GROUND GEOPHYSICAL SURVEYS
MONTREAL RIVER PROPERTY
Wabana Explorations Inc.
Gillies Limit Township

September 1997

Meegwich Consultants Inc. P.O. Box 482, Temagami, Ontario P0H 2H0 Tel. (705) 569-2904 Fax. (705) 569-2817

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1.0 INTRODUCTION:

From September 1 to 15 of 1997, a program of linecutting and geophysical surveys was carried out on the Montreal River Property held by Wabana Explorations Inc of Waterloo, Ontario . This exploratory work was executed and reported on by David Laronde of Meegwich Consultants Inc. P.O. Box 482, Temagami, Ontario POH 2HO.

Linecutting: A total of 28.60 km of linecutting was done. 26.0 km were cut from 2.60 km. of baseline running at an azimuth of 315 degrees. 26.0 km of line were surveyed with magnetics and VLF electromagnetics.

2.0 PROPERTY:

The property consists of a group of 15 contiguous mining claims situated in lots 3, 9, 10, 17, 18 the north central area of Gillies Limit Township NTS 31 M/5. The 30 unit (480 hectare) property is described as follows:

1 unit claims: 1179076, 1179185, 1179189, 1179190, 1179191, 1179192, ~~1179193~~ 1212249, 1179195, 1179197, 1179198, 1118406, 1118407

2 unit claim: 1179194

4 unit claim: 1212081

12 unit claim: 1179200

Topography on the property consists of jackpine plantation in sandy flat ground on the part north of the river with a rugged section toward the east side where outcrop is abundant with birch, poplar, spruce and dense undergrowth. South of the river the topography is tiered down to river level in three stages from an elevated gabbro ridge. The ground between each stage is relatively flat. Typical tree coverage is composed of mature white and red pine mixed with black spruce and dense undergrowth. Most topographic features trend south-east as does the Montreal River Fault.

3.0 LOCATION AND ACCESS:

The property is located 5 km due south of the town of Cobalt, Ontario which is 150 km north of the city of North Bay along Hwy 11. The claim group is accessible from the Bass Lake Road which departs Hwy 11B 3 km south of Cobalt. A network of old logging roads provide good access to all parts of the property north of the Montreal River which cuts the claim group in half. Access to the south part of the property is by boat which may be put in at a landing at the river.

4.0 GEOLOGIC SETTING:

The property is underlain by a patch of Early Precambrian intermediate and mafic metavolcanics and Precambrian Nipissing

gabbro. Structurally, a major fault zone (Montreal River Fault) cuts the property in a south-east direction.

5.0 MAGNETOMETER SURVEY:

A total of 26.0 km was surveyed (1040 readings) at 25 meter stations on lines spaced at 100 meters.

5.1 Instrumentation: A GEM GSM 19 Mag/VLF unit, Serial no. 706692 was used for the survey. A base station was set up on the property to monitor and correct for the diurnal variation during the course of the survey. These instruments are micro-processor based and measure the earth's total magnetic field to an accuracy of one one-hundredth of a gamma.

5.2 Survey Results: The results are presented in contour form on plans at 1:5000 scale.

North part: The survey results can be best described as patchy highs with irregular shape and sizes against a background of relatively uniform magnetic values. Two of the more massive highs are centred around 2300 W, 1150 N and 1300 W, 1600 N. Other areas of high gradient noteworthy of mentioning are located near

1800 W, 1250 N. Other than these highs there are magnetic lows near the river that likely represent part of the Montreal River Fault zone.

South part: Two linear sections of high magnetic gradient are apparent. One is along the baseline 0 and the other and 250 S. These trend more or less parallel to the Montreal River. Unlike the north part there seems to be continuity from line to line. Massive looking highs are partially covered in the extreme south-west and south-east parts of the surveyed area. As in the north, magnetic lows are adjacent to the river and probably indicate part of the fault zone.. The background values appear to be lower south of the river as compared to the north section.

6.0 VLF Electromagnetic Survey:

A total of 26.00 km was surveyed for a total of 1040 readings taken at 12.5 and 25 meter stations on lines spaced at 100 meters.

6.1 Instrumentation: The same instrument was used for the VLF surveys only employing the VLF capabilities to record in-phase and quadrature components of VLF transmitting station Cutler, Maine NAA transmitting at 24.0 kHz. The measured quantities are the in-phase and quadrature components of the vertical magnetic field

measured as a percentage of horizontal primary field (read to a resolution of +/- 1%).

6.2 Survey Results: The results of the survey are presented in contour format on plans at 1:5000 scale.

In many cases weak VLF conductors are electrolytic (bedrock shears and fractures, overburden filled bedrock troughs and valleys) or poorly connected metallic grains such as stringer sulphides. Strong conductors caused by metallic sources have a definite signature of which, none are apparent on this grid.

The VLF survey yielded 8 series of conductors. Typically they have a weak signature and/or indicate a resistivity shift (a long gradual increase or decrease in the in-phase). The conductors south of the river seem to trend consistent with topographic features such as bottom of cliffs, swamp edges, ledges etc. The conductors to the north on the other hand are away from topo-effect and up on the sand plains. This is not to say the source is metallic but there is still a possibility this may be the case.

A power line at 600 N is the cause of a strong conductor not discussed in this report but worth mentioning since it wiped out a corridor where otherwise useful data would have been obtained.

6.0 CONCLUSIONS AND RECOMMENDATIONS:

The magnetometer survey yielded some massive areas that could be indicating intrusions of mafic rock. The areas of high gradient probably outline this geology while the areas of quiet background just north of the river represent volcanic rock.

Conductor sources for the most part appear to be horizontal layers of weakly conductive sediment/organic matter or water filled fractures. The placement of the anomalies alone make them suspicious of having a non-metallic source. For example, D,E,F and series anomalies are co-incident with one of the following topographic features: Bottom of cliff, swamp edge, depression or valley.

While none of the conductors encountered appear to have a metallic source there nevertheless should be follow-up on anomalies that are located away from topographic influence. Particular attention should be given to anomalies with magnetic association. Conductors A, B and C should be followed up in this regard.

The VLF conductors should be followed up with a program of induced polarisation that would pick up metallic particles both disseminated and massive. Shear zone gold deposits contain conductive sulphide mineralization targets as well as VMS (volcanogenic massive sulphides) deposits. The property has potential for both types of deposits and the induced polarization would zero in on sulphides for immediate drill targets.

Lines to survey with I.P.	L 700 W	600 N to 1000 S
	800 W	600 N to 800 S
	2000 W	600 N to North end
	1800 W	600 N to North end
	1600 W	600 N to North end
	1300 W	600 N to North end

Respectfully submitted,

David Laronde

References

Ontario Geological Survey Map 2361 1972
Sudbury-Cobalt Geological Series

CERTIFICATE OF AUTHOR

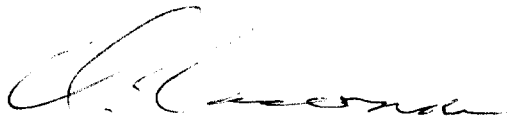
I, David Laronde of the town of Temagami, Ontario hereby certify:

1. That I am a consulting technologist and have been engaged in my profession for the past 16 years.

2. That I am a graduate of Cambrian College in Sudbury with a diploma in Geology Engineering Technology 1979.

3. That my knowledge of the property described herein was acquired by field work and documentation.

Dated at Temagami this 23rd day of September 1997.



David Laronde

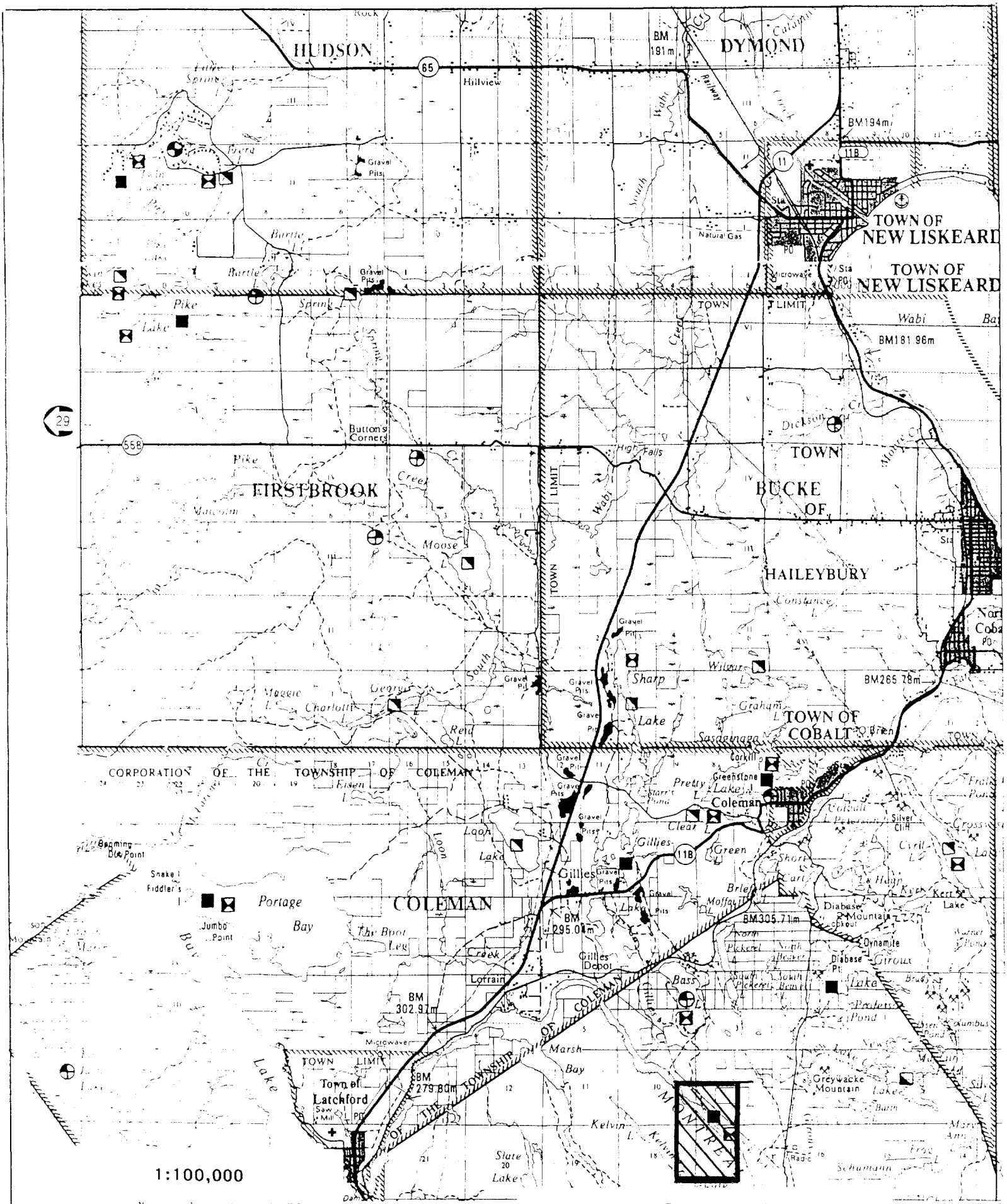


FIG 1

PROPERTY LOCATION MAP

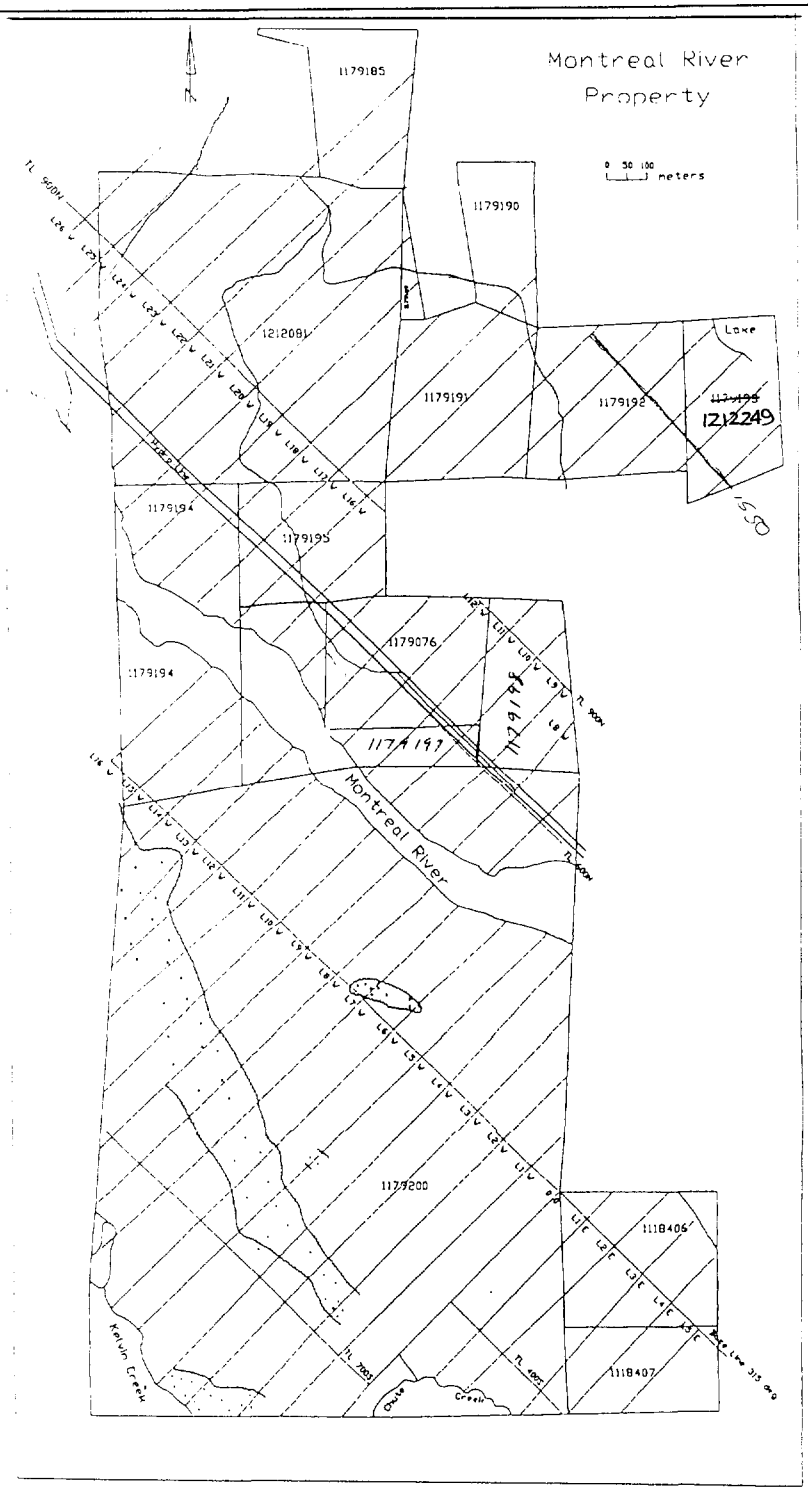


FIG. 2

GILLES LIMIT (NORTH) CLAIM MAP

Instrument Specifications

Magnetometer / Gradiometer

Resolution:	0.01 nT (gamma), magnetic field and gradient.
Accuracy:	0.2 nT over operating range.
Range:	20,000 to 120,000 nT.
Gradient Tolerance:	Over 10,000 nT/m
Operating interval:	3 seconds minimum, faster optional. Readings initiated from keyboard, external trigger, or carriage return via RS-232-C.
Input/Output:	6 pin weatherproof connector, RS-232C, and (optional) analog output.
Power Requirements:	12 V, 200 mA peak (during polarization), 30 mA standby, 300mA peak in gradiometer mode.
Power Source:	Internal 12 V, 2.6 Ah sealed lead-acid battery standard, others optional. An External 12V power source can also be used.
Battery Charger:	**Input:** 110 VAC, 60 Hz. Optional 110/220 VAC, 50/60 Hz. **Output:** dual level charging.
Operating Ranges:	Temperature: **-40 °C to +60 °C.** Battery Voltage: **10.0 V minimum to 15V maximum.** Humidity: **up to 90% relative, non condensing.**
Storage Temperature:	-50°C to +65°C
Display:	**LCD**: 240 x 64 pixels, or 8 x 30 characters. Built in heater for operation below -20°C
Dimensions:	**Console:** 223 x 69 x 240mm. **Sensor staff:** 4 x 450mm sections. **Sensor:** 170 x 71mm dia. **Weight:** Console 2.1kg, Staff 0.9kg, Sensors 1.1kg each.

VLF

Frequency Range:	15 - 30.0 kHz.
Parameters Measured:	Vertical In-phase and Out-of-phase components as percentage of total field. 2 components of horizontal field. Absolute amplitude of total field.
Resolution:	0.1%.
Number of Stations:	Up to 3 at a time.
Storage:	Automatic with: time, coordinates, magnetic field/gradient, slope, EM field, frequency, in- and out-of-phase vertical, and both horizontal components for each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	14 x 15 x 9 cm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb).

Swastika Laboratories

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Established 1988

Assaying - Consulting - Representation

Geochemical Analysis Certificate

7W-3905-RG1

Company: WABANA EXPLORATIONS INC
Project: Tomagami
Attn: R. Norcott / C. Stephenson

Date: OCT-03-97

We hereby certify the following Geochemical Analysis of 66 Rock samples submitted OCT-01-97 by .

Sample Number	Au PPB	Au Check PPB	Ag PPM	Co PPM	Cu PPM	%	Ni PPM	Pb PPM	%	Zn PPM	
1501		-	45.3 g	5500	0.5%	9620	0.9%	330	1310	0.13%	143
1502		-	2.6	129		1640		67	1120	0.11%	52
1503		-	1.4	76		1030		71	110		57
1504		-	7.6	10400	1%	686		580	154		86
1505		163	148.5 g	532		69200	7%	115	1760	0.18%	93
1506		-	3.0	65		40100	4%	91	30		100
1507		-	0.8	74		135		92	28		75
1508		-	3.9	432		2020		130	177		110
1509		-	3.1	212		38800	4%	83	47		103
1510 MONTREAL RIVER	5	-	0.3	67		443		80	15		26
1511	7	-	0.4	37		624		62	35		178
1512	3	-	0.2	84		37		65	100		362
1513	2	-	0.1	27		2160	0.2%	91	3		38
1514	5	-	1.2	22		389		32	217		71
1515	3	-	0.3	58		227		81	46		81
	Nil	-	0.1	48		75		83	2		55
1517	Nil	12	0.1	25		18		59	25		43
1518	2	-	0.2	12		21		33	20		48
	2	-	0.1	23		10		20	1		12
1520	Nil	-	0.4	22		253		59	36		64
1521	Nil	-	3.4	59		597		37	673		1800 0.18%
1522	2	-	1.4	24		149		25	373		810
1523	14	-	0.1	55		202		70	1		80
1524	Nil	-	1.0	37		88		35	22700	0.73%	4150 0.42%
1525	2	-	0.5	31		118		16	89		360
1526	7	2	0.3	30		120		72	14		84
1527	2	-	2.8	31		412		188	16700	1.6%	3150 0.32%
1528	Nil	-	0.4	38		53		63	44		63
1529	Nil	-	0.4	17		70		37	99		108
1530	Nil	-	0.7	36		149		128	92		105

One assay ton portion used.

2.17714

1000ppm = 0.1%
10,000ppm = 1%

Certified by Paul Chartier

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705)642-3244 Fax (705)642-3300

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Geochemical Analysis Certificate

7W-3347-RG1

Company: **WABANA EXPLORATION INC** Date: AUG-26-97
Project: Temagami
Attn: R. Norcott/C. Stephenson

We hereby certify the following Geochemical Analysis of 19 Rock samples submitted AUG-20-97 by .

Sample Number	Au PPB	Au Check PPB	Ag PPM	Co PPM	Cu PPM	Ni PPM	Pb PPM	Zn PPM
49625 MR-John	Nil	-	0.3	17	13	72	107	108
49626 "	Nil	-	2.9	1	98	1	185	36
49627 "	9	-	6.0	2	65	1	486	20
49628 "	Nil	-	0.2	15	20	58	40	98
49629 "	7	3	0.1	37	34	65	6	102
49630 "	Nil	-	0.1	17	13	58	18	72
49631 "	Nil	-	0.3	37	207	93	25	167
49632	Nil	-	0.2	16	275	70	12	111
49744	93	79	0.1	27	15	30	1	93
49745	Nil	-	0.1	21	20	64	1	65
49746	Nil	-	0.1	24	38	71	4	135
49747	5	-	0.1	20	64	45	4	43
49748	2	-	0.1	27	94	44	6	15
49749	24	-	0.1	16	152	28	5	38
49932	3	-	0.1	27	123	41	1	118
49933 MR-(Jim)	89	-	2.0	70	132	59	78	68
49934 "	216	110	1.8	1	86	1	211	14
49935 "	Nil	-	0.9	40	70	55	46	34
49936 "	Nil	-	0.9	21	738	23	124	211

m/R

m/R

One assay ton portion used.

Certified by G. Leh

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Swastika Laboratories

A Division of TSL/Assayers Inc.

Established 1935

Assaying - Consulting - Representation

Geochemical Analysis Certificate

7W-3905-RG1

Company: **WABANA EXPLORATIONS INC**
Project: Temagami
Attn: R. Norcott / C. Stephenson

Date: OCT-03-97

We hereby certify the following Geochemical Analysis of 66 Rock samples submitted OCT-01-97 by .

Sample Number		Au PPB	Au Check PPB	Ag PPM	Co PPM	Cu PPM	Ni PPM	Pb PPM	Zn PPM
49944	MONTREAL RIVER	5	-	0.6	14	388	25	343	874
49945		2	-	0.3	39	104	75	73	233
49946		3	-	0.6	97	46	71	638	1250
49947		Nil	-	2.2	61	161	81	2190	2190
49948		15	15	1.2	46	59	161	335	2270
49949		5	-	0.4	65	29	82	190	308

One assay ton portion used.

Certified by Paul Chartier

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Telephone (705)642-3244 Fax (705)642-3300

Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Geochemical Analysis Certificate

7W-3905-RG1

Company: WABANA EXPLORATIONS INC
Project: Temagami
Attn: R. Noroott / C. Stephenson

Date: OCT-03-97

We hereby certify the following Geochemical Analysis of 66 Rock samples submitted OCT-01-97 by .

Sample Number	Au PPB	Au Check PPB	Ag PPM	Cu PPM	Cu PPM	Ni PPM	Pb PPM	Zn PPM
1531	7	-	0.5	17	115	21	17	31
1532	14	5	0.8	58	161	111	449	468
1533	17	-	1.7	309	1950	113	509	808
1534	19	-	6.8	38	640	134	281	159
1535	39	-	0.4	90	1700	47	1	326
1536	5	-	0.1	63	17	96	1	32
1537	3	-	0.2	50	223	40	1	324
1538	3	-	0.3	128	1590	95	1	104
1539	5	-	0.7	32	419	72	5	89
1540	2	-	0.7	31	178	80	3	95
49577	63	-	0.5	40	124	95	6	81
[illegible]	43	-	0.4	51	135	94	7	69
49579	39	48	0.6	43	100	101	21	141
49580	Nil	-	0.6	49	188	92	188	187
49581	14	-	0.4	31	194	86	4	159
49582	33	-	0.5	36	191	75	32	263
49583	5	-	0.7	43	125	155	152	248
49584	22	-	0.8	70	183	116	94	224
49585	34	-	1.5	88	485	120	247	782
49586	19	-	0.4	54	115	84	12	152
49587	24	-	0.5	41	96	102	17	98
49588	2	-	0.2	31	76	104	3	70
[illegible]	29	-	0.5	66	157	93	9	82
49937	Nil	-	0.9	28	364	57	2890	14500
49938	Nil	-	0.6	39	108	88	851	4990
49939	5	-	0.3	33	79	117	74	262
49940	2	-	0.4	52	106	83	561	1900
49941	17	7	0.5	29	80	67	80	100
49942	10	-	3.3	19	2030	40	573	1080
49943	Nil	-	0.7	36	139	98	160	410

One assay ton portion used.

Certified by Paul Chartier

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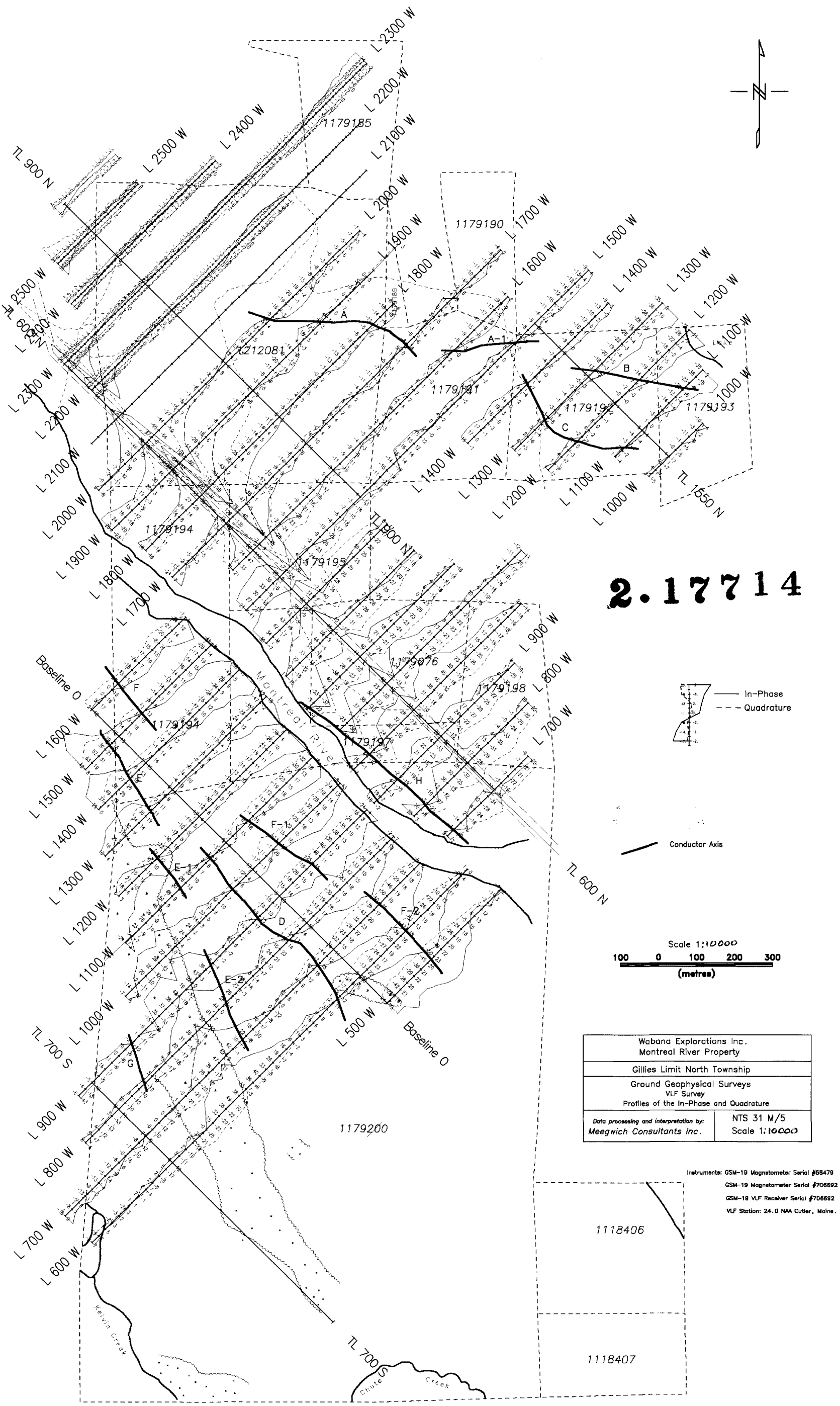
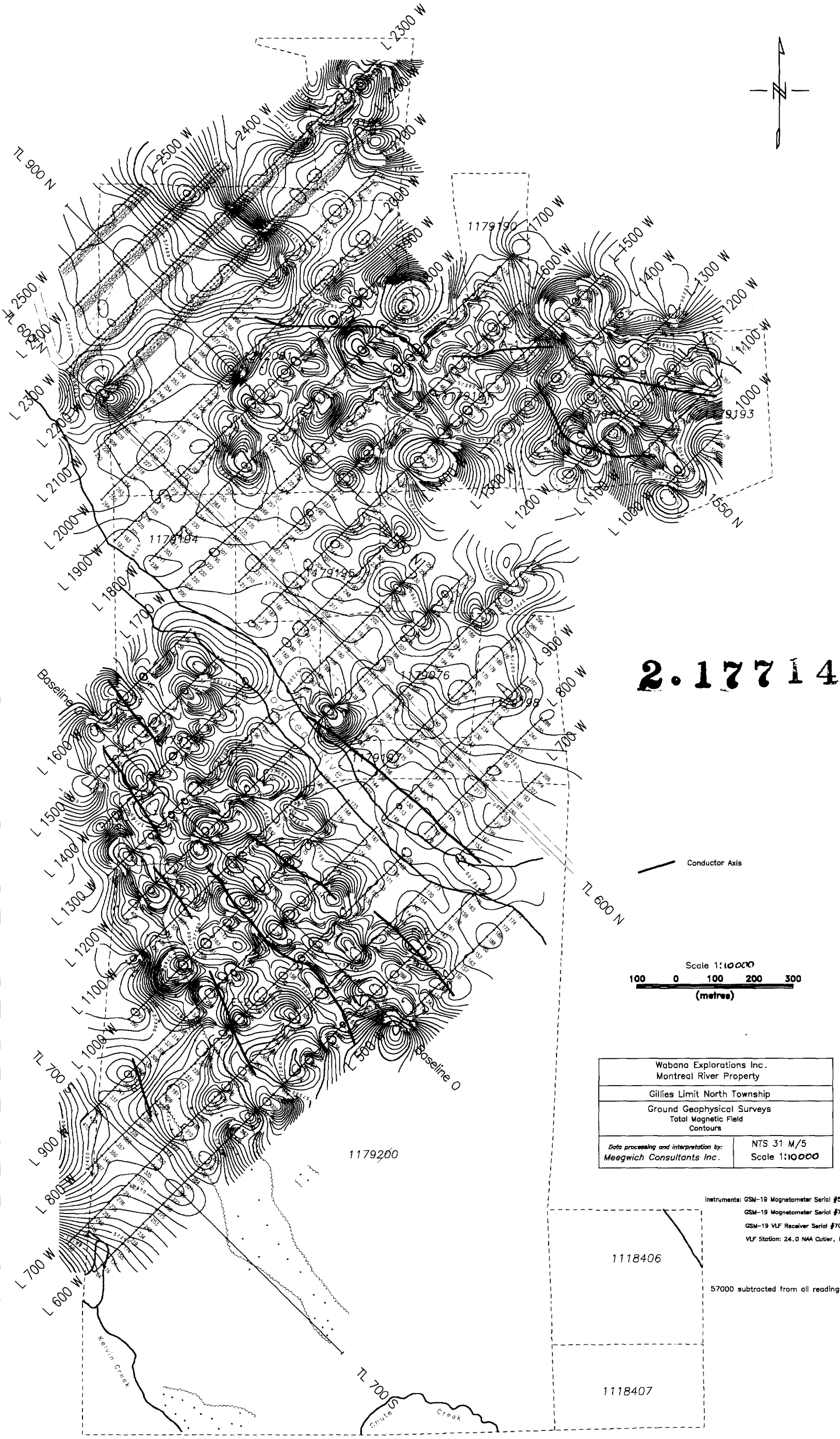
Telephone (705)642-3244 Fax (705)642-3300


L 2300 W
L 2200 W
L 2100 W
L 2000 W
L 1900 W
L 1800 W
L 1700 W
L 1600 W
L 1500 W
L 1400 W
L 1300 W
L 1200 W
L 1100 W
L 1000 W
L 900 W
L 800 W
L 700 W
L 600 W
L 500 W
TL 900 N
TL 1650 N
TL 600 N
TL 700 S
Baseline 0
1179185
1179190
1212081
1179191
1179192
1179193
1179194
1179195
1179076
1179198
1179197
1179200
1118406
1118407
Montreal River
Kelvin Creek
Chute Creek
A
A-1
B
C
D
E
E-1
E-2
F
F-1
F-2
G
H
In-Phase
Quadrature
Conductor Axis
Scale 1:10000
100 0 100 200 300
(metres)
Wabana Explorations Inc.
Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys
VLF Survey
Profiles of the In-Phase and Quadrature
Data processing and interpretation by:
Meegwich Consultants Inc.
NTS 31 M/5
Scale 1:10000
Instruments: GSM-19 Magnetometer Serial #58479
GSM-19 Magnetometer Serial #706692
GSM-19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.

2.17714


L 2300 W
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TL 900 N
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L 2500 W
L 2400 W
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L 1600 W
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L 800 W
L 700 W
L 600 W
1179190
1700 W
1600 W
1500 W
1400 W
1300 W
1200 W
1100 W
1000 W
1179193
1650 N
1179194
1179195
1179196
1179197
1179198
1179199
1179200
1179104
TL 600 N
TL 700 N
TL 700 S
Baseline 0
Kelvin Creek
Chute Creek
1118406
1118407
Conductor Axis
Scale 1:10000
100 0 100 200 300
(metres)
Wabana Explorations Inc.
Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys
Total Magnetic Field
Contours
Data processing and interpretation by:
Meegwich Consultants Inc.
NTS 31 M/5
Scale 1:10000
Instruments: GSM-19 Magnetometer Serial #58479
GSM-19 Magnetometer Serial #706692
GSM-19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.
57000 subtracted from all readings

2.17714

020

Assessment Report on Prospecting and Stripping over the Montreal River Property, Gillies Limit Township, Ontario, for WABANA EXPLORATIONS INC.

Clive D. Stephenson, B.Sc., FGAC.
Strathclyde Geological Services
Val Therese, Ontario
September 24th, 1997.

CONTENTS

020C

FIGURE 1

PROPERTY LOCATION MAP

Strathclyde Geological Services

1.0 INTRODUCTION

In 1996 Wabana Explorations Inc. of Waterloo, Ontario entered into a number of option agreements to conduct mineral exploration on properties in the Temagami and Cobalt areas of northern Ontario.

This report covers the Montreal River property, which is situated to the southeast of the town of Cobalt. The property lies just south of the "Cobalt Camp" where silver was first discovered in 1904. This discovery led to over 60 years of exploration work in the area. Due to the Temagami Land Caution, the area has received little attention over the past 25 years. The opening of the caution in stages over the past 3 years has led to renewed interest and in September 1996 led to one of the largest staking rushes in recent memory.

2.0 PROPERTY LOCATION AND ACCESS

The Montreal River property is situated in the north-central portion of Gillies Limit township. It is cut by the Montreal River and is bounded to the north by Bass Lake, to the east by the Hound Chute hydro line, to the west by Kelvin Lake and to the south by Chute Creek. The property lies approximately 7 km east of the town of Latchford. The town of Cobalt is situated approximately 7km to the north with the town of Temagami lying 25 km to the south.

Access to Latchford and Cobalt is by Provincial Highway 11 from North Bay, approximately 130 km to the south. Access to the property is by the Hound Chute hydro road, the Bass Lake road and by the Montreal River.

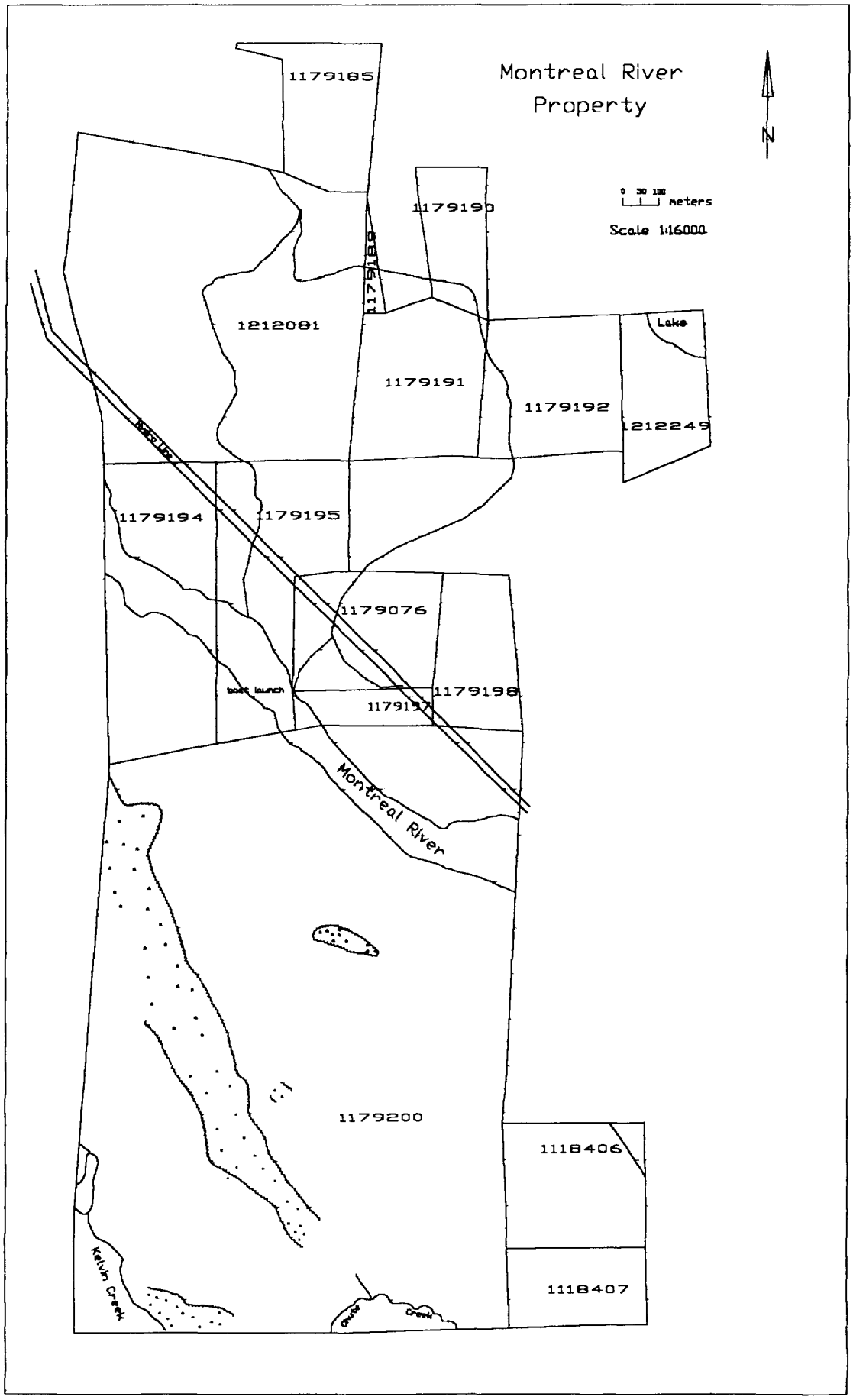
3.0 PROPERTY DESCRIPTION AND STATUS

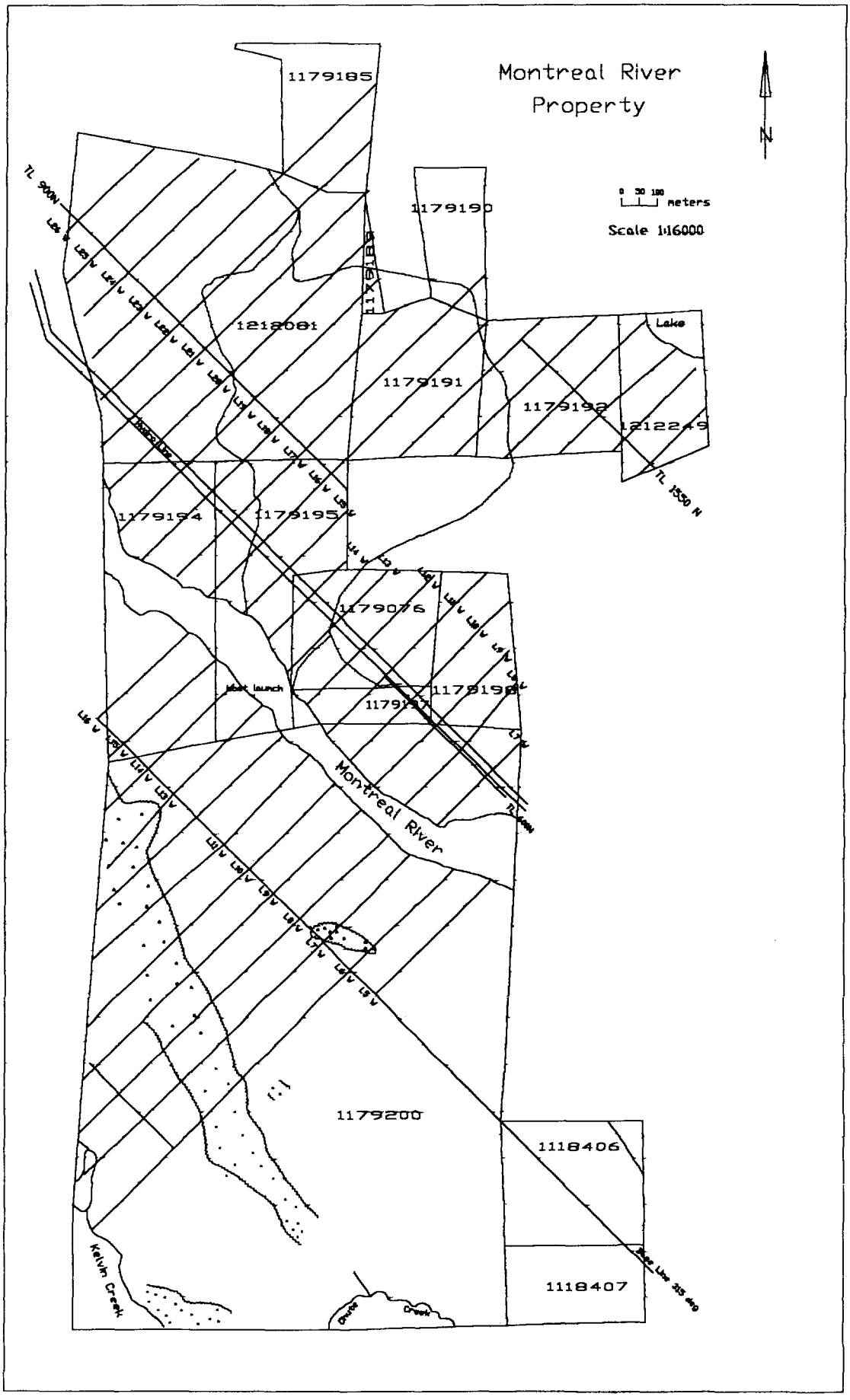
The property consists of 13 claims totaling twenty five, 16 hectare units. In addition the survey also covered 2 claims of the adjacent Gillies Limit property giving an additional five, 16 hectare units of coverage. All of the surveyed claims are recorded in the name of Wabana Explorations Inc. of Waterloo, Ontario. The claim numbers are as follows:

Montreal River:

1118406	1118407	1179076	1179185	1179189	1179190
1179191	1179192	1179194	1179195	1179197	1179198
1179200					

Gillies Limit: 1212081 1212249


Montreal River
Property
N
0 30 100 meters
Scale 1:16000
1179185
1179190
1179185
1212081
1179191
1179192
Lake
1212249
Access Line
1179194
1179195
1179076
boat launch
1179198
1179197
Montreal River
1179200
1118406
1118407
Kelvin Creek
Creek


Montreal River
Property
N
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meters
Scale 1:16000
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1179192
1212249
Lake
1179194
1179195
1179076
1179197
1179198
Montreal River
1179200
1118406
1118407
Kelvin Creek

4.0 REGIONAL GEOLOGY

TABLE 1. Generalized table of Lithologic Units for Gillies Limit Township (after Born and Hitch, 1990, Thomson 1965 and Legun 1986)

PHANEROZOIC
CENOZOIC
QUATERNARY
PLEISTOCENE AND RECENT
glacial, gravel, clay, swamp, deposits
unconformity
PRECAMBRIAN
MIDDLE PROTEROZOIC
Lamprophyre Dykes and Diatreme Breccia
Olivine Diabase Dykes (Sudbury swarm)
Intrusive Contact
EARLY PROTEROZOIC
Mafic Intrusive Rocks
Nipissing Diabase
gabbro, hypersthene gabbro, quartz gabbro, leucogabbro, varied texture gabbro, granophyre, sheared and/or hydrothermally altered gabbro
Intrusive Contact
HURONIAN SUPERGROUP
COBALT GROUP
Lorrain Formation
arkose, mudstone
Conformable Contact
Gowganda Formation:
Firstbrook Member: siltstone, mudstone, arenite
Conformable Contact
Coleman Member: conglomerate, pebbly wacke, arenite, mudstone
Unconformity
ARCHEAN
Felsic to Intermediate Plutonic rocks
mafic diorite and minor quartz diorite, tonalite, granodiorite, granite
Metavolcanic Rocks
Intermediate to Felsic
dacite; rhyolite; tuffs and pyroclastic flows
Mafic to Intermediate
amphibolite; basalt; pillowed basalt; plagioclase-phyric basalt; variolitic basalt; andesite;

ARCHEAN

Archean rocks underlie the north, northeast and southwest-central portions of Gillies Limit township. They consist mainly of felsic plutonic and migmatic rocks will lesser mafic metavolcanics and associated metasediments. The rest of the area is underlain by Proterozoic rocks.

MAFIC TO INTERMEDIATE METAVOLCANIC ROCKS

The most abundant mafic metavolcanic rock in the township is a fine grained massive basalt. Minor pyrite is a common accessory mineral. Commonly these massive flow rocks are intercalated with plagioclase-phyric basalts. Structural deformation is evident at a number of locations often exhibiting shearing, strong epidotization and intrusion by quartz veins and granitic dykes (Born and Hitch 1990).

Less abundant units of amphibolite and pillowed and plagioclase phyric basaltic flows occur in the Chopin and Borden Lakes area to the northeast of the township. Tuffaceous units are exposed in the northern part of the township.

The mafic volcanics in the northern portion of the township may have underwent a greater degree of folding than indicated on the current geology maps (J. Ireland, Resident Geologist Cobalt; Pers.Comm).

INTERMEDIATE TO FELSIC METAVOLCANIC ROCKS

Dacite is the most common rock of this type. It occurs in the northern area and in the northeast around Borden Lake. Rhyolites occur intercalated with other intermediate to felsic rocks and are inferred to represent proximal vent facies rocks (Born and Hitch 1990). They tend to be siliceous and massive with poorly developed flow textures. Also intermixed are pyroclastic units ranging from lapilli tuff to debris flows. These commonly contain primary sulphide fragments and together with their hydrothermally altered nature indicate that they would be a good target for massive sulphide exploration (Born and Hitch 1990). Examples of these rocks occur in the vicinity of Borden Lake and in the northern part of the township in the vicinity of block 9, north of the Montreal river.

INTERMEDIATE TO FELSIC PLUTONIC ROCKS

Foliated diorite, granodiorite and tonalite intrude the metavolcanic rocks and are present in the east of the township and into Lorrain township to the east of Chopin Lake.

EARLY TO MIDDLE PROTEROZOIC ROCKS

COBALT GROUP

The Lorrain and Gowganda formations are part of the Cobalt group which represents the upper portion of the Huronian Supergroup. They consist of clastic sediments which underlie large portions of the township.

Rocks of the lower Lorrain formation are present in the township and locally have a thickness of up to 250 m and underlie much of the southwestern and west central parts of the township. They consist of fine grained arkose overlain by mudstones and course grained arkose. The thickness of the Lorrain formation tends to be thinner towards the south (J. Ireland; Pers.Comm)

The Gowganda formation is subdivided into two members, the upper member being the Firstbrook Member and the lower member the Coleman Member.

The Firstbrook Member has a maximum thickness of approximately 260 m. It consists of a sequence of mudstones, siltstones and arenites.

The Coleman Member locally has a thickness of up to 430 m and occurs as an unconformable cover over the Archean basement rocks (Thomson 1965).

NIPISSING DIABASE

Early Proterozoic Nipissing diabase occurs as several east trending sills, up to 500 m maximum thickness, and intrudes all of the older rock types. Course grained quartz diabase and hypersthene gabbro are the main rock types of the lower part of the sill, with course grained varied texture marking the sills upper portion. Granophyre occurs sporadically along the upper portion where it is in contact with the Lorrain formation (Born and Hitch 1990).

The youngest Precambrian rocks in the area are northwest trending olivine diabase dykes and less prominent lamprophyre dykes.

5.0 STRUCTURE

Weak foliation of the Archean metavolcanic and plutonic rocks is evident throughout the township. This foliation generally trends southeast and has a near vertical dip. Younging direction from pillowed flows seem to be to the southwest (Born and Hitch 1990, Thomson 1965). Local folding of these lithologies seem to be minor. Poorly

developed jointing is locally developed with generally east and southwest trending joint sets (Born and Hitch 1990)

The Latchford Fault is a prominent northwest trending fault that cuts across the central part of the township. There also exists a number of similar northwest trending faults or lineaments. The Montreal River Fault, in the north-central part of the township, being one of the better developed examples. Displacements along these structures seems to be minor (Born and Hitch 1990).

The rocks of the Lorrain and Gowganda formations are generally undeformed and locally only exhibit gentle flexure folding. Schistosity and jointing is generally poorly developed. (Born and Hitch 1990)

Several northeast and northwest trending shear and extensional fracture zones cut the Nipissing diabase. Some of these have quartz and/or carbonate veining with associated copper, cobalt and silver mineralisation. The remainder only exhibit a late infilling with chlorite and no mineralisation. Joint set are well developed with the most common trend being in northwest and northeast directions. (Born and Hitch 1990, Thomson 1965).

Over the northwest portion of the township the Cobalt Lake Fault strikes northeasterly and is exposed between Pickerel and Brief Lakes.

6.0 Possible Mineralisation

The Early Proterozoic Nipissing diabase sills of the Cobalt area are considered to be a favourable host for fractures and veins filled by post-Nipissing silver mineralisation. Reactivation of regional scale faults during tectonic activity, before, during and after these intrusions, resulted in the use of the structures as fluid pathways. Most veins are carbonate rich and occur within a vertical distance of 200 m from the sill. The deposits are located at or near the Archean-Huronian unconformity. Associated low pressure - temperature (propylitic) alteration in the wall rock surrounding the veins is indicative of highly alkaline fluids (Andrews et. al. 1986). The vein constituents are thought to be introduced with the these fluids.

Abundant base metal sulphides hosted in the underlying Archean volcanics are a probable source of the silver and cobalt mineralisation in the area (Patterson 1979).

In the Coleman member most of the rocks contain disseminated sulphides. These occur both as vein related and as detrital sulphides (Patterson 1979). The vein related sulphides may be controlled by the sulphides in the underlying Archean volcanics while the detrital sulphides are probably controlled by paleovalleys in the Archean basement (Patterson 1979).

Copper, cobalt and silver minerals are hosted in carbonate rich veins that may contain various amounts of quartz and other minerals such as; smaltite, cobaltite, gersdorffite, erythrite, annabergite, pyrite, chalcopyrite, bismuth, argentite, nicolite and galena. Others such as native silver and numerous sulpharsenides occur, but are rare (Born and Hitch 1990).

In general three vein types exist within the area. These are dilatant, shear and replacement types with mineralisation being typically discontinuous along their length. Higher grade areas may occur in the vicinity of the vein intersection with, shallow-dipping shear zones, lithologic contacts and abrupt fault controlled changes in the configuration of the Archean basement (Andrews et. al. 1986).

The occurrences of copper, cobalt, silver, gold, zinc, lead and nickel in the Cobalt and surrounding area can be subdivided into four groups based on lithological and mineral assemblege characteristics (Boyle and Dass 1971, Andrews et al 1986). These are described as follows;

Type 1: Cu, Co, Ag ± Au and Ni mineralisation hosted in narrow (70 - 140 m) Nipissing diabase dykes. Deposits of this type are not common in the Cobalt camp but occur to the south in Gillies Limit (Born and Hitch 1990).

Type 2: Cu, Co, Ag ± Au and Ni mineralisation related to the upper margin of the Nipissing diabase sill. In the Cobalt camp no significant mineralisation was discovered in the adjacent rocks above the upper margin of the sill (Born and Hitch 1990).

Type 3: Cu, Co, Ag ± Au and Ni mineralisation is hosted in the lower margin of the Nipissing diabase sill at or near the contacts between the diabase and sedimentary rocks of the Cobalt Group. There are many examples of this type in the Cobalt camp (Born and Hitch 1990)

Type 4: Cu, Co, Ag ± Au and Ni mineralisation hosted within Archean volcanics and interflow sediments and sediments of the Gowganda formation adjacent to Nipissing diabase sills. The mineralisation in adjacent rocks is spatially related and is linked to the diabase. Ore grades are highest in the host volcanics and generally disappear rapidly in the diabase (Andrews et. al. 1986).

Ruzicka and Thorpe (1996) suggests a similar subdivision based on three principal mineral assemblages. These are:

1. minor base metal sulphide assemblege in the Archean basement

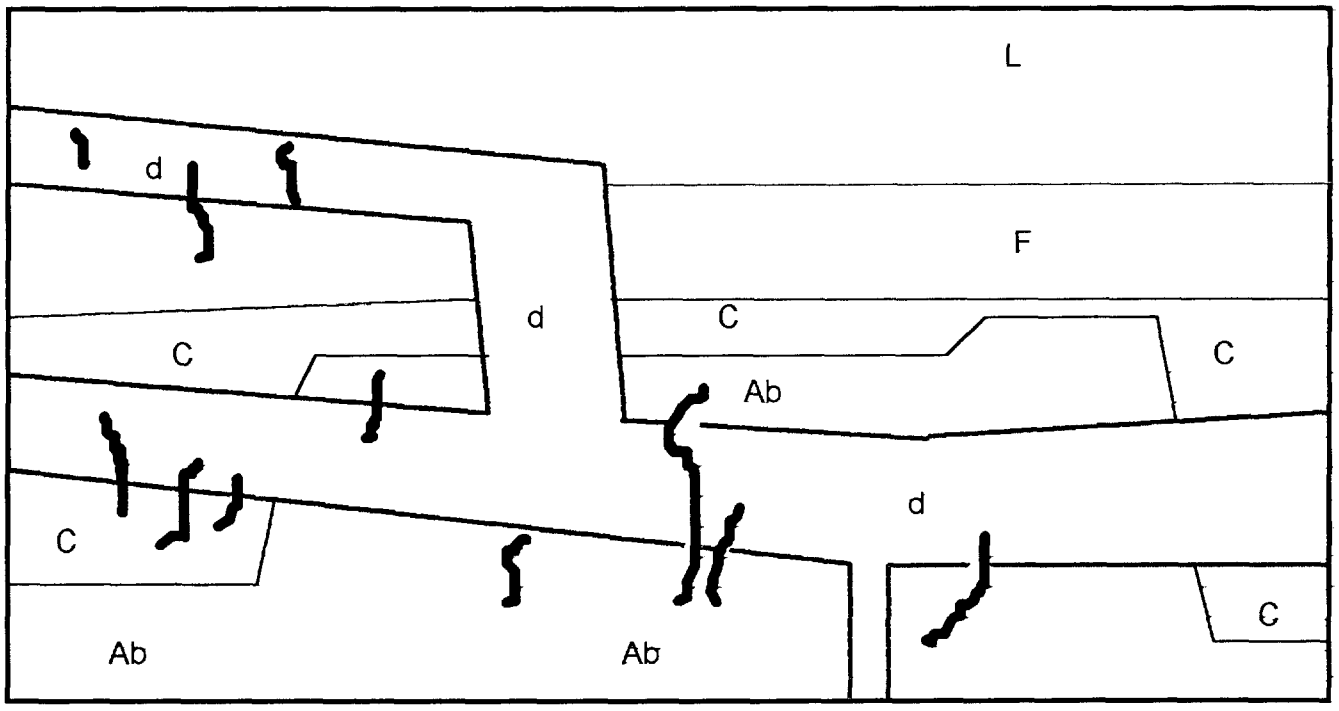
2. arsenite silver-cobalt veins, which occur principally at or near the contacts between the Nipissing diabase and Gowganda formation sediments

3. a late stage sulphide assemblege which in part is distributed along the margins of arsenide-rich veins that have been reopened

The age of the arsenide silver-cobalt veins (Type 3) has been established from geological evidence and age dating of the associated diabase sheets (Ruzicka and Thorpe 1996). In the Cobalt area these veins cut the Nipissing diabase, but are displaced by postore reverse faults which are contemporaneous with the intrusion of the quartz diabase dykes. The deposition of the ore must therefore have taken place after the intrusion of the diabase sills. Andrews et. al. (1986) state that the bulk of the ore was emplaced very soon after the intrusion of the diabase.

An association exists between the distribution of the silver-cobalt veins in the Cobalt camp and the contact between the Nipissing diabase and Gowganda formation. These veins occur within the diabase and in sedimentary rocks within 200 m of the diabase. They dip steeply and may extend horizontally for as much as 1000 m and vertically as much as
120 m (Ruzicka and Thorpe 1996).

In addition there exist a number of minor sulphide occurrences in central and southern Gillies Limit township that do not fit the above subdivisions (Born and Hitch 1990). These are hosted in Archean metavolcanics but are not spatially associated with the Nipissing diabase sills. Born and Hitch (1990) believe that they represent either primary Archean volcanogenic sulphide mineralisation or Archean shear related and remobilised sulphides hosted within these rocks.



L : Lorrain Formation
F : Firstbrook member (Gowganda Formation)
C : Coleman member (Gowganda Formation)
Ab : Archean basement
d : diabase
: Sulpherarsenide vein

Simplified Geological Section Showing Relationship between Lithologic Units and Sulpherarsenide Vein Systems (after Born and Hitch 1990, Andrews et. al. 1986)

The arsenide-silver vein deposits in the Cobalt area are localised in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks (Ruzicka and Thorpe 1996). The application of this relationship in the Gillies Limit area is hampered by the lack of exploration during the land caution. However it would seem that the claims overlie an anticlinal depression , west of a north-south bedrock high located west of Cobalt.

Distribution of the arsenide silver-cobalt veins seems to be structurally controlled by regional fault systems and by the contact zones between Nipissing diabase sills and Huronian sediments and less commonly with Nipissing diabase and Archean rocks (Ruzicka and Thorpe 1996). The veins tend to dip steeply and have a strike extent of < 100 m. Alteration zones are developed in the wall rock along the veins as narrow, (10 cm), zones of calcite, chlorite, epidote, K-feldspar, muscovite, and anatase. Chlotite often occurs as spots, 1 - 5 mm in diameter (Ruzicka and Thorpe 1996).

The Gillies limit claims have high potential for silver-arsenide mineralisation near to or up to 200 m below the Nipissing diabase sills. A large diabase sill is exposed on the property west of the Montreal river and extends northerly from the vicinity of Hound Chute Lake. Thomson (1965) and Born and Hitch (1990) indicate that the dips in the Huronian strata are steep (9-15° SW) in the vicinity of block 19 (one block north of Hound Chute Lake). Therefore initial exploration should be concentrated in the northwest of the property in the vicinity of the diabase-sediment contact with the hope of identifying shallower targets.

Evidence of proximal vent facies rocks, as interpreted by Born and Hitch (1990), in the vicinity of Borden Lake (east of property) suggest the possibility of massive sulphide mineralisation in Gillies Limit township. These rocks contain primary sulphide fragments and are hydrothermally altered. Similar rocks also occur, although to a much lesser extent, in the northern part of the township, in the vicinity of block 9, north of the Montreal river. This area is in part covered by the property but seems to have sparse outcrop.

7.0 Present Work

During the period August 16th to September 24th 1997 Wabana Explorations Inc. completed a linecutting, geophysical, prospecting and stripping program over, and in the vicinity of, their Montreal River property.

A total of 27.5 kilometres of line were cut which included 1.5 kilometres of tie lines at 315° with cross lines at right angles to this. The linecutting was completed by employees of Wabana Exploration Inc., the geophysics (Mag and VLF) by Meegwich Consultants of Temagami, and the stripping by James Lathem Excavating of Cobalt. This report covers the prospecting and stripping with the geophysics covered under a separate report.

Prospecting:

The prospecting work was completed over a total period of 6 days on August 16, 20, 27, 29,30, 31 and September 10 and 13.

The work comprised selective prospecting traverses of grid lines, traverses between grid lines and prospecting around old workings and new stripped areas. A total of 45 samples were taken and are summarized as an attachment to this report. The main rock type encountered was mafic to intermediate basalt with variable intensity of carbonitization. All samples taken had greater than 5% sulphides in the form predominantly of pyrite and chalcopyrite with minor pyrrhotite.

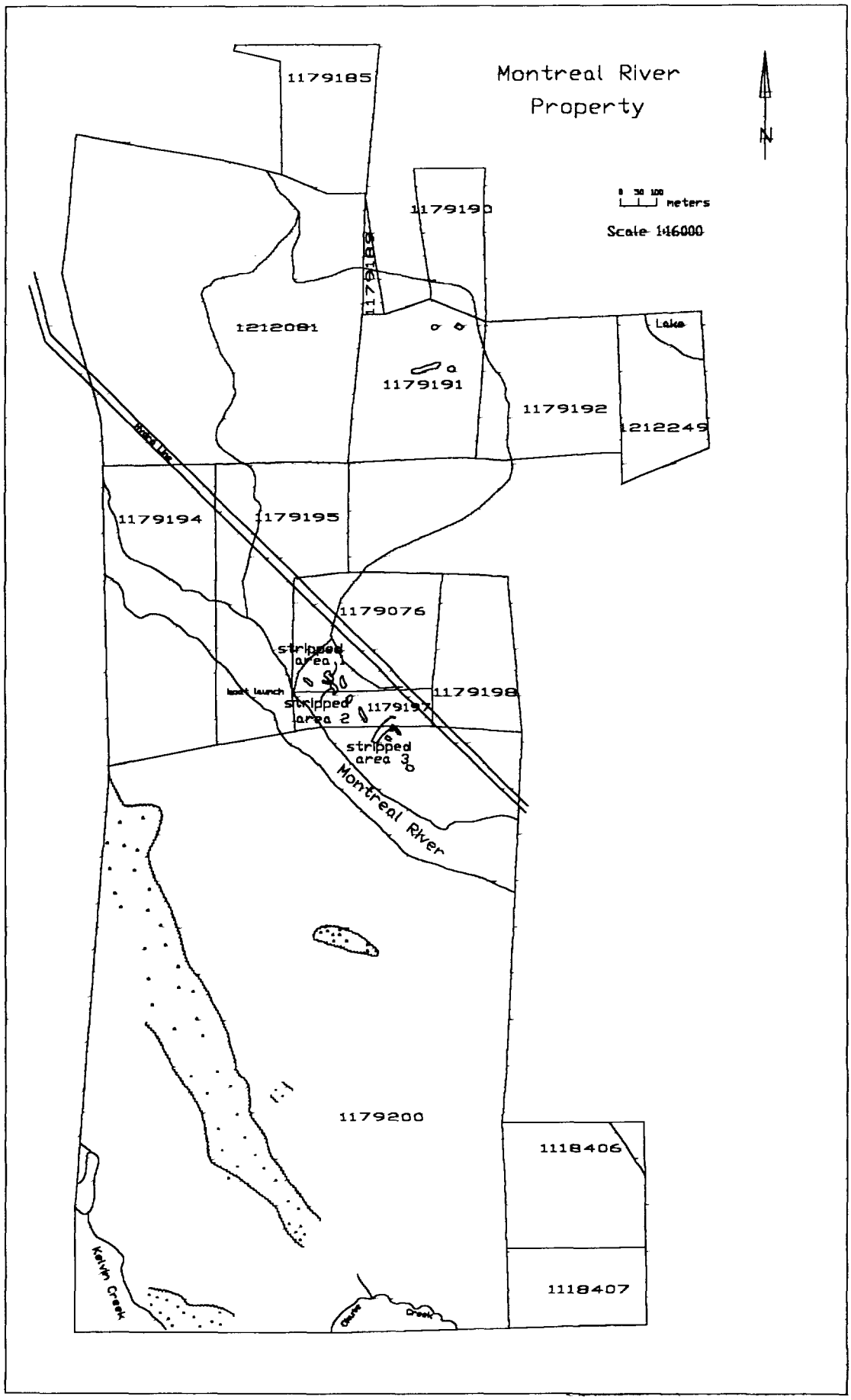
Stripping:

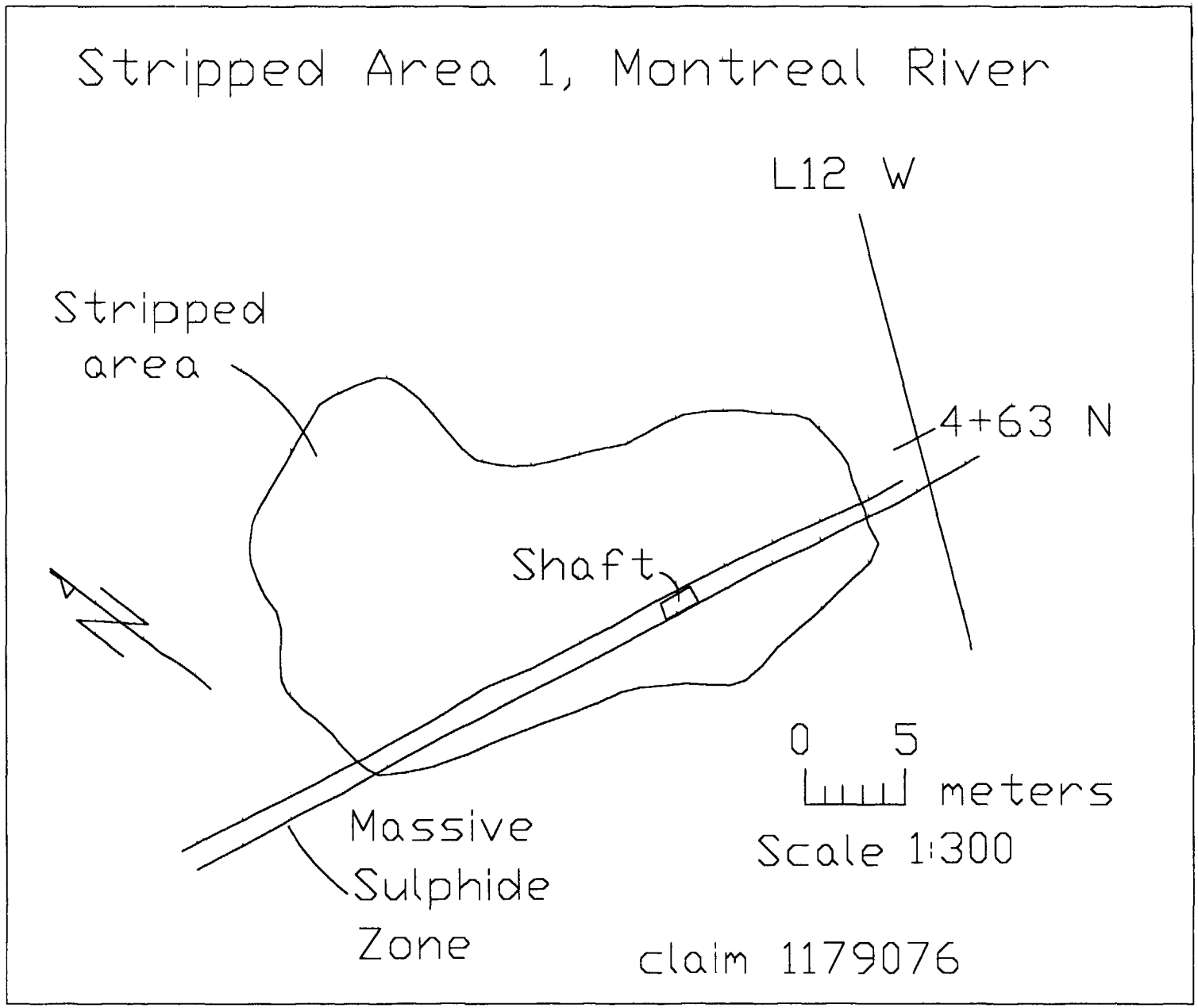
Stripping was conducted over the period September 20th to 24th 1997 and was conducted by James Lathem Excavating Limited of North Cobalt.

A total of 50 hours of stripping and trenching was completed using a Hitachi Exc200 excavator at an hourly rate of $70. The equipment was operated by Al Jenkins.

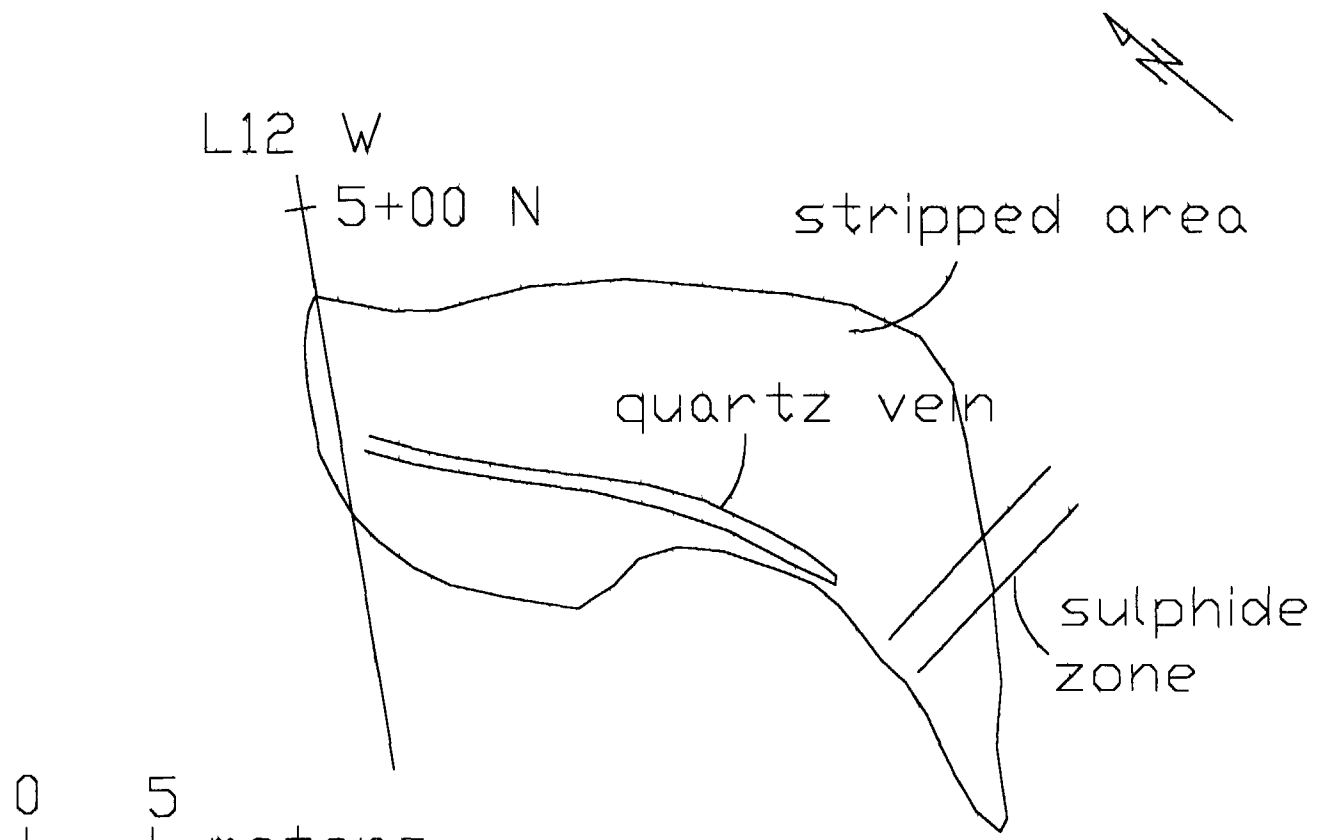
The stripped areas lie between grid lines 12W and 13W at 4+63N on claim 1179076, in the vicinity of line 12W at 4+49N on claim 1179076 and on claim 1179200 in the vicinity of line 10W at 5+35N.

The stripping uncovered sulphide rich mafic volcanics with well developed gossan zones.

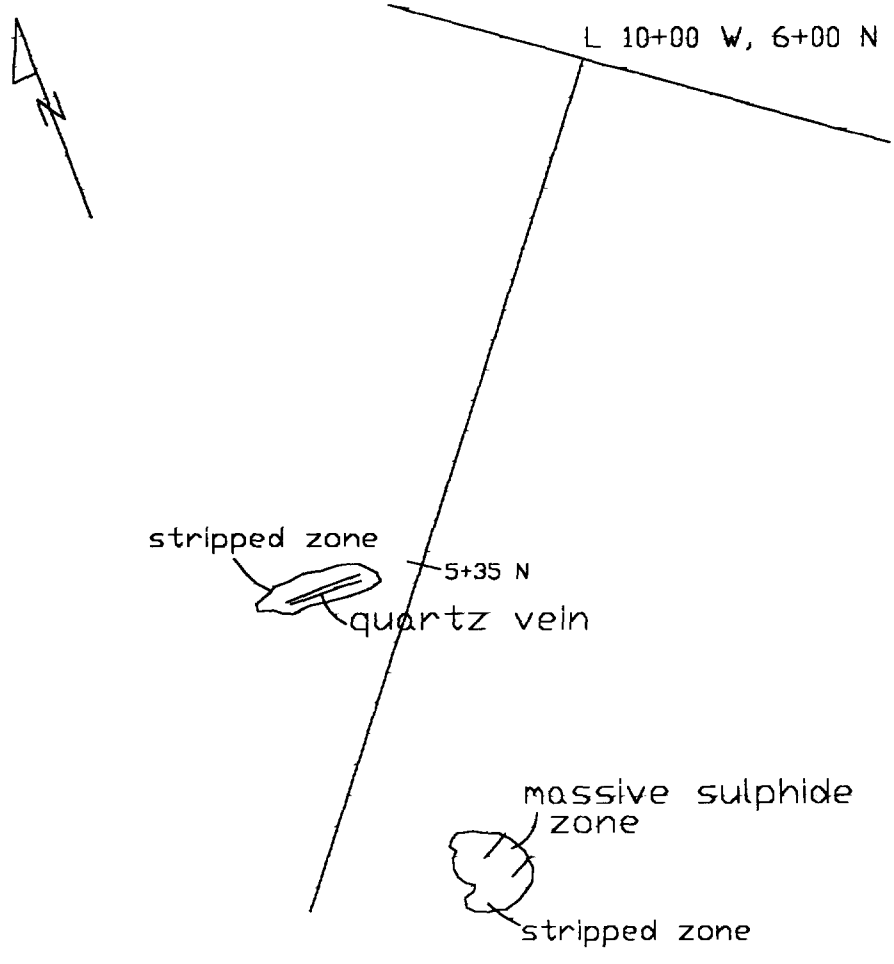

Montreal River
Property
N
0 50 100 meters
Scale 1:6000
1179185
1179190
1179189
1212081
1179191
1179192
1212249
Lake
1179194
1179195
1179076
stripped area 1
boat launch
stripped area 2
1179198
1179197
stripped area 3
Montreal River
1179200
1118406
1118407
Kelvin Creek
Creek


Stripped Area 1, Montreal River
L12 W
Stripped
area
4+63 N
Shaft
N
0 5
meters
Scale 1:300
Massive
Sulphide
Zone
claim 1179076

Stripped Area 2, Montreal River



Stripped Area 3, Montreal River



claim 1179200

Appendix I: References

Andrews, A.J., Owsiacki, L., Kerrich, R., and Strong, D.F., 1986. The Silver Deposits at Cobalt and Gowganda, Ontario 1: Geology, Petrography and Whole-Rock Geochemistry. Canadian Journal of Earth Sciences, Volume 23, p1480-1506.

Born, P., and Hitch, M.W.,1990. Precambrian Geology, Bay Lake Area; Ontario Geological Survey, Report 276, 81p.

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Legun, A.S., 1986. Huronian Stratigraphy and Sedimentation in the Cobalt Area; Ontario Geological Survey, Miscellaneous Paper 124, 24p and 3 charts.

Lambert, G., 1997. Report on Airborne Magnetic and Electromagnetic Surveys in the Temagami and Cobalt Areas; Unpublished Internal Report for Wabana Explorations Inc. by Lambert Geosciences and SIAL Geophysics, 17p and 6 maps

Patterson, G.C., 1979. Metallogenesis of Base Metals in the Cobalt Area; *in* Summary of Field Work, Ontario Geological Survey, Miscellaneous Paper 70, p 222-229.

Ruzicka, V., and Thorpe, R.I., 1996. Arsenide Vein Silver, Uranium; *in* Geology of Canadian Mineral Deposit Types, (editor) O.R. Eckstrand, W.D. Sinclair and R.I. Thorpe; Geological Survey of Canada, Geology of Canada, no. 8, p287 (also Geological Society of America, The Geology of North America, v.P-1).

Thomson, R., 1965. Preliminary Report on Parts of Coleman Township and Gillies Limit to the South and Southwest of Cobalt, District of Temiskaming, Ontario; Ontario Department of Mines, Preliminary Report 1960-3, 57p

Sample #	Location	Description
49933	L12 W, 5 + 60 N	massive py + cpy from old pit
49934	L 12 W, 5 + 60 N	massive py + cpy from old pit
49935	L 12 W, 5 + 60 N	massive py + cpy from old pit
49936	L 12 W, 5 + 60 N	massive py + cpy from old pit
49625	L12 +07 W, 4+75 N	altered vesicular basalt, 2-5% py from footwall of pit
49626	L12 +07 W, 4+75 N	1 meter chip, gossan, shear, sulphides.
49627	L12 +07 W, 4+75 N	Selected grab, Gossan zone.
49628	L12 +07 W, 4+75 N	Gossan zone, chloritic, altered, besicular basalt, 2-10%.Py
49629	L12 +07 W, 4+75 N	chloritic vesicular basalt, 20-30% py, locally magnetic
49630	L 12 W, 5+00 N	Silicified altered vesicular basalt, 5% K-feld- vesic. filled, epidote altered matrix. Tr-1% py
49937	L 11+0W, 6 +00 N	volcanic, lt grey-green, blebs to finely disseminated py and galena
49938	L 11+00 W, 6 + 25 N	volcanic, lt grey-green, blebs to finely disseminated py and galena
49939	L 11+00 W, 6 + 30 N	volcanic, lt grey-green, blebs to finely disseminated py and galena
49940	L 11+00 W, 6 + 30 N	mfc volcanic with quartz vein, 10% sulphides
49941	L 11+00 W, 5 +00 N	mfc volcanic flow, dk grey, med gr, masive py, some cpy
49942	L11 W, 5 +00 N	quartz vein in dark green mfc vlc, blebs of py

Sample #	Location	Description
49943	L 11 W, 5 + 00 N	dk grey -greenish grey mfc vlc, with 10% py
49944	L11 W, 5 + 00 N	quartz vein with 3% py + cpy
49945	L11 W, 5 +00 N	quartz vein, 10-15% py + cpy
49946	L11 W, 5 +00 N	dark grey-green mfc vlc with quartz, 8-10% diss py + cpy + gal
49947	L 8W, 7 + 60 N	dark grey mfc vlc, 10-15% py
1510	L10 + 90, 6 + 15 N	dark grey, mfc vlc, 5% py as veinlets
1511	L11 W, 5 + 50 N	dark grey, mfc vlc, 25-50% py + cpy
1512	L11 W, 5 + 75 N	quartz vein, with 5-10% py + cpy + gal
1513	TL 9 +00 N, 14 + 70W	quartz vein, 5% py + cpy
1514	L13 W, 5 + 50 N	quartz vein in mfc vlc, <5% py + cpy + po
1515	TL 6 +00N, 13 +00 W	silicious, mfc vlc, aphanitic, 3% po + cpy
1517	L 9 + 90W, 4 + 75N	dark grey mfc vlc, gossaneous, 10-15% py + cpy, locally quartz veins with 50% py
1518	L 10 W, 4 + 90 N	dark grey, aphanitic, mfc vlc with carbonate and chloritic veinlets , gossaneous, 50% massive py + cpy
1520	L16 W, 10+00 N	dark grey, mfc vlc, gossaneous, 5-10% cpy + py
1521	L16 W, 10 +25 N	dark grey, mfc vlc with calcite veins, cpy + py
1522	L16 W, 10 + 25 N	calcite vein with disseminated cpy + py

Sample #	Location	Description
1523	L16 W, 13 + 70 N	mfc vlc, quartz vein, 3% py + cpy
1524	L16 W, 10 + 25 N	quartz vein with diss py + cpy
1525	L10 +90 W, 5 + 60 N	quartz vein with 3-5% py + cpy, minor carbonate veins
1526	L11 W, 6 + 12 N	gossan zone, light grey mfc-intm vlc, 3-5% disseminated py + cpy
1527	L 9 + 90 W, 4 +70 N	light grey mfc-intm vlc, silicious, 3-5% diss py + cpy
1528	L10 W, 4 + 90 N	dark grey mfc vlc, 50% massive py + cpy
1529	L 11+20 W, 5 + 25 N	quartz vein, 75cm wide with 5% cpy + py in a dark grey mfc vlc with 10-15% py.
1534	L6 + 25 W, 0 +20 N	dark grey-black, chert?, pervasive carbonate stringers, magnetic, 5% disseminated py + cpy
1535	L6 + 00 W, 0 + 20 N	quartz vein, disseminated po + cpy, magnetic
1536	L10 + 50 W, 0 +00 N	light grey, mfc-intm vlc, carbonate stringers, 5-7% py, disseminated, slightly magnetic
1537	L6 +00 W, 0 +00 N	light grey mfc-intm vlc, 5% disseminated py
1538	L 10 + 60 W, 0 + 00 N	light grey mfc-intm vlc, 10-15% disseminated py + cpy + po
1539	L12+50 W, 0 + 50 N	gossan zone in mfc-intm vlc, 15-25% py

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): W9780.00982
Assessment Files Research Imaging

Personal Information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, the informati ... and correspond with the mining land holder. Questions about this c ... rthern Development and Mines, 6th Floor, 933 Ramsey Lake Road

31M05SE0072 2.17714 GILLIES LIMIT (NORTH PART) 900

Instructions: - Fc ... se form 0240.
- Please type or print in ink.

*MONTREAL RIVER

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

Name: WABANA EXPLORATIONS INC.	Client Number: 302280
Address: 47 BRIDGEPORT ROAD	Telephone Number: (519) 886-3007
WATERLOO, ONTARIO N2J 2J4	Fax Number: (519) 886-3903
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

		Office Use
Work Type: STRIPPING / ASSAYS		Commodity
		Total $ Value of Work Claimed
Dates Work Performed: From 15 (Day) 09 (Month) 97 (Year) To 24 (Day) 09 (Month) 97 (Year)		NTS Reference
Global Positioning System Data (if available)	Township/Area: GILLIES LIMIT	Mining Division
	M or G-Plan Number: G 3429	Resident Geologist District

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.

2.17.2

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

Name: CLIVE STEPHENSON. EXPLORATION MANAGER WABANA EXPL. INC.	Telephone Number: (705) 569-2700
Address: GENERAL DELIVERY, TEMAGAMI, ONT P0H 2H0	Fax Number: (705) 569-2701
Name:	Telephone Number:
Address:	Fax Number:
Name:	Telephone Number:
Address:	Fax Number:

RECEIVED
SEP 23 1997
GEOSCIENCE ASSESSMENT OFFICE

4. Certification by Recorded Holder or Agent

I, CLIVE D. STEPHENSON (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: C. D. Stephenson		Date: 24th SEPT 1997.
Agent's Address: GENERAL DELIVERY, TEMAGAMI, ONT. P0H 2H0	Telephone Number: (705) 569-2700	Fax Number: (705) 569-2701

 W9785.00982

...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.

*Amended.

	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 w... 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	1179076	1	$3,507	Ø	$3,507	
2	1179200	12	$1,806	$5,313	Ø	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
		Column Totals	$5,313	$5,313	$3,507	

I, CLIVE D. STEPHENSON, (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: C.D. Stephenson Date: 24th Sept 97.

2.12.1

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):

DUPLICATE COPY

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)	

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)
W9780.00983
Assessment Files Research Imaging

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. 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.

2.17714

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

*MONTREAL RIV.

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

Name	Client Number
WABANA EXPLORATIONS. INC.	302280
Address	**Telephone Number**
47 BRIDGEPORT ROAD	(519) 886-3007
WATERLOO, ONTARIO, N2J 2J4	Fax Number (519) 886-3903
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
PROSPECTING, MAG/VLF, LINECUTTING.	Commodity
	Total $ Value of Work Claimed
Dates Work Performed From 16 (Day) 08 (Month) 97 (Year) To 24 (Day) 09 (Month) 97 (Year)	NTS Reference
Global Positioning System Data (if available) — Township/Area: GILLIES LIMIT	Mining Division
M or G-Plan Number: G 3429	Resident Geologist District

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 repor

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

Name	Telephone Number
CLIVE STEPHENSON EXPLORATION MANAGER WABANA EXPL. INC	(705) 569-2700
Address	Fax Number (705) 569-2701
GENERAL DELIVERY, TEMAGAMI, ONT. P0H 2H0	
Name DAVID LARONDE, MEEGWICH CONSULTANTS	Telephone Number (705) 569-2904
Address P.O. BOX 482, TEMAGAMI, ONT. P0H 2H0	Fax Number (705) 569-2817
Name	**Telephone Number**
Address	**Fax Number**

RECEIVED
SEP 29 1997
GEOSCIENCE ASSESSMENT OFFICE

4. Certification by Recorded Holder or Agent

I, CLIVE D. STEPHENSON (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		Date
C. D. Stephenson		Sept 24th 97
Agent's Address	**Telephone Number**	**Fax Number**
GENERAL DELIVERY, TEMAGAMI P0H 2H0	(705) 569-2700	(705) 569-2701

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.

	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	1118406	1	Ø	$ 800	Ø	
2	1118407	1	Ø	$ 800	Ø	
3	1179076 ✓	1	$1,579	$ 800	$ 779	
4	1179185 ✓	1	$ 336	$ 800	Ø	
5	1179189 ✓	1	$ 58	$ 800	Ø	
6	1179190 ✓	1	$ 75	$ 800	Ø	
7	1179191 ✓	1	$1, 144	$ 800	$ 344	
8	1179192 ✓	1	$1, 111	$ 800	$ 311	
9	1179194 ✓	2	$ 481	$ 1600	Ø	
10	1179195 ✓	1	$1, 190	$ 800	$ 390	
11	1179197 ✓	1	$ 605	$ 800	Ø	
12	1179198 ✓	1	$ 569	$ 800	Ø	
13	1179200 ✓	12	$ 6,172	$4,287	Ø	$1,885
14	1212081 ✓	4	$5,252	Ø	$2,663	$2,589
15	1212249 ✓	1	$ 589	Ø	$ 589	
		Column Totals	$19,161	$14,687	$5,076	$4,474

I, CLIVE D. STEPHENSON (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: C. D. Stephenson — Date: 24th Sept 97

2.17214

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):

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)	

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)
W9780.00982
W9780.00983

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.

* MONTREAL RIVER.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
LINECUTTING	27.5 kilometres	$ 265.00	$ 7,287.50
MAG/VLF	26 kilometres	$ 165.00	$ 4,290.00
PROSPECTING	6 days	$ 150.00	$ 900.00
STRIPPING	EXCAVATOR ↳ 50 hours	$ 70.00	$ 3,500.00
SAMPLES/ASSAYS.	45.	$ 21.00	$ 945.00
SUPERVISION, REPORT PREP, DRAFTING ETC.			$ 4,450.00
Associated Costs (e.g. supplies, mobilization and demobilization).			
EQUIPMENT RENTAL (bushwackers, BOAT ATV), FOOD, LODGING, SUPPLIES (flagging tape, spray paint etc)			$ 3,101.00
Transportation Costs			
Food and Lodging Costs			
		Total Value of Assessment Work	$ 24,473.50

2.17714

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, CLIVE D. STEPHENSON (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 EXPLORATION MANAGER. (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
C. D. Stephenson	Sept 24th 97

0212 (02/96)

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

January 20, 1998

WABANA EXPLORATIONS INC.
47 BRIDGEPORT ROAD EAST
WATERLOO, ONTARIO
N2J-2J4

Dear Sir or Madam:

Submission Number: 2.17714

Subject: Transaction Number(s):		**Status**
	W9780.00982	Approval After Notice
	W9780.00983	Approval After Notice

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.

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: 11783

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.17714

Date Correspondence Sent: January 20, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9780.00982	1179076	GILLIES	Approval After Notice	January 19, 1998

Section:
10 Physical PSTRIP

All deficiencies associated with this submission have been corrected. Accordingly, assessment work credit has been approved as outlined on the Report of Work form accompanying this submission.

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9780.00983	1179076	GILLIES	Approval After Notice	January 19, 1998

Section:
9 Prospecting PROSP
14 Geophysical MAG
14 Geophysical VLF

All deficiencies associated with this submission have been corrected. Accordingly, assessment work credit has been approved as outlined on the Report of Work form accompanying this submission.

Correspondence to:

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

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

Jim Carlson
TEMAGAMI, ONTARIO, CANADA

WABANA EXPLORATIONS INC.
WATERLOO, ONTARIO

Correspondence ID: 11783

DATE OF ISSUE
JAN 2 1998
PROVINCIAL RECORDING OFFICE - SUDBURY

Ontario Ministry of Natural Resources | Ministry of Northern Development and Mines

INDEX TO LAND DISPOSITION

PLAN
G – 3429

TOWNSHIP
GILLIES LIMIT
(NORTH PART)

M.N.R. ADMINISTRATIVE DISTRICT
TEMAGAMI

MINING DIVISION
LARDER LAKE

LAND TITLES/REGISTRY DIVISION
TIMISKAMING

Scale 1:20 000

Contour Interval 10 Metres

SYMBOLS

Boundary
- Administration District
- Township, Meridian, Baseline
- Road allowance: surveyed / shoreline
- Lot or reserve: surveyed / unsurveyed
- Parcel: surveyed / unsurveyed
- Right-of-way: road / railway / utility
- Reservation
- Cliff, Pit, Mine
- Contour: interpolated / approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine shaft
- Pipeline (above ground)
- Railway, single track / double track / abandoned
- River, Stream, Creek: intermittent
- Road, Highway, Trail: winter / access / trail, blue
- Shoreline (original)
- Transmission line
- Wooded area

DISPOSITION OF CROWN LANDS

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
Quarry
Sand & Gravel
Land Use permit

400' Surface Rights along the shores of all lakes and rivers

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.

THIS TOWNSHIP FALLS WITHIN THE TEMAGAMI COMPREHENSIVE PLANING AREA. SPECIAL WORKING CONDITIONS MAY APPLY TO EXPLORATION ACTIVITIES. FOR MORE DETAILS PLEASE CONTACT:
DISTRICT MANAGER,
NORTH BAY DISTRICT
MINISTRY, NATURAL RESOURCES

CIRCULATED AUGUST 20, 1996

ARCHIVED SEPT. 17, 1996

THIS IS A SUBDIVIDED TOWNSHIP
CLAIMS MUST BE STAKED IN SPECIFIC QUARTERS OF THE "BLOCKS" WHERE POSSIBLE. ALSO CLAIMS MUST BE STAKED CONFORMING TO THE SURVEY OF LOCATIONS A1-A100.

REGULAR "BLOCKS" ARE APPROXIMATELY 1600 METERS SQUARE. "A" LOCATIONS ARE APPROXIMATELY 8 HECTARES.

WHERE POSSIBLE STAKE TWO "A" LOCATIONS FOR MINIMUM SIZE CLAIMS.

AREAS WITHDRAWN FROM DISPOSITION
MRO – Mining Rights Only
SRO – Surface Rights Only
M+S – Mining and Surface Rights

Description	Order No.	Date	Disposition	File

(R4) SURFACE RIGHTS WITHDRAWN FROM STAKING, PROSPECTING BY ORDER W-L58/96 NER SEPT 17/96 RESEARCH

(R3) SEC. 35, 1990 W-L61/96 SEPT 17/96 M & S

****PART OF ORDER W-L2-90 NER REOPENED BY ORDER O-ONT-06/92 NER/CR. EFFECTIVE MAR. 16/92 AT 4:45 PM EST

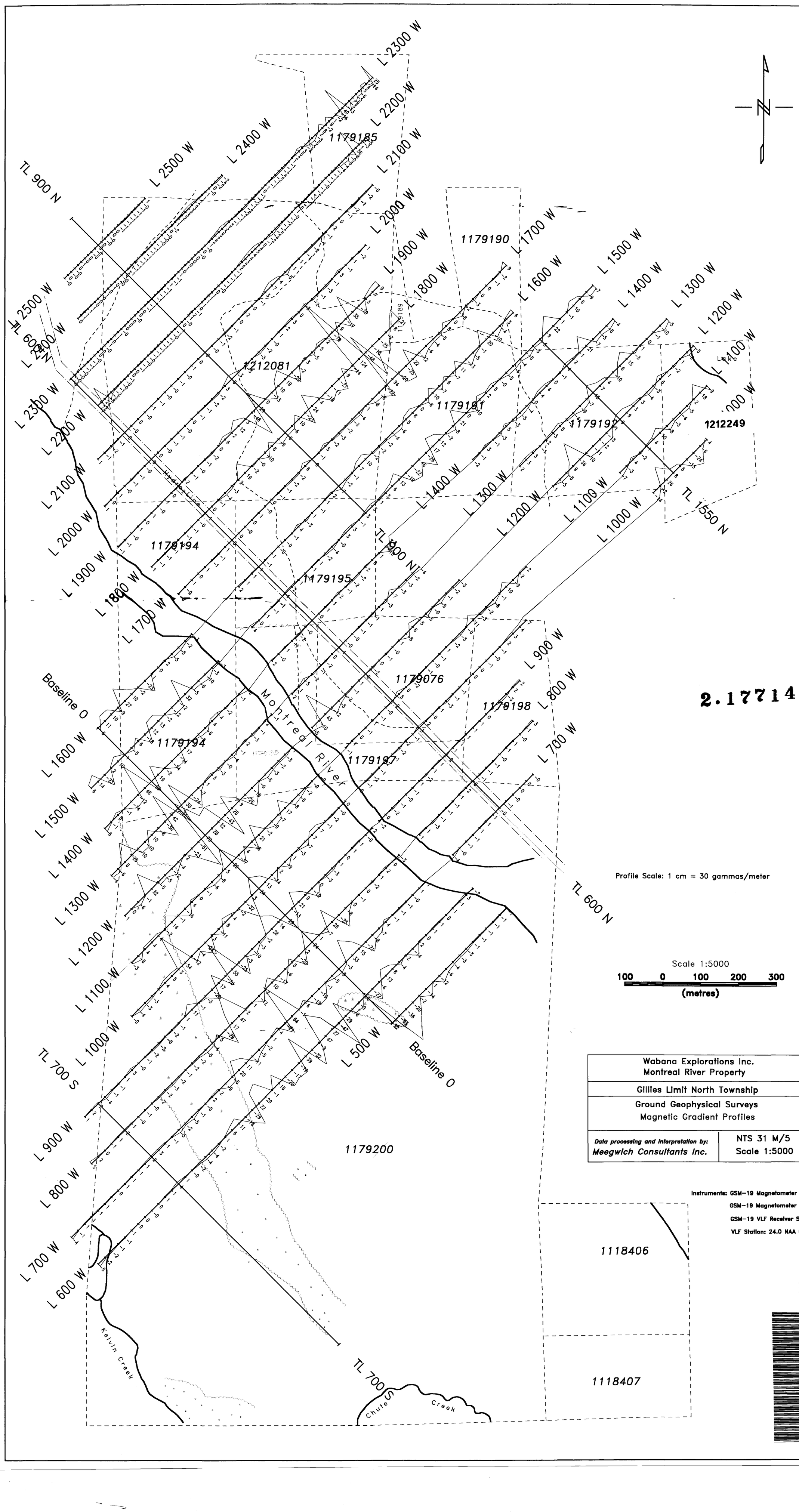
****PART OF ORDER W-L2-90 NER REOPENED BY ORDER O-ONT-07/92 NER/CR. EFFECTIVE JUNE 1/92 AT 7:00 AM EST

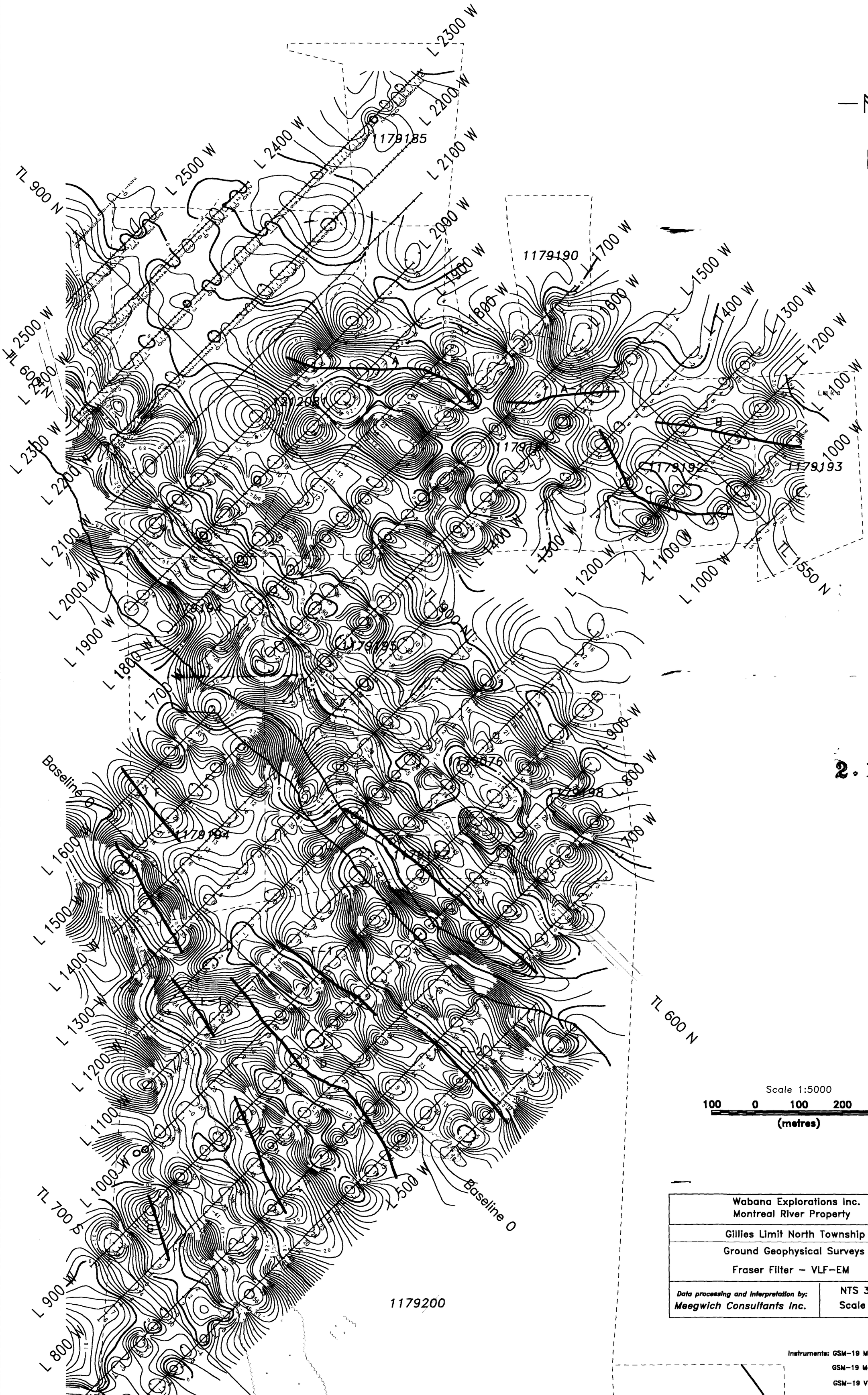
(R1) W-L59/96 NER SEPT 17/96 SRO ONT HYDRO

(R2) W-L58/96 NER SEPT 17/96 SRO PIPELINE

2.17714 PSTRIP PROSP MAG VLF

GILLIES LIMIT SOUTH PART


L 2300 W
L 2200 W
L 2400 W
L 2500 W
TL 900 N
L 2100 W
L 2000 W
L 1900 W
L 1800 W
L 1700 W
L 1600 W
L 1500 W
L 1400 W
L 1300 W
L 1200 W
L 1100 W
L 1000 W
L 900 W
L 800 W
L 700 W
L 600 W
L 500 W
TL 1550 N
TL 600 N
TL 700 S
1179185
1179190
1212081
1179191
1179192
1212249
1179194
1179195
1179076
1179198
1179197
1179200
1118406
1118407
Baseline 0
Montreal River
Kelvin Creek
Chute Creek
Hydro Line
Profile Scale: 1 cm = 30 gammas/meter
Scale 1:5000
100 0 100 200 300
(metres)
Wabana Explorations Inc.
Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys
Magnetic Gradient Profiles
Data processing and interpretation by:
Meegwich Consultants Inc.
NTS 31 M/5
Scale 1:5000
Instruments: GSM-19 Magnetometer Serial #58479
GSM-19 Magnetometer Serial #706692
GSM-19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.
2.17714
210
31M05SE0072 2.17714 GILLIES LIMIT (NORTH PART)


L 2300 W
L 2200 W
L 2400 W
L 2500 W
L 2100 W
L 2000 W
L 1900 W
L 1800 W
L 1700 W
L 1600 W
L 1500 W
L 1400 W
L 1300 W
L 1200 W
L 1100 W
L 1000 W
L 900 W
L 800 W
L 700 W
L 600 W
TL 900 N
TL 1550 N
TL 600 N
TL 700 S
Baseline 0
1179185
1179190
1179191
1179192
1179193
1179194
1179195
1179196
1179197
1179198
1179199
1179200
1118406
1118407
Lake
Kelvin Creek
Chute Creek
A
A-1
B
C
C-1
D
D-1
D-2
E
E-1
F
F-1
F-2
Scale 1:5000
100 0 100 200 300
(metres)
Wabana Explorations Inc.
Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys
Fraser Filter – VLF–EM
Data processing and interpretation by:
Meegwich Consultants Inc.
NTS 31 M/5
Scale 1:5000
Instruments: GSM–19 Magnetometer Serial #58479
GSM–19 Magnetometer Serial #706692
GSM–19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.
2.17715
220
31M05SE0072 2.17714 GILLIES LIMIT (NORTH PART)

2.17714

Montreal River Property

N

0 50 100 meters

Scale 1: 5000

1179185

Aug. 27/97

Aug. 30/97

Aug. 29/97

TL 900N

L26 W

L25 W

L24 W

L23 W

L22 W

L21 W

L20 W

L19 W

L18 W

L17 W

L16 W

L15 W

L14 W

L13 W

L12 W

L11 W

L10 W

L9 W

L8 W

L7 W

L6 W

L5 W

no o/c

1212081

1179190

Aug. 31/97

Sept. 10/9

1179191

1523

Lake

1179192

1212249

Hydro Line

1524

1522

1521

1520

TL 1550 N

1179194

1179195

1513

1179076

1515

Aug. 20/97

1514

49625

49626

49627

49628

49629

49630

1516

1511

1512

1510

49937

49938

49939

49940

1179198

boat launch

49933

49934

49935

49936

1526

1525

49941

49942

49943

49944

49945

49946

1179197

1517

1518

49947

49948

1527

1528

Aug. 13/97

1539

1536

1538

Sept. 13/97

1537

Montreal River

TL 600N

1179200

1118406

1118407

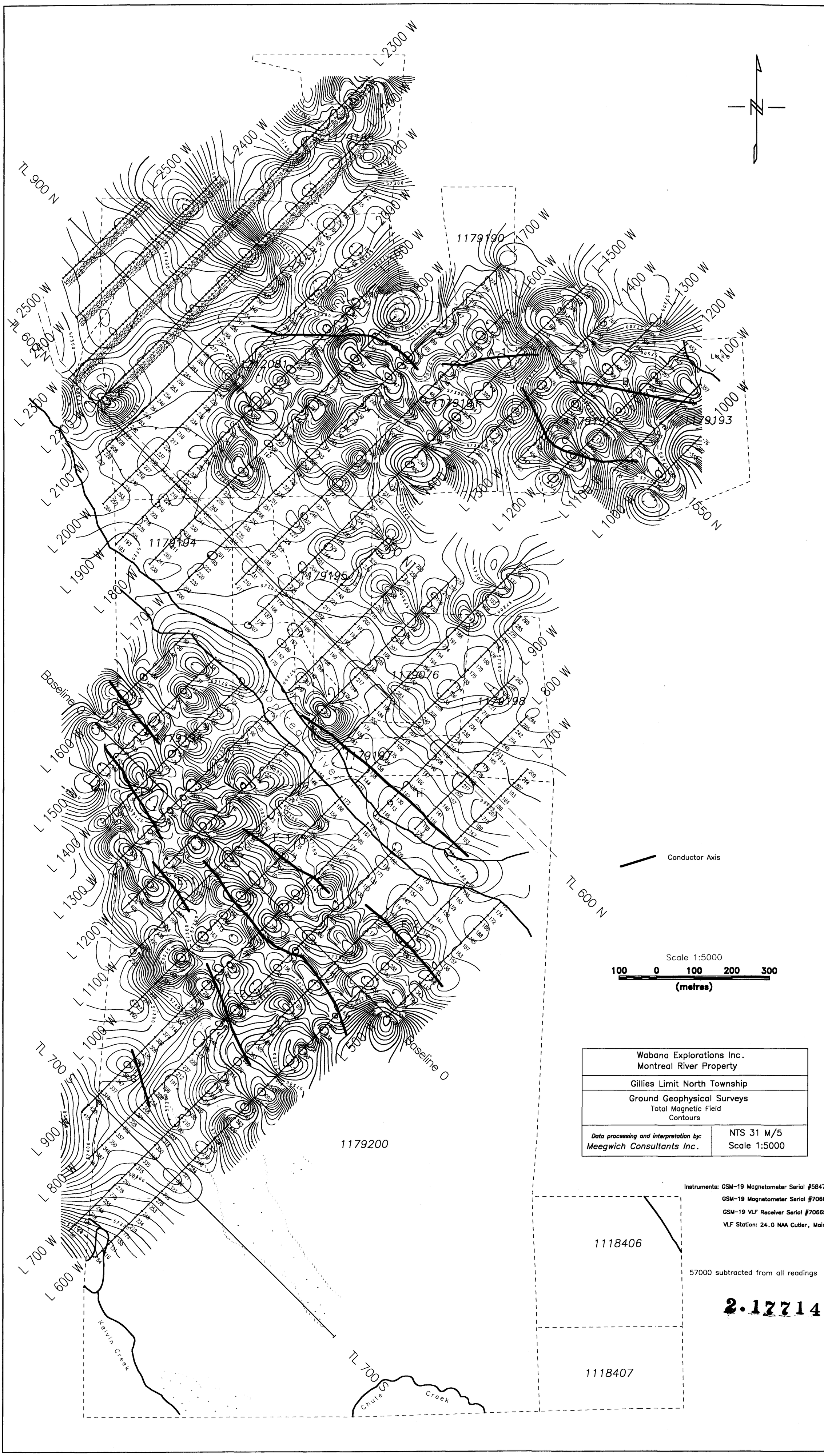
Bose Line 315 deg

Kelvin Creek

Chute Creek

Legend

1179198	Claim number
	Bush road
X 1514	Sample location and number
	Swamp
Sept. 10/97	Prospecting traverse with date
	trench, pit



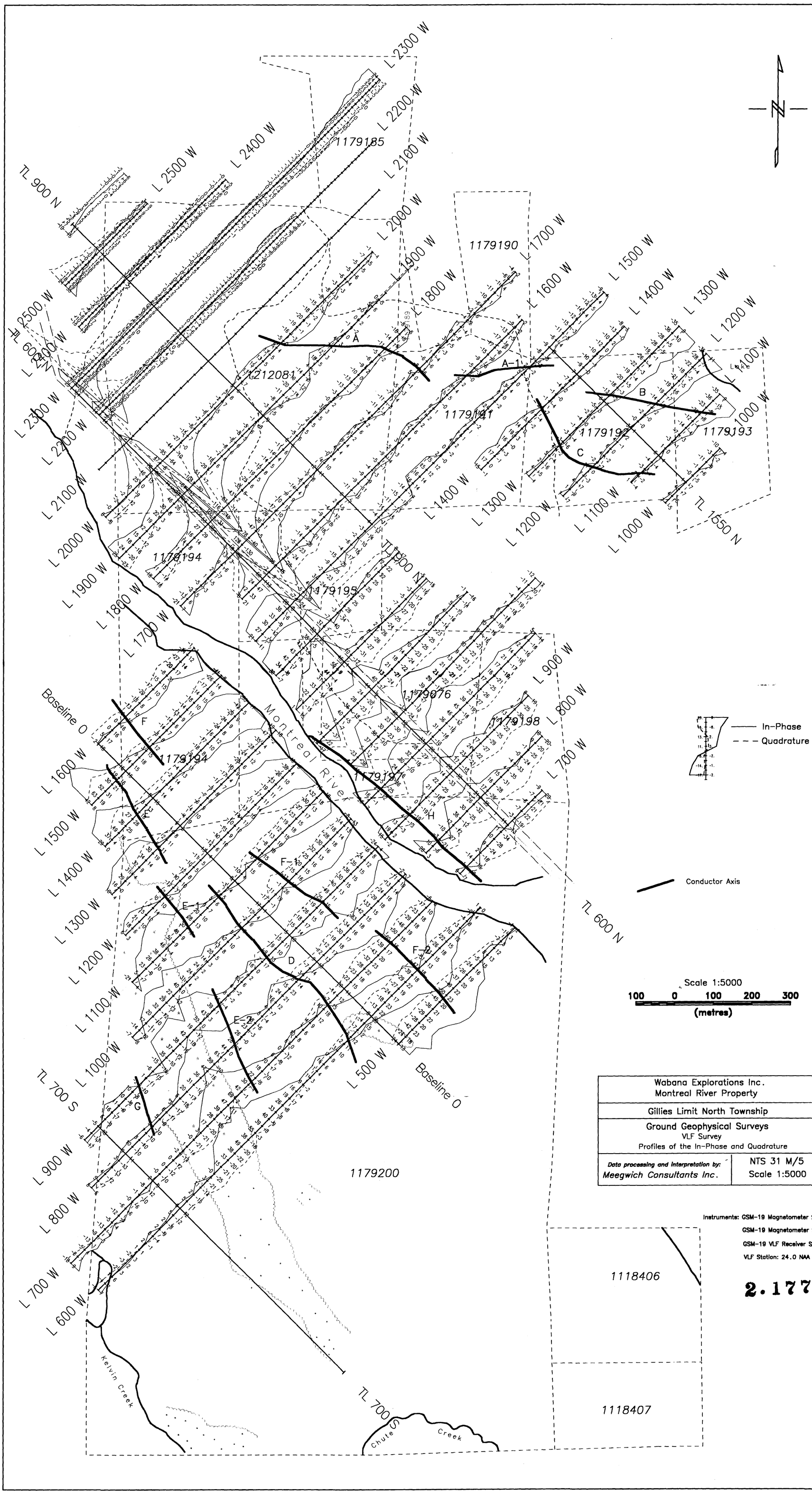
Wabana Explorations Inc. Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys Total Magnetic Field Contours
Data processing and interpretation by: *Meegwich Consultants Inc.* — NTS 31 M/5 Scale 1:5000

Instruments: GSM-19 Magnetometer Serial #58479
GSM-19 Magnetometer Serial #706692
GSM-19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.

57000 subtracted from all readings

2.17714

240



Wabana Explorations Inc. Montreal River Property
Gillies Limit North Township
Ground Geophysical Surveys VLF Survey Profiles of the In-Phase and Quadrature
Data processing and interpretation by: Meegwich Consultants Inc. | NTS 31 M/5 Scale 1:5000

Instruments: GSM-19 Magnetometer Serial #58479
GSM-19 Magnetometer Serial #706692
GSM-19 VLF Receiver Serial #706692
VLF Station: 24.0 NAA Cutler, Maine.

2.17714

250

Montreal River Property

N

0 50 100 meters

Scale 1: 5000

no o/c

Hydro Line

O/B

M/V

I/V

Area 1+2

Area 3

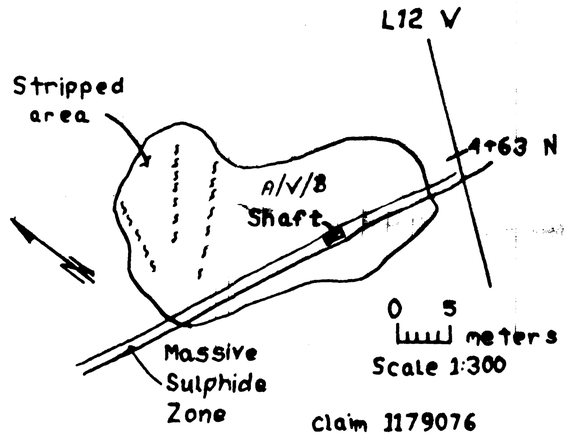
Montreal River

Legend

- Bush Road
- Swamp
- Trench.
- Gossen zone
- quartz vein
- Shear
- M/V mafic volcanic
- I/V Intermediate – Felsic
- O/B over Burden.
- Chirt
- SULphide zone
- Dry Gravel Bed
- A/V/B Altered vesicular basalt.

Jim.C

Stripped Area 1, Montreal River



Claim 1179076

Area 2,

Claim 1179076

Area 3,

Claim 1179200