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**MATAWEST PROPERTY  
N.T.S 42 A/3 - 41 P/14  
PN-776 / 777**

**GEOLOGICAL SURVEY  
REPORT**

2017

**MARC-ANDRÉ LAROUCHE  
PROJECT GEOLOGIST**

**APRIL 1998**

## SUMMARY

The Matawest Project is located in Zavitz and Hutt townships, N.T.S. 42 A/3 and 41 P/14, approximately 40 kilometres south of Timmins and 35 kilometres west of Matachewan in Ontario. All claims are 100% owned by Inmet Mining Corporation. The property was in part optioned from Dave Meunier, Chris Pegg, Ellen Preston and G.S.W. Bruce and Associates Inc. and purchased from Victor Warford in 1997. The rest of the property was staked by Inmet.

During the summer of 1997, a geological survey and a sampling program were carried out as well as line cutting, a magnetic survey and an induced polarization survey.

The property geology can be divided into two (2) distinct assemblages based on whole rock geochemistry. They consist of a Northern Assemblage made of tholeiitic mafic volcanics and ultramafic volcanics, and a Southern Assemblage made of calc-alkaline intermediate to felsic volcanics. The contact between the two (2) assemblages is sheared. Two (2) small syenitic intrusives and ultramafic sills intrude that contact or the surrounding rocks.

Gold occurrences on the property occur in pyritized and altered basalts and ultramafic volcanics (intruded by albitite dikes) in the vicinity of the sheared contact between the Northern Assemblage and the Southern Assemblage. Strong albitite, iron carbonate and fuchsite alteration is associated with gold mineralization. Values up to 648 ppb Au were obtained.

Recommendations include surface stripping and drilling (1 000 metres) on selected I.P. anomalies.



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Geological map (southern sheet and northern sheet)

## **1.0 INTRODUCTION**

This report documents the 1997 mapping program on the Matawest Project, located 40 kilometres south of Timmins, Ontario (figure 1). The work consisted of mapping, sampling and prospecting for gold.

The property lies along the structural contact between a sequence of intermediate to felsic metavolcanic rocks and a younger sequence of mafic to ultramafic metavolcanic rocks (Hrabi and Helmstaedt 1990). This sheared contact might be correlated with the Galer Lake Branch of Cadillac-Larder Lake Break interpreted by L.S. Jensen in Powell, Bannockburn and Montrose townships (Jensen 1996a,b,c).

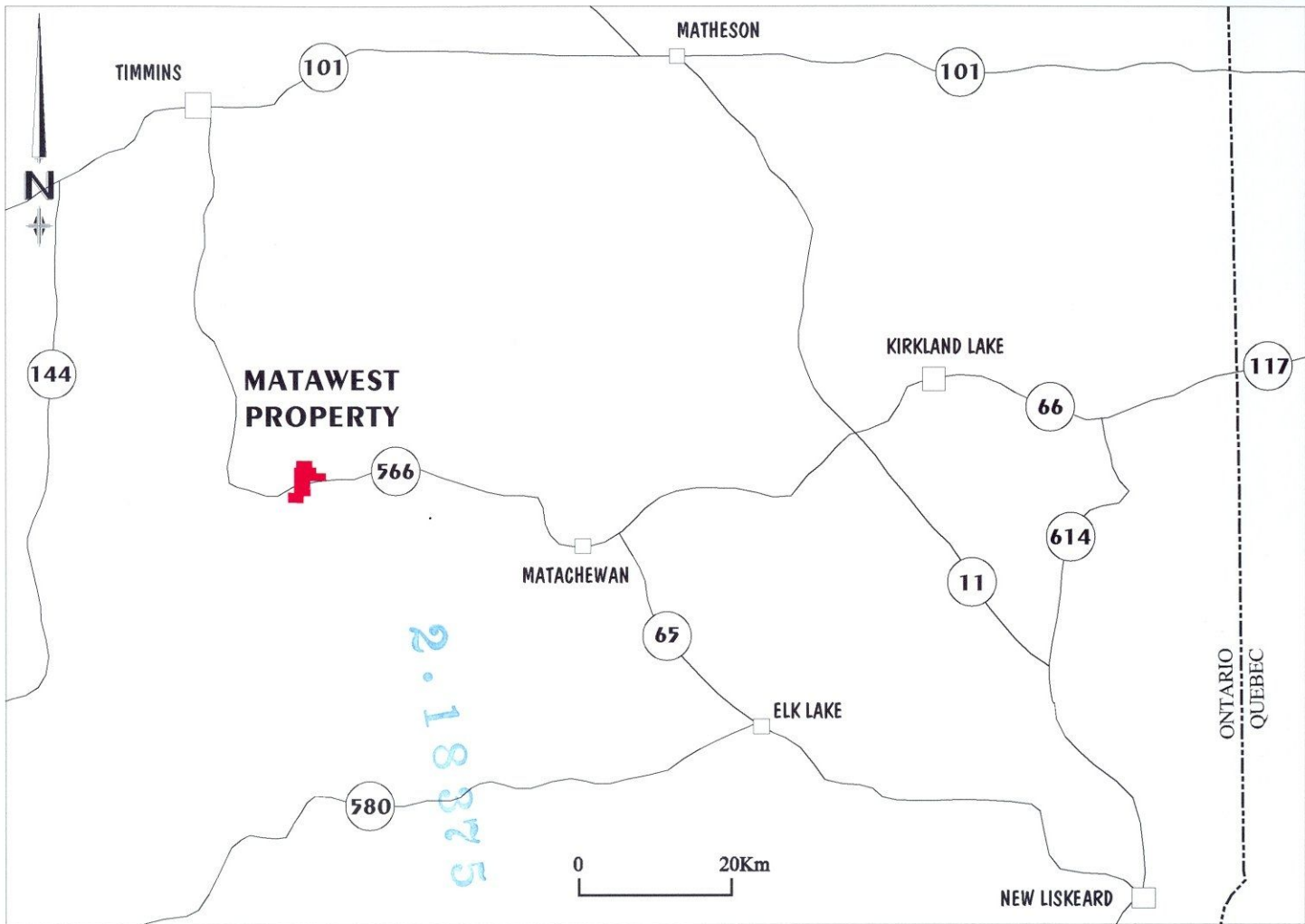
Potential for mineral discoveries is still high and supported by the occurrence of several past-producing mines in the region (Ashley Gold Mine in Bannockburn Twp, Stairs Mine in Midlothian Twp, Young-Davidson and Matachewan Consolidated in Powell Twp) and many gold showings. At present, Royal Oak Mines Inc. is conducting an advanced exploration program in order to re-open the Young-Davidson / Matachewan Consolidated Mines. Last released reserves were 12,44 M tons grading 2,26 g/t Au.

## **2.0 LOCATION, ACCESS**

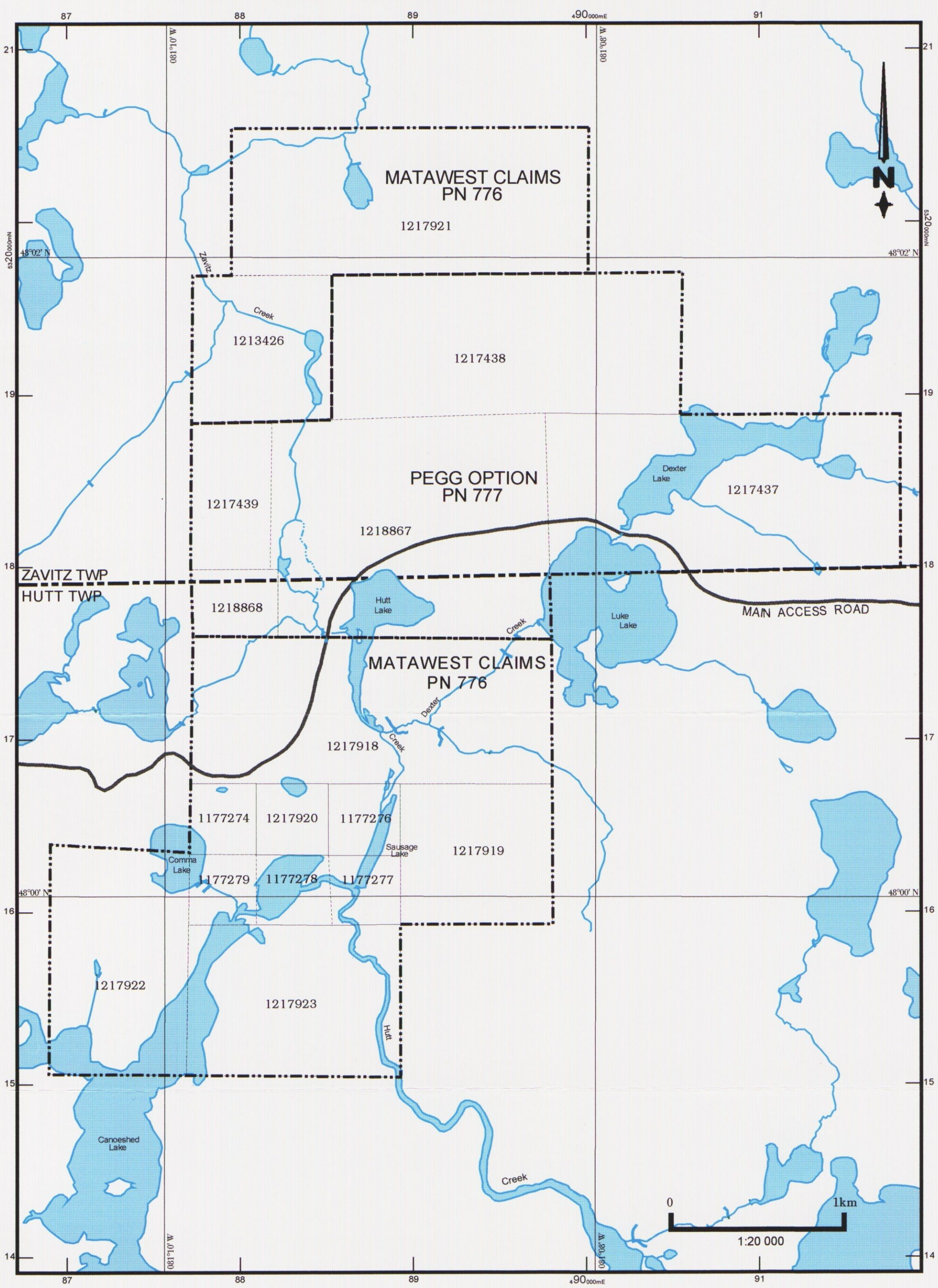
The Matawest Project is located in Zavitz and Hutt townships, N.T.S. 42 A/3 and 41 P/14, approximately 40 kilometres south of Timmins and 35 kilometres west of Matachewan, Ontario (figure 1). Access to the property is provided by logging roads south, from Timmins (Pine Street) and south, from South Porcupine (Forks River road) and west from Matachewan (road 566 and Matachewan road). Whithin the property, the Canoeshed Lake and the Zavitz Creek provide excellent boat access.

## **3.0 PROPERTY STATUS** (Figure 2 and Table 1)

The Matawest property consists of 17 mining claims totalling 81 units (1296 ha). All claims are 100% owned by Inmet Mining Corporation. The property was in part optioned from Dave Meunier, Chris Pegg, Ellen Preston and G.S.W. Bruce and Associates Inc. and purchased from Victor Warford in 1997. The rest of the property was staked by Inmet.



**FIG. 1**  
 LOCATION MAP



**CLAIMS MAP**

Fig. 2

**MATAWEST PROJECTS**

MATAWEST CLAIMS (PN 70-776)  
 PEGG OPTION (PN 70-777)

**TABLE 1**  
**Claims list**

<b>CLAIMS #</b>	<b>UNIT</b>	<b>AREA (ha)</b>	<b>RECORD. DATE</b>	<b>TOWNSHIP</b>
1177274	1	16	08-07-91	Hutt
1177276	1	16	08-07-91	Hutt
1177277	1	16	08-07-91	Hutt
1177278	1	16	08-07-91	Hutt
1177279	1	16	08-07-91	Hutt
1213426	4	64	12-04-96	Zavitz
1217918	10	160	04-02-97	Hutt
1217919	4	64	04-02-97	Hutt
1217920	1	16	04-02-97	Hutt
1217921	10	160	28-02-97	Zavitz
1217922	6	96	28-02-97	Hutt
1217923	6	96	28-02-97	Hutt
1217437	10	160	17-06-96	Zavitz
1217438	10	160	17-06-96	Zavitz
1217439	2	32	17-06-96	Zavitz
1218867	12	192	13-12-96	Zavitz
1218868	1	16	13-12-96	Hutt

**4.0 PREVIOUS WORK** (see Table 2)

Work on the property has consisted of mapping, sampling, prospecting, ground magnetic surveys and minor drilling. Scattered gold anomalies occur within and near the property.



**TABLE 2**  
**Previous work**

<b>Asses. File</b>	<b>Company/Person</b>	<b>Year</b>	<b>Description</b>
<b>Government Work</b>			
N/A	E.G. Bright, Ontario Geological Survey	1968	Preliminary Geological Maps P.491 and P.455 (Zavitz and Hutt twps).
N/A	D.R. Pyke, Ontario geological Survey	1978	Report 171, Map 2345, geology and mineralization in the Peterlong Lake area.
N/A	E.G. Bright, Ontario Geological Survey	1984	Report 231, Maps 2290-91, geology, structure and mineral occurrences of Ferrier Lake-Canoeshed Lake area.
N/A	R.B. Hrabí and H. Helmtaedt, Queen's University (Ontario Geoscience Grants Program, O.G.S)	1990	Miscellaneous Paper 156, Grant 359 Geological and Stratigraphic studies in the Midlothian Lake-Peterlong Lake area.
N/A	Ontario Geological Survey	1990	Maps 81397-398 and 81400-401, airborne Electromagnetic and total intensity magnetic survey.
N/A	M.C. Rogers, Ontario Geological Survey	1995	Preliminary Map 3343, Geological and exploration data compilation of the Grassy River area.
N/A	A.F. Bajc, Ontario Geological Survey	1996	Open File Report 5941. This report provides a framework of quaternary geology using glacial drift analysis in the Peterlong Lake-Radisson Lake area.
N/A	A.F. Bajc, Ontario Geological Survey	1996	Open File Report 5942. This report provides a framework of quaternary geology using glacial drift analysis, lake sediments analysis and lake water sampling in the Peterlong Lake-Radisson Lake area.

**TABLE 2**  
**Previous work**

<b>Industry Related Work</b>			
T-197	M.E. Hurst (Ontario Department of mines), T.S. Vipond and C. Heard	1947	Evaluation Report by Hurst, concerning the Vipond and Heard works on their property (prospecting, trenching and sampling) in Zavitz creek area.. Gold values up to 0,11 oz./T are reported.
T-275	Phelps-dodge Corp. of Canada Ltd.	1965	Two (2) holes, totalling 341 feet (104m), were drilled northwest of Dexter Lake. Hole 65-1 intersected felsic volcanics and volcanoclastites, graphitic tuff/sediments and a diabase dike. Hole 65-2 intersected similar lithologies, mineralized with 10-15% py over 32 feet (9,8m) and 3% py or less over 48 feet (14,6m). No indication of sampling.
T-291	R. Rousseau	1973	Power and hand stripping on the Vipond and Heard gold occurrence (s).
T-1643	Granges Inc.	1974	<p>Airborne Electromagnetic Survey covering Hutt, Zavitz, English, Semple and parts of Beemer and Bartlett townships.</p> <p>Two (2) holes (totalling 276 feet) were drilled in the Canoeshed Lake area. Both holes (Hut-20 and 22) intersected graphitic rocks, mineralized with pyrite (up to 20% over 12 feet). From the seven (7) samples taken, only two (2) were assayed for gold and returned 35ppb Au. Two (2) other holes (#54 and #55) were drilled in the same area. Hole #54 intersected graphitic sedimentary rocks, mineralized with pyrite. Hole #55 intersected a gabbroic intrusive rock (margin of an ultramafic sill?). Total drilled length is unknown.</p>

**TABLE 2**  
**Previous work**

T-292	Vantage Mining Co. Ltd.	1974 1975	Evaluation report, geology, ground based magnetic survey, VLF and one (1) hole drilled (672 feet) in the Zavitz creek area (Vipond and Heard gold occurrence(s)). hole #1 intersected mafic and ultramafic volcanic rocks, intruded by pyritized felsic dikes. Three (3) samples were assayed for gold and returned "nil" values.
T-2687	Essex Minerals Company	1978	Prospection, ground magnetic and EM surveys in the northwestern quadrant of Hutt Township. A 18,2 g/t Au showing was found and stripped. Exact location is not given.
T-299	Geolex Res. Ltd.	1979	Reverse circulation drilling (28 holes) was carried out on the Vipond and Heard gold occurrence(s). 28 basal till samples were taken and gold assay results returned less than 10 ppb Au
T-306	Newmont Exploration of Canada Ltd.	1980	Ground magnetic survey in the Zavitz creek area (Vipond and Heard gold occurrence).
T-3397	Falconbridge Ltd.	1991 1993	Magnetic and HLEM surveys. One (1) hole (345m) was drilled on the north shore of Canoeshed Lake in Hutt Twp. Felsic volcanic rocks and sedimentary rocks, intruded by ultramafic dikes, were intersected.
T-3550	Inco Exploration and Technical Services Inc.	1991 1993	Mapping, sampling and drilling in Hutt and Zavitz twps near Zavitz creek and Canoeshed Lake areas. A small syenite intrusion was mapped and a few gold anomalies were found.
T-3477	G.S.W. Bruce and Halladay Lorne	1992	Prospecting, mapping, rocks and soil sampling in the Comma Lake area (Hutt Twp). Presence of anomalous gold values were highlighted in the Comma lake area.

## **5.0 REGIONAL GEOLOGY**(Figure 3)

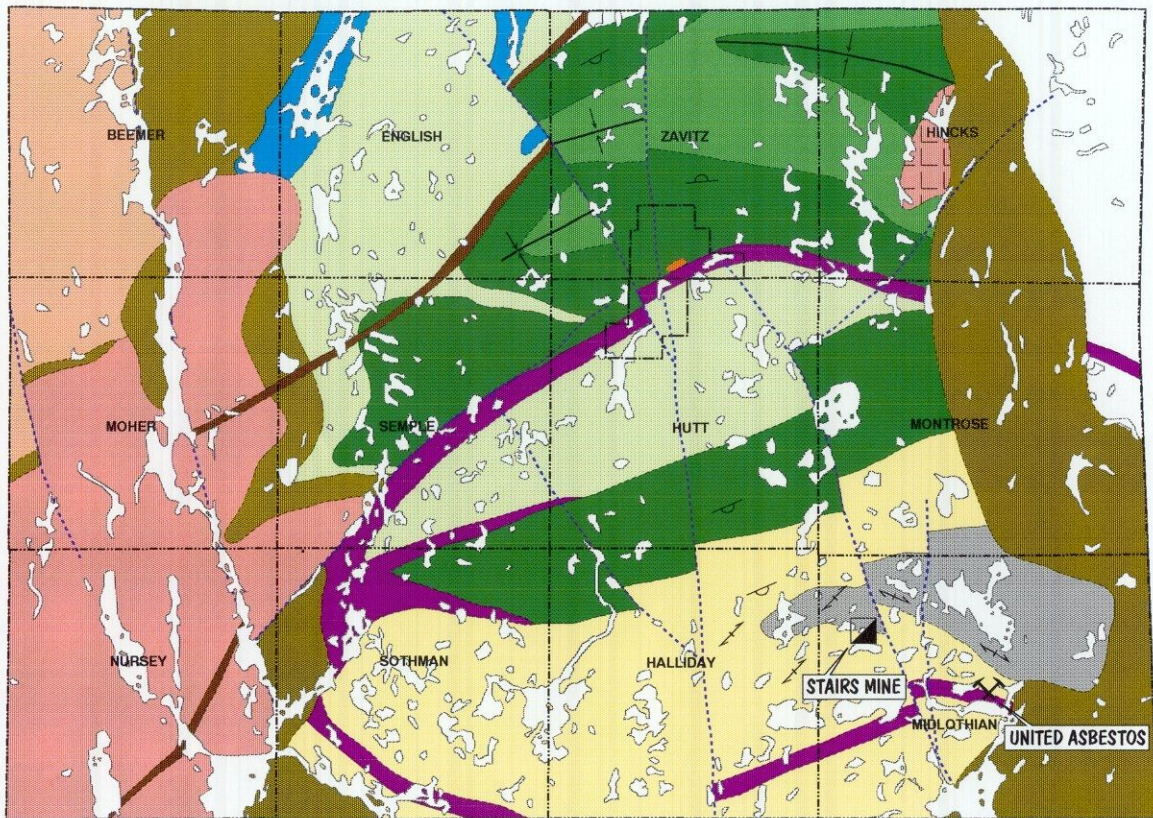
The area is underlain by three cycles of volcanism (Hrabi and Helmstaedt 1990). The oldest cycle consists of a lower sequence of mafic to intermediate metavolcanic rocks of tholeiitic affinity (Beemer assemblage) and an upper sequence of intermediate to felsic metavolcanic rocks of calc-alkalic affinity (English assemblage). Discontinuous units of magnetite rich iron formations are found at several stratigraphic levels in the English assemblage. A sample from that same assemblage yielded a U-Pb zircon date of 2727±1,5Ma (Corfu et al. 1989). That date indicates the English assemblage is one of the oldest in the mapped area.

The second oldest cycle of volcanism consists of magnesium- and iron-rich tholeiitic basalt and ultramafic volcanic rocks (Zavitz-hutt assemblage). This assemblage overlies the English assemblage and the contact between them is marked by a narrow but laterally extensive zone of high strain. This shear might be correlated with the Galer Lake Branch of Cadillac-Larder Lake Break interpreted by L.S. Jensen in Powell, Bannockburn and Montrose townships (Jensen 1996a,b,c). Late ultramafic sills intrude this structural contact. The old age of the English assemblage, compared with most of the metavolcanic rocks of the southern Abitibi Subprovince, is taken as evidence that the Zavitz-hutt assemblage is younger than the English assemblage. In Zavitz Townships, the Zavitz-Hutt assemblage forms an east-plunging syncline with an east- to northeast-trending axial trace. In Semple and Hutt townships, it forms several east- to northeast-trending anticline - syncline pairs. At the southern margin the assemblage faces south and is stratigraphically overlaid by the Halliday assemblage.

The latest volcanic cycle consists predominantly of calc-alkalic intermediate to felsic metavolcanic rocks (Halliday assemblage)). Numerous late ultramafic sills intrude the volcanic package in the southern part of Midlothian and Halliday townships, near the Proterozoic sedimentary rocks of the Gowganda Formation which unconformably overlay the volcanic assemblage. In the northern part of Midlothian Township, the assemblage is marked by widespread iron carbonate alteration and a medium to strong foliation trending northeast. The Halliday assemblage is interpreted as a south-facing homocline lying conformably or disconformably above the Zavitz-Hutt assemblage. In contrast to the English assemblage, there are no units of iron formation in the Halliday package.

The Midlothian assemblage consists of Timiskaming type metasedimentary rocks, similar to those described by Lovell (1967) in the Matachewan area. Common facies include conglomerate, interbedded and cross-bedded sandstone and mudstone. The unit is folded into an upright syncline. The contact with surrounding metavolcanic rocks is poorly exposed and no clear depositional unconformity was ever found.

The Kenogamissi Batholith occupies the west-half of the mapped area and is composed of biotite to hornblende tonalite, granodiorite and diorite. None of the phases of the batholith has been dated so far. Structural relationships, however, indicate that the biotite to hornblende tonalite is the oldest phase and is intruded by the younger granodiorite. The tonalite is highly strained at the contact with the granodiorite and along much of the contact with the metavolcanic rocks. Near the batholith margin, the metavolcanic rocks of the Beemer assemblage are metamorphosed to amphibolite facies and a mafic gneiss is developed where the primary structures are strongly flattened.

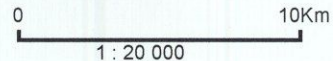


**LEGEND**

- Proterozoic rocks
- Midlothian assemblage
- Timiskaming conglomerate
- Late granodiorite intrusions
- Kenogamissi Batholith
- Granodiorite
- Tonalite
- Muskasenda mafic intrusion

- Halliday assemblage
- Felsic metavolcanics
- Zavitz-Hutt assemblage
- Mg-tholeiitic metavolcanics
- Fe-tholeiitic metavolcanics
- English assemblage
- Interm. to felsic metavolcanics
- Beemer assemblage
- Basalt

- Late UM intrusive
- Diabase dike
- Syenite
- Fold-axial trace(syncline)
- Foliation
- Pillowed lava flow with top from shape



## **6.0 1997 EXPLORATION PROGRAM**

The objectives for the 1997 exploration program were:

- 1) gaining a thorough understanding of the stratigraphy, the lithologies, the style of mineralization and alteration;
- 2) locating the reported gold occurrences;
- 3) finding new gold showings;
- 4) mapping major structures.

To meet these objectives, previous work was reviewed and a field program completed:

### **April and May (intermittent)**

Line cutting (approximately 75 kilometres of baseline, ties-lines and gridlines)

Contractor: Services Exploration Enr. (Rouyn, Québec);

### **April to June (intermittent)**

Ground magnetic Survey (carried out over approximately 75 kilometres of cut lines)

Contractor: Services Exploration Enr. (Rouyn, Québec);

I.P. Survey (carried out over approximately 50 kilometres of cut lines)

Contractors: survey carried out by Rémy Bélanger Géophysique Enr. (Rouyn, Québec) and interpretation made by Gérard Lambert Géosciences (Rouyn, Québec);

### **July 2 to August 15**

Mapping and sampling of the property

Samples analysis: Chemex Laboratories Ltd (Rouyn, Québec) and XRAL Laboratories (Rouyn, Québec)

Geologist: Marc-André Larouche (Inmet)

Technician (student): Benjamin Martel (contract employee).

## **7.0 PROPERTY GEOLOGY** (see appended maps)

### **7.1 LITHOLOGIES**

The property geology can be divided into two (2) distinct volcanic sequences based on whole rock geochemistry. The sequences consist of a Northern Assemblage made of tholeiitic mafic volcanics and ultramafic volcanics (Zavitz-Hutt assemblage), and a Southern Assemblage made of calc-alkaline intermediate to felsic volcanics (English assemblage). The stratigraphy is oriented northeast, in the Comma Lake area, but its orientation changes west of the Wellington Lake fault towards the east, in the Zavitz Creek area. Younging direction is undetermined. Two (2) small syenitic intrusives occur at the contact between the two (2) volcanic assemblages in the middle of the property. Ultramafic sills intrude both volcanic assemblages. The Wellington Lake Fault cut the area in a northwest trend. Lithologies are displaced in an apparent sinistral movement.

## NORTHERN ASSEMBLAGE

The Northern Assemblage consists mainly of pillowed to massive basaltic flows and ultramafic massive flows and volcanoclastites.

The basaltic rocks commonly consist of fine grained, dark green, massive to pillowed flows. Individual pillows have been deformed to the degree that their tops direction can no longer be recognized with confidence. The variolitic facies is present in the northeast half of the property and may form a distinct unit.

The ultramafic volcanics commonly consist of medium grained, dark grey to black massive flows (locally spinifex textured), flow breccia and volcanoclastites. They weather chocolate brown. Polyhedral jointing locally gives the rock a brecciated appearance with subrounded, polyhedral fragments.

## SOUTHERN ASSEMBLAGE

The Southern Assemblage consists mainly of massive (locally pillowed) dacitic flows and volcanoclastites. The dacitic flows are generally light green with a white to light grey weathered surface. Different volcanoclastites (crystal tuff, lapilli tuff and lapilli-block tuff) were mapped.

## INTRUSIVE ROCKS

Several types of intrusions occur on the property. These include mafic to ultramafic sills, diabase dikes, albitite dikes, syenitic intrusions and a small QFP intrusion.

The ultramafic sills occur mainly in the central portion of the property. They are coarse grained and generally featureless. Sometimes they exhibit orthogonal fracture patterns. They are strongly magnetic and are frequently serpentinized.

Two (2) small feldspar porphyritic syenite (magnetic) intrude the contact between the Northern Assemblage and the Southern Assemblage. Plagioclase occurs as phenocrysts (3-4mm) up to 30% rock volume. They have a reddish tint, due to pervasive hematization.

Albitite dikes seem to be closely associated with ultramafic rocks since they mainly intrude the contacts between ultramafic rocks (volcanics and sills) and country rocks. These dikes are medium grey, fine to medium grained and typically have a "sugary" texture. The presence of fuchsitized ultramafic angular inclusions is also common. Their thickness varies from 30 centimetres to more than 5 metres.

Only one (1) diabase dike was mapped in the field. It is strongly magnetic, medium to coarse grained and exhibits poecilitic texture.

## 7.2 STRUCTURE

Deformation level is generally low, except at the contact between the Northern Assemblage and the Southern Assemblage (zone of high strain). This contact does not outcrop on the property but is visible on one (1) outcrop immediately west of Canoeshed Lake, near the powerline (Hutt Township). At this location, a dacitic tuff or porphyry (Southern Assemblage), containing subhedral feldspar is strongly foliated over a thickness of more than five (5) metres. Ultramafic volcanics and intrusives (Northern Assemblage) outcrop a few hundreds metres to the north.

One (1) late northwest trending fault (Wellington Lake Fault) transects the area and displaces the rock units over hundred of metres. Stratigraphic correlations between rock units located on both sides of the structure is uncertain due to the absence of a good marker horizon. Based on the displacement of a large diabase dike, located northwest of the property in English and Zavitz townships, the Wellington Lake Fault has an apparent sinistral displacement of 1600 metres.

Many topographic lineaments suggest the presence of north to northwest trending faults in both volcanic assemblages. These faults do not seem to significantly affect or displace the lithologies.

## 7.3 GEOCHEMISTRY

### 7.3.1 PRIMARY CHARACTERISTICS

#### Volcanic rocks

Analysis for major elements (appendix II) were used to help to classify the lithologies from a geochemical perspective. The AFM diagram (figure 4) shows three (3) distinct groups of rocks falling into the calc-alkaline affinity field (dacitic volcanics from the Southern Assemblage) and the tholeiitic affinity field (basalts and ultramafic volcanics from the Northern Assemblage).

Based on the Jensen Cation Plot (figure 5), volcanic rocks from the Northern Assemblage fall into the basaltic tholeiites field and the ultramafic komatiites field. Those from the Southern Assemblage fall into the intermediate to felsic field.

However, extreme care must be used when using the Jensen Cation Plot with altered samples.

The ultramafic volcanics and basalts were easily recognizable and distinguishable in the field. Ultramafic volcanics also have a typical geochemical signature whereas the geochemical composition of the basaltic volcanics on the property is similar to any basalt elsewhere in the Abitibi subprovince. For these rocks, the Jensen Cation Plot seems adequate.

The geochemical classification of the volcanic rocks of the Southern Assemblage is made difficult



- Basalt
- ▲ UM Flow
- Basalt?
- Dacite

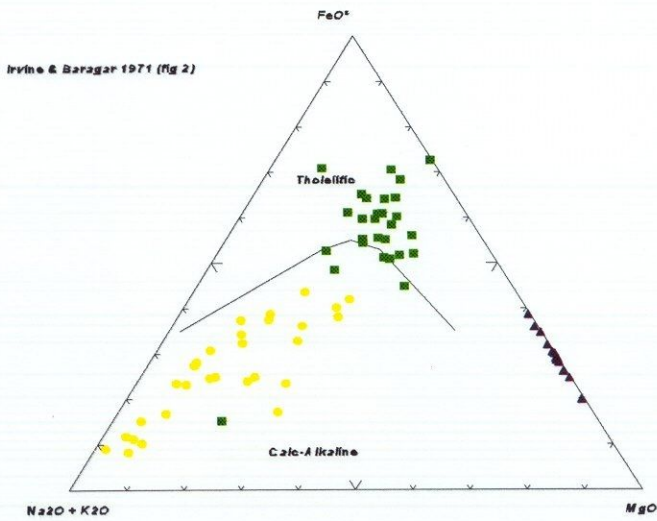
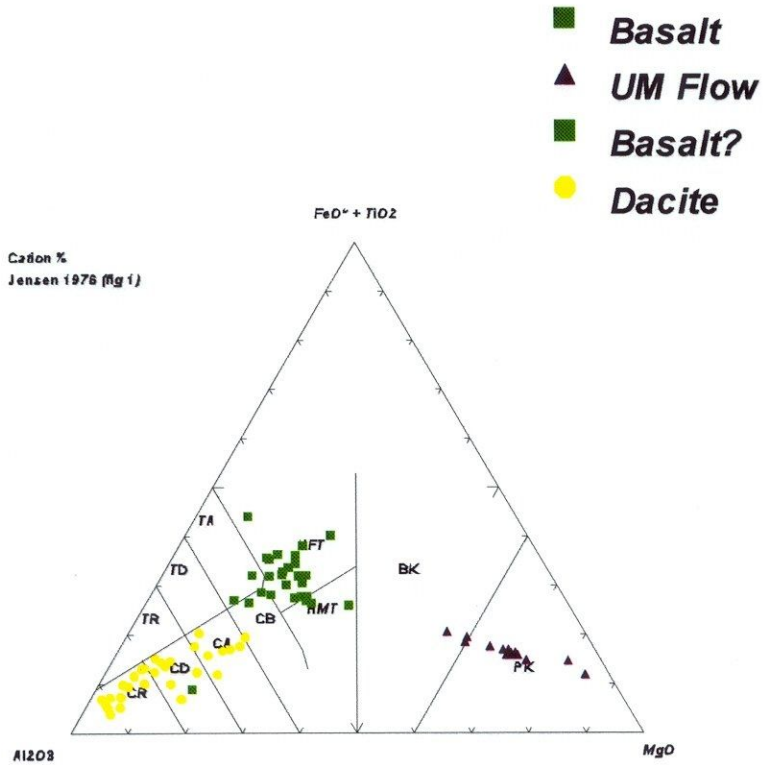


FIGURE 4. AFM diagram (after Irvine and Baragar, 1971)



**FIGURE 5. Jensen Cation Plot (after Jensen, 1976)**

by the presence of variations in the major elements content. The Jensen Cation Plot shows various compositions from andesite to rhyolite. Names given in the field to these rocks also varied from andesite to rhyolite. However, when plotted on a TiO<sub>2</sub> / Zr diagram (figure 6), all those intermediate to felsic rock samples line up along one single trend (constant ratio), indicating these samples have a similar composition and are variably affected by an alteration process. According to that line up, the main composition would be dacitic. Least altered samples, with coherent SiO<sub>2</sub>, TiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> and Zr content, are also dacitic.

### Intrusive rocks

Albitite dikes were recognized within and outside of the property during previous regional evaluation. They all have the same saccharoidal aspect, similar to those found in known mines (e.g. Kerr Addison mine, Matachewan Consol. mine). They show an extremely variable Na<sub>2</sub>O and SiO<sub>2</sub> content ranging from 2% to 8% and from 57% to 79% respectively. Na<sub>2</sub>O and SiO<sub>2</sub> content for those taken on the property during the last mapping program ranged from 2% to 6.5% and 52% to 60% respectively. All those dikes are also characterized by their elevated content in barium suggesting a possible affinity with the syenitic intrusions (similar barium content).

The two (2) small syenitic intrusions are characterized by a Na<sub>2</sub>O content close to 6% and a barium content going up to 2420 ppm.

Ultramafic intrusives are geochemically similar to their extrusive equivalents.

Table 3 shows typical composition for metavolcanic rocks and some intrusions found on the property.

### 7.3.2 ALTERATION

#### -Carbonatization

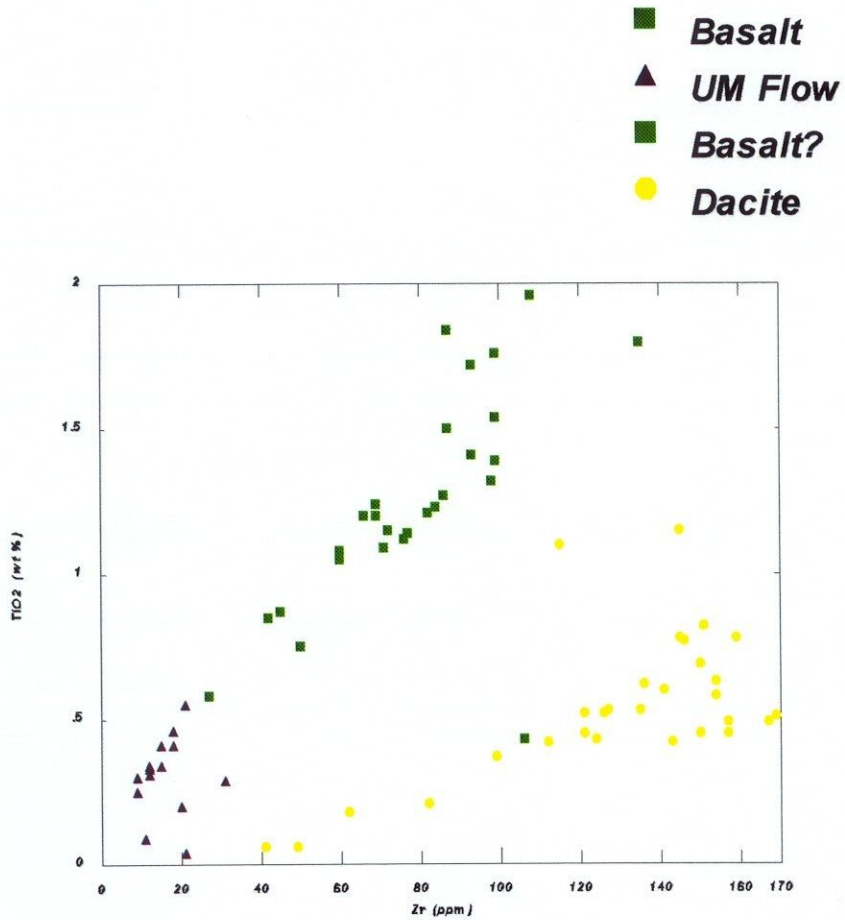
Calcium carbonate alteration is widespread in the basalts of the Northern Assemblage. It occurs as veinlets and/or pervasive alteration.

Strong iron carbonate alteration has been observed in ultramafic flows and in albitite dikes. Ankerite index (CO<sub>2</sub>-CaO) is useful to give an appreciation of the alteration degree (positive value indicates iron carbonate alteration).

#### -Hematization

Strong pervasive hematization has been observed in ultramafic rocks and in the dacitic volcanics of the Hutt Lake and the Sausage Lake areas.

Slight pervasive hematization has been observed in the feldspar porphyritic syenite and in albitite dikes.



**FIGURE 6. Tio2 / Zr diagram.**

TABLE 3. Typical composition

Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Tot. F as % Fe	MgO %	CaO %	Na2O %	K2O %	SiO2 %	TiO2 %	Al2O3 %	MnO %	CO2 % inorg	P2O5 %	LOI %	S % Total	Ba ppm	Zr ppm	Ni ppm	TOTAL %	Mo ppm	As ppm	Sb ppm
Basalt	108	66	2	0.2	5	12.72	5.79	9.25	2.41	0.21	48.9	1.2	13.49	0.22	1.1	0.09	4.02	0.01	40	66	43	99.72	1	2	2
UM Flow	29	14	2	0.2	5	6.16	24.73	4.57	0.11	0.05	48.0	0.09	1.56	0.08	7.20	0.01	11.93	1.23	20	11	1115	97.97	1	144	2
Dacite	38	22	2	0.2	5	3.27	3.68	2.28	5.44	1.59	61.1	0.78	16.08	0.05	1.40	0.18	3.48	0.01	272	145	67	98.27	1	12	2
FP Syenite	12	54	2	0.2	5	3.58	1.21	3.77	5.95	3.25	61.1	0.41	15.29	0.06	2.6	0.28	3.81	0.05	2100	177	13	99.13	1	2	2
Albite dike	40	74	2	0.2	5	4.50	3.23	4.87	4.20	2.45	56.0	0.52	14.51	0.09	6.30	0.27	7.82	0.03	1130	146	38	98.98	1	2	2

#### -Fuchsite

Strong pervasive fuchsite alteration is present in ultramafic volcanics in association with iron carbonate and local albitization .

#### -Silicification

Pervasive silicification occurs in dacitic flows and is counterbalanced by a decrease in aluminium.

#### -Albitization

Pervasive albitization occurs in dacitic volcanics near the Sausage Lake area and northwest of Dexter Lake . This alteration seems to be best developed in the vicinity of the ultramafic sills. The altered rocks have a “porcelain” look. Ultramafic volcanics in the vicinity of Coma Lake are locally affected by this alteration, in combination with iron carbonate alteration. Na<sub>2</sub>O values up to 8,49% were obtained in dacite.

#### -Sericitization

Sericite is developed in dacitic volcanics near the Hutt Lake, where a foliation is present, due to the Wellington Lake Fault.

## **8.0 ECONOMIC GEOLOGY**

A total of 134 samples were analyzed for Au, Zn, Pb, Ag, Mo, As and Sb at Chemex Laboratories in Rouyn-Noranda. Results are shown in Appendix III. Best results are shown in Table 4. Values up to 648 ppb Au were obtained.

Gold occurs in pyritized albitite dikes and pyritized / albitized volcanics (variolithic basalt and ultramafic volcanics?). Pyrite mineralization occurs as fine disseminations (up to 5-10%) often associated with a stockwork of quartz veinlets. Strong iron carbonate alteration is also present in host rocks. Typical examples of this type of mineralization are the Comma Lake Showing (occurrence #5) and the Zavitz Creek Showing (occurrence #1) where gold values up to 405 ppb and 648 ppb were obtained respectively.

On the Vipond's prospect (west of Zavitz Creek), gold values up to 0,11 oz / T are reported in assessment work filed at the Ministry of Northern Development and Mines office in Timmins. Our sampling on that prospect did not permit to find any significant gold mineralization. One drill hole, executed by Vantage Mining, tested this area and did not yield any significant gold mineralization either.

A small gold anomaly also occurs in the syenite, which contains up to 2% disseminated pyrite. The best result is 155 ppb Au. No strong deformation has been observed in association with gold occurrences, although most of them occur close to the sheared contact between the Northern

**Table 4**  
**Au-Best results**

<b>SAMPLE</b>	<b>GOLD (ppb)</b>	<b>DESCRIPTION</b>
<b>Occurrence #1 (Zavitz Creek occurrence)</b>		
42109	648	Albitite dike
42110	570	Albitite dike + qtz vein
<b>Occurrence #2</b>		
42093	425	Albitized variolitic basalt (albitite dike?)
42094	322	idem
<b>Occurrence #3</b>		
42088	440	Albitite dike
42089	245	idem
42091	220	idem
42092	97	idem
<b>Occurrence #4</b>		
42114	135	Qtz vein in altered rock
42115	298	Fuchsitized, albitized and ankeritized rock (ultramafic?)
42116	388	idem
42117	88	idem
<b>Occurrence #5 (Comma Lake occurrence)</b>		
42031	250	Altered ultramafic flow (albite, iron carbonate)
42032	405	idem
42033	190	Qtz vein
42036	210	Altered QFP ? (albite, iron carbonate)
<b>Occurrence #6</b>		
42082	150	Albitized rock (albitite dike?)
42083	331	idem
42086	295	idem + qtz vein

Assemblage and the Southern Assemblage. Albitite dikes seem to occur preferentially within ultramafic volcanics. Pyrite mineralization is common in altered ultramafic but most of the time it is barren in gold. Dacitic volcanics and volcanoclastites are constantly mineralized with disseminations and blebs (up to 2cm in diameter) of barren pyrite (up to 10%). Disseminated pyrite (up to 1%) is locally present in basalts (pillow selvages) but is barren in gold. Also, large euhedral grains, pods, blebs and semi-massive pyrite mineralization is frequently associated with graphitic sedimentary rocks (Granges drilling).

## **9.0 CONCLUSION AND RECOMMENDATIONS**

Most of the gold occurrences found on the property are associated with altered basalts and ultramafic volcanics (intruded by albitite dikes), close to the sheared contact between the Northern Assemblage and the Southern Assemblage. Porphyritic intrusions and ultramafic sills, slightly anomalous in gold, occur locally along that contact.

No economic mineralization was found in the course of the 1997 exploration program. However, several strong I.P. anomalies (chargeability increase) were detected and some of them are coinciding with gold occurrences.

In the next exploration program, it is recommended to test by surface strippings and/or drilling (1000m), selected targets located along I.P. anomalies.



## **10.0 REFERENCES**

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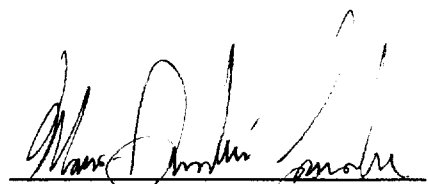
**Assessment Files** - Resident Geologist Office - Timmins, Ontario.

## STATEMENT OF QUALIFICATIONS

I, Marc-André Larouche of 1468 Vézina, Rouyn-Noranda, Québec do hereby certify as follow:

- I am a graduate of Université du Québec à Chicoutimi and hold a Bachelor of Science Degree in Geology (1993).
- I am presently employed on a full time basis with Inmet Mining Corporation (Exploration Division) located at 1300 Saguenay Blvd, Rouyn-Noranda, Québec.
- I have been employed as an exploration geologist on a full time basis since 1993.
- The information contained in this report was obtained on site supervision of the program and a review of all available exploration data.

Dated at Rouyn-Noranda, Québec this 7th day of April, 1998.



Marc-André Larouche  
project Geologist

**APPENDIX I**  
**SAMPLE DESCRIPTION**

OUTCROP	SAMPLE	ROCK TYPE	FACIES	TEXTURES	ALTERATIONS	CONTROL	MINERALIZ.	CONTROL	REMARKS
MAL97-01	Lithor 42301 42109 42110	Basalt Albitite Idem 42109+quartz v.	Pillowed Dike		Calcite+ Ankerite+++	Fractures Pervasive	10% py	Diss.	
MAL97-02	Lithor 42302 42001 42002	Basalt Quartz vein Basalt	Massive Massive		Calcite++	Pervasive	Tr. py ? <1%py 5-7% py	Diss./fractures	3cm thick (+10% basaltic wallrock).
MAL97-03	Lithor 42303 42003 42004	Albitite Idem Lithor 42303 Quartz vein	Dike	3-4% diss. mafic minerals					Quartz vein (2cm thick) in the albitite dike
MAL97-04	Lithor 42304 Lithor 42305 Lithor 42306 Lithor 42307	Basalt UM Idem Lithor 42305 Intermediate	Massive Conglomerate? Dike	60-70% rounded pebbles 20-30% diss. mafic minerals	Chlorite++, calcite++ Chlorite++, talc++	Foliation Foliation			Slightly sheared Matrix sampled Pebbles sampled
MAL97-05	Lithor 42308 42005 42006	Albitite Quartz vein UM	Dike Massive flow	Saccharoid,	Slight hematization		<1%py <1%py	Diss. Diss.	A few quartz veins Quartz vein in the albitite dike
MAL97-06	Lithor 42309	UM	Massive flow		Ankerite++, dolomite++	Stockwork (dol.)			
MAL97-07	Lithor 42310 42007	Basalt Quartz vein	Pillowed		Chlorite++, dolomite+ Calcite+	Fractures			2cm thick
MAL97-08	Lithor 42311	UM	Massive flow		Chlorite++, dolomite++ Tourmaline++	Stockwork (dol.) Veinlets stockwork			Hydrothermal Breccia
MAL97-09	Lithor 42312 Lithor 42313	Brecciated Basalt UM	Flow Breccia		Ankerite++, Fuchsite++ Dolomite veins stockwork?	Pervasive	Tr. py	Diss.	
	Lithor 42314 Lithor 42315 Lithor 42316	Idem Lithor 42313 Idem Lithor 42314 UM	Flow		Chlorite+, Fuchsite, Dol. veins stockwork++.	Pervasive	Tr. py		
	Lithor 42317 42008 42009 42010 42011 42012 42013	UM Quartz vein Quartz vein Quartz vein UM Albitite	Flow Dike	Spinifex					A few quartz veinlets 5cm thick, oriented 348 60 5cm thick, oriented 348 45 oriented 025 30 oriented 050 40 Many quartz (+dolomite?) veinlets (50%). A few small quartz veins.
	42014 42015 42019	Albitite Idem 42014 Albitite	Dike Dike				2-3% py (coarse grained) 1% py (coarse grained)	Diss. Diss.	A few small UM fragments with fuchsite
	42020 42021 42022 42023 42024 42025	Quartz vein Idem 42020 Albitite Idem 42022(+qtz veins) Idem 42022 Quartz vein	Dike Dike		Ankerite++ Fuchsite++		5% py Tr. py 1-2% py 3%py	Diss. Diss.	Quartz veins also sampled (50%) Quartz vein in an albitite dike.
MAL97-10	Lithor 42318	Basalt	Massive		Calcite++	Pervasive, veinlets	Tr. py	Diss.	Quartz vein in an albitite dike. A few quartz veins
MAL97-11	Lithor 42319 42016 42017	Basalt Quartz vein Quartz vein	Pillowed		Calcite++	Pervasive, veinlets			4cm thick 2-3cm thick, 40% basaltic wallrock sampled
MAL97-12	Lithor 42320 42018	Basalt Quartz vein	Pillowed	Variolitic	Bleached locally				
MAL97-16	Lithor 42321	Basalt	Massive		Calcite++	Pervasive, veinlets			

OUTCROP	SAMPLE	ROCK TYPE	FACIES	TEXTURES	ALTERATIONS	CONTROL	MINERALIZ.	CONTROL	REMARKS
	42103	Basalt	Pillowed	Variolitic			1-2% py	Diss.	Coarse grained
	42104	Idem 42103					4-5% py	Diss.	
	42105	Idem 42103			Ankerite+++ , calcite++	Pervasive, veinlets	5-7% py	Diss.	
	42106	Quartz vein							
	42107	Idem 42103?			Ankerite++++, albite+++	Pervasive	1-2% py up to 20% py	Diss. Blebs, diss.	
	42108	Idem 42103							
MAL97-17	Lithor 42322	Basalt	Massive		Calcite++	Pervasive, veinlets	Tr. py		
MAL97-18	Lithor 42323	Dacite	Volcanoclastite?		Silicified ++(basalt?)	Pervasive	<1% py	Diss.	
	42026	Idem Lithor 42323					3-5%py	Diss.	
	42027	Idem 42026					5%py	Diss.	
MAL97-19	Lithor 42324	Monzonite		Feldspar porphyritic (30-40%)	Potassic alt.+++	Pervasive	<1%py	Diss.	Magnetic
	Lithor 42325	Idem Lithor 42324							
	42028	Idem Lithor 42325					2% py	Diss.	
	42029	Quartz vein					3-5% py	Diss.	Quartz vein in monzonite+ pyritized wallrock
MAL97-20	Lithor 42326	Basalt	Massive		Calcite+++	Veinlets			
MAL97-23	Lithor 42327	Basalt	Massive		Chlorite++, Calcite+++	Pervasive			Mafic intrusive?
MAL97-24	Lithor 42328	UM	Flow		Chlorite++, Dolomite++	Stockwork (dol.)			
MAL97-25	Lithor 42329	Basalt	Massive	Dark green tint	Chlorite++, Calcite++		<1%py	Diss.	
MAL97-26	Lithor 42330	Dacite	Massive						
MAL97-27	42030	Monzonite		Feldspar porphyritic (30-40%)	Potassic alt.++	Pervasive			
MAL97-28	Lithor 42331	Basalt	Massive		Calcite+	Pervasive			
MAL97-31	Lithor 42332	Basalt	Massive?	Variolitic			1% py	Diss.	Diss. pyrite associated with a quartz vein wallrock.
MAL97-32	Lithor 42333	Mafic to UM intrusive?			Epidote				
MAL97-34	Lithor 42334	Basalt	Massive?		Chlorite++, Calcite++	Pervasive			
MAL97-35	Lithor 42335	Idem Lithor 42334							
MAL97-36	Lithor 42336	Basalt	Massive		calcite++	Pervasive			
MAL97-37	Lithor 42337	QFP (tonalite?)			Ankerite++	Pervasive	2% py	Diss.	
	Lithor 42338	UM	Flow	Spinifex? remnants	Ankerite++, Dolomite++	Pervasive, Stockwork (dol.)	<1%py	Diss.	
	42031	Albitized UM?	Massive		Ankerite++++	Pervasive	5-7% py	Diss.	
	42032	Idem 42031							
	42033	Quartz vein					Tr. py		Quartz vein in albitized rock, 3cm thick.
	42034	Idem 42033							
	42035	Quartz vein							Quartz vein in albitized QFP?, 10-15cm thick.
	42036	Albitized QFP?(tonalite?)			Ankerite++++	Pervasive	5-7%py	Diss.	
	42037	Quartz vein							Quartz vein in QFP, 10-15cm thick.
	42038	QFP (tonalite?)+Qtz veins			Ankerite+	Pervasive	3-5%py	Diss.	
	42039	Albitized UM?	Massive		Ankerite+	Pervasive	1-3%py	Diss.	
	42040	Quartz vein							Quartz vein in albitized rock.
	42041	Idem 42040					2-3%py	Diss.	
	42042	Idem 42041							
	42043	UM	Flow		Fuchsite+++ , Albite++	Pervasive	2-5%py	Diss.	Blocs (old pit?)
	42044	QFP			Ankerite++	Pervasive	5-10% py	Diss.	Blocs (old pit?)
	42045	UM	Flow	Spinifex? remnants	Fuchsite+++	Pervasive	3-5%py	Diss.	
	42046	Albitized UM?	Massive		Ankerite++	Pervasive	1-5%py	Diss.	
	42047	Quartz vein +wallrock					3-5%py	Diss.	In wallrock
	42048	Idem 42046							
MAL97-38	Lithor 42339	Basalt (mafic intrusive?)	Massive	medium grained	Chlorite?+	Pervasive	Tr. py	Diss.	Quartz vein in rhyodacite.
	42049	Quartz vein							
	42050	Wallrock of the quartz v.					1% py	Diss.	
MAL97-41	Lithor 42340	Rhyodacite	Massive		Calcite+	Fractures	<1%py	Diss.	

OUTCROP	SAMPLE	ROCK TYPE	FACIES	TEXTURES	ALTERATIONS	CONTROL	MINERALIZ.	CONTROL	REMARKS
MAL97-40	Lithor 42341	UM intrusive (peridotite?)			Serpentine+	Fractures?			Strongly magnetic.
MAL97-42	Lithor 42342	Basalt	Massive		Calcite++	Fractures, veinlets			
MAL97-43	42051	Basalt	Massive	Foliated	Calcite++		py (%)?	Small masses	
MAL97-44	Lithor 42343	Basalt	Massive		Calcite++, Chlorite+	Pervasive			
	Lithor 42344	UM intrusive?			Ankerite+, Dolomite+++	Pervasive Stockwork(dol.)	Tr. py		
	Lithor 42345	UM intrusive?		Fine grained					Strongly magnetic.
MAL97-45	Lithor 42346	Albite	Dike		Hematite+	Pervasive	<1%py	Diss.	
	42052	Albite ?	Dike?				1-2% py	Diss.	Many small UM fragments (fuchsitized).
	42053	UM intrusive?			Dolomite+++ , Fuchsite?	Stockwork (dol.)	1%py	Diss.	
MAL97-46	Lithor 42347	Intermediate	Dike	Pale grey tint	Albitized?	Pervasive	<1%py	Diss.	
	42054	UM intrusive?			Ankerite+++ , Dolomite+	Pervasive	1%py	Diss.	
	Lithor 42396	Rhyodacite	Volcanoclastite		Sericite+, Ankerite+	Pervasive			Lapilli-block tuff
MAL97-47	Lithor 42348	Intermediate	Dike		Hematite++	Veinlets, Pervasive			
MAL97-49	Lithor 42349	Basalt	Massive		silica+, sericite++	Pervasive (sil.)			
	Lithor 42350	UM intrusive			chlorite+, fuchsite loc.	foliation (ser, chl, fu)			Not magnetic
	Lithor 42351	Basalt	Massive		Chlorite				
	Lithor 42352	UM intrusive			Silica++				Many small quartz veins with hematized wallrocks.
	Lithor 42353	Idem Lithor 42352			Hematite++, talc, chlorite				
	Lithor 42354	Albite	Dike		Hematite++++				
	Lithor 42355	Altered rock			Hematite+, ankerite?	Pervasive	<1%py	Diss.	Many small UM fragments (fuchsitized).
	Lithor 42356	Basalt?	Massive		Hematite+++ , sericite++	Pervasive, foliation			Strongly foliated N312 90
	Lithor 42378	Dacite	Massive		Silica+++	Pervasive			Foliated
	42055	Basalt	Massive		Sericite+	Foliation	15-20% py	Veinlets, blebs	Quartz vein in basalt.
	42056	Quartz vein							
	42057	Basalt	Massive		Silica++, ankerite?	Pervasive	2% py (coarse gr.)	Diss.	Foliated.
	42058	Basalt?	Massive		Calcite++	Pervasive	Rusty (% py?)		
	42059	Gossan							
MAL97-51	Lithor 42357	Basalt	Volcanoclastite						Strongly foliated (N 315 68).
MAL97-52	Lithor 42358	FP	Dike	40-50% feldspar phenocrystals	Ankerite++	Pervasive			
	Lithor 42359	Altered rock			hematite++, ankerite++ sericite+	Pervasive	<1% py	Diss.	Many small quartz and calcite veinlets. Slightly foliated (N325 90), many small fuchsitized UM fragments.
MAL97-53	Lithor 42360	Intermediate	Dike	5% biotite(?) crystals (1mm)					
	Lithor 42361	Basalt, dacite?	Massive		Silica++, ankerite++	Pervasive			Many quartz veins.
	42060	Quartz vein							
MAL97-54	Lithor 42362	Albite	Dike		Hematite++, ankerite?	Pervasive	<1%py	Diss.	Many small UM fragments (fuchsitized).
	Lithor 42363	Albitized rock	Dike?		silica++?, ankerite++	Pervasive			A few quartz veins.
	Lithor 42364	Albitized rock (basalt?)	Dike?		Ser+	Foliation			Slightly foliated N320 90
	Lithor 42365	UM	Flow		Albite++, silica?, ankerite++	Pervasive			
	Lithor 42366	UM	Flow		Albite++++	Pervasive			A few quartz veinlets.
	Lithor 42367	Basalt, dacite?	Massive?		Albite++++, ankerite+	Pervasive	<1%py	Diss.	
	Lithor 42379	Albitized rock					<1%py	Diss.	
	Lithor 42380	Albitized rock			Silica++?, ankerite++	Pervasive			Many quartz veinlets.
	42061	Albite	Dike		Hematite++	Pervasive	Tr. py	Diss.	A few quartz veinlets.
	42062	Hematized rock (basalt?)			Hematite+++ , bleaching	Pervasive	15-20% py	Veinlets, blebs	
	42063	Idem 42062							
	42064	Hematized rock (basalt?)	Dike?						
	42065	Albitized rock (basalt?)	Dike?				1-2% fine py	Diss.	A few quartz veinlets.

OUTCROP	SAMPLE	ROCK TYPE	FACIES	TEXTURES	ALTERATIONS	CONTROL	MINERALIZ.	CONTROL	REMARKS
	42066	Quartz vein							Quartz vein in albitized rock.
	42067	Albitized rock (basalt?)	Dike?						A few quartz veinlets.
	42068	UM	Flow		Fuchsite++	Pervasive	2-3% py	Diss.	A few quartz veinlets.
	42069	UM	Flow		Albite++++	Pervasive	1% fine py	Diss.	
	42073	Albite	Dike		Hematite+, ankerite+	Pervasive	<1% py	Diss.	
	42074	Idem 42073							
	42075	UM	Flow		Fuchsite++, ankerite+, albite+.	Pervasive	2-5%py	Diss.	
	42076	Albite	Dike		Hematite+, ankerite+	Pervasive	<1% py	Diss.	Many small UM fragments (fuchsitized).
	42077	Albitized rock							
	42078	UM	Flow		Fuchsite++, albitized++	Pervasive	1%py	Diss.	A few quartz veinlets.
	42079	Albite	Dike		Hematite+, ankerite+	Pervasive	<1% py	Diss.	
	42080	Albite	Dike		Hematite+, ankerite+	Pervasive	3-5% py	Diss.	
	42081	UM	Flow		Fuchsite+++., albitized+	Pervasive	5%py	Diss.	A few quartz veinlets.
	42082	Albitized rock	Dike?				5-10%py	Diss.	Many small quartz veinlets.
	42083	Idem 42082							
	42084	Quartz vein							
	42085	Quartz vein							
	42086	Quartz vein and albitized rock.					5%py	Diss.	
MAL97-56	Lithor 42369	UM intrusive			Serpentine+	Veinlets			Strongly magnetic
MAL97-57	Lithor 42368	Basalt (dacite?)	Massive?		Silica++	Pervasive			
MAL97-59	42070	UM intrusive					<1%py	Diss.	
MAL97-62	Lithor 42370	silicified rock (basalt?)							
MAL97-65	Lithor 42372	Rhyodacite	Massive				1%py	Blebs	Boulder?
	Lithor 42374	Altered rock	Massive		Ankerite++++, sericite++				
	Lithor 42375	Idem Lithor 42372							
	42071	Idem Lithor 42372					3-5%py	Blebs	
	42072	Idem 42071							
MAL97-66	Lithor 42371	Basalt	Flow breccia?		Calcite++				
MAL97-67	Lithor 42373	Basalt	Pillowed?		Silica++				
MAL97-68	Lithor 42376	Rhyodacite	Massive						
MAL97-69	Lithor 42377	Strongly foliated rock			Silica+, sericite+	Pervasive (sil.)			
		Dacite?				Foliation (ser.)			
MAL97-72	Lithor 42381	Dacite	Pillowed		Calcite+	Veinlets			
MAL97-73	Lithor 42382	Basalt	Massive?		Calcite	Veinlets			
MAL97-76	42087	UM intrusive		Fine to medium grained					Strongly magnetic.
MAL97-77	Lithor 42384	Idem MAL97-76							
MAL97-78	Lithor 42383	Rhyodacite	Massive				Tr. py	Diss.	
MAL97-79	Lithor 42385	Dacite	Massive		Calcite++	Veinlets			
MAL97-80	Lithor 42386	Basalt	Massive		Calcite++	Veinlets			
MAL97-83	Lithor 42387	Basalt	Pillowed		Silica++, calcite+	Pervasive			
	42088	Albite	Dike		Ankerite++++	Pervasive	5-7%py	Diss.	Many small UM fragments (fuchsitized).
	42089	Idem 42088							
	42090	Basalt	Pillowed		Silica++	Pervasive	5-7%py (coarse gr.)	Diss.	
	42091	Idem 42088							
	42092	Idem 42088							
MAL97-85	Lithor 42395	Syenite		Aphyric, reddish tint, medium grained	Ankerite+		Tr-1% py	Diss.	
	42130	Albite?	Dike		Ankerite++	Pervasive	1-2% py	Diss.	
	42131	Idem Lithor 42395							
	42093	Albite	Dike?		Ankerite+++	Pervasive	10%py	Diss.	

OUTCROP	SAMPLE	ROCK TYPE	FACIES	TEXTURES	ALTERATIONS	CONTROL	MINERALIZ.	CONTROL	REMARKS
MAL97-87	42094	Idem 42093	Dike						
MAL97-88	42095	Albite	Pillowed	Variolitic	Ankerite+++	Disseminated	2%py	Diss.	
MAL97-88	42096	Basalt					2-3%py	Diss.	
MAL97-94	42097	UM	Flow		Fuchsite+++ ank.++++	Pervasive	1-2% py	Associated with dolomite veins	
	42098	UM	Flow		Albite+++ ankerite+++	Pervasive	3-5%py	Diss.	
MAL97-95	42099	Idem 42098					2-4%py	Diss.	
	42100	Albite	Dike		Ankerite++	Pervasive	2-3%py	Diss.	A few quartz veinlets.
	42101	UM?	Flow		ankerite+, albite+	Pervasive	1-3%py	Blebs	A few calcite and dolomite veinlets.
MAL97-96	Lithor 42388	Basalt	Pillowed		Silica++				
MAL97-102	42102	Basalt	Massive?				py	Blebs	
MAL97-103	Lithor 42389	Basalt	Massive?		Silica++, calcite+++	Pervasive			
MAL97-105	Lithor 42390	UM Intrusive		Fine grained, strongly magnetic.	Serpentine+				
	42111	Dacite	Lapilli-bloc tuff				1-5% py	Diss.	
	42112	Idem 42111					7-10% py	Diss.	
MAL97-106	Lithor 42391	Intermediate dike					1-2% py	Diss.	
	42113	Dacite	Lapilli-bloc tuff	Strongly altered	ankerite++++, calcite++	Pervasive	<1%py	Diss.	
	42114	Quartz vein							
	42115	UM	Flow?		Albite+++ fuchsite++, ankerite++++	Pervasive	5-10% py	Diss.	
	42116	Idem 42115					2-4% py	Diss.	
	42117	Idem 42115							
	42118	Idem 42117							
	42119	UM	Flow?	Foliated	Fuchsite+++ calcite++	Pervasive	3-5% py	Diss.	
	42120	Idem 42119			Qtz v.				
	42121	Albitized rock			Ankerite+++ a few Qtz v.		1-2% py	Diss.	
	42122	UM	Flow?		Albite++, fuchsite++, ankerite++, calcite++		1-2%py	Diss.	
MAL97-107	42123	Idem 42122+qtz veinlets					<1% py	Diss.	
	Lithor 42392	Intermediate intrusive		Feldspar porphyritic			1-2% py	Diss.	
MAL97-108	42124	Idem Lithor 42392					1% py	Diss.	
	42125	Basalt	Pillowed		Silica++		5% py	Diss.	Py. disseminated in selvages.
	42126	Idem 42125							
	42127	Quartz vein							
	42128	Idem Lithor 42393					3-5% py	Diss.	
MAL97-109	Lithor 42393	Basalt	Massive		Silica++, ankerite+	Pervasive	1-2% py	Diss.	
	Lithor 42394	Basalt	Massive		Silica++, ankerite+	Pervasive	<1% py	Diss.	
	42129	Basalt	Pillowed		Silica+		2% py	Diss.	
MAL97-112	42132	UM	Flow?		Ankerite+++ fuchsite++ dolomite++++	Pervasive	2-4% py	Diss.	
MAL97-113	42133	Albite	Dike		Ankerite++	Pervasive	1-2% py	Diss.	
MAL97-114	42134	Dacite	Flow				1-2% py	Diss.	



**APPENDIX II**

**LITHOGEOCHEMICAL ANALYSIS**

Lithochemical analysis

SAMPLE NO.	UTM EAST	UTM NORTH	Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Tot. F as % Fe	MgO %	Tot. F/Tot. F+MgO	CaO %	Na2O %	K2O %	SiO2 %	TiO2 %	Al2O3 %	MnO %	CO2 % inorg	P2O5 %	LOI %	S % Total	Ba ppm	Zr ppm	Ni ppm	TOTAL %	Mo ppm	As ppm	Sb ppm	Ank Index CO2-CaO
GX42386	490238.218	5318275.85	Dacite	1	54	2	0.2	5	5.26	3.79	0.58	1.74	6.01	0.96	60.9	0.78	15.75	0.08	0.20	0.18	2.05	0.01	232	159	60	98.09	1	2	2	-1.54
GX42387	489748.517	5318753.44	Basalt	108	70	2	0.2	5	9.76	5.60	0.64	12.05	1.84	0.22	43.3	0.75	12.17	0.32	8.20	0.06	12.33	0.01	72	50	52	99.48	1	2	2	-3.85
GX42388	489526.157	5320030.38	Basalt	56	72	2	0.2	5	12.14	5.80	0.68	6.17	3.82	0.13	51.6	1.14	12.41	0.30	1.50	0.10	3.91	0.04	30	77	42	98.63	1	2	2	-4.67
GX42389	489744.056	5320060.3048	Basalt	106	84	2	0.2	5	10.18	5.88	0.63	5.5	3.69	0.11	50.4	1.27	13.67	0.19	3.7	0.11	7.21	0.03	67	86	58	99.33	1	2	2	-1.8
GX42393	490001.212	5318968.94	Basalt	108	104	36	0.2	5	10.45	4.84	0.68	6.99	6.02	0.26	52.0	1.23	14.80	0.37	0.80	0.11	2.44	0.11	225	84	64	100.85	1	2	2	-8.19
GX42394	489977.859	5318954.26	Basalt	78	90	2	0.2	5	10.47	3.16	0.77	7.28	3.34	0.17	52.0	1.09	13.18	0.34	5.70	0.09	7.71	0.16	67	71	35	100.00	1	2	2	-1.58
GX42396	489180.756	5317757.77	Basalt?	1	6	2	0.2	5	1.88	2.36	0.44	8.52	0.88	7.48	53.7	0.43	13.3	0.09	9	0.13	10.39	0.01	674	106	6	99.18	1	2	2	0.48
GX42303	488443.768	5319079.55	Albite dike	17	24	2	0.2	5	2.58	1.18		5.41	3.57	2.96	60.3	0.5	15.12	0.08	4.2	0.22	5.85	0.4	1280	150	11	98.05	1	2	2	-1.21
GX42307	488482.629	5319249.01	Albite dike	1	82	2	0.2	5	5.57	6.88		2.14	6.49	0.44	52.5	0.96	16.91	0.05	1.8	0.57	5.04	0.15	5180	150	31	98.12	1	2	2	-0.54
GX42308	488416.126	5319237.66	Albite dike	44	26	2	0.2	5	3.19	3.96		5.6	2.9	3.99	52.7	0.56	15.08	0.07	8.3	0.27	10.08	0.03	780	156	21	98.75	1	2	2	2.7
GX42324	488574.552	5318233.39	FP Syenite	9	42	2	0.2	5	3.85	1.61		3.28	5.54	3.35	59.6	0.46	15.11	0.09	4.1	0.31	5.26	0.08	2420	165	9	98.97	1	2	2	0.84
GX42325	488508.381	5318229.92	FP Syenite	12	54	2	0.2	5	3.58	1.21		3.77	5.95	3.25	61.1	0.41	15.29	0.06	2.6	0.28	3.81	0.05	2100	177	13	99.13	1	2	2	-1.17
GX42337	487925.266	5316285.66	QFP	6	42	2	0.2	25	2.29	1.74		3.86	4.03	1.49	68.4	0.26	11.95	0.09	5.00	0.24	5.47	0.34	517	93	15	100.04	1	2	2	1.14
GX42346	488973.61	5317858.14	Albite dike	1	26	2	0.2	5	3.14	2.32		4.59	4.86	2.85	57.7	0.73	15.08	0.06	5.90	0.43	6.71	0.16	1920	174	6	98.79	1	2	2	1.31
GX42347	489113.479	5317736.63	Albite dike	6	42	2	0.2	5	4.21	4.16		4.88	3.04	2.99	55.8	0.76	14.15	0.10	6.20	0.42	7.88	0.07	661	183	46	98.47	1	2	2	1.52
GX42348	488983.818	5316664.29	Albite dike	40	74	2	0.2	5	4.50	3.23		4.87	4.20	2.45	56.0	0.52	14.51	0.09	6.30	0.27	7.82	0.03	1130	146	38	98.98	1	2	2	1.43
GX42354	488615.575	5317432.41	Albite dike	100	36	2	0.2	5	3.68	3.12		5.66	2.18	3.60	56.7	0.58	13.89	0.07	8.20	0.38	9.05	0.18	917	158	36	99.30	1	2	2	2.54
GX42358	489236.14	5316882.15	FP dike	26	66	2	0.2	5	5.54	3.72		5.01	3.18	3.13	53.7	0.56	14.89	0.09	6.60	0.35	8.31	0.06	663	152	47	99.09	1	2	2	1.59
GX42360	489399.455	5318102.77	Albite dike	86	66	2	0.2	5	6.05	6.73		9.53	3.16	0.32	41.9	0.72	10.12	0.16	12.80	0.67	14.52	0.14	96	166	90	98.60	1	2	2	3.27
GX42362	488805.06	5318343.33	Albite dike	10	48	2	0.2	5	5.07	4.60		6.43	4.56	1.73	52.1	0.70	12.92	0.11	8.60	0.41	9.72	0.22	201	164	108	98.90	1	2	2	2.17
GX42391	490064.109	5318679.28	Albite dike	5	24	4	0.2	5	2.32	1.54		1.57	3.86	3.04	68.0	0.44	15.69	0.03	0.90	0.24	2.99	0.21	737	168	10	99.98	1	2	2	-0.67
GX42392	490056.396	5318746.73	FP interm. intrus	8	30	18	0.2	5	1.33	0.72		1.98	5.52	2.19	70.0	0.26	16.07	0.03	1.20	0.11	2.50	0.11	985	144	14	100.85	1	2	2	-0.78
GX42395	488800.189	5318891.64	Aphy. Syenite	34	80	8	0.2	5	5.12	2.94		4.88	5.19	1.96	56.0	0.46	15.40	0.10	4.80	0.32	6.65	0.25	4970	194	31	98.59	1	2	2	-0.08
GX42344	488789.749	5317855.28	UM Intrusive	13	28	2	0.2	5	5.66	13.71		13.04	0.01	0.04	39.3	0.21	4.84	0.25	19.00	0.03	22.07	0.01	20	24	630	98.79	1	2	2	5.96
GX42345	488803.211	5317858.17	UM Intrusive	136	104	2	0.2	5	12.62	6.60		5.55	2.69	0.38	48.7	1.37	14.07	0.14	1.80	0.18	5.14	0.15	132	121	71	98.80	1	6	2	-3.95
GX42350	488542.838	5317526.94	UM Intrusive	54	78	2	0.2	5	7.86	15.56		6.05	0.15	0.08	43.9	0.50	10.17	0.20	7.90	0.27	13.62	0.02	54	103	293	99.27	1	6	2	1.85
GX42352	488543.495	5317488.49	UM Intrusive	1	18	2	0.2	5	6.88	24.23		6.87	0.05	0.06	32.4	0.14	2.84	0.14	17.40	0.01	24.97	0.10	46	10	639	99.42	1	2	2	10.53
GX42353	488541.495	5317480.19	UM Intrusive	9	12	2	0.2	5	3.64	14.11		16.91	0.01	0.04	34.7	0.08	2.14	0.24	25.70	0.02	27.31	0.01	20	10	582	99.58	1	2	2	8.79
GX42389	489187.113	5318612.54	UM Intrusive	112	78	2	0.2	5	12.10	4.48		5.67	3.49	0.49	50.8	1.28	13.82	0.20	2.20	0.12	4.56	0.03	207	97	57	98.32	1	2	2	-3.47
GX42384	491196.73	5318335.04	UM Intrusive	17	30	2	0.2	5	10.82	31.90		1.74	0.44	0.10	37.1	0.19	3.09	0.14	1.00	0.03	11.85	0.01	20	13	1280	98.55	1	12	2	-0.74

Lithochemical analysis

SAMPLE NO.	UTM EAST	UTM NORTH	Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Tot. F as % Fe	MgO %	Tot. F/Tot. F+MgO	CaO %	Na2O %	K2O %	SiO2 %	TiO2 %	Al2O3 %	MnO %	CO2 % Inorg	P2O5 %	LOI %	S % Total	Ba ppm	Zr ppm	Ni ppm	TOTAL %	Mo ppm	As ppm	Sb ppm	Ank Index CO2-CaO
GX42301	488284.54	5318717.85	Basalt	91	98	2	0.2	5	12.93	5.05	0.72	8.32	2.01	0.1	45.1	1.2	12.5	0.38	5.9	0.11	9.38	0.07	20	69	61	98.51	1	6	2	-2.42
GX42302	488420.882	5318985.9	Basalt	94	100	2	0.2	5	8.15	3.65	0.69	7.98	1.96	1.21	50.9	1.76	12.81	0.31	6.2	0.14	8.89	0.17	340	99	28	98.49	1	2	6	-1.78
GX42304	488442.936	5319099.99	Basalt	5	148	2	0.2	5	17.89	8.62	0.73	8.06	0.01	0.05	40.2	1.05	11.27	0.41	6.4	0.09	11.41	0.01	20	60	65	98.81	1	2	2	-1.68
GX42305	488469.092	5319255.74	UM Flow	55	40	2	0.2	5	9.05	23.08	0.28	6.29	0.07	0.04	38.2	0.34	6.09	0.18	8.9	0.06	15.08	0.02	20	12	456	99.5	1	2	2	2.61
GX42306	488469.092	5319255.74	UM Flow	51	48	2	0.2	5	9.84	22.94	0.30	6.55	0.01	0.03	35.8	0.41	6.4	0.17	8.2	0.04	15.57	0.02	20	15	556	98.6	1	2	2	2.65
GX42309	488310.125	5318396.22	UM Flow	202	50	2	0.2	5	9.75	24.3	0.29	5.84	0.14	0.06	42.3	0.34	7.16	0.14	0.5	0.01	7.87	0.01	20	15	1200	98.98	1	2	2	-5.34
GX42310	488159.315	5320506.78	Basalt	53	106	2	0.2	5	12.26	3.56	0.77	6.95	1.89	1.12	48.3	1.54	12.91	0.2	5	0.22	8.31	0.14	200	99	32	98.67	1	2	2	-1.95
GX42311	488180.252	5319459.28	UM Flow	63	50	2	0.2	5	10.2	21.62	0.32	8.55	0.06	0.06	41.6	0.41	7.54	0.2	1.6	0.04	7.96	0.01	20	18	711	99.39	1	2	2	-6.95
GX42312	488169.973	5319450.48	Basalt?	85	40	2	0.2	5	9.67	8.01	0.55	9.46	4	0.15	52.5	0.58	10.86	0.19	0.7	0.04	1.65	0.17	80	27	1820	98.39	1	2	2	-8.76
GX42313	488225.427	5319251.39	UM Flow	25	44	2	0.2	5	7.33	20.69	0.26	4.86	0.01	0.16	34.5	0.25	4.71	0.14	17.3	0.01	25.81	0.01	20	9	825	99.28	1	2	2	12.44
GX42314	488233.952	5319267.26	UM Flow	23	58	2	0.2	5	10.27	19.32	0.35	5.41	0.02	0.04	35.1	0.46	8.91	0.17	10.8	0.03	18.35	0.08	20	18	432	99.21	1	2	2	5.39
GX42315	488207.33	5319265.22	UM Flow	36	56	2	0.2	5	8.58	19.58	0.30	6.28	0.04	0.06	33.8	0.31	5.88	0.13	17.5	0.03	23.81	0.05	20	12	866	99.16	1	2	2	11.24
GX42316	488227.227	5319215.12	UM Flow	14	48	2	0.2	5	8.01	19.87	0.29	6.02	0.01	0.04	36.2	0.3	5.38	0.14	17.9	0.01	23.21	0.01	120	9	752	99.82	1	2	2	11.88
GX42317	488261.457	5319212.92	UM Flow	41	74	2	0.2	5	10.86	17.18	0.39	6.66	0.05	0.06	38.5	0.55	9.34	0.15	9.8	0.04	16.44	0.01	80	21	395	99.02	1	2	4	3.14
GX42318	488356.19	5319520.88	Basalt	113	68	2	0.2	5	10.28	8.8	0.60	9.03	2.6	0.09	50.4	0.87	13.25	0.2	1.4	0.07	4.38	0.02	40	45	77	99.11	1	2	2	-7.63
GX42319	488364.637	5319629.34	Basalt	77	50	2	0.2	5	11.28	5.71	0.66	9.76	3.14	0.31	50.1	1.06	12.57	0.25	2.5	0.11	4.39	0.02	80	60	44	99.97	1	2	2	-7.26
GX42320	488602.859	5320003.27	Basalt	91	108	2	0.2	5	13.55	4.94	0.73	7.31	2.37	0.29	49	1.5	12.43	0.25	2.9	0.11	6.19	0.15	40	87	35	99.42	1	2	2	-4.41
GX42321	487977.899	5318563.1	Basalt	13	82	2	0.2	5	13.05	5.1	0.72	5.92	3.21	0.09	48.7	1.41	14.37	0.24	1.1	0.14	4.84	0.01	40	93	58	98.28	1	2	2	-4.82
GX42322	487978.59	5318854.76	Basalt	45	158	2	0.2	5	11.72	3.68	0.76	4.85	2.59	0.26	53.2	1.96	12.82	0.26	3.1	0.16	6.11	0.09	120	108	19	98.94	1	2	2	-1.75
GX42323	488583.735	5318149.02	Dacite	29	88	2	0.2	5	3.19	0.95	0.77	2.74	5.94	1.3	63.4	0.6	16.43	0.11	1.7	0.14	3.26	0.09	500	141	247	98.4	1	22	2	-1.04
GX42326	488595.269	5318365.92	Basalt	74	68	2	0.2	5	7.96	2.85	0.74	6.13	3.01	1.29	54.4	1.24	13.74	0.2	4.3	0.1	7.46	0.01	280	69	41	99.26	1	2	2	-1.83
GX42327	488599.477	5318587.25	Basalt	85	90	2	0.2	5	10.19	6.19	0.62	8.52	2.7	0.97	47.4	1.08	12.99	0.23	4.1	0.1	7.37	0.09	480	60	165	98.6	1	2	2	-4.42
GX42328	488600.066	5319659.99	UM Flow	75	44	2	0.2	5	8.94	22.88	0.28	9.17	0.07	0.06	40.7	0.33	5.78	0.15	3	0.03	9.53	0.06	20	12	1195	98.63	1	2	2	-6.17
GX42329	488816.735	5319918.77	Basalt	58	104	2	0.2	5	14.67	1.89	0.89	4.99	3.97	0.18	52.8	1.8	12.25	0.22	2.4	0.18	4.26	0.04	20	135	12	98.88	1	2	2	-2.59
GX42330	488779.723	5318058.89	Dacite	26	52	2	0.2	5	2.23	0.86	0.72	4.65	4.04	2.49	60.4	0.53	17.24	0.08	3.4	0.11	5.29	0.01	480	135	25	98.15	1	2	2	-1.25
GX42331	488773.202	5318498.36	Basalt	118	66	2	0.2	5	10.27	6.37	0.62	7.92	2.94	0.27	48.5	0.85	13.13	0.31	3.7	0.06	7.18	0.06	100	42	54	98.9	1	2	2	-4.22
GX42332	488752.055	5319533.51	Basalt	94	148	2	0.2	5	15.14	5.32	0.74	6.56	1.63	0.06	46.8	1.72	12.47	0.29	3.5	0.13	7.59	0.13	20	83	26	99.16	1	2	2	-3.06
GX42333	488772.176	5319786.73	Basalt	108	66	2	0.2	5	12.72	5.79	0.69	9.25	2.41	0.21	48.9	1.2	13.49	0.22	1.1	0.09	4.02	0.01	40	66	43	99.72	1	2	2	-8.15
GX42334	488959.788	5318849.6	Basalt	133	88	2	0.2	5	11.09	5.21	0.68	6.99	2.58	0.12	50.3	1.39	13.68	0.2	2.6	0.12	6.33	0.01	40	99	47	99.22	1	2	2	-4.39
GX42335	489084.501	5319921.34	Basalt	100	64	2	0.2	5	11.04	4.02	0.73	6.68	2.79	0.65	49.9	1.15	13.18	0.24	3.9	0.09	7.16	0.02	140	72	59	98.12	1	2	2	-2.78
GX42336	489176.549	5318806.15	Basalt	142	150	2	0.2	5	12.5	5.04	0.71	1.92	2.03	0.96	54.3	1.84	13.41	0.1	0.9	0.11	5.12	0.16	220	87	39	98.73	1	2	2	-1.02
GX42338	487998.369	5318209.01	UM Flow	47	30	2	0.2	5	6.45	15.76	0.29	14.12	0.05	0.05	34.8	0.20	4.04	0.18	21.10	0.03	23.58	0.27	20	20	524	99.79	1	2	2	6.98
GX42339	488034.631	5316446.83	Basalt	108	108	2	0.2	5	12.03	4.83	0.71	5.75	2.71	0.61	48.7	1.32	13.65	0.37	3.60	0.11	6.88	0.14	112	98	46	98.34	1	6	2	-2.15
GX42340	488578.018	5317759.77	Dacite	10	28	2	0.2	10	1.36	0.45	0.75	2.13	3.69	3.47	68.5	0.45	15.43	0.03	1.40	0.11	2.30	0.25	488	121	23	98.08	1	36	2	-0.73
GX42342	488681.198	5317579.1	Dacite	27	52	2	0.2	5	4.18	2.65	0.81	5.84	2.87	1.89	59.5	0.52	14.17	0.06	4.70	0.13	6.66	0.03	362	121	58	98.83	1	2	2	-1.14
GX42343	488783.125	5317640.92	Dacite	45	66	2	0.2	5	4.68	3.13	0.60	5.54	1.64	2.22	60.2	0.52	14.16	0.08	4.20	0.11	6.67	0.06	298	126	59	99.44	1	2	2	-1.34
GX42349	488550.657	5317512.07	Dacite	15	36	2	0.2	5	2.45	1.98	0.55	2.40	3.75	2.09	67.4	0.42	15.48	0.04	2.00	0.12	3.27	0.07	501	112	61	99.68	1	2	2	-0.4
GX42351	488550.881	5317481.71	Dacite	13	36	2	0.2	5	2.74	0.84	0.77	2.58	2.54	2.79	69.1	0.49	13.64	0.09	1.70	0.11	3.36	0.01	486	157	7	98.53	1	4	2	-0.88
GX42355	488608.695	5317354.41	Dacite	1	10	2	0.2	25	1.48	2.40	0.38	3.89	1.23	3.50	64.5	0.43	14.73	0.09	5.70	0.12	7.26	0.30	853	124	16	99.81	1	2	2	1.81
GX42356	488588.273	5317293.68	Dacite	7	64	2	0.2	5	3.65	1.59	0.70	2.73	2.35	2.16	64.8	0.51	14.97	0.05	3.40	0.10	5.19	0.79	323	169	19	98.54	1	2	2	0.67
GX42357	488603.142	5318246.81	Dacite	1	58	2	0.2	5	5.21	2.34	0.89	7.12	2.15	2.25	54.2	0.63	16.08	0.13	5.30	0.12	8.09	0.01	284	154	44	98.93	1	2	2	-1.82
GX42359	488228.723	5316999.32	Dacite	48	20	2	0.2	5	3.01	1.80	0.65	5.92	4.90	2.80	55.3	1.10	18.01	0.08	6.90	0.15	7.16	0.44	903	115	28	98.19	1	54	2	0.98
GX42361	489408.727	5318093.53	Dacite	9	32	2	0.2	5	1.03	0.21	0.83	0.73	0.74	9.38	72.2	0.37	12.61	0.03	0.50	0.09	0.77	0.28	1550	99	10	98.24	1	6	2	-0.23
GX42363	488823.631	5316341.59	Dacite	2	6	2	0.2	5	0.85	0.84	0.57	1.44	8.49	0.29	70.1	0.06	14.90	0.05	2.00	0.08	1.88	0.18	63	49	6	98.83	1	2	2	0.56
GX4236																														

**APPENDIX III**

**GOLD AND BASE METAL ANALYSIS**

SAMPLE NO.	UTM EAST	UTM NORTH	Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Mo ppm	As ppm	Sb ppm
42001	488420.88	5318985.90	Qtz v.	12	16	2	0.2	5	1	2	2
42002	488418.65	5318995.71	Basalt	46	106	2	0.2	5	1	2	2
42003	488443.77	5319079.55	Albitite dike	3	26	2	0.2	5	1	2	2
42004	488443.77	5319079.55	Qtz v. in alb. dik	1	26	2	0.2	5	1	2	2
42005	488416.13	5319237.66	Qtz v. in alb. dik	22	24	2	0.2	5	1	2	2
42006	488423.99	5319223.44	UM Flow	40	56	2	0.2	5	1	2	2
42007	488164.19	5320513.94	Qtz v.	47	72	2	0.2	35	1	38	2
42008	488225.43	5319251.39	Qtz v.	8	30	2	0.2	5	1	2	2
42009	488245.49	5319250.42	Qtz v.	17	44	2	0.2	5	1	2	2
42010	488233.95	5319267.26	Qtz v.	6	22	2	0.2	5	1	2	2
42011	488224.44	5319284.25	Qtz v.	13	22	2	0.2	5	1	2	2
42012	488261.46	5319212.92	UM Flow	78	62	2	0.2	5	1	2	2
42013	488289.65	5319220.44	Albitite dike	49	48	2	0.2	5	1	2	2
42014	488312.42	5319217.22	Albitite dike	42	54	2	0.2	5	1	2	2
42015	488207.72	5319242.22	Albitite dike	57	58	2	0.2	5	1	2	2
42016	488326.64	5319739.00	Qtz v.	6	14	2	0.2	5	1	2	2
42017	488305.74	5319785.65	Qtz v.	28	70	2	0.2	5	1	2	2
42018	488590.19	5320006.53	Qtz v.	3	16	2	0.2	5	1	2	2
42019	488307.01	5319196.58	Albitite dike	17	36	2	0.2	5	1	2	2
42020	488307.01	5319196.58	Qtz v.	2	10	2	0.2	5	1	2	2
42021	488307.01	5319196.58	Qtz v.	2	20	2	0.2	5	1	2	2
42022	488280.23	5319183.41	Albitite dike	83	36	6	0.2	5	1	2	2
42023	488255.80	5319170.86	Albitite dike	194	36	2	0.2	75	1	2	2
42024	488233.31	5319163.56	Albitite dike	19	44	2	0.2	25	1	2	2
42025	488233.31	5319163.56	Qtz v.	7	24	2	0.2	5	1	2	2
42026	488583.74	5318149.02	Dacite	29	70	2	0.2	5	1	10	2
42027	488589.81	5318146.44	Dacite	16	44	2	0.2	5	1	12	2
42028	488574.55	5318233.39	Syenite	7	20	4	0.2	5	1	2	2
42029	488508.59	5318223.95	Qtz v. in syenite	1	22	4	0.2	155	1	2	2
42030	488777.16	5318183.42	Syenite	3	68	2	0.2	5	1	2	2
42031	487995.31	5316282.53	UM Flow	115	68	4	0.2	250	1	12	2
42032	487995.31	5316282.53	UM Flow	122	112	2	0.2	405	1	6	2
42033	487995.31	5316282.53	Qtz v.	6	20	2	0.2	190	1	4	2
42034	487995.31	5316282.53	Qtz v.	5	62	2	0.2	15	1	2	2
42035	487980.67	5316283.06	Qtz v.	4	36	2	0.4	35	1	2	2
42036	487980.67	5316283.06	QFP?	94	78	2	0.2	210	5	2	2
42037	487925.27	5316285.66	Qtz v. in QFP	6	14	2	0.2	5	1	2	2
42038	487925.27	5316285.66	Qtz v. in QFP	6	44	2	0.2	10	1	2	2
42039	487990.81	5316234.19	UM Flow	102	136	2	0.2	5	2	2	2
42040	487990.81	5316234.19	Qtz v.	4	26	2	0.2	10	1	2	2
42041	487990.81	5316234.19	Qtz v.	134	138	2	0.2	50	14	4	2
42042	487990.81	5316234.19	Qtz v.	143	212	2	0.2	5	5	2	2
42043	488011.89	5316203.35	UM Flow	46	24	2	0.2	5	1	2	2
42044	488011.89	5316203.35	QFP	70	14	8	0.2	15	1	2	2
42045	488016.91	5316179.87	UM Flow	6	24	2	0.2	5	1	10	2
42046	488029.39	5316209.66	UM Flow	103	182	2	0.2	5	1	56	2
42047	488029.39	5316209.66	Qtz v.	70	126	2	0.2	5	1	18	2
42048	488029.39	5316209.66	UM Flow	100	70	2	0.2	30	9	26	2
42049	488578.02	5317759.77	Qtz v.	2	6	2	0.2	5	1	4	2
42050	488578.02	5317759.77	Qtz v. wall	13	38	2	0.2	5	1	2	2
42051	488641.43	5317580.57	Dacite	32	72	10	0.8	20	2	90	2
42052	488959.82	5317648.92	Dacite	32	28	2	0.2	20	1	2	2
42053	488980.49	5317650.72	UM intrusive?	35	42	2	0.2	5	1	2	2
42054	489113.38	5317725.05	Albitite dike	1	10	2	0.2	5	1	2	2
42055	488578.53	5317535.47	Dacite	104	38	8	0.4	25	2	46	2
42056	488544.40	5317494.04	Qtz v. in dacite	4	14	2	0.2	5	1	10	2
42057	488537.58	5317478.79	Dacite	1	70	2	0.2	35	1	2	2
42058	488617.77	5317417.59	Dacite?	42	4	6	0.2	40	2	30	2
42059	488615.97	5317379.07	Oxidized zone	14	10	26	0.4	85	23	228	2
42060	489399.46	5318102.77	Qtz v.	4	12	2	0.2	5	1	4	2
42061	488831.69	5316385.01	Albitite dike	30	52	2	0.2	10	1	2	2
42062	488861.35	5316379.74	Dacite	66	114	8	0.2	20	1	32	2

SAMPLE NO.	UTM EAST	UTM NORTH	Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Mo ppm	As ppm	Sb ppm
42063	488861.35	5316379.74	Dacite	53	120	4	0.2	20	1	26	2
42064	488861.35	5316379.74	Dacite?	38	136	2	0.2	5	1	6	2
42065	488836.20	5316394.61	Dacite?	4	12	2	0.2	5	3	8	2
42066	488882.34	5316423.53	Qtz v.	15	16	2	0.2	5	1	10	2
42067	488879.20	5316408.63	UM Flow	23	34	2	0.2	5	1	60	2
42068	488891.37	5316428.91	UM Flow	53	28	2	0.2	5	1	208	2
42069	488969.92	5316519.27	UM Flow	35	8	2	0.2	40	1	10	2
42070	489280.92	5318925.38	UM Intrusive	135	96	2	0.2	5	1	2	2
42071	488464.81	5315593.59	Dacite	26	48	2	0.2	5	1	10	2
42072	488446.78	5315559.86	Dacite	74	70	10	0.2	5	1	28	2
42073	488808.91	5316328.62	Albitite dike	10	26	2	0.2	20	1	2	2
42074	488799.34	5316318.16	Albitite dike	24	30	2	0.2	5	1	6	2
42075	488799.34	5316318.16	UM Flow	183	40	2	0.2	5	5	50	2
42076	488803.23	5316293.74	Albitite dike	9	20	2	0.2	20	1	2	2
42077	488808.73	5316304.63	Dacite?	7	12	2	0.2	5	5	10	2
42078	488796.50	5316280.44	UM Flow	189	28	2	0.2	5	23	2	2
42079	488784.59	5316266.51	Albitite dike	4	26	2	0.2	5	1	2	2
42080	488784.59	5316266.51	Albitite dike	42	34	2	0.2	5	1	12	2
42081	488737.65	5316179.70	UM Flow	56	44	2	0.2	5	4	10	2
42082	488737.65	5316179.70	Albitite dike?	296	38	2	0.2	150	1	2	2
42083	488737.65	5316179.70	Albitite dike?					331			
42084	488737.65	5316179.70	Qtz v.	4	14	2	0.2	5	2	2	2
42085	488737.65	5316179.70	Qtz v.	20	12	2	0.2	5	1	2	2
42086	488737.65	5316179.70	tz v. +alb. roc	118	24	2	0.2	295	2	2	2
42087	491183.33	5318263.46	UM Intrusive	27	128	70	0.2	5	1	38	2
42088	489752.04	5318751.87	Albitite dike	16	56	8	1	440	1	2	2
42089	489752.04	5318751.87	Albitite dike	13	60	10	0.8	245	1	2	2
42090	489752.04	5318751.87	Basalt	92	50	2	0.2	5	1	2	2
42091	489752.04	5318751.87	Albitite dike	9	52	8	0.6	220	1	2	2
42092	489752.04	5318751.87	Albitite dike					97			
42093	489739.75	5318902.55	Albitite dike?	98	54	2	0.2	425	1	2	2
42094	489739.75	5318902.55	Albitite dike?					322			
42095	489630.76	5318904.30	Albitite dike	8	18	2	0.2	25	1	2	2
42096	489553.29	5319000.72	Basalt	61	98	2	0.2	5	1	2	2
42097	489514.61	5319611.66	UM Flow	36	30	2	0.2	35	1	2	2
42098	489522.59	5319610.81	UM Flow	56	58	2	0.2	5	1	2	2
42099	489536.27	5319610.27	UM Flow	38	40	2	0.2	40	1	2	2
42100	489487.40	5319935.14	Albitite dike	7	24	2	0.2	180	1	2	2
42101	489487.40	5319935.14	Basalt	89	52	2	0.2	5	1	2	2
42102	489752.47	5319793.42	Basalt	864	92	2	0.2	50	1	4	2
42103	487965.24	5318479.78	Basalt					1			
42104	487965.24	5318479.78	Basalt					2			
42105	487962.88	5318487.17	Basalt					4			
42106	487962.36	5318494.53	Qtz v.					5			
42107	487955.24	5318501.50	Basalt					2			
42108	487969.74	5318468.32	Basalt					28			
42109	488284.75	5318743.52	Albitite dike					647			
42110	488284.75	5318743.52	Alb. dike+qtz v.					570			
42111	490007.81	5318456.78	Dacite					15			
42112	490007.81	5318456.78	Dacite					5			
42113	489997.39	5318617.80	Dacite					2			
42114	489997.39	5318617.80	Qtz v.					135			
42115	489995.26	5318637.77	UM Flow?					298			
42116	489995.26	5318637.77	UM Flow?					388			
42117	490005.20	5318655.61	UM Flow?					88			
42118	489990.32	5318646.10	UM Flow?					14			
42119	490027.80	5318652.76	UM Flow?					35			
42120	490027.80	5318652.76	UM Flow?					10			
42121	490052.98	5318661.49	UM Flow?					5			
42122	490050.54	5318674.98	UM Flow?					12			
42123	490064.11	5318679.28	UM Flow?					26			
42124	489972.97	5318815.15	Interm. Intrusive					31			

SAMPLE NO.	UTM EAST	UTM NORTH	Rock Type	Cu ppm	Zn ppm	Pb ppm	Ag ppm	Au ppb FA+AA	Mo ppm	As ppm	Sb ppm
42125	489972.97	5318815.15	Basalt					13			
42126	489962.09	5318856.04	Basalt					31			
42127	489962.09	5318856.04	Qtz v.					10			
42128	490001.21	5318868.94	Basalt					9			
42129	489952.38	5319006.75	Basalt					12			
42130	489816.95	5318902.14	Albitite dike?					16			
42131	489800.19	5318891.64	Syenite					10			
42132	487714.76	5318503.72	UM Flow					50			
42133	487722.28	5318722.57	Albitite dike					32			
42134	488806.00	5317517.12	Dacite	79	8	2	0.2	5	1.00	4.00	2.00

**APPENDIX IV**  
**CERTIFICATES OF ANALYSIS**





# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul, Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Page Number :1-A  
Total Pages :1  
Certificate Date: 03-AUG-97  
Invoice No. : I9733393  
P.O. Number :  
Account : HYA

Project : 703-70-608-776  
Comments: ATTN MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9733393

SAMPLE	PREP CODE	Al2O3 % XRF	CaO % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42301	208 294	12.50	8.32	14.37	0.10	5.05	0.38	2.01	0.11	45.11	1.20	9.36	98.51	12.93	20
GX42302	208 294	12.61	7.98	9.06	1.21	3.65	0.31	1.96	0.14	50.92	1.76	8.89	98.49	8.15	340
GX42303	208 294	15.12	5.41	2.87	2.96	1.18	0.08	3.57	0.22	60.29	0.50	5.85	98.05	2.58	1260
GX42304	208 294	11.27	8.08	19.66	0.05	6.62	0.41	0.01	0.09	40.16	1.05	11.41	98.81	17.69	< 20
GX42305	208 294	6.09	6.29	10.06	0.04	23.08	0.18	0.07	0.06	38.23	0.34	15.06	99.50	9.05	20
GX42306	208 294	6.40	6.55	10.94	0.03	22.94	0.17	< 0.01	0.04	35.55	0.41	15.57	98.60	9.84	< 20
GX42307	208 294	16.91	2.14	6.19	0.44	6.88	0.05	6.49	0.57	52.45	0.96	5.04	98.12	5.57	5180
GX42308	208 294	15.08	5.60	3.55	3.99	3.96	0.07	2.90	0.27	52.69	0.56	10.08	98.75	3.19	780
GX42309	208 294	7.16	5.84	10.84	0.06	24.30	0.14	0.14	0.01	42.28	0.34	7.87	98.98	9.75	20
GX42310	208 294	12.91	6.95	13.63	1.12	3.56	0.20	1.89	0.22	48.34	1.54	8.31	98.67	12.26	200
GX42311	208 294	7.54	8.55	11.34	0.06	21.62	0.20	0.06	0.04	41.61	0.41	7.96	99.39	10.20	< 20
GX42312	208 294	10.86	9.46	10.97	0.15	8.01	0.19	4.00	0.04	52.48	0.58	1.65	98.39	9.87	80
GX42313	208 294	4.71	4.86	8.15	0.16	20.69	0.14	< 0.01	0.01	34.50	0.25	25.81	99.28	7.33	< 20
GX42314	208 294	8.91	5.41	11.41	0.04	19.32	0.17	0.02	0.03	35.09	0.46	18.35	99.21	10.27	< 20
GX42315	208 294	5.88	6.26	9.51	0.06	19.58	0.13	0.04	0.03	33.55	0.31	23.81	99.16	8.56	< 20
GX42316	208 294	5.38	6.02	8.90	0.04	19.67	0.14	< 0.01	< 0.01	36.16	0.30	23.21	99.82	8.01	120
GX42317	208 294	9.34	6.66	12.07	0.06	17.18	0.15	0.05	0.04	36.48	0.55	16.44	99.02	10.86	80
GX42318	208 294	13.25	9.03	11.43	0.09	6.80	0.20	2.60	0.07	50.39	0.87	4.38	99.11	10.28	40
GX42319	208 294	12.57	9.76	12.54	0.31	5.71	0.25	3.14	0.11	50.13	1.06	4.39	99.97	11.28	60
GX42320	208 294	12.43	7.31	15.06	0.29	4.94	0.25	2.37	0.11	48.97	1.50	6.19	99.42	13.55	40
GX42321	208 294	14.37	5.92	14.50	0.09	5.10	0.24	3.21	0.14	48.66	1.41	4.64	98.28	13.05	40
GX42322	208 294	12.82	4.85	13.02	0.26	3.68	0.26	2.59	0.16	53.23	1.96	6.11	98.94	11.72	120
GX42323	208 294	16.43	2.74	3.54	1.30	0.95	0.11	5.94	0.14	63.39	0.60	3.26	98.40	3.19	500
GX42324	208 294	15.11	3.26	4.39	3.35	1.61	0.09	5.54	0.31	59.59	0.46	5.26	98.97	3.95	2420
GX42325	208 294	15.29	3.77	3.98	3.25	1.21	0.06	5.95	0.28	61.12	0.41	3.81	99.13	3.58	2100
GX42326	208 294	13.74	6.13	8.85	1.29	2.85	0.20	3.01	0.10	54.39	1.24	7.46	99.26	7.96	260
GX42327	208 294	12.69	8.52	11.32	0.97	6.19	0.23	2.70	0.10	47.43	1.08	7.37	98.60	10.19	460
GX42328	208 294	5.76	9.17	9.94	0.06	22.88	0.15	0.07	0.03	40.71	0.33	9.53	98.63	8.94	< 20
GX42329	208 294	12.25	4.99	16.30	0.18	1.89	0.22	3.97	0.18	52.84	1.80	4.26	98.88	14.67	20
GX42330	208 294	17.24	4.65	2.48	2.49	0.86	0.08	4.04	0.11	60.38	0.53	5.29	98.15	2.23	480
GX42331	208 294	13.13	7.92	11.41	0.27	6.37	0.31	2.94	0.06	48.46	0.85	7.18	98.90	10.27	100
GX42332	208 294	12.47	6.56	16.83	0.06	5.32	0.29	1.63	0.13	46.56	1.72	7.59	99.16	15.14	< 20
GX42333	208 294	13.49	9.25	14.14	0.21	5.79	0.22	2.41	0.09	48.90	1.20	4.02	99.72	12.72	40
GX42334	208 294	13.68	6.99	12.32	0.12	5.21	0.20	2.58	0.12	50.28	1.39	6.33	99.22	11.09	40
GX42335	208 294	13.18	6.68	12.27	0.65	4.02	0.24	2.79	0.09	49.89	1.15	7.16	98.12	11.04	140
GX42336	208 294	13.41	1.92	13.89	0.96	5.04	0.10	2.03	0.11	54.31	1.84	5.12	98.73	12.50	220

CERTIFICATION:



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Page Number :1-B  
 Total Pages :1  
 Certificate Date: 03-AUG-97  
 Invoice No. :I9733393  
 P.O. Number :  
 Account :HYA

Project : 703-70-608-776  
 Comments: ATTN MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9733393

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42301	208 294	69	5.9	0.07	< 5	< 0.2	6	91	< 1	< 2	2	98	61		
GX42302	208 294	99	6.2	0.17	< 5	< 0.2	2	94	< 1	< 2	6	100	26		
GX42303	208 294	150	4.2	0.40	< 5	< 0.2	< 2	17	< 1	< 2	< 2	24	11		
GX42304	208 294	60	6.4	< 0.01	< 5	< 0.2	< 2	5	< 1	< 2	< 2	148	65		
GX42305	208 294	12	8.9	0.02	< 5	< 0.2	< 2	55	< 1	< 2	2	40	456		
GX42306	208 294	15	9.2	0.02	< 5	< 0.2	< 2	51	< 1	< 2	2	48	556		
GX42307	208 294	150	1.6	0.15	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	82	31		
GX42308	208 294	156	8.3	0.03	< 5	< 0.2	< 2	44	< 1	< 2	< 2	26	21		
GX42309	208 294	15	0.5	0.01	< 5	< 0.2	< 2	202	< 1	< 2	< 2	50	1200		
GX42310	208 294	99	5.0	0.14	< 5	< 0.2	< 2	53	< 1	< 2	< 2	106	32		
GX42311	208 294	18	1.6	< 0.01	< 5	< 0.2	< 2	63	< 1	< 2	2	50	711		
GX42312	208 294	27	0.7	0.17	< 5	< 0.2	< 2	85	< 1	< 2	< 2	40	1820		
GX42313	208 294	9	17.3	0.01	< 5	< 0.2	< 2	25	< 1	< 2	< 2	44	825		
GX42314	208 294	18	10.8	0.08	< 5	< 0.2	< 2	23	< 1	< 2	< 2	58	432		
GX42315	208 294	12	17.5	0.05	< 5	< 0.2	< 2	36	< 1	< 2	< 2	56	866		
GX42316	208 294	9	17.9	0.01	< 5	< 0.2	< 2	14	< 1	< 2	< 2	48	752		
GX42317	208 294	21	9.8	< 0.01	< 5	< 0.2	< 2	41	< 1	< 2	4	74	395		
GX42318	208 294	45	1.4	0.02	< 5	< 0.2	< 2	113	< 1	< 2	< 2	68	77		
GX42319	208 294	60	2.5	0.02	< 5	< 0.2	< 2	77	< 1	< 2	< 2	50	44		
GX42320	208 294	87	2.9	0.15	< 5	< 0.2	< 2	91	< 1	< 2	< 2	108	35		
GX42321	208 294	93	1.1	< 0.01	< 5	< 0.2	< 2	13	< 1	< 2	2	82	58		
GX42322	208 294	108	3.1	0.09	< 5	< 0.2	< 2	45	< 1	< 2	< 2	158	19		
GX42323	208 294	141	1.7	0.09	< 5	< 0.2	22	29	< 1	< 2	< 2	88	247		
GX42324	208 294	165	4.1	0.08	< 5	< 0.2	< 2	9	< 1	< 2	< 2	42	9		
GX42325	208 294	177	2.6	0.05	< 5	< 0.2	< 2	12	< 1	2	< 2	54	13		
GX42326	208 294	69	4.3	0.01	< 5	< 0.2	< 2	74	< 1	< 2	< 2	68	41		
GX42327	208 294	60	4.1	0.09	< 5	< 0.2	< 2	85	< 1	< 2	< 2	90	165		
GX42328	208 294	12	3.0	0.06	< 5	< 0.2	< 2	75	< 1	< 2	< 2	44	1195		
GX42329	208 294	135	2.4	0.04	< 5	< 0.2	< 2	58	< 1	< 2	< 2	104	12		
GX42330	208 294	135	3.4	0.01	< 5	< 0.2	< 2	26	< 1	< 2	< 2	52	25		
GX42331	208 294	42	3.7	0.06	< 5	< 0.2	< 2	118	< 1	< 2	< 2	66	54		
GX42332	208 294	93	3.5	0.13	< 5	< 0.2	2	94	< 1	< 2	< 2	148	26		
GX42333	208 294	66	1.1	0.01	< 5	< 0.2	< 2	108	< 1	< 2	< 2	66	43		
GX42334	208 294	99	2.6	0.01	< 5	< 0.2	< 2	133	< 1	< 2	< 2	88	47		
GX42335	208 294	72	3.9	0.02	< 5	< 0.2	< 2	100	< 1	< 2	< 2	64	59		
GX42336	208 294	87	0.9	0.16	< 5	< 0.2	< 2	142	< 1	< 2	< 2	150	39		

CERTIFICATION: *Marc Andre Larouche*



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

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 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
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 Account :HYA

Project : 703-70-608-776  
 Comments: ATN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9736875

SAMPLE	PREP CODE	Al2O3 % XRF	CaO % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42337	208 294	11.95	3.86	2.54	1.49	1.74	0.09	4.03	0.24	68.37	0.26	5.47	100.04	2.29	517
GX42338	208 294	4.04	14.12	7.17	0.05	15.76	0.18	0.05	0.03	34.63	0.20	23.56	99.79	6.45	< 20
GX42339	208 294	13.65	5.75	13.37	0.61	4.83	0.37	2.71	0.11	48.74	1.32	6.88	98.34	12.03	112
GX42340	208 294	15.43	2.13	1.51	3.47	0.45	0.03	3.69	0.11	68.51	0.45	2.30	98.08	1.36	488
GX42341	208 294	3.91	1.09	9.65	0.05	32.02	0.10	0.04	0.02	40.27	0.20	10.63	97.98	8.68	< 20
GX42342	208 294	14.17	5.84	4.65	1.89	2.65	0.08	2.87	0.13	59.47	0.52	6.66	98.93	4.18	362
GX42343	208 294	14.16	5.54	5.20	2.22	3.13	0.08	1.64	0.11	60.17	0.52	6.67	99.44	4.68	296
GX42344	208 294	4.64	13.04	6.51	0.04	13.71	0.25	< 0.01	0.03	39.29	0.21	22.07	99.79	5.86	< 20
GX42345	208 294	14.07	5.55	14.02	0.38	6.60	0.14	2.69	0.16	48.68	1.37	5.14	98.80	12.62	132
GX42346	208 294	15.08	4.59	3.49	2.85	2.32	0.06	4.86	0.43	57.67	0.73	6.71	98.79	3.14	1920
GX42347	208 294	14.15	4.68	4.68	2.99	4.16	0.10	3.04	0.42	55.61	0.76	7.88	98.47	4.21	661
GX42348	208 294	14.51	4.87	5.00	2.45	3.23	0.09	4.20	0.27	56.02	0.52	7.82	98.98	4.50	1130
GX42349	208 294	15.48	2.40	2.72	2.09	1.98	0.04	3.75	0.12	67.41	0.42	3.27	99.68	2.45	501
GX42350	208 294	10.17	6.05	8.73	0.08	15.56	0.20	0.15	0.27	43.94	0.50	13.62	99.27	7.86	54
GX42351	208 294	13.64	2.58	3.04	2.79	0.84	0.09	2.54	0.11	69.05	0.49	3.36	98.53	2.74	486
GX42352	208 294	2.84	6.87	7.76	0.06	24.23	0.14	0.05	0.01	32.35	0.14	24.97	99.42	6.98	46
GX42353	208 294	2.14	16.91	4.04	0.04	14.11	0.24	< 0.01	0.02	34.69	0.08	27.31	99.58	3.64	< 20
GX42354	208 294	13.89	5.66	4.09	3.60	3.12	0.07	2.18	0.38	56.68	0.58	9.05	99.30	3.68	917
GX42355	208 294	14.73	3.89	1.64	3.50	2.40	0.09	1.23	0.12	64.52	0.43	7.26	99.81	1.48	653
GX42356	208 294	14.97	2.73	4.06	2.16	1.59	0.05	2.35	0.10	64.83	0.51	5.19	98.54	3.65	323
GX42357	208 294	16.08	7.12	5.79	2.25	2.34	0.13	2.15	0.12	54.23	0.63	8.09	98.93	5.21	284
GX42358	208 294	14.89	5.01	6.16	3.13	3.72	0.09	3.18	0.35	53.69	0.56	8.31	99.09	5.54	663
GX42359	208 294	16.01	5.92	3.35	2.60	1.60	0.08	4.90	0.15	55.32	1.10	7.16	98.19	3.01	903
GX42360	208 294	10.12	9.53	8.95	0.32	8.73	0.16	3.16	0.67	41.92	0.72	14.52	98.80	8.05	96
GX42361	208 294	12.61	0.73	1.15	9.38	0.21	0.03	0.74	0.09	72.16	0.37	0.77	98.24	1.03	1550
GX42362	208 294	12.92	6.43	5.63	1.73	4.60	0.11	4.56	0.41	52.09	0.70	9.72	98.90	5.07	201
GX42363	208 294	14.90	1.44	0.95	0.29	0.64	0.05	8.49	0.08	70.07	0.06	1.86	98.83	0.85	63
GX42364	208 294	15.06	4.42	3.63	2.58	2.64	0.07	4.67	0.30	57.30	0.45	7.20	98.32	3.27	1400
GX42365	208 294	6.30	12.25	8.89	0.14	14.12	0.16	0.01	0.03	35.78	0.29	21.53	99.50	8.00	< 20
GX42366	208 294	1.14	17.85	4.54	0.03	12.50	0.22	< 0.01	< 0.01	36.03	0.04	26.99	99.34	4.09	< 20
GX42367	208 294	16.36	3.76	1.25	1.80	0.57	0.05	6.52	0.08	64.16	0.21	3.52	98.28	1.12	806
GX42368	208 294	13.43	8.59	15.63	0.52	4.25	0.32	1.11	0.10	44.07	1.21	9.99	99.22	14.06	112
GX42369	208 294	13.82	5.67	13.45	0.49	4.48	0.20	3.49	0.12	50.76	1.28	4.56	98.32	12.10	207
GX42370	208 294	12.90	9.51	8.55	1.45	3.32	0.18	1.45	0.10	45.12	1.12	15.12	98.82	7.69	148
GX42371	208 294	14.53	8.81	3.74	1.18	1.29	0.16	4.00	0.14	57.03	0.53	8.11	99.52	3.37	149
GX42372	208 294	17.59	3.11	1.75	3.62	0.81	0.04	3.39	0.13	63.47	0.58	3.61	98.10	1.57	379
GX42373	208 294	15.42	4.82	7.06	0.84	4.26	0.09	3.68	0.20	55.51	0.82	6.25	98.95	6.35	345
GX42374	208 294	1.56	4.57	6.85	0.05	24.73	0.08	0.11	< 0.01	48.00	0.09	11.93	97.97	6.16	< 20
GX42375	208 294	13.99	5.48	2.97	1.73	1.18	0.06	2.69	0.22	63.49	0.49	5.68	97.98	2.67	271
GX42376	208 294	16.00	3.13	2.67	1.63	1.21	0.06	4.54	0.09	64.76	0.42	3.58	98.09	2.40	384

CERTIFICATION: *Marc-Andre Larouche*



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
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To: INMET MINING CORPORATION  
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1300 BOUL. SAGUENAY, SUITE 200  
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J9X 5A6


Project : 703-70-608-776  
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## CERTIFICATE OF ANALYSIS

### A9736875

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42337	208 294	93	5.0	0.34	25	< 0.2	< 2	6	< 1	< 2	< 2	42	15		
GX42338	208 294	20	21.1	0.27	< 5	< 0.2	< 2	47	< 1	< 2	< 2	30	524		
GX42339	208 294	98	3.6	0.14	< 5	< 0.2	6	108	< 1	< 2	< 2	106	46		
GX42340	208 294	121	1.4	0.25	10	< 0.2	36	10	< 1	< 2	< 2	28	23		
GX42341	208 294	12	1.6	0.03	< 5	< 0.2	8	5	< 1	< 2	< 2	20	1295		
GX42342	208 294	121	4.7	0.03	< 5	< 0.2	< 2	27	< 1	< 2	< 2	52	58		
GX42343	208 294	126	4.2	0.06	< 5	< 0.2	< 2	45	< 1	< 2	< 2	66	59		
GX42344	208 294	24	19.0	0.01	< 5	< 0.2	< 2	13	< 1	< 2	< 2	28	630		
GX42345	208 294	121	1.6	0.15	< 5	< 0.2	6	136	< 1	< 2	< 2	104	71		
GX42346	208 294	174	5.9	0.16	< 5	< 0.2	< 2	< 1	1	< 2	< 2	26	6		
GX42347	208 294	183	6.2	0.07	< 5	< 0.2	2	6	< 1	< 2	< 2	42	46		
GX42348	208 294	146	6.3	0.03	< 5	< 0.2	< 2	40	< 1	< 2	< 2	74	38		
GX42349	208 294	112	2.0	0.07	< 5	< 0.2	< 2	15	< 1	< 2	< 2	36	61		
GX42350	208 294	103	7.9	0.02	< 5	< 0.2	6	54	< 1	< 2	< 2	78	293		
GX42351	208 294	157	1.7	0.01	< 5	< 0.2	4	13	< 1	< 2	< 2	36	7		
GX42352	208 294	10	17.4	0.10	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	18	639		
GX42353	208 294	10	25.7	< 0.01	< 5	< 0.2	< 2	9	< 1	< 2	< 2	12	582		
GX42354	208 294	158	8.2	0.18	< 5	< 0.2	2	100	< 1	< 2	< 2	36	36		
GX42355	208 294	124	5.7	0.30	25	< 0.2	< 2	< 1	< 1	< 2	< 2	10	16		
GX42356	208 294	169	3.4	0.79	< 5	< 0.2	< 2	7	< 1	< 2	< 2	64	19		
GX42357	208 294	154	5.3	0.01	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	58	44		
GX42358	208 294	152	6.6	0.06	< 5	< 0.2	< 2	26	< 1	< 2	< 2	66	47		
GX42359	208 294	115	6.9	0.44	< 5	< 0.2	54	46	1	2	< 2	20	28		
GX42360	208 294	168	12.8	0.14	< 5	< 0.2	< 2	86	< 1	< 2	< 2	66	90		
GX42361	208 294	99	0.5	0.28	< 5	< 0.2	6	9	< 1	< 2	< 2	32	10		
GX42362	208 294	164	8.6	0.22	< 5	< 0.2	< 2	10	< 1	< 2	< 2	48	106		
GX42363	208 294	49	2.0	0.18	< 5	< 0.2	< 2	2	1	< 2	< 2	8	6		
GX42364	208 294	157	5.8	0.04	< 5	< 0.2	12	17	< 1	2	< 2	30	40		
GX42365	208 294	31	17.5	0.01	< 5	< 0.2	< 2	27	< 1	< 2	< 2	58	641		
GX42366	208 294	21	26.7	0.38	< 5	< 0.2	18	4	< 1	< 2	< 2	12	832		
GX42367	208 294	82	3.4	0.52	< 5	< 0.2	8	7	1	< 2	< 2	6	9		
GX42368	208 294	82	6.3	0.11	< 5	< 0.2	< 2	108	< 1	< 2	< 2	96	53		
GX42369	208 294	97	2.2	0.03	< 5	< 0.2	< 2	112	< 1	< 2	< 2	78	57		
GX42370	208 294	76	13.4	0.16	< 5	< 0.2	4	70	< 1	< 2	< 2	100	42		
GX42371	208 294	127	6.9	0.06	< 5	< 0.2	6	35	< 1	< 2	< 2	122	23		
GX42372	208 294	154	2.4	0.24	< 5	< 0.2	8	17	< 1	< 2	< 2	38	10		
GX42373	208 294	151	3.5	0.03	< 5	< 0.2	6	2	1	< 2	< 2	82	54		
GX42374	208 294	11	7.2	1.23	< 5	< 0.2	144	29	< 1	2	< 2	14	1115		
GX42375	208 294	167	4.2	0.03	< 5	< 0.2	2	15	< 1	< 2	< 2	56	14		
GX42376	208 294	143	2.2	0.04	< 5	< 0.2	2	10	< 1	< 2	< 2	60	20		

CERTIFICATION: 



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

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SAMPLE	PREP CODE	Al2O3 % XRF	CaO % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42377	208 294	16.24	5.67	4.30	2.79	1.19	0.12	2.51	0.19	58.63	0.69	6.25	98.58	3.87	497
GX42378	208 294	12.86	3.45	2.38	1.38	0.65	0.08	3.65	0.12	69.68	0.45	3.51	98.21	2.14	254
GX42379	208 294	12.37	0.88	1.17	0.18	0.36	0.03	7.30	0.07	74.64	0.06	1.07	98.13	1.05	31
GX42380	208 294	15.15	1.64	1.22	0.34	0.82	0.06	8.47	0.09	69.21	0.18	2.19	99.37	1.10	168
GX42381	208 294	14.36	4.68	5.63	0.72	2.09	0.11	5.22	0.21	57.91	1.15	7.09	99.17	5.07	119
GX42382	208 294	15.80	3.71	6.35	0.94	4.23	0.10	4.14	0.17	59.05	0.77	4.13	99.39	5.71	292
GX42383	208 294	16.41	2.67	2.33	1.85	0.64	0.05	4.38	0.12	66.81	0.62	2.43	98.31	2.10	507
GX42384	208 294	3.09	1.74	12.02	0.10	31.90	0.14	0.44	0.03	37.05	0.19	11.85	98.55	10.82	< 20
GX42385	208 294	16.06	2.28	3.63	1.59	3.66	0.05	5.44	0.18	61.12	0.78	3.48	98.27	3.27	272
GX42386	208 294	15.75	1.74	5.85	0.96	3.79	0.08	6.01	0.18	60.90	0.78	2.05	98.09	5.26	232

CERTIFICATION: *Marc-Andre Larouche*



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul. Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Page Number :2-B  
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 Certificate Date: 09-SEP-97  
 Invoice No. :19736875  
 P.O. Number :  
 Account :HYA

Project : 703-70-608-776  
 Comments: ATN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9736875

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42377	208 294	150	4.3	0.01	< 5	< 0.2	2	36	< 1	< 2	< 2	48	32		
GX42378	208 294	150	3.1	0.32	< 5	< 0.2	< 2	14	< 1	< 2	< 2	32	4		
GX42379	208 294	41	0.8	0.69	< 5	< 0.2	2	4	35	4	< 2	12	5		
GX42380	208 294	62	2.1	0.24	< 5	< 0.2	4	1	7	< 2	< 2	10	10		
GX42381	208 294	145	6.3	0.01	< 5	< 0.2	< 2	38	< 1	< 2	< 2	62	23		
GX42382	208 294	146	1.7	0.02	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	60	55		
GX42383	208 294	136	0.9	0.18	< 5	< 0.2	70	39	< 1	8	< 2	100	120		
GX42384	208 294	13	1.0	0.01	< 5	< 0.2	12	17	< 1	< 2	< 2	30	1260		
GX42385	208 294	145	1.4	< 0.01	< 5	< 0.2	12	38	< 1	< 2	< 2	22	67		
GX42386	208 294	159	0.2	< 0.01	< 5	< 0.2	< 2	1	< 1	< 2	< 2	54	60		

CERTIFICATION: \_\_\_\_\_



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Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

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 Certificate Date: 08-SEP-97  
 Invoice No. : I9738162  
 P.O. Number :  
 Account : HYA

Project : 703-70-608-777  
 Comments: ATN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9738162

SAMPLE	PREP CODE		Al2O3 %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Tot. Fe as %FeO	Ba ppm
			XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF	XRF			XRF
GX42387	208	294	12.17	12.05	10.85	0.22	5.60	0.32	1.84	0.06	43.29	0.75	12.33	99.48	9.76	72
GX42388	208	294	12.41	6.17	13.49	0.13	5.80	0.30	3.82	0.10	51.56	1.14	3.91	98.83	12.14	30

CERTIFICATION: \_\_\_\_\_



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Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Project : 703-70-808-777  
 Comments: ATN: MARC-ANDRE LAROUCHE

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 Certificate Date: 08-SEP-97  
 Invoice No. : I9738162  
 P.O. Number :  
 Account : HYA

## CERTIFICATE OF ANALYSIS

A9738162

SAMPLE	PREP CODE		Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42387	208	294	50	8.2	0.01	< 5	< 0.2	2	108	< 1	< 2	< 2	70	52		
GX42388	208	294	77	1.5	0.04	< 5	< 0.2	2	56	< 1	< 2	< 2	72	42		

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Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Project : 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

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Invoice No. : I9739510  
P.O. Number :  
Account : HYA

## CERTIFICATE OF ANALYSIS

A9739510

SAMPLE	PREP CODE	Al2O3 % XRF	CaO % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	TiO2 % XRF	LOI % XRF	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42389	208 294	13.67	5.50	11.29	0.11	5.88	0.19	3.69	0.11	50.41	1.27	7.21	99.33	10.16	67

CERTIFICATION:

*[Signature]*



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Essayeurs \* Geochimistes \* Chimistes Analytique  
175 Boul, Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

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Invoice No. : 19739510  
P.O. Number :  
Account : HYA

Project : 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9739510

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42389	208 294	86	3.7	0.03	< 5	< 0.2	< 2	106	< 1	< 2	2	94	58		

CERTIFICATION: Hart Buchler



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Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul. Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
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 Certificate Date : 26-SEP-97  
 Invoice No. : I9741493  
 P.O. Number :  
 Account : HYA

Project :  
 Comments: ATTN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9741493

SAMPLE	PREP CODE	Al2O3 %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42390	208 294	3.55	1.94	9.55	0.04	33.00	0.12	0.04	< 0.01	38.00	0.16	13.83	100.25	8.59	23
GX42391	208 294	15.69	1.57	2.58	3.04	1.54	0.03	3.86	0.24	68.00	0.44	2.99	99.98	2.32	737
GX42392	208 294	16.07	1.98	1.48	2.19	0.72	0.03	5.52	0.11	70.00	0.26	2.50	100.85	1.33	985
GX42393	208 294	14.80	6.99	11.61	0.26	4.84	0.37	6.02	0.11	52.00	1.23	2.44	100.65	10.45	225
GX42394	208 294	13.18	7.28	11.64	0.17	3.16	0.34	3.34	0.09	52.00	1.09	7.71	100.00	10.47	67
GX42395	208 294	15.40	4.88	5.69	1.96	2.94	0.10	5.19	0.32	56.00	0.46	6.65	99.59	5.12	4970

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175 Boul. Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Page Number : 1-B  
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P.O. Number :  
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Project :  
Comments: ATTN: MARC-ANDRE LAROUCHE

## CERTIFICATE OF ANALYSIS A9741493

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42390	208 294	12	2.7	0.03	< 5	< 0.2	20	23	< 1	2	< 2	26	1775		
GX42391	208 294	168	0.9	0.21	< 5	< 0.2	< 2	5	< 1	4	< 2	24	10		
GX42392	208 294	144	1.2	0.11	< 5	0.2	2	8	1	16	< 2	30	14		
GX42393	208 294	84	0.8	0.11	< 5	< 0.2	< 2	106	< 1	36	< 2	104	64		
GX42394	208 294	71	5.7	0.16	< 5	0.2	< 2	78	< 1	< 2	< 2	90	35		
GX42395	208 294	194	4.8	0.25	< 5	< 0.2	< 2	34	< 1	8	< 2	80	31		

CERTIFICATION:

*Hart Beckler*



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Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Project: 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

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Certificate Date: 21-OCT-97  
Invoice No. :19744405  
P.O. Number :  
Account :HYA

## CERTIFICATE OF ANALYSIS

A9744405

SAMPLE	PREP CODE	Al2O3 %	CaO %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	TiO2 %	LOI %	TOTAL %	Tot. Fe as %FeO	Ba ppm XRF
GX42396	208 294	13.30	8.52	2.09	7.48	2.38	0.09	0.68	0.13	53.69	0.43	10.39	99.18	1.88	674

CERTIFICATION:

*Hait...*



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175 Boul, Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Project : 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

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Certificate Date: 21-OCT-97  
Invoice No. : I9744405  
P.O. Number :  
Account : HYA

## CERTIFICATE OF ANALYSIS

A9744405

SAMPLE	PREP CODE	Zr ppm XRF	CO2 % inorg	S % Total	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm	Ni ppm		
GX42396	208 294	106	9.0	< 0.01	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	6	6		

CERTIFICATION:

*Hart Buchler*



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Project: 703-70-608-776  
 Comments: ATTN: MARC-ANDRE LAROUCHE

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 Certificate Date: 29-JUL-97  
 Invoice No. : I9733394  
 P.O. Number :  
 Account : HYA

## CERTIFICATE OF ANALYSIS A9733394

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
42001	205 294	< 5	< 0.2	< 2	12	< 1	< 2	< 2			
42002	205 294	< 5	< 0.2	< 2	46	< 1	< 2	< 2	16		
42003	205 294	< 5	< 0.2	< 2	3	< 1	< 2	< 2	106		
42004	205 294	< 5	< 0.2	< 2	1	< 1	< 2	< 2	26		
42005	205 294	< 5	< 0.2	< 2	22	< 1	< 2	< 2	26		
42006	205 294	< 5	< 0.2	< 2	40	< 1	< 2	< 2	24		
42007	205 294	35	< 0.2	38	47	< 1	< 2	< 2	56		
42008	205 294	< 5	< 0.2	< 2	8	< 1	< 2	< 2	72		
42009	205 294	< 5	< 0.2	< 2	17	< 1	< 2	< 2	30		
42010	205 294	< 5	< 0.2	< 2	6	< 1	< 2	< 2	44		
42011	205 294	< 5	< 0.2	< 2	13	< 1	< 2	< 2	22		
42012	205 294	< 5	< 0.2	< 2	78	< 1	< 2	< 2	62		
42013	205 294	< 5	< 0.2	< 2	49	< 1	< 2	< 2	48		
42014	205 294	< 5	< 0.2	< 2	42	< 1	< 2	< 2	54		
42015	205 294	< 5	< 0.2	< 2	57	< 1	2	< 2	58		
42016	205 294	< 5	< 0.2	< 2	6	< 1	< 2	< 2	14		
42017	205 294	< 5	< 0.2	< 2	28	< 1	< 2	< 2	70		
42018	205 294	< 5	< 0.2	< 2	3	< 1	< 2	< 2	16		
42019	205 294	< 5	< 0.2	< 2	17	< 1	< 2	< 2	36		
42020	205 294	< 5	< 0.2	< 2	2	< 1	< 2	< 2	10		
42021	205 294	< 5	< 0.2	< 2	2	< 1	< 2	< 2	20		
42022	205 294	< 5	< 0.2	< 2	83	< 1	< 2	< 2	36		
42023	205 294	75	< 0.2	< 2	194	< 1	2	< 2	36		
42024	205 294	25	< 0.2	< 2	19	< 1	2	< 2	36		
42025	205 294	< 5	< 0.2	< 2	7	< 1	2	< 2	44		
42026	205 294	< 5	< 0.2	10	29	1	< 2	< 2	70		

CERTIFICATION: Haut-Bouchier



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Project : 703-70-608-776  
 Comments: ATTN: MARD-ANDRE LAROUCHE

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 20-AUG-97  
 Invoice No. : I9736876  
 P.O. Number :  
 Account : HYA

## CERTIFICATE OF ANALYSIS A9736876

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
GX42027	205 294	< 5	< 0.2	12	16	< 1	2	< 2	44		
GX42028	205 294	< 5	< 0.2	2	7	< 1	4	< 2	20		
GX42029	205 294	155	< 0.2	< 2	< 1	< 1	4	< 2	22		
GX42030	205 294	< 5	< 0.2	2	3	< 1	2	< 2	68		
GX42031	205 294	250	0.2	12	115	< 1	4	< 2	68		
GX42032	205 294	405	< 0.2	6	122	< 1	< 2	< 2	112		
GX42033	205 294	190	< 0.2	4	6	< 1	2	< 2	20		
GX42034	205 294	15	< 0.2	< 2	5	< 1	2	< 2	62		
GX42035	205 294	35	0.4	2	4	1	< 2	< 2	36		
GX42036	205 294	210	< 0.2	< 2	94	5	< 2	< 2	78		
GX42037	205 294	< 5	< 0.2	< 2	6	< 1	< 2	< 2	14		
GX42038	205 294	10	< 0.2	< 2	6	1	< 2	< 2	44		
GX42039	205 294	< 5	< 0.2	2	102	2	< 2	< 2	136		
GX42040	205 294	10	< 0.2	< 2	4	< 1	< 2	< 2	26		
GX42041	205 294	50	< 0.2	4	134	14	< 2	< 2	138		
GX42042	205 294	< 5	< 0.2	2	143	5	< 2	< 2	212		
GX42043	205 294	< 5	< 0.2	< 2	46	< 1	< 2	< 2	24		
GX42044	205 294	15	< 0.2	2	70	< 1	8	< 2	14		
GX42045	205 294	5	< 0.2	10	6	< 1	< 2	< 2	24		
GX42046	205 294	< 5	< 0.2	56	103	1	2	< 2	182		
GX42047	205 294	< 5	< 0.2	18	70	1	< 2	< 2	126		
GX42048	205 294	30	< 0.2	26	100	9	< 2	< 2	70		
GX42049	205 294	< 5	< 0.2	4	2	< 1	< 2	< 2	6		
GX42050	205 294	< 5	< 0.2	2	13	< 1	< 2	< 2	38		
GX42051	205 294	20	0.8	90	32	2	10	< 2	72		
GX42052	205 294	20	< 0.2	< 2	32	< 1	< 2	< 2	28		
GX42053	205 294	5	< 0.2	< 2	35	< 1	< 2	< 2	42		
GX42054	205 294	< 5	< 0.2	< 2	< 1	< 1	< 2	< 2	10		
GX42055	205 294	25	0.4	46	104	2	8	< 2	38		
GX42056	205 294	5	< 0.2	10	4	< 1	< 2	< 2	14		
GX42057	205 294	35	< 0.2	2	< 1	< 1	< 2	< 2	70		
GX42058	205 294	40	0.2	30	42	2	6	< 2	4		
GX42059	205 294	85	0.4	228	14	23	26	< 2	10		
GX42060	205 294	< 5	< 0.2	4	4	< 1	< 2	< 2	12		
GX42061	205 294	10	< 0.2	< 2	30	< 1	< 2	< 2	52		
GX42062	205 294	20	< 0.2	32	66	1	8	< 2	114		
GX42063	205 294	20	< 0.2	26	53	< 1	4	< 2	120		
GX42064	205 294	< 5	< 0.2	6	38	< 1	< 2	< 2	136		
GX42065	205 294	< 5	< 0.2	8	4	3	< 2	< 2	12		
GX42066	205 294	< 5	< 0.2	10	15	< 1	< 2	< 2	16		

CERTIFICATION: \_\_\_\_\_





# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique  
 175 Boul, Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Project : 703-70-608-776  
 Comments: ATTN: MARD-ANDRE LARUCHE

Page Number :2  
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 Certificate Date: 20-AUG-97  
 Invoice No. : I9736876  
 P.O. Number :  
 Account : HYA

## CERTIFICATE OF ANALYSIS A9736876

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
GX42067	205 294	< 5	< 0.2	60	23	< 1	< 2	< 2	34		
GX42068	205 294	< 5	< 0.2	208	53	< 1	< 2	< 2	28		
GX42069	205 294	40	< 0.2	10	35	< 1	< 2	< 2	8		
GX42070	205 294	< 5	< 0.2	< 2	135	< 1	< 2	< 2	96		
GX42071	205 294	< 5	< 0.2	10	26	< 1	< 2	< 2	48		
GX42072	205 294	< 5	< 0.2	28	74	< 1	10	< 2	70		
GX42073	205 294	20	< 0.2	< 2	10	< 1	< 2	< 2	26		
GX42074	205 294	< 5	< 0.2	6	24	< 1	< 2	< 2	30		
GX42075	205 294	< 5	< 0.2	50	183	< 5	< 2	< 2	40		
GX42076	205 294	20	< 0.2	2	9	< 1	< 2	< 2	20		
GX42077	205 294	< 5	< 0.2	10	7	5	< 2	< 2	12		
GX42078	205 294	< 5	< 0.2	< 2	189	23	< 2	< 2	28		
GX42079	205 294	< 5	< 0.2	2	4	< 1	< 2	< 2	26		
GX42080	205 294	< 5	< 0.2	12	42	< 1	< 2	< 2	34		
GX42081	205 294	< 5	< 0.2	10	56	4	2	< 2	44		
GX42082	205 294	150	< 0.2	< 2	296	< 1	< 2	< 2	38		
GX42084	205 294	< 5	< 0.2	< 2	4	2	< 2	< 2	14		
GX42085	205 294	< 5	< 0.2	< 2	20	1	< 2	< 2	12		
GX42086	205 294	295	< 0.2	2	118	2	< 2	< 2	24		
GX42087	205 294	< 5	< 0.2	38	27	< 1	70	< 2	128		

CERTIFICATION: \_\_\_\_\_



# LES LABORATOIRES XRAL LABORATORIES

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. RÉAL CAQUETTE • C.P. 2283 • ROUYN-NORANDA • QUÉBEC J9X 5A9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R12560

Nom de la Compagnie/Company: INMET Corporation Miniere  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 776  
 Date Soumis/ Submitted : Aug 08, 1997  
 Attention : Marc-Andre Larouche

Aug 13, 1997

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
---------------------------------	-----------	---------------

42083	343	319
-------	-----	-----

Certifie par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
 Quebec, Canada J9X 5C3  
 PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
 C.P. 2187  
 1300 BOUL. SAGUENAY, SUITE 200  
 ROUYN-NORANDA, PQ  
 J9X 5A6

Project : 703-70-608-777  
 Comments: ATTN: MARC-ANDRE LAROUCHE

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 24-AUG-97  
 Invoice No. : I9738161  
 P.O. Number :  
 Account : HYA

## CERTIFICATE OF ANALYSIS A9738161

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
GX42088	205	294	440	1.0	< 2	16	< 1	8	< 2	56		
GX42089	205	294	245	0.8	< 2	13	< 1	10	< 2	60		
GX42090	205	294	5	< 0.2	< 2	92	< 1	2	< 2	50		
GX42091	205	294	220	0.6	< 2	9	< 1	8	< 2	52		
GX42093	205	294	425	0.2	2	98	< 1	< 2	< 2	54		
GX42095	205	294	25	< 0.2	< 2	8	< 1	2	< 2	18		
GX42096	205	294	< 5	< 0.2	2	61	< 1	< 2	< 2	98		
GX42097	205	294	35	< 0.2	2	36	< 1	2	< 2	30		
GX42098	205	294	< 5	< 0.2	< 2	56	< 1	2	< 2	58		
GX42099	205	294	40	< 0.2	2	38	< 1	2	< 2	40		
GX42100	205	294	180	0.2	< 2	7	< 1	2	< 2	24		
GX42101	205	294	< 5	< 0.2	< 2	89	< 1	< 2	< 2	52		

CERTIFICATION:

*Hart Bichler*



# LES LABORATOIRES XRAL LABORATORIES

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. RÉAL CAOQUETTE • C.P. 2283 • ROUYN-NORANDA • QUÉBEC J9X 5A9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R12612

Nom de la Compagnie/Company: INMET Corporation Miniere  
 Bon de Commande N<sup>o</sup>/ P.O. No:  
 Projet/ Project No : 776  
 Date Soumis/ Submitted : Aug 18, 1997  
 Attention : Marc-Andre Larouche

Aug 20, 1997

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
---------------------------------	-----------	---------------

42092	87	107
42094	322	

Certifie par / Certified by :



\_\_\_\_\_  
 Membre du Groupe SGS (Société Générale de Surveillance)



# Laboratoires Chemex Ltee.

Essayeurs \* Geochimistes \* Chimistes Analytique

175 Boul. Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Project: 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

Page Number : 1  
Total Pages : 1  
Certificate Date: 31-AUG-97  
Invoice No. : 19739511  
P.O. Number :  
Account : HYA

## CERTIFICATE OF ANALYSIS

A9739511

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
GX42102	205	294	50	0.2	4	864	< 1	2	< 2	92		

CERTIFICATION:

*Hart Bickler*



# LES LABORATOIRES XRAL LABORATORIES

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. RÉAL CAOQUETTE • C.P. 2283 • ROUYN-NORANDA • QUÉBEC J9X 5A9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R12811

Nom de la Compagnie/Company: INMET Corporation Miniere  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 70370608-776  
 Date Soumis/ Submitted : Sep 09, 1997  
 Attention : Marc-Andre Larouche

Sep 15, 1997

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
---------------------------------	-----------	---------------

42103	1	
42104	2	
42105	4	
42106	5	
42107	2	
42108	28	
42109	651	644
42110	558	583
42111	15	
42112	5	
42113	2	
42114	135	
42115	298	
42116	388	
42117	88	
42118	14	
42119	35	
42120	10	
42121	5	
42122	10	13
42123	26	
42124	31	
42125	13	
42126	31	
42127	10	
42128	9	
42129	12	
42130	16	
42131	10	
42132	53	47
42133	32	

Certifie par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)



# Laboratoires Chemex Ltee.

Essayeurs \* Géochimistes \* Chimistes Analytique

175 Boul, Industriel C.P. 284, Rouyn  
Quebec, Canada J9X 5C3  
PHONE: 819-797-1922 FAX: 819-797-0106

To: INMET MINING CORPORATION  
C.P. 2187  
1300 BOUL. SAGUENAY, SUITE 200  
ROUYN-NORANDA, PQ  
J9X 5A6

Project : 703-70-608-777  
Comments: ATTN: MARC-ANDRE LAROUCHE

Page Number : 1  
Total Pages : 1  
Certificate Date: 05-OCT-97  
Invoice No. : 19744406  
P.O. Number :  
Account : HYA

## CERTIFICATE OF ANALYSIS

A9744406

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Cu ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm		
	GX42134	205	294	< 5	< 0.2	4	79	1	< 2	< 2	8	

CERTIFICATION:

*H. B. Bickler*



Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use) 1986-00391 Assessment Files Research Imaging



42A03SE2004 2.18375 ZAVITZ 900

ty of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the I to review the assessment work and correspond with the mining land holder. ing Recorder, Ministry of Northern Development and Mines, 6th Floor,

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240. - Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

Name: INMET MINING CORPORATION, Client Number: 169899, Address: SUITE 3400, AETNA TOWER, P.O. BOX 19, TORONTO DOMINION CENTER, TORONTO, ONTARIO, M5K 1A1, Telephone Number: (416) 361-6400, Fax Number: (416) 368-4692

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

Geotechnical: prospecting, surveys, assays and work under section 18 (regs) [checked], Physical: drilling, stripping, trenching and associated assays [unchecked], Rehabilitation [unchecked], Work Type: MAPPING AND ASSAYS, Office Use: [blank], Commodity: [blank], Total \$ Value of Work Claimed: \$21,899, Dates Work Performed: From 02/07/97 To 15/08/97, Township/Area: HUTT AND ZAVITZ TWPS, Mining Division: TIM PROYNE, Resident Geologist District: Timmins

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required; - provide proper notice to surface rights holders before starting work; - complete and attach a Statement of Costs, form 0212; - provide a map showing contiguous mining lands that are linked for assigning work; - include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name: INMET MINING CORPORATION, Telephone Number: (319) 764-6666, Address: 1300, BOUL. SAGUENAY, C.P. 2187, Fax Number: (319) 764-6404, Name: SUITE 200, ROUYN-NORANDA, QC, Address: J9X 5A6, RECEIVED APR 14 1998, RECEIVED APR 14 1998

4. Certification by Recorded Holder or Agent

I, BERNARD BOILEY (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true. Signature of Recorded Holder or Agent: Bernard Boiley, Date: April 7, 1998, Agent's Address: 1300, BOUL. SAGUENAY, C.P. 2187, Telephone Number: (319) 764-6666, Fax Number: (319) 764-6404, Deemed July 13/98



5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W986-00391

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	0
eg 1234568	2	\$8,892	\$4,000	0	\$4,892
1 1217922	6	74'			94
2 1217923	6	762'			762
3 1177279	1	1430'			1430
4 1177277	1	1809'			1809
5 1217919	4	379'			379
6 1177274	1	94'			94
7 1177276	1	1240'			1240
8 1217918	10	1905'			1905
9 1218867	12	4380'			4380
10 1217437	10	3427'			3427
11 1217439	2	188'			188
12 1217438	10	1335'			1335
13 1213426	4	3332'			3332
14 1217921	10	1524'			1524
15					
Column Totals		21899 \$			21899 \$

I, BERNARD BOILY (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing Bernard Boily Date April 8, 1998

6. Instructions for cutting back credits that are not approved.
- Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:
- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
  - 2. Credits are to be cut back starting with the claims listed last, working backwards; or
  - 3. Credits are to be cut back equally over all claims listed in this declaration; or
  - 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

RECEIVED  
8 9:30  
APR 14/98  
REGISTRY OFFICE - REGISTRATION

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

**For Office Use Only**

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)		

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work <small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small>	Cost Per Unit of work <small>(MEAN)</small>	Total Cost
SAMPLING	230 SAMPLES	20,12 \$/SAMPLE	4626 \$
MAPPING - GEOLOGIST	42 DAYS (ON THE FIELD)	223,89 \$/DAY	9403 \$
- ASSISTANT	42 DAYS (ON THE FIELD)	90,23 \$/DAY	3790 \$
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs			
Food and Lodging Costs			4080 \$
<b>Total Value of Assessment Work</b>			<b>21 899 \$</b>

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, BERNARD DOILY (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as SENIOR PROJECT GEOLOGIST (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature: Bernard D. Donly Date: April 7, 1998

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9846  
Fax: (705) 670-5881

June 23, 1998

Bernard Boily  
INMET MINING CORPORATION  
1300 Boul. Sagenay C.P. 2187  
Rouyn-Noranda, Quebec  
J9X 5A6

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number: 2.18375**

**Status**

**Subject: Transaction Number(s):** W9860.00391 Deemed Approval

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Lucille Jerome by e-mail at [jeromel2@epo.gov.on.ca](mailto:jeromel2@epo.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Blair Kite  
Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

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**Submission Number:** 2.18375

**Date Correspondence Sent:** June 23, 1998

**Assessor:** Lucille Jerome

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9860.00391	1217922	HUTT, ZAVITZ	Deemed Approval	June 22, 1998

**Section:**

12 Geological GEOL

Any geotechnical submission must be accompanied by uncoloured maps that show claim posts and boundary lines, township boundary lines, lot and concession lines, base lines, picket lines and traverse lines the mining claim, lease, patent or parcel numbers of all mining land covered by the survey

In all future geotechnical submissions, please ensure that the claim fabric (claim lines, corner posts) and the claim numbers are identified on the map.

**Correspondence to:**

Resident Geologist  
South Porcupine, ON

Assessment Files Library  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

Bernard Boily  
INMET MINING CORPORATION  
Rouyn-Noranda, Quebec

---

W1189

WMT STIVAT

W1189

W1189

WMT STIVAT

W1189

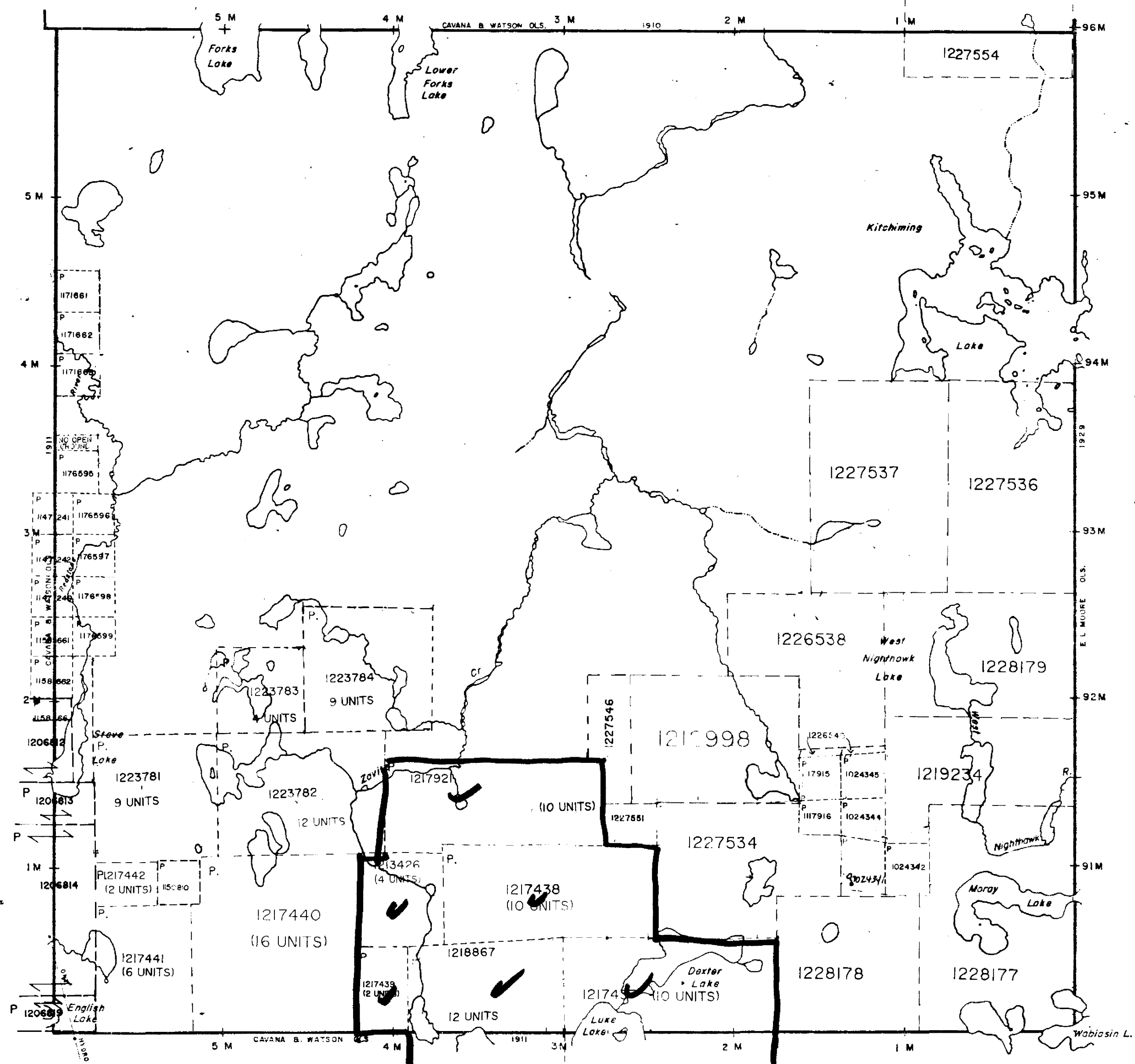
# Geikie Twp.(M.320)

English Twp.(M.787)

Hincks Twp.(M.223)

Hutt Twp.(M.943)

2.18375 GEOL.



THE TOWNSHIP OF  
OF  
**ZAVITZ**

DISTRICT OF SUDBURY

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

### LEGEND

PATENTED LAND	⊙
CROWN LAND SALE	C.S.
LEASES	⊖
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	⊙
CANCELLED	—

### NOTES

400' SURFACE RIGHTS RESERVATION ALONG THE SHORES OF ALL LAKES AND RIVERS.

### DATE OF ISSUE

JUN 22 1998

PROVINCIAL RECORDING OFFICE - SUDBURY

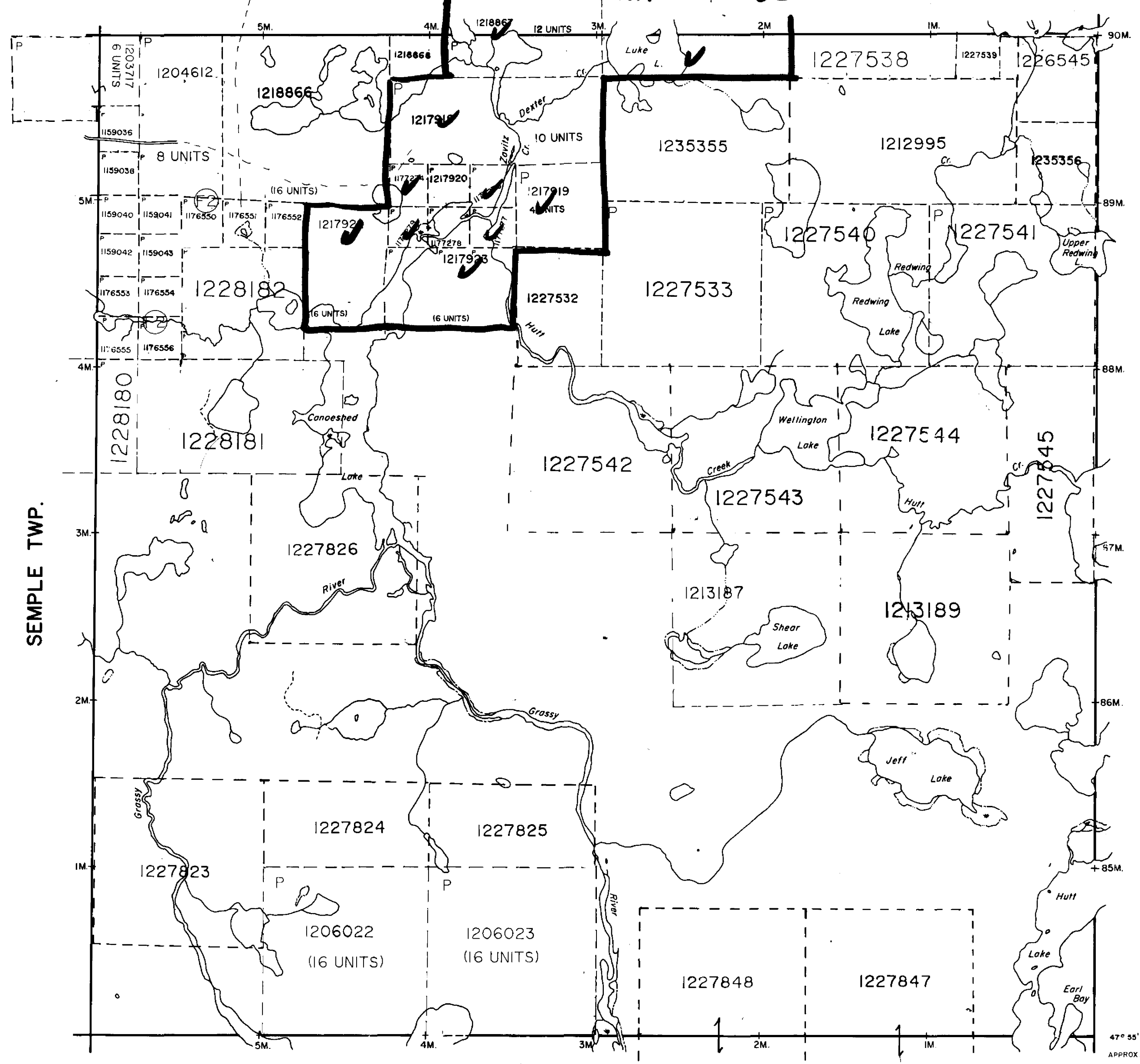
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

PLAN NO. M. 1189

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



### ZAVITZ TWP. 2.18375 GEOL



### HALLIDAY TWP.

47° 55' 45" APPROX.  
81° 04' 35"

#### LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

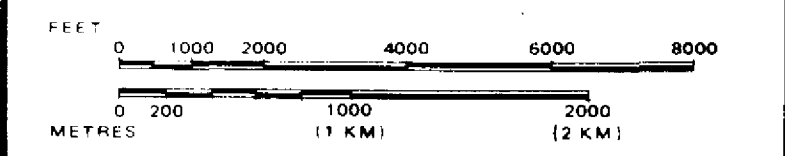
#### DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	□
" MINING RIGHTS ONLY	◑
LICENCE OF OCCUPATION	◔
ORDER-IN COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊖
SAND & GRAVEL	⊕

DATE OF ISSUE  
JUN 22 1992

PROVINCIAL RECORDS DIV.  
OFFICE - SUDBURY

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP  
**HUTT**  
M.N.R. ADMINISTRATIVE DISTRICT  
**TIMMINS**  
MINING DIVISION  
**PORCUPINE**  
LAND TITLES / REGISTRY DIVISION  
**SUDBURY**

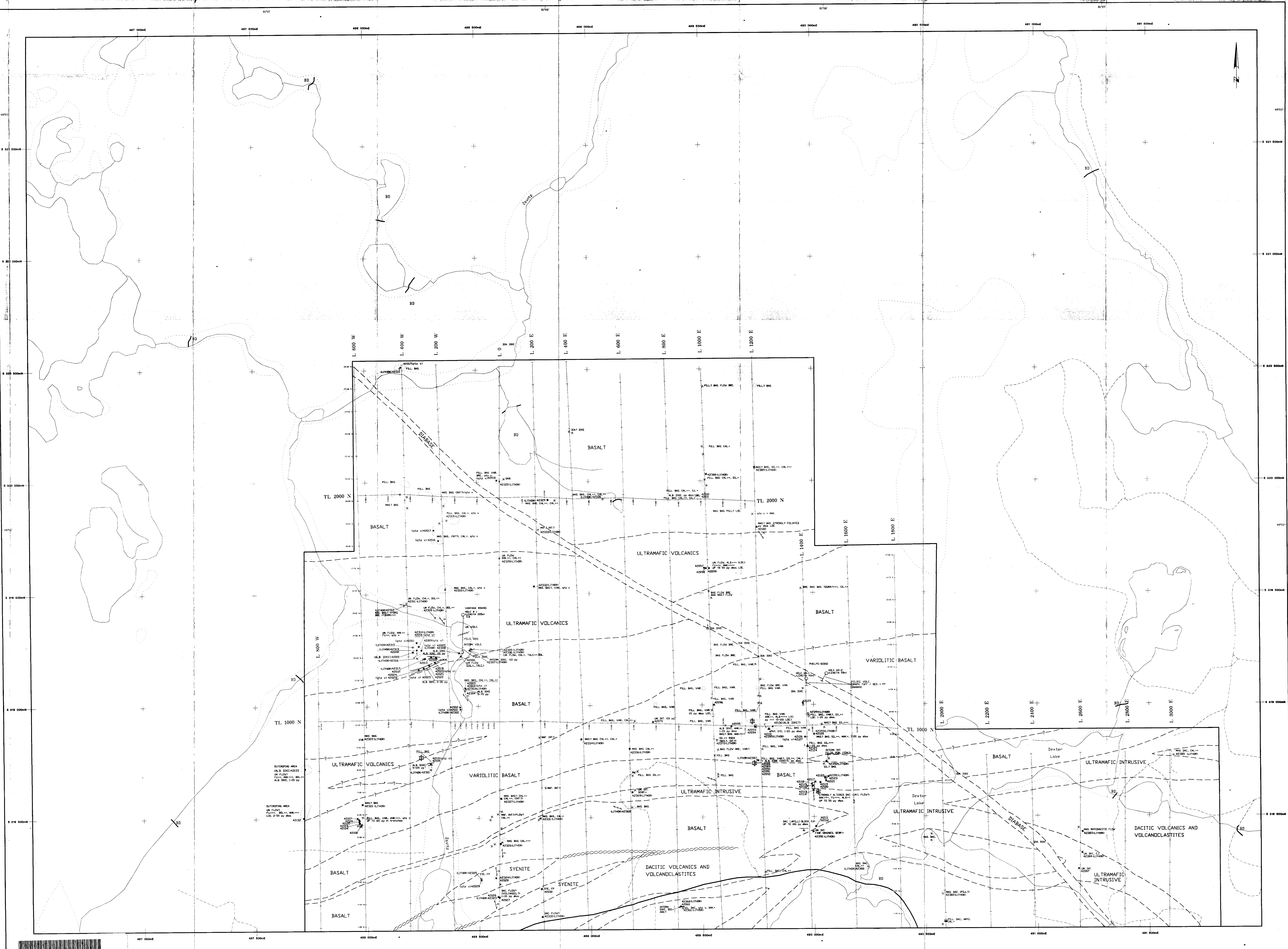
Ministry of Natural Resources Ontario  
Ministry of Northern Development and Mines

Date: JUNE, 1992  
Number: **G-3948**

ACTIVATED JULY 16, 1992 BY D.C.  
CHECKED BY G.W.

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON





**LEGEND**

**ROCK TYPE, COMPOSITION**

BAS	BASALTIC
BAC	BASALTIC, BASALTIC
ALB	ALBITIC (GSK)
DIA	DIABASE
MAF	MAFIC
UM	ULTRAMAFIC
FELS	FELSIC
INTERM	INTERMEDIATE
SYE	SYENITE
FP	FELDSPAR PORPHYRY
GFP	QUARTZ - FELDSPAR PORPHYRY

**FACIES, OTHER**

INT	INTRUSIVE
VOLC	VOLCANIC
SED	SEDIMENTARY (SEDIMENTARY ROCKS)
VOLCANOCL	VOLCANOCLASTIC
MAS	MASSIVE
PILL	PILLARED
BRK	BRICKEN, BRICKENATED
VAR	VARIOLITIC
HYDRO	HYDROTHERMAL
C.J.	COLUMNAR JOINTING

**ALTERATION / MINERAL**

TOLM	TOLMINE
TR	TROILITE
ANK	ANKERITE
SER	SERICITE
SIL	SILICA, SILICIFIED
CAL	CALCITE
ALB	ALBITE, ALBITIZED
CHL	CHLORITE, CHLORITIZED
HEM	HEMATITE, HEMATITIZED
FU	FUCHSITE
QTZ	QUARTZ
SERP	SERPENTINE
BIT	BITUMEN
GRAP	GRAPHITE

**MINERALIZATION / OTHER**

py	PYRITE
tr	TRACES
LOC	LOCAL, LOCALITY
DIS	DISSEMINATED
DTCRPS	DITCRPS
42009	SAMPLE (BASE AND PRECIOUS METALS)
42010	SAMPLE (BASE ELEMENTS)
TRENCH	TRENCH
PIT	PIT
EXP	EXPLORATION SHAFT
GC	GEOLOGICAL CONTACT
F/S	FAULT / SHEAR
TRAIL	TRAIL
Road	ROAD (SUITABLE FOR MOTOR VEHICLES)
GD	GOLD OCCURRENCE

**GOLD OCCURRENCES**

**ZAVITZ CREEK SHOWING**  
 C3-5m LARGE ALBITIC (GSK)  
 42009 848 ppb Au  
 42010 578 ppb Au

**ALBITIZED ZONE IN VARIOLITIC BASALT**  
 42009 425 ppb Au  
 42004 322 ppb Au

**ALBITIZED ZONE IN VARIOLITIC BASALT**  
 42008 440 ppb Au  
 42009 245 ppb Au  
 42001 220 ppb Au  
 42002 97 ppb Au

**FUCHSITIZED AND ALBITIZED ROCK (UM?)**  
 42114 125 ppb Au  
 42115 298 ppb Au  
 42116 388 ppb Au  
 42117 98 ppb Au

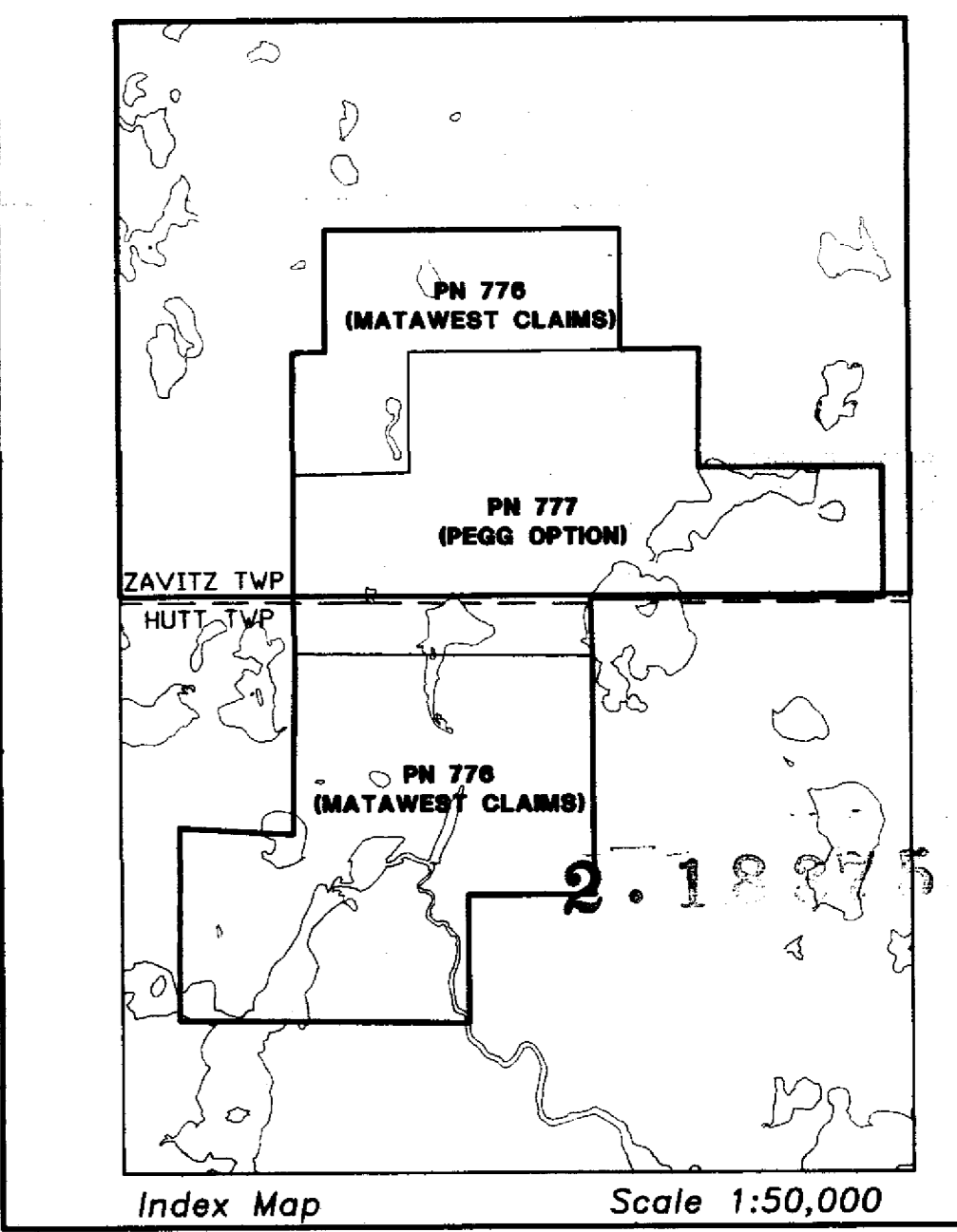
**OTHERS SLIGHT ANOMALIES (Au)**

**SYENITE**  
 42029 155 ppb Au

**VIPOND'S PROSPECT**  
 42023 75 ppb Au

**ALBITIC DIKE**  
 42109 180 ppb Au

**OTHER**  
 42023 75 ppb Au  
 42132 53 ppb Au  
 42059 85 ppb Au



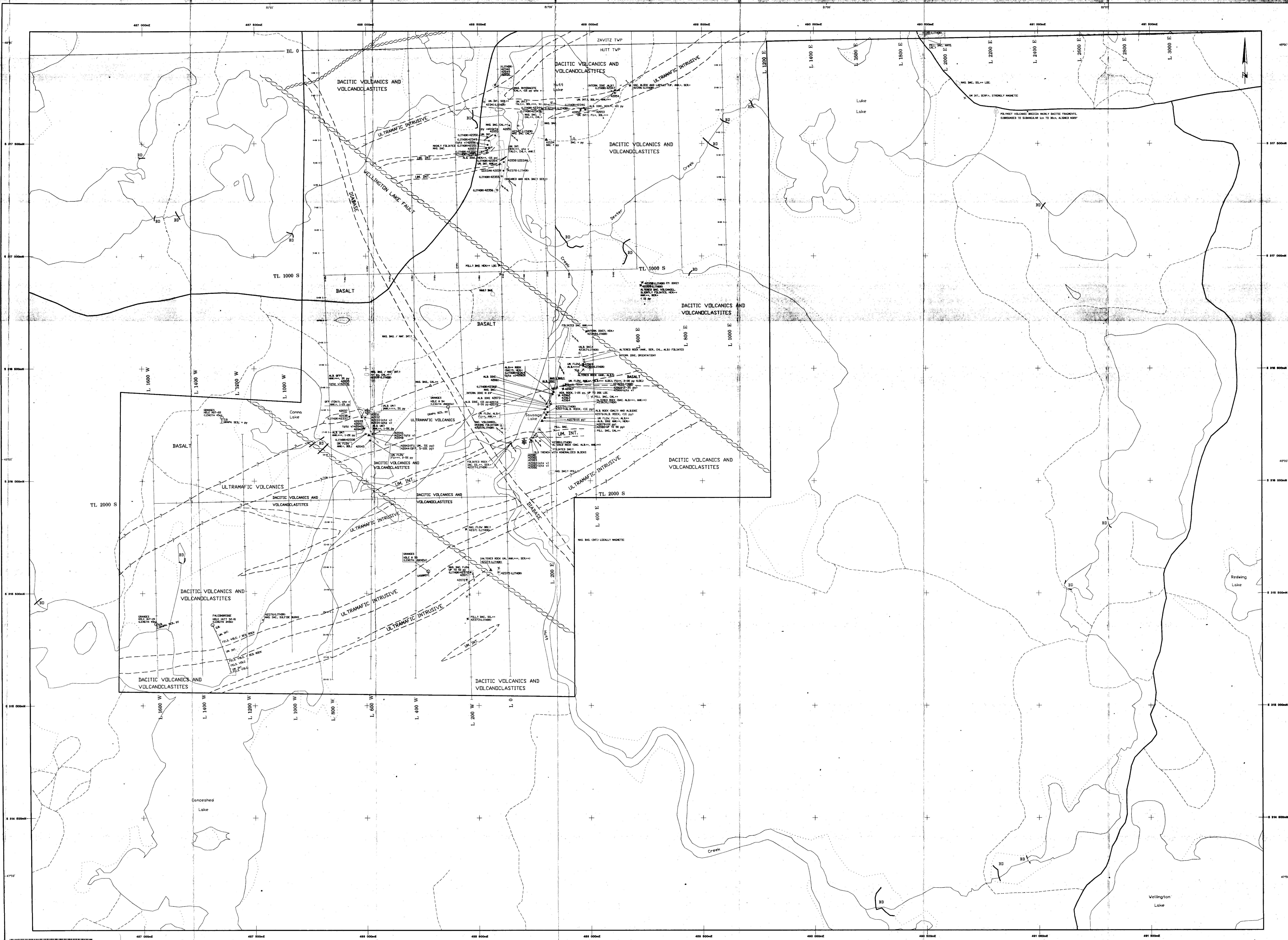
**LES MINES INMET CORPORATION MINIERE INMET**  
 ULTRAMAFIC, SERICITIC DIVISION, EXPLORATION

PROPRIÉTÉ : MATAWEST (PH-776, 777)

**GEOLOGICAL MAP**  
 NORTHERN SHEET

Scale: 1:50,000

Interpreté par: M.A.L. 30/02/98 Dessiné par: J.M.B. 16/02/98  
 Modifié par: C.M. 01/03/98  
 S.E.C.C. : C-7, 42-A No. plan :  
 Projection : UTM 20N 17 RAD 27 Fuselage : MATL-3-A



**LEGEND**

**ROCK TYPE, COMPOSITION**

- BAS. : BASALTE
- DAC. : DACITE, DACITE
- ALB. : ALBITE GROUND
- DIA. : DIABASE
- MAF. : MAFIC
- UM. : ULTRAMAFIC
- FELS. : FELSIC
- INTERM. : INTERMEDIATE
- SYE. : SYENITE
- FP. : FELDSPAR PORPHYRITIC
- QFP. : QUARTZ - FELDSPAR PORPHYRY

**FACIES, OTHER**

- INT. : INTRUSIVE
- VOLC. : VOLCANIC
- SER. : SEDIMENTS (SEDIMENTARY ROCKS)
- VOLCANOCL. : VOLCANOCLASTITE
- MAS. : MASSIVE
- PILL. : PILLLOWED
- BRECC. : BRECCIA, BRECCIATED
- VAR. : VARIOLITIC
- HYDRO. : HYDROTHERMAL
- C.J. : COLUMNAR JOINTING

**ALTERATION / MINERAL**

- TOL. : TOURMALINE
- SL. : SERICITE
- AN. : ANKERITE
- SER. : SERICITE
- SIL. : SILICA, SILICIFIED
- CAL. : CALCITE
- ALB. : ALBITE, ALBITIZED
- CHL. : CHLORITE, CHLORITIZED
- HEM. : HEMATITE, HEMATIZED
- FEL. : FELSIC
- QZ. V. : QUARTZ V.
- SERP. : SERPENTINE
- BD. : BOTTLE
- GRAPH. : GRAPHITE

**MINERALIZATION / OTHER**

- PY. : PYRITE
- TR. : TRACES
- LOC. : LOCAL, LOCALLY
- DIS. : DISSEMINATED
- DIT. : DUCTILE
- 42073 : SAMPLE (BASE AND PRECIOUS METAL)
- 42082 : SAMPLE (GOLD ELEMENTS)
- TRENCH : TRENCH
- PIT : PIT
- EXP. : EXPLORATION SHAFT
- GEOL. : GEOLOGICAL CONTACT
- FAULT / SHEAR : FAULT / SHEAR
- TRAIL : TRAIL
- ROAD : ROAD (SUITABLE FOR MOTOR VEHICLES)
- GOLD : GOLD OCCURRENCE

**GOLD OCCURENCES**

**COMA LAKE SHOWING**

- 42031 : 250 ppb Au
- 42032 : 425 ppb Au
- 42033 : 150 ppb Au
- 42036 : 250 ppb Au

**OLD TRENCH WITH MINERALIZED BLOCS**

- 42082 : 150 ppb Au
- 42083 : 331 ppb Au
- 42086 : 295 ppb Au

**OTHERS SLIGHT ANOMALIES (Au)**

- SYENITE
- 42029 : 155 ppb Au
- VIPOND'S PROSPECT
- 42023 : 75 ppb Au
- ALBITITE DIKE
- 42100 : 160 ppb Au
- OTHER
- 42023 : 75 ppb Au
- 42132 : 53 ppb Au
- 42025 : 85 ppb Au

**Index Map** Scale 1:50,000

**LES MINES INMET CORPORATION MINIERE INMET**

PROPRIÉTÉ : MATAWEST (PN-776, 777)

**GEOLOGICAL MAP SOUTHERN SHEET**

Scale 1:50,000

Interpreté par : M.A.L. 30/03/98 Dessiné par : Z.M.B. 17/05/98

Modifié par : M.A.L. 04/05/98

S.R.E.C. : 41-P-42-A No. plan : 17/05/98

Projection : UTM ZONE 17 MAP 27 Fichier d'ing : MATA\_3.D