion is not consistent with the oxygen isotope data, which indicate isotopic equilibrium of veins and immediate wall rocks, but disequilibrium of these with country rocks at distances of $\geq$20 m from veins. (d) This proposed

diffusion mechanism does not account for the highly reduced state of wallrocks, (e) nor for the observed separation of base metals from rare elements, nor (f) for the predominance of lode gold deposits in greenstone belts vs. Phanerozoic and Proterozoic metamorphic belts.

Finally, if lateral diffusion operated, a relationship might be anticipated between the distinctive trace-element suits of various rock types and their abundances in veins, but this is not the case (Tables 1 and 2). For instance, lead does not exhibit preferential enrichment in veins traversing felsic igneous rocks, nor is copper more abundant in mafic-hosted veins (Table 2). *

It is clearly important to understand the genesis of gold deposits because this will determine how one looks for them.

*NOTE: The complete references cited by Kerrich may be obtained from the original article or from Ulrick Kretschmar on request.

Ministry of Natural Resources
Ontario

Report of Work

Assess
ROWAN LAKE
#157-85

The Mini

52F05SE0057 36 ROWAN LAKE

900

Name and Postal Address of Recorded Holder

BIGSTONE MINERALS LTD. | T 1703

#1703 - 8 King Street East, Toronto, Ontario M5C 1B5

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed: ~~800~~ 795

for Performance of the following work. (Check one only)

- [ ] Manual Work
- [ ] Shaft Sinking Drifting or other Lateral Work.
- [ ] Compressed Air, other Power driven or mechanical equip.
- [ ] Power Stripping
- [x] Diamond or other Core drilling
- [ ] Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
K	697711	53	K	728771	53			
	727136	53		728772	53			
	727828	53		728773	53			
	728460	53		728783	53			
	728524	53		728784	53			
	728555	53		728785	53			
	728557	53		728801	53			
	728558	53						

All the work was performed on Mining Claim(s): K 697711

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
RESEARCH OFFICE
AUG 0 2 1985
RECEIVED

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

DIAMOND DRILLING

Core Logs included in attached signed report.

Drilling Company: Ultra Mobile Diamond Drilling Ltd.
12708 - 24th Avenue
Surrey, British Columbia
V4A 2E6

Date of Drilling: October 21 - November 4, 1984

Work Sketch included in attached signed report.

DIV.
JUL 29 1985
AM Postmarked PM
7 8 9 10 11 12 1 2 3 4 5 6
July 25/85

Date of Report: July 23, 1985
Recorded Holder or Agent (Signature): [signature]
President

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 - 8 King Street East, Suite 1703, Toronto, Ontario M5C1B5

Date Certified: July 23, 1985
Certified by (Signature): [signature]

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment. 697711	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment		
Power Stripping	Type of equipment and amount expended. **Note:** Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

LEGEND

- 4a — Gabbroic flows, possibly Komatiitic
- 1a — Pillowed andesite
- 1c — Tuff
- 1d — Hyaloclastite breccia
- 1e — Feldspar crystal lapilli tuff

■ Claim post, located

Strike and dip of bedding top determination from pillow shape

ROWAN LAKE

L 20W

L 24W

L 28W

L 32W

L 36W

BOULDER

Q. carb. py ribbon cht.

Q. carb fuchsite

Cht.

cht.

leucogabbro

Patmour Showing
Fig. 5, 6

Au

Tr. 1

Tr. 2

BR-9-84

BR-10-84

BR-11-84

Section 3

Section 2

BASE LINE

85°

N

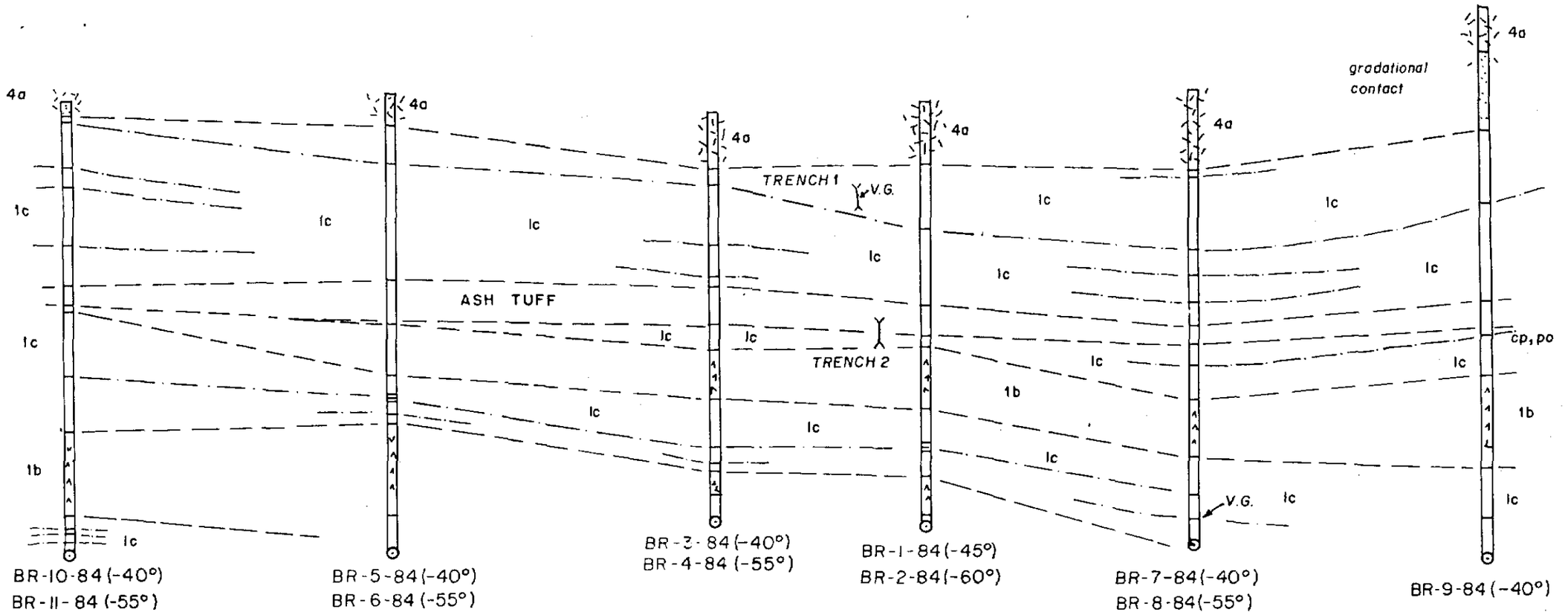
Compilation based on work by S. Sears et al., O.D.M. P831
with additons by U. Kretschmar

Feet 0 400 800 Feet

Metres 0 100 200 Metres

Fig. 4, Geology near Patmour Showing, Rowan Lake

ROWAN LAKE DDR #36



LEGEND

- 1b — Massive andesite
- 1c — Tuff
- 4a — Gabbroic flow
- Conformable quartz chlorite, carbonate

SCALE 1:240

0 20 40 60 FEET

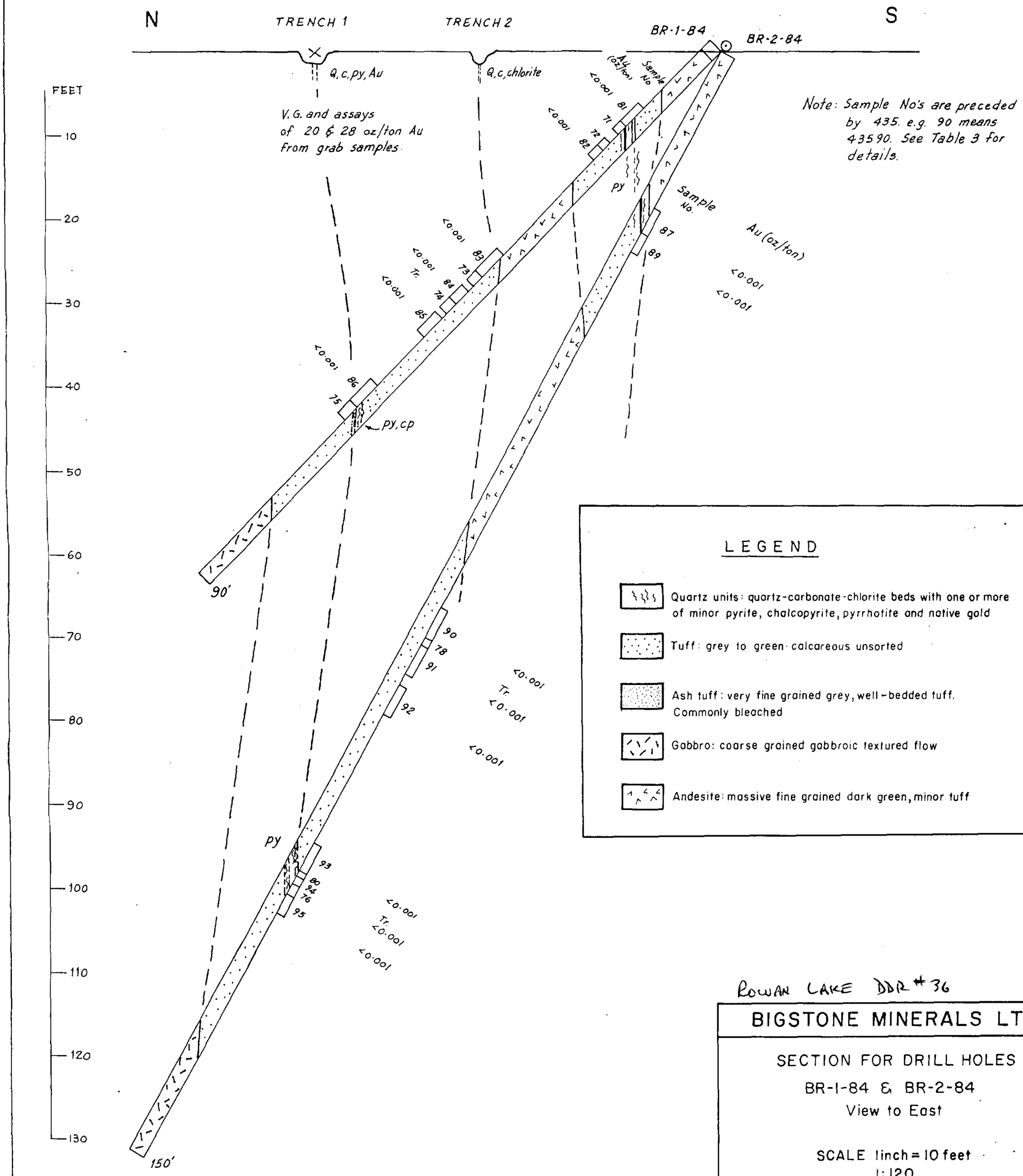
0 10 20 METRES

N

Fig. 6 Horizontal Projection of Geology in DH. BR-1 to BR-11 Patmour Showing, Rowan Lake, Ontario

ROWAN LAKE DDR #36

Geology by: U. Kretschmar
Oct. 1984



LEGEND

- Quartz units: quartz-carbonate-chlorite beds with one or more of minor pyrite, chalcopyrite, pyrrhotite and native gold
- Tuff: grey to green calcareous unsorted
- Ash tuff: very fine grained grey, well-bedded tuff. Commonly bleached
- Gabbro: coarse grained gabbroic textured flow
- Andesite: massive fine grained dark green, minor tuff

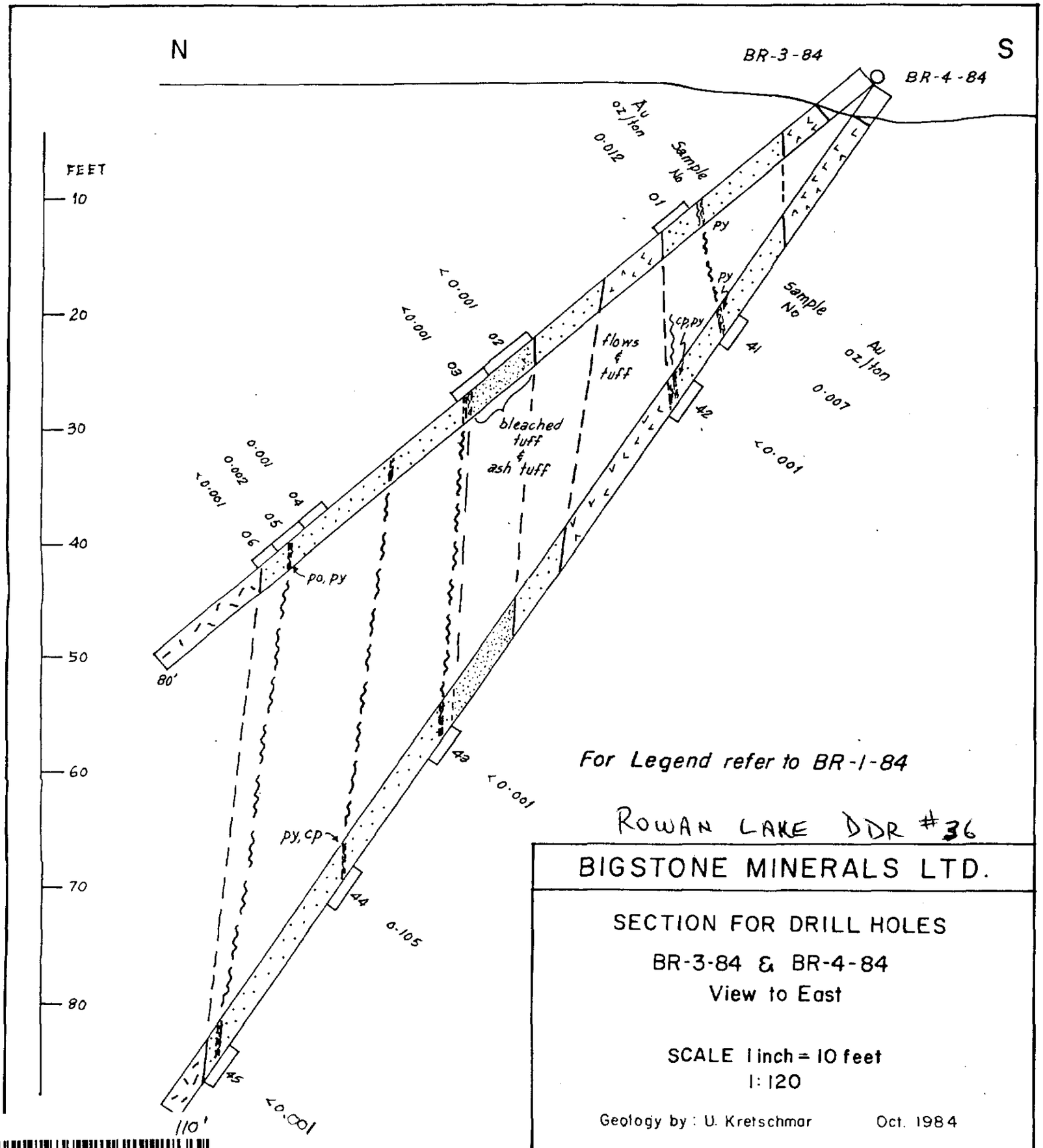
ROWAN LAKE DDR #36

BIGSTONE MINERALS LTD.

SECTION FOR DRILL HOLES
BR-1-84 & BR-2-84
View to East

SCALE 1inch = 10 feet
1:120

Geology by: U. Kretschmar Oct. 1984



ROWAN LAKE DDR #36

BIGSTONE MINERALS LTD.

SECTION FOR DRILL HOLES

BR-3-84 & BR-4-84

View to East

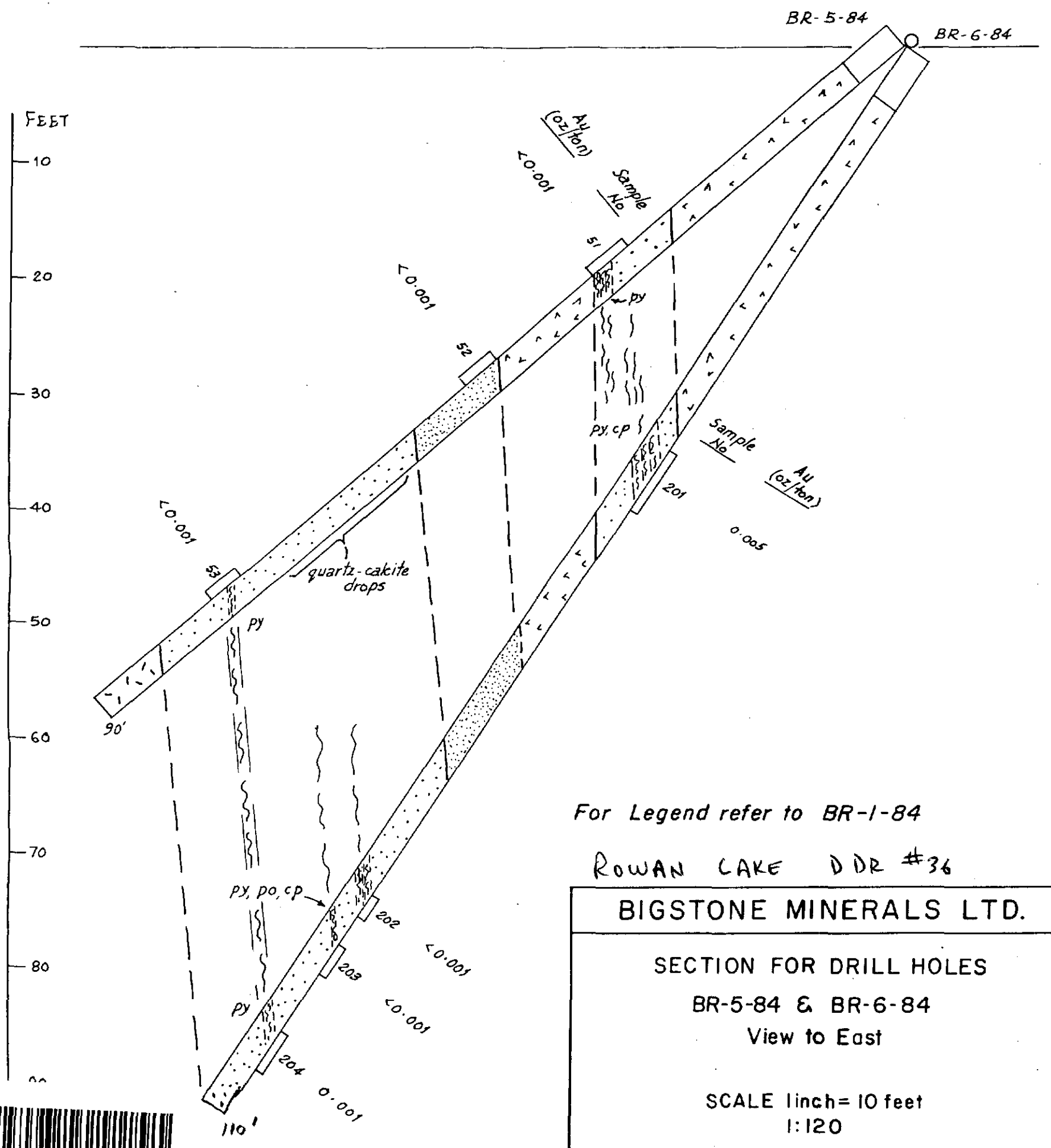
SCALE 1 inch = 10 feet

1:120

Geology by : U. Kretschmar Oct. 1984

N

S



For Legend refer to BR-1-84

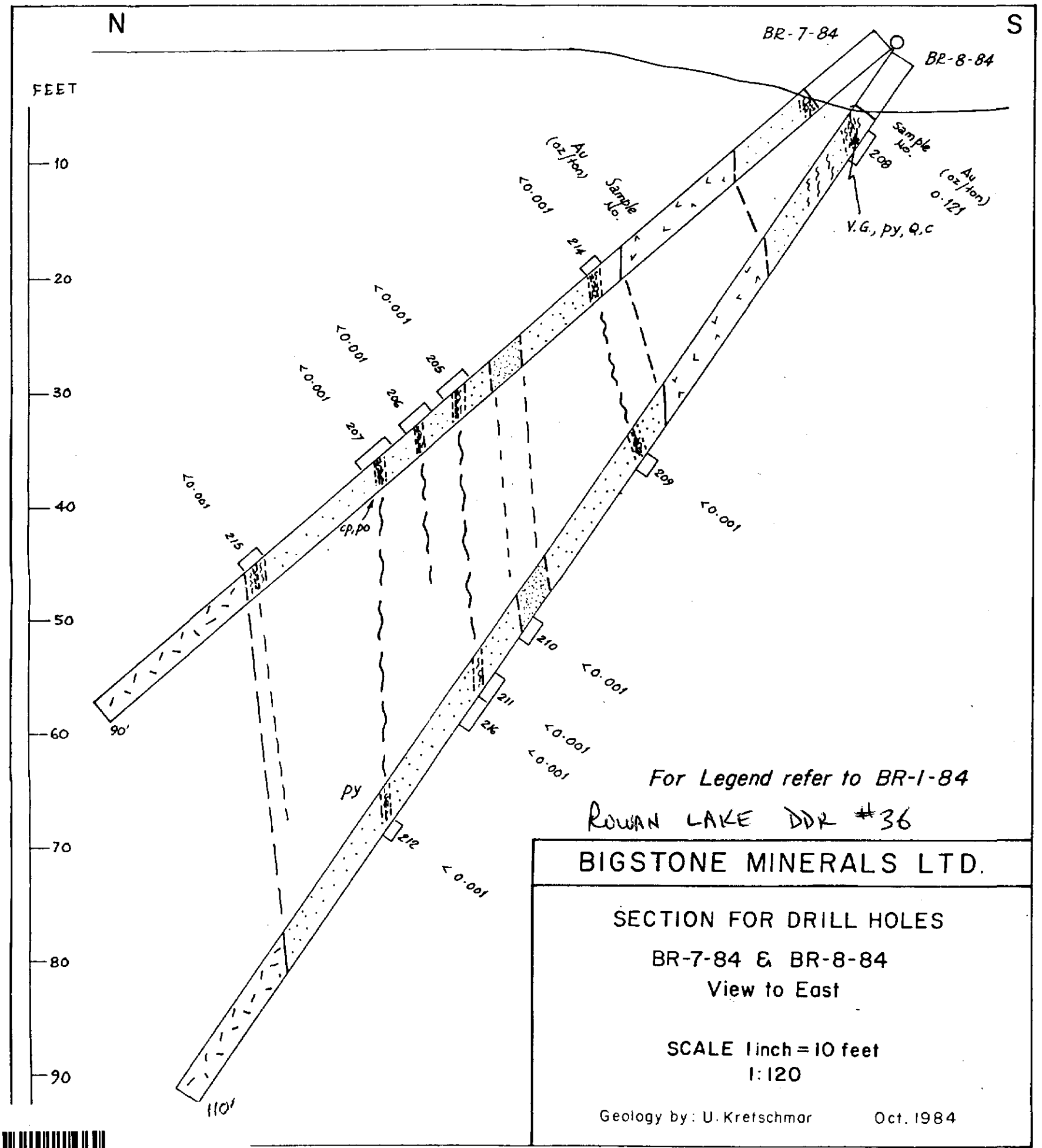
ROWAN LAKE DDR #36

BIGSTONE MINERALS LTD.

SECTION FOR DRILL HOLES
BR-5-84 & BR-6-84
View to East

SCALE 1inch= 10 feet
1:120

Geology by U. Kretschmar Oct. 1984



For Legend refer to BR-1-84

ROWAN LAKE DDR #36

BIGSTONE MINERALS LTD.

SECTION FOR DRILL HOLES

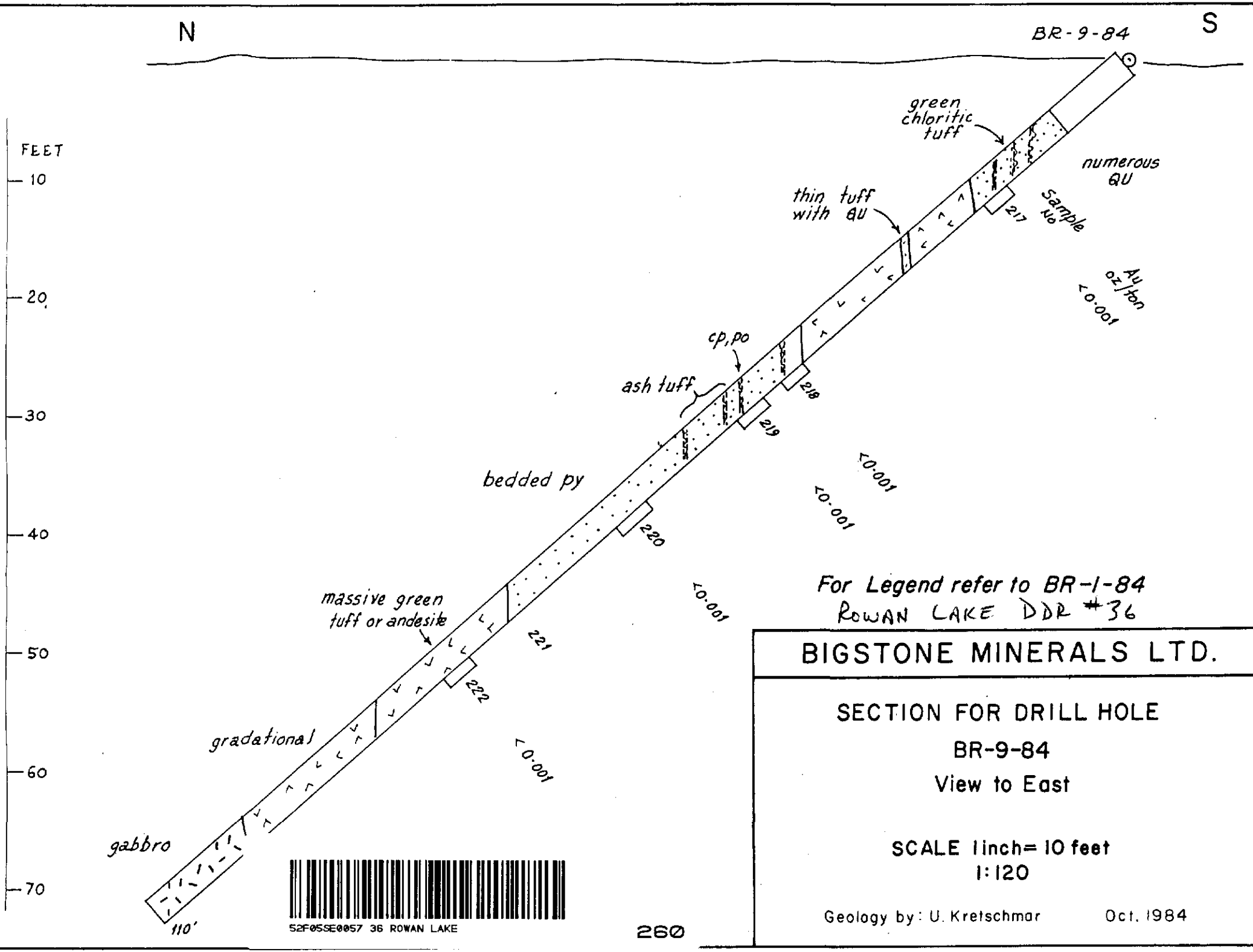
BR-7-84 & BR-8-84

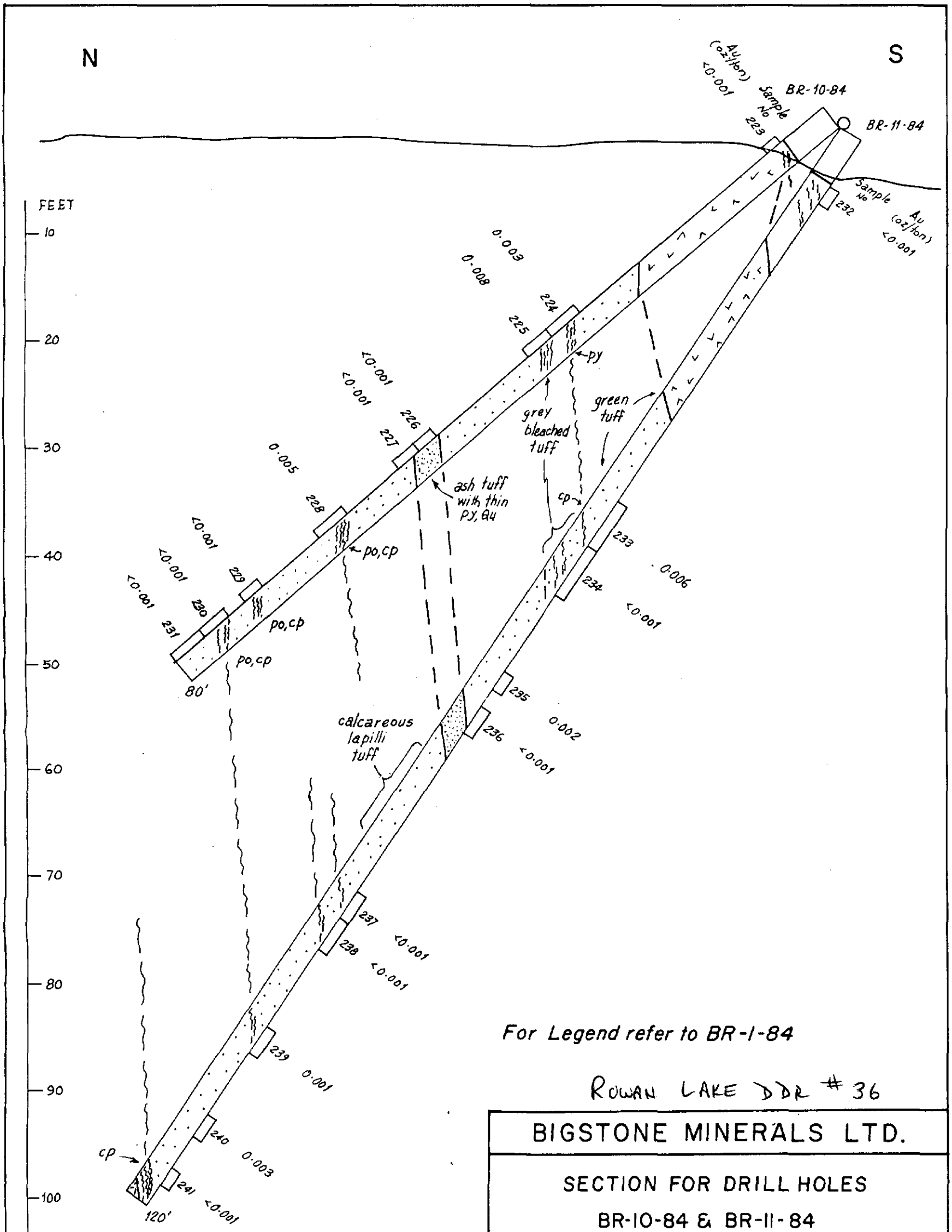
View to East

SCALE 1 inch = 10 feet

1:120

Geology by: U. Kretschmar Oct. 1984


N
S
BR-9-84
FEET
10
20
30
40
50
60
70
green chloritic tuff
numerous QU
thin tuff with QU
sample no
217
Au oz/ton
<0.001
cp, po
ash tuff
218
219
bedded py
220
<0.001
<0.001
<0.001
massive green tuff or andesite
221
222
<0.001
gradational
gabbro
110'
52F05SE0057 36 ROWAN LAKE
260
For Legend refer to BR-1-84
ROWAN LAKE DDR #36
BIGSTONE MINERALS LTD.
SECTION FOR DRILL HOLE
BR-9-84
View to East
SCALE 1inch= 10 feet
1:120
Geology by: U. Kretschmar
Oct. 1984



For Legend refer to BR-1-84

ROWAN LAKE DDR #36

BIGSTONE MINERALS LTD.

SECTION FOR DRILL HOLES

BR-10-84 & BR-11-84

View to East

SCALE 1 inch = 10 feet
1:120

Geology by: U. Kretschmar Oct. 1984