GM 51405

GEOLOGICAL REPORT, FREEWEST BENOIT EAST PROPERTY AND ASARCO OPTION

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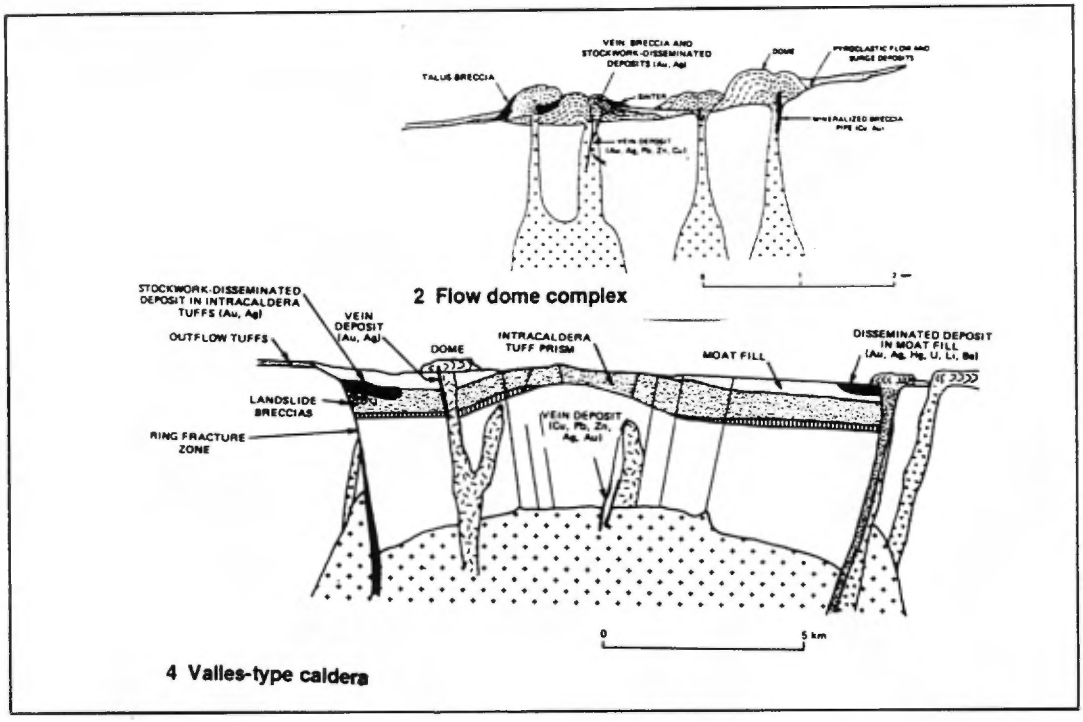
GEOLOGICAL REPORT ON 12-CLAIM GROUP OF FREEWEST BENOIT-EAST PROPERTY AND 40-CLAIM GROUP OF ASARCO OPTION NORTH BENOIT TOWNSHIP PROVINCE OF QUEBEC FOR FREEWEST RESOURCES INC. APRIL 1992

by
JEAN-PAUL BARRETTE
Geologist

GEOLOGICAL REPORT ON
12-CLAIM GROUP OF
FREEWEST BENOIT-EAST PROPERTY
AND
40-CLAIM GROUP OF ASARCO OPTION
NORTH BENOIT TOWNSHIP
PROVINCE OF QUEBEC
FOR
FREEWEST RESOURCES INC.
APRIL 1992



Idealized genetic models of quartz-Au-Ag-Pb-Zn-Cu veins in volcanic related. From Sillitoe, R.H. and bonham, Jr H.F. (1984); Economic Geology, no.79

INDEX

List of figures

Annex

In Pocket

Compilation 1:5000 scale maps (reduced)

RÉSUMÉ

Freewest Resources Inc. has recently acquired, at the northern part of Benoit Township, a block of 12 claims and optioned a block of 34 claims belonging to Asarco Exploration Co. of Canada. The latter is situated immediately to the west of the block of the 12 new Freewest claims. The Asarco/Freewest Benoit East property is localised approximately 15 km southwest of Desmaraisville, Abitibi East, province of Québec.

The geology of the Asarco/Freewest Benoit East property is separated into three stratigraphic division which strike in WSW. They are each separated by important mineralized fault/shear zones. The first division or major unit is located in the northwestern part of the property. It is dominated by the oldest stratigraphic unit, such as magnesian basalt and syngenetic gabbro sills, with one thin horizon of felsic rocks and deformed graphitic fine metasediments. Following to southeast, the second major unit, contains thick sequences of pumiceous felsic rocks, associated with andesitic rocks and sheared carbonatized volcano-sedimentary rocks. The contact of the mafic and felsic major units is affected by a WSW Duplessis regional shear zone. The third part of the stratigraphic division is located in the southeastern part of the property. Its alternation of andesitic flow and blocky tuff, with several intrusions of gabbro sills and dikes. This property geology is concordant with the regional geology of the Quevillon-Wedding Lake-Desmaraisville SW volcanic segment, observed by various authors.

The 1986 Asarco gold discoveries, found in three overburden drill holes, such as 3615ppb Au/8.5 feet, 1260 ppb Au/5 feet and 1295 ppb Au/7 feet, and the new gold prospect (126 g Au/t), close to the north of the property in Nelligan Township, serve as the principal interest in the northern part of the Benoit Township for Freewest Resources Inc.

Moreover, new structural and geological interpretations emanate from this study, Freewest/Asarco property also contains new discoveries of gold, copper, zinc, silver and lead ore deposits, and a potential of polymetallic massive sulfide deposits (Zn,Pb,Ag±Cu,Au). These showings and mineralized zones are demonstrated and interpretated from results of geological and prospecting fieldworks. Additional information from other prospecting works, such as soil sampling, geophysical IP and VLF-EM surveying, diamond and overburden drilling campains, serve as helpful knowledge relative to the real economical potential of the property.

The 1992's prospection campain reveals three altered and mineralized zones of the property. Each contain possible economic ore deposits. They are:

a) the **1,5 km length of the EW sheared carbonatized, hematized and pyritized zone situated in the andesite and felsic rocks at the southern sector of the property**. One of several showings found, has gold (0,1 to 0,49 oz/t), copper (0,8%), silver (1,1oz/t), zinc (0,50%) and lead (0,69%) values. They are from a NE[N66°/45°] quartz-sulfide tension vein (0,45cm x 5m) in large tension breccias. Another showing in the same altered band, has 0,01 to 0,03 oz Au/t in the quartz-carbonate tension veins. However, the quartz tension mineralized veins are not economic, because they are scarce and to small in width. Moreover, high gold values (885 and greater than 10,000 ppb Au) are found in overburden drill samples, carried out close to the gold-polymetallic vein showing. A part of this carbonatized zone is intercepted by one diamond drill hole (163 meters), but no economic values are found. Several IP and VLF conductors occur in this altered band area. They are caused by dissiminated pyrite in hematized felsic pyroclastic flow and by the graphite-chlorite-pyrite veinets in strong deformed felsic and gabbroic rocks.

b) the **6 km length of the WSW band of folded, sheared, altered and mineralized graphitic volcano-sedimentary rocks, within a massive sulfide deposit (Py-Po) and interstratified altered pumiceous felsic rocks**. This mineralized zone occurs along a large and regional WSW input conductor passing through the property. This large conductive zone is 350 to 500 meters wide and 6 kms in length. It belongs to the regional Duplessis shear-input zone. It includes three or four successive folded horizons of mineralized and carbonatized graphitic mudstone-chert-mafic tuff, intercallated in intermediate to felsic rocks. The felsic rocks, in contact with the sulfides body, are carbonatized and fuchsitized and contain Py-Po dissiminated patches. Strong IP and VLF conductors and also magnetic anomalies, occur within these proposed sulfide iron formations. This long zone is observed on several outcrops of the property and intercepted by several diamond drilling holes. The samples taken from these give no economic results. Moreover, several overburden drilling holes are carried out above the IP and VLF conductors. The conductors are attribuable to these mineralized rocks. Two of the drills emanate from the Asarco overburden drilling project, which contains high gold values (3615 and 1260 ppb Au). Another, from the summer of 1992, is drilled 700 meters southwest of the Asarco drills. It gives 2355 ppb of gold in the analytic results. These gold overburden drilling discoveries are in the hot spot situated in the center of the property, in which several fault and shear zones are intercepted. Finally, the soil sampling, program carried out above this WSW mineralized and conductive zone, has Zn, Cu, Pb and ±Au,As moderate contour anomalies.

c) The **1,5 km length of EW folded, sheared, altered and mineralized graphitic volcano-sedimentary situated in basaltic rocks of the northwestern area**. This band consists of an east-end extension of the same mineralized volcano-sedimentary rocks, within massive sulfides of Py-Po±Cp±Sp, occuring in the contiguous Freewest NW Benoit property. This altered and mineralized EW shear zone also contains mafic and felsic tuff and a possible magnetite iron formation (MIF). This band is accompanied by a large input and VLF conductor and a magnetic high susceptibility unit. This magnetic unit possibly emanate from a MIF and/or magnetic gabbro dike. No massive sulfide deposits are found, however, high zinc values, such as 2850, 2380 and 800 ppm of zinc are found in the carbonatized and chloritized graphitic schist, with porphyroblastic cristals of pyrite. Several overburden drill holes are carried out in this zone. Only 48 ppb of gold and 105 and 107 ppb of zinc are found.

Considering the results of the preliminary exploration program, several areas of the Freewest/Asarco property are unexplored and/or need a second exploration program as they possibly contain economic ore deposits. Consequently, we suggest the following works:

- An Induced Polarisation (IP) survey should be carried out on all the property surface (minimum 27 kms) or on the insufficiently explored mineralized zones (approximately 18 kms).

- An soil sampling should be undertaken in the mineralized zone areas and analysed for Zn, Au, Pb, Cu, As, Ag, Hg.

- Two weeks of geological exploration should be undertaken on surface of the property.

- Approximately 8 diamond drilling holes (1200 meters) should be executed in the half eastern part of the property, several (3 holes) in the golden hot spot and few in the western part. Others holes could be envisaged depending upon the IP geophysic results.

1. INTRODUCTION

Freewest Resources Inc. has recently acquired, at the northern part of Benoit Township, a block of 12 claims and optioned a block of 34 claims belonging to Asarco Exploration Co. of Canada. The latter is situated immediately to the west of the block of the 12 new Freewest claims. The Asarco/Freewest Benoit East property is localized approximately 15 km southwest of Desmaraisville, Quebec.

In the present report we analyze the stratigraphy, geology and structure of the region and the property. Secondly, we disclose and discuss the principal results of the exploration survies carried out on the property. The methods undertaken within this section are prospecting and mineralized rock sampling, geophysical survies, soil geochemistry and overburden and diamond drilling campaigns. Finally, we submit various propositions with regard to future exploration on the property.

2. LOCATION AND ACCES

The Freewest Resources and Asarco Option claims are situated at the northern part of the Benoit Township, district of Abitibi East, Province of Quebec. The property is located 15 km from Desmaraisville (figure 1). Access to the property is facilitated by the paved highway 113, which joins the Chibougamau and Noranda-Val d'Or areas and passes through the northern part of the claims. Furthermore, both the recent north-south ground geophysical lines, which cover all the Freewest/Asarco claims, and the 8 km long of the east-west drilling trail, give very good access by foo

The area is generally flat save a few rolling hills. The majority of the outcrops found on the property emanate from the foot of the hilly area, in particular at the northern side.

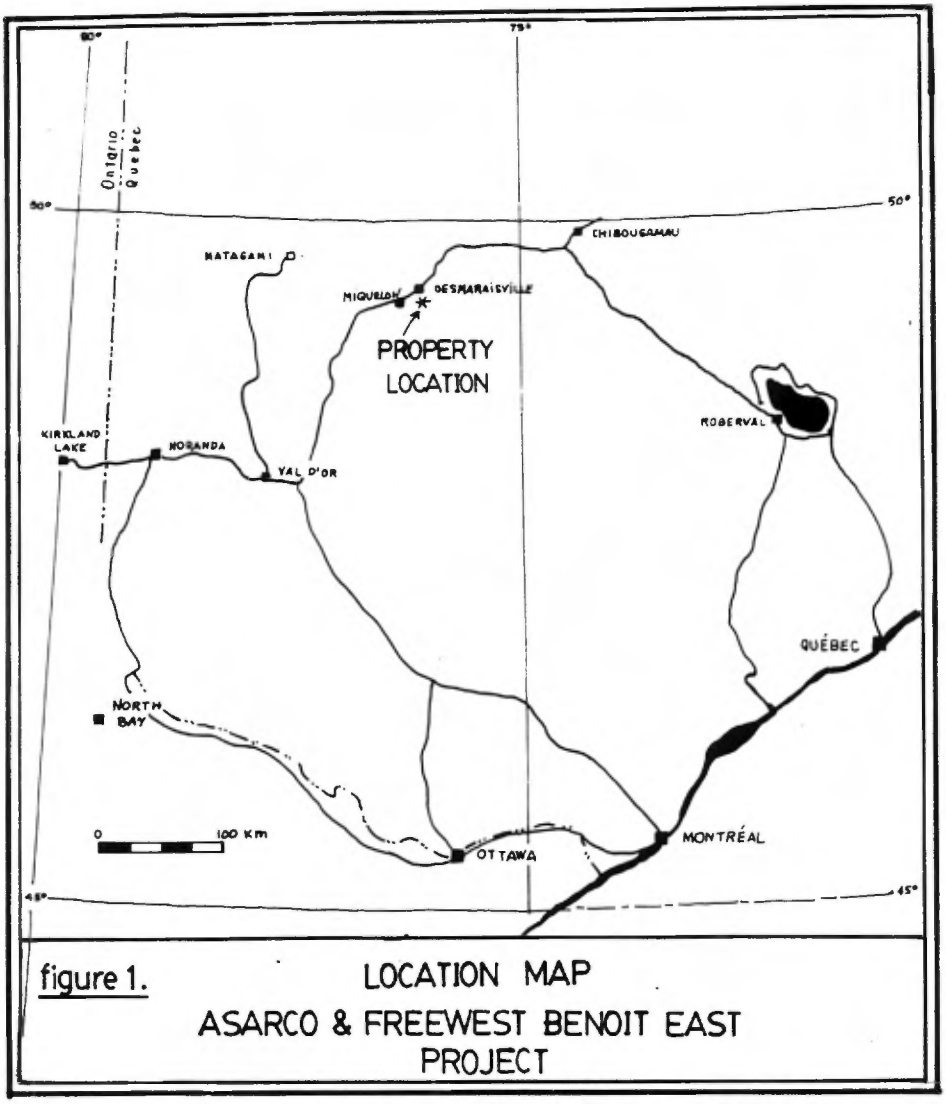


figure 1. LOCATION MAP
ASARCO & FREEWEST BENOIT EAST
PROJECT

3.0 PROPERTY OF CLAIMS

The mineral claims comprise two blocks. The first is the Asarco option and the second is the Freewest Benoit East property. They are located in the northern part of the Benoit Township (figure 2). The eastern Asarco option block contains 40 claims which represent approximately 640 hectares. The contiguous eastern Freewest Benoit East block contains 12 claims comprising a total of 192 hectares. They are as follows:

Freewest Benoit East (approx. 192 ha)

5063087, 5063088,
5063089, 5063090,
5063091, 5063092,
5063093, 5063094,
5063095, 5063096,
5063097, 5063098

Asarco Option: (approx. 640 ha)

455742- 1, 2, 3, 4, 5
455743- 1, 2, 3, 4, 5
455744- 1, 2, 3, 4, 5
455745- 1, 2, 3, 4, 5
455746- 1, 2, 3, 4, 5
455747- 1, 2, 3, 4, 5
455748- 1, 2, 3, 4, 5
455749- 1, 2, 3, 4, 5

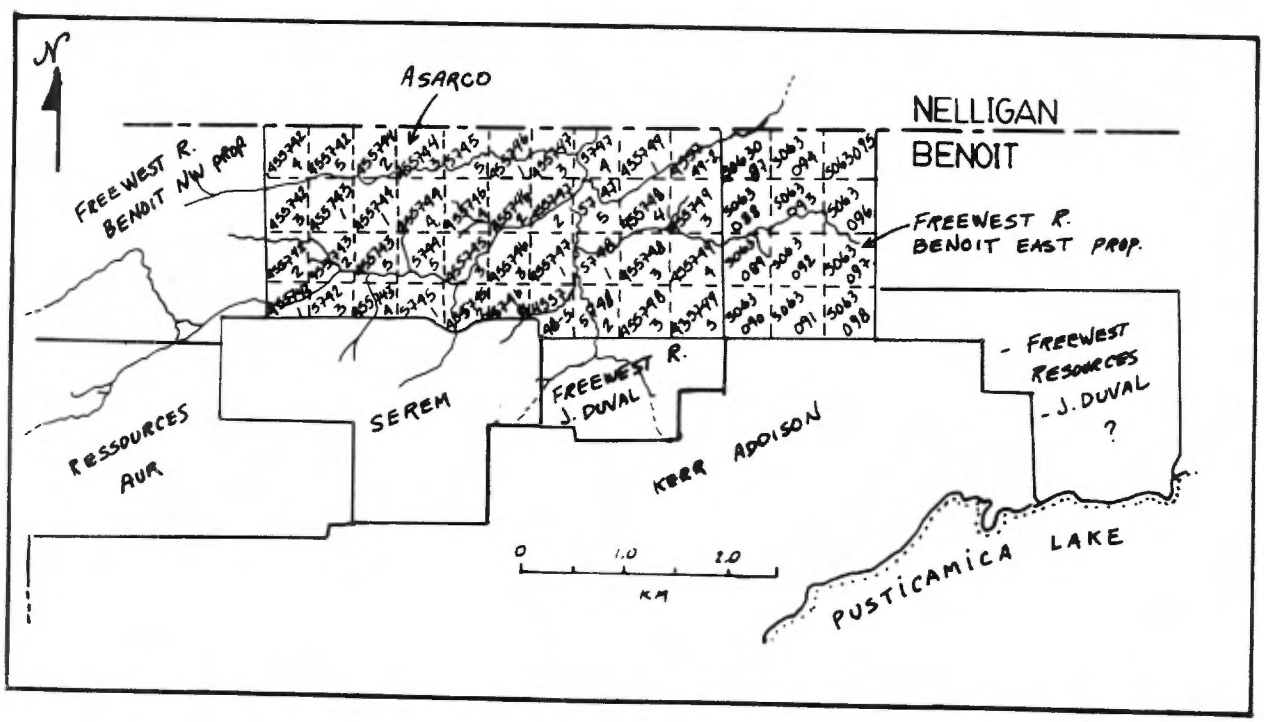


FIGURE 2: Claim map of Freewest Benoit East and Asarco properties

4.0 REGIONAL GEOLOGY

The property of the Asarco/Freewest Benoit East claims is situated in the Chibougamau-Matagami band in the eastern part of the large Abitibi archean greenstone belt within the Superior Province in the Canadian Shield. The regional geology, which includes the property, is displayed on figures 3 and 4 and table 1. The figures describe and compare the stratigraphy, structure and altered-mineralized zones observed by various authors in different localities in the NE-SW Desmaraisville-Wedding Lake-Quevillon volcanic segment. From theses compilations, we retain the following observations:

❶ The northwestern and southeastern limits of the volcanic belt are occupied by large diorite-tonalite-granodiorite massif to gneissic plutons of the Waswanipi and Lichen or Mountain plutons, trending in an east-west direction.

❷ A differentiation and bimodal evolution of the volcanic rock pile begins in the border of the volcanic belt, by tholeiitic to magnesian basalts. It follows toward the center of the belt respectively by sheared and altered felsic volcanic rocks, epiclastite sedimentary rocks, andesitic flows and blocky tuffs, and finishes with a second formation of epiclastic sedimentary rocks.

❸ The majority of the above mentionned rocks are intruded by synvolcanic gabbro sills, pyroxenite-gabbro-anorthosite and hornblendite-diorite sills and plutons, monzodiorite-tonalite-granodiorite plutons and finally, monzodiorite-syenite postectonic stocks. Migmatite, gneiss and schist are also present within the large plutons of granodiorite, at the margins of the volcanic belt. Late stage diabase dikes of proterozoic age crosscut all these rocks.

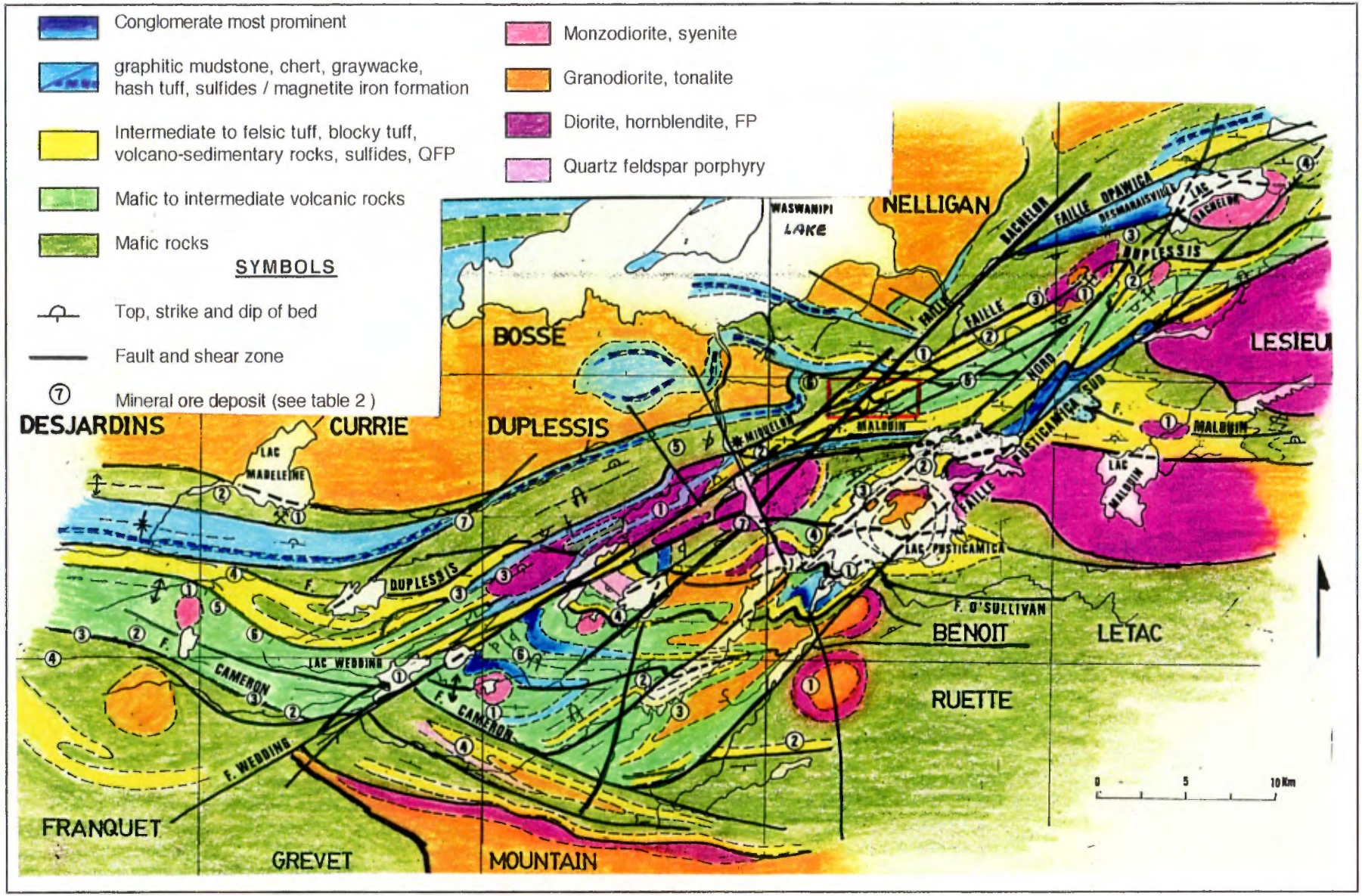


Figure 3: Property location on regional geology, structure and localized ore deposits map of the Quevillon-Wedding Lake-Desmaraisville volcanic rocks segment; see figure 4 and tables 1 and 2 for more information. Modified fron Avramtchev (1981), Hock (1989) and Barrette (1991)

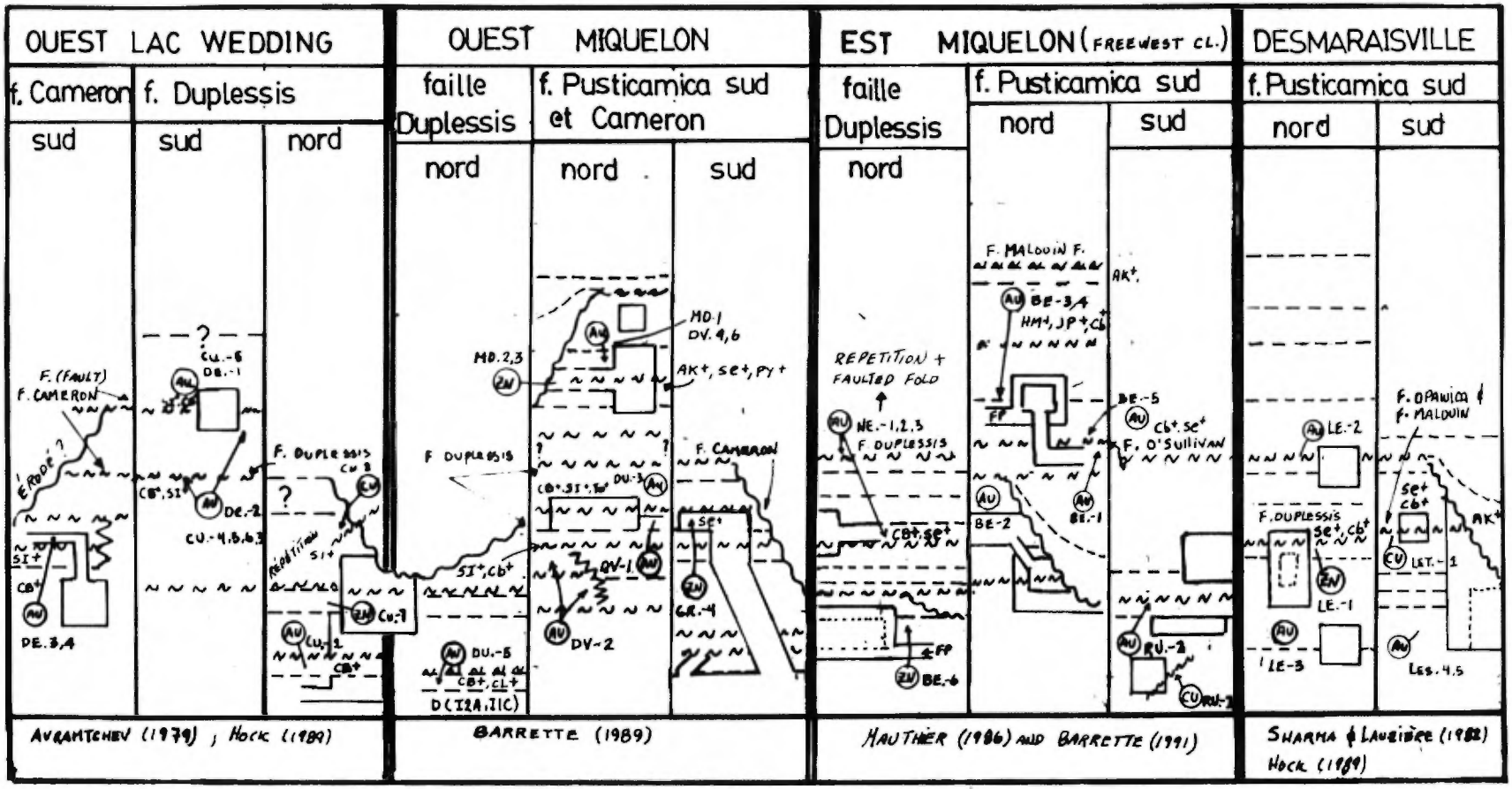


Figure 4: Lithological, structural and metallogenical correlations essay between different regions of the Quevillon-Wedding Lake-Desmaraisville volcanic rock segment. See figure 3 for lithological descriptions.

Table 1: Comparison of stratigraphic units in different regions in the Wedding-Bachelor volcanic belt

Proulx (1989)	Barrette (1989)	Gauthier (1986) Barrette (1990)	Sharma & Lauziere (1982)
9: Olivine diabase	Diabase	Biogenic ordovician limestone	**9:** Diabase
8a: Syenite **8:** Carbonatite	Stock of diorite-monzodiorite-syenite	Magnetite diabase	**8:** QFP in contact with **7a**
7a: Diorite **7:** Monzodiorite-monzonite	Diorite-monzodiorite-potash feldspar porphyry granodiorite	Hornblende, biotite granodiorite post.tect	**7c:** Alcali diorite
6: Quartz monzonite	Quartz ferrodiorite-hornblendite-quartz monzodiorite	Diorite-hornblendite pluton	**7b:** Granodiorite-syenite
5e: Tuffite, turbidite, wacky, mudstone, graphit sediment **5d:** Turbidite, iron formation **5c:** Arkose **5b:** Iron formation **5a:** Graywacke, mudstone, sulfides, graphitic arkose	Blue quartz mag. gabbro-pyroxenite-tonalite-granodiorite, aplite	Blue quartz diorite-tonalite, monzodiorite-granodiorite rocks, gneiss and mixed rocks	**7a:** Quartz diorite-granodiorite **6:** Gabbro, diorite, pyroxenite, peridotite
4d: Felsic tuff: Lapilli and blocky tuff, cristal tuff **4c:** Ryodacite, pumice rhyodacite tuff **4b:** Feldspar porphyry **4a:** Rhyolite	Pyroxenite-gabbro-anorthosite intrusion	Magnetite gabbro-pyroxenite-anorthosite intrusions and sills	**5a1:** Diorite and magnetite pebble conglomerat **5a2:** Porphyry pebble conglomerate **5b:** Sandstone **5c:** Turbidite **5d:** Silstone, mudstone
3: Magnesien basalt, spinifex and vescicular, green mica-talc-carbonate schist and chlorite-carbonate schist	**CYCLE II** **2d:** Conglomerat, lithic wacke, mudstone, tuffite, epiclastite **2c:** Intermediate to felsic lapilli and blocky tuff, mafic to felsic tuff **2b:** Dacite to rhyolite, QFP, felsic pyroclastite flow **2a:** Andesite-basalt, comagmatic gabbro-diorite	**5c:** Turbidite, felsic hash tuff, coarse epiclastite **5b:** Diorite clastic lithic sandstone and conglomerate **5a:** Exhalite, graphitic fine sediment, chert, mafic to felsic tuff, mudstone chert conglomerate and breccia, massif sulfides (Po-Py)	**4:** Cristal, lapilli and blocky tuff **3c:** Andesite-Basalte, comagmatic gabbro **3b:** Rhyodacite-Rhyolite, gabbro, lapilli and blocky tuff, felsic tuf, agglomerate **3a:** Amygdalar basalt, gabbro
2c: Comagmatic gabbro, quartz gabbro, diorite, QFP **2b:** Intermediate tuff: Lapilli and blocky tuff **2a:** Magnesian basalt **2:** Andesite basalt, vescicular and amygdalar	**CYCLE I** **1f:** Graphitic mudstone, chert, iron formation, mafic and felsic tuff, massif sulfides **1e:** Andesite lapilli and blocky tuff **1d:** Ryodacite-rhyolite, QFP, sericite-carbonate schist **1c:** Andesite **1b:** Magnesian plagioclase porphyry basalt, mega breccia flow, comagmatic gabbro and anorthosite **1a:** Aphyric basalt, comagmatic gabbro	**4e:** Felsic cristal, lapilli or blocky tuff **4d:** Dacite to rhyolite **4c:** QFP, FP **4b:** Andesite lapilli and blocky tuff **4a:** Andesite-basalt	**2:** Intermediate to felsic lapilli and blocky tuff
1a: Comagmatic gabbro sill **1:** Plagioclase megaporphyry basalt, vescicular		**3:** Basalt-andesite, volcanic breccia **2b:** Felsic to intermediate lapilli and blocky tuff **2a:** Dacite, rhyodacite	**1b:** Magnetite iron formation **1a:** Plagioclase porphyry basalt, gabbro
		1c: Chert tuff **1b:** Aphyric basalt **1a:** Plagioclase porphyry basalt	

❹ Five majors volcanic and sedimentary units are recognized in the area. They are as fellows;

Unit 1 is at the base of the regional stratigraphy. It is dominantly present at each side of the Quevillon-Desmaraisville volcanic segment, more precisely to the northwest of the Duplessis shear zone and to the southeast of Pusticamica fault zone (figure 3). It consists of magnesian basalt with or without plagioclase megaporphyries, with comagmatic gabbro and gabbro-anorthositic sills. Thinner volcano-sedimentary sequences, such as intermediate lapili tuff, tuffite, iron formation, chert and mudstone with dissiminated to massif sulfides are equally observed in this unit. This unit is compared with a feldspar porphyry basalt of the Obatogamau Formation in the Chibougamau area (Daigneault et Allard 1990).

Unit 2 overlaps unit 1 in sheared, altered and mineralized contact (figures 3 and 4). It Is present between the large unit of andesitic flows and tuffs in the center of the volcanic belt and the marginal basaltic rocks of unit 1. It consists of a sequence of intermediate to felsic flows and tuffs of varying coarseness, including crystal, lapilli and blocky tuffs. The limits of this unit are intensely sheared and altered in sericite, carbonate, graphite and sulfides. It is easy to recognize due to its geophysical anomalic signature. Several thin horizons of graphitic fine sedimentary rocks with massive sulfide deposits are interstratified in the felsic rocks. Intrusions of gabbro, quartz diorite and quartz-feldspath porphyry genetically tied with granodiorite, are also frequently observed. The final stage of the felsic rock complex consists of destruction and remobilisation of the volcanic pile of the complex, particulary around the felsic plugs and the archean volcanic normal fault. The Coniagas Zn-Ag-Pb mine, Shortt and Bachelor Lake gold mines are found in this felsic center, in particular when the rocks are folded, faulted and intruded by felsic intrusions (figure 4).

Unit 3 is a small unit located between the rocks of the felsic center and the andesitic volcanism of the next unit 4. In the Miquelon-Desmaraisville area,

this unit constitutes amygdaloidal basalts-andesite. In the Lake Wedding region, the unit is composed of magnesian amydaloidal basalt with spinifex structure. In the shear zone, this unit is transformed in to talc-chlorite-carbonate schist (Proulx 1990).

Unit 4 overlaps, and is a lateral equivalent to, the felsic rocks complex and sedimentary rocks of unit 5. This unit represents the second cycle of volcanic evolution. It is present in thick sequences of andesite flows and lapilli-blocky tuff, with fine insertions of felsic and volcano-sedimentary rocks in the center of the Quevillon-Desmaraisville volcanic belt. It also contains gabbro-diorite comagmatic sills and QFP intrusions.

Unit 5 is made of a thin to thick sequences of sedimentary rocks which overlap interfingeringly the mafic rocks of unit 1 and equally the intermediate to felsic rocks of unit 2. It may however, also be a lateral equivalent. Moreover, there are several types of sedimentary rocks recognized in the region. They are: **a)** Diorite, magnetite and/or felsic porphyry pebble conglomerate and sandstone. The composition of these detritic rocks depends upon the lithologies eroded and affected by the early normal synvolcanic fault, which is the principal cause of the formation of the conglomerate and turbidite (see Barrette 1991, Daigneault et allard 1990 and Hock 1989). Examples are found in the conglomeratic rocks around the Wedding, Bachelor, Opawica and Pusticamica faults (figure 3); **b)** The widespread fine volcano-sedimentary rocks of mudstone-chert and hash tuff, with or without massive oxydes or sulfides iron formation deposit. They are observed between principal volcanic units and in felsic center; **c)** One finds rare turbitite, graywackes and lithic sandstone. **d)** Magnetite iron formation is present in the exhalitive subunit 5b, close to the Waswanipi pluton. An iron formation is also observed in the southwest corner of the Lesieur Township (Sharma et Lauzière 1983; figures 3 and 4). **e)** The last distinct sedimentary rock is observed in the wedding lake area, and consist of arkosic sandstone (Proulx 1990). It possibly emanates from the erosion of the Waswanipi pluton.

❺ This region is strongly folded and sheared, particulaly in the interface between the mafic, felsic and sedimentary rock units. The major concordant shear zones, such as Duplessis, Opawica, Malouin, Cameron and Mountain, are situated approximately at these interfaces and also in the felsic center (figures 3 and 4). The felsic and volcano-sedimentary rocks are particularly folded, sheared and altered in carbonate, sericite, silica, graphite, chlorite, hematite and sulfides at various degrees. The presence of quartz-feldspar porphyry, diorite, diorite-granodiorite and monzodiorite-syenite, in or close to the major regional structures, accentuate the alteration and mineralization. However, the major gold, copper, zinc, lead and silver mineralizations are found in these altered large structures. Examples are: Madeleine Lake gold mine in Currie twp. (#1 on the figure 3, table 2 and annex D), the prospect of zinc, lead, silver and gold of the Serem Grevet twp. (Grevet #4), Freewest Pusticamica lake gold prospects (Benoit #1 and #2), Coniagas zinc-silver-lead mine and Bachelor gold mine in Lesieur twp. (Lesieur #1 and #2 resp.).

Table 2: Description of a few mineral deposits in Wedding Lake-Desmaraisville volcanic segment. See Annex D for other information and mineral deposits

TWP.& No.	ORE DEPOSIT	GRADE	DESCRIPTION
Lesieur 1 Coniagas Mine 1961 to 1967	Zn, Pb,Ag±Au	652,000t Zn (10,7%) Pb (1,1%) Ag (182 g/t)	Folded massive sulfide (Zn,Py,Po) in sheared felsic rock, blocky tuff and proximate to a chlorite schist (major normal fault)
Lesieur 2 Bachelor Mine 1982	Au	508,000t Au (5g/t) res. 570,000t Au(6,5g/t)	N70°to N55° quartz sulfide veins in fractured, hematized and silicified basalt, felsic rocks and felsic plug
Nelligan 1 1990	Au	Au(126 g/t) from sample	EW quart-carbonate-pyrite tension veins in pyritized, silicified wall rocks affected carbonate and sericite schist
Benoit 5 1986	Au	Au (4,8 g/t)	WSW quartz-carbonate-pyrite veins intruded in sheared and metamorphized basalt from Gauthier (1986)
Benoit 6 1959 McIntyre	Zn,Cu,Pb,Ag	Cu(1%), Zn(1%) from sample	Massive sulfide (Po,Py,±Sp,Cp) in graphitic mudstone-chert between andesite and felsic rocks
Currie 1 Lake Rose or Madeleine Mine 1938,39	Au Cu,Zn,Bi,Te	6000t 0,64 oz/t and 1,34 oz/t (140')	Gold quartz-Cp-Sp-Py-tellure bismuth Ag-Au vein in sheared tuff, andesite and diorite
Grevet 4 M and B Serem 1990	Zn,Pb,Ag,Cu,Au	476650t at Zn(9,7%) Cu(0,58%) Ag(24 g/t)	Lenticular massive sulfide (Sp,Py,Po,Cp) intercallated in strong deformed basalt, blocky tuff and QFP

5.0 GEOLOGY OF THE PROPERTY

5.1 Introduction

The geology of the Asarco option and Freewest Benoit East property is exposed on maps 1 and 2 (in the pocket) and compiled in the small map in figure 5. These contigeous blocks of claims cover a 5 km length and a 1,5 km width, at the northern limit of the Benoit Township. It is situated 10 kms east of the Miquelon settlement.

Approximately eighty percent (80%) of the property surface is explored by using the ground geophysical lines and the drilling trails (map 1). The following zones and areas are particularly explored:

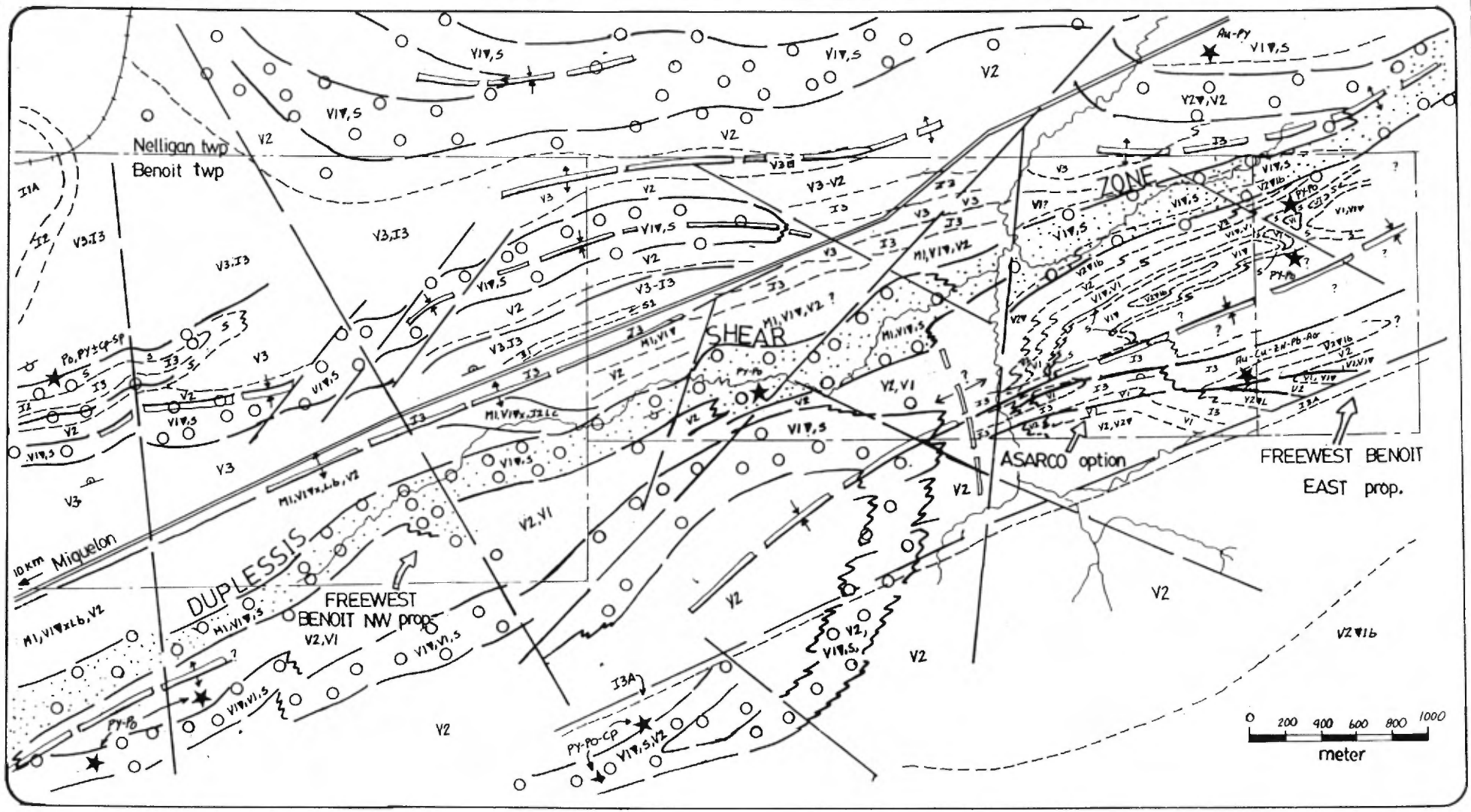
- The high-geophysical resistivity zones, most likely coincident with bedrock ridges and outcroping bedrock.

- The concentric and concentrated topographical lines, corresponding to a hill and escarpment. The majority of the outcrop found on the property, is located in the northern and western hillside,

- Geophysic anomalies and conductors such as VLF-EM, IP and Input survies (see previous work below).

- Mineralized and altered zones and possible extension of regional mineralized zones in the property.

- Ancien prospecting field works and trench.



LITHOLOGIES

INTRUSIVE ROCKS ; I1 : GRANODIORITE , I2 : DIORITE I3 : GABBRO, I3A : DIABASE

VOLCANIC ROCKS ; V1 FELSIC , V2 INTERMEDIATE , V3 : MAFIC , (▼) PYROCLASTITE

VOLCANO SEDIMENTARY ROCKS ; S : GRAPHITIC MUDSTONE AND CHERT , MUDSTONE CONGLOMERATE, MAFIC TO FELSIC TUFF, IRON FORM., MASSIF SULFIDE (Po, Py ± Cp, Sp)

SYMBOLS

LITHOLOGICAL CONTACT

INTERPRETED FAULT

PROPOSED FOLD AXE

STRIKE, DIP AND TOP OF STRATIGRAPHY

ORIENTED SHEAR AND INPUT ZONE

IMPORTANT SHOWING

FIGURE - 5

COMPILATION MAP: geology and input anomalies

5.2 Previous works

The general area of Miquelon-Desmaraisville is intensely explored, when the Coniagas mine (Zn-Pb-Ag), Madeleine Lake mine (Au) and Bachelor Lake Mine (Au) (encercle Currie 1, Lesieur 1 and 2 on figure 3) are discovered in 1940. Most of the activity, at this time, is concentrated at the southeast and northeast of Asarco-Freewest block, in the Miquelon-Burge Lake and Desmaraisville area. Some of the work, however, spills over to the east and southwest of the properties.

In 1947, Holliger Consolidated Gold Mines Ltd (GM 7103) implements geological work in what is now, Nelligan Gold Hawk/Ressources Orient claims and Benoit-East Freewest claims No. 5063095 to 5063098. The geological map published by the company only concerns a carbonatized zone, 300 meters to the north of the Nelligan-Benoit bondary. No economic results are therein found or published.

In 1957, Moneta Porcupine Mine Ltd (GM 7308-B) implements various geological work and a ground EM-electromagnetic survey. They partially cover the southwest corner of the Asarco claims (455742-1,2 and 455743-2,3). Two large WSW trending conductors are defined in this area. In 1958, a diamond drilling program is therein carried out (GM 7308-A). The holes are located 2,5 km southwest of the property. The southern conductors concide with a magnetic anomaly, corresponding to a massive pyrite-pyrrhotite-magnetite mineralization. The second northern conductor is the same as the large input conductor observed in the southwestern part of Asarco block (figure 5 and map 2). Moneta's find in the northern conductor, is pyritic and graphitic mineralization, without magnetic, in the sheared andesite and graphitic sediments. Drill core intersections yield gold values which range from trace to 0,01 oz Au/t.

After an approximate one decade hiatus of the economic interest of the area, the federal government follows-up the geophycical works with an airborne geophysical survey. It includes the Asarco/Freewest claims. An EM aeromagnetite 1:50,000 map of the Pusticamica Lake area (C.G.C. 1965) is a result of the research.

Much later, geophysic compilations are followed up in the region, such as: a 1:250,000 scale map (C.G.C 1980), a 1:20,000 scale Input and geological map (M.E.R. 1981) and a 1:250,000 Input map (M.E.R. 1985).

In 1985, the Quebec government carries out a geological fieldwork of the Miquelon area and consequently, a 1:20,000 scale geological map is compiled (Gauthier 1986). The principal geological interpretation is shown on figure 3. However, the only mineralization found by Gauthier in the Freewest/Asarco claims blocks, is located in the old trench, situated at the south-eastern part of the Freewest claims (see L5E/10+00S on the map 1). The quartz-carbonate-pyrite vein, found in the trench, gives no economic results (7ppb Au in #4007). Gauthier notes the presence of a sterile graphite-pyrite-pyrrhotite fracture-filling occuring in the felsic rocks complex of unit 2, located on the top of the basalt of unit 1. An important gold discovery is reported and situated approximately 1,5 km east of this old trench (Benoit 5 in figure 3). The gold discovery is a 4,8 g Au/t in sheared metabasalt in contact with a diabase dyke (see #5 on figure 3). This same dike passes through the south-eastern part of the Benoit-East property (see map 1). However, this gold mineralisation is an intersection of EW shear-IP conductive zone and the SW fault zone intruded by diabase dikes (see Barrette 1991 report).

Following this, Asarco Exploration Co. of Canada stakes the 34 claims falling within the parameters of the present report. In 1987, Asarco publishes (GM 46276), the results of a reverse circulation overburden drill program (20 holes totalised 1183 feets). Three holes have the following high gold values: 1260 ppb Au/5', 3615 ppb Au/8.5' and 1295 ppb Au/7' (map 1).

In 1990, Freewest Resources Inc. options the block of 34 Asarco's claims and stakes 12 others claims of the actual Benoit-East property, situated immediately to the east of Asarco's claims. Following this, a magnetic and electromagnetic survey (EM-VLF) is carried out on the Asarco option and Freewest Benoit-East property, totalling 74,6 kms. When several showings are discovered (see chap.6), Freewest then follows-up with the program of an Induced Polarization (I.P.), in the summer of

1991, on their Asarco and Benoit East property (12,15 kms).

5.3 Stratigraphy

Outcrops are concentrated, with moderated density, in four sectors of the property, i.e. northwest, southwest, northeast and southeast. Outside these areas, the outcrops are scarce and the geology is inferred from geophysics.

The geology of the property is separated into three stratigraphic subdivision strikes in WSW (figure 6 and map 1). The first is located in the northwestern part of the property. It is dominated by the oldest stratigraphic unit, such as magnesian aphyric basalt and gabbro of unit 1, with one thin horizon of andesite, felsic tuff and graphitic fine metasediments. Following to southeast, the second part, contains the felsic rocks complex of the regional unit 2, associated with andesite and altered volcano-sedimentary rocks of the subunit 5a. The contact with both units 1 and 2 is a WSW Duplessis regional input shear-input zone (map 1 and figure 4). The third part of the stratigraphic subdivision is located in the southeastern part of the property. Only a few outcrops expose the andesitic rock complex (alternation of andesitic flow and tuff) associated with gabbro sills and dikes.

The property contains the following lithologies:

✔ The **basalts** are present in the northwestern part of map 1. They are generally massive flows with rare pellowed variety. The last is only observed near Highway 113, with a stratigrahic top facing to the south. This basalt is aphyric and has dark green color on the weathering surface. Comagmatic mesogabbro sills, sometime with plagioclase feldspar porphyries, largely dominate the basalt in this area. The geophysic compilation in the northwestern sector (map 2), shows a moderate to high magnetic susceptibility large area (100 to 200 gammas). We submit this to represent a distinct stratigraphic mafic volcanic rock, such as the basalt and magnesian basalt of the unit 1.

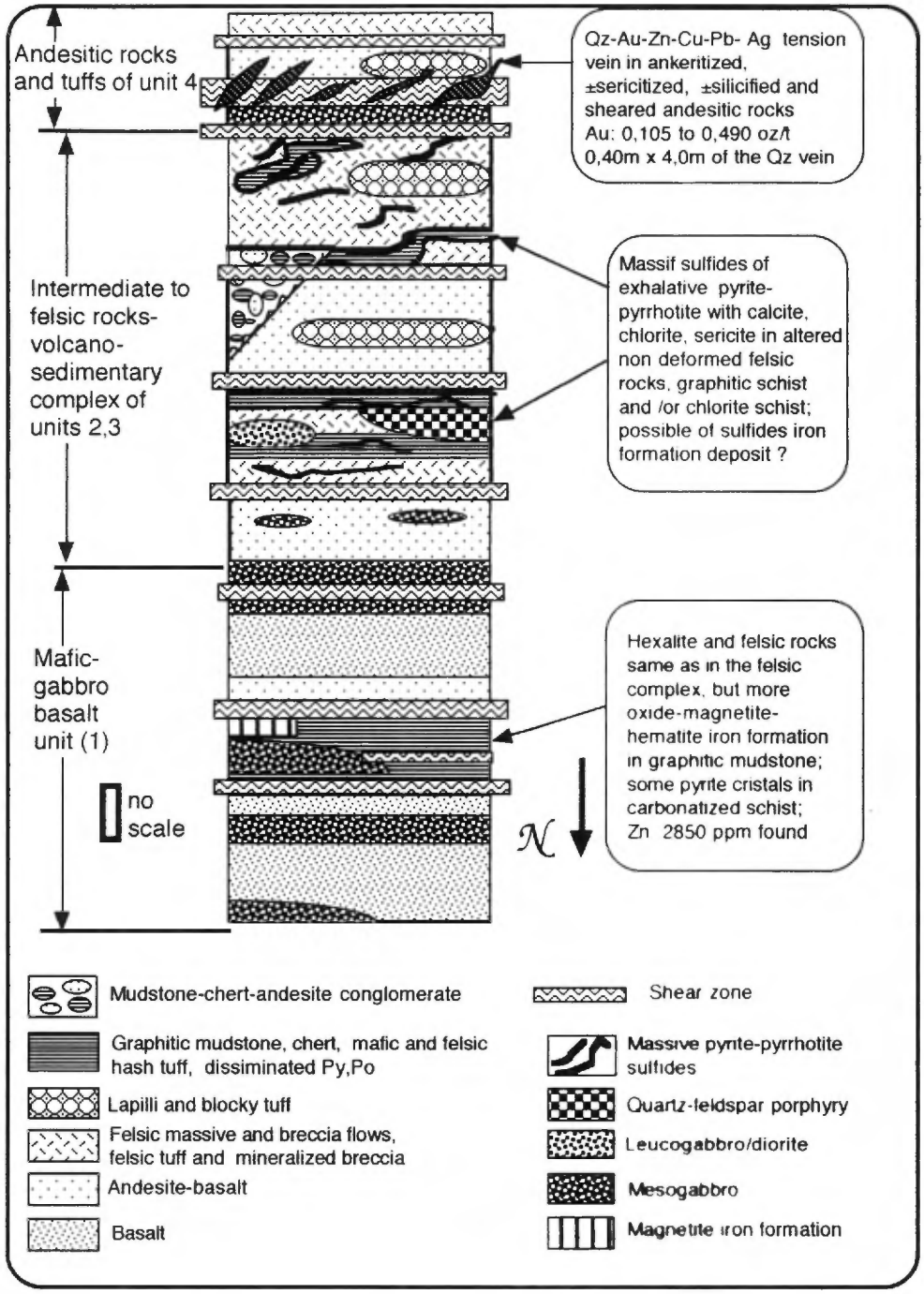


Figure 6: Stratigraphic column and major synvolcanic mineralized zones of the Asarco option and Freewest Benoit East property, Benoit Township

✔ The **andesite-basaltic rocks** interdigitate the andesite tuff, felsic and sedimentary rocks. Except for the basaltic northwest area, the andesite dominates the mafic rocks on the property. It consists of a succession of gray-green colored massive, pellowed and brecciated flows andesite varieties with some small feldspar porphyries. The typical vescicular texture is frequent and filled with quartz-carbonate. This unit also contains cogenetic mafic **meso to leuco gabbro-diorite and leucoxene gabbro** sills. The geophysical signature of this unit is wide and ranges from a moderate to low magnetite susceptibility (0 to 200 gamma).

✔ The **andesite lapilli and blocky tuffs** are interdigitated with andesitic flows and felsic rocks. They are observed in thick bands in the east half of the property only. This tuff consists of small to coarse felsic rock fragments in the intermediate chloritic matrix, with sometime broken feldspar cristals.

✔ The **Felsic rock complex** is present in the southeastern half of the property. The felsic rock consist of undeformed dacite to rhyolite creamy white weathering surface, with massive and brecciated varieties. They are frequently vescicular to pumiceous with amygdules filled with silica, fuchsite, carbonate and pyrite. The typical felsic rocks have tabular to needle like porphyritic (1-2mm) quartz and feldspars cristals, which are sometimes difficult to distinguish from the subintrusion of quartz-feldspar porphyry or felsic cristal tuff. This felsic center is a rock complex, which includes felsic hash tuff, intermediate to felsic cristal and/or blocky tuff and hexalitic rocks such as graphitic to chloritic mafic tuff, mudstone and chert. Several QFP and leucogabbro/diorite dikes and sills also occur in the felsic unit. The rock complex are frequently altered, are demonstrated by: **a)** dissiminate calcite, sericite, fuchsite and graphite and patches of chlorite-pyrite-pyrrhotite; **b)** amygdules of calcite, silica, fuchsite, chlorite and Po-Py and; **c)** chlorite, graphite, calcite, quartz and Py-Po in the fractures and matrix breccia. The felsic rocks have the lowest magnetic susceptibility (<0 gamma). Consequently, it is relativly easy to localize the felsic rocks in the scarce outcrop area. The large lower magnetic zone, occuring in the central east of the property, suggests a larger felsic center than in the southwestern part (see map 2).

✔ The **metasedimentary rocks** occur within the felsic center and in the andesitic and basaltic rocks units. They are present in thin bands in the northwestern part of the property and in thick bands along the Duplessis shear input zone (maps 1 and 2). The sedimentary rocks observed on the property are generally fine and exhalative, such as graphitic mudstone, chert , mafic to felsic hash tuff, silicious tuff and sulfides iron formation of Po-Py. This is the principal cause of the conductivity and the chargeability of these rocks. In some places, the sedimentary rocks exhibit strong magnetic anomalies (northwest and south center bands); they represent a possible variety of **magnetite iron formation** previously intercepted in these units (GM 15858, Barrette 1991; **figures 3 to 5)** and/or also **magnetite gabbro dikes and sills** frequently occuring in the volcano-sedimentary rocks. Another type of sedimentary rock occurs in the southwestern corner of the property, at the end of the line L29w (map1). It is a fine sediment and andesitic pebble **conglomerate or agglomerate** in the siliceous and pyriteous matrix with intercallations of graphitic black mudstone (figure 6). Most of the sedimentary rocks show sedimentary structures such as stratification, slump, breccia and concortion. They equally show strong deformations, such as shearing and folding associated with alteration in graphite, carbonate, sericite, chlorite, hematite and pyrite.

✔ Several geophysical infered **diabase dikes zone** are proposed in the southeastern part of map 1 with northeast trends. They have do not outcrop, although they are recognized due to their characteristic high magnetit susceptibility signature (map 2). Serem Ltd and Aur Resources (GM 36405, GM36503 and GM45858) equally finds a diabase dike in the southwestern extension. These dikes are probably intruded in the ancient ENE fault zone. The presence of the high IP anomalies in the diabase area, also suggest possible volcano-exhalative sedimentary rocks or graphitic to sulfidic area (map 2).

5.4 Structure

The rock's bedding (S0) strikes between 240° to 270° and dips abruptly to the north. The regional schistosity (S1) and the subconcordant altered and mineralized shear zones generally strike in the same EW and WSW trends. At the

Benoit/Nelligan bondary area, stratification and several input conductors strike in both these synchroneous trends **(figures 3 and 5)**. However, in the property area, the general trend of the stratigraphy and geophysical elements is WSW (maps 1 and 2); but several outcrops show EW trending of S0 and S1 !. This is a structural particularity of the northern part of the Benoit Township area. The figure 7 displays a model explaining this structural problem of the stratigraphy attitude in the region.

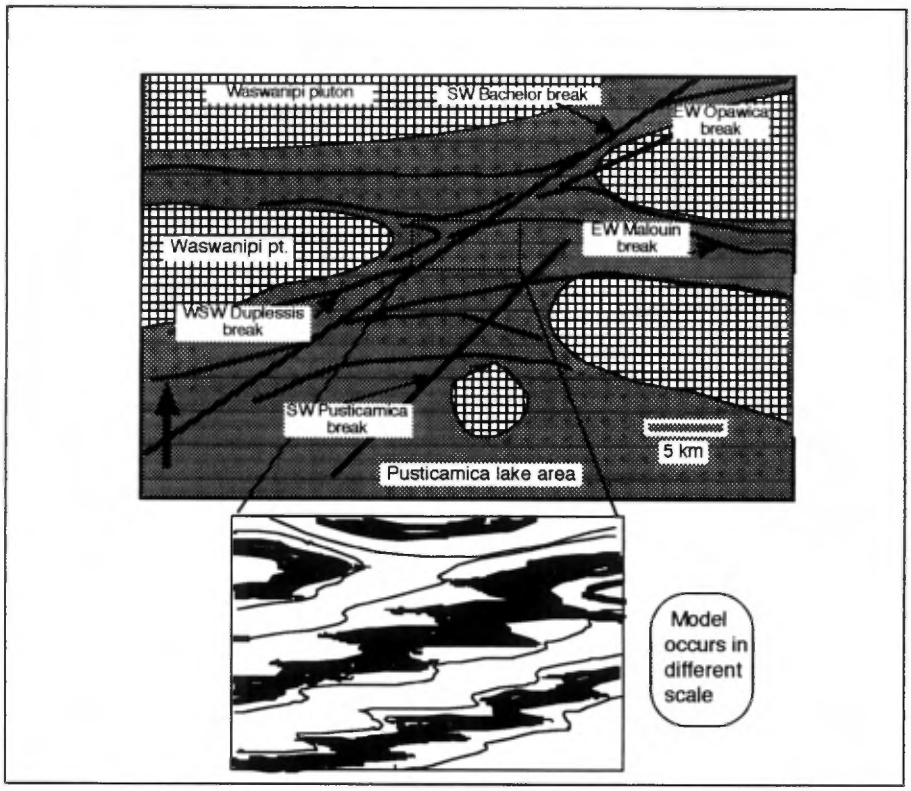


Figure 7: Structural sketch of part of the Wedding-Bachelor volcanic segment. It explains hypothetically the difference between the EW trend of the stratigraphy (S0) and schistosity (S1) on the outcrop scale and the SW trend of the same unit on a regional scale from the geophysics infered. The unit is a deformed and conductive graphitic-sulfide (Py-Po) volcano-sedimentary rock which occurs in the Nelligan/Benoit Twps area.

The majority of the folds observed on the outcrops are "**S**" branch type folds with the same pattern as figure 7. Their trends range from WSW to WNW with fold hinge plonging moderately in the east and west. These folds are affected by EW to WSW small scale faults and shears. Several times, the course toward the west of the EW stratigraphy and the concordant mineralizations disappear by transposition in these shear zones. Consequently, it moves to the SW direction. A good example occurs in the felsic rocks of the northeastern sector of the property (shear zone 1A to 1C on map 1). Several strong IP geophysic anomalies, caracterized by the presence of pyrite-pyrrhotite in graphitic volcano-sedimentary rocks, strike WSW (map 2). However, on the mineralized outcrops, the S0,S1 and several shears strike EW !. This downstep SW lateral moving is partially explained by the transposition in the concordant shear zones and the west plonging "**S**" folds.

The oldest concordant shear zones observed on the property are frequently coupled with strong alterations and quartz veins. One in particular has a high gold concentration (see chap. 6). The property concordant fault zones are: EW break zones (#1 to #4 on the map 1), WSW Duplessis break type (#5 to #7) and some WNW break zones (#8 and possibly #10). The schist of these shears is frequently affected by crenulation clivages, fault and conical closed and faulted folds.

The following structural elements affect the S0,S1 and also the concordant shear zones.

❶ WSW to SW Pusticamica type fractures and senestrial fault, within parallel, dipping north second schistosity and crenulation (S2). This system is probably equally responsible for the SW downstep and the parallel reorientation of the principal structural surfaces. An example occurs in the northeastern outcrops and in the fault zone no. 5,6 and 7 on map 1. The rocks affected by this fault system are frequently altered and injected by quartz-carbonate-sulfides veins and magnetic gabbro dikes (have a magnetic susceptibility observed in the figure 2).

❷ NW and NS fractures and fault zones also affect the stratigraphic units, such as the

moved or broken stratigraphy and conductor courses (see Input ad magnetic contours in map 2). This relatively short and discordant fault system also causes a NW to NS reorientation of the principal surfaces and mineralizations. It is equally intruded by quartz-chlorite-calcite-pyrite veins (map 1). An example occurs on the property at the NW fault zones of no. 8 to 10 and NS of no. 11 to 13.

The structural interpretation of the property is laid out on maps 1 and 2 and compiled in figure 5. In particular, map 1 shows a WSW to EW major refolded synclinal fold passing through the southeastern half part of the property. This important structure is deducted from: **a)** geophysical lower magnetic susceptibility signature of felsic rocks, forming a pattern like a fold nose oriented to the WSW direction (map 2); **b)** the orientation of the IP conductors from mineralized graphitic volcano-sedimentary rocks; **c)** the presence of the outcrop scale asymetric "S" folds in the northern side and the "Z" folds in the southern side of the axe of major fold and; **d)** the relation with the S0, S1and the top of the stratigraphy.

The axial plan of this synclinal structure is affected by the WSW fault-shear zones (# 5 on map 1) and is intruded by gabbro sills and dikes. Several outcrops in the southern part of the property (outcrops #14,31 on map 2) show evidence of this deformation with alteration and mineralization. This concordant major synclinal fold is equally affected by a NW to NNW second phase fold which occurs in the south central part of the property (map 1 and figure 6). The structural facing (structural relation with stratigraphy top, S0 and S1 to understanding and positionning the overprinting of several folding phases) and geophysical elements aide in finding this second fold system. Further evidence of the NW fold is an orientation of a strong input anomaly and the NW cutting of the course of the stratigraphic unit. The input of the six-channel anomalies in the three Input conductors, located at the half center part of the property, correlate to the imaginary NW line ! (map 2 and figure 5). If this hypothesis is correct, the northern volcano-sedimentary input zone correlates with the southern one!. The stratigraphic and economic ore deposit should then imply a new view. The Golden Harvest Exploration Inc, suggests and interprets the same structure in its report (Thalenhorst 1986).

6.0 ECONOMIC GEOLOGY OF THE PROPERTY

6.1 Introduction and methodology

The Asarco's gold discoveries of 3615ppb Au/8.5 feet, 1260 ppb Au/5 feet and 1295 ppb Au/7 feet, found in three overburden drill holes, are the principal mineralization found on the property. This is previous to Freewest Resources Inc. option and interest in the region. Therein after, Freewest Resources sets up following works:

❶ Geophysical survies of: **a)** an electromagnetic VLM-EM survey is carried out on Asarco option along a north-south grid line cut at 100 meter intervals, between the lines 1E to 37W, which covers 57,8 km, and on Freewest Benoit East property between lines 1E to 12E, which covers 17,8 km (Freewest Res. 1990a,b) and; **b)** a 25 meter spacing Induced Polarization (I.P.) survey carried out on Freewest Benoit East on lines 2E, 4E and 6E from 0+00 to 14+50S and lines 5E, 10E and 12E from 7+50S to 14+50S, which covers 6,45 km and, on Asarco option, on lines 1w, 3w, 5w and 7w to 11w from 10+00S to 14+50S and on lines 4w, 6w, 0 from 0+00 to 14+50S. Futhermore, on line 1E from 7+50S to 14+50S which covers 8,65 km (Freewest Res. 1991). A short test line at a 12,5 meter spacing carried out on line 1W from 11+00S to 9+75S covers the new gold discovery area at L1E/10+00S close to Asarco's/Freewest's claims boundary (see maps 1 and 2 and section 6.2.1). The emplacment of the IP survey is selected from the new mineralized zone area, discovered in early summer of 1992, by surface prospecting. It consists of northeastern mineralized outcrops as seen in frame A on the map 1, and the carbonatized and pyritized WSW zone show in frame letter C, D and E on map 1.

❷ Geological survey, prospecting and rock sampling are carried out on the majority of the Asarco/freewest claims. A total of 216 rocks samples are collected elsewhere on the property, essentially from quartz veins and altered and mineralized zones. They are forwarded to Bourlamaque Essay Laboratory in Val d'Or. They are analysed for gold and several, for zinc, copper, silver, lead, nickel and platinium group. They are

compiled in the table of a results and descriptions of mineralized samples (annex A).

❸ A pedochemistry soil sampling program, in which the 'O' horizon is taken every 25 meters on lines 2E and 0+00 between 2+00S to 7+50S and lines 4W, 6W, 8W and 9W between 10+00S to 14+00S covered 3,1 km. They are forwarded to Metriclab Inc. in St. Marc sur le Lac and analysed for Au, Zn, Cu, Pb, Ag and As. A contour map of those elements and results is exposed in annex B of this report and map 2.

❹ An overburden drilling program is carried out on the following areas: a) the principal geophysic anomalies and conductors; b) on Asarco's overburden gold discovery for verification; and c) in the no outcrops areas, where mineralized zone are projected. A total of 63 overburden drill holes are carried out elsewhere on the property (map 2).

❺ An approximate 1200 meters of diamond drilling program is carried out on the Asarco option and Benoit East property. A total of 8 holes, each consisting of uncaracterised important geophysical anomaly targets, such as the intersection of IP and VLF conductors and magnetic anomalies on the surface. We only herein expose positions and the principal lithologies and mineralizations intrecepted. A complete report of this drilling program will be forwarded.

The next section undertakes a discussion of the results of these prospection works in different mineralized zones and area on the property.

6.2 Results of the exploration programs

6.2.1 The 1,5 km length of the EW sheared carbonatized and mineralized zone with some quartz-Au-Zn-Cu-Pb-Ag tension veins and breccias

This altered band, which is 40 to 200 meters in width, is situated in the southeastern quarter part of the property, delimitated by framed letter A, B and C on map 1. The geological environment of this altered zone is composed of the following rocks: massive and breccia flows andesite interstratified with felsic lapilli andesitic tuff,

massive white weadering dacite to rhyolite, felsic tuff and a pumiceous felsic wide blocky pyroclastite flow (ignimbrite). All are intruded and crosscut by several gabbro sills and dikes.

A large EW sheared fold (asymetric "Z" fold ?) is interpreted in the east sector of the carbonatized zone. This fold is uncertain although the schistosity S1 crosscuts the S0 in some places. Normal interstratification should be also envisaged. However, this zone is affected by two important deformations: 1) the synchroneous north dipping of the EW and WSW dextrial and inverse shear zones, and 2) tension veins and breccias. These deformations include alterations, such as calcitization, ankeritization, epidotization, sericitization, silicification, hematization and pyritization at various degrees. The same alteration material is also observed in the fractures and matrix breccia, plus quartz, chlorite, fuchsite and sulfides sush as chalcopyrite, sphalerite, galena and tellure of silver and gold (?). These alterations have also percolated the nondeformed rocks, which probably represent a rock affected by hydrothermale fluids emanating from alteration chimney, fault and/or breccias (?). However, the following outcrops and trenchs expose three windows of this altered and deformed southern band :

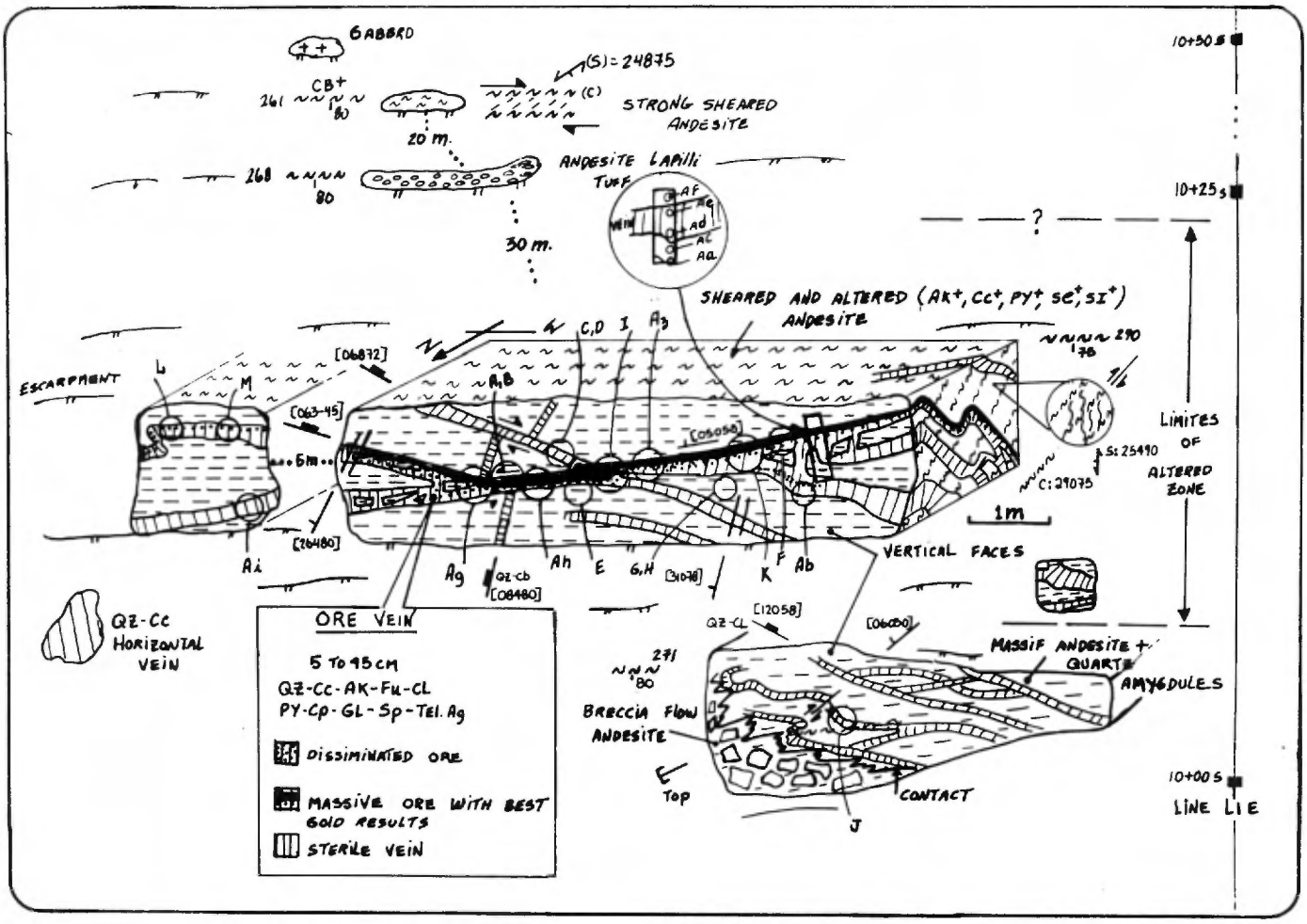
❶ **The tension breccia and quartz-Au-Cu-Zn-Pb-Ag veins in the "A" showing** is situated at the east extremity of the altered band. Several outcrops expose the carbonatized zone. Therein, we find an old trench and 0,10 to 0,50 oz /ton of gold in the tension quartz veins and breccias. Five trenchs, three diamond drill holes and also several overburden drill holes are executed in this area (maps 1 and 2).

Geophysically, this area is localised in the WSW and EW lower magnetic area. It is crosscut by a WNW electromagnetic VLF conductor at the southwest side of the carbonatized outcrops area and by WSW high magnetic susceptibility of the diabase dikes situated in the southeast (map 2).

The gold discoveries are situated on outcrops in the east of the line 1E/P10+00S. Therein the best gold results emanate from outcrop number 6 encircled

on map 2 and shown in detail in figure 8. This outcrop exposure and trench is observed only on the EW escarped vertical face. Sand and grass, a half meter thick cover all the horizontal surface of this outcrop. It shows an approximate 20 meter width of sheared ankeritized andesite with massive and breccia flow varieties. The andesite is intruded by several tension veins (10 to 40 cm wide) injected in the tension breccia or stockwork. The WSW to EW shear zone dips abruptly to the north. However, the tension breccia and the associated veins strike N66° and N120° and dip approximately 45° to the south. Several subhorizontal quartz veines are also observed in this area. However, the relation with the schistosity (S on the figure 8), the fault zone (C), and the south dipping tension fractures and breccias are concordant with the dextrial lateral and vertical movements on the shear plan, as shown on figure 8.

One of these numerous quartz veins possess important economic minerals and values. It is situated mainly to the southern edge of the altered tension zone (figure 8). The ore part of the quartz vein is 5 meters long and 45 centimeters wide. It contains quartz, ankerite, calcite, chlorite, fuchsite, pyrite, chalcopyrite, sphalerite, galena and tellure of silver and gold. The wall rocks of the mineralized quartz veins contain dissiminate pyrite associated with sericite, silica and ankerite. The gold mineralization consists of massive sulfides veinets (2 to 8 mm) observed along the wall rocks in the quartz vein. It also is made up of massive sulfide patches (3 to 10 cm) at the intersection of several quartz tension veins (figure 8). Twenty-two samples are taken in different places of this outcrop (6a to 6m, 6Aa to 6Ag and 6Az on the figure 9; and no. 1 to 22 on the map 2 and in description table in annex a). The quartz-sulfide vein has a gold value range of 0,05 to 0,49 oz/t. The maximum value is found in the massive sulfide patches which contain approximately 40% pyrite, 40% chalcopyrite (0,8 oz/t Cu), 10% sphalerite (0,51 oz/t Zn), 7% galena (0,69 oz/t Pb) and brown arborescent mineral of probable tellure of silver (1,08 oz/t Ag) and gold. The ore minerals and gold concentration reduce appreciably in the east extension of the vein (figure 8). However, in the west extension, the ore minerals continue in form of thin veinlets, where they are hidden under mud deposits after a few meters. Further quartz-carbonate veins are also observed on the vertical face of several outcrop. They are sterile.



MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
1	6a	412605	0,250*	0,704*	0,177*	-	0,55*	Qz-Cb-Cl-Fu-Py-Cp-Ga-Sp vein
2	6b	412604	0,017*	0,135*	-	-	-	Same as before plus cb-mafic wall rocks
3	6c	412610	nil	-	-	-	-	Sama as before
4	6d	412616	0,004*	-	-	-	-	Carbonatized, pyritized andesite + Qz-Cb vein
5	6E	412611	nil	-	-	-	-	Stockwork of Qz-Py veins in altered andesite
6	6f	412612	0,007*	-	-	-	-	Pyritized and carbonatized andesite
7	6g	412614	nil	-	-	-	-	Sheared rock same as before
8	6i	412617	0,262*	0,430*	0,111*	0,690*	0,53*	Same as no. 6a
9	6j	412602	nil	-	-	-	-	Qz-Cl-Py vein
10	6k	412604	0,105*	0,184*	0,006*	-	0,090*	Qz-Ep-Cb-Py-Cp
11	6L	412603	0,006*	-	-	-		Same as before
12	6m	412608	0,005*	-	-	-		Qz veinets in carbonatized andesite
13	6Az	412654	0,061*	0,020*	0,011*	0,018*	0,020*	Qz-Ga-Py-Cp vein
14	6Ag	412655	0,297*	0,800*	0,450*	0,243*	1,080*	Qz-Fu-Ga-Sp-Cp-Py vein
15	6Ah	412656	0,490*	0,310*	0,515*	0,061*	0,500*	Same as before
16	6Ai	412657	0,020*	0,065*	0,092*	0,002*	trace	Qz-Py-Cp vein
17	6Aa	412648	nil	0,007*	-	-		Sericitic carbonat., silicif. and pyritised wall andesite rock
18	6Ab	412649	nil	0,007*	-	-		Qz vein
19	6Ac	412650	nil	0,009*	-	-		Carbonate veinets in pyritized andesite
20	6Ad	412651	0,056*	0,020*	-	-		Carb. Sericit. and pyritized andesite
21	6Ae	412652	0,050*	0,038*	-	-		North contact and wall rock of gold vein
22	6Af	412653	trace	0,012*	-	-		South contact and wall rock of gold vein

Figure 8: Sketch of the outcrop no.6, which exposes on the vertical face only, the tension quartz gold vein in sheared carbonatized andesitic rock.

The carbonatized-gold zone reappears at the east of line 2E in the Freewest Benoit East claims, on three trenchs (#9,11,12). One of these trenchs is blasted (#11) and another is composed of an old trench (#12). No informations existes from Quebec Energy and Resources with regard to this old trench (2mx5m). This area has the same alterations, deformations and lithologies as the gold-copper-zinc showing, plus a lapilli tuff at the north and felsic rocks at the south. The rocks are also affected by tension breccia deformation. Only minor and thin shear zones are observed. The major shear zone is probably situated at the north and south of the trench exposures. However, these trenchs show ankeritized, sericitized, pyritized and partially silicified andesite. Further alterations occur in the thin shear zones (<25cm), which intrude by NE trends and south diping tension quartz-ankerite-Py(1-5%)-±Cp(trace) veins. Several samples from more altered and pyritized andesite give a gold concentration between 0,01 to 0,03 oz Au/t on trenchs nos. 11 and 12, and between 0,005 to 0,013 oz Au/t on trench no.9 (analysis nos. 36 to 56 on annex A and map 1). The east extension of this gold mineralized zone trends both EW and ENE, like the horse tail model (Daigneault et Allard 1990).

A drill hole BE 92-04 is carried out on L3E and is situated at P9+00S, close to the north area of the old trench (map 2). This hole crosscuts the sheared carbonatized andesitic rocks, with few tension quartz-carbonate veins. However, no ore minerals are therein found.

Several overburden drilling holes have been drilled in this area. They are shown on map 2 containing the analysis results. A significative and higher gold value is found on line 1E, close to the picket P10+25, situated only 150 meters north of the gold showing on outcrop no. 6. Till samples have a gold value greater than 10,000 ppb in the analysis results (#23 on the map 2 and annex C). A sample from this high gold result contains sericite schist rock fragments (Cormier pers. comm.). Six other overburden holes are carried out around hole #23 for verification. Only 885 ppb of gold is found in the same hole emplacement and 32 ppb of gold at the east of the hole #23 on the L2E. Furthermore, a 163 meter diamond drill hole (AS 92-03) is carried out on the same place (L1E/P8+40S). It crosscuts only relatively fresh gabbro and

andesitic rocks.

Fifty meters south of the gold showing, on the same line (L1E/11+00S), the carbonatized EW zone reappears (map 1). This outcrop no.7 shows a leucoxene fine gabbro, which is largely ankeritized with NS, NE and NW tension fractures and breccias filled with quartz-ankerite±pyrite. The wall rocks of these quartz filled veins are sericitized, silicified, carbonatized and pyritized (1 to 20% pyrite with mean 3%). Few EW thin (<25cm) shear zones, accompagnied with altered wall rocks occur in brecciated rocks. Only a maximum 0,005 ppb of gold is found in the altered and deformed rocks (#23 to 35 on annex A and map 2). Additionally, overburden and diamond drill holes are carried out at 200 meters west of trench no.7 (AS 92-02). They are drilled at the emplacement ofa weak IP anomaly and VLF conductor (map 2). We find 46 ppb of gold in the overburden hole (drill hole #21). Unfortunately, the diamond drill hole As 92-03 intercepts a fresh gabbro and a sterile pyrite and sericite schist at the end of the hole. The sericite and pyrite schist is possibly the raison for the IP and VLF conductors in this place.

❷ The **hematized, silicified and pyritized felsic pyroclastite flow of the "B" zone** is situated between lines 4W to 2W and between 10+75S to 11+50S (map 1). This area contains the EW steep outcrop no. 14. It consists of an altered pumeceous felsic pyroclastic flow, interstratified with pumiceous massif flow. Several gabbro dikes and sills are intruded in these rocks. The hematite, silica and pyrite alterations affect only the undeformed pumeceous felsic fragments. This implies a hydrothermal alteration prior to fragmentation of the felsic rock. The mineralization consists of 3 to 15% of dissiminated pyrite, with a maximum alteration in the trench falling between lines 3W and 4W (map 1). The pyritized samples from this trench (#57 to 64 in annex A and map 2) and the overburden drill hole no.20, carried out on the IP anomaly target, do not give significative economic results. Futhermore, these alterations are the same as those in the Bachelor and Shortt gold mines in the Desmaraisville area (Lesieur 1 in table 2).

No carbonatized zone is observed in this area, except on west outcrop no.

15, on the line L5W (map 1). This outcrop shows a large ankeritized and pyritized fine gabbro with caracteristic wide tension breccia. The outcrop possesses the same lithology, alteration and deformation as outcrop no.7, previously described in this report. Several thin sericitized, silicified and pyritized shear zones are taken and analysed (#65 to 68). The best results give 30 ppb of gold and 252 ppm of copper.

❸ The third window of the southern EW altered band consists of **folded, faulted, sheared and altered felsic and gabbro rocks of the "C" showing.** It is situated to the central south of the property on outcrops nos. 30, 31A, 31B and 32. This area is located in an important intersection of the following structures **a)** the EW altered band previously described , **b)** the WSW and SW fault zones, **c)** the strong IP conductor, and **d)** the wide geophysical infered fold nose from the felsic unit (maps 1 and 2).

Blasted outcrop no. 31 exposes carbonatized, sericitized and pyritized folded, sheared and faulted felsic rocks and gabbro sill. The major shear zone affecting these rocks strikes SW and dips moderately to the NW. The rock is altered in carbonate, sericite, ±graphite, ±chlorite with pyrite ±chalcopyrite. The pyritized fractures and veinets also strike to the SW [22068]. These veinets are tightly folded. They form caracterized branch "**Z**" type folds which plonge to the northeastern direction [02350]. Tension quartz-ankerite vein with sericitized, silicified and pyritized wall rocks overprint the shear zone and strike at the EW and NS directions. Several samples from the pyritized zones are analysed (#77 to 84). The best gold result obtained is 110 ppb Au.

The pyrite±graphitic veinets are the possible principal cause of the SW IP conductor which is observed immediately north of the mineralized outcrop no. 31A and on the line L10W/11+00S (map 2). Several overburden drill holes are carried out on geophysic conductors (#37 to 41 and 54 on map 2). One of them (#37) reveals 170 ppb of gold. The IP geophysical anomaly situated on the line L10W, is a diamond drill target. The Induce Polarized Freewest Inside Report (Freewest Res. 1991) estimates that the anomaly would intersect a 25-meter wide layer containing 10% of sulfides

and/or graphite. No diamond drilling hole is therein carried out.

This carbonatized zone has a possible of 200 meter width or more in the southern area on line L10W. This is demonstrated by the continuation to the south of the IP anomalies on line L19W and the carbonatized felsic rocks observed on the southern outcrop no. 32 (map 2).

Several soil samples are analysed for gold, copper, silver, lead, zinc and arsenic elements. They are taken on the lines L4W, L6W, L8W and L9W until 10+00S to 14+00S (annex B). This soil sampling program partially covers the EW alteration southern zone. The principal results of this sampling are as fellows:

1. The background of several elements are: 5ppb for gold, 20ppm for zinc, 1,5 ppm for arsenic, 4ppm for copper, 0.3ppm for silver and 5ppm for lead.

2. The must important anomalic area is centered on line L6W-7W/13+25S and oriented to the EW. This zone contains anomalies of gold (11ppb), arsenic (2.0 and 3.5 ppm at L4W), zinc (56ppm), copper (19ppm) and lead (13ppm).

3. A second anomalic is centered approximately at L4W/10+00S and strikes WSW. It includes arsenic (2.0 to 8.0ppm), copper (15ppm), lead (9ppm) and zinc (46 to 51ppm) anomalies.

6.2.2 The Duplessis shear-input zone: a 6 km lenth exposure of WSW folded, sheared, altered and mineralized Py-Po graphitic volcano-sedimentary rocks interstratified in altered felsic rocks

This mineralized zone occurs along a large and regional WSW input conductor passing through the property (maps 1 and 2). The large conductive zone is 350 to 500 meters wide and 6 kms in lenth. It belongs to the regional Duplessis shear-input zone. It includes three or four successive thin bands of graphitic and mineralized volcano-sedimentary rocks intercallated in intermediate to felsic rocks. These bands are found and caracterized by:

a) Strong WSW to SW IP conductors intercepted on lines L6E, L4E, L2E, L0, L4W and L6W (each contains three strong IP anomalies; map 2) and on lines L9W, L10W and L22W to L25W (not shown on map 2);

b) EW to WSW VLF conductors and high magnetic susceptibility units situated approximately at the same place as the IP conductors;

c) Carbonatized and chloritized graphitic mudstone, chert and mafic tuff, which contains dissiminated patches, veinets and bands of massive sulfides of pyrite, pyrrhotite a centimeter to a several meters in wigth. The undeformed amygdalar felsic rocks, matrix of the andesitic blocky tuff and cristal tuff in contact with the ore body, also contain the same alterations, plus fuchsitization and dissiminated Py-Po patches. This mineralized rock complex is observed in the group of outcrops situated in the northeastern and southwestern sector of the property (resp. E and G,H on the map 1). They are also intercepted and observed in the diamond drill holes BE-92-05,06,07 in the northeastern sector and holes AS-92-01, 08, in the southwestern sector and the property. Several samples are taken from this type of mineralization on the outcrops and drilling core. No economic results are found (see map 2 and annex a).

Two soil anomalic zones of Zn, Cu, Pb and ±Au,As occur in the northeastern sector of the property, between 2+00S to 7+00S on lines L0 and L2E (map 2 and annex B). The first one comes through 2+50S/L2E to 3+00S/L0 along the input and IP conductors. It contains the following anomalies zinc (90 to 200 ppm), copper (14 to 20 ppm) and weak anomalies of lead (11 to 15 ppm) and arsenic (1.5 ppm). The second soil anomalic zone is situated at the southern part of the WSW IP conductors (map 2), and contains anomalies of gold (7 to 15 ppb), copper (20 to 25 ppm), zinc (80 to 11 ppm) and lead (15 to 22 ppm) and weak anomalies of arsenic (1.0 to 1.5 ppm) and silver (0.6ppm).

Several overburden drilling holes are carried out above this volcano-sedimentary rock zone. In the "E" and "F" mineralized northeastern area, no gold is

found. However, in the "G" southwestern area, 2355 ppb and 47 ppb of gold is found along a EW creek on the lines L23W and L24W (map 2). These two holes are close to the north part of the large ankeritized and pyritized chlorite schist, mudstone and chert outcrop. Several samples are analysed from this large outcrop on lines L25W, L24W and L23W at 12+25S and the western outcrop situated on lines L28W and L29W. Few samples give weak zinc values ranging between 100 to 200 ppm and copper values between 100 to 130 ppm (#187 to 201 and #210 to 216 on annex A and map 2).

Further overburden holes are carried out above the EW geophysic conductor, situated west of the overburden Asarco's gold discovery, in the central sector of the property. The two holes drilled on this conductor, along the Asarco drilling trail, contain 20 to 30 ppb of gold (#42 and 43 on map 2 and annex C). Three other holes are drilled around the highest Asarco's gold discovery (ME-13) for verification. Only 5ppb of gold is detected (#51 to 53). However, the ice grooves in this sector are oriented to SSW with some in NNE !. If the Asarco's gold discoveries, from the overburden drilling holes, emanate from a glacial origin, the source of the gold consists of mineralized rocks from the NNE area or SSW. The second possible origin of the gold, is the mineralized rocks, which occur directly in the drilling area. The center of the property, containing overburden gold discoveries, is situated exactly on the hot spot of the intersection of several mineralized structures and input and VLF conductors (figure 6 and map 2).

6.2.3 The 1,5 km length of felsic rocks and folded, sheared, altered, and mineralized graphitic volcano-sedimentary rocks in basalt of the northwestern area

This band consists of an east extension of the same felsic rocks band within mineralized volcano-sedimentary rocks associated with or without massive sulfides of Py-Po±Cp±Sp, occuring in the Freewest NW Benoit property (figures 3 and 5, Barrette 1991). This altered and mineralized EW shear zone is accompanied with a large input conductor, a VLF conductor and a magnetic high susceptibility unit (map 2).

The lithologies observed in this zone are a thin unit of graphitic mudstone

chert and mafic to felsic tuffs and possibly magnetic iron formation. These rocks are intruded by gabbro dikes and sills. All the rocks in this zone are altered, such as carbonatization, chloritization, epidotization and pyritization, and also sheared, folded and intruded by deformed quartz-carbonate-pyrite veins. No massive sulfide deposit is found in this volcano-sedimentary band. The mineralized rock type is a graphitic and chloritic crenulated schist, with porphyroblast cristals of pyrite (5 to 20%) and completely carbonatized. Several injections of quartz-carbonate±pyrite veins strike to the WSW and SE ("K" zone on map 1). The samples taken on the best mineralized outcrop of this band (#R21), have high zinc values, such as 2850, 2380, 800 and 580 ppm of zinc in the same type of rock (#148 to 160 on map 2 and annex A).

Several overburden drill holes are carried out in the northwest sector of the property. The results are 105 and 107 ppm of zinc from the "K" mineralized sector (holes #47 and 48 on the map 2 and annex C). Another overburden hole is carried out above the VLF conductor, situated between lines L34W and L36W. It gives 38 ppb of gold (overburden hole#2 on map 2).

This EW sheared and altered zone and the associated geophysical conductors stop drastically by a NW fault zone around the line L24W (map 2). It is possible this band continues to the southeast by folding and faulting. The magnetic pattern and the input six challels anomalies justify this interpretation (figure 5 and map 2).

7.0 CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE EXPLORATION PROGRAMS

The Asarco/Freewest Benoit East property has a new geological interpretation. It also contains new economic zones, with potential for gold, copper, zinc, silver and lead ore deposits. These mineralized zones are demonstrated and interpretated by geological and prospecting fieldwork results. Additional information exists from various prospecting works, for example soil sampling, geophysical IP and VLF-EM surveying, diamond and overburden drilling campains. These serve as

property. The prospection reveals several good economic values, such as: **a)** gold (0,1 to 0,49 oz/t), copper (0,8%), silver (1,1oz/t), zinc (0,50%) and lead (0,69%) from quartz-sulfices tension veins and breccias which occur in the southern sheared carbonatized rock zone; **b)** high gold values of 885 and greater than 10,000 ppb from overburden drill samples; **c)** high zinc values between 800 to 2860ppm, from altered and sheared volcano-sedimentary rocks, occur in the northwestern sector of the property; and finally **d)** the weak anomalic concentrations of Au, Zn, Cu, Pb, Ag and As of the soil samples occur in the concentric zone on the eastern sector of the property.

The poor economic results of the first diamond drilling campain, carried out on the southern carbonate zone and on the graphitic Py-Po volcano-sedimentary rocks, are a preliminary verification of the properties real economic potential. This potential is more evident when we consider the number and size of the altered and mineralized zones, the geological context and the comparison with the different mines and prospects in the Wedding-Desmaraisville volcanic segment. The polymetallic Zn, Pb, Ag deposit of the Coniagas Mines serve as an example (Lesieur 1 in figure 3 and table 2). It consists of a massive sulfide deposit, situated in the same felsic rocks as unit 2, and it is associated with graphitic volcano-sedimentary rocks and chlorite schist. Other examples are the Bachelor Lake and Shortt Lake gold mines, in the Desmaraisville area (Lesieur 2). The gold is in the hematized and pyritized sheared felsic rocks, close to the granodiorite plug. The new gold prospect, near the property in the Nelligan Township, is also an example (Nelligan 1). This prospect is close to the wide massive pyrite body in the graphitic mudstone-chert sulfides unit. The same aspect is observed on the property. The gold prospect contains tension quartz-ankerite veins, injected in EW sheared sericitized, carbonatized and pyritized felsic rocks. The silicified and pyritized wall rocks of quartz veins contain high gold values, such as 126 g Au/t. The alterations and mineralizations observed on the property compare and correlate with these ore deposits, with exception of the felsic plug. However, the subvolcanic rock of felsic quartz-feldspar porphyry, observed on the southwestern outcrop (#R42) and in the holes BE 92-5 and 6, demonstrate the presence of felsic plug, perhaps in depth .

Taking into consideration the previous results of the preliminary exploration program, several areas on the property need a second exploration program. Within these areas possible economic ore deposits may be found. They are:

❶ **The southern EW large band of altered and deformed rocks at:**

a) the intersection of this EW carbonatized zone and the SW IP conductors occur on the lines L10W and L9W between 11+50S and 14+50S. This area, is also affected by NNE, SW and EW fault zones. Several IP geophysic targets occur in this sector; they are only verified by overburden drilling. One of these holes contains 170 ppb of gold. Diamond drilling is necessary in this area.;

b) the strong hematized and pyritized pumiceous felsic rocks at L3W and L4W between 10+00 to 11+50S. This pyritisation is probably the source of the WNW IP and VLF conductors which occur in this sector. The sericite, carbonate and pyrite schist intercepted in the diamond drill hole AS 92-02, is possibly another source of the conductors. One overburden drill hole drilled on these conductors has the gold value of 46ppb Au.;

c) the gold showing falls within the altered dextrial shear zone strikes EW and dips abruptely to the north. The mineralized tension breccia and gold veins strike at N66° and dips to south at 45°. The gold veins belong and follow this EW shear zone. More exploration in depth is necessary in this sector, with consideration to the undesirable unmineralized gabbro sill intruded in this altered shear zone (ref. holes: AS 92-02 and 03).

❷ **The WSW Input zone of graphitic Py-Po volcano-sedimentary rocks associated within felsic rocks** comprise a 6 km diagonally long band passing through the property. Several outcrops and five diamond drill holes give more information about this mineralized zone. It is caracterized by py-po massive sulfide bands in the graphitic mudstone-chert, interstratified in carbonatized, fuchsitized and sericitized undeformed felsic rocks. An important zone of sericite, carbonate and pyrite

schist, from sheared felsic rocks, is also observed in the drilling holes. However, they are apparently sterile (ex.: BE 92-05 and AS 92-08). Nonetheless, the zones need more gold and zinc deposits exploration, along the sheared felsic and volcano-sedimentary rocks. These zones are:

a) the zinc, lead and silver soil anomalic contours situated approximately at L0/3+50s and L2E/2+25S, and at the same site of the unexplained IP conductor;

b) the unexplored area to the east of the line L6E. The sulfides Py-Po zones and IP/VLF conductors are possibly continue in this area;

c) the center of the property, in which the large WSW Duplessis shear input zone intercepts the EW, SW, NS and SE faults zones. The Asarco's overburden gold discoveries are from this area;

d) the southwestern sector of the property, in which several altered, mineralized, sheared and folded zones are associated with quartz-sulfides veins and diorite and QFP intrusions; and finally

e) the large **"EW economic golden corridor"** situated in the center of the property, precisely along the swampy EW lineament and caracterized by the presence of several gold discoveries and deformed, altered and mineralized rocks zones. The gold discoveries of the hypothetic golden corridor are from overburden drill holes found on lines 1E/8+75S (>10,000 and 885ppb), L12W/7+50S (1260ppb), L16W/7+50S (3615ppb), L24W/12+00S (2355ppb), L27W/10+50S (1295ppb) and from the ankeritized outcrops which occur in the southern altered EW zone. This 400 meter wide economic corridor requires further exploration.

❸ **The EW input zone of graphitic volcano-sedimentary rocks with significative zinc values** is a shorter band situated at the northwestern sector of

the property. The west extension of this volcano-sedimentary band, in the contiguous Freewest Benoit NW property, has a Py-Po massive sulfide deposit. Additionally, the geophysical information exposed on map 2, demonstrates a possibl2 south extension of this zone. Several six-channel input anomalies and magnetic susceptibilety concours, suggest a possible correlation with two other large Input conductors occuring in the central-south area of the property. This suggests the existance of A sheared and folded large fold noze. This zone is difinitively not sufficiently explored.

Consequently, considering the insufficient exploration of the areas, we suggest the following works:

- An Induced Polarisation (IP) survey should be carried out on all the property surface (minimum 27 kms) or on the insufficiently explored mineralized zones (approximately 18 kms).
- An soil sampling should be undertaken in the mineralized zone areas, followed by and analysis of Zn, Au, Pb, Cu, As, Ag, Hg.
- Two weeks of geological exploration should be undertaken on surface of the property.
- Approximately 8 diamond drilling holes (1200 meters) should be executed in the half eastern part of the property, several (3 holes) in the golden hot spot and few in the western part. Others holes could be envisaged depending upon the IP geophysic results. See map 2 for the emplacement of the diamond drilling hole.

GÉOLOGUE ✦ GEOLOGIST
APGGQ
JEAN-PAUL BARRETTE
Nº 622
QUÉBEC ✲ CANADA

Yours truly,

Jean-Paul Barrette
Geologist

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Reports

GM 7103
GM 7308-B
GM 7308-A
GM 46276,
GM 15858,
GM 36405,
GM 36503,
GM 45858

MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
1	6a	412605	0,250*	0,704*	0,177*	-	0,55*	Qz-Cb-Cl-Fu-Py-Cp-Ga-Sp vein
2	6b	412604	0,017*	0,135*	-	-	-	Same as before plus cb-mafic wall rocks
3	6c	412610	nil	-	-	-	-	Sama as before
4	6d	412616	0,004*	-	-	-	-	Carbonatized, pyritized andesite + Qz-Cb vein
5	6E	412611	nil	-	-	-	-	Stockwork of Qz-Py veins in altered andesite
6	6f	412612	0,007*	-	-	-	-	Pyritized and carbonatized andesite
7	6g	412614	nil	-	-	-	-	Sheared rock same as before
8	6i	412617	0,262*	0,430*	0,111*	0,690*	0,53*	Same as no. 6a
9	6j	412602	nil	-	-	-	-	Qz-Cl-Py vein
10	6k	412604	0,105*	0,184*	0,006*	-	0,090*	Qz-Ep-Cb-Py-Cp
11	6L	412603	0,006*	-	-	-	-	Same as before
12	6m	412608	0,005*	-	-	-	-	Qz veinets in carbonatized andesite
13	6Az	412654	0,061*	0,020*	0,011*	0,018*	0,020*	Qz-Ga-Py-Cp vein
14	6Ag	412655	0,297*	0,800*	0,450*	0,243*	1,080*	Qz-Fu-Ga-Sp-Cp-Py vein
15	6Ah	412656	0,490*	0,310*	0,515*	0,061*	0,500*	Same as before
16	6Ai	412657	0,020*	0,065*	0,092*	0,002*	trace	Qz-Py-Cp vein
17	6Aa	412648	nil	0,007*	-	-	-	Seric., carbonat., silicif. and pyritised wall andesite rock
18	6Ab	412649	nil	0,007*	-	-	-	Qz-vein
19	6Ac	412650	nil	0,009*	-	-	-	Carbonate veinets in pyritized andesite
20	6Ad	412651	0,056*	0,020*	-	-	-	Carb., Sericit. and pyritized andesite
21	6Ae	412652	0,050*	0,038*	-	-	-	North contact and wall rock of gold vein
22	6Af	412653	trace	0,012*	-	-	-	South contact and wall rock of gold vein
23	7a	412606	nil	-	-	-	-	Qz-Cb-To veins in silic, carbonat and pyritized basalt
24	7b	412605	nil	-	-	-	-	Qz-Cb-Py veinets in ankeritized gabbro
25	7c	412607	nil	-	-	-	-	Same as before
26	7d	412601	0,001*	-	-	-	-	Pyrite and ankerite schist
27	7g	412618	nil	-	-	-	-	Qz-Ep-Py vein
28	7f	412619	nil	-	-	-	-	Qz-Ak vein
29	7h	412620	nil	-	-	-	-	Qz-Ep-Py vein
30	7j	412621	nil	-	-	-	-	pyritized leucoxene gabbro

ANNEX A: Table of analytic results from mineralized samples

MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
31	7k	412622	nil	-	-	-	-	Qz vein
32	7L	412623	trace	-	-	-	-	Silicified and pyritized gabbro
33	7L'	412624	trace	-	-	-	-	Qz-Py vein
34	7m	412625	0,005*	-	-	-	-	Qz-Cl-Cb-Ep vein in silicif. and pyritized gabbro
35	7n	412626	trace	-	-	-	-	Qz-Cb-Py veinets in pyritized and sheared gabbro
36	9c	412627	trace	-	-	-	-	Gray Qz vein in sericitized and pyritized dacite
37	9d	412628	0,008*	-	-	-	-	Same as before + silicified
38	9e	412629	0,013*	-	-	-	-	Same as before
39	9f	412630	trace	-	-	-	-	Same as before
40	9g	412631	nil	-	-	-	-	Qz-Py vein in silicified and epidotized andesite
41	9h	412632	nil	-	-	-	-	Ankerit., Sericit. and pyritized andesite
42	9i	412633	0,006*	-	-	-	-	Pyritized and sericitized wall rock
43	9j	412634	nil	-	-	-	-	Qz-Ak vein and pyritized wallrock
44	9p	412635	nil	-	-	-	-	Qz-Se-Cl-Ep-Py vein in sheared mafic rock
45	9q	412636	0,006*	-	-	-	-	Sericitized, silicified and pyritized wall rock
46	9r	412637	0,007*	-	-	-	-	Qz veinets in chloritized and pyritized mafic tuf
47	10a	412638	trace	-	-	-	-	Qz-Se-Cb-Cl-Py vein
48	11b	412639	0,013*	-	-	-	-	Pyritized and carbonatized mafic schist
49	11c	412640	0,006*	-	-	-	-	Qz-Ak-Py vein in sericite, pyrite and carbonate schist
50	11d	412641	0,018*	-	-	-	-	Carb., Chlorit.and pyritized mafic schist with Qz veinets
51	11e	412642	0,016*	-	-	-	-	Pyritized wall mafic schist of Qz-Py vein
52	11f	412643	0,030*	-	-	-	-	Ankeritized and sericitized mafic schist
53	11g	412644	0,005*	-	-	-	-	Same as before + chloritization
54	11i	412645	0,012*	-	-	-	-	Silicified and pyritized tension breccia in mafic rocks
55	11j	412646	trace	-	-	-	-	Serpentinized and pyritized wall rock with Qz vein
56	12a	412647	0,010*	-	-	-	-	Qz-AEp-Se-Py vein
57	14a	412660	nil	-	-	-	-	Jaspelized, pyritized and hematized felsic volcanic breccia
58	14b	412661	nil	-	-	-	-	Silica and pyrite bands in hematite schist
59	14c1	412622	nil	-	-	-	-	Same as No 57
60	14c2	412633	nil	-	-	-	-	Hematized, pyritized and silicified schist
61	14d	412664	nil	-	-	-	-	Same as before

ANNEX A: Table of analytic results from mineralized samples

MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
62	14e	412665	nil	-	-	-	-	Same as before
63	14f1	412666	nil	- -	-	-	-	Erratic block of pyritized schist
64	14f2	412669	nil	-	-	-	-	Same as before
65	15a	412668	nil	-	-	-	-	Sericit., carbon., silicif., pyritized sheared microgabbro
66	15Aa	412670	30	252	-	-	-	with Qz-Py-Cp tension veinets
67	15b	412675	nil	-	-	-	-	Same as before
68	15c	412676	nil	-	-	-	-	Same as before
69	16a	412669	nil	84	-	-	-	Carb., Silic., Py-Cp gabbro
70	18a	412677	nil	-	-	-	-	Hematized and pyritized gabbro-diorite
71	18b	412678	nil	-	-	-	-	Same as before
72	19a	412671	10	-	-	-	-	Block of fuchsite, chlorite, carbonate and pyrite schist
73	19d	412672	nil	-	-	-	-	+ stockwork of Qz veinets
74	19c	412673	15	-	-	-	-	Same as before
75	19b	412674	nil	-	-	-	-	Same as before
76	R1a	412679	nil	-	-	-	-	Carbonate and pyrite schist
77	31e	412680	30	-	-	-	-	QZ-Cb-Cl-Py veins in sheared and altered felsic rock
78	31c	412681	20	-	-	-	-	Same as before
79	31b	412682	nil	-	-	-	-	Same as before
80	31a	412683	nil	-	-	-	-	Same as before
81	31d	412684	nil	-	-	-	-	Same as before
82	31Af	412685	110	-	-	-	-	Same as before + pyrite veinets
83	31 Ag	412686	10	-	-	-	-	Quartz vein
84	31 Ah	412687	nil	-	-	-	-	Same as No. 82
85	R4a	412688	nil	-	-	-	-	Carbonatized, sericitized and pyritized mafic schist
86	R4b	412689	nil	-	-	-	-	Qz veins in same rock as before
87	R4c	412690	nil	-	-	-	-	Same AS No 85
88	R4F1	8806	nil	-	-	-	-	Pyrite band in mafic schist
89	R4Gb	8807	nil	-	-	-	-	Altered mafic schist
90	R4Gc	8808	nil	-	-	-	-	Altered mafic schist
91	R4j	8809	nil	-	-	-	-	Same as before
92	R4k	8810	15	-	-	-	-	Pyritized and calcitized mafic schist

ANNEX A: Table of analytic results from mineralized samples

MAP	OUTCR.	ANALYSYS	Au(ppb)	Cu(ppm)	Zn(ppm)	Pb(ppm)	Ag(ppm)	description of sample
No	No	No	* (Oz/t)	* (%)	*(%)	*(%)	*(Oz/t)	
93	R4h	8811	nil	-	-	-	-	Block of pyritized, ankeritized and calcitized dacite
94	R4l	8838	nil	-	-	-	-	-
95	R5	412691	nil	-	-	-	-	Pyritized gabbro
96	R6	412692	nil	-	-	-	-	Silicified basalt
97	R7	412695	nil	-	-	-	-	Qz-Py-Cc vein in gabbro
98	R8	412696	nil	-	-	-	-	Same as before
99	R9	412697	nil	-	-	-	-	Same as before
100	R10	412698	nil	-	-	-	-	Pyritized leucogabbro
101	R13a	412699	nil	-	-	-	-	Qz vein in leucogabbro
102	R13b	412700	nil	-	-	-	-	Pyritized leucogabbro
103	R13c	412701	nil	-	-	-	-	Same as before +Qz veins
104	R13d	412702	20	-	-	-	-	Pyritized and sheared leucogabbro
105	36	8701	20	-	-	Ni: 34ppm; Pt< 70ppb		Pyrrhotitized and pyritized sheared leucogabbro
106	38b	8703	nil	60	-	-	-	Po-Py-Cp(tr)-To-Graphite tension veinets and breccias
107	38a	8702	20	50	-	-	-	in silicified felsic rocks
108	38c-a	JP-38Ca-91	5	31	68	4	0,5	Same as before
109	39a-a	JP-39Aa-91	4	42	50	4	0,6	Silicif., fuchsite and pyritized brecciated and
110	39a-b	JP-39Ab-91	6	45	51	4	0,6	vescicular felsic rock
111	39c-b	JP-39Ca-91	5	45	27	2	0,4	Qz-Fu vein in Qz-Py stockwork in quartz porphyry
112	R15a	8704	nil	-	-	-	-	Wall rock of Qz vein in basalt
113	R15b	8705	nil	-	-	-	-	Sheared gabbro
114	R15c	8706	nil	-	-	-	-	Qz-Cl vein in gabbro
115	R16a	8707	nil	-	-	-	-	Sericite schist
116	R16b	8708	nil	-	-	-	-	Same as before in contact with gabbro
117	R16c	8709	nil	-	-	-	-	Same as before
118	R17a	8711	nil	110	-	-	-	Py,Cp(tr) in sheared gabbro
119	R17e	8722	nil	-	-	-	-	Qz vein in gabbro
120	40a-a	8712	20	100	80	10	nil	Chloritized and pyritized sheared rhyolite
121	40a-b	8713	nil	-	-	-	-	Same as before
122	40a-a2	8714	20	80	90	10	nil	Pyrite bands in sheared dacitic rock
123	40a-a1	8715	nil	-	-	-	-	Cert, pyrite bands in mafic to felsic tuff

ANNEX A: Table of analytic results from mineralized samples

MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
124	40a-a2	8716	nil	60	80	nil	nil	Same as before
125	42a-b	8717	nil	-	-	-	-	Qz-Cc stockwork in pyritized felsic rock
126	42a-b	8834	100	-	-	-	-	Pyrite bands in carb., chlor. and pyritized felsic rocks
127	43A1	8718	nil	-	-	-	-	Pyritized felsic rock
128	43a-b	8719	nil	-	-	-	-	Same as before
129	43a-c	8720	nil	80	110	nil	nil	Pyrite bands in mafic schist
130	43a-c2	8721	nil	60	80	10	nil	Mafic-felsic schist
131	43d-a	8747	nil	-	-	-	-	Qz-Py stockwork in pyritized, calcitized sheared rhyolite
132	43d-b	8748	nil	74	68	4	0,2	Py veins in calcitized, pyritized, chloritized mafic schist
133	43d-c	8749	nil	-	-	-	-	Same as before but in the felsic rock
134	43d-d	8750	nil	62	66	4	0,2	Same as No 132
135	43d	8801	nil	52	72	8	0,2	Same as before
136	43a-c	8802	nil	-	-	-	-	Same as 133
137	43d-b	8835	30	-	-	-	-	Pyrite-chlorite schist
138	43e-a	8772	nil	-	110	-	-	Pyrite bands in ankeritized intermediate sheared rock
139	43e-d	8773	nil	-	-	-	-	Pyritized sheared felsic rock
140	43e-c	8774	nil	-	-	-	-	Pyrite bands in chlorite schist
141	43e-b	8775	nil	-	-	-	-	Pyritized sheared felsic rock
142	R18c	8723	nil	-	-	-	-	Qz veinets in carbonatized mafic schist
143	R20a	8724	nil	-	-	-	-	Same as before
144	R20b	8725	nil	-	-	-	-	Pyritized intermediate schist
145	R20c	8726	nil	-	-	-	-	Qz-py-magnetite vein in interm-mafic schist
146	R20d	8727	nil	-	80	-	nil	Same as before
147	R20f	8728	nil	-	-	-	-	Same as before
148	R21i	8729	nil	-	580	10	nil	Disseminated pyrite cristal in graphitic schist
149	R21j	8730	nil	210	160	nil	nil	Qz veins in mafic schist
150	R21e	8731	nil	50	100	nil	nil	Same as before
151	R21d	8732	nil	-	-	-	-	Qz vein
152	R21e	8733	nil	-	-	-	-	Qz-Ep vein
153	R21f	8734	nil	-	-	-	-	Gray Qz-Ep vein in shale
154	R21l	8836	20	-	-	-	-	Pyritic shale

ANNEX A: Table of analytic results from mineralized samples

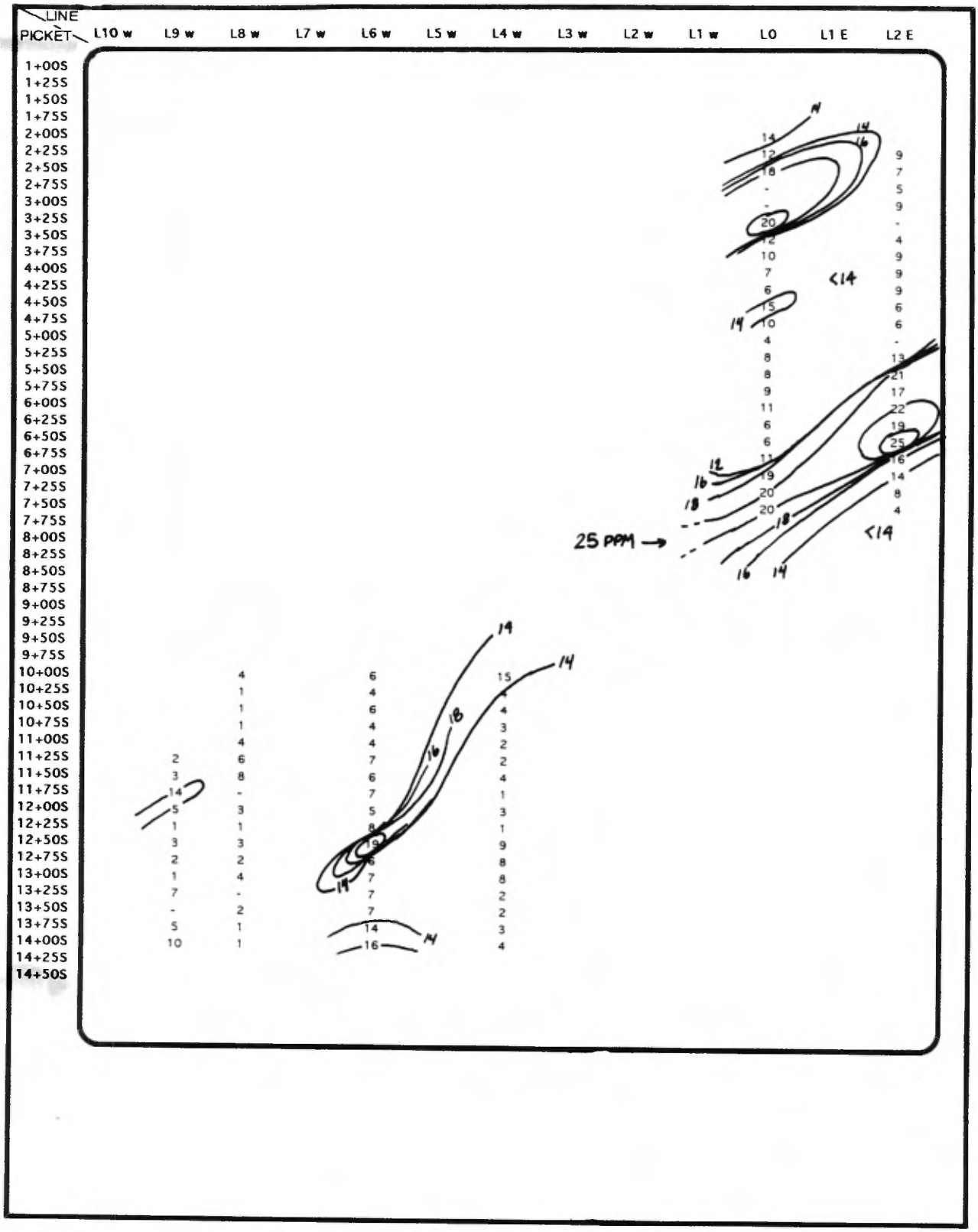
MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
155	R21m	8837	350	-	-	-	-	Qz vein in pyritic shale
156	R21n	8839	nil	-	130	-	-	Same as before
157	R21o	8840	10	-	800	-	-	Pyritic and graphitic shale
158	R21p	8841	20	-	2850	-	-	Same as before
159	R21q	8842	30	-	2380	-	-	Same as before
160	R21r	8843	nil	-	-	-	-	Qz vein
161	R22b	8735	nil	-	-	-	-	Calcitized and pyritized intermediate rock
162	R22e	8736	nil	-	-	-	-	Same as before + sheared
163	R22f	8737	nil	-	-	-	-	Same as before
164	R22g	8738	nil	-	-	-	-	Same as before
165	R22h	8739	nil	-	-	-	-	Same as before
166	R22i	8740	nil	-	-	-	-	Same as before
167	R22j	8741	nil	-	-	-	-	Same as before
168	R22k	8742	nil	-	-	-	-	Same as before + chalcopyrite (trace)
169	R22L	8743	nil	64	-	-	-	Magnetite, chalcopyrite in sheared calcitized gabbro
170	R22o	8744	nil	-	-	-	-	Pyritized,, carbonatized sheared mafic tuff
171	R22p	8745	nil	-	-	-	-	Qz-Ak-Ep-Py vein
172	R22r	8746	nil	-	-	-	-	Pyritized, Ankeritized and calcitized mafic schist
173	R25b	8803	nil	-	-	-	-	Qz-Cc vein in mafic schist
174	R31a	8804	10	-	-	-	-	Ankeritized and pyritized mafic schist
175	R31b	8805	nil	-	-	-	-	Qz-Cc-Ak-Py vein
176	R35b	8844	nil	-	-	-	-	Sheared gabbro
177	R35c	8845	nil	-	-	-	-	Qz-Hm vein in gabbro
178	R35d	8846	nil	-	-	-	-	Same as before + pyritised gabbro
179	R36a	8847	nil	-	-	-	-	Same as before
180	R38x	8849	nil	-	-	-	-	Block of calcitized and pyritized basalt + Qz vein
181	R37a	8850	nil	--	-	-	-	Pyritized gabbro
182	R38a	8751	nil	-	-	-	-	Same as before
183	R38b	8752	nil	-	-	-	-	Same as before
184	R38c	8753	nil	-	-	-	-	Ankeritized and pyritized sheared gabbro
185	R38e	8755	nil	-	-	-	-	Same as before

ANNEX A: Table of analytic results from mineralized samples

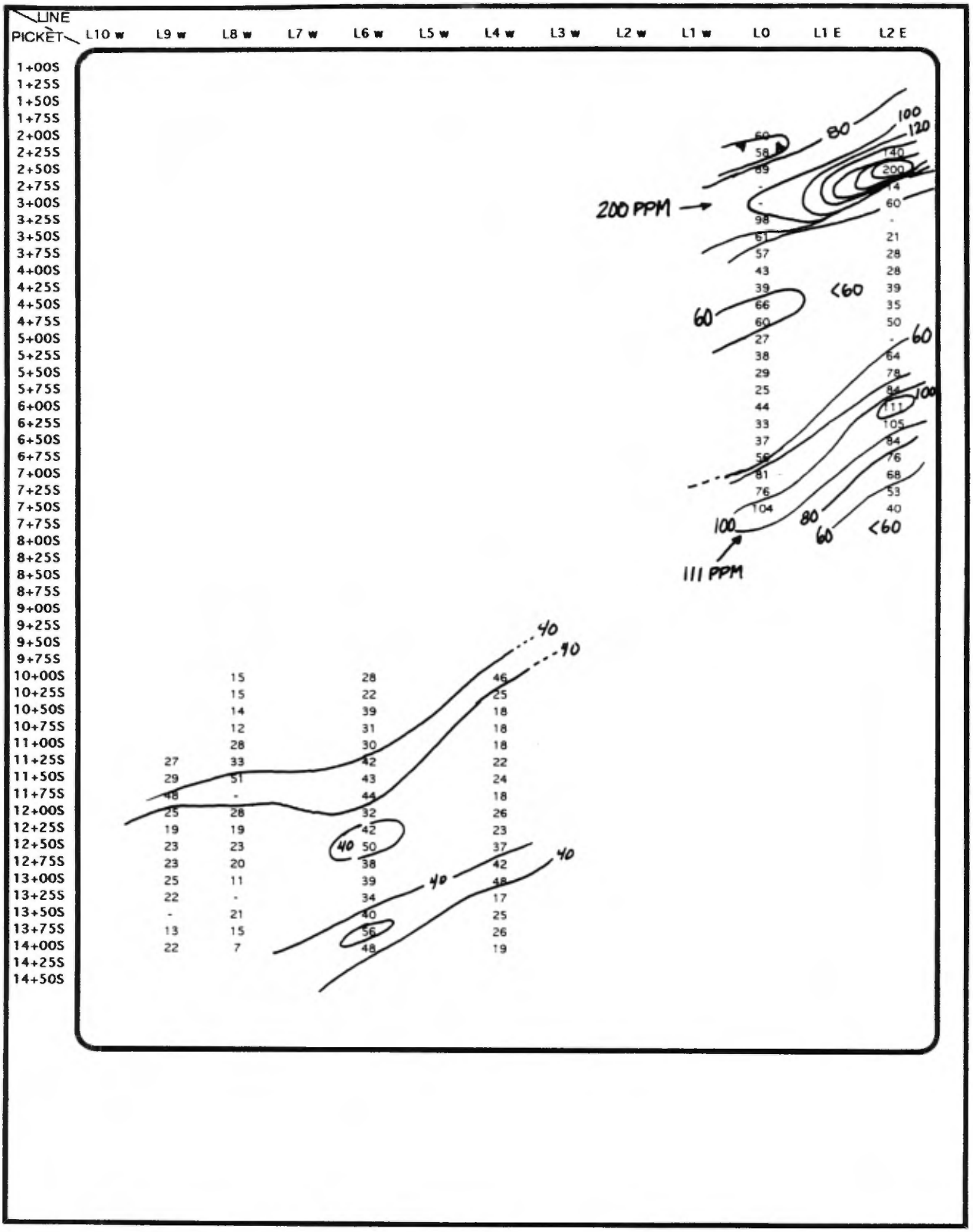
MAP No	OUTCR. No	ANALYSYS No	Au(ppb) * (Oz/t)	Cu(ppm) * (%)	Zn(ppm) *(%)	Pb(ppm) *(%)	Ag(ppm) *(Oz/t)	description of sample
186	R38f	8756	nil	-	-	-	-	Same as before
187	R42a	8757	nil	-	130	-	-	Pyritized sheared andesite
188	R42b	8758	nil	-	100	-	-	Pyritised, Ankeritized and graphite chert with mafic tuff
189	R42c	8759	20	-	140	-	-	Same as before +moore pyrite
190	R42d	8760	nil	-	30	-	-	Same as before + Qz vein
191	R42e	8761	nil	-	40	-	-	Same as before
192	R42f	8762	nil	-	50	-	-	Same as before
193	R42g	8763	nil	-	140	-	-	Same as before
194	R42h	8764	nil	-	100	-	-	Cc veinets in Pyritised andesite
195	R42i	8765	nil	-	30	-	-	Pyritized chert
196	R43k	8766	nil	-	110	-	-	Pyritized mafic tuff
197	R43L	8767	nil	-	100	-	-	Same as before
198	R43m	8768	nil	-	80	-	-	Same as before
199	R43n	8769	nil	- -	50	-	-	Pyritized chert
200	R43o	8770	nil	-	50	-	-	Same as before
201	R43p	8771	nil	-	40	-	-	Pyritized mafic schist
202	44b-c2	8776	nil	-	-	-	-	Qz vein and ankeritized, pyritized sheared felsic tuff
203	44b-c1	8777	nil	-	-	-	-	Pyritized, sericitized and ankeritized felsictuff
204	44b-e	8778	nil	-	-	-	-	Same as No202
205	44b-d	8779	nil	-	-	-	-	Same as before
206	44b-b	8780	nil	-	-	-	-	Qz-Cb-Py vein
207	44b-a	8781	nil	-	-	-	-	Gray Qz -Cb vein in pyritized sheared felsic rock
208	47a	8782	nil	-	-	-	-	Silicified and calcitized sheared mudstone
209	47b	8783	nil	-	-	-	-	Same as before
210	47f	8784	nil	100	30	-	-	Ankeritized and hematized chlorite schist
211	47c1	8785	nil	-	-	-	-	Gray Qz vein
212	47i	8786	nil	-	-	-	-	Pyritized chlorite schist
213	47g	8787	nil	60	10	-	-	Same as before
214	47h	8788	nil	130	100	-	-	Chloritized and pyritized sheared felsic tuff
215	47e	8789	nil	70	200	-	-	Same as before
216	50a	8663	nil	-	-	-	-	Pyritized and silicified cherty agglomerate

ANNEX A: Table of analytic results from mineralized samples

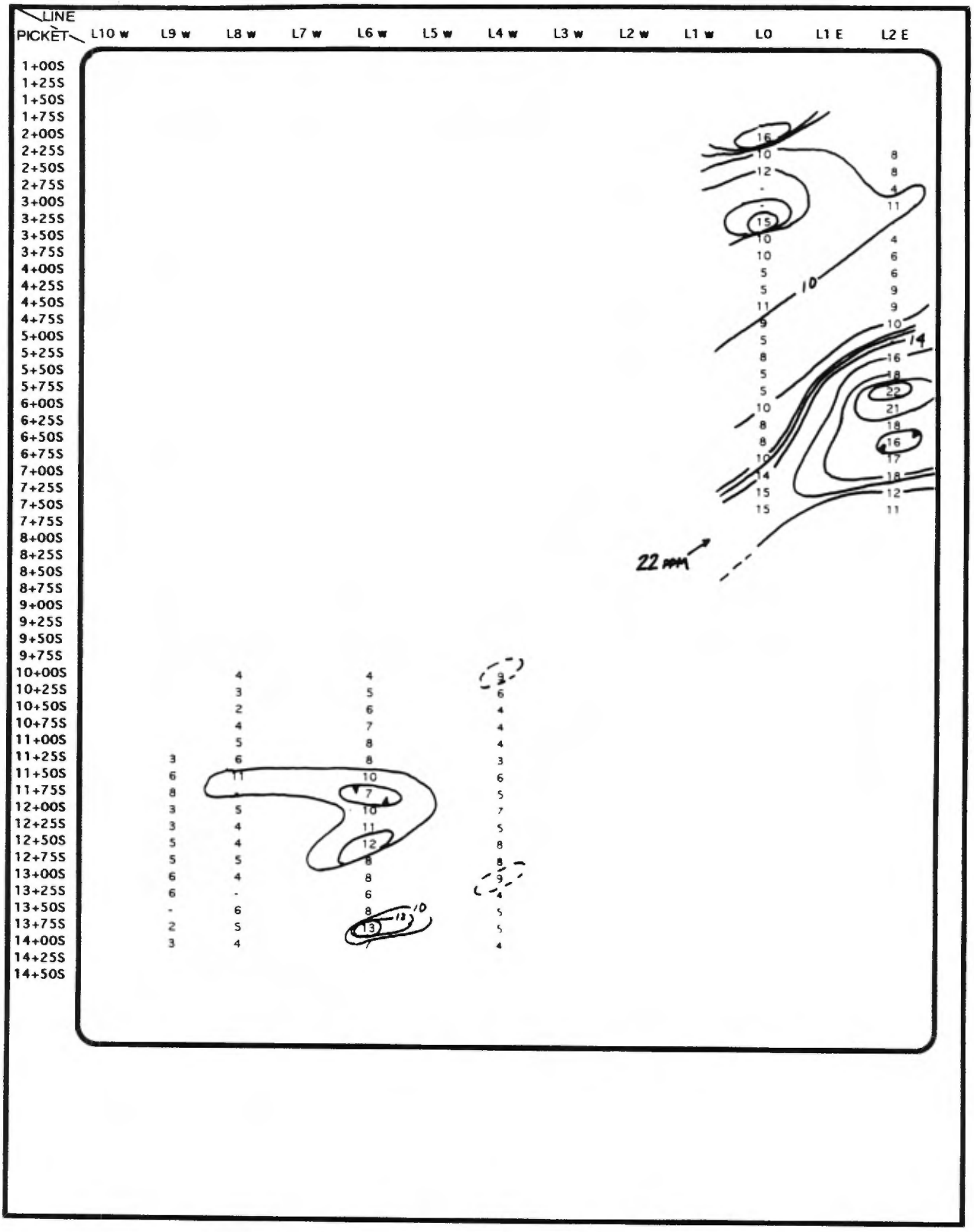
ANNEX B-1: Contour map of copper concentration (ppm) from soil samples



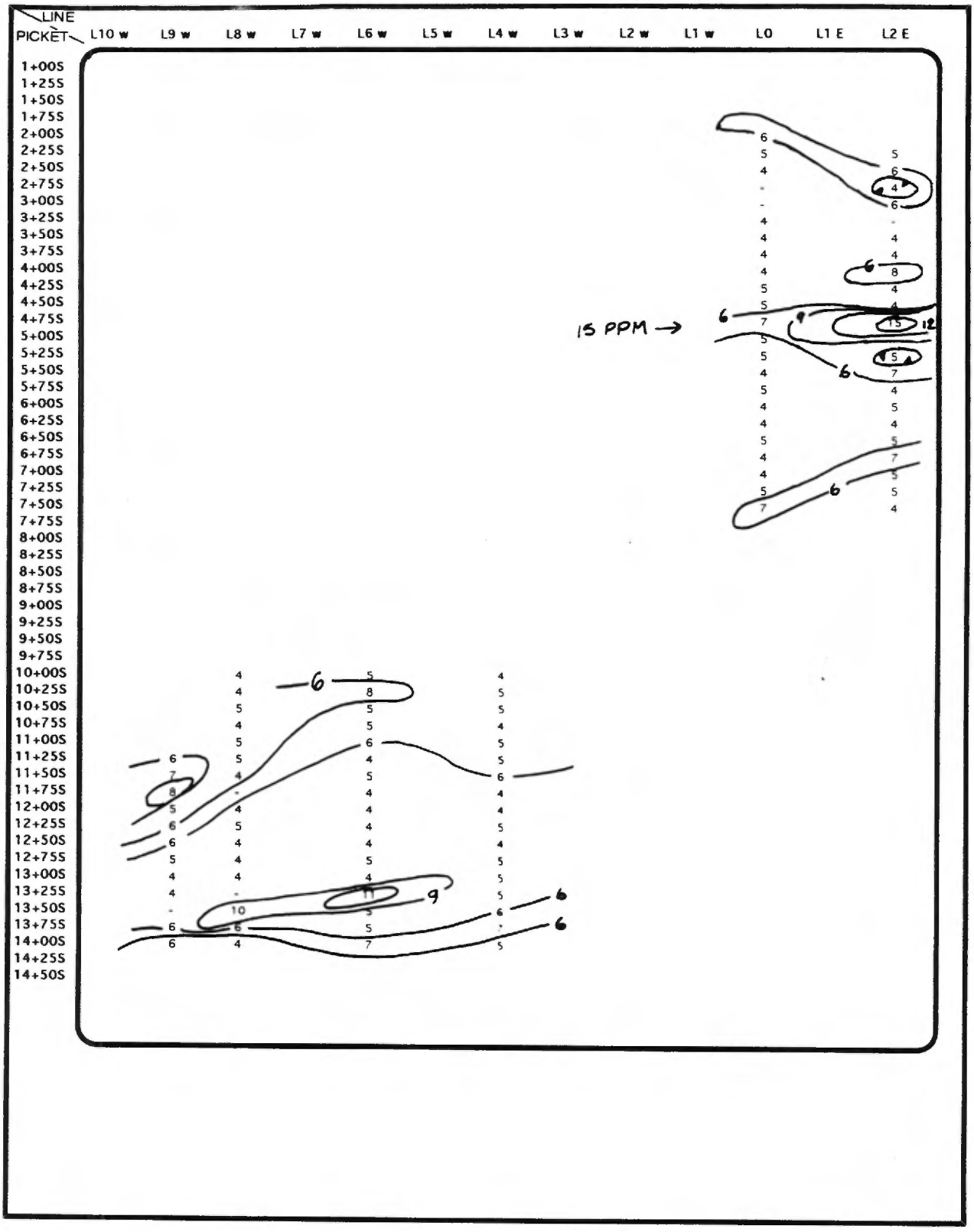
ANNEX B -2: Contour map of zinc concentration (ppm) from soil samples



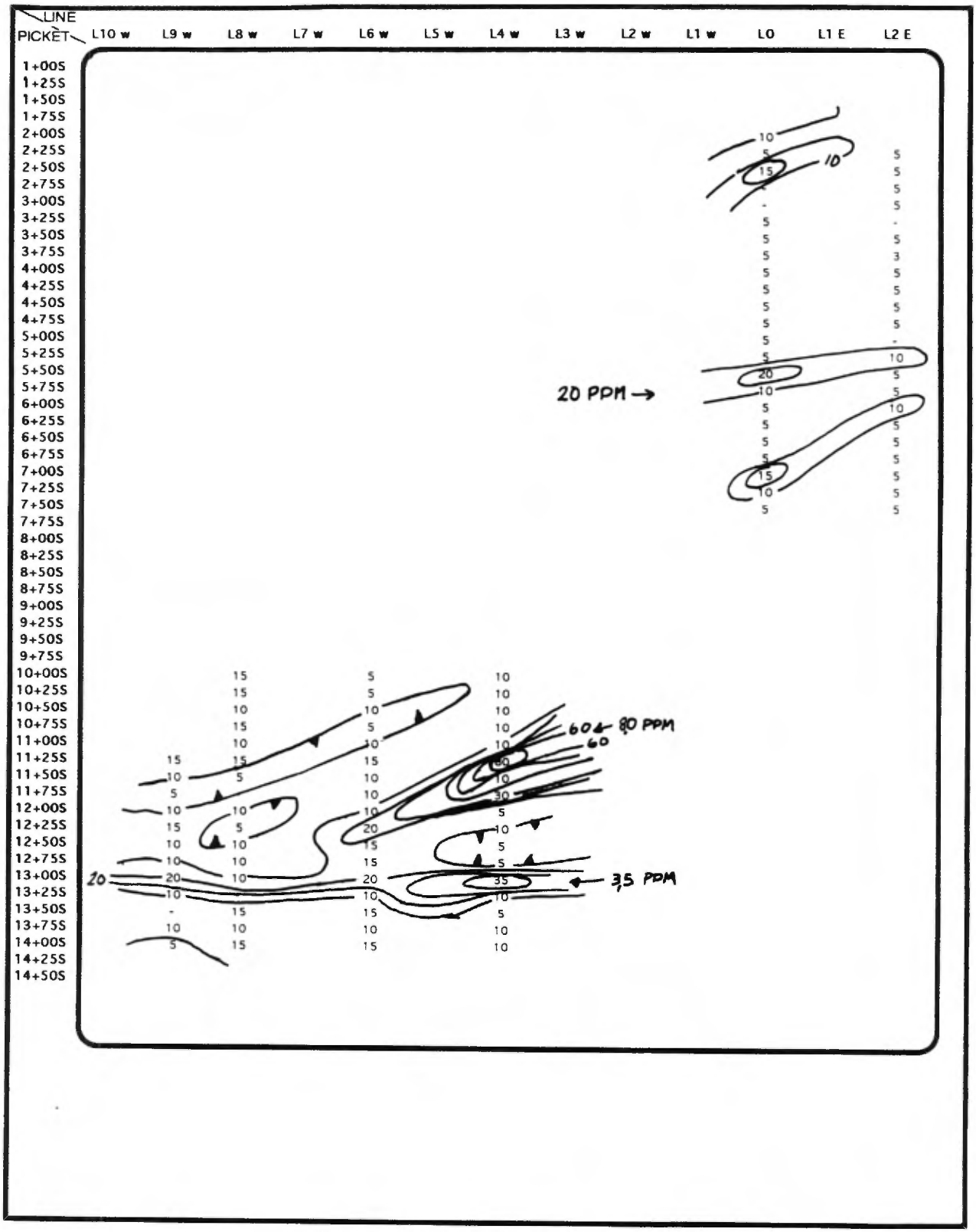
ANNEX B-3: Contour map of lead concentration (ppm) from soil samples



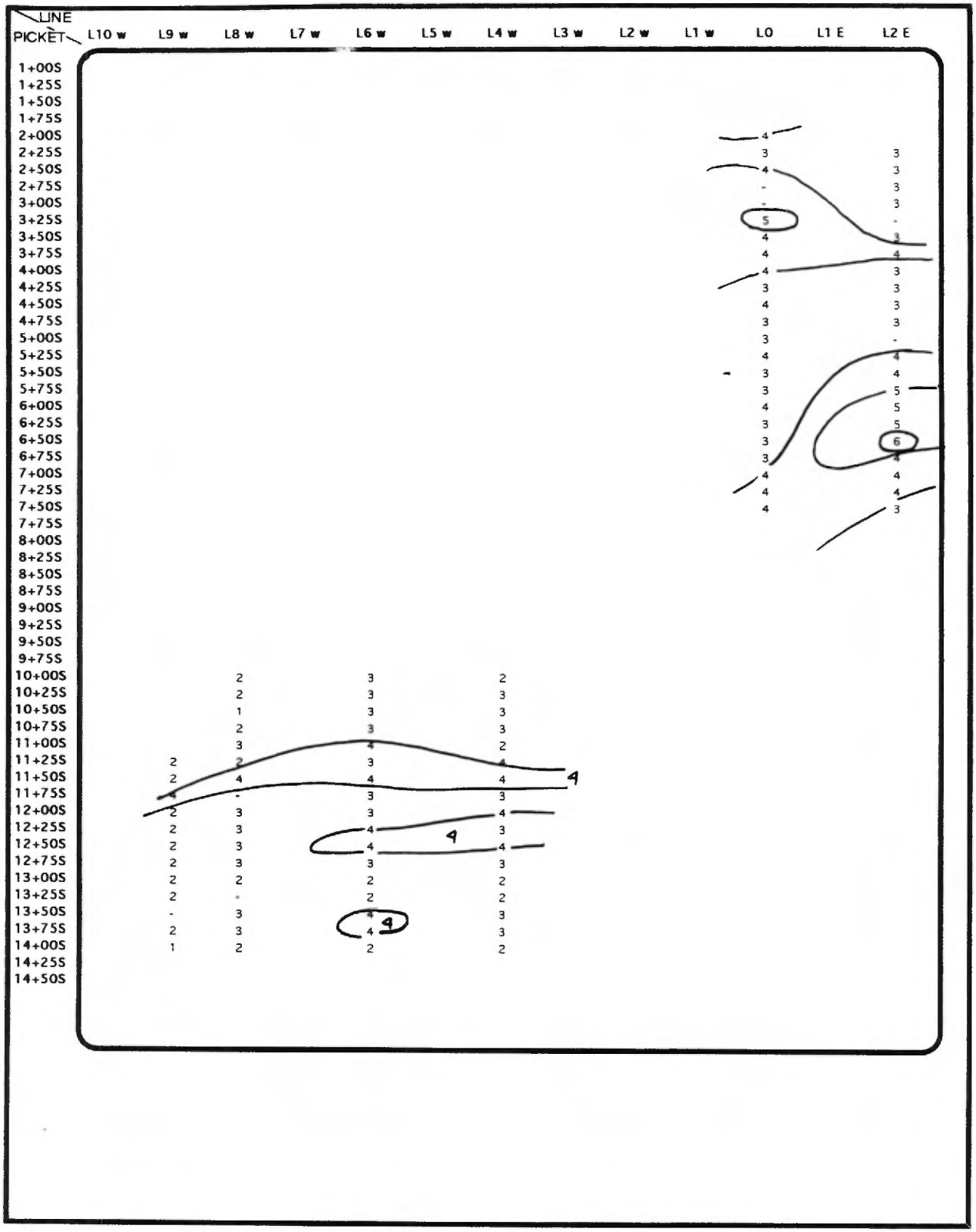
ANNEX B-4: Contour map of gold concentration (ppb) from soil samples



ANNEX B-5: Contour map of arsenic concentration (÷ 10 ppm from soil samples



ANNEX B-6: Contour map of silver concentration (÷ 10 ppm) from soil samples



C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

Annex A1

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Asarco

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57675

VAL D'OR (QUÉBEC) le 12 juin 19 91

ANALYSES / ASSAYS: 17 Au, 3 Ag, 4 Cu, 3 Zn, 1 Pb

Echantillon	Au oz/ton	Ag oz/ton	Cu %	Zn %	Pb %
412601	0.007	-	-	-	-
412602	Nil	-	-	-	-
412603	0.006	-	-	-	-
412604	0.105	0.09	0.184	0.006	-
412605	Nil	-	-	-	-
412606	Nil	-	-	-	-
412607	Nil	-	-	-	-
412608	0.005	-	-	-	-
412609	0.017	-	0.135	-	-
412610	Nil	-	-	-	-
412611	Nil	-	-	-	-
412612	0.007	-	-	-	-
412613	Nil	-	-	-	-
412614	Nil	-	-	-	-
412615	0.250	0.55	0.704	0.177	-
412616	0.009	-	-	-	-
412617	0.262	0.53	0.430	0.111	0.690

1/12

PR

ANALYSTE / ASSAYER

12628-01

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Asarco

ÉCHANTILLONS / SAMPLES Rock/Roches

REÇU DE / RECEIVED FROM Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57751 pg 1/2

VAL D'OR (QUÉBEC) le 21 juin 19 91

ANALYSES / ASSAYS 40 Au, 4 Ag, 11Cu, 4 Zn, 4 Pb

Echantillon	Au oz/ton	Ag oz/ton	Cu %	Zn %	Pb %
412618	Nil	-	-	-	-
412619	Nil	-	-	-	-
412620	Nil	-	-	-	-
412621	Nil	-	-	-	-
412622	Nil	-	-	-	-
412623	Trace	-	-	-	-
412624	Trace	-	-	-	-
412625	0.005	-	-	-	-
412626	Trace	-	-	-	-
412627	Trace	-	-	-	-
412628	0.008	-	-	-	-
412629	0.013	-	-	-	-
412630	Trace	-	-	-	-
412631	Nil	-	-	-	-
412632	Nil	-	-	-	-
412633	0.006	-	-	-	-
412634	Nil	-	-	-	-
412635	Nil	-	-	-	-
412636	0.006	-	0.008	-	-
412637	0.007	-	-	-	-
412638	Trace	-	-	-	-
412639	0.013	-	-	-	-
412640	0.005	-	-	-	-
412641	0.018	-	-	-	-
412642	0.016	-	-	-	-
412643	0.030	-	-	-	-
412644	0.005	-	-	-	-
412645	0.012	-	-	-	-
412646	Trace	-	-	-	-
412647	0.010	-	-	-	-

12/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

Annex A

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Azarco

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57751 pg 2/2

VAL D'OR (QUÉBEC) le 21 juin 19 91

ANALYSES / ASSAYS: 40 Au, 4 Ag, 11Cu, 4 Zn, 4 P

Echantillon	Au oz/ton	Ag oz/ton	Cu %	Zn %	Pb %
412648	Nil	-	0.007	-	-
412649	Nil	-	0.007	-	-
412650	Nil	-	0.009	-	-
412651	0.056	-	0.020	-	-
412652	0.050	-	0.038	-	-
412653	Trace	-	0.012	-	-
412654	0.061	0.02	0.020	0.011	0.018
412655	0.297	1.08	0.800	0.450	0.243
412656	0.490	0.56	0.310	0.515	0.610
412657	0.020	Trace	0.065	0.092	0.002

13/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Asarco

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57829

ÉCHANTILLONS / SAMPLES: Rock/Roches

VAL D'OR (QUÉBEC): le 4 juillet 19 91

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

ANALYSES / ASSAYS: 29 Au, 4 Cu, 2 Ag, 2 Zn, 2 Géochimie

Echantillon	Au ppb	Cu ppm	Ag ppm	Zn ppm	Pb ppm
Sédiment					
412658	N.D.	22	<0.2	76	16
412659	N.D.	18	<0.2	64	14
Roche					
412660	N.D.	-			
412661	N.D.	-			
412662	N.D.	-			
412663	N.D.	-			
412664	N.D.	-			
412665	N.D.	-			
412666	N.D.	-			
412667	N.D.	-			
412668	N.D.	-			
412669	N.D.	84			
412670	30	252			
412671	10	-			
412672	N.D.	-			
412673	N.D.	-			
412674	N.D.	-			
412675	N.D.	-			
412676	N.D.	-			
412677	N.D.	-			
412679	N.D.	-			
412680	30	-			
412681	20	-			
412682	N.D.	-			
412683	N.D.	-			
412684	N.D.	-			
412685	110	-			
412686	10	-			
412687	N.D.	-			

4/12

Pour Au N.D. veut dire moins que 5 ppb.
Pour Au N.D. means less than 5 ppb

Linda Hebert
ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Benoit

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57906

VAL D'OR (QUÉBEC) le 12 juillet 19 91

ANALYSES / ASSAYS: 26 Au, 3 Cu
Géochimie

Echantillon	Au ppb	Cu ppm
412688	N.D.	-
412689	N.D.	-
412690	N.D.	-
412691	N.D.	-
412692	N.D.	-
412693	N.D.	-
412694	N.D.	-
412695	N.D.	-
412696	N.D.	-
412697	N.D.	-
412698	N.D.	-
412699	N.D.	-
412700	N.D.	-
412701	N.D.	-
412702 *	N.D.	-
8701	20	-
8702	20	50
8703	N.D.	60
8704	N.D.	-
8705	N.D.	-
8706	N.D.	-
8707	N.D.	-
8708	N.D.	-
8709	N.D.	-
8710	N.D.	-
8711	N.D.	110

* Pt, Pd, Ni à suivre.

Pour Au N.D. veut dire moins que 5 ppb.
For Au N.D. means less than 5 ppb.

5/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Agarco & Benoit EAST prop.

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57947

VAL D'OR (QUÉBEC) le 17 juillet 19 91

ANALYSES / ASSAYS: 23 Au, 9 Ag, 7 Cu, 9 Zn, 8 P
Géochimie

Echantillon	Au ppb	Ag ppm	Cu ppm	Zn ppm	Pb ppm
8712	20	N.D.	100	80	10
8713	N.D.	-	-	-	-
8714	20	N.D.	80	90	10
8715	N.D.	-	-	-	-
8716	N.D.	N.D.	60	80	N.D.
8717	N.D.	-	-	-	-
8718	N.D.	-	-	-	-
8719	N.D.	-	-	-	-
8720	N.D.	N.D.	80	110	N.D.
8721	N.D.	N.D.	60	80	10
8722	N.D.	-	-	-	-
8723	N.D.	-	-	-	-
8724	N.D.	-	-	-	-
8725	N.D.	-	-	-	-
8726	N.D.	-	-	-	-
8727	N.D.	N.D.	-	80	-
8728	N.D.	-	-	-	-
8729	N.D.	N.D.	-	580	10
8730	N.D.	N.D.	210	160	N.D.
8731	N.D.	N.D.	50	100	N.D.
8732	N.D.	-	-	-	-
8733	N.D.	-	-	-	-
8734	N.D.	-	-	-	-

Pour Au N.D. veut dire moins que 5 ppb
Pour Ag N.D. veut dire moins que 1.0 ppm
Pour métaux de base N.D. veut dire moins que 10 ppm

6/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Asarco

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette FAST Prod

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57973

VAL D'OR (QUÉBEC) le 19 juillet 19 91

ANALYSES / ASSAYS 18 Au

Echantillon	Au ppb
8735	N.D.
8736	N.D.
8737	N.D.
8738	N.D.
8739	N.D.
8740	N.D.
8741	N.D.
8742	N.D.
8743	N.D.
8744	N.D.
8745	N.D.
8746	N.D.
8747	N.D.
8748	N.D.
8749	N.D.
8750	N.D.
8801	N.D.
8802	N.D.

Pour Au N.D. veut dire moins que 5 ppb.
For Au N.D. means less than 5 ppb.

Métaux de base à suivre.

7/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Benoit

ÉCHANTILLONS / SAMPLES: Rock/Roches; réf 57906

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 57964

VAL D'OR (QUÉBEC) le 19 juillet 19 91

ANALYSES / ASSAYS: 1 Pt, 1 Pd, 1 Ni
Géochimie

Echantillon	Pt ppb	Pd ppb	Ni ppm
412702	<70	<70	34

8/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUEBEC) J9P 4P5 TEL.: (819) 824-4337
FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Agarco

ÉCHANTILLONS / SAMPLES Rock/Roches réf:57973

REÇU DE / RECEIVED FROM Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 58073

VAL D'OR (QUÉBEC) le 31 juillet 19 91

ANALYSES / ASSAYS 4 Cu, 3 Ag, 3 Zn, 3 Pb

Echantillon	Ag ppm	Cu ppm	Zn ppm	Pb ppm
8743	-	64	-	-
8748	0.2	74	68	4
8750	0.2	62	66	4
8801	0.2	52	72	8

9/12

Linda Dufresne
ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337 FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet ASarco & Benoit

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 58123

VAL D'OR (QUÉBEC) le 7 août 19 91

ANALYSES / ASSAYS: 36 Au

Echantillon	Au ppb	Au ppm
ASarco		
8803	N.D.	
8804	10	
8805	N.D.	
8806	N.D.	
8807	N.D.	
8808	N.D.	
8809	N.D.	
8810	15	
8811	N.D.	
8812	G.1000	4.03
8813	60	
8814	20	
8815	N.D.	
8816	30	
8817	N.D.	
8818	180	
8819	130	
8820	10	
8821	120	
8822	10	
8823	10	
8824	N.D.	
8825	N.D.	
8826	60	
8827	10	

RESULTS FROM OTHER PLACE. NO in this project. JP.

Echantillon	Au ppb
Benoit:	
8828	130
8829	300
8830	N.D.
8831	70
8832	20
8833	200
8834	100
No tag Bag=8834	30
8836	20
8837	350
8838	N.D.

Pour Au N.D. veut dire moins que 5 ppb.
G.1000 veut dire "plus que 1000 ppb".

10/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337 FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Agarco & Benoit East

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 58325 Pg 1/2

VAL D'OR (QUÉBEC) le 28 août 19 91

ANALYSES / ASSAYS: 52 Au, 4 Cu, 25 Zn Géochimie

Echantillon	Au ppb	Cu ppm	Zn ppm
8839 (156)	N.D.	-	130
8840 (157)	10	-	800
8841 (158)	20	-	2850
8842 (159)	30	-	2380
8843 (160)	N.D	-	-
8844 (170)	N.D.	-	-
8845 (177)	N.D.	-	-
8846 (178)	N.D.	-	-
8847 (179)	N.D.	-	-
8848 (1	N D.	-	-
8849 (180)	N.D.	-	-
8850 (181)	N.D.	-	-
8751 (182)	N.D.	-	-
8752 (183)	N.D.	-	-
8753 (184)	N.D.	-	-
8754 (	N.D.	-	-
8755 (185)	N.D.	-	-
8756 (186)	N.D.	-	-
8757 (187)	N.D.	-	130
8758 (188)	N.D.	-	100
8759 (189)	20	-	140
8760 (190)	N.D.	-	30
8761 (191)	N.D.	-	40
8762 (192)	N.D.	-	50
8763 (193)	N.D.	-	140
8764 (194)	N.D.	-	100
8765 (195)	N.D.	-	30
8766 (196)	N.D.	-	110
8767 (197)	N.D.	-	100
8768 (198)	N.D.	-	80

12/12

ANALYSTE / ASSAYER

C.P. / P.O. 550 148, AVENUE PERREAULT VAL D'OR (QUÉBEC) J9P 4P5 TÉL.: (819) 824-4337 FAX: (819) 824-4745

LABORATOIRE D'ANALYSE BOURLAMAQUE LTÉE
BOURLAMAQUE ASSAY LABORATORIES LTD.

FREEWEST RESOURCES INC.

Projet Agarco & Benoit East

ÉCHANTILLONS / SAMPLES: Rock/Roches

REÇU DE / RECEIVED FROM: Jean-Paul Barrette

CERTIFICAT D'ANALYSES
CERTIFICATE OF ANALYSIS

N° 58325 Pg 2/2

VAL D'OR (QUÉBEC) le 28 août 19 91

ANALYSES / ASSAYS: 52 Au, 4 Cu, 25 Zn - Géochimie

Echantillon	Au ppb	Cu ppm	Zn ppm
RAIN 8769 (199)	N.D.	-	50
O 8770 (200)	N.D.	-	50
P 8771 (201)	N.D.	-	40
Q 8772 (136)	N.D.	-	110
8773 (139)	N.D.	-	-
8774 (140)	N.D.	-	90
8775 (141)	N.D.	-	-
8776 (202)	N.D.	-	-
8777 (203)	N.D.	-	-
8778 (204)	N.D.	-	-
8779 (205)	N.D.	-	-
8780 (206)	N.D.	-	-
8781 (207)	N.D.	-	-
8782 (208)	N.D.	-	-
8783 (209)	N.D.	-	-
8784 (210)	N.D.	100	30
8785 (211)	N.D.	-	-
8786 (212)	N.D.	-	-
8787 (213)	N.D.	60	10
8788 (214)	N.D.	130	100
8789 (215)	N.D.	70	200
- 8790	N.D.	-	-

Pour Au: N.D. veut dire moins que 5 ppb.

Annex A1

12/12

ANALYSTE / ASSAYER

METRICLAB (1980) INC.
CASE POSTALE 150
STE-MARTHE SUR LE LAC (QUÉBEC) J0N 1P0
TÉLEX: 05-835543 / FAX: (514) 491-1074
TÉL.: (514) 473-0920

FREEWEST RESOURCES
800 Rene Levesque -Ouest - S. 1525
Montreal / Que.
H3B 1X9

RÉSULTATS # 91-06-093 COMMANDE # PROJET # DATE: 91/07/16

PAGE: 1

Att.: M. Mark Fekete

RÉSULTATS D'ANALYSES/ASSAY REPORT

ÉCHANTILLONS SAMPLES	Cu	Pb	Zn	Ag	Au	Au	Au				
	ppm	ppm	ppm	ppm	ppb	g/tm	oz/t				
JP38C-A-91	31	4	68	0.5	5						
JP39A-A-91	42	4	50	0.6	4						
JP39A-B-91	45	4	51	0.6	6						
JP39C-A-91	45	2	27	0.4	5						
JP39C-B-91	20	1	21	0.4	5						

LABORATOIRE, 3388 CHEMIN OKA, STE-MARTHE SUR LE LAC (QUÉBEC)

METRICLAB (1980) INC J.H. Blais.

metriclab (1980) inc.
CASE POSTALE 150
STE-MARTHE SUR LE LAC (QUÉBEC) J0N 1P0
TÉLEX: 05-835543 / FAX: (514) 491-1074
TÉL.: (514) 473-0920

FREEWEST RESOURCES
800 Rene Levesque - Ouest S. 1525
Montreal / Que.
H3B 1X9

RÉSULTATS # 91-07-005 COMMANDE # PROJET #

ANNEX B1

DATE: 91/07/22

PAGE: 1

Att.: M. Mark Fekete

RÉSULTATS D'ANALYSES/ASSAY REPORT

ÉCHANTILLONS SAMPLES	Cu ppm	Pb ppm	Zn ppm	As ppm	Ag ppm	Au ppb
L0W-2+00S	14	16	60	1.0	0.4	6
L0W-2+25S	12	10	58	0.5	0.3	5
L0W-2+50S	18	12	89	1.5	0.4	4
L0W-3-25S	20	15	98	0.5	0.5	4
L0W-3+50S	12	10	61	0.5	0.4	4
L0W-3+75S	10	10	57	0.5	0.4	4
L0W-4+00S	7	5	43	0.5	0.4	4
L0W-4+25S	6	5	39	0.5	0.3	5
L0W-4+50S	15	11	66	0.5	0.4	5
L0W-4+75S	10	9	60	0.5	0.3	7
L0W-5+00S	4	5	27	0.5	0.3	5
L0W-5+25S	8	8	38	0.5	0.4	5
L0W-5+50S	8	5	29	2.0	0.3	4
L0W-5+75S	9	5	25	1.0	0.3	5
L0W-6+00S	11	10	44	0.5	0.4	4
L0W-6+25S	6	8	33	0.5	0.3	4
L0W-6+50S	6	8	37	0.5	0.3	5
L0W-6+75S	11	10	56	0.5	0.3	4
L0W-7+00S	19	14	81	1.5	0.4	4
L0W-7+25S	20	15	76	1.0	0.4	5
L0W-7+50S	20	15	104	0.5	0.4	7
L2E-2+25S	9	8	140	0.5	0.3	5
L2E-2+50S	7	8	200	0.5	0.3	6
L2E-2+75S	5	4	14	0.5	0.3	4
L2E-3+00S	9	11	60	0.5	0.3	6
L2E-3+50S	4	4	21	0.5	0.3	4
L2E-3+75S	9	6	28	0.3	0.4	4
L2E-4+00S	9	6	28	0.5	0.3	8
L2E-4+25S	9	9	39	0.5	0.3	4
L2E-4+50S	6	9	35	0.5	0.3	4

1/4

metriclab (1980) inc. J.H. Blais.

metriCLAB (1980) INC.
CASE POSTALE 150
STE-MARTHE SUR LE LAC (QUÉBEC) J0N 1P0
TÉLEX: 05-835543 / FAX: (514) 491-1074
TÉL.: (514) 473-0920

FREEWEST RESOURCES
800 Rene Levesque - Ouest S. 1525
Montreal / Que.
H3B 1X9

RÉSULTATS # 91-07-005 COMMANDE # PROJET # DATE: 91/07/22

Att.: M. Mark Fekete

RÉSULTATS D'ANALYSES/ASSAY REPORT

ÉCHANTILLONS SAMPLES	Cu ppm	Pb ppm	Zn ppm	As ppm	Ag ppm	Au ppb
L2E-4+75S	6	10	50	0.5	0.3	15
L2E-5+25S	13	16	64	1.0	0.4	5
L2E-5+50S	21	18	78	0.5	0.4	7
L2E-5+75S	17	22	84	0.5	0.5	4
L2E-6+00S	22	21	111	1.0	0.5	5
L2E-6+25S	19	18	105	0.5	0.5	4
L2E-6+50S	25	16	84	0.5	0.6	5
L2E-6+75S	16	17	76	0.5	0.4	7
L2E-7+00S	14	18	68	0.5	0.4	5
L2E-7+25S	8	12	53	0.5	0.4	5
L2E-7+50S	4	11	40	0.5	0.3	4
L4W-10+00S	15	9	46	1.0	0.2	4
L4W-10+25S	4	6	25	1.0	0.3	5
L4W-10+50S	4	4	18	1.0	0.3	5
L4W-10+75S	3	4	18	1.0	0.3	4
L4W-11+00S	2	4	18	1.0	0.2	5
L4W-11+25S	2	3	22	8.0	0.4	5
L4W-11+50S	4	6	24	1.0	0.4	6
L4W-11+75S	1	5	18	3.0	0.3	4
L4W-12+00S	3	7	26	0.5	0.4	4
L4W-12+25S	1	5	23	1.0	0.3	5
L4W-12+50S	9	8	37	0.5	0.4	4
L4W-12+75S	8	8	42	0.5	0.3	5
L4W-13+00S	8	9	48	3.5	0.2	5
L4W-13+25S	2	4	17	1.0	0.2	5
L4W-13+50S	2	5	25	0.5	0.3	6
L4W-13+75S	3	5	26	1.0	0.3	7
L4W-14+00S	4	4	19	1.0	0.2	5
L6W-10+00S	6	4	28	0.5	0.3	5
L6W-10+25S	4	5	22	0.5	0.3	8

2/4

LABORATOIRE, 3388 CHEMIN OKA, STE-MARTHE SUR LE LAC (QUÉBEC)

metriCLAB (1980) INC /H Blais.

metriCLAB (1980) INC.
CASE POSTALE 150
STE-MARTHE SUR LE LAC (QUÉBEC) J0N 1P0
TÉLEX: 05-835543 / FAX: (514) 491-1074
TÉL.: (514) 473-0920

FREEWEST RESOURCES
800 Rene Levesque - Ouest S. 1525
Montreal / Que.
H3B 1X9

RÉSULTATS # 91-07-005 COMMANDE # PROJET # DATE: 91/07/22

Att.: M. Mark Fekete

RÉSULTATS D'ANALYSES/ASSAY REPORT

ÉCHANTILLONS SAMPLES	Cu ppm	Pb ppm	Zn ppm	As ppm	Ag ppm	Au ppb
L6W-10+50S	6	6	39	1.0	0.3	5
L6W-10+75S	4	7	31	0.5	0.3	5
L6W-11+00S	4	8	30	1.0	0.4	6
L6W-11+25S	7	8	42	1.5	0.3	4
L6W-11+50S	6	10	43	1.0	0.4	5
L6W-11+75S	7	7	44	1.0	0.3	4
L6W-12+00S	5	10	32	1.0	0.3	4
L6W-12+25S	8	11	42	2.0	0.4	4
L6W-12+50S	19	12	50	1.5	0.4	4
L6W-12+75S	6	8	38	1.5	0.3	5
L6W-13+00S	7	8	39	2.0	0.2	4
L6W-13+25S	7	6	34	1.0	0.2	11
L6W-13+50S	7	8	40	1.5	0.4	5
L6W-13+75S	14	13	56	1.0	0.4	5
L6W-14+00S	16	7	48	1.5	0.2	7
L8W-10+00S	4	4	15	1.5	0.2	4
L8W-10+25S	1	3	15	1.5	0.2	4
L8W-10+50S	1	2	14	1.0	0.1	5
L8W-10+75S	1	4	12	1.5	0.2	4
L8W-11+00S	4	5	28	1.0	0.3	5
L8W-11+25S	6	6	33	1.5	0.2	5
L8W-11+50S	8	11	51	0.5	0.4	4
L8W-12+00S	3	5	28	1.0	0.3	4
L8W-12+25S	1	4	19	0.5	0.3	5
L8W-12+50S	3	4	23	1.0	0.3	4
L8W-12+75S	2	5	20	1.0	0.3	4
L8W-13+00S	4	4	11	1.0	0.2	4
L8W-13+50S	2	6	21	1.5	0.3	10
L8W-13+75S	1	5	15	1.0	0.3	6
L8W-14+00S	1	4	7	1.5	0.2	4

3/4

LABORATOIRE, 3388 CHEMIN OKA, STE-MARTHE SUR LE LAC (QUÉBEC)

metriCLAB (1980) INC. /H Blais.

METRICLAB (1980) INC.
CASE POSTALE 150
STE-MARTHE SUR LE LAC (QUÉBEC) J0N 1P0
TÉLEX: 05-835543 / FAX: (514) 491-1074
TÉL.: (514) 473-0920

FREEWEST RESOURCES
800 Rene Levesque - Ouest S. 1525
Montreal / Que.
H3B 1X9

RÉSULTATS # 91-07-005 COMMANDE # PROJET # DATE: 91/07/22

Att.: M. Mark Fekete

RÉSULTATS D'ANALYSES/ASSAY REPORT

ÉCHANTILLONS SAMPLES	Cu	Pb	Zn	As	Ag	Au					
	ppm	ppm	ppm	ppm	ppm	ppb					
L9W-11+25S	2	3	27	1.5	0.2	6					
L9W-11+50S	3	6	29	1.0	0.2	7					
L9W-11+75S	14	8	48	0.5	0.4	8					
L9W-12+00S	5	3	25	1.0	0.2	5					
L9W-12+25S	1	3	19	1.5	0.2	6					
L9W-12+50S	3	5	23	1.0	0.2	6					
L9W-12+75S	2	5	23	1.0	0.2	5					
L9W-13+00S	1	6	25	2.0	0.2	4					
L9W-13+25S	7	6	22	1.0	0.2	4					
L9W-13+75S	5	2	13	1.0	0.2	6					
L9W-14+00S	10	3	22	0.5	0.1	6					
JP38C-A-91				3.5							
JP39A-A-91				1.5							
JP39A-B-91				2.0							
JP39C-A-91				36							
JP39C-B-91				2.5							

4/4

LABORATOIRE, 3388 CHEMIN OKA, STE-MARTHE SUR LE LAC (QUÉBEC)

METRICLAB (1980) INC. /H Blais.

M.C.S.
2050 Thibault, Bécancour, Québec G0X 1B0

Annex-C-1
1/3

Sample Location and Weigh Sheet

Client: FREEWEST RESOURCES EXPLORATION
Address: 800 Blvd René Levesque W.
Suite 1525
Montréal, Qué.
attn: M. M. Watson

Project: Benoit east property
Date September 19 91

Sample No	NO soil map	Line	Station	Depth	Total Weight	- (+ 5 m)	- 5 + 250 m	AU PPB	Heavies
1LA 5001	1	36+00 W	6+00 S	7.0	334.8	239.6	166.8	11	54.0
1LA 5002	2	36+00 W	2+35 S	5.0	354.5	321.5	230.3	38	49.8
1LA 5003	3	35+00 W	2+60 S	6.9	175.1	164.0	71.0	8	17.6
1LA 5004	4	34+00 W	2+75 S	4.7	180.7	145.9	80.7	16	21.9
1LA 5005	5	4+00 E	0+50 S	14.0	342.8	255.2	215.0	< 5	69.1
1LA 5006	6	4+00 E	3+00 S	4.2	354.5	269.1	86.4	8	61.1
1LA 5007	7	4+00 E	3+25 S	1.9	183.6	159.4	100.0	7	34.9
1LA 5008	8	6+00 E	2+50 S	4.2	181.9	141.4	102.1	6	65.8
1LA 5009	9	6+00 E	3+62 S	0.9	178.4	136.2	107.0	12	22.2
1LA 5010	10	6+00 E	3+90 S	3.0	337.3	309.2	180.7	8	39.7
1LA 5011	11	6+00 E	4+15 S	2.4	328.6	277.4	160.0	< 5	38.2
1LA 5012	12	6+00 E	5+90 S	5.4	258.0	239.8	128.0	8	25.0
1LA 5013	13	10+00 E	9+40 S	14.9	273.5	263.5	151.3	< 5	32.9
1LA 5014	14	12+00 E	10+25 S	1.4	276.3	276.3	223.5	15	18.5
1LA 5015	15	8+00 E	13+70 S	16.2	156.2	156.2	92.0	< 5	8.3
1LA 5016	16	6+00 E	13+90 S	19.4	161.5	150.3	110.3	< 5	16.0
1LA 5017	17	2+00 E	14+40 S	24.2	185.0	171.0	131.5	< 5	40.0
1LA 5018	18	1+00 E	13+40 S	17.2	190.0	187.0	125.6	< 5	19.5
1LA 5019	19	2+00 W	14+00 S	11.2	101.3	98.8	44.0	9	6.7
1LA 5020	20	3+00 W	10+80 S	14.1	168.6	136.3	85.3	10	24.2
1LA 5021	21	1+00 W	11+12 S	10.2	145.3	86.7	59.4	46	5.1
1LA 5022	22	1+00 E	10+25 S	1.4	387.6	303.1	162.5	5	36.6
1LA 5023	23	1+00 E	8+75 S	5.4	75.2	75.2	18.4	710000	0.5
1LA 5024	24	4+00 E	7+90 S	9.5	167.0	161.0	88.0	7	15.4
1LA 5025	25	4+00 E	9+50 S	11.2	130.2	96.3	61.0	8	11.2
1LA 5026	26	2+00 E	5+75 S	7.1	189.0	157.2	76.9	7	11.0
1LA 5027	27	2+00 E	4+40 S	3.2	284.9	273.5	110.9	6	13.0
1LA 5028	28	2+00 E	4+15 S	3.3	295.9	274.3	158.3	< 5	13.3
1LA 5029	29	0+00	2+35 S	16.4	179.0	139.5	101.6	< 5	24.4
1LA 5030	30	0+00	5+85 S	2.3	375.6	252.4	169.3	< 5	27.6

M.C.S.
2050 Thibault, Bécancour, Québec G0X 1B0

C-1
2/3

Sample Location and Weigh Sheet

Client: FREEWEST RESOURCES EXPLORATION
Address: 800 Blvd René Levesque W.
Suite 1525
Montréal, Qué.
attn: M. M. Watson

Project: Benoit east property

Date September 19 91

Sample No	No Old/New	Line	Station	Depth	Total Weight	- (+ 5 m)	- 5 + 250 m		Heavies
1LA 5031	31	0+00	6+15 S	5.2	201.3	119.3	76.5	6	18.1
1LA 5032	32	0+00	9+15 S	6.0	345.7	295.7	143.6	<5	26.3
1LA 5033	33	4+00 W	8+65 S	6.1	298.7	218.7	124.9	6	39.3
1LA 5034	34	4+00 W	7+10 S	10.4	115.3	107.8	61.0	10	10.1
1LA 5035	35	6+00 W	6+90 S	2.5	297.6	277.1	140.0	5	23.2
1LA 5036	36	6+00 W	4+90 S	10.1	181.3	144.8	114.5	8	40.4
1LA 5037	37	10+00 W	12+50 S	3.7	181.2	181.2	22.5	171	2.0
1LA 5039	39	10+00 W	12+75 S	5.3	255.2	189.3	110.3	8	34.6
1LA 5040	40	10+00 W	13+00 S	4.0	289.5	233.0	137.9	<5	31.5
1LA 5041	41	10+00 W	13+85 S	7.4	298.0	289.0	200.7	6	28.6
1LA 5042	42	21+00 W	8+10 S	8.1	174.7	174.7	31.7	23	5.9
1LA 5043	43	20+00 W	8+00 S	5.1	253.1	212.2	156.8	11	35.1
1LA 5044	44	28+00 W	12+35 S	11.1	167.8	150.3	92.0	<5	17.0
1LA 5045	45	29+00 W	12+35 S	7.2	103.3	102.3	23.3	17	5.7
1LA 5046	46	33+00 W	11+85 S	outcrop	53.1	46.7	41.1	9	13.3

M.C.S.
2050 Thibault, Bécancour, Québec G0X 1B0

C-1
3/3

Sample Location and Weigh Sheet

Client: FREEWEST RESOURCES
Address: 800 René Lévesque
Suite 1525
Montréal, Qué.
attn: M. M. Watson

Project: Benoit twp

Date: November 19 91

Sample No	No. on map	Line	Station	Depth	Total Weight	- (+ 6 m)	- 5 + 250 m	Analysis Results	Heavies
1LA 6001	47	24 W	2+30 S	3.10	218.1	202.6	182.3	Zn: 105 ppm Au: <5	11.1
1LA 6002	48	24 W	2+60 S	5.2	231.3	214.5	171.2	Zn: 107 ppm Au: <5	12.3
1LA 6003	49	24 W	12+00 S	4.3	281.0	221.0	170.1	Au: 2395 ppb	9.2
1LA 6004	50	23 W	11+70 S	4.1	359.1	315.7	277.1	Au: 47	5.2
1LA 6005	51	17 W	8+50 S	13.6	162.3	154.1	105.3	Au <5	10.4
1LA 6006	52	16 W	7+50 S	10.4	199.0	173.4	130.7	" <5	6.5
1LA 6007	53	15 W	7+50 S	13.7	199.7	186.3	146.9	" <5	8.0
1LA 6008	54	11 W	11+10 S	7.9	350.0	309.5	232.5	9	15.9
1LA 6009	55	0	11+25 S	8.6	372.5	294.0	172.6	9	9.2
1LA 6010	56	2 E	11+80 S	5.6	405.6	353.4	274.0	8	12.8
1LA 6011	57	2 E	8+70 S	17.6	186.5	149.0	81.6	32	4.3
1LA 6012	58	1+50 E	8+60 S	17.5	483.0	479.3	242.0	6	9.3
1LA 6013	59	1+50 E	8+75 S	10.4	718.7	704.2	356.3	<5	4.8
1LA 6014	60	1+00 E	8+90 S	5.3	590.2	523.3	207.1	<5	2.1
1LA 6015	61	1+00 E	8+73 S	8.4	309.4	309.4	121.5	885	10.5
1LA 6016	62	1+00 E	8+60 S	9.5	461.7	371.7	175.3	5	11.6
1LA 6017	63	0+50 E	8+60 S	8.3	848.3	728.0	450.6	9	7.2
1LA 6018	64	4 W	0+60 S	6.25	329.7	289.5	136.2	5	10.1
1LA 6014-A	65	1 E	9+00 S	4.3	203.4	130.0	80.1		