

GM 51495

PETIT LAC MANICOUAGAN AREA

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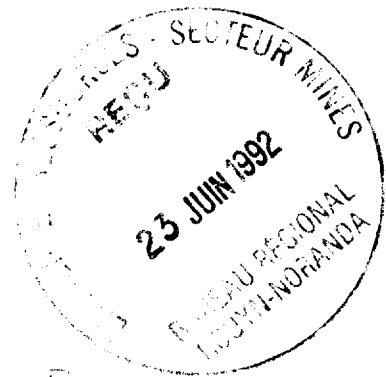
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au document et ne fait pas partie du
rapport tel que soumis par les auteurs.

Énergie et Ressources
naturelles

Québec 

Petit Lac Manicouagan Area

MER - S.I.S.E.M. 1992/10/21
GM 51495



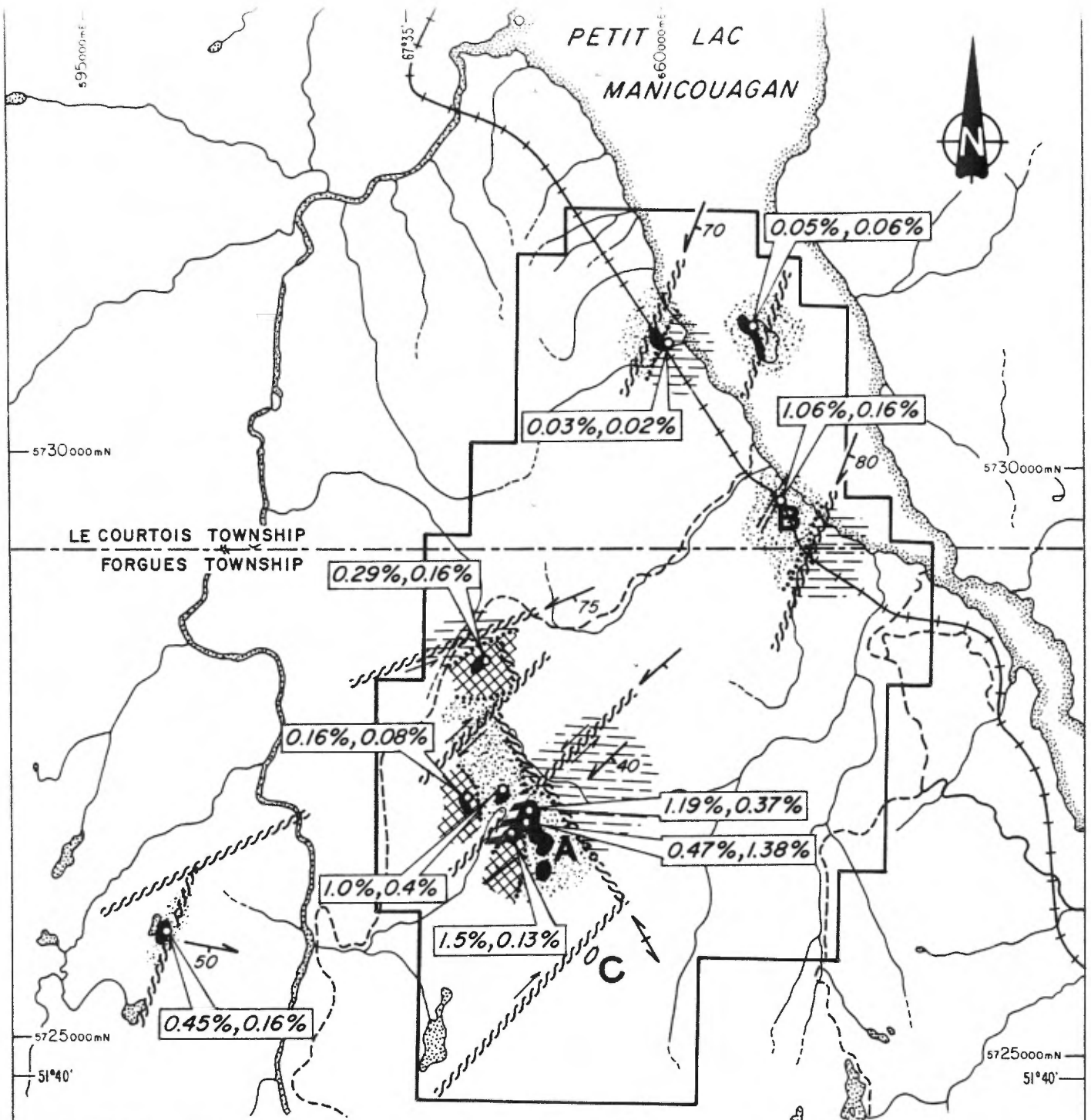
92 JUN 30 11:35

DE GESTION DES
QUEBEC

Target # 16 - 2-EZ Showing - N:5727000 m , E:599000 m

Introduction

Eight days were spent at this target, performing prospecting, sampling and local mapping exercises. The target was chosen on the basis of its geophysical character, highlighted by a very large



- FELSIC (MASSIVE & GNEISS)
- GRANULITIC GABBRO
- ALTERED GABBRO (INCLUDES PEGMATITIC GABBRO)
- MINERALIZED ZONES
- INFERRED AND OBSERVED GEOLOGICAL CONTACT
- SHEARED MAFIC DYKE
- INFERRED & OBSERVED LINEAMENTS FAULT / SHEAR ZONE
- BEST GRAB SAMPLE ASSAY %Ni %Cu
- A** 2-EZ MAIN SHOWING

- B** 2nd SHOWING
 - C** UNPROSPECTED GOSSAN
 - CARTIER RAILWAY COMPANY
 - GRAVEL ACCESS ROAD
 - BEDDING : MINERALIZED HORIZONS
- NTS: 22 0/12

FALCONBRIDGE LTD			
PETIT LAC MANIC PN-II2			
COMPILATION MAP			
Traced by	Date	Revised by	Date
Supervised by M. BANAS			
Drawn by GÉODES inc.	10/90	Scale 1:50 000	0 1km

fig.19

lake bottom geochemical nickel anomaly.

The area hosts significant massive sulphide mineralization, over impressive widths (75-350 metres) and along a possible strike extension of at least 4 kilometres.

A total of 136 samples were collected from various mineralized zones, including 23 as part of a continuous chip sample traverse, over the massive sulphide portion of the Main Zone.

Several economic zones were delineated, with associated values in the 1.0-1.5% range for nickel and 1.3-2.9% range for copper (Fig.19).

These values have prompted Falconbridge Ltd. to stake 163 claims over this area (Fig.20), and propose a follow-up program for 1991.

A separate section will follow, presenting details concerning a second showing on the lake shore to the north.

Access

The property is ideally located straddling the southern shore of Petit lac Manicouagan (PLM) at the foot of the lake. Float-plane access is made very easy by the abundant and wide flat beaches. The Cartier Railway Company has a functional railway travelling from Port-Cartier on the north shore of the St-lawrence river. This railway crosses the property along the southern shore of PLM. A service gravel road follows the railway from Port-Cartier, with several abandoned and maintained offshoot roads entering the property at various locations.

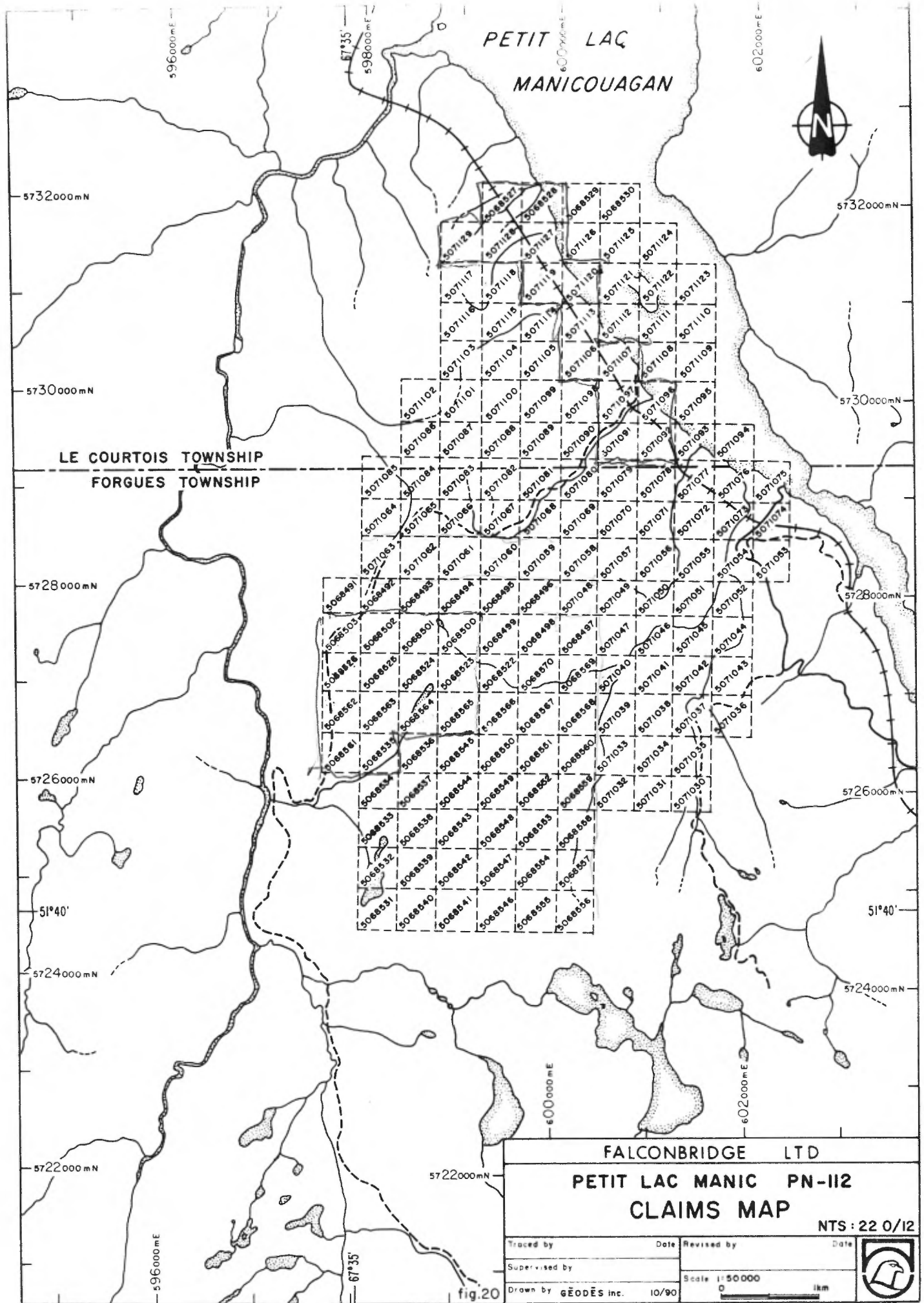
Local Topography and Vegetation

The southern part of the property exhibits higher relief, with taiga covered mountains reaching 150 metres in elevation. Valley areas are generally wooded with muskeg underbrush. Some swampy areas exist, and overburden seems to increase sharply towards the north accompanied by lower relief.

Geophysics

The area comprising this showing, defines a geophysical domain quite different to that of the rest of the Manicouagan complex to the south-west. This area highlights lower amplitude anomalies with larger wavelengths (Fig.21). Although there are rounded and oblong "high" islands amid a generally flat local gradient, one can easily interpret a blocky fracture system, which can be transposed at all scales including 1:15000 air photos. This suggests an increasingly complex structural setting, to which an attempted interpretation will be presented further on.

The Main zone itself is located on the southern flank of a broad crescent-shaped (concave west) magnetic high. A very subtle



but interesting 60-70 gamma high symmetric ridge trends SSE and then SSW from here, and is probably the true geophysical signature for the Main Zone showing.

Geochemistry

The lake defining the top of the hydrographic basin hosting the Main Zone, produces a creek flowing west, whose sediments were sampled (MER, Geochimie des Sediments de Lac, 1986), which revealed the highest nickel value from all samples collected over the Manicouagan region. The geochemical anomaly is 378 ppm, with associated copper and cobalt values of 108 and 64 ppm respectively. The nickel value is clearly anomalous in an area where the average background does not exceed 50 ppm. Cu and Co on the other hand, while being very representative in the context of the host basin, have a generally high background in this area, and by themselves would not constitute favorable and anomalous targets.

It should be noted that a sediment sample near a mineralized zone external to the claims, and to the west (see fig. 19), reveals low nickel (38 ppm), where the rock geochemistry produced a value of 0.45% Ni. It is clear that we are looking at very special conditions for element concentration in the glacial sediments, which is reflected over the entire complex.

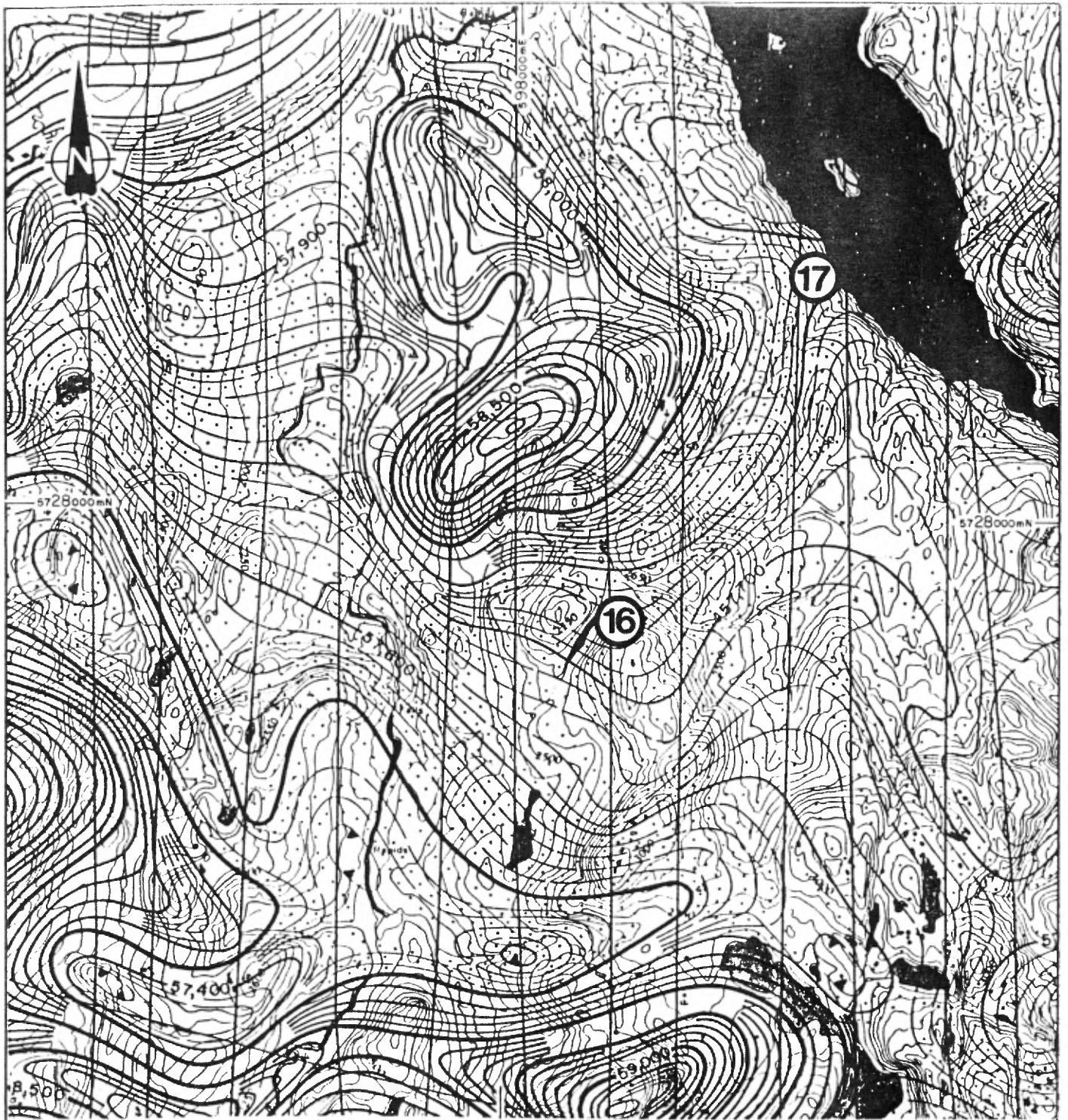
Geology

The observed underlying geology consists of generally light to medium grey, medium grained, and massive to weakly foliated granulitic gabbro (Fig.19). This gabbro is locally altered, where it contains significant quantities of felsic to gabbroic gneiss, the former of which may just be a more intensely altered gabbro. This feature may also represent a zone of intercalated true felsic gneiss inclusions and gabbro host, along a shear zone separating these distinct lithologies.

These altered zones also include irregular pegmatitic gabbro inclusions with sharp contacts (may be a dyke swarm), as well as sheared gabbros creating immature mafic augen gneisses.

The second most abundant lithology in this area is a succession of weakly banded felsic gneisses. These are white to peach coloured, fine to coarse grained, quartzofeldspathic beds, rarely with biotite, but often garnetiferous. Adjacent to the aforementioned shear zones, the gneisses are progressively strained, and large (1-2 cm) rotated garnet augens are abundant. The foliation is multidirectional in this area, and may have been affected by folding and faulting.

A mafic dyke has been mapped near the gneiss/gabbro contact at the base of the Main Zone, and appears parallel to the adjacent shear structure (N45E). This dyke is approximately 1 metre thick, and is dark green, aphanitic, and intensely sheared and silicified. It is visible again 300 metres to the SW, yet appears as a swarm



ISOMAGNETIC LINES (total field):
LIGNES ISOMAGNÉTIQUES (champ total)

- 500 gammas
- 100 gammas
- 20 gammas
- 10 gammas
- Magnetic depression
Dépression magnétique
- Flight lines
Lignes de vol
- Flight altitude: 1000 feet above ground level
Altitude du vol: 1000 pieds au-dessus du niveau du sol

G.S.C. MAP: 4997 G

NTS: 22 0/12

FALCONBRIDGE LTD			
LAC RAUDOT			
AEROMAGNETIC MAP			
Traced by	Date	Revised by	Date
Supervised by R. LAPLANTE		Scale: 1:50000	
Drawn by GÉODÈS inc 11/90			

fig.21

of thin centimetre-sized dykes.

Structure

Foliations measured in the gabbro in the vicinity of the Main Zone are N20W, and may define the axial surface trace of a tight folding pattern with near vertical limbs.

These folds are dislocated by N45E to N68E shear/fault planes which define at least three structural blocks, elongated along their NE axis (Fig. 19). Evidence from slickensides suggest a transform movement along these planes, with a proposed large dip-slip and small strike-slip component. The block hosting the Main Zone, has possibly moved north-eastward and vertically upward, while the adjacent block to the west has moved towards the south-west as well as vertically downward. Alternate movements would be suggested for other adjoining blocks.

It should be noted that these sub-parallel structural blocks may also have undergone some rotation about a horizontal NW axis during faulting, which may have reoriented some of the mineralized zones and host lithologies.

The shearing has produced deformation zones within portions of the felsic gneiss, as well as the mafic dyke which has also absorbed a large amount of the shearing stress.

Mineralization

Mineralization in this area is prolific and can be found in all rock types mentioned above except for the deformed felsic gneisses in the shear axes. In the gabbroic host, the mineralization consists of disseminated interstitial, to fine and coarsely laminated pyrrhotite, chalcopyrite, pentlandite, and magnetite.

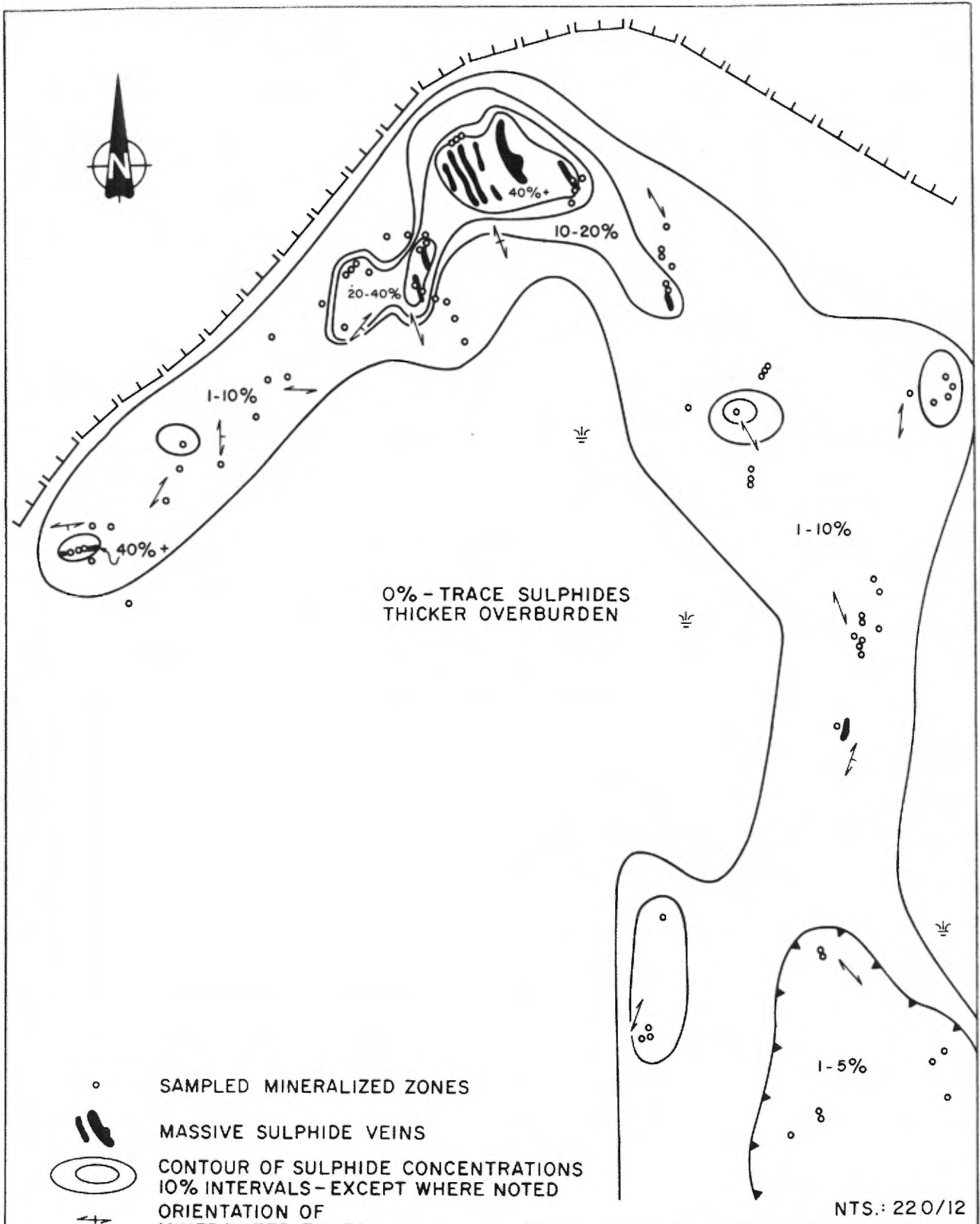
Hematite and graphite are rare, and seem restricted to sulfide and non-sulfide bearing garnetiferous felsic rock horizons within the altered gabbro.

The Main Zone itself is spectacular, with a wide (75x40 meter) disseminated zone exceeding 20% mixed sulfides, hosting a minimum of seven massive sulfide veins 0.2 to 4.0 metres in width. These are largely coarse crystalline pyrrhotite with coarse blebs and massive veinlets of chalcopyrite (2-5 cm). A suspect, blue oxide bloom, located along certain MS veins, suggests the presence of cobalt.

The disseminated ore in the wall rock is generally finer grained.

Two mineralized "limbs" extend SW and SE from the MS area, with respective surface areas of 300x50 meters and 450x100 meters. Sulfide concentrations here vary between 1 and 20%, and several relict MS veins have been identified (fig. 22).

In total, the 2-EZ showing hosts three separate mineralized zones (including the Main Zone) covering 1.3 km. Although not described in detail, these additional zones similar mineralization



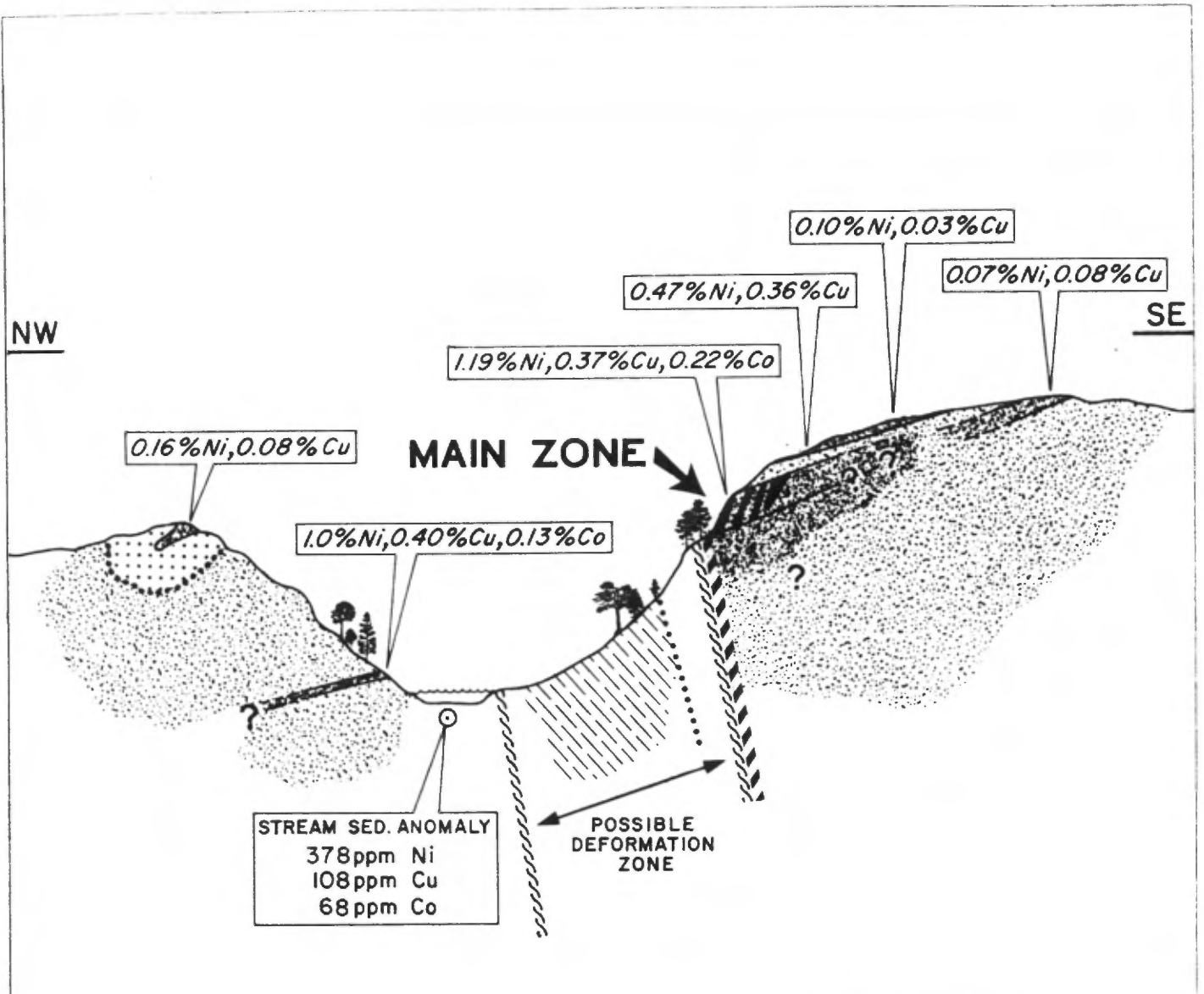
NTS.: 220/12

- SAMPLED MINERALIZED ZONES
- ▬ MASSIVE SULPHIDE VEINS
- CONTOUR OF SULPHIDE CONCENTRATIONS 10% INTERVALS - EXCEPT WHERE NOTED
- ↔ ORIENTATION OF MINERALIZED ZONES
- ┌ TOPOGRAPHIC ESCARPMENT







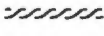
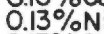
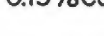
FALCONBRIDGE LTD	
PETIT LAC MANIC PN-112	
SULPHIDES LOCATION AND CONTOUR	
MAIN ZONE	
Traced by : M BANAS	Date Revised by : _____ Date
Supervised by : R LAPLANTE	Scale : 2500
Drawn by : GÉODÉS inc. 11/90	0 50m

fig.22





VERTICAL EXAGGERATION 2:1

-  FELSIC GNEISS
-  GRANULITIC GABBRO GNEISS
-  ALTERED GABBRO
-  MAFIC DYKE
-  MINERALIZED ZONE
-  MS VEINS
-  FAULT / SHEAR ZONE
-  INFERRED GEOLOGICAL CONTACT
-  BEST GRAB SAMPLE ANALYSIS
-  0.10% Cu
0.13% Ni
0.13% Co

NTS: 22 0/12

FALCONBRIDGE LTD	
PETIT LAC MANIC PN-112	
IDEALIZED SCHEMATIC VERTICAL SECTION MAIN SHOWING "2-EZ"	
Traced by	Date
Supervised by M BANAS	Revised by
Scale 1:5000	0 50 100m
Drawn by GÉODÈS inc. 10/90	

fig.23

styles, but in apparently smaller volumes. Figure 23 is a schematic representation of the proposed relationship between two mineralized zones at the 2-EZ showing.

Assay Results

A total of 136 samples were retrieved from the three mineralized zones referred to above. The results highlight three economic zones with Ni and Cu values exceeding 1.0%, and sub-economic semi-massive halos, with many values between 0.1% and 0.5%.

The best grabs from MS veins, are (i) 1.5% Ni, 0.13% Cu, 0.48% Co and (ii) 1.19% Ni, 0.37% Cu, 0.22% Co, which represent samples 300 meters apart at the Main Zone. It should be noted that the interval between these samples is weakly mineralized, and constitutes only two small MS veins.

A continuous chip sample traverse was carried along a line bysecting the proposed stratigraphy (at 90 degrees) of the MS portion of the Main Zone. A segment of the chip sample assayed 0.36% Ni and 0.43% Cu over 8.65 meters, with a Cu/Ni ratio of 1.2. This ratio is persistent, when an average is taken over the whole of all economic and sub-economic samples from this part of the property.

Discussion

Figures 22 and 23 represent information leading to the proposal of two different models. The former suggests a drag fold structure resulting from displacement along a N45E lineament which underlies this zone. It is conceivable that remobilization from tectonic processes, has recrystallised sulfides in dilation zones within the nose of this drag fold, as well as other parasitic folds nearby. This is supported somewhat by the prevailing orientation of mineralized gossans (structural measurements, fig 22).

The latter follows a premise that vertical lenses are stacked laterally within horizontal layers, and has been presented in the structural section above.

Target # 17 - 2nd Showing - 5730400N : 600750E

Geophysics

The area is located at the south-western edge of a moderate high mag, as it can be seen from the GSC's 1962 airborne survey (Fig.21). The mag response (57700 gammas) is elongated, trending NE-SW from the Main Zone up to the Petit Lac Manicouagan. This

magnetic signature can be correlated with the geology of the Ministère of Energy and Ressources map at the scale of 1:250000, illustrated by two paragneiss lenses included in the gabbro and elongated NE-SW, on both side of the southern part of the Petit Lac Manicouagan. Another low mag (57700 gammas) occurs with a crescent-shape, one kilometer north of the one described above.

Geochemistry

The area north of the railway track along the Petit Lac Manicouagan was not covered by lake bottom sediments survey and no geochemical data is available for this region.

Geology

Because of the lack of outcrop exposure in the south, the prospecting was concentrated in the north part, into three areas (Fig.24): (1) the most southern island of the Petit Lac Manicouagan (UTM: 5731100N 600900E), (2) outcrops blasted along the railway track, west of the island (UTM: 5731100N 600000E), (3) outcrops along the railway track, south of the island (UTM: 5729650N 601100E).

(1) A rusty well-exposed cliff of mineralised gabbro, 5 to 15 m high and 200 m long occurs along the western and the northern edges of the island. The rock type is a medium to coarse grained gabbro. In the eastern and southern part of the outcrop, a fresh medium grained, foliated gabbro occurs without mineralization. The two zones are divided in the middle of the island by a NE-SW fault dipping 70°.

(2) West of the island, some hills have been blasted by Quebec Quartier Mining at the time of the railway track building. Outcrops of this area show a medium to fine grained mineralized gabbro with silicified shear zone north of the outcrop. South of the outcrop, a two meter thick gossan occurs at the contact with metasediments.

(3) The most southern series of outcrops visited in this area occur along the railway track, 1 km south of the island. The northern most outcrop is a coarse-grained foliated and mineralized gabbro with a one meter massive sulfide vein, striking N.20° and dipping 70°. Fifteen meters south of the vein, mineralization becomes very sporadic, the amount of plagioclase locally decreases and gives to the rock a very mafic aspect. the southern most outcrop is a foliated gabbro with sporadic trace amount of pyrrhotite intercalated with felsic paragneiss with nodules of retromorphosed mafic minerals. These nodules have a reaction rim of pyrrhotite, 1 to 5 mm thick.

Structure

The main structural feature of the rocks in this region is the constant direction of foliations and shear zones. The better exposed structural feature is the island fault striking N.20° and dipping 70°. It separates a rusty zone to the north from a non-mineralized gabbro to the south. The evidence of this fault is seen in a rusty area of the mafic schist, and it is 20 cm wide. The contact with the gabbro on both sides of the fault is sharp and the mafic schist in contact with the non-mineralized gabbro is rusty. Only trace amount of sulfide were found in the shear zone. Others minor shear zones were found in the island area, trending N.20° and some are injected with granitic pegmatite. Foliations measured in this area are constantly N.20° and the dip range from 45° to 75°.

Along the railway track, structural features are the same except south of the area where foliations and shear zones dip NW instead of SE (Figure 24). The massive sulfide vein is parallele to the structural trend and the shear zones generally show sulfide enrichment.

Mineralization and assay results

The island, south of the Petit Lac Manicouagan has been sampled and results of assays are generally low. South of the showing, a sporadic massive sulfide vein of pyrrhotite and chalcopyrite occurs one meter north of the fault described above. The results obtained were 0.06% Cu and 0.05% Ni (#6077). The host gabbro is mineralized from 10 to 25% pyrrhotite and chalcopyrite and the best results are 0.04% Cu and 0.04% Ni (#6079). Fifteen samples from the mineralized gabbro were taken but results ran below 0.02% for Cu and Ni.

Ten samples from the rusty zone, west of the island were taken and the best result was obtained from a gossan, north of the outcrops. It is a very fine grained mafic rock with 10 to 15% po and cp and ran at 0.03% Cu and 0.03% Ni. Other assays of this area ran from 0.01 to 0.02% Cu and from 0.005 to 0.02% Ni.

The last area investgated in this region was a blasted outcrop along the railway track, at the edge of Petit Lac Manicouagan, south of the island (figue 24). It is a medium to coarse-grained gabbro with 30 to 50% recrystalized plagioclase. A massive sulfide vein of pyrrhotite and trace amount of chalcopyrite occurs in the gabbro, striking N.20° and dipping 70°. The vein parallel to the foliation is exposed for a lenth of 15 meter long and 1 meter wide. Assay result were 0.16% Cu and 1.06% Ni (#6101), with a Cu/Ni = 0.15. The host gabbro is present, 2 meters on both sides of the massive sulfide and contains 50% of pyrrhotite with trace amount of chalcopyrite. Assays obtained were 0.2% Cu and 0.7% Ni (#6102) with a Cu/Ni = 0.28. Five and ten meters away from the massive

sulfide vein, the mineralized gabbro (with about 10% po) ran 0.27% Cu, 0.50% Ni and 0.20 Cu, 0.50% Ni respectively with a Cu/Ni of 0.54 and 0.40 respectively.

CONCLUSIONS 22N/O

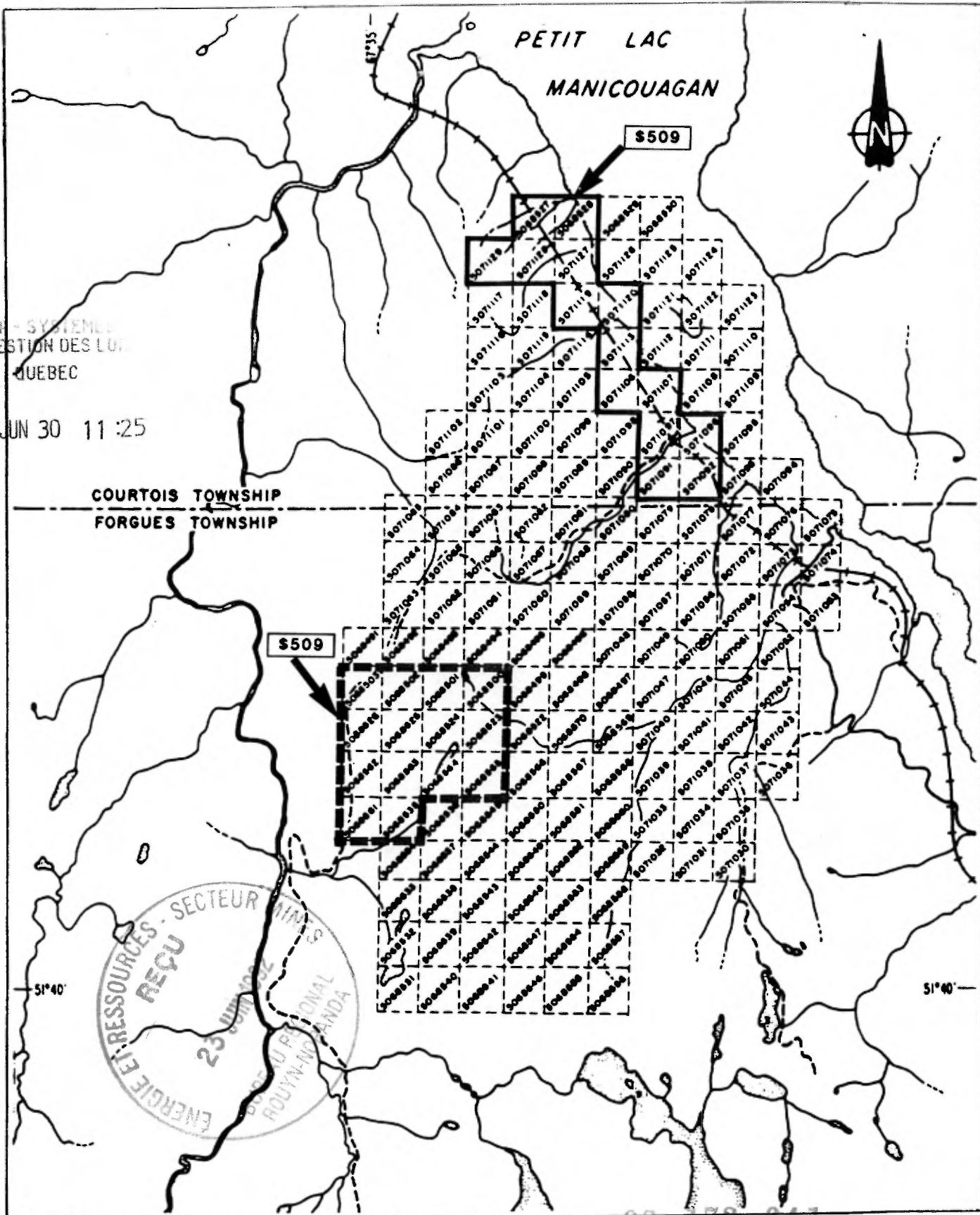
Areas from four different 1:50000 NTS maps were investigated in order to evaluate the economic potential of the Manicouagan upland. The main lithology of this region is a foliated and occasionally sheared granulitic gabbro, with some felsic and mafic gneiss intercalations. All the shear zones seen in this region are silicified, few are mineralized, and the associated assays are generally low. In the north-eastern quadrant of the Manicouagan upland, a zone of economic importance was discovered hosting several massive sulfide veins within the contact zone between gabbro and felsic gneiss. The region is characterized geophysically by a lack of highly variable gradient which distinguishes it from the rest of the complex.

It appears that the emplacement of mineralization is due largely to structural control. This aspect is strengthened by its proximity to observed structural lineaments. There is an apparent difference in Cu/Ni ratios, as we progress northwards. At the southern limit, these ratios are 1.2 and decrease to 0.33 in the north. This, in association with an observed elevation difference of 300 metres between these two locations, reflects the structural complexity of the region, and insinuates a possible difference in stratigraphic levels between north and south.

A sporadic occurrence of economic values across mineralized zones, may simply reflect the observed intense weathering of exposed surfaces, and it is likely that values will be more consistent at depth.

MEP - SYSTEME
DE GESTION DES LOI
QUEBEC

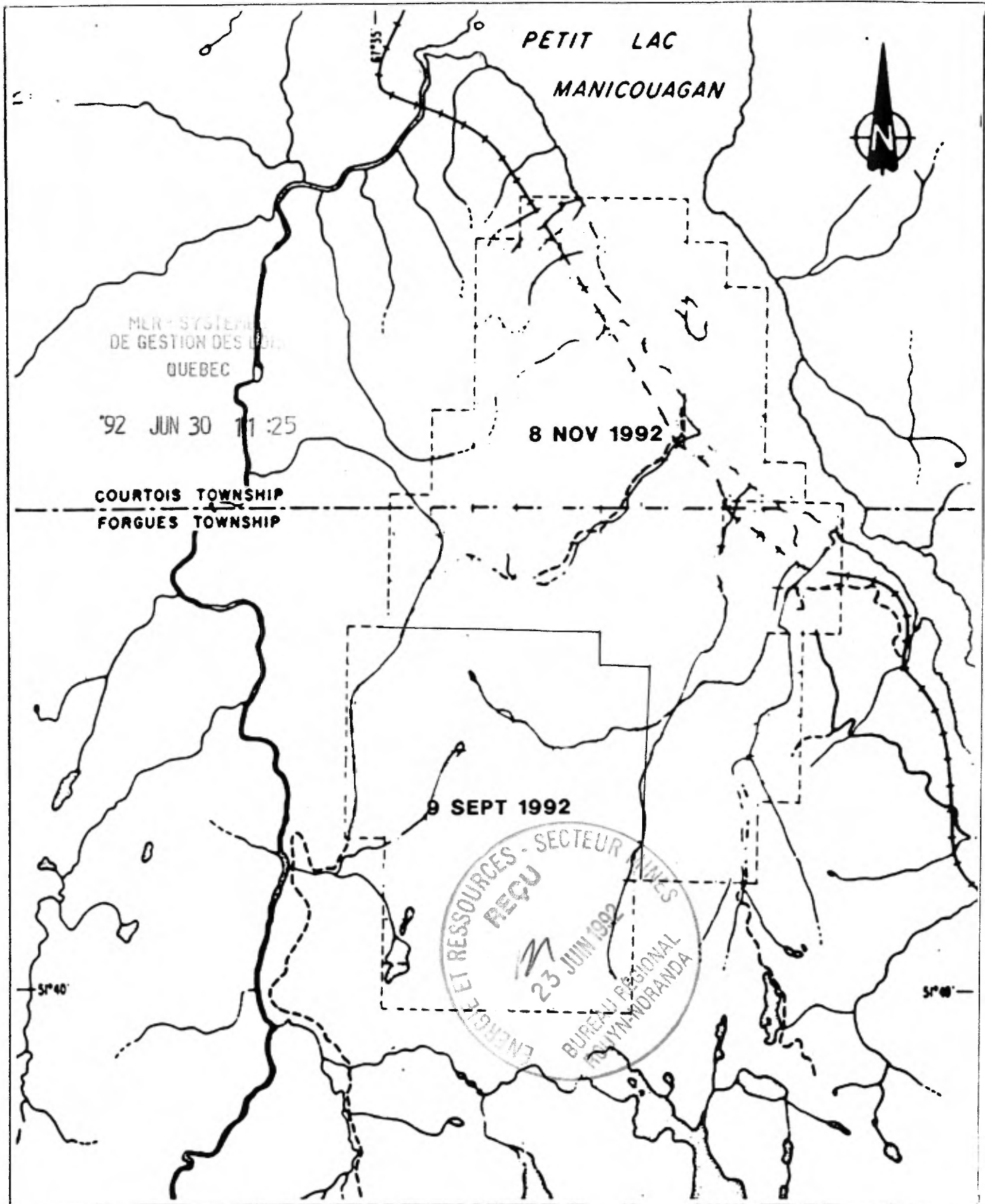
'92 JUN 30 11:25



92 178 041

Travaux exécutés:	date:
Carte exécutée : GEODES inc	date: 21/11/91
Dessiné : L.Dube	date: 21/11/91
Supervisé : R.Laplante	date: 21/11/91
Approuvé :	date:
Echelle	0 0.5 1.0 1.5 2.0 Km
1: 50 000	

FALCONBRIDGE LTEE. - EXPLORATION ROUYN-NORANDA	
PETIT LAC MANIC CARTE DE CLAIM	
N.T.S. : 22 0/12	Zone U.T.M. : 19 U
No. Carte :	No. Micro :
No. Projet 112	



Travaux exécutés:		date:		FALCONBRIDGE LTEE. - EXPLORATION ROUYN-NORANDA			No. Projet
Carte exécutée : GEODES Inc		date: 21/11/91					
Dessiné : L.Dube		date: 21/11/91		PETIT LAC MANIC DATE D'EXPIRATION			112
Supervisé : R.Laplante		date: 21/11/91					
Approuvé :		date:		N.T.S. : 22 0/12			Zone U.T.M. : 19 U
Echelle : 1: 50 000		0 0.5 1.0 1.5 2.0 Km		No. Carte:			No. Micro :

92 178 041

Numéros d'analyse	Valeur Ni correspondante sur la figure #23
5623 à 5637, 5648 à 5660	0.10
5638 à 5647	0.07
5661, 5694 à 5750, 6070	1.19
5662 à 5693	0.47
6071 à 6076, 7504 à 7510	1.0
7501 à 7503	0.16
total des échantillons = 145	

Certains échantillons ont été analysés en double, en voici la liste:

#7507 en double

#5625 correspond au #5627

#5638 ----- #5640

#5653 ----- #5657

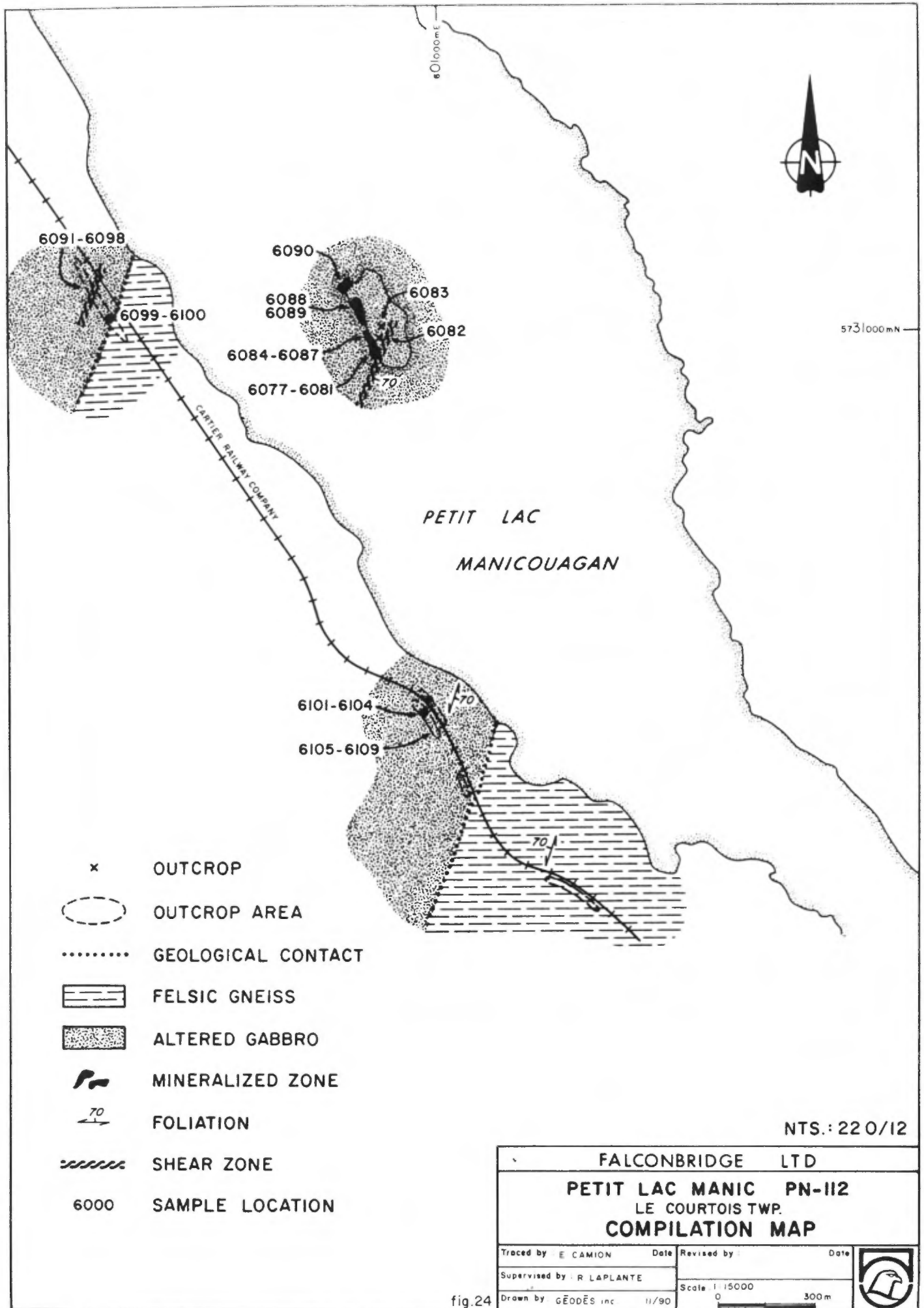
#5668 ----- #5669

#5686 ----- #5687

#5705 ----- #5709

#5722 ----- #5726

#5733 ----- #5734



- x OUTCROP
- OUTCROP AREA
- GEOLOGICAL CONTACT
- ▬ FELSIC GNEISS
- ▨ ALTERED GABBRO
- ~ MINERALIZED ZONE
- ↙₇₀ FOLIATION
- - - - SHEAR ZONE
- 6000 SAMPLE LOCATION

NTS.: 22 0/12

FALCONBRIDGE LTD			
PETIT LAC MANIC PN-112 LE COURTOIS TWP. COMPILATION MAP			
Traced by	E CAMION	Date	Revised by
Supervised by	R LAPLANTE	Date	
Drawn by	GÉODÉS inc	11/90	Scale 1:15000
			0 300m

fig.24



26 Sept. 1990

Rép:

TECHNI-LAB abitibi inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
 Att: Monsieur Ron Lemery

DATE : 18/09/90
 PROJET: 1488

Echantillon #	Au ppb	Cu ppm	Ni ppm	Pt ppm	Pd ppm
6077		630	506		
78		169	144		
79		374	424		
80		144	154		
81		165	200		
6082		199	200		
83		188	119		
Double 83		(176)	(117)		
84		94	59		
85		85	70		
86		192	123		
6087		139	99		
88		85	65		
89		95	75		
90		200	120		
91		83	78		
6092		105	110		
93		154	144		
94		237	340		
95		120	55		
96		183	74		
6097		169	60		
98		245	88		
99		286	138		
6100		279	124		
1		1599	1,06%		
6102		1966	6882		
3		1943	4334		
4		1299	2497		
5		2799	4899		

Les résultats des échantillons ci-dessus sont certifiés

par: 



TECHNI-LAB abitibi inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
Att: M. Richard Laplante

DATE :
PROJET: 1488

Echantillon #	Au ppb	Cu ppm	Ni ppm	Pt ppm	Pd ppm
Double	6105	2688	4878		
	6106	1992	5378		
	6107	409	1296		
	8	1148	1672		
	9	2347	4395		



Les resultats des echantillons ci-dessus sont certifies

par: Stefane Prémont

...2/

TECHNI-LAB abiti inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
 Att: M. Richard Laplante

DATE : 01/08/90
 PROJET: 01277

Echantillon #	Au ppb	Cu ppm	Ni ppm
# 5623	143 (147)	331	1036
24	280 (220)	975	590
25	50 (57)	415	219
26	23	372	360
27	33	324	216
5628	17	792	702
29	13	520	505
30	10	444	503
31	127 (103)	529	464
32	10	369	382
5633	3	694	660
34	3	590	502
35	< 2	819	819
36	10 (10)	915 (941)	852 (832)
37	13	1090	604
5638	< 2	892	550
39	13	808	700
40	7	868	534
41	27	214	135
42	3	297	227
5643	< 2	256	269
44	7	725	438
45	3	529	309
46	3	352	244
47	< 2	425	330
5648	3	519	424
49	< 2	245	39,6
50	47	2,63 %	215
51	45	894	75,5
52	3	777	1030

Les resultats des echantillons ci-dessus sont certifies

[Signature] B.S. CHIMIE

TECHNI-LAB abitibi inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
 Att: M. Richard Laplante

DATE : 01/08/90
 PROJET: 01277

Echantillon #	Au PPb	Cu PPM	Ni PPM
# 5653	3	205	170
54	7	159	129
55	3	310	135
56	< 2 (< 2)	108	80,6
57	10	209	153
5658	7	307 (306)	151 (152)
59	13	410	192
60	3	555	500
61	7	1298	1,5 %
62	7	353	230
5663	17	154	102
65	10	684	836
66	< 2	433	236
67	17	360	350
68	10	899	974
5669	13	890	905
70	45	779	574
71	10	567	491
72	27	1082	895
73	10	698	202
5674	7	594	886
75	150 (140)	3642	4730
76	35	707	627
77	13	844	749
78	10	1402	575
5679	< 2 (< 2)	2776 (2714)	2528 (2571)
80	7	408	457
81	7	234	351
82	< 2	251	328
83	< 2	926	1023

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TECHNI-LAB abitihi inc.

CERTIFICAT D'ANALYSE

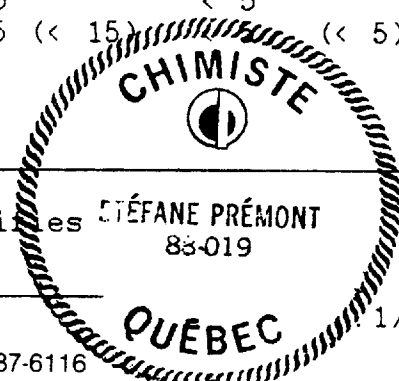
NOM: FALCONBRIDGE LIMITEE
 Att: M. Richard Laplante

DATE : 06/08/90
 Projet: 01294

Echantillon #	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb
# 5684	110	145			
85	6073	3683	390	< 15	8
86	177	95			
87	166	94			
88	82	70			
5689	145	85			
90	175	302			
91	429	429			
92	451	511			
93	218	148			
5694	847	1146			
95	229	75			
96	145	70			
97	194	219			
98	1396	8975	2098	< 15	38
5699	992	1091	205	< 15	< 5
5700	3888	3439	426	< 15	10
1	1210	1162	275	< 15	< 5
2	498	2439	312	< 15	< 5
3	1,35%	1855	270 (269)	< 15	35
5704	4912	7939	1508	< 15	12
5	3025	2032	321	< 15	< 5
6	3896	2825	456	< 15	11
7	9972	5185	1075	< 15	19
8	7175	6776	1258	< 15	22
5709	3333	2009	329	< 15	< 5
10	2138	2237	330	< 15 (< 15)	< 5 (< 5)
11	243	148			
12	358	127			
13	110	100			

Les resultats des echantillons ci-dessus sont certifiés par STÉFANE PRÉMONT

par: 



TECHNI-LAB abitibi inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
 Att: M. Richard Laplante

DATE : 06-08-90
 PROJET: 01294

Echantillon #	Cu ppm	Ni ppm	Co ppm	Pt ppb	Pd ppb	
# 5714	444	319				
15	890	361				
16	50	130				
17	70	140				
18	75	175				
5719	355	382				
20	743	585				
21	2,86%	2542	292	< 15	< 5	
22	402	526	81	< 15	< 5	
23	556	788	160	< 15	< 5	
5724	991	788	169	< 15	< 5	
25	842	1139	196	< 15	5	
26	404	512	107	< 15	< 5	
27	981	4782	1170	< 15	< 5	
28	4237	1146	212	< 15	11	
5729	2050	1123	185	< 15	< 5	
30	7098	1250	225	35	40	(50)
31	7691	3658	456	< 15	5	
32	3740	1,19%	2190	< 15	< 5	
33	713	1078	154	< 15	< 5	
5734	749	1054	142	< 15	< 5	< 5
35	859	1448	226	(227) < 15	< 5	< 5
36	2892	4737	1092	< 15	7	
37						
38	1,38%	4682	838	32	27	
5739	3,43%	162	44	< 15	< 5	
40	1029	2127	384	< 15	< 5	
41	2357	4125	1019	< 15		
42	4139	3092	504	< 15		
43	9934	139				

Les resultats des echantillons ci-dessus sont certifies

par:




TECHNI-LAB abitibi inc.

CERTIFICAT D'ANALYSE

NOM: FALCONBRIDGE LIMITEE
Att: M. Richard Laplante

DATE : 06-08-90
PROJET: 01294

Echantillon #	Cu ppm	Ni ppm
# 5744	1493	1393
45	4616	3077
46	7765	2815
47	290	192
48	669	669
5749	845	373
50	494	544
6070	1647	4542
71	114	149
72	418	418
6073	1382	1678
74	875	860
75	310	165
76	2889	3330
7501	837	1555
7502	217	232
3	432	523
4	1119	1799
5	1354	1638
6	2098	2898
7507	3968	9982
8	626	859
9	1578	2861
10	973	1547
DOUBLE 7507	3941	9852



Les résultats des échantillons ci-dessus sont certifiés

par: *Stéphane Prémont*