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**Assessment Report on  
Geophysical (HLEM Survey) Survey  
On the Minnipuka Property,  
Minnipuka and Walls Townships**

Claims (4265571, 4265572, 4265573, 4265574, 4265575, 4265576, 4266190, 4269930, 4269931,  
4269932),

Minnipuka and Walls Townships, Porcupine Mining Division

UTM WGS84 Zone 17U 297433mE 5425484mN;

Lat 48° 56' 57" N, Long 83° 46' 01"W;

NTS 42B13

For:

Pavey Ark Minerals Inc.

Client number 41165

Prepared By:

Robert Weicker

Suite 2801, 1166 Melville St.,

Vancouver, B.C. V6E 4P5

July 30, 2017

## Executive Summary

This assessment report summarizes the results of a Horizontal Loop Electromagnetic (HLEM) geophysical survey completed in January 2017, on the Minnipuka Property, Minnipuka and Walls Townships, Porcupine Mining Division, Ontario. The exploration targets comprise gold mineralization associated with the Puskuta Deformation Zone and base metal mineralization associated with felsic metavolcanic rocks.

The Minnipuka Property is located 80 km south of Hearst, Ontario. The Property is road accessible by route 583 and the Caithness logging road system that extends south from the Trans-Canada Highway 11 at Hearst. The Minnipuka Property is comprised of ten 16-unit contiguous staked claims (4265571, 4265572, 4265573, 4265574, 4265575, 4265576, 4269930, 4269932, 4266190, 4269931) covering 160 units (2,5602 ha) owned by Pavey Ark Minerals Inc., a private Ontario company.

Field work for this report was carried out in early January 2017 and comprised 4 days of field work and two days of travel from Timmins to an operational base in Hearst. A total of 12.6 line-kilometers were completed on a cut grid established in 2015. Expenditures before GST/HST were \$7247, HST for the geophysical survey completed by Vision Exploration Ltd., Crystal Falls, Ontario, and \$2,100 for the report by the author, for a total of \$9,347.

The principal work was conducted on claims 4269932, 4265572 and 4269930 located in Minnipuka Township in the Porcupine Mining Division, Ontario. The geophysical survey was commissioned and paid for by Sunvest Minerals Corp., (“Sunvest”, or the “Company”) on behalf of the owner of the claims, Pavey Ark Minerals Inc., (“Pavey Ark”). Sunvest is acquiring a 100-percent interest in the McKinnon-Hawkins gold property under the terms of an Option Agreement dated October 24, 2016. The Minnipuka property worked on, are part of a larger contiguous property in Hawkins, Walls and Puskuta Townships that is owned by Pavey Ark Minerals Inc.

A previously filed assessment report by Richard Sutcliffe (2015) has summarized the exploration history on the Minnipuka Property:

*“There has been limited previous exploration on the Minnipuka Property. Work has been concentrated on the west end of the property in Walls Township where AMAX completed airborne geophysics and drilled one 65.5 m hole that intersected a narrow interval of massive*

*pyrite-pyrrhotite in garnetiferous biotite schist in 1981. Subsequent assessment by Maurex Resources Limited reported that the AMAX core contained an interval of 6.02 ppm Au over 1.4 m. This result was not confirmed by resampling of the historical core at the MNM Timmins core library for the present program.”*

Sutcliffe (2015) also summarizes the geology on the Minnipuka Property:

*The Minnipuka Property is underlain by predominately Archean rocks at the eastern end of the Kabinakagami Lake greenstone belt. There are no detailed maps of Minnipuka Township. The Puskuta Deformation Zone is a km wide, steeply dipping, dextral, transcurrent structure that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and extends for over 30 km to the southeast through Minnipuka and Puskuta Townships.*

*Mafic and felsic to intermediate metavolcanic rocks on the property have been metamorphosed to amphibolite facies and have been strongly deformed. The 2015 mapping indicates that the Puskuta Deformation Zone is located immediately south of the claim group. Potentially gold mineralized alteration systems associated with large scale silicification, sericitization and sulphide mineralization were not identified in the present work.*

*The mapping program identified felsic to intermediate rocks, including rhyolite, south of Goat and Little Goat Lakes that may be prospective for base metals. These felsic rocks are coincident with at least 4 VTEM anomalies identified on the 2015 OGS airborne survey. None of the conductors have been drill tested and it is recommended that ground EM surveys be carried out to better define potential drill targets in this prospective metavolcanic stratigraphy.*

The winter Horizontal Loop Electromagnetic (HLEM) geophysical survey was completed to better define any conductive zones. In the authors opinion, no significant conductors are indicated by the HLEM survey, or VTEM survey, that are likely to be caused by conductive massive sulphide mineralization (i.e. VMS deposits). However, three weak, subtle, EM conductors are indicated that may be related to disseminated sulphides associated with formational geological features (e.g. contacts, quartz veining, alteration zones, etc.) and/or structural features, that may host anomalous gold mineralization.

All three HLEM conductors occur in areas of little or no outcrop, so additional prospecting and geological mapping is unlikely to enhance the targets. A program of soil sampling over the three conductors to determine gold and/or pathfinder metals support gold mineralization is

recommended, along with augering on the Goat Lake Road over Conductor B to determine the depth and type of overburden. Assuming the geochemistry and auger program are positive, a limited diamond drill program (2 holes, 225 meters) is recommended directed at Conductor C.

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## **1.0 Introduction**

This assessment report documents a Horizontal Loop Electromagnetic (HLEM) geophysical survey completed in January 2017, on the Minnipuka Property located in Minnipuka and Walls Townships, Porcupine Mining Division, Ontario. The work was carried out a third-party contractor, Vision Exploration Ltd., Crystal Falls, Ontario, in early January 2017, accessed from Hearst to the property, via logging roads and snowmobile trails. The Minnipuka Property is located 80 km south of Hearst, Ontario.

The Minnipuka Property was recently (2015) covered by an Ontario Geological Survey helicopter mounted Geotech VTEM ((Versatile Time Domain Electromagnetic), plus magnetic and electromagnetic survey flown at 200 m line spacing. Several weak to moderate EM (electromagnetic) conductors were indicated on the Minnipuka property and in 2015 a grid was cut, and a program of geological mapping and sampling completed (Sutcliffe, R., 2015).

Field work for this report was carried out in early January 2017 and comprised 4 days of field work and two days of travel from Timmins to an operational base in Hearst. A total of 12.6 line-kilometers were completed on a cut grid established in 2015. The objective of the HLEM survey was to confirm EM (electromagnetic) conductors indicated in the VTEM survey and test for other conductors, related with gold mineralization associated with the Puskuta Deformation Zone and base metal mineralization associated with felsic metavolcanic rocks.

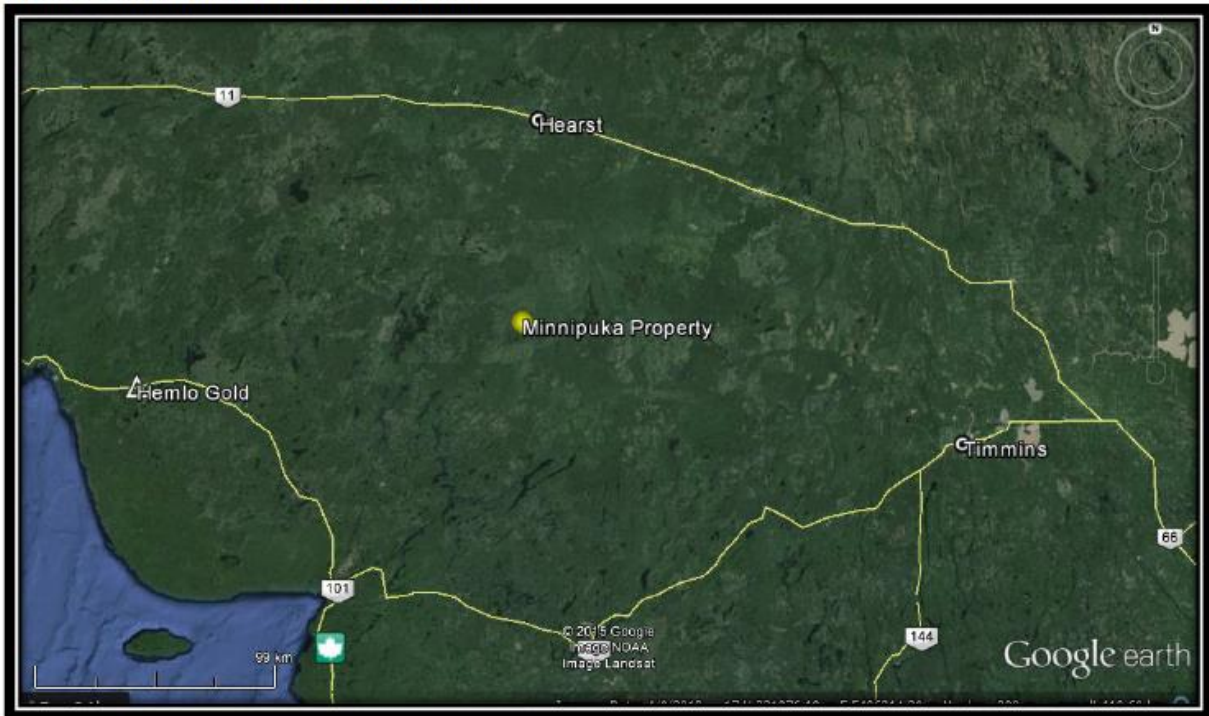
Expenditures before GST/HST were \$9,347.

## **2.0 Location and Access**

The Minnipuka Property is 82 km south of Hearst, Ontario (Figure 1). The Property is road accessible by route 583 and the Caithness logging road system that extends south from the Trans-Canada Highway 11 at Hearst.

To access the property, at Hearst, Ontario, turn south from highway 11 onto route 583. Approximately 10.5 km south of Hearst on route 583, turn left onto the Caithness Road. At approximately 73 km south on the Caithness Road there is a junction with the Dishnish and Marjorie Roads. The Dishnish Road provides access to the east part of the claim group, via the Little Goat Lake Road, and the Marjorie Road crosses the western most claim of the Property. The Goat Lake Road extends south from the Marjorie Road to the center of the Property. Both the Dishnish and Marjorie Roads are all weather gravel roads. The Little Goat Lake and Goat Lake Roads are suitable for ATV or snowmobiles, however, access is restricted by the MNR during certain times of the year. 5

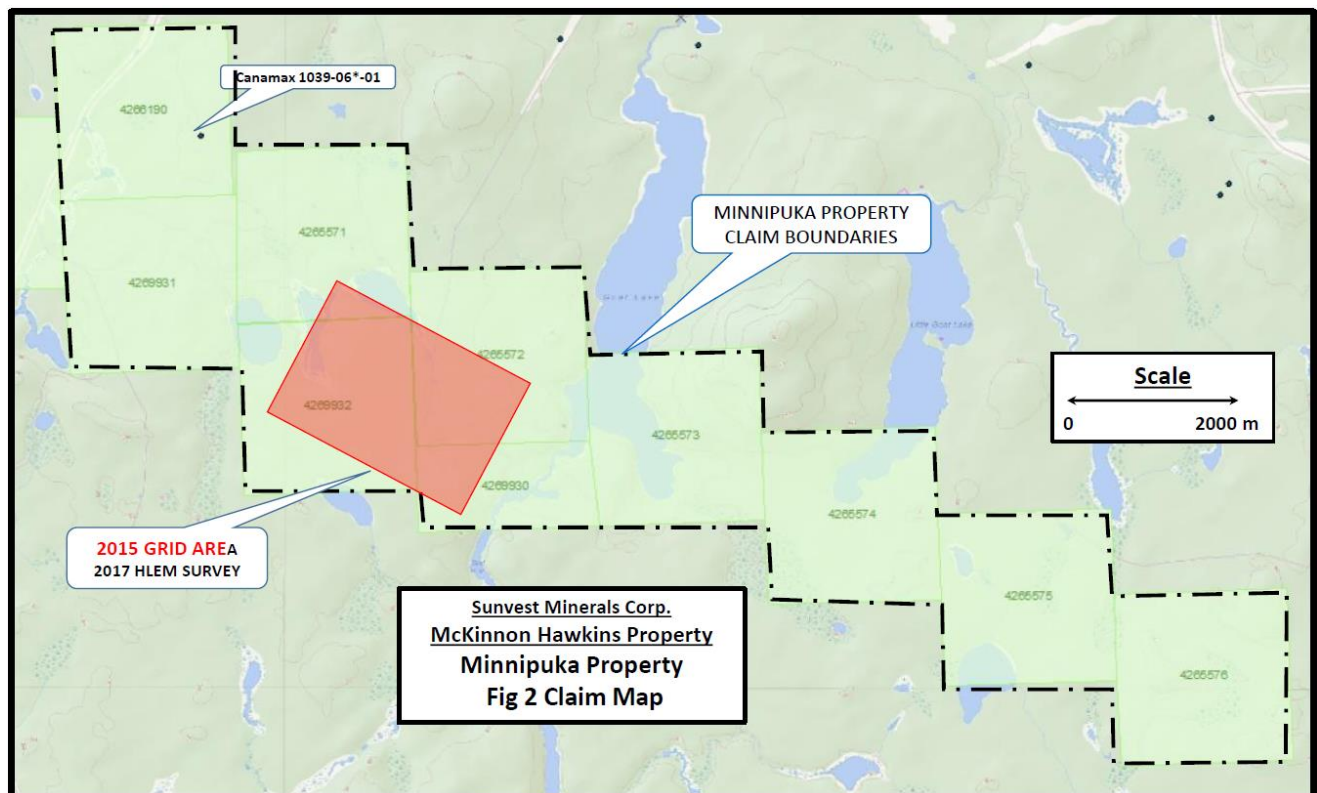
**Figure 1. Minnipuka Property Location**



*Source: Google Earth 2015*

### **3.0 Claim Holdings and Property Disposition**

The Minnipuka Property is comprised of ten 16-unit contiguous staked claims (4265571, 4265572, 4265573, 4265574, 4265575, 4265576, 4269930, 4269932, 4266190, 4269931) covering 160 units (2,5602 ha) (Table 1). The claims are 100% owned by Pavey Ark Minerals Inc., a private Ontario company. One claim was initially staked in Walls Township in October 2013, and subsequently 6 claims were staked in July, 2014 in Minnipuka Township, with three additional claims added (see Fig 2). The property was initially called the Walls Property by Pavey Ark, but has been renamed to reflect the fact that the majority of the claims are now located in Minnipuka Township.



The principal geophysical survey was conducted the cut grid (shaded area) on claim #4269932, 4265572 and 4269930. The geophysical survey was commissioned and paid for by Sunvest Minerals Corp., ("Sunvest", or the "Company") on behalf of the owner of the claims, Pavey Ark Minerals Inc., ("Pavey Ark"). Sunvest is acquiring a 100-per-cent interest in the McKinnon-Hawkins gold property under the terms of an Option Agreement dated October 24,

2016, whereby Sunvest will complete cash payments of \$1-million, the issuance of \$1-million worth of shares of the company plus incur expenditures of \$2-million over a four-year period. A 0.5-per-cent-to-2-per-cent net smelter return royalty will be granted to the vendor on various claims contained in this agreement. The claims worked on the Minnipuka Property are part of a larger contiguous property in Hawkins, Walls and Puskuta Townships that is owned by Pavey Ark Minerals Inc.

**Table 1 Minnipuka Property Claim Schedule**

PORCUPINE Mining Division - 411465 - PAVEY ARK MINERALS INC.

Township	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
MINNIPIKA	<a href="#">4265571</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4265572</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4265573</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4265574</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4265575</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4265576</a>	2014-Jul-02	2017-Jul-02	A	100%	\$6,400	\$6,400	\$0	\$0
MINNIPIKA	<a href="#">4269930</a>	2016-Feb-08	2018-Feb-08	A	100%	\$3,200	\$0	\$0	\$0
MINNIPIKA	<a href="#">4269932</a>	2016-Feb-08	2018-Feb-08	A	100%	\$4,578	\$1,822	\$0	\$0
WALLS	<a href="#">4266190</a>	2013-Oct-30	2017-Jun-06	A	100%	\$6,400	\$6,400	\$0	\$0
WALLS	<a href="#">4269931</a>	2016-Feb-08	2018-Feb-08	A	100%	\$6,400	\$0	\$0	\$0

#### **4.0 Previous Work**

A previously filed assessment report by Richard Sutcliffe (2015) has summarized the exploration history on the Minnipuka Property:

*“There has been limited previous exploration on the Minnipuka Property. Most of the work has been concentrated on the west end of the property in Walls Township. AMAX completed airborne geophysical surveys over the Project area including an airborne magnetic survey at 200 m line spacing in 1979 (AFRI 42G04SW0207).*

*Subsequent to the airborne survey, AMAX completed a seven-hole diamond drilling program in Walls Township in 1981 (AFRI 42G04SW0217). One hole, 1039-06B-01 with a length of 66.5 m, was located on Pavey Ark’s claim 4266190 at the west end of the claim group. Hole 1039-06B-01 tested an airborne EM conductor and intersected a narrow interval of massive pyrite-pyrrhotite in biotite schist. No assay results were reported by AMAX, however, subsequent*

assessment work by Maurex Resources Limited (AFRI 42B13NW0202) reports that the interval from 32.0 to 33.4 m contained 6.02 ppm Au in massive sulphides.

*Maurex Resources Limited conducted ground VLF-EM and magnetic surveys in 1987 (AFRI 42B13NW0202 and 42B13NE0211) to follow up on the AMAX drill results. Further work was recommended but no work is reported.*

*Golden Trio Minerals Ltd. conducted trenching on a number of EM targets in Minnipuka Township in 1988 (AFRI 42B13NE0204). Some of the trenches are located on claim 4265572 near the south end of the Goat Lake Road. No assay results are reported.*

*The Ontario Geological Survey (2015) released results of a helicopter mounted Geotech VTEM plus magnetic and electromagnetic surveys flown at 200 m line spacing that covered Minnipuka Township and adjacent townships”.*

## **5.0 Geology**

A previously filed assessment report by Richard Sutcliffe (2015) has summarized the geology on the Minnipuka Property:

*“The Minnipuka Property is underlain by predominately Archean rocks at the eastern end of the Kabinakagami Lake greenstone belt (Figure 2). The greenstone belt is intruded by Archean granite, megacrystic granodiorite, and tonalite plutons and by Proterozoic diabase dikes of the Hearst swarm. Walls Township was originally mapped by Maynard (1929). Subsequent Precambrian mapping was completed by Thurston et al. (1977) as part of a regional mapping program of the Chapleau area. There are no detailed maps of Minnipuka Township. The Puskuta Deformation zone is a 1 km wide, steeply dipping, dextral, transcurrent structure that on a regional scale bounds the south side of the Kabinakagami Lake greenstone belt and extends for over 30 km to the southeast through Minnipuka and Puskuta Townships (Leclair et al, 1993). LeClair and Sullivan (1991) report a U-Pb titanite age of 2,665 Ma for mylonite related to the Puskuta Deformation zone.*

*...Mafic metavolcanic rocks on the Property are dominantly amphibolite metamorphic facies mafic metavolcanics that are banded (unit 1a) to strongly foliated (unit 1b). Banded amphibolites are characterized by mm to cm scale feldspathic layers alternating with more mafic layers. The author interprets that these textures are probably metamorphic.*

*Felsic to intermediate metavolcanic rocks occur in an approximately 500 m thick unit striking northwest-southeast and extending across the claim group. These metavolcanic rocks are associated with biotite schists that have been mapped as metasedimentary in the present program. Several outcrops of white to light grey, highly siliceous, foliated and banded aphanitic rhyolite (unit 2a) are well exposed at the south end of the Goat Lake road. South of Little Goat Lake, a small outcrop of intermediate fragmental rocks (unit 2b) interpreted as lapilli tuff was observed. This lithological unit contains cm scale felsic-intermediate fragment in an intermediate matrix. On claim 4266190 at the western end of the property, layered intermediate amphibolite (unit 2c) was observed.*

*Biotite schist (unit 3a) interpreted to be of metasedimentary origin is associated with intermediate to felsic metavolcanic rocks. These rocks are well-foliated, commonly banded, medium grained, grey schists. Locally amphibole –rich calc-silicate layers are present (unit 3b). Muscovite biotite schist (unit 3c) was observed in the western end of the claim group. Several different granitoid plutons have been identified on the property.*

*North of the unit of metavolcanic/metasedimentary rocks, the dominant lithology is massive, pink, megacrystic biotite granodiorite (unit 4a) with 1 to 2 cm microcline phenocrysts. This unit forms a relatively homogenous pluton centered on Goat Lake.*

*In the northwestern part of the area, inequigranular, medium- to coarse-grained, white biotite-muscovite leuco-granite/granodiorite (unit 4b) and associated pegmatite are intrusive into biotite schists (3a). Locally unit 4b is observed to intrude unit 4a.*

*In the south-western part of the area, south of the claim group, strongly foliated biotite tonalite (unit 4c) is intrusive into layered and foliated mafic amphibolite (units 1a and 1b). Adjacent to the tonalite, the mafic amphibolite contains numerous sills of felsite (unit 4d). This assemblage is similar to the rocks hosting gold mineralization in Hawkins township to the west. Medium-grained diabase dikes intrude the Archean metavolcanic and intrusive rocks. The dikes are weakly magnetic and equigranular. The mapped dikes have preferred orientations of approximately 140°.*

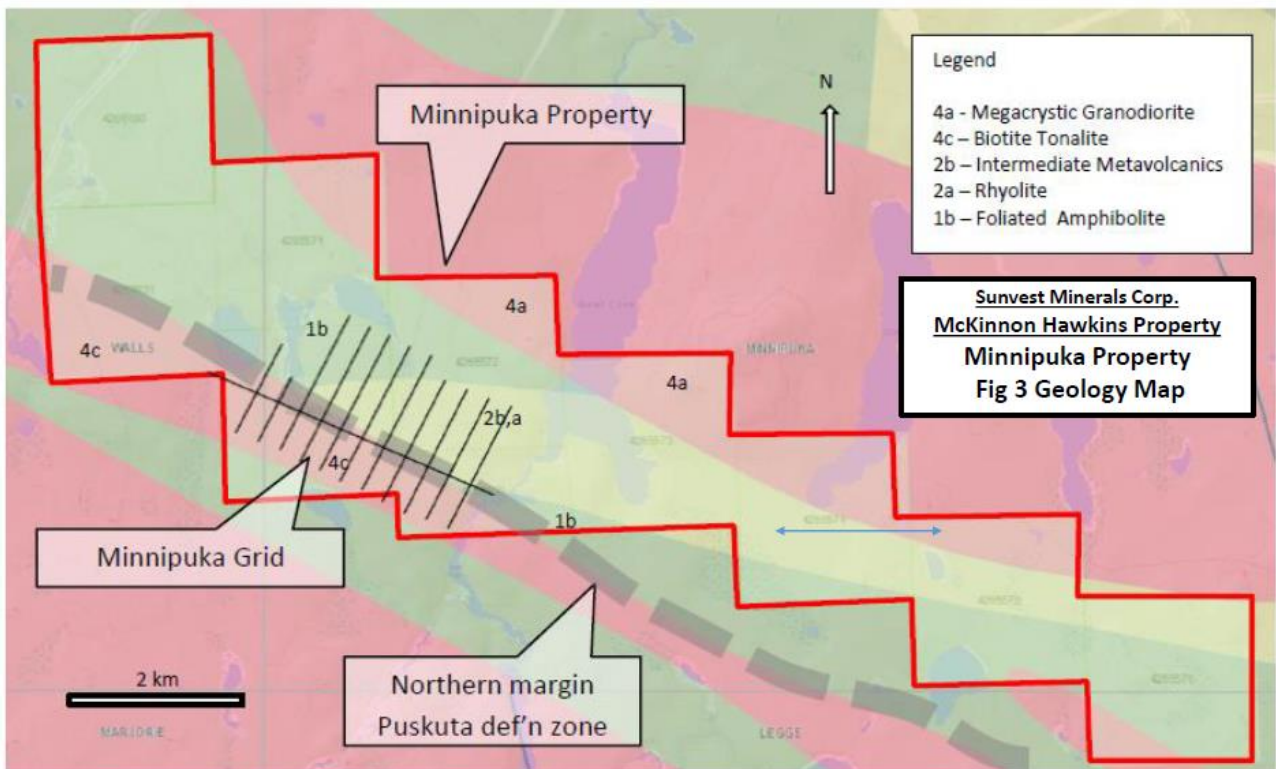
#### *Structure*

*The metavolcanic and metasedimentary rocks are characterized by strong penetrative fabrics and ductile deformation. Foliations in the rocks in the central part of the claim group are northwest-southeast striking with near vertical dips in the eastern part of the property and*

moderate to steep north dips in the west. Minor folds typically have a “Z” asymmetry suggesting a dextral displacement. This is consistent with Leclair et al.’s (1993) interpretation of movement on the Puskuta Deformation Zone.

The Puskuta Deformation Zone occurs in the southern part of the claim group and the approximate northern boundary of the deformation zone as defined by outcrops with features of high strain is indicated on Map 2. Typical high strain textures include protomylonite fabric with quartz ribbons, rootless “hook shaped” minor folds, boudinage, and augen or flaser-type textures with clasts of less deformed rock in strongly deformed matrix. Foliation in the Puskuta deformation zone is characterized by a broadly northwest-southeast strike and north dipping orientation. The northern limit of the Puskuta Deformation Zone is poorly exposed and generally covered by low lying swampy ground.

**Fig 3. Minnipuka Property Geology**



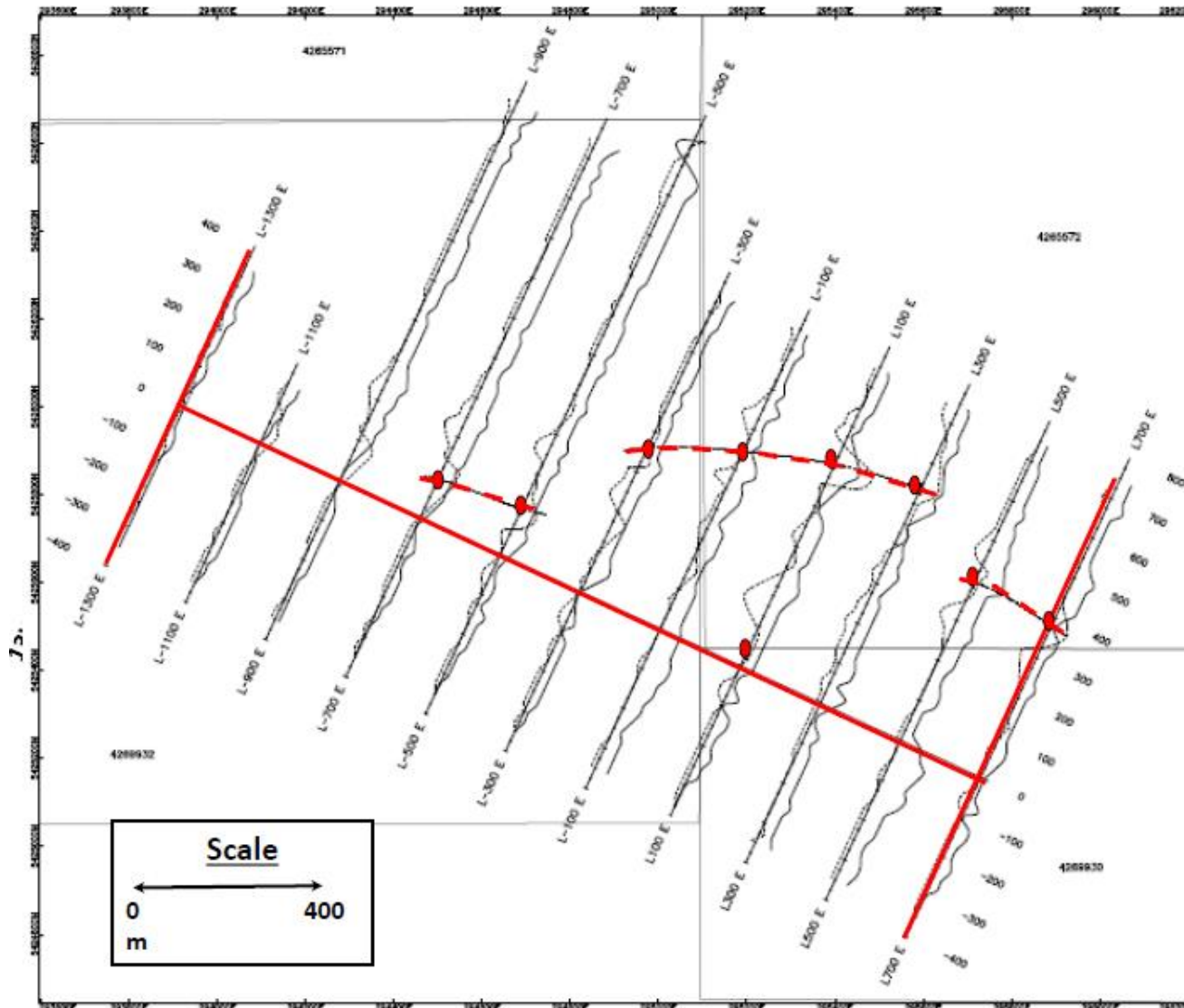
Base map source: OGS Claimaps 2016

## **6.0 HLEM THEORY AND INTERPRETATION PROCEDURES**

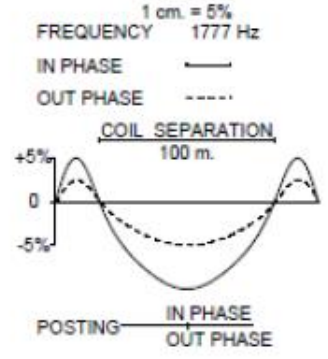
The horizontal loop EM method is well described in standard text such as Telford et. Al. (1990) and Ketola and Puranen (1987), and readers may check these references for more information. Vision Exploration Ltd., conducted the survey using an Apex Parametrics Max Min 11-5 instrument made by Apex Parametrics (Toronto).

A Max Min II-5 portable unit was used in the maximum coupled mode (horizontal loop) with a 100-meter reference cable to confirm the presence of deep bedrock conductors. The parameters (in phase and quadrature components of the secondary field) were read and recorded for three frequencies: 444, 1,777 and 3,555 Hz. Readings were taken every 25 meters on all the lines.

The 444 and 1,777 Hz profiles and interpreted conductor locations and trends (Fig 4 and 5), as determined by Steve Anderson, of Vision Exploration Ltd., are presented below. For comparison purposes, the author has transposed the EM conductive anomalies from the HLEM survey over the EM conductors indicated by the Ontario Geological Survey helicopter mounted Geotech VTEM ((Versatile Time Domain Electromagnetic), plus magnetic and electromagnetic survey flown at 200 m line spacing (Fig 5).



**MAX-MIN HORIZONTAL LOOP LEGEND**

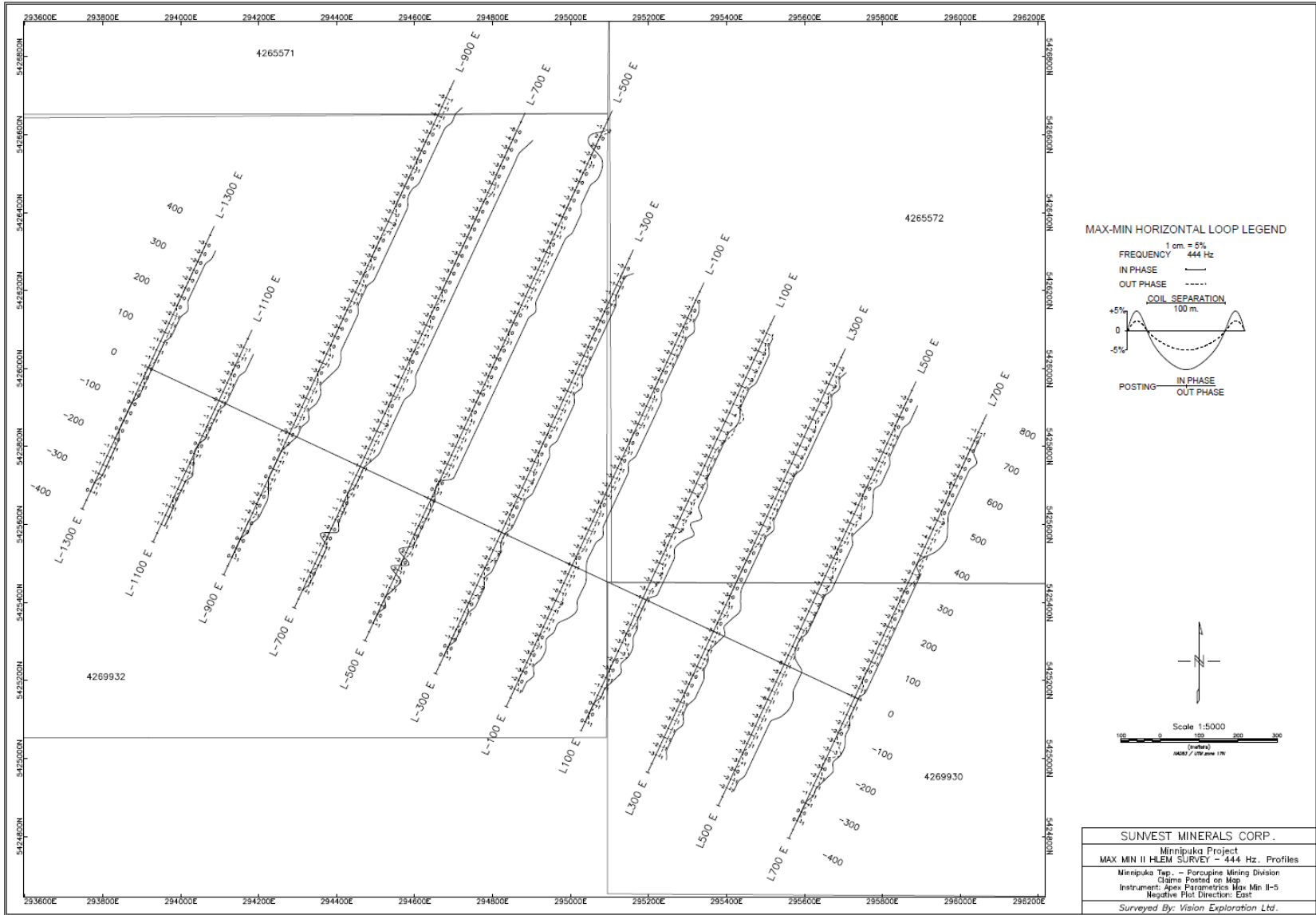


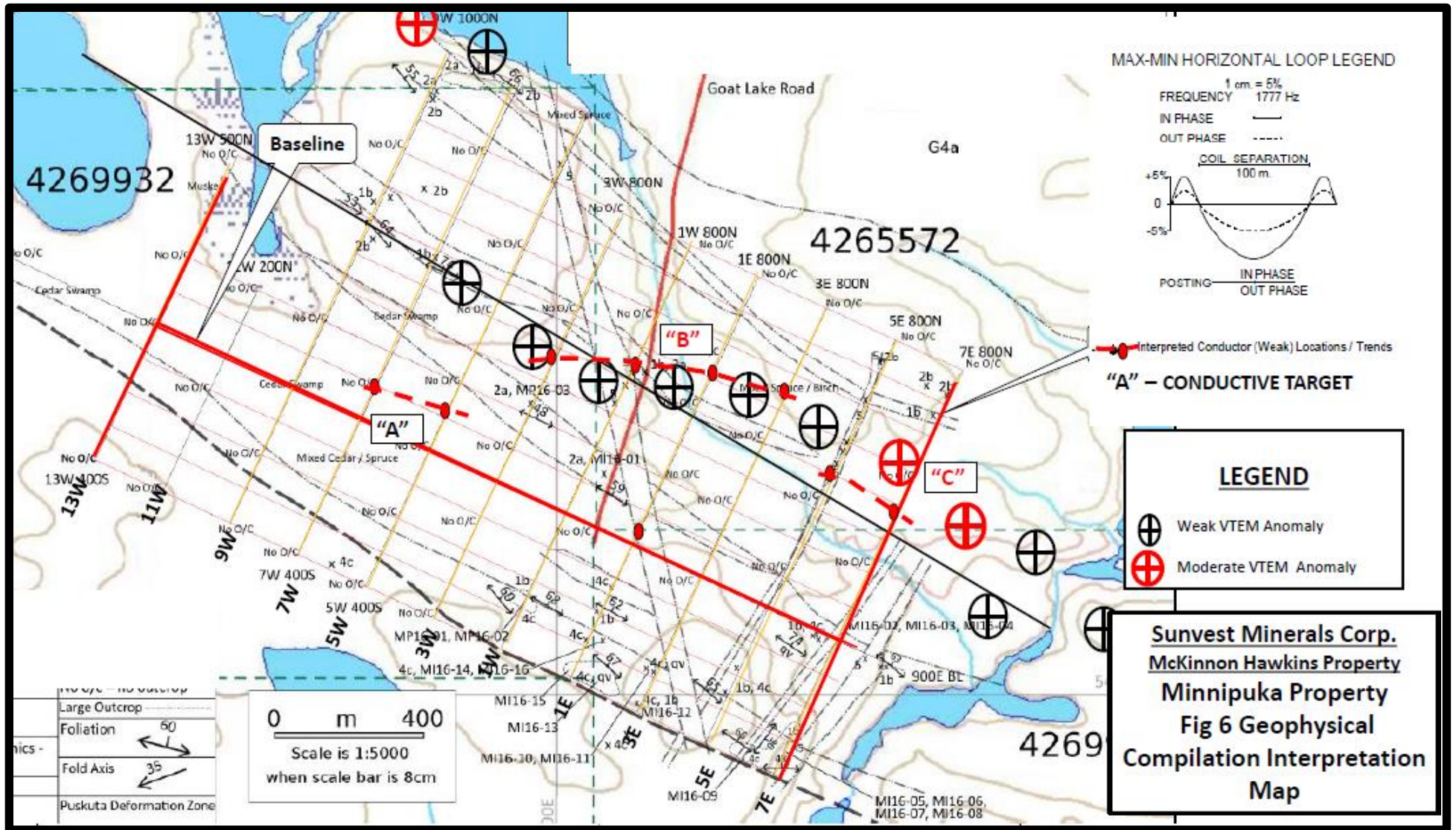
Interpreted Conductor (Weak) Locations / Trends

**SUNVEST MINERALS CORP.**  
 Minnipuka Project  
 MAX MIN II HLEM SURVEY - 1777 Hz. Profiles  
 Minnipuka Twp. - Porcupine Mining Division  
 Claims Posted on Map  
 Instrument: Apex Parametrics Max Min II-5  
 Negative Plot Direction: East  
 Surveyed By: Vision Exploration Ltd.

**Sunvest Minerals Corp.**  
**McKinnon Hawkins Property**  
**Minnipuka Property**  
**Fig 4 Geophysical HLEM**  
**Interpretation Map**

**FIG 5 MAX MIN II HLEM SURVEY – 444 HZ Profiles.**





## **7.0 Conclusions and Recommendations**

The 1,777 Hz profiles and interpreted conductor locations and trends (Fig 4), as determined by Steve Anderson, of Vision Exploration Ltd., indicate three weak EM conductors. The author has transposed the EM conductive anomalies from the HLEM survey over the EM conductors indicated by the Ontario Geological Survey helicopter mounted Geotech VTEM ((Versatile Time Domain Electromagnetic), plus magnetic and electromagnetic survey flown at 200 m line spacing (Fig 5).

In the authors opinion, no significant conductors are indicated by the HLEM survey, or VTEM survey, that are likely to be caused by conductive massive sulphide mineralization (i.e. VMS deposits). However, three weak, subtle, EM conductors are indicated that may be related to disseminated sulphides associated with formational geological features (e.g. contacts, quartz veining, alteration zones, etc.) and/or structural features, that may host anomalous gold mineralization. These (Fig 5) include:

- Conductor A – weak HLEM, 2- line conductor, over 200 meters, no correlation with VTEM, low priority target.
- Conductor B – weak HLEM, 4-line conductor, over 800 meters, trending roughly east-west. Cuts diabase at west extent. Good correlation with weak VTEM anomaly.
- Conductor C- weak HLEM, 2-line conductor, over 200 meters, but open to the east (off the grid). Correlates with moderate VTEM conductor just north of the HLEM conductor, may represent a northerly dip picked up by VTEM. Recommend drilling.

As indicated in Fig 5, all three HLEM conductors occur in areas of little or no outcrop, so additional prospecting and geological mapping is unlikely to enhance the targets. Conductor B is readily assessable from the Goat Lake Road. The following recommendations are proposed:

- Soil sampling on the grid lines over the conductors, multi-element analysis to determine if elevated gold and/or pathfinder metals support gold mineralization related to the conductors.
- Augering with a truck supported power auger on the Goat Lake Road over Conductor B, but away from the interpreted diabase contacts. The objective is to test the depth

and type of overburden, to determine if the conductors are topography features (i.e. clay, swamps, water courses). The auger holes should also be analyzed to determine variation in metal contents with depth profiles.

- Diamond drilling conductor C. Assuming the above activities are supported, conductor C is a valid drill target. Assuming a northerly dip, the drill hole should be located to the north and drilled in a southwest direction. Recommend two holes, 75 and 150 meters (total 225 m).

## **8.0 References**

LeClair, A.D., Ernst, R.E., and Hattori, K. 1993. Crustal scale auriferous shear zones in the central Superior province, Canada. *Geology*, v. 21, pp. 399-402.

Leclair, A.D. and Sullivan, R.W. 1991. U-Pb zircon and titanite ages of upper and lower crustal rocks in the central Kapuskasing uplift, northern Ontario, in *Radiogenic age and Isotopic Studies, Report 4, Geological Survey of Canada, Paper 90-2*, p. 45-59.

Ketola, M. and M. Puranen (1967) Tṽe curves for the interoretation of Slinaram [Horizontal loop) anomalies over tabular bodies. Geological Survey of Finland Report of Investigations No.1.

Maynard, J.E. 1929, Oba Area, District of Algoma, Ontario Department of Mines, Annual Report 1929, v. 38, pt. 6, pp. 114-125.

Ontario Geological Survey, 2015. Airborne magnetic and electromagnetic surveys, colour-filled contours of the residual magnetic field and electromagnetic anomalies, Kabinakagami Lake area; Ontario, Geological Survey, Map 82 754, scale 1:50 000.

Sutcliffe, R., 2015. Assessment Report on Mapping Program Minnipuka Property, Minnipuka and Walls Townships, Assessment Report.

Telford, W.M., L.P. Geldart and R.E. Sheriff (1990) *Applied Geophvsics (2"d Edition)*. New York: Cambridge University Press.

Thurston, P.C., Siragusa, G.M., Sage R.P. 1977. *Geology of the Chapleau Area, Ontario Division of Mines, Geoscience Report 157, Accompanying Map 2221*.

## 10.0 Statement of Qualifications

I, Robert Weicker, of Suite 2801, 1166 Melville St., Vancouver, B.C., do hereby certify that:

- I am a graduate of University of Waterloo (B.Sc. Earth Sciences, 1977), and I have been practicing my profession as a geologist since.
- I have direct knowledge of the exploration work performed for this assessment.

Signed

“R.F, Weicker”

Robert F. Weicker Geologist

July 30, 2017

Vancouver, B.C.

## **APPENDIX A: EQUIPMENT SPECIFICATIONS**

- ❑ Designed for geoenvironmental applications and groundwater and mineral exploration, continuing and expanding the concepts of the earlier and highly popular MaxMin models.
- ❑ Frequency span is extended to ten octavely spaced frequencies from 222 to 3555 Hz, with increased range and number of coil separations. These and other developments result in greater performance, with more applications and enhanced interpretation.
- ❑ Advanced spheric and powerline interference rejection is still further improved, resulting in faster and more accurate surveys, particularly at the larger coil separations.
- ❑ MaxMin Computer or MMC, which is described in a separate data sheet, is offered for digital data processing, display, storage and transfer. The MMC displays and stores the in-phase and quadrature readings, their standard deviations, and the corresponding apparent ground conductivity values. Rough terrain surveys are also simplified with the MMC.
- ❑ Data interpretation and presentation programs are available for layered earth parametric soundings and discrete conductor surveys done with MaxMin EM.



**Transmitter**



**Receiver + MMC**

## MAXMIN II-5 ELECTROMAGNETIC SYSTEM SPECIFICATIONS :

# APEX

## MAXMIN COMPUTER MMC

- ❑ The MMC interfaces with MaxMin EM System receivers for digital data processing, display, storage and transfer, enhancing survey productivity and data accuracy.
- ❑ Digital display and logging of in-phase (real) and quadrature (imaginary) readings with standard deviations, the corresponding apparent ground conductivity values, line station, terrain slope and coil tilt information.
- ❑ Easy fingertip operation by read and store switches on MaxMin receiver front panel, with digital averaging for improved signal to noise ratio.
- ❑ Rough terrain surveys are simplified with the use of built-in-tilt meter, slope entry and computed coil orientation and separation information.
- ❑ Data transfer, formatting, correction and viewing programs are supplied for personal computers. Program for computing multi-frequency best-fit apparent conductivities and fit error is provided.
- ❑ Data interpretation and presentation programs are available for multi-layer parametric or geometric soundings and discrete conductor surveys done with MaxMin EM.



**Receiver + MMC**



**Transmitter**

## MAXMIN COMPUTER MMC SPECIFICATIONS :

<b>OPERATING SYSTEM :</b>	Menu driven user-friendly hierarchial operationg system. Interfacing with MaxMin EM System receiver and with personal computers.
<b>DISPLAY :</b>	Liquid Crystal Display, with two lines of 24 alphanumeric characters each.
<b>KEYBOARD :</b>	18 tactile pushbutton keys.
<b>BEEPER :</b>	To provide audible operator guidance and to speed up operations, especially in very cold weather.
<b>CLOCK CALENDAR :</b>	Date and Time ( year, month, day, hour and minutes ).
<b>COIL TILT :</b>	Tilt display, with built in tilt sensor and circuitry, with $0 \pm 99\%$ grade range and with 1% resolution.
<b>IN-PHASE &amp; QUADRATURE :</b>	$0 \pm 199.99\%$ autoranging programmable gain system with 0.1% resolution for displayed data and 0.01% resolution for stored data.
<b>APPARENT CONDUCTIVITY :</b>	0.1 to 3276 milliSiemens ( millimho ) per metre available conductivity range, with conductivity arrived at using the quadrature, in-phase, frequency and coil separation data..
<b>PROCESSOR :</b>	16 bit low power CMOS CPU and bus at 6 Mhz clock rate.
<b>MEMORY :</b>	ROM : 16 Kb expandable to 64 Kb RAM : 256 Kb, static CMOS
<b>PHYSICAL SIZE :</b>	24.2 x 17.3 x 4.3 cm, to fit inside MaxMin receiver leather case notebook pocket.
<b>WEIGHT :</b>	1.0 Kilogram.
<b>BATTERIES :</b>	Two 9 Volt - 0.57 Ampere-hour alkaline batteries. Battery life 28 hours continuous duty, less in cold weather. Optional 1.2 Ah lithium batteries recommended for very cold weather operation. One lithium 3 Volt back-up battery, type 2032.
<b>CONNECTIONS :</b>	19 pin bayonet connector receptacle to connect to MaxMin receiver with the supplied aluminum tube connectors.  One each of DB25S and DB9S data transfer cords aupplied for downloading data to personal computer serial port.
<b>TEMPERATURE RANGE :</b>	Minus 30 to plus 60 degree Celsius. Temperature sensor and temperature display built-in.

1993-10-04

## **APPENDIX B: EXPENDITURES**

**EXPENDITURES**

	Amount \$	GST/HST	TOTAL
• VISION EXPLORATION LTD.,	\$7,247.06	\$942.12	\$8,189.18
• R.F. Weicker (3 days-Report/Compile)	\$2,100.00	\$105.00	\$2205.00
TOTAL	\$9,347.06	\$1,046.12	\$10,394.18

**2041663 ONTARIO LTD.  
VISION EXPLORATION  
1780 Coyote Ridge Road  
Crystal Falls, Ontario  
P0H-1L0**

Phone: (705) 266-4703  
E-mail: [visionexploration@persona.ca](mailto:visionexploration@persona.ca)  
[www.duenorth.net/vision](http://www.duenorth.net/vision)

January 20, 2017  
Job # V-601  
Invoice # 685-V601-1

In Account With: Sunvest Minerals Corp.  
1240-789 W Pender St.  
Vancouver B.C.  
V6C-1H2

Invoice RE: Hawkins Project

12.6 km HLEM Survey @ \$350/km.....	\$ 4,410.00
2 Day Travel.....	\$ 500.00
4 days skidoo Rental @ \$50/day.....	\$ 200.00
Truck 2,100km @ .50/km.....	\$ 1,050.00
Room and Board.....	\$ 887.06
Map Plotting.....	<u>\$ 200.00</u>
Sub Total	\$ 7,247.06
 HST #859243206RT	 <u>\$ 942.12</u>
Total	\$ 8,189.18

**Amount Due: \$ 8,189.18**

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