REPORT OF WORK

on the

SYLVANITE CREEK PROPERTY

Tooms Township, ON
NTS 41 0/10
Porcupine Mining Division

for

INTERNATIONAL KIRKLAND MINERALS INC.

January 19, 1998 Geoserve Canada Inc. Rodney Barber

TABLE OF CONTENTS

ACCOMPANYING FIGURES AND PLANS

1.0 SUMMARY

During December 1997, line cutting, total field magnetics, and horizontal loop electromagnetic surveys were carried out on a selected portion of the Sylvanite Creek Property on behalf of International Kirkland Minerals, Ltd. Five bedrock electromagnetic conductors were found, all in, or near a north-northeast trending area of higher magnetic susceptibility. Diamond drilling of three, and possibly four, of these conductors is recommended.

2.0 INTRODUCTION

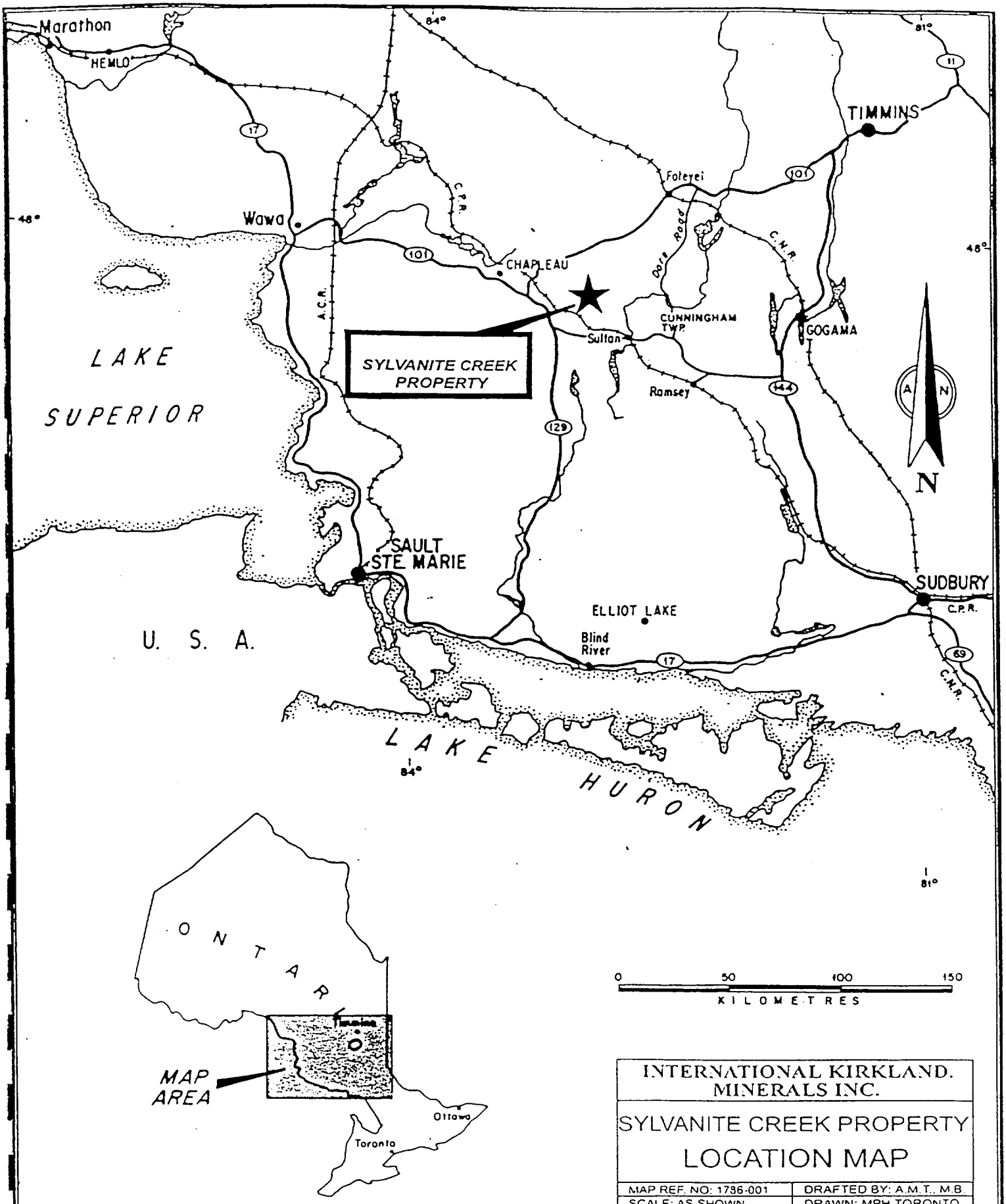
Between December 25 and December 29, 1997, Geoserve Canada Inc conducted geophysical surveys on behalf of International Kirkland Minerals Inc on the Sylvanite Creek Property. The results of these surveys form the basis of this report.

The property consists of unpatented contiguous mining claims comprising 98 units in Tooms Township, ON. The claims are numbered 1151590, 1159700, 1154863 to 1154866 inclusive, 1154941 to 1154950 inclusive, 1155570 to 1155580 inclusive, 1155593, 1158171 and 1189130 to 1189137 inclusive.

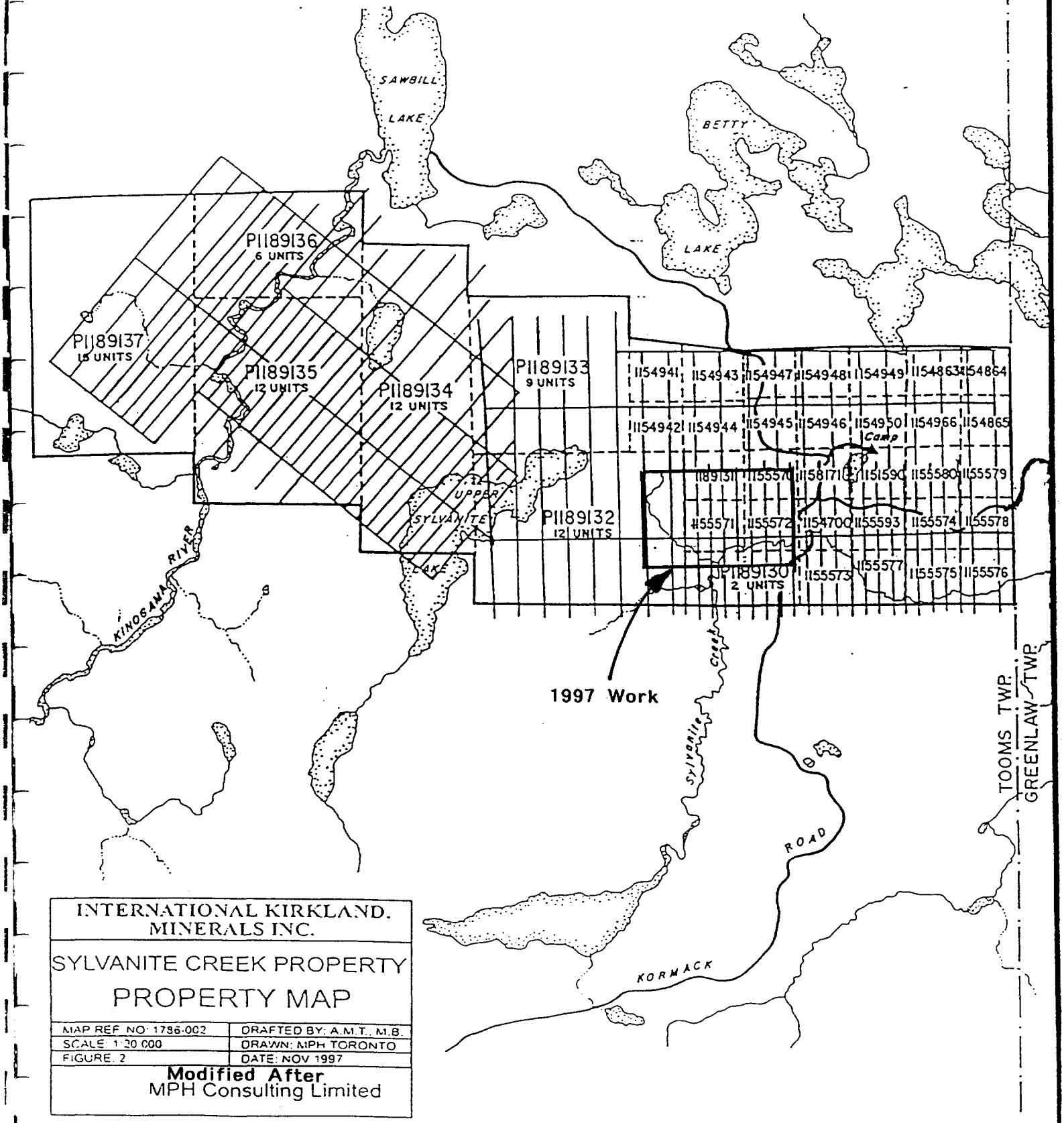
The property is located approximately 140 km (240 km via road) southwest of Timmins, ON and 45 km (60 km via road) southeast of Chapleau, ON. The Tooms Logging Road passes through the property and connects with Sultan-Chapleau highway (HWY 667) see Figure 1.

3.0 REGIONAL GEOLOGY

The property lies within the southwestern part of the Swayze Greenstone Belt, which is generally considered to be the westward extension of the Abitibi Subprovince. The Swayze Greenstone Belt consists primarily of mafic volcanics with intercalated intermediate to felsic volcanics and local komatiitic volcanics, all of Archean age. Late Archean, "Temiskaming-type" clastic sediments unconformably overlie the volcanic rocks. The supracrustal rocks are intruded by batholiths and stocks of granitic to granodiorite composition and by Proterozoic-aged diabase dykes.



INTERNATIONAL KIRKLAND. MINERALS INC.	
SYLVANITE CREEK PROPERTY	
LOCATION MAP	
MAP REF. NO: 1786-001	DRAFTED BY: A.M.T., M.B.
SCALE: AS SHOWN	DRAWN: MPH TORONTO
FIGURE: 1	DATE: NOV 1997
After MPH Consulting Limited	



INTERNATIONAL KIRKLAND MINERALS INC.	
SYLVANITE CREEK PROPERTY	
PROPERTY MAP	
MAP REF. NO: 1796-002	DRAFTED BY: A.M.T., M.B.
SCALE: 1:20 000	DRAWN: MPH TORONTO
FIGURE: 2	DATE: NOV 1997
Modified After MPH Consulting Limited	

PROTEROZOIC

MESOPROTEROZOIC (0.9 to 1.6 Ga)

UPPER KEWEENAWAN SUPERGROUP

INTRUSIVE ROCKS

Carbonatite–alkalic intrusive suite (1.0 to 1.2 Ga): carbonatite, nepheline syenite, alkalic syenite, ijolite, fenite; associated mafic and ultramafic rocks

30 **Mafic intrusive rocks**[l]

30a *Mackenzie swarm (1267 Ma):* diabase dikes

30b *Sudbury swarm (1238 Ma):* diabase dikes

PALEOPROTEROZOIC (1.6 to 2.5 Ga)

21 **Mafic and related intrusive rocks**[l]

21a *Preissac swarm:* diabase dikes

21b *Marathon swarm:* diabase dikes

21c *Kenora–Fort Frances swarm:* diabase dikes

21d *Nipissing sills (2219 Ma):* diabase sills, dikes and related granophyre

21e Mafic dikes and plutons of uncertain age

INTRUSIVE ROCKS

17 **Mafic and ultramafic intrusive rocks**

17a *Matachewan and Hearst swarms (2454 Ma)*[l]: diabase dikes

17b Gabbro, anorthosite

SUPERIOR PROVINCE

ARCHEAN

NEO- TO MESOARCHEAN (2.5 to 3.4 Ga)[egop]

INTRUSIVE ROCKS

Massive granodiorite to granite: massive to foliated granodiorite to granite

15a Potassium feldspar megacrystic units

Diorite–monzonite–granodiorite suite: diorite, tonalite, monzonite, granodiorite, syenite and hypabyssal equivalents (saturated to oversaturated suite)

12 **Foliated tonalite suite:** tonalite to granodiorite—foliated to massive

11 **Gneissic tonalite suite:** tonalite to granodiorite—foliated to gneissic—with minor supracrustal inclusions

Mafic and ultramafic rocks[q]: gabbro, anorthosite, ultramafic rocks

NEO-ARCHEAN (2.5 to 2.9 Ga)

SUPRACRUSTAL ROCKS

Coarse clastic metasedimentary rocks[r]: mainly coarse clastic metasedimentary rocks, with minor, mainly alkalic, mafic to felsic metavolcanic flows, tuffs and breccias

NEO- TO MESOARCHEAN (2.5 to 3.4 Ga)

SUPRACRUSTAL ROCKS

Migmatized supracrustal rocks[eg]: metavolcanic rocks, minor metasedimentary rocks, mafic gneisses of uncertain protolith, granitic gneisses

7 **Metasedimentary rocks**[eg]: wacke, arkose, argillite, slate, marble, chert, iron formation, minor metavolcanic rocks

7a Paragneisses and migmatites[s]

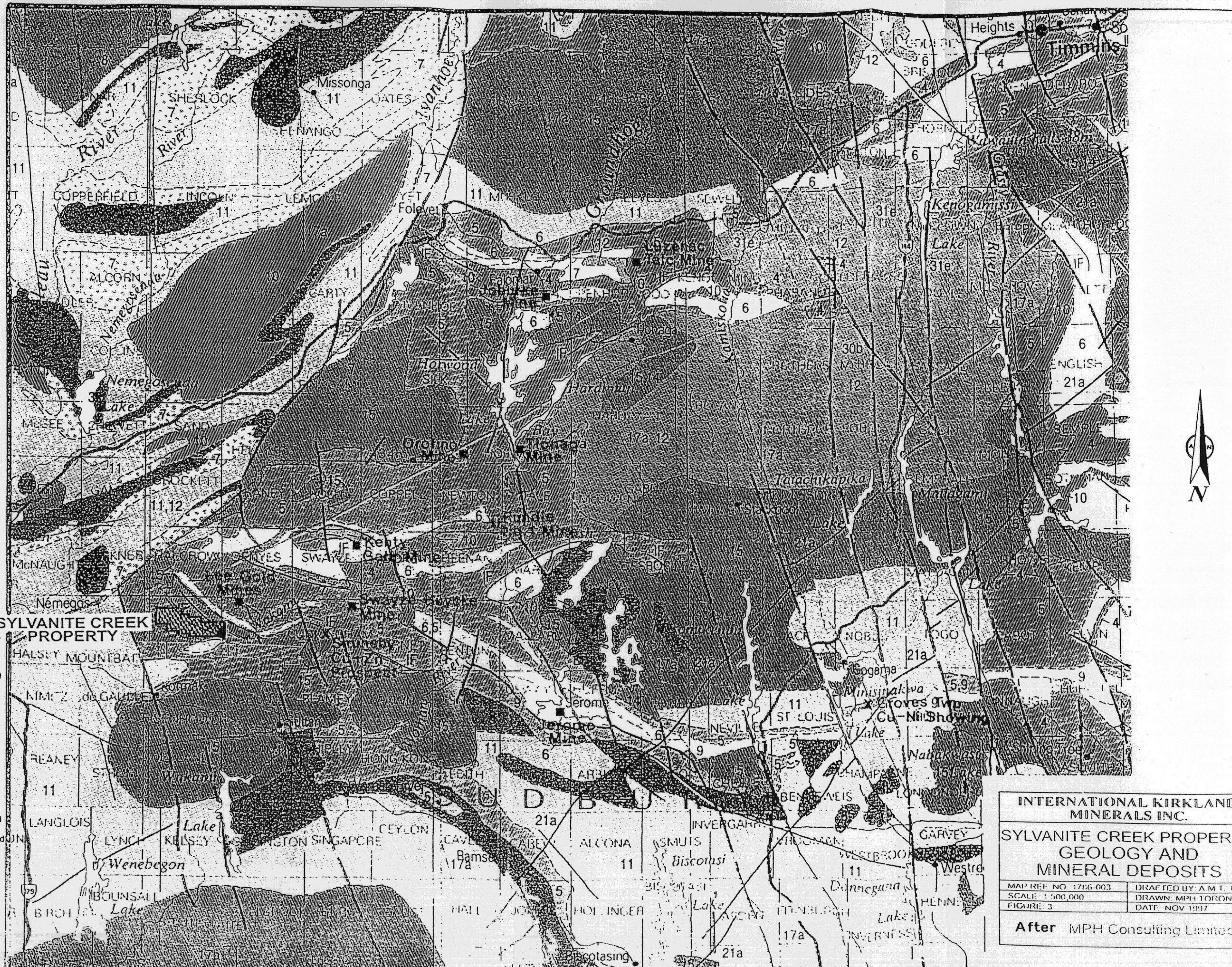
7b Conglomerate and arenite

Felsic to intermediate metavolcanic rocks[gt]: rhyolitic, rhyodacitic, dacitic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and intrusive rocks; related migmatites

5 **Mafic to intermediate metavolcanic rocks**[gt]: basaltic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and intrusive rocks, related migmatites

5a Andesitic flows, tuffs and breccias with minor rhyolites[u]

4 **Mafic to ultramafic metavolcanic rocks**[gt]: mafic metavolcanic rocks with minor komatiite, minor metasedimentary and pyroclastic rocks



Donovan (1968) describes a large synclinal structure, mainly to the north at the property. The axis of this fold trends roughly 305°/125° through Halcrow and Denyes Townships, before swinging to 280°/100° further to the east. Bate and Sobie (1992) suggest that the complimentary anticline underlies the property. The Swayze Belt is truncated to the west by northeast-southwest trending faults associated with the Kapuskasing Structure. Late faults trending 345°/165° cut the supracrustal rocks and Archean batholiths.

The Swayze Greenstone Belt contains hundreds of occurrences of gold, copper, zinc, lead, nickel, iron molybdenum, asbestos and talc.

4.0 PREVIOUS WORK

Although prospecting activities in adjacent Greenlaw Township date back to 1931, the extensive overburden cover in Tooms Township meant that this area received only cursory examination. Since the 1950's, a great deal of work has been done in the surrounding area. Following is a summary of past work on the area covered by the current property only. An excellent compilation of geology and past work has been prepared by MPH Consulting Ltd. (1997).

Anaconda Company (Canada) Limited (1959) conducted airborne and ground electromagnetic surveys on a 9 claim group. 3 holes were drilled for a total of 831 feet.

Tooms Nickel Syndicate/Armac Securities (1966-1968) performed magnetometer, VLF-EM and geological surveys and trenching, resulting in the discovery of the Tooms Nickel Syndicate Showing. Subsequently, a total of 13 diamond drill holes tested the area near the showing.

Canex Aerial Explorations Ltd. (1972) conducted magnetometer and VLF-EM surveys near the Tooms Nickel Syndicate Showing.

Granges Explorations AB (late 1970's) performed airborne and ground magnetometer and EM surveys as part of a regional exploration program. This was followed by 30 diamond drill holes on the current property, resulting in the discovery of the Granges Showing.

Quinterra Resources Inc/Highland Crow Resources (1982-1987) conducted airborne magnetometer and EM surveys, followed by ground magnetometer, geology and IP surveys and trenching. Diamond drilling concentrated on the Quinterra Showing. At one point, Inco Gold held an option on the Quinterra ground, and drilled a number of reverse circulation holes.

Kennecott Canada Inc. (1992-1993) contracted MPH Consulting Ltd to perform magnetometer, HLEM and geological surveys and trenching. This was followed by 8 diamond drill holes for 1564.4 m.

International Kirkland Minerals Inc. (1997) Geological compilation report by B.J. McKay Limited.

5.0 PROPERTY GEOLOGY

Following is a brief description of the geology of the Sylvanite Creek Property. More complete and detailed descriptions are contained in McKay (1997) and Bate and Sobie (1992). The property is underlain primarily by a sequence of mafic to intermediate flows and felsic flows and pyroclastics. Within this sequence are intercalations of

ultramafic volcanics and intrusive equivalents and iron formation, consisting of silicate, oxide and sulphide components. An interflow(?) sedimentary horizon, consisting of greywacke, argillite, chert and sulphide members occurs in the southeastern part of the property. Generally, stratigraphy strikes northwest-southeast, but is locally disrupted due to minor folds. North-facing flows were reported by Bate and Sobie (1992), while bedding dips steeply northeast or steeply southwest. This provides evidence of the anticline mentioned earlier. Local shearing has converted the mafic and ultramafic rocks to chlorite-quartz-sericite schist or carbonate-chlorite-sericite-fuchsite-talc schist ("green carbonate")

The volcano-sedimentary sequence is intruded by gabbro (possibly in part subvolcanic or extrusive), diorite, granite and feldspar and/or quartz -feldspar porphyry.

A major northeast-southwest trending fault is located in the western part of the property.

5.1 Mineral Occurrences

Two significant copper-nickel showings and one gold showing occur on the property. Both copper-nickel showings are believed to represent a style of mineralization similar to that of the Kambalda, Australia and Langmuir Township, Ontario deposits.

5.1.1 Tooms Nickel Syndicate

This showing was discovered by the Tooms Nickel Syndicate in 1968, as a follow-up to magnetometer and VLF-EM surveys. The mineralization consists of 1% to 15% combined pyrrhotite, pyrite and chalcopyrite within mafic pyroclastics and cherty exhalites; near the contact of a massive serpentinite body. Bate and Sobie (1992) report that "pentlandite is the main nickel mineral, this occurring as exsolution-like lamella in pyrrhotite and possibly as discrete grains with pyrite and pyrrhotite".

The showing has been trenched and/or drilled in at least 3 major exploration programs (Tooms Nickel Syndicate, Granges and Kennecott). The highest values obtained from the trenches are 1.82% Ni and 1.02% Cu from separate grab samples. The highest values obtained from diamond drilling are 0.516% Cu over 10.36 m and 0.479% Ni over 7.62 m in separate holes. Bate and Sobie (1992) report that this mineralization occurs near the top of the ultramafic body.

5.1.2 Granges Showing

The Granges Showing occurs approximately 1200 m along strike to the west of the Tooms Nickel Syndicate Showing and was discovered in the 1970's by Granges Exploration AB. The showing is hosted in intermediate to felsic tuffs and fragmentals and mafic tuffs in contact with serpentinite. The highest assay results from diamond drilling are 0.50% Ni, 0.01% Cu and 0.02% Co over 4.82 m, 0.21% Ni, 0.15% Cu, 0.05% Co over 9.14 m and 0.44% Ni, 0.02% Cu over 3.66 m.

5.1.3 Quinterra Gold Showing

In the period 1982-1987, the Quinterra Gold Showing was discovered and drilled. The mineralization is hosted within carbonatized, silicified and sericitized mafic and ultramafic volcanics, within an extensive regional deformation zone. Assay results from diamond drilling range up to 0.113 oz Au/ton over 7.47 m, including 1.36 oz Au/ton over 0.46 m. The mineralization proved to be erratic, however, and the property was allowed to lapse.

6.0 1997 WORK

6.1 Line Cutting

Between December 15 and December 23,1997 Geoserve Canada Inc crews cut a total of 14.4 km of line grid in the Granges Showing area. This consisted of 11 cross lines oriented 090°/270°, including recutting part of Kennecott's baseline and recutting parts of Line 1200E, and 2200E orientated north-south. All lines were chained at 25 m intervals. Two additional north-south lines were cut at 1650E, and 1750E, parallel to 1200E and 2200E.

6.2 TFM SURVEY

6.2.1 Procedure

From December 27 to December 28, 1997, A. Belisle and D. Caron carried out the total field magnetics survey over the recently 14.4 km detail grid. Crews used GSM-19 magnetometers to take readings at 12.5 m intervals along the lines. A similar GSM-19 magnetomer was used to monitor the diurnal drift at 30 second intervals. A total of 1158 stations were read for 14.4 km. The original data ranged from 56358 nT to 69161 nT. This was then corrected by subtracting 58000 nT, before posting the values on Plan 2.

6.2.2 Results

The corrected magnetics data is presented in Plan 2. The western part of the survey area appears fairly flat, while the eastern part shows much more contrast. Two prominent magnetic "bullseyes" are centred near L200S, 1565E and L1750E, 260N, respectively. The cause of the first is not known, while the second corresponds to an area known to be underlain by serpentinite. A weaker north-northeast trending high connects the two bullseyes. Note that the magnetic gradient is highly variable in this area. A break in the high magnetics centred near 100S, 1600E is coincident with a north-south fault shown on the MPH Compilation.

6.3 HLEM SURVEY

6.3.1 Procedure

The electromagnetic survey was conducted from December 27 to December 29, 1997 by G. Coyne (operator) and D. Crowley both of Timmins, ON. Crews used the Apex max-min I-9 to take readings at 440 Hz, 1760 Hz and 3620 Hz, with a 100 m coil spacing, to take readings at 25 m intervals along each line. Crews read 524 stations.

6.3.2 Results

Profiles of the HLEM surveys are shown on Plan 3, 4 and 5 (440, 1760, and 3520 Hz respectively). Eight anomalies were outlined by the surveys, five of which are considered significant. Anomalies a, b and c may be related to bedrock sources, but lack sufficient profile width to be classified as conductors.

Conductor C1 is a northwest-southeast trending conductor located between BL0, 1500E and L1750E, 160S. The strongest part, on Line 1750E, is a prominent conductor on all of the frequencies surveyed. Minimum conductivity is 21.6 mhos and the maximum 69.1 mhos at 440 Hz. This, and the width of the anomaly classify this as a strong, bedrock conductor. The average inferred depth is 50 m with a southwesterly dip. Note that in three of the places where the profile was analyzed, the inferred depth is greater than the theoretical penetration of the survey. This may be attributed to the sandy overburden and good conductivity of the conductor. It is not certain if this conductor was previously tested by diamond drilling. The compilation by MPH shows drilling by Granges to be located slightly to the south. Note that the western part of this conductor is on the west side of a previously mapped north-south fault and does not appear to have been drilled.

C2 is an east-west trending conductor on lines 1650E and 1750E at approximately 70N. Conductivity of 69.1 mhos and 51.8 mhos, on the 440 Hz survey, and widths over 200 m classify this as a strong bedrock conductor. This conductor appears to have been drilled by Granges and Kennecott, both of whom intersected low nickel values within sulphide mineralization. Note that the inferred depth of the conductor on Line 1750 is beyond the theoretical penetration, as for conductor C1.

C3 is a northwest-southeast trending conductor between Line 50S, 1980E and BL0, 1950E. The anomaly is barely discernable in the 1760 Hz and 3520 Hz surveys, but shows a good width in the 440 Hz survey. On both lines, the conductivity is 43.2 mhos and the inferred depth is 62 m (see explanation for C1).

C4 is a northwest-southeast trending conductor running from Line 300N, 1800E to Line 100N, 1950E. It is strongest on Line 300N, where the conductivity reaches 172.8 mhos. This and the profile width obviously indicates a strongly conductive bedrock source. Part of this conductor may have been tested by Granges hole SW-86. Again, the inferred depth is greater than the theoretical penetration.

C5 is a one line response on Line 300N, 1575N. The anomaly occurs in each of the surveys but is most pronounced on the 3520 Hz survey. Conductivity is 14.4 mhos, on the 440 Hz survey infering a moderate strength bedrock conductor. The interpreted depth is 38 m.

HLEM Anomaly Classification

ANOMALY	Local Coordinate	Width (meters)	InPhase	OutPhase	Resp.Par. (Depth)	Resp.Par. (Cond)	Depth (meters)	Conduct. (mhos)	Dip
C1	BL0/1500E	48m	-3	-1	0.62	15	62	43.1932	
	L50S/1565E	<1m	-5	-2	0.58	19	58	54.7114	
	L1650E/100S	<1m	-2	-1	0.5	7.5	50	21.5966	
	L100S/1660E	<1m	-3	-1	0.62	15	62	43.1932	
	L150S/1780E	18m	-12	-5	0.4	24	40	69.1091	
	L1750E/170S	20m	-18	-9	0.28	15	28	43.1932	
C2	L1650E/75N	13m	-10	-4	0.45	24	45	69.1091	
	L1750E/60N	40m	-5	-2	0.58	18	58	51.8318	
C3	L50S/1980E	12m	-3	-1	0.62	15	62	43.1932	
	BL0/1950E	30m	-3	-1	0.62	15	62	43.1932	
C4	L300N/1800E	6m	-7	-1	0.58	60	58	172.773	
	L200N/1890E	2m	-4	-1	0.62	19	62	54.7114	
C5	L300N/1575E	12m	-3	-3	0.38	5	38	14.3977	
Unit	max-min I-9	Cable	100						
Freq.	440	Hz							

HLEM Anomaly Classification

ANOMALY	Local Coordinate	Width (meters)	InPhase	OutPhase	Resp.Par. (Depth)	Resp.Par. (Cond)	Depth (meters)	Conduct. (mhos)	Dip
C1	BL0/1500E	42m	-2	-2	0.45	5	45	3.59943	
	L50S/1586E	<1m	-8	-4	0.48	17	48	12.2381	
	L1650E/120S	10m	-3	-2	0.4	5	40	3.59943	
	L100S/1660E	<1m	-3	-2	0.4	5	40	3.59943	
	L150S/1740E	5m	-20	-15	0.18	10	18	7.19886	
	L1750E/165S	20m	-25	-12	0.2	20	20	14.3977	
C2	L1650E/75N	37m	-15	-6	0.35	33	35	23.7563	
	L1750E/75N	48m	-7	-6	0.38	6	38	4.31932	
C3	BL0+00	<1m	extremely	weak			0	0	
	L50S	<1m	"	"			0	0	
C4	L300N/1800E	10m	-4	-5	0.31	3	31	2.15966	
	L200N/1880E	<1m	extremely	weak			0	0	
C5	L300N/1565E	30m	-4	-9	0.09	2	9	1.43977	
							0	0	
Unit	max-min I-9	Cable	100						
Freq.	1760	Hz							

HLEM Anomaly Classification

ANOMALY	Local Coordinate	Width (meters)	InPhase	OutPhase	Resp.Par. (Depth)	Resp.Par. (Cond)	Depth (meters)	Conduct. (mhos)	Dip
C1	BL0/1500E	40m	-2	-3	0.2	1.4	20	0.50392	
	L50S/1600E	<1m	-8	-6	0.4	10	40	3.59943	
	L1650E/120S	10m	-3	-2	0.5	10	50	3.59943	
	L100S/1660E	<1m	-3	-5	0.25	3	25	1.07983	
	L1750E/170S	18m	-29	-11	0.18	36	18	12.9580	
	L150S/1740E	5m	-20	-14	0.18	11	18	3.95938	
C2	L1650E/75N	40m	-15	-5	0.38	52	38	18.7170	
	L1750E/60N	50m	-7	-6	0.38	7	38	2.51960	
C3			extremely	weak					
			"	"					
C4	L300N/1800E	10m	-4	-7	0.2	2	20	0.71989	
C5	L300N/1560E	30m	-4	-8	0.1	1.5	10	0.53991	
Unit	max-min I-9	Cable	100						
Freq.	3520	Hz							

7.0 CONCLUSIONS AND RECOMMENDATIONS

The magnetics survey outlined a north-northeast trending area of higher magnetic susceptibility near the centre of the property. This appears to be cut by a previously mapped north-south fault near 100S, 1600E.

Five conductors, thought to be caused by bedrock sources and three anomalies, thought to be due to overburden responses or a weakly conductive bedrock source were outlined by the HLEM survey. The eastern part of C1 was probably drilled by Granges, who intersected low nickel values. The slight difference in the location of the holes relative to the conductor is attributable to the lack of a common, fixed survey point in the area. C2 was drilled by Granges and Kennecott and is caused by nickel-bearing sulphides. C3, C5, the west part of C1 and possibly C4 have not been tested and should be investigated further.

Recommendations to advance the property are:

1. If possible, hole SW-86 should be located in the field, to determine if conductor C4 was adequately tested. Likewise, the holes drilled near C1 should be located, if possible.

2. The west part of C1, and conductors C3, C5 and possibly C4 should all be tested by diamond drilling.

Respectfully Submitted For Approval,

R Barber

Rodney A Barber

01/27/98

Date

8.0 REFERENCES

Anaconda Company (Canada) Limited, 1959, Report on Electromagnetic Surveys, accompanied by diamond drill logs. MNDM Assessment Files, South Porcupine.

Bate, S. J. And Sobie, P. A., 1992, Report on the Tooms Nickel Property of Kennecott Canada Inc., Swayze Greenstone Belt, ON.

Donovan, T.F., 1968 Geology of the Halcrow-Ridout Lakes Area. ODM GR 63, 45p.

McKay, B.J., 1997 Geological Compilation of the Sylvanite Creek Property.

Canex Aerial Explorations (1972) Report on magnetomer and VLF surveys, MNDM Assessment Files, South Porcupine.

Granges Explorations AB Various reports covering magnetometer and EM surveys and diamond drilling. MNDM Assessment Files, South Porcupine.

Quinterra Resources Inc., 1981-1985, Various reports covering geology, geophysics, diamond drilling, progress on, and exploration potential of the Sylvanite Creek Property, Tooms and Greenlaw Townships. MNDM Assessment Files, South Porcupine.

Tooms Nickel Syndicate, 1969, Drill logs, sections and plan map covering work on the Tooms Township Property. MNDM Assessment Files, South Porcupine.

9.0 CERTIFICATE OF QUALIFICATIONS

I, **Rodney Alan Barber**, residing at 119 Lois Crescent, Timmins, ON., certify that:

1. I hold a BSC (Honours) in Geology, obtained from Laurentian University, Sudbury, ON in 1988.

2. I have worked within the mineral exploration and mining industries since 1988, with an emphasis on northeastern Ontario for the last 7 years.

3. This report is the product of the examination of the survey results which accompany this report, published geological reports and maps and Assessment Files located in the Resident Geologists Office South Porcupine, ON.

4. I have no direct interest in International Kirkland Minerals Inc., MPH Consulting Ltd., or the Sylvanite Creek Property.

01/27/98
Date

R Barber
Rodney A. Barber

10.0 Equipment Specifications & Survey Theory

10.1.0 Apex MaxMin I-9 Description

•The MaxMin I ground Horizontal Loop ElectroMagnetic (HLEM) systems are designed for mineral & water exploration and for geoengineering applications. They expand the highly popular MaxMin II and III EM system concepts. The frequency range (in Hz) is extended to seven octaves from four. The ranges and numbers of coil separations are increased and new operating modes are added. The receiver can also be used independently for measurements with power line sources. The advanced spheric and powerline noise rejection is further improved, resulting in faster and more accurate surveys, particularly at large coil separations. Several receivers may be operated along a single reference scale. Mating plug in data acquisition computer is available for use with MaxMin I for automatic digital acquisition and processing. The computer specifications are in separate data sheets.

10.1.2 Specifications

•Frequencies 110, 220, 440, 880, 1760, 3520, 7040, 14080 Hz plus 50/60Hz powerline frequency (receiver only).

•Modes MAX1: HL mode, Tx & Rx coil planes horizontal and coplanar.
MAX2: V coplanar loop mode, Tx & Rx coil planes V & coplanar
MAX3: V coaxial loop mode, Tx & Rx coil planes V & coaxial
MIN1: P loop mode 1 (Tx coil plane H & Rx coil plane V.
MIN2: P loop mode 2 (Tx coil plane V & Rx coil plane H.

•Coil Separation 12.5,25,50,75,100,125,150,200,300,400 meters standard.
10,20,40,60,80,100,120,160,200,240,320 m, internal option
50,100,200,300,400,500,600,800,1000,1200,1600ft internal opt •Parameters IP and Q components of the secondary magnetic field, in % Measure of primary (Tx) fld. Fld amplitude and/or tilt of PL fld. •Readouts Analog direct readouts on edgewise panel meters for IP, Q and tilt, and for 50/60Hz amplitude. Additional digital readouts when using the DAC, for which interfacing and controls are provided for plug-in.

•Range of Analog IP and Q scales; 0 ±20%, 0 ±2-%, 0 Readouts ±100%, switch activated. Analogue tilt scale 0 ±75% grade (digital IP & Q 0 ±102.4%).

•Readability Analogue IP and Q 0.05% to 0.5%, analogue tilt 1% grade (digital IP & Q 0.1%).

•Repeatability ±0.05% to ± 1% normally, depending on frequency, coil spacing & conditions.

•Signal Powerline comb filter, continuous spherics noise clipping, Filtering autoadjusting time constants and other filtering.

•Warning Lights Rx signal and reference warning lights to indicate potential errors.

•Survey Depth From surface down to 1.5 times coil separation used.

•Transmitter 110Hz: 220atm 220Hz: 215atm 440Hz: 210atm 880Hz: 200atm
Dipole moments 1760Hz: 160atm 3520Hz: 80atm 7040Hz:40atm 14080Hz: 20atm •Reference Cable Light weight unshielded 4/2 conductor teflon cable for maximum temperature range and for minimum friction.

•Intercom Voice communication link via reference cable.

•Rx Power Supply Four standard 9V batt (0.5Ah, alk). Life 30 hrs continuous duty, less in cold weather. Rechargeable batt optional.

•Tx Power Supply Rechargeable sealed gel type lead acid 12V-13Ahr batt (4x 6V-6½Ah) in canvas belt. Opt 12V-8Ahr light duty belt pack.

•Tx Battery For 110-120/220-240VAC, 50/60/400 Hz and 12-15VDC supply Charger operation, automatic float charge mode, three charge status indicator lights. Output 14.4V-1.25A nominal.

•Operating Temp -40°C to +60°C

•Rx weight 8 kg •Tx weight 16 kg with standard batt.

IP=In-Phase/ Q=Quadrature/ H= Horizontal/ V= Vertical/ PL= Powerline

10.1.3 HLEM Theory

The MaxMin I is a frequency domain, horizontal loop electromagnetic (HLEM) system, based on measuring the response of conductors to a transmitted, time varying electromagnetic field. The transmitted, or primary EM field is a sinusoidally varying field at any of the eight varying frequencies. This field induces an electromotive force (emf), or voltage, in any conductor through which the field passes (defined by Faraday's Law). The emf causes a secondary current to flow in the conductor in turn generating a secondary electromagnetic field. This changing secondary field induces an emf in the receiver coil (by Faraday's Law) at the same frequency, but which differs from the primary field in magnitude and phase. The difference in phase (phase angle) is a function of the conductance of the conductor(s), both the target and the overburden, and host rock. The magnitude of the secondary field is dependant on the conductance, dimension, depth, geometry as well as on the interference from the overburden and host rock. The two parameters, phase angle and magnitude are measured by measuring the strength of the secondary field in two components; the real field, **In-phase** with the primary field, and the imaginary field, **Quadrature** or 90° out-of-phase from the primary field. The magnitude and phase angle of the response is also a function of the frequency of the primary field. A higher frequency field generates a stronger response to weaker conductors. A low frequency tends to pass through weak conductors and penetrate to a deeper depth. The lower frequency also tends to energize the full thickness of a conductor, and give better measure of it's true conductivity-thickness " α " , in mho's per meter. For these reasons, two or more frequencies are usually used. A lower frequency for better penetration and a higher frequency for stronger response to weaker conductors. The transmitted primary field also creates an emf in the receiver coil, which is much stronger than that of the secondary and must be corrected for by the receiver. This is done by electronically creating an emf in the receiver, whose magnitude is determined by the distance between the transmitter and receiver. The phase is derived from the receiver via an interconnecting cable.

10.1.4 Method

The MaxMin I is a two-man continuously portable EM system. Designed to measure both the vertical and horizontal In-Phase (IP) and Quadrature (QP) components of the anomalous field from electrically conductive zones. The plane of the Transmitter (Tx) was kept parallel to the mean slope between the TX and Receiver (Rx) at all times. This ensures a horizontal loop system measuring perpendicular to the anomalous targets. The grid being surveyed should also be secant chained in order to keep a constant separation (between Tx and Rx) to eliminate anomalous response derived from cable loss over rough terrain. Crews attempted to keep a constant separation for a qualitative survey. Three frequencies; 440Hz, 1760Hz, and 3520Hz were selected to resolve complex conductors if/when encountered. The 200 meter coil spacing, chosen to detect possible deep conductors also ensures a more consistent survey overall (a large spread gives better penetration over areas of conductive layers, eg. clay). The crews read the cross-lines only to cut the geology at a perpendicular angle for better cross-over response.

10.2.0 GEM Systems Advanced Magnetometers GSM-19 V 4.0

GEM Systems Inc
52 West Beaver Creek Road, Unit 14
Richmond Hill, Ontario Phone; (905) 764- 8008
Canada, L4B-1L9 Fax ; (905) 764- 9329

10.2.1 Instrument Description

•The sensor is a dual coil type designed to reduce noise and improve gradient tolerance. The coils are electrostatically shielded and contain a proton rich liquid in a pyrex bottle, which also acts as an RF resonator.

•The sensor cable is coaxial, typically RG-58/U, up to 100m long.

•The staff is made of strong aluminum tubing sections. This construction allows for a selection of sensor elevations above the ground during surveys. For best precision the full staff length should be used. Recommended sensor separation in gradiometer mode is one staff section, although two or three section separations are sometimes used for maximum sensitivity.

•The console contains all the electronic circuitry. It has a sixteen key keyboard, a 4x20 character alphanumeric display, and sensor and power input/ output connectors. The keyboard also serves as an ON-OFF switch.

•The power input/output connector also serves as a RS232 input/output and optionally as analog output and contact closure triggering input.

•The keyboard front panel, and connectors are sealed (can operate under rainy conditions)

•The charger has two levels of charging, full and trickle, switching automatically from one to another. Input is normally 110V 50/60Hz. Optionally, 12V DC can be provided.

•The all-metal housing of the console guarantees excellent EM protection.

10.2.2 Instrument Specifications

Resolution 0.01 nT, magnetic field and gradient
Accuracy 0.20 nT over operating range
Range 20,000 to 120,000 nT automatic tuning, requiring initial setup
Gradient Tolerance over 10,000 nT/m
Operating Interval 3 seconds minimum, faster optional. Reading initiated from keyboard, external trigger, or carriage return via RS-232
Input/Output 6 pin weatherproof connectors
Power Requirements 12V, 200mA peak, 30mA standby, 300mA peak with Gradiometer
Power Source Internal 12V, 1.9Ah sealed lead-acid battery standard, external source optional.
Battery Charger Input; 110/ 220VAC, 50/60Hz and/or 12VDC
Output; 12V dual level charging
Operating Ranges Temperatures; -40°C to +60°C
Battery Voltages; 10.0 V min to 15.0V max
Humidity; up to 90% relative, non condensing
Storage Temperature -50°C to +65°C
Dimensions Console; 223 X 69 X 240 cm
Sensor Staff; 4 x 450mm sections
Sensor; 170 x 71 mm diameter
Weight; Console 2.1Kg Staff 0.9Kg Sensors; 1.1Kg

10.2.3 Theory;

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally occurring magnetic field caused by changes in the magnetization of the rocks in the earth. These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals. Magnetic anomalies in the earth's filed are caused by changes in two types of magnetization; (1) Induced, caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals. (2) Remanent magnetism is independent of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc..) in the rocks. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field. The ***unit*** *of measurement (variations in intensity) is commonly known as the Gamma which is equivalent to the nanotesla (nT).*

10.3.4 Method;

The magnetometer, ***GSM-19*** *with an Overhauser sensor measures the* ***Total Magnetic Field*** *(TFM) perpendicular to the earth's field (horizontal position in the polar region). The unit has no moving parts, produces an absolute and relatively high resolution measurement of the field and displays the measurement on a digital lighted display and is recorded (to memory). Initially, the tuning of the instrument should agree with the nominal value of the magnetic field for each particular area. The Overhauser procession magnetometer collected the data with a* ***0.2 nanoTesla accuracy.*** *The operator read each and every line at a* ***12.5 m interval*** *with the sensor attached to the top of three (56cm) aluminum tubing sections. The readings were corrected for changes in the earth's magnetic field (diurnal drift) with a similar GSM-19 magnetometer, >>base station<< which automatically read and stored the readings at every 30 seconds. The data from both units was then downloaded to PC and base corrected values were computed.*

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

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

Transaction Number (office use)
W9860.00344
Assessment Files Research Imaging

41010NW2001 2.18386 TOOMS 900

subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury,

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	Client Number
Ms. Elizabeth J. Kirkwood	152556
Address: P.O. Box 369, 100 King St. West, Suite 745, Toronto, Ontario, M5X 1E2	Telephone Number (416) 864 9795
	Fax Number (416) 364 0618
Name	Client Number
Address	Telephone Number
	Fax Number

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) | Physical: drilling stripping, trenching and associated assays | Rehabilitation

Work Type	Office Use
Linecutting and Geophysical Surveys	Commodity
	Total $ Value of Work Claimed 11,962
Dates Work Performed From Day 15 Month 12 Year 1997 To Day 29 Month 12 Year 1997	NTS Reference
Global Positioning System Data (if available)	Township/Area: Tooms Township
	M or G-Plan Number
	Mining Division Porcupine
	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	Telephone Number
Geoserve Canada Inc., Rodney Barber	(705) 235 8661
Address: 998 Bruce Ave., P.O. 1525, South Porcupine, Ontario, P0N 1H0	Fax Number (705) 235 8038
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

RECEIVED
MAR 23 1998
GEOSCIENCE ASSESSMENT OFFICE

4. Certification by Recorded Holder or Agent

I, Michael Rosatelli, do hereby certify that I have personal knowledge of the facts set forth in
(Print Name)
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 Michael Rosatelli		Date March 18, 1998
Agent's Address MPH Consulting Limited, 150 York Street, Suite 1800, Toronto, Ontario, M5H 3S5	Telephone Number (416) 365 0930	Fax Number (416) 365 1830

0241 (03/97)

Deemed June 21/98

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.

W9860.00344 (E[illegible] RAIS[illegible])
See NOTE re [illegible] cuts attached

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
1	P1189132	12	$4284.45	~~$4284.45~~ 4800 HR	0	N/A
2	P1189131	1	$1022.38	~~$1022.38~~ 800 HR	0	$222.38
3	P1155571	1	$2044.78	~~$1528.78~~ 800 HR	$516.00	$728.78
4	P1189130	2	$2390.52	~~$2390.52~~ 1600 HR	0	$790.52
5	P1155570	1	$628.10	$628.10	0	N/A
6	P1155572	1	$1592.01	~~$1592.01~~ 800 HR	0	$792.01
	Column Totals	18	$11,962.24	~~$11,448.24~~ 9428 HR	$516.00	$2533.69

I, Michael Rosatelli, 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	Date
Michael Rosatelli	March 18, 1998

6. **Instruction 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
APR 0 6 1998
GEOSCIENCE ASSESSMENT OFFICE

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)	

0241 (03/97)

APR 06 '98 13:18 4163651830 PAGE.02

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
RECEIVED MAR 23 1998 GEOSCIENCE ASSESSMENT OFFICE	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)
W9860.00344

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, this 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 a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of work Depending on the type of work, list the number of hours/day worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Linecutting	14.425 Km	$321.00/km	$4630.42
TFM Geophysical Survey	14.425 Km	$117.70/km	$1697.82
HLEM Geophysical Survey	13.20 Km	$267.50/Km	$3531.00
Quality Control and Supervision	14.425 Km	$69.32/Km	$1000.00
Associated Costs (e.g. supplies, mobilization and demobilization).			
Mobilization/Demobilization	14.425 Km	76.47/Km	$1103.00
Transportation Costs			
Food and Lodging Costs			
		Total Value of Assessment Work	$11,962.24

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 x 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, Michael Rosatelli, do hereby certify, that the amounts shown are as accurate as may reasonably
(print name)
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 consultant geologist, I am authorized to make this certification.
(recorded holder, agent, or state company position with signing authority)

0212 (03/97)

RECEIVED
MAR 23 1998
GEOSCIENCE ASSESSMENT OFFICE

Signature: Michael Rosatelli
Date: March 18, 1998

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

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

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

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

June 5, 1998

ELIZABETH JEAN KIRKWOOD
21 NESBITT DRIVE
TORONTO, Ontario
M4W-2G2

Dear Sir or Madam:

Submission Number: 2.18386

Subject: Transaction Number(s):		**Status**
	W9860.00344	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 Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

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

Correspondence ID: 12379

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18386

Date Correspondence Sent: June 05, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00344	1189132	TOOMS	Deemed Approval	June 03, 1998

Section:
14 Geophysical MAG
14 Geophysical EM

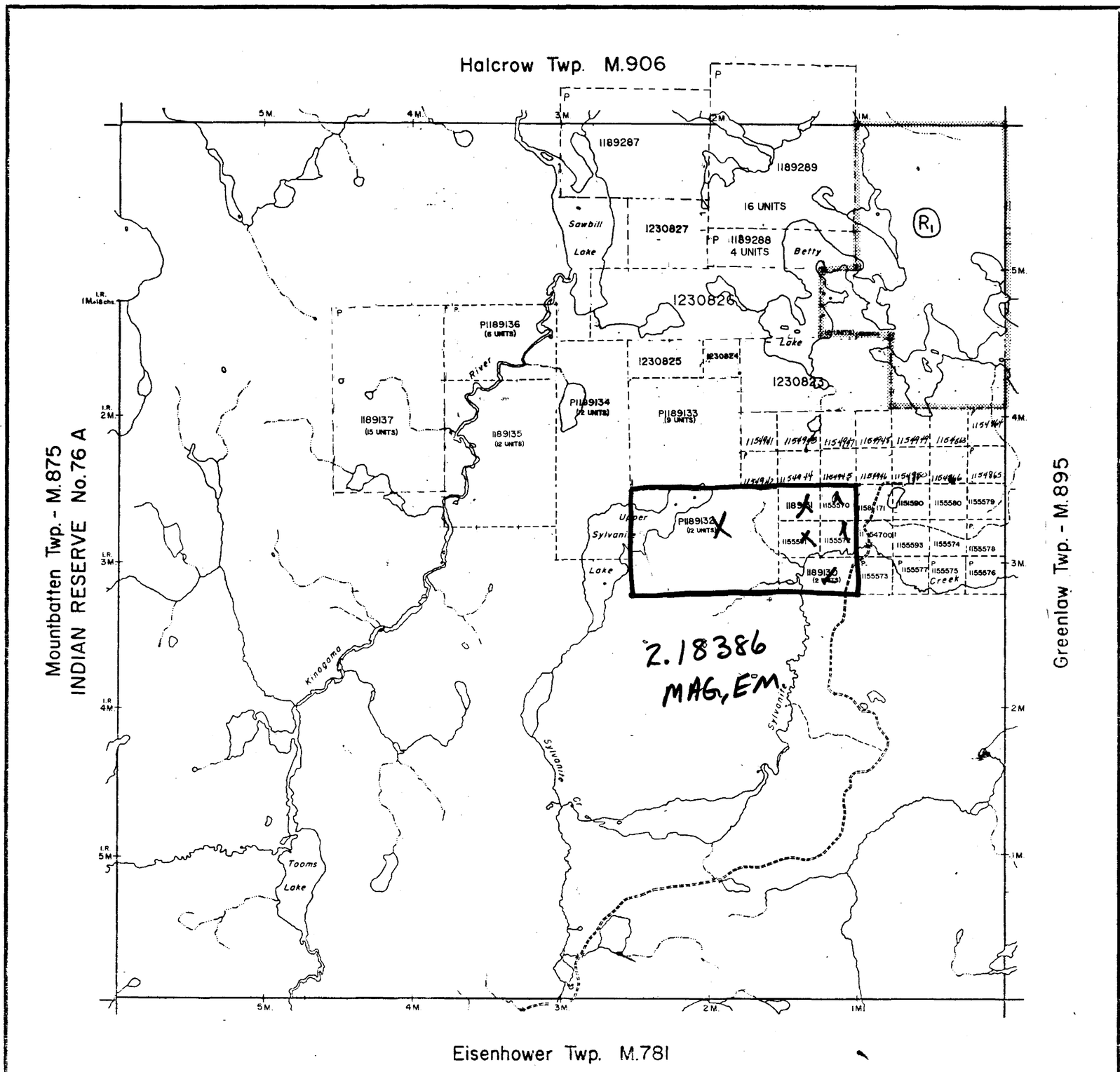
Correspondence to:
Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Michael Rosatelli
TORONTO, ON

ELIZABETH JEAN KIRKWOOD
TORONTO, Ontario

Correspondence ID: 12379



THE TOWNSHIP
OF

TOOMS

DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S.
LEASES	L
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	C.

NOTES

400' Surface Rights Reservation around all lakes and rivers.

R SEC.35 W-P-G/98 NER 28/01/98 M-S 195150

DATE OF ISSUE

JUN 03 1998

PROVINCIAL RECORDING OFFICE - SUDBURY

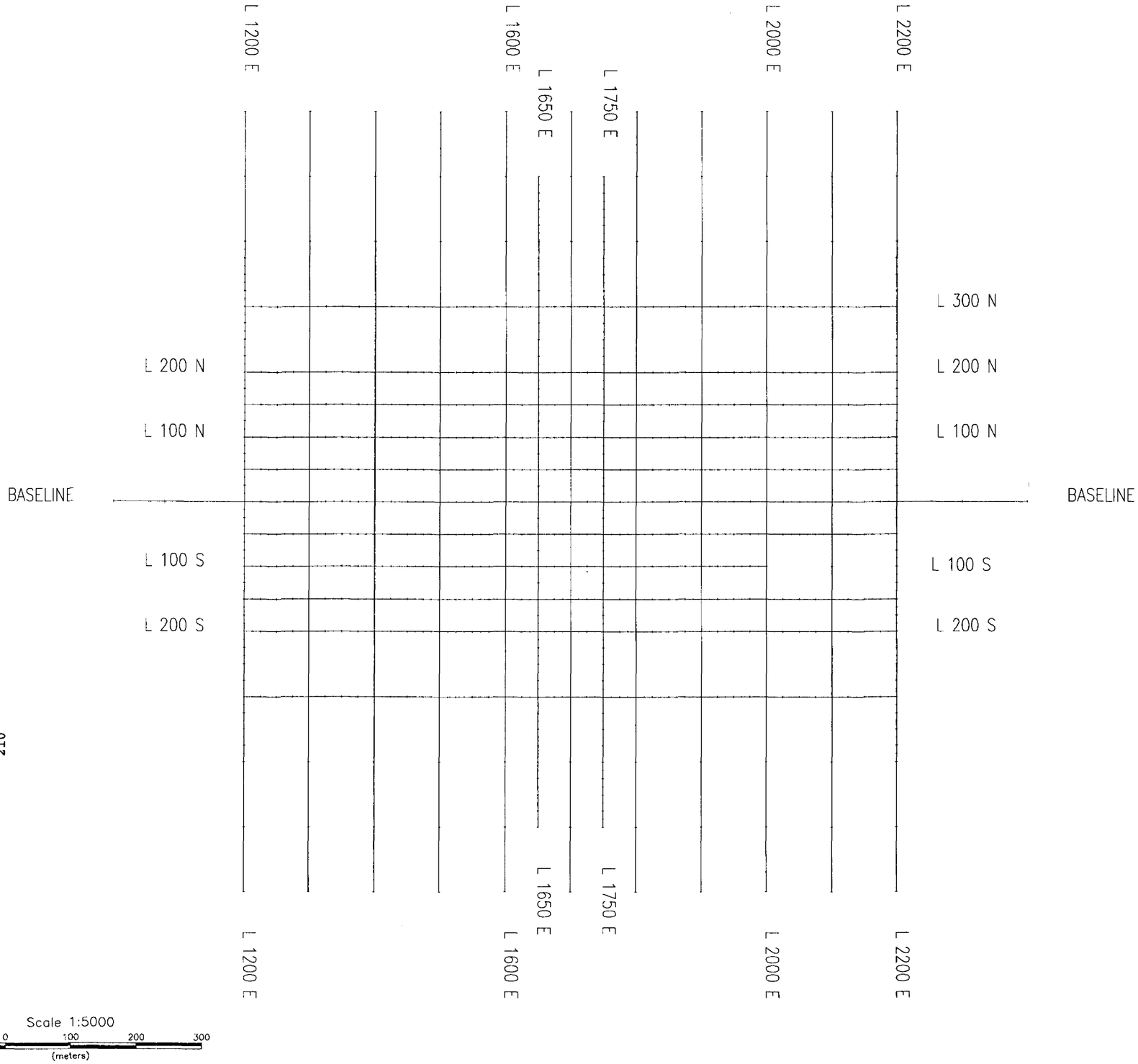
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

ACTIVATED APRIL 3/1990 BB

PLAN NO. G-1223

DEPARTMENT OF MINES

— ONTARIO —



Scale 1:5000

100 0 100 200 300
(meters)

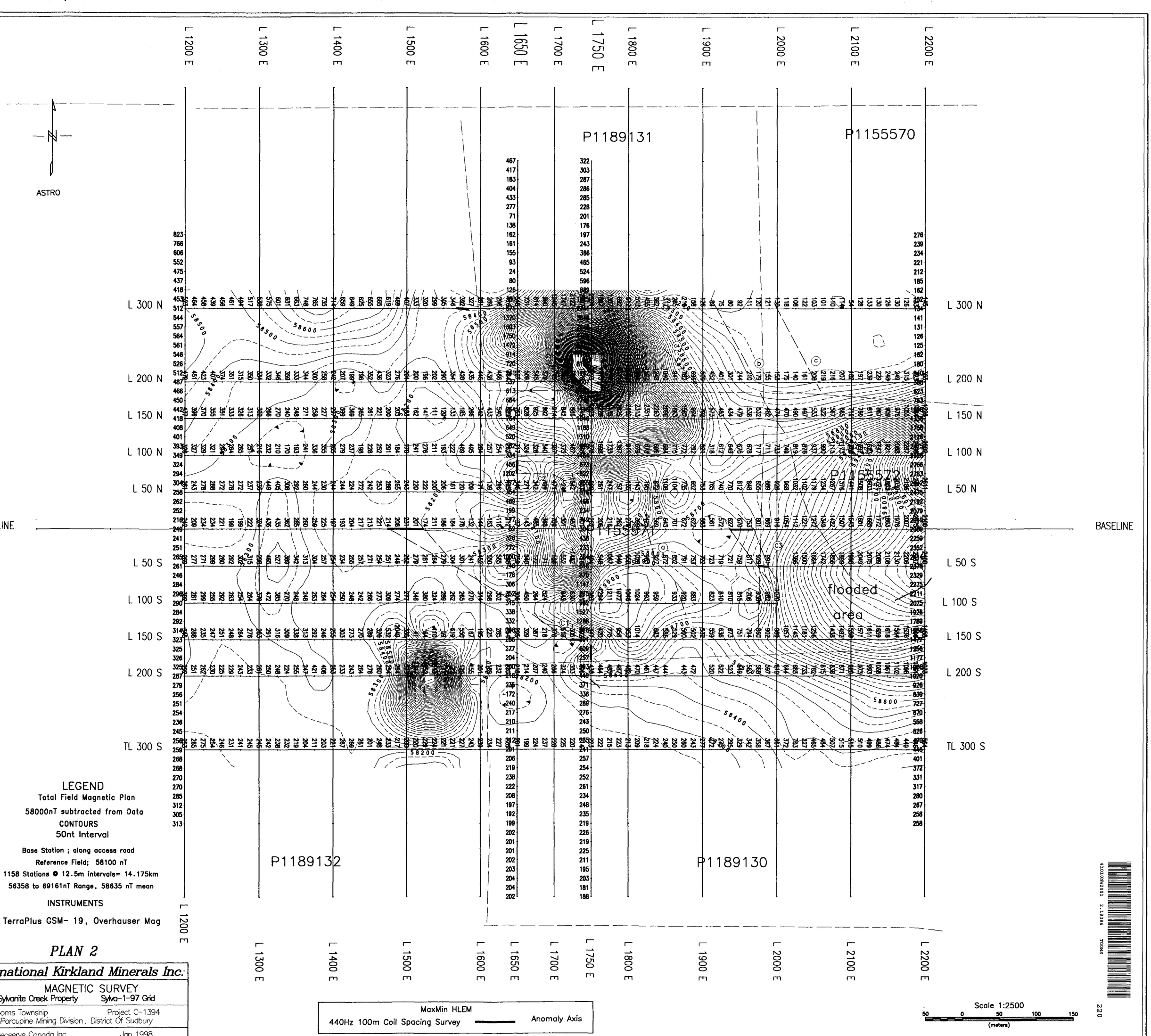
PLAN 1

MPH Consulting Ltd

Picket Line Map
Sylvanite Property

Tooms Township, Project C-1394
Sudbury Mining Division, District Of Sudbury

Geoserve Canada Inc. Jan 1998.



LEGEND

Total Field Magnetic Plan

58000nT subtracted from Data

CONTOURS

50nt Interval

Base Station ; along access road

Reference Field; 58100 nT

1158 Stations @ 12.5m intervals= 14.175km

56358 to 69161nT Range, 58635 nT mean

INSTRUMENTS

TerraPlus GSM- 19, Overhauser Mag

MaxMin HLEM

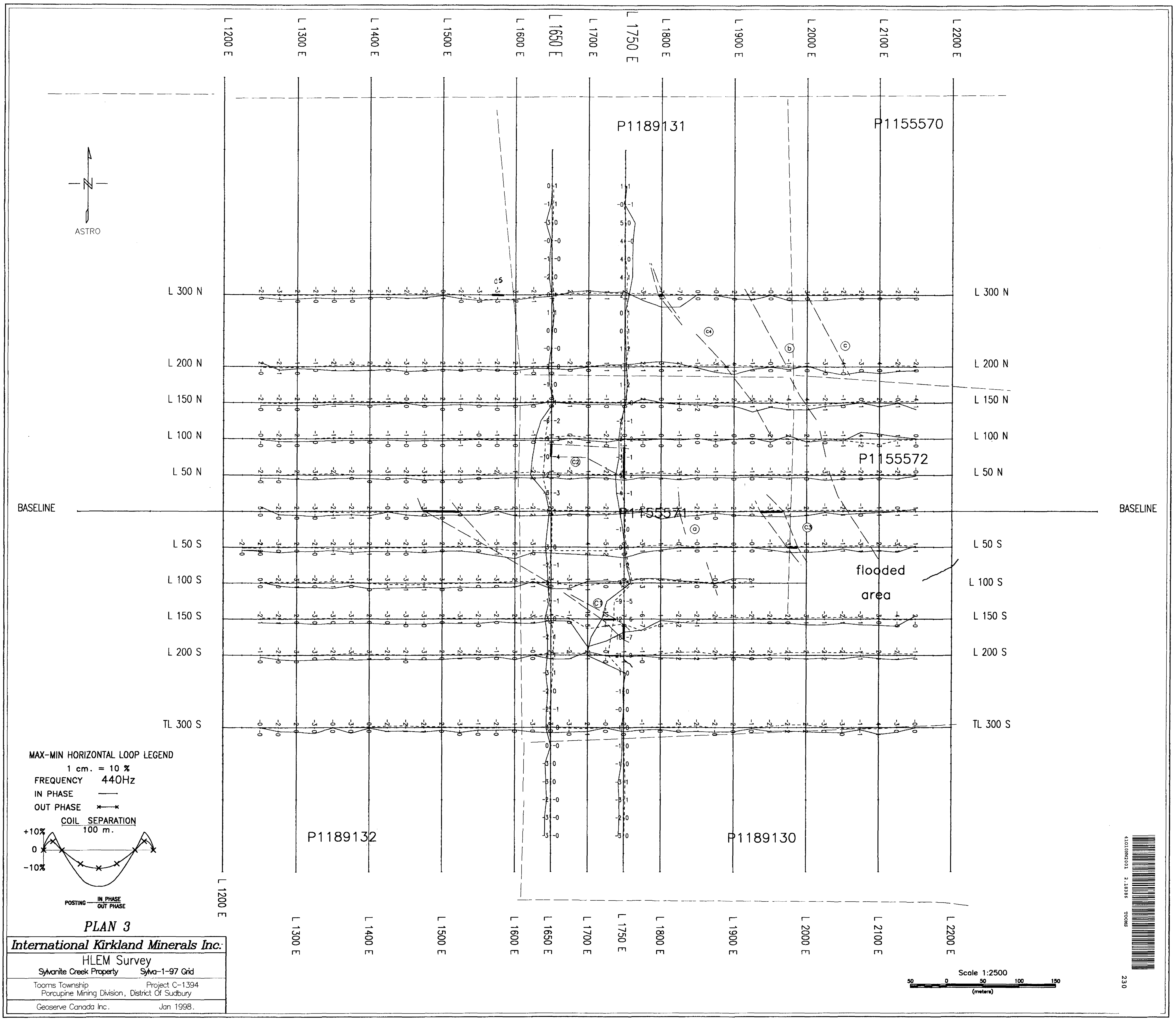
440Hz 100m Coil Spacing Survey — Anomaly Axis

Scale 1:2500

50 0 50 100 150 (meters)

PLAN 2

International Kirkland Minerals Inc.	
MAGNETIC SURVEY Sylvanite Creek Property	Sylva-1-97 Grid
Tooms Township Porcupine Mining Division, District Of Sudbury	Project C-1394
Geoserve Canada Inc.	Jan 1998.


L 1200 E
L 1300 E
L 1400 E
L 1500 E
L 1600 E
L 1650 E
L 1700 E
L 1750 E
L 1800 E
L 1900 E
L 2000 E
L 2100 E
L 2200 E
ASTRO
P1189131
P1155570
P1155572
P1155571
P1189132
P1189130
L 300 N
L 200 N
L 150 N
L 100 N
L 50 N
BASELINE
L 50 S
L 100 S
L 150 S
L 200 S
TL 300 S
flooded area
MAX-MIN HORIZONTAL LOOP LEGEND
1 cm. = 10 %
FREQUENCY 440Hz
IN PHASE
OUT PHASE
COIL SEPARATION 100 m.
+10%
0
-10%
POSTING — IN PHASE / OUT PHASE
PLAN 3
International Kirkland Minerals Inc.
HLEM Survey
Sylvanite Creek Property Sylva-1-97 Grid
Tooms Township Project C-1394
Porcupine Mining Division, District Of Sudbury
Geoserve Canada Inc. Jan 1998.
Scale 1:2500
50 0 50 100 150
(meters)
41O10NW2001 2.18386 TOOMS
230

L 1200 E | L 1300 E | L 1400 E | L 1500 E | L 1600 E | L 1650 E | L 1700 E | L 1750 E | L 1800 E | L 1900 E | L 2000 E | L 2100 E | L 2200 E

ASTRO

P1189131

P1155570

L 300 N

L 200 N

L 150 N

L 100 N

L 50 N

P1155572

P1155571

BASELINE

L 50 S

L 100 S

L 150 S

L 200 S

TL 300 S

flooded area

C5 C4 C2 C3 C1 b c a

P1189132

P1189130

MAX-MIN HORIZONTAL LOOP LEGEND

1cm=20%

FREQUENCY 1760Hz

IN PHASE ——

OUT PHASE - - -

COIL SEPARATION 100 m.

+20%

0

-20%

POSTING IN PHASE / OUT PHASE

PLAN 4

International Kirkland Minerals Inc.	
HLEM Survey	
Sylvanite Creek Property	Sylva-1-97 Grid
Tooms Township	Project C-1394
Porcupine Mining Division, District Of Sudbury	
Geoserve Canada Inc.	Jan 1998.

Scale 1:2500

50 0 50 100 150 (meters)

410100WM2001 2.18396 TOOMS

240

L 1200 E | L 1300 E | L 1400 E | L 1500 E | L 1600 E | L 1650 E | L 1700 E | L 1750 E | L 1800 E | L 1900 E | L 2000 E | L 2100 E | L 2200 E

ASTRO

P1189131

P1155570

L 300 N

L 200 N

L 150 N

L 100 N

L 50 N

P1155572

BASELINE

P1155571

L 50 S

L 100 S

L 150 S

L 200 S

TL 300 S

flooded area

C1 C2 C3 C4 C5 a b c

P1189132

P1189130

MAX-MIN HORIZONTAL LOOP LEGEND
1cm=25%
FREQUENCY 3520Hz
IN PHASE ——
OUT PHASE

COIL SEPARATION
100 m.

+25%
0
-25%

POSTING — IN PHASE / OUT PHASE

PLAN 5

International Kirkland Minerals Inc.	
HLEM Survey	
Sylvanite Creek Property	Sylva-1-97 Grid
Tooms Township Porcupine Mining Division, District Of Sudbury	Project C-1394
Geoserve Canada Inc.	Jan 1998.

Scale 1:2500
50 0 50 100 150
(meters)

41G10NW2001 2.18386 TOOMS 250