2017 Exploration Relinquishment Report
(Mosku Regional Project - AA Sakatti Mining Oy)

Kersilo 21-23

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TABLE OF CONTENTS

1  INTRODUCTION ........................................................................................................... 3
2  EXPLORATION WORK ................................................................................................. 3
   2.1 GEOLOGICAL MAPPING AND BOULDER HUNTING .................................................. 3
   2.2 GEOPHYSICAL AND PETROPHYSICAL SURVEYS ..................................................... 3
       2.2.1 Airborne geophysical surveys ........................................................................... 3
       2.2.2 Ground geophysical surveys .......................................................................... 4
       2.2.3 Borehole geophysical surveys ...................................................................... 4
   2.3 SOIL GEOCHEMISTRY ............................................................................................ 4
       2.3.1 Base of till sampling ....................................................................................... 4
       2.3.2 Soil sampling .................................................................................................. 4
   2.4 DRILLING, CHANNEL SAMPLING AND TRENCHING ............................................... 4
       2.4.1 Drilling ............................................................................................................ 4
   2.5 PETROLOGICAL, GEOCHEMICAL AND OTHER GEOLOGICAL SURVEYS ............ 4
3  Maps .............................................................................................................................. 5
4  SUMMARY AND CONCLUSIONS .............................................................................. 15
5  APPENDIXES ............................................................................................................... 15

LIST OF FIGURES

FIGURE 1-1: OVERVIEW MAP SHOWING THE LOCATION OF THE CLAIMS WITH INSERT SHOWING THE MOSKU-REGIONAL PROJECT AREA ............. 5
FIGURE 1-2: DETAILED MAP OF THE CLAIM AREA SHOWING LAND OWNERS ................................................................. 6
FIGURE 1-3: A MAP SHOWING THE BEDROCK GEOLOGY .................................................................................. 7
FIGURE 2-1: A MAP SHOWING THE FIELD OBSERVATIONS .......................................................... 8
FIGURE 2-2: A MAP SHOWING THE 2010 VTEM SURVEY .......................................................... 9
FIGURE 2-3: A MAP SHOWING THE 2014 HIGH RES MAGNETIC SURVEY ..................................................... 10
FIGURE 2-4: A MAP SHOWING THE AGG SURVEY .............................................................................. 11
FIGURE 2-4: A MAP SHOWING THE MLEM SURVEY .............................................................................. 12
FIGURE 2-5: A MAP SHOWING THE BASE OF TILL AND SOIL SAMPLES .................................................. 13
FIGURE 2-6: A MAP SHOWING THE DIAMOND DRILL HOLES .......................................................... 14
1 INTRODUCTION

The Kersilo 21-23 (ML2012:0189-01) Ni-Cu-PGE-Au exploration area is located approximately 18 km to north from Sodankylä municipality center in Finnish Lapland and it covers an area of 229.05 ha (Fig. 1-1). The southernmost edge of the Kersilo 21-23 permit area is approximately 200 m north from the river Sattanen and 130 meters north from the closest main road. The permit area is located in between the Vantionselkä on the north and Asentonpalto on the south. The area lies mostly on a wet, boggy area, with only couple of dry lands amongst the bog. Outcropping rocks are absent within the area. Most of the area are owned by Metsähallitus, but on the southern part of the area, near Asentonpalto, are privately owned areas (Fig. 1-2).

Anglo American Exploration B.V. Suomen Sivuliike (AAE BV) first applied for a claim (KaivNro 7915/1-3 Kersilo 21-23) in this region, with the intent to explore for: copper, nickel, PGE and gold in February 2005. The 7915/1-3 Kersilo 21-23 claim was granted on the 12th of April 2005 and it expired on the 12th of April 2013. The extending permit (ML2012:0189-01 Kersilo 21-23) became valid on the 3rd of May 2014 and this has now been relinquished as of 3rd of May 2017.

Geologically the region of interest belongs to the Central Lapland Greenstone Belt, which hosts amongst others the Suurikususikko and Pahtavaara gold deposits as well as the Kevitsa and Sakatti Cu-Ni-PGE deposit. The main geology of the Kersilo 21-23 area consists mostly of Matarakoski formation graphic sediments of the Savukoski group (Fig. 1-3). In stratigraphy these sulphide-bearing graphic paraschists belongs between the younger Savukoski group komatites of the Sattasvaara formation in the north and older Sodankylä group mafic volcanics and quartzites in the south. In general the Sodankylä group consists predominantly of psammitic metasediments with minor volcanic rocks. Whereas the Savukoski group is formed of two main formations: the Matarakoski formation of predominantly graphic sediments with interbedded mafic volcanic rocks and the overlying Sattasvaara formation of komatitic volcanic rocks. Our primary interests are the ultramafic rocks, which may host economic Ni-Cu-PGE-Au mineralisation. The main interest within this area have been the magnetic body which is cutting through the Lehtokummut in E-W-direction.

2 EXPLORATION WORK

Initial exploration in the region started in 2003, targeting was based on regional datasets provided by the GTK (airborne geophysics, geochemistry and geology). An early analogy to the Pechenga–Imandra–Varzuga Greenstone Belt in the Kola–Karelia region was recognised, this led to a focus on the Sodankylä–Savukoski groups. Heavy exploration (BOT-sampling, DDH drilling) is carried out mostly during the winter season to minimise the environmental impact. The main exploration methods and equipment used in general in the field are: airborne geophysics, ground geophysics (Moving Loop Electro-Magnetics), base of till (BOT) sampling and diamond drilling (DDH). The reconnaissance work for individual targets includes frequent field checks and geological mapping during the summer field season. The historic work carried out by Anglo American in the Kersilo 21-23 permit area is detailed below.

2.1 GEOLOGICAL MAPPING AND BOULDER HUNTING

General geological mapping, boulder hunting and interpretation have been completed during the summer field season. In the Kersilo 21-23 permit area, only single boulder observation of mafic tuffite has been made. This boulder observed was found from a ditched forest area between boggy areas. Outcrops are absent within this area. All corresponding data can be found in the accompanying data files.

2.2 GEOPHYSICAL AND PETROPHYSICAL SURVEYS

2.2.1 Airborne geophysical surveys

Three regional scale airborne geophysical surveys which include the Kersilo 21-23 permit, have been completed (figure 2-2, 2-3 & 2-4). The first was an electro-magnetic survey that took place in July 2009 by
2.2.2 Ground geophysical surveys

A moving loop electro-magnetic (MLEM) survey was conducted over the Kersilo 21-23 permit area during 2014, with a total of 3.8 line km (figure 2-5). This was completed by AGEOS Oy using the Anglo American in-house low temperature SQUID system. It is worth noting that this data has been provided in the original coordinate system (GCS_KKJ_3) as to avoid reproduction errors.

2.2.3 Borehole geophysical surveys

Two of the diamond drill holes have been surveyed using down hole EM (BHEM): 10MOS20001 & 10MOS20002 (Fig. 2-7). The surveys were conducted by Crone Geophysics using their Crone Geophysics tool. The data and reports are attached. Please note that the susceptibility have not been measured from these drill holes.

2.3 SOIL GEOCHEMISTRY

2.3.1 Base of till sampling

A total of 52 base of till (BOT) samples were taken from within the Kersilo 21-23 permit area between January 2005 and April 2006 (Fig. 2-6). The survey was operated by Moreenityö Mäcklin Oy. The samples have been taken N-S directionally with a 25 m sample spacing and 200 m line spacing. Analysis was completed at OMAC Laboratories Ltd., Ireland. All corresponding data can be found in the accompanying data files. Please note that all of the assay data, which is not within the permit area have been removed from the analysis data files.

2.3.2 Soil sampling

A small number, in total 18, of surface soil samples were collected within the Kersilo 21-23 permit area during 2003 (figure 2-6). The samples have been taken in a one SW-NE oriented line with an approximately 25 m sample spacing. Line spacing is oriented almost perpendicularly to an E-W oriented magnetic body. The survey was operated in house and the analysis was done at OMAC Laboratories Ltd., Ireland. All corresponding data can be found in the accompanying data files.

2.4 DRILLING, CHANNEL SAMPLING AND TRENCHING

No channel sampling or trenching has occurred in these claims.

2.4.1 Drilling

There are in total 2 drill holes (DDH) completed in the Kersilo 21-23 permit area during 2010 with a combined length of 607.65m (figure 2-7). These holes targeted a large magnetic body. The boreholes 10MOS20001 and 10MOS20002 intersected sequences of ultramafic rocks between the layers of graphitic sediments. In total, 127 samples from these holes were selected for analyses in total of 4 batches, from which 3 were sent to OMAC Laboratories, Ireland and one to Genanalysis Laboratory Services for DDWR analyses. All corresponding data can be found in the accompanying data files. Please note that all of the assay data, which is not within the permit area have been removed from the analysis data files.

2.5 PETROLOGICAL, GEOCHEMICAL AND OTHER GEOLOGICAL SURVEYS

There is no other work to report.
Figure 1-1: Location of Kersilo 21-23 permit area, insert: Location of the AngloAmerican’s MOSKU project region within Finland.
Figure 1-2: Map showing the landowner boundaries of the Kersilo 21-23 permit area.
Figure 1-3: Geological map of the Kersilo 21-23 permit area. Geological map and amended legend from GTK, bedrock of Finland 200K.
Figure 2-1: Map of the Kersilo 21-23 permit area showing the field observation made within the area.
Figure 2-2: Map showing the 2010 VTEM survey of the Kersilo 21-23 permit area.
Figure 2-3: Map showing the 2014 Magnetic survey of the Kersilo 21-23 permit area.
Figure 2-4: Map showing the location of the Gravity survey lines within the Kersilo 21-23 permit area.
Figure 2-5: Map showing the location of the MLEM survey lines within the Kersilo 21-23 permit area.
Figure 2-6: Map showing the location of the BOT and soil samples within the Kersilo 21-23 permit area.
Figure 2-7: Map showing the location of the diamond drill holes within the Kersilo 21-23 permit area.
4 SUMMARY AND CONCLUSIONS

After an extensive exploration program, all viable targets within the Kersilo 21-23 permit area have been tested. Although ultramafic signals from the base of till campaign, diamond drilling and the electromagnetic signature from the geophysical surveys were observed no economic values of Ni-Cu-PGEs were detected. The Kersilo 21-23 permit is being relinquished as the overall results did not give evidence to support continuing the exploration program in the area.

5 APPENDIXES

Accompanying data files:

- ML2012_0189-01_Template2_2017_12_22.xlsx
- ML2012_0189-01_Template3_2017_12_22.xlsx
- ML2012_0189-01_Template4_2017_12_22.xlsx
- 2010_VTEM_survey_A806_Report.pdf
- Magnetic_survey_Anglo_American_Exploration_Finland_2014_Report.pdf
- ML2012_0189-01_Template5_2017_12_22.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_5.xlsx
- ML2012_0189-01_Template6_2017_12_22.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_6.xlsx
- ML2012_0189-01_Template7_2017_12_22.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_1.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_2.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_3.xlsx
- ML2012_0189-01_analysisdata_2017_12_22_4.xlsx
- ML2012_0189-01_mapappendix1_2017_12_22.jpg
- ML2012_0189-01_mapappendix2_2017_12_22.jpg
- ML2012_0189-01_mapappendix3_2017_12_22.jpg
- ML2012_0189-01_mapappendix4_2017_12_22.jpg
- ML2012_0189-01_mapappendix5_2017_12_22.jpg
- ML2012_0189-01_mapappendix6_2017_12_22.jpg
- ML2012_0189-01_mapappendix7_2017_12_22.jpg
- ML2012_0189-01_mapappendix8_2017_12_22.jpg
- ML2012_0189-01_mapappendix9_2017_12_22.jpg
- ML2012_0189-01_mapappendix10_2017_12_22.jpg