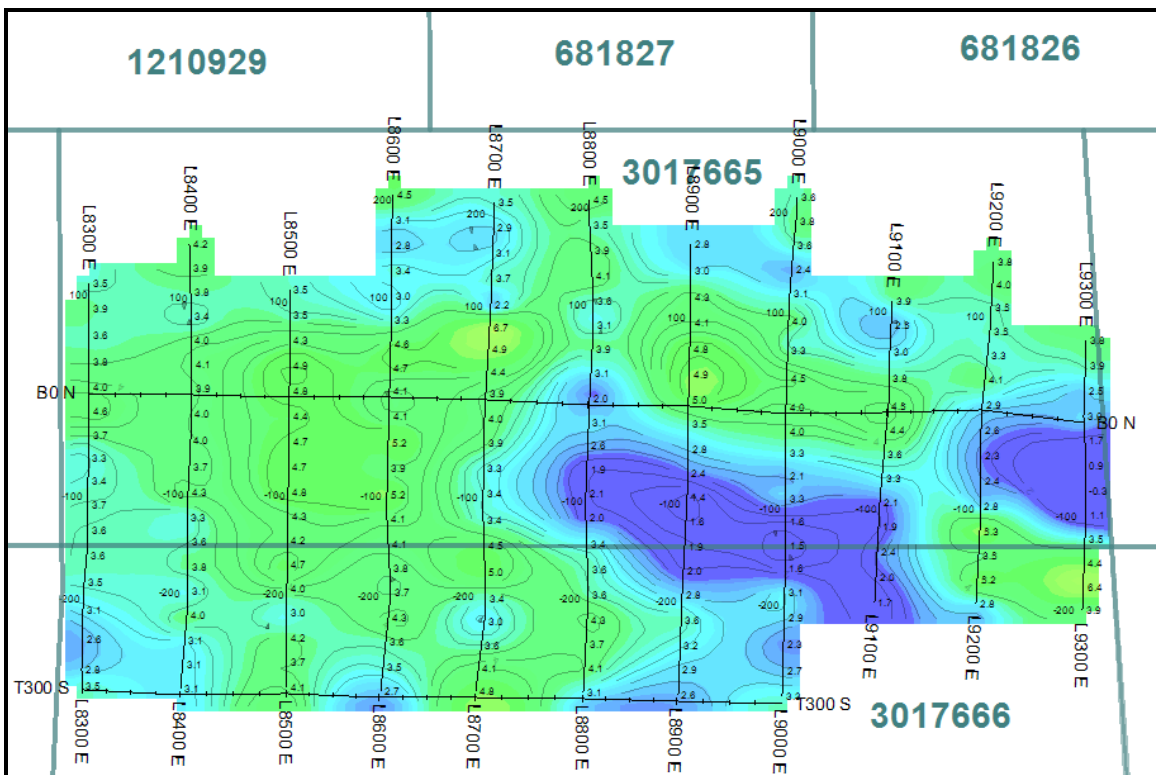




GEOPHYSICAL SURVEYS AND CONSULTING

**Logistical Report on  
Spectral IP/Resistivity and Magnetic/VLF Surveys  
Chester Gold Grid  
South Swayze Project, Gogama Area, Ontario  
Augen Gold Corp.**



Ref. 9-60b  
March, 2010

# **Logistical Report on Spectral IP/Resistivity and Magnetic/VLF Surveys Chester Gold Grid, South Swayze Project, Gogama Area, Ontario**

## **For : Augen Gold Corp.**

130 King Street West, Suite 720  
Toronto, ON  
M5X 1A6  
Tel : 416.777.2007  
Fax : 416.777.2008  
[www.augengold.com](http://www.augengold.com)

## **By : JVX Ltd.**

60 West Wilmot Street, Unit 22  
Richmond Hill, Ontario L4B 1M6  
Tel: 905.731.0972  
Fax: 905.731.9312  
[www.jvx.ca](http://www.jvx.ca)

Ref. 9-60b  
March, 2010

## **Summary**

Magnetic/VLF and spectral IP/resistivity surveys were done on the Chester Gold grid, part of the South Swayze Project centered 35 km west southwest of Gogama, Ontario. The magnetic/VLF survey was done on December 8 and 10, 2009. The IP/resistivity survey was done from January 24 to 31, 2010. Total production was 5,925 m IP/resistivity and 7,475 m magnetics/VLF. The results of the surveys are presented on 4 plan maps at 1:5000 and 11 stacked pseudosections at 1:2500.

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## Maps

The results of the surveys are presented on 4 plan maps at 1:5000 and 11 stacked pseudosections at 1:2500. All maps show the survey grid, claim numbers and claim boundaries, roads and drainage, a UTM grid (NAD83, Z17N) and latitude / longitude co-ordinates. Maps types are

- total magnetic intensity
- VLF offset profiles, vertical inphase and quadrature components
- $n=2$  Mx chargeability
- $n=2$  apparent resistivity

The 11 stacked pseudosections (lines 8300E to 9300E) show colour / line contoured pseudosections of apparent resistivity, Mx chargeability and the spectral parameters MIP and tau.

## Spectral IP/Resistivity and Magnetic/VLF Surveys Chester Gold grid, South Swayze Project Augen Gold Corp.

Spectral IP/resistivity and magnetic/VLF surveys were done on the Chester Gold grid, part of the South Swayze Project centered 35 km west southwest of Gogama, Ontario (figure 1). The work was done for Augen Gold Corp. by JVX Ltd. under JVX job number 9-60. The magnetic/VLF survey was done on December 8 and 10, 2009. The IP/resistivity survey was done from January 24 to 31, 2010. Total production was 5,925 m IP/resistivity and 7,475 m magnetics/VLF.

The Chester Gold grid is largely on claims 3017665 and 3017666 (figure 2) registered to Augen Gold Corp. These 2 claims are in Chester Township. Gogama is 23 km east northeast of the grid. Timmins is 120 km to the northeast. The grid is made up of 11 north/south lines at 100 m (8300E to 9300E), a base line and a tie line at 300S. The station range is 300S to 300N.

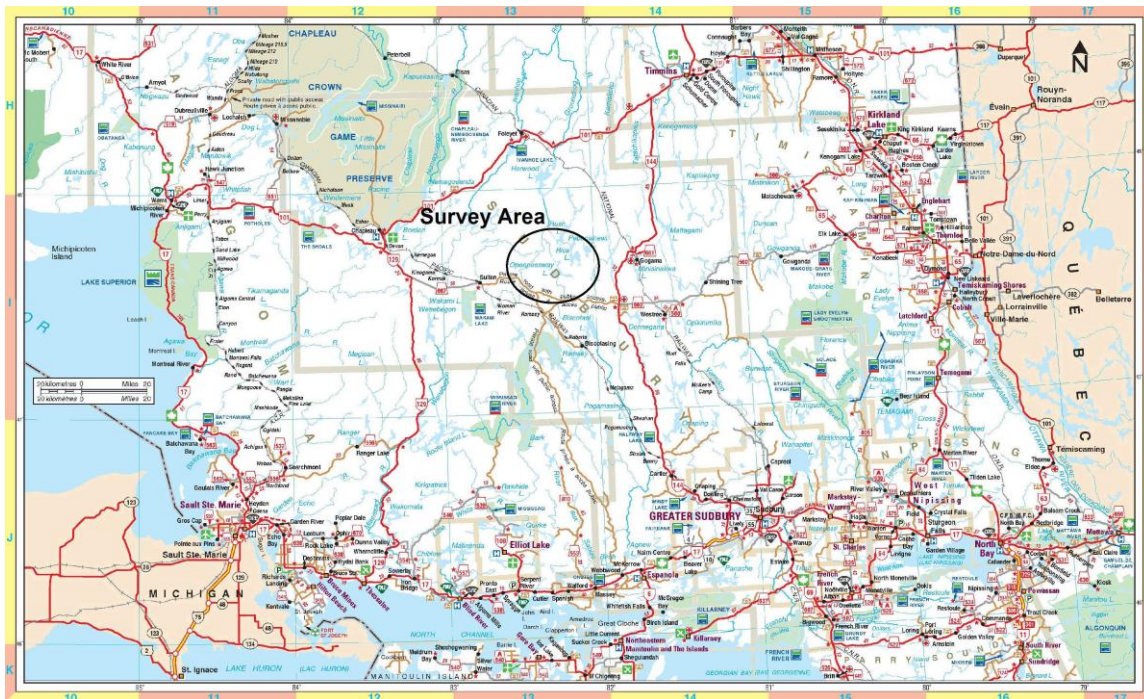


Figure 1. Regional location map

IP/resistivity and magnetic/VLF surveys on the Chester Gold grid are part of a larger program of ground geophysical surveys for Augen Gold Corp. on the South Swayze Project by JVX Ltd. under JVX job number 9-60. Other grids include Brady, Skye, Bi-Ore, Schist Lake and Huffman. Work on these other grids is reported on separately using a different job number suffix.

Production summaries, GPS control points, instrumentation, data processing and archives are described in appendix 1. Weekly field production reports are reproduced in appendix 2. Images of all plan maps are in appendix 3. Instrument specification sheets are attached. Paper maps and pseudosections are folded and bound with this report.

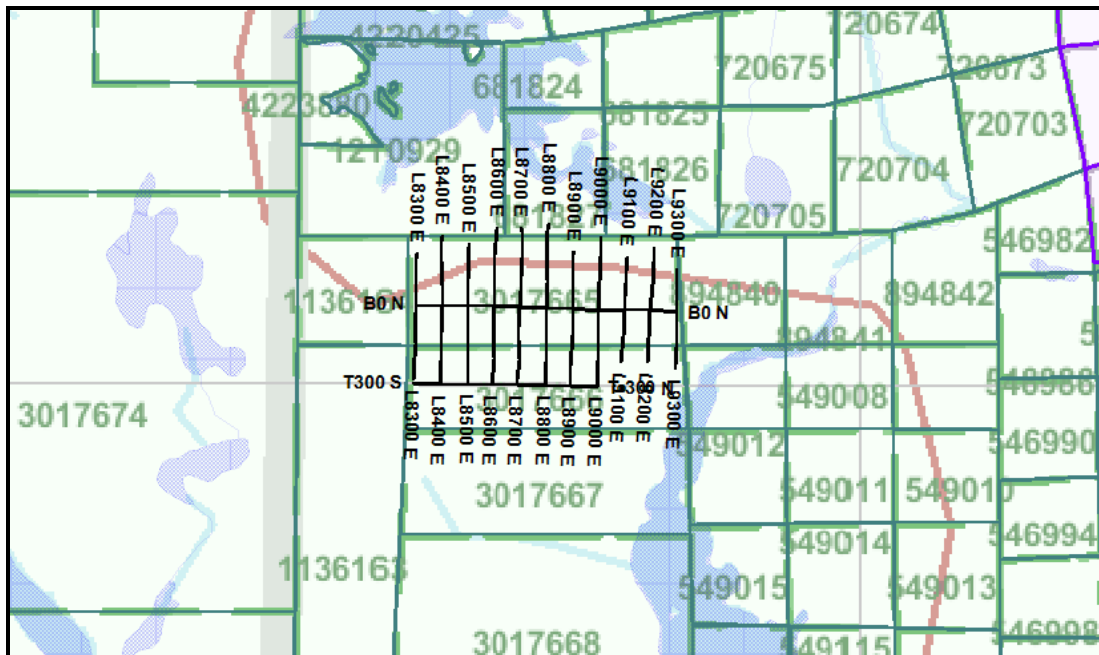


Figure 2. Grid layout with claim fabric

## 1. Background

Reading from an October 29, 2009 press release from Augen Gold Corp. –

Augen Gold is a gold exploration company with 24,581 hectares of staked and patented mining claims in the Southern Swayze Greenstone Belt, including the formerly producing Jerome Gold Mine. The claims cover a 45 kilometre long section of the Ridout Deformation Zone, believed to be the western extension of the Kirkland Lake/Larder Lake Break. The geological setting is comparable to the major gold camps of Timmins and Kirkland Lake, and the claims contain numerous gold showings that have received very little historical exploration. Augen Gold is the first company to have assembled such a coherent ground position. Augen Gold has performed a detailed airborne geophysical survey over the whole area, and its sampling program has confirmed the historically reported gold values. The correlation of many gold showings with geophysical features indicates excellent potential **for the discovery of additional deposits. The Company's objectives are to aggressively** explore the gold showings that correlate with geophysical anomalies, continue resource definition at the Jerome Mine, and to expand its property portfolio with highly prospective mineral assets.

The South Swayze Project area geology and exploration targets are shown in figure 3 taken from Augen Gold's Investor Fact Sheet, October 2008.

## 2. Personnel

Rob St. Michel, senior geophysical operator from JVX acted as party chief. He was responsible for all technical aspects of the field survey and operated the IP receiver. Rob Raby from JVX operated the IP transmitter. Scott Mortson from JVX did the magnetic/VLF survey. Helpers from JVX included Dean McNichol, Brandon Martel and Jim Corbeil. Data processing was handled Lily Manoukian at the JVX office in Richmond Hill, Ontario.

## REGIONAL EXPLORATION & TARGETS

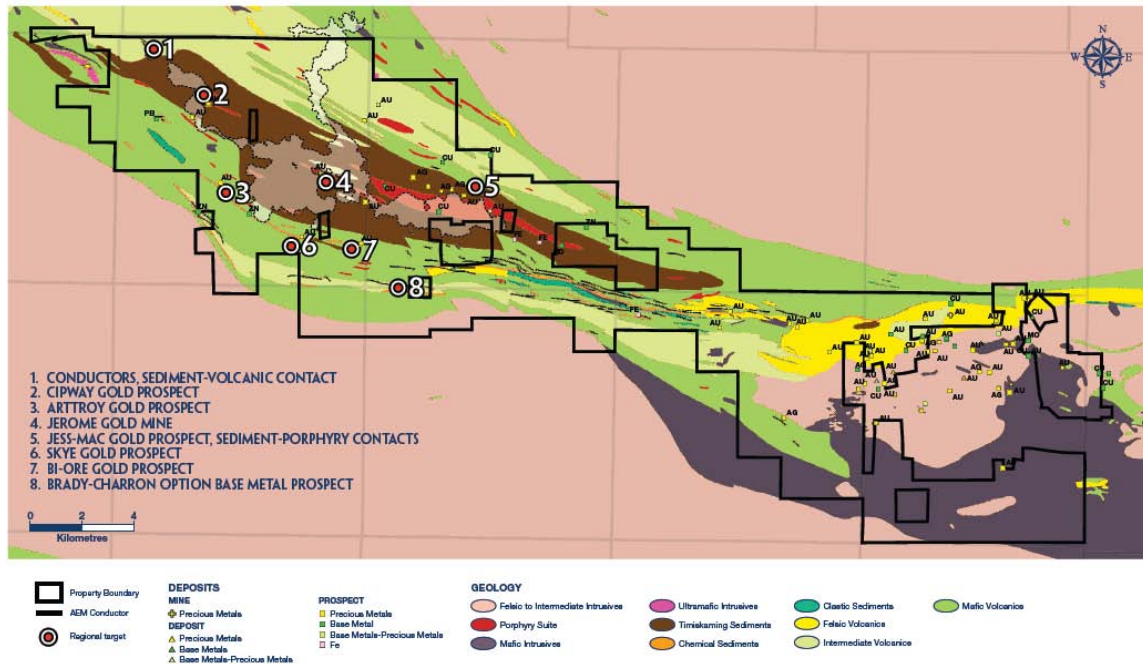


Figure 3. South Swayze Project area (from Augen Gold Investor Fact Sheet)

### 3. Instrumentation

#### Magnetometer/VLF

Gem Systems GSM-19WV, SN 7052356 (mobile)  
 Gem Systems GSM-19, SN 6072060 (base)

The GSM19WV magnetometer/VLF receiver has a built in GPS receiver. The GSM-19 is an earlier version of the same magnetometer without a built in GPS receiver. The GSM-19WV measures total magnetic intensity, VLF total field, vertical inphase, vertical quadrature and two horizontal VLF components. Specification sheets are attached.

#### IP/resistivity

Scintrex IPR12 receiver, SN 9502048  
 GDD TXII – 1800W-2400V time domain transmitter, SN TX332  
 Hunttec 2.5 kVA time domain transmitter, SN 272

The IPR12 is an eight channel time domain IP receiver that measures the primary voltage and decay voltages at 11 preset windows plus a user selected window (Mx). A 2 second current pulse was used. The IP receiver and transmitter are described in appendix 1. Specification sheets are attached.

### 4. Surveys

The UTM coordinates of at least two separated points on each line were collected with a hand held GPS receiver. An average separation between GPS control points of around 100 m is ideal. These GPS derived UTM coordinates are used to draw an interpolated grid needed to

register the geophysical results. The line/station, UTM coordinates and ellipsoidal elevation of GPS control points are listed in appendix 1. UTM coordinates are NAD83, Z17N.

Total magnetic intensity and VLF readings were taken every 12.5 m. Each reading record show line, station, total magnetic intensity, time, VLF frequency, VLF vertical inphase (ip) and quadrature (op) components, two VLF horizontal field components (h1 and h2) and VLF total field (pT). UTM coordinates were not recorded. VLF readings were taken at 24.0 kHz. The primary VLF signal was from NAA, Cutler, Maine at 44.7° n, 67.3° w, 1000 kW. The base station magnetometer was set to record the total magnetic intensity every 10 seconds.

IP/resistivity surveys were done with a pole-dipole array ('a' = 25 m, n=1,6) with the moving current electrode south of the potential electrodes. Weekly field production reports are reproduced in appendix 2.

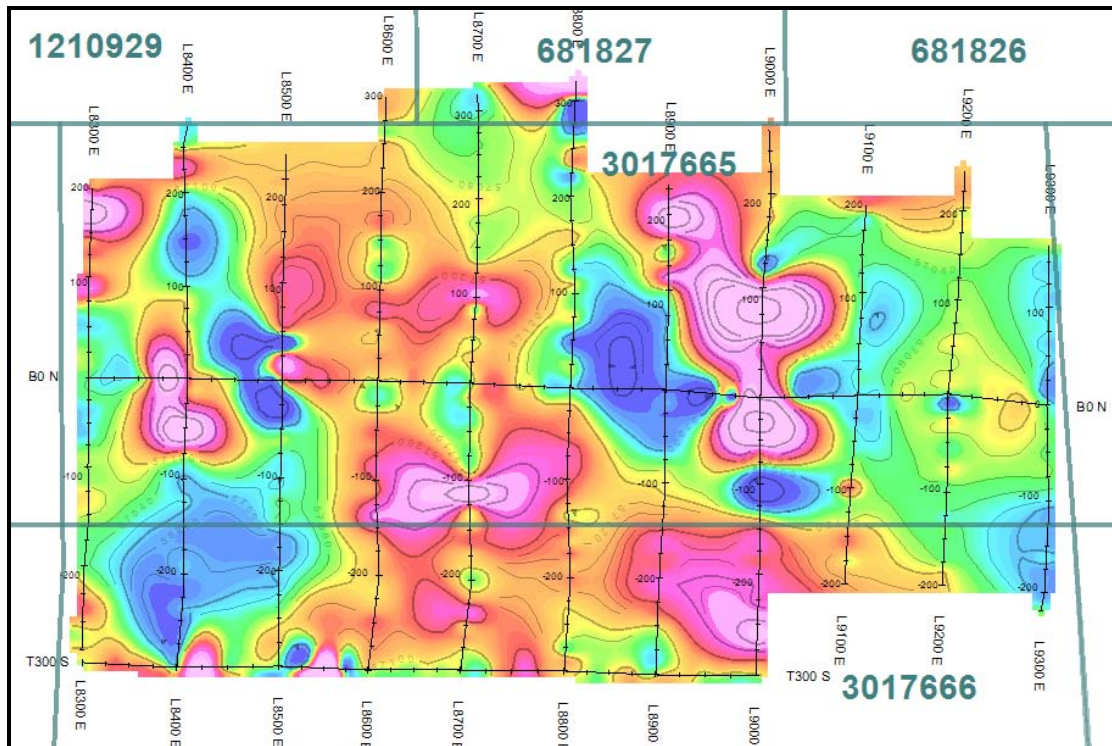


Figure 4. Total magnetic intensity, Chester Gold grid

## 5. Presentation

The results of the surveys are presented on 4 plan maps at 1:5000 and 11 stacked pseudosections at 1:2500. All maps show the survey grid, claim numbers and claim boundaries, roads and drainage, a UTM grid (NAD83, Z17N) and latitude / longitude co-ordinates. Topography from MNDMF claimmap3 shows little for the small map area and is not shown on final paper maps. Maps types are

- total magnetic intensity contours
- VLF offset profiles, vertical inphase and quadrature
- n=2 Mx chargeability contours
- n=2 apparent resistivity contours

Total magnetic intensity contours are shown in figure 4. n=2 Mx chargeability contours are shown in figure 5. Folded paper copies of all maps and pseudosections are bound with this report. Images of all maps are shown in appendix 3.

Each of the 11 sets of stacked pseudosections (lines 8300E to 9300E) shows colour/line pseudosections of the spectral IP time constant ( $\tau$ ), the spectral IP amplitude (MIP), the measured IP amplitude (Mx) and apparent resistivity.

Digital results (this report, raw and processed ASCII data files, Geosoft database and map files) are archived on CD.

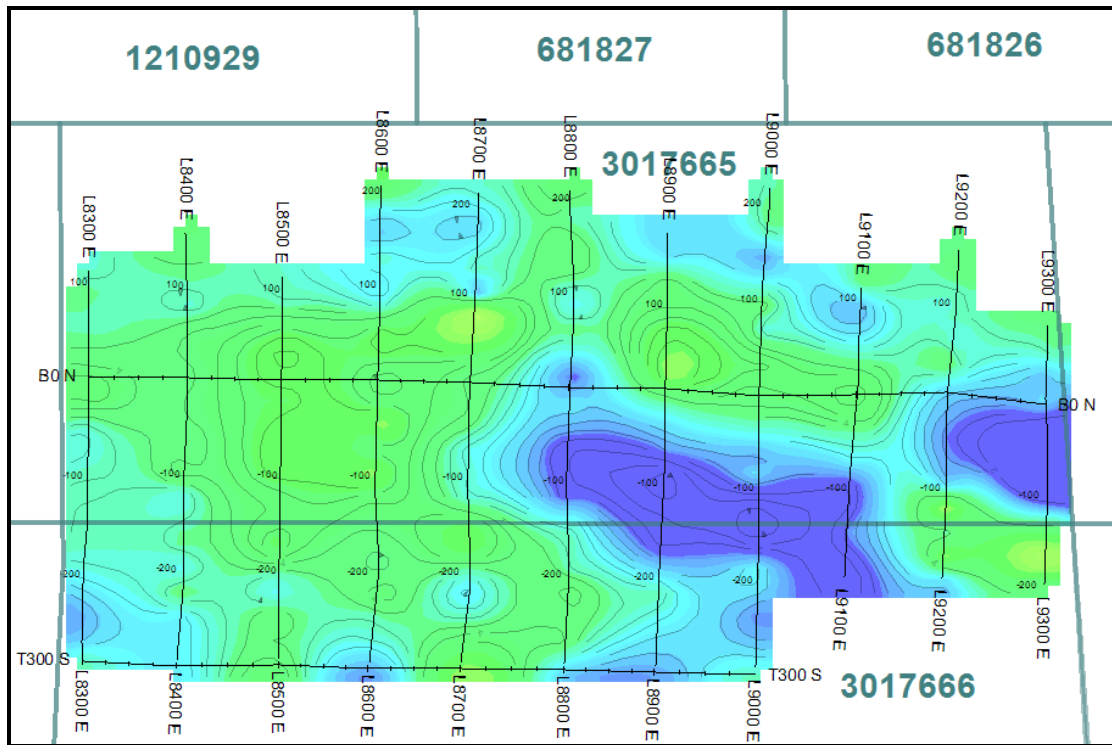


Figure 5. n=2 Mx chargeability, Chester Gold grid

## 6. Conclusions

Magnetic/VLF and spectral IP/resistivity surveys were done on the Chester Gold grid, part of Augen Gold's South Swayze Project centered 35 km west southwest of Gogama, Ontario. The field work was done from December 8 to 10, 2009 (magnetics/VLF) and January 24 to 31, 2010 (IP/resistivity). Total production was 5,925 m IP/resistivity and 7,475 m magnetics/VLF. The results have been presented on 4 plan maps at 1:5,000 and 11 stacked pseudosections at 1:2,500.

Blaine Webster, B.Sc., P. Geo.  
March 3, 2010



## **Certificate of Qualifications**

**Blaine Webster  
President - JVX Ltd.,  
60 West Wilmot Street, Unit 22  
Richmond Hill, Ontario L4B 1M6  
Tel : (905) 731-0972 Email : bwebster@jvx.ca**

I, Blaine Webster, B. Sc., P. Geo., do hereby certify that

1. I graduated with a Bachelor of Science degree in Geophysics from the University of British Columbia in 1970.
2. I am a member of the Association of Professional Geoscientists of Ontario.
3. I have worked as a geophysicist for a total of 36 years since my graduation from university and have been involved in minerals exploration for base, precious and noble metals and uranium throughout much of the world.
4. I am responsible for the overall preparation of this report. Most of the technical information in this report is derived from geophysical surveys conducted by JVX Ltd. for Augen Gold Corp. and information provided by Augen Gold Corp.

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Blaine Webster, B. Sc., P. Geo.

## Appendix 1

### Production, GPS control points, Instrumentation and Data Processing

Spectral IP/resistivity and magnetic/VLF surveys were done on the Chester Gold grid, part of the South Swayze Project centered 35 km west southwest of Gogama, Ontario. The work was done for Augen Gold Corp. by JVX Ltd. under JVX job number 9-60. The magnetic/VLF survey was done on December 8 and 10, 2009. The IP/resistivity survey was done from January 24 to 31, 2010. Total production was 5,925 m IP/resistivity (table 1) and 7,475 m magnetics/VLF (table 2).

Line	IP-From	IP-To	Separation	Date
8300E	325S	200N	525	January 31, 2010
8400E	325S	200N	525	January 30, 2010
8500E	325S	200N	525	January 30, 2010
8600E	325S	300N	625	January 30, 2010
8700E	325S	300N	625	January 28, 2010
8800E	325S	300N	625	January 28, 2010
8900E	325S	250N	575	January 24, 2010
9000E	325S	300N	625	January 24/26, 2010
9100E	225S	200N	425	January 27, 2010
9200E	225S	250N	475	January 27, 2010
9300E	225S	150N	375	January 27, 2010
		<b>Total</b>	<b>5,925 m</b>	

**Table 1. Production summary, IP/resistivity survey, Chester Gold grid**

Line	Mag/VLF-From	Mag/VLF-To	VLF	Separation	Date
8300E	275S	200N	24.0	475	December 8, 2009
8400E	300S	275N	24.0	575	December 8, 2009
8500E	300S	225N	24.0	525	December 10, 2009
8600E	300S	300N	24.0	600	December 8, 2009
8700E	300S	325N	24.0	625	December 8, 2009
8800E	300S	325N	24.0	625	December 8, 2009
8900E	300S	225N	24.0	525	December 8, 2009
9000E	300S	275N	24.0	575	December 8, 2009
9100E	200S	200N	24.0	400	December 10, 2009
9200E	200S	250N	24.0	450	December 10, 2009
9300E	225S	175N	24.0	400	December 10, 2009
B00N	8300E	9300E	24.0	1000	December 8, 2009
T300S	8300E	9000E	24.0	700	December 8, 2009
			<b>Total</b>	<b>7,475 m</b>	

**Table 2. Production summary, magnetics/VLF survey, Chester Gold grid**

For the IP/resistivity survey, coverage is measured from the station of the first moving current electrode to the station of the last potential electrode (ideal grid). For the magnetic/VLF survey, coverage is measured from the first to last station (ideal grid).

Magnetic and VLF readings were taken every 12.5 m. IP/resistivity surveys were done in time domain with a pole-dipole array ( $a' = 25$  m,  $n=1,6$ ). The moving current electrode was always south of the potential electrodes.

### Grid

The Chester Gold grid is largely within claims 3017665 and 3017666 (figure 1) registered to Augen Gold Corp. These 2 claims are in Chester Township. Gogama is 23 km east northeast of the grid. Timmins is 120 km to the northeast. The grid is made up of 11 north/south lines at 100 m (8300E to 9300E), a base line and a tie line at 300S. The station range is 300S to 300N.

## Appendix 1 : Production, GPS control points, Instrumentation and Data Processing

Grid registration is based on UTM coordinates from a hand held GPS receiver at 2 or more well separated points on each survey line (table 3). The geophysical survey results are registered with UTM coordinates interpolated or extrapolated from these GPS control points.

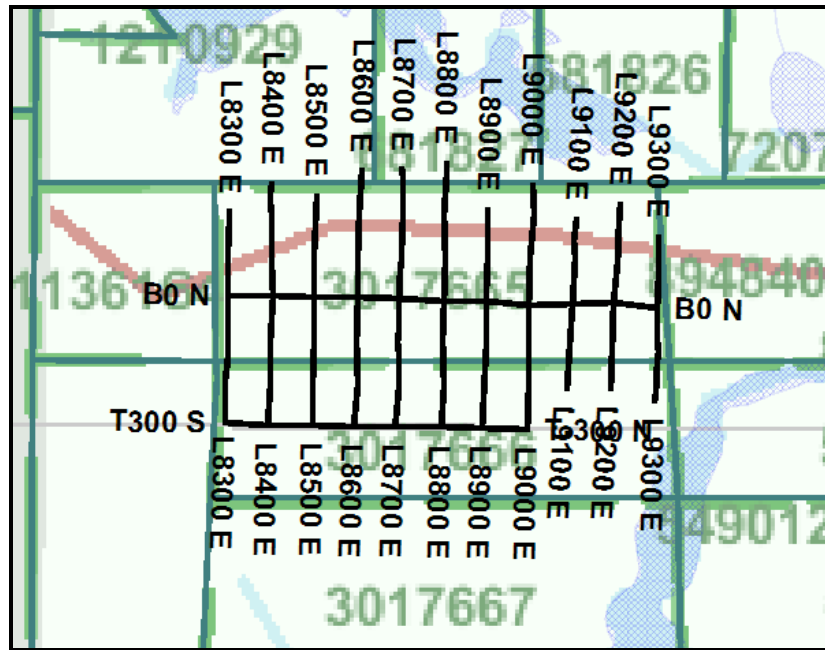


Figure 1. Chester Gold grid with claim fabric from MNDM claimap3

Line	Station	UTM e	UTM n	elevation
8300E	300S	428300	5265004	380
	275S	428299	5265017	392
	200S	428301	5265105	421
	150S	428306	5265158	404
	100S	428305	5265207	400
	00	428307	5265300	402
	100N	428306	5265406	404
8400E	200N	428311	5265498	393
	300S	428398	5264999	388
	200S	428406	5265096	425
	100S	428405	5265195	414
	00	428410	5265300	405
	100N	428408	5265396	407
	200N	428407	5265493	409
8500E	250N	428404	5265541	419
	275N	428409	5265563	396
	300S	428505	5265000	411
	200S	428505	5265099	407
	100S	428506	5265196	407
	00	428508	5265297	411
	100N	428508	5265399	408
8600E	200N	428511	5265507	412
	300S	428598	5264996	392
	200S	428609	5265095	407
	100S	428605	5265193	405
	00	428608	5265297	402
	100N	428610	5265392	400
	200N	428611	5265494	398
8900E	300N	428617	5265593	401

## Appendix 1 : Production, GPS control points, Instrumentation and Data Processing

Line	Station	UTM e	UTM n	elevation
8700E	300S	428694	5264996	400
	200S	428705	5265089	406
	100S	428702	5265194	400
	00	428704	5265295	400
	100N	428710	5265384	410
	200N	428713	5265487	403
	300N	428713	5265579	403
	325N	428711	5265596	386
8800E	300S	428802	5264995	392
	200S	428808	5265092	395
	100S	428805	5265195	392
	00	428808	5265290	395
	100N	428813	5265388	392
	200N	428808	5265489	395
	300N	428814	5265589	386
	325N	428815	5265610	393
8900E	300S	428897	5264992	392
	200S	428901	5265092	389
	100S	428907	5265191	385
	00	428908	5265288	395
	100N	428911	5265391	396
	200N	428911	5265497	402
	250N	428912	5265508	392
9000E	300S	429002	5264990	392
	200S	429005	5265096	395
	100S	429006	5265190	402
	00	429006	5265280	383
	100N	429009	5265395	392
	200N	429018	5265492	392
	300N	429015	5265582	394
9100E	200S	429094	5265085	382
	100S	429100	5265186	391
	00	429108	5265282	391
	50N	429110	5265336	386
	100N	429113	5265389	400
	150N	429112	5265429	389
	200N	429117	5265480	391
9200E	250N	429220	5265516	383
	200N	429217	5265474	394
	100N	429212	5265382	408
	00	429202	5265284	364
	100S	429201	5265181	393
	200S	429196	5265084	389
9300E	175N	429308	5265438	393
	150N	429307	5265421	395
	100N	429308	5265374	399
	00	429305	5265272	393
	100S	429307	5265172	399
	200S	429303	5265077	396
	225S	429299	5265058	384

**Table 3. GPS control points (NAD83, Z17N), Chester Gold grid**

### Instrumentation

#### Magnetometer/VLF

Gem Systems GSM-19WV, SN 7052356 (mobile)  
Gem Systems GSM-19, SN 6072060 (base)

## Appendix 1 : Production, GPS control points, Instrumentation and Data Processing

The GSM19WV magnetometer/VLF receiver has a built in GPS receiver and data may be recorded with line/station and UTM coordinates. GSM-19WV stands for walking Overhauser magnetometer with VLF option. The GSM-19 is an earlier version of the same magnetometer without a built in GPS receiver. Both receivers measure total magnetic intensity to 0.01 nT. The GSM-19WV measures total magnetic intensity, VLF total field, vertical inphase, vertical quadrature and two horizontal components. Specification sheets are attached.

### IP/resistivity

Scintrex IPR12 receiver, SN 9502048

GDD TXII – 1800W-2400V time domain transmitter, SN TX332

Huntec 2.5 kVA time domain transmitter, SN 272

For each potential electrode pair, the IPR12 measures the primary voltage ( $V_p$ ) and the ratio of secondary to primary voltages ( $V_s/V_p$ ) at 11 points on the IP decay (2 second current pulse). These 11 points are labeled M4 to M14. There is the option for an additional user defined slice ( $M_x$ ). Units are millivolts for  $V_p$  and milliVolts/Volt for M4 to M14 and  $M_x$ . Settings are

$V_p$	: 200 to 1600 msec
M4 centered at	60 msec (50 to 70)
M5 centered at	90 msec (70 to 110)
M6 centered at	130 msec (110 to 150)
M7 centered at	190 msec (150 to 230)
M8 centered at	270 msec (230 to 310)
M9 centered at	380 msec (310 to 450)
M10 centered at	520 msec (450 to 590)
M11 centered at	705 msec (590 to 820)
M12 centered at	935 msec (820 to 1050)
M13 centered at	1230 msec (1050 to 1410)
M14 centered at	1590 msec (1410 to 1770)
$M_x$ centered at	870 msec (690 to 1050)

The apparent resistivity is calculated from  $V_p$ , the transmitted current and the appropriate geometric or K factors. M4 to M14 define the IP decay curve. The M12 or  $M_x$  slice is commonly presented in contoured pseudosections.

JVX has chosen the above settings for  $M_x$  in order to better reflect an IP measurement from the older Scintrex IPR11 time domain receiver. In IPR11 surveys from the 1980s, this chargeability window was most often plotted and experience gained is based in part on this measurement.

The IPR12 also calculates the theoretical decay that best fits the measured decay. The theoretical decay is based on the Cole-Cole impedance model applied in the 1970s. The fit is based on a set of theoretical master curves with restrictions that limit the value of the calculation. JVX uses a different method to calculate impedance parameters (see below).

The Instrumentation GDD Inc. GDD TXII 1800 watt time domain IP transmitter operates off 120V output from a 2000 watt motor generator. Output is current stabilized from 150 to 2400 volt taps. The maximum current is 10 amps. Current and circuit resistance are displayed in digital form.

### Data Processing and Presentation

#### Grid

UTM coordinates at two or more well separated stations for each line were recorded with a hand held GPS receiver. These UTM coordinate – line/station pairs are loaded into a Geosoft database (gps.gdb). The rest of the grid is registered by interpolation or extrapolation from these GPS control points. UTM coordinates from the GPS receiver built into the mobile magnetometer were not recorded.

## Appendix 1 : Production, GPS control points, Instrumentation and Data Processing

### Base Map

Claim fabric has been downloaded as \*.shp files from the MNDMF claimap3 website (Copyright Queen's Printer for Ontario). A topographic base map and claim fabric are available as a \*.png image from the same source. For some maps, lakes, rivers and roads, downloaded as 1:50,000 \*.shp files from GeoGratis (Earth Sciences Sector of Natural Resources Canada), may also be shown. There are minor differences in these elements from federal and provincial sources.

### Magnetics/VLF

At the end of every survey day, data from the mobile and base station magnetometers are dumped to a PC. Output from both magnetometers are text files labelled by date and 'MAG' or 'mobile' and 'base'. Data dumps from the mobile unit show line, station, total magnetic intensity (nT), time (decimal hours), the VLF frequency, total field (pT), vertical inphase and quadrature components (ip and op) and two horizontal components (h1 and h2). Data dumps for the base unit contain time and total magnetic intensity. Subsequent processing steps are

1. Apply base station corrections to the mobile data. Corrected total magnetic intensity values are appended to the mobile files and renamed as '\*\_cor' files. Bad data or repeat values are removed.
2. Move the contents of the files containing the corrected total magnetic intensity and VLF values into a Geosoft database (\*.gdb).
3. In the database, assign UTM coordinates to each line/station using a look up procedure from gps.gdb.

Colour + line contour maps of the corrected total magnetic intensity are generated from the database using Geosoft Montaj. Random gridding with a 6.25 m grid cell is used.

### IP/Resistivity

At the end of every survey day, the IP/resistivity data are dumped from the IPR12 to a PC. Output is an ASCII \*.dmp file with the date as the file name. Raw data from each survey line are collected in ASCII \*.i12 files with the line number as the file name. The data are checked for quality and quantity. The data are archived for transfer to JVX Ltd. in Toronto.

Office data processing is based largely on Geosoft Oasis Montaj v6.3 ([www.geosoft.com](http://www.geosoft.com)). Impedance modelling software (below) is based on a suite of programs developed by JVX for the IPR11 and IPR12.

The \*.i12 files are taken into a Geosoft database and merged with the position data in gps.gdb. The IP decays are analyzed for spectral content (see below).

The results are presented as plan maps of the  $n=2$  Mx chargeability and apparent resistivity and stacked pseudosections. Stacked pseudosections show the Mx chargeability, apparent resistivity, spectral IP time constant ( $\tau$ ) and spectral IP amplitude (MIP). All are prepared with Geosoft Oasis Montaj. Random gridding is used in all cases. The pseudosections assume an ideal survey line. Plan maps show the interpolated grid, station numbers, posted values and line + colour contours.

### Impedance Modelling

The Cole-Cole impedance model was developed in the 1970s after it became clear that chargeability is a complex property that includes amplitude (volume percent electronic conductors), grain size and grain size uniformity. In this model, the low frequency electrical impedance  $Z(\omega)$  of rocks and soils is defined by 4 parameters. They are

$r_0$ :	DC resistivity in ohm.m
$m$ :	true chargeability amplitude in V/V (also called MIP)
$\tau$ :	tau - time constant in seconds
$c$ :	exponent

## Appendix 1 : Production, GPS control points, Instrumentation and Data Processing

The form of the model is

$$Z(\omega) = r_0 \{1 - m [1 - (1 + (i\omega\tau)^c)^{-1}]\} \text{ ohm.m}$$

where  $\omega$  is the angular frequency ( $2\pi f$ ).

The true chargeability (m or MIP) is a better measure of the volume percent electronic conductors - primarily pyrrhotite and graphite. The time constant is a measure of the square of the average grain size. The exponent is a measure of the uniformity of the grain size. Common or possible ranges are 0 to 1 V/V (m), .01 to 100 seconds (tau) and .1 to .5 (c).

In time domain IP surveys, impedance model parameters may be estimated using a best fit between theoretical and measured decays. The simplest approach is to use a set of master decay curves, pre-calculated for selected values of time constant and exponent. For a 2 second current pulse, the master curve set used here is for time constant values of .01, .03, .1, .3, 1, 3, 10, 30 and 100 seconds and exponent values of 0.1, 0.2, 0.3, 0.4 and 0.5. This gives a total of 45 master curves.

All decays that give an RMS fit between measured and master decay of less than 5% are judged to be of sufficient quality to yield spectral IP parameters.

Under ideal conditions, more than 90 % of the IP decays in any survey are of sufficient amplitude and quality to yield spectral parameters. 80 % is probably average for most surveys. The most common reason for the lack of spectral parameters is very low decay amplitudes – often seen in areas of thick and/or conductive overburden. Instrumentation and/or noise problems can occur over long sections of outcrop or at an abrupt boundary between outcrop and conductive ground.

### Pseudosections

The pseudosections are plotted using standard depth and position conventions. The plot point for any measured quantity for the  $n^{\text{th}}$  potential dipole pair is  $(n + \frac{1}{2})a/2$  m forward of and below the current electrode. Pole-dipole anomaly shapes depend on array orientation. The array sketch shown with each pseudosection shows the correct array orientation.

These plot forms have been found to give a reasonable image of target-top location, width and depth where 1) the anomalously chargeable and/or resistive body is an isolated, tabular body with a dip that is within  $\pm 45^\circ$  of vertical, 2) where background chargeabilities and resistivities (overburden and host rock) are uniform and 3) where the terrain is relatively flat. They are more difficult to interpret for irregular or nearby chargeable bodies and where there is any amount of conductive cover or topographic relief. Forward or inverse modelling may be useful in such cases.

For Mx, MIP and apparent resistivity, colour contour intervals in the pseudosections are taken from equal area distribution for the whole grid. Colour assignments for the spectral 'tau' and 'c' are fixed.

### **Archives**

The results of the survey are archived on CD. Included on the CD is the Oasis Montaj viewer. File types include

- ASCII \*.txt or \*.dmp or \*.xyz – text files, including instrument data dumps
- ASCII \*.i12 – IPR12 collated raw data dumps
- \*.gdb - Geosoft databases (gps, magnetics/VLF, IP/resistivity)
- \*.map – Geosoft format pseudosections and maps included with this report
- MS WORD \*.doc and Adobe Acrobat \*.pdf – this report

**Appendix 2  
Weekly Field Production Reports**

**JVX Ltd.  
Weekly Field Production Report – Magnetic/VLF Survey**

Project No 9-60	Client: <b>Augen Gold</b>	Area: Jerome Mine	Week Ending: Dec.12/2009
-----------------	---------------------------	-------------------	--------------------------

Day	Description of Work	Grid	Line	From	To	Length
Sun 6	Mag NOTE: Lines not chained north of BL are L50E & L53E. Line that is not chained at all is L52E.	Schist Lake	5500E	8900N	9675N	775M
			5400E	9550N	8887.5N	662.5M
			5300E	8900N	9375N	400M
			5200E	9400N	8950N	450M
			5100E 5000E	8950N 9425N	9325N 8925N	375M 500M
Mon 7	Mag NOTE: Lines not chained are L46E, 47E, 48E; also old power Line on L48E caused noise on VLF readings. Took wpts on Chester grid BL and located ddhs on Chester grid.	Schist Lake	4900E	9150N	9575N	425M
			4800E	9600N	9175N	425M
			4700E	9150N	9550N	400M
			4600E	9625N	9175N	450M
Tue 8	Chaining error: Line 8+300E is marked Line 8+200E in the bush and Line 8+400E is marked 8+300E in the bush. All other lines are marked correctly.	Chester Gold	B00	9300E	8300E	1000M
			8300E	275S	200N	475M
			8400E	275N	300S	575M
			T 300S	8300E	9000E	700M
			9000E	300S	300N	600M
			8900E	275N	300S	575M
			8800E 8700E 8600E	300S 325N 300S	325N 300S 300N	625M 625M 600M
Wed. 9	Weather (winter storm).					
Thurs 10	Mag survey. Chester grid is finished	Chester Gold	9300E	175N	225S	400M
			9200E	200S	250N	450M
			9100E	200S	200N	400M
			8500E	300S	225N	525M
Fri. 11						
Sat. 12						

Personnel	Name	S	M	T	W	T	F	S
Geophysicist								
Operator	Scott Mortson	x	x	x	x	x		
Assistant								



**JVX Ltd.**  
**Weekly Field Production Report – IP/Resistivity Survey**

Project No 9-60	Client: <b>Augen Gold</b>	Area: Jerome Mine	Week Ending: Jan.30/2010
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Day	Description of Work	Grid	Line	From	To	Length
Sun. 24	Lay out access & setup. Start reading on line 8900E. Read line complete. Change lines & start 9000E, read to BL. Starts raining @ 1:28 PM. Used two snow-machines today.	Chester Gold	8900E	325S	250N	575M
			9000E	325S	0N	325M
Mon. 25	Weather Day, rain all day. Go to Watershed & meet with Frank (Gord off). Bring Frank up to speed on everything going on, & arrange to have grader sent into grid, as if this freezes there is no way I'll make it up the road. Trip to Timmins for groceries & supplies.	Chester Gold				
Tues. 26	Out to grid, generator not running right. Get it going & finish line 9000E. Move & setup on 9100E. Generator getting worse. Have to shut it down. Back to town & bring it in for repair. The repair man works on it & says the rings are probably shot. Will have to bring out Hunttec. Used two snow-machines.	Chester Gold	9000E	0N	300N	300M
Wed. 27	Out to grid, using Hunttec Tx. Read lines 9100, 9200, & 9300E Complete. East end of grid finished. Move back to start West end @ 8800E to 8300E. Used two snow-machines.	Chester Gold	9100E	225S	200N	425M
			9200E	225S	250N	475M
			9300E	225S	150N	375M
Thurs 28	Out to grid using GDD Tx. Setup & read lines 8800, 8700E Complete. -20C all day, about -28C with wind. Back to truck, too cold to setup on line 8600E. Used two snow-machines.	Chester Gold	8800E	325S	300N	625M
			8700E	325S	300N	625M
Fri. 29	Too cold -30C without wind-chill factor. Wait until 10:00 am, still too cold for IP. Go to Huffman, cannot find any new lines off road. Will have to back with snow-machine & go down & walk Base-line, to see what's been cut. It is now 1:30 PM & still -25C without wind-chill factor.	Huffman				
Sat. 30	Out to grid & setup, read Lines 86, 85, & 8400E Complete.	Chester Gold	8600E	325S	300N	625M
			8500E	325S	200N	525M
			8400E	325S	250N	575M

Personnel	Name	S	M	T	W	T	F	S
Geophysicist								
Operator	Rob St. Michel	x	x	x	x	x	x	x
Operator	Rob Raby	x	x	x	x	x	x	x
Assistant	Dean McNichol	x	x	x	x	x	x	x
Assistant	Brandon Martel	x	x	x	x	x	x	x
Assistant	Jim Corbeil	x	x	x	x	x	x	x
Assistant								

**Appendix 2 : Weekly Field Production Reports**

**JVX Ltd.  
Weekly Field Production Report – IP/Resistivity Survey**

Project No 9-60	Client: <b>Augen Gold</b>	Area: Jerome Mine	Week Ending: Feb.6/2010
-----------------	---------------------------	-------------------	-------------------------

Day	Description of Work	Grid	Line	From	To	Length
Sun. Jan 31	Out to grid & read line 8300E Complete. Pick up all wire & cleanup. Go to Schist Grid for Ski-Doo Trailer. Pack up all gear & machines. Chester Grid Complete, & Schist Grid finished for now.	Chester Gold	8300E	325S	200N	525M
Mon. Feb 1	Meet with Client for more info. On Huffman Grid. Out to Huffman & go by snow-machine down to base-line @ Line6400E, this is where the last project ended & the grid was supposed to be extended from. There is no new base-line cut to East. The plan was to have a man walk each line to see start points @ North End, as I knew they did not go all the way because of Lake, (& or) creeks. Go back around other end to North to Felix Lake to see if any lines were cut over there, Nothing has been done, there is no grid extension @ this point. Go back & meet with client (Gord) again & inform him, he wants to know if JVX can cut this grid. About 12KM. Back to room & phone office & talk to Chris about situation.	Huffman East Grid				
Tues. Feb 2	Pack up & pull out of Augen for now. Waiting for line-cutters.					
Wed. Feb 3						
Thurs Feb 4						
Fri. Feb 5						
Sat. Feb 6						

Personnel	Name	S	M	T	W	T	F	S
Geophysicist								
Operator	Rob St. Michel	X	X	X				
Operator	Rob Raby	X	X	X				
Assistant	Dean McNichol	X	X	X				
Assistant	Brandon Martel	X	X	X				
Assistant	Jim Corbeil	X	X	X				
Assistant								

### Appendix 3 Map Images

The results of the surveys are presented on 4 plan maps at 1:5000 and 11 stacked pseudosections at 1:2500. Colour/line contours, posted values, claim fabric and the survey grid of the 4 plan maps are shown here. Map surrounds and coordinates are not shown here. The 4 plan maps are

- total magnetic intensity contours
- VLF offset profiles, vertical inphase and quadrature, 24.0 kHz
- n=2 Mx chargeability contours
- n=2 apparent resistivity contours

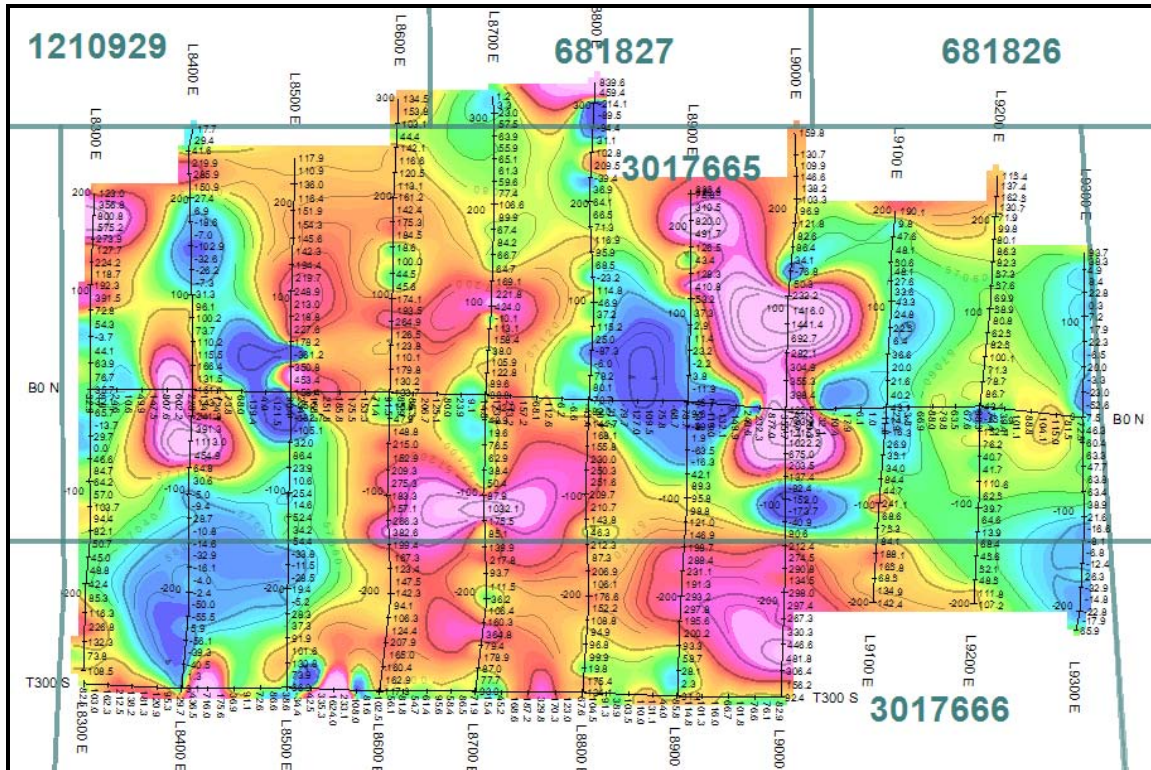


Figure 1. Total magnetic intensity

Appendix 3 : Map Images

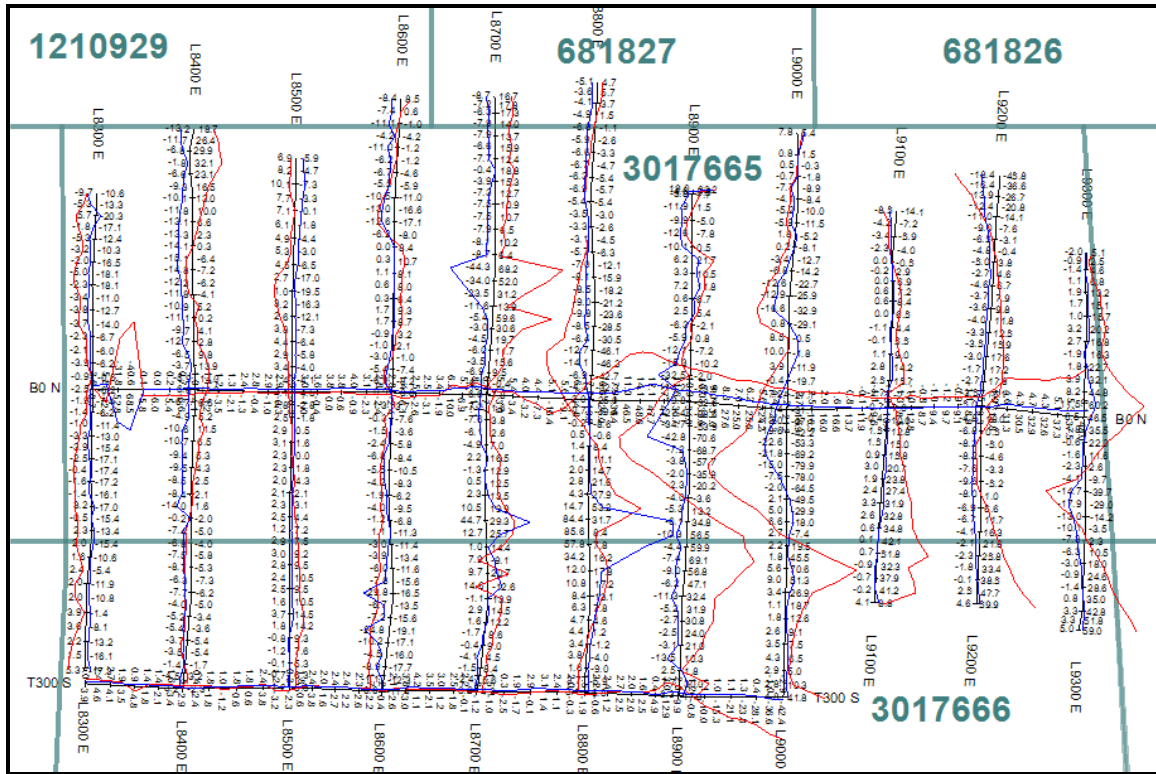


Figure 2. VLF offset profiles

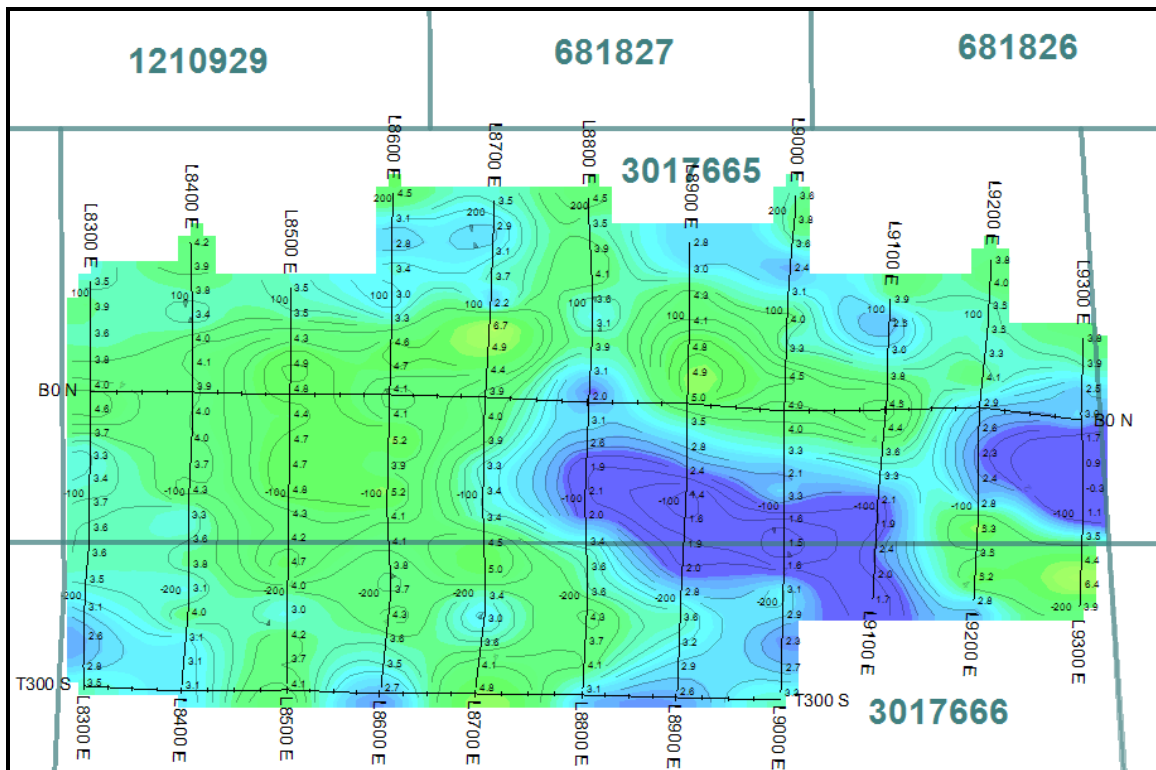


Figure 3. n=2 Mx chargeability

Appendix 3 : Map Images

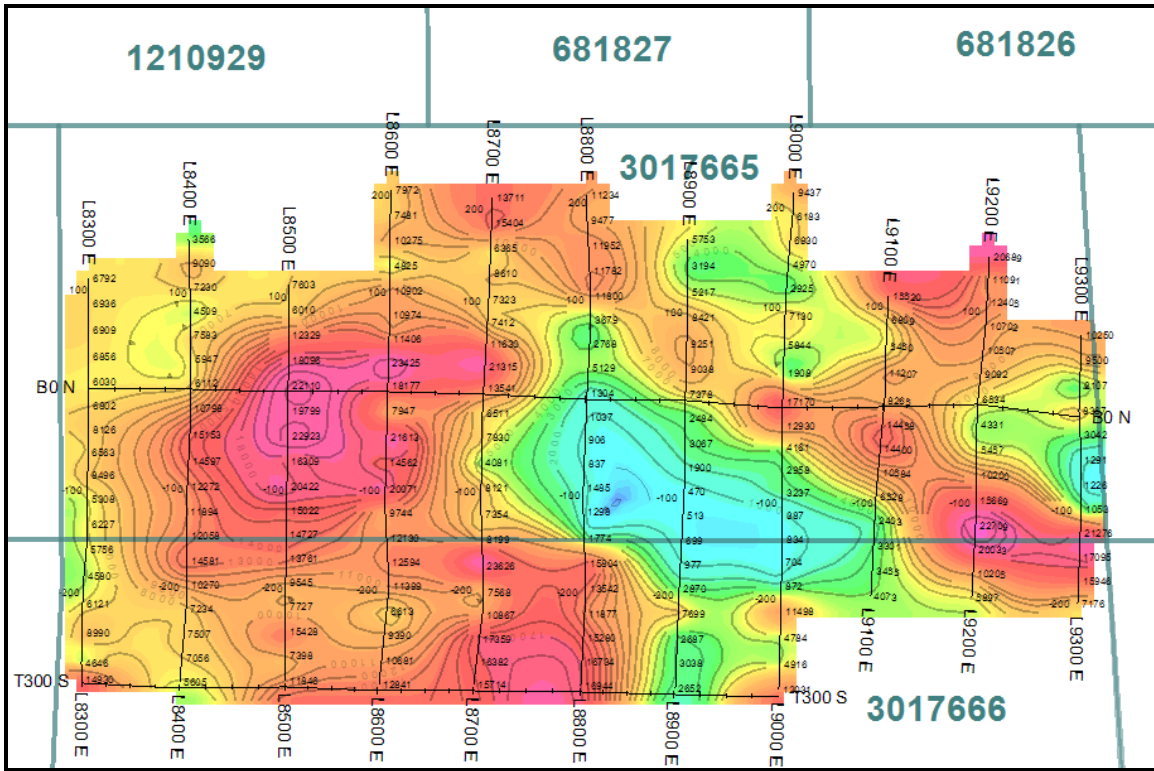


Figure 4. n=2 apparent resistivity

v7.0



# Overhauser

Magnetometer / Gradiometer / VLF (GSM-19 v7.0)

GEM's unique Overhauser system combines data quality, survey efficiency and options into an instrument that matches costlier optically pumped Caesium devices.

And the latest v7.0 technology upgrades provide even more value:

Data export in standard XYZ (i.e. line-oriented) format for easy use in standard commercial software programs

Programmable export format for full control over output

GPS elevation values provide input for geophysical modeling

Enhanced GPS positioning resolution  
<1.5m standard GPS for high resolution surveying  
<1.0m OmniStar GPS  
<0.7m for newly introduced CDGPS

Multi-sensor capability for advanced surveys to resolve target geometry

Picket marketing / annotation for capturing related surveying information on-the-go

And all of these technologies come complete with the most attractive savings and warranty in the business!



Overhauser (GSM-19) console with sensor and cable. Can also be configured with additional sensor for gradiometer (simultaneous) readings.

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment -- representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

- o Mineral exploration (ground and airborne base station)
- o Environmental and engineering
- o Pipeline mapping
- o Unexploded Ordnance Detection
- o Archeology
- o Magnetic observatory measurements
- o Volcanology and earthquake prediction

## Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices -- except that they produce an order-of-

magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal -- that is ideal for very high-sensitivity total field measurements.

In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and eliminates noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously -- which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

Other advantages are described in the section called, "GEM's Commercial Overhauser System" that appears later in this brochure.

## 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.

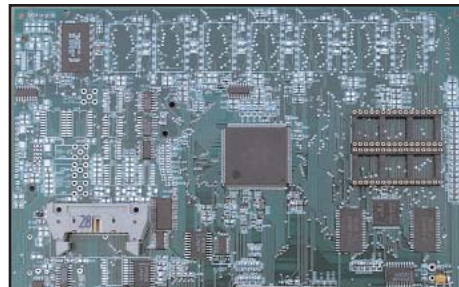
Key products include the QuickTracker™ Proton Precession, Overhauser and SuperSenser™ Optically-Pumped Potassium instruments. Each system offers unique benefits in terms of sensitivity, sampling, and acquisition of high-quality data. These core benefits are complemented by GPS technologies that provide 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 / $\sqrt{\text{Hz}}$ @ 1 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 - 16 MB (# of Readings)

Mobile:	838,860
Base Station:	2,796,202
Gradiometer:	699,050
Walking Mag:	1,677,721

### 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:



## **IPR-12**

### Induced Polarization



# IPR-12 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 µvolt 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 10 ms 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 ±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.

## 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 100/230V, 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

GGT-3      GGT-10

\* All specifications are subject to change without notice.



## CANADA

### Scintrex

222 Snidercroft Road  
Concord, Ontario, Canada L4K 2K1  
Telephone: +1 905 669 2280  
Fax: +1 905 669 6403  
e-mail: [scintrex@scintrexltd.com](mailto:scintrex@scintrexltd.com)  
Website: [www.scintrexltd.com](http://www.scintrexltd.com)

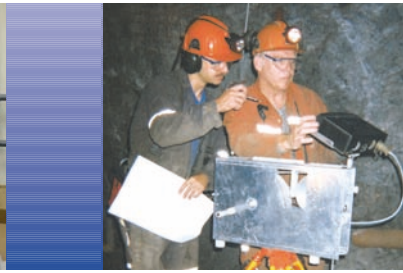
## USA

### Micro-g LaCoste

1401 Horizon Avenue  
Lafayette, CO 80026  
Telephone: +1 303 828 3499  
Fax: +1 303 828 3288  
e-mail: [info@microglacoste.com](mailto:info@microglacoste.com)  
website: [www.microglacoste.com](http://www.microglacoste.com)



Canadian Manufacturer of  
Geophysical Instruments Since 1976



# Induced Polarization Transmitter

## TxII-1800 Model

## TxII-3600 Model



**New feature: link two GDD 1800 W or 3600 W IP TX together and increase the power.**

### TxII-1800 Model, 1800 watts

Its high power combined with its light weight and a 21 kg / 2000 W Honda generator makes it particularly suitable for dipole-dipole Induced Polarization surveys.

- Protection against short circuits even at zero (0) ohm
- Output voltage range: 150 V - 2400 V / 14 steps
- Power source: 120 V - Optional: 220 V, 50 / 60 Hz
- Displays electrode contact, transmitting power and current
- Three years warranty on parts and labour

This backpackable 1800 watts Induced Polarization (I.P.) transmitter works from a standard 120 V source and is well adapted to rocky environments where a high output voltage of up to 2400 volts is needed. Moreover, in highly conductive overburden, at 150 V, the highly efficient TxII-1800 watts transmitter is able to send a current of up to 10 A. By using this I.P. transmitter, you obtain fast and high-quality I.P. readings even in the worst conditions. Link two GDD 1800 W IP TX together and transmit up to 3600 watts.

### TxII-3600 Model, 3600 watts

Its high power combined with a Honda generator makes it particularly suitable for pole-dipole Induced Polarization surveys.

- Protection against short circuits even at zero (0) ohm
- Output voltage range: 150 V - 2400 V / 14 steps
- Power source: 220 V, 50 / 60 Hz - standard 220 V generator
- Displays electrode contact, transmitting power and current
- Three years warranty on parts and labour

This 3600 watts Induced Polarization (I.P.) transmitter works from a standard 220 V source and is well adapted to rocky environments where a high output voltage of up to 2400 volts is needed. Moreover, in highly conductive overburden, at 350 V, the highly efficient TxII-3600 watts transmitter is able to send a current of up to 10 A. By using this I.P. transmitter, you obtain fast and high-quality I.P. readings even in the most difficult conditions. Link two GDD 3600 W IP TX together and transmit up to 7200 watts.

## SPECIFICATIONS

### TxII-1800 W

- Size: 21 x 34 x 39 cm.
- Weight: approximately 20 kg.
- Operating temperature: -40° C to 65° C.

### TxII-3600 W

- 51 X 41.5 X 21.5 cm – built-in transportation box from Pelican.
- Weight: approximately 32 kg.
- Operating temperature: -40° C to 65° C.

## ELECTRICAL CHARACTERISTICS

### TxII-1800 W and TxII-3600 W

- Standard time base of 2 seconds for time-domain: 2 seconds ON, 2 seconds OFF.
- Optional time base: DC, 0.5, 1, 2, 4 or DC, 1, 2, 4, 8 seconds.
- Output current range: 0.030 to 10 A (normal operation).  
0.000 to 10 A (cancel open loop).
- Output voltage range: 150 to 2400 V / 14 steps.
- Ability to link 2 GDD transmitters to double power (Master / Slave).

## CONTROLS

### TxII-1800 W and TxII-3600 W

- Power ON/OFF.
- Output voltage range switch: 150 V, 180 V, 350 V, 420 V, 500 V, 600 V, 700 V, 840 V, 1000 V, 1200 V, 1400 V, 1680 V, 2000 V, 2400 V.

## DISPLAYS

### TxII-1800 W and TxII-3600 W

- Output current LCD: reads to  $\pm 0.001$  A.
- Electrode contact displayed when not transmitting.
- Output power displayed when transmitting.
- Automatic thermostat controlled LCD heater for readout.
- Total protection against short circuits even at zero (0) ohm.
- Indicator lamps in case of overload:
  - High voltage ON/OFF
  - Output overcurrent
  - Generator over or undervoltage
  - Overheating
  - Logic fail
  - Open Loop Protection

## POWER

### TxII-1800 W

Recommended generator:

- Standard 120 V / 60 Hz backpackable Honda generator.
- Suggested Models: EU1000iC, 1000 W, 13.5 kg  
or EU2000iC, 2000 W, 21.0 kg.

### TxII-3600 W

Recommended generator:

- Standard 220 V, 50/ 60 Hz Honda generator.
- Suggested Models: EM3500XK1C, 3500 W, 62 kg  
or EM5000XK1C, 5000 kw, 77 kg.

## DESCRIPTION

### TxII-1800 W

- Includes shipping box, instruction manual and 110 V plug.
- Optional backpackable frame for transmitter or generator.

### TxII-3600 W

- Includes built-in shipping box, instruction manual and 220 V plug.
- Optional 220 V extension.

## SERVICE

Any instrument manufactured by GDD that breaks down while under warranty or service contract is replaced free of charge upon request, subject to instrument availability.

## WARRANTY

- Standard three-year warranty on parts and labour.
- Repairs done at GDD's office in Sainte-Foy, QC, Canada.



**Instrumentation  
GDD inc.**

3700, boul. de la Chaudière, suite 200  
Sainte-Foy (Québec) Canada G1X 4B7

**Tel. : (418) 877-4249**  
**Toll Free : 1-877-977-4249**  
**Fax : (418) 877-4054**

Web Site: [www.gddinstrumentation.com](http://www.gddinstrumentation.com)  
E-Mail: [gdd@gddinstrumentation.com](mailto:gdd@gddinstrumentation.com)

*Specifications subject to change without notice.*

*Taxes, transportation and duties are extra if applicable.*

**Instruments available for rental or sale.**

© Copyright 2005 Instrumentation GDD inc.



## Motor Generator - Model MG 2



Output: 60 - 100V AC  
400 Hz / 3 Phase  
2 KVA

Generator: Leece - Neville  
(modified)  
60 AMP Rated.

Engine: 5.5 - 6.5 HP Honda

Size: 62cm x 42cm x 37cm

Weight: 35 kg.

Backpackable

**Address: 2106 Regional Rd. 3  
Enniskillen, Ontario, Canada  
LOB 1J0  
Phone: (905) 263-8761 Fax: (905) 263-8766  
[www.GeophysicsCanada.com](http://www.GeophysicsCanada.com)**

Supplier of Gen Sets for the Mineral Exploration Industry



# WALCER Geophysics Limited

## Huntec Transmitters – M-2 & M-4 / Dummy Loads Sales – Service – Modifications



Dummy Load



Model 7500 8.8 KVA



Dummy Load

Model 2500 2.5 KVA

125V line to neutral  
400 Hz / 3 Phase  
Powered by MG-12

100 - 3200V in 10 steps  
0.5 - 16 Amps

53cm x 43cm x 43cm

50 kg.

### Power Input

125V line to line  
400 Hz / 3 Phase  
Powered by MG-2.5

### Output

150 - 2200V in 8 steps  
0.2 - 7 Amps

### Size

53cm x 43cm x 43cm

### Weight

25 kg.

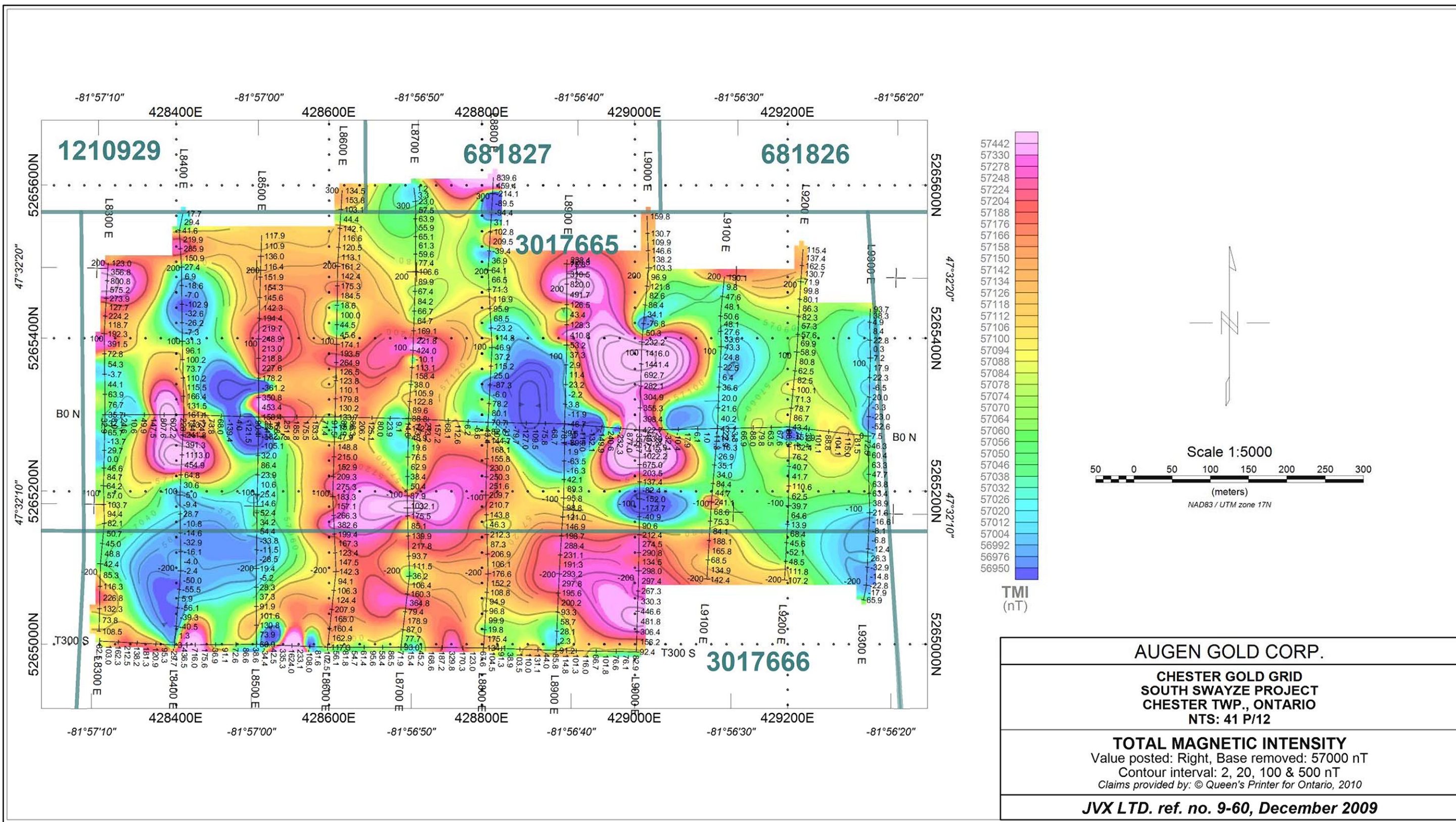
Reconditioned transmitters available with warranty.

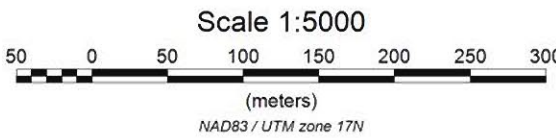
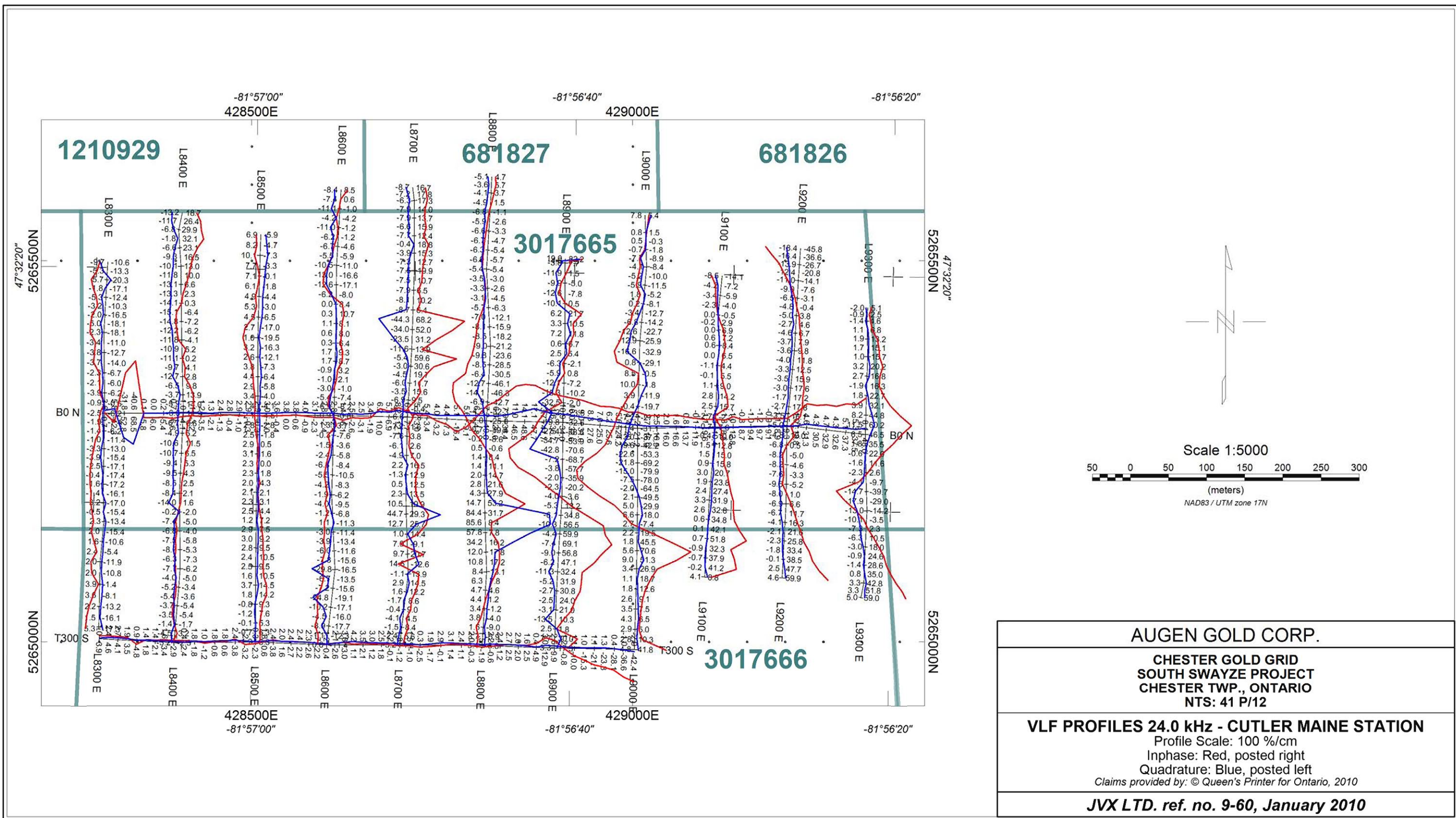
### Address:

**2106 Regional Rd. 3  
Enniskillen, Ontario, Canada  
L0B 1J0**

**Phone: (905) 263-8761 Fax: (905) 263-8766**

**[www.GeophysicsCanada.com](http://www.GeophysicsCanada.com)**



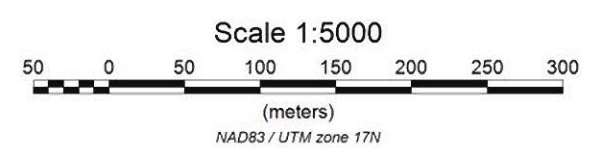
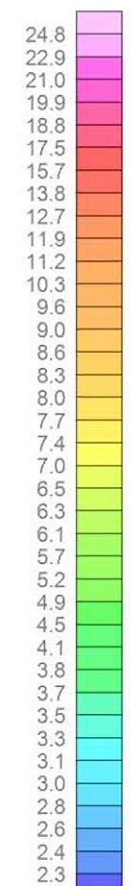
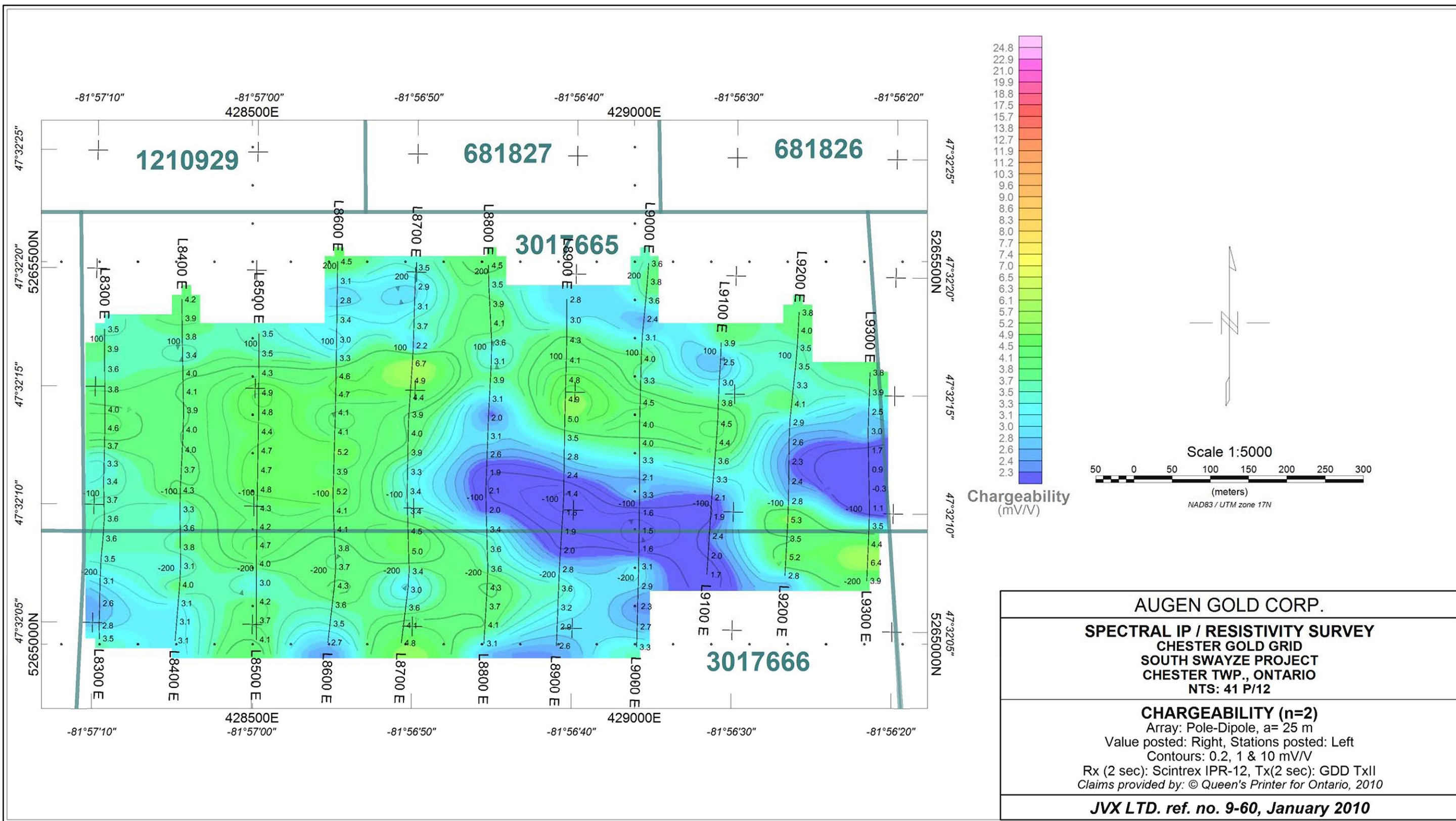


**AUGEN GOLD CORP.**

**CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT  
CHESTER TWP., ONTARIO  
NTS: 41 P/12**

**VLF PROFILES 24.0 kHz - CUTLER MAINE STATION**  
Profile Scale: 100 %/cm  
Inphase: Red, posted right  
Quadrature: Blue, posted left  
Claims provided by: © Queen's Printer for Ontario, 2010

**JVX LTD. ref. no. 9-60, January 2010**



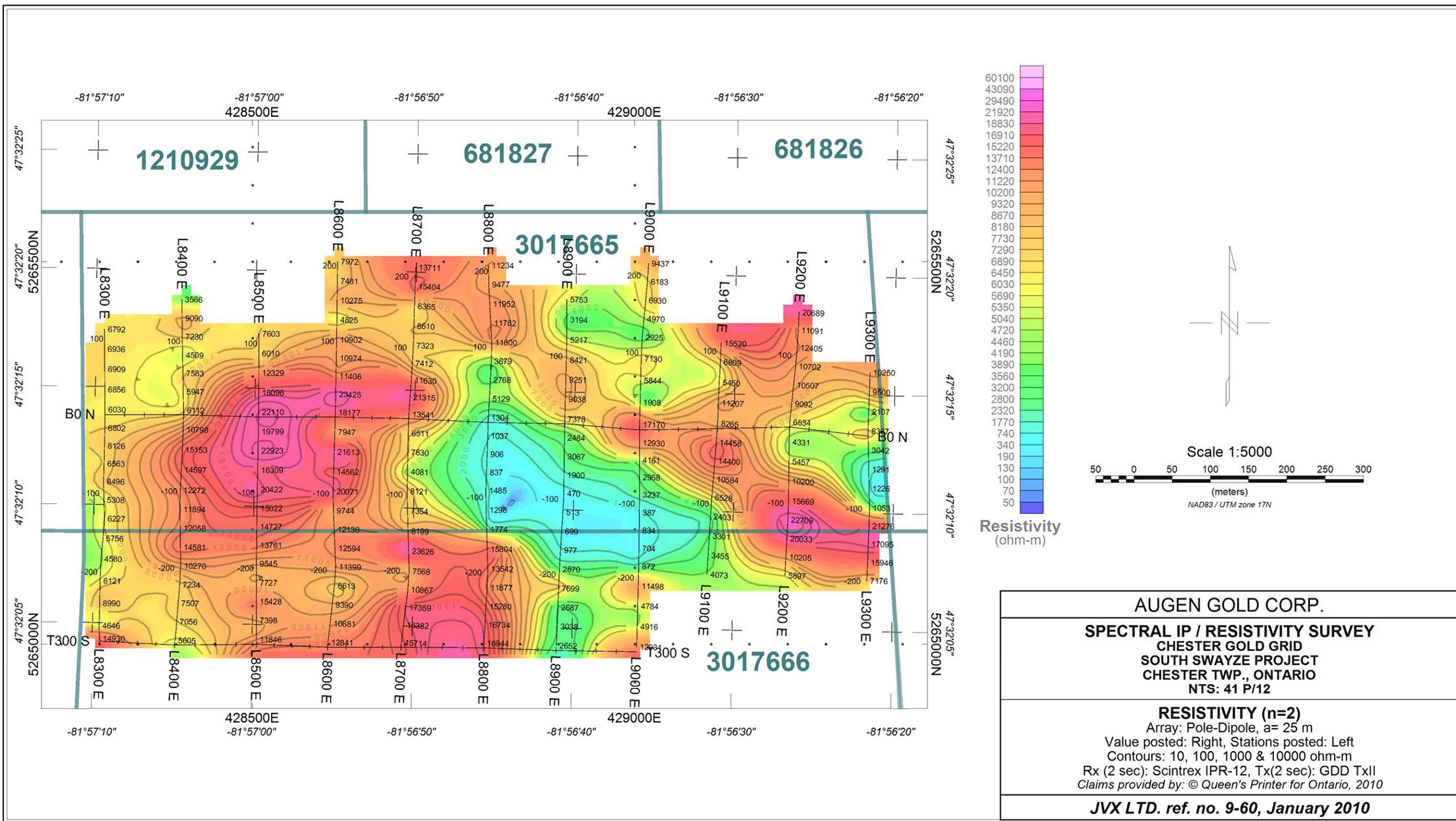
**AUGEN GOLD CORP.**

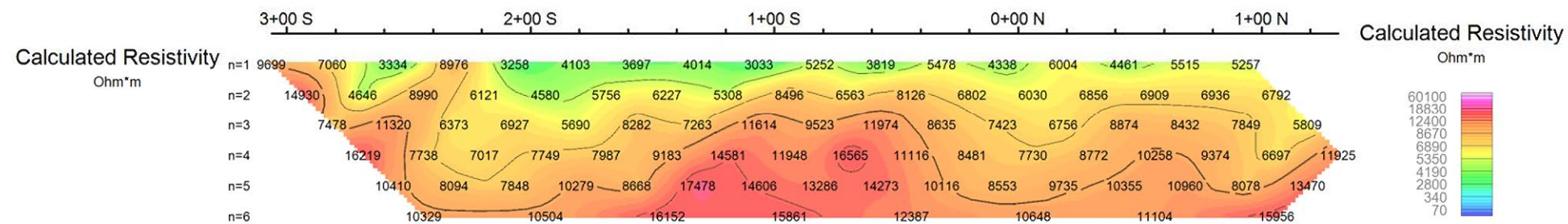
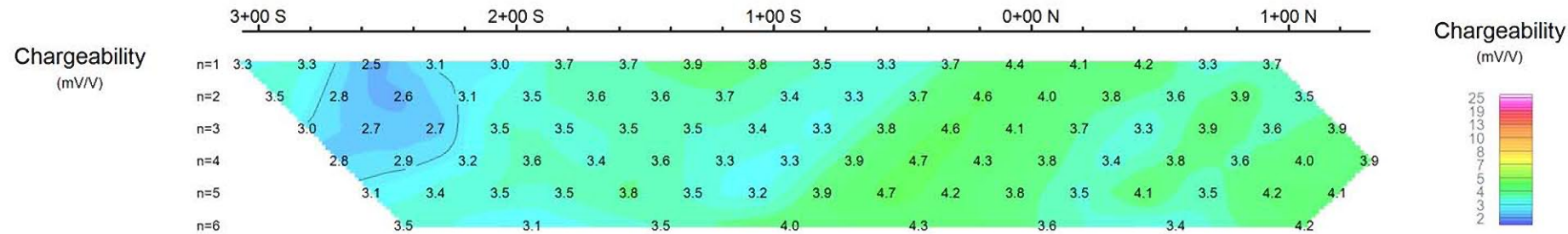
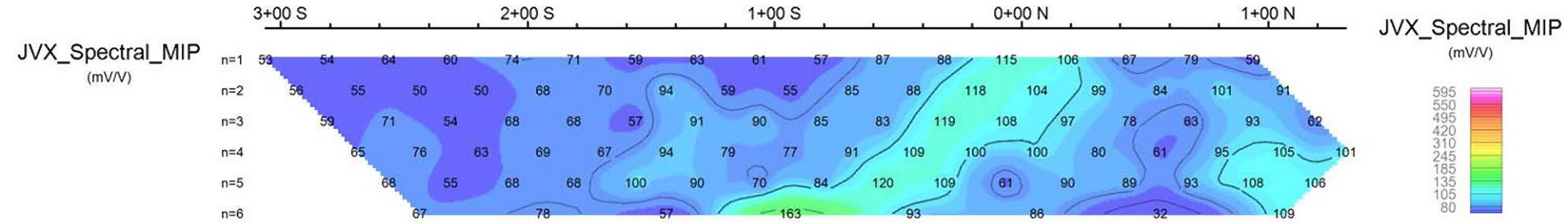
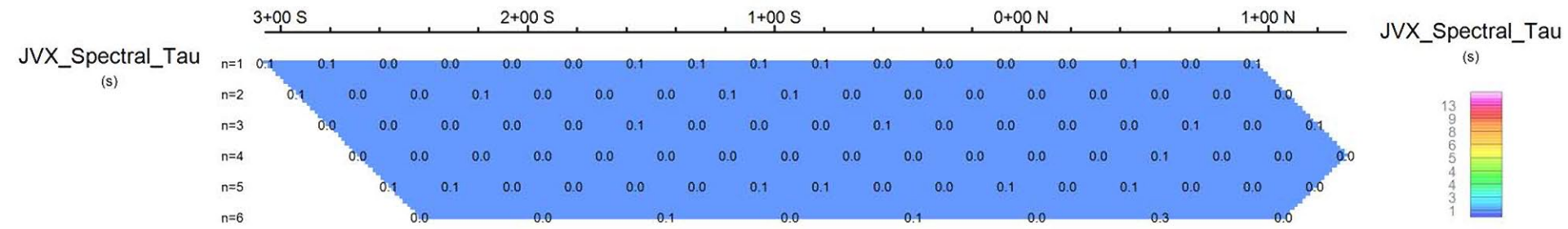
**SPECTRAL IP / RESISTIVITY SURVEY**  
**CHESTER GOLD GRID**  
**SOUTH SWAYZE PROJECT**  
**CHESTER TWP., ONTARIO**  
**NTS: 41 P/12**

**CHARGEABILITY (n=2)**  
 Array: Pole-Dipole, a= 25 m  
 Value posted: Right, Stations posted: Left  
 Contours: 0.2, 1 & 10 mV/V  
 Rx (2 sec): Scintrex IPR-12, Tx(2 sec): GDD TxII  
 Claims provided by: © Queen's Printer for Ontario, 2010

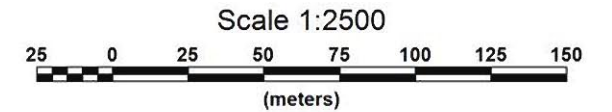
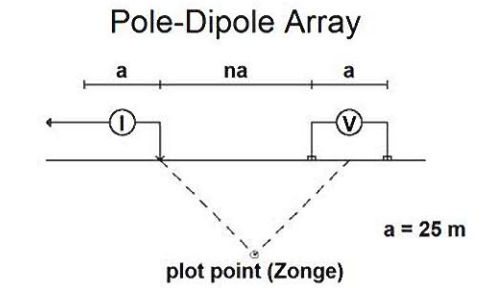
**JVX LTD. ref. no. 9-60, January 2010**







**Pseudo Section Plot**  
83+00 E



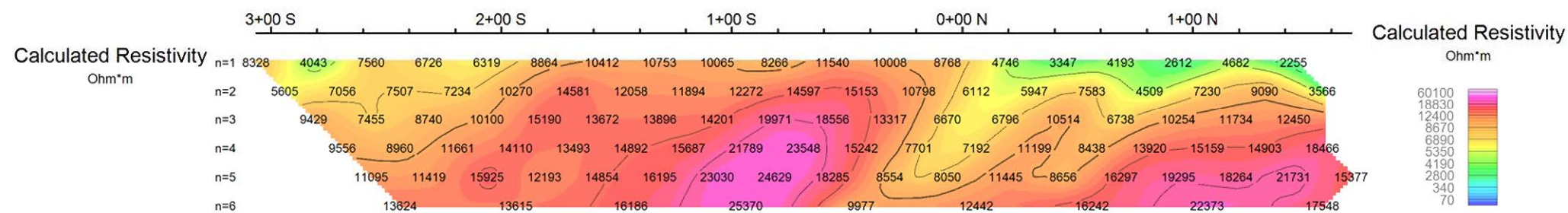
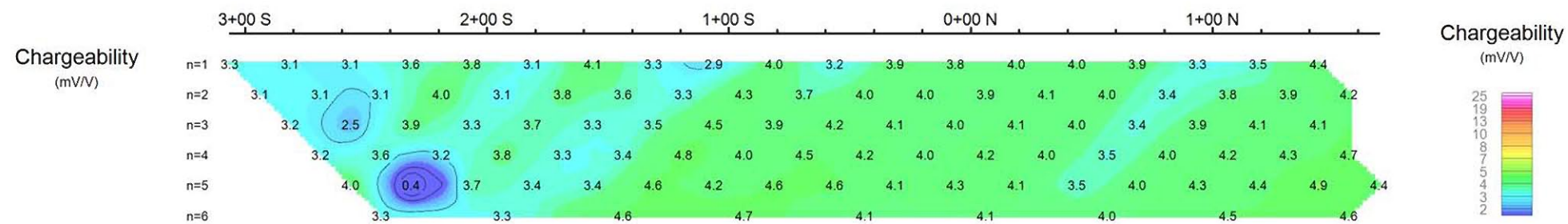
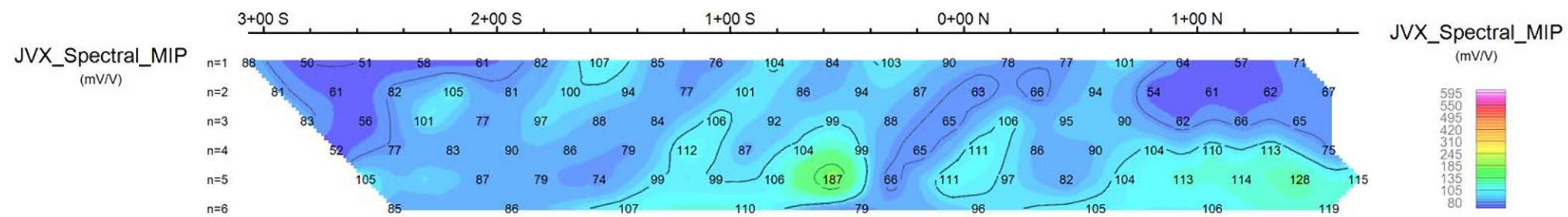
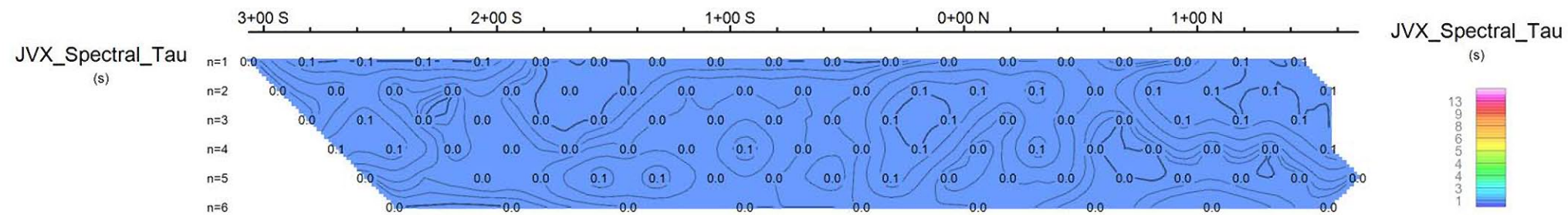
**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**

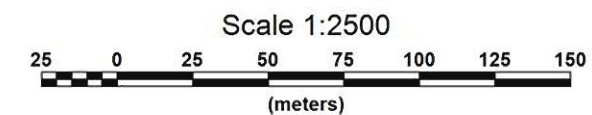
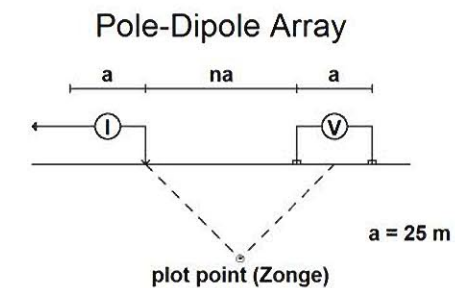
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 01/02/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



**Pseudo Section Plot**  
**84+00 E**

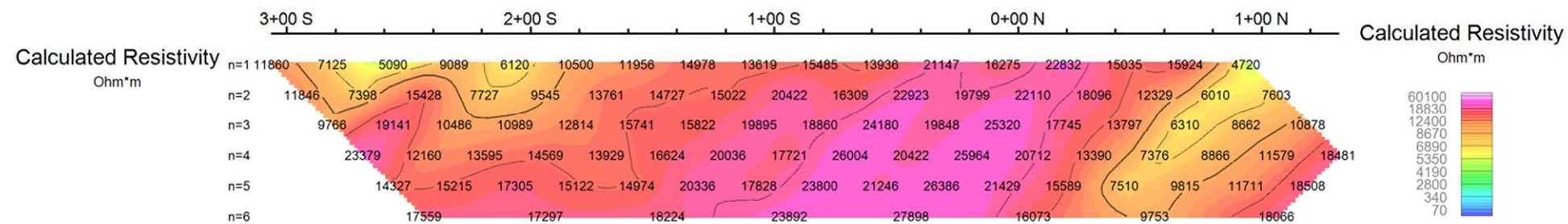
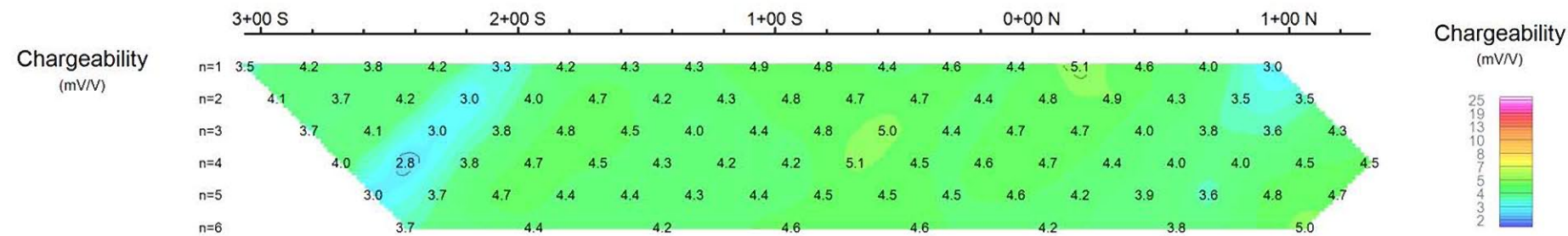
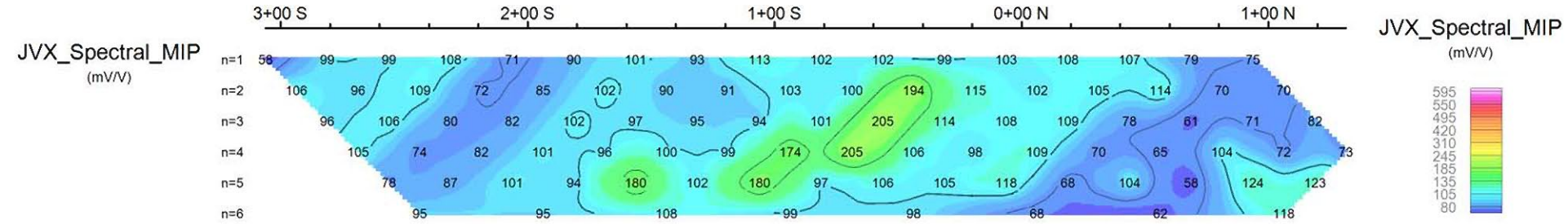
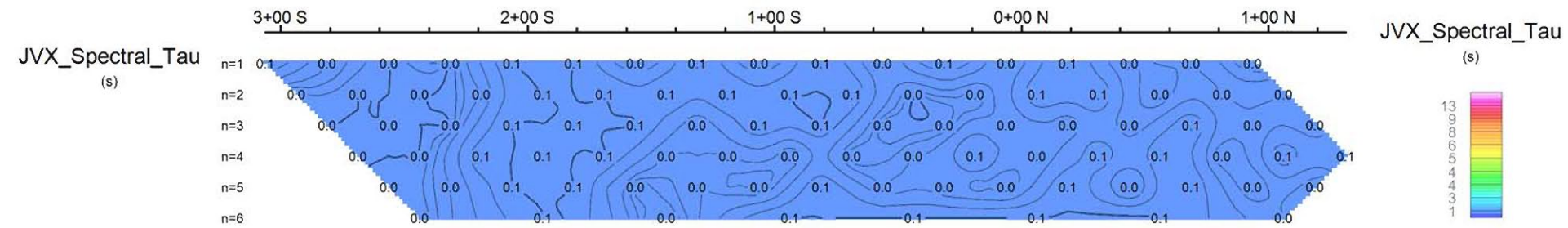


**AUGEN GOLD CORP.**

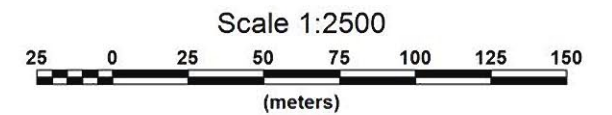
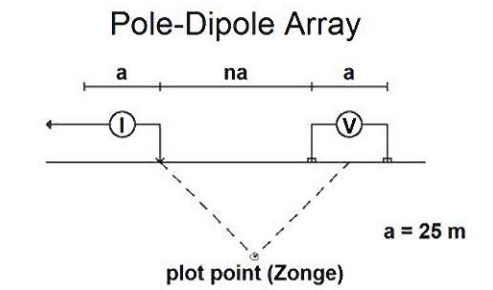
**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 01/02/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



**Pseudo Section Plot**  
**85+00 E**



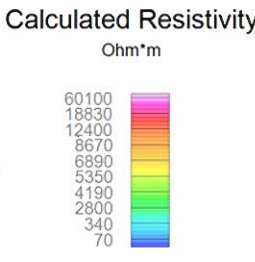
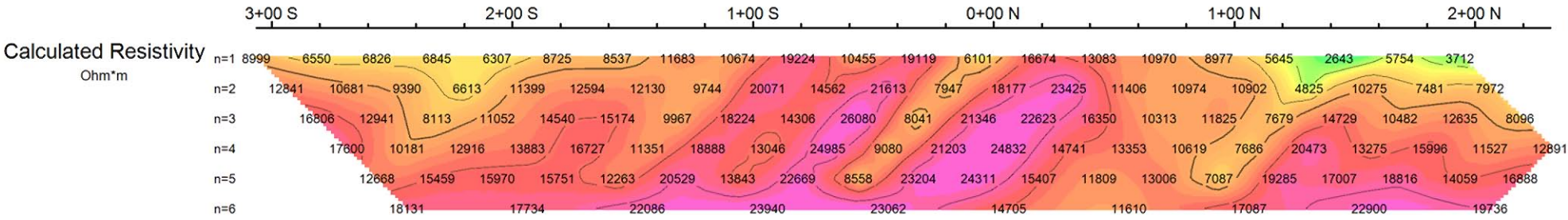
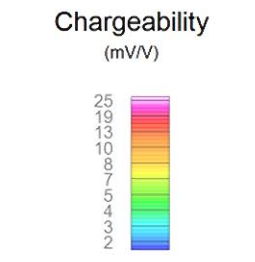
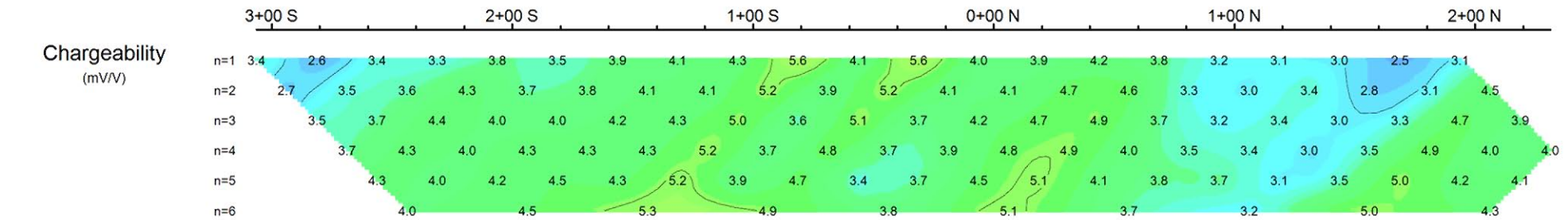
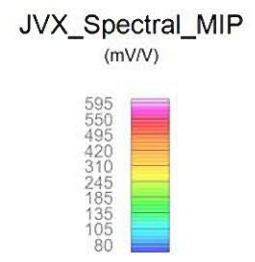
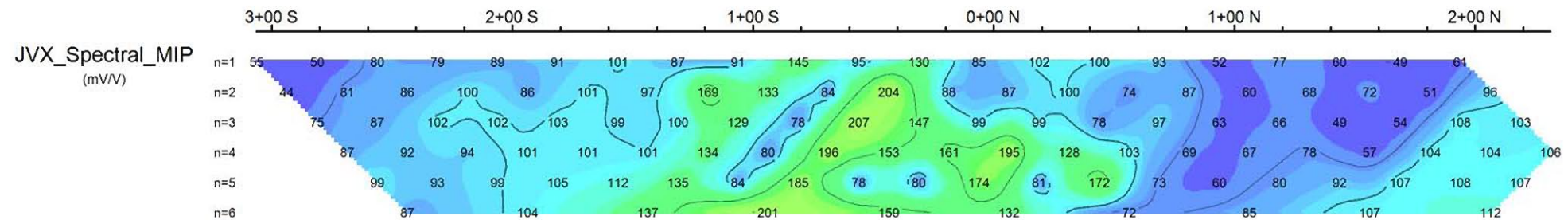
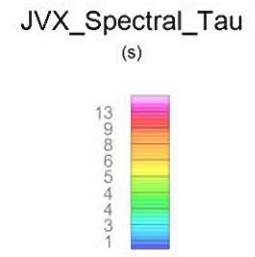
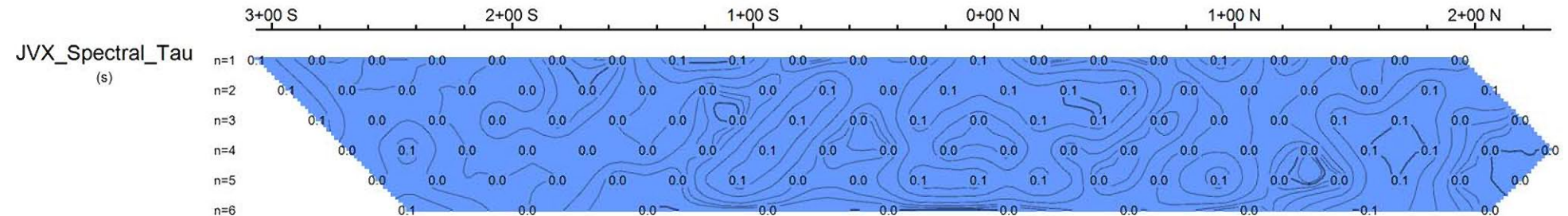
**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**

CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

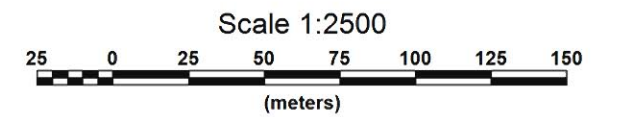
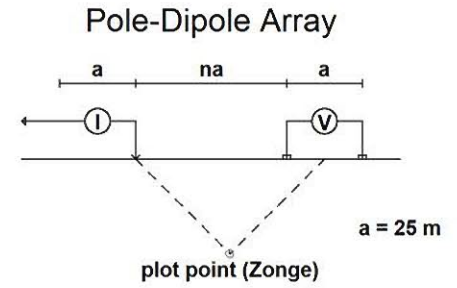
Date: 30/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



### Pseudo Section Plot

86+00 E

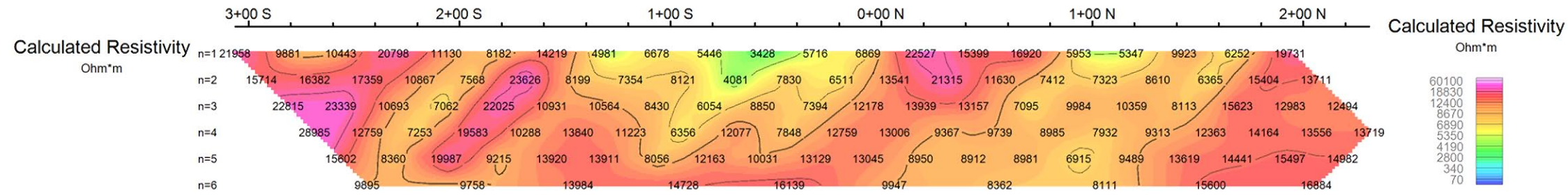
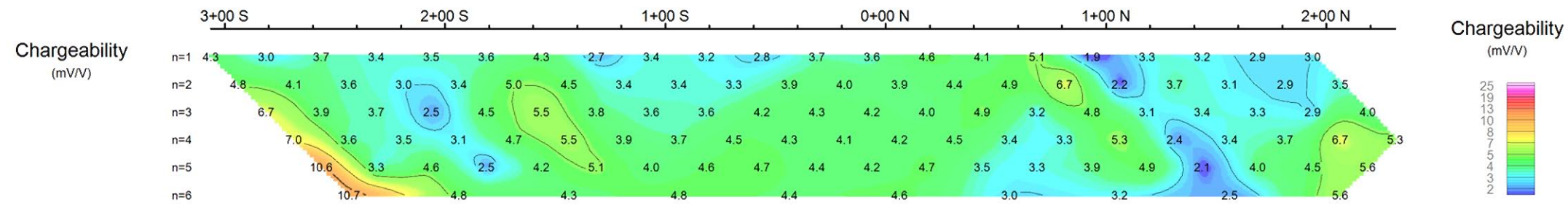
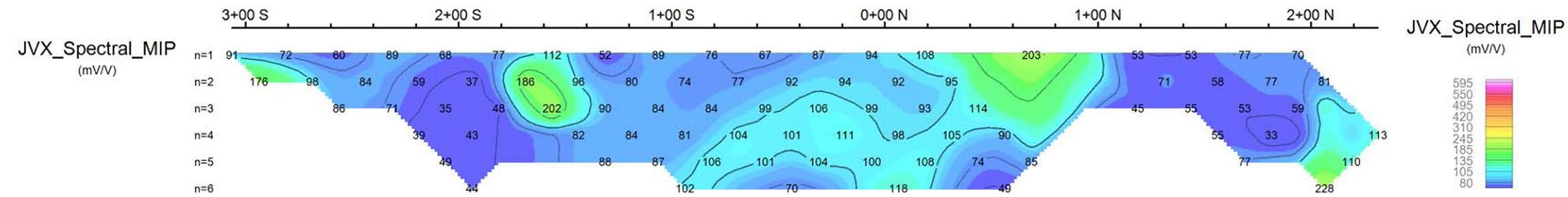
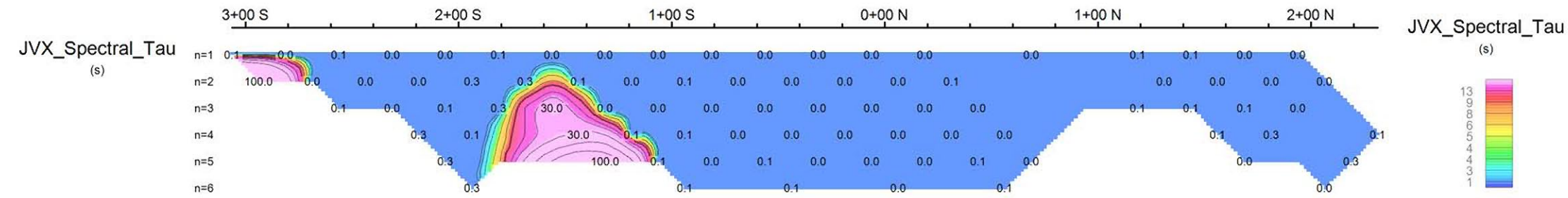


**AUGEN GOLD CORP.**

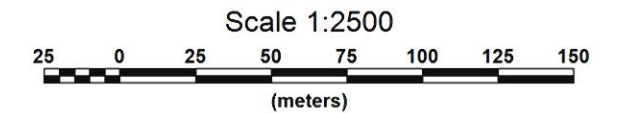
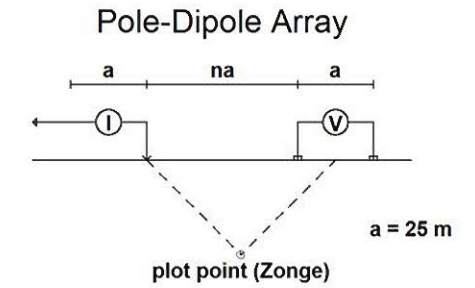
**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 30/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



**Pseudo Section Plot**  
87+00 E

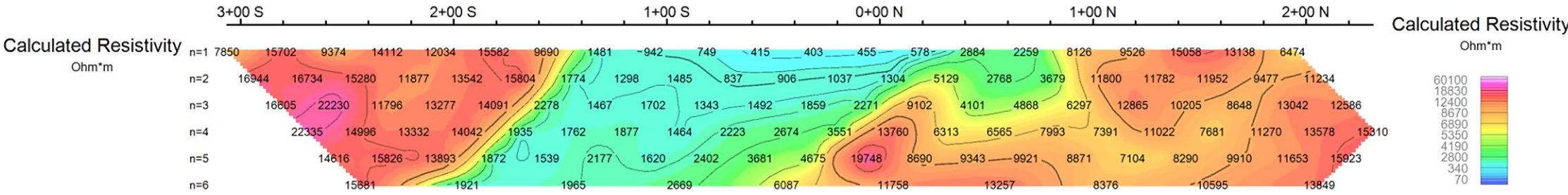
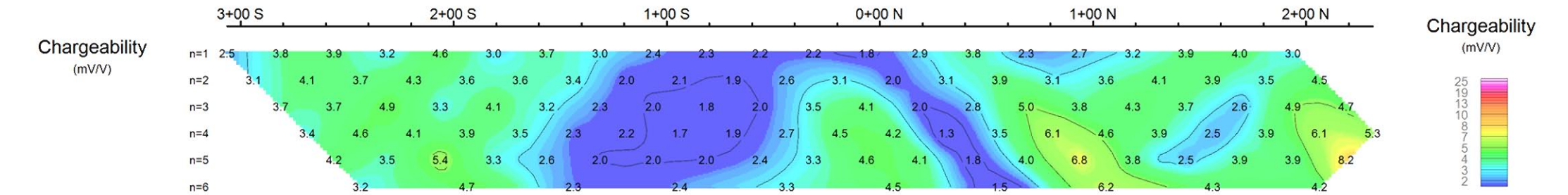
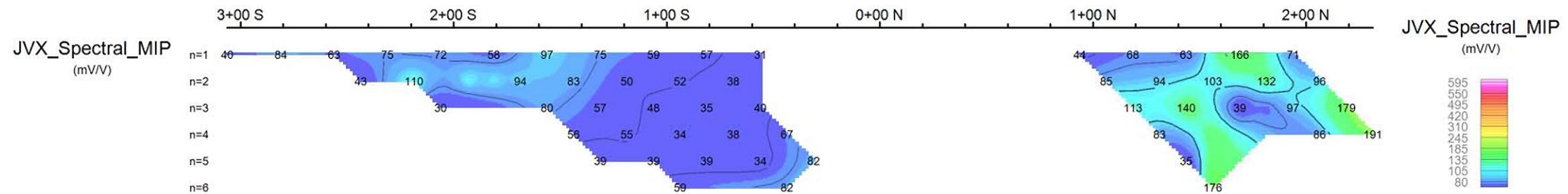
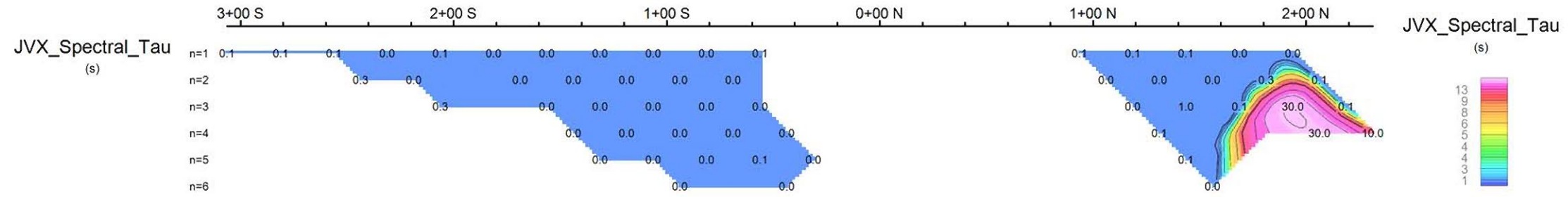


**AUGEN GOLD CORP.**

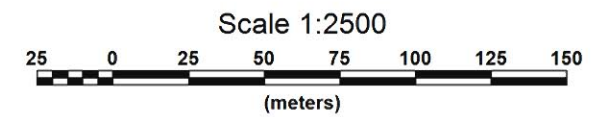
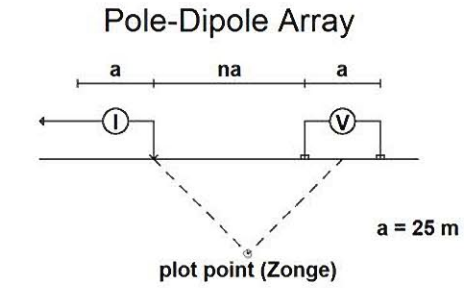
**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 29/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

JVX LTD., ref. 9-60



**Pseudo Section Plot**  
88+00 E

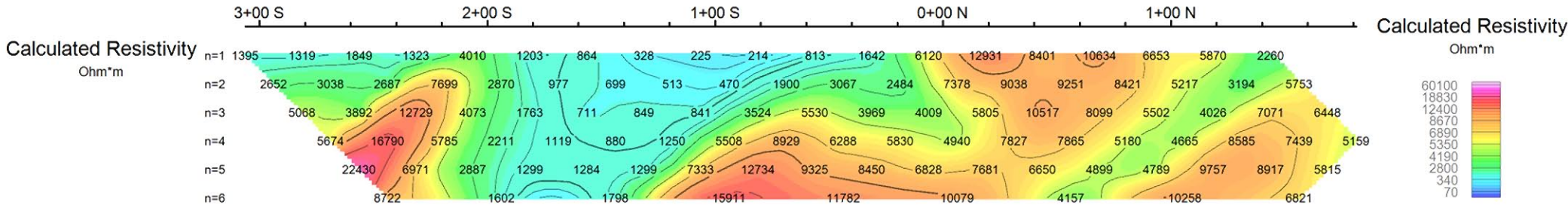
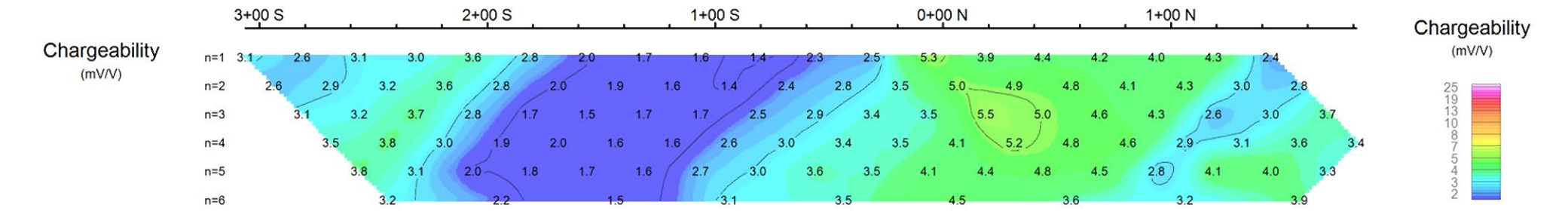
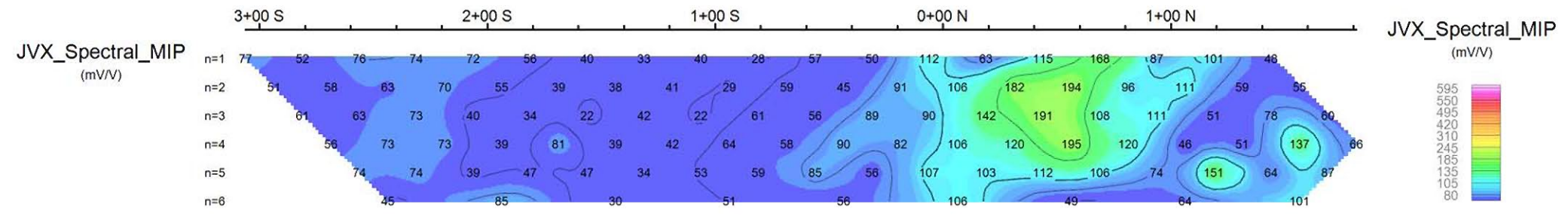
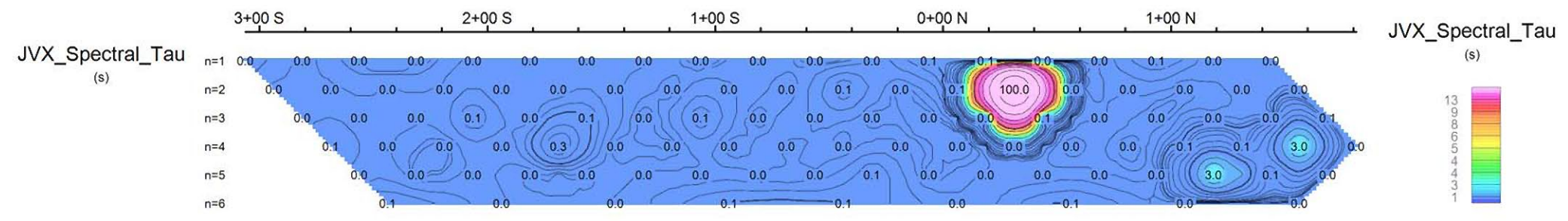


**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 29/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

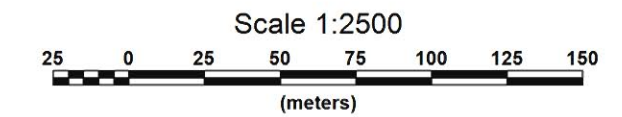
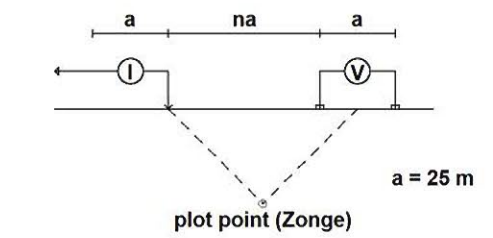
**JVX LTD., ref. 9-60**



**Pseudo Section Plot**

89+00 E

Pole-Dipole Array



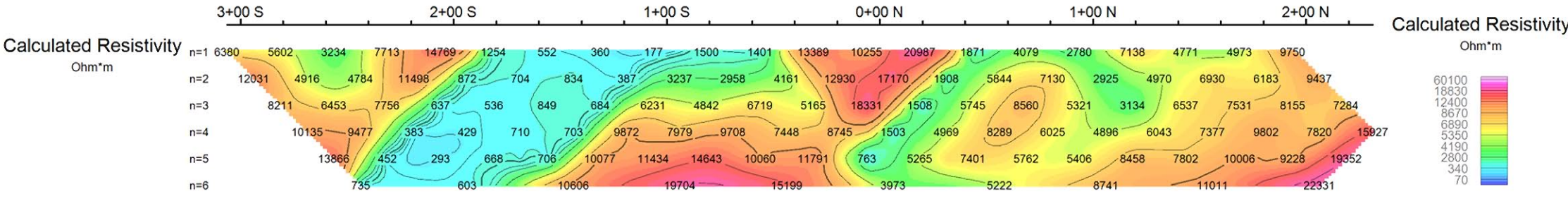
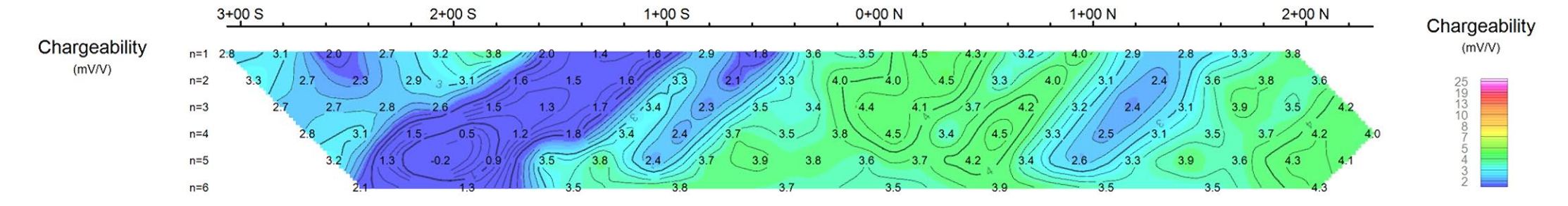
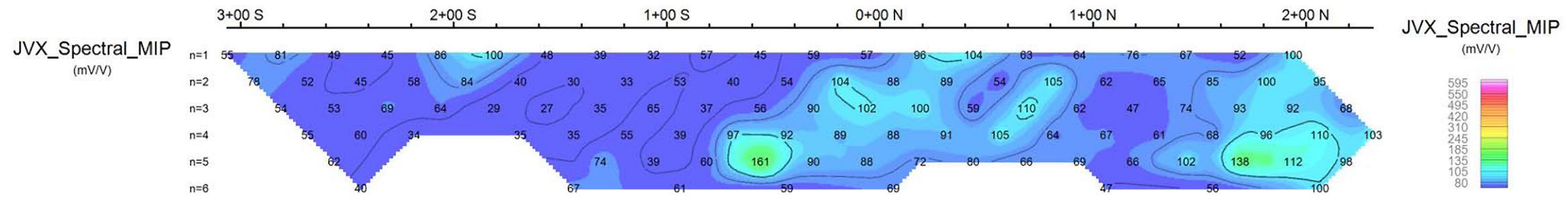
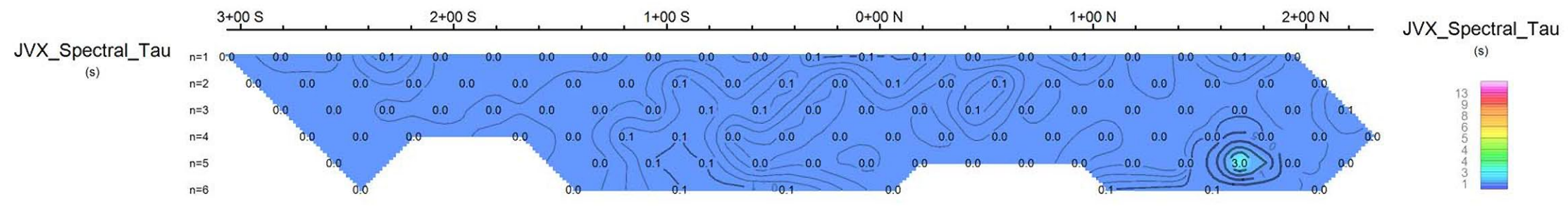
**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

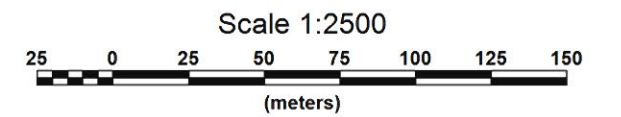
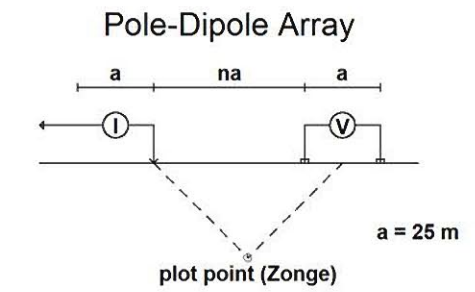
Date: 25/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**





**Pseudo Section Plot**  
**90+00 E**

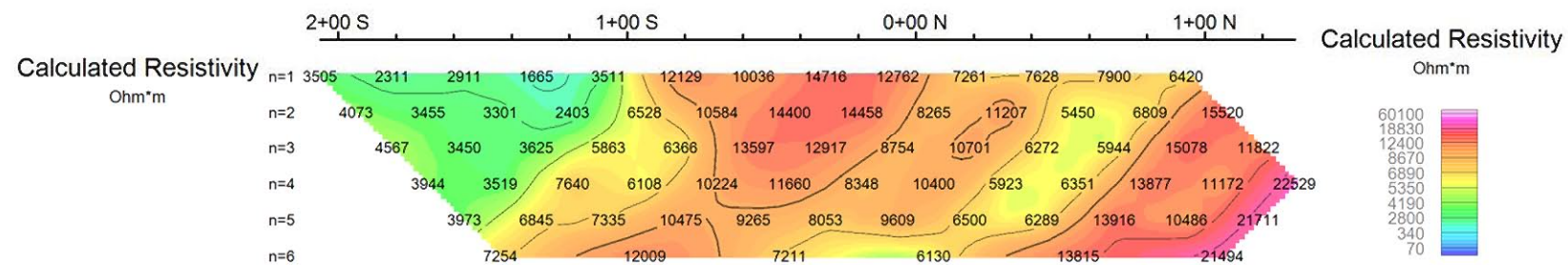
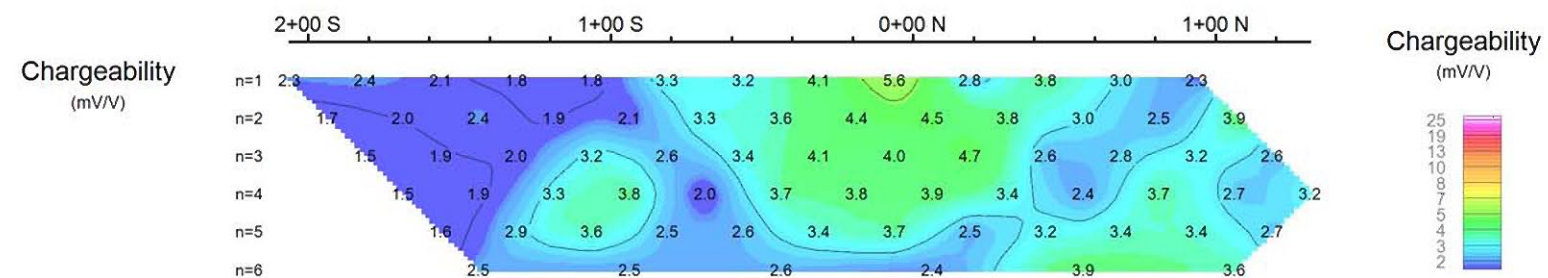
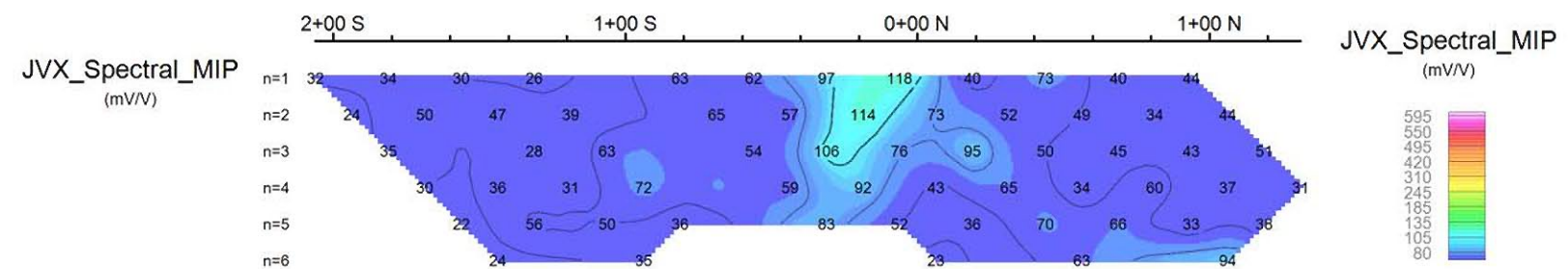
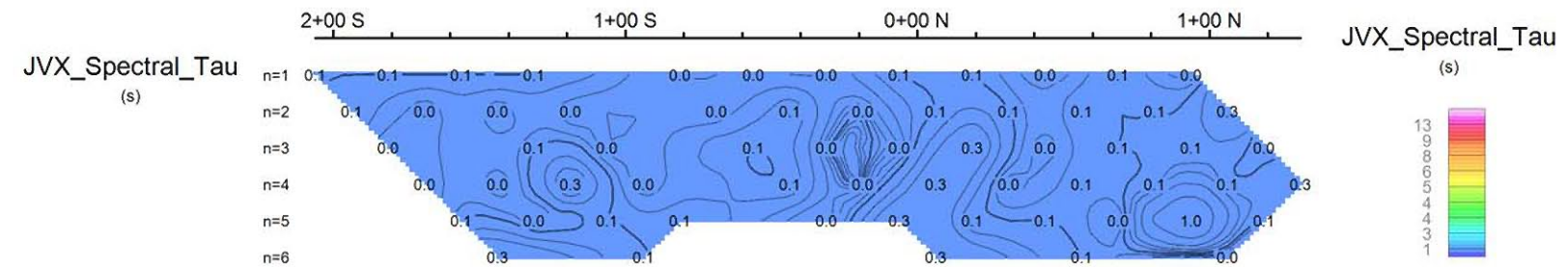


**AUGEN GOLD CORP.**

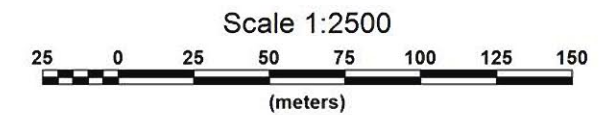
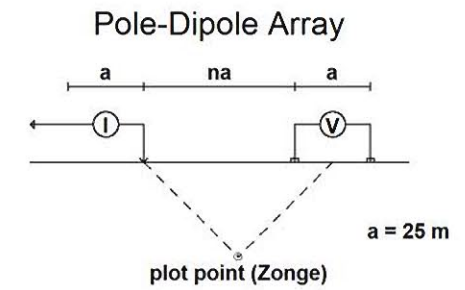
**JVX SPECTRAL IP/RESISTIVITY SURVEY**  
CHESTER GOLD GRID  
SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 27/01/2010  
Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



**Pseudo Section Plot**  
**91+00 E**



**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**

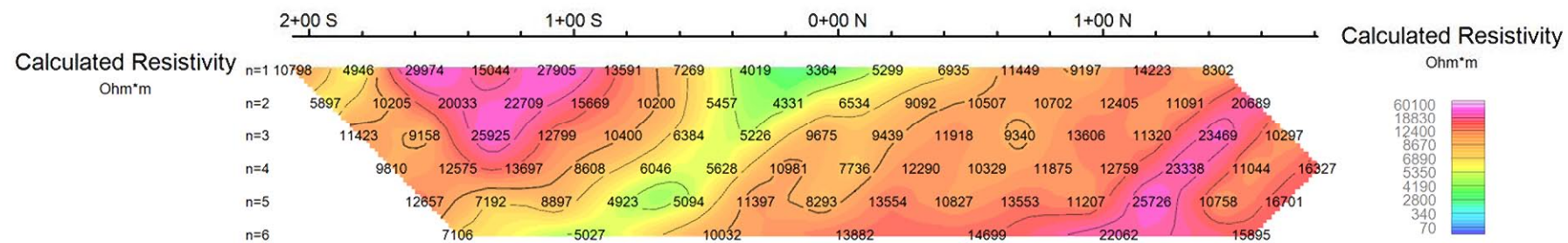
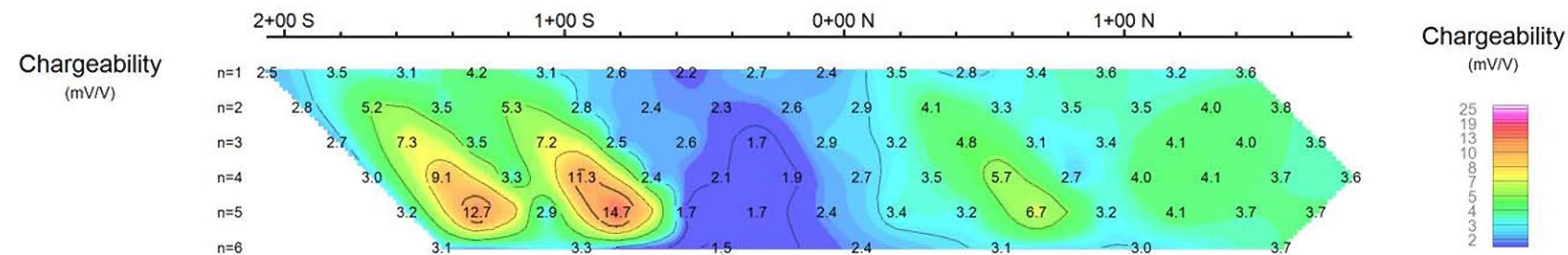
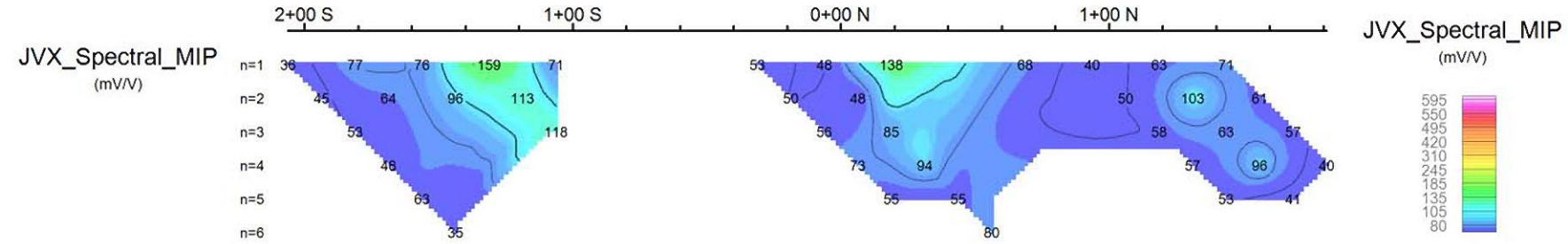
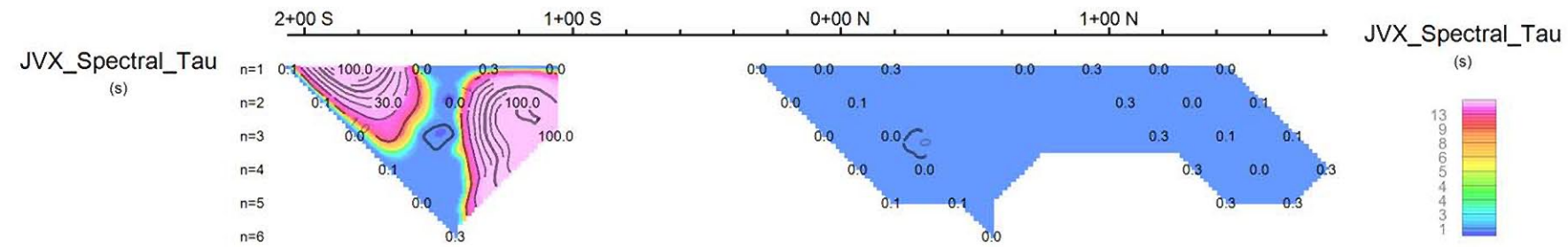
CHESTER GOLD GRID

SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

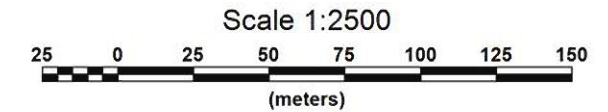
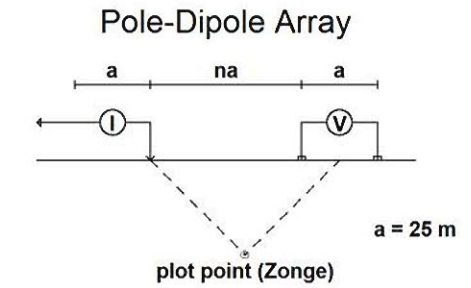
Date: 28/01/2010

Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

**JVX LTD., ref. 9-60**



**Pseudo Section Plot**  
**92+00 E**



**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**

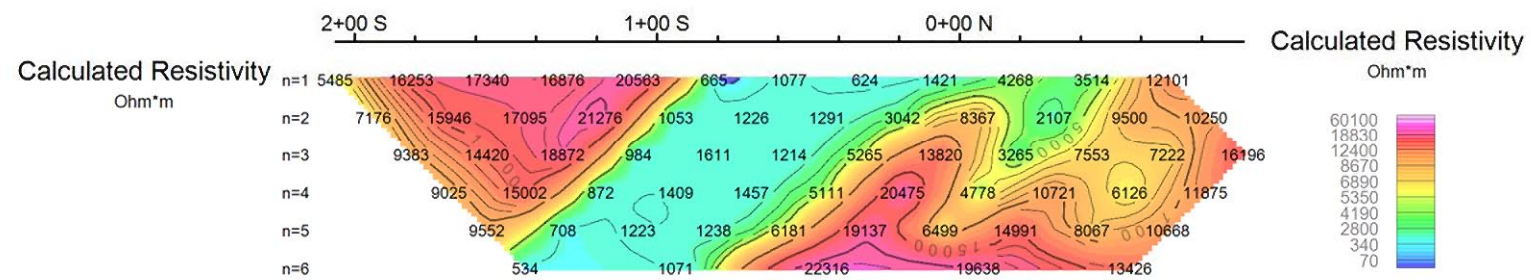
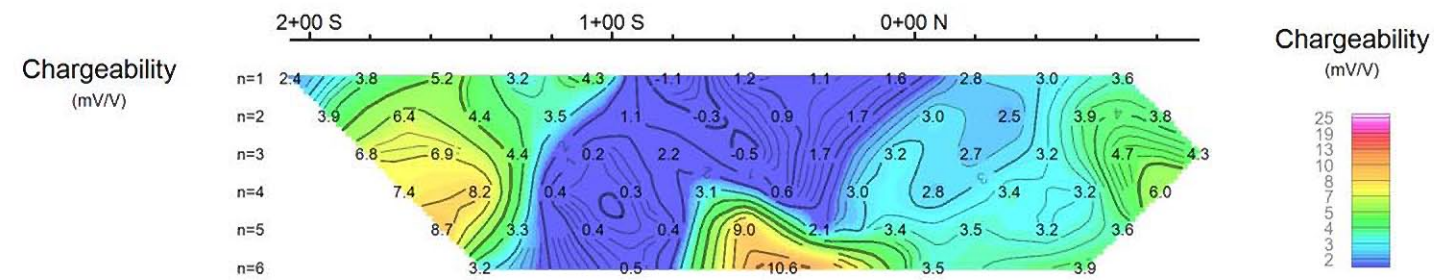
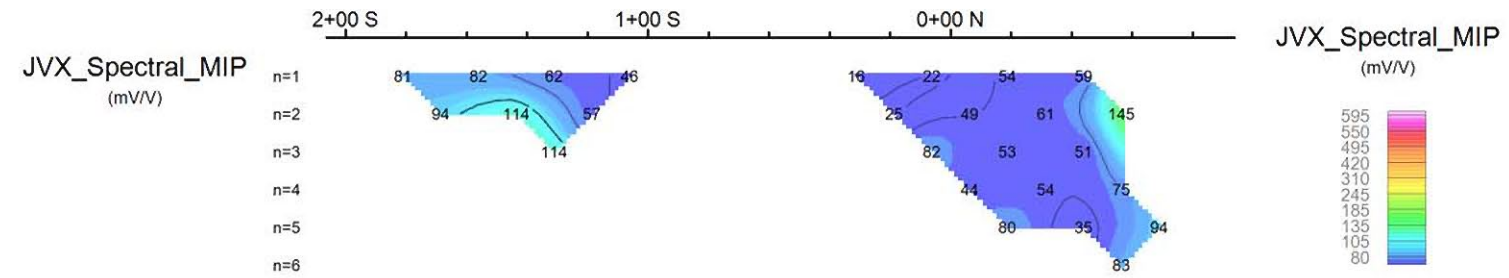
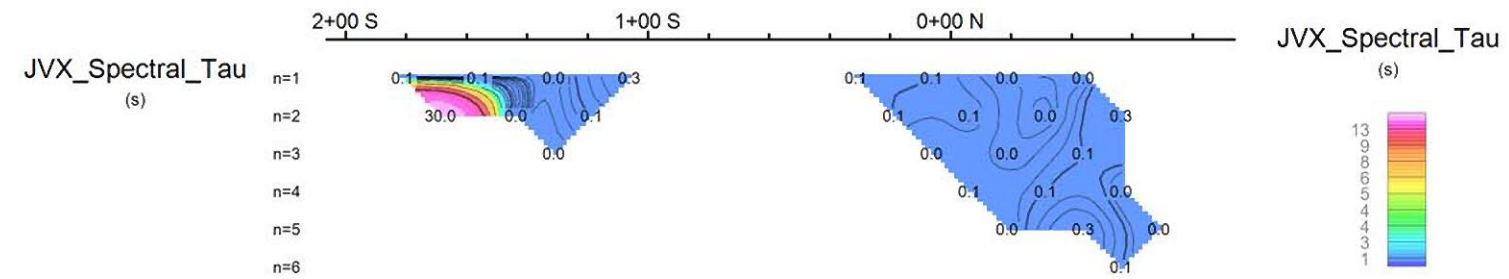
CHESTER GOLD GRID

SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

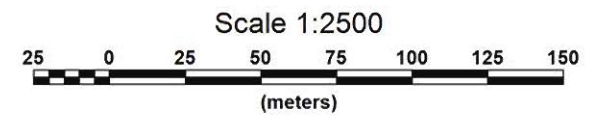
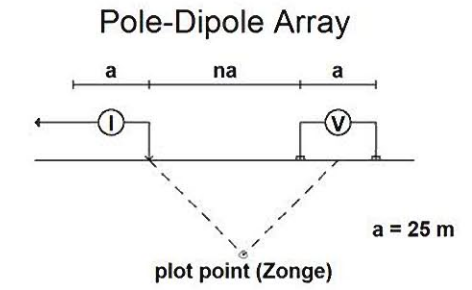
Date: 28/01/2010

Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

JVX LTD., ref. 9-60



### Pseudo Section Plot 93+00 E



**AUGEN GOLD CORP.**

**JVX SPECTRAL IP/RESISTIVITY SURVEY**

CHESTER GOLD GRID

SOUTH SWAYZE PROJECT, CHESTER TWP., ONTARIO

Date: 28/01/2010

Instruments: (Rx) Scintrex IPR12, Tx(2 sec): GDD TxII

JVX LTD., ref. 9-60