We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l'accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez nous contacter.

Ontario

INDUCED POLARIZATION (IP) SURVEY REPORT

on the

TIME EAST GRID

BENNEWEIS AND ST. LOUIS TOWNSHIPS
DISTRICT OF SUDBURY
ONTARIO

FOR

TRELAWNEY MINING AND EXPLORATION INC.

prepared by:

Dan Patrie Exploration Ltd.
L.D.S. Winter, P.Geo.
28 September 2015

TABLE OF CONTENTS

LIST OF TABLES

LIST OF MAPS

PSEUDOSECTIONS

1. INTRODUCTION

Trelawney Mining and Exploration Inc. (“Trelawney” or the “Company”) holds a group of claims in Benneweis and south St. Louis townships, District of Sudbury, Ontario centred at UTM Co-ordinates 440000mE, 5268500mN, Zone IT, NAD 83 (Map 1). The claims were acquired for their potential to host gold mineralization of economic interest. At the request of the Company, Dan Patrie Exploration Ltd., Massey, Ontario carried out an Induced Polarization (IP) survey on the TME East Grid. The following report describes the work carried out and the results obtained. The work was carried out over the period 15 January 2015 to 15 May 2015 inclusive for the line cutting and IP survey.

TABLE 1

TRELAWNEY MINING AND EXPORATION INC.

TME EAST GRID CLAIMS COVERED ALL OR IN PART BY IP SURVEY

1. **SINGLE UNIT CLAIMS (45)**	
Claim Numbers	**Number of Units**
507667, 507668, 507669	3
539181, 539182, 539183	3
539281, 539282, 539283, 539247, 539285 and 539288 to 539298 inclusive	16
539316, 539317, 539318, 539319, 539320, 539321 and 539328	7
539406 to 539421 inclusive	16
Total	45

2. **MULTIPLE UNIT CLAIMS (4)**	
Claim Numbers	**Number of Units**
42449461	12
4249463	16
4249468	16
4249471	16
Total	**<u>60</u>**
The number of claims surveyed in whole or in part is 49 containing 105 units. The claims are in the southern part of St. Louis township and the northwestern quadrant of Benneweis township (Map 3A)	

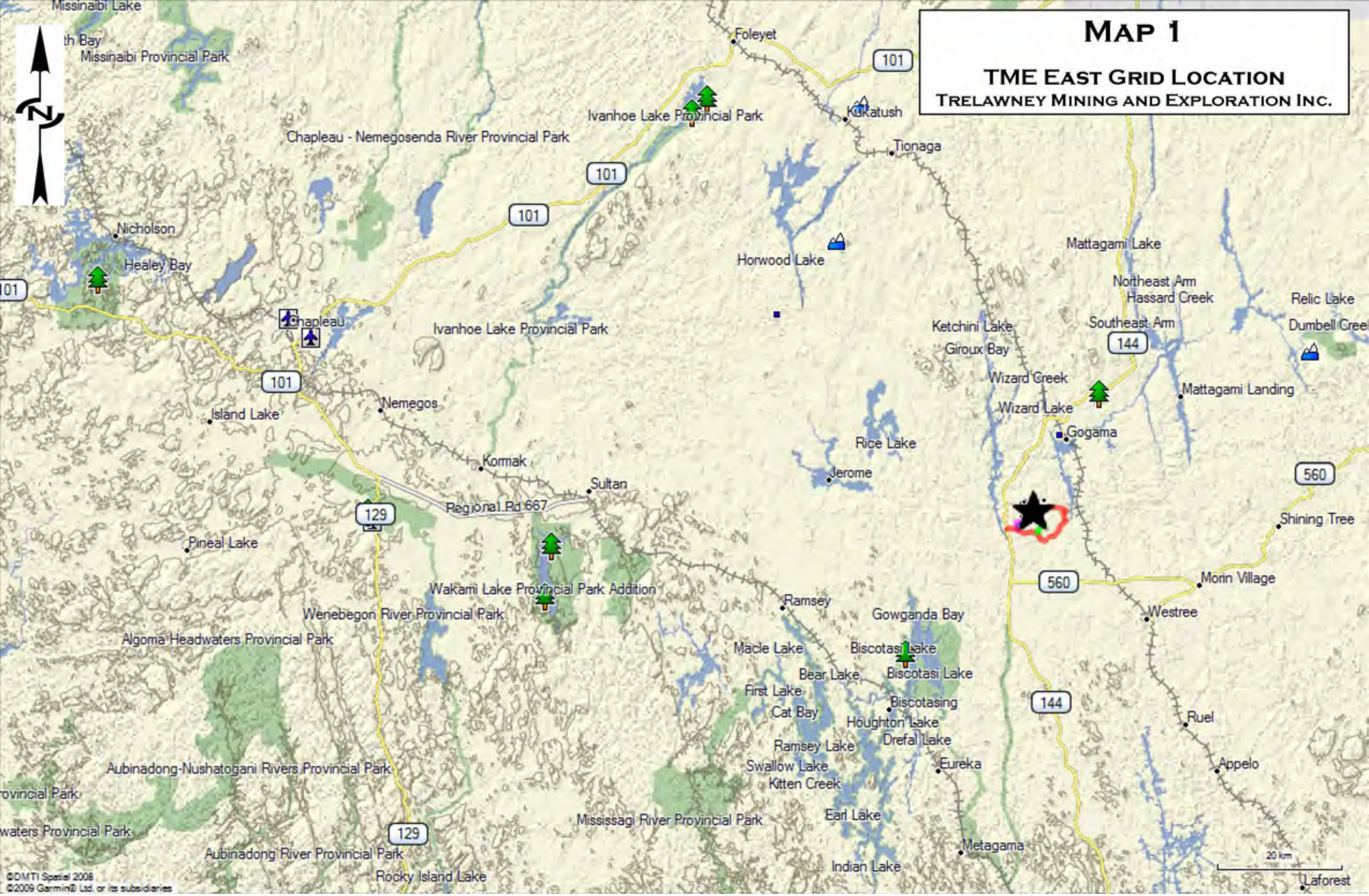
2. PROPERTY

2.1 GRID AREA DESCRIPTION

The TME East Grid is located within the southern part of St. Louis township and the Benneweis township northwestern quadrant of Champagne township and the adjacent part of southwestern Groves township and the eastern part of Benneweis township, NTS 41P/12, District of Sudbury, Ontario (Map 3). The current survey on the South Sheridan grid covered all or parts of the 3 claims listed in Table 1 (Figure 2).

2.2 LOCATION AND ACCESS

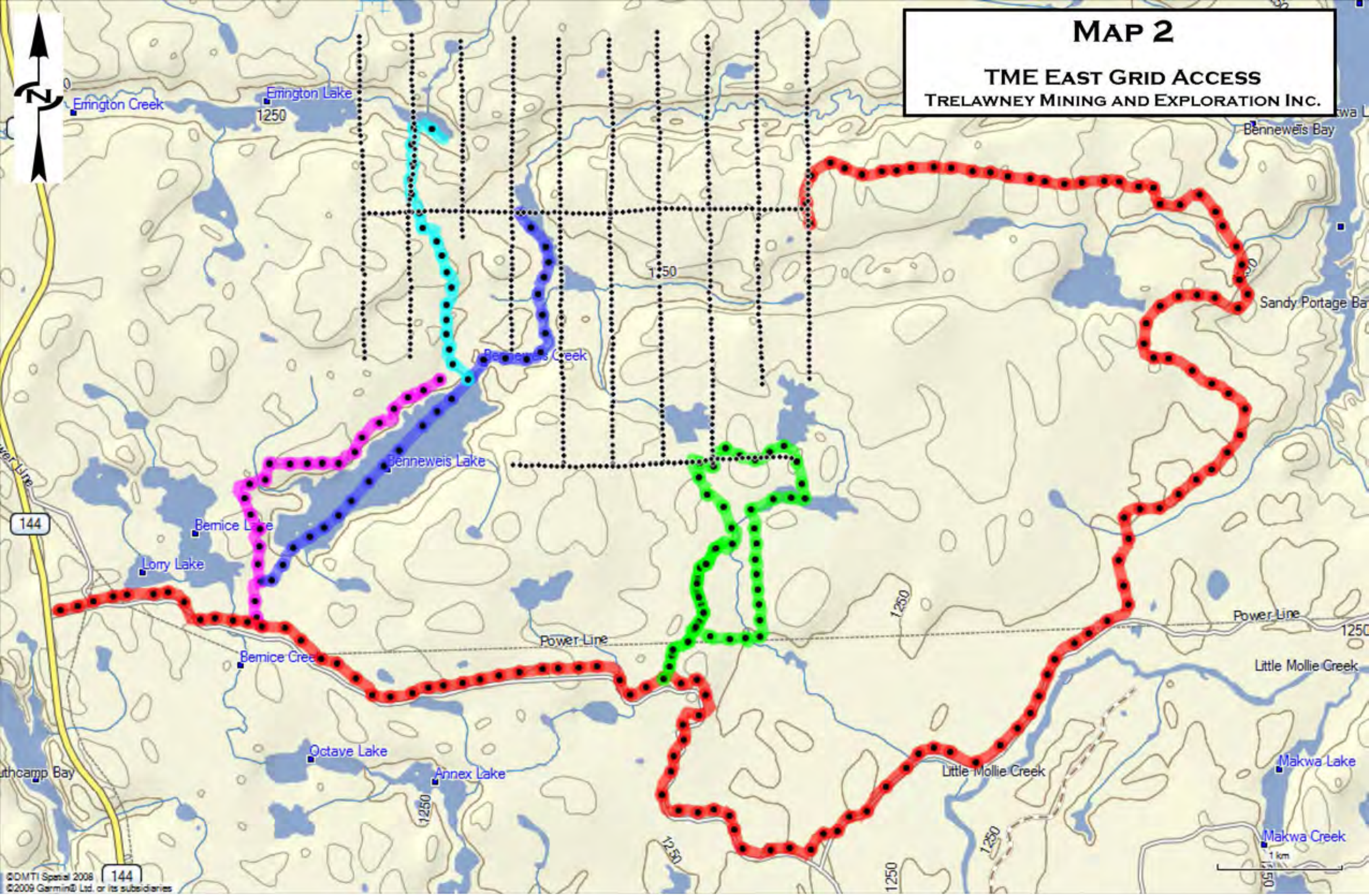
The Property is located approximately midway between Timmins to the north and Sudbury to the south, in Northern Ontario at UTM Co-ordinates 440000mE, 52685000mN Zone 17, NAD 83 (Map 1). The area surveyed is in the northwest quadrant of Benneweis township and the southern part of St. Louis township, District of Sudbury and Porcupine Mining Division, Ontario Maps 1, 3A and 3B).



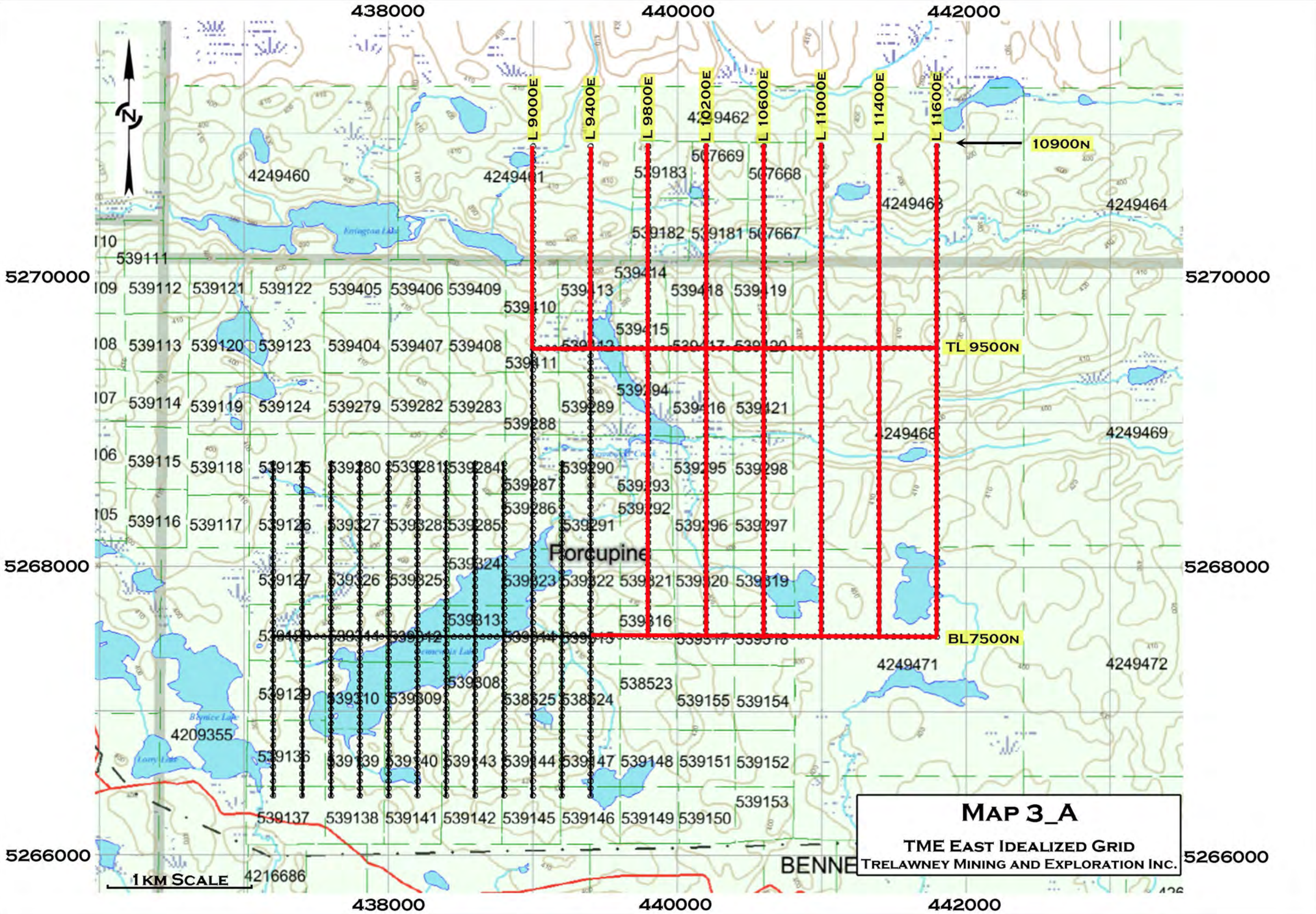
Map 1

TME East Grid Location

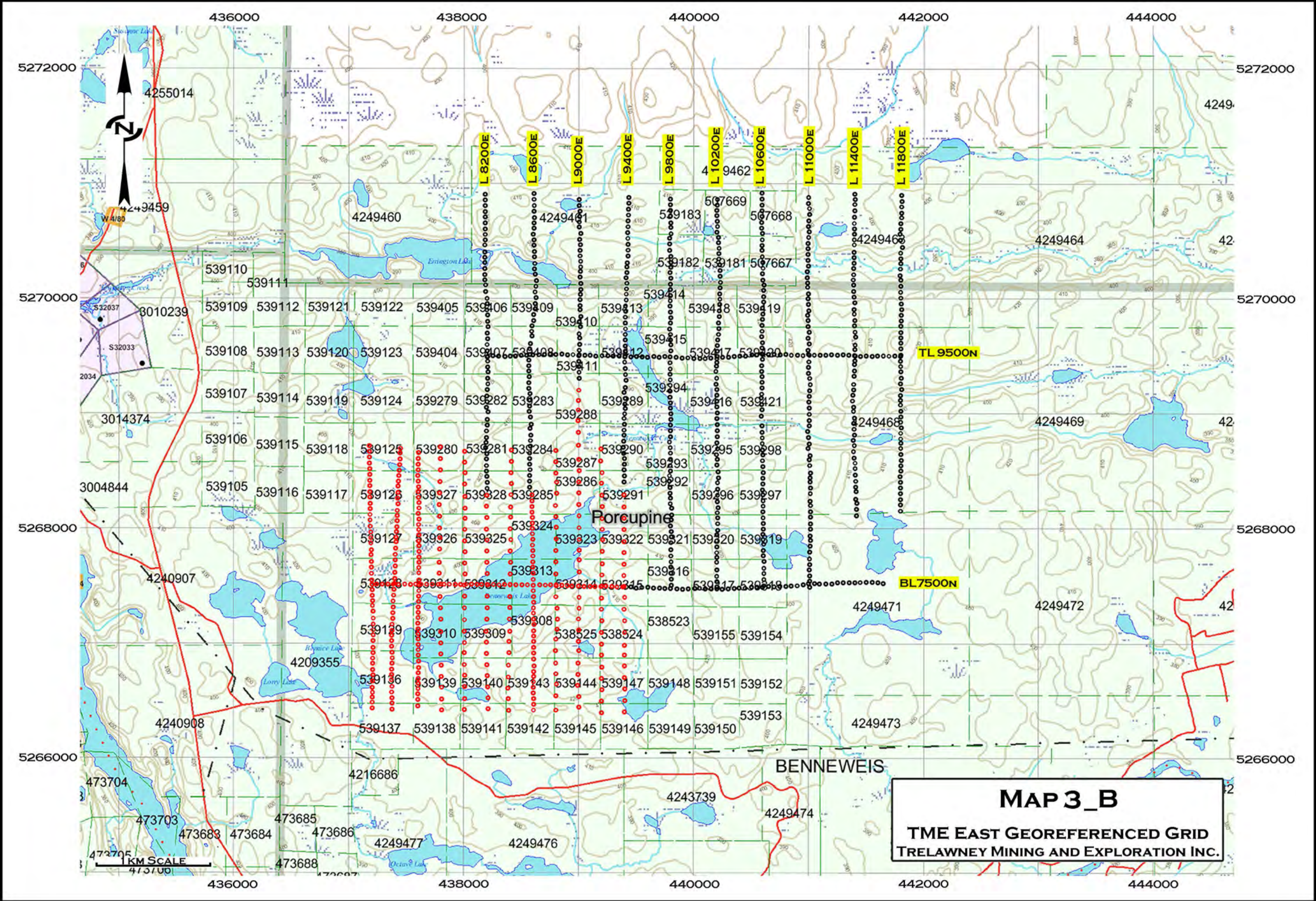
Trelawney Mining and Exploration Inc.



Map 2
TME East Grid Access
Trelawney Mining and Exploration Inc.
N
Errington Creek
Errington Lake
1250
Benneweis Bay
Sandy Portage Ba
Benneweis Creek
Benneweis Lake
Bernice Lake
Lorry Lake
144
Power Line
Bernice Cree
Power Line
1250
Little Mollie Creek
Little Mollie Creek
Octave Lake
Annex Lake
Makwa Lake
Makwa Creek
1 km
©DMTI Spatial 2008
©2009 Garmin® Ltd. or its subsidiaries



Map 3_A
TME East Idealized Grid
Trelawney Mining and Exploration Inc.
438000
440000
442000
5270000
5268000
5266000
L 9000E
L 9400E
L 9800E
L 10200E
L 10600E
L 11000E
L 11400E
L 11600E
10900N
TL 9500N
BL7500N
1km Scale
Porcupine
BENNE
4249460
4249461
4249463
4249464
4249468
4249469
4249471
4249472
4209355
4216686
507669
507668
507667
539183
539182
539181
539111
539112
539121
539122
539405
539406
539409
539410
539414
539415
539113
539120
539123
539404
539407
539408
539411
539114
539119
539124
539279
539282
539283
539288
539115
539118
539116
539117
539145
539146
539149
539150
539153
539148
539151
539152
539155
539154
538523
539137
539138
539141
539142



Map 3_B
TME East Georeferenced Grid
Trelawney Mining and Exploration Inc.
436000
438000
440000
442000
444000
5272000
5270000
5268000
5266000
N
1km Scale
L 8200E
L 8600E
L 9000E
L 9400E
L 9800E
L 10200E
L 10600E
L 11000E
L 11400E
L 11800E
TL 9500N
BL7500N
Porcupine
BENNEWEIS
4255014
4249459
4249460
4249461
4249462
4249463
4249464
4249468
4249469
4249471
4249472
4249473
4249474
4249476
4249477
3010239
3014374
3004844
4240907
4240908
4209355
4216686
4243739
473704
473703
473683
473684
473685
473686
473688
539110
539111
539109
539112
539121
539122
539405
539406
539409
539410
539413
539414
539418
539419
539108
539113
539120
539123
539404
539407
539408
539411
539412
539415
539417
539420
539107
539114
539119
539124
539279
539282
539283
539288
539289
539294
539416
539421
539106
539115
539118
539125
539280
539281
539284
539287
539290
539293
539295
539298
539105
539116
539117
539126
539327
539328
539285
539286
539291
539292
539296
539297
539127
539326
539325
539324
539323
539322
539321
539320
539319
539313
539316
539128
539311
539312
539314
539315
539317
539318
539308
538523
539129
539310
539309
538525
538524
539155
539154
539136
539139
539140
539143
539144
539147
539148
539151
539152
539153
539137
539138
539141
539142
539145
539146
539149
539150
507669
507668
507667
539183
539182
539181

Access to the Property is by road. Provincial highway 144 connects Timmins and Sudbury. The intersection of the Gowganda highway (560) / Sultan – Chapleau road (Halfway Restaurant) is approximately 150 km from both Timmins and Sudbury. Approximately 10 km north of this intersection, access to the Property is by way of the Forest Access Roads shown in Map 2.

3. REGIONAL GEOLOGY AND MINERALIZATION

The Trelawney Mining and Exploration Inc. Property is located within the Superior Province of the Canadian Shield and the south central part of the Abitibi Subprovince. The TME East Grid ("the Grid") is located in the transition area between the eastern end, to the west, of the Swayze greenstone belt and the Shining Tree – Gowganda Area metavolcanics and metasediments to the east. In the Grid area, the eastern extension of the northern belt of Swayze metavolcanics and the overlying Timiskaming-type clastic metasediments of the Ridout assemblage, extend through the southern part of St. Louis and Groves townships. Champagne township is to the east and in its western half is mainly underlain by mafic intrusive rocks – diorites, gabbros and anorthosites. In southern Groves township a band of the felsic intrusive suite lies between the metavolcanic and Ridout assemblage belt to the north and the mafic intrusives to the south. The felsic intrusive suite broadens out to the east into a large felsic intrusive body to the south of the metavolcanic – Ridout assemblage belt (Ayer and Trowell, 2002).

Regional granitic rocks flank to the north the northern metavolcanic-Ridout assemblage belt. Felsic intrusives that are leucocratic in character occur in the southern part of Groves township and the northern part of Champagne. This is the felsic to intermediate suite of Ayer and Trowell (2002). These rocks are dominantly trondhjemitic in composition and form a broadly oval, west-trending body which intrudes the core of the synclinally folded metavolcanics and extends eastward into Brunswick and Londonderry townships. This body is bordered to the south in Champagne township and to the west by hornblende diorite, gabbro and migmatite which underlie southern

Benneweis and Chester townships. North-northwest trending diabase dykes are commonly found throughout the map area cutting the supracrustal and granitic rocks.

Gold-bearing quartz veins were discovered near West Shining Tree Lake in the summer of 1911. Subsequent discoveries in the area led to the influx of many prospectors who then spread westward along the favourable belt of rocks. Many old abandoned test pits and trenches were observed in the central part of Groves township and in the northern half of Connaught township during the work by the Ontario Ministry of Mines in the 1930's (Ontario Dept. Mines, Annual Report 1934).

In Champagne township, east of the TME East Grid and during the summer of 1922, gold was discovered 800 metres east of the railway bridge at Makwa on what was known as the North Bay Group. The showing consisted of a sparsely mineralized quartz vein 0.6 to 1.3 metres wide, 100 metres long trending N80^{o}E and dipping steeply south. The vein was hosted in a granite or granodiorite. On the eastern end of the vein, a 1.6 metre deep test pit was excavated in a heavy gossan in a fractured zone 2 to 3 metres wide. Fine sulphides consisting of pyrrhotite, chalcopyrite and pyrite were present. Associated with the sulphides was a gold-bearing gossan. Four hundred (400) metres to the north, another quartz vein trending S30^{o}W was exposed for a length of 5 metres. The vein was composed of white quartz carrying chalcopyrite which in places ran up to 5%. It is reported that the sulphides from the vein, when roasted, yielded fine gold that could be panned. Further to the northeast, a quartz stockwork was reported with a general trend of N40^{o}E.

In 1933 Makwa-Champagne Gold Mines Limited held 10 claims north of the dam on Mollie River which contained a showing hosting two parallel quartz lenses separated by granodiorite and trending N35^{o}E. Again this is east of the current TME East Grid. The veins dip steeply to the west. The most easterly vein or lens was 0.6 metres wide while the westerly one was 1 metre wide and both were exposed over a length of 10 metres. The mineralization consisted of a quartz vein carrying pyrite and chalcopyrite and visible specks of very pale yellow gold.

Immediately to the east of the Makwa-Champagne property was the Dunn showing which consisted of a large irregular quartz lens measuring 15 metres to 3 metres and trending N60^{o}E and with a vertical dip. It was located at the contact of a volcanic schist to the north and a granite to granodiorite to the south.

In Groves township, the Tasmijopen Syndicate held claims centred at Pensyl Lake with the main showing being on the east end of the lake. Here, cherty quartz veins were exposed over a strike length of 8 metres and across a width of 3 metres with the zone trending N85^{o}E at the contact with greywacke to the north. The mineralization consisted of very fine sulphides and one drill core sample returned a value of 0.15 oz/ton Au and 0.15 oz/ton Ag.

One hundred and fifty metres to the east a cherty iron formation in highly deformed greywacke had a trend N85^{o}E with a steep dip to the north. The zone consisted of a heavy gossan across a width of 8 metres and for a strike length of 10 metres. Within the zone, alternating bands of dark cherty material and sulphides were present with pyrite, pyrrhotite, chalcopyrite, arsenopyrite and sphalerite being present. Grab samples from the zone returned values from 0.25 to 0.50 oz/ton Au plus Ag. Thirty metres to the north a mineralized quartz vein in greywacke, 0 – 3 metres wide had a trend of S80^{o}E and an 80^{o}N dip. It was exposed over a strike length of 13 metres and showed heavy ankerite and pyrite and an associated gossan. A grab sample from this zone returned 0.50 oz/ton Au and 2.5 oz/ton Ag.

4. INSTRUMENTATION AND WORK DONE

Line cutting (34 line-km) and an induced polarization (IP) survey on the Property were carried out between January 15 2015 and May 15 2015 inclusive. Ten (10) lines spaced at 400 metres were surveyed for a total of 28.7 line-km (Maps 3A & 3B).

Induced polarization readings were taken on the Property grid with an “a” spacing of 50 m and with 6 levels being read (N = 6). The IP survey was a time domain pole-dipole survey and it was carried out with a Walcer 9000 transmitter in combination with a Honda 18 HP motor generator and a Scintrex IPR-12 receiver. The motor generator and transmitter were stationary on the end of the line being read with the current being transmitted through a wire with an electrode into the ground for contact. A second wire and electrode (the live electrode) was moved along the line being surveyed as per the survey protocol. At all times, the transmitter man, live electrode man and receiver personnel were in radio contact. Ahead of the live current electrode was a crew of men with electrodes at 50 m intervals. These electrodes are connected to the receiver where the receiver operator obtains and records the readings. The data is downloaded from the receiver at the end of the day to a computer where the resistivity and chargeability are calculated and plotted using pseudosections and/or maps using Geosoft software.

The geophysical survey was carried out by Dan Patrie Exploration Ltd., Massey, Ontario an experienced geophysical contractor. The survey personnel are listed in Section 7.

TABLE 2
TRELAWNEY MINING AND EXPLORATION INC.
INDUCED POLARIZATION (IP) SURVEY - AREAS OF INCREASED CHARGEABILITY
TME EAST GRID

LINE	STATION	CHARGEABILITY VALUES		COMMENTS
		BACKGROUND mV/V	ANOMALY mV/V	
82+00E	86+00N (South End of line) - 92+50N	1 to 4	4 to 6	Increasing chargeability values mainly on levels 4, 5 and 6 with associated increase in resistivity. Dyke-like zone with apparent slope to north between 91+00N and 92+00N.
	95+25N - 96+75N	<0 to 4	4 to 6	Increasing chargeability values mainly on levels 4, 5 and 6 with associated increase in resistivity. Dyke-like zone with apparent slope to north between 91+00N and

				92+00N. One spot chargeability high of 21mV/V
	99+50N - 103+00N	<0 to 4	4 to 6	Increasing chargeability values mainly on levels 4, 5 and 6 with associated low resistivity.
	105+75N - 108+00N (end of line and open to north)	<0 to 4	4 to 19	Zone of anomalous chargeability over 4x background and increasing resistivity at north end of line and open to the north.
86+00E	86+00N (end of line and open to South) - 87+75N	<0 to 4	4 to 6	Increasing chargeability on all levels with associated mixed resistivity in dyke-like forms with apparent slope to the north.
	91+00N - 96+25N	<0 to 4	4 to 10	500m wide zone in an irregular shape formed by3, dyke-like zones of higher chargeability with similar values in connecting areas. Dyke-like zones have apparent slopes to north. Associated higher resistivities.
	102+00N	<0 to 4	4 to 5	Dyke-like zone of increasing chargeability with apparent slope to south and associated low resistivity.
	106+00N - 108+50N (end of line and open to the north)	<0 to 4	4 to 23	Zone of anomalous chargeability over 5 background with associated low resistivity at north end of line and open to the north.
L90+00E	97+50N -	<0 to 3	3 to 5	Increasing chargeability on

	98+00N			levels 4, 5 and 6 in dyke-like zone with apparent slope to south and associated increasing resistivity.
	100+00N	<0 to 3	3 to 5	Increasing chargeability on levels 4, 5 and 6 in dyke-like zone with apparent slope to south and associated increasing resistivity.
	100+50N - 104+00N	<0 to 3	3 to 5	Broad zone of increasing chargeability on levels 4, 5 and 6 with mixed associated resistivity.
	106N+00N - 108+50N (end of line and open to the north)	<0 to 3	3 to 17	Zone of anomalous chargeability over 5 background with associated low resistivity at north end of line and open to the north.
	87+50N (south end of line and open to south)	2 to 3	3 to 7	Zone of increasing chargeability with associated high resistivity at south end of line and open to the south
94+00E	90+00N - 104+00N	<0 to 3	3 and 4	Mainly on levels 3, 4, 5 and 6, small increases in chargeability with mixed resistivity values.
	106+00N - 108+50N (north end of line and open to the north)	<0 to 4	4 to 19	Zone of anomalous chargeability over 4x background with associated mixed resistivity; high close to surface and lower in depth.

98+00E	80+00N - 84+00N	<0 to 4	4 to 15	Anomalous chargeability values to approximately 4x background with associated high resistivity. Dyke-like shape on northern edge.
	96+00N - 103+00N	<0 to 4	4 to 5 with one dyke-line zone to 8	Mainly on levels 3, 4, 5 and 6, small increases in chargeability with associated increase resistivity.
	106+00N - 108+50N (north end of line and open to the north)	<0 to 4	4 to 18	Anomalous chargeability values to 4.5x background with mixed resistivity.
102+00E	82+00N - 86+00N	<0 to 4	4 to 11	Broad zone of anomalous chargeability values to approximately 3x background with associated high resistivity.
	94+00N - 102+00N	<0 to 4	4 to 5	Irregular pattern of increasing chargeability values, mainly on levels 3, 4, 5 and 6 with associated high resistivity.
	105+00N - 108+50N	<0 to 4	4 to 17	Zone of anomalous chargeability values to 4x background with

				associated low resistivity
106+00E	82+50N - 87+50N (south end of line and open to the south)	<0 to 4	4 to 10	Zone of anomalous chargeability up to 2.5x background mainly with higher associated resistivity at south end of line and open to the south.
	96+00N - 103+00N	<0 to 4	4 to 16	Dyke-like zone of anomalous chargeability with apparent slope to north and associated high resistivity
	105+00N - 108+50N (at north end of line and open to the north)	<0 to 4	4 to 21	Zone of anomalous chargeability over 5x background with mixed associated resistivity. 105+50N appears to be north end of anomaly.
110+00E	78+50N - 82+00N	<0 to 4	4 to 9	Broad zone of incre4asing to anomalous chargeability to over 2x background with generally higher resistivities. Zone has extension to north of 500m hosting higher chargeabilities up to 5 and 6mV/V.
	106+00N - 108+50N (north end of line and open to the north).	<0 to 4	4 to 35	Broad zone of highly anomalous chargeability, 8x background with associated low resistivity at north end of line and open to the north.
114+00E	92+00N - 96+30N (at south end of	<0 to 3	3 to 7	Zone of increasing anomalous chargeability with associated high

	line and open to the south)			resistivity. Zone is more irregular to the north and appears to be crosscut by a barren; later dyke at 93+40N. Values over 2x background.
	99+00N - 99+50N			Low chargeability zone in dyke-like form with apparent slope to south. May be later cross-cutting dyke.
	99+00N - 103+00N	<0 to 3	3 to 6	Zone of increasing chargeability on levels 3, 4, 5 and 6 with associated low resistivity.
	105+60N (north end of line and open to the north)	<0 to 3	3 to 9	Zone of anomalous chargeability up to 3x background with associated low resistivity at north end of line and open to the north.
118+00E	84+50N (south end of line) - 100+00N			Broad are with an irregular pattern of low chargeabilities intermixed with increasing values up to 5mV/V. One spot high at 100+00N on level 6.
	105+75N - 108+75N (north end of line and open)	<0 to 4	4 to 15	Broad zone of anomalous chargeability values to approximately 4x background with associated, increasing resistivity. Zone at the north end of the line and open to the north.

5. RESULTS, INDUCED POLARIZATION (IP) SURVEY

A total of 28.7 line-km was surveyed on 10 lines, L82+00E to L118+00E spaced at 400 m. The results obtained are presented in 10 pseudosections provided in Appendix 3 and the results for each pseudosection are summarized in Table 2. Maps 4A, 4B, 5A and 5B are plan views showing the area/zones of increased chargeability identified in the survey on survey levels N=2 and N=4 (Appendix 2).

In general, background chargeability values are in the <0 m V/V to 4 m V/V range with most anomalous zones showing increased chargeabilities from threshold levels (3-4 m V/V to 30 m V/V. The higher chargeability values are up to 5 x to 8 x background values. The areas of these higher values occur in the northern and southern parts of the Grid (Maps 4A, 4B, 5A and 5B).

This area connects in the east to Zone B identified in the 2013 survey (Figure 5). Zone B extends northeasterly from the area of grid lines 68+00E and 70+00E.

Some of the pseudosections show relatively narrow “dyke-like” patterns with virtually no chargeability which produce gaps in the chargeabilities along the survey lines. These zero chargeability gaps may, at least in part, represent north-northwest trending, late diabase dykes that are common throughout the area.

6. SUMMARY AND CONCLUSIONS

During the period 15 January 2015 to 15 May 2015 inclusive, 28.7 line-km in 10 lines were covered by a pole-dipole IP survey in the south part of St. Louis township and the northwest quadrant of Benneweis township. The IP survey used an “a” spacing of 50 m with 6 levels being read (n = 1 to 6). This work outlined two (2) IP chargeability anomalies of interest (Maps 4A, 4B, 5A, 5B). The first anomaly runs east-west along the northern part of the Grid and is open to the east and west. It has a width in the order of 500m and maximum chargeabilities are in the 20mV/V +/- range to 4 to 5 times background. This anomaly appears to coincide with the east-west-trending mafic metavolcanics and metasedimentary units in the southern part of St. Louis and Neville to the west.

The second anomaly is in the southern part of the Grid and also runs east-west and is open in both directions (Maps 4A, 5B, 5A, 5B) although the zone may be weakening to the east. It has width in the order of 500m to 600m. This zone in general has weaker chargeabilities than the zone to the north. The chargeabilities in this zone are strongest in the centre of the grid and appear to weaken to the east and the west. Maximum chargeabilities range up to 15mV/V, 4x background, and decrease east and west to 1.5 times to 2 times background. This anomaly lies east of the north end of Benneweis Lake, an area mapped as containing mafic metavolcanics and felsic to intermediate intrusives.

7. RECOMMENDATIONS

To further evaluate the TME East Grid area and the IP anomalies identified in the current survey, the following work is recommended.

1. Geological mapping and/or prospecting of the grid area and in particular the areas of the identified IP anomalies and the areas to the east and west along strikes.

2. Soil geochemical survey over the area in which the IP anomalies are located to determine if any of the identified zones also show soil geochemical signatures.

8. PERSONNEL

The IP survey was carried out by Dan Patrie Exploration Ltd., Massey, Ontario using the following personnel.

Brent Patrie, Val Therese, Ontario
Gab Roy, Elliot Lake, Ontario
Tyler Gagan, Espanola, Ontario
Jim Patrie, Massey, Ontario
Addison Duhaime, Elliot Lake, Ontario
Mario Pilon, Timmins, Ontario

Gil Robert, Sudbury, Ontario

Brandon Sangster, Walford, Ontario

Riley Vanier, Massey, Ontario

Trevor Mailloux, Massey, Ontario

9. REFERENCES

1. Ayer, J.A., Trowell, N.F., Josey, S., Nevills, M. and Valade, L., 2003

   Geological compilation of the Matachewan area, Abitibi greenstone belt; Ontario Geological Survey, Preliminary Map P.3527, scale 1:100 000.

2. Ayer, J.A. and Trowell, N.F. 2002

   Geological compilation of the Swayze area, Abitibi greenstone belt; Ontario Geological Survey, Preliminary Map P.3511, scale 1:100 000.

3. Jackson, S.L. and Fyon, J.A., 1991

   The Western Abitibi Subprovince in Ontario in Geology of Ontario, OGS, Sp. Vol. 4, Part 1, p., 445-450.

4. Ontario Geological Survey, 1991

   Bedrock geology of Ontario, east-central sheet: Ontario Geological Survey, map 2543, scale 1:1 000 000.

5. Winter, L.D.S., 2011

   Induced Polarization (IP) Survey on the Sheridan Property Grid, Groves and Champagne Twp., Dist. Of Sudbury, Ontario for Trelawney Mining and Exploration Inc., 18 p., 2 tables, 4 figures, 1 Map, pseudosections.

6. Winter, L.D.S., 2013

   Induced Polarization (IP) Survey on the South Sheridan Grid, Sheridan Property, Champagne Twp., Dist. of Sudbury, Ont. For Trelawney Mining and Exploration Inc., 16 p., 2 tables, 3 Fig., 3 Maps, 8 pseudosections.

7. Winter, L.D.S., 2013

Induced Polarization (IP) Survey on the South Sheridan Grid, Sheridan Property, Benneweiss and Champagne Twps., Dist. of Sudbury, Ont. For Trelawney Mining and Exploration Inc., 16 p., 2 tables, 5 Fig., 10 pseudosections.

L.D.S. Winter, P.Geo.

28 September 2015

L.D.S. Winter

1849 Oriole Drive, Sudbury, ON P3E 2W5
(705) 560-6967
(705) 560-6997 (fax)
email: winbourne@bellnet.ca

CERTIFICATE OF AUTHOR

I, Lionel Donald Stewart Winter, P. Geo. do hereby certify that:

1. I am currently an independent consulting geologist.

2. I graduated with a degree in Mining Engineering (B.A.Sc.) from the University of Toronto in 1957. In addition, I have obtained a Master of Science (Applied) (M.Sc. App.) from McGill University, Montreal, QC.

3. I am a Life Member of the Canadian Institute of Mining, a Life Member of the Prospectors and Developers Association of Canada and a Registered Geoscientist in Ontario (P.Geo.).

4. I have worked as a geologist for a total of 54 years since my graduation from university.

5. I am the author responsible for the preparation of the Induced Polarization (IP) Report titled "Induced Polarization (IP) Survey Report on TME East Grid, Benneweis and ST. Louis Townships, District of Sudbury, Ontario" and dated 28 September 2015.

Dated this 28th Day of September 2015

____

L.D.S. Winter, P.Geo.

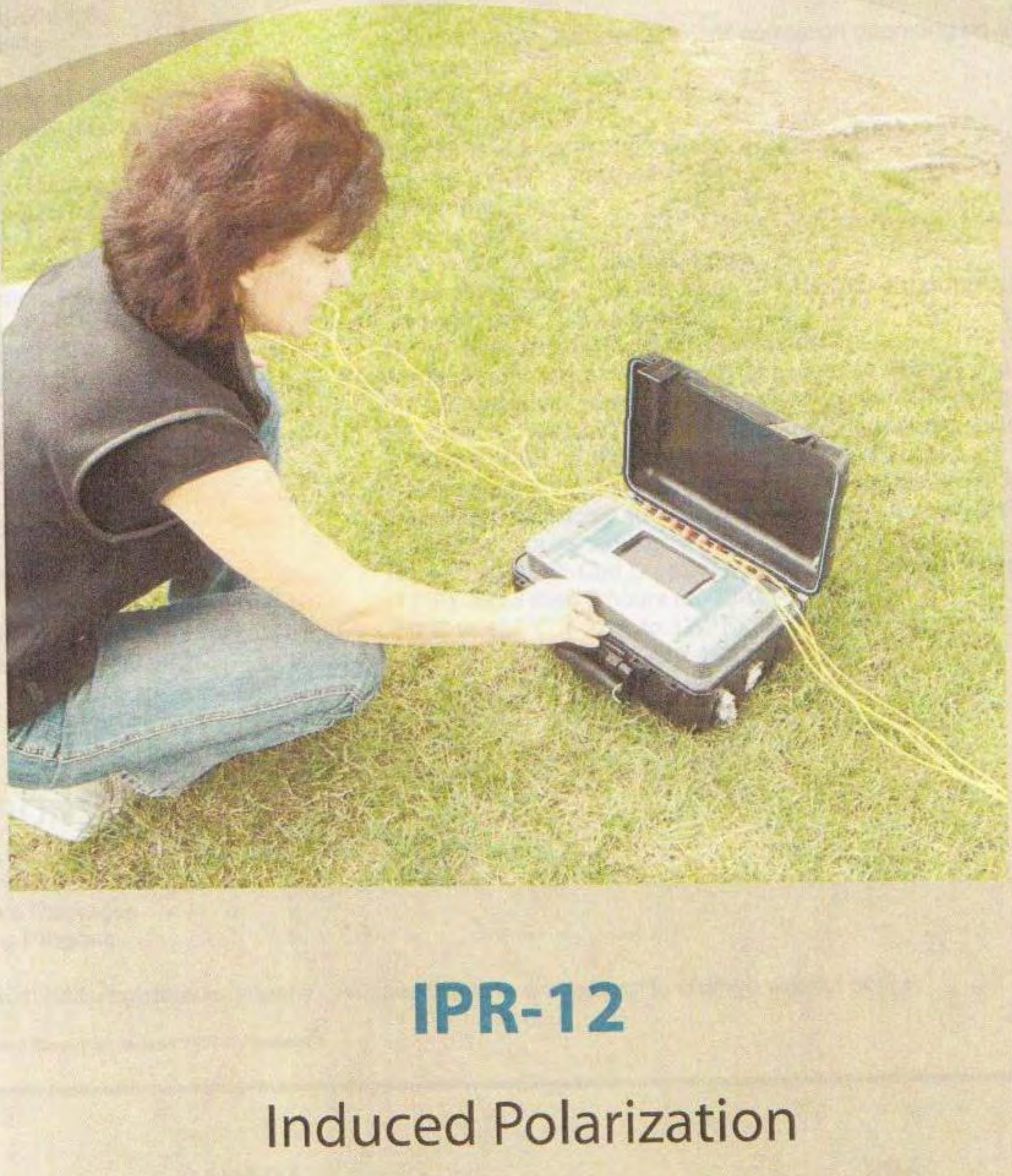
APPENDIX 1

INDUCED POLARIZATION SURVEY EQUIPMENT

TECHNICAL SPECIFICATIONS

SCINTREX
A DIVISION OF LRS

ELECTRICAL METHODS



IPR-12

Induced Polarization

WWW.SCINTREXLTD.COM

Setting the Standards

IPR-12 SPECIFICATIONS

The IPR-12 IP receiver has been successfully used for many years as a mineral exploration tool, specifically for gold exploration.

Induced polarization can also be used as a method for mapping hydrocarbon plumes and geotechnical applications.

Inputs:	1 to 8 dipoles are measured simultaneously.
Input Impedance:	16 MΩ
SP Bucking:	±10 volt range. Automatic linear correction operating on a cycle by cycle basis.
Input Voltage (Vp) Range:	50 µV to 14 V
Chargeability (M) Range:	0 to 300 mV/V
Tau Range:	60 microseconds to 2000 seconds.
Reading Resolution of Vp, SP and M:	Vp - 10 µV; SP - 1 mV; M - 0.01 mV/V
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:	Pulse selectable at 1,2,4,8,16 or 32 seconds. Programmable windows also available. 50% duty cycle.
Transmitter Timing:	On/off times of 1,2,4,8,16 or 32 seconds.
External Circuit Test:	All dipoles measured individually in sequence. Range 0 to 2 MΩ with 0.1 kΩ resolution. Circuit resistances 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.
Memory Capacity:	Stores approximately 400 dipoles of information when 8 dipoles are measured simultaneously.
Power Supply:	Rechargeable Ni-Cad D cells. More than 20 hours service at +25°C. (77°F), more than 8 hours at -30°C (-22°F)
Operating Temperature:	-30°C to +50°C (-22°F to 122°F)
Dimensions and Weights:	Console: 355 x 270 x 165 mm (14" x 10.6" x 6.5")
	Charger: 120 x 95 x 55 mm (4.7" x 3.7" x 2")
	Console: 5.8 kg (12.8 lbs.)
	Batteries: 1.3 kg (2.8 lbs.)
	Charger: 1.1 kg (2.4 lbs.)

OPTIONS

Transmitters
Software Packages
Training Program

ISO 9001:2000 registered company. All specifications are subject to change without notice.

Specification Sheet Part Number 745711 Revision 0

SCINTREX

CANADA

Scintrex
222 Snidercroft Road
Concord, Ontario L4K 2K1
Telephone: +1 905 669 2280
Fax: +1 905 669 6403
e-mail: scintrex@scintrexltd.com
Website: www.scintrex.com

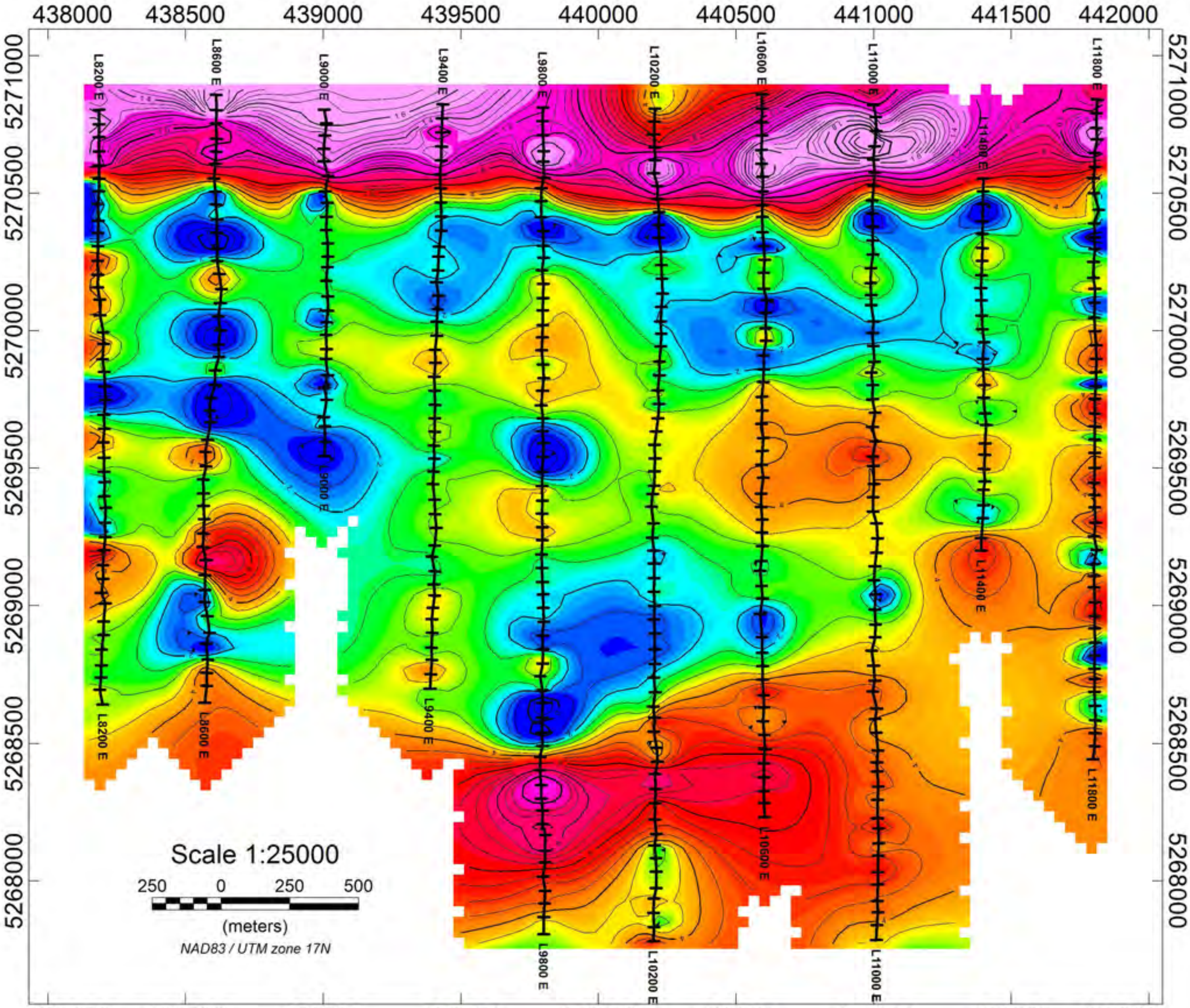
MICRO g LACOSTE

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
Website: www.microglacoste.com

APPENDIX 2

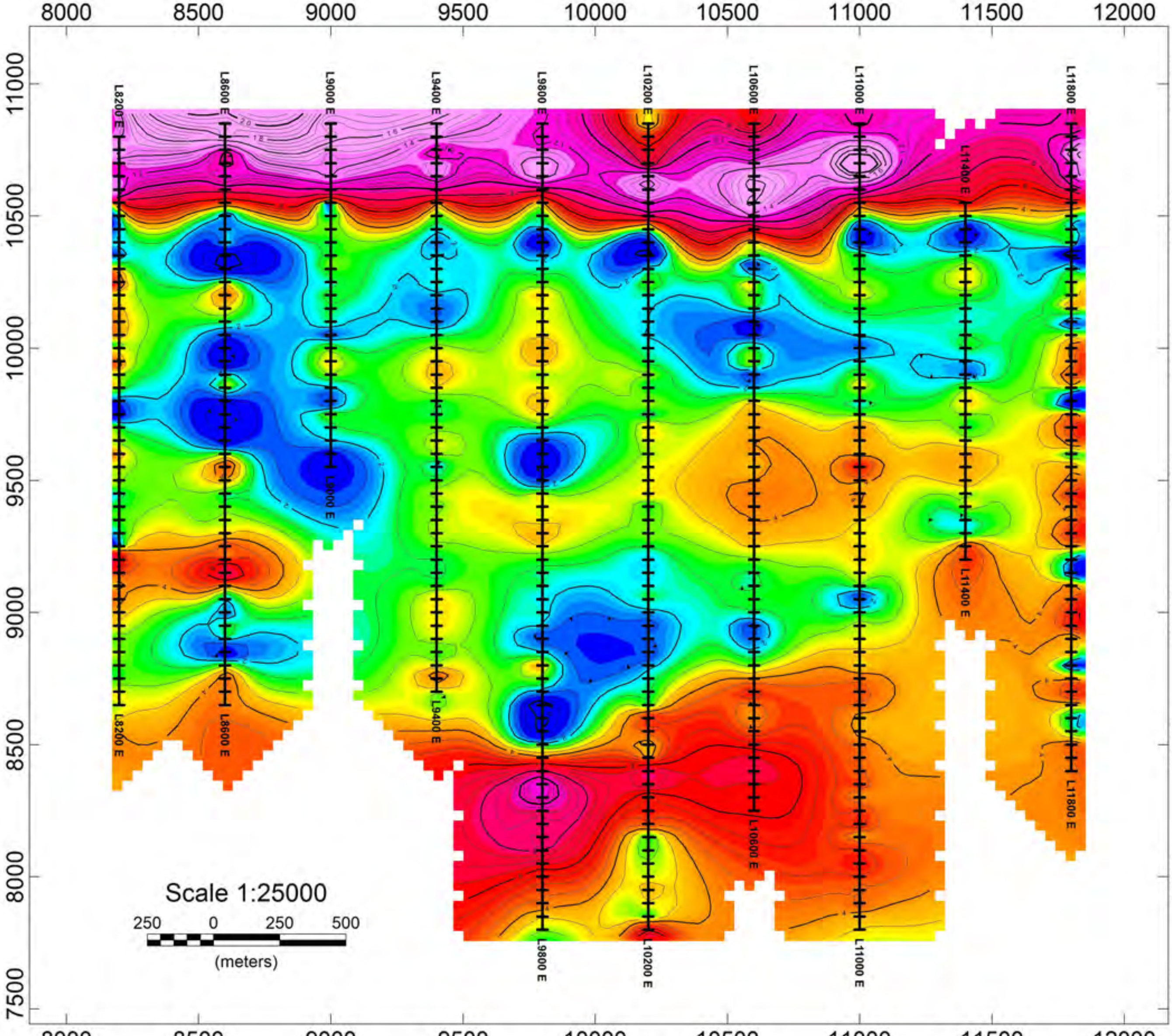
Maps 3A, 3B, 4A, 4B, 5A, 5B

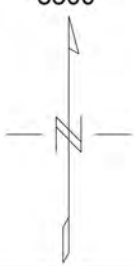


Trelawney Mining and Exploration Inc.

Map 4_A
TME East Georeferenced Grid
Level 2 IP Chargeability

Dan Patrie Exploration Ltd.

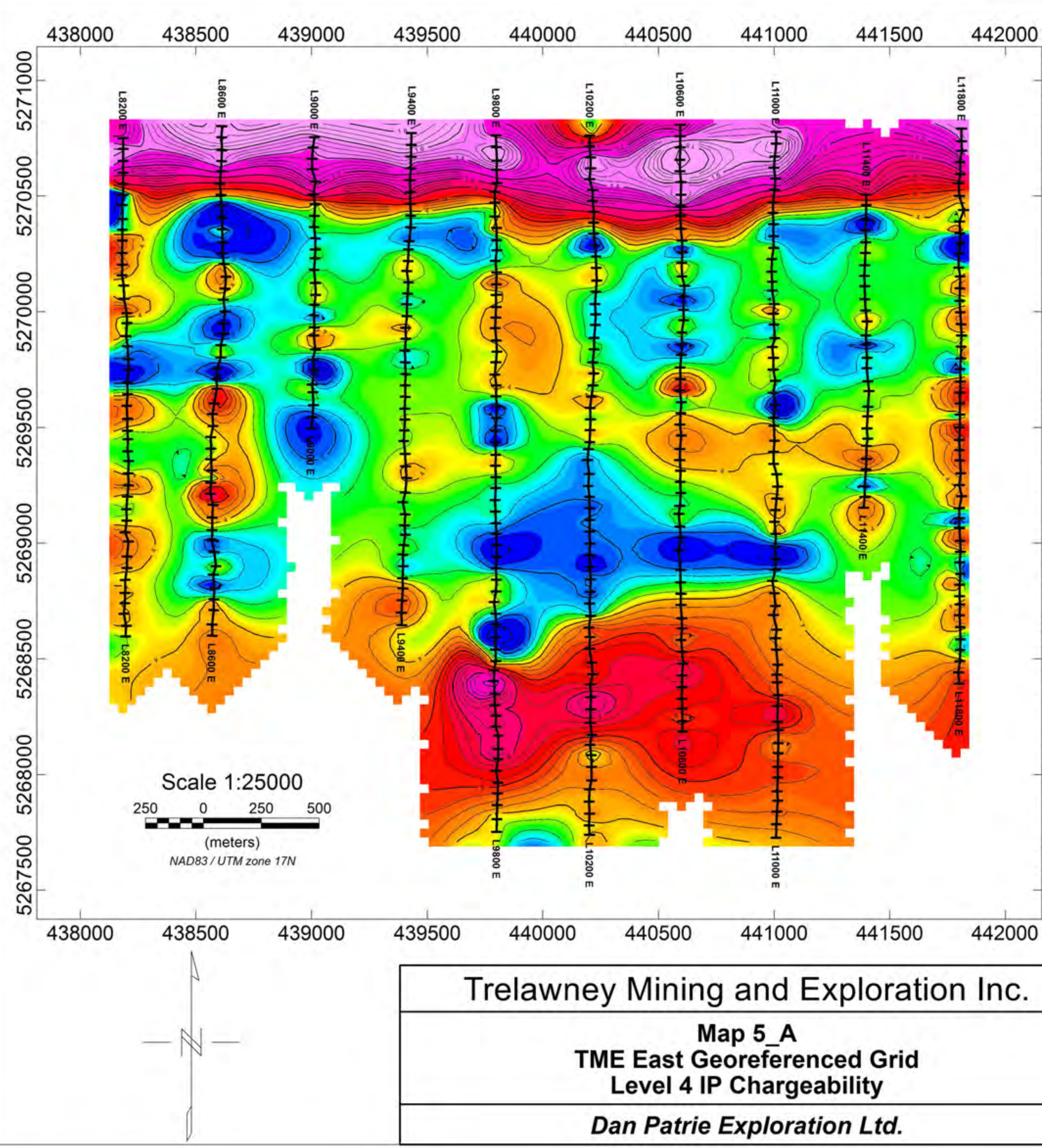




Trelawney Mining and Exploration Inc.

Map 4_B
TME East Idealized Grid
Level 2 IP Chargeability

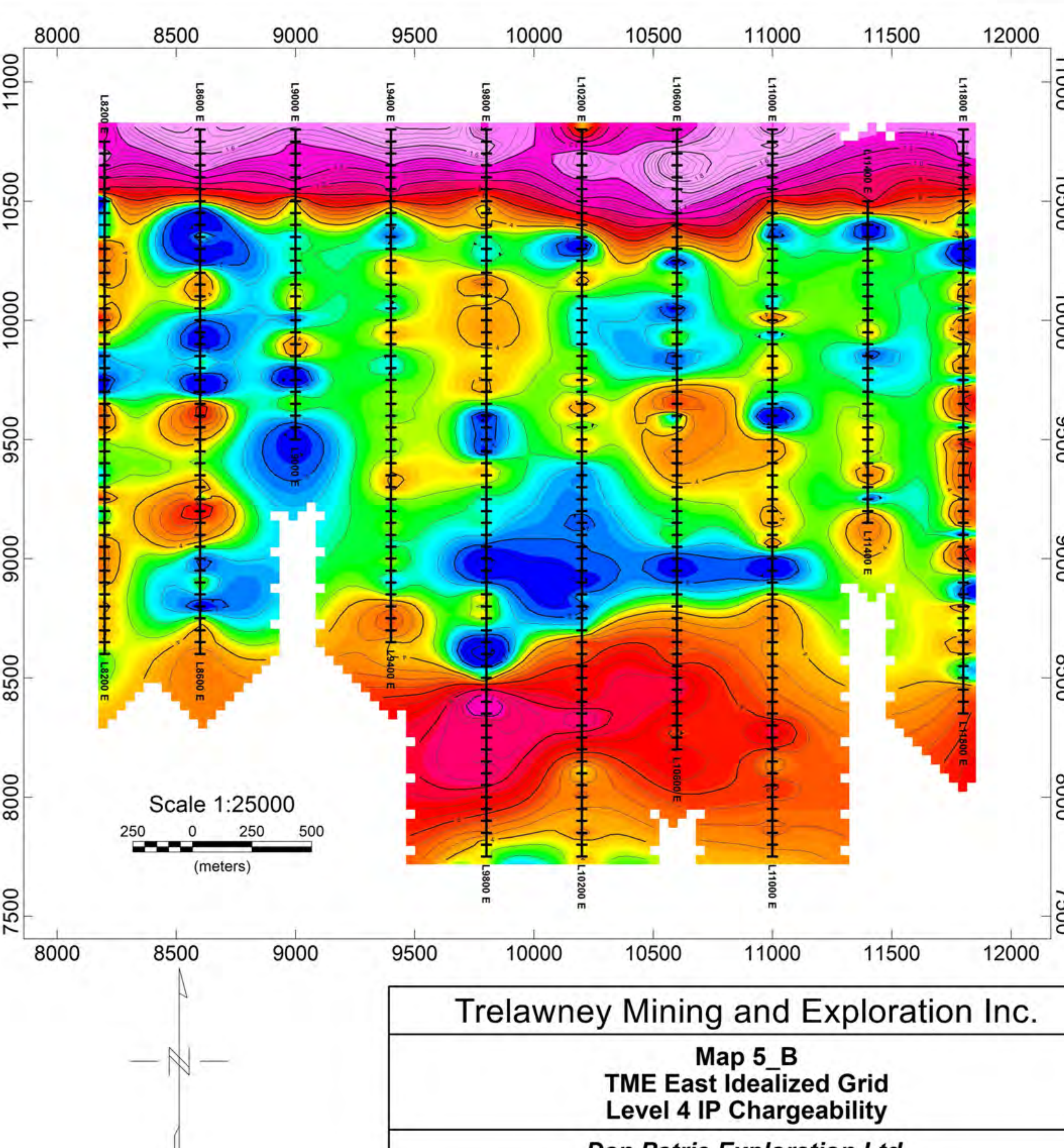
Dan Patrie Exploration Ltd.



Trelawney Mining and Exploration Inc.

Map 5_A
TME East Georeferenced Grid
Level 4 IP Chargeability

Dan Patrie Exploration Ltd.



Trelawney Mining and Exploration Inc.

Map 5_B
TME East Idealized Grid
Level 4 IP Chargeability

Dan Patrie Exploration Ltd.

APPENDIX 3

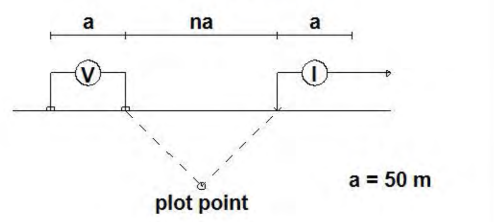
TEN (10) IP PSEUDOSECTIONS

Geosoft Software for the Earth Sciences

Pseudo Section Plot

82+00 E

Dipole-Pole Array



Pant-leg Filter

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ Strong increase in polarization accompanied by marked decrease in resistivity.
- ☐ Well defined increase in polarization without marked resistivity decrease.
- ☐ Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:3500

50 0 50 100 150 200 (meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 16/04/2015
Interpretation:

Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences

Pseudo Section Plot

86+00 E

Dipole-Pole Array

Pant-leg Filter

a = 50 m

plot point

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ Strong increase in polarization accompanied by marked decrease in resistivity.
- □ Well defined increase in polarization without marked resistivity decrease.
- □ Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:3500

50 0 50 100 150 200 (meters)

Trelawney Mining and Exploration Inc.

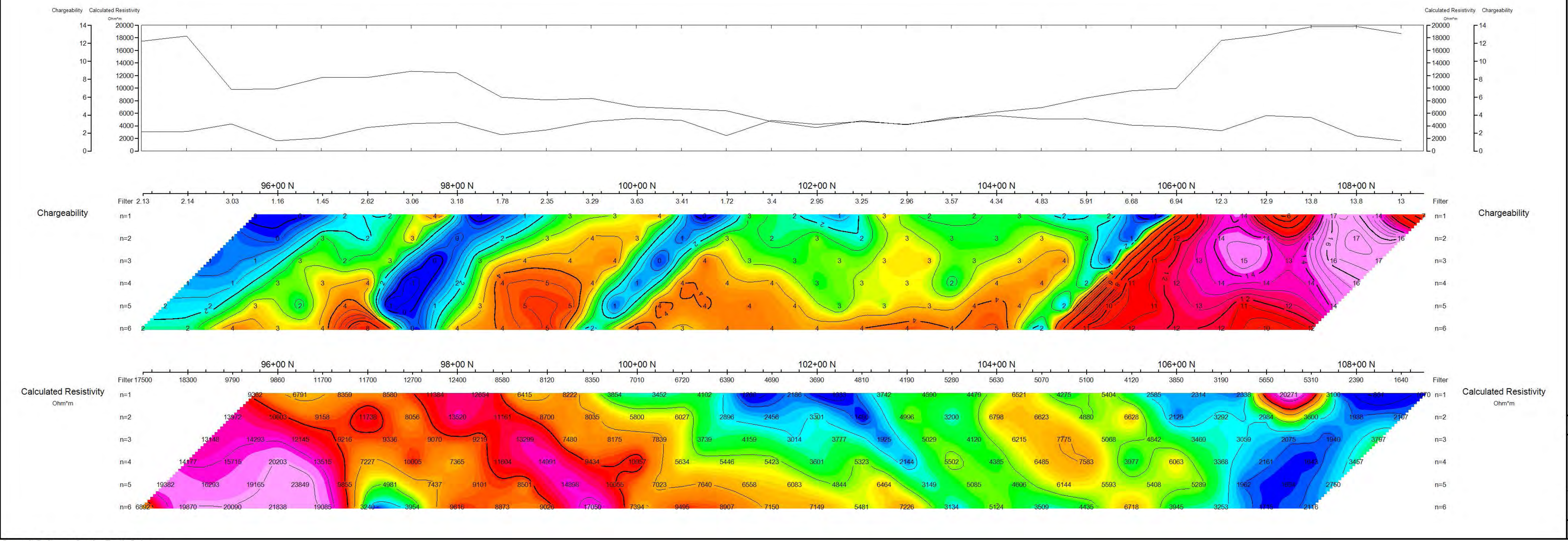
INDUCED POLARIZATION SURVEY

TME East Grid

Date: 16/04/2015

Interpretation:

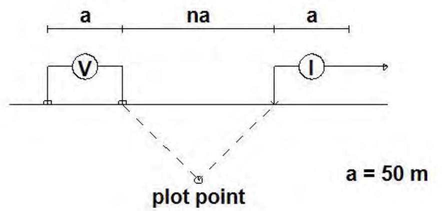
Dan Patrie Exploration Ltd.



Pseudo Section Plot

90+00 E

Dipole-Pole Array



Pant-leg Filter

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ Strong increase in polarization accompanied by marked decrease in resistivity.
- ▣ Well defined increase in polarization without marked resistivity decrease.
- □ Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 12/04/2015

Interpretation:

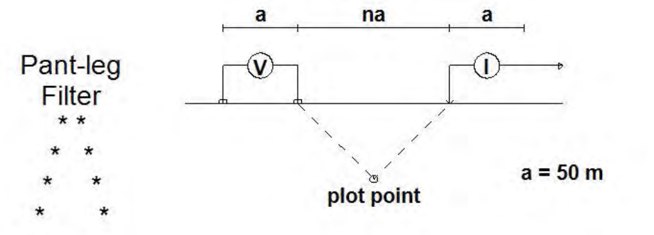
Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences

Pseudo Section Plot

94+00 E

Dipole-Pole Array

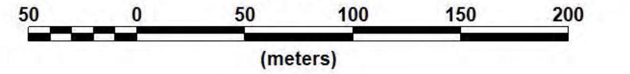


Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ **Strong increase in polarization accompanied by marked decrease in resistivity.**
- □ **Well defined increase in polarization without marked resistivity decrease.**
- □ **Poorly defined polarization increase with no resistivity signature.**
- ▼ **Low resistivity feature.**

Scale 1:3500



Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

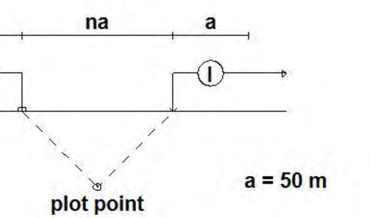
Date: 14/04/2015
Interpretation:

Dan Patrie Exploration Ltd.

Pseudo Section Plot

98+00 E

Dipole-Pole Array



Pant-leg Filter

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ **Strong increase in polarization accompanied by marked decrease in resistivity.**
- □ **Well defined increase in polarization without marked resistivity decrease.**
- □ **Poorly defined polarization increase with no resistivity signature.**
- ▼ **Low resistivity feature.**

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 14/04/2015

Interpretation:

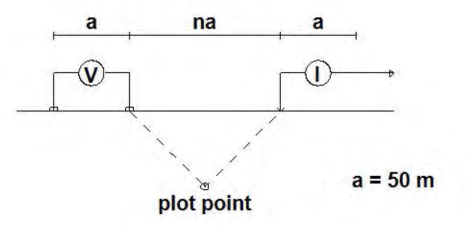
Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences

Pseudo Section Plot

102+00 E

Dipole-Pole Array



Pant-leg Filter

* *
*   *
*   *
*   *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ **Strong increase in polarization accompanied by marked decrease in resistivity.**
- □ **Well defined increase in polarization without marked resistivity decrease.**
- □ **Poorly defined polarization increase with no resistivity signature.**
- ▼ **Low resistivity feature.**

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 16/04/2015

Interpretation:

Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences

Pseudo Section Plot

106+00 E

Dipole-Pole Array

Pant-leg Filter

a = 50 m

plot point

Logarithmic Contours: 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ **Strong increase in polarization accompanied by marked decrease in resistivity.**
- □ **Well defined increase in polarization without marked resistivity decrease.**
- □ **Poorly defined polarization increase with no resistivity signature.**
- ▼ **Low resistivity feature.**

Scale 1:3500

50 0 50 100 150 200 (meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 03/05/2015
Interpretation:

Dan Patrie Exploration Ltd.

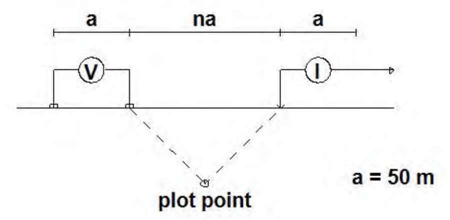
Geosoft Software for the Earth Sciences

Pseudo Section Plot

110+00 E

Dipole-Pole Array

Pant-leg Filter



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ **Strong increase in polarization accompanied by marked decrease in resistivity.**
- ◘ **Well defined increase in polarization without marked resistivity decrease.**
- □ **Poorly defined polarization increase with no resistivity signature.**
- ▼ **Low resistivity feature.**

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

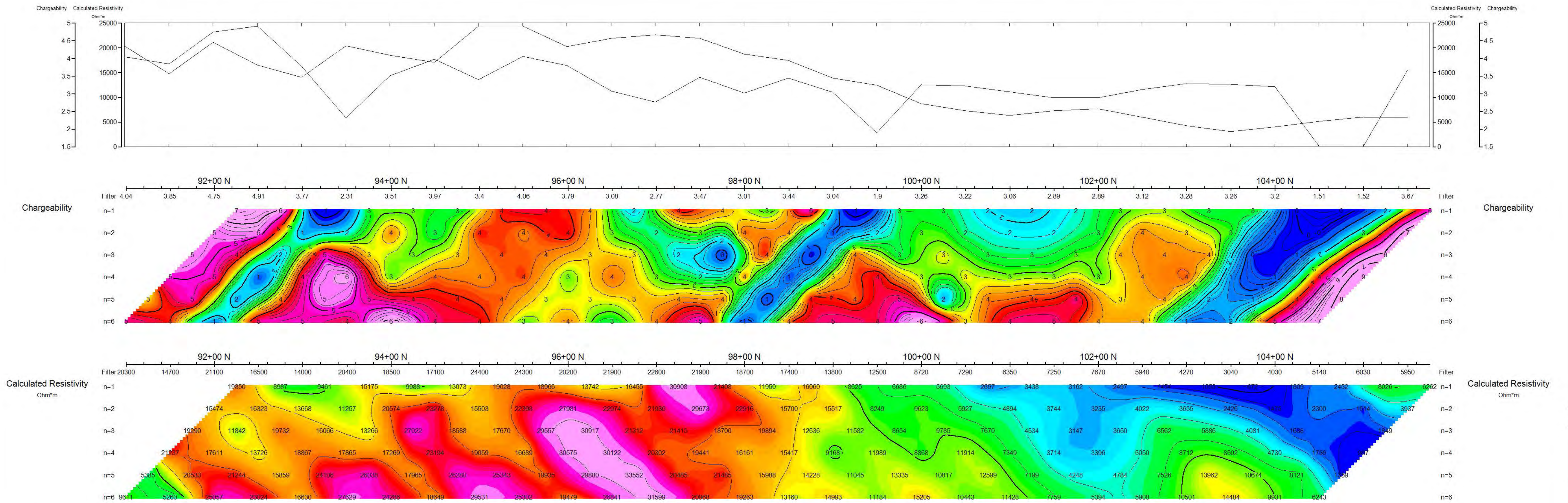
TME East Grid

Date: 02/05/2015

Interpretation:

Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences



Pseudo Section Plot

114+00 E

Dipole-Pole Array

a na a

Pant-leg Filter

a = 50 m

plot point

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ■ Strong increase in polarization accompanied by marked decrease in resistivity.
- □ Well defined increase in polarization without marked resistivity decrease.
- □ Poorly defined polarization increase with no resistivity signature.
- ▼ Low resistivity feature.

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 01/05/2015

Interpretation:

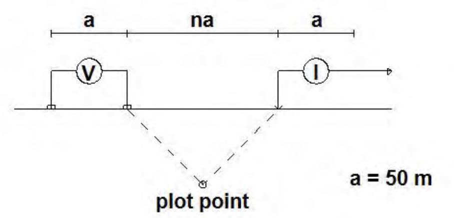
Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences

Pseudo Section Plot

118+00 E

Dipole-Pole Array



Pant-leg Filter

* *
*   *
*   *
*   *

Logarithmic Contours   1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

■ **Strong increase in polarization accompanied by marked decrease in resistivity.**

□ **Well defined increase in polarization without marked resistivity decrease.**

□ **Poorly defined polarization increase with no resistivity signature.**

▼ **Low resistivity feature.**

Scale 1:3500

50 0 50 100 150 200

(meters)

Trelawney Mining and Exploration Inc.

INDUCED POLARIZATION SURVEY

TME East Grid

Date: 30/04/2015
Interpretation:

Dan Patrie Exploration Ltd.

Geosoft Software for the Earth Sciences