

**REPORT ON THE VENCAN GOLD CORPORATION  
CAYENNE – CHILI GOLD PROPERTY,  
2005 GEOPHYSICAL EXPLORATION PROGRAM  
HEENAN, MARION, MALLARD and GENOA TOWNSHIPS,**

**SWAYZE AREA, ONTARIO**

Porcupine Mining Division, Ontario

NTS 41 O/16

Latitude 47°47' N, Longitude 82°22' W

Magnetic Declination in 2005: 9°41' West

**(Appendix IV under separate cover)**

**Roman Tykajlo, B.Sc., P. Geo.  
Alan Sexton, M.Sc., P. Geo.  
Tara Sagriff, B.Sc.**

**GeoVector Management Inc.  
10 Green Street, Suite 312  
Nepean, Ontario K2J 3Z6  
Tel: 613-843-8109 fax: 613-843-8110  
Website: [www.geovector.ca](http://www.geovector.ca)  
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**GeoVector Management Inc.**

## EXECUTIVE SUMMARY

The Cayenne and Chili Property consists of 57 contiguous mining claims comprising 538 claim units for 8704.84 hectares. Within this claim package there are 46 unpatented mining claims, comprised of 512 claim units (8284.16 hectares) and 5 patented mining claims, comprised of 20 claim units (323.60 hectares) that are recorded 100% in the name of VenCan Gold Corporation. In addition, there are 4 leased mining claims, comprised of 4 claim units (64.72 hectares) and 2 unpatented mining claims, comprised of 2 claim units (32.36 hectares) that VenCan Gold Corporation has optioned from Falconbridge Limited. The claims are located in the Porcupine Mining Division in Heenan (G-1139), Marion (G-1174), Mallard (G-1171) and Genoa (G1131) townships, Ontario.

The 2005 geophysical exploration program was initiated in early February, 2005 and extended to late June, 2005. During this period, a detailed exploration program consisting of line cutting, ground magnetic, ground horizontal-loop electromagnetic (HLEM), and induced polarization (IP) / Resistivity surveys was completed. The geophysical surveys were conducted over grids cut in the Claim Lake and October Lake areas on the western portion of the Cayenne and Chili Property. The majority of the exploration program was designed and managed by GeoVector Management Inc. of Ottawa Ontario.

Geophysical surveys mapped the complex interior character of the northeast trending Woman River Iron Formation. The iron formation is characterized by very high magnetic intensity, with correlated HLEM anomalies, and chargeability anomalies dominantly associated with low resistivity. The responses are typical of py/po/mag iron formations.

The IP/Resistivity survey outlined several chargeable sources (disseminated sulphides) with high-resistivity association (possible quartz veining) that could be related to possible gold mineralized structures cutting the Woman River iron formation and adjacent Fe- to Mg-tholeiitic mafic volcanic rocks of the Trailbreaker Group.

Of particular interest are chargeability anomalies that correlate with resistivity highs, and that are proximal to inferred structures approximately at the intersection of Lines 15+00N, 16+00N, and 17+00N with Line 82+00E.

Based on these results a follow-up exploration program of geological mapping, trenching and diamond drilling is recommended to test a number of IP anomalies correlated with resistivity highs including the area at the intersection of Lines 15+00N, 16+00N, and 17+00N with Line 82+00E.

## TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	i
TABLE OF CONTENTS	ii
LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF MAPS	iii
LIST OF IP LINE SECTIONS	iv
1.0 INTRODUCTION	1
2.0 PROPERTY LOCATION AND ACCESS	1
3.0 PROPERTY DESCRIPTION	1
4.0 REGIONAL GEOLOGY	5
5.0 PREVIOUS EXPLORATION HISTORY	6
6.0 CURRENT PROGRAM AND RESULTS	9
6.1 Grid Cutting	10
6.2 Geophysical Surveys	10
6.2.1 Grid Electromagnetic Surveys	10
6.2.2 Grid Magnetic Survey	11
6.2.3 Grid IP/Resistivity Survey	11
6.2.4 IP/Resistivity Inversion Modeling	12
7.0 GEOPHYSICAL DATA INTERPRETATION	12
8.0 RECOMMENDATIONS	13
9.0 REFERENCES	13

APPENDIX I: Statements of Qualifications

APPENDIX II: Contractor Listing and Dates Worked

APPENDIX III: Claim Lake and October Lake Grids Electromagnetic Survey Specifications

APPENDIX IV: Claim Lake Grid IP and Magnetic Surveys Logistics Report

### LIST OF TABLES

	Page
1. Cayenne and Chili Property Claims Listing	3
2. Distribution of Work by Mining Claim	9

### LIST OF FIGURES

	Page
1. Location of the Cayenne and Chili Properties in eastern Ontario	2
2. Geology of the Swayze Greenstone Belt	8

## LIST OF MAPS

		Scale
1	Cayenne, Chili and Gagne Properties Claim and Grid Location, Heenan, Marion, Genoa and Benton Townships	1:20,000
2.	Claim Lake Grid, Index of 2005 Geophysical Work	1:5,000
3a.	Claim Lake Grid, Horizontal Loop Electromagnetic Survey, 1777Hz In-Phase and Quadrature Phase Profiles with Data Values Posted	1:5,000
3b.	Claim Lake Grid, Horizontal Loop Electromagnetic Survey, 444Hz In-Phase and Quadrature Phase Profiles with Data Values Posted	1:5,000
4a.	October Lake Grid, Horizontal Loop Electromagnetic Survey, 1777Hz In-Phase and Quadrature Phase Profiles with Data Values Posted	1:5,000
4b.	October Lake Grid, Horizontal Loop Electromagnetic Survey, 444Hz In-Phase and Quadrature Phase Profiles with Data Values Posted	1:5,000
5a.	Claim Lake Grid, Total Magnetic Intensity Survey, Contours with Data Values Posted	1:5,000
5b.	Claim Lake Grid, Total Magnetic Intensity Survey, Profiles with Data Values Posted	1:5,000
6	Claim Lake Grid, Induced Polarization and Resistivity Survey 55m Depth Slice (UBCIP2D Inversion Modeling) Profiles with Modeled Values Posted	1:5,000
7.	Claim Lake Grid, Geophysical Data Interpretation	1:5,000



## LIST OF IP LINE SECTIONS

IP Section L4+00W	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L4+00W	1:2500
IP Section L8+00W	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L8+00W	1:2500
IP Section L16+00W	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L16+00W	1:2500
IP Section L79+00E	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L79+00E	1:2500
IP Section L82+00E	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L82+00E	1:2500
IP Section L89+00E	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L89+00E	1:2500
IP Section L920 + 00N	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L920+00N	1:2500
IP Section L925 + 00N	Cayenne Property, Resistivity/IP Pseudosections and Inversion Depth Sections, L925+00N	1:2500

## **1.0 INTRODUCTION**

The focus of this exploration program was based upon the well known deposit type model of Archean aged mesothermal lode gold.

## **2.0 PROPERTY LOCATION AND ACCESS**

The Cayenne and Chili Property is located approximately 110 kilometres southwest of the city of Timmins (Figure 1). The property is centered on latitude 47°147' N and longitude 82°22' W within 1:50,000 NTS map sheet 41O/16.

Access to the property is gained via a good all weather logging road west off of highway 144 on the Sultan Industrial Road for 56 kilometres then north on the Dore Road for 16 kilometres to the Heenan Road. Several logging roads running east off the Heenan Road cross the western portion of the property and are accessible by truck. The central portion of the property is accessible by foot or all-terrain vehicle along several trails that run north off logging roads. The western portion of the property is accessible by truck on a newly constructed logging road. Additional access can be gained to all areas of the property by fixed or rotary wing aircraft and by foot or all-terrain vehicle along numerous trails.

## **3.0 PROPERTY DESCRIPTION**

The Cayenne and Chili Property consists of 57 contiguous mining claims (Map 1, Table 1) comprising 538 claim units for 8704.84 hectares. Within this claim package there are 46 unpatented mining claims, comprised of 512 claim units (8284.16 hectares) and 5 patented mining claims, comprised of 20 claim units (323.60 hectares) that are recorded 100% in the name of VenCan Gold Corporation. In addition, there are 4 leased mining claims, comprised of 4 claim units (64.72 hectares) and 2 unpatented mining claims, comprised of 2 claim units (32.36 hectares) that VenCan Gold Corporation has optioned from Falconbridge Limited. The claims are located in the Porcupine Mining Division in Heenan (G-1139), Marion (G-1174), Mallard (G-1171) and Genoa (G1131) townships, Ontario.

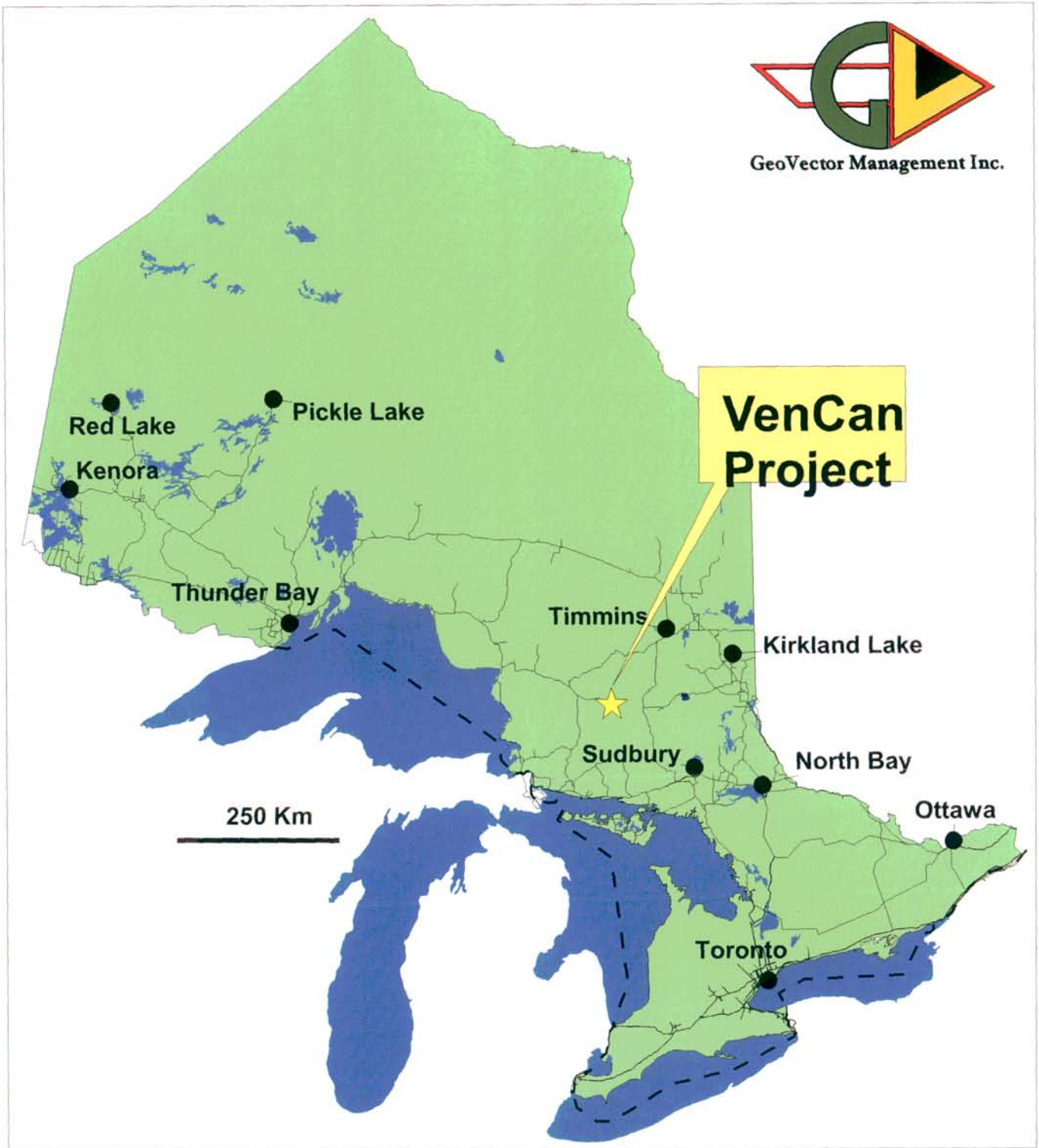


Figure 1: Location of the VenCan Project in eastern Ontario

**Table 1. VenCan Cayenne and Chili Property Claim Listing**

Project Name	Township	G-Plan	Claim Number	Recording Date	Claim Due Date	Units	Hectares
Cayenne	Heenan	G-1139	3004853	2003-Mar-05	2006-Mar-05	16	258.88
Cayenne	Heenan	G-1139	3004858	2003-Mar-05	2006-Mar-05	15	242.7
Cayenne	Heenan	G-1139	3005870	2004-Jul-20	2006-Jul-20	12	194.16
Cayenne	Heenan	G-1139	3005872	2004-Jul-20	2006-Jul-20	9	145.62
Cayenne	Heenan	G-1139	3011886	2004-Jul-20	2006-Jul-20	2	32.36
Cayenne	Heenan	G-1139	3011914	2004-Jul-20	2006-Jul-20	16	258.88
Cayenne	Heenan	G-1139	3003895	2004-Sep-07	2006-Sep-07	8	129.44
Cayenne	Heenan	G-1139	3003896	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Heenan	G-1139	3003897	2004-Sep-07	2006-Sep-07	15	242.7
Cayenne	Mallard	G-1171	3003893	2004-Sep-07	2006-Sep-07	12	194.16
Cayenne	Mallard	G-1171	3003894	2004-Sep-07	2006-Sep-07	6	97.08
Cayenne	Marion	G-1174	3003877	2004-Sep-07	2006-Sep-07	9	145.62
Cayenne	Marion	G-1174	3003878	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Marion	G-1174	3003879	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Marion	G-1174	3003880	2004-Sep-07	2006-Sep-07	16	258.88
Cayenne	Heenan	G-1139	3005871	2004-Jul-20	2007-Jul-20	9	145.62
Cayenne	Heenan	G-1139	4200151	2005-Jul-25	2007-Jul-25	12	194.16
Cayenne	Heenan	G-1139	4200152	2005-Jul-25	2007-Jul-25	14	226.52
Cayenne	Heenan	G-1139	3003889	2005-Sep-06	2007-Sep-06	3	48.54
Cayenne	Heenan	G-1139	3003900	2005-Sep-15	2007-Sep-15	6	97.08
Chili	Heenan	G-1139	WS8	Patented Claim	Patented Claim	6	97.08
Chili	Heenan	G-1139	WS9	Patented Claim	Patented Claim	4	64.72
Chili	Heenan	G-1139	WS10	Patented Claim	Patented Claim	6	97.08
Chili	Heenan	G-1139	WS11	Patented Claim	Patented Claim	2	32.36
Chili	Heenan	G-1139	WS12	Patented Claim	Patented Claim	2	32.36
Cayenne	Marion	G-1174	1199601	2002-Mar-06	2006-Mar-06	16	258.88
Cayenne	Marion	G-1174	1199603	2002-Mar-06	2006-Mar-06	16	258.88
Cayenne	Marion	G-1174	1199604	2002-Mar-06	2006-Mar-06	16	258.88
Cayenne	Marion	G-1174	1239271	2001-Sep-06	2006-Sep-06	6	97.08
Cayenne	Marion	G-1174	1239272	2001-Sep-06	2006-Sep-06	10	161.8
Cayenne	Marion	G-1174	1239273	2001-Oct-02	2006-Oct-02	12	194.16
Cayenne	Marion	G-1174	1239274	2001-Oct-02	2006-Oct-02	8	129.44
Cayenne	Marion	G-1174	3008049	2003-Jun-18	2007-Jun-18	4	64.72
Cayenne	Marion	G-1174	3008050	2003-Jun-24	2007-Jun-24	4	64.72
Cayenne	Marion	G-1174	1239269	2001-Aug-08	2008-Aug-08	4	64.72
Cayenne	Genoa	G-1131	3007651	2005-May-12	2007-May-12	12	194.16
Cayenne	Genoa	G-1131	4200166	2005-May-12	2007-May-12	8	129.44
Cayenne	Genoa	G-1131	4200167	2005-May-12	2007-May-12	13	210.34

Project Name	Township	G-Plan	Claim Number	Recording Date	Claim Due Date	Units	Hectares
Cayenne	Genoa	G-1131	4200201	2005-May-12	2007-May-12	16	258.88
Cayenne	Genoa	G-1131	4200202	2005-May-12	2007-May-12	8	129.44
Cayenne	Genoa	G-1131	4200203	2005-May-12	2007-May-12	5	80.9
Cayenne	Genoa	G-1131	4200204	2005-May-12	2007-May-12	14	226.52
Cayenne	Marion	G-1174	4200192	2005-May-12	2007-May-12	16	258.88
Cayenne	Marion	G-1174	4200193	2005-May-12	2007-May-12	16	258.88
Cayenne	Marion	G-1174	4200194	2005-May-12	2007-May-12	8	129.44
Cayenne	Marion	G-1174	4200195	2005-May-12	2007-May-12	8	129.44
Cayenne	Marion	G-1174	4200196	2005-May-12	2007-May-12	16	258.88
Cayenne	Marion	G-1174	4200197	2005-May-12	2007-May-12	16	258.88
Cayenne	Marion	G-1174	4200198	2005-May-12	2007-May-12	8	129.44
Cayenne	Marion	G-1174	4200199	2005-May-12	2007-May-12	16	258.88
Cayenne	Marion	G-1174	4200200	2005-May-12	2007-May-12	8	129.44
Cayenne	Genoa	G-1131	583877	1980-Sep-15	2007-Sep-15	1	16.18
Cayenne	Genoa	G-1131	583878	1980-Sep-15	2007-Sep-15	1	16.18
Cayenne	Genoa	G-1131	P583880	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583881	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583884	1980-Sep-15	2012-Dec-1	1	16.18
Cayenne	Genoa	G-1131	P583885	1980-Sep-15	2012-Dec-1	1	16.18
					<b>TOTALS</b>	<b>538</b>	<b>8704.84</b>

#### 4.0 REGIONAL GEOLOGY

The Swayze greenstone belt is bounded in the north by the Nat River granitoid complex, to the west by the Kapuskasing uplift, to the south by the Ramsay-Algoma granitoid complex and to the east by the Kenogamissi batholith (Figure 2). The volcanic and sedimentary rocks of the Swayze greenstone belt were previously classified into five stratigraphic groups (Heather and van Breemen 1994; Becker and Benn, 2003). From oldest to youngest, these are the Chester group, the Marion group, the Trailbreaker group, the Swayze group and the Ridout group. Geochronological data for the different groups of the Swayze greenstone belt are not abundant and they are as yet insufficient to tightly constrain the absolute timing and duration of deposition for the different groups.

The Chester group (2736 to 2746 Ma; Heather 1998) is the oldest stratigraphic group in the Swayze greenstone belt. This group is composed of mafic volcanic rocks and amphibolites overlain by felsic to intermediate volcanic rocks, intercalated with chemical and clastic sedimentary rocks.

The Marion group consists of massive, calc-alkalic intermediate to felsic volcanic flows, ash and crystal tuffs interbedded with lapilli tuff and volcanic breccia. The Marion group is capped by iron formations, the most significant are contained within the Woman River Iron Formation. Ages of ca. 2729 Ma, obtained by U/Pb analyses of a quartz-eye bearing rhyolite breccia, are considered to be close to the beginning of the deposition of this group (Heather et al. 1996; Heather 1998).

The lower Trailbreaker group conformably overlies the Marion group and consists of a thick succession of massive, pillowed, Fe- to Mg-tholeiitic mafic volcanic rocks. The upper part of the Trailbreaker group is made up of calcalkalic, intermediate to felsic volcanic rocks, including pyroclastic, volcanoclastic and minor clastic sedimentary facies that are intruded by synvolcanic feldspar +/- quartz porphyry dikes and stocks. A U/Pb zircon age of  $2705 \pm 2$  Ma from a quartz-phyric rhyolite of the Trailbreaker group (Heather and van Breemen 1994) is used as an approximate upper bracket for deposition of the Trailbreaker Group.

The Swayze group occupies the largest area in the mapped parts of the Swayze greenstone belt. The basal part of the Swayze group comprises pillowed Mg-tholeiites and basaltic komatiites intercalated with picritic komatiites. This succession exhibits well developed hyaloclastic, variolitic and flow-top breccias. Komatiitic rocks are also common in the Swayze group. The overlying upper part of the Swayze group consists of felsic to intermediate pyroclastic and volcanoclastic rocks, interlayered with clastic sediments. The sedimentary rock mainly consists of intercalated quartz and/or feldspar-rich sandstones, siltstones, polymictic conglomerates, wackes and mudstones. The absence of clasts of iron formation or granitoids in the conglomerates of the Swayze group distinguishes them from the conglomerates in the overlying Ridout group (see below). Ages determined for the Swayze group are 2697 Ma and 2695 Ma (Heather 1998) for felsic to intermediate volcanic rocks at the top of the Swayze group.

The Ridout group is the youngest stratigraphic group recognized by previous workers. Predominantly, it is made up of greywackes and conglomerates with minor amounts of feldspar and quartz porphyry dikes and sheets. A maximum depositional age of 2690 Ma for the Ridout group is based on the youngest ages obtained from zircons from a quartz-feldspar rich sandstone (Heather 1998).

Two major tectonic events have been recognized in the Swayze Greenstone Belt. An earlier deformation event generated north-south trending folds. The second deformation event generated east-west trending folds. No large fault zones have been mapped in the Swayze greenstone belt, however, high-strain zones have been mapped by Heather et al. (1996). While most of these high-strain zones are only of local significance, the Ridout high-strain zone south of the Rice Lake batholith extends into the Abitibi greenstone belt and may be is the western extension of the Larder-Cadillac deformation zone (Milne 1972; Hall 2001; Heather et al. 1995). An east-striking shear zone to the north of the Kenogamissi batholith may correspond to the Porcupine-Destor deformation zone in the Abitibi belt Milne (1972).

## **5.0 PREVIOUS EXPLORATION HISTORY**

A history of the most significant exploration programs conducted on and immediately adjacent to the portion of the VenCan property in the October Lake to Claim Lake area (Map 1) is summarized below.

The earliest reported work on the property was during the 1906-1908 period and was related to an evaluation of the iron ore potential of the Woman River Iron Formation. This evaluation was completed by a syndicate consisting of C.K. Leith and C.R. Van Hise of Madison, Wisconsin. The work consisted of reconnaissance dip-needle surveys, regional and detailed geological mapping and 2848 metres (9344 feet) of trenching and pitting within the iron formation. The results of this work outlined low grade iron with values up to 43% iron (Goodwin, 1965).

In 1946, Fumerton Mining and Development Company held a number of claims covering the area between Claim Lake and W.S.8. A program of magnetic surveying, prospecting and mapping was completed. No significant results were obtained.

During the 1963-65 period bedrock geological mapping was completed by Ontario Department of Mines (Goodwin, 1965) in Heenan and Marion Townships.

In 1975, U.S. Steel International Limited (W.G. Wahl, 1975) completed work to evaluate the iron ore potential of the Woman River Iron Formation within Benton, Heenan, Marion and Mallard Townships. The work consisted of reconnaissance and detailed ground VLF-EM and magnetic surveys, and rock geochemical sampling. The results of this work outlined twelve (12) VLF-EM anomalies.

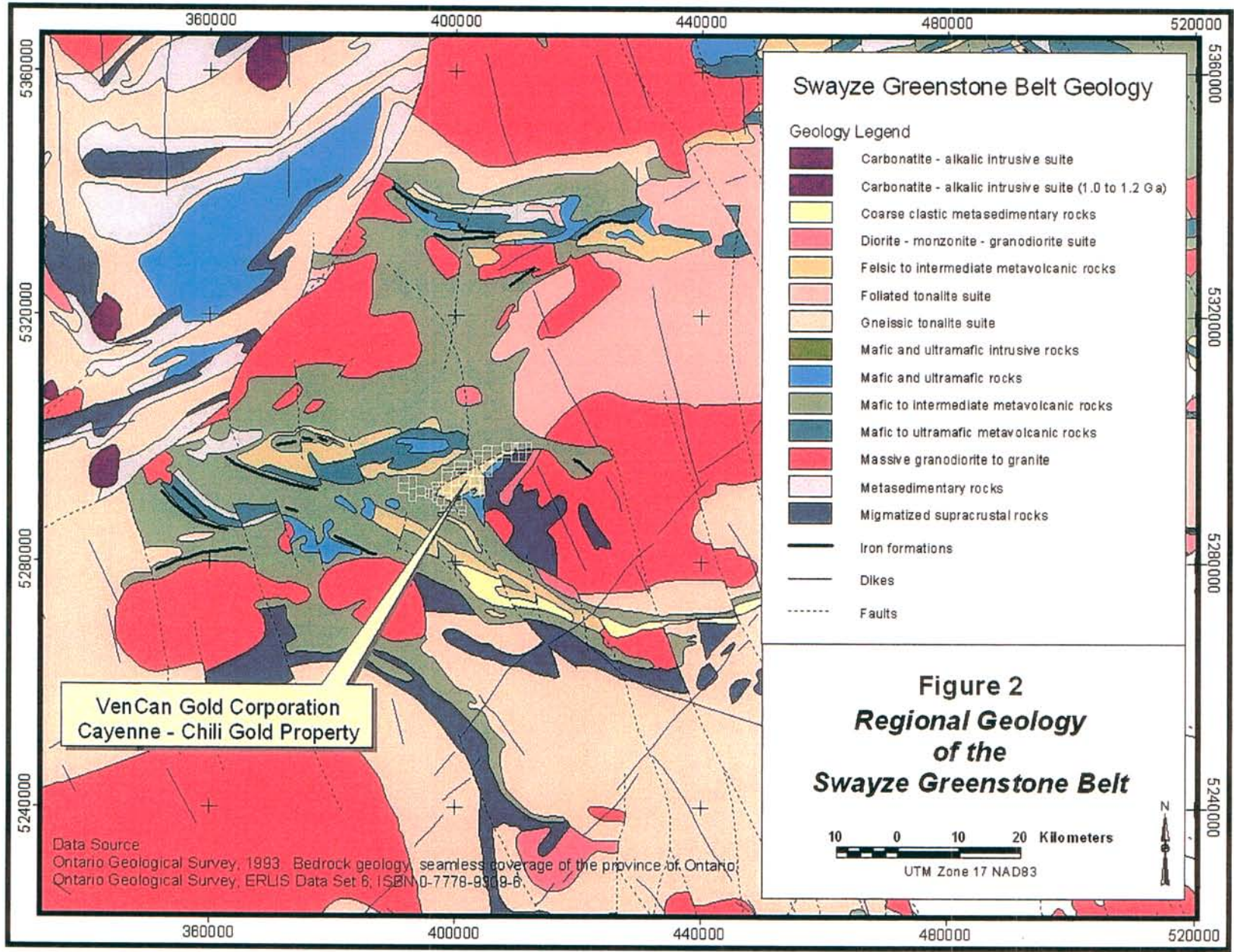
During the 1980-1985 period, Falconbridge Limited carried out a significant amount of work over much of the Woman River Iron Formation in search of base metals and gold. This work consisted of an extensive grid with northeast trending baseline and tie-lines and northwest-southeast trending cross lines over much of the current property (Manchuk, 1985). Geophysical (VLF-EM, magnetometer, HLEM), geological mapping and geochemical (humus) surveys were completed over the grid area. Several areas had follow-up trenching and diamond drilling completed. This work located several gold rich zones in quartz-pyrite veins in the iron formation, quartz-carbonate pyrite veins in the felsic volcanics, sulfide facies iron formation and in shear-related alteration zones (hematization, silicification, carbonatization, pyritization) within felsic volcanics and quartz-feldspar porphyries.

In 1987-88 Ressources Halex Inc. (AGEOS, 1987; Zemerov, 1988) completed 83.5 km of line cutting, 30 km of I.P. surveys and 2307 metres of diamond drilling in six (6) drill holes. This work was completed in the Claim Lake area with no significant results.

In 1994-95 Conquest Yellowknife Resources Inc. (Lashbrook, 1995) completed a program of mechanical stripping, trenching, mapping and sampling in the area of Claim Lake. The best results obtained were 0.28 oz/ ton Au over 12 feet and 0.155 oz/ton Au over 9.5 feet. In addition, 630 metres of diamond drilling in seven (7) drill holes were completed with no significant results.

In 1997, prospectors A. MacDonnell and R. Lashbrook (Lashbrook, 1997) completed 16 km of line cutting, 4.0 km of I.P. surveys and prospecting. This work was completed in the Claim Lake area. The most significant result was a grab sample of a sheared outcrop of mafic volcanic with pyrite bearing quartz veins which assayed 0.14 oz/ton gold.





## 6.0 CURRENT PROGRAM AND RESULTS

The 2005 exploration program on the Cayenne-Chili property consisted of grid cutting, grid based HLEM, magnetic, and IP/resistivity surveys (Map 2). The majority of the work was completed by GeoVector Management Inc. of Ottawa, Ontario under contract to VenCan Gold Corporation. A listing of GeoVector staff and sub-contractors that completed this work are attached in Appendix II.

A summary of the 2005 exploration work program completed is as follows:

- Claim Lake winter grid cutting – 36.0 kilometers
- Claim Lake spring grid cutting – 16.1 kilometers
- Claim Lake HLEM survey – 28 kilometers
- Claim Lake Magnetic survey – 45.5 kilometers
- Claim Lake IP/Resistivity survey – 21 kilometers
- October Lake grid line cutting – 7.6 kilometers
- October Lake HLEM survey – 6.8 kilometers

Each component of the 2005 exploration work program is discussed in detail in the following sections and in Table 2.

**Table 2. Distribution of Work by Mining Claim**

Claim Number	Winter Grid Kilometers	Spring Grid Kilometers	HLEM Survey Kilometers	Magnetic Survey Kilometers	IP/Resistivity Survey Kilometers
3003877	2	2	2.71	5.3	2.4
3003878	4	0	4.26	4.6	1.1
3003879	0	0.55	0	0	0.5
3003897	7.6	0	6.8	0	0
3003900	0	1.35	0	0	1.35
3004853	5	4.75	19.85	30.6	7.8
3004858	0	5.4	1.18	5	5.6
3011886	0	0.45	0	0	0.65
WS-8	0	1.6	0	0	1.6
<b>TOTALS</b>	<b>18.6</b>	<b>16.1</b>	<b>34.8</b>	<b>45.5</b>	<b>21</b>

## **6.1 Grid Cutting**

Two grids, namely the Claim Lake Grid and the October Lake Grid (Map 1), were cut and chained over the property in February and March, 2005 by Lashex Ltd. A portion of the Claim Lake grid cutting, from L22+00W to L9+00W, was previously filed for assessment by Lashex Ltd. (Lashbrook, 2005) and the remainder is filed herein. Both grids were cut with 100m line intervals and picketed at 25m station intervals. The Claim Lake Grid consisted of 36.0 line-km of cutting, of which 25.0 km was previously reported. The October Lake Grid consisted of 7.6 line-km of cutting and chaining of which 0.475km was cut on crown land.

The Claim Lake grid was enlarged (Map 2) in 2005, by adding extensions to L4+00W and L8+00W, and establishing several north-south reconnaissance lines at L79+00E, L82+00E, L89+00E, and east-west lines at L920+00N and L925+00N. A total of 16.1 line-km was established with stations picketed at 25m. Extensions were cut, chained, and picketed by Devex Ltd. in June, 2005.

## **6.2 Geophysical Surveys**

### **6.2.1 Grid Electromagnetic Surveys**

Lashex Ltd. completed horizontal loop electromagnetic surveys (HLEM) on the Claim Lake and October Lake Grids using a MaxMin 1-5 unit manufactured by Apex Parametrics Ltd. The surveying was completed in March 2005 to follow-up airborne EM anomalies originally detected by an airborne magnetic-electromagnetic survey completed by Questor Surveys over the Swayze area, on behalf of the Ontario Geological Survey (OGS) in 1980-81 (OGS, 1997). Using a coil spacing of 150m, readings of in-phase and quadrature response at frequencies of 1777Hz and 444Hz were taken at 25m station intervals along grid lines. A total of 28 line-km were surveyed at Claim Lake Grid, and 6.8 line-km at October Lake Grid. No corrections were made for topographic variations along survey lines. Instrument and survey specifications, survey dates, and crew names are documented in Appendix III. Survey profile results for Claim Lake Grid are presented in Maps 3a and 3b, and for October Lake Grid in Maps 4a and 4b.

Both grid surveys successfully detected conductors related to the 1980-81 airborne survey. Interpreted conductive trends are illustrated in Maps 3a, 3b, 4a, and 4b.

At Claim Lake, a strong, north-east trending formational conductor, due to the Woman River iron formation was detected along the entire length of the grid. In-phase profiles are contaminated by magnetic permeability effects due to the intense magnetic susceptibility of the iron formation, and show spurious peaks that are likely due to the lack of topographic corrections in the data. The quadrature-phase profiles, which are largely immune to the aforementioned effects, were used to interpret the conductive trend shown in Maps 3a and 3b.

A short, discrete, 300m strike length, moderately strong conductor, trending east-south-east (Maps 4a and 4b), was detected along four lines at October Lake. Asymmetrical anomaly shoulders suggest the conductor dips north-east approximately 60-80 deg.

### 6.2.2 Grid Magnetic Survey

Magnetic surveying was completed on the Claim Lake grid (Map 5a) and extensions (Map 5b), by Clearview Geophysics Inc., of Brampton, Ontario. A total of 45.5 line-km of diurnal drift corrected magnetic survey was completed at approximately 5m station intervals between June 21 and 29, 2005. The Claim Lake Grid is centered over a highly magnetic iron formation of the Woman River Formation, and extremely high vertical magnetic gradients caused data drop-out problems with proton precession magnetometers used in the Lashex Ltd. 2004 survey. In an attempt to alleviate the drop-out problem, Clearview utilized a cesium vapour magnetometer, which is much more tolerant of extremely high magnetic gradients, and in addition to surveying newly cut lines, repeated coverage completed in 2004. Further survey instrument specifications, names of field personnel, and daily production logs are documented in a survey logistics report (Appendix IV) prepared by Clearview.

The survey clearly outlined a 200-250m wide, northeast trending, intense magnetic high of the Woman River iron formation trend. The inferred boundaries of the magnetic iron formation (Map 7) appear to be sinuous and in some cases offset by possible north-south and northwest trending faults. The HLEM conductor axis lies proximal to the edges, and partially within the interior of the magnetic iron formation.

### 6.2.3 Grid IP/Resistivity Survey

IP/resistivity surveying was completed on eight selected lines on the Claim Lake Grid (Map 6), by Clearview Geophysics Inc., of Brampton, Ontario, between June 5 and 27, 2005. The survey was completed to test for chargeable sources (disseminated sulphides) related to possible gold mineralized structures cutting the Woman River iron formation and adjacent Fe to Mg-tholeiitic mafic volcanic rocks of the Trailbreaker Group. Clearview used a Phoenix IPT-1 3kW transmitter, and Scintrex IPR-12 receiver, to acquire 21 line kilometres of IP and resistivity data in a standard pole-dipole array mode with dipole "a" spacing of 25m and "n" levels 1 through 8. Data was acquired in the time domain with Mx chargeability window starting at 690 ms and extending to 1050 ms after transmitter current shut-off. The transmitter pulse was a 50% duty cycle alternating square wave with 2 sec on and 2 sec off duration. Readings were recorded at 25 metre station intervals along each surveyed line. Spectral IP parameters of Tau, M-IP, and "c" were derived from the field data and plotted as pseudosections along with apparent resistivity and apparent chargeability by Clearview. Pseudosections prepared by Clearview and further survey instrument specifications, names of field personnel, and production reports are documented in a survey logistics report (Appendix IV) prepared by Clearview.

#### 6.2.4 IP/Resistivity Inversion Modeling

GeoVector subsequently completed inversion modeling and data interpretation on resistivity/IP data acquired by Clearview. All IP/Resistivity data was modeled using a suite of 2D modeling programs developed by the University of British Columbia (DCIP2D, 2001).

The program suite was used to calculate an unconstrained, smooth model depth section of a possible resistivity and chargeability distribution with depth that explains the field data. The algorithms assume that subsurface anomalous features are 2D (i.e. of infinite strike length and orthogonal to the survey line). In practice, features will be modeled less accurately as the strike length, and angle with survey line, of anomalous features deviates from the 2D assumption.

Each of the model sections is presented (attached to this report) as a series of stacked sections at 1:2500 scale (IP Sections L4+00W, L8+00W, L16+00W, L79+00E, L82+00E, L89+00E, L920+00N, and L925+00N), showing six panels of colour-contoured data. The top three panels illustrate the apparent resistivity pseudosection, the synthetic pseudosection derived from the depth section model, and the resistivity depth section model. The bottom three panels show the same series of sections for apparent chargeability.

Values of chargeability and resistivity derived from inversion model results at an arbitrary depth of 55 metres below surface, were extracted from each relevant model section and plotted as profiles at 1:5,000 scale (Map 6). Chargeability anomalies were interpreted from depth sections and separated into two anomaly categories based on their association with either resistivity lows (blue dots) or highs (red dots) on Map 6. Many IP (chargeability) anomalies with low resistivity association correspond with high magnetic intensity, and HLEM anomalies, and are likely due to formational pyrite/pyrhotite/magnetite of the Woman River Iron Formation. A small number of chargeability anomalies are associated with high resistivity and are of priority exploration interest as they may represent possible gold bearing, disseminated sulphides associated with quartz veining.

### 7.0 GEOPHYSICAL DATA INTERPRETATION

Geophysical surveys mapped the complex interior character of the northeast trending Woman River Iron Formation (Map 7). The iron formation is characterized by very high magnetic intensity, with correlated HLEM anomalies, and chargeability anomalies dominantly associated with low resistivity. The responses are typical of py/po/mag iron formations.

The IP/Resistivity survey outlined several chargeable sources (disseminated sulphides) with high-resistivity association (possible quartz veining) that could be related to possible

gold mineralized structures cutting the Woman River iron formation and adjacent Fe- to Mg-tholeiitic mafic volcanic rocks of the Trailbreaker Group.

Of particular interest are chargeability anomalies that correlate with resistivity highs, and that are proximal to inferred structures approximately at the intersection of Lines 15+00N, 16+00N, and 17+00N with Line 82+00E.

## 8.0 RECOMMENDATIONS

Based on these results a follow-up exploration program of geological mapping, trenching and diamond drilling is recommended to test a number of IP anomalies correlated with resistivity highs including the area at the intersection of Lines 15+00N, 16+00N, and 17+00N with Line 82+00E.

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**APPENDIX I**  
**STATEMENTS OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

I, Roman Tykajlo of 74 Stonebriar Drive, Ottawa, in the Province of Ontario  
DO HEREBY CERTIFY:

1. THAT I am a Consulting Geoscientist with GeoVector Management Inc. with an office at 10 Green Street, Suite 312, Ottawa, Ontario, K2J 3Z6.
2. THAT I am a graduate of Lakehead University with a Bachelor of Science Honours degree in Geology/Physics (1978) and I have been practicing my profession since graduation.
3. THAT I am a Professional Geoscientist (P.Ge.) registered in good standing with the Association of Professional Geoscientists of Ontario (APGO), member # 0685.
4. THAT this report describes property geophysics work conducted by Clearview Geophysics Inc. and supervised by GeoVector Management Inc. for VenCan Gold Corporation on the Cayenne and Chili Property during 2005.

DATED at Ottawa, Ontario, this 27<sup>th</sup> day of February, 2006.



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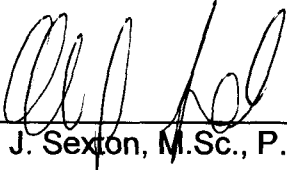
Roman Tykajlo, H.B.Sc., P.Ge.

## STATEMENT OF QUALIFICATIONS

I, Alan J. Sexton, of the City of Ottawa, Province of Ontario, do hereby certify that:

- (1) I was the Project Manager for GeoVector Management Inc. while working on VenCan Gold Corporation's Cayenne-Chili Gold Project during the period of February 1<sup>st</sup>, 2005 to June 30<sup>th</sup>, 2005; when the field work for this report was completed.
- (2) I reside at 41 Barrhaven Cr., Ottawa, Ontario, K2J 1E7.
- (3) I am a graduate of St. Marys University with a Bachelor of Science (Honours) degree in Geology (1982). I am a graduate of Acadia University with a Master of Science degree in Geology (1988).
- (4) I have been practicing my profession continuously since 1985.
- (5) I am a member in good standing of the:
  - Prospectors and Developers Association of Canada (PDAC)
  - Ontario Prospectors Association (OPA)
  - Association of Exploration Geochemists (AEG)
  - Society of Economic Geologists (SEG)
- (6) I am a registered Professional Geologist with the following professional Associations
  - The Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut (NAPEGG). My licensee member number is L1339.
  - The Association of Professional Geoscientists of Ontario (APGO). My P.Geo. member number is 0563.
  - The Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL). My P.Geo. member number is 04028.
- (7) I supervised the work relevant to this report from February 1<sup>st</sup>, 2005 to June 30<sup>th</sup>, 2005.

Signed at the City of Ottawa, this 23<sup>rd</sup> day of February, 2006.

  
Alan J. Sexton, M.Sc., P.Geo.

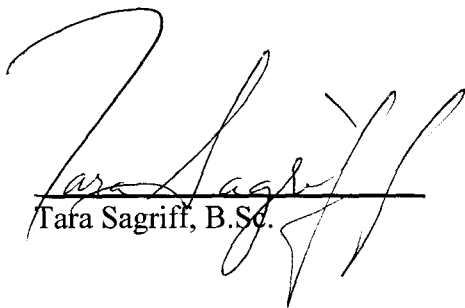


## STATEMENT OF QUALIFICATION

I, Tara Sagriff, of 7 Bylot Court, Kanata, in the Province of Ontario,  
DO HEREBY CERTIFY that:

- (1) I am a Consulting Geologist with GeoVector Management Inc. with an office at 10 Green Street, Suite 312, Ottawa, Ontario, K2J 3Z6.
- (2) I am a graduate of Carleton University of Ontario with a Bachelor of Science degree in Earth Sciences (1994).
- (3) I have been practicing my profession since 1994.
- (4) My contribution to this report is based upon compilation of historical data and examination of available data pertaining to the property

**Signed in the town of Kanata, this 28<sup>th</sup> day of February, 2006.**

  
Tara Sagriff, B.Sc.

**APPENDIX II**  
**CONTRACTOR LISTING and DATES WORKED**

---

**Linecutting**

Lashex Ltd.  
973 Pine Creek Road South,  
RR#1, Callander  
Ontario, P0H 1H0  
phone 705-752-3957

Total km of cross lines, base lines and tie lines: 19.0 km

Dates of cutting: March 6-14, 2005

Devex Ltd.  
6 Chevrier St., P.O. Box 694  
Notre Dame Du Nord  
Quebec  
JOZ 3B0  
Phone 819- 723-2519

Total km of cross lines, base lines and tie lines: 16.1 km

Dates of cutting: June 9-16, 2005

---

**Geophysics (Magnetometer and Induced Polarization)**

ClearView Geophysics Inc.  
12 Twisted Oak Street  
Brampton, ON L6R 1T1  
phone 905-458-1883

Total km of pole-dipole IP / resistivity (a=25m n=1-8): 21 km

Dates of survey: June 5 to 27, 2005

---

**Geophysics (HLEM)**

Lashex Ltd.  
973 Pine Creek Road South,  
RR#1, Callander  
Ontario, p0H 1H0  
phone 705-752-3957

Dates of survey: March 6 to 24, 2005.

---

---

**Project Management and Geoscience Services**

GeoVector Management Inc.  
10 Green Street, Suite 312  
Nepean, ON K2J 3Z6  
phone 613-843-8109

Alan Sexton, Project Manager  
Roman Tykaljo, Senior Geophysicist  
Tara Sagriff, Project Geologist

GeoVector Management Inc. dates worked in 2005-2006

<b>Name</b>	<b>June/05</b>	<b>February/06</b>	<b>Total Days</b>
<b>Alan Sexton</b>	<b>6, 15</b>	<b>9, 16, 17 and 23</b>	<b>6</b>
<b>Roman Tykaljo</b>	<b>6, 15 and 25</b>	<b>1, 2, 3, 6, 7, 8, 9, 23, 24, 26, and 27</b>	<b>14</b>
<b>Tara Sagriff</b>		<b>15, 16, 17, 23, 24, 27 and 28</b>	<b>7</b>

Dates for field programs: February 1 to June 30, 2005

Dates for report writing: January 1 to February 28, 2006.

**APPENDIX III**

**Claim Lake and October Lake Grids  
Electromagnetic Survey Specifications**



Survey type: Horizontal loop electromagnetic (HLEM)

Survey dates: Claim Lake Grid - March 21-27, 2005  
October Lake Grid – March 29-30, 2005

Instrument: Apex Parametrics MaxMin I-5 serial# 1230

Frequencies read: In-phase and quadrature phase for 1777Hz and 444Hz

Coil separation: 150m  
Line interval: 100m  
Station interval: 25m

Survey coverages: Claim Lake Grid – 28 line-km  
October Lake Grid – 6.8 line-km

Operators: Receiver: A. MacDonnell  
Transmitter: D. Lashbrook

Apex Parametrics MaxMin 1-5 Instrument specifications:

Transmitter frequencies: 111, 222, 444, 888, 1777, and 7111Hz

Coil separations: 50, 75, 100, 125, 150, 200, 250, 300, 400, and 500m

**Note: Instrument specifications for the MaxMin 1-5 are unavailable to the author. Specifications for a related instrument from the MaxMin family (MaxMin I+10) are presented herein to provide a physical description of the survey instrument.**

## EM SYSTEMS



# Maxmin I+10

Frequency EM System

### Features

*Designed for geoenvironmental, groundwater and mineral exploration applications.*

*Frequency span is extended to ten octave spaced frequencies from 110 to 56320 Hz, with increased range and number of coil separations.*

*Advanced spheric and powerline interference rejection results in faster and more accurate surveys, particularly at the larger coil separations.*

*The Maxmin Computer or MMC is offered for digital data processing, display, storage and transfer. The MMC displays and stores the inphase and quadrature readings, their standard deviations, and the corresponding apparent ground conductivity values. Rough terrain surveys are also simplified with the MMC.*

*Data interpretation and presentation programs are available for layered earth parametric soundings and discrete conductor surveys.*



### Specifications

Frequencies: 110, 220, 440, 880, 1760, 3520, 7040, 14080, 28160 and 56320 Hz

#### Coil Separations:

SET 1: 12.5, 25, 50, 75, 100, 125, 150, 200, 250, 300 and 400 meters (the standard set).

SET 2: 10, 20, 40, 60, 80, 100, 120, 160, 200, 240 and 320 meters (selected with grid switch inside the receiver).

SET 3: 50, 100, 200, 300, 400, 500, 600, 800, 1000, 1200 and 1600 feet (selected with grid switch inside the receiver).

#### *Transmitter Dipole Moments:*

110 Hz	250 Atm <sup>2</sup>
220 Hz	245 Atm <sup>2</sup>
440 Hz	240 Atm <sup>2</sup>
880 Hz	235 Atm <sup>2</sup>
1760 Hz	230 Atm <sup>2</sup>
3520 Hz	200 Atm <sup>2</sup>
7040 Hz	100 Atm <sup>2</sup>
14080 Hz	50 Atm <sup>2</sup>
28160 Hz	25 Atm <sup>2</sup>
56320 Hz	10 Atm <sup>2</sup>

Terraplus Inc.

52 West Beaver Cr. Rd. #12, Richmond Hill, ON, Canada L4B 1L9

Tel: 905-764-5505

Fax: 905-764-8093

Email: sales@terrapius.ca

Website: www.terrapius.ca

# EM SYSTEMS

## **Modes of Operation:**

MAX 1: *Horizontal loop or slingram*— Transmitter and receiver coil planes horizontal and coplanar.

MAX 2: *Vertical coplanar loop mode*— Transmitter and receiver coil planes vertical and coplanar.

MIN 1: *Perpendicular mode 1*—Transmitter coil plane horizontal and receiver coil plane vertical.

MIN 2: *Perpendicular mode 2*—Transmitter coil plane vertical and receiver coil plane horizontal.

## **Parameters Measured:**

In-phase and quadrature components of the secondary magnetic field. Measures percent of primary field.

## **Readouts:**

Analog direct edgewise meter readouts for in-phase, quadrature and tilt. Additional digital LCD readouts provided in the optional MMC computer. Interfacing and controls are provided for ready plug-in of the MMC.

## **Ranges of Readouts:**

Switch activated analog in-phase and quadrature scales: 0±4%, 0±20% and 0±100%, and digital 0±199.9% autorange with optional MMG Analog tilt 0±75% and 0±99% grade with MMC.

## **Resolution:**

Analog in-phase and quadrature 0.1 to 1% of primary field, depending on scale used, digital 0.01% with autoranging MMC; tilt 1% grade.

## **Repeatability:**

0.01 to 1% of primary field typical, depending on frequency, coil separation and conditions.

## **Signal Filtering:**

Powerline comb filter, continuous spheric noise clipping, auto adjusting time constant, and more.

## **Warning Lights:**

Receiver signal and reference warning lights to indicate potential error conditions.

## **Survey Depth Penetration:**

From surface down to 1.5 times coil separations for large horizontal targets, and 0.75 times coil separation for large vertical targets are typical values.

## **Reference Cable:**

Lightweight unshielded 4/2 conductor teflon cables for maximum operating temperature range and for minimum pulling friction.

## **Intercom:**

Voice communication link provided for operators via the reference cable.

## **Temperature Range:**

Minus 40 to plus 60 degrees Celsius, operating.

## **Receiver Batteries:**

Four standard 9V - 0.6 Ah alkaline batteries. Life: 20 hours continuous duty, less in cold weather. Optional 1.2 Ah extended life lithium batteries available (recommended for very cold weather).

## **Transmitter Batteries:**

Standard rechargeable gel-type lead-acid 12V-24 Ah batteries (4 x 6V - 6.5 Ah) in nylon belt pack.

## **Transmitter Battery Chargers:**

14.8 V - 3 A nominal output with automatic switching to 13.9 V float mode after battery pack is charged. Operation from 110-120 and 220-240 VAC, 50/60/400 Hz, and 10-14 VDC supply

## **Receiver Weight:**

8 Kg carrying weight (including the two ferrite cored antenna coils), 9 Kg with MMC computer.

## **Transmitter Weight:**

16 Kg carrying weight

## **Shipping Weight:**

65 Kg plus weight of reference cables at 3 Kg per 100 meters, plus optional items if any Shipped in two aluminum-lined field / shipping cases.

## **Standard Spares:**

Spare transmitter battery pack, spare transmitter battery charger, two spare transmitter retractile connecting cords, and a spare set of receiver batteries.

## **Options and Accessories:**

MMC, Maxmin Computer option  
Data interpretation and presentation programs  
Reference cables, lengths as required  
Reference cable extension adapter  
Handheld inclinometer for rough terrain  
Receiver extended life lithium batteries  
Transmitter NiCd battery & charger option  
Minimal, regular or extended spare parts kit

## **Standard Components**

Maxmin I+10 system, 4/2 conductor teflon reference cables, receiver and transmitter batteries, battery charger, spares kit and instruction manual.

## **Ordering Information**

<u>Description</u>	<u>Order Number</u>
Maxmin I-10 System	107-108-0000
MMC, Computer Option	107-108-0010
Data interpretation Programs	107-108-0020
Reference Cables	107-108-0030
Reference Cable Ext. Adapter	107-108-0040
Handheld Inclinometer	107-108-0050
Receiver Lithium Batteries	107-108-0060
Transmitter Charger Option	107-108-0070
Spare Part Kits	107-108-0080

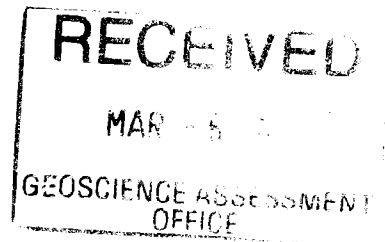
**APPENDIX IV**

**Claim Lake Grid IP and Magnetic Survey Logistics Report**

**Under separate cover**

**Report on  
Spectral IP / Resistivity  
and  
Magnetics Surveys  
at the  
Cayenne, Chili & Gagne Properties  
Foleyet Area, Northcentral Ontario**

2 . 3 1 6 4 1



ClearView Geophysics Inc.

**Report on**  
**Spectral IP / Resistivity**  
**and**  
**Magnetics Surveys**  
**at the**  
**Cayenne, Chili & Gagne Properties**  
**Cayenne, Chili & Gagne Project**  
**Foleyet Area, Northcentral Ontario**

On behalf of:

**VenCan Gold Corporation**  
141 Adelaide Street West  
Suite 901  
Toronto, Ontario  
M5H 3L5

telephone: 416 364 7024

facsimile: 416 364 2753

E-mail:

Contact: c/o Roman Tykajlo, GeoVector Management Inc.

By:

**ClearView Geophysics Inc.**  
12 Twisted Oak Street  
Brampton, Ontario  
L6R 1T1

telephone: 905.458.1883

facsimile: 905.792.1884

cellular: 416.617.1884

E-mail: [clearview@geophysics.ca](mailto:clearview@geophysics.ca)

Contact: Mr. Joe Mihelcic

ClearView Ref: *J0519*

# TABLE of CONTENTS

1.	INTRODUCTION -----	1
2.	SURVEY LOGISTICS -----	2
2.1	Details for the IP survey and equipment -----	5
2.2	Details for the Magnetics survey and equipment -----	5
2.3	Survey Methodology -----	6
2.4	Data Processing & Presentation -----	7
2.5	Daily Log & IP Coverage -----	8
2.6	Magnetics Coverage -----	10
2.6.1	West Grid -----	10
2.6.2	North Grid -----	11
3.	STATEMENT OF QUALIFICATIONS, JOE MIHELIC -----	12
	<i>APPENDIX A – Instrument Specifications</i>	
	<i>APPENDIX B – Transmitter Operator Field Notes</i>	
	<i>APPENDIX C – Plates</i>	
	Figure – Grid Location Map -----	1

## LIST of PLATES

### Appendix C

	<i>Pseudos 1:2500</i>
Plate 1.....	L1600W: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 2.....	L800W: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 3.....	L400W: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 4.....	L7900E: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 5.....	L8200E: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 6.....	L8900E: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 7.....	L92000N: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
Plate 8.....	L92500N: “a”=25m, n=1-8; Res/Mx/M-IP/Tau/c
	<i>Magnetics Plan Maps 1:5000</i>
Plate 9.....	West Grid, Total Field Magnetics; colour shaded and contoured
Plate 9a.....	West Grid, Total Field Magnetics; profiles with postings
Plate 10.....	North Grid, Total Field Magnetics; profiles with postings

## 1. INTRODUCTION

*ClearView Geophysics Inc.* carried out Spectral Induced Polarization and Magnetics Surveys for *VenCan Gold Corporation* at their Cayenne, Chili and Gagne Properties, Swayze Township, Foleyet Area, Northcentral Ontario. The fieldwork was carried out between June 5 and June 29, 2005. The work was done in order to map geologic features to aid with the ongoing exploration programme.

The West and North grids are located approximately 50 km south of Hwy 101 and Foleyet, Ontario. Access from Hwy 101 is along Foleyet Timber Road and bush roads. Their position relative to Foleyet is indicated below (supplied by GeoVector Management Inc.).

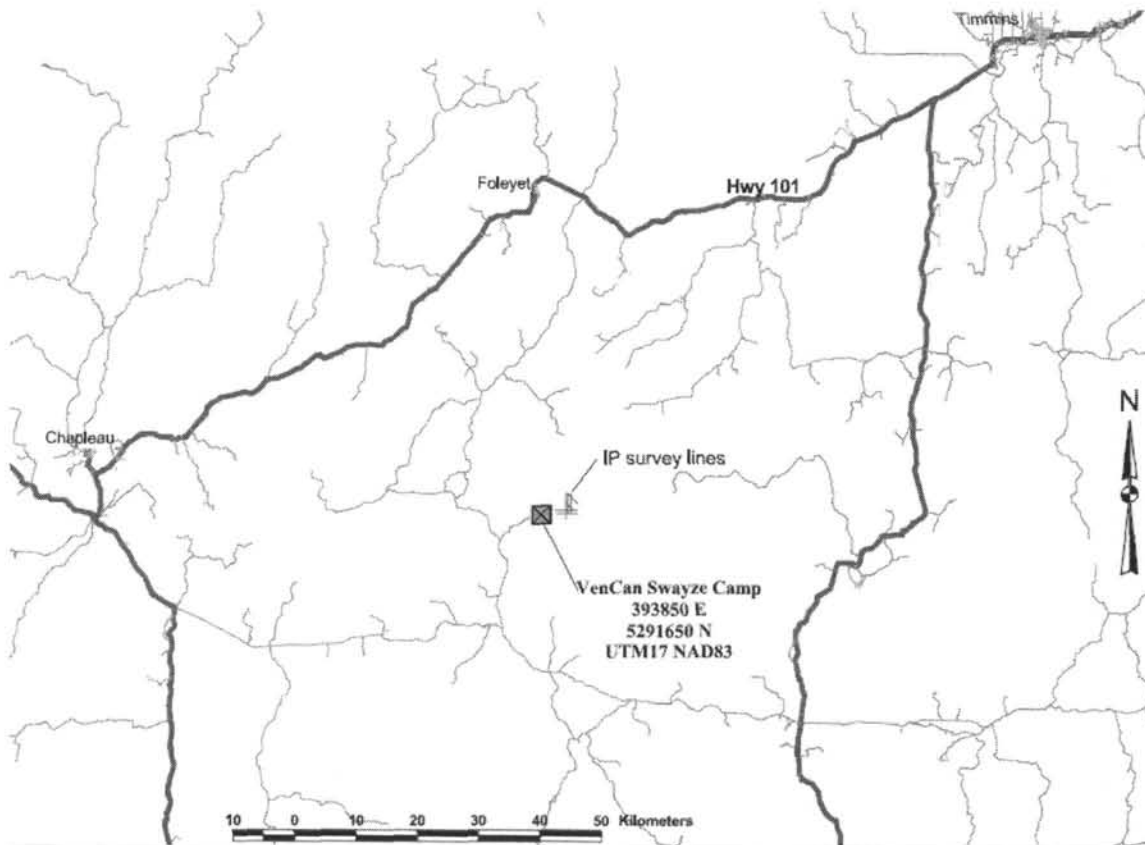


Figure – Grid Location Map



2. SURVEY LOGISTICS

The following personnel were employed to carry out the work. The attached calendars indicates field dates worked for each crew member:

Mr. Gord Hume, Sr. Operator (IP):

Mr. Hume carried out the IP/resistivity fieldwork. He operated the IP receiver and was responsible for all members of the crew. He also edited and emailed the data presented in this report.

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			June 1	June 2	June 3	June 4
June 5	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16 ✓	June 17 ✓	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27 ✓	June 28	June 29	June 30		

Mr. Jason Flood, Operator (IP):

Mr. Flood assisted to carry out the IP/resistivity fieldwork. He also edited and emailed the data presented in this report.

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			June 1	June 2	June 3	June 4
June 5 ✓	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16 ✓	June 17 ✓	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27	June 28	June 29	June 30		

Field Assistants:

Several field assistants were employed to carry out field operations.

Ms. Cassie Deslauriers (IP):

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			June 1	June 2	June 3	June 4
June 5	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16 ✓	June 17 ✓	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22	June 23	June 24	June 25
June 26	June 27	June 28	June 29	June 30		

Ms. Marie Josee Tremblay (IP):

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			June 1	June 2	June 3	June 4
June 5	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16 ✓	June 17 ✓	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27 ✓	June 28	June 29	June 30		

Mr. Patrick Papineau (IP):

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			June 1	June 2	June 3	June 4
June 5	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16 ✓	June 17 ✓	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27 ✓	June 28	June 29	June 30		

Mr. Tyler Rutledge (IP):

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			June 1	June 2	June 3	June 4
June 5	June 6 ✓	June 7 ✓	June 8 ✓	June 9 ✓	June 10 ✓	June 11 ✓
June 12 ✓	June 13 ✓	June 14 ✓	June 15 ✓	June 16	June 17	June 18
June 19	June 20	June 21	June 22	June 23	June 24	June 25
June 26	June 27	June 28	June 29	June 30		

Mr. Scott Luke (IP):

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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AUGUST 15, 2005

			June 1	June 2	June 3	June 4
June 5	June 6	June 7	June 8	June 9	June 10	June 11
June 12	June 13	June 14	June 15	June 16	June 17	June 18 ✓
June 19 ✓	June 20 ✓	June 21 ✓	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27 ✓	June 28	June 29	June 30		

Ms. Thelma MacDonnell (IP):

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			June 1	June 2	June 3	June 4
June 5	June 6	June 7	June 8	June 9	June 10	June 11
June 12	June 13	June 14	June 15	June 16	June 17	June 18
June 19	June 20	June 21	June 22 ✓	June 23 ✓	June 24 ✓	June 25 ✓
June 26 ✓	June 27	June 28	June 29	June 30		

Mr. Graham Stone (Magnetics):

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
			June 1	June 2	June 3	June 4
June 5	June 6	June 7	June 8	June 9	June 10	June 11
June 12	June 13	June 14	June 15	June 16	June 17	June 18
June 19	June 20	June 21 ✓	June 22	June 23	June 24 ✓	June 25 ✓
June 26 ✓	June 27 ✓	June 28 ✓	June 29 ✓	June 30		

Mr. Joe Mihelcic, P.Eng. - Geophysicist:

Mr. Mihelcic provided overall supervision. He also processed and plotted the data, and prepared this report.

## 2.1 DETAILS FOR THE IP SURVEY AND EQUIPMENT

Pole-Dipole Array (combination)	n=1-8, "a"=25 m
Station interval	25 metres
Receiver	Scintrex IPR12, time domain
Transmitter	Phoenix IPT-1, 3 kW
Total Coverage	21 075 m

## 2.2 DETAILS FOR THE MAGNETICS SURVEY AND EQUIPMENT

Magnetics Mode	Total Field
Station interval	Nominally 5 metres
Rover Magnetometer	Scintrex SM5 Navmag – Cesium Vapour Sensor
Base Magnetometer	GEM Systems GSM-19 v.4 Overhauser Sensor
Total Coverage	45 521 m

Refer to Appendix A for Instrument Specifications.

### 2.3 SURVEY METHODOLOGY

The IP survey consisted of injecting an electrical current into the ground for two seconds. The transmitter current was then turned off for two seconds, during which time a receiver recorded the decaying voltage at pre-defined intervals. The transmitter consisted of a current electrode placed at “infinity”, which was sufficiently distant from the receiver array so that the line electrode acts as a “pole”.

The line current electrode was moved along the survey line and maintained a distance of 25 metres from the nearest receiver electrode. There were nine receiver electrodes placed at 25-metre intervals. The potential receiver electrode, which is nearest the transmitter current electrode, is called “P1”. The furthest electrode down the line is called “P9”. Eight dipoles were read for every position except at the end of the survey line where dipoles were dropped.

Voltage drops are measured between adjacent receiver electrode pairs, also called “dipoles”. As the dipoles increase in distance from the transmitter current electrode, they will obtain decay information from deeper features. Therefore, the results are displayed as “pseudosections” (Appendix B). The transmitter operator measured the contact resistance and electric current passing through the current electrodes during the readings. These current measurements were relayed to the receiver operator and entered into the IPR12 instrument for subsequent apparent resistivity calculations.

The transmitter operator also wrote down field notes relayed by the line workers. These notes are related to topography and obstacles encountered along the survey line (e.g., cliffs, swamps, hydro lines, etc.) that could be relevant to interpretation of the data. A photocopy of the notes is presented in Appendix B of this report.

The magnetics survey was carried out with readings taken at 1-second intervals between 25-metre pickets. This was done by pace and estimation. The base station magnetometer was established in low gradient locations. Base readings were automatically recorded at 3-second intervals. The operator carried the field unit sensor on a backpack so that it extended above his head with sensor cylinder approximately vertically oriented. He ensured that all metallic objects that could influence the measurements were absent from the setup and his body.

#### 2.4 DATA PROCESSING & PRESENTATION

The IP pseudosections presented in Appendix B contain the apparent resistivity, chargeability and spectral parameter panels. The selected slice of 690 ms to 1050 ms is the industry standard slice used by the *Scintrex* IPR-11 receiver. This was done so that experience gained by IP interpreters during the past decades could be applied more readily to the modern data. Spectral data for *Tau*, *M-IP* and '*c*' are calculated from a modified version of *Scintrex*' *Spectrum* software. This software matches the IP data to a suite of master curves. Readings with poor matches are not plotted/presented.

Magnetics data were diurnally corrected using *Geosoft Look-up Tables*. This software straight-line interpolates base station data to time-match field data. The interpolated base readings, along with line, station, time, uncorrected and corrected magnetics, are output as separate columns in the processed file. These data were subsequently plotted with *Geosoft Oasis* software for presentation.

All plots were output to an HP Designjet 800PS 42" colour plotter or Panasonic KX-P7105 laser printer.

## 2.5 DAILY LOG &amp; IP COVERAGE

Date (2004)	IP Line	IP Coverage (C1 to last Potential)	IP Distance	Survey Activity
June 5	<i>Mobilize</i>	N/A	N/A	<ul style="list-style-type: none"> <li>• Jason drive to Parry Sound to pick-up gear</li> </ul>
June 6	<i>Mobilize</i>	N/A	N/A	<ul style="list-style-type: none"> <li>• Crew travel to Swayze Camp</li> </ul>
June 7	<i>Setup</i>	N/A	N/A	<ul style="list-style-type: none"> <li>• Setup on grid</li> <li>• Bush-crash ~2½ km to get wire to L1600W</li> </ul>
June 8	1600W	C1=800N to P1=450N	350 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Rain in AM, stopped around noon</li> <li>• Linecutters broke wire, down for ~2hrs repair</li> </ul>
June 9	1600W	C1=800N to P9=525S	1325 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Redid 650m due to incorrect current location</li> </ul>
June 10	800W	C1=1600N to P1=600N	1000 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Newborn moose with mother at 550S stopped survey for day</li> <li>• No road access</li> <li>• Picked up wire 1600W</li> </ul>
June 11	800W	Continue to Rx=700S	1300 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Pick up wire L800W</li> <li>• Crooked line in area.</li> </ul>
June 12	400W	C1=1600N to P1=425N	1175 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Major line change</li> </ul>
June 13	400W	Continue to Rx=700S	1125 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Pick up wire L400W</li> </ul>
June 14	8900E	C1=4475N to P1=3200N	1325 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Lines cut poorly</li> </ul>
June 15	<i>Weather Day</i>	N/A	N/A	<ul style="list-style-type: none"> <li>• Standby</li> </ul>
June 16	8900E	Continue to Rx=2125N	1125 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Short handed – Tyler Rutledge left, crew worked to make up time</li> <li>• Pick up wire L8900E</li> <li>• Crooked line</li> <li>• End of line @ 398853E/5292075N</li> </ul>

AUGUST 15, 2005

June 17	92000N	C1=6300E to P1=6875E	575 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Put out infinity and setup L92000N as 8200E and 7900E being cut</li> <li>• Slash piles slows progress</li> </ul>
June 18	92000N	Continue to P1=8025E	1150 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Hill slowed progress</li> <li>• Bends in line</li> </ul>
June 19	92000N	Continue to P1=8675E	650 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Generator failed</li> </ul>
June 20	92000N	Continue to Rx=9775E	1100 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Moose broke wire</li> <li>• Generator failed</li> <li>• Pick up wire 92000N</li> </ul>
June 21	92500N	C1=6100E to P1=7875E	1775m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Casey went home</li> <li>• Setup on 92500N</li> </ul>
June 22	92500N	Continue to Rx=9600E	1725 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Pick up ~3.2 km wire</li> <li>• Graham Stone run Tx</li> </ul>
June 23	7900E	C1=5175N to P1=3800N	1375 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Setup on 7900E</li> <li>• Bush-crash 600m</li> </ul>
June 24	7900E	Continue to P1=2700E	1100 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Chaining incorrect</li> <li>• Problems getting contact going through slash piles</li> <li>• Moved Tx setup</li> </ul>
June 25	7900E 8200E	Continue to Rx=2175N C1=4350N to P1=3475N	525 m 875 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Chaining incorrect</li> </ul>
June 26	8200E	Continue to Rx=1975N	1500 m	<ul style="list-style-type: none"> <li>• IP Survey</li> <li>• Chaining incorrect</li> <li>• Picked up wire</li> <li>• Crew demob home</li> </ul>
<b>Total Distance =</b>			<b>21 075 m</b>	

There were various problems encountered during the fieldwork. The IP generator failed and was repaired. Survey lines were poorly chained, irregular and poorly cut in a number of locations. Errors were noted where possible (refer to field notes, Appendix B). Temperatures were generally in the mid- to upper-30 degree Celsius range. There were a few wire breaks caused by various factors. These were all overcome but reduced overall survey production from ideal conditions.



AUGUST 15, 2005

2.6 MAGNETICS COVERAGE

2.6.1 West Grid

Line	Day	X-min	X-max	Y-min	Y-max	# Pts	Distance
L-2200	June 21	-2200	-2200	-625	425	1365	1050
L-1800	June 24	-1800	-1800	-725	0	926	725
L-1400	June 25	-1400	-1400	-725	-250	593	475
L-1900	June 27	-1900	-1900	0	650	935	650
L-700	June 26	-700	-700	-250	750	1088	1000
L-400	June 28	-400	-400	800	1500	929	700
L-1400	June 29	-1400	-1400	-125	800	1142	925
L-2100	June 21	-2100	-2100	-725	525	1607	1250
L-2000	June 21	-2000	-2000	-725	600	1696	1325
L-1900	June 21	-1900	-1900	-725	0	960	725
L-1800	June 21	-1800	-1800	-250	600	772	850
L-1700	June 21	-1700	-1700	-250	825	1378	1075
L-1700	June 24	-1700	-1700	-725	-177	627	548
L-1600	June 24	-1600	-1600	-725	800	1936	1525
L-1500	June 24	-1500	-1500	-725	800	1775	1525
L-1300	June 24	-1300	-1300	475	800	418	325
L-1200	June 24	-1200	-1200	475	800	443	325
L-1100	June 24	-1100	-1100	450	800	514	350
L-1000	June 24	-1000	-1000	400	800	532	400
L-900	June 24	-900	-900	-250	800	1067	1050
L-1300	June 25	-1300	-1300	-725	125	1103	850
L-1200	June 25	-1200	-1200	-725	175	1167	900
L-1100	June 25	-1100	-1100	-700	200	1363	900
L-1000	June 25	-1000	-1000	-725	200	1392	925
L-900	June 25	-900	-900	-700	24	1178	724
L-800	June 25	-800	-800	-700	75	1268	775
L-700	June 25	-700	-700	-700	125	1421	825
L-600	June 26	-600	-600	-700	800	2516	1500
L-500	June 26	-500	-500	-700	800	2217	1500
L-400	June 26	-400	-400	-675	800	1842	1475
L-300	June 26	-300	-300	-475	-125	494	350
L-300	June 27	-300	-300	-125	800	1428	924
L-200	June 27	-200	-200	-450	800	1895	1250
L-100	June 27	-100	-100	-500	800	2166	1300
L0	June 27	0	0	-550	800	2131	1350
L-800	June 29	-800	-800	-250	1600	2173	1850
					<b>Total</b>	<b>46457</b>	<b>34196</b>

AUGUST 15, 2005

2.6.2 North Grid

Line	Day	X-min	X-max	Y-min	Y-max	# Pts	Distance
L8200	June 28	8200	8200	91900	94250	2560	2350
L92500	June 28	8200	9625	92500	92500	1668	1425
L7900	June 29	7900	7900	92000	95050	3842	3050
L92500	June 29	6100	8200	92500	92500	2853	2100
L8900	June 28	8900	8900	92075	94475	3287	2400
					<b>Total</b>	<b>14210</b>	<b>11325</b>

Magnetics data were acquired between June 21 and June 29, 2005. The main problem encountered was related to maintaining the sensor outside of the "dead zone" in rough bush and terrain. The sensor was repositioned several times to optimize production rates with good quality data. Lines were resurveyed where it was apparent that the sensor was not consistently oriented properly.

If there are any questions about the surveys, please do not hesitate to contact the undersigned.

Sincerely,

**ClearView Geophysics Inc.**



Joe Mihelcic, P.Eng., M.B.A.  
Geophysicist/President



AUGUST 15, 2005

3. STATEMENT OF QUALIFICATIONS, JOE MIHELICIC

I, Joe Mihelcic, Hereby certify that:

- 1) I am a geophysicist with business office at 12 Twisted Oak Street, Brampton, Ontario L6R 1T1.
- 2) I am a principle of ClearView Geophysics Inc., a company listed with the PEO (Professional Engineers Ontario) as performing geophysical services.
- 3) I am a graduate of Queen's University in Applied Science, Geological Engineering (B.Sc. 1988) and of Ivey Business School (M.B.A. 1995).
- 4) I am a member of the Professional Engineers of Ontario (PEO).
- 5) I have practiced by profession for over 15 years.
- 6) I do not have a direct or indirect interest in VenCan Gold Corporation securities.

Signed



Joe Mihelcic, P.Eng., M.B.A.  
Brampton, Ontario  
August 15, 2005

**APPENDIX A – Instrument Specifications**

## SPECIFICATIONS

### Inputs

1 to 8 dipoles are measured simultaneously.

### Input Impedance

16 Megohms

### SP Bucking

± 10 volt range. Automatic linear correction operating on a cycle by cycle basis.

### Input Voltage (Vp) Range

50  $\mu$ volt to 14 volt

### Chargeability (M) Range

0 to 300 millivolt/volt

### Tau Range

60 microseconds to 2000 seconds

### Reading Resolution of Vp, SP and M

Vp, 10 microvolt; SP, 1 millivolt; M, 0.01 millivolt/volt

### Absolute Accuracy of Vp, SP and M

Better than 1%

### Common Mode Rejection

At input more than 100db

### Vp Integration Time

10% to 80% of the current on time.

### IP Transient Program

Total measuring time keyboard selectable at 1, 2, 4, 8, 16 or 32 seconds. Normally 14 windows except that the first four are not measured on the 1 second timing, the first three are not measured on the 2 second timing and the first is not measured on the 4 second timing. An additional transient slice of minimum 10 ms width, and 10ms steps, with delay of at least 40 ms is keyboard selectable. Programmable windows also available.

### Transmitter Timing

Equal on and off times with polarity change each half cycle. On/off times of 1, 2, 4, 8, 16 or 32 seconds. Timing accuracy of  $\pm 100$  ppm or better is required.

### External Circuit Test

All dipoles are measured individually in sequence, using a 10 Hz square wave. The range is 0 to 2 Mohm with 0.1 kohm resolution. Circuit resistances are displayed and recorded.

### Synchronization

Self synchronization on the signal received at a keyboard selectable dipole. Limited to avoid mistriggering.

### Filtering

RF filter, 10 Hz 6 pole low pass filter, statistical noise spike removal.

### Internal Test Generator

1200 mV of SP; 807 mV of Vp and 30.28 mV/V of M.

### Analog Meter

For monitoring input signals; switchable to any dipole via keyboard.

### Keyboard

17 key keypad with direct one key access to the most frequently used functions.

### Display

16 lines by 40 characters, 128 x 240 dots, Backlit SuperTwist Liquid Crystal Display. Displays instrument status and data during and after reading. Alphanumeric and graphic displays.

### Display Heater

Available for below -15°C operation.

### Memory Capacity

Stores approximately 400 dipoles of information when 8 dipoles are measured simultaneously.

### Real Time Clock

Data is recorded with year, month, day, hour, minute and second.

### Digital Data Output

Formatted serial data output for printer and PC etc. Data output in 7 or 8 bit ASCII, one start, one stop bit, no parity format. Baud rate is keyboard selectable for standard rates between 300 baud and 57.6 kBaud. Selectable carriage

return delay to accommodate slow peripherals. Hand-shaking is done by X-on/X-off.

### Standard Rechargeable Batteries

Eight rechargeable Ni-Cad D cells. Supplied with a charger, suitable for 110/230V, 50 to 60 Hz, 10W. More than 20 hours service at +25°C, more than 8 hours at -30°C.

### Ancillary Rechargeable Batteries

An additional eight rechargeable Ni-Cad D cells may be installed in the console along with the Standard Rechargeable Batteries. Used to power the Display Heater or as backup power. Supplied with a second charger. More than 6 hours service at -30°C.

### Use of Non-Rechargeable Batteries

Can be powered by D size Alkaline batteries, but rechargeable batteries are recommended for lower cost over time.

### Operating Temperature Range

-30°C to +50°C

### Storage Temperature Range

-30°C to +50°C

### Dimensions

Console: 355 x 270 x 165 mm

Charger: 120 x 95 x 55 mm

### Weights

Console: 5.8 kg Batteries: 1.3 kg

Charger: 1.1 kg

### Transmitters Available

IPC-9 200 W TSQ-2E 750 W

TSQ-3 3 kW TSQ-4 10 kW

VERSA TX



# SCINTREX

Earth Science Instrumentation



Head Office  
**SCINTREX** Limited  
222 Snidercroft Road  
Concord, Ontario, Canada L4K 1B5  
Telephone: (905) 669-2280  
Fax: (905) 669-6403  
e-mail: scintrex@scintrextld.com  
website: www.scintrextld.com

In the U.S.A.  
**SCINTREX** Inc.  
900 Woodrow Lane, Suite #100  
Denton, Texas  
76205 U.S.A.  
Telephone: (940) 591-7755  
Fax: (940) 591-1968  
e-mail: richardj@scintrexusa.com

In S.E. Asia  
**SCINTREX/AUSLOG**  
P.O. BOX 125 Summer Park  
83 Jijaws Street, Brisbane  
Telephone: +61-7-3376-5188  
Fax: +61-7-3376-6626  
e-mail: auslog@auslog.com.au  
website: www.auslog.com.au

1, 2, 4, 8, 16 or 32 seconds. Normally 14 windows except that the first four are not measured on the 1 second timing, the first three are not measured on the 2 second timing and the first is not measured on the 4 second timing. An additional transient slice of minimum 10 ms width, and 10ms steps, with delay of at least 40 ms is keyboard selectable. Programmable windows also available.

#### **Transmitter Timing**

Equal on and off times with polarity change each half cycle. On/off times of 1, 2, 4, 8, 16 or 32 seconds. Timing accuracy of  $\pm 100$  ppm or better is required.

#### **Memory Capacity**

Stores approximately 400 dipoles of information when 8 dipoles are measured simultaneously.

#### **Real Time Clock**

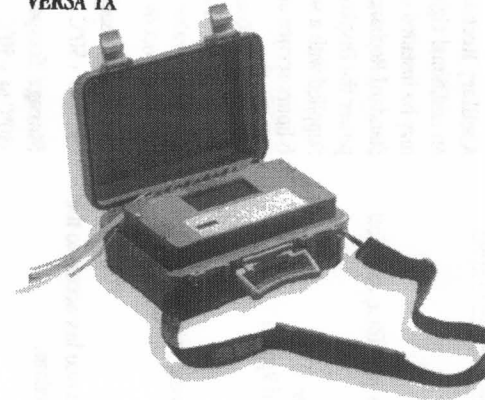
Data is recorded with year, month, day, hour, minute and second.

#### **Digital Data Output**

Formatted serial data output for printer and PC etc. Data output in 7 or 8 bit ASCII, one start, one stop bit, no parity format. Baud rate is keyboard selectable for standard rates between 300 baud and 57.6 kBaud. Selectable carriage

#### **Transmitters Available**

IPC-9 200 W      TSQ-2E 750 W  
TSQ-3 3 kW      TSQ-4 10 kW  
VERSA TX



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# **SCINTREX**

Earth Science Instrumentation



**Head Office**  
**SCINTREX** Limited  
222 Snidercroft Road  
Concord, Ontario, Canada L4K 1B5  
Telephone: (905) 669-2280  
Fax: (905) 669-6403  
e-mail: [scintrex@scintrextld.com](mailto:scintrex@scintrextld.com)  
website: [www.scintrextld.com](http://www.scintrextld.com)

In the U.S.A.  
**SCINTREX** Inc.  
900 Woodrow Lane, Suite #100  
Denton, Texas  
76205 U.S.A.  
Telephone: (940) 591-7755  
Fax: (940) 591-1968  
e-mail: [richardj@scintrexusa.com](mailto:richardj@scintrexusa.com)

In S.E. Asia  
**SCINTREX/AUSLOG**  
P.O. BOX 125 Summer Park  
83 Jijaws Street, Brisbane  
Telephone: +61-7-3376-5188  
Fax: +61-7-3376-6626  
e-mail: [auslog@auslog.com.au](mailto:auslog@auslog.com.au)  
website: [www.auslog.com.au](http://www.auslog.com.au)

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# Internal Power Modules

To: [unclear]  
 FROM: ALEN  
 FAX: 905-712-1834

## BPS-1 DRY CELL BATTERY POWER MODULE

- Output Voltage** : 90V, 180V and 360V.
- Output Current** : 1 mA to 1A maximum.
- Output Power** : Recommended maximum output power is 30 watts. Absolute maximum output power is 100 watts.
- Power Supply** : 8x1.5V dry cell batteries (Eveready 482, Mallory 202 or equivalent). Normal field operation, with low output power, results in an average battery life expectancy of one month. Operation with the absolute maximum output power results in much shorter battery life.
- Control Supply** : 4 x 6V lantern batteries (Eveready 409, Mallory 908 or equivalent) connected in series/parallel are used to provide the 40 to 70 mA at 12V required for the control circuitry. Average battery life expectancy is six months.
- Operating Temperature** : 0°C to +60°C.

## BPS-2 RECHARGEABLE BATTERY POWER MODULE

- Output Voltage** : 50V, 106V, 212V, 425V, and 850V.
- Output Current** : 3 mA to 3A.
- Output Power** : Maximum output power is 300 watts. Above this output power a protective cut-out is engaged to prevent battery and circuit damage.
- Batteries** : 4 x 12V rechargeable gall cell batteries connected in series/parallel have a capacity of 9 A-hr. External batteries (such as car or motorcycle batteries) may also be used. A special cord and plug are provided for this mode of operation. An adaptor cord connects the 12V batteries in parallel with the 12V charging unit.
- Operating Temperature** : -40°C to +60°C. Below 0°C the capacity of the batteries is significantly reduced (by 70% at -40°C).

## AC 3000 TRANSFORMER POWER MODULE

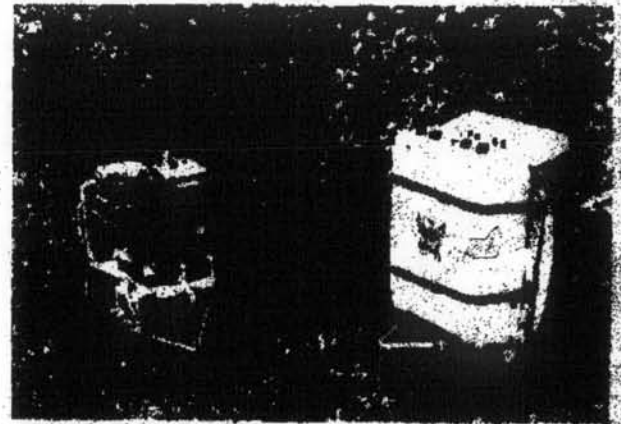
- Output Voltage** : 75V, 150V, 300V, 600V and 1200V.
- Output Current** : 3 mA to 10A.
- Output Power** : Maximum continuous output power is 3KW with MG-3 motor generator, 2KW with MG-2 motor generator and 1KW with MG-1 motor generator.
- Input Power** : Three phase, 400 Hz (350 to 1000 Hz), 60V (50V to 80V) is standard. Three phase, 400 Hz (350 to 1000 Hz), 120V (100V to 160V) is optional.
- Current Regulation** : Achieved by feedback to the alternator of the motor generator unit.
- Operating Temperature** : -40°C to +60°C.
- Thermal Protection** : Thermostat turns off at 65°C and turns back on at 55°C internal temperature.

## AC 5000 TRANSFORMER POWER MODULE

- Same as AC 3000 except for:
- Output Voltage** : 44V, 87V, 175V, 350V and 700V.
  - Frequency Range** : DC to 3000 Hz under external drive (all other power modules have a maximum frequency of 5 Hz).
- (Note: AC 3000 is not intended for extended time domain operation)

## General

- Dimensions** : 20 x 40 x 55 cm (9 x 16 x 22 in).
- Weight** : 13 kg (29 lb) with BPS-1.  
 13 kg (29 lb) with BPS-2.  
 17 kg (37 lb) with AC-3000.  
 18 kg (40 lb) with AC-3003.
- Standard Accessories** : Pack frame, manual. At least one of the four possible power modules is required. The transformer power modules in turn require one of the three external 1KVA, 2KVA, 3KVA, motor generators and a connecting cable.





**Sensor:**

Self-oscillating split-beam Cesium Vapor (non-radioactive Cs<sub>133</sub>) automatic hemisphere switching

Single sensor is standard

Optional second sensor (gradiometer)

Standard systems are field upgradable

**Data capacity:**

Up to 8 million readings in internal flash.

**Operating Zones:**

10-85 Degrees

**Data output:**

RS-232C, USB and optional portable FlashDisk

**Resolution:**

0.01 nT (?) for all sample rates

**Sensitivity:**

< 0.003 nT (?) vHz RMS

**Sample rate:**

User selectable 1,2,5,10 samples per second

**Gradient tolerance:**

1,000 nT (?) per inch (40,000 nT(?) / m)

**Display:**

Full VGA color display

**User interface:**

Environmental pointing device (mouse) and 5 dedicated keys

**Heading Error:**

< ± 1 nT (?)

**Temperature drift:**

0.01 nT (?) per degrees C

**Real Time Clock:**

Accurate synchronization to GPS PPS

Drift less than 0.2 sec / day

**Standard Cables:**

USB cable for "active sync" communication

**Battery Charger:**

Standard 120/240V AC

**Audio Output:**

Auto baseline tracking

Internal speaker or optional non-magnetic headsets

**Standard software:**

Scintrex Map Registration and Setup Utility

Mag Util quality control and display tool

**Mechanical:**

Console: 8.6"(W), 7.2"(D), 7.9"(H)

Weight: 2kg

Backpack: 0.25kg

Console batteries: 2x @ 0.75kg each

Sensor: 1.7kg

Staff and harness: 0.9kg

**Power:**

External Power: 21 – 28 V two connectors

Internal console batteries

2 x 12V Gel cells,

Optional battery pack/belt

**Environmental:**

Operating temperature:

-30°C to +50°C

Storage temperature:

-40°C to +70°C

**Options:**

Battery Belt/pack

Data and Power Cables

USB FlashDisk portable storage upgrade

Additional Cs sensor

Back pack

Internal GPS

External GPS

External keyboard

NOTE: Preliminary specifications are subject to change without notice



## Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

### Sensor Technology

GEM's sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich

liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-to-noise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

### About GEM Advanced Magnetometers

GEM Systems, Inc. delivers the world's only magnetometers and gradiometers with built-in GPS for accurately-positioned ground, airborne and stationary data acquisition. The company serves customers in many fields including mineral exploration, hydrocarbon exploration, environmental and engineering, Unexploded Ordnance Detection, archeology, earthquake hazard prediction and observatory research.

Key products include the QuickTracker™ Proton Precession, Overhauser and SuperSensor™ Optically-Pumped Potassium instruments. Each system offers unique benefits in terms of sensitivity, sampling, and acquisition of high-quality data. These core benefits are complemented by GPS technologies that provide metre to sub-metre positioning.

With customers in more than 50 countries globally and more than 20 years of continuous technology R&D, GEM is known as the only geophysical instrument manufacturer that focuses exclusively on magnetic technology advancement.

"Our World is Magnetic"



GEM Systems, Inc.  
52 West Beaver Creek Road, 14  
Richmond Hill, ON  
Canada L4B 1L9  
Email: [info@gemsys.on.ca](mailto:info@gemsys.on.ca)  
Web: [www.gemsys.ca](http://www.gemsys.ca)

## Specifications

### Performance

Sensitivity:	< 0.015 nT / $\sqrt{\text{Hz}}$
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Range:	10,000 to 120,000 nT
Gradient Tolerance:	> 10,000 nT/m
Samples at:	60+, 5, 3, 2, 1, 0.5, 0.2 sec
Operating Temperature:	-40C to +55C

### Operating Modes

Manual: Coordinates, time, date and reading stored automatically at minimum 3 second interval.

Base Station: Time, date and reading stored at 3 to 60 second intervals.

Remote Control: Optional remote control using RS-232 interface.

Input / Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

### Storage - 4Mbytes (# of Readings)

Mobile:	209,715
Base Station:	699,050
Gradiometer:	174,762
Walking Mag:	299,593

### Dimensions

Console:	223 x 69 x 240 mm
Sensor:	175 x 75mm diameter cylinder

### Weights

Console with Belt:	2.1 kg
Sensor and Staff Assembly:	1.0 kg

### Standard Components

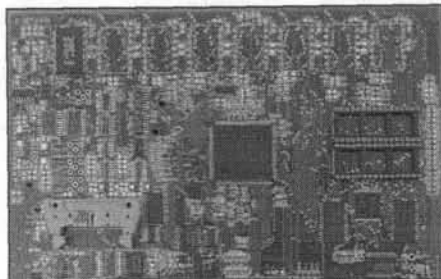
GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232 cable, staff, instruction manual and shipping case.

### Optional VLF

Frequency Range: Up to 3 stations between 15 to 30.0 kHz

Parameters: Vertical in-phase and out-of-phase components as % of total field. 2 components of horizontal field amplitude and total field strength in pT.

Resolution: 0.1% of total field



Represented By:

GEM Systems, Inc. delivers the world's only magnetometers and gradiometers with built-in GPS for accurately-positioned ground, airborne and stationary data acquisition. The company serves customers in many fields including mineral exploration, hydrocarbon exploration, environmental and engineering, Unexploded Ordnance Detection, archeology, earthquake hazard prediction and observatory research.

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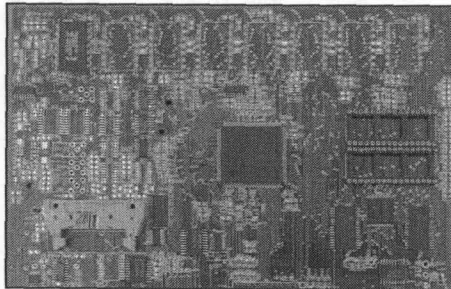
With customers in more than 50 countries globally and more than 20 years of continuous technology R&D, GEM is known as the only geophysical instrument manufacturer that focuses exclusively on magnetic technology advancement.

**"Our World is Magnetic"**

#### Data Acquisition Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easy-to-use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via the GEMLinkW software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to GEM -- resulting in both timely implementation of updates and reduced shipping / servicing costs.



GEM Systems, Inc.  
52 West Beaver Creek Road, 14  
Richmond Hill, ON

#### Storage - 4Mbytes (# of Readings)

Mobile:	209,715
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#### Dimensions

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#### Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232 cable, staff, instruction manual and shipping case.

#### Optional VLF

Frequency Range: Up to 3 stations between 15 to 30.0 kHz

Parameters: Vertical in-phase and out-of-phase components as % of total field. 2 components of horizontal field amplitude and total field strength in pT.

Resolution: 0.1% of total field

Represented By:



## **APPENDIX B – Transmitter Operator Field Notes**

Vencan Project June 9, 2005

PL

STAT IMA VOLTS

Remarks L-16+1000

975 N 420 3

750 N 290 3

725 N 290 3

700 N 290 3

675 N 290 3

650 N 310 3

625 N 310 3

600 N 310 3

575 N 380 3

550 N 390 3

525 N 390 3

500 N 390 3

475 N 380 3

450 N 390 3

425 N 380 3

X 400 N 380 3

375 N 380 3

350 N 350 3

325 N 410 4

300 W 400 4

275 N 290 4

250 N 150 4

225 W 190 4

K.P. PEN-LITE, MADE IN VANCOUVER, CANADA  
DURABLE WATERPROOF

LEVEL(S)

PAGE #1  
1



STAT IMA VOLTS REMARKS

200N	380	3
175N	220	2
150N	210	2
125N	240	4
100N	180	4
75N	230	4
50N	<del>350</del>	4
25N	280	5
0N	220	5
25S	220	5
50S	260	5
75S	210	5
100S	170	5
125S	110	5
150S	120	5
175S	180	5
200S	130	5
225S	140	5
250S	390	4
275S	450	4
300S	340	5
325S	240	3

June 9th

"Bottom of hill"

End of day

STAT IMA VOLTS REMARKS

1575W	270	2	"Swamp 1600"
1550W	270	2	"Started at 11:30"
1525W	270	2	
1500W	340	2	"moose brake wire"
1475W	340	3	
1450W	340	3	
1425W	340	3	
1400W	340	3	
1375W	100	3	
1350W	350	5	
1325W	390	5	
1300W	340	3	
1275W	340	3	
1250W	350	3	
1225W	340	3	
1200W	220	5	1340
1175W	530	5	1220
1150W	230	2	1530
1125W	180	5	1230
1100W	330	5	1100
1075W	450	4	180
1050	230		

P.O. PRESWALL LTD. MADE IN BRITAIN/COVER CANADA ENGLAND/DATE 1980

STRT	TMA	VOLTS	REMARKS
1000w	340	3	
975w	340	3	
950w	250	2	
925w	250	2	
900w	250	2	
875w	250	2	
850w	240	2	
825w	270	2	
800w	250	2	
775w	460/480	3	
750w	450/400/3	3	
725w	130	4	
700w	140	4	
675w	110	4	
650w	130	4	
625w	170	3	
600w	170	3	
575w		3	
550w		3	
525w		3	
500w		3	
475w		3	
450w		3	
425w		3	

June 10th

End of day

Page 4

F.D. PENHALL LTD. MADE IN MALAYSIA WATERPROOF

Yandang Project June 11th 2005

Line	BLDN	TMA	VOLTS	REMARKS
575N	30		2	
550N	40		3	
525N	50		3	
500N	40		3	
475N	50		3	
450N	140		3	
425N	40		3	
400N	40		3	
375N	40		3	
350N	20		2	
325N	40		2	
300N	20		2	
275N	40		2	
250N	50		2	
225N	140		2	
200N	110		2	
175N	100		4	
150N	90		4	
125N	30		3	
100N	50		3	
75N	50		3	
50N	120		3	

2nd rearing: above mill  
"bill trail"

"top of mill"

Page 5

LEVEL (S)

STAT	IMA	VOLTS	REMARKS
25N	70	3	
0 N	70	4	
25 S	140	4	
50 S	70	4	
75 S	110	4	top of wall
100 S	80	4	
125 S	70	4	
150 S	90	5	
175 S	110	5	
200 S	130	4	
225 S	150	4	
250 S	180	2	June 11 <sup>th</sup>
275 S	40	2	
300 S	80	1	
325 S	50	1	
350 S	30	2	
375 S	30	2	
400 S	70	3	
425 S	60	3	
450 S	40	3	
475 S	50	3	
500 S	40	3	
525 S	40	3	
550 S	50	3	

PAGE 6

STAT	IMA	VOLTS	REMARKS
475 S	50	3	
600 S	50	3	End of day
650 S	40	3	
675 S	50	3	

Vencan Project  
June 12<sup>th</sup> 2005 line 400w

STAT	IMA	VOLTS	REMARKS
1575N	240	3	
1550N	120/270	3	
1525N	330	3	
1500N	520	4	
1475N	300	3	
1450N	610	4	
1425N	370	3	
1400N	360	3	
1375N	360	3	
1350N	340	3	
1325N	350	3	
1300N	380	3	
1275N	310	3	
1250N	220	5	"total swampy area"
1225N	180	5	
1200N	120	4	"100w"

LEVEL (S)

PAGE 7



STAT	IMA	VOLTS	REMARKS
1075N	360	4	"Pickup goes from
1050N	240	4	1200N to 1075"
1025N	190/240	3	
1000N	150/170	3	1050N → 1075
975N	140	3	100.
950N	240/303	3	
925N	210/160	3	
900N	150	2	
875N	120	2	Line
850N	90	2	400w
825N	100	2	
800N	100	2	
775N	140/100	5	
750N	140	5	
725N	140	4 "4"	
700N	140	4	"start a swamp"
675N	270	4	
650N	110	1	
625N	60	1	"End of swamp"
600N	80	1	
575N	70	2	
550N	40	2	
525N	110	3	Page 8
500N	80	3	

June 12<sup>th</sup>

R.D. FENHALL LTD. MADE IN MEXICO BY C.A.H.A.C.A.  
DURABLE WATERPROOF

STAT	IMA	VOLTS	REMARKS
475N	20	4	
450N	120	4	End of
425N	150	4	day
Verkan Project June 13 2005			
Line 400w			
400N	340	3	started reading at
375N	290	3	9:20.
350N	190	3	
325N	310	3	
300N	260	3	
275N	200	3	
250N	150	3	
225N	370	3	
200N	120	5	
175N	130	5	
150N	110	5	
125N	90	5	
100N	220	3	
75N	290	3	"bottom of hill"
50N	260	3	
25N	250	3	
0N	210	4	PAGE 9
25S	98	4	"15s road"
LEVEL (S)	150		



STAT	IMA	VOLTS	REMARKS
50S	290	3 4	<del>Bottom of hull</del>
75S	<del>40</del> <sup>140</sup>	5	
100S	130	5	
125S	190	5	
150S	150	5	"bottom of hull"
175S	190	5	
200S	120	4	
225S	80	4	
250S	90	4	
275S	100	4	
300S	70	4	
325S	80	4	
350S	90	4	
375S	90	4	
400S	100	4	
425S	70	4	
450S	110	5	
475S	70	5	
500S	150	5	
525S	80	5	
550S	170	5	
575S	70	5	
600S	120	5	
625S	130	5	
650S	120	4	

PAGE 10

675S 110 4  
End of day

Vencan Project June 14, 05

Line 8900E

START IMA VOLTS REMARKS

44 475N	230	✓ 3	"start reading at 9:45"
4450N	120	✓ 3	
4425N	230	✓ 3	
4400N	110	✓ 2	
4375N	170	✓ 2	
4350N	150	✓ 2	
4325N	230	✓ 2	
4300N	180	✓ 4	
4275N	130	✓ 5	
4250N	140	✓ 5	
4225N	70	✓ 3	
4200N	70	✓ 3	
4175N	50	✓ 3	
4150N	30	✓ 3	
4125N	30	✓ 3	
4100N	40	✓ 3	
4075N	110	✓ 3	
4050N	80	✓ 3	
4025N	140	✓ 3	

LEVEL (S)

PAGE 11

STAT	TMA	VOLTS	REMARKS
4000N	90	3 ✓	
3975N	100	5 ✓	
3950N	150	2 ✓	
3925N	140	2 ✓	
3900N	120	2	IMA VOLTS
3875N	90	2	120 2
3850N	270	5 ✓	
3825N	60	5 ✓	"oc out grass"
3800N	200	5 ✓	
3775N	120	5 ✓	"top of hill"
3750N	140	5	
3725N	140	5 ✓	
3700N	170	5	
3675N	240	5 ✓	"bike trail"
<sup>3650</sup> <del>3625</del> N	120	5 ✓	
<sup>3625</sup> <del>3600</del> N	440	4 ✓	
<sup>3600</sup> <del>3575</del> N	390	4 ✓	
<sup>3575</sup> <del>3550</del> N	410	4 ✓	
<sup>3550</sup> <del>3525</del> N	340	4 ✓	
<sup>3525</sup> <del>3500</del> N	120	4 ✓	
<sup>3500</sup> <del>3475</del> N	130	4 ✓	
<sup>3475</sup> <del>3450</del> N	120	4 ✓	
3450N	110	4 ✓	
3425N	90	4 ✓	

Line 89000E  
June 14

PAGE 12

STAT	TMA	VOLTS	REMARKS
3400N	120	4 ✓	
<del>3375N</del>	110	4 ✓	
3350N	120	5 ✓	
3325N	160	5 ✓	
<del>3300N</del>	210	5 ✓	
3275N	120	5 ✓	
3250N	180	5 ✓	
<del>3225N</del>	230	5 ✓	
<del>3200N</del>	150	5	
June 16, 05			
3225N	230	4 ✓	
3200N	280	4 ✓	
3175N	120	4 ✓	
<del>3150N</del>	160	4 ✓	
*3125N	70	4 ✓*	
<del>3100N</del>	120	4 ✓	
3075N	120	4 ✓	
3050N	120	4 ✓	
<del>3025N</del>	120	4 ✓	
3000N	140	4 ✓	
2975N	90	4 ✓	
<del>2950N</del>	90	4 ✓	
<del>2925N</del>	230	4	

Line 89000E  
June 15

End of day

Line 89000E

PAGE 13

LEVEL (S)

STAT	TIME	WPTS	REMARKS	DATE
2700N	80	4	✓	
2875N	150	4	✓	
2850N	240	4	✓	
2835N	140	4	✓	
2810N	80	4	✓	
2775N	70	4	✓	
2750N	20	4	✓	X
2730N	240	4	✓	
2710N	200	4	✓	
2675N	410	4	✓	
2650N	310	3	✓	
2630N	240	3	✓	
2610N	220	3	✓	
2575N	210	3	✓	
2550N	170	3	✓	
2525N	160	3	✓	"below ground"
2510N	460	5	✓	
2475N	430	5	✓	
2450N	600	4	✓	
2435N	500	4	✓	PAGE 14
2410N	500	4	✓	460
2375N	570	4	✓	500
2350N	270	4	✓	590
2325N	200	4	✓	

Line 89000E

2300N	390	4	✓
2275N	200	4	✓
2250N	170	4	✓
2225N	190	4	✓
2200N	120	4	✓
2175N	140	4	✓
2150N	190	4	✓

Line 89000E  
June 16, 05

End of day

Vancouver Project June 17, 05

Line 92000N

STAT	TIME	WPTS	REMARKS
6325E	100	3	6525 ✓
6350E	80	2	6550 ✓
6375E	60	2	6575 ✓
6400E	40	2	6600 ✓
6425E	50	2	6625 ✓
6450E	60	2	6650 ✓
6475E	50	2	6675 ✓
6500E	50	2	6700 ✓
6525E	30	2	6725 ✓
6550E	30	2	6750 ✓
6575E	30	2	6775 ✓
6600E	400	2	6800 ✓
6625E	100	3	6825 ✓
6650E	100	2	6850 ✓

LEVEL (S)

PAGE 15





7875E	520	4
7900E	710	5
7925E	400	4
7950E	160	4
7975E	170	4
8000E	70	4
8025E	240	4
8050E	180	4
8075E	230	3
8100E	100	3
8125E	80	3
8150E	80	4
8175E	110	4
8200E	140	5
8225E	140	5
8250E	420	4
8275E	340	4
8300E	230	4
8325E	140	4
8350E	180	4
8375E	150	4
8400E	260	4
8425E	260	4
8450E	420	4
8475E	320	4

End of day  
 repeat 230-04  
 June 19, 05  
 Line 92000N

~~XXXXXXXXXX~~ OUTCROP

PAGE 18

June 18 Line 92000N

8500E	250	5
8525E	380	4
8550E	350	4
8575E	380	5
8600E	350	4
8625E	210	4
8650E	450	4
8675E	420	4
8700E	580	4
8725E	350	4
8750E	470	4
8775E	430	4
8800E	420	4
8825E	450	4
8850E	440	4
8875E	360	4
8900E	440	5
8925E	340	5
8950E	360	5
8975E	520	5
9000E	440	4
9025E	440	4
9050E	450	4
9075E	450	4

LEVEL (S)

June 19, 05  
 Line 92000N -  
 "8560 - 0 creek"  
 "Generator broke  
 for 3.0 hours."

End of day.

June 20<sup>th</sup>, 05  
 started at 9:05,  
 wire broken.  
 buy mouse.  
 Lost 1.00 hour.  
 Line 92000N.

PAGE 19

June 20<sup>th</sup>, 05 Line 02000

9100E	460	4
9125E	480	4
9150E	470	4
9175E	550	3
9200E	540	3
9225E	500	4
9250E	560	4
9275E	410	5
9300E	440	5
9325E	450	5
9350E	390	5
9375E	410	5
9400E	370	5
9425E	180	5
9450E	150	5
9475E	140	5
9500E	150	5
9525E	150	5
9550E	150	5
9575E	150	5
9600E	180	5
9625E	160	5
9650E	140	5
9675E	110	5
9700E	150	

"creek"  
"creek"

PAGE 20

9725N	140	5
9750N	140	5
9775N		
9800N		

R.D. FENWALL LTD. MADE IN MEXICO OR CANADA  
LUBRICA WATERPROOF

LEVEL (S)

PAGE 21

Line 925 00W  
Vencan Project

JUNE 21<sup>th</sup>

STAT	IMH	VOLTS	REMARKS
6125E	110	4	"swamp"
6150E	130	4	
6175E	220	4	
6200E	360	3	
6225E	320	3	
6250E	220	4	
6275E	100	4	
6300E	130	2	
6325E	60	2	"road"
6350E	80	1	
6375E	30	2	
6400E	30	2	
6425E	30	2	
6450E	30	2	
6475E	40	2	
6500E	50	1	
6525E	50	1	
6550E	10	1	
6575E	30	1	
6600E	190	4	

PAGE 22

LEVEL (S)



Line	92500W	REMARKS
6675E	400	3 "Start a subamp"
6650E	330	2
6675E	300	2
6710E	290	2
6725E	120	5
6750E	390	3
6775E	510	3
6800E	510	3
6825E	320	2 "End of subamp"
6850E	400	3
6875E	100	3
6900E	70	3
6925E	90	3
6950E	60	3
6975E	50	3
7000E	180	5
7025E	220	2
7050E	440	3
7075E	420	3
7100E	390	3
7125E	390/140	5
7150E	230	5
7175E	60	4

PAGE 23

Line	92500W	REMARKS
STAT	IMV	VOLTS
7200 E	620	4
7225 E	520	4
7250 E	420	3
7275 E	420	3
7300 E	410	3
7325 E	430	3
7350 E	520	5
7375 E	150	5
7400 E	110	4
7425 E	110	5
7450 E	140	5
7475 E	210	5
7500 E	460/180	4
7525 E	480	4
7550 E	500	4
7575 E	470	4
7600 E	460	4
7625 E	490	4
7650 E	480	4
7675 E	460	4
7700 E	560	4






PAGE 24

LEVEL (S)



STAT	IMA	VOLTS	REMARKS
7725E	560	4	
7750E	560	4	
7775E	550	4	
7800E	360	4	
7825E	420	4	
7850E	560	4	
7875E	590	4	
7900E			
7925E			
7950E			"outcrop"

PAGE 25

LINE	VEN CAN	L 92500	June 22/05
STA	Ima	Volts	Remarks
 7900E	230	2	
7925E	400	4	TAP DOWN WITH
"	310	4	AMMETER
"	450	4	<del>put in another</del>
	350	4	moved Rod
7950E	350	3	
 7975E	180	5	MAX
	100	4	TAP DOWN
8000E	40	5	
	50	5	
8025E	130	5	
8050E	270	4	8185E ATV tvzi/
8075E	270	5	MAX
	150	4	TAP DOWN
 8100E	130	4	
8125E	270	5	MAX
	190	4	TAP DOWN
 8150E	190	4	
	140	4	TAP DOWN
8175E	140	3	
 8200E	140	3	
8225E	140	4	8260E end of o.c.
LEVEL (S) "	150	4	start of Swamp

PAGE 26

STA	Ima	Volts	Remarks
8235E	170	4	Bad contact Tx keeps shutting off
8250E	100	3	"
8275E	30	4	8415E end of swamp MAX rock outcrop
8300E	140	2	
8325E	250	3	
8350E	400	3	
8375E	400	3	
8400E	410	3	
8425E	400	3	
8450E	370	3	8625E start of swamp
8475E	510	4	Tx shutting off
"	500	4	
8500E	500	4	8675E small creek
8525E	510	4	
8550E	500	4	
8575E	460	4	
8600E	390	5	
	250	5	
8625E	500	4	8780E start of swamp
8650E	540	4	
8675E	520	4	8823E Creek
8700E	500	4	8865E end of swamp

PAGE 27

STA	Ima	Volts	Remarks
8725E	520	4	
8750E	500	4	
8775E	500	4	
8800E	500	4	
8825E	500	4	
8850E	520	4	
8875E	500	4	
8900E	480	4	
8925E	500	5	
8950E	480	5	won't run tap down
	300	4	↓
	250	4	
8975E	400	3	
9000E	400	3	Tx shutting off
	420	4	adjust Voltage 7-8
9025E	400	4	
9050E	390	4	
9075E	410	4	
9100E	400	4	
9125E	400	4	
9150E	270	4	* error current climbing
	330	4	
9175E	360	4	

PAGE 28

Sta	Ima	Volts	Remarks
9200E	450	4	
9225E	400	4	
9250E	290	4	
9275	290	4	4300
9300E	260	4	4325
9325E	320	4	4350
9350E	430	4	4375
9400E	500	4	4375 - 4400
9425E	500	4	9400
9450E	200	4	9425
9475E	210	4	9450
9500E	220	4	9475
9525	330	4	9500 - 9525
	390	4	9525E - 9550
	410		9550E

END OF LINE

9550

9575 - 400

PAGE 29

Pi	LINE	7900	E	DATE
STA	Ima	Volts	REMARKS	
95150N	310	✓	3	JUNE 23/05
95125N	300	✓	3	cedar swamp ←
	520	✓	4	95175N start of
95100N	460	✓	4	
95075N	550	✓	4	
95050N	400	✓	3	
95025N	400	✓	3	
	380		3	
95000N	350	✓	3	
94975N	350	✓	3	
94950N	350	✓	3	
94925N	350	✓	3	
94900N	350	✓	3	
94875N	380	✓	3	
94850N	390	✓	3	
94825N	380	✓	3	
94800N	350	✓	3	
94775N	350	✓	3	
94750N	380	✓	3	
94725	380	✓	3	
94700	380	✓	3	
94675	380	✓	3	
94650	380	✓	3	

PAGE 30



P1	STA	IMA	VOLTS	REMARKS
	94625N	380	3 ✓	end of Swamp @ 94425
	94600N	380	3 ✓	
	94575N	390	3 ✓	F
	94550N	380	3 ✓	
	94525N	380	3 ✓	
	94500N	380	3 ✓	<del>94500N</del>
	94475N	380	3	START OF SWAMP
		560	4 ✓	94125
	94450N	570	4 ✓	
	94425N	490	4 ✓	
	94400N	400	4 ✓	
	94375N	490	5	
		300	4 ✓	
	94350N	180	5 ✓	
	94325N	260	5 ✓	4150N OUTLAP.
	94300N	300	3 ✓	
	94275N	300	3 ✓	4125 SWAMP SWAMP
	94250N	300	3 ✓	
	94225N	300	3 ✓	
	94200N	290	3 ✓	PAGE 31
	94175N	290	3 ✓	

P1	STAT	IMA	VOLTS	REMARKS
	94150N	300	3 ✓	
	94125N	180	5 ✓	
	94100N	340	4 ✓	
	94075N	300	3 ✓	
	94050N	300	3 ✓	
	94025N	300	3 ✓	
	94000N	290	3 ✓	
	93975N	290	3 ✓	
	93950N	300	3 ✓	
	93925N	290	3 ✓	
	93900N	290	3 ✓	
	93875N	410	4 ✓	
	93850N	410	4 ✓	
	93825N	370	4 ✓	
	93800N	420	4 ✓	end of day
JUNE 24/05 LINE 7900E				
	93775N	380	4 ✓	
	93750N	400	4 ✓	
	937	410	4 ✓	
	937.25	390	4 ✓	PAGE 32

R.D. PERMALLOY. MADE IN CANADA. DUNSBURY, ONTARIO.

LEVEL (S)

P1 LINE 7900<sub>E</sub> CONT

STAT	IMA	VOLTS	REMARKS
93700N	460	4	✓ 3575 end of Swamp
93675	380	4	✓
93650N	460	4	✓
93625N	300	4	✓
93600N	370	4	✓
93575N	370	4	✓
93550N	410	4	✓
(93525N)	410	4	✓
93500N	410	4	✓
93525N	130	4	✓
93500N	150	4	ammeter @ 1
	100	4	✓ ammeter to .3
93475	90	4	✓
93450N	50	4	✓
93425N	70	5	✓
93400N	90	5	✓
93375N	180	5	
<del>93350N</del>	90	3	
	25	1	✓ ammeter to .03
	15	1	✓ ammeter @ .3
93350N	95	4	✓
93325N	65	4	✓

PAGE 33

P1 LINE 7900<sub>E</sub> CONT. JUNE 24/05

STAT	IMA	VOLTS	REMARKS
93300N	80	4	✓
93275N	85	4	✓
93250N	60	4	✓
93225N	95	4	✓
93200N	140	4	✓
93175N	200	3	✓
93150N	65	4	✓
93125N	120	4	✓
93100N	140	5	✓
93075	110	5	✓
93050N	110	5	✓
93025N	200	5	✓
93000N	220	5	✓
93025N	220	5	✓
93000N	336	4	✓
92975N	250	4	✓
92950N	290	4	✓
92925N	340	4	✓
92900N	295	5	✓
92875N	290	5	✓
92850	420	5	✓

31175<sup>N</sup> ROAD

280<sup>N</sup> CREEK

PAGE 34

LEVEL (S)

PI LINE 7900E CONT June 24/05

STAT	IMA	VOLTS	REMARKS
92825	480	5 ✓	
92800	410	5 ✓	
92775N	415	5 ✓	
92750N	150	5 ✓	
92725N	170	5 ✓	
92700N	340	5	
<del>92675N</del>	180	3 ✓	OK TAKE IT FOR THE DAY

JUNE 25/05 LINE 7900E

92675N	95	4 ✓	
	100	3 ✓	
92650N	60	5 ✓	
92625N	175	5 ✓	
92600N	170	3 ✓	
92575N	140	3 ✓	chaining
92550N	300	5 ✓	
92525N	300	4 ✓	
92500N	285	4 ✓	

PAGE 35

PI L 7900E CO. 25 JUNE 25/05

STAT	IMA	VOLTS	REMARKS
92475N	300	4 ✓	
92450N	350	4 ✓	
92425N	310	4 ✓	
	250	3 ✓	
92400N	220	4 ✓	
	130	3 ✓	
92375N	110	5 ✓	
92350N	220	5 ✓	
92325N	110	5 ✓	
92300N	170	5 ✓	
92275N	280	5	
	180	4 ✓	
92250N	110	4 ✓	
92225N	140	4 ✓	
92200N	230	4 ✓	
92175N	100	4 ✓	
92150N	210	4 ✓	end of line

PAGE 36



PI L 8200E

June 29/05

STATION	IMA	VOLTS	REMARKS
94325N	150	4	LEAD. SPRUCE SWAMP
	90	3	
94300N	220	5	
94275N	330	4	
94250N	470	4	
94225N	470	4	
94200N	520	4	
<del>94175</del>	520	4	
94175N	490	4	
94150	400	4	
94125N	440	4	
94100N	210	4	
94075N	250	4	
94050N	270	5	
94025N	490	5	
94000N	390	4	
93975N	380	4	
93950N	190	5	
93925N	140	4	
	120	4	
	70	3	

PAGE 37

PI LINE ~~8200E~~ 8200E CONT

STAT	IMA	VOLTS	REMARKS
<del>93825N</del>	50	3	
93800N	50	3	
<del>93875N</del>	50	3	
93850N	50	3	
93825N	230/170	3	
93800	250	3	
93775N	270	3	
93750N	280	3	
93725N	280	3	
93700N	270	3	
93675N	265	3	
93650N	240	3	
	560	5	
93625N	140	5	
93600N	140	5	
93575N	440	4	
93550N	500	4	
93525N	435	4	
93500N	440	4	
93475N	435	4	

8250N  
Outcrop  
3575N  
SIDE OF SWAMP

PAGE 38

end of day

LEVEL (S)

June 26  
September

100E

Monday P1

WV

VOLTS

STAT	MA	VOLTS
93450N	560	5
6 Tuesday 93425N	240 ✓	3
93400N	250 ✓	3
93375N	240 ✓	3
93350N	250 ✓	3
93350N	260	3
7 Wednesday 93325N	460 ✓	4
93300N	480 ✓	4
93275N	280 ✓	4
93250N	215 ✓	4
93250N	300	5
8 Thursday 93225N	170 ✓	4
93200N	410	4
93175N	230 ✓	3
93150N	300 ✓	5
93150N	485 ✓	5
93150N	485	4
93125N	270 ✓	3
93100N	270 ✓	3
93100N	425	4
93075N	240 ✓	3
93075N	240 ✓	3
10 Saturday 93050N	270 ✓	3
93025N	470 ✓	4
93025N	560	4
93000N	280 ✓	3
92975N	200 ✓	3
92975N	220 ✓	4
92950N	240	5

PAGE 41

Brownline

September

8200E  
CON

19 Monday

P1  
STAT

MA

VOLTS

92925N	170 ✓	5
20 Tuesday 92900	170 ✓	5
92875	395 ✓	5
92850N	370 ✓	5
92825N	365 ✓	4
92800N	440 ✓	4
21 Wednesday 92775	440 ✓	4
92750N	420 ✓	4
92725N	410 ✓	4
92700N	250 ✓	4
92675N	200 ✓	4
22 Thursday 92650N	385 ✓	4
92625N	410 ✓	4
92600N	410 ✓	4
92575N	400 ✓	4
92550N	420 ✓	4
23 Friday	450	5
	240 ✓	3
92525N	225 ✓	3
92500N	240 ✓	3
92475N	110 ✓	4
24 Saturday 92450N	130	4
	150	5
92425N	520	5
92400	170 ✓	3
92375	140 ✓	3
92350N	130 ✓	5

PAGE 40

Brownline

October 2005

8200E  
CONT

3 Monday

P1

STAT

MA

VOLTS

4 Tuesday 92325N	130	5
	130	5
92300N	770 ✓	4
92275N	740 ✓	5
92250N	90 ✓	5
92225	80 ✓	5
92200N	70 ✓	5
92175N	210 ✓	5
92150N	230 ✓	4
6 Thursday 92125N	225 ✓	3
92100N	40 ✓	3
92075N	50 ✓	3
92050N	40 ✓	3
92025N	50 ✓	3
92000N	30 ✓	3
91975N	200 ✓	3

PAGE 39

Brownline



## **APPENDIX C – Plates**