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ONTARIO EXPLORATION CORPORATION
JUNIOR EXPLORATION ASSISTANCE PROGRAM

Report of Diamond Drilling

2016 Kasabonika Project

BMA 535882

NTS 53H/9

Kasabonika Minerals Corporation

April 2017

INTRODUCTION:

The 2016 Kasabonika Project consists of 17 unpatented claims (208 units) located in Shibogama Lake Area, BMA 535882 and BMA 536882, NTS 53H/9, Thunder Bay Mining Division.

The Archean rocks of the area exhibit geological settings favourable for hosting a diverse and rich mineral endowment of chrome, nickel, PGE, gold, VMS and diamonds.

The area is located within the Kasabonika-Shibogama Greenstone Belt and along the western extension of the North Kenyon Fault. This greenstone belt is the extension of the stratigraphy that hosts the precious and base metal discoveries in the McFaulds Lake area. This fault structure is widely viewed as being genetically related to the diamond-bearing kimberlites of the Kyle and Victor Kimberlite fields.

High concentrations of kimberlite indicator minerals (including Chrome-diopside, chromite, ilmenite and pyrope garnets) have been identified by the Ontario Geological Survey (OGS) in the area down-ice from the Kasabonika Project. De Beers Canada is actively exploring and holding key claims in the area. The OGS considers the area 'broadly favourable for kimberlite exploration'.

Numerous priority targets have been identified including the Williams Bay, Wolverine South and EHA areas.

Diamond drilling tested 2 priority diamond targets in the Williams Bay area with 2 vertical BQtw drill holes totaling 203.35 metres.

The project was managed by Kasabonika Minerals Corporation (100% aboriginal owned) under the supervision of staff designated as Qualified Supervisors by MNDM. The majority of persons conducting field work and providing goods and services were aboriginal. All work was carried out in consultation with the community of Kasabonika Lake First Nation.

LOCATION:

The project is located approximately 20 km northeast of the community of Kasabonika in the Thunder Bay Mining Division of northwestern Ontario. (See Location Map)

Shibogama Lake Area, BMA 535882 and BMA 536882

NTS 53H/9

Lat/Long 53°36'N, 88°20'W

ACCESS:

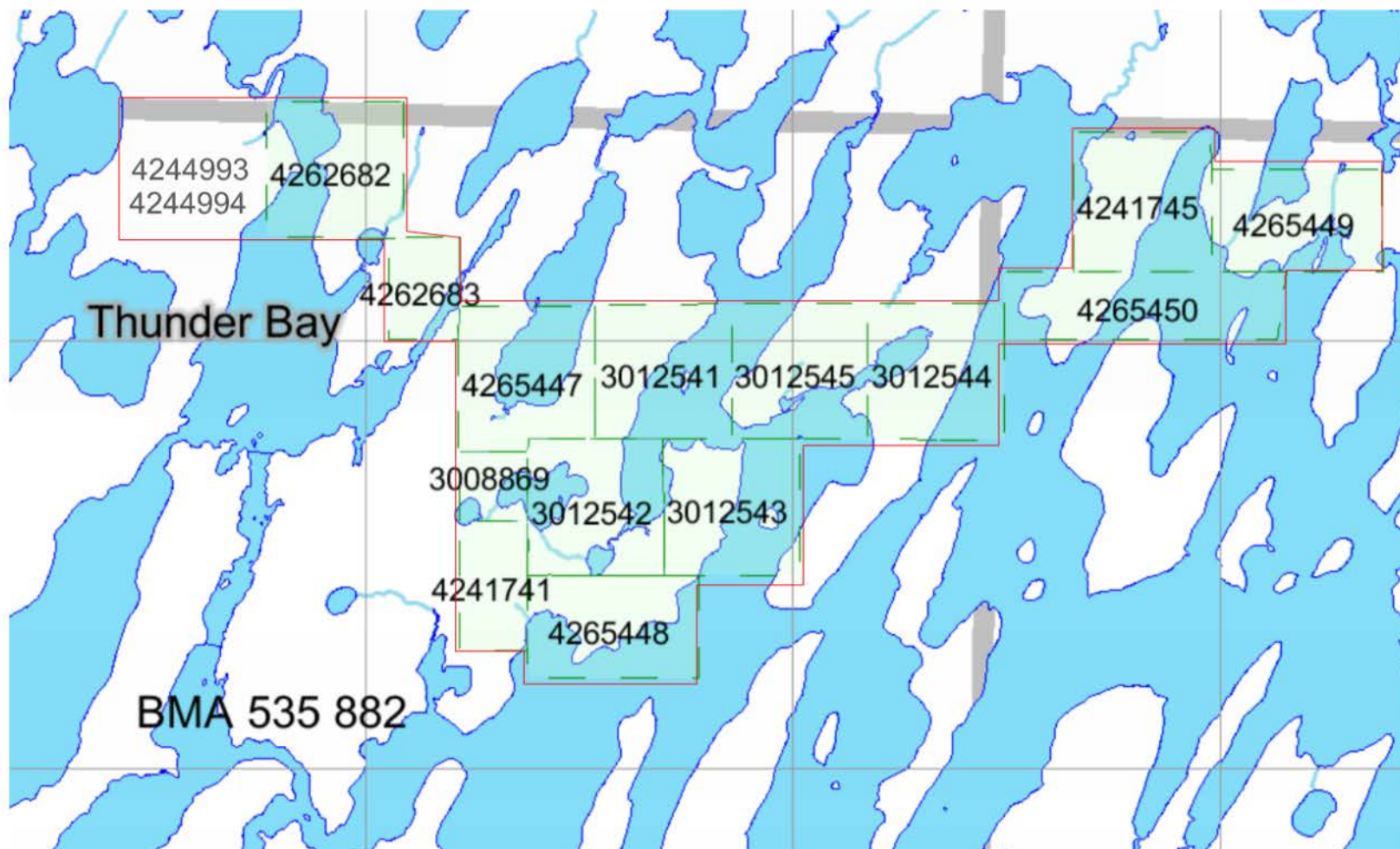
Access is best achieved by boat or floatplane in the summer and helicopter or snow machine in the winter from the community of Kasabonika Lake. Kasabonika Lake is accessed by winter road from Pickle Lake and by regular scheduled commercial flights.

PROPERTY:

The property consists of 16 unpatented claims, 208 units (See Claim Map)

THUNDER BAY Mining Division - 403073 - KASABONIKA MINERALS CORPORATION

Township / Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option
BMA 535 882	3008869	2005-Mar-17	2019-Mar-17	A	100 %
BMA 535 882	3012541	2006-Apr-06	2020-Apr-06	A	100 %
BMA 535 882	3012542	2006-Apr-06	2019-Apr-06	A	100 %
BMA 535 882	3012543	2006-Apr-06	2020-Apr-06	A	100 %
BMA 535 882	3012544	2006-Apr-06	2019-Apr-06	A	100 %
BMA 535 882	3012545	2006-Apr-06	2019-Apr-06	A	100 %
BMA 535 882	4241741	2008-Apr-30	2019-Apr-30	A	100 %
BMA 535 882	4262683	2014-Nov-13	2016-Nov-13	A	100 %
BMA 535 882	4265447	2014-Nov-13	2016-Nov-13	A	100 %
BMA 535 882	4265448	2014-Nov-13	2016-Nov-13	A	100 %
BMA 536 882	4262682	2014-Nov-13	2016-Nov-13	A	100 %
BMA 535 882	4244994	2015-Mar-04	2017-Mar-04	A	100 %
SHIBOGAMA LAKE AREA	4241745	2008-Apr-30	2016-Apr-30	A	100 %
SHIBOGAMA LAKE AREA	4265449	2014-Nov-13	2016-Nov-13	A	100 %
SHIBOGAMA LAKE AREA	4265450	2014-Nov-13	2016-Nov-13	A	100 %
BMA 535 882	4244993	2016-Mar-30	2018-Mar-30	A	100 %



Kasabonika Project Claim Map

WORK PROGRAM RESULTS:

One (1) BQtw hole was drilled to test each of two (2) magnetic features considered priority diamond targets as follows:

AN-2-16

Location: 16 U 408100 5941925 nad83

This vertical 127.1 metre hole was drilled during Oct 25 – Nov 05, 2016 on claim 4244993.

The hole encountered Gabbro and Mafic Volcanics. No samples were taken for analysis.

The magnetic anomaly is explained by the gabbro which exhibits high magnetic susceptibility.

No diamond related features or indicators were noted.

AN-1-16

Location: 16 U 409025 5941875 nad83

This 76.25 metre hole was drilled during Dec 10-20, 2016 on claim 4262682.

The hole encountered Mafic to Ultramafic Volcanics. No samples were taken for analysis.

The magnetic anomaly is explained by the weakly magnetic mafic to ultramafic volcanic.

No diamond related features or indicators were noted.

CONCLUSIONS:

The drill holes failed to intersect stratigraphy or mineralization indicative of diamond potential.

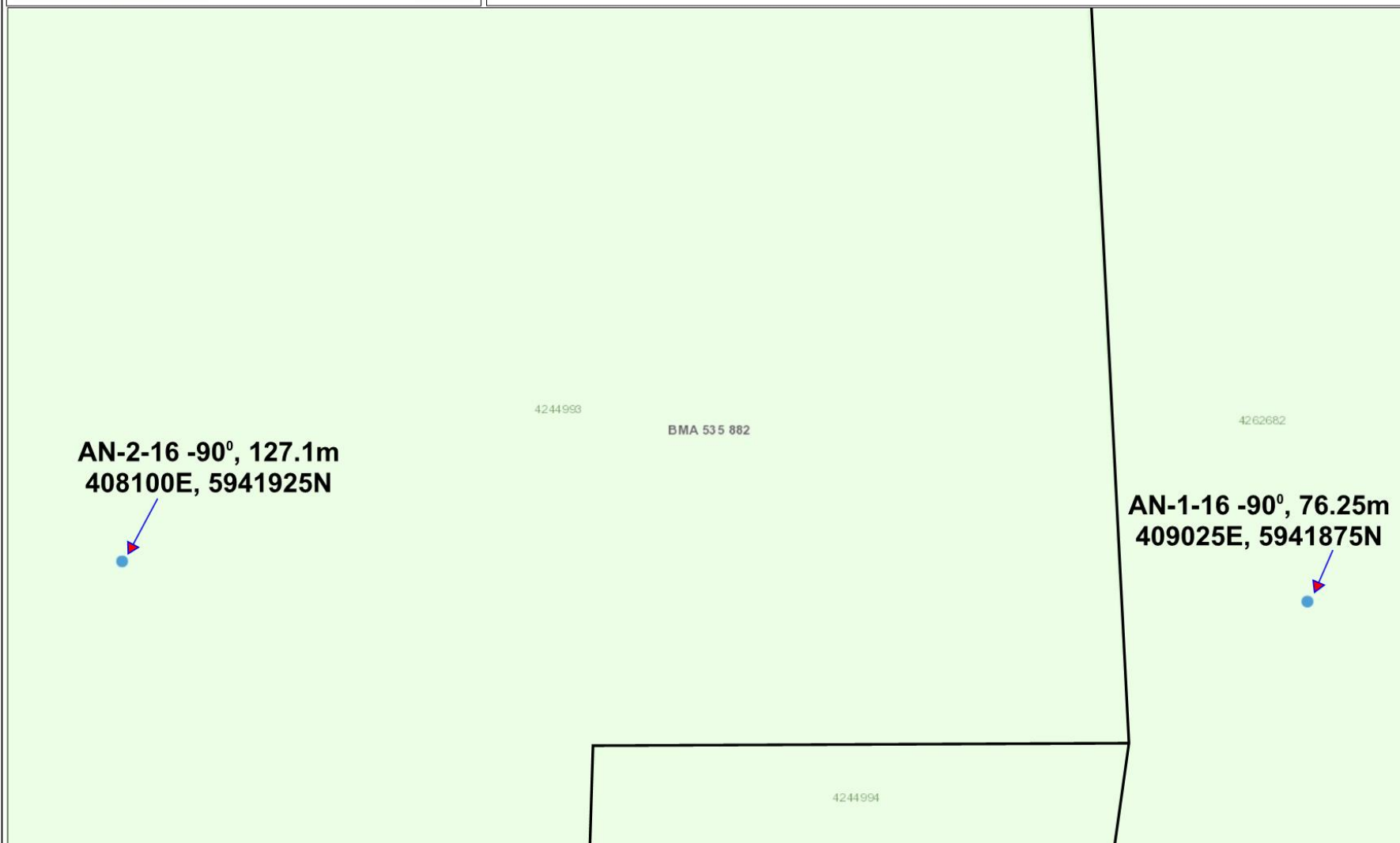
Significantly, both holes intersected mafic to ultramafic units exemplifying the abundant and extensive nature of these rock types in the Kasabonika area and the potential for hosting significant mineral deposits such as Ni, Cu, Cr, V, Au and PGE identified in the Wolverine Bay, Big Trout Lake and Ring of Fire areas.

RECOMMENDATIONS:

The basal till intersected at the bedrock surface in both drill holes should be analyzed for kimberlite and other ore indicators.

Whole rock analysis of the rock units intersected would provide insight into the nature of the geological environment.

Regional geochemical surveys (stream and lake sediment and till) should be followed by high resolution magnetic and electromagnetic surveys in order to prioritize areas for detailed exploration for precious and base metal and diamond deposits.



Legend

- Administration Boundaries**
 - Mining Divisions
 - Resident Geological District
 - Townships and Areas
 - UTM Grid
 - Geographic Lot Fabric
 - Other Federal Land
- Mineral Tenure Grid**
 - DMTG Tenure Grid
- Alienations**
 - Withdrawal
 - Notice
- Unpatented Claim**
 - Active
 - Recorded
 - Pending
- Disposition**
 - Disposition
- Disposition Symbols**
 - Camp
 - Disposition Unknown/Pending
 - Freehold Patent Mining Rights Only
 - Freehold Patent Surface Rights Only
 - Freehold Patent Surface and Mining Rights
 - Land Use Permit
 - Leasehold Patent Mining Rights Only
 - Leasehold Patent Surface Rights Only
 - Leasehold Patent Surface and Mining Rights
 - License of Occupation Mining Use Only
 - License of Occupation Surface Use Only
 - License of Occupation Surface and Mining Rights
 - License of Occupation Uses Not Specified
 - Order in Council
 - Town
 - WPLA
- Geology Layers**
 - AMIS Sites
 - AMIS Features
 - Drill Holes
 - Mineral Occurrences

0 0.15 km

Projection: Web Mercator



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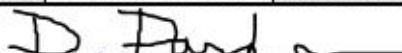


Kasabonika Minerals Corp

DIAMOND DRILL LOG

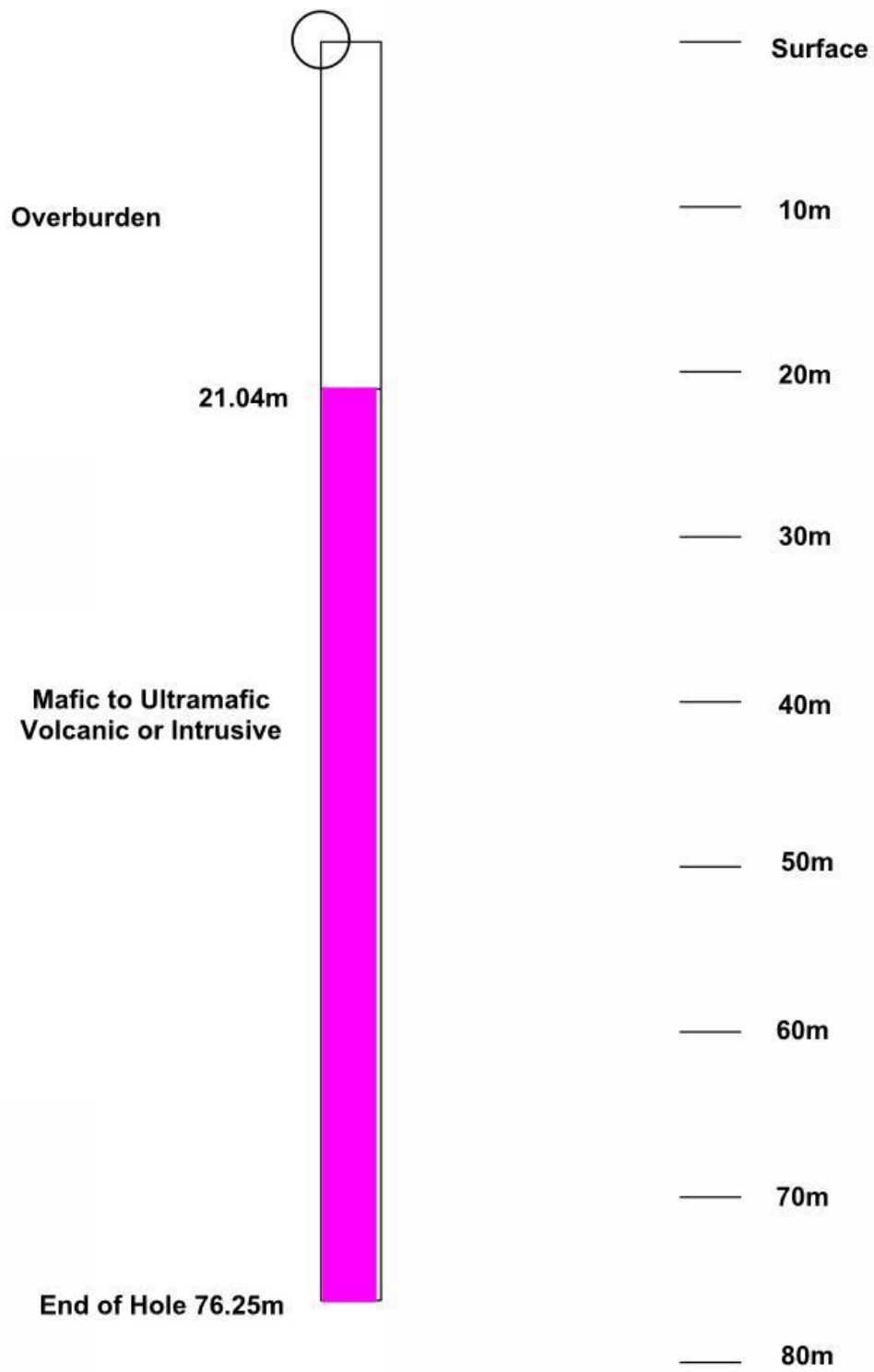
Hole No. AN-1-16

Page 1 of 1

Project:	Kasabonika	Collar				Drilling Progress			
Property:	William Bay	Azimuth:		Grid Northing	5941875	Date Started:	10-Dec-16	Logged For:	KMC
Township:	BMA535882	Grid, True or Mag:		Grid Easting:	409025	Completed:	20-Dec-16	Logged By:	D. Parker
Claim	4262682	Dip:	90°	Collar Elevation:	116m	Core Size:	BQ(tw)	Date Logged:	2017
				Total Depth:	76.25m	Drilled By:	Asabanaka Drill Services	Core Stored At:	Kasabonika
Purpose of Hole:	Test Magnetic Feature Kimberlite Target (Geosig Anomaly M-2)					Signed by:			
Remarks / Results:									

Major Units			Major Lithology	Description
From:	To:	Length:		Colour, grain size, primary mineralogy, textures, mono or multi-lithic, bedding, structure, magnetic alteration, intensity, minerals (potassic, silicic, biotite, chlorite, ankerite, calcite, epidote, etc.) if breccia, etc. then clast or matrix supported, describe clast lithology and size for each type
(m)	(m)	(m)		
SUMMARY LOG				
0.00	21.04	21.04	Overburden	Boulders and Pebbles of medium grained gabbro (moderately magnetic), limestone, chert nodules (paleozoic), and granite gneiss
				2 metres of basal till at outcrop surface consisting of buff coloured clay-rich matrix with 30% pebbles and coarse sand-sized angular fragments
21.04	76.25	55.21	Mafic-Ultramafic Volcanic Flow or Intrusive	Black to very dark gray-green, very fine grained, massive, locally very weakly foliated 10°ca, very hard, moderate density, typically weakly magnetic, locally weak disseminated calcite, <1% quartz and calcite sealed fractures 1mm at various core angles locally creating a weak insitu breccia.
				Core is very blocky and fractured to 44.23m then becomes moderately fractured to the bottom of the hole. Core recovery appears satisfactory.
				31.72m: 1.5cm quartz stringer 50°ca
				45.14m: 2cm quartz calcite stringer 30°ca
				46.67-46.91m: 5% quartz calcite stringers @ various angles with minor hematite stain and minor pyrite
				49.90m: 1cm quartz calcite stringer 40°ca
				50.36m: 1cm quartz calcite stringer 40°ca with 1% pyrite
				62.49m: 1cm quartz calcite stringer 40°ca with 1% pyrite
				64.51m: 1cm quartz calcite stringer 80°ca with 3% pyrite
	76.25			End of Hole

AN-1-16 Vertical Section



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DDH: AN-2-16	Claims title:	Section:	
	Township:	Level:	
	Range:	Work place:	KLFN
Contractor: Asabanaka Drilling	Lot:		
Author: Kevin Kivi PGeo	Start date: 31/10/2016	Description date: 16/11/2016	
	End date: 04/11/2016		

Collar

Azimuth: 0.00°
Dip: -90.00°
Length: 127.10

UTM

East	408100.00
North	5941925.00
Elevation	191.00

Down hole survey

Type	Depth	Azimuth	Dip	Invalid

Type	Depth	Azimuth	Dip	Invalid

Number of samples: 0
Number of QAQC samples: 0
Total sampled length: 0.00

Description:



Core size: NQ

Cemented: No

Stored: Yes

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Description		
0.00	20.40	MT Overburden Clay-rich till with boulders and cobbles of diorite, granite and gabbro.
20.40	72.20	I2G Gabbro Coarse grained massive gabbro intrusive, 2-3 mm amphibole and plagioclase with disseminated magnetite. Very high magnetic susceptibility, which explains the positive magnetic high response in ground magnetic survey. Rare scattered 2-10 mm white quartz carbonate stringers locally
20.40	31.60	I2G Gabbro Coarse grained magnetic gabbro, 2 cm white quartz-carbonate vein at 40 degrees to core axis at 23.9m
35.40	52.20	I2G Gabbro Medium grained gabbro, locally coarse grained strongly magnetic , locally fractured and blocky.
42.60	42.80	FAI Fault minor fault at 42.6m - 20 cm wide
47.30	47.90	FAI Fault Blocky fault, perhaps minor core loss here, core is wet and muddy, no mineralization of significance
52.20	55.00	I2G Gabbro Chloritized with shear zone, finer grained, some loss of magnetite. 53.0m 5cm wide quartz vein at 22 degrees to core axis (C/A), no sulphides, barren
55.00	61.00	I2G Gabbro Weakly foliated, medium grained gabbro, 1-3% disseminated 1-2mm magnetite clots, 1% 2-4mm white quartz carbonate stringers at 40 degrees to C/A , which is parallel to foliation
61.00	72.20	I2G Gabbro Coarse grained, massive gabbro or coarse basaltic flow centre, dark green chloritic patches and 3-5% 2mm magnetite clots, 3% 4-8mm irregular quartz carbonate stringers
72.20	89.40	I2Gnm



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		Description
		Gabbro-NonMag Dark green, coarse grained gabbro, 30% amphibole crystals 3mm in size in aphanitic chlorite matrix, Unit could be a coarse basaltic flow centre
72.20	82.50	I2Gnm Gabbro-NonMag typical section as above
82.50	89.40	I2Gnm Gabbro-NonMag Fine grained, weakly foliated with loss of amphibole phenocrysts, 3-5% wispy quartz-carbonate stringers 2-10mm wide, with irregular orientation
89.40	94.20	I2G Gabbro Coarse grained gabbro with 3mm aphibole phenocrysts (after pyroxene) and 3% 1-2 mm disseminated magnetite
94.20	127.10	V1b Mafic Volcanic MAFIC LAVA FLOWS - Fine to coarse grained mafic lava flows, some finer grained foliated zones may exhibit flow banding, coarser zones have 2mm amphibole clots (like 72.2-89.4). Four wide-spaced zones of white quartz-carbonate strigers could represent flow-top breccia
94.20	101.40	V1b Mafic Volcanic Fine grained chloritized, possible flow banding @ 30 degrees to C/A
101.40	105.00	V1b Mafic Volcanic 5% white quartz carbonate stringers, irregular, 2mm quartz-carbonate-filled amygdules
105.00	117.00	V1b Mafic Volcanic Thick massive flow centre, medium to coarse grained, 1-3% 3-7mm irregular quartz, stringers randomly oriented
117.00	121.00	V1b Mafic Volcanic Coarse grained flow centre with 3mm amphibole clots (after pyroxene)
121.00	123.80	V1b Mafic Volcanic Chaotic quartz carbonate stringer zone, 10% veins with semi-random orientation but trend about 5-10 degrees to C/A with foliation, may be flow-top breccia zone, but no amygdules found



Kasabonika Mining Company

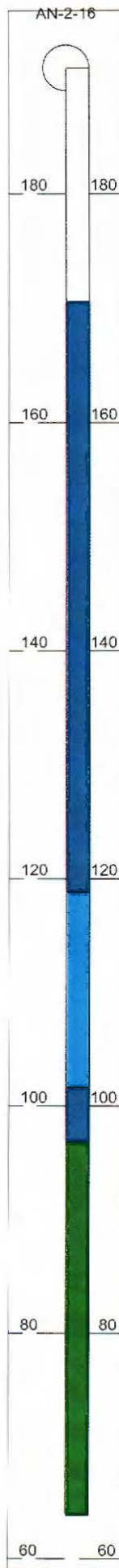
Description

123.80 127.10 V1b

Mafic Volcanic

Coarse grained flow centre with 3mm amphiboles (like 117-121)





AN-2-16 Vertical Section

Mag Susc

10

20

30

40

50

60

70

80

90

100

110

120

I2G

I2Ghm

I2G

V1B¹⁰



37.7
41.4
39.8
25.9
22.3
23.6
25.8
46.5
42
36
44.5
40.5
33.2
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