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SKEAD HOLDINGS LTD.

Abstract

CXS was contracted to perform a magnetometer and VLF EM survey over a portion of the Aberdeen Property. The crew accessed the site on May 16th, 2022.

A total length of 11.3875 kilometers was covered with 934 magnetometer and VLF EM samples taken at a 12.5 meter interval. Strong linear magnetic signatures occur over both grid 1 and 2. These are paralleled by weaker magnetic anomalies with coincident VLF EM signatures.

Skead Holdings Ltd.

Q3015 – Aberdeen Property Magnetometer and VLF EM Surveys

C Jason Ploeger, P.Geo. – May 25, 2022



TABLE OF CONTENTS

1.		SURVEY DETAILS
	1.1	PROJECT NAME
	1.2	CLIENT
	1.3	OVERVIEW
	1.4	OBJECTIVE
	1.5	SURVEY & PHYSICAL ACTIVITIES UNDERTAKEN
	1.6	SUMMARY OF RESULTS, CONCLUSIONS & RECOMMENDATIONS 4
	1.7	CO-ORDINATE SYSTEM
2.		SURVEY LOCATION DETAILS
	2.1	LOCATION
	2.2	ACCESS
	2.3	MINING CLAIMS
	2.4	PROPERTY HISTORY
	2.5	GENERAL REGIONAL/LOCAL GEOLOGICAL SETTINGS
	2.6	TARGET OF INTEREST
3.		SURVEY WORK UNDERTAKEN 10
	3.1	SUMMARY
	3.2	SURVEY GRID
	3.3	SURVEY LOG
	3.4	PERSONNEL
	3.5	SAFETY
	2.2	SURVEY SPECIFICATIONS
3	OVER	VIEW OF SURVEY RESULTS
	3.1	SUMMARY

LIST OF APPENDICES

APPENDIX A	STATEMENT OF QUALIFICATIONS
APPENDIX B	
APPENDIX C	INSTRUMENT SPECIFICATIONS
APPENDIX D.	LIST OF MAPS (IN MAP POCKET)

LIST OF TABLES AND FIGURES

Figure 1: Location of the Aberdeen Property	5
Figure 2: Claim Map with the Aberdeen Property Grid 1 Traverses	7
Figure 3: Claim Map with the Aberdeen Property Grid 2 Traverses	8



Figure 4: Grid 1 Magnetometer Plan Map on Google Earth	. 13
Figure 5: Grid 1 VLF Fraser Filter Map on Google Earth	. 14
Figure 6: Grid 2 Magnetometer Plan Map on Google Earth	. 15
Figure 7: Grid 2 VLF Fraser Filter Map on Google Earth	. 16
Table 1: Survey and Physical Activity Details	3
Table 2: Mining Lands and Cells Information	6
Table 1: Survey Log	. 11



1. SURVEY DETAILS

1.1 PROJECT NAME

This project is known as the **Aberdeen Property**.

1.2 CLIENT

SKEAD HOLDINGS LTD.

28 Ford St. Sault Ste. Marie, Ontario P6A 4N4

1.3 OVERVIEW

CXS was contracted to perform a magnetometer and VLF EM survey over a portion of the Aberdeen Property. The crew accessed the site on May 16th, 2022.

A total length of 11.3875 kilometers was covered with 934 magnetometer and VLF EM samples taken at a 12.5 meter interval. Strong linear magnetic signatures occur over both grid 1 and 2. These are paralleled by weaker magnetic anomalies with coincident VLF EM signatures.

1.4 OBJECTIVE

The objective of the magnetometer and VLF EM survey was to explore the area for magnetic and conductive signatures.

1.5 SURVEY & PHYSICAL ACTIVITIES UNDERTAKEN

Survey/Physical	Dates	Total Days	Total Line
Activity		in Field	Kilometers
Magnetometer and VLF EM	May 16 th , 2022	3	11.3875

Table 1: Survey and Physical Activity Details



1.6 SUMMARY OF RESULTS, CONCLUSIONS & RECOMMENDATIONS

CXS was contracted to perform a magnetometer and VLF EM survey over a portion of the Aberdeen Property. The crew accessed the site on May 16th, 2022.

A total length of 11.3875 kilometers was covered with 934 magnetometer and VLF EM samples taken at a 12.5 meter interval. Strong linear magnetic signatures occur over both grid 1 and 2. These are paralleled by weaker magnetic anomalies with coincident VLF EM signatures.

1.7 CO-ORDINATE SYSTEM

Projection: UTM zone 17N Datum: NAD83 UTM Coordinates near center of grid: 283820 Easting and 5153486 Northing



2. SURVEY LOCATION DETAILS

2.1 LOCATION

The Aberdeen Property is located approximately 19.0 kilometers east of Echo Bay, Ontario. The survey on the property covers a portion of mining claims 628495, 628496, 628461, 628462, 628463, 628467, 628498, 628499, 628500, 628501, 628502, 628503, 628506 and 628507 all located in Aberdeen Township, within the Sault Ste. Marie Mining Division.



Figure 1: Location of the Aberdeen Property



2.2 ACCESS

Access to the Aberdeen Property was attained with a 4x4 truck and ATV via the Bass Lake Road. From Echo Bay, Highway 638 was travelled 22.5 kilometers east to Bass Lake Road. The Bass Lake Road was then travelled an additional 3.5 km; from there, an ATV was used to access portions of the survey area.

2.3 MINING CLAIMS

The survey area covers a portion of mining claims 628495, 628496, 628461, 628462, 628463, 628467, 628498, 628499, 628500, 628501, 628502, 628503, 628506 and 628507 all located in Aberdeen Township, within the Sault Ste. Marie Mining Division.

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
628495	41J12C368	Skead Holdings Ltd.	Aberdeen
628496	41J12C369	Skead Holdings Ltd.	Aberdeen
628461	41J12C388	Skead Holdings Ltd.	Aberdeen
628462	41J12C389	Skead Holdings Ltd.	Aberdeen
628463	41J12C390	Skead Holdings Ltd.	Aberdeen
628467	41J05K009	Skead Holdings Ltd.	Aberdeen
628498	41J05K032	Skead Holdings Ltd.	Aberdeen
628499	41J05K033	Skead Holdings Ltd.	Aberdeen
628500	41J05K052	Skead Holdings Ltd.	Aberdeen
628501	41J05K053	Skead Holdings Ltd.	Aberdeen
628502	41J05K054	Skead Holdings Ltd.	Aberdeen
628503	41J05K055	Skead Holdings Ltd.	Aberdeen
628506	41J05K074	Skead Holdings Ltd.	Aberdeen
628507	41J05K075	Skead Holdings Ltd.	Aberdeen

Table 2: Mining Lands and Cells Information



Magnetometer and VLF EM Surveys Aberdeen Property Aberdeen Township, Ontario

Skead Holdings Ltd.



Figure 2: Claim Map with the Aberdeen Property Grid 1 Traverses





Figure 3: Claim Map with the Aberdeen Property Grid 2 Traverses

2.4 PROPERTY HISTORY

There have been many historical exploration projects conducted over the years, all over the survey area. The following list describes details of the previous geoscience work which was collected by the Mines and Minerals division and provided by OGSEarth (MNDM & OGSEarth, 2022).

- 1963 1964: A Laframboise, Conwest Expl Company Ltd, New Senator-Rouyn Ltd. (File 41J12SW0026) *Geological, Physical and Diamond Drilling* In 1963 and 1964 Laframboise et al. reported geological mapping and trenching. They also reported drilling 33 drill holes 3200 feet.
- 1968: Canadian Johns-Manville Company Ltd. (File 41J12SW0012) Airborne Geophysics

In 1968 Canadian Johns-Manville reported flying an airborne magnetometer, EM, and radiometric survey.



- 1970 1971: Safari Exploration Ltd. (Files 41J12SW0023, 41J12SW0028 and 41J12SW0029) Ground Geophysical, Geological and Geochemical In 1970 and 1971 Safari reported performing an IP survey along with geological mapping and assaying.
- 1971: Gulf Minerals Ltd. (File 41J12SW0016) Diamond Drilling
 In 1971 Gulf reported drilling 3 drill holes 4005 feet.
- 1974: Cavalier Energy Inc. (File 41J12SW0024, 41J12SW0027) Diamond Drilling and Other In 1974 Cavalier reported drilling 3 drill holes 524.3 feet. Cavalier also reported writing a prospectus.
- 1986: Brink Mining & Resources Ltd. (File 41J05NW0001) Geochemical

In 1986 Brink reported some sampling being performed.

 2018: Battery Mineral Resources Limited. (File 20000017205) *Airborne Geophysics* In 2018 Battery flow on airborne magnetemeter. EM. and rediametric our

In 2018 Battery flew an airborne magnetometer, EM, and radiometric survey.

 2020 - 2021: Evgeniy Seminenko (File 20000019678) Geochemical
In 2020 and 2021 Seminenko reported seme sempling heit

In 2020 and 2021 Seminenko reported some sampling being performed.

2.5 GENERAL REGIONAL/LOCAL GEOLOGICAL SETTINGS

General Geology:

Taken from MacGregor, 1986

The claims lie in the Southern Geological Province and are underlain by Middle Precambrian rocks of the Huronian Supergroup. The sedimentary and volcanic rocks of the Huronian group consist of a homocline striking WNW-ESE and is intruded by sheets, sills, and dykes of Nipissing Diabase. Faulting also follows a WNW-ESE trend and is probably related to the major Murray Fault about 8 miles south.

2.6 TARGET OF INTEREST

Targeting was designed over the MDI showing which indicates the precense of chalcopyrite and bornite. The survey was projected east west of the MDI in hopes of identifying a trend and further targets.



3. SURVEY WORK UNDERTAKEN

3.1 SUMMARY

CXS was contracted to perform a magnetometer and VLF EM survey over a portion of the Aberdeen Property. The crew accessed the site on May 16th, 2022.

A total length of 11.3875 kilometers was covered with 934 magnetometer and VLF EM samples taken at a 12.5 meter interval. Strong linear magnetic signatures occur over both grid 1 and 2. These are paralleled by weaker magnetic anomalies with coincident VLF EM signatures.

3.2 SURVEY GRID

The traversed lines were established using a GPS in conjunction with the execution of the survey. The GPS operator would establish sample locations while remaining approximately 25m in front of the magnetometer operator. GPS waypoints and magnetic samples were taken every 12.5m along these controlled traverses. The GPS used was a Garmin GPSMAP 62s with an external antenna for added accuracy.

			Min	Mox	Total
Date	Description	Line	Extent	Extent	(m)
	•				
May 16, 2022	Mobilize to Sault Ste Marie.	-	-	-	-
May 17, 2002	Locate survey area and begin				
	survey on grid 1.	1200E	0	150N	150
		1080E	200S	250N	450
		960E	200S	300N	500
		840E	200S	250N	450
		720E	200S	300N	500
		600E	200S	300N	500
		480E	200S	300N	500
		360E	0	300N	300
		0N	0E	1200E	1200
May 18, 2022	Complete survey over grid 1.	360E	200S	0	200
		240E	200S	300N	500
		120E	200S	300N	500
		0E	200S	300N	500
	Begin survey on grid 2.	1320E	200S	300N	500

3.3 SURVEY LOG



			Min	Мох	Total
Date	Description	Lino	Fytont	Fytont	(m)
Date	Description	1200E	2005	250N	450
		1200	2003	2001	430
			0	200N	200
		960E	0	125N	125
		840E	0	62.5N	62.5
		0N	725E	1325E	600
May 19, 2022	Complete survey over grid 2.	720E	200S	0	200
		600E	0	175N	175
		480E	0	300N	300
		360E	0	300N	300
		240E	200S	300N	500
		120E	200S	300N	500
		0E	200S	300N	500
		0N	0E	725E	725
May 20, 2022	Demobilize from Sault Ste.				
-	Marie to Larder Lake.	-	-	-	-

Table 3: Survey Log

3.4 PERSONNEL

Claudia Moraga of Dobie, Ontario conducted all the magnetic and VLF EM data collection with Cameron Hansen of Larder Lake, Ontario being responsible for GPS control and waypoint collection.

3.5 SAFETY

Canadian Exploration Services prides itself in creating and maintaining a safe work environment for its employees. Each crew member is briefed on the jobsite location, equipment safety, standard operating procedures along with our health and safety manual. An emergency response plan is generated relating to the specific job and with the jobsite predominantly in the field, which is unpredictable, morning safety briefings are essential. Topics are generally chosen based off jobsite characteristics of the area, time of year and crew experience.



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2.2 SURVEY SPECIFICATIONS

The survey was conducted with a GSM-19 v7 Overhauser magnetometer/VLF with a second GSM-19 magnetometer for a base station mode for diurnal correction.

A total of 11.3875 line kilometers of magnetometer was read over the Aberdeen Property on between May 16th and May 20th, 2022. This consisted of 934 magnetometer and VLF EM samples taken at a 12.5m sample interval.



3 OVERVIEW OF SURVEY RESULTS

3.1 SUMMARY



Figure 4: Grid 1 Magnetometer Plan Map on Google Earth





Figure 5: Grid 1 VLF Fraser Filter Map on Google Earth

Culture was noted on this grid. The noted culture was in the form of power lines crossing line 0E and 120E at the southern end of the lines.

The magnetic data indicates the presence of an intense linear magnetic anomaly. This strength of this anomaly indicates the possibility of an iron formation or a magnetite rich dike.

Running parallel 200m south of the main linear magnetic anomaly is a weaker magnetic anomaly. Coincident to this anomaly is a VLF EM signature. This may indicate a mineralized system exists and should be investigated further.







Figure 6: Grid 2 Magnetometer Plan Map on Google Earth







Figure 7: Grid 2 VLF Fraser Filter Map on Google Earth

Grid 2 was located approximately 1.5 kilometers southeast along strike from grid 1. There was culture noted on this grid. The noted culture was in the form of power lines crossing line 1200E and 1320E at the southern end of the lines.

The magnetic signature for grid 2 is similar to that of grid 1. The magnetic data indicates the presence of an intense linear magnetic anomaly. This strength of this anomaly indicates the possibility of an iron formation or a magnetite rich dike.

Running parallel 200m south of the main linear magnetic anomaly is a weaker magnetic anomaly. Coincident to this anomaly is a VLF EM signature. This may indicate a mineralized system exists and should be investigated further.

Strong linear magnetic signatures occur over both grid 1 and 2. These are paralleled by weaker magnetic anomalies with coincident VLF EM signatures.

It is recommended that the area be prospected for the historic showings and anomalous trends. These showings and trends should then be stripped and mapped in detail.



APPENDIX A

STATEMENT OF QUALIFICATIONS

- I, C. Jason Ploeger, hereby declare that:
- 1. 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 of Skead Holdings Ltd.
- 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.

May 25th, 2022



APPENDIX B

THEORETICAL BASIS AND SURVEY PROCEDURES

TOTAL FIELD MAGNETIC SURVEY

Base station corrected Total Field Magnetic surveying is conducted using at least two synchronized magnetometers of identical type. One magnetometer unit is set in a fixed position in a region of stable geomagnetic gradient, and away from possible cultural effects (i.e. moving vehicles) to monitor and correct for daily diurnal drift. This magnetometer, given the term 'base station,' stores the time, date, and total field measurement at fixed time intervals over the survey day. The second, remote mobile unit stores the coordinates, time, date, and the total field measurements of the Earth's field at stations, along individual profiles, including Tie and Base lines. A 2 meter staff is used to mount the sensor, in order to optimally minimize localized near-surface geologic noise. At the end of a survey day, the mobile and base-station units are linked, via RS-232 ports, for diurnal drift and other magnetic activity (ionospheric and spheric) corrections using internal software.

For the gradiometer application, two identical sensors are mounted vertically at the ends of a rigid fiberglass tube. The centers of the coils are spaced a fixed distance apart (0.5 to 1.0m). The two coils are then read simultaneously, which alleviates the need to correct the gradient readings for diurnal variations, to measure the gradient of the total magnetic field.



APPENDIX C

GSM 19

0	GEM Systems	
	GSM-19 Overhauses Magnetomet	

Specifications

Overhauser Performance

Resolution: 0.01 nT Relative Sensitivity: 0.02 nT Absolute Accuracy: 0.2nT Range: 20,000 to 120,000 nT Gradient Tolerance: Over 10,000nT/m Operating Temperature: -40°C to +60°C

Operation Modes

Manual: Coordinates, time, date and reading stored automatically at min. 3 second interval.

Base Station: Time, date and reading stored at 3 to 60 second intervals. Walking Mag: Time, date and reading stored at coordinates of fiducial. Remote Control: Optional remote control using RS-232 interface. Input/Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

Operating Parameters

Power Consumption: Only 2Ws per reading. Operates continuously for 45 hours on standby.

Power Source: 12V 2.6Ah sealed lead acid battery standard, other batteries available

Operating Temperature: -50°C to +60°C

Storage Capacity

Manual Operation: 29,000 readings standard, with up to 116,000 optional. With 3 VLF stations: 12,000 standard and up to 48,000 optional.

Base Station: 105,000 readings standard, with up to 419,000 optional (88 hours or 14 days uninterrupted operation with 3 sec. intervals)

Gradiometer: 25,000 readings standard, with up to 100,000 optional. With 3 VLF stations: 12,000, with up to 45,000 optional.



Omnidirectional VLF

Performance Parameters: Resolution 0.5% and range to $\pm 200\%$ of total field. Frequency 15 to 30 kHz.

Measured Parameters: Vertical in-phase & out-of-phase, 2 horizontal components, total field coordinates, date, and time.

Features: Up to 3 stations measured automatically, in-field data review, displays station field strength continuously, and tilt correction for up to $\pm 10^{\circ}$ tilts.

Dimensions and Weights: 93 x 143 x 150mm and weighs only 1.0kg.

Dimensions and Weights

Dimensions: Console: 223 x 69 x 240mm Sensor: 170 x 71mm diameter cylinder Weight: Console: 2.1kg Sensor and Staff Assembly: 2.0kg

Standard Components

GSM-19 magnetometer console, harness, battery charger, shipping case, sensor with cable, staff, instruction manual, data transfer cable and software.

Taking Advantage of a "Quirk" of Physics

Overhauser effect magnetometers are essentially proton precession devices except that they produce an order-of magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal-- that is ideal for very high-sensitivity total field measurement. In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

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

• The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that ... exceeds proton precession and matches costlier optically pumped cesium capabilities





APPENDIX C

GARMIN GPS MAP 64



Physical & Performance:				
Unit dimensions, WxHxD:	2.4" x 6.3" x 1.4" (6.1 x 16.0 x 3.6 cm)			
Display size, WxH:	1.43" x 2.15" (3.6 x 5.5 cm); 2.6" diag (6.6 cm)			
Display resolution, WxH:	160 x 240 pixels			
Display type:	transflective, 65-K color TFT			
Weight:	8.1 oz (230 g) with batteries			
Battery:	2 AA batteries (not included); NiMH or Lithium recom- mended			
Battery life:	16 hours			
Waterproof:	yes (IPX7)			
Floats:	no			



High-sensitivity re- ceiver:	yes			
Interface: high-speed USB		and NMEA 0183 compatible		
Maps & Memory:				
Basemap:		yes		
Ability to add maps:		yes		
Built-in memory:		4 GB		
Accepts data cards:		microSD™ card (not included)		
Custom POIs (ability to points of interest)	add additional	yes		
Waypoints/favorites/loc	ations:	5000		
Routes:		200		
Track log:		10,000 points, 200 saved tracks		
Features & Benefits: Automatic routing (turn on roads):	by turn routing	yes (with optional mapping for detailed roads)		
Geocaching-friendly:		yes (paperless)		
Custom maps compatib	<u>ble</u> :	yes		
Hunt/fish calendar:		yes		
Sun and moon informat	tion:	yes		
Tide tables:		yes		
Area calculation:		yes		
Picture Viewer		yes		

• Specifications obtained from www.garmin.com



APPENDIX D

LIST OF MAPS (IN MAP POCKET)

Magnetometer Plan Maps (1:2500)

- 1) Q3015-Skead-Aberdeen-1-Mag-Cont
- 2) Q3015-Skead-Aberdeen-2-Mag-Cont

VLF EM Profiled Plan Maps (1:2500)

- 1) Q3015-Skead-Aberdeen-1-VLF-NML
- 2) Q3015-Skead-Aberdeen-2-VLF-NML

TOTAL MAPS = 4







Drawing: Q3015-Skead-Aberdeen-2-Mag-Cont





Drawing: Q2991-Q3015-Skead-Aberdeen-2-VLF-NML