### ASSESSMENT REPORT on the BORDEN NORTH PROPERTY (West Block) CARTY, EVANS, PINOGAMI AND WARREN TOWNSHIPS PORCUPINE MINING DIVISION ONTARIO NTS 42B/02

For

Kapuskasing Gold Corp. 885 Dunsmuir St. – Suite 350 Vancouver, BC V6C 1N5

by Steven Siemieniuk, P.Geo.

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# Summary

The Borden North property consists of two non-contiguous claim groups (denoted the East Block and the West Block) comprising 31 staked mining claims (440 units). This assessment report covers the Spring 2015 exploration program on the West Block. This claim group is situated in Carty, Evans, Pinogami and Warren Townships, Porcupine Mining Division, Ontario. The property lies within NTS 42B/02.

This exploration program was successful in identifying areas of anomalous gold in bedrock conditions during a short field program. The author recommends that some samples be assayed using a multielement package as well as PGE's. The exploration program on this project should be first followed up by an airborne magnetics and EM Survey to aid in identifying prospective zones. This would then be followed up with additional prospecting and mapping.

## **Property Description and Location**

The Borden North property consists two non-contiguous claim groups (denoted the East Block and the West Block) comprising 30 staked mining claims (425 units). The total area of the property is 6,976 hectares, with the West Block occupying 3,930 ha and the East Block 3,046 ha. The property is situated in Carty, Evans, Foleyet, Ivanhoe, Pinogami and Warren Townships, Porcupine Mining Division, Ontario (see Figure 1). The property lies within NTS 42B/02. The geographic coordinates at the approximate centre of the West Block of the property are 48° 07' north, 82 ° 44' west.

Claim numbers land tenure are listed on Table 1 below.

The claims are held by Mike Tremblay and Randall Salo (Ontario Ministry of Northern Development and Mines mining claims website database) as of the time of writing this report.



Figure 1: Borden North Property, Location Map

Township/ Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
WARREN	<u>4260517</u>	2010-Dec-08	2015- Jun-08	А	100%	\$9,600	\$4,800	\$0	\$0
CARTY	<u>4260518</u>	2010-Dec-08	2015- Jun-08	А	100%	\$5,550	\$13,650	\$0	\$0
EVANS	<u>4260519</u>	2010-Dec-08	2015- Jun-08	А	100%	\$12,800	\$6,400	\$0	\$0
PINOGAMI	<u>4260520</u>	2010-Dec-08	2015- Jun-08	А	100%	\$12,800	\$6,400	\$0	\$0
PINOGAMI	<u>4260521</u>	2010-Dec-08	2015- Dec-08	А	100%	\$6,400	\$19,200	\$0	\$0
EVANS	<u>4271920</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0

Table 1: Borden North Property, Status of Staked Claims, April 10, 2014.

Township/ Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
EVANS	<u>4271921</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
WARREN	4271922	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
WARREN	<u>4271923</u>	2014-Jan-10	2016- Jan-10	А	100%	\$3,600	\$0	\$0	\$0
WARREN	<u>4271924</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271925</u>	2014-Jan-10	2016- Jan-10	А	100%	\$4,800	\$0	\$0	\$0
CARTY	<u>4271926</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,400	\$0	\$0	\$0
CARTY	<u>4271927</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271928</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271929</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271930</u>	2014-Jan-10	2016- Jan-10	А	100%	\$6,400	\$0	\$0	\$0
CARTY	<u>4271931</u>	2014-Jan-10	2016- Jan-10	А	100%	\$4,800	\$0	\$0	\$0
FOLEYET	<u>4271932</u>	2014-Feb-11	2016- Feb-11	А	100%	\$4,800	\$0	\$0	\$0
FOLEYET	<u>4271933</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,000	\$0	\$0	\$0
IVANHOE	<u>4271935</u>	2014-Feb-11	2016- Feb-11	А	100%	\$3,600	\$0	\$0	\$0
FOLEYET	<u>4271936</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,400	\$0	\$0	\$0
IVANHOE	<u>4271937</u>	2014-Feb-11	2016- Feb-11	А	100%	\$3,600	\$0	\$0	\$0
IVANHOE	<u>4271938</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271939</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,400	\$0	\$0	\$0
IVANHOE	<u>4271940</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,400	\$0	\$0	\$0
IVANHOE	<u>4271941</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,400	\$0	\$0	\$0
IVANHOE	<u>4271942</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,000	\$0	\$0	\$0
IVANHOE	<u>4271943</u>	2014-Feb-11	2016- Feb-11	А	100%	\$6,000	\$0	\$0	\$0
CARTY	<u>4271944</u>	2014-Feb-11	2016- Feb-11	А	100%	\$4,800	\$0	\$0	\$0
IVANHOE	<u>4271945</u>	2014-Feb-11	2016- Feb-11	А	100%	\$5,200	\$0	\$0	\$0

## Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Borden North Property is situated in Northeastern Ontario, north of Lake Huron and Sault Ste. Marie (see Figure 1). The property lies approximately 120 km southwest of Timmins, 200 km northeast of Sault Ste. Marie and 460 km east of Thunder Bay, Ontario.

The property can be reached via Highway 101, which extends eastward from the Municipality of Wawa through Timmins to the Quebec border. The highway cuts across the southeastern boundary of the East Block; and the West Block, which is located a short distance northwest of the highway can be accessed by a forest access road that departs Highway 101 approximately 23 km west of the community of Foleyet and 76 km east from the Township of Chapleau.

The property is characterized by low, relatively flat, well-drained topography, with numerous small lakes and streams often bordered by minor wetlands. Average elevation is 381m above sea level, with little significant variation. Low-lying topographic features tend to trend southwesterly, likely parallel to the most recent glacial direction. The majority of the East Block is covered by an overburden of sand and gravel. Satellite imagery suggests that tree cover consists mainly of pine and spruce. Extensive forestry operations have been carried out in recent years on both claim groups, resulting in widespread clearcut areas or areas of young tree growth. The area is host to numerous logging and forestry access roads and trails, with only the southwestern part of the West Block being less accessible because of little recent logging activity.

The area exhibits a northern boreal climate, with short, warm summers and cold winters with moderate snowfall. Freezing temperatures can be expected from late October through mid-May. Exploration and mining activities should be able to be carried out year-round.

Timmins, Sault Ste. Marie and Thunder Bay are major sources of mining and industrial equipment and skilled labour. Wawa and Chapleau would be minor sources of supplies, equipment and labour; Foleyet could be a source of labour and basic supplies.

The area is serviced by Highway 101, which extends east to Timmins and Matheson, where it intersects Trans Canada Highway 11, and west to Wawa where it joins Trans Canada Highway 17. Rail transportation is available via the Canadian Pacific main line that runs through Chapleau and the Canadian National main line that runs through Foleyet. Small airports are present at Chapleau and Wawa. Airports in Timmins, Sault Ste. Marie and Thunder Bay host numerous daily scheduled commercial flights. Several small lakes and streams on and surrounding the property could provide sources of water, and electrical power is available in Foleyet, a few kilometers to the east.

Surface rights of staked claims are held by the Crown.

A few cottages occupy the eastern shore of East Twin Lake, in the northwest part of claim P-4272923, immediately west of Highway 101. It is recommended that communications be initiated with the cottage owners prior to field work being conducted close to the lakes.

To the author's knowledge there are no other restrictions on surface rights that would limit or preclude exploration or future mining activities on the property, other than the right-of-way along Highway 101

# History

A small amount of mineral exploration has been carried out in the Borden North property area since 1964.

Selected information from past exploration results is shown on Figure 4 at back of report. Where possible, historic data maps were georeferenced to ensure that data was plotted as accurately as possible.

Keevil Mining Corporation Ltd. carried out geophysical and geological surveys and a minor amount of diamond drilling on several claim groups mainly south of the Borden North claim groups in 1964 and 1965. Minor amounts of copper, nickel, silver and zinc were reported.

Reconnaissance mapping of the area was carried out during 1970 by P. Thurston, G. Siragusa and R. Sage of the Ontario Geological Survey as part of Operation Chapleau. Results were published in 1971 (Thurston et al., 1971).

L. Riccio, of the Ontario Geological Survey, mapped the Shawmere Anorthosite Complex, covering the property compilation area, in 1979. Results were published in 1981 as Preliminary Maps P. 2383 and P. 2384 which accompany Open File Report OFR 5338 (Riccio, 1981).

The Borden North property area makes up the northwestern corner of a series of geophysical, geochemical and geological compilation maps prepared jointly by the Geological Survey of Canada and the Ontario Geological Survey of the Ontario Ministry of Northern Development and Mines published in 1995 (Harris and Wilkinson and Wilkinson and Harris, 1995). General property geology and shaded airborne magnetics were used from this series of maps in the preparation of Figure 4.

In 1999 Marl Resources Corp. carried out a helicopter-borne airborne magnetic and electromagnetic survey, in an area overlapping on present claims P 4771930 and 4771931 of the West Group, and extending to the north (Andrews, 1999). Work was done following recommendations contained in a geological research report, included in the same AFRI file, completed in 1998 (Keast, 1998). Target of the exploration was Ni-Cu-PGE mineralization hosted within the Shawmere Anorthosite Complex.

In the same year Filo Exploration completed one 167m diamond drill hole in the eastern part of present claim P 4271929 (Filo, 1999). The hole was drilled with a dip of -55°, at an azimuth of 315°. It intersected mafic gneisses, metagabbro and diorite, locally intruded by pyroxenite dykes. Only minor sulphide minerals were intersected and no significant assay values were reported.

On patented claim 467, west of the Borden North West Group, anorthositic rocks were trenched and bulk sampled over the course of several years.

## **Geological Setting and Mineralization**

The Borden North property lies along the southeastern boundary of the Shawmere Anorthosite Complex which, in turn occupies the eastern portion of the Kapuskasing uplift in north central Ontario (see Figure 3). The Kapuskasing uplift is a northeasterly striking, 500 km long structure exposing high grade gneissic rocks.

According to Leclair et al, 1993 "The uplift includes crustal blocks from 30 km paleodepth, interpreted as the hanging wall of a large Paleoproterozoic thrust structure (Percival, 1980) dissected by steep, crustal-scale, dip-slip faults (Percival and McGrath, 1986; Leclair et al., 1991) and subsequently affected by dextral transcurrent motion (West and Ernst, 1991: Bates and Halls, 1991)".

Riccio, 1979, has described the Shawmere Anorthosite Complex as "a highly deformed and metamorphosed layered intrusion of Early Precambrian (Archean) age (K/Ar date of 2.51 Ma) surrounded by biotite-rich garnetiferous paragneisses, quartzo-feldspathic schists and amphibolites".

On the Borden North property itself, the West Group is interpreted to be underlain mainly by a northeasterly-striking folded sequence of tonalite gneisses bordered to the northwest by migmatized serpentinitic and anorthositic rocks of the Shawmere Anorthosite Complex; while the East Group is interpreted to be underlain by a northeasterly-striking suite of gneissic tonalite. A thin lens of metasedimentary rocks is interpreted to occur within the tonalite gneisses in the north part of the claim group. All rocks lie within the Kapuskasing uplift. The property has been poorly explored in the past, with only one drill hole, near the northeastern boundary of the West Group, known to occur. This hole returned no significant assay values (see History, above). General geology of the property and immediately surrounding area is shown on Figure 4.

At the Borden Gold Project of Probe Mines Ltd., situated approximately 60 km to the westsouthwest of the Borden North property, exploration continues on a shallow-dipping, moderate to high grade gold mineralized system hosted by a metaconglomeratic sequence of rocks. The Borden Lake conglomerate belt is interpreted by Leclair et al., 1993, as part of a western extension of the Larder-Cadillac fault zone within the Kapuskasing uplift. The Larder-Cadillac fault zone would, therefore, be interpreted to extend west through the Kapuskasing uplift, to the Goudreau Lake deformation zone north of Wawa. Locally the Borden Lake conglomerate is interpreted to strike eastward to the Borden North property and may lie within the sequence of metasediments and tonalitic gneisses, noted above, which occur on the property.

The author has been unable to verify the information concerning the geology and mineralization of the Borden Gold property, as described immediately above. The information is not necessarily indicative of the mineralization on the Borden North property.

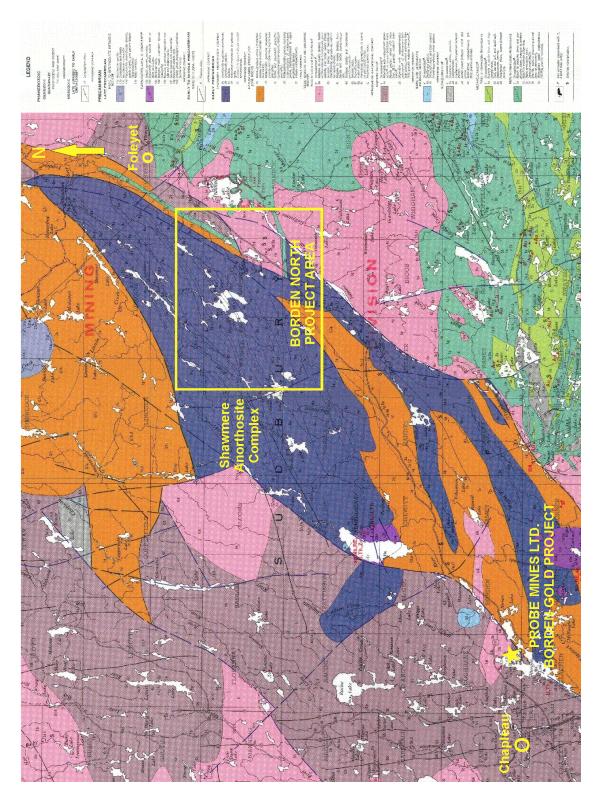


Figure 3. Regional Geology showing location of Borden North Property, after OGS Map M2221.

# **Deposit Types**

The target mineralization on the Borden North property will be similar to that of the Borden Gold project, situated approximately 60 km to the west-southwest. At Borden Gold, significant gold mineralization occurs within a sequence of feldspar, chlorite and biotite altered metasedimentary horizons and minor felsic to intermediate intrusions. Gold is associated with variable amounts of pyrite and pyrrhotite mineralization. There is no quartz veining associated with the gold mineralization. At Borden Gold the mineralized zone, which ranges up to 170m in true thickness, strikes east-southeasterly, dips -45° to the north and plunges approximately -15° to the east.

Published 43-101 open pittable resource estimates of the original, land-based portion of the mineralized horizon contained average grades in the 1.0 g/t gold range. Recently, drilling to the east beneath the waters of Borden Lake has intersected significantly higher gold grades. Further discussion of Borden Lake resource estimates is presented in the section titled Adjacent Properties, below.

It has been postulated (Leclair et al., 1993) that the gold-bearing metasedimentary horizons on Borden Lake strike east-northeastwards onto the Borden North property.

The author has been unable to verify the information concerning the geology and mineralization of the Borden Gold property, as described immediately above. The information is not necessarily indicative of the mineralization on the Borden North property.

# 2015 Exploration Program

The 2015 prospecting program was conducted over a period of 13 days from May 8<sup>th</sup> to May 20<sup>th</sup>, 2015. Various magnetic features were prospected on the property with a total of 77 samples being taken.

The highest gold assay returned was 102 ppb from a felsic gneiss containing garnets and trace pyrite. Other anomalous gold assays returned were 91 and 83 ppb in quartz rich zone in mafic gneiss containing pyrite and chalcopyrite. It is speculated that this narrow, highly-magnetic zone is the metamorphosed equivalent of an iron formation.

Prospecting logs can be found in Appendix A, Sample Descriptions in Appendix B, Field Maps in Appendix C and Assay certificates in Appendix D.

# **Adjacent Properties**

The Borden Gold deposit, situated about 60 km to the south-southwest of the Borden North property, is the nearest significant gold deposit, as well as being the target model for exploration on Borden North. The general geology and mineralization of Borden Gold are described under Deposit Types, above.

The author has been unable to verify the information concerning the geology and mineralization of the Borden Gold property. The information is not necessarily indicative of the mineralization on the Borden North property.

The most recent published 43-101 compliant resource estimate was prepared by Micon International Ltd. in 2012 (Murahwi, 2012). Micon's resource estimated, using a 0.30 g/t Au cutoff, was:

Indicated: 176,959,000 tons with average grade 0.71 g/t Au for a total of 4,051,000 contained ounces gold Inferred: 90,817,000 tons with average grade of 0.62 g/t Au for a total of 1,796,000 contained ounces gold.

In January 2013 Probe released the results of a revised, pit constrained resource estimate completed by P. and E Mining Consultants Inc. This resource estimate was part of a 43-101 compliant preliminary economic assessment of the mineral deposit, focusing on the open pit potential. To the author's knowledge, this report has not yet been made available to the public and the updated resource estimate is not reported here.

Since 2013 Probe has been drill-testing the higher-grade eastern extension of the mineralized zone beneath the waters of Borden Lake. The most recent Probe corporate presentation (Probe Mines Ltd. corporate website) indicates the deposit to have a strike length of more than 3 km.

## **Other Relevant Data and Information**

In the opinion of the author no additional data and information is required.

## **Conclusions and Recommendations**

The Borden North property may be underlain by similar stratigraphy to that which hosts significant gold mineralization being actively explored by Probe Mines Ltd. on the Borden Gold deposit situated approximately 60 km to the west-southwest.

This exploration program was successful in identifying areas of anomalous gold in bedrock conditions during a short field program. The author recommends that some samples be assayed using a multi-element package as well as PGE's. The exploration program on this project should be first followed up by an airborne magnetics and EM Survey to aid in identifying prospective zones. This would then be followed up with additional prospecting and mapping.

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Appendices

Appendix A Prospecting Logs

Date	Activities	Weather
8-May-		
15	Field Prep Day	n/a
9-May-		
15	Travel to Foleyet	Overcast, +10
10-May-		
15	Roads, 200ppb showing	Sunny, +13
11-May-		
15	Gossan Showing	Overcast, +9, scattered showers
12-May-		
15	Weather Day	Rain, +5
13-May-		
15	Mag trend north end	Sunny, +12
14-May-		
15	South Mag Trend (eastern portion)	Partly cloudy, +18
15-May-		
15	South Mag Trend, west of beaver dam	Cloudy, scattered showers, +19
16-May-		
15	South Mag Trend, east of beaver dam	Partly cloudy, +23
17-May-		
15	South Mag Trend, east of beaver dam	Sunny, +18
18-May-		
15	South Mag Trend, east of beaver dam	Partly cloudy, +15
19-May-		
15	South Mag Trend, east of beaver dam	Sunny, +20
20-May-		
15	Travel to Thunder Bay	Overcast, +15

Appendix B Sample Descriptions

Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79251	Mike	372176	5328784	Outcrop	fel. Gn garnet, tr py		0.102
79252	Mike	372161	5328800	Outcrop	mfgn		<0.005
79253	Mike	372142	5328821	Outcrop	Mf gn magnetic		0.012
79254	Mike	371482	5329824	Outcrop	rusty biotitic Fgn		<0.005
79255	Mike	371556	5329825	Outcrop	sil Mf gn tr py w/ garnets		<0.005
79256	Mike	371484	5327899	Outcrop	cg Mf gn tr py		<0.005
79257	Mike	371495	5327823	Outcrop	same		<0.005
79258	Mike	371495	5327814	Outcrop	altd granophyre in Amphib rick mf gn tr py		<0.005
79259	Mike	371447	5327725	Outcrop	mf gn 2% py		<0.005
79260	Mike	370794	5328065	Outcrop	rusty Mf gn		0.014
79261	Mike	370794	5328065	Outcrop	rusty zone in Mf gn with 1" qs		0.012
79262	Mike	370794	5328065	Outcrop	3cm qtz stringer		<0.005
79263	Mike	370794	5328065	Outcrop	rusty Mf gn tr py		0.005
79264	Mike	370872	5328053	Outcrop	sil gossan float		0.015
79265	Mike	370878	5328052	Outcrop	Mf gn gossan		0.011
79266	Mike	370878	5328052	Outcrop	same		0.008
79267	Mike	370878	5328052	Outcrop	same		0.013
79268	Mike	370878	5328052	Outcrop	same		0.012
79269	Mike	370878	5328052	Outcrop	.7m rubbly gossan in mf gn		<0.005
79270	Mike	370956	5328012	Outcrop	mf gn gossanous		<0.005
79271	Mike	371012	5327972	Outcrop	mf gn rusty gossan		0.01
79272	Mike	371012	5327972	Outcrop	mf gn w/ 5% py		<0.005
79273	Mike	371034	5327928	Outcrop	gossan is sil py po rock		0.01
79274	Mike	370855	5331729	Outcrop	n-s Kspar dyke tr py		<0.005
79275	Mike	370855	5331729	Outcrop	3cm qtz py, cpy vein		0.036
79276	Mike	370853	5331725	Outcrop	sil mf gn w/ q-py		<0.005

Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79277	Mike	370853	5331725	Outcrop	mf gn py in Qtz, K stringers		0.02
79278	Mike	370853	5331725	Outcrop	py, cpy tr Q to 3cm		0.083
79279	Mike	370853	5331725	Outcrop	mf gn w/ tr py, kspar stringers		<0.005
79280	Mike	370853	5331725	Outcrop	mf gn tr py in q		0.014
79281	Mike	370853	5331725	Outcrop	heavy py-cpy in q		0.091
79282	Mike	370033	5327993	Outcrop	gossan shear in mf gn		0.022
79283	Mike	370033	5327993	Outcrop	same		<0.005
79284	Mike	369885	5327980	Outcrop	tr py in Kspar in mf gn		<0.005
79285	Mike	371033	5327926	Outcrop	sil zone in mf gn		0.027
79286	Mike	371033	5327926	Outcrop	sil gossan		0.009
79287	Mike	371033	5327926	Outcrop	sil stringers w/ py		0.008
79288	Mike	371033	5327926	Outcrop	sil py zone		0.012
79289	Mike	371033	5327926	Outcrop	sil py zone		0.019
79290	Mike	371033	5327926	Outcrop	same		<0.005
79291	Mike	371390	5332539	Outcrop	mf gn tr py		<0.005
79351	Desmond	372162	5328820	Outcrop	Mafic gneiss; up to 30-40% amphibole, 25-30% garnet (almandine? - red in colour), and 30-40% plagioclase with lesser quartz; medium grained (2-3mm); occasional thin quartz vein (~1mm) with trace pyrite		0.006
79352	Desmond	372161	5328796	Outcrop	Mafic gneiss; moderate limonite (gossan); similar to above but increase in quartz veins and fractures with trace pyrite (+ arsenopyrite); ~40-45% fine to medium grained amphibole, 20-25% garnet up to 5mm, 20% plagioclase, 10% quartz in veins, fractures and grains		<0.005
79353	Desmond	372147	5328818	Outcrop	Mafic gneiss; strong gossan/limonite (difficult to determine mineralogy); ~30% amphibole, 25-30% garnet, 25-30% quartz, 10% plagioclase; trace to 0.5% disseminated pyrite + arsenopyrite + chalcopyrite		0.03
79354	Desmond	372147	5328818	Outcrop	As above, same location		0.016

Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79355	Desmond	373564	5333161	Outcrop	Mafic gneiss; sample is from a more felsic band with ~50% plagioclase and ~50% amphibole with minor biotite and quartz; minor FeOx predominantly along fracture planes; gneissocity strike is 50° with subvertical dip		<0.005
79356	Desmond	371498	5327931	Outcrop	Ultramafic (amphibolite/hornblendite?); massive; coarse grained (up to ~6mm); <10% plagioclase (+ Kspar - some buff coloured feldpsar veins, possibly weak FeOx); rare thin quartz vein (1-2mm) trace fine grained pyrite		<0.005
79357	Desmond	372502	5328656	Outcrop	Mafic gneiss; ~60% amphibole and ~40% plagioclase; medium to locally coarse grained; local epidote alteration of plagioclase; trace to 0.5% fine grained disseminated pyrite; strike ~145° dip 50° west		0.006
79358	Desmond	372161	5328802	Outcrop	Sample is highly iron oxidized and rotted/crumbly but looks well mineralized with 1-2% fine grained disseminated pyrite; mineralogy difficult to determine due to strong FeOx		0.047
79359	Desmond	370040	5327998	Outcrop	Garnetiferous mafic gneiss; strike - dip: 85° - 70°; ~60% amphibole (medium to coarse grained); ~25% garnet (2- 4mm); ~15% plagioclase (+ minor quartz); ~1-2% fine grained disseminated and blebby pyrite (+ cpy?)		0.005
79360	Desmond	370040	5327998	Outcrop	As above, same location		<0.005
79361	Desmond	369885	5327982	Outcrop	Mafic to ultramafic gneiss - looks like it could be an altered iron formation (contains significant magnetite); rare garnet; moderate quartz (+plagioclase) in parallel veins up to 5- 6mm wide; trace to 0.5% disseminated and blebby pyrite; looks like ~80% amphibole /magnetite		0.011

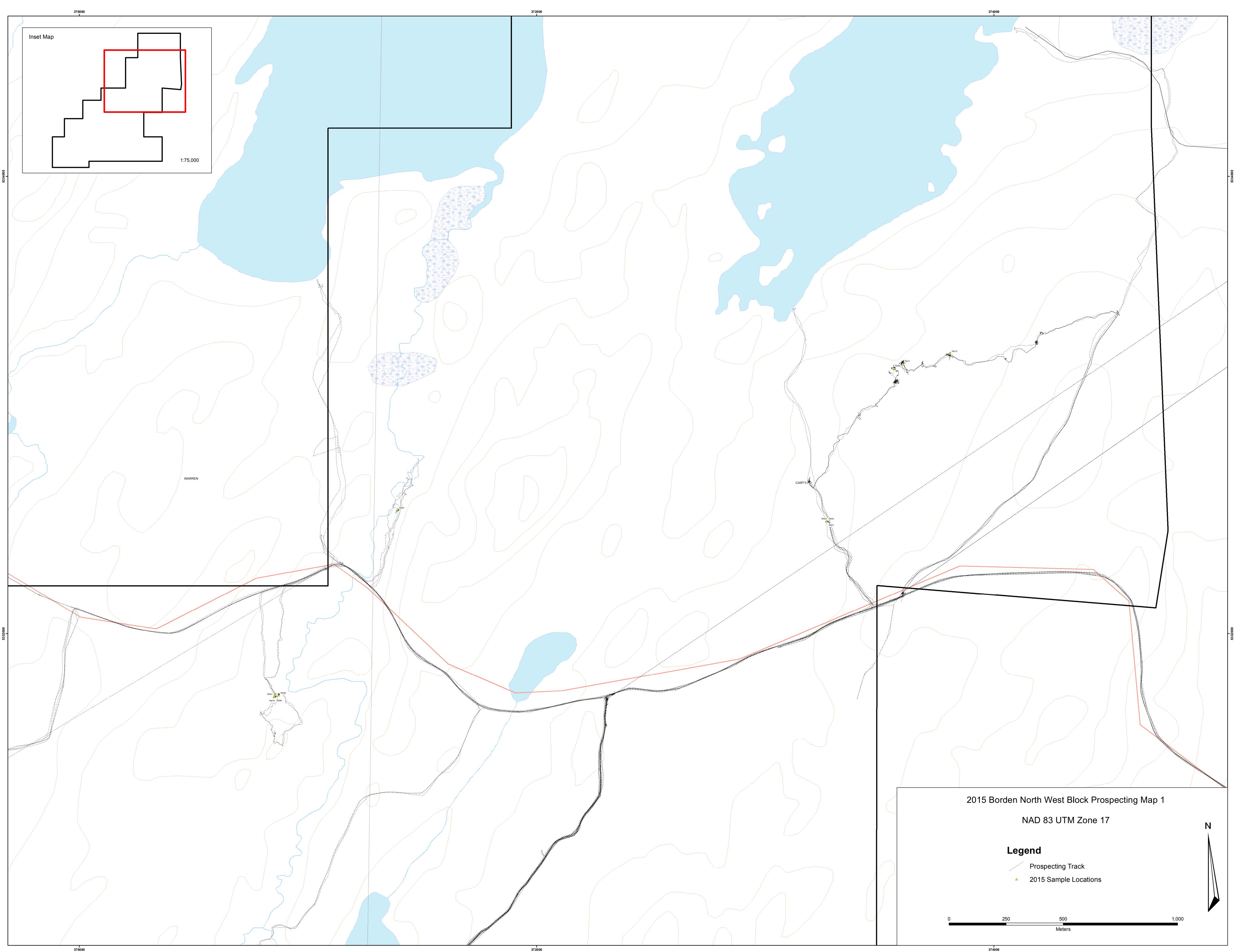
Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79362	Desmond	370871	5331730	Outcrop	Garnetiferous mafic gneiss; strike - dip: 245° - 45°; ~40-45% amphibole; ~40-45% plagioclase in grains and veinlets/bands parallel to gneissocity; ~10-20% garnets up to 3-5mm; moderate FeOx, but no fresh sulphides visible		<0.005
79363	Desmond	370040	5327998	Outcrop	Same location and rock as samples 79359 and 360 but with trace sulphides		<0.005
79364	Desmond	370040	5327998	Outcrop	As above, same location		<0.005
79365	Desmond	369885	5327982	Outcrop	Same location and rock as samples 79361; strong gossan/FeOx; ~1% disseminated and stringer pyrite; moderate quartz veining; ~50-60% mafics (amphibole + magnetite + chlorite); ~40-50% quartz veins in samples		0.007
79366	Desmond	369885	5327982	Outcrop	As above, same location		0.018
79367	Desmond	371038	5327931	Outcrop	Strong gossan/FeOx - sample is highly Fe oxidized and rubbly; looks like ~50-60% amphibole; 20-25% quartz - generally clear to FeOx stained; ~15-20% garnet from 1- 4mm; trace sulphides visible (py + cpy?)		0.021
79368	Desmond	371038	5327931	Outcrop	As above, same location		0.011
79401	Steve	373268	5332492	Outcrop	Felsic Gneiss, white-pink in colour, fine to medium grained, 1 to 2 cm diffuse bands of plag-kspar-qtz-garnets, no visible sulfides, non-magnetic	0.427	<0.005
79402	Steve	373268	5332492	Outcrop	Quartz vein / domain in felsic gneiss, vein 3 to 5 cm wide, bull white in colour, no visible sulfides	0.001	<0.005

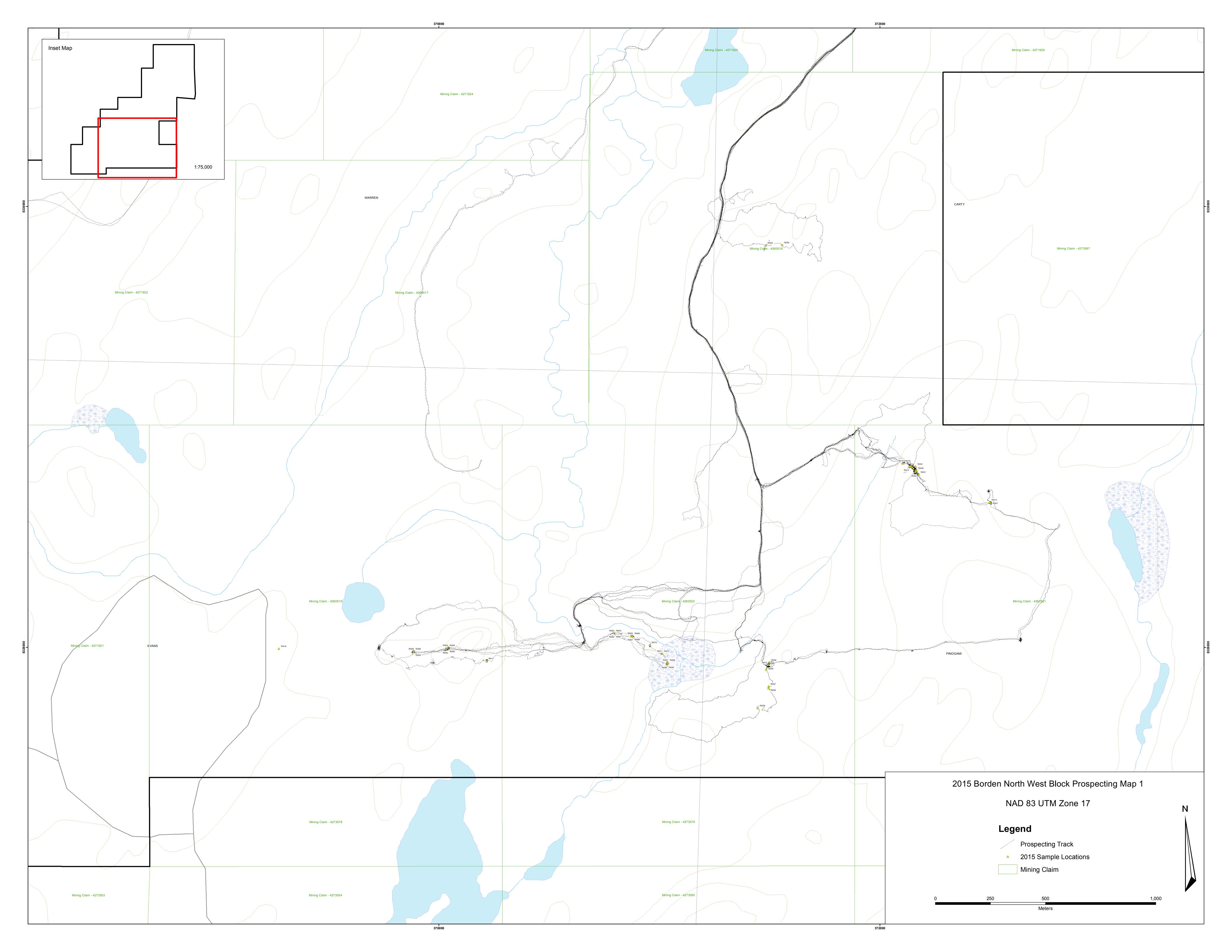
Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79403	Steve	373268	5332492	Outcrop	Mafic Gneiss, black/green-white in colour, could be more macro-scale banding of Felsic Gneiss or Felsic Gneiss could be a felsic phase of the mafic gneiss, no contacts observed, mafic portion made up of amphiboles is dominantly massive with minor felsic bands. Sample is dominantly fine to medium grained amphiboles, non-magnetic, no visible sulfides, minor quartz and felsic material on edge due to chipping at contact with felsic band.	0.022	<0.005
79404	Steve	372165	5328802	Outcrop	Rock is rust-brown in colour. Quite dense, contains a fair amount of weathered rusty material similar to weathered ankerite, abundant quartz and medium to coarse grained amphiboles, no visible sulfides. Quartz vein??	1.546	0.02
79405	Steve	372165	5328802	Outcrop	Rust brown to green/black in colour. Dense, orange rust on some surfaces, appears similar to weathered ankerite, consists dominantly of an aggregate of medium to coarse grained amphibole, no fabric, weakly magnetic, trace fine grained pyrite, minor quartz blebs.	4.249	<0.005
79406	Steve	372165	5328802	Outcrop	Rock is rust-brown in colour. Quite dense, contains a fair amount of weathered rusty material similar to weathered ankerite, abundant quartz and medium to coarse grained amphiboles, trace sulfides. Quartz vein??	0.864	0.015

Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79407	Steve	372153	5328812	Outcrop	Green-grey in colour. Appears to be amphibolite - approaching hornblendite - with crosscutting quartz veining. Rock is strongly magnetic (may have very fine grained pyrrhotite, as well as fine grained magnetite) in amphibolitic bands, quartz veins are mm to cm scale, crosscut moderate fabric of rock and contain medium to coarse grained subhedral garnets as well as trace to trace to 1% sulfides (po-py-cpy). Sulfides are anhedral blebs.	220.7	0.015
79408	Steve	372153	5328812	Outcrop	Green-grey in colour. Appears to be amphibolite - approaching hornblendite - with crosscutting quartz veining. Rock is strongly magnetic (may have very fine grained pyrrhotite, as well as fine grained magnetite) in amphibolitic bands, quartz veins are not as well defined as 79407 and more pervasive in nature but are visible and mm to cm scale, crosscut moderate fabric of rock. Rock contains 1 to 2% sulfides, dominantly cpy with lesser py-po, present mainly in mafic zones. Sulfides are present as anhedral blebs.	59.59	0.018
79409	Steve	372153	5328812	Outcrop	Rust brown to green/black in colour. Dense, orange rust on some surfaces, appears similar to weathered ankerite, consists dominantly of an aggregate of medium to coarse grained amphibole and coarse grained quartz, no fabric, weakly magnetic, trace to 1% fine grained cpy and pyrite present as anhedral blebs.	239.1	0.019
79410	Steve	373806	5333224	Float	Grey white in colour, gneissic banding on cm scale, black amphibole-plag minor quartz as well as light bands of plag- kspar, no sulfides, weak to moderately magnetic in more mafic portions.	2.22	<0.005

Sample Number	Sampler	Easting_z17_83	Northing_z17_83	Туре	Description	MagSus	Au g/t (ppm)
79411	Steve	373601	5333181	Outcrop	Grey white in colour, about 50/50 hornblende/plag, some mafic bands contain biotite (metased?), trace fine-grained garnet, amphibole is fine to medium grained as well as plag, no visible sulfides, non magnetic, very minor interstitial quartz.	0.705	<0.005
79412	Steve	371492	5327920	Outcrop	Black in colour, approaching a hornblendite, contains mostly mg amphibole with very minor interstital plag +/- qtz and garnets, with trace vfg pyrite, weak to moderate magnetism	0.54	<0.005
79413	Steve	372498	5328659	Outcrop	Black grey in colour, standard mafic gneiss, amphibole with interstitial plag and minor garnet, non mag, trace to 1% vfg disseminated pyrite blebs.	0.434	0.005
79414	Steve	372137	5328822	Float	Rust-brown in colour, very rusty, coarse amphibole and quartz, rusty ankerite looking material, very magnetic, no visible sulfides.	190.2	0.021
79415	Steve	372106	5328835	Float	Rust-brown in colour, very rusty, coarse amphibole and quartz, rusty ankerite looking material, very magnetic, no visible sulfides.	71.78	0.015
79416	Steve	372106	5328835	Float	Rust-brown in colour, very rusty, coarse amphibole and quartz, rusty ankerite looking material, very magnetic, no visible sulfides.	1.943	<0.005
79417	Steve	370216	5327939	Outcrop	Black green in colour, standard mafic gneiss / amphibolite gneiss, mg amphibole with interstital plagioclase, odd 1cm quartz leucosome / sweat (discontinuous), m-cg garnets present, non magnetic, trace pyrite.	0.703	<0.005
79418	Steve	369274	5327994	Outcrop	Grey-black in colour, mafic gneiss / amphibolite, minor quartz, no visible sulfides, non magnetic.	1.992	<0.005

Appendix C Field Maps





Appendix D Assays



Tel: (807) 626-1630 Fax: (807) 622-7571 www.accurassay.com assay@accurassay.com

Tuesday, June 2, 2015

### **Final Certificate**

Clark Consulting 1000 Alloy Dr. Thunder Bay, ON, CAN P7A6G5 Ph#: (807) 622-3284 Fax#: (807) 622-4156 Email: gjclark@tbaytel.net, steve@clarkexploration.com

Acc #	Client ID	Au g/t (ppm)
160238	79251	0.102
160239	79252	<0.005
160240	79253	0.012
160241	79254	<0.005
160242	79255	<0.005
160243	79256	<0.005
160244	79257	<0.005
160245	79258	<0.005
160246	79259	<0.005
160247	79260	0.014
160248	79260 Dup	0.015
160249	79261	0.012
160250	79262	<0.005
160251	79263	0.005
160252	79264	0.015
160253	79265	0.011
160254	79266	0.008
160255	79267	0.013
160256	79268	0.012
160257	79269	<0.005
160258	79270	<0.005
160259	79270 Dup	<0.005
160260	79271	0.010
160261	79272	<0.005
160262	79273	0.010

#### APPLIED SCOPES: ALP1, ALFA1



**Certified By:** 

Andrew Oleski Lab Manager - Thunder Bay

Authorized By:

Derek Demianiuk, VP Quality

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Date Received: 05/21/2015 Date Completed: 06/02/2015 Job #: 201541896 Reference: Sample #: 77



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Acc #	Client ID	Au g/t (ppm)
160263	79274	<0.005
160264	79275	0.036
160265	79276	<0.005
160266	79277	0.020
160267	79278	0.083
160268	79279	<0.005
160269	79280	0.014
160270	79280 Dup	0.017
160271	79281	0.091
160272	79282	0.022
160273	79283	<0.005
160274	79284	<0.005
160275	79285	0.027
160276	79286	0.009
160277	79287	0.008
160278	79288	0.012
160279	79289	0.019
160280	79290	<0.005
160281	79290 Dup	<0.005
160282	79291	<0.005
160283	79401	<0.005
160284	79402	<0.005
160285	79403	<0.005
160286	79404	0.020
160287	79405	<0.005

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Acc #	Client ID	Au g/t (ppm)
160288	79406	0.015
160289	79407	0.015
160290	79408	0.018
160291	79409	0.019
160292	79409 Dup	0.015
160293	79410	<0.005
160294	79411	<0.005
160295	79412	<0.005
160296	79413	0.005
160297	79414	0.021
160298	79415	0.015
160299	79416	<0.005
160300	79417	<0.005
160301	79418	<0.005
160302	79351	0.006
160303	79351 Rep	0.008
160304	79352	<0.005
160305	79353	0.030
160306	79354	0.016
160307	79355	<0.005
160308	79356	<0.005
160309	79357	0.006
160310	79358	0.047
160311	79359	0.005
160312	79360	<0.005

#### APPLIED SCOPES: ALP1, ALFA1



Shawn Rask Laboratory Assistant Manager

**Certified By:** 

Andrew Oleski Lab Manager - Thunder Bay

Authorized By:

Derek Demianiuk, VP Quality

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Acc #	Client ID	Au g/t (ppm)
160313	79361	0.011
160314	79361 Dup	0.011
160315	79362	<0.005
160316	79363	<0.005
160317	79364	<0.005
160318	79365	0.007
160319	79366	0.018
160320	79367	0.021
160321	79368	0.011

APPLIED SCOPES: ALP1, ALFA1

#### Validated By:

Shawn Rask Laboratory Assistant Manager

Certified By:

Andrew Oleski

Lab Manager - Thunder Bay

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Date Received: 05/21/2015 Date Completed: 06/02/2015 Job #: 201541896 Reference: Sample #: 77

Authorized By:

Derek Demianiuk, VP Quality



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Date Received: 05/21/2015 Date Completed: 06/02/2015 Job #: 201541896 Reference: Sample #: 77

#### **Control Standards**

QC Type	QC Performance (ppm)	Mean (ppm)	Std Dev (ppm)
AR02	1.690	1.575	0.088
AR02	1.587	1.575	0.088
AR02	1.637	1.575	0.088

#### APPLIED SCOPES: ALP1, ALFA1

Validated By: Shawn Rask Laboratory Assistant Manager

Certified By:

Andrew Oleski Lab Manager - Thunder Bay

Authorized By:

Derek Demianiuk, VP Quality

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