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BLUE REGAL RESOURCES LIMITED

**1988 EXPLORATION PROGRAM ON
THE LAW-SPENCE OCCURRENCE PROPERTY
DISTRICT OF RAINY RIVER
ONTARIO**

**by: Wayne E. Holmstead
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May 15, 1989.

DM88-4-C-231



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INTRODUCTION

The Law-Spence Occurrence property is owned by Blue Regal Resources Ltd. It consists of 22 contiguous, unpatented mining claims in the Calm Lake and Righteye Lake areas in the District of Rainy River, Ontario.

The following report describes the history, geology and mineralization of the Law Occurrence and the Spence Occurrence and the immediate vicinity as well as an exploration program carried out in 1988 designed to test the mineral potential of the property.

The claim numbers listed below are 100% owned by Blue Regal Resources Ltd.;

940895 [✓]	940939 [✓]	989649 [✓]
940896 [✓]	974196 [✓]	989650 [✓]
940897 [✓]	974197 [✓]	1000621 [✓]
940898 [✓]	974198 [✓]	1000622 [✓]
940899 [✓]	974199 [✓]	1000623 [✓]
940900 [✓]	974200 [✓]	1000624 [✓]
940901 [✓]	989648 [✓]	1000625 [✓]
940938 [✓]		

The Law Occurrence and Spence Occurrence are located between Banning and Niven Lakes south of Asmussen Township and about 30 kilometers west of Atikokan, Ontario (latitude 48 44', longitude 92 00'). Access is via Highway 11, one kilometre north and by boat across Banning Lake and by foot trail across the claims. Most services are available in Atikokan or Thunder Bay.

HISTORY

The Law Occurrence was first described in a Geological Survey of Canada report by Tanton (1927). He reported that "Mr Law of Banning reported discovering gold-bearing vein material visibly mineralized with chalcopryite at a locality 650 feet south of Niven Lake along the portage to Seine river near Banning. Two grab samples taken by him from this vicinity are said to have shown, upon assay, gold values at the rate of \$28(1.33 oz.) and \$33(1.57 oz.) per ton, respectively."

The Spence Occurrence was first described in 1928 in a letter written by Frank Spence of Fort William to Mr. Watson of the Mining Corporation in Toronto (Resident Geologist's Files, Thunder Bay). In the letter he reported a quartz porphyry dike "that varies from 300 to 500 feet in width and extends over one mile in length. There has been no work on this and only surface assays which run \$0.20 (0.01 oz), \$1.92 (0.09 oz), \$13.40 (0.64 oz) and \$18.00 (0.86 oz), in gold with a 5% copper content."

The Law Syndicate was formed and in 1929 conducted prospecting, trenching and stripping (Schnieders and Dutka, 1985). Results were not available at the time of writing.

In 1956, Moneta Porcupine Mines conducted geological mapping and ground electromagnetic surveys (Schnieders and Dutka, 1985).

John Heilman, a former owner of the property of no known affiliation, drilled two short holes (212 feet) on the Law Occurrence in 1960. He intersected greenstone, diorite and occasional quartz veining all mineralized with pyrite. Some chalcopryite was detected in the quartz veining. No assay values were included.

Cominco carried out geological and geophysical surveys and 150 metres of diamond drilling in 1966. The holes were drilled to intersect electromagnetic conductors. The mineralized rocks encountered consisted of silicified and graphitic zones up to 3 meters thick with massive pyrite, pyrrhotite and trace amounts of chalcopryite (Fumerton, 1985).

In 1981, the property was staked by Fern Elizabeth Gold Mining Company Limited (Schnieders and Dutka, 1985).

Phantom Exploration conducted a property visit for Strike Exploration Limited in 1982 (Schnieders and Dutka, 1985).

In 1987, Matt Stewardson, a former owner of the property, took 10 grab samples from the Law Occurrence and had them assayed for gold and silver by Geoscience Laboratories in Toronto. The best gold results were; 0.04 oz/ton from a mineralized quartz vein on claim 940899, 0.03 oz/ton in quartz vein with up to 20% sulphides and 0.01 oz/ton in massive pyrite (70%) containing siliceous fragments (possibly sheared quartz vein material).

No further exploration work was done on the property in 1987.

GENERAL GEOLOGY AND MINERALIZATION

Fumerton (1985) describes the Law Occurrence as sulphide showings that "occur within quartz veins or minor shear zones in mafic metavolcanics intercalated with banded ironstone and felsic metavolcanics. These rocks have been folded and the occurrence is in the core of a large fold which occurs primarily east of the present map area (Calm Lake area). The metavolcanics have been intruded by a number of mafic dikes, and felsic dikes and stocks. The rocks around the showings have been cut by shear zones.

In the northern group of trenches near Wright Lake the host rocks consist of compositionally banded and homogeneous tuffs which are strongly foliated or sheared parallel to the banding where present. Quartz veins, mineralized with chalcopyrite and pyrite are parallel to the foliation, but are discontinuous, and are up to 25 cm thick. The total sulphide concentrations range from trace amounts to 2 percent, and the veins tend to be concentrated into 1 m thick bands. In the southern group of trenches sparsely disseminated pyrite and pyrrhotite, and trace amounts of chalcopyrite occur in bands of highly sheared and altered rock which trend north. The shear zones are up to 3 m thick and contain unmineralized quartz veins less than 2 cm thick that parallel the shear zones. Abundant disseminated carbonate occurs throughout the shear zones. Laterally these shear zones grade into unsheared, fine-grained basalts."

Six selected grab samples were taken by Fumerton (1985). Sample 1 gave 0.01 oz/ton in fine-grained quartz with lenses of chlorite and wall rock and sample 6 also gave 0.01 oz/ton in strongly foliated, fine-grained rock with 1% sulphides. All the remaining samples gave trace gold. Sample 2 from trench 5 assayed 0.24 oz/ton silver in strongly sheared fine-grained mafic tuff with 3% sulphides.

Little (1928) described the Spence Occurrence as follows; "The chief rock exposures are basic lavas which have been altered to sericite, chlorite and in some places andalusite schist. There appear to be two distinct lines of weakness. Two claims are crossed by a large porphyry dike striking N35E, the schisting following the dike. On the claims to the north of this the schisting is north and south corresponding with a pronounced "burn". Small intrusions of diabase were seen but no porphyry was noted in the northern group, but on account of the small amount of work that has been done and the large extent of the property nothing definite can be stated about this. A siliceous quartz porphyry dike striking N35E contains quartz veins striking in the same direction and dipping about 70 degrees to the north. From what shows in the only pit on this vein, the quartz is widening downwards and the south wall still shows stringers of quartz. There is a good deal of mineral in the quartz. A chipped sample taken over a width of 7 feet gave trace gold. The owner claims to have got over 3% copper here, which seems doubtful. The porphyry plunges into the swamp to the west; it is stated on reliable authority to be traceable for half a mile further, but work which has only been done this year has been concentrated in the pit which owing to the slope of the hill exposes the vein well. Fifty feet south another pit has been started on a similar quartz vein in the porphyry. Conditions here appear similar but there is not much mineral in evidence and only a small amount of work has been done. Half a mile north of the porphyry dike and striking almost north and south is a pronounced "burn" which can be traced for several hundred feet (Law Occurrence). Several old test pits were sunk on this exposing a good deal of pyrrhotite and some pyrite, no chalcopryite was seen in the older pits at the south end. The width probably averages six feet. The pits were not cleaned out and sampling was impossible. The strike at the south end was N5E. The strike has not been followed straight through owing to low ground, but what is supposed to be the same vein outcrops half a mile further north. It is doubtful if this is the same thing as its strike is N10W and its appearance is very different. There is a fair amount of chalcopryite in one pit where most of the work has been done, in the centre of a quartz vein. A sample here gave 1.66% copper. One claim east there is another pronounced "burn" striking north and south, which can be traced across two claims, but as absolutely no work has been done on it very little can be said about it." (Resident Geologists Files, Thunder Bay)

GOLD PROSPECTS IN THE AREA

The Mayflower Prospect is located about 9 kilometers west of the Law-Spence Occurrence along strike. Gold mineralization is concentrated in quartz and quartz-carbonate veins hosted by sheared chemical sedimentary rocks, altered metavolcanic fragmental units or both. Quartz feldspar porphyry cuts the above rocks in the vicinity of the mineralization. It occurs as an oblong body that is zoned from the aphanitic margins to a medium-grained core. (Wilkinson, 1982) Drilling by Andowan Mines in 1946 returned the following results in two holes on the vein system (Schnieders and Dutka, 1985);

Hole 1
0.30 oz/ton gold across 8 feet
Hole 2
0.23 oz/ton gold across 2.5 feet
5.96 oz/ton gold across 1.3 feet
0.26 oz/ton gold across 3.5 feet

The Harold Lake Mine is a past-producer of gold and is located about 19 kilometers ENE of the Law-Spence Occurrence. From 1895 to 1896, 1,131 tons of ore were milled producing 687 ounces of gold (average 0.59 oz/ton gold). (Ferguson et. al., 1971)

The Elizabeth Mine located about 21 kilometers ENE of the Law-Spence Occurrence is also a past producer of gold. In 1908, \$8,500 worth of gold was produced from the mine (411 oz gold at \$20.07/ounce of gold). (Sullivan, 1908) In 1913, 20 ounces of gold were extracted from 50 tons of ore (average 0.40 oz/ton gold). (Ferguson et. al., 1971)

The general geology of the Harold Lake Mine and the Elizabeth Mine consists of leucocratic granitic rocks of the Dashwa Lake Batholith, in contact with both mafic and felsic metavolcanics. Along the contact between the metavolcanics and granitic rocks is a prominent shear zone and associated quartz veining. Lamprophyre and quartz feldspar porphyry dikes intrude all rock types. (Schnieders and Dutka, 1985)

THE 1988 EXPLORATION PROGRAM

A total of 33.1 kilometers of line were cut on the property in the spring of 1988. The baseline was cut in an east-west direction and the crosslines were cut at 90 degrees to the baseline. In the summer, fall and winter of 1988, the following surveys were completed; geological mapping, magnetometer survey, VLF electromagnetic survey and an induced polarization survey. A total of 2151 feet of diamond drilling was completed in December, 1988.

THE MAGNETOMETER SURVEY

Total field magnetic measurements were made with a Scintrex MP-2 magnetometer at 25 meter intervals on the grid lines. Diurnal variation was determined by base station readings made along the base line about every hour. The MP-2 is accurate to +/-1 gamma. The results of the survey are contoured on the accompanying map.

The background value was found to be about 59,500 gammas. The property may be divided into two areas based on the interpretation of the magnetic data. If a line is drawn from Line 6E, 7N to Line 0, 6S and then to L15W, 4+50S the map will be split into two areas. The area northwest of the line is high background magnetics caused by intermediate to mafic volcanics with a high magnetite and sulphide content. The area southwest of the line is low background magnetics and is characterized by intermediate to mafic volcanics with low magnetite and sulphide content.

THE ELECTROMAGNETIC SURVEY

The in-phase and out of phase component of the local electromagnetic field generated by low frequency radio transmissions from Cutler, Maine were measured at 25 meter intervals using a Geonics VLF-EM.

A total of 4 anomalies were detected, 3 of which were considered valid and an expression of the bedrock.

Anomaly A is located from L4E, 0+50N to 8E, 00 at the baseline and Anomaly B was located from L1E, 2S to L5E, 2+75S. Both of these anomalies are located in an area of intermediate to mafic volcanic rocks with low magnetic releif.

Anomaly C is located from L13W, 4+50S to L4E, 6S. In the eastern end of the property the anomaly runs through an area of low magnetics and on the western end it coincides with the boundary between high magnetics to the north and low magnetics to the south.

Anomaly D, from 9W, 2S to 6W, 3+25S is considered to be due to surface effects such as swampy overburden.

THE INDUCED POLARIZATION SURVEY

A. For results of the Induced Polarization survey, see Appendix

GEOLOGICAL MAPPING

The Blue Regal property is located on Banning Lake. The southern boundary of the property has the Quetico Fault passing through it and it subdivides the Wabigoon Subprovince to the north and the Quetico Subprovince to the south. The mapped area consists of mainly metavolcanics, granitic rocks, some mafic intrusives and metasediments of the Wabigoon Subprovince. There may also be some metasediments (interbanded wackes and mudstones) of the Quetico Subprovince possibly occurring at the southern part of the property that are highly deformed and sheared.

The units on this property consist mainly of mafic to intermediate volcanics (metabasalts to meta-andesites), mafic to intermediate tuffs, chlorite schists and phyllites, sericite schists, and massive granitic to granodioritic intrusives. Throughout the area there are numerous dykes or sills intruding.

The mafic to intermediate volcanics cover more than 60% of the property. These are green to dark green and/or black at times, fine to medium grained, equigranular, massive to foliated, and occasionally pillowed with tops being possibly towards the south. Well foliated and/or banded volcanics may represent highly deformed and metamorphosed units found near shear zones and near intrusives. Intrusives may cause recrystallization of the volcanics to medium and coarse grained units. The magnetic susceptibility is moderate to high on the northwest side of the property near the Calm Lake Granite Batholith, otherwise it is low and moderate locally. There are few quartz-carbonate veinlets (<3%) except near the intrusives and near areas of high magnetics where the veins maybe up to 3m in size (>5%). Furthermore, granite dykes are more common near the batholith. There is weak to moderate chloritization and carbonatization, and some weak epidotization. Mineralization is weak with traces to 2% pyrite, the exception is near areas of magnetic highs (sulphide iron formation). This sulphide iron formation is oxidized at surface, banded with chlorite, quartz, sulfides and magnetite, and it may have some graphite bands. The sulfides consist of pyrite (3-30%), chalcopyrite (1-3%), and pyrrhotite (<3%). Units that are lighter green, weakly bleached, siliceous, porphyritic with <25% feldspars, and a fine mafic and chloritic matrix could represent the intermediate volcanics (andesites to dacites). There are a few occurrences of white, fine to medium grained and massive intermediate to felsic porphyries with 15-25% feldspars, and 5% quartz eyes.

Highly deformed mafic volcanics may give rise to chlorite schists that are green, fine grained, well foliated, and occasionally banded with some feldspathic and brown ankeritic bands. The schist is often kinked and has micro folds, weakly to strongly magnetic, oxidized, weakly carbonatized and sericitized, cut with 2-3% quartz veins and pods, 1-3% pyrite and occasionally pyritized, and a mineral assemblage of quartz, feldspar, chlorite and some sericite. The schists in some localities may represent mafic tuffs that are green, fine to very fine grained, moderately to strongly magnetic, carbonitized and chloritized, and traces to 2% pyrite. There are some porphyritic occurrences of chlorite schist in the southwestern part of the property. The schist is light green, has 10-15% feldspars (<3mm) and 5% quartz eyes, hence it may represent a deformed intermediate tuff. There are also some grey, fine grained and foliated phyllites.

The property has a few occurrences of felsic (rhyolites and tuffs) to intermediate (dacites) volcanics seen south of the narrows and the odd occurrence north of the narrows. Sericite schists are friable and highly altered; that is, with oxidation, carbonatization, ankeritization and some fuchsite. They have 5-10% quartz eyes, 5-10% quartz bands and veins (1-5cm), 10-15% oxidized bands and some sulfide alteration. The unit may represent a felsic to intermediate tuff and/or a shear zone. A rhyolite that is white, fine grained, massive, siliceous and felsic, 5-10% quartz eyes, hard, weakly chloritized and with stringer like quartz veinlets was encountered south of the narrows.

The property touches the southeast boundary of a granite batholith that is white to pink, medium grained, massive, equigranular and with block jointing. Near the boundary the intrusive may have differentiated to a granodiorite that is white to grey with green tint, medium to coarse grained, massive, block jointing, and has 25-30% quartz, 10-20% amphiboles and 50-55% feldspars.

The volcanic units, especially around the boundary of the granite batholith, have been intruded by several dykes and sills of diorites to tonalites, granodiorites and feldspar porphyries. These intermediate dykes may be associated with the granite batholith or other nearby intrusives. The diorites to tonalites are light green, white to greyish white, fine to medium grained, granular, occasionally with some rounded quartz porphyroblasts (<2cm), massive, fractured, 1-2% pyrite and 2-5% quartz veins of 1-2cm. The mineralogy consists of 10-20% quartz, 30-40% feldspars, 30-35% amphiboles (hornblende), and <10% biotite, chlorite and sericite. Alteration is especially seen in the tonalite which is weakly to moderately sericitized, weakly chloritized and oxidized, and generally of lighter colors. There is also a feldspar porphyry of granodioritic composition that is greenish white, medium grained, massive, and has 25-30% feldspars(<4mm) and 10% quartz. Mafic dykes have also intruded the volcanics and these are diorites, gabbros and diabase dykes. They are green to dark green, fine to coarse grained, equigranular, homogeneous, massive, and consist of 40-45% feldspars and 55% amphiboles.

The metamorphism on the property is generally of the greenschist facies with a mineral assemblage of chlorite and sericite. Generally some relict features such as pillows are still preserved. The metamorphism has developed phyllites and schists. Units closer to the granite batholith will have undergone a higher degree of metamorphism; that is, upper greenschist to lower amphibolite. These will have amphiboles (actinolite) and biotite developing within schists and mafic gneisses.

Deformation in the area is intense due to the combined forces of the Quetico Faulting and the intrusion of the granite batholith. The Quetico Fault trending eastward may occur in the very southern part of the property within possibly the sericite schists. These are very well foliated, friable and are possibly of submylonitic appearance, hence very close to the fault. The Quetico Fault has several splay faults curving northeastward and following the boundaries of the granite batholiths. These tend to be outlined by the presence of chlorite schists, phyllites, and high magnetic susceptibilities(fig.1 and map 1). These splay faults on the property are well mineralized with 2-30% sulfides and massive sulfides, and several trenches have been dug along their trend. The deformation is also outlined by the foliation which trends generally northeast but near the batholith it too tends to curve northwards. The varying foliation also illustrates the presence of synclines and anticlines(map 1) and they are assumed to be plunging at ~81 degrees to the northeast evidenced from field data.

Mineralization as already mentioned tends to be close to the granite batholith, closely associated with the magnetic highs within mafic to intermediate metavolcanics or chlorite schists near splay faults. The sulfide content may vary from 3-30% pyrite, 1-10% chalcopyrite, 1-3% pyrrhotite and at times massive sulfides. This is true of trenches found southwest of Wright Lake on Lines 0 and 2W (see results below). Other trenches were discovered but they did not give as good results. Quartz diorites to tonalites just southwest of Anderson Lake appeared very interesting for gold mineralization since they had 5-10% quartz veining and had oxidization of sulfides(pyrite) and ankerite. One sample (BR-1); occuring within an intermediate volcanic that is altered, bleached, weakly sericitized and chloritized, and has 2-3% pyrite, gave a gold assay of 1020ppb. Hence, it is recommended that exploration efforts be concentrated near the granite batholith where there is a likelihood of finding northeast trending shears closely associated with magnetic highs and the trenches with sulfide occurrences.

Location	Sample#	Au(ppb)	Ag(ppm)	Cu(ppm)	Zn(ppm)
8+15W/4+00S	BR-1	1020			
1+80W/2+40N	BR-27	16	<1	230	90
1+80W/2+40N	BR-31	<5	3	312	614
L0/2+50N	BR-41	296	3	6700	97
L0/2+50N	BR-42	566	23	60308	197
L0/2+50N	BR-43	38	1	1244	40
0+05E/3+35N	BR-44	153	1	392	45
0+05E/5+24N	BR-48	205			

DIAMOND DRILLING

The property was drilled during the months of November and December, 1988 (Refer to Table I). Four holes of BQ size were drilled and they totaled 2151'. Due to the inaccessibility of the property the drilling was helicopter supported.

Three out of the four holes; that is, BR-88-2, 3 and 4, were testing a unit or section within the basalt that is moderately to strongly magnetic, mineralized with sulfides and sheared. The section is easily outlined with magnetics and VLF(EM). The hole BR-88-1 was testing a granodiorite to tonalite that is altered on the surface and cut with numerous quartz veins. Some of the quartz veins (<30cm), in a bleached granodiorite, were mineralized with 1-2% pyrite, and traces of chalcopyrite. They ran 300 and 600ppb gold(Au) at 136, 143 and 386.6 feet.

Hole BR-88-2 was testing the most southern extension of the sulfide mineralization. A section of deformed metabasalt (211.5 to 310.9) was mineralized with 2 to 5% pyrite. However, no interesting anomalous gold values were obtained.

Hole BR-88-3, located just east of the pit on L2W/2+50N, was drilled through the units found in the pit. The hole intersected meta-basalts cut with 5 to 10% quartz veins, zones of silicification and fuchsite alteration, and well mineralized with 3 to 8% pyrite, 1 to 2% chalcopyrite, traces to 2% pyrrhotite and some magnetite. The unit appeared very interesting; however, no gold values were obtained.

Hole BR-88-4, just 200m northeast of BR-88-3, was also verifying a zone of sulfide mineralization. A metabasalt at 143 to 170.4', 234.1 to 249', and 266.3 to 267.5' were well mineralized with sulfides; that is, 2 to 4% pyrite, 1 to 3% chalcopyrite, 1 to 2% pyrrhotite, and some magnetite bands and quartz veins. Gold assays were generally not higher than 86ppb but the best copper(Cu) assay returned a good gold assay of 1602ppb. Eight good copper assays were obtained, these ranged between 1392 and 22,560ppm (Refer to Table II). Zinc assays were rather low.

Table I: Drilling on Banning Lake - Blue Regal Resources

Hole #	Location Line/Station	Depth	Bearing/Plunge	Drilled
BR-88-1	10+00W/2+50S	637	135/-45	Nov.19,Dec.10/88
BR-88-2	3+00W/3+00S	502	285/-50	Dec.2/88
BR-88-4	0+75E/2+25N	556'	250/-45	Dec.4/88
BR-88-3	1+00W/2+00N	456'	250/-55	Dec.6/88

Table II: Assay Results of Hole BR-88-4

Sample #	Depth	Au(ppb)	Ag(ppm)	Cu(ppm)
137724	143.0-145.0	53	7	5128
137725	147.0-149.3	1602	15	22560
137726	153.2-155.6	86	9	5162
137727	155.6-157.0	28	6	644
137728	161.2-162.3	74	9	6146
137729	162.3-166.0	27	6	1624
137730	166.0-170.4	54	7	1512
133735	234.1-236.0	48	6	1840
137735	266.3-267.5	27	5	1392

CONCLUSIONS AND RECOMMENDATIONS

The Law-Spence Occurrence property contains geology conducive to gold and silver mineralization. Past assay values have indicated the presence of gold and silver on the property.

Work in the past done on the property was aimed at base metal potential so that conductive anomalies were given the first priority as exploration targets. Gold exploration was directed towards the discovery of mineralized quartz vein systems.

The Phase I diamond drilling was based primarily on geological targets. The best intersections were 1602 ppb gold (0.05 oz/ton), 15 ppm silver (0.44 oz/ton) and 22,560 ppm copper (2.25%) over 2.3 feet. Additional work on the property should be aimed at geophysical targets.

REFERENCES

- Ferguson, S. A., Groen, H. A., Haynes, R.
1971: Gold Deposits of Ontario, Part I, Ontario Department of Mines and Northern Affairs, Mineral Resources Circular 13, 315 p.
- Fumerton, S. L.
1985: Geology of the Calm Lake Area, District of Rainy River; Ontario Geological Survey Report 226, 72 p.
- Fumerton, S. L.
1986: Geology of the Righteye Lake Area, District of Rainy River; Ontario Geological Survey Report 239, 57 p.
- Little, W. C. H.
1928: Private Report to Mining Corporation of Canada Limited, Resident Geologist's Files, Thunder Bay, 5 p.
- Schnieders, B. R., and Dutka, R. J.
1985: Property Visits and Reports of the Atikokan Economic Geologists, 1979-1983, Atikokan Geological Survey; Ontario Geological Survey Open File Report 5539, 512 p.
- Spence, F.
1928: Letter to Mr Watson of Mining Corporation, Resident Geologist's Files, Thunder Bay, 1 p.
- Sullivan, A.
1908: Extracts from Reports of Engineers on Elizabeth Gold Mines, Resident Geologist's Files, Thunder Bay.
- Tanton, T. L.
1927: Mineral Deposits of the Steeprock Lake Map Area, Ontario; Geological Survey Of Canada, Summary Report for 1925, Part C, p. 1-11.
- Wilkinson S. J.
1982: Gold Deposits of the Atikokan Area; Ontario Geological Survey, Mineral Deposits Circular 24, 54 p.

CERTIFICATE

I, Wayne E. Holmstead, of the City of Kingston in the Province of Ontario, DO HEREBY CERTIFY THAT:

1. I am a Consulting Geologist with address at 1074 Dillingham Street, Kingston, Ontario, Canada.
2. I graduated from the University of Toronto with a Bachelor of Science in Geology in 1976 and have been practicing my profession since.
3. I am a fellow in good standing of the Geological Association of Canada.
4. I have no interest, directly or indirectly, nor do I expect to receive any interest, directly or indirectly, in the mining property described in this report or in the securities of Blue Regal Resources Ltd.
5. This report is based upon all available information on the property and a work program on the property that I personally supervised.
6. I permit Blue Regal Resources Ltd. to use this report or portions of this report in the prospectus or other documents of the company.

Dated at Kingston, Ontario, this 15th day of May, 1989.



Wayne E. Holmstead, B.Sc., F.G.A.C.

HOLMSTEAD AND ASSOCIATES

APPENDIX A
INDUCED POLARIZATION SURVEY

HOLMSTEAD AND ASSOCIATES

INTERPRETATION REPORT
ON AN
INDUCED POLARIZATION SURVEY
ON THE
BANNING LAKE PROPERTY
FOR
BLUE REGAL RESOURCES

Prepared by:
S. Anderson
Exsics Exploration Ltd.
February, 1989

Introduction

A "Gradient Array" Induced Polarization survey was conducted on a group of 22 contiguous claims in the Kenora - Fort Frances area, District of Rainy River, Ontario.

The survey was performed by Exsics Exploration Limited under contract to Geocom Geological Consulting Services. The I.P. survey was carried out over most of the property covering 19.1 km of grid lines. The purpose of the survey was to investigate the entire property for the possibility of disseminated sulphides which would not necessarily have been picked up by previous Magnetometer and VLF - EM surveys.

This report deals with the results of the I.P. survey only. It is the understanding of the author that a detailed compilation of the Geological Mapping, Magnetometer Survey, VLF - EM survey and current I.P. survey will form the main report encompassing this I.P. interpretation.

Survey Parameters

A "Gradient Array" I.P. survey was chosen to get optimum coverage of the entire property.

This array provides a good reconnaissance coverage with good horizontal resolution. Because of the relatively shallow overburden it is felt that the gradient results can be drilled as is. Certain anomalies may warrant closer spaced lines and some "dipole-dipole" array follow-up.

A description of the "Gradient Array" and procedures is as follows:

Gradient Survey:

The gradient array method involves placing two infinite or remote electrodes (A-B) a fixed distance apart, three times the length of and parallel to the lines to be surveyed.

A potential is applied across A-B using a motor generator powered transmitter capable of producing in this case 2500 watts maximum output. This potential is applied continuously using a 2 second on, 2 second off, square wave direct current. The middle one-third of A-B surveyed from this set-up as well as parallel lines either side until the signal decreases at which time another A-B set-up is required further along the geological strike. A single receiving dipole (P1-P2) consisting of two porous pots a fixed distance of 25 m apart, was moved along the survey lines. A single reading was recorded every 25 m with the reading plotting between P1-P2. The following two parameters were recorded at each station:

Chargeability - The potential across P1-P2 was recorded during the two second off cycle. The potential was an integration over a selected window width (time in milliseconds), a fixed delay time after the current shut off. This reading is usually expressed in millivolts per volt of milliseconds.

Primary Voltage - The potential across P1-P2 was recorded during the 2 second on time. This potential is a direct result of the AB output current (amperes), the distance of the P1-P2 dipole from AB, and the true resistivity of the measured medium which is a combination of the geological rock units within the influence of the measuring P1-P2 dipole as well as the overburden. Thus "ohms's law" is used to compute the apparent resistivity of the measured medium beneath P1-P2 with a constant or 'K' factor applied. The 'K' factor is used to compensate for the Geometric Factor which is the relative positions between AB and P1-P2. The resultant value is called "Apparent Resistivity" as it is not the true resistivity of the bedrock but rather a combination of the overburden as well.

The following parameters were used:

Electrode Array - Gradient

Dipole Spacing - 25 meters

Method - Time Domain

Receiver - EDA IP-2

Transmitter - Huntec 2.5 kva

Pulse Time - 2 second on 2 second off, square wave

Delay Time - 500 milliseconds

Integration Time- 420 milliseconds

Parameters Measured A: Chargeability (millivolts per volt or milliseconds) presented in plan contoured form, 1:2500. B: Apparent Resistivity (ohm-meters) presented in plan contoured form, 1:2500. - 3 -

Survey Results

A number of areas of interest have been outlined throughout the property. Each of these areas will be discussed individually and in further detail below.

Zone A: This zone which occurs on the south side of Banning Lake extends from L10E/175N to L13E/250N remaining open to the east. It is situated over a strong resistivity low. This low is most likely responsible for a number of no-readings (NR) shown on strike with, and to the west of this zone. Therefore this feature may continue as far as L7E/125N and possibly off the grid to the west at this point. These high chargeabilities over low resistivities are typical of a sulphide bearing zone.

Zone B: This zone appears to have a fairly short strike length, occurring along the north shore of Banning Lake. It strikes from L1E/850S to L2E/850S appearing open to the east and possibly extending into Banning Lake to the west. It is flanked to the north by a resistivity low, while the high chargeabilities of this zone occur over roughly background resistivities.

Zone C: This feature extends from L0/425S to L1E/425S. It consists of high chargeabilities occurring over an area which is slightly less resistive than background. Previous trench work is known to exist in this area as indicated by Geological Map Sketch, S. L. Fumerton, 1979-80.

Zone D: This zone is made up of chargeability highs occurring within a broad area which has a moderately chargeable background. It strikes from L11W/450S to L12W/450S and is of a sulphide bearing zone. This feature is also coincidental with an EM conductor shown by Geological Map Sketch, S. L. Fumerton, 1979-80.

Zone E: This zone is similar to zone C, having a short strike length with chargeability highs occurring over a resistivity low. It extends from L4E/BLO to L5E/75N, and again is typical of a sulphide bearing zone.

Zone F: This zone shows strong chargeability highs occurring over very conductive areas, and appears to strike from L2W/175N to L1E/550N. This zone is very spotty along it's axis and is flanked on both sides by resistivity highs. This may be the result of banded ironstone shown running through this area by Geological Map Sketch, S. L. Fumerton, 1979-80.

Zone G: This zone consists of chargeability highs occurring over resistivity highs. It appears to extend from the northeast corner of Wright Lake on L4E/425N and L5E/475N and strike grid north from here. This zone seems to be influenced by resistivity highs and is most likely the result of amphibolite and doirite units extending through this area, as shown by Geological Map Sketch, S. L. Fumerton, 1979-80.

Conclusions and Recommendations

A number of areas of interest have been outlined and discussed under results. Any recommendations made at this point are based solely on the results of the current I.P. program. Priorities established in this report may be subject to change upon the correlation of this data with any previous geological or geophysical programs. Based on the I.P. results, priority would tend to be placed on zone A, which shows the characteristics of a sulphide bearing zone and seems to have the greatest strike length of the zones discussed.

Zones B, C, D and E would tend to have second priority, all showing sulphide bearing characteristics, but over a relatively short strike length. The priority of these zones may change upon their correlation with existing data as they tend to lie within or near areas of previous workings.

Zones F and G both seem to be structurally related. The priority of these zones would depend on the influence that these geological structures have on any sulphide bearing zones in this area.

All of the areas discussed should be looked at in greater detail, and none of these areas should be dismissed without further investigation.

If after correlation and compilation with previous geophysical and geological results any of these zones are not felt to be resolved good enough to drill, a line or two of Dipole-Dipole I.P. over the areas of interest may be recommended.

Respectfully submitted,

S. Anderson

Exsics Exploration

CERTIFICATION

I, Steve Anderson of Timmins, Ontario hereby certify that:

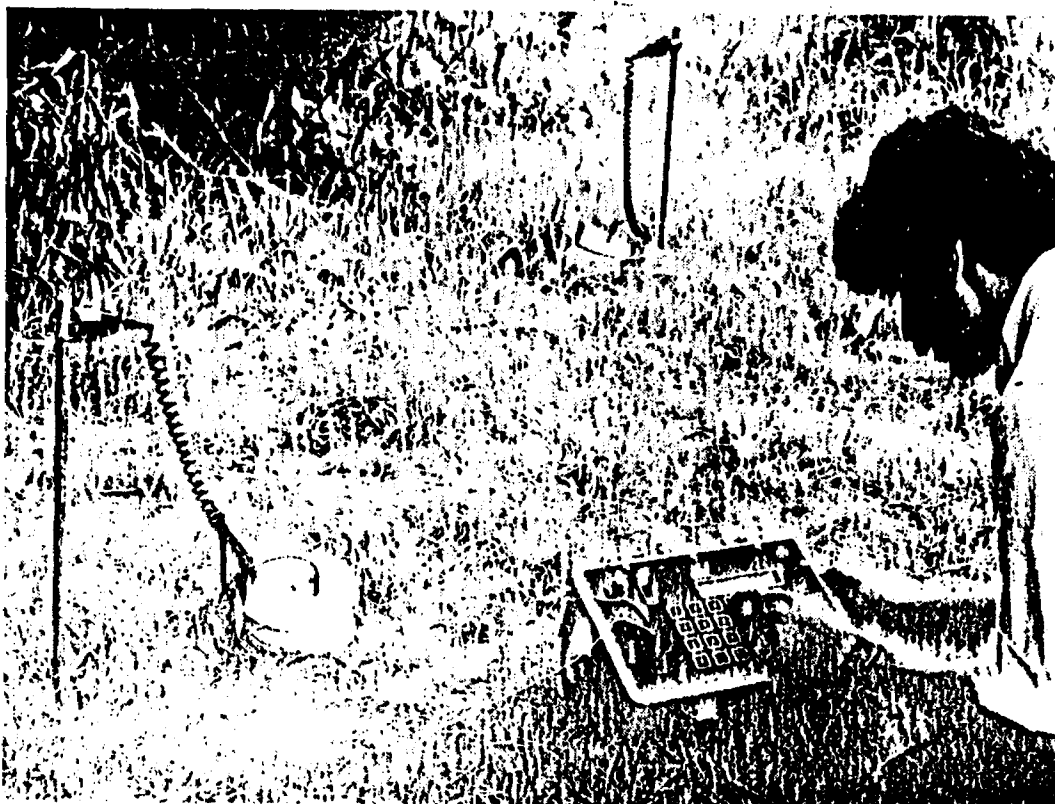
1. I hold a three year Technologist Diploma from the Sir Stanford Fleming College, Lindsay, Ontario obtained in 1982.
2. I have been practising my profession since 1980 in Ontario, Quebec, Saskatchewan and NWT. for Urangesellschaft Candada Ltd., Asamera Oil Ltd., Rayan Explorations, and most recently Exsics Exploration Ltd.
3. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience, and on the results of the field work conducted on the property during November, 1988.
4. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest in the BANNING LAKE PROPERTY for BLUE REGAL RESOURCES INC. or any of it's subsidiary companies.

Dated this 20th day of Feb, 1989
at Timmins, Ontario

S.D. Anderson
Exsics Exploration Ltd.

Product Information

IP-2 TWO DIPOLE TIME DOMAIN IP RECEIVER



MAJOR BENEFITS

- * TWO DIPOLES SIMULTANEOUSLY MEASURED
- * SOLID STATE MEMORY
- * AUTOMATIC PRIMARY VOLTAGE (V_p) RANGING
- * AUTOMATICALLY CALCULATES APPARENT RESISTIVITY
- * COMPUTER COMPATIBLE

EDA Instruments Inc., Head Office: 4 Thorncliffe Park Drive, Toronto, Canada M4H 1H1
Telephone: (416) 425-7800, Telex: 06 23222 EDA TOR, Cables: INSTRUMENTS TORONTO

In USA, EDA Instruments Inc., 5151 Ward Road, Wheat Ridge, Colorado 80033
Telephone: (303) 422-9112

Specifications

Dipoles	Two simultaneous input dipoles.
Input Voltage (Vp) Range	40 microvolts to 4 volts, with automatic ranging and overvoltage protection.
Vp Resolution	10 microvolts.
Vp Accuracy	0.3% typical; maximum 1% over temperature range.
Chargeability Resolution	1 %.
Chargeability Accuracy	0.3% typical; maximum 1% over temperature range for Vp > 10 mV.
Automatic SP Compensation	± 1 V with linear drift correction up to 1 mV/s.
Input Impedance	1 Megohm.
Sample Rate	10 milliseconds.
Automatic Stacking	3 to 99 cycles.
Synchronization	Minimum primary voltage level of 40 microvolts.
Rejection Filters	50 and 60 Hz power line rejection greater than 100 dB.
Grounding Resistance Check	100 ohm to 128 kilo-ohm.
Compatible Transmitters	Any time domain waveform transmitter with a pulse duration of 1 or 2 seconds and a crystal timing stability of 100 ppm.
Programmable Parameters	Geometric parameters, time parameter, intensity of current, type of array and station number.
Display	Two line, 32-character alphanumeric liquid crystal display protected by an internal heater for low temperature conditions.
Memory Capacity	600 sets of readings.
RS-232C Serial I/O Interface	1200 baud, 8 data bits, 1 stop bit, no parity.
Console Power Supply	Six- 1.5V "D" cell disposable batteries with a maximum supply current of 70 mA and auto power save.
Operating Environmental Range	-25°C to +55°C; 0-100% relative humidity; weatherproof.
Storage Temperature Range	-40°C to +60°C.
Weight and Dimensions	5.5 kg, 310x230x210 mm.
Standard System Complement	Instrument console with carrying strap, batteries and operations manual.
Available Options	Stainless steel transmitting electrodes, copper sulphate receiving electrodes, alligator clips, bridge leads, wire spools, interface cables, rechargeable batteries, charger and software programs.

EDA Instruments Inc.
 4 Thorncliffe Park Drive,
 Toronto, Ontario
 Canada M4H 1H1
 Telex: 06 23222 EDA TOR
 Cable: Instruments Toronto
 (416) 425 7800

in U.S.A.
 EDA Instruments Inc.
 5151 Ward Road,
 Wheat Ridge, Colorado
 U.S.A. 80053
 (303) 422 9112

APPENDIX B
DIAMOND DRILL LOGS

HOLMSTEAD AND ASSOCIATES

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

BR-8-1

09-11-1989 :: 22:08

PROPERTY : Banning Lake	PROJECT # :	
NTS MAP # : 52C/9	TOWNSHIP :	CLAIM # :
LINE/STATION: 10+00W / 2+50S	EASTINGS/NORTHINGS:	ELEVATION : Surface
LENGTH : 637.00 ft	INCLINATION : -45.0 degrees	AZIMUTH : 135.0 degrees
OVERBURDEN : 30.00 ft	CASING : Removed	
LOGGED BY : E. Canova	DRILLED BY : Forage Alexandre	ASSAYING BY : Accurassay Lab, Thunder Bay, Ont.
DATE LOGGED : 1988/11/28 to 1988/12/12	DATE DRILLED : 1988/11/21 to 1988/12/10	CORE LOCATION: Kashabowie, Ont.

Acid Tests

<u>Depth</u>	<u>Dip</u>
267.00	-41.0
497.00	-39.0

BLUE REGAL RESOURCES LTD.

SUMMARY LOG

BR-8-1
Page 2

09-11-1989 :: 22:09

From(ft)	To(ft)	Field Name (Legend)
0.00	30.00	Overburden
30.00	52.20	Mafic Meta - Volcanic Foliation and strong deformed
52.20	386.60	Granodiorite Massive , equigranular, homogeneous compositionally.
386.60	399.50	Mafic Meta Volcanic Weak foliation
399.50	421.20	Ultramafic Meta Volcanic Foliation , magnetite
421.20	424.10	Trondhjemite to Granodiorite Massive
424.10	433.70	Diorite Massive , equigranular
433.70	469.00	Granodiorite to Granite Massive , red feldspar saussuritisation alteration
469.00	516.60	Granodiorite Massive
516.60	637.00	Granodiorite Melanocratic & massive
637.00		END OF HOLE.

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

09-11-1989 :: 22:10

From(ft)	To(ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Quartz: 20 to 25%. Feldspar: to 60%.									
		Structure Fracturing: 20 to 60 deg. cax. 12/m									
		Alteration Sericite: Weak to Moderate. Near quartz veining & shearing, bleached granodiorite									
		Mineralisation Pyrite: 1 to 4%. 4% in alteration sections.									
		Veins and Sub-Intervals Quartz Veining. Width 0.50in. Core axis angle 27 to 64 degrees. 5% quartz veining , 1-3% pyrite									
		(81.50)-(113.50): Bleached & alteration granodiorite, weak to moderately sericite , 5% quartz & quartz feldspar veining with some ankerite , veining 1-8cm, trend 16-43 degrees deg. cax ,some xenoliths of mafic volcanic at 90.7-93.9 & 98.7-101.1, (1% pyrite , weak fuchsite alteration									
		(128.00)-(183.40): Dark granodiorite, green grey with weak pink tint, 25% mafic , 25-30% quartz									
		(183.40)-(311.20): Granodiorite: green with pink tint, melanocratic, large amphibole phenocrysts 5% & 2cm, anhedral to rounded. 20% finer an interstitial amphibole , remainder quartz & feldspar , large phenocrysts & porphyroblasts growths of chlorite & some quartz in them. Fracturing 3/m 30-71 degrees deg. cax , 1% pyrite & tremolite - 1% chalcopyrite									
		(311.20)-(317.60): Bleached leucocratic granodiorite, white quartz carbonate veining 3-4% veining , (4cm, trend 51 degrees deg. cax , green chlorite sections are sheared, stretched feldspar , chlorite & amphibole grains. Narrower mylonitic sections. Foliation 43 degrees deg. cax , fracturing 52 degrees deg. cax , 1%pyrite									
		(351.90)-(386.50): Leucocratic, bleached alteration granodiorite, moderately sericite , alteration mafic minerals, yellow white with green tint, tremolite pyrite , 2-3% quartz veining & some calcite veining at 44 degrees deg. cax									

386.60 399.50 Mafic Meta Volcanic

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

09-11-1989 :: 22:12

From (ft)	To (ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
-----------	---------	-------------	---------	-----------	---------	------------	----------	-------------	----------	----------	----------

Sericite: to Weak.

Chlorite: to Weak.

Mineralisation

Pyrite: Trace.

Sub-Intervals

(440.50)-(448.50): Diorite: same as above, contact 57 & 38 degrees deg. cax

(459.10)-(464.60): Mafic unit, green, fine to medium grained, may represent mafic xenolith. Weak foliation & deformed. Foliation 38 degrees deg. cax. Weak carbonate & chlorite

469.00 516.60

Granodiorite

Colour: Pink green.

Fracturing: Weak (1-3)/ft.

Composition

Amphibole: 15 to 20%.

Quartz: and feldspar remainder

Structure

Fracturing: 38 to 62 deg. cax. 6/m, chlorite along fracturing

Banded: 38 to 62 deg. cax. Associated with fracturing, mafic & chlorite, green, 5-10%, 1% pyrite

Alteration

Chlorite: Weak.

Mineralisation

Pyrite: Trace to 1%.

Veins and Sub-Intervals

Quartz Veining. Width 6.00in. Core axis angle 32 to 63 degrees. 1-15cm quartz veining, every 30cm, 5-10% veining, also as pods & irregular folded veining

(483.70)-(484.50): Mafic banded, rich in amphibole, mineral segregation or differentiation

516.60 637.00

Granodiorite

Colour: Pink green.

Fracturing: Weak (1-3)/ft.

Composition

Mafic: 30 to 40%. Amphibole, darker sections rich in amphibole

Quartz: and feldspar remainder

Structure

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

09-11-1989 :: 22:13

From(ft)	To(ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
----------	--------	-------------	---------	-----------	---------	------------	----------	-------------	----------	----------	----------

Fracturing: 42 to 58 deg. cax. 4/m

Alteration

Chlorite: to Weak.

Feldspar: to Weak. K alteration resulting in red color.

Mineralisation

Pyrite: 2 to 3%.

Veins and Sub-Intervals

Quartz Veining. Width 12.00in. 1-30cm quartz veining & some calcite , 5% veining

(570.50)-(608.00): Leucocratic granite to granodiorite: pink , fine to medium grained , 5-10% amphibole , some sections 20% amphibole and darker, 5% quartz vein , tremolite - 2% pyrite

(608.60)-(620.60): Diorite: Green , medium grained , massive , weak alteration , bleached , weak sericite to strong sericite at 620.6, contact 38 degrees deg. cax , minor quartz vein

637.00 **END OF HOLE.**

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

BR-1-2

09-11-1989 :: 22:13

PROPERTY : Banning Lake	PROJECT # :	
NTS MAP # : 52B/12	TOWNSHIP :	CLAIM # :
LINE/STATION: 3+00W / 3+00S	EASTINGS/NORTHINGS:	ELEVATION : Surface
LENGTH : 502.00 ft	INCLINATION : -50.0 degrees	AZIMUTH : 285.0 degrees
OVERBURDEN : 25.00 ft	CASING : Removed	
LOGGED BY : E. Canova	DRILLED BY : Alexander Drilling	ASSAYING BY : Accurassay Lab, Thunder Bay, Ont.
DATE LOGGED : 1988/12/04	DATE DRILLED : 1988/12/02 to 1988/12/03	CORE LOCATION: Kashabowie, Ont.

Acid Tests

<u>Depth</u>	<u>Dip</u>
250.00	48.0
486.00	42.0

BLUE REGAL RESOURCES LTD.
SUMMARY LOGBR-8-2
Page 2

09-11-1989 :: 22:13

From(ft)	To(ft)	Field Name (Legend)
0.00	25.00	Overburden
25.00	343.20	Deformed Meta Basalt Foliation , occassionally sheared, magnetite
343.20	350.00	Meta Diorite Massive to weak foliation
350.00	484.80	Intermediate Volcanic , Quartz Andesites to Dacites Massive to weak foliation , recrystallized & metamorphosed, moderately hard.
484.80	502.00	Mafic Meta Volcanic - Meta Basalt to Meta Andesite Massive
502.00		END OF HOLE.

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

BR-8-3

09-11-1989 :: 22:15

PROPERTY : Banning Lake	PROJECT # :	
NTS MAP # : 52C/16	TOWNSHIP :	CLAIM # :
LINE/STATION: 1+00W / 2+00N	EASTINGS/NORTHINGS:	ELEVATION : Surface
LENGTH : 456.00 ft	INCLINATION : -55.0 degrees	AZIMUTH : 250.0 degrees
OVERBURDEN : 28.00 ft	CASING : Removed	
LOGGED BY : E. Canova	DRILLED BY : Alexander Drilling	ASSAYING BY : Accurassay Lab, Thunder Bay, Ont.
DATE LOGGED : 1988/12/08	DATE DRILLED : 1988/12/06 to 1988/12/08	CORE LOCATION: Kashabowie, Ont.

Acid Tests

<u>Depth</u>	<u>Dip</u>
210.00	55.0
456.00	53.0

BLUE REGAL RESOURCES LTD.
SUMMARY LOGBR-8-3
Page 2

09-11-1989 :: 22:15

From(ft)	To(ft)	Field Name (Legend)
0.00	28.00	Overburden
28.00	39.70	Meta Basalts Massive , weak magnetite
39.70	205.20	Meta Basalt Massive to foliation , weak magnetite
205.20	446.00	Meta Basalt Non magnetite
446.00		END OF HOLE.

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

09-11-1989 :: 22:16

From(ft)	To(ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
----------	--------	-------------	---------	-----------	---------	------------	----------	-------------	----------	----------	----------

Pyrrhotite: 1 to 2%.
Chalcopyrite: Trace to 1%.

Veins and Sub-Intervals

Quartz Veining. Width 2.00in. 5-10% veining & white zones of silica and carbonate of 1-4ft wide, some pods and folded veins.
(39.70)-(48.00): Shearing & grounding, 58 degrees deg. cax

205.20 446.00

Meta Basalt

Colour: Light green.
Fracturing: Weak (1-3)/ft.
Magnetic Response: Nil.

Composition

Mafic: Mainly
Feldspar: Mainly
Biotite: to 5% and some chlorite bands

Structure

Foliation: to 65 deg. cax.
Fracturing: 20 to 62 deg. cax.
Banding: to 65 deg. cax. Quartz-carbonate banding, & folding of these.

Alteration

Carbonate: to Weak.

Mineralisation

Pyrite: 1 to 2%.

Veins and Sub-Intervals

Quartz-carbonate Veining. Width 0.20in. Core axis angle random to 65 degrees.
Quartz-carbonate bands also
(260.40)-(275.60): Ultramafic section, dark green with blue tint, soft.
(440.30)-(445.60): Meta basalt fine granular, grey, massive.

446.00

END OF HOLE.

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

BR-4

09-11-1989 :: 22:17

PROPERTY : Banning Lake	PROJECT # :	
NTS MAP # : 52C/16	TOWNSHIP :	CLAIM # :
LINE/STATION: 0+75E / 2+25N	EASTINGS/NORTHINGS:	ELEVATION : Surface
LENGTH : 556.00 ft	INCLINATION : -45.0 degrees	AZIMUTH : 250.0 degrees
OVERBURDEN : 14.00 ft	CASING : Removed	
LOGGED BY : E. Canova	DRILLED BY : Alexander Drilling	ASSAYING BY : Accurassay Lab, Thunder Bay, Ont.
DATE LOGGED : 1988/12/05	DATE DRILLED : 1988/12/04 to 1988/12/06	CORE LOCATION: Kashabowie, Ont.

Acid Tests

<u>Depth</u>	<u>Dip</u>
266.00	41.0
550.00	39.0

BLUE REGAL RESOURCES LTD.
SUMMARY LOGBR-4
Page 2

09-11-1989 :: 22:17

From(ft)	To(ft)	Field Name (Legend)
0.00	14.00	Overburden
14.00	31.70	Trondhjemite to Granodiorite Massive & equigranular
31.70	65.40	Meta Gabbro Cut by several dykes of trondhjemite. Massive , equigranular, homogeneous compositionally.
65.40	556.00	Meta Basalt Foliation & some weak banding , magnetite
556.00		END OF HOLE.

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

BR-9-4
 Page 4

09-11-1989 :: 22:18

From(ft)	To(ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
----------	--------	-------------	---------	-----------	---------	------------	----------	-------------	----------	----------	----------

Colour: Green Green.
 Fracturing: Weak (1-3)/ft.
 Magnetic Response: Weak to Strong.

Composition

Mafic: Mainly
 Feldspar: Mainly
 Chlorite: Weak
 Biotite: Weak

Structure

Foliation: to 65 deg. cax.
 Banding: to 65 deg. cax. Black fine biotite banding
 Fracturing: 29 to 56 deg. cax. 8/m

Alteration

Chlorite: Weak.
 Carbonate: to Weak. Along fracturing

Mineralisation

Pyrite: 1 to 3%. Especially at 143-170
 Chalcopyrite: Trace to 4%. Especially at 143-170, massive sections of chalcopyrite & massive sections of magnetite

Veins and Sub-intervals

Quartz-carbonate Veining. Width 0.30in. 1-4% veining, fine
 (72.70)-(74.20): Trondhjemite Dyke: Pink grey, same as above. 1% pyrite, contact 55 degrees deg. cax
 (76.40)-(77.60): Diabase Dyke: Grey, fine grained, massive, contact 23 & 80 degrees deg. cax. Also at 137.6-139.9, 145-147, 149.3-153.2.
 (111.00)-(186.00): Moderately to strong magnetite
 (123.50)-(128.30): Diorite: Green, fine grained, massive, equigranular & homogeneous, 30% mafic, 5-10% quartz, 60% feldspar, 2-4% quartz-carbonate veining at 19 & 40 degrees deg. cax.
 (170.00): 170 Plus, Green metabasalt, fine grained, foliation, weak to moderately magnetite, foliation 48 degrees deg. cax, fracturing 34 to 65 degrees deg. cax, 9/m, weak chlorite, 1% pyrite
 (240.20)-(243.00): Diabase Dyke: Grey, fine grained, massive, contact 44 degrees deg. cax, also at 249-253.7.
 (253.70)-(264.80): Mafic volcanic flow brecciated: 30-35% fragments, flattened, 1-5cm, fine to medium grained mafic matrix. Foliation 59

BLUE REGAL RESOURCES LTD.
DIAMOND DRILL LOG

09-11-1989 :: 22:19

From(ft)	To(ft)	Description	Sample#	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/ton)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		degrees deg. cax . Appear to be mafic lapelli tuff . Also at 320-323.9, 340.4-346.9, 352.5-360.6.									
	(352.50)-(376.00)	: Some sections appear to be Ultramafic. Blue green and soft.									
	(411.00)	: Shearing 43 degrees deg. cax , & at 412.2-413.3 shearing & friable. Also at 418-420.3 shearing , broken core & fault gouging, green chlorite mud.									
	(483.00)-(485.00)	: Diabase Dyke: Grey green , fine grained , contact 80 degrees deg. cax .									
	(489.70)-(520.10)	: Silica , carbonate & magnetite metabasalt, possibly some albitization. 10-15% quartz vein , irregular veining , quartz pods, folded veining & some trending 60-70 degrees deg. cax , quartz flooding. Moderately magnetite , 2-4% pyrite									

556.00 **END OF HOLE.**

**PART II
MAPS**

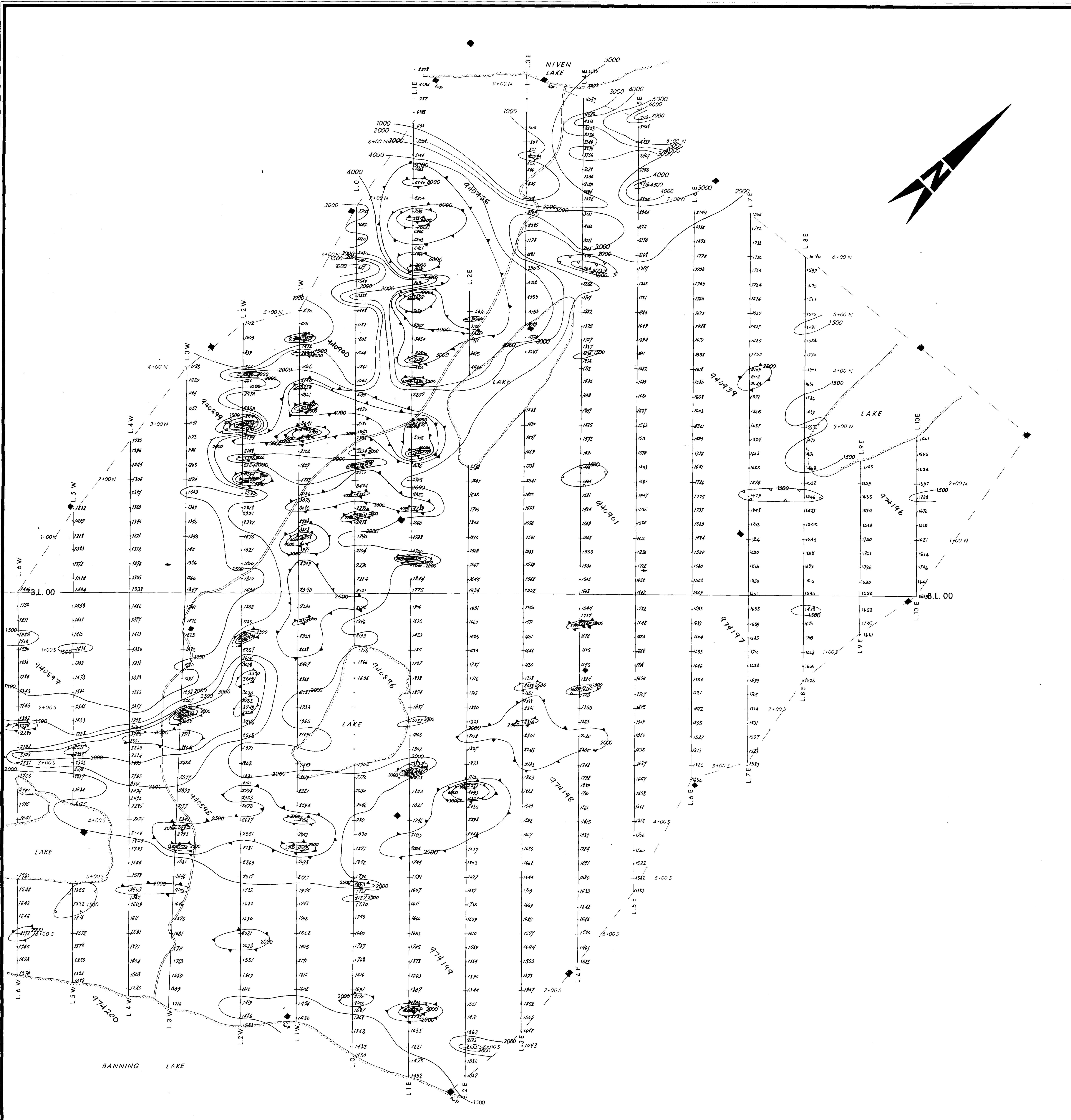
BLUE REGAL RESOURCES LIMITED

**1988 EXPLORATION PROGRAM ON
THE LAW-SPENCE OCCURRENCE PROPERTY
DISTRICT OF RAINY RIVER
ONTARIO**

**by: Wayne E. Holmstead
E. Canova
S. Anderson**

May 15, 1989.

HOLMSTEAD AND ASSOCIATES



▲ HIGH VALUE CONTOUR
 ▼ LOW VALUE CONTOUR

BASIC VALUE IS 58000 GAMMAS

63 63 90

63 63 91

GEOCOM CONSULTING
 118 Niagara St. KIRKLAND, Qc. H9J 3B6 Tel. 514-296-2321

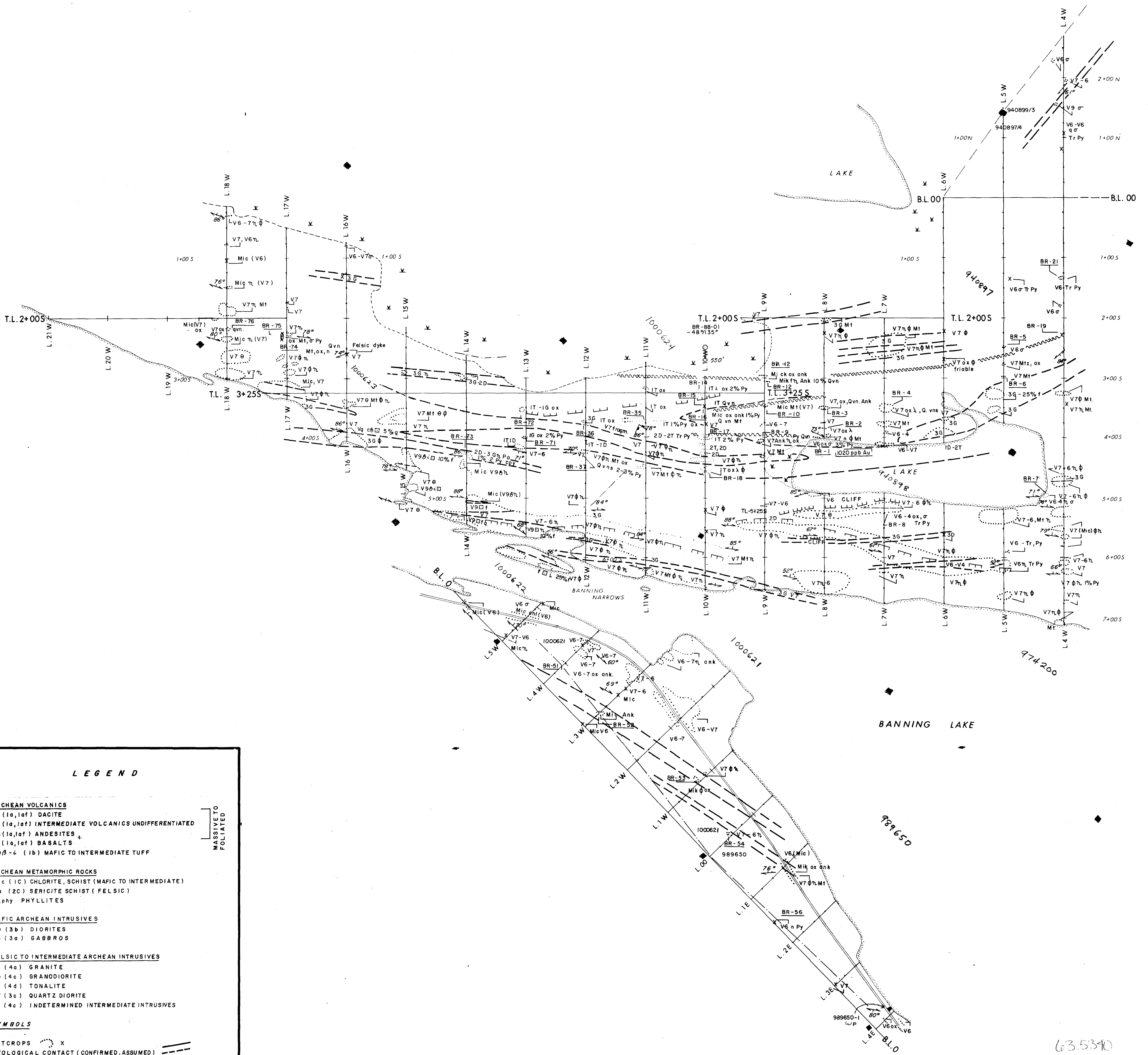
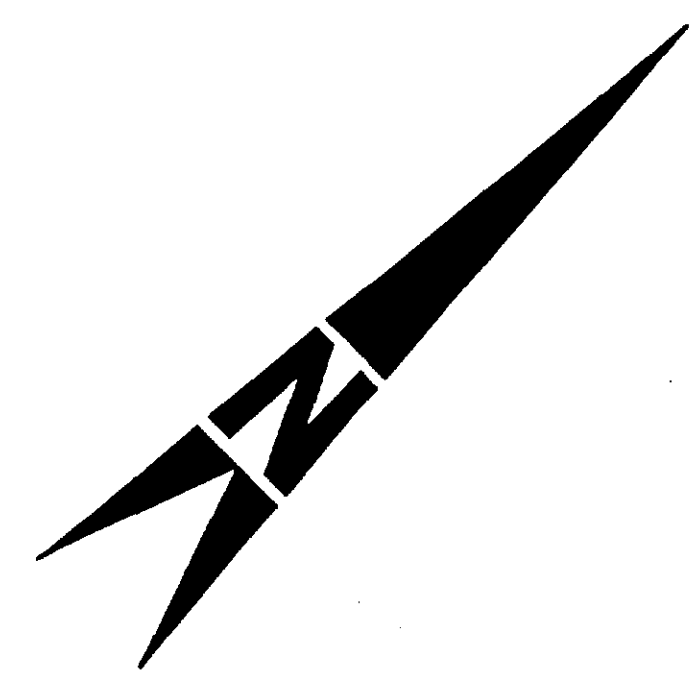
BLUE REGAL RESOURCES INC.
MAGNETIC CONTOURS
BANNING LAKE PTY.
 NORTH-EAST SHEET

Compilation by <u>Gecom Consulting</u>	DATE
Interpretation by <u>Wayne Holmstead</u>	<u>Nov. 1988</u>
Drafting by <u>Georges Brunel</u>	<u>Nov. 1988</u>

Township _____ N.T.S. _____ Drawing No. _____

SCALE 1:2500





LEGEND

- ARCHEAN VOLCANICS**
- V4 (1a, 1af) DACITE
 - V5 (1a, 1af) INTERMEDIATE VOLCANICS UNDIFFERENTIATED
 - V6 (1a, 1af) ANDESITES
 - V7 (1a, 1af) BASALTS
 - V9b-2 (1b) MAFIC TO INTERMEDIATE TUFF
- ARCHEAN METAMORPHIC ROCKS**
- Mic (1c) CHLORITE, SCHIST (MAFIC TO INTERMEDIATE)
 - Mik (2c) SERICITE SCHIST (FELSIC)
 - Miphy PHYLITES
- MAFIC ARCHEAN INTRUSIVES**
- 2D (3b) DIORITES
 - 3G (3a) GABBROS
- FELSIC TO INTERMEDIATE ARCHEAN INTRUSIVES**
- 1G (4a) GRANITE
 - 1D (4c) GRANDIORITE
 - 1T (4d) TONALITE
 - 2T (3c) QUARTZ DIORITE
 - 2 (4c) UNDETERMINED INTERMEDIATE INTRUSIVES
- SYMBOLS**
- OUTCROPS
 - GEOLOGICAL CONTACT (CONFIRMED, ASSUMED)
 - BEDDING / BONDING / CONTACTS
 - FOLIATION
 - JOINTING
 - FOLDING (AXIAL PLANE)
 - FAULTING
 - SWAMP, ALDERS
 - BR-88-02 SITE OF DIAMOND DRILL HOLE
 - BR-52 ROCK SAMPLE SITE
- TRAIN TRACK**
- CLAIM LINE AND CLAIM POST**
- Abbreviations:**
- Act ACTINOLIT
 - Py PYRITE
 - ox OXIDIZED
 - bio BIOTITE
 - Chl CHLORITIZED
 - Por PORPHYRITIC
 - Ank ANKERITE
 - k SERICITE
 - f FELDSPARS
 - phy PHYLITE
 - σ SILICIFIED
 - Mi MAGNETITE
 - c CHLORITE
 - Q QUARTZ
 - ϕ CARBONATIZED
 - θ PILLOWED

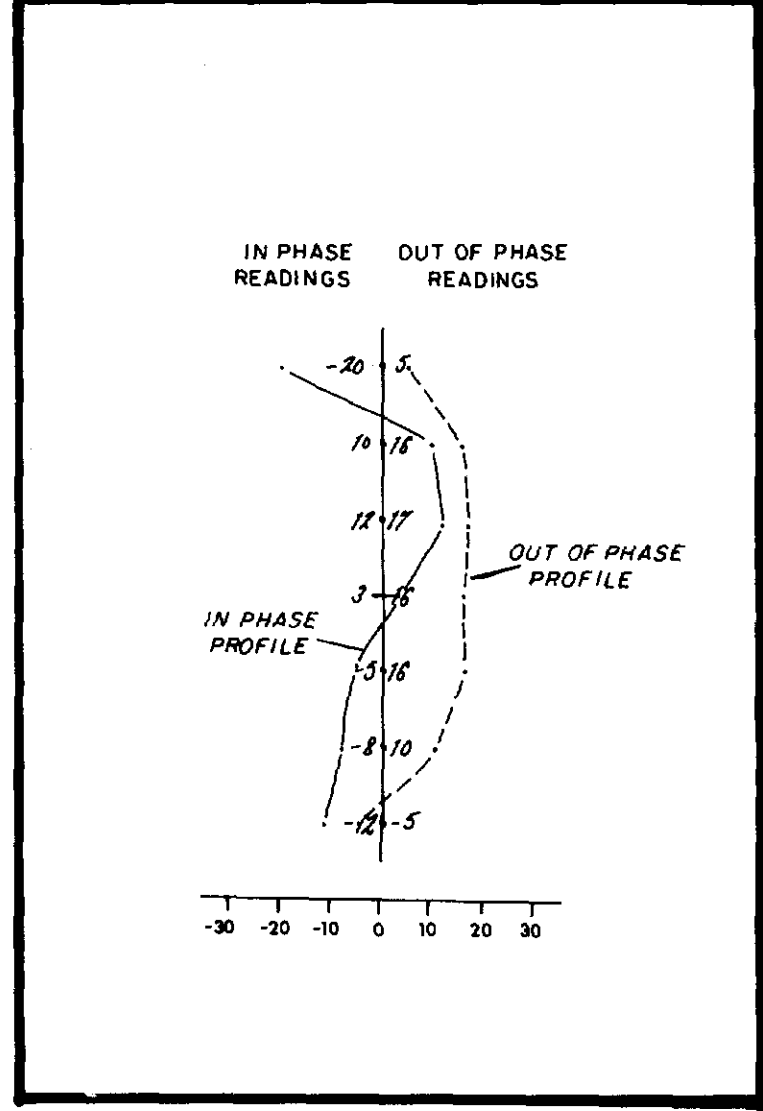
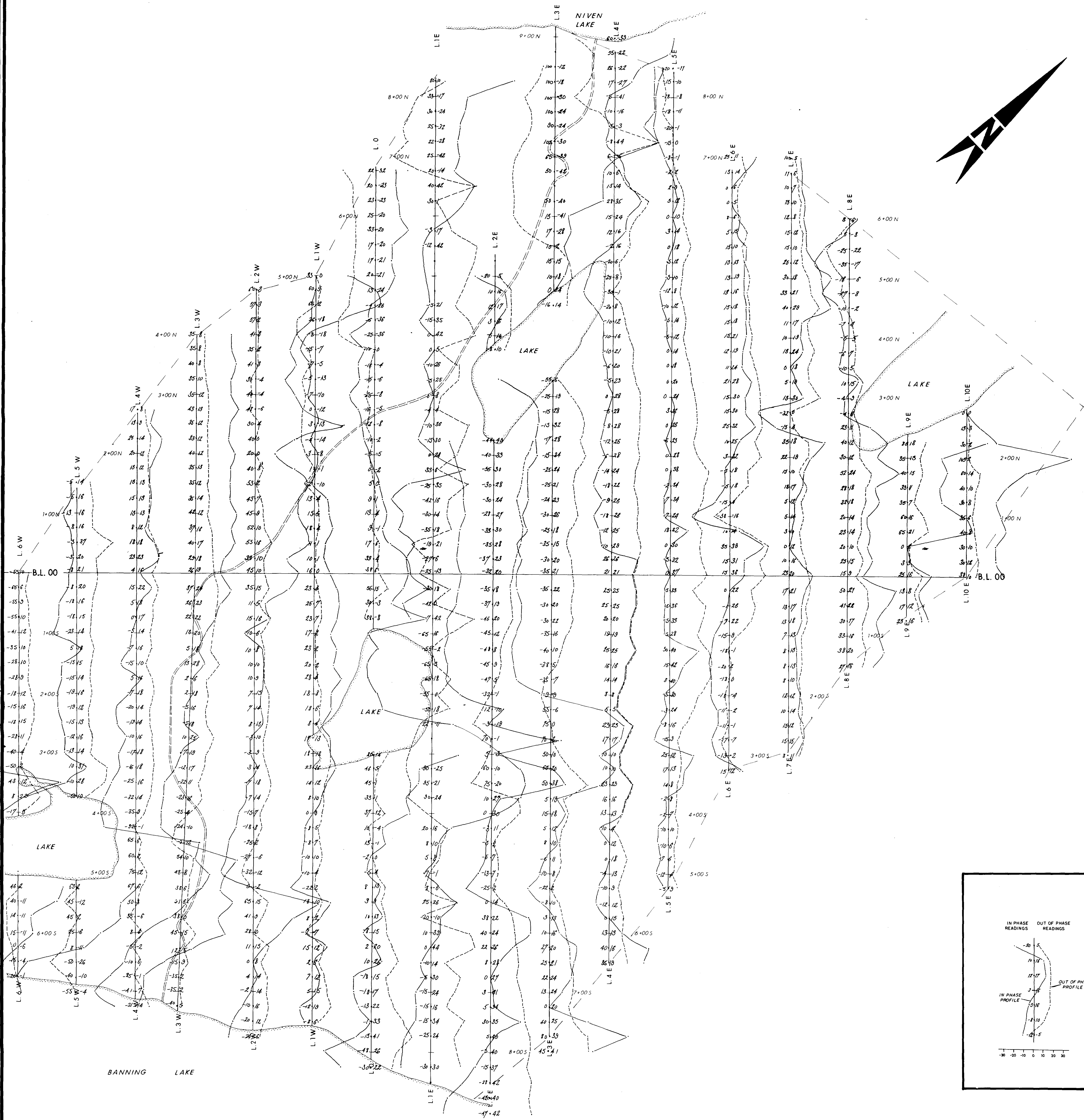
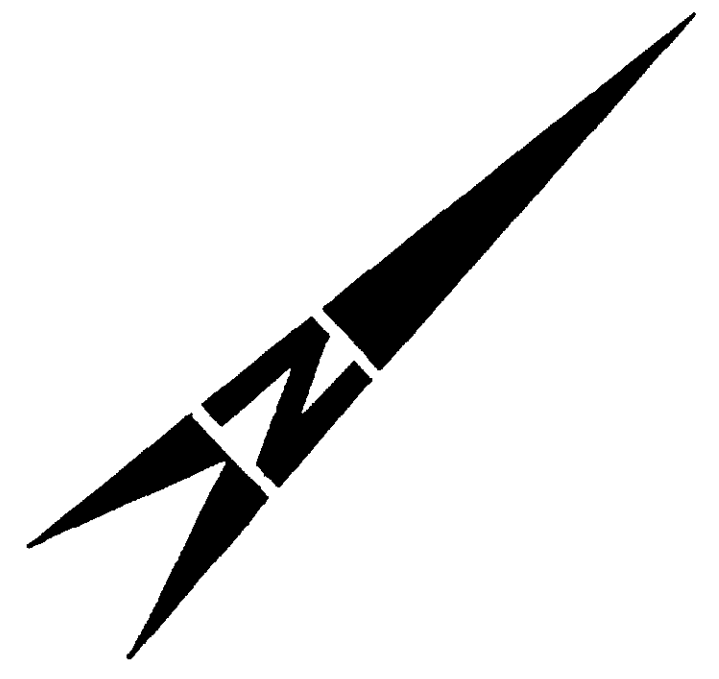
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GEOLOGICAL COMPILATION MAP
BANNING LAKE PT.
SOUTH-WEST SHEET

Compilation by E. C. DATE NOV. 88
Interpretation by _____
Drafting by G. B. P. L.

Township _____ N.T.S. Drawing No. _____

SCALE 1:2500



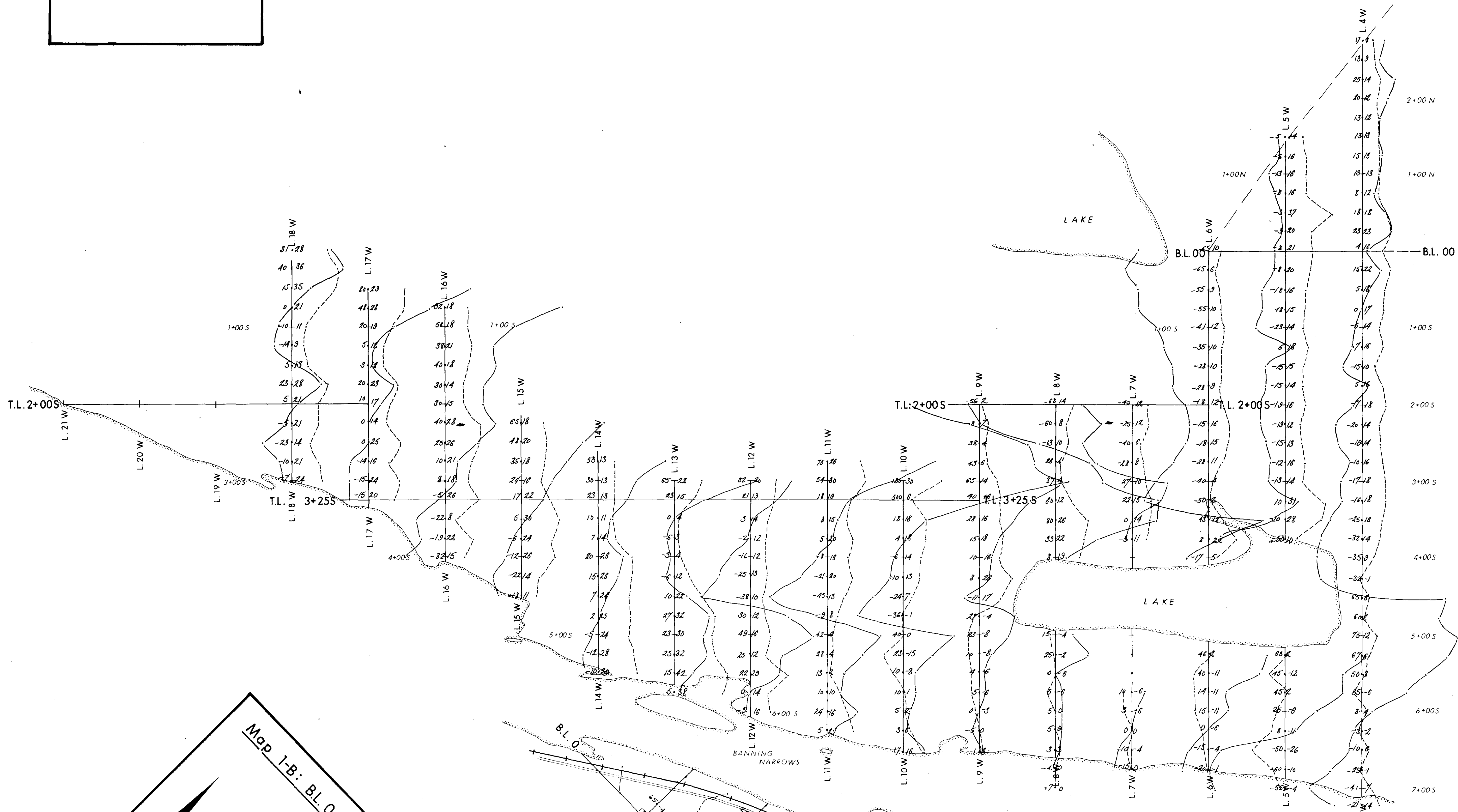
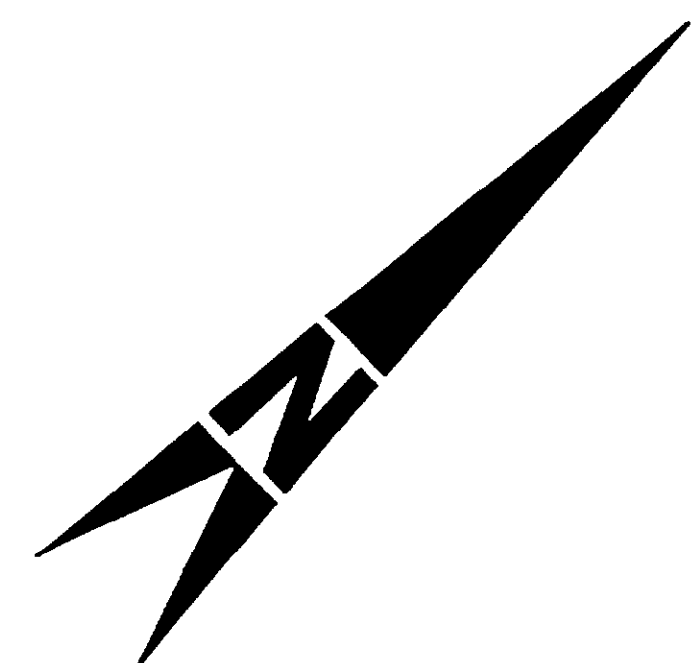
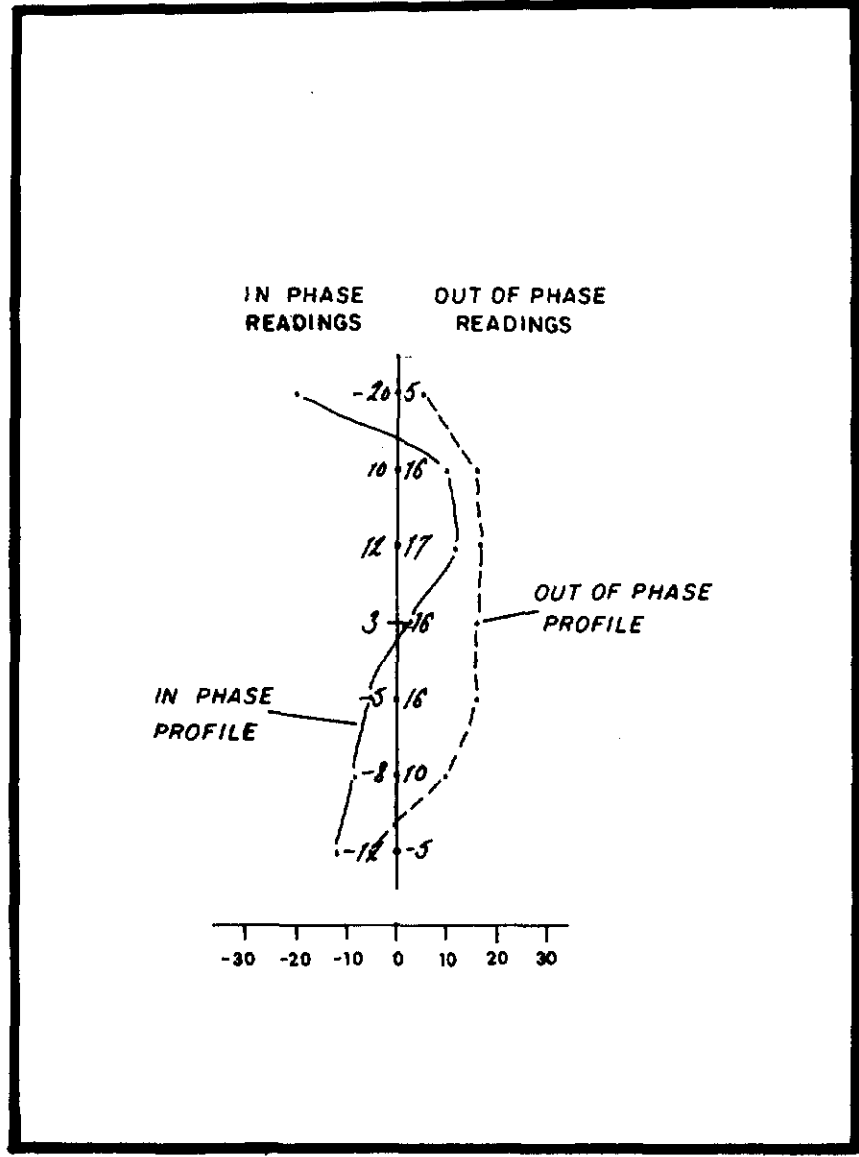
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 NORTH-EAST SHEET

Compilation by Geocom Consulting DATE _____
 Interpretation by Wayne Holmstead Dec. 1988
 Drafting by Georges Brunel Dec. 1988

Township _____ N.T.S. Drawing No. _____
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Map 1-B: B.L.O continued



BANNING LAKE

See Map 1-B

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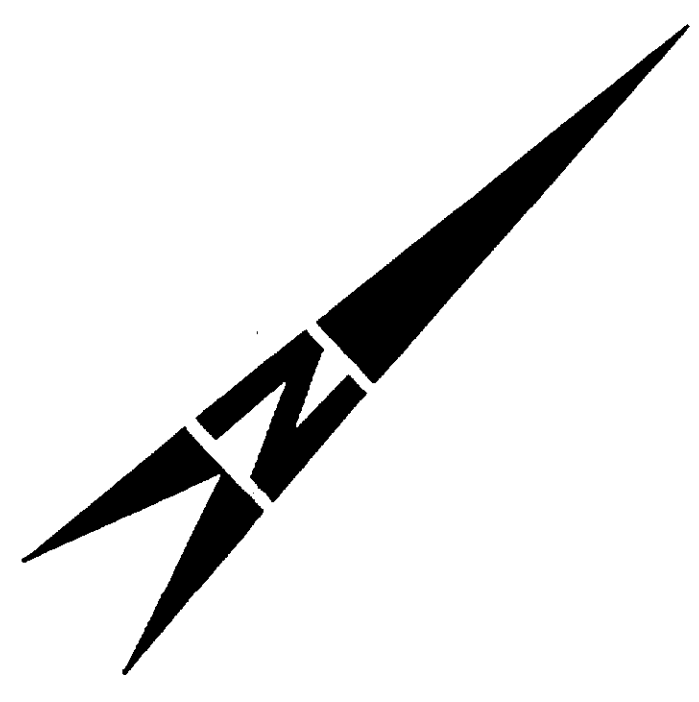
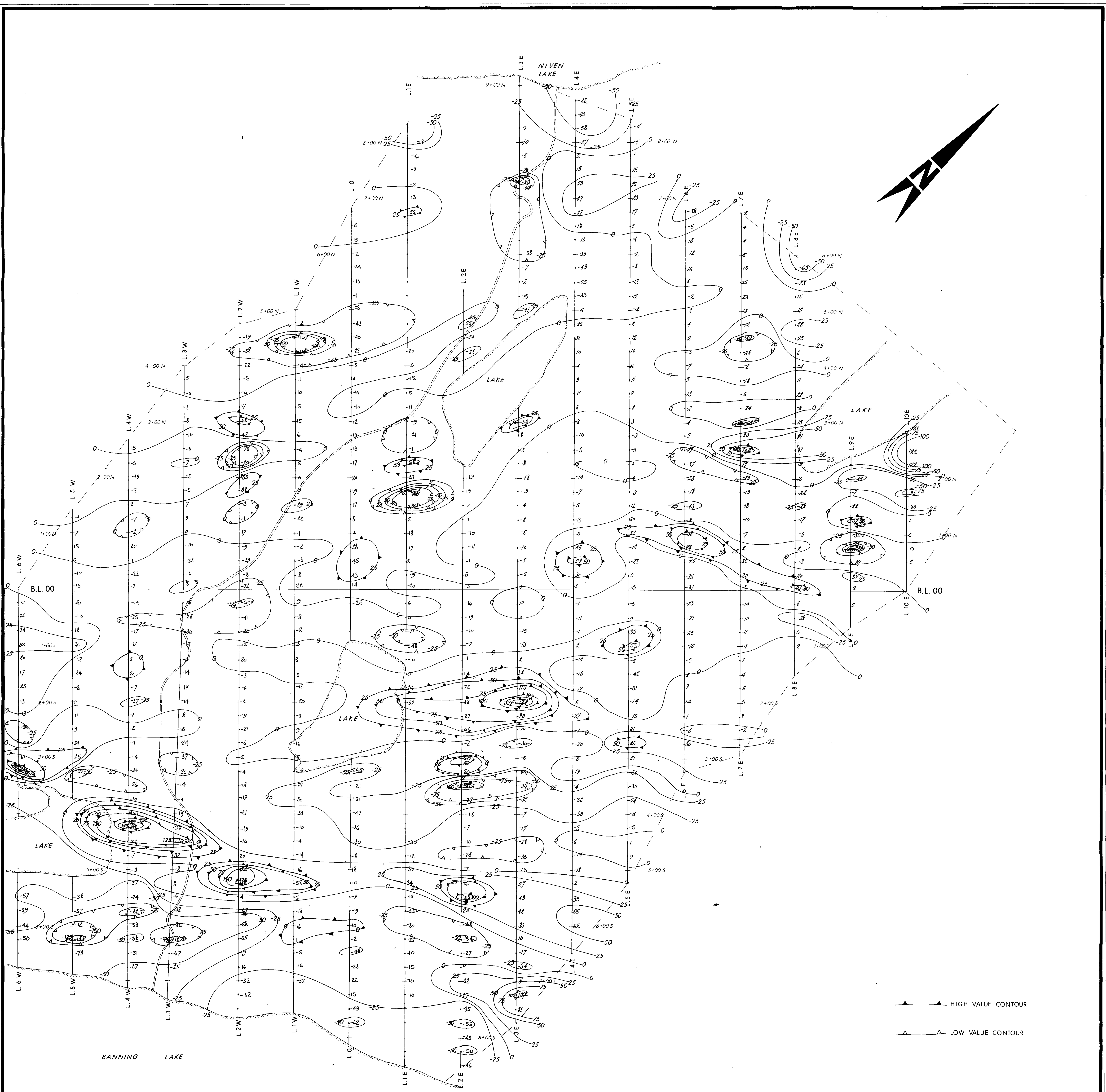
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SCALE 1:2500 0 50 100 m



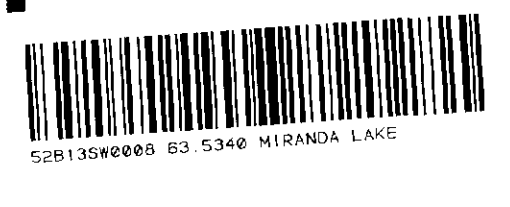


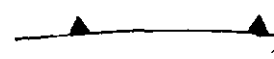

▲ HIGH VALUE CONTOUR
 ▲ LOW VALUE CONTOUR

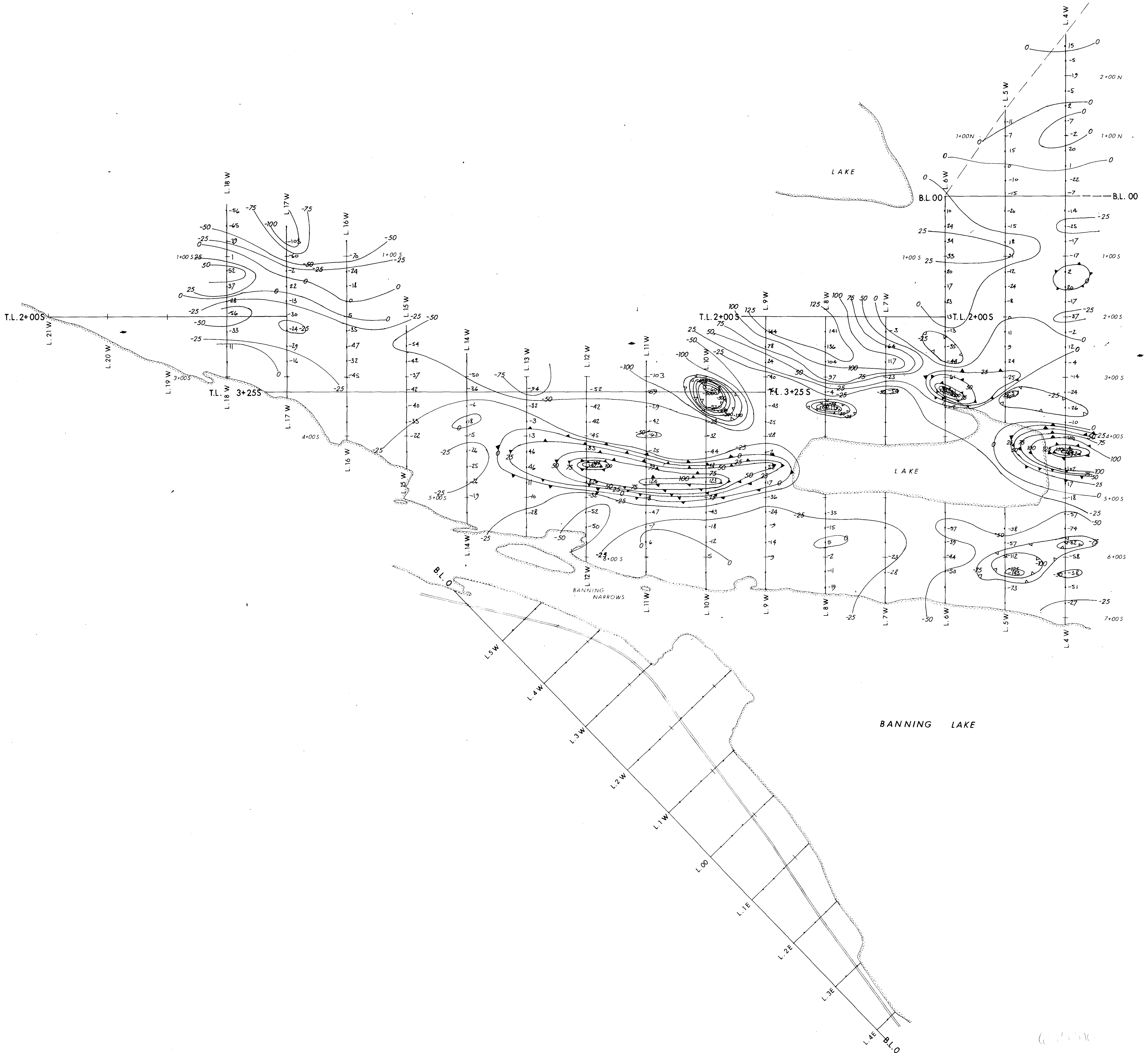
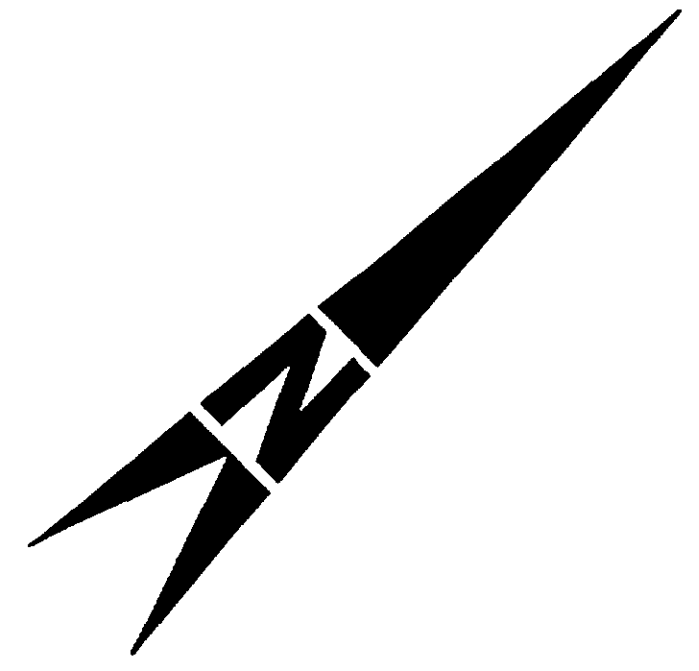
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BLUE REGAL RESOURCES INC.
E.M. FRASER CONTOURS
BANNING LAKE PTY.
 NORTH-EAST SHEET

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 Drafting by Georges Groulx Dec. 1988
 Township _____ N.T.S. Drawing No. _____
 SCALE 1:2500 100 m




 HIGH VALUE CONTOUR
 LOW VALUE CONTOUR



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 Drafting by Georges Brunel Dec 1988
 Township _____ N.T.S. Drawing No. _____
 SCALE 1:2500 





LEGEND

METHOD: TIME DOMAIN
 ELECTRODE ARRAY: GRADIENT
 PULSE DURATION: 2 sec on/2 sec off
 DELAY TIME: 900 ms
 INTEGRATION TIME: 450 ms
 RECEIVER: Smiths ER-8
 TRANSMITTER: Hunteck 2.5 KVA
 UNITS: chargeability - milliseconds

ELECTRODE ARRAY : Gradient

SURVEY PORTION: 1/3 of C1 - C2

EXSICO EXPLORATION LTD.
 100, BOX 1000, P4W-7X1
 Suite 13, Hollinger Bldg, Timmins Ont. Oremiss - 254
 Telephone: 705-267-4151

CLIENT: BLUE REGAL RESOURCES LTD.
 PROPERTY: BANNING LAKE PROPERTY
 TITLE: CONTOURED
 IP CHARGEABILITY

Date: Nov. 1968 Scale: 1:5000 NTS:
 Drawn: P.G. Interp Job No. IP 191



