



52F10NW0009 OM91-076 CONTACT BAY

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**SOCIETE MINIERE MIMISKA INC.**

**Glatz - Kozowy Option**

**Nabish Lake Property**

**Contact Bay Area (G-2579)**

**Kenora District of Northwestern, Ontario**

**Summary of 1991 Exploration Activities**

**March, 1991**

**William C. Yeomans**

## SUMMARY

This report describes the results of preliminary geophysical and diamond drilling campaigns which were completed during January and February of 1991, on the Contact Bay property. This property consists of forty-two (42) claims which are located twenty kilometers south-southwest of the town of Dryden, in northwestern Ontario.

Samples taken from a surface showing, discovered in 1990 by Messrs. A. Glatz and A. Kozowy, assayed up to 6.5% Cu and 3.5% Ni, with significant platinum and palladium values. Line-cutting, ground geophysics and a 2,000 foot diamond drilling program indicated that nickel-copper mineralization on the Contact Bay property is limited in continuity at depth. The small lense of remobilized mineralization on surface appears to be fracture-controlled, hosted within a quartz-diorite breccia. Significant drill hole intersections included 0.91% Ni with 0.52% Cu over 1.52 m from a depth of 1.40 m to 2.92 m, and 0.62% Ni with 0.39% Cu over 1.28 m from a depth of 5.00 m to 6.28 m in hole CB-91-01. These values were obtained under the main trench. A vertical hole intersected 0.53% Ni over 0.65 m from a depth of 4.12 m to 4.77 m in drill hole CB-91-05. Five other drill holes returned no significant base metal values. It is recommended that the trench area be washed and mapped in detail. Pending results of detailed mapping and prospecting, selected areas could be tested with an I.P. survey.



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## 1.0 INTRODUCTION

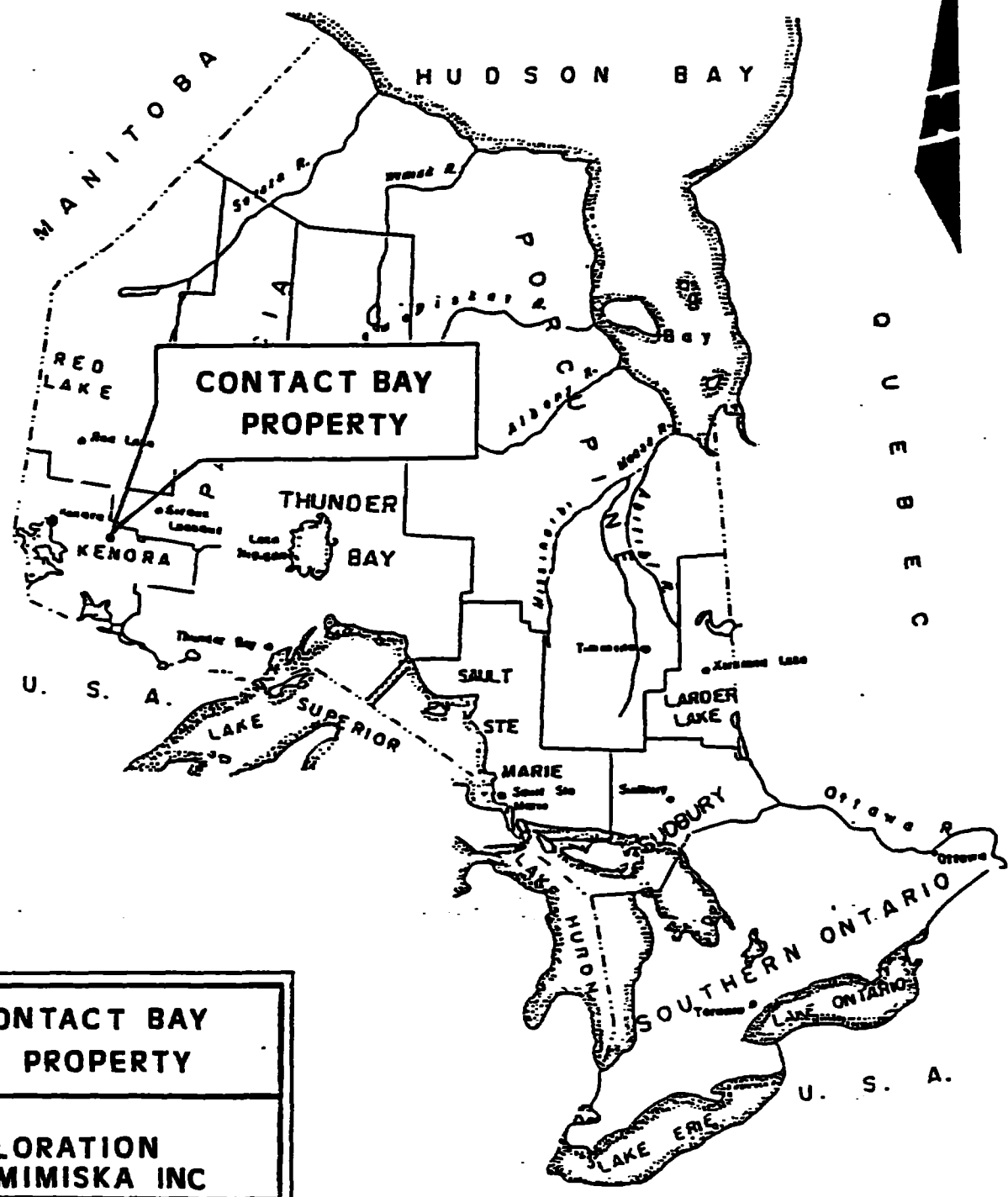
During December of 1990, Messrs. Glatz and Kozowy of Dryden, Ontario, contacted Société Minière Mimiska Inc. in Thunder Bay, Ontario, concerning a nickel-copper discovery near Nabish Lake, located 20 kilometers south-southwest of Dryden, Ontario. Surface sampling and examination of available VLF-EM-16 and magnetic data resulted with Mimiska optioning the ground late in December of 1990. This report describes the results of subsequent geophysics surveys and a two thousand foot drilling program.

Société Minière Mimiska Inc. can earn a 100% interest in the property by making payments which total \$ 93,000 over four years. A list of claims is presented in Appendix A.

## 2.0 PROPERTY LOCATION AND ACCESS

The Nabish Lake property is accessible by driving 17 km south from Dryden, Ontario, along highway 594 to the Old Century Road. The Old Century road is followed southwest to the Nabish Lake road. The Nabish Lake road is a seasonal access route which is followed west for a distance of six (6) kilometers to the main showing.

Two separate grids were established on the claim block. The western grid has a north-south oriented base line which extends southward from the Nabish Lake road to the southern limit of the property. East-west lines were also established every 100 m. A total of 6 kilometers of line were cut on this grid.



**CONTACT BAY  
PROPERTY**

**EXPLORATION  
MIMISKA INC**

**Property Location  
Map**

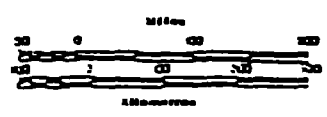
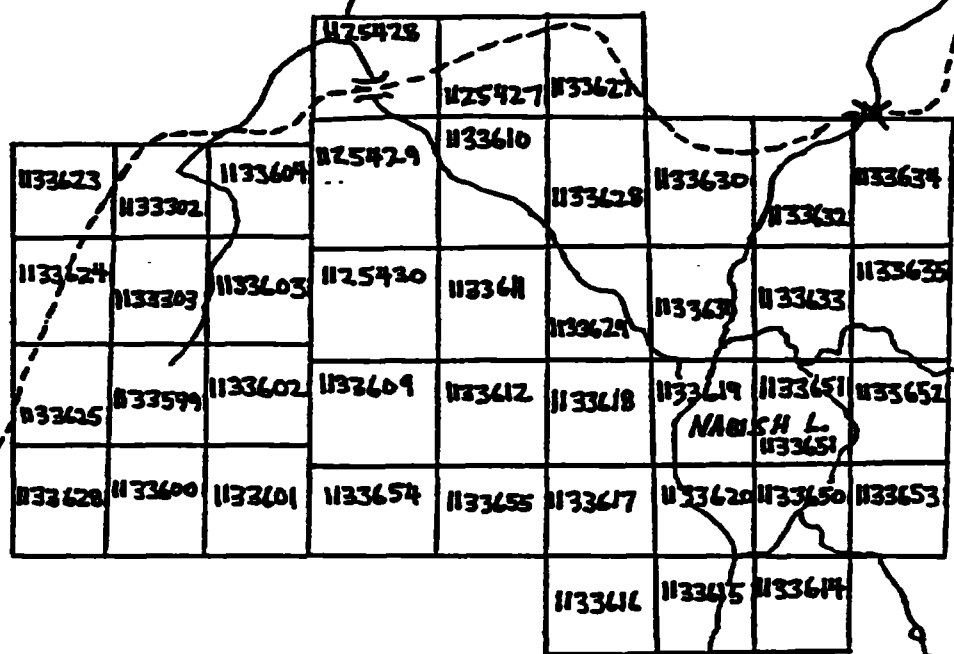


Figure 1

N  
4



AREA G-2579

CONTACT BAY PROPERTY

SCALE 1 inch = 40 Chains

FIGURE 2 - CLAIM MAP - Contact Bay Area

93°56' 49°37'30"

A second grid was completed over Nabish Lake. The base line transected the centre of Nabish Lake at an orientation of N319°E. Cross-lines were established on the ice with a line-spacing of 100 meters. Two tie lines were also cut. A total of 15 km of line was cut on the second grid. A property location map is indicated in Figure 1, while Figure 2 indicates the location of the 42 claim block.

### 3.0 PREVIOUS WORK

Copper-nickel mineralization in the Dryden area was initially documented by Parsons (1911) at Meridian Bay, located at the south end of Eagle Lake. The Kenbridge Nickel deposit was discovered in 1936. This deposit is situated 24 km, southwest of Muskeg Bay, from Eagle Lake.

Past exploration work by mining companies on the present claim block included Cooper (1962), The Mining Corporation (1968), Hollinger (1969), Lynx (1970) and more recently by Kozowy and Glatz (1989) and Falconbridge (1990). A GSC aeromagnetic map for the Nabish Lake area was initially presented on Map 1154G in 1960. This survey was reflowed in 1986 and presented on OGS Map 80971, utilizing the Geotrex Geotem airborne EM system.

Hollinger (1969) and Lynx (1970) completed ground geophysics surveys and diamond drilling in the vicinity of the main showing. No economic base metal intersections were obtained during these programs. Falconbridge (1990) completed Max-Min and magnetic surveys over the main showing. These surveys did not identify any favourable base metal targets.

Société Minière Mimiska Inc. completed detailed total field magnetic and VLF-EM-16 surveys as well as limited Max-Min and vertical loop programs over the two established grids during February of 1991. These surveys were followed by a 2,000 foot diamond drilling program which tested targets on the two grids.

#### 4.0 REGIONAL GEOLOGY

The Dryden area is situated within the western portion of the Wabigoon Subprovince, and is composed of Archaean volcanic and metasedimentary rocks which have been intruded by granitoid rocks. Some of the granitic intrusions attain batholithic dimensions, causing segmentation of the volcanic and sedimentary rocks into individual belts. The Wabigoon Subprovince is bounded to the north by the English River Subprovince, a gneissic terrain, and to the south by the Quetico Subprovince (Figure 3). Blackburn et al. (1985) developed a tectonic model which basically identifies each of the Subprovinces as being accretionary wedges in an island arc setting.



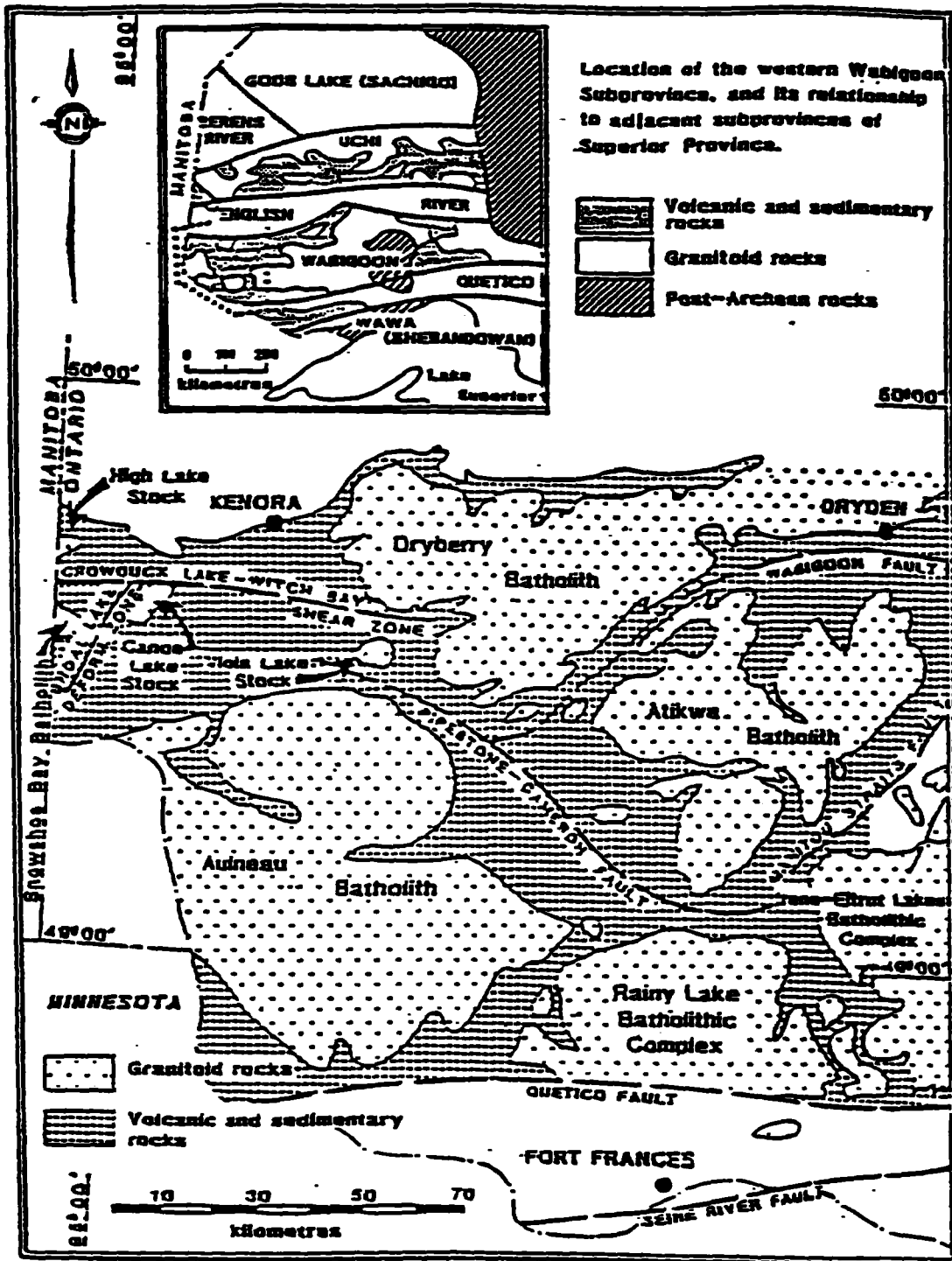


Figure 3. Simplified regional geology of northwestern Ontario (Modified from Blackburn et. al., 1985)

The margins of the Subprovinces are generally oriented east-west, and characteristically have major breaks or fault zones developed along them. Within the central portions of these belts, high strain zones occur around margins and between granitic complexes.

The property described in this report occurs within a mafic to ultramafic series of intrusive rocks located proximal to the border of the Atikwa batholith. Other copper-nickel occurrences in the region occur in this setting.

The stratigraphic nomenclature for the area was described by Moorehouse (1939). Table 1 is a Table of Formations for the area of interest.

TABLE 1 - TABLE OF FORMATIONS  
(From Moorehouse, 1939)

<b>QUATERNARY</b>	
Pleistocene:	Varved lake clays, till, sand and gravel.
<b>PRE-CAMBRIAN</b>	
Keweenawan:	Diabase dikes.
	Granitic intrusives: Pegmatitic granite; granodiorite, quartz diorite, granite gneiss.
Algoman(?):	Hybrid intrusives: Diorites, amphibolites intrusive into the Keewatin and cut by granite.
Haileyburian(?):	Basic intrusives: Norite, diabase, gabbro, anorthosite, and transitional phases; diorite; sheared, chloritized, and silicified equivalents; some granites.
Timiskaming(?):	Sedimentary series: Greywacke and paragneiss with minor amounts of slate and quartzite; iron formation.
Keewatin:	Volcanic complex: Flows of basalt, andesite, dacite and rhyolite and their pyroclastic and altered equivalents; associated porphyry dikes, possibly, in part, of Algoman age.

## 5.0 PROPERTY GEOLOGY

Société Minière Mimiska Inc. did not map the property, as the ground was optioned in December, 1990. A limited amount of data is available, from drill holes and previous work. The property geology can only be summarized from this data.

The Nabish Lake property contains hybrid diorite and mixed contact phases of amphibolite and other ultramafic rocks which are considered to be Algoman by Moorehouse (1939). These diorites and amphibolites intrude Keewatin intermediate to mafic rocks. The younger Atikwa batholith intruded the mafic to ultramafic rocks and the Keewatin felsic to mafic volcanics.

The ultramafic rocks have a strong aeromagnetic and ground magnetic signature on the claims. Quartz diorite appears to be a border phase to the ultramafic sequence, and this phase is commonly brecciated. The breccia contains angular fragments of Keewatin felsic rocks. The ultramafic rocks have been mapped as gabbro by Cooper (1962). Gabbro was observed with amphibolite and talc-chlorite schists during the 1991 drilling campaign. Several of these rock types are highly magnetic, with up to 5% magnetite.

Within the vicinity of the main showing, drilling by Hollinger (1969) and Lynx (1970) intersected amphibolite and feldspar porphyry dikes along with quartz diorite breccia. The zones of brecciation are widespread immediately west of the ultramafic sequence. Brecciation may be structurally controlled. Copper-nickel mineralization appears to be spatially associated with the quartz diorite breccia. Drill hole results by Hollinger and Lynx returned uneconomic values.

The main Glatz-Kozowy trench is located at L7+10S, 15 m east of Base Line 0+00, and is known as Trench 1. It is oriented approximately N025°E and is 5.5 m in length. The second trench is located 4 m north of the northern limit of Trench 1. This trench terminates along line 7+00S, 15.5 m east of Base Line 0+00. The total length of Trench 2 is 7 m, and it is oriented north-south. Outcrops of rusted diorite and quartz diorite breccia are present between Trenches 1 and 2 and Base Line 0+00.

Spectacular pyrrhotite-chalcopyrite mineralization is present at Trench 1. Up to 25% chalcopyrite and 60% pyrrhotite was observed and sampled. The sulfides appear to be remobilized. The host diorite may have been totally replaced. Semi-massive sulfide containing blue quartz eyes and altered chloritic wallrock was observed in Trench 1. It was not possible to obtain any detailed structural data due to the amount of snow and blast debris which filled the trench. The width of the zone appears to be 1.0 m to 1.5 m, and strikes roughly N025°E. The mineralization occurs as a

small lense with limited strike potential. A 1:5000 scale compilation map for the property indicates the location of previous drilling, geophysical anomalies and geology (Back Pocket). The trenches are indicated on a 1:500 scale map. Complete rock descriptions for areas drilled are available in the drill logs (Appendix B).

## 6.0 STRUCTURAL GEOLOGY

The regional schistosity is variable within the Nabish Lake mafic to ultramafic complex, ranging from a northwest to northeast direction. Major fault zones trend N025°E and N325°E. These sharply defined lineaments are recognizable on regional maps and air photos.

The N025°E lineaments may have been responsible for an event which allowed the emplacement of quartz diorite breccia and the remobilization of base metals. A large scale lineament oriented N025°E is situated 40 m east of the main showing. The proximity of this structure to mineralization suggests that it may have been a controlling factor during the mineralizing event. Most of the small showings and sporadic geophysical anomalies are oriented parallel to this feature. Mapping and prospecting would be required to ascertain the importance of this lineament. Drilling indicated that some of these fault structures contain hydrous mineral assemblages and fault gouge with elevated nickel and palladium values (CB-91-06).

## 7.0 ECONOMIC GEOLOGY

Copper-nickel values are plotted on the detailed map of the main showing. Grab samples returned up to 6.5% Cu and 3.5% Ni. Platinum and palladium values ranged up to 280 ppb. Drill hole results proved that these high values do not continue for any significant depth. Drill hole CB-91-01 intersected 0.91% Ni with 0.52% Cu over 1.52 m from a depth of 1.40 m to 2.92 m, and 0.62% Ni with 0.39% Cu over 1.28 m from a depth of 5.00 m to 6.28 m. These values were intersected at a shallow depth directly under Trench 1. Drill hole CB-91-05 was drilled vertically in Trench 1 to test the mineralization at depth. Weak mineralization was obtained at the top of the hole, including 0.53% Ni over 0.65 m from a depth of 4.12 m to 4.77 m. It was noted that hydrous alteration within the breccia had taken place, as chloritic rims around fragments appeared to be biotitized.

Biotitized fault zones containing elevated Ni and Pd values were intersected within the ultramafic complex near the northern limit of Nabish Lake. These magnetite rich sections contain up to 1,140 ppm Ni and 140 ppb Pd. Drill holes CB-91-02, 03 and 04 did not obtain any significant values. The drill hole results from the 1991 program indicated the limited potential of the main zone. However other geophysically defined targets on the property remain untested. Sample descriptions and assay values from the main showing are presented in Appendix C.

## 8.0 RESULTS OF GEOPHYSICS SURVEYS

### 8.1 TOTAL FIELD MAGNETIC SURVEY

During the fall of 1990, Mr. A. Glatz completed a total field magnetic survey utilizing a Scintrex MP-2 Proton procession magnetometer over claims K1133302 and K1133303, on the western grid.

The main showing corresponds to a magnetic low with an adjacent magnetic high. The magnetic high is caused by pyrrhotite mineralization. The magnetic high values drop off substantially to the north and south of Line 7+00S, indicating the limited strike length potential of the main showing.

During January and February of 1991, Mr. A. Glatz completed a magnetic survey over east-west lines south of the showing and over the Nabish Lake grid. No significant magnetic anomalies were identified on the western grid south of the main showing (Map 3, Back Pocket).

The Nabish Lake survey (Map 3) identified a magnetite rich unit that trends approximately N330°E, parallel with the base line. Drilling indicated that the high magnetic values were caused by disseminated magnetite. Several N025°E fault zones cross-cut this unit, causing a segmented appearance as a result of magnetite destruction within biotitized shears. One isolated magnetic high occurs near the southwest corner of Nabish Lake. The cause of the high

magnetism is suspected to be magnetite mineralization. The magnetometer survey proved to be the most useful tool for outlining areas of potential Cu-Ni mineralization on the property.

## 8.2 VLF-EM-16 SURVEY

During the fall of 1990, Mr. A. Glatz completed a VLF-EM-16 survey (NSS Annapolis, Maryland) over claims K1133302 and K1133303 on the western grid. Conductors A, B, C and D were identified, with Conductor A corresponding to the main showing. Conductors A and B were drilled and returned negligible results. Conductor A is caused by sporadic mineralization, while Conductor B is suspected to be caused by an overburden response. Conductors C and D do not have an associated magnetic anomaly, suggesting that pyrrhotite is absent. It was noted during the drilling campaign that the distance between pickets on the Glatz-Kozowy grid was poorly rechaind. It appears that the grid was originally picketed on 25 meter stations. Messrs. Glatz and Kozowy relabelled the 25 meter stations as 100 foot stations, introducing an error of 5.48 m between each consecutive station. The plotted data by Glatz is suspected to be innaccurate.

This problem did not occur on Mimiska's winter grid, cut south of claims K1133302 and K1133303, or on the Nabish Lake grid. A. Glatz was hired to complete VLF-EM-16 surveys during February, 1991. No significant VLF-EM-16 responses were



identified. Weak VLF-EM-16 responses on the grids are considered to be caused by lake bottom clays or topographic effects. Approximately 25 m of clay and muddy glacial outwash filled the Nabish Lake basin. The Annapolis NSS Maryland transmitter station was used for this survey. The VLF-EM-16 survey did not prove to be a useful exploration tool on the Nabish Lake grid.

### 8.3 VERTICAL LOOP SURVEY

The vertical loop survey was conducted over several lines on the Nabish Lake grid. The frequency utilized was 930 Hz and the instrument model was an Inco Mark IV unit. The survey was completed in late January by D. Macheachern. The vertical loop data is presented at a scale of 1:2500 (back pocket). The profiles indicate that weak cross-overs exist under the lake. Several of the anomalies may be related to geological contacts between magnetic and nonmagnetic rock types.

### 8.4 HORIZONTAL LOOP SURVEY

A limited amount of H.E.M., utilizing an Apex instrument and three frequencies (444 Hz, 1777 Hz and 3555 Hz) with a 400' cable was completed on the Nabish Lake grid. The results were generally flat, with a weak anomaly at 1+75E on line 8+00N. The in-phase responded with positive values over magnetite-rich rock near BLO on line 8+00N. This data is presented on Map 4, located in the back pocket of this report.

## 9.0 SUMMARY OF DIAMOND DRILLING

Seven diamond drill holes, totalling 609.6 m were completed during a preliminary campaign in February, 1991. Individual drill logs are presented in Appendix B. All of the drill holes are plotted on 1:5000 scale maps, and drill sections are plotted at a scale of 1:500. These are located in the back pocket. Significant values intersected in drill holes CB-91-01 and CB-91-05 were discussed in the Economic Geology chapter. Drill holes CB-91-02, 03, 04, 06 and 07 did not return any significant values. A Summary Table of important information concerning each drill hole is presented in Table 2.

TABLE 2 - DRILL HOLE SUMMARY

DRILL HOLE	COORDINATES (metric)	AZIMUTH	DIP	LENGTH (m)	OBJECTIVES	RESULTS
CB-91-01	L7+17.5S O+12.4E	N030°E	-50°	60.96m	Western Grid Trench 1	0.91% Ni with 0.52% Cu over 1.52m from a depth of 1.40m to 2.92m ----- 0.62% Ni with 0.39% Cu over 1.28m from a depth of 5.00m to 6.28m
CB-91-02	L7+33.0S O+3.5E	N030°E	-45°	59.74m	Western Grid Trench 1	No significant values
CB-91-03	L7+00S 117.96E	N095°E	-45°	91.44m	Western Grid B-Conductor	No significant values
CB-91-04	L7+16S O+38.2E	N282°E	-45°	93.26m	Western Grid Trench 1	No significant values
CB-91-05	L7+11.5S O+15.9E	Vertical	-90°	75.29m	Western Grid Trench 1	0.53% Ni with 0.57% Cu over 0.65m from 4.12m to 4.77m
CB-91-06	L8+00N BLO	N054°E	-55°	89.92m	Nabish Lake Grid	1140 ppb Ni over 1.52m from 65.83m to 67.35m
CB-91-07	L8+00N 1+25E	N054°E	-52°	135.94m	Nabish Lake Grid	140 ppb Pd over 0.67m from a depth of 113.93m to 114.60m

## 10.0 CONCLUSIONS AND RECOMMENDATIONS

The main showing on the Nabish Lake property is a remobilized lense of copper-nickel mineralization which does not have continuity at depth. The mineralization appears to be fracture controlled and hosted within quartz diorite breccia. Subeconomic values were obtained from the drilling campaign.

It is recommended that the main showing be completely stripped, washed, and mapped in detail. Additional mapping and prospecting could be carried out over areas of potential interest. If no significant showings or encouragement were obtained from this small program, the property should be abandoned.

**11.0 REFERENCES**

- Airborne Electromagnetic Survey, 1987. Dryden Area, District of Kenora, Map 80971. Scale 1:20,000.**
- Cooper, G., 1962. Report on Nabish Lake Claims, File F/10 NW V-6, #2331. 5 p + maps.**
- Davies, J.C. and Watowich, S.N., 1956. Geology of the Populous Lake Area. O.D.M. Report, Volume LXV, Part 4, 24 p + maps.**
- Falconbridge, 1990. Max-Min Survey + Report of Sampling by S. Eriks. Unpublished report.**
- Glatz, A., 1990. Magnetic and VLF-EM Survey of Mining Claims K1133302 and K1133303. Unpublished OPAP Report.**
- Hollinger Mines Limited, 1969. Combined Ground Electromagnetic and Geomagnetic Survey, Kozowy Option Contact Bay Area, Dryden, Ontario. 8 p. + maps.**
- Moorehouse, W.W., 1939. Geology of the Eagle Lake Area. ODM Report, Volume XLVIII' Part IV. 31 p. + maps.**
- Satterly, J., 1941. Geology of the Dryden - Wabigoon Area. ODM Report, Volume L, Part II. 67 p + maps.**
- The Mining Corporation, 1968. Magnetic and VLF-EM-16 Surveys on Nabish Lake. 2 maps. File F/10 NW.**

**APPENDIX A - CLAIM LIST**

**K1133302  
K1133303  
K1133609  
K1133610  
K1133611  
K1133612**

**K1125427  
K1125428  
K1125429  
K1125430**

**K1133650  
K1133651  
K1133652  
K1133653  
K1133654  
K1133655**

**K1133623  
K1133624  
K1133625  
K1133626  
K1133627  
K1133628  
K1133629  
K1133630  
K1133631  
K1133632  
K1133633  
K1133634  
K1133635**

**K1133699  
K1133600  
K1133601  
K1133602  
K1133603  
K1133604**

**K1133614  
K1133615  
K1133616  
K1133617  
K1133618  
K1133619  
K1133620**

**APPENDIX C - TRENCH GRAB SAMPLES**

<b>SAMPLE NO.</b>	<b>LOCATION</b>	<b>DESCRIPTION</b>	<b>Ni %</b>	<b>Cu %</b>	<b>Pt ppb</b>	<b>Au ppb</b>
29951	Small pit near BLO Line 7S within N345°E shear P	Sheared Qtz diortie 1-2% cpy 1-2% pyrrhotite rusty, difficult to estimate sulphide content	.17	0.16	100	185
29952	North 25' from 29951-East 5' at 2nd pit	Fresher looking, hybrid-breccia diorite with pyxenite xtls magnetite due to 4-5% po 4-5% cpy Evidence of breccia fragments Sulfides as larger ragged clots up to 1.5 cm, angular Pentlandite-po as exsolution feature Fragment of felsic dike origin possible	.31	0.39	80	190
29953	South end of trenched area Trench 1	High grade po-pentlandite ore in Qtz diorite with 5% Qtz eyes 15-20% pyrrhotite 1-2% cpy-pentlandite exsolved difficult to see Highly magnetitic	1.3	0.09	20	160
29954	North end of trenched area Trench 1	Heavy cpy mineralization at opposite end of trench 20-25% cpy as thick coarse bands and angular shape Appears to be a sheared Pyroxenitic phase ass'd with mineralization Possible fragment of felsic material. No visible Qtz eyes. Contact somewhere under snow-cover	.11	6.50	70	150
29955	West of 29954 lense of out-crop sulfide	7-10% cpy-heavily rusted Sheared Qtz diorite sericitized, silicified shearing NNW 350°	.02	1.90	270	280

APPENDIX C - TRENCH GRAB SAMPLES - Cont'd

SAMPLE NO.	LOCATION	DESCRIPTION	Ni %	Cu %	Pt ppb	Au ppb
29956	East side of intrusive complex	Mineralized peridotite NW shear 5-6% cpy 10% po	.06	1.18	20	100





NET:

CONTACT BAY

TROU N°:

CB-91-02

GROUPE MINIER ARIEL

2 DE 3

DE (M)	A (M)	DESCRIPTION	ECHANTILLON N°:	DE (m)	A (M)	LONGUEUR (m)	Cu ppm	Ni ppm	Au g/tonne
17.22	22.12	Sheared Quartz diorite - biotitized, minor leucocene - barren of significant mineralization, lower contact irregular	33123	22.12	22.68	0.56	281	17	nil
22.92	25.27	Silicified Basalt - tr-to 1% fine disseminated py - 2-3% fine grained xln magnetite - weakly magnetic	33124	22.68	23.16	0.48	.91	15	nil
			33125	23.16	23.65	0.49	67	17	nil
			33126	26.21	27.54	0.33	30	69	0.01
25.27	25.76	Feldspar Porphyry Dike - barren	33127	27.54	28.16	0.38	22	137	nil
25.76	30.56	Sheared Quartz Diorite - biotitized, minor leucocene - barren of significant brecciation							
30.56	45.87	Vesicular Fe-rich Basalt - fine grained, massive, dark green - 2-3% fine xln magnetite - fresh, barren - no significant mineralization - lower contact at 15° to C.A.	33128	54.56	55.17	0.61	91	18	nil
			33129	55.17	56.08	0.91	102	15	nil
45.87	59.74	Hornblende Diorite - fine to med grained green in colour - massive to weakly schistose							



COLLECT

LIGNE: 7+005

ORDONNÉE: 17+18 E

JOURNAL DE FORAGE



Société d'exploration:

Miniska Inc.

PROJET:

Contact Bay

TROU N°:

CB-91-03

NTS

DIMENSION CAROTTE: BQ

COMMENCÉ:

AZIMUTH

095

SONDEUSE: Morissette

TERMINÉ: Feb 18/91

INCLINAISON

-45°

TESTS D'INCLINAISON

Head -45°  
60.96m -40°

LONGUEUR

91.44m

Geologist: Bill Yeomans

DE (m)	A (m)	DE (m)	ECHANTILLON N°	DESCRIPTION	LONGUEUR (m)
0.00	4.27			Overburden	
4.27	30.78			Diorite Breccia - Fine grained, dark green, massive to weakly schistose - non-magnetic - angular fragments of felsic volcanics - Breccia invaded mafic to felsic volcanic sequence - barren of significant mineralization	
30.78	37.03			Feldspar Porphyry Dike - 25-30% feldspar phenocrysts up to 3mm long, anhedral - non-magnetic - fine grained, dark green groundmass - local narrow quartz veins near contacts - barren of sulfide mineralization	



JOURNAL DE FORAGE



Société d'exploration:

MIMISKA INC

COLLET LIGNE: L 7+16 BS

ORDONNÉE: C0+38E

PROJET:

CONTACT BAY

TROU N°:

CB-91-04

DIMENSION CAROTTE: BQ

COMMENCÉ: Feb 16 / 90

TERMINÉ: Feb 19 / 90

AZIMUTH N. 282° E

SONDEUSE: MORISSETTE

INCLINAISON -45°

TESTS D'INCLINAISON Head -45°

60,96m - 42,5°

LONGUEUR 93,26 m

Geologist: Hill Yeomans

DE (M)	A (M)	DESCRIPTION	ÉCHANTILLON N°	DE (M)	A (M)	LONGUEUR (M)	Cu ppm	Ni ppm	Pd pph	Pt ppb
0.00	3.05	Overburden - Boulders, sandy soil								
3.05	35.04	Fe - Tholeiitic Basalt - fine grained, dark green massive - magnetic with up to 5% Fin y/ln magnetite - minor narrow quartz veins with 5% cov crescent core axis at 45° to 85° as follows: - 8.5.3m - 8.65 - gv with 2% po cut 45° to c.a - 16.24 - 16.34 - gv with tr po at 85° to c.a - 17.74 - 17.79 - gv with 8% po cut 65° to c.a - 28.89 - 28.91 - gv with 2% po at 80° to c.a - these are minor zones of po mineralization up to 2 cm wide adjacent to the vein	33133	8.41	9.08	0.67	18	45		
			33134	15.94	17.06	1.12	12	45		
			33135	17.50	18.29	0.79	20	45		
			33136	28.64	29.26	0.62	11	45		

DE (M)	A (M)	DESCRIPTION	ECHANTILLON N°:	DE (M)	A (M)	LONGUEUR (M)		
35.04	41.36	Feldspar Porphyry Dike - 25-30% feldspar porphyries to 3mm, subhedral to anhedral - non magnetic, fine grained, dark green, coarse grained - local narrow quartz veins - upper contact ragged, lower contact at 22° to c.a. - barren of mineralization						
41.36	42.82	Sheared Brecciated Diorite - barren of sulfide mineralization						
42.82	47.84	Hybrid Basalt / Hornblende Diorite - fine to medium grained - well developed amphibole xls up to 2mm - fine grained magnetite bearing basalts have vesicles - contacts gradational - lower contact at 44° to c.a. - minor narrow quartz filled fractures at 20° to 60° to c.a. up to 2mm wide - barren of significant sulfide mineralization						
47.84	54.40	Quartz Diorite Breccia - angular felsic fragments up to 5cm - strong block chertic overprint - shearing defined by oblique - minor pyrite mineralization along fractures						





JOURNAL DE FORAGE



Société d'exploration:

MIMISKA LAIC.

LIGNE: 7+11.85

ORDONNÉE: 0+15.9E

PROJET:

CONTACT BAY

TROU N°:

CB-91-05

NTS

DIMENSION CAROTTE: 80

COMMENCÉ:

AZIMUTH

vertical

SONDEUSE: MORISSETTE

TERMINÉ:

INCLINAISON

90°

TESTS D'INCLINAISON

Head 90°  
75.29m 89°

LONGUEUR

75.29m

Geologist: Bill Vermaas

DESCRIPTION

ECHANTILLON N°

A (m)

LONGUEUR (m)

Ni ppm

Pb ppb

Cu ppm

Pt ppb

DE (m)

A (m)

DE (m)

DE (m)

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1.13

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0.61

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0.65

0.41

1.00

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1710

2150

117

936

5320

173

112

63

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abundant quartz-chl seams near irregular fractures

abundant quartz-chl seams near irregular fractures

abundant quartz-chl seams near irregular fractures

abundant quartz-chl seams near irregular fractures

abundant quartz-chl seams near irregular fractures

abundant quartz-chl seams near irregular fractures

DE (m)	A (m)	DESCRIPTION	ECHANTILLON N°:	DE (m)	A (m)	LONGUEUR (m)	Ni ppm	Cu ppm	Pt ppm	Pd ppm
4.72	24.84	generally barren quartz veins as follows 6.67-6.70 - qv oriented at 30° to c.a. 7.25-7.28 - qv at 90° to c.a. 7.28-7.90 - qtz-ch stringers 7.90-8.23 - barren qtz-ch vein oriented at irregular angles to c.a. 15.80-15.84 - mineralized qtz-ch vein at 5% po 15.84-24.84 - minor mineralized qtz-ch vein with 2-3% po, generally rare, up to 2 cm wide, one every 1.5 m, oriented at 50° to 65° to c.a.								
24.84	28.35	Feldspar Porphyry Dike - upper contacts irregular - this dike fully described in log NL-91-02								
28.35	43.28	Hybrid hornblende diorite / Fe-rich basalt - fine grained dark green - locally magnetic with 2-3% fine grained disseminated magnetite								
43.28	75.29	Quartz Diorite Breccia - Breccia contains fragments of diorite and felsic volcanic rock up to 20 cm in length, fragments appear partially assimilated. - local isolated blebs of chloroprite / pyrochloite up to 2 cm in size very rare throughout section - bi-titized sections, rare narrow qtz-ch stringers	33150	45.48	46.20	0.72	74	-	-	15
			33151	71.55	72.24	0.69	32	-	-	45





DE (m)	A m	DESCRIPTION	ÉCHANTILLON N°:	DE (m)	A (m)	LONGUEUR (m)	Ni ppm	Pd ppb
47.24	63.52	- Fine grained Amphibolite - similar to previous description - sheared and altered from 47.24 to 48.50 m - minor barren Qtz - cb veins crosscut fault axis at all angles, some veins contain 3% fine magnetite - highly magnetic.						
63.52	72.00	Talc-Chlorite - Carbonate schist - ultramafic unit very schistose with bands oriented at 50° to 60° to r.d. - highly magnetic with 9% fine disseminated magnetite - fault zone at 70.10m to 70.41m biotitic mud - defined by black hollow mineral - possibly biotite, also at 71.78m to 71.93m - lower contact has a psammitic phase of a feldspar porphyry dikes with large Feldspar phenocrysts up to 2cm in length						
72.00	74.97	Mafic Feldspar Porphyry Dike - similar to previously described dike - barren of significant mineralization	33152	44.50	45.35	0.85	437	5
74.97	89.92	Amphibolite - med grained highly magnetic - upper sheared section from 74.97 to 78.02 progressively altered to appearance to tc-ckl-c6-schist	33153	65.83	67.35	1.52	1140	10
			33154	69.80	70.65	0.85	327	15
			33155	71.41	72.21	0.80	320	15



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PROJET: CONTACT BAY TROU N°: CB - 91-07

Société d'exploration:

MIMISKA INC



COLLET: 8 + 00 N

ORDONNÉE: 1 + 25 E

NTS: DIMENSION CAROTTE: BQ COMMENCÉ:

AZIMUTH: N054°E SONDEUSE: Morisette TERMINÉ:

INCLINAISON: -52° TESTS D'INCLINAISON: Head - 52° 121.92 m - 51°

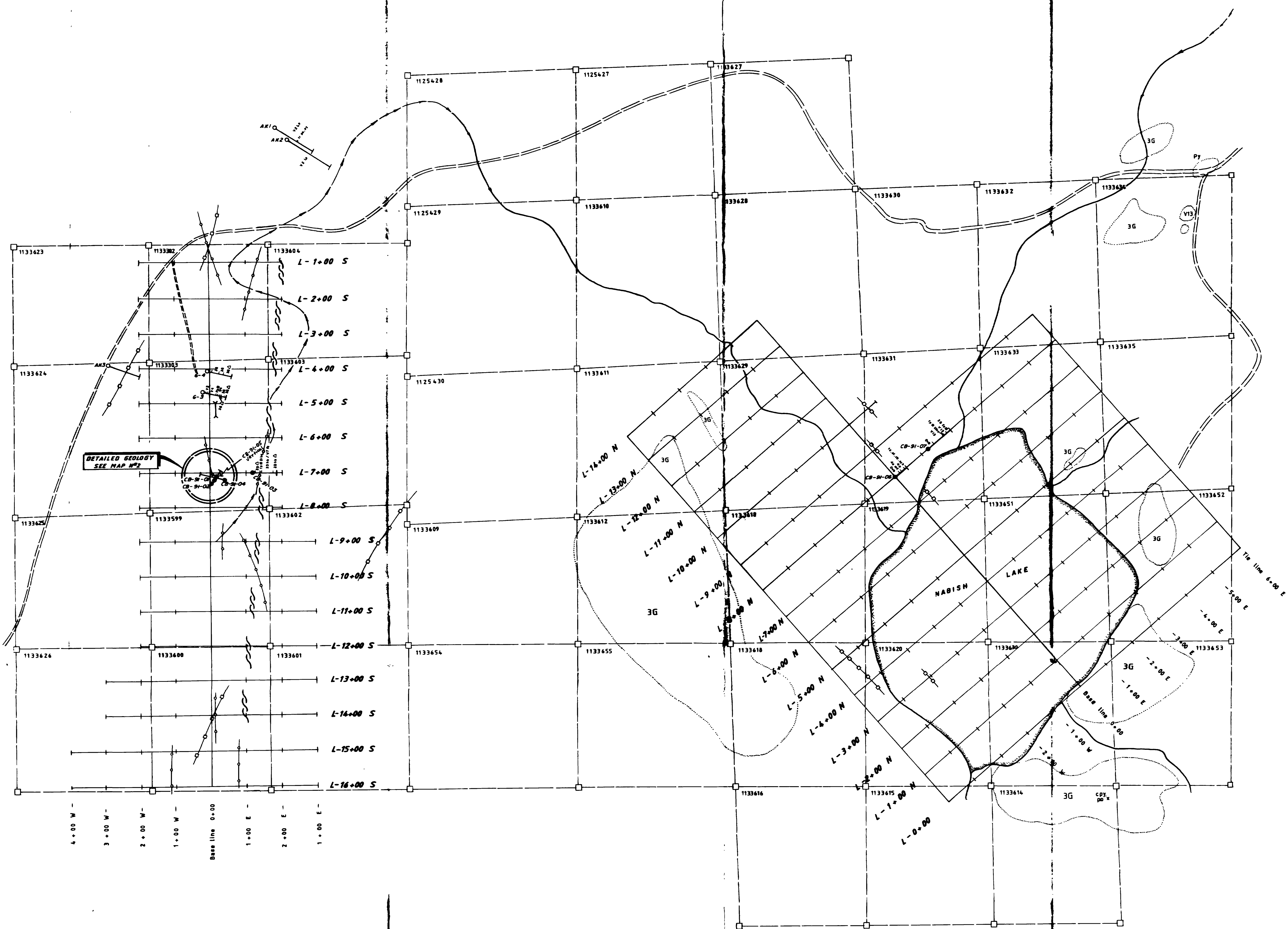
LONGUEUR: 135-94m

Geologist: Bill Yeomans

DE (m)	A (m)	DESCRIPTION	ECHANTILLON N°	DE (m)	A (m)	LONGUEUR (m)	Ni ppm	Pd ppb
0.00	33.53	Overburden						
33.53	95.09	Ultramafic Unit						
		- Black green, massive to schistose						
		- generally magnetic with patches that are highly magnetic						
		- 2-5% fine grained, disseminated mt						
		- major faults at the following locations						
		- 53.64m - 56.15	33156	43.89	44.50	0.61	-	45
		- 56.69 - 56.82						
		- 93.10 - 94.50	33157	54.47	55.32	0.85	-	45
		- Fault zones contain a lot of mud fault gouge						
		- Ultramafic highly altered in vicinity of faults	33158	92.35	92.93	0.58	-	45
		- bands of serpentine and talc are generally narrow, rare						
		In upper half of hole						
		- Increase in frequency towards lower contact (2.5 banking						
		fractures filled with serpentine (calc per metre)						







**LEGEND**

- fp B Dike Feldspar Porphyry Dike
- 2D Diorite
- 2Dhb Hornblende Diorite Breccia
- 3G Gabbro
- 3G fp B Feldspar Porphyry Dike
- 4a Amphibolite
- V13mt Ultramafic (magnetite rich)
- V2Lp Intermediate to felsic Lapilli Tuff
- V7Fe Iron Tholeiitic Basalt
- tc,ct,cb,sc Talc Chlorite Carbonate Schists

**MINERALS, ALTERATION**

- po Pyrrhotite
- cpy Chalcopyrite
- mt Magnetite

- Outcrop area (approximate location)
- Outcrop
- Fault zone
- Gravel road
- Creek

**GEOPHYSICAL ANOMALY AXIS**

- VLF-EM-16
- VEM Vertical loop (190 Hz)

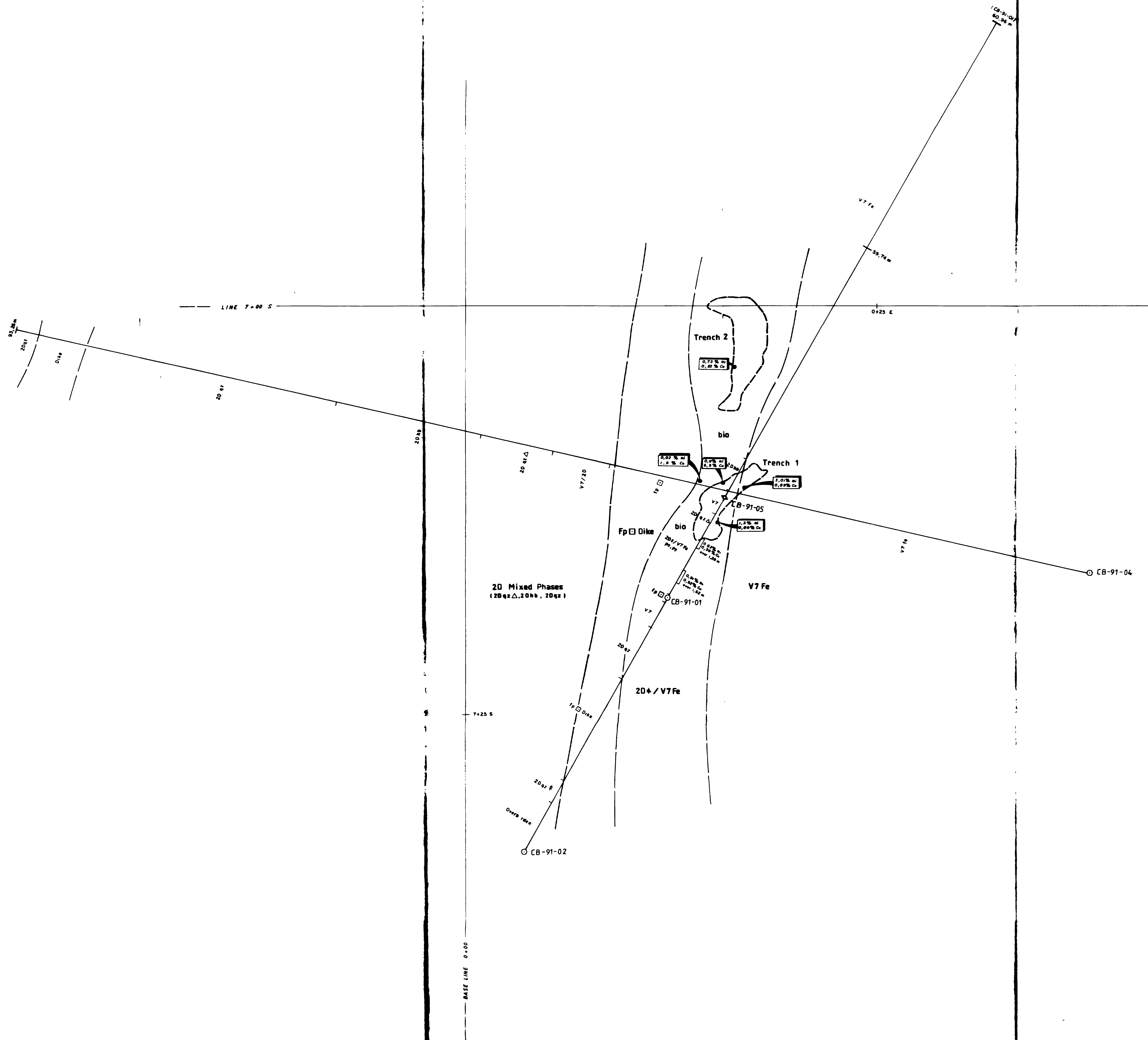
**Société Minière Mimiska Inc.**

CONTACT BAY PROJECT  
CONTACT BAY AREA - KENORA DISTRICT

**COMPILATION MAP**

COMPILED BY: <i>B.H. Yessens geol. 03/91</i>	SCALE 1:5000
DRAWN BY: <i>L. Desrosne 04/91</i>	0 50 100 200 300 METERS
REVIEWED BY: _____	PROJECT NO. _____ MAP NO. <b>1</b>





**LEGEND**

- V7 Basalt
- V7Fe Iron Tholeiitic Basalt
- 2D Diorite
- 2Dqt Quartz Diorite
- 2Dhb Hornblende Porphyry Dike
- Fp Dike Feldspar Porphyry Dike

**MINERALS**

- Cu Copper
- Ni Nickel
- po Pyrrhotite
- py Pyrite
- bls Biotite

**SYMBOLS**

- † Sheared
- △ Brecciated
- ◇ Vertical Drill Hole
- Inclined Drill Hole
- Trench
- Grab sample

**Société Minière Mimiska Inc.**

CONTACT BAY PROJECT  
CONTACT BAY AREA - KENORA DISTRICT

**MAIN SHOWING  
DETAILED GEOLOGY**

COMPILED BY: *Bill Tompkins* 03/91  
DRAWN BY: *L. Beltracchi* 04/91  
REVIEWED BY: \_\_\_\_\_

SCALE 1:100	
METERS	
PROJECT NO	MAP NO
	<b>2</b>



