We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l’accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d’aide à la communication, veuillez nous contacter.

ASSESSMENT REPORT ON
DIAMOND DRILLING
BORDEN EAST PROJECT

HELLYER TOWNSHIP
PORCUPINE DISTRICT, ONTARIO

Submitted to:
Geoscience Assessment Office
Ministry of Northern Development and Mines and Forestry
933 Ramsey Lake Road
Sudbury, Ontario
P3E 6B5

Prepared by:

S. Allan
Probe Mines Limited
56 Temperance Street,
Suite 1000
M5H 3V5

Date: 24 December, 2012

Table of Contents

List of Appendices:

INTRODUCTION

Between December 7th and December 17th 2012, Probe Mines Limited completed a diamond drilling program on the Borden East Project that comprised 6 drill holes. This report describes the results of five of the drill holes. One drill hole, WO12-03, was filed in a previous report on December 19, 2012 (W1260.02864). The Borden East property, part of Probe's ongoing regional exploration initiative, is located approximately 20 kilometres east of Probe's main Borden lake project. It comprises a number of claims acquired through property acquisitions and staking.

A surface gold showing is present on Probe's main Borden Lake Project and has been identified over an area 150 metres long by up to 45 metres wide, hosted by a highly altered and metamorphosed suite of rocks within the volcano-sedimentary horizon. Grab samples from selected outcrop returned values of up to 3.4 g/t gold, and the property is considered to have excellent potential to host a low-grade, bulk tonnage-type of gold deposit.

In July 2010, an initial drill program on the Borden Lake Project was completed to test the extent of the surface showing. Results indicated that there was excellent potential to host a low-grade, bulk tonnage gold deposit on the property. Additional drilling on the property has continued to illustrate this potential and Probe released an updated NI 43-101 compliant Resource Estimate in May 2012 on the Borden Lake Deposit. Previous assessment for the first stage drilling was filed under work report W1060.02610 in November 2010. Additional drilling was filed in August 2012 under work report W1260.02025.

All maps coordinates are UTM Nad 83, Zone 17. All costs are in Canadian dollars.

LOCATION AND ACCESS

The Borden East project claims are located in the 1:50,000 NTS topographic sheets 41O14, 41O15 and 42B02, approximately 120 km southwest of the city of Timmins and 36 km east-northeast of the town of Chapleau, Ontario (Figure 1). Townships include Chewett, Sandy, Crockett, Raney, Hellyer, Evans, Pinogami, Ivanhoe and Carty. Access to the property is via Highway 101 and logging roads off the main highway. The Borden East property, part of Probe's ongoing regional exploration initiative, is located approximately 20 kilometres east of Probe's main Borden lake project. It comprises a number of claims acquired through property acquisitions and staking.

The current report details work applicable to 3 claims, 4259567, 4263009 and 4263010, located in Hellyer Township. The amount of credits applied from the work completed as detailed in this report is $145,529 and is being used towards keeping the project claims in good standing.

Mineral Claim information is displayed in Table 1.

Table 1 – Mineral Claim Information

Mineral Claim	District	Claim Due Date	Township	G-Plan	NTS	Units	Assess Required by Due Date
4259567	POR	2013-Feb-03	HELLYER	G-1140	42B02	16	$6,400.00
4263009	POR	2013-Apr-29	HELLYER	G-1140	42B02	16	$6,400.00
4263010	POR	2013-Apr-29	HELLYER	G-1140	42B02	16	$6,400.00

GEOLOGY

The Borden East Project is located in the Superior Province of Northern Ontario. The Superior Province is divided into numerous Subprovinces, bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. The Subprovinces are divided into 4 categories: Volcano-plutonic; Metasedimentary; Gneissic/plutonic; and High-grade gneissic (Thurston, 1991). The rocks range in age from 3.5Ga to less than 2.76 Ga and form an east-west trending pattern of alternating terranes.

Regionally (Figure 2), the Kapuskasing Structural Zone (KSZ), an elongate north to northeast trending structure, transects the Wawa Subprovince to the west, and the Abitibi Subprovince to the east. The KSZ is approximately 500km long, extending from James Bay at its northeast end to the east shore of Lake Superior at its southwest end. Typically the KSZ is represented by high metamorphic grade granulite and amphibolite facies paragneiss, tonalitic gneisses and anorthosite-suite gneisses occurring along a moderate northwest dipping crustal scale thrust fault believed to have resulted from an early Proterozoic event (Percival and McGrath 1986).

The Wawa and Abitibi Subprovinces, which abut the KSZ, are volcano-plutonic terranes comprising low metamorphic grade metavolcanic-metasedimentary belts. They contain lithologically diverse metavolcanic rocks with various intrusive suites and to a lesser extent chemical and clastic metasedimentary rocks. The individual greenstone belts within the subprovinces have been intruded, deformed and truncated by felsic batholiths. The east trending Abitibi and Swayze greenstone belts of the Abitibi subprovince have historically been explored and mined for a variety of commodities; while

the Wawa subprovince hosts the east-trending Wawa greenstone belt and the Mishibishu greenstone belt where much exploration and mining has occurred.

Several alkalic rocks such as carbonatite complexes along with lamprohyric dykes intruded along the KSZ, approximately 1022 to 1141 Ma ago. The carbonatite occurrences appear to display close spatial relationships with major northeast-striking shear zones. Proximal to the project area, on the northern side of the KSZ, three (3) such complexes are known to occur. These include the Borden Township carbonatite complex, the Nemegosenda Lake alkalic complex; and the Lackner Lake alkalic complex.

LOCAL GEOLOGY

The Borden Lake greenstone belt is a west trending belt of supracrustal rocks, approximately 3 km wide, that includes mafic to ultramafic gneiss, pillow basalt, felsic metavolcanic rocks, felsic porphyries and tonalites which are overlain by a +30 m thick suite of Timiskaming-aged clastic metasediments (Moser 1989, Moser 1994, Moser 2008, Percival 2008). The metasediments comprise greywackes, arkose, arenite, quartz pebble conglomerate and polymictic cobble conglomerate, metamorphosed to upper amphibolite facies. Gneissic fabrics are evident and the rocks appear to have been affected by regional deformation. Several episodes of deformation are reflected in the structural imprint of the rocks, with the last deformation being related to the development of the KSZ. The Borden Lake belt can be traced continuously for 35 km to the east and is considered to be one of the youngest in the KSZ (Percival and McGrath, 1986; Burnstall et al., 1994; Percival and West, 1994; Heather et al., 1995). The Borden East project is considered to be located within the Borden Lake greenstone belt, along its eastern extension. Similar rock types are observed, with the additional presence of anorthosites.

PREVIOUS WORK

Minimal previous work has been completed in the area of the Borden East property. Keevil Mining Group explored the area in the mid 1960s, as part of their Project Ivanhoe 679. On the Group 27 – Sandy & Crockett townships property, assessment report 41O15NW0001 summarizes the results of geophysical surveys and diamond drilling that was completed. The property was staked to cover a strong AEM anomaly identified from a survey that was flown in 1964. One drill hole was completed which intersected granite and hornblende gneisses, with a narrow zone of disseminated pyrrhotite and scattered stringers of massive pyrrhotite accounting for the conductor. Thinly disseminated pyrite and chalcopyrite were also noted. Results indicated low to nil nickel and copper values, it was reported that one sample of the mineralized core assayed trace in nickel and 0.01% in copper.

A discretionary gold occurrence, MDI42B02SW00007 is also located in the property area. The occurrence is the Keevil Group 38 from work in the mid-1960s. Assessment report 42B02SW0003 details the work completed by Keevil which includes trenching. Rock types encountered included biotite quartz feldspar gneisses and hornblende quartz feldspar gneisses, containing horizons interbedded with either 10-25% magnetite and 30-60% pyrite (west grid) or 10-20% magnetite and 40-70% pyrite (east grid). Reportedly, grab samples did not return any values, however grab samples by the OGS taken in 1992 returned 0.0097% Cu and 0.0172% Zn.

On Probe's main Borden Lake project to the West, Probe completed a diamond drill program comprising eight holes and totaling 790m on claim number 4227868 in July 2010. An assessment report on the drilling was filed in November 2010 under work report W1060.02610. Results indicated that there is excellent potential to host a low-grade, bulk tonnage gold deposit on the property. Additional drilling in 2011 was filed under work report W1260.02025 in August 2012.

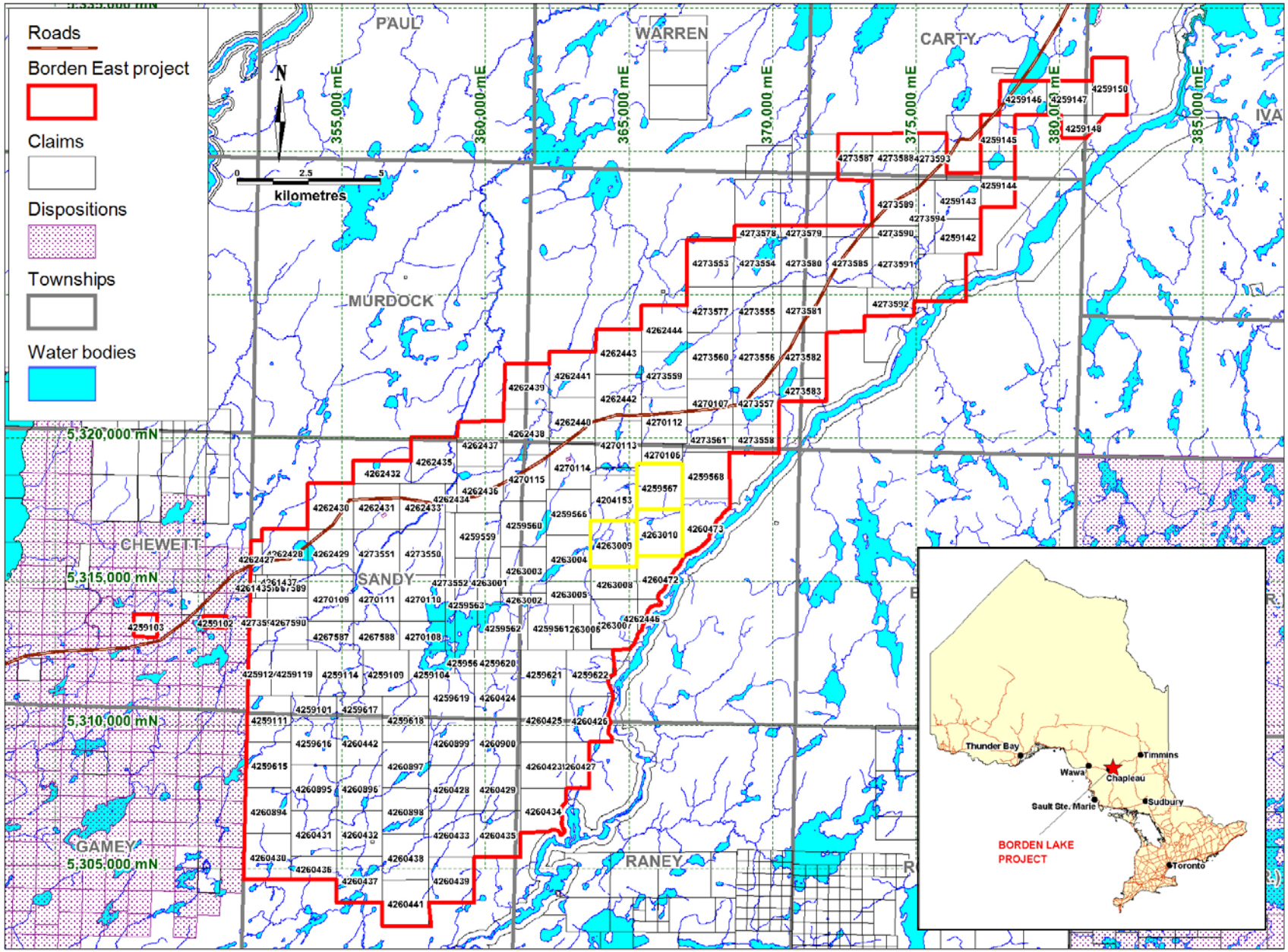


Figure 1- Location of the Borden East Project (claims subject of this report highlighted in yellow)

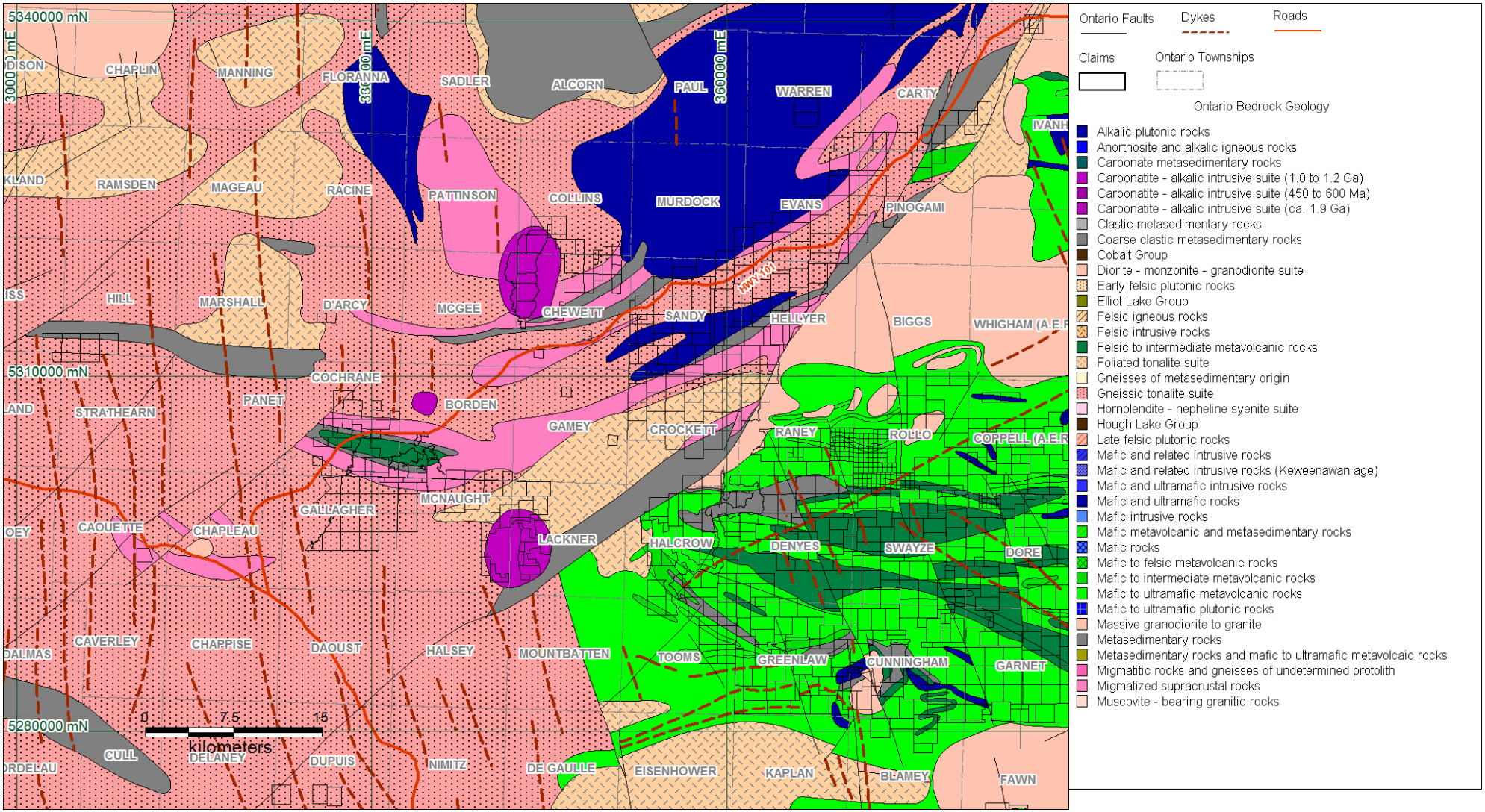


Figure 2 – General Geology of the Borden Lake and Borden East Area

DIAMOND DRILLING

Between December 7th and December 17th 2012, Probe Mines Limited completed a diamond drilling program on the Borden East Project. Six diamond drill holes were completed in total. One drill hole, WO12-03, was filed in a previous report on December 19, 2012 (W1260.02864). The five remaining holes, W012-01 to 02, and WO12-04 to 06 are the subject of this report.

Total meterage for the five holes was 1155m. Major Drilling (Bradley Brothers) was the drilling contractor. The program was overseen by David Palmer, with onsite management and logging by Craig Yuill and section creation and report writing by Sharon Allan. Two drills were in operation for the drill program. One drill completed holes WO12-01, 02, 05 & 06; while the other completed WO12-03 & 04.

The drill hole data is summarized in Table 2. Figure 3 illustrates the collar locations and hole traces. Appendix I illustrates the collar locations and hole traces at a scale of 1:4500.

Table 2 – Diamond drill hole data (NAD 83, Zone 17)

HoleID	Date Started	Date Completed	Azimuth	Depth (m)	Collar Dip	Easting	Northing	Elevation (m)
WO12-01	07/12/2012	09/12/2012	180	200	-50	365136	5316283	418.61
WO12-02	09/12/2012	12/12/2012	180	251	-70	365136	5316283	418.61
WO12-04	14/12/2012	17/12/2012	180	252	-70	365330	5317845	422.50
WO12-05	12/12/2012	14/12/2012	180	200	-50	365329	5316294	427.12
WO12-06	14/12/2012	17/12/2012	180	252	-70	365329	5316294	427.12

RESULTS

The Drill logs are presented in Appendix II and the drill hole cross sections in Appendix III. The sections are illustrated at scale of 1:1,000.

The drill program intersected mineralogically similar rock units to those present in the main Borden Lake Project area including Amphibolite, Felsic Gneiss and Amphibole gneiss. However there are differences in that the Amphibolite contains more garnet than is typically observed at Borden Lake and the Amphibole gneiss contains more biotite than typically observed at Borden Lake. Additionally, more developed gneissic banding is observed.

RECOMMENDATIONS

Drilling results indicate that the Borden East area area has similar rock units to those present to at the main Borden Lake Project that hosts the Borden Lake Deposit. Further work is recommended to correlate these units with those in the main Borden Lake project area and could comprise soil sampling, ground geophysics, geological modelling and whole rock/trace element geochemistry.

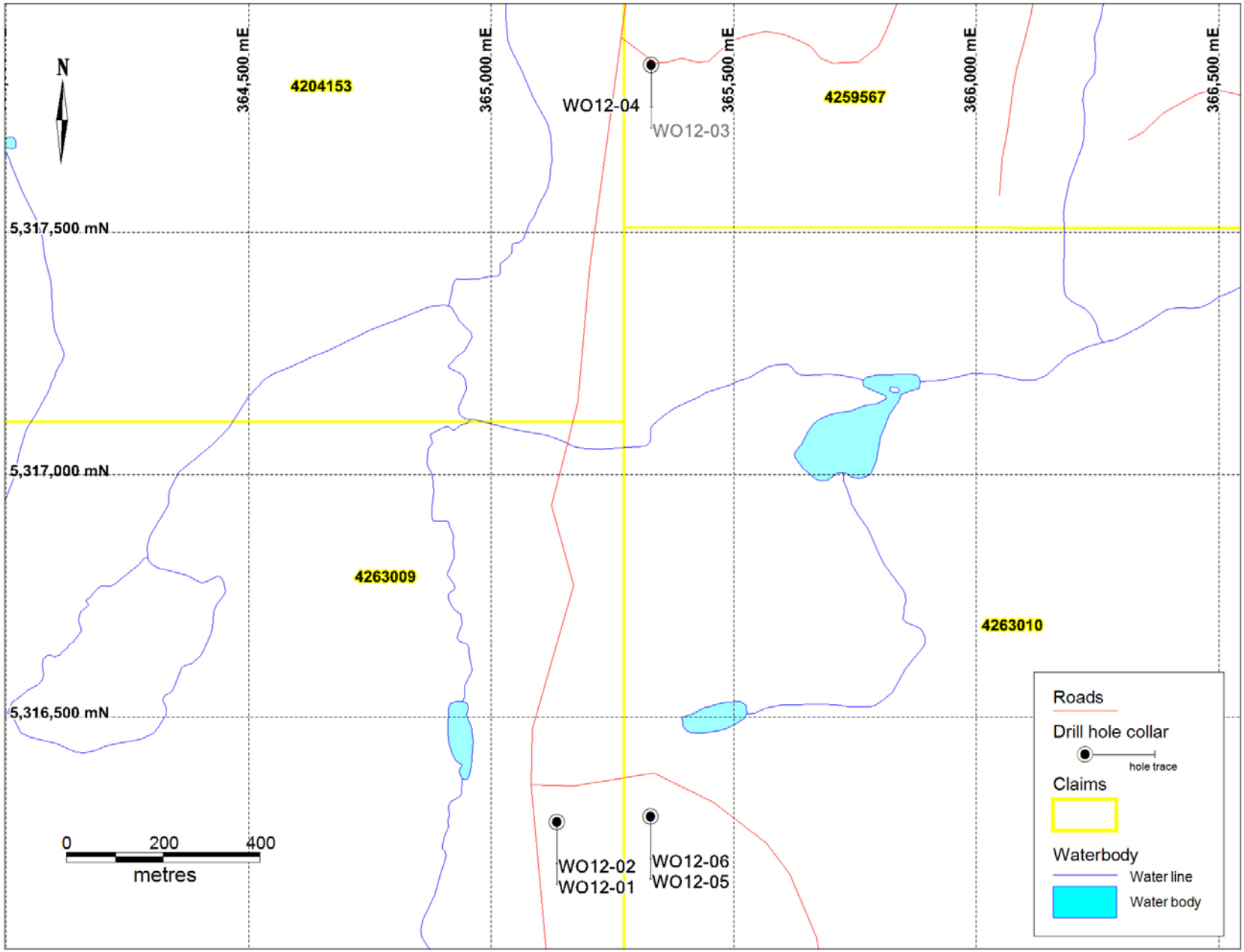


Figure 3 - Diamond Drill Hole Locations and Hole traces (Appendix I shows map at 1:4500 scale)

REFERENCES

Burnstall, J.T., LeClair, A.D., Moser, D.E., Percival, J.A., 1994. Structural correlation within the Kapuskasing uplift. Can. J. Earth Sci. v31, p 1081-1095.

Heather, K.B., Percival, J.A., Moser, D. and Bleeker, W., 1995, Tectonics and metallogeny of the Archean crust in the Abitibi-Kapuskasing-Wawa region. Geological Survey of Canada Open File Report 3141 159 p.

Moser, D. E. 1989. Preliminary Map, Geology of the Wawa Gneiss Terrane Adjacent to the Kapuskasing Structural Zone near Chapleau, Ontario; Geological Survey of Canada Open File Map 2056, scale 1:50 000.

Moser, D.E. 1994. The geology and structure of the mid-crustal Wawa gneiss domain – a key to understanding tectonic variation with depth and time in the late Archean Abitibi-Wawa Orogen. Canadian Journal of Earth Sciences, 31: p. 1064-1080.

Moser, D.E, Bowman, J.R., Wooden, J., Valley, J.W., Mazdab, F. and Kita, N. 2008. Creation of a continent recorded in zircon zoning. Geology 36: p. 239-242.

Murahwi, C. Gowans, R. and San Martin, A. J. 2012 Technical Report on the Updated Mineral Resource Estimate For the Borden Lake Gold Deposit, Borden Lake Property, Northern Ontario, Canada, 188p.

Ontario Geological Survey 1991a. Bedrock geology of Ontario, north sheet; Ontario Geological Survey, Map 2543, scale 1:1 000 000.

Ontario Geological Survey 2001. Results of modern alluvium sampling, Chapleau area, northeastern Ontario: Operation Treasure Hunt—Kapuskasing Structural Zone; Ontario Geological Survey, Open File Report 6063, 164p.

Percival, J.A. and West, G.F. 1994. The Kapuskasing uplift: a geological and geophysical synthesis; Canadian Journal of Earth Sciences, v.31, p.1256-1286.

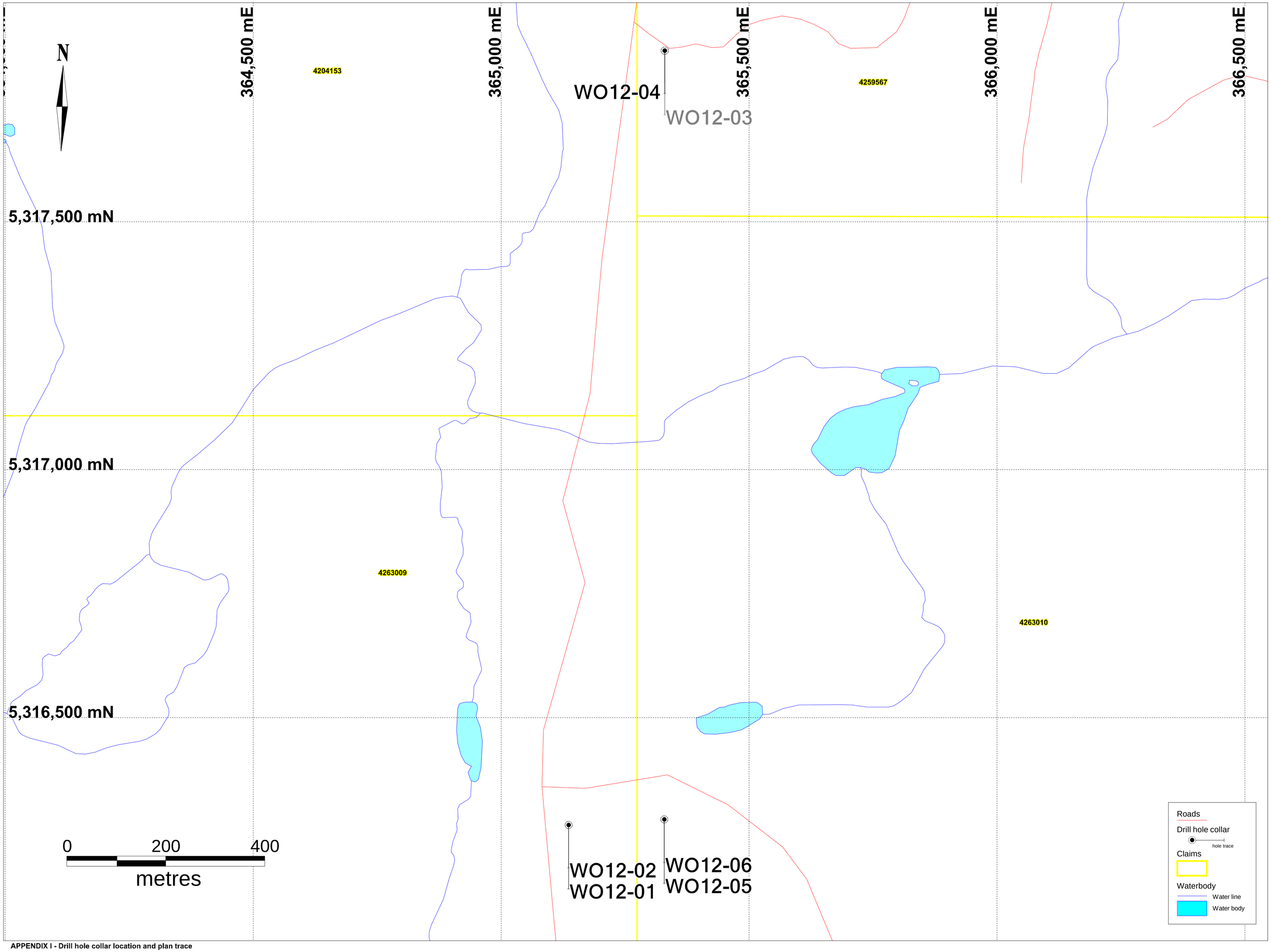
Percival, J. A. and McGrath, P.H. 1986. Deep crustal structure and tectonic history of the northern Kapuskasing uplift of Ontario: an integrated petrological–geophysical study; Tectonics, v.5, no.4, p.553-572.

Percival, J. 2008. Field Guide to the Kapuskasing Uplift, Chapleau-Foleyet Transect: A window on the deep crust, in Geological Society of America Field Forum “Late Archean Crust: Magmatism and Tectonics of the Abitibi Subprovince, Canadian Shield” p. 46-76.

Thurston, P.C., 1991, Archean geology of Ontario: Introduction, in Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part l, p.73-78

APPENDIX I

Large Scale Collar Location and Drill hole Trace Map (1:4,500)



APPENDIX I - Drill hole collar location and plan trace
Scale 1:4500

APPENDIX II

Drill logs

PROBE MINES LIMITED

Diamond Drilling Log

Hole No DDH. WO12-01

Drilling Company	Core Size	Collar Elevation (m)	Bearing of Hole from true North	Total Depth (m)	Dip of Hole At	Location where core stored
Bradley Brothers	NQ	419	180	200	Collar 50	Chapleau Ont

Date Hole Started	Date Completed	Date Logged	Logged By		
07/12/2012	09/12/2012	Dec.7-9 2012	Craig Yuill	(m)	degrees
				(m)	degrees
				(m)	degrees
				(m)	degrees

Exploration Co., Owner or Optionee

Probe Mines Limited

Property Name

Borden East

Location of DDH (TWP, Lot, Con, LatLong)

Easting	365136
Northing	5316283
Datum	NAD 83
Zone	17

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
0.0	6.1	Casing								
6.1	39.6	Garnet Amphibolite	Dark green, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of both coarse grained and fine grained crystals of garnet and biotite within a fine-medium (locally coarse) grained greenish-black amphibole and fine grained felsic matrix. Biotite is prevalent within the silicified section (6.1-8.5m) at the upper contact of the unit. Unit is intruded by numerous quartz veins and veinlets and quartz pegmatitic sections. Sulfides are patchy and most commonly found at the margins of garnet porphyroblasts both that are within quartz veins and quartz pegmatites and the garnets with the amphibole rich sections. Unit is magnetic in the areas that pyrrhotite blebs are present.	5	25	<1	<1
39.6	41.7	Biotite Garnet Gneiss	Grey, black and pink	Medium-coarse grained	Banded	Unit is comprised of 10-15% medium grained biotite and 15-20% coarse grained garnet porphyroblasts in a fine grained felsic matrix. Unit is intermittent with cm-scale quartz bands. Unit is locally magnetic when pyrrhotite is present. Sulfides are patchy and are associated with the margins of biotite and garnet crystals.	10 to 15	15 to 20	Tr to <1	Tr to <1
41.7	47.3	Garnet Amphibolite	Dark\Light green and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of both coarse grained and fine grained crystals of garnet and biotite within a fine-medium (locally coarse) grained greenish-black amphibole and fine grained felsic matrix. Unit is intruded by numerous quartz veins and veinlets. Sulfides are patchy and most commonly found at the margins of garnet porphyroblasts both that are within quartz veins and the garnets with the amphibole rich sections. Unit is magnetic in the areas that pyrrhotite blebs are present.	5	25	<1	<1
47.3	76.3	Biotite Amphibole Gneiss	Black and grey	Medium Grained	Moderately Well Foliated	Unit is comprised of 40% medium grained biotite and amphibole crystals within a fine-medium grained felsic matrix. Matrix is intensely potassically altered in sections. Localized cm-scale intrusions of granitic pegmatite. Pathcy pyrite is found as crystals forming aligned parallel to foliation. Unit is locally magnetitc due fine grained magnetite.	20	0	<1	Tr

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
76.3	94.0	Granitic Gneiss	Grey, white, and pink	Medium-coarse grained	Banded	Patchy fine grained schlieren and disseminated pyrite and pyrrhotite. Unit is comprised of alternating quartz and feldspar bands in a fine grained felsic matrix with fine grained biotite. Localized granitic pegmatite clots with fine grained sulfides within. Localized crystals of amphibole and chlorite alteration.	15	0	Tr to <1	Tr
94.0	105.9	Felsic Gneiss	Grey	Fine Grained	Weakly-moderately well foliated	Coarse grained blebby and fine-medium grained net-textured pyrrhotite with intermixed pyrite within the unit. Sulfide rich sections are associated with sections of increased biotite. Increased sulfides at 100.9, 101.6, 102, 103.1, 104.2m, with pyrrhotite dominated by pyrrhotite. Unit is strongly magnetic in the sections with pyrrhotite.	5 to 10	5	1	2
105.9	108.7	Garnet Amphibolite	Dark\Light green and pink	Fine Grained	Moderately Well Foliated	Unit is comprised of coarse grained garnet porphyroblasts within fine grained amphibole and felsic matrix. Coarse grained blebs and fine grained net-textured pyrrhotite is present with localized sections of 2-3%. Main pyrrhotite section is 105.9-107m. Unit is strongly magnetic in the sections with pyrrhotite.	3	20	<1	2
108.7	133.1	Biotite Garnet Gneiss	Grey, black and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained biotite and felsic matrix. Sections with finer grained biotite resemble "garnet biotite gneisses" of the Borden Lake deposit. Localized quartz pegmatite sections.	20	25	<1 to 1	<1 to 1
133.1	141.0	Amphibolite	Dark\Light green and pink	Coarse Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a medium to coarse grained amphibole and plagioclase groundmass. Patchy pyrite and pyrrhotite throughout the unit. 136.2m- 15 cm section with medium grained garnet crystals with interstitial pyrrhotite crystals.	5	10	<1	1
141.0	151.4	Felsic Gneiss	Light Grey	Fine-medium grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts and fine-medium grained banded biotite in a fine-medium grained felisc matrix. Localized quartz spider veinlets, and sections of siliceous alteration. 144.8-145.4m- 5-10 Massive net-textured pyrrhotite. Unit is magnetic where pyrrhotite is present.	15	10	1	2
151.4	168.1	Biotite Garnet Gneiss	Grey, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained biotite and felsic matrix. Sections with finer grained biotite resemble "garnet biotite gneisses" of the Borden Lake deposit. Localized quartz pegmatite sections. Patchy sulfides.	15 to 20	25 to 30	Tr to <1	Tr to <1
168.1	184.1	Felsic Gneiss	Grey	Fine-medium grained	Moderately well-well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts and fine grained bands of biotite in a medium grained felsic matrix. Sulfides are dominantly located in biotite rich sections that resemble "garnet biotite felsic gneiss" from Borden Lake. Abundant quartz spider veinlets and quartz 1-2 cm wide veins oriented parallel to the S1 foliation. Unit is locally magnetic where pyrrhotite is present.	15	5	<1 to 1	<1 to 1
184.1	187.9	Felsic Gneiss	Light Grey	Coarse Grained	Moderately well-well Foliated	Unit is comprised of fine-medium grained biotite within a medium-coarse grained felsic matrix with minor crystals of amphibole present. Sulfides are dominantly along the margins of biotite. Unit is intermittent with cm-scale quartz and feldspar veins. Unit is magnetic in areas with pyrrhotite.	10 to 15	0	<1	<1

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
187.9	200.0	Biotite Amphibole Gneiss	Black and green	Fine-medium grained	Moderately well-well Foliated	Unit is comprised of 35% medium-coarse grained biotite and amphibole in a fine-medium grained felsic matrix. Numerous intermixed quartz and feldspar veins intruded the unit. Fine grained disseminated sulfides are throughout the unit both in the veins and matrix.	10 to 15	1	<1	<1 to 1

PROBE MINES LIMITED

Diamond Drilling Log

Hole No DDH. WO12-02

Drilling Company	Core Size	Collar Elevation (m)	Bearing of Hole from true North	Total Depth (m)	Dip of Hole At	Location where core stored
Bradley Brothers	NQ	419	180	251	Collar 70	Chapleau Ont

Date Hole Started	Date Completed	Date Logged	Logged By		
09/12/2012	12/12/2012	Dec.9-12 2012	Craig Yuill	(m)	degrees
				(m)	degrees
				(m)	degrees
				(m)	degrees

Exploration Co., Owner or Optionee

Probe Mines Limited

Property Name

Borden East

Location of DDH (TWP, Lot, Con, LatLong)

Easting	365136
Northing	5316283
Datum	NAD 83
Zone	17

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
0.0	4.5	Casing								
4.5	36.2	Garnet Amphibolite	Dark green, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of both coarse grained and fine grained crystals of garnet and biotite within a fine-medium (locally coarse) grained greenish-black amphibole and fine grained felsic matrix. Biotite is patchy. Unit is intruded by numerous quartz veins and veinlets and quartz pegmatitic sections. Sulfides are patchy and most commonly found at the margins of garnet porphyroblasts both that are within quartz veins and quartz pegmatites and the garnets with the amphibole rich sections. Unit is magnetic in the areas that pyrrhotite blebs are present.	5	20 to 25	Tr to <1	Tr to <1
36.2	38.6	Biotite Garnet Gneiss	Grey, black and pink	Medium-coarse grained	Banded	Unit is comprised of 10-15% medium grained biotite and 15-20% coarse grained garnet porphyroblasts in a fine grained felsic matrix. Unit is intermittent with cm-scale quartz bands. Unit is locally magnetic when pyrrhotite is present. Sulfides are patchy and are associated with the margins of biotite and garnet crystals. Unit resembles "garnet biotite felsic gneiss" from Borden Lake.	15	15	Tr to <1	Tr to <1
38.6	43.7	Garnet Amphibolite	Dark green, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of both coarse grained and fine grained crystals of garnet and biotite within a fine-medium (locally coarse) grained greenish-black amphibole and fine grained felsic matrix. Biotite is patchy. Unit is intruded by numerous quartz veins and veinlets and quartz pegmatitic sections. Sulfides are patchy and most commonly found at the margins of garnet porphyroblasts both that are within quartz veins and quartz pegmatites and the garnets with the amphibole rich sections. Unit is magnetic in the areas that pyrrhotite blebs are present.	5	25	Tr to <1	Tr to <1

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
43.7	70.5	Biotite Amphibole Gneiss	Black, pink and grey	Medium-coarse grained	Banded	Unit is comprised of 40% medium grained biotite and amphibole crystals within a fine-medium grained felsic matrix. Matrix is intensely potassically altered in sections. Localized cm-scale intrusions of granitic pegmatite. Patchy pyrite is found as crystals forming aligned parallel to foliation. Unit is locally magnetitc due fine grained magnetite. Localized cm-scale fine grained UM\LAMP dike.	20	0	<1	Tr
70.5	78.4	Granitic Gneiss	Grey, pink, black	Coarse Grained	Moderately Well Foliated	Unit is comprised of coarse grained banded quartz, biotite and feldspar. Patchy fine grained disseminated pyrite. Localized sections of intense potassic alteration.	10	0	Tr	Tr
78.4	96.6	Felsic Gneiss	Variable Grey	Fine-medium grained	Moderately Well Foliated	Coarse grained blebby and fine-medium grained net-textured pyrrhotite with intermixed pyrite within the unit. Sulfide rich sections are associated with sections of increased biotite, and finer grained. Increased sulfide sections at 84.1, 92.3 92.9, 94.8, 95.3m, with pyrrhotite and pyrite but dominated by pyrrhotite. Unit is strongly magnetic in the sections with pyrrhotite.	15	7	<1 to 1	2 to 3
96.6	109.0	Garnet Amphibolite	Dark green, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of coarse grained garnet porphyroblasts within fine grained amphibole and felsic matrix. Coarse grained blebs of pyrrhotite is present with localized sections of 1-2%. Main pyrrhotite section is 96.6-98m. Unit is strongly magnetic in the sections with pyrrhotite.	5	20	<1	1 to 2
109.0	129.4	Biotite Garnet Gneiss	Grey, black and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained biotite and felsic matrix. Sections with finer grained biotite resemble "garnet biotite gneisses" of the Borden Lake deposit. Localized quartz pegmatite sections.	15 to 20	20 to 25	Tr	Tr
129.4	137.5	Amphibolite	Grey and Green	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a medium to coarse grained amphibole and plagioclase groundmass. Patchy pyrite and pyrrhotite throughout the unit. Localized disseminated and blebby pyrrhotite. Unit is magnetic in areas where pyrrhotite is present.	5	15	Tr	1
137.5	143.9	Felsic Gneiss	Grey	Fine-medium grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts and fine-medium grained banded biotite in a fine-medium grained felisc matrix. Localized quartz spider veinlets, granitic pegmatite and sections of siliceous alteration. 141.1-141.6m- 5-10% massive net-textured pyrrhotite. Localized coarse grained blebs of pyrrhotite associated with pegmatitic clots and coarse grained biotite. Unit is magnetic where pyrrhotite is present.	10 to 15	7	Tr to <1	2
143.9	153.8	Biotite Garnet Gneiss	Grey, black and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained biotite and felsic matrix. Sections with finer grained biotite resemble "garnet biotite gneisses" of the Borden Lake deposit. Localized quartz pegmatite sections. Patchy sulfides.	15 to 10	25 to 30	Tr	Tr
153.8	168.2	Felsic Gneiss	Grey, black and pink	Fine-medium grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts and fine grained bands of biotite in a medium grained felsic matrix. Sulfides are dominantly located in biotite rich sections that resemble "garnet biotite felsic gneiss" from Borden Lake. Abundant quartz spider veinlets and quartz 1-2 cm wide veins oriented parallel to the S1 foliation. Unit is locally magnetic where pyrrhotite is present.	15	10	<1	<1

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
168.2	172.2	Felsic Gneiss	Grey and white	Fine Grained	Moderately Well Foliated	Unit is comprised of fine-medium grained biotite within a medium-coarse grained felsic matrix. Sulfides are dominantly along the margins of biotite. Unit is intermittent with cm-scale quartz and feldspar veins. Unit is magnetic in areas with pyrrhotite.	10	0	<1	<1
172.2	233.1	Biotite Amphibole Gneiss	White, green and grey	Medium-coarse grained	Banded	Unit is comprised of 35% medium-coarse grained biotite and amphibole in a fine-medium grained felsic matrix. Numerous intermixed quartz and feldspar veins intruded the unit. Fine grained disseminated sulfides are throughout the unit both in the veins and matrix. Unit is locally magnetic where pyrrhotite is present. Localized potassic alteration. Numerous quartz spider veinlets. 228.9-231.5m- Broken, blocky, brecciated and silicified section. Localized quartz pegmatite sections.	20	<1	1	<1
233.1	251.0	Garnet Amphibolite	Dark\Light green and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of coarse grained garnet porphyroblasts in a a medium grained plagioclase and amphibole matrix. Localized cm granitic pegmatite sections. 237-239m - 3-5% thin banded magnetite present.	5	20	Tr	Tr

PROBE MINES LIMITED

Diamond Drilling Log

Hole No DDH. WO12-04

Drilling Company	Core Size	Collar Elevation (m)	Bearing of Hole from true North	Total Depth (m)	Dip of Hole At	Location where core stored	Location of DDH (TWP, Lot, Con, LatLong)
Bradley Brothers	NQ	423	180	252	Collar 70	Chapleau Ont	

Date Hole Started	Date Completed	Date Logged	Logged By			Property Name		
14/12/2012	17/12/2012	Dec.14-17 2012	Craig Yuill	(m)	degrees		Easting	365330
				(m)	degrees		Northing	5317845
Exploration Co., Owner or Optionee				(m)	degrees		Datum	NAD 83
Probe Mines Limited				(m)	degrees	Borden East	Zone	17

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
0.0	6.8	Casing								
6.8	9.8	Garnet Amphibolite	Dark\Light green and pink	Fine-medium grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained amphibole and plagioclase matrix. Lower contact of unit is intensely sericitically and potassically altered due to intruding dike.	5	7	Tr	Tr
9.8	17.8	Diabase Dike	Black and white	Fine-medium	Massive	Unit is comprised of fine-medium grained radiating euhedral crystals of plagioclase in a fine grained pyroxene and amphibole groundmass. Unit is magnetic.	0	0		
17.8	23.1	Amphibolite	Grey, green, pink.	Coarse Grained	Weakly Foliated	Unit is comprised of coarse grained amphibole crystals in a coarse grained plagioclase groundmass.	5	0	Tr	Tr
23.1	55.1	Diabase Dike	Black and white	Fine-medium	Massive	Unit is comprised of fine-medium grained radiating euhedral crystals of plagioclase in a fine grained pyroxene, and amphibole matrix. Unit is magnetic.	0	0	Tr	0
55.1	69.8	Felsic Gneiss	Grey and white, and black	Coarse Grained	Moderately Well Foliated	Unit is comprised of bands of medium grained biotite and medium-coarse grained amphibole in a medium grained felsic matrix. Pyrite is fine grained disseminated and patchy. Localized sections containing 3-5 cm wide clots of amphibole.	10	Tr	Tr to <1	Tr
69.8	74.2	Biotite Amphibole Gneiss	Black, grey, pink, and	Medium-coarse	Banded	Unit is comprised ofalternating bands of ampibole and biotite and felsic bands. Pyrite is fine grained patchy and associated with crystals of biotite and amphibole.	5	0	Tr to <1	Tr
74.2	77.1	UM\LAMP Dike	Grey, green and pink	Fine Grained	Massive	Dike intensely potassically alters the surrounding gneisses.				
77.1	113.9	Biotite Amphibole Gneiss	Green, grey and pink	Medium-coarse grained	Banded	Unit is comprised of alternating biotite and amphibole rich bands and felsic bands. Pyrite is patchy and is associated with crystals of biotite and amphibole. Localized potassic alteration sections. 79.9m - 20 cm Section with potssic and chlorite alterati	10	1	Tr to <1	Tr
113.9	116.9	UM\LAMP Dike	Black and white	Fine Grained	Massive	Unit is strongly magnetic. Localized quartz-carbonate veinlets.			0	0

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
116.9	209.8	Biotite Amphibole Gneiss	Grey , black, pink, and white	Medium-coarse grained	Banded	Unit is comprised of bands fine-medium grained biotite and medium-coarse grained amphibole in a medium-coarse grained felsic matrix. Localized UM\LAMP dikelets. Sulfides are fine grained disseminated crystals associated with amphibole and biotite. 129m -	10 to 15	3	<1	<1
209.8	217.7	Garnet Amphibolite	Dark\Light green and pink	Fine-medium grained	Moderately Well Foliated	Unit is comprised of fine-medium grained garnet porphyroblasts in a fine-medium grained amphibole and plagioclase matrix. Abundant quartz-carbonate spider veinlets and cm-scale granitic pegmatite sections. Patchy fine grained pyrite. Localized potassic al	5	10	<1	Tr
217.7	252.0	Biotite Amphibole Gneiss	Grey, dark\Light green and	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of bands of fine-medium grained biotite and amphibole in a fine-medium grained felsic matrix. Unit has undergone pervasive potassic alteration from 231-249m. 243.3-244.6m- Fault with breccia, host rock gouge and a 1 cm vein of graphite.	5	3	1	Tr

PROBE MINES LIMITED

Diamond Drilling Log

Hole No	Page No
DDH. WO12-05	1 of 2

Drilling Company	Core Size	Collar Elevation (m)	Bearing of Hole from true North	Total Depth (m)	Dip of Hole At	Location where core stored	Location of DDH (TWP, Lot, Con, LatLong)
Bradley Brothers	NQ	427	180	200	Collar 50	Chapleau Ont	

Date Hole Started	Date Completed	Date Logged	Logged By			Property Name		
12/12/2012	14/12/2012	Dec.12-14 2012	Craig Yuill	(m)	degrees		Easting	365329
				(m)	degrees		Northing	5316294
Exploration Co., Owner or Optionee				(m)	degrees		Datum	NAD 83
Probe Mines Limited				(m)	degrees	Borden East	Zone	17

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
0.0	6.3	Casing								
6.3	17.1	Garnet Amphibolite	Dark\Light green and pink	Fine-medium grained	Banded	Unit is comprised of coarse grained garnet porphyroblasts in a fine-medium grained amphibole and plagioclase groundmass. Unit has alternating sections of plagioclase rich and amphibole rich bands. Unit locally strongly magnetic locally where fine grained crystalline magnetite. Intermixed sections of cm-scale granitic pegmatite and sections of silicification and potassic alteration.	3	15	Tr	Tr
17.1	62.1	Biotite Amphibole Gneiss	Grey, white, and pink	Medium Grained	Banded	Unit is comprised of bands of medium grained biotite and amphibole with a fine-medium grained felsic matrix. Pyrite is patchy and is at the margins Localized cm-scale granitic pegmatite sections.	10	15	<1	Tr
62.1	80.9	Felsic Gneiss	Light Grey	Fine-medium grained	Moderately Well Foliated	Unit is comprised of fine-medium grained thin banded biotite in a fine-medium grained felsic matrix. Localized quartz spider veinlets. Pyrrhotite is in localized sections and occurs as thin veinlets and as thin laminations. Possible section of thinly laminated graphite bearing schist at 71.2m. 79.8-80.3m Almost enitrely made of Garnet crystals with interstitial pyrrhotite. 80.4m - Pyrrhotite vein. Localized silicified sections.	10 to 15	3	Tr to <1	1 to 2
80.9	160.9	Biotite Garnet Gneiss	Grey, black and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained biotite and felsic matrix. Sections with finer grained biotite resemble "garnet biotite gneisses" of the Borden Lake deposit. Localized quartz pegmatite sections. Fine grained disseminated and locally medium-coarse grained blebs of pyrrhotite and pyrite associated with granitic pegmatite sections and coarse grained crystals of biotite. Localized cm-scale granitic pegmatite sections, and quartz spider veinlets with sericitic alteration. 117.4-121.2m- Silicicifed section with 2-3% pyrrhotite at 120.5. Graphite along a fracture surface at 135.3m.	15	20	Tr to <1	1 to 2

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
160.9	163.3	UM\LAMP Dike	Black and white	Fine Grained	Moderately Well Foliated					
163.3	200.0	Felsic Gneiss	Light Grey	Medium Grained	Moderately Well Foliated	Unit is comprised of fine-medium grained biotite and amphibole bands in a fine-medium grained felsic matrix with localized medium grained garnet porphyroblasts. Localized cm-scale granitic pegmatite sections. Unit is locally magnetic when pyrrhotite is present.	10 to 15	2 to 3	1	<1 to 1

PROBE MINES LIMITED

Diamond Drilling Log

Hole No	Page No
DDH. WO12-06	1 of 2

Drilling Company	Core Size	Collar Elevation (m)	Bearing of Hole from true North	Total Depth (m)	Dip of Hole At	Location where core stored	Location of DDH (TWP, Lot, Con, LatLong)
Bradley Brothers	NQ	427	180	252	Collar 70	Chapleau Ont	

Date Hole Started	Date Completed	Date Logged	Logged By			Property Name		
14/12/2012	17/12/2012	Dec.14-17 2012	Craig Yuill	(m)	degrees		Easting	365329
				(m)	degrees		Northing	5316294
Exploration Co., Owner or Optionee				(m)	degrees		Datum	NAD 83
Probe Mines Limited				(m)	degrees	Borden East	Zone	17

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
0.0	3.1	Casing								
3.1	16.3	Garnet Amphibolite	Dark\Light green and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse grained garnet porphyroblasts in a fine-medium grained amphibole and felsic matrix. Pyrite is finely disseminated throughout the unit within the groundmass and at the margins of garnet porphyroblasts. Abundant quartz sp	5	15	Tr to <1	Tr
16.3	56.9	Biotite Amphibole Gneiss	Grey, black, green, and pink	Medium-coarse grained	Moderately Well Foliated	Unit is comprised of bands of medium grained biotite and amphibole in a fine-medium grained felsic matrix. Abundant potassic alteration of the feldspar bands and granitic pegamtite clots. Localized quartz-carbonate spider veinlets. 42.6m- 35 cm UM\LAMP di	15	0	Tr to <1	Tr
56.9	73.3	Felsic Gneiss	Light Grey	Medium Grained	Moderately Well Foliated	Unit is comprised of fine-medium grained biotite in thin bands in a fine-medium grained matrix. 69.2-69.6m- 10% net-textured fine grained massive pyrrhotite and pyrite. 71.7m- 1 cm vein of pyrrhotite, and 5 cm section of 5% massive net-textured pyrrhotite	10	0	Tr	Tr
73.3	81.0	Biotite Garnet Gneiss	Grey, black and pink	Medium-coarse grained	Banded	Unit is comprised of fine-medium grained banded biotite and medium-coarse grained porphyroblastsic garnet in a fine-medium grained felsic matrix. Localized coarse grained blebby pyrrhotite and pyrite (near upper contact). Localized cm-scale sections of gr	10 to 15	20 to 25	<1 to 1	<1 to 1
81.0	85.0	Felsic Gneiss	Grey	Fine-medium	Moderately Well Foliated	Unit is comprised of thin bande biotite in a fine-medium grained felsic matrix. Sulfides are associated with the bands of biotite.	15	0	Tr to <1	Tr to <1
85.0	110.9	Biotite Garnet Gneiss	Grey, black and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of thin banded fine grained biotite and medium-coarse grained porphyroblasts of garnet in a fine-medium grained felsic matrix. Sulfides are associated with crystals of biotite within quartz clots, bands and veins. Localized cm-scale sect	15	20 to 25	<1 to 1	<1 to 1
110.9	117.1	Felsic Gneiss	Light Grey	Fine Grained	Weakly-moderately	Unit resembles biotite garnet gneiss and is perhaps a quartz flooded version of this unit. Cm-scale sections of massive net textured pyrrhotite and pyrite.	5	2	1	1 to 2
117.1	151.6	Biotite Garnet Gneiss	Grey, black and pink	Fine-medium grained	Moderately Well Foliated	Unit is comprised of thin banded fine grained biotite and medium-coarse grained porphyroblasts of garnet in a fine-medium grained felsic matrix. Sulfides are associated with crystals of biotite within quartz clots, bands and veins. Localized cm-scale sect	10 to 15	20 to 25	<1 to 1	<1 to 1

From	To	RockType	Colour	Grain Size	Texture	Description	Bio %	Gt %	Py %	Po %
151.6	208.4	Felsic Gneiss	Grey	Fine-medium grained	Moderately Well Foliated	Unit is comprised of bands of fine-medium grained biotite and amphibole in a fine-medium grained matrix. Fine grained blebby and disseminated pyrrhotite and pyrite throughout at the margins of quartz clots and the margins of biotite crystals. Localized ch	15 to 10	2	<1 to 1	<1 to 1
208.4	214.2	Felsic Gneiss	Grey	Fine Grained	Moderately Well Foliated	Unit is comprised of thin banded biotite in a fine-medium grained felsic matrix. Intermixed granodiorite sections, and localized quartz spider veinlets. Localized potassic alteration. Sulfides are concentrated along the bands of biotite.	10	0	<1 to 1	<1
214.2	252.0	Garnet Amphibolite	Dark\Light green and pink	Medium Grained	Moderately Well Foliated	Unit is comprised of medium-coarse garnet porphryoblasts in a fine-medium grained amphibole and plagioclase matrix. Pyrite occurs as localized fine grained disseminated crystals, and localized coarse grained porphyroblasts. Localized granitic pegmatite se	5	15	<1 to 1	Tr

APPENDIX III

Drill Hole Cross Sections (1:1,000)

5,316,000mN
5,316,050mN
5,316,100mN
5,316,150mN
5,316,200mN
5,316,250mN
5,316,300mN
5,316,350mN

450mRL
400mRL
350mRL
300mRL
250mRL
200mRL
150mRL

Legend
Lithology BordenEast

- Casing
- Garnet Amphibolite
- Biotite Garnet Gneiss
- Biotite Amphibole Gneiss
- Granitic Gneiss
- Felsic Gneiss
- Amphibolite
- Diabase Dike
- UM\LAMP Dike

DDH: WO12-01 &
WO12-02
Claim: 4263009

365136E, 5316283N

0

100

100

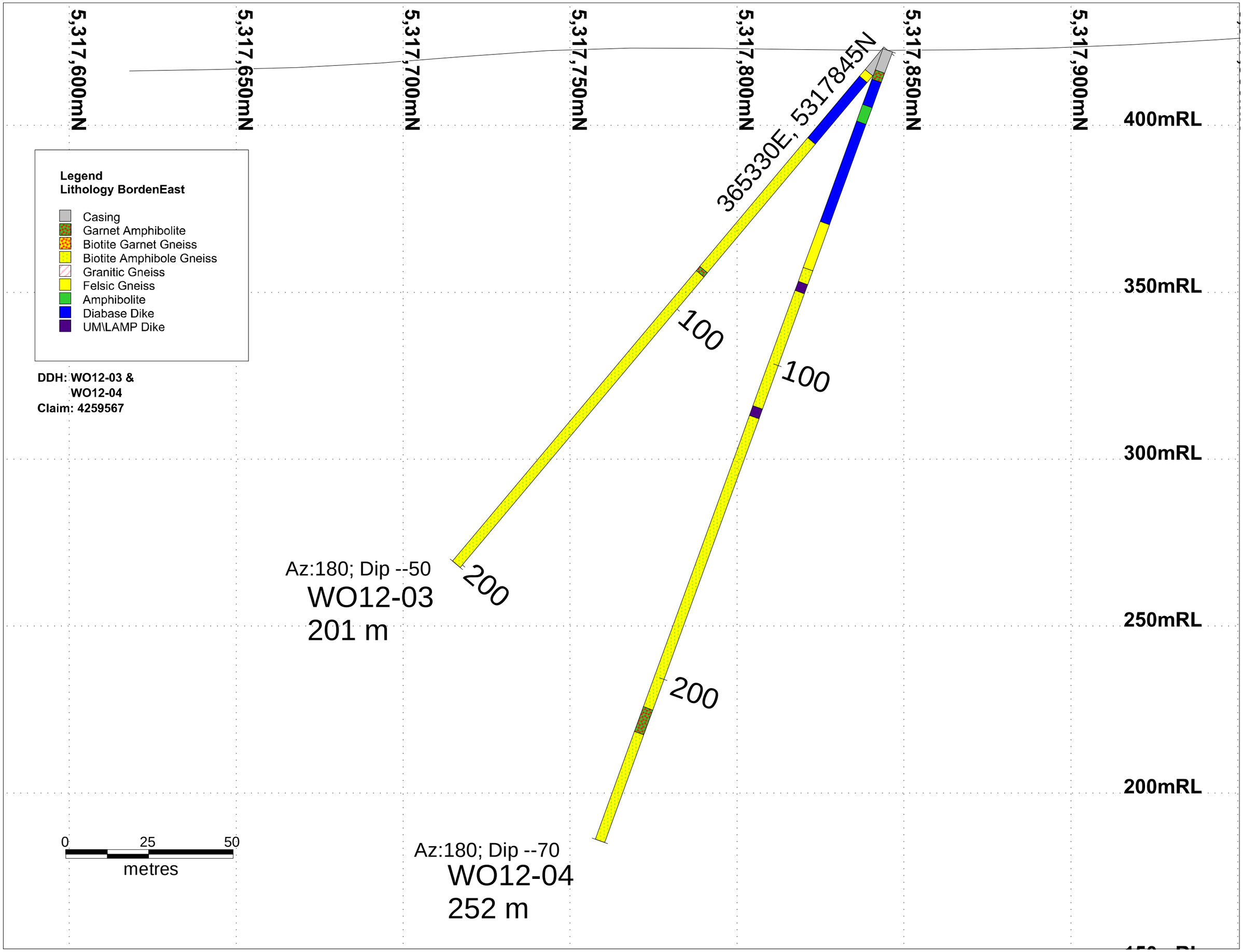
200

200

Az:180; Dip --50
WO12-01
200 m

Az:180; Dip --70
WO12-02
251 m

0 25 50
metres


5,317,600mN
5,317,650mN
5,317,700mN
5,317,750mN
5,317,800mN
5,317,850mN
5,317,900mN
400mRL
350mRL
300mRL
250mRL
200mRL
Legend
Lithology BordenEast
Casing
Garnet Amphibolite
Biotite Garnet Gneiss
Biotite Amphibole Gneiss
Granitic Gneiss
Felsic Gneiss
Amphibolite
Diabase Dike
UM\LAMP Dike
DDH: WO12-03 &
WO12-04
Claim: 4259567
365330E, 5317845N
100
100
200
200
Az:180; Dip --50
WO12-03
201 m
Az:180; Dip --70
WO12-04
252 m
0
25
50
metres

5,316,050mN
5,316,100mN
5,316,150mN
5,316,200mN
5,316,250mN
5,316,300mN
5,316,350mN

450mRL
400mRL
350mRL
300mRL
250mRL
200mRL

365329E, 5316294N

80

100

100

200

200

Legend
Lithology BordenEast

- Casing
- Garnet Amphibolite
- Biotite Garnet Gneiss
- Biotite Amphibole Gneiss
- Granitic Gneiss
- Felsic Gneiss
- Amphibolite
- Diabase Dike
- UM\LAMP Dike

DDH: WO12-05 &
WO12-06
Claim: 4263010

Az:180; Dip --50
WO12-05
200 m

Az:180; Dip --70
WO12-06
252 m

0 25 50
metres