Report on

Test IP Surveys

at the

Surluga ("Wawa Gold") Project

Wawa Ontario

March 5, 2014

ClearView Geophysics Inc.

Report On
Test IP Surveys
at the
Surluga ("Wawa Gold") Project
Wawa Ontario

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1.0 SUMMARY

ClearView Geophysics Inc. carried out IP (Induced Polarization) Surveys for Red Pine Exploration Inc. on their Surluga Project located near Wawa, Ontario. A total of 3.233 line kms were completed on the property from December 12th through to the 16th, 2015 in order to determine if IP could be used to enhance drill targeting for gold mineralization.

The interpretation of the results found that Gold mineralization at the test lines is generally associated with moderately strong chargeability with consistently short spectral Tau, at or immediately adjacent to a resistivity low zone within moderately high resistivity, and locally low or relatively flat magnetics typical of alteration. The combination of Spectral IP Tau, resistivity and ground magnetics can therefore be used to provide drill targets outside of the drilled test area.

2.0 INTRODUCTION

In December 2014, *ClearView Geophysics Inc.* carried out IP (Induced Polarization) Surveys for Red Pine Exploration Inc. on their Surluga Project located near Wawa, Ontario. The work was performed in order to determine if IP could be used to enhance drill targeting for gold mineralization in preparation for their 2014/2015 Winter Drill Program.

3.0 PROPERTY DESCRIPTION AND LOCATION

The “Surluga” or “Wawa Gold Project” is located in Wawa, Ontario, an area of significant historical and current gold exploration and production. The property consists of four contiguous mining claim groups totaling 5,338 hectares (Figure 3.1-1) and has hosted eight past producing mines with historic production of over 120,000 ounces.

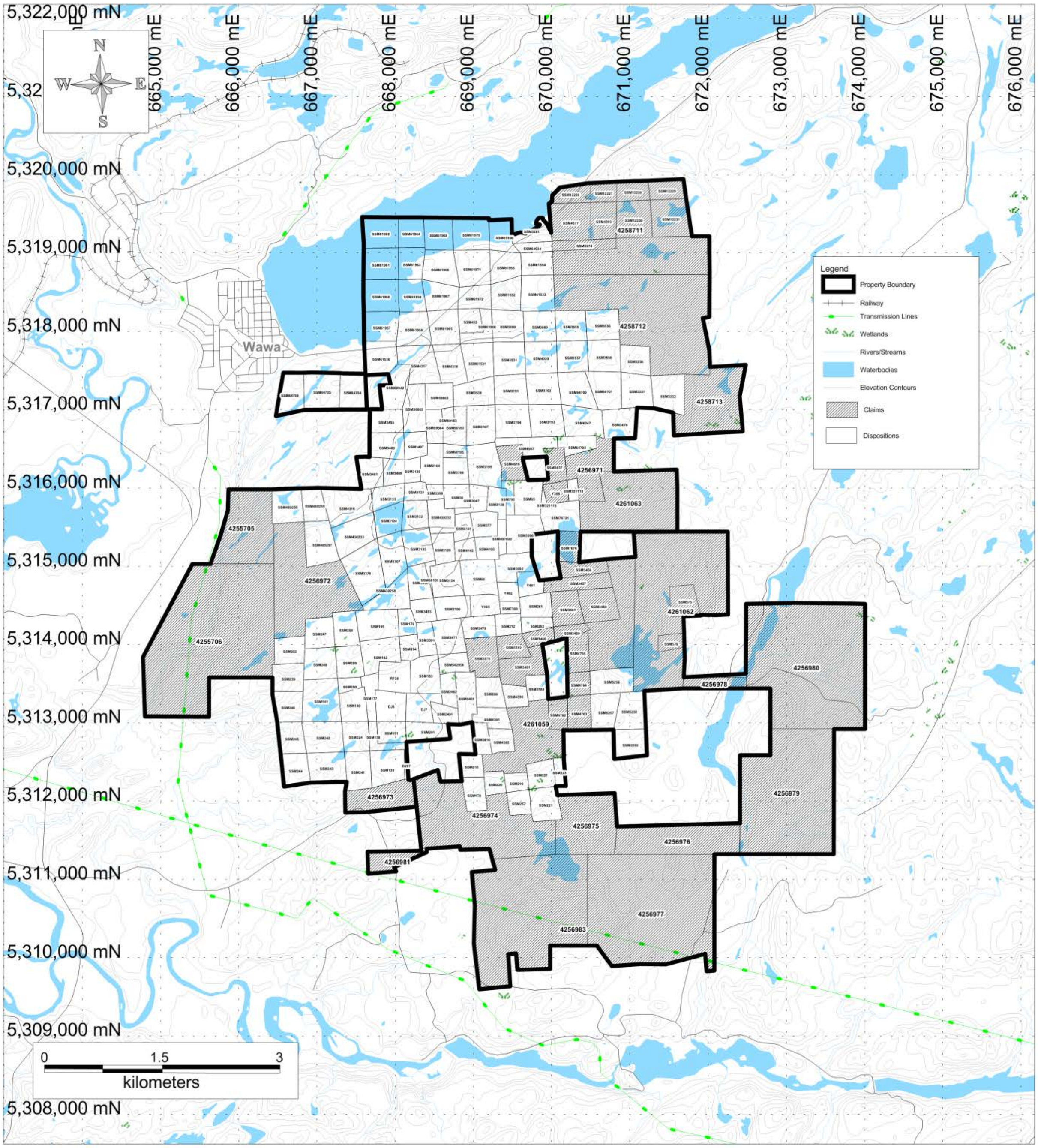

Figure 3.1-1: Surluga (Wawa Gold) Property

The property currently features an inferred gold resource ("The Surluga Deposit") of 1,072,335 ounces at 1.49 grams per tonne gold, contained in 22.355 million tonnes, open along strike and at depth. Red Pine has entered an assumption agreement with Augustine Ventures (CSE: WAW) and Citabar (acting by and through its sole General Partner, WAWA GP INC.) to further develop the Wawa Gold Project. Reinterpretation of the property geology could lead to an improvement in both the grade and size of the gold resource.

4.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Access

The Town of Wawa is located on Highway 17 (Trans-Canada Highway), ~480 km east of Thunder Bay, Ontario, ~225 km north of Sault St. Marie, Ontario, and ~650 km northwest of Toronto, Ontario. The property can be accessed by driving 2 km on Highway 101 from Wawa and then turning south onto a gravel road using a 2-wheel drive vehicle. During the winter months, the main access road to the property from Highway 101 is ploughed. Areas off the main road can be accessed by snowmobiles.

4.2 Climate

The vicinity to Lake Superior has a significant impact on the climate on the property. Environment Canada has recorded weather details in Wawa since 1981 (http://climate.weather.gc.ca) and showed that the warmest temperatures are recorded in July and August (daily average 15° C; daily maximum 20.8° C). The coldest temperatures are typically recorded in January (daily average −14° C; daily minimum −20.2° C). September and October are the months with the most rainfall (~122 and ~107 mm, respectively) and the highest snowfall occurs in December (80 cm).

Exploration can be completed on the property year-round.

4.3 Physiography and Vegetation

The Town of Wawa is located at 289 m asl. The area of the property is hilly with a range of elevations from 300 m to 400 m asl. Steep ridges exist locally. The property is forested with spruce, pine, poplar and birch being the dominant species.

4.4 Infrastructure and Local Resources

Skilled and unskilled labour is available in Wawa because of the long mining history of the area. Wawa has a population of 2,975 persons (http://www12.statcan.gc.ca/census-recensement/2011).

A 230 kV power line crosses the southern part of the property and a second power line crosses the western part of the property. An airport exists in Wawa but no commercial flights are operated from it. Algoma Central Railway was acquired by Canadian National Railways and does not operate freight service between Sault Ste. Marie and Hearst any more. Passenger service still exists to Hawk Junction, 23 km northeast of Wawa, but is scheduled to end in 2015 also.

Sufficient water is available from lakes and streams on the property. Surface rights for a large part of the property are held by Red Pine's joint venture partners Augustine Ventures Inc. and Citabar Limited Partnership (acting by and through its sole general partner WAWA GP INC.) and are sufficient for any potential mining operation.

5.0 Geological Setting and Mineralization

5.1 Regional Geology

The property is located in the Michipicoten greenstone belt of the Wawa Subprovince (Superior Province). The Superior Province is the world's largest Archean craton; it formed by amalgamation of subprovinces of various origins (plutonic, volcanic-plutonic, gneissic, sedimentary) (Polat and Kerrich, 2000). The subprovinces range in age from 3.0 to 2.65 Ga. The Wawa Subprovince extends from Minnesota in the west to the Kapuskasing structural zone in the east (Figure 5.1-1). The Quetico subprovince is located to the north of the Wawa subprovince and the south-eastern boundary is represented by the Batchawana fault zone. The southern boundary is located under Lake Superior.

Two areas of greenstone belts characterize the subprovince: one along its northern border and one in its central parts. The latter area includes the Michipicoten greenstone belt.

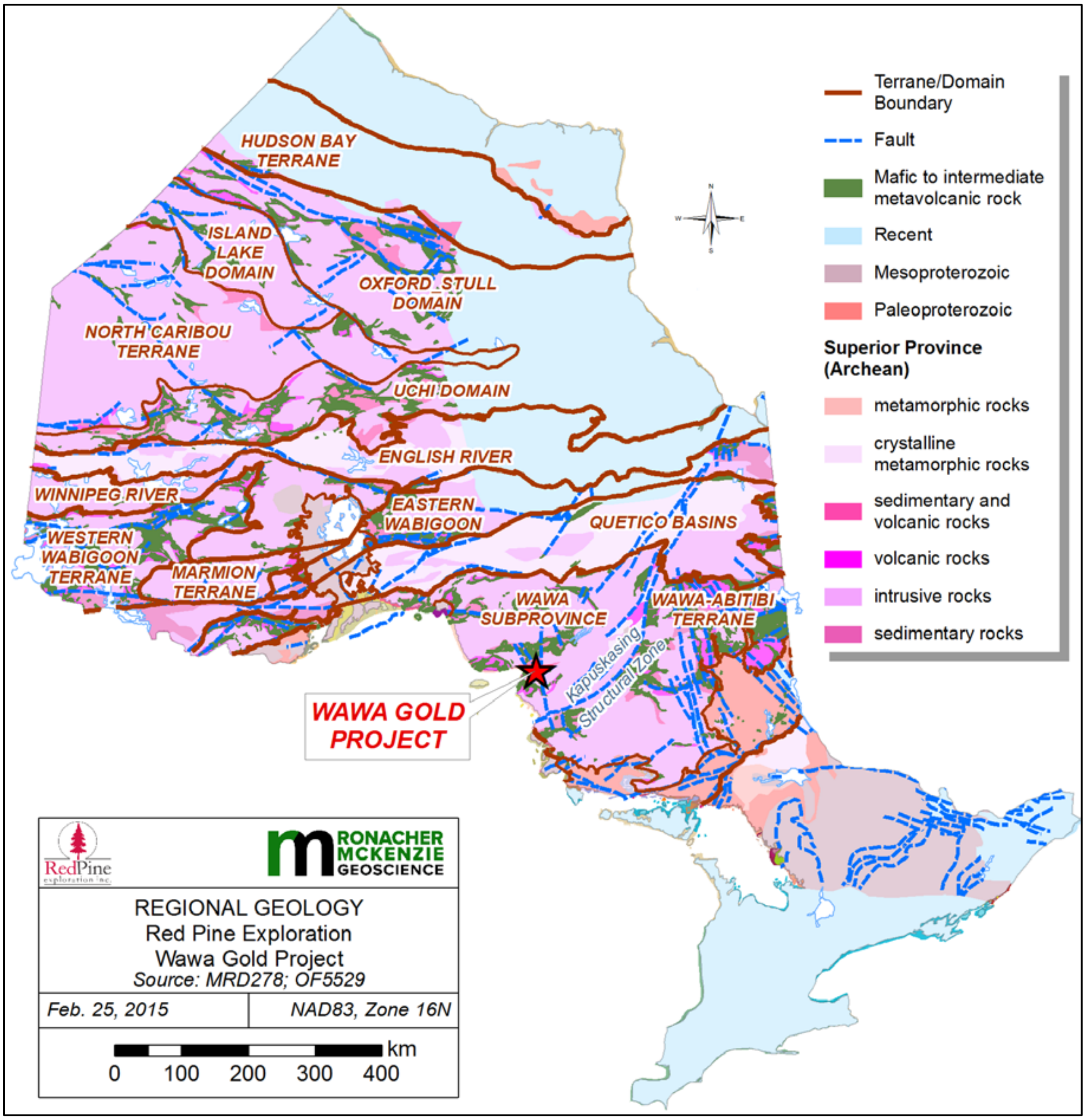

Figure 5.1-1: Map showing the Superior Province and its Sub-provinces

5.2 Local Geology

The Michipicoten greenstone belt consists of three cycles of mafic and felsic metavolcanic rocks with associated subvolcanic intrusions and metasedimentary (Sage, 1994). The ages of the three cycles are 2.9 Ga, 2.75 Ga and 2.7 Ga. The two older cycles are capped by extensive iron formation. The composition of the mafic volcanic rocks ranges from basaltic to komatiitic; the youngest mafic volcanic rocks are tholeiitic. The Hawk Lake Granitic Complex and the Jubilee Lake Stock are the intrusive equivalents to the felsic portions of the two oldest cycles and represent the centres of calderas. The granitic stocks are located along a regional structure, the Wawa–Hawk Lake–Manitowik Lake Fault (Figure 5.3-1). Diabase dikes cut the supracrustal rocks. The Firesand River Carbonatite intruded along the Wawa–Hawk Lake–Manitowik Lake Fault indicating that the fault is deep-seated. The fault forms the boundary between an area of extensive lamprophyres to the south and a lamprophyre-free zone to the north. Sage (1994) interpreted the greenstone belt to have formed as an island arc in a convergent plate margin environment.

The Michipicoten greenstone belt was metamorphosed to greenschist facies whereas the surrounding supracrustal rocks were metamorphosed to amphibolite facies. The greenstone belt is surrounded by Early Precambrian granite and gneiss. It is covered by extensive glacial material.

The Wawa Gold Project is located along the southern boundary of Michipicoten greenstone belt (Sherman, 2005).

5.3 PROPERTY GEOLOGY

A large part of the property is underlain by the Jubilee Stock, a high-level subvolcanic intrusion of variable composition (diorite to quartz diorite and granodiorite; Frey, 1987) (Figure 5.3-1) and (Figure 5.3-2). The Jubilee Stock is fine- to medium-grained and locally porphyritic; it intruded into quartz-feldspar crystal tuff at 2.745 Ga. Intrusive breccia occurs at the margins of the stock. MacMillan and Rupert (1990) observed that the more massive and competent, central parts of the Jubilee Stock are associated with better gold grades, which they attributed to a locally favorable stress field spatially associated with the competent blocks.

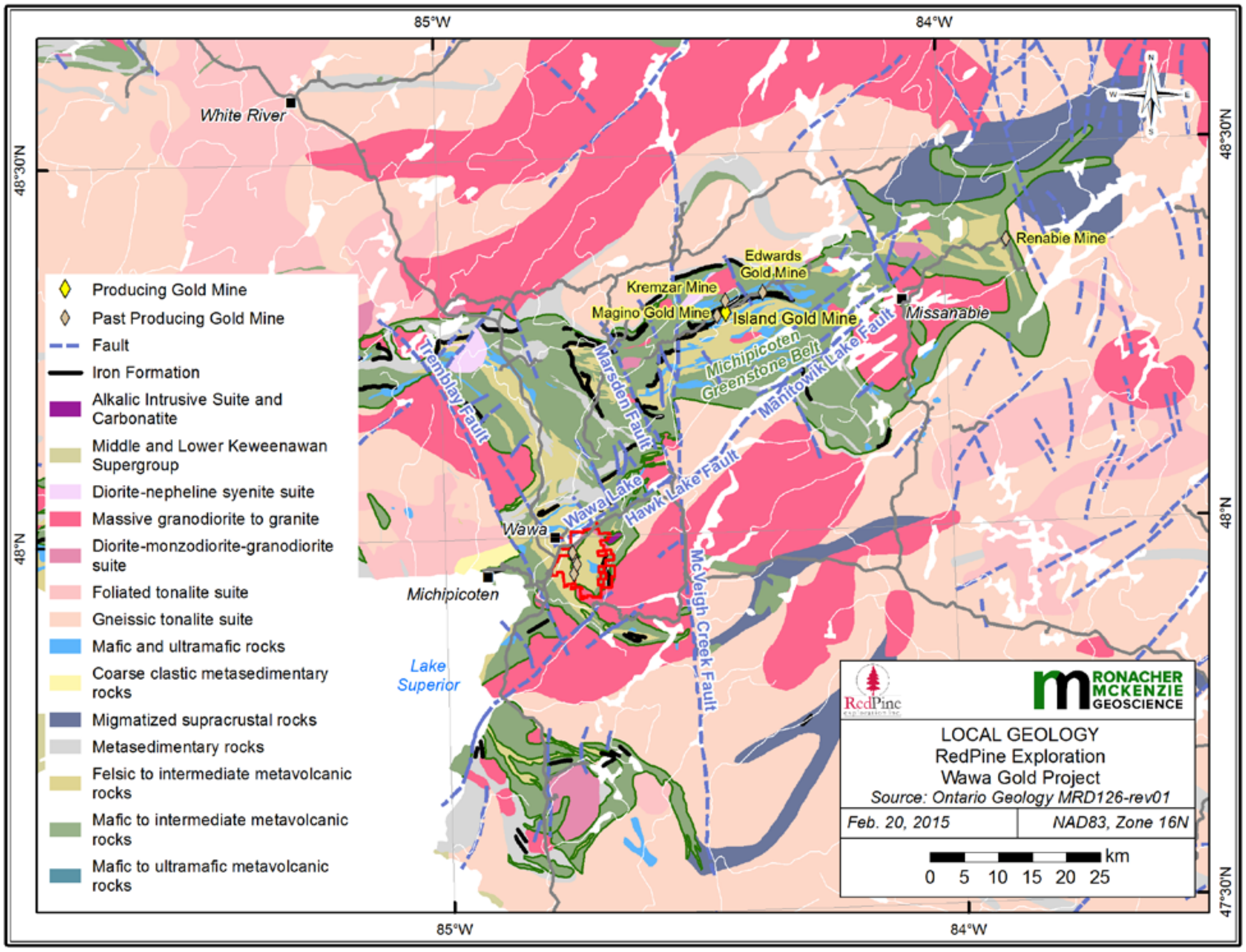

Figure 5.3-1: Map of the Michipicoten Greenstone Belt

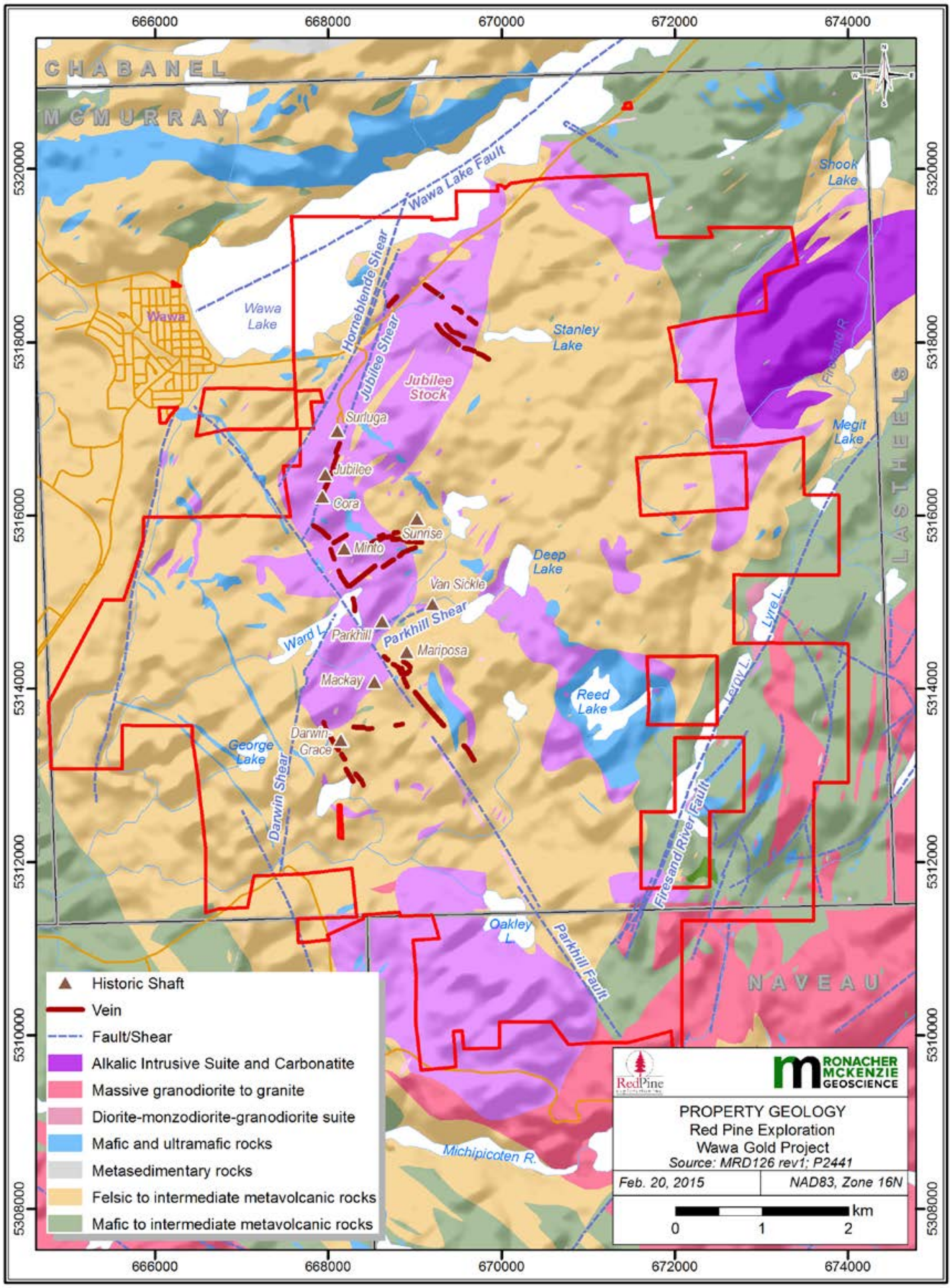

Figure 5.3-2: Property Geology Map

5.4 STRUCTURE

The structural setting on the property is complex and characterized by numerous fractures and faults of variable strikes and dips. The dominant directions of structural features, e.g., faults, joints, quartz-gold veins and zones of weakness intruded by dikes, is northeast (20°–45° and 45°–70°; Frohberg, 1937) and northwest (320°–340°). Examples of northeast striking faults are the prominent Jubilee shear zone, the Darwin shear, which is interpreted to be the offset extension of the Jubilee shear, and the Minto fault (Figure 5.3-2). The Parkhill fault is an example of a northwest striking feature.

Diabase dikes post-date gold mineralization. Lamprophyre dikes cut the diabase dikes.

The Jubilee shear zone, which hosts the majority of the mineralization at the Surluga Mine, consists of a number of parallel, ~300–900 m long en-echelon segments (Rupert, 1997). It strikes northeast (018°) and dips 40° to the southeast. Its width ranges from 9 m to 60 m. It extends from Wawa Lake to the northwest-trending Parkhill Fault (3.2 km); its southern continuation, the Darwin Shear Zone, extends another 2 km to the southwest (Rupert, 1997; MacMillan and Rupert, 1990). The Jubilee Shear Zone was interpreted to be an oblique thrust fault with the hanging wall moving up and north (Helmstaedt, 1988). It is not exposed north of Wawa Lake and is assumed to be truncated by a NW trending fault under Wawa Lake (Helmstaedt, 1988).

5.5 MINERALIZATION

Historically, mineralization was found at various locations on the property as evidenced by the eight past-producing mines. The mineralization is spatially associated with the major shear-zones on the property.

Gold mineralization is finely disseminated in quartz veins, lenses and pods within shear and breccia zones in various rock types (Frey, 1987). This lack of preference of the gold mineralization for a particular rock type is typical of the mineralization in the area. Recrystallized quartz and minor amounts of sulfides are also characteristic. Gold in wall rock is not common. Frey (1987) interpreted the rock competency to have a major impact on the character and location of the mineralization.

According to Frey (1987) gold occurs within the NE (20°) trending Jubilee shear zone and dips between 30° and 40° east. However, Sherman (2005) stressed that most historical deposits are hosted by quartz lenses located east of the Jubilee shear zone. In addition, mineralization also occurs in the hanging-wall of the Jubilee shear zone.

Rupert (1997) describes the ore zones to consist of thin lenses of <2.5 cm to 6 m thickness, 4.5–15 m length and 3 to 12 m width. They occur in clusters and are arranged in en-enchelon manner, which made it difficult to target them by drilling. Two to 4% pyrite and minor arsenopyrite and chalcopyrite were also reported; strong silicification is associated with the mineralization. The lenses consist of banded, smoky quartz that is often folded and deformed. Younger, barren quartz veins also occur. Helmstaedt (1988) suggested that the ore zones appear to be lenses because the maximum elongation direction during ductile shearing was oblique to the trend of the Jubilee zone.

Kuryliw (1970) reported the mineralization to be zoned from white quartz-tourmaline-gold to grey quartz-pyrite-gold to blue-grey quartz-arsenopyrite-gold with increasing gold grades from quartz–tourmaline to quartz–gold.

The continuity of the mineralization between the various historic mines on the property is uncertain due to lack of drilling data.

6.0 EXPLORATION HISTORY

6.1 PRIOR TO 2007

Prior to 2007 exploration drilling along the Jubilee Shear consisted of 49,549 m of diamond drilling in 279 surface holes, and 48,768 m in 1,502 underground diamond drill holes. In 1998, the Ontario Geological Survey flew the Surluga Property as part of a helicopter-borne geophysical survey. Magnetic and three frequency electromagnetic data were recorded. A mining history of the property was summarized by Rupert (1990) and is outlined below:

1880s	Numerous mining locations acquired in the area by "Princes of Commerce". Very few technical records.
1895	The Ontario government adopted a claiming system to encourage mining title acquisition by other classes of citizens.
1897-1902	A staking rush occurs in the Wawa area. Most local prospects are reported as legally defined new discoveries in this period.

1901 Grace Mine (Algoma Commercial Co.) started operations.

1899-1903 Mariposa and Minto shafts are sunk.

1902 Longbottom and other veins are located near the Parkhill mine but their development is deterred by property boundaries.

1901-1912 Intermittent production from the Grace mine.

1910-1922 Many claims in the area are abandoned.

1922-1926 The area is restaked and heavily promoted, primarily by the Power and Mines Syndicate and Corporation, owner of the Grace mine, the Michael Syndicate,

1930-1938 Parkhill Gold Mines Limited sank a shaft and produced gold from the Parkhill mine.

1930-1934 The Minto mine produced gold for Minto Gold Mines Limited.

1934-1939 The Jubilee mine was operated by Minto Gold Mines Limited.

1934-1937 Darwin Gold Mines Ltd. produced gold from the Grace mine.

1961-1987 Surluga Gold Mines (later renamed Citadel Gold Mines) explored the property north of Ward Lake, and developed the Surluga mine. Production began in 1969. Over 350 surface and 900 underground diamond drill holes were bored.

1980-1986 Dunraine Mines Limited acquires the Parkhill mine and the Vansickle mine, and drilled 39 additional diamond drill holes. The Parkhill mine is partially dewatered.

1980-1983 Dunraine Mines Limited acquires the Grace mine property and drills 37 diamond drill holes.

1988 Citadel purchases the Parkhill and Grace mine properties. 1987 Citadel options the Vashaw Claims.

1988-1990 Citadel conducts surface stripping programs on the Parkhill, Darwin and Vashaw claim groups.

1987-1989 Citadel diamond drill program includes one hole along the Darwin Shear and 5 holes along a suspected splay off the Darwin Shear, north of Ward Lake.

1989 Citadel produces gold from the Surluga mine for 8 months. The tailings area is developed at Minto Lake. On closing the remaining resources were estimated at 710,000 short tons at a grade of 0.125 oz/short ton. WGM has not audited this estimate. This estimate is considered historical as it pre-dates the NI 43-101 standard. This historical estimate is presented here for historical completeness, and should not be relied upon.

In 1989, Van-Ollie Mines Limited acquired the neighboring Van Sickle mine property. An extensive stripping program was conducted on the Van Sickle, Sunrise and Mickelson veins, and 5,113 feet is diamond drilled in 30 holes.

In 1996, Goldbrook Explorations Ltd. ("**Goldbrook**") optioned the Surluga Property to consider the potential for a large tonnage - low grade operation. Bowdidge (1996) used surface diamond drill holes to prepare an estimate of the grade and tonnage in the upper part of the Jubilee Shear. By using a lower cutoff grade of 1.03 g Au/t, and reducing all assays greater than 34.29 g/t to that value, Bowdidge estimated that the Surluga Property contained 9,319,000 tonnes grading 1.75 g Au/t. It should be noted that the Bowdidge estimate has not been audited, and, while the method used is valid, the estimate pre-dates the NI 43-101 standard. This historical estimate is presented here for historical completeness, and should not be relied upon.

In 2004, Mr. Peter Irwin of Resource Data Management Inc. ("**RDM**") compiled a three dimensional model of the Surluga mine for Citabar. RDM used the existing drill hole database and digitized the mine levels from mine plans. Mineralized zones greater than 1 g Au/t were outlined. The model highlighted the potential for mineralization down plunge to the south-east of the existing mine workings. Citabar then drilled 9,282 m in 14 diamond drill holes to test the model.

6.2 PRODUCTION HISTORY

The property's production history is listed in Table 6.2-1.

Company	**Mine**	**Years of Operation**	**Tonnes Milled**	**Recovere (kg Au)**	**Grade (g/mt Au)**
5 Companies	Grace-Darwin	1902-1937	41,302	548.5	13.3
Mariposa GML	Mariposa	1904	8	0.6	72.4
Minto GML	Minto	1930-1934	57,335	661.5	11.5
Cooper GML & Minto GML	Jubilee	1929-1939	107,930	463.9	4.3
Parkhill GML	Parkhill	1929-1938	114,096	1689.1	14.8
Canfield & Smith	Van Sickle	1935-1936	8,372	53.2	6.4
Minto GML	Cooper	1938	4,435	50.6	11.4
Surluga GML & Citadel	Surluga	1968-1991	86,082	268.4	3.1
Total			**419,559**	**3,735.8**	**8.9**
					(Source: Rupert, 1990)

Table 6.2-1: Surluga Property Production History

6.3 PRE 2007 DRILLING

Prior to 2007, exploration drilling along the Jubilee Shear consisted of 49,549 m of diamond drilling in 279 surface holes, and 48,768 m in 1,502 underground diamond drill holes. Most of the holes are documented on plans and sections that were drawn in the course of mine production. In addition, Augustine has been able to locate some surface drill hole collars where there are records of surface holes being drilled. This suggests good survey control of the historical drilling in the database. The underground workings are not currently accessible, so the quality of the underground drilling must be inferred from the quality of the available data, which seems to be good.

6.4 2007 DRILLING

There were 12 diamond drill holes, and three wedged holes, drilled in the summer and fall of 2007. A total of 8,401 m of core was drilled. All the holes were NQ size, except for hole 07-393B which was reduced to BQ size because of problems with the wedging procedure. The drill holes targeted the down dip extension of the Jubilee Shear zone.

Down hole surveys were carried out 4 or 5 times in each hole, more often when wedging was being attempted. Deviation was within reasonable limits. Core logging was completed on site by three different geologists. Augustine has noted that there is a large discrepancy between the nomenclature used by each of the geologists, and proposes to relog and resample the core. A lack of storage space prompted Citabar to dispose of some of the core that was considered to be unmineralized.

6.5 2011 DRILLING

In the spring of 2011, Augustine conducted an 18 hole drill program to verify the historical data on the Surluga claims. Five of the holes were set to target the mineralization around the Citadel Jubilee mine, while the remaining 13 holes were designed to twin existing diamond drill holes. Discovery Diamond Drilling Ltd. of Morinville AB was contracted to drill 2,944 m of NQ size core. The holes were surveyed every 10 m down the hole using a Flex-IT® down hole survey tool. The drill hole collar locations were located with a SXBlue WAS Area based GPS survey instrument. The core was transported by Augustine personnel by truck to the core shack in Wawa, where it was logged and sampled.

7.0 CURRENT EXPLORATION

7.1 2014 TEST IP SURVEY

In December of 2014, ClearView Geophysics Inc. carried out IP (Induced Polarization) Surveys for Red Pine Exploration Inc. on the following patented mining claims making up part of the Surluga Project located near Wawa, Ontario (Table 7.1-1):

Patented Mining Claim ID	Line ms
SSM59663	306
SSM60942	52
SSM59662	258
SSM60183	29
SSM60184	50
*SSM3104	814
SSM3400	246
SSM3407	254
SSM3131	483
SSM3408	304
**SSM6495	154
SSM3401	59
SSM3130	77
SSM59664	86
SSM3132	61
15 Patented Mining Claims	**3.233 Line Kms**

*Table 7.1-1: Location and extent of work. *Title listed is for the associated surface rights. Mineral rights patented claim title currently being confirmed by MNDM but known to be part of lease 107761. **Title listed is for mineral rights and known to be part of lease 107761 but is also pending patented mining claim ID confirmation by MNDM*

All titles are held 100% by WAWA GP INC. as part of the December 10th, 2014 Assumption agreement between Red Pine Exploration, Augustine Ventures Inc., and Citabar Limited Partnership (acting by and through its sole General Partner, WAWA GP INC.). A total of 3.233 line kms were completed from December 12th, 2014 to December 16th, 2014 with the objective of determining if IP could be used to enhance drill targeting for gold mineralization in preparation for the Winter Drill Program of 2014/2015.

7.2 Location & Access

Access to the project area was south on Surluga road from Hwy 101 a couple kilometers east of Wawa. The base of operations for the crew was in Wawa. Daily access to the survey area was by 4W-drive trucks.

7.3 Personnel

Joe Mihelcic; Geophysicist/Party Chief: Mr. Mihelcic operated the IP receiver. He was responsible for the surveys and data quality. He also processed and plotted the data on a daily basis, and prepared this report.

Barron Mercier; Transmitter Operator: Mr. Mercier operated the IP transmitter and motor generator. He also recorded transmitter currents, reading times and topographic notations in a field book.

Daniel A. Tremblay; Current Rods: Mr. Tremblay moved and installed the transmitter current rods. He also reeled-up and moved the current wire along the line and across the grid.

Nicole L. Fortin, Barron-Jonathon Mercier, Michael Tremblay; Receiver Electrodes: Ms. Fortin, Ms. Smith and Mr. Bourassa positioned the IP receiver electrodes. They also assisted with the general operations of the IP survey.

7.4 Survey Specifications & Equipment

Table 7.4-1 and Table 7.4-2 summarize the survey specifications and equipment:

Date	Line	Station From	Station To	*Distance (m)	Comments
Dec.12	n/a	n/a	n/a	n/a	Joe/Mike/Barron/BJ and equipment mobilize to Wawa.
Dec.13	3N	0	200E	200	Setup system and infinity, IP survey partial 4-person crew; Nicole/Dan Arrive late PM.
Dec.14	3N	200E	900E	700	IP survey – full 6-person crew.
	4E (‘BL’)	0N	1000E	1 000	
	2N	800E	500E	300	
Dec.15	2N	500E	50W	550	IP Survey, reel-up and all gear out from field.
	1N	0E	750E	750	
Dec.16	n/a	n/a	n/a	n/a	Demob crew and equipment.
			Total:	**3 500 m**	

Table 7.4-1: Production Report. Distances listed in this table are approximations.

Refer to Appendix A Instrument Specifications.

Pole-Dipole Array	n=1-6, “a”=50 m; n=7,8 “a”=100m combo-array
Receiver	Scintrex IPR12, time domain
Transmitter	Walcer 10 kW

Table 7.4-2: Instrumentation and Array

7.5 SURVEY METHODOLOGY

The IP survey consisted of injecting an electrical current into the ground for two seconds. The transmitter current was then turned off for two seconds, during which time an IP receiver recorded the decaying voltage at pre-defined intervals.

The infinity current electrode was located approximately 500 metres west of Minto Lake at a small dam. The in-line electrode was maintained 50 metres from the nearest receiver electrode. There were nine receiver electrodes. The first seven were placed at 50-metre intervals and the last two at 100-metre intervals. The potential electrode located nearest the transmitter current electrode is called “P1”. The furthest electrode down the line is called “P9”. Electrode pairs are called dipoles.

The first reading was taken with eight dipoles. Following this reading, the current electrode was moved forward 50 metres while keeping the receiver electrodes stationary. The first receiver electrode was disconnected and seven dipoles were read: five with 50-metre dipoles and the last two with 100-metre dipoles. Following this reading, the receiver electrodes were moved 100-metres forward and the current electrode 50 metres so that the process could be repeated. Eight and seven dipoles were read for the entire line except at the end where dipoles were dropped.

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

The transmitter operator also wrote down field notes relayed by the line workers. These notes are related to topography and obstacles encountered along the survey line (e.g., cliffs, lakes) that could be relevant to data interpretation.

7.6 DATA PROCESSING AND PRESENTATION

The survey was completed on four (4) test lines as depicted in the following image (Figure 7.6-1). The IP data are presented as pseudosections (refer to Plates 1 through 4, Appendix B).

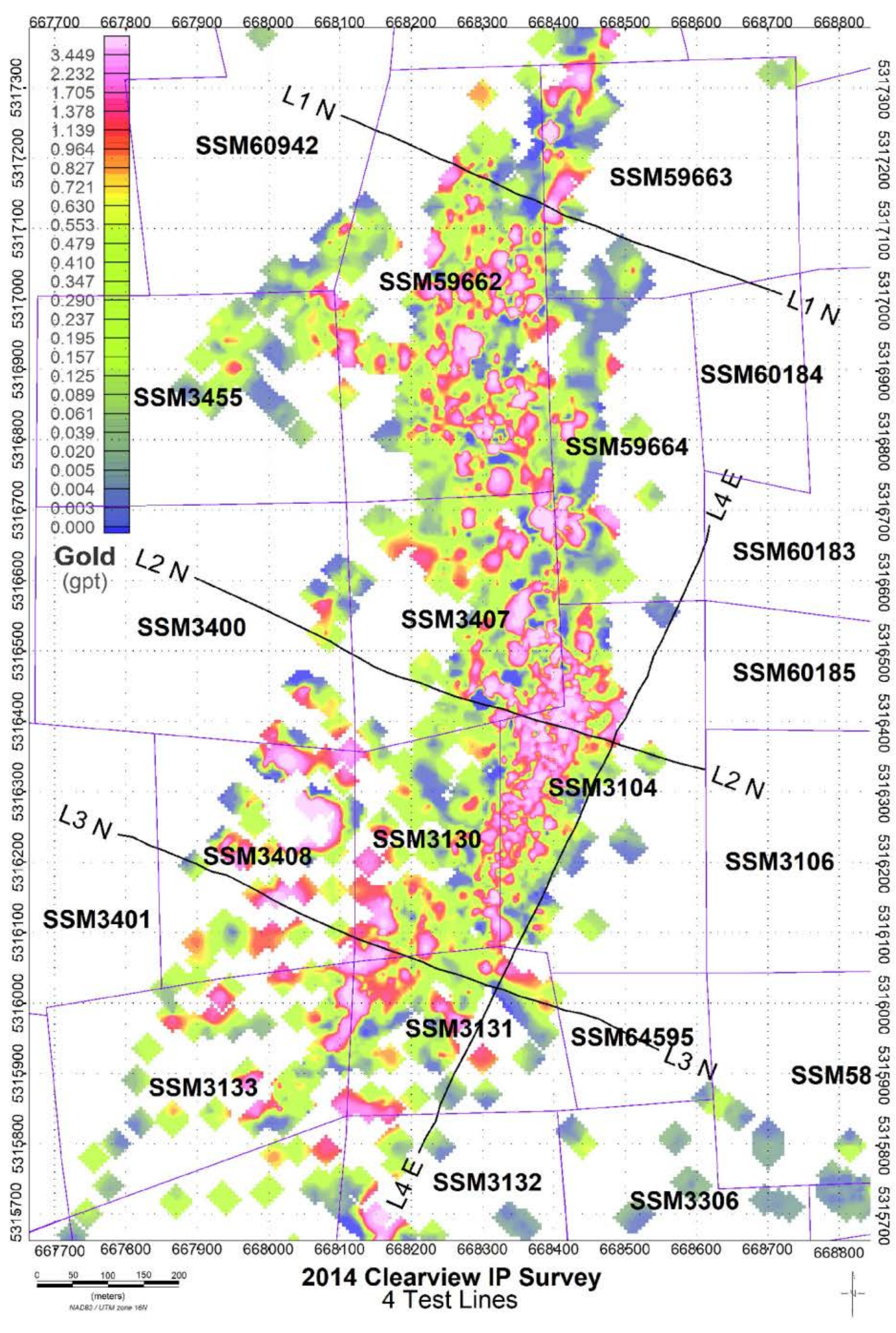

Figure 7.6-1: IP Survey Lines

Pseudosection panels are presented for the Mx chargeability (690 ms – 1050 ms decay slice), apparent resistivity, and Spectral *Tau*. Spectral *MIP* and Spectral *c* were also calculated and preserved but are not presented on the plates. The selected chargeability slice of 690 ms to 1050 ms is the industry standard slice used by the *Scintrex* IPR11 receiver. This was done so that experience gained during the past few decades could be applied more readily to the present data. Inversion modeling results are also presented for the chargeability and apparent resistivity data.

Total field ground magnetics data provided by the client are also presented on these plates as profiles.

7.7 INTERPRETATION

L1N:

Gold mineralization is predominantly at a contact between low resistivity to west and high resistivity to the east of stn.350E. Broad chargeability anomaly **A** ~10 mV/V extends down from approximately 100 metres deep at this location. This anomaly is weaker than an anomaly ~15 mV/V to the west which peaks at 150E ~50m deep.

Magnetics data are ‘flatter’ through anomaly **A** compared to at the stronger ~150E chargeability anomaly, as would be expected if gold is associated with altered mineralization. Spectral *Tau* are also short at **A** and long at the stronger 150E anomaly, which indicates gold is associated with fine-grained or disseminated sulphides.

L2N:

Gold mineralization is more widespread from approximately 500E to 650E. This coincides with a moderate chargeability anomaly **B** ~12 mV/V centred at approximately 600E. The anomaly is ~100 m deep and is inversion modeled along the eastern side of a broader anomaly that extends between 300E and 650E. Spectral *Tau* is short at gold-bearing **B** and longer towards the non-gold western part of the broader chargeability anomaly, making *Tau* and important diagnostic tool**.**

This broader chargeability zone is located immediately east of a resistivity low contact located between 100E and 250E. Lower resistivity is also seen to the east of **B.** **B** coincides with relatively low magnetics.

L3N:

Gold mineralization is indicated as scattered from the cliff ~175E to 600E. Best gold values are at **C** between 350E and 450E. This corresponds with a broad inversion chargeability anomaly ~14 mV/V extending from 100E, at over 100m deep, to 550E near surface.

The broader chargeability response is located between resistivity low zones. The west low may be related to the cliff which might be a fault or contact. Spectral *Tau* is short at **C** but longer along the upper part of this broader response. This could indicate a transition zone, with better gold mineralization located below this zone at the shorter spectral *Tau.*

L4E 'baseline':

This line is located up to 75 metres east of the peak of gold mineralization and therefore may not be suitable as test data to compare with gold assays. Nonetheless, high gold assays touch on the line at approximately 700N. The main break between low apparent resistivity to the south and high resistivity to the north is located between ~400N and ~650N. This corresponds to the area of gold mineralization located to the east.

The inversion chargeability panel indicates the best and broadest response ~11 mV/V at 100 metres depth between 300N and 600N which also coincides with the gold mineralization area. Spectral *Tau* are the shortest within this area compared to elsewhere on the line.

7.8 CONCLUSIONS AND RECOMMENDATIONS

Gold mineralization at the test lines is generally associated with moderately strong chargeability with consistently short spectral *Tau,* at or immediately adjacent to a resistivity low zone within moderately high resistivity, and locally low or relatively flat magnetics typical of alteration. The combination of Spectral IP *Tau*, resistivity and ground magnetics can be used to provide drill targets outside of the drilled test area.

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

Sincerely,

ClearView Geophysics Inc.

Per:

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

9.0 REFERENCES

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10.0 STATEMENT OF QUALIFICATIONS, JOE MIHELCIC

I, Joe Mihelcic, Hereby certify that:

1) I am a geophysicist with business office at 12 Twisted Oak Street, Brampton, Ontario L6R 1T1.

2) I am the owner of ClearView Geophysics Inc., a company performing geophysical services.

3) I am a graduate of Queen’s University in Applied Science, Geological Engineering (B.Sc. 1988) and of Ivey Business School (M.B.A. 1995).

4) I am a member of the Professional Engineers of Ontario (PEO).

5) I have practiced my profession for 28 years.

Signed ________________________

Joe Mihelcic, P.Eng., M.B.A.
Brampton, Ontario
March 6, 2015

APPENDIX A – Instrument Specifications

SCINTREX

IPR-12 Time Domain Induced Polarization/Resistivity Receiver

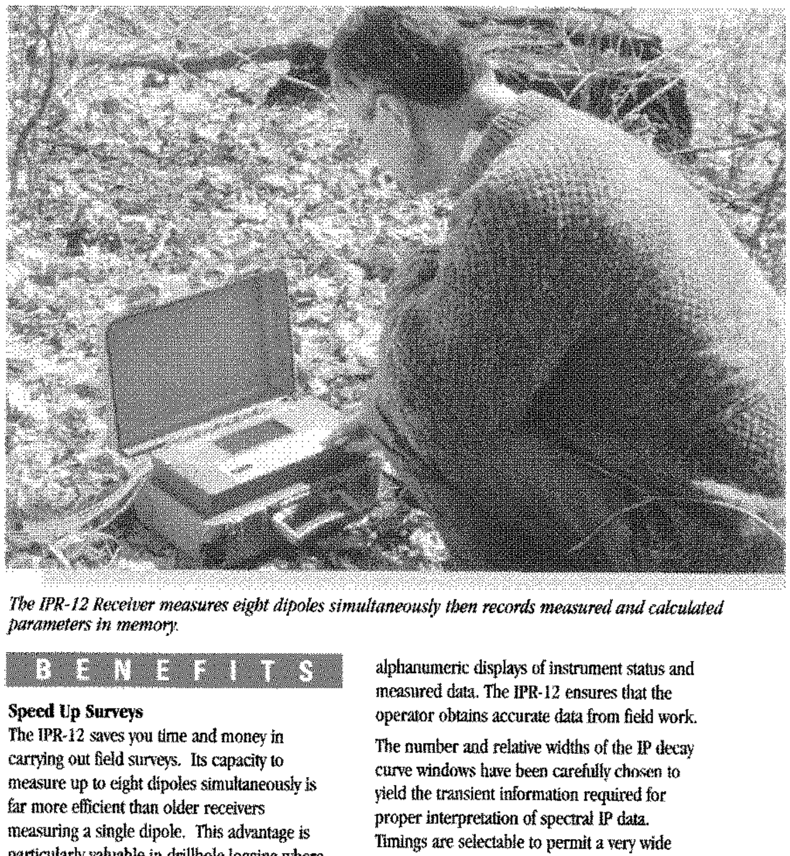
Brief Description

The IPR-12 Time Domain IP/Resistivity Receiver is principally used in exploration for precious and base metal mineral deposits. In addition, it is used in geoelectrical surveying for groundwater or geothermal resources, often to great depths. For these latter targets, the induced polarization measurements may be as useful as the high accuracy resistivity results since it often happens that geological materials have IP contrasts when resistivity differences are absent.

Due to its integrated, lightweight, microprocessor based design and its large, 16 line display screen, the IPR-12 is a remarkably powerful, yet easy to use instrument. A wide variety of alphanumeric and graphical information can be viewed by the operator during and after the taking of readings. Signals from up to eight potential dipoles can be measured simultaneously and recorded in solid-state memory along with automatically calculated parameters. Later, data can be output to a printer or a PC (direct or via modem) for processing into profiles and maps.

The IPR-12 is compatible with Scintrex IPC, TSQ and VERSA Transmitters, or others which output square waves with equal on and off periods and polarity changes each half cycle. The IPR-12 measures the primary voltage (Vp), self potential (SP) and time domain induced polarization (Mi) characteristics of the received waveform. Resistivity, statistical and Cole-Cole parameters are calculated and recorded in memory with the measured data, time and location.

Scintrex has been active in induced polarization research, development, manufacturing, consulting and surveying for over thirty years. We offer a full range of instrumentation, accessories and training.



The IPR-12 Receiver measures eight dipoles simultaneously then records measured and calculated parameters in memory.

BENEFITS

Speed Up Surveys

The IPR-12 saves you time and money in carrying out field surveys. Its capacity to measure up to eight dipoles simultaneously is far more efficient than older receivers measuring a single dipole. This advantage is particularly valuable in drillhole logging where electrode movement time is minimal.

The built-in, solid-state memory records all information associated with a reading, dispensing with the need for any hand written notes. PC compatibility means rapid electronic transfer of data from the receiver to a computer for rapid data processing.

Taking a reading is simple and fast. Only a few keystrokes are needed since the IPR-12 features automatic circuit resistance checks, SP buckout and gain setting.

High Quality Data

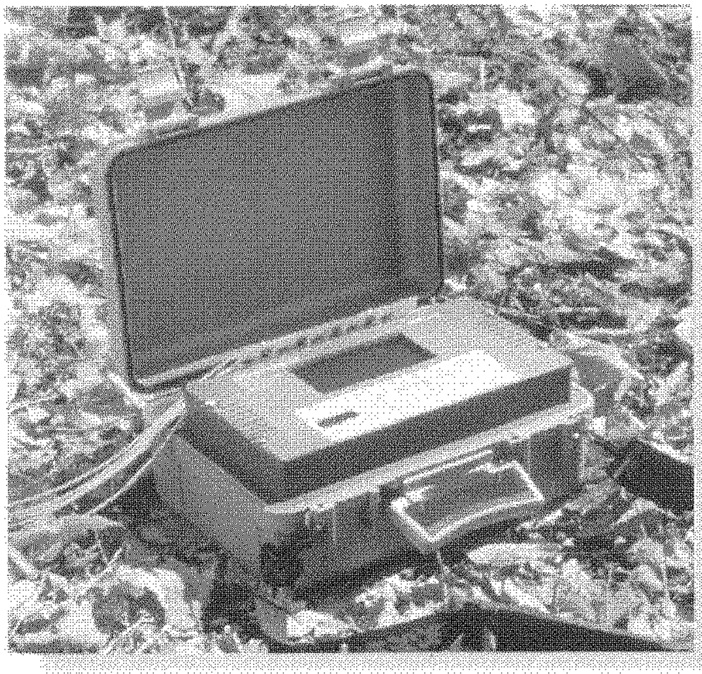
One of the most important features of the IPR-12 in permitting high quality data to be acquired, is the large display screen which allows the operator easy real time access to graphic and alphanumeric displays of instrument status and measured data. The IPR-12 ensures that the operator obtains accurate data from field work.

The number and relative widths of the IP decay curve windows have been carefully chosen to yield the transient information required for proper interpretation of spectral IP data. Timings are selectable to permit a very wide range of responses to be measured.

The IPR-12 stacks the information for each cycle and calculates a running average for Vp, SP and each transient window. This enhancement is equivalent to a noise decrease of $\sqrt{N}$ or a transmitter power increase of N where N is the number of values averaged. Since values are measured each few seconds, it does not take long for this signal enhancement technique to have great effect.

The automatic SP program bucks out and corrects completely for linear SP drift. Data are also kept noise free by: radio-frequency (RF) filters, low pass filters and statistical spheric noise spike rejection.

To prevent mistriggering, the IPR-12 does not accept trigger-line signals at inappropriate times.



The IPR-12 is fully portable and easy to use.

FEATURES

Eight Dipoles Simultaneously
The analog input section of the IPR-12 contains eight identical differential inputs to accept signals from up to eight individual potential dipoles. Any dipole can be disabled. The amplified analog signals are converted to digital form by a high resolution A/D converter and recorded with other pertinent information identifying each group of dipoles.

Large Backlit Display
The 16 line by 40 character backlit SuperTwist Liquid Crystal Display (LCD) enhances the operator's understanding of the status and the accuracy of the measured data. Any one of thirteen different display screens are used for entering information, monitoring the progress of a reading and checking data before and after recording. An LCD heater is provided for low temperature operation.

Programmable Windows
The user has the option to use the default window width's in the IPR-12 or you may set up custom slice width's to suit your application.

Keyboard
Seventeen large keys control the instrument and permit entry of alphanumeric information.

Solid State Memory
All instrument parameters as well as; entered notes, measured and calculated quantities are stored in the large capacity, fail-safe memory.

Memory Recall
Any observation recorded in memory can be recalled, by simple keypad entry, for inspection on the display.

PC Compatibility
The IPR-12 uses an RS-232C, 7 or 8 bit ASCII high baud rate interface, compatible with most lap-tops or PC's. This permits data to be dumped on a line by line basis or all at once from the receiver's memory for archiving or processing.

Spectral Quality IP
Depending on receive time, 10 to 14 windows are measured simultaneously for each dipole. Selectable total receive times are 1, 2, 4, 8, 16 and 32 seconds. After the current is shut off, there is a delay of t milliseconds. Then, the width of each window in the seven following pairs of windows is, respectively: t, 2t, 4t, 8t, 14t, 23t and 36t. This format provides a high density of information at early times where the decay of the curve is steepest.

Variable Chargeability Summing
By keyboard selection, you can choose an additional, summed transient window.
This value, Mx, is recorded in memory along with the value for each of the measured transient windows. Summing can be done for the purpose of obtaining a parameter close to that measured with earlier receivers. The width of the Mx window ranges upwards from 10 milliseconds in 10 millisecond steps.

Signal Enhancement
Primary voltage, self potential and individual transient windows are continuously averaged and the display is updated every cycle so the operator is fully aware of signal improvement.

Calculates Cole-Cole Parameters
The IPR-12 calculates the Cole-Cole parameters; true chargeability (M) and time constant (Tau) for a fixed C of 0.25. These parameters, which are recorded in memory may be used to assist interpretation by distinguishing between different chargeable sources, based mainly on textural differences. This feature is not available if programmable windows are selected.

Noise Rejection

F E A T U R E S

Individual samples contaminated by noise can be automatically rejected.

Statistical Parameters
The IPR-12 calculates statistical error parameters for Mx. The RMS error of the deviation between the measured data and best fit of the Cole-Cole calculation is also derived.

Selectable Reading Termination
By keyboard selection the receiver can be set up to terminate readings by either a manual key press or when a preset number of cycles have been measured.

Normalizes for Time and Vp
The value recorded for each M window is in millivolt/volt, that is to say that normalization is automatically done for the width of each window and for the primary voltage, Vp is also normalized for time of integration.

Automatic Resistivity Calculations
The IPR-12 calculates the geometrical (K) factors for standard arrays shown in the Info display based on electrode positions given in the Locations display. This feature is particularly helpful for arrays like the Gradient of Schlumberger in which the K-Factors change for every station. Then, using measured primary voltages with operator entered current values, the receiver calculates and records apparent resistivity values.

Automatic Vp Self Ranging
There is no manual adjustment for different primary voltages since the IPR-12 automatically adjusts the gain of its signal conditioning amplifiers for any Vp signal in the range of 50 microvolts to 14 volts full scale.

Automatic SP Correction
Self potential buckout is entirely automatic, both initially and throughout the measurement.

Synchronization
In normal operation, the IPR-12 synchronizes itself on the received waveform, and triggering is disabled until to within about 60 milliseconds before a signal transition. This reduces to a negligible level the possibility of false triggering.

Electrode Resistance Check
A built-in AC ohmmeter avoids electrode polarization, while checking the ground resistance of electrodes and the continuity of field cables. The circuit resistance values are displayed and are automatically recorded in memory.

Self-Check Program
Each time the instrument is turned on, a verification of the program memory is automatically performed.

Out of Limit Checks
Messages appear on the display if any of the following errors occur: out of calibration or failed memory test, incorrect signal amplitude or excessive noise, signal input with respect to the reference electrode in excess of the permitted range, synchronization failure, previous station's data not filed and data memory full.

Analog Meter
When signals on up to eight dipoles are presented simultaneously on the digital display, one analog meter, easily switchable from dipole to dipole, has been provided for monitoring particularly noisy conditions.

Internal Test Generator
An internal signal generator is used to test the instrument periodically, to ensure that it is functioning properly.

Overload Detection
All analog signal levels are monitored to prevent measurements on individual dipoles for which limits are exceeded and appropriate messages are displayed. The affected samples are not added to the previous average.

Noise Filters
Radio frequency and 10Hz, 6 pole low pass filters enhance signal quality. The low cut off frequency and steep roll-off of the latter filters provide better powerline noise rejection than notch filters.

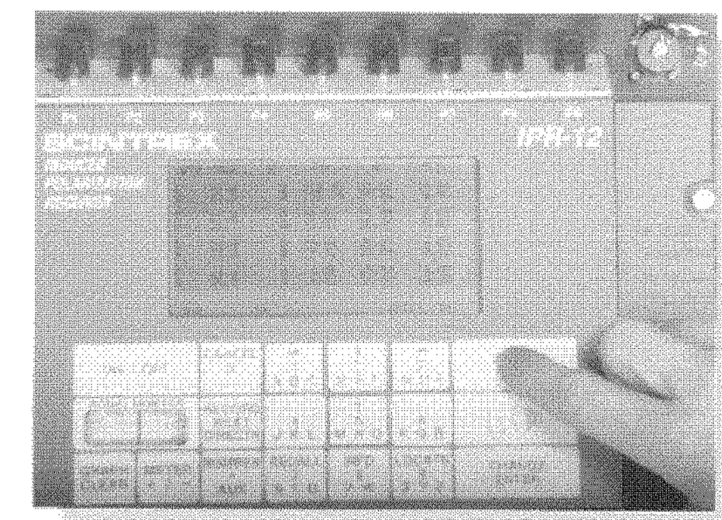
Noise Monitor
This monitor allows the display of noise and/or the received signal for any selected dipole in a similar manner to that of a digital oscilloscope.

Input Protection
If signals in excess of 14V and up to 60V are accidentally applied at the input, zener diode protection ensures that no damage will occur. For higher voltages fuse protection is used.

Binding Posts
To avoid inter-electrode leakage which may occur in humid conditions with small, multipin connectors, the IPR-12 has been designed with widely spaced binding posts.

Mueller Cable
The "Mueller IP/Resistivity Snake" is a potential cable set that has been designed by a geophysical field operator with many years of practical experience in conducting surveys in all types of terrain. Designed to be easily and quickly moved along the survey line to increase your survey efficiency results in significant cost savings made possible by the "Snake".

Software
A complete range of data processing, plotting and interpretation software is available to meet all requirements.



The IPR-12 features a new, improved large highly visible Liquid Crystal Display.

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 10ms steps, with delay of at least 40 ms is keyboard selectable. Programmable windows also available.

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

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

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

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

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

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

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

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

Display Heater
Available for below -15°C operation.

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

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

Digital Data Output
Formatted serial data output for printer and PC etc. Data output in 7 or 8 bit ASCII, one start, one stop bit, no parity format. Baud rate is keyboard selectable for standard rates between 300 baud and 57.6 kBaud. Selectable carriage return delay to accommodate slow peripherals. Hand-shaking is done by X-on/X-off.

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

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

Use of Non-Rechargeable Batteries
Can be powered by D size Alkaline batteries, but rechargeable batteries are recommended for lower cost over time.

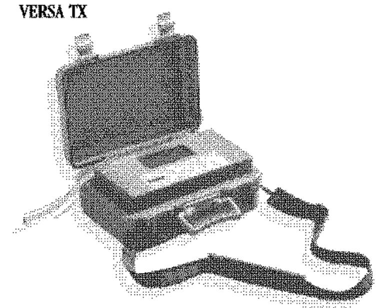
Operating Temperature Range
-30°C to +50°C

Storage Temperature Range
-30°C to +50°C

Dimensions
Console: 355 x 270 x 165 mm
Charger: 120 x 95 x 55 mm

Weights
Console: 5.8 kg Batteries: 1.3 kg
Charger: 1.1 kg

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



SCINTREX
Earth Science Instrumentation

ISO 9001 Registered Company SGS

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e-mail: auslog@auslog.com.au
website: www.auslog.com.au

Walcer Model TX 9000

Power Input
125V line to neutral
400 Hz / 3 phase
Powered by MG-12

Output
100 - 3200V in 10 steps
0.05 - 20 Amps
Tested to 9.25 kVA

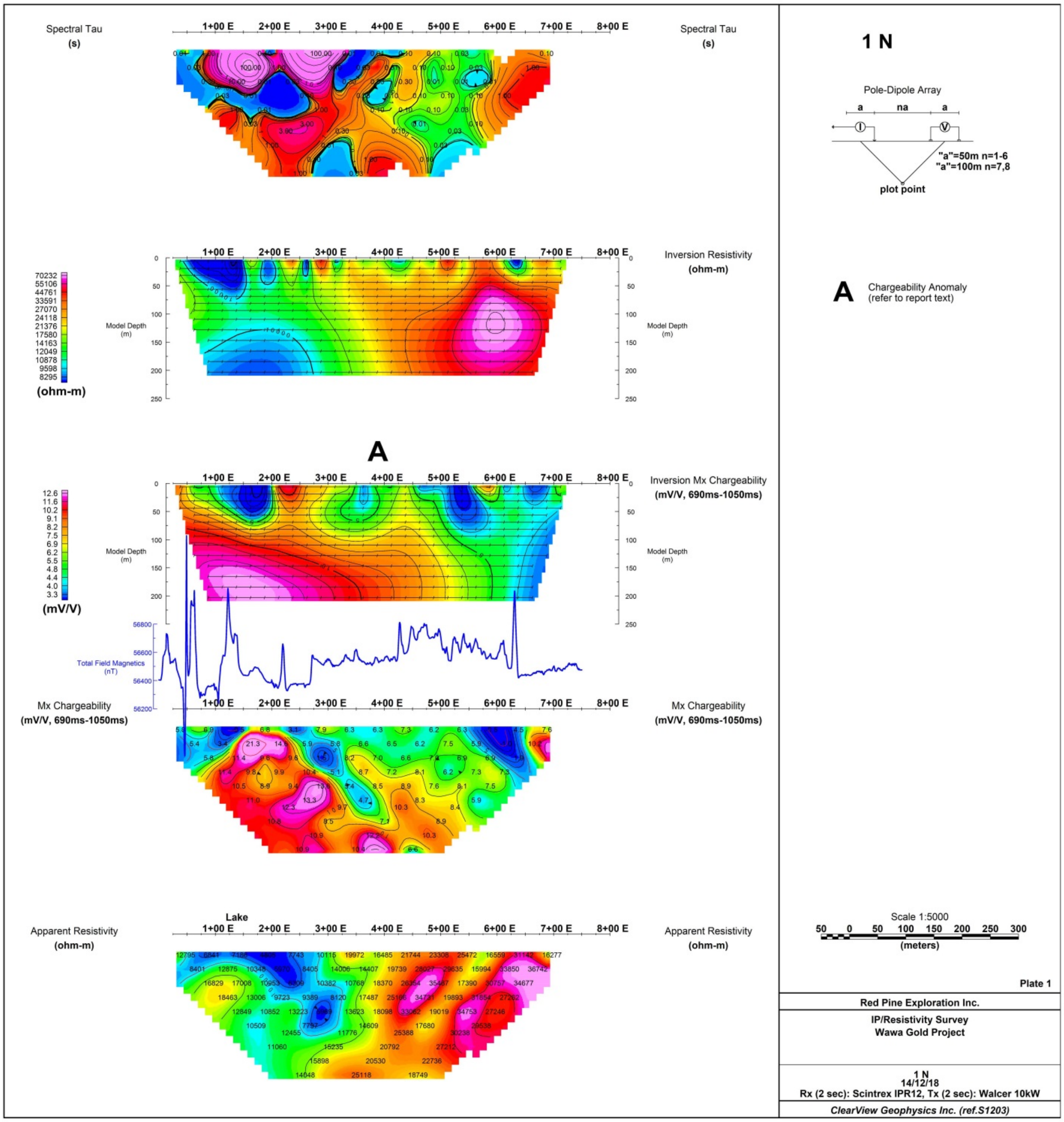
Switching
1 sec., 2 sec., 4 sec., 8 sec.

Metering
LED for line voltage
and output current

Size
63cm. x 54cm. x 25cm.

Weight
44 kg.

APPENDIX B – Plates



Spectral Tau
(s)
1+00 E 2+00 E 3+00 E 4+00 E 5+00 E 6+00 E 7+00 E 8+00 E
Inversion Resistivity
(ohm-m)
Model Depth
(m)
A
Inversion Mx Chargeability
(mV/V, 690ms-1050ms)
(mV/V)
Total Field Magnetics
(nT)
Mx Chargeability
(mV/V, 690ms-1050ms)
Lake
Apparent Resistivity
(ohm-m)
1 N
Pole-Dipole Array
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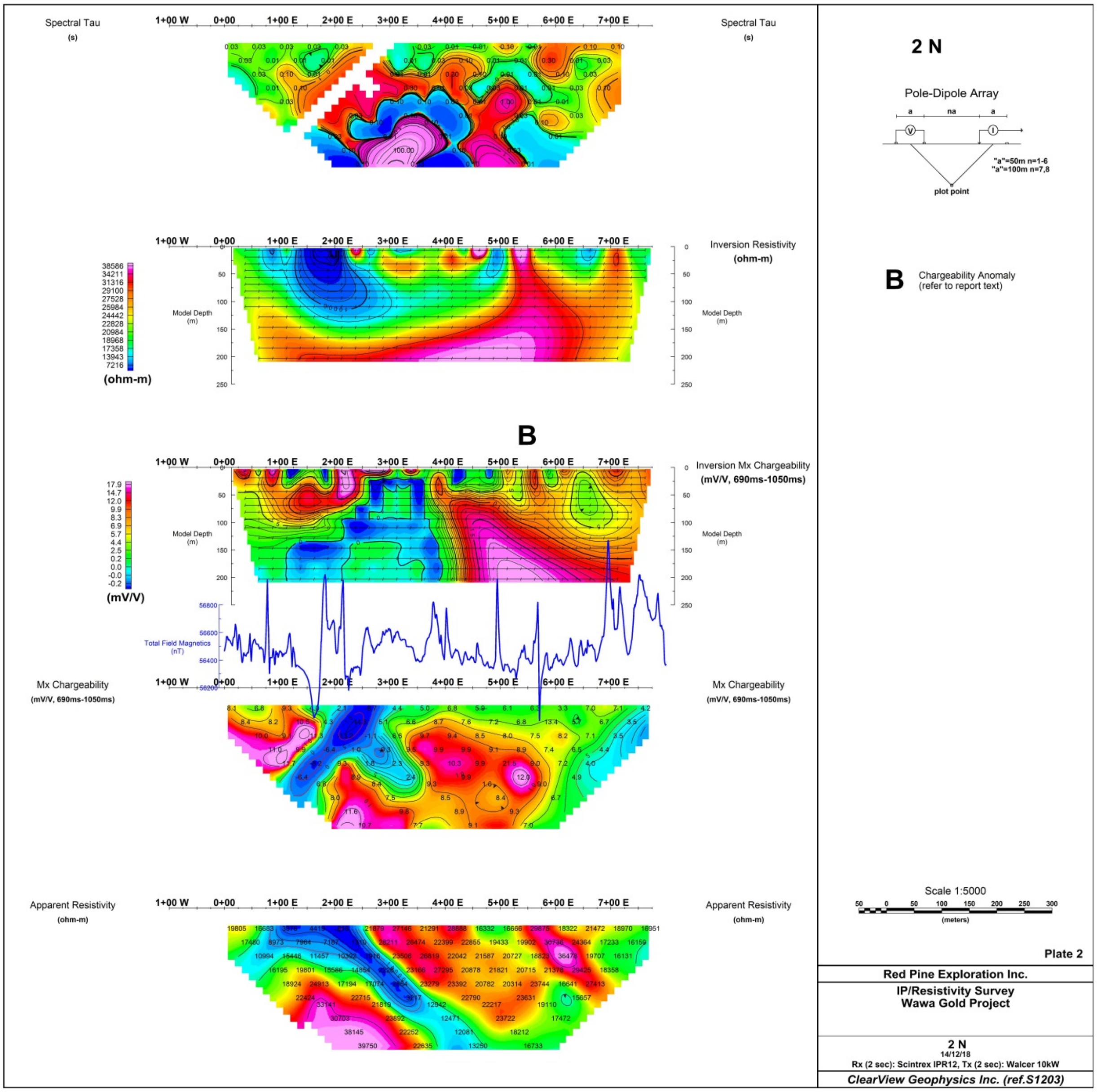
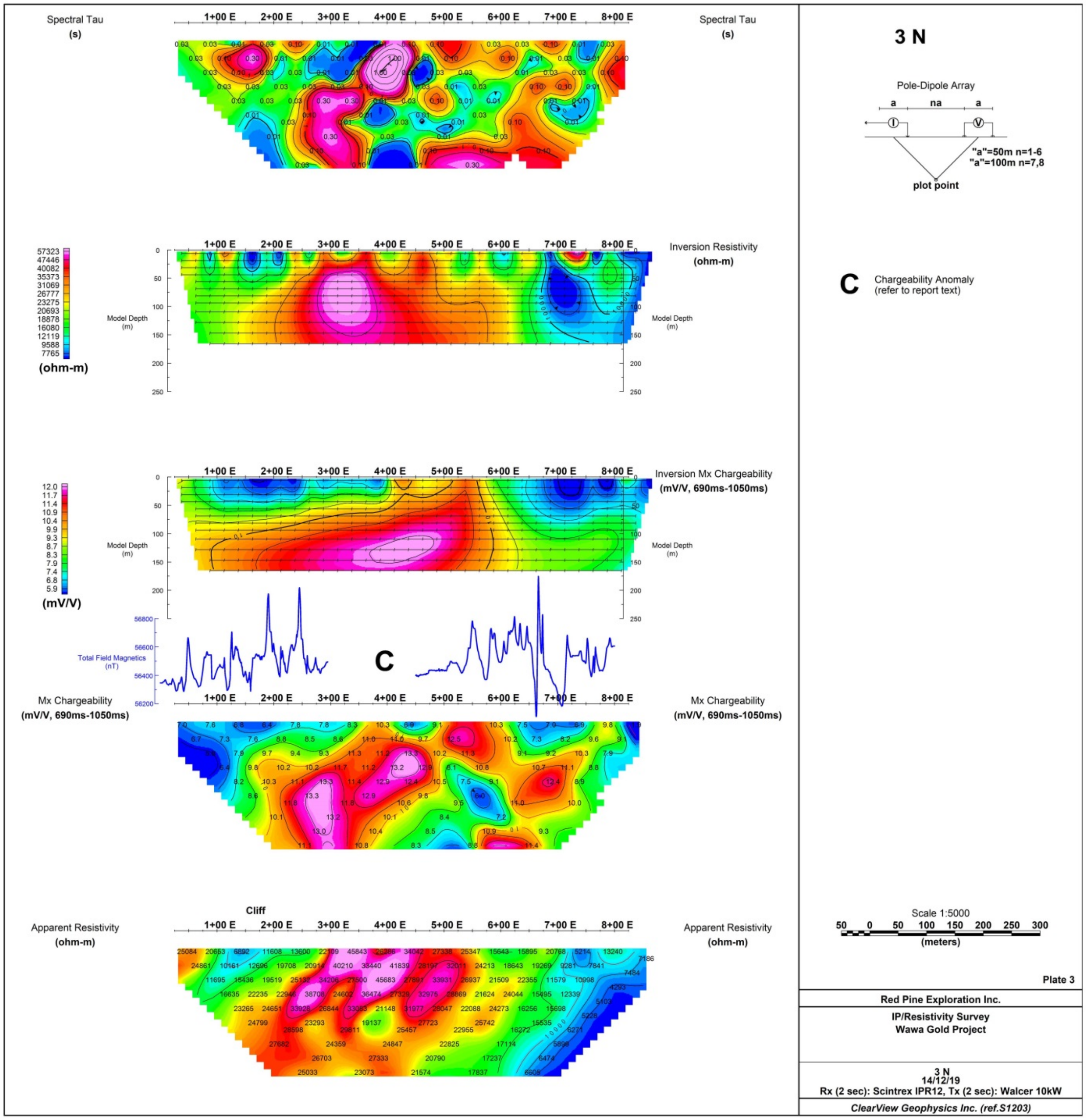
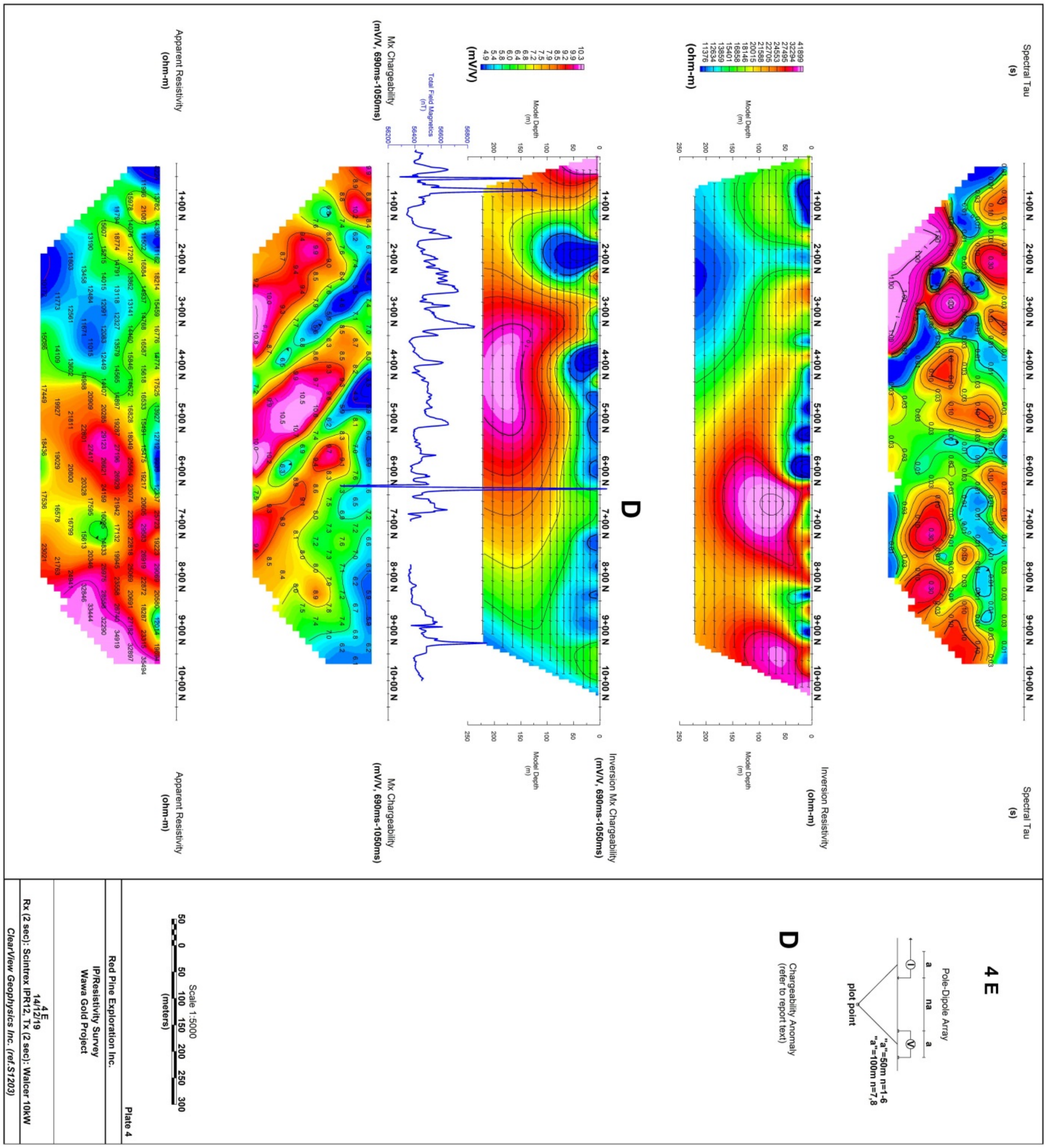
"a"=50m n=1-6
"a"=100m n=7,8
plot point
A Chargeability Anomaly
(refer to report text)
Scale 1:5000
50 0 50 100 150 200 250 300
(meters)
Plate 1
Red Pine Exploration Inc.
IP/Resistivity Survey
Wawa Gold Project
1 N
14/12/18
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Walcer 10kW
ClearView Geophysics Inc. (ref.S1203)


2 N
Pole-Dipole Array
B Chargeability Anomaly (refer to report text)
Spectral Tau (s)
Inversion Resistivity (ohm-m)
Inversion Mx Chargeability (mV/V, 690ms-1050ms)
Total Field Magnetics (nT)
Mx Chargeability (mV/V, 690ms-1050ms)
Apparent Resistivity (ohm-m)
Scale 1:5000
Plate 2
Red Pine Exploration Inc.
IP/Resistivity Survey
Wawa Gold Project
2 N
14/12/18
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Walcer 10kW
ClearView Geophysics Inc. (ref.S1203)


Spectral Tau
(s)
1+00 E 2+00 E 3+00 E 4+00 E 5+00 E 6+00 E 7+00 E 8+00 E
Inversion Resistivity
(ohm-m)
Model Depth
(m)
Inversion Mx Chargeability
(mV/V, 690ms-1050ms)
(mV/V)
Total Field Magnetics
(nT)
C
Mx Chargeability
(mV/V, 690ms-1050ms)
Cliff
Apparent Resistivity
(ohm-m)
3 N
Pole-Dipole Array
a na a
"a"=50m n=1-6
"a"=100m n=7,8
plot point
C Chargeability Anomaly
(refer to report text)
Scale 1:5000
50 0 50 100 150 200 250 300
(meters)
Plate 3
Red Pine Exploration Inc.
IP/Resistivity Survey
Wawa Gold Project
3 N
14/12/19
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Walcer 10kW
ClearView Geophysics Inc. (ref.S1203)


Spectral Tau
(s)
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Inversion Mx Chargeability
(mV/V, 690ms-1050ms)
Mx Chargeability
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Apparent Resistivity
(ohm-m)
Total Field Magnetics
(nT)
Model Depth
(m)
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3+00 N
4+00 N
5+00 N
6+00 N
7+00 N
8+00 N
9+00 N
10+00 N
D
4 E
Pole-Dipole Array
plot point
"a"=50m n=1-6
"a"=100m n=7,8
D Chargeability Anomaly
(refer to report text)
Scale 1:5000
(meters)
Plate 4
Red Pine Exploration Inc.
IP/Resistivity Survey
Wawa Gold Project
4 E
14/12/19
Rx (2 sec): Scintrex IPR12, Tx (2 sec): Walcer 10kW
ClearView Geophysics Inc. (ref.S1203)