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# Beepmat Survey Over the HUDSON BAY PROPERTY Leith Township, Ontario





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# 1. SURVEY DETAILS

#### 1.1 PROJECT NAME

This project is known as the **Hudson Bay Property**.

# 1.2 CLIENT

Ashley Gold Mines Limited

P.O. Box 219

Larder Lake, Ontario

**P0K 1L0** 

#### 1.3 LOCATION

The Hudson Bay Property is located approximately 15 km south of Gowganda, Ontario.



Figure 1: Location of the Hudson Bay Property





#### 1.4 Access

Access to the property was attained with a 4x4 truck via highway 560 approximately 33km west of Elk Lake Ontario. One would then take the Beauty Lake road south from highway 560 for approximately 30km to the Rusty Lake Road. From the Beauty Lake road, one takes the Rusty Lake Mine Road for approximately 3km to the Rusty Lake Mine site.

#### 1.5 SURVEY AREA

The traversed lines were established using a GPS in conjunction with the execution of the survey. The survey area was for reconnaissance and therefore randomly generated in the field based on topography and vegetation.



#### 2. SURVEY WORK UNDERTAKEN

#### 2.1 SURVEY LOG

Date	Description	Total Survey (km)
June 17, 2015	Locate survey area and conduct survey.	1.452

Table 1: Survey Log

#### 2.2 PERSONNEL

Jason Ploeger of Larder Lake, Ontario operated the Beepmat.

#### 2.3 SURVEY SPECIFICATIONS

The survey was conducted with a GDD Beep Mat BM8 system. This system was integrated with a Garmin GPSmap 76 GPS with an external antenna. The BM8 was set to automatically take a simultaneous GPS and HFR and LFR measurement every second. Every 15 minutes the BM8 was re-initialized.

A total of 1.452 kilometers of no grid beep mat was performed on June 17<sup>th</sup>, 2015. This consisted of 1109 HFR and LFR samples taken at 1 second intervals.





# 3. OVERVIEW OF SURVEY RESULTS

# 3.1 SUMMARY

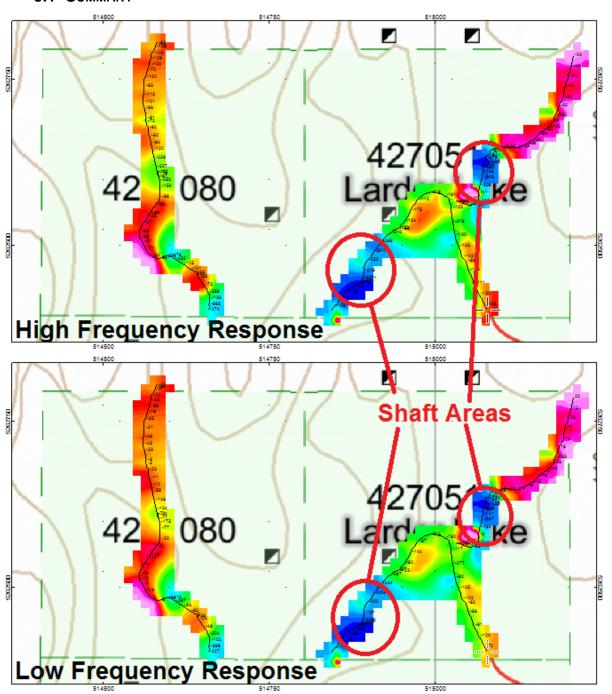


Figure 2: Beepmat Readings With Historical Shaft Areas Circled





A correlation appears to occur surrounding the historic shaft areas. Both of these areas appear to exhibit a drop in both the HFR and LFR responses. This may be an indication of the favorable alteration for mineralization.

I would recommend further beepmat through the area.





#### **APPENDIX A**

#### STATEMENT OF QUALIFICATIONS

- I, C. Jason Ploeger, hereby declare that:
- I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Ltd. of Larder Lake, Ontario.
- 2. I am a Practicing Member of the Association of Professional Geoscientists, with membership number 2172.
- 3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
- 4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
- 5. I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
- 6. I do not have nor expect an interest in the properties and securities of **Ashley Gold Mines Limited.**
- 7. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.



C. Jason Ploeger, P.Geo., B.Sc. Geophysical Manager Canadian Exploration Services Ltd.

> Larder Lake, ON August 4, 2015

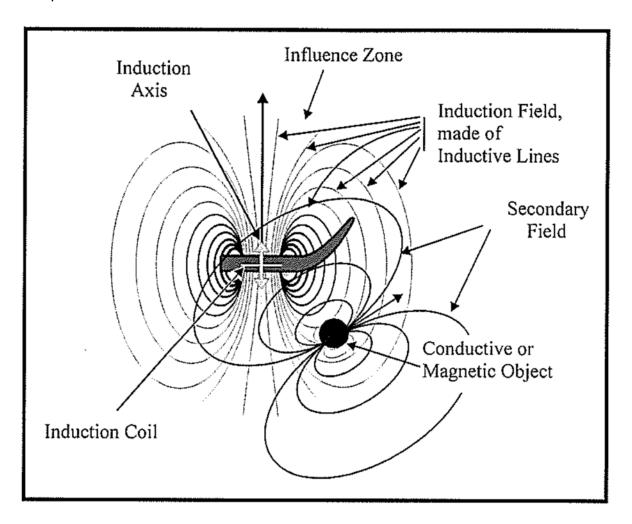


#### **APPENDIX B**

#### THEORETICAL BASIS AND SURVEY PROCEDURES

#### BEEP MAT EM SURVEY

The probe contains an inductive coil within its shell. When the probe is in normal position on the ground, as shown below, the induction axis sent be the coil is in the vertical position.



The influence zone of its induction field has an average radius (called "range") of about 3 meters. This field is similar to the field of a magnet. Any conductive or magnetic object within the zone reacts by sending out a secondary field (or "induced" field) which is weaker and has distinctive features. The probe reacts on the part of this field that goes through its inductive coil. This reaction is then displayed on the reading unit in terms of LFR, HRF, MAG and Rt values.

Picture the inductive field as being composed of several induction lines crossing the





inductive coil and which density increases towards the center of the coil. To illustrate that, only a few induction lines are presented in the above figure. Therefore the greater the number of lines that cross the conductive object, the higher the displayed values will be.

The LFR value (Low Frequency Response) represents a specific reaction of low frequency, in hertz, to the presence of a conductor near the probe.

The HFR value (High Frequency Response) represents a specific reaction of the high frequency, in hertz, to the presence of a conductor near the probe.

The MAG value (Magnetite) represents a specific reaction of the probe, in hertz, to the presence of a magnetic body, in particular containing magnetite (relative susceptibility)

The Rt value (Ratio) indicates the quality of the conductor (intrinsic conductivity) and is independent of the quantity of material present. For the ratio value to be calculated by the unit, there are two conditions

- 1) The HFR must be at least 10Hz
- 2) No magnetite must be present (MAG=0)

In the presence of magnetite, the Rt value is altered and the Rt=0% will be displayed. When HFR is below 10Hz, the Rt value is not precise enough and Rt=0% will be displayed.



# **APPENDIX C**

#### **GDD BEEP MAT MODEL BM8**



#### **FEATURES**

- EM / MAG ground survey
- Detect the magnetic susceptibility and EM conductivity along with GPS position
- Get fast results
- Shock resistant, portable and weatherproof.
- Provide real time feedback
- New internal Lithium-Ion in the reading unit
- Transfers data from the reading unit to your PC in order to draw maps.

#### **SPECIFICATIONS**

- Power Source: Rechargeable Batteries
- Daily Autonomy: Up to 10 hours
- Memory Capacity: 8,093,750 readings
- Weight (including accessories and shipping bag): 10 kg
- **Dimension** (including accessories and shipping bag): 90 x 30 x 30 cm
- Operating temperature: -50C to 70C (-58F to 158F)
- Positioning: Garmin GPS Map 76 integrated



# **APPENDIX C**

#### **GARMIN GPS 76**





#### **GPS Performance**

Receiver: WAAS-enabled, 12 parallel channel GPS receiver continuously tracks and uses up to 12 satellites to compute and update your position

# **Navigation Features**

**Waypoints/icons:** 500 with name and graphic symbol, 10 nearest (automatic), 10 proximity

**Routes:** 50 reversible routes with up to 50 points each, plus MOB and Trac-Back® modes

**Tracks:** Automatic track log; 10 saved tracks let you retrace your path in both directions

**Trip computer:** Current speed, average speed, resettable max. speed, trip timer and trip distance

**Alarms:** Anchor drag, approach and arrival, off-course, proximity waypoint, shallow water and deep water

**Tables:** Built-in celestial tables for best times to fish and hunt, sun and moon rise, set and location

**Map datums:** More than 100 plus user datum

Position format: Lat/Lon, UTM/UPS, Maidenhead, MGRS, Loran TDs and

other grids, including user grid

#### **Acquisition times**

**Warm:** Approximately 15 seconds **Cold:** Approximately 45 seconds

**AutoLocate®:** Approximately 2 minutes **Update rate:** 1/second, continuous

#### GPS accuracy

Position: < 15 meters, 95% typical\* Velocity: 0.05 meter/sec steady state





WAAS accuracy

**Position:** < 3 meters, 95% typical\* **Velocity:** 0.05 meter/sec steady state

**Power** 

**Source:** Two "AA" batteries (not included)

Battery Life: Up to 16 hours

**Physical** 

**Size:** 2.7"W x 6.2"H x 1.2"D (6.9 x 15.7 x 3.0 cm)

Weight: 7.7 ounces

**Display** 

1.6"W x 2.2"H (4.1 x 5.6 cm) 180 x 240 pixels, high-contrast FSTN with bright backlighting

Case: Fully gasketed, high-impact plastic alloy, waterproof to IEC 529

IPX7 standards

Interfaces: RS232 with NMEA 0183, RTCM 104 DGPS data format and

proprietary Garmin®

**Antenna:** Built-in quadrifilar, with external antenna connection (MCX)

**Differential:** DGPS (USCG and WAAS capable) **Temperature range:** 5°F to 158°F (-15°C to 70°C)

**Dynamics:** 6 g's

User data storage: Indefinite, no memory battery required

Specifications obtained from www.garmin.com





# **APPENDIX D**

# LIST OF MAPS (IN MAP POCKET)

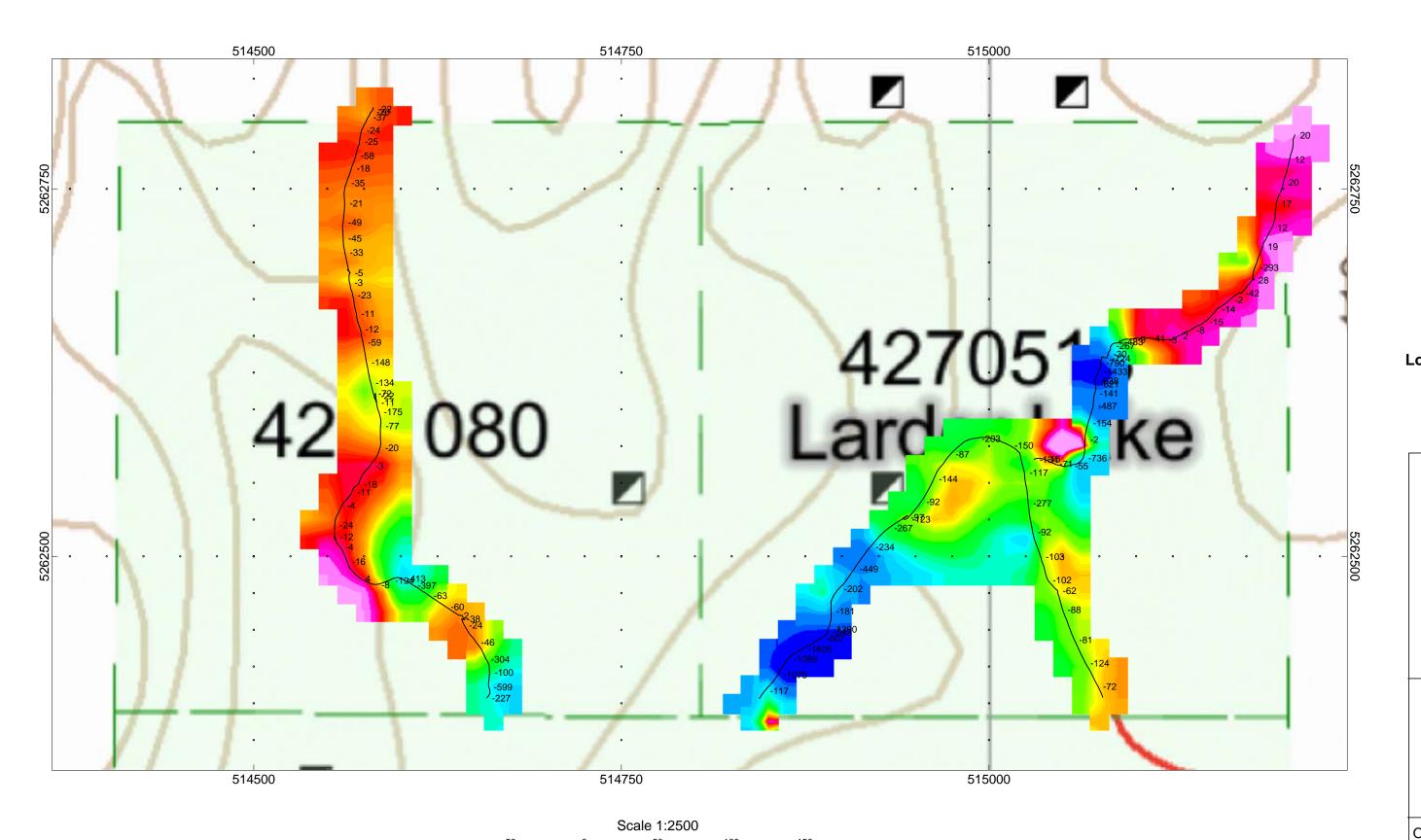
Posted beepmat plan maps (1:2500)

- 1) ASHLEY-HUDSON BAY-BEEPMAT-HFR
- 2) ASHLEY-HUDSON BAY-BEEPMAT-LFR

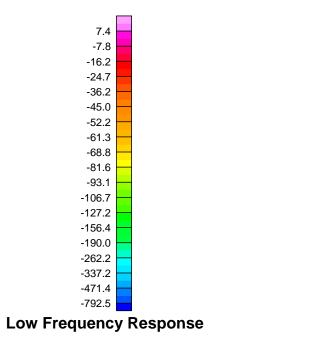
Grid Sketch on Claim Map (1:20000)

3) ASHLEY-HUDSON BAY-SBEEPMAT-TRAVERSES

**TOTAL MAPS = 3** 



(meters)
NAD83 / UTM zone 17N





# HUDSON BAY PROPERTY Leith Township, Ontario

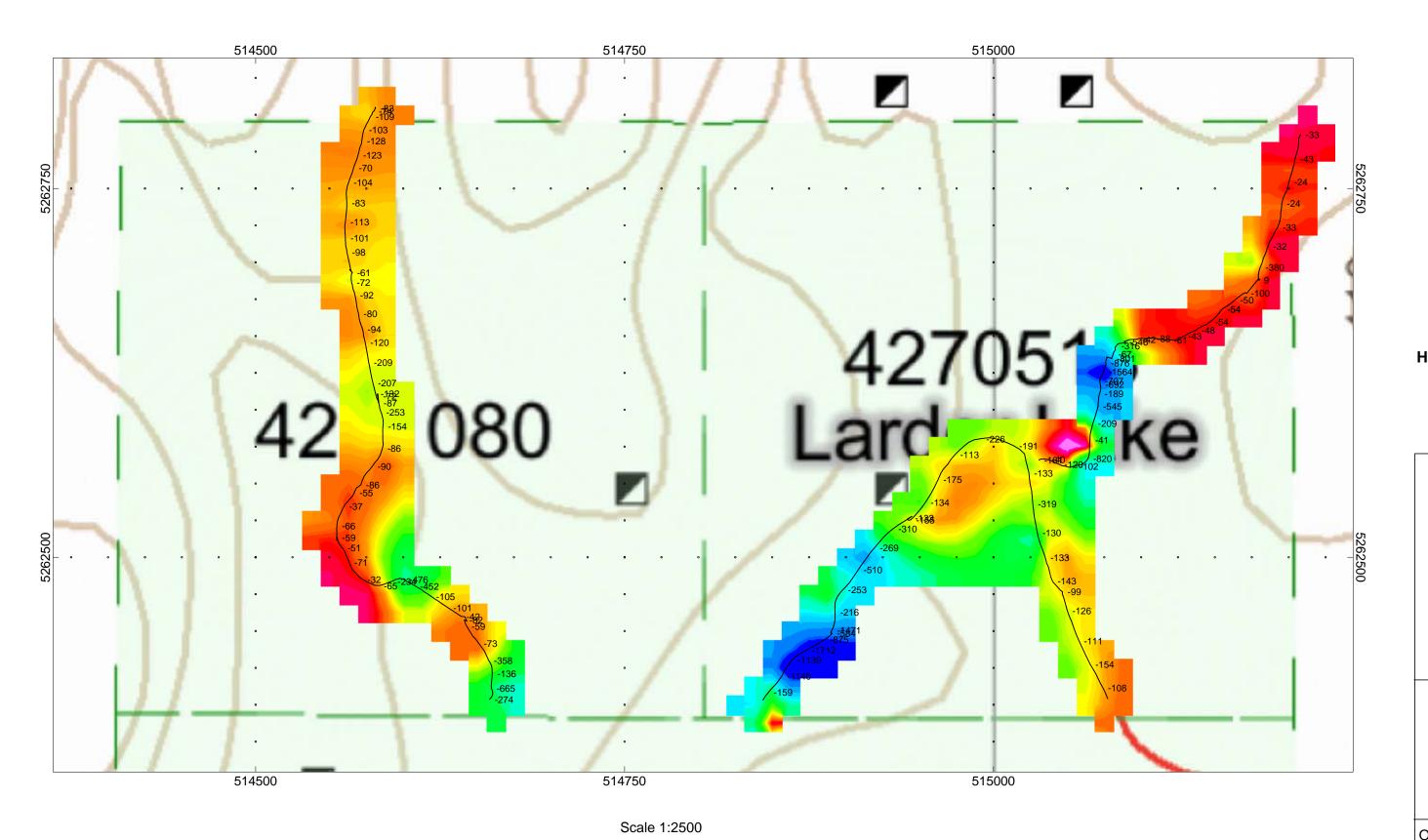
LOW FREQUENCY RESPONSE BEEP MAT PLAN MAP

Posting Level: 0
Station Seperation: 1 second interval
GDD BEEP MAT MODEL BM8

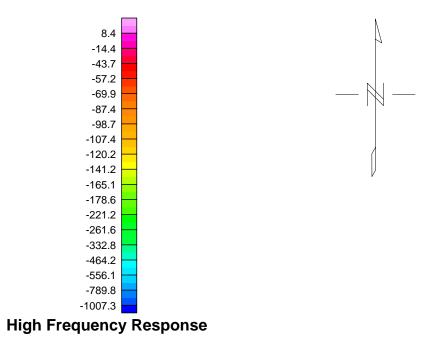
Operated By: C Jason Ploeger Processed by: C Jason Ploeger, B.Sc. Map Drawn By: C Jason Ploeger, B.Sc. August 2015



Drawing: ASHLEY-HUDSON BAY-BEEPMAT-LFR



(meters)
NAD83 / UTM zone 17N





# HUDSON BAY PROPERTY Leith Township, Ontario

HIGH FREQUENCY RESPONSE BEEP MAT PLAN MAP

Posting Level: 0
Station Seperation: 1 second interval
GDD BEEP MAT MODEL BM8

Operated By: C Jason Ploeger Processed by: C Jason Ploeger, B.Sc. Map Drawn By: C Jason Ploeger, B.Sc. Aug 2015



Drawing: ASHLEY-HUDSON BAY-BEEPMAT-HFR

