

PROBE MINES LIMITED

TECHNICAL REPORT ON THE

INITIAL MINERAL RESOURCE ESTIMATE

FOR THE BORDEN LAKE GOLD DEPOSIT

NORTHERN ONTARIO, CANADA

Signing Date: October 6, 2011 Effective Date: August 23, 2011

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1.0 SUMMARY

1.1 TERMS OF REFERENCE, PROPERTY DESCRIPTION AND OWNERSHIP

1.1.1 Terms of Reference

Probe Mines Limited (Probe) has retained Micon International Limited (Micon) to prepare an initial mineral resource estimate and independent Technical Report under Canadian National Instrument 43-101 (NI 43-101) on the Borden Lake gold deposit located near Chapleau in northern Ontario. The Borden Lake property represents a new gold discovery associated with Timiskaming-age metasediments in a largely under-explored part of the Kapuskasing Structural Zone. The estimate of mineral resources presented in this report conforms to the Mineral Resource and Mineral Reserve definitions as set out by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and dated 27 November, 2010, referred to in NI 43-101.

1.1.2 Property Description

The Borden Lake gold project is located in northern Ontario, approximately 160 km southwest of the city of Timmins and 9 km east-northeast of the town of Chapleau. The discovery area is located on the eastern shore of Borden Lake which is located in Cochrane Township, in 1:50,000 NTS topographic sheet 410/14.

The centre of licence number 4227868, where the initial discovery was made for the Borden Lake deposit, is located at roughly 5303800 N and 329500 E in the UTM NAD83 coordinate system (Zone 17). The block comprises 15 claim units covering an area of approximately 251.6 ha (2.516 km²).

The Borden Lake project was acquired by Probe in 2010 at which time Probe entered into an option agreement with the vendors on the claims through which it has the right to acquire an interest of 100%. Subsequently, Probe has acquired interests in additional land holdings through staking (wholly-owned) and other private land agreements.

1.1.3 Ownership and Underlying Agreements

The Borden Lake Project covers a total area of 4,416 ha (276 units) and comprises three categories of landholdings:

- Wholly-owned claims acquired by staking (3,040 ha).
- Optioned claims acquired under an option agreement (1,056 ha).
- Private claims acquired through option or purchase agreements (320 ha).

These are summarized as follow:



The 190 wholly-owned claim units comprise 30 separate mineral licences. All wholly-owned claims were staked and recorded in the name of Probe Mines Limited.

The 66 option claims comprise eight individual mineral licences. The claims were optioned from Jacques Robert and Michael Tremblay. The option agreement gives Probe the right to earn 100% interest in the claims by making cash payments totalling \$55,000 and issuing 300,000 shares over the four-year term of the agreement, which was signed on 31 March, 2010, and the amended agreement on 13 August, 2011. The vendors maintain a 2% net smelter return (NSR) interest, while Probe retains an option to buy back 1% of the NSR for \$1,000,000

There are five private claims or dispositions (patent lands) on which Probe has option or purchase agreements. Each disposition is equal in size to four claim units and, as such, there are 20 units in total. The north half of Lot 6, Concession 3 was purchased from Mr. J. O'Brien for a cash payment of \$15,000 and the issuance of 20,000 shares. The vendor will maintain a 0.5% NSR which can be purchased by Probe for \$500,000. Probe 100% owns the surface and mineral rights. Probe has the right to earn a 100% interest in the mineral rights of the North Half of Lot 3, Concession 2 by making cumulative cash payments totalling \$20,000 and issuing 45,000 shares to Mrs. H. Ward, the vendor, over the three-year period of the option agreement which began on 23 February, 2011. The South Half of Lot 2, Concession 2, North Half of Lot 2, Concession 2 and North Half of Lot 1, Concession 2 are under an option agreement with BLI Inc. During the earn-in period, beginning on 22 December, 2010, Probe will need to complete \$400,000 in exploration expenditures and also complete and deliver a Preliminary Assessment, as defined by NI 43-101, on any resource identified on the property

There are no outstanding or pending adverse environmental issues attached to any of the properties. Regulatory permits are not required for the current and recommended exploration activities outlined in this report.

A total of \$76,000 in assessment credits will be required to maintain all of the wholly-owned mineral claims in good standing in the year following their respective due dates. A total of \$17,211 in assessment credits will be required to maintain all of the optioned mineral claims in good standing by their respective due dates as detailed in Section 4.0.

Assessment credits in the total amount of \$105,808 for drilling were filed in 2010 for claim 4227868 under work report W1060.02610 submitted to the Ministry of Northern Development and Mines and Forestry (MNDMF). A total of \$30,000 was applied to claim 4227868, leaving \$75,808 in reserve credits.

Assessment credits in the total amount of \$15,589 were applied in report W1160.00098 submitted to the MNDMF. Claims 4240490, 4240489, 4252987, 4252996 and 4252997 were covered by this report.



At the time of the present report, additional assessment reports of work completed were being compiled to cover the required expenditures to maintain the claims in good standing.

The property boundaries were located using a hand-held, retail grade, GPS. There are no mineral reserves, mine workings, tailing ponds, waste deposits, important natural features and improvements within the property bounds or in the immediate adjacent areas.

1.2 GEOLOGY, MINERALIZATION AND GENETIC MODEL

1.2.1 Geological Outline

The Borden Lake property claims are located in the Superior Province of northern Ontario. The Superior Province is divided into numerous subprovinces, each bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. These subprovinces can be classified into four types:

- 1) Volcano-plutonic, consisting of low-grade metamorphic greenstone belts, typically intruded by granitic magmas, and products of multiple deformation events.
- 2) Metasedimentary, dominated by clastic sediments and displaying low grade metamorphism at the subprovince boundary and amphibolite to granulite facies towards the centres.
- 3) Gneissic/plutonic, comprised of tonalitic gneiss containing early plutonic and volcanic mafic enclaves, and larger volumes of granitoid plutons, which range from sodic (early) to potassic (late).
- 4) High-grade gneissic subprovinces, characterized by amphibolite to granulite facies igneous and metasedimentary gneisses intruded by tonalite, granodioritic and syenitic magmas.

Regionally, 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. It is a structurally discordant zone, bounded by abrupt changes in lithology and metamorphic grade indicative of faults. The KSZ is approximately 500 km 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. It is proposed that the KSZ is an east-verging thrust fault that has exposed an oblique section through 20 km of uplifted Archean crust. The KSZ is characterized by a high-grade gneiss terrain and grades westward into a central gneiss terrain and then into low-grade terrain of east-west-striking linear belts composed of supracrustal rocks. In addition to the major fault which forms the east boundary of the KSZ, three major northeast-striking faults dip 60° to 70° northwest and are present within the uplift. These internal faults are



west-side-down, with displacements of 7 to 10 km, and result from a late tensional event that followed the compressional uplift.

The Borden Lake property lies at the intersection of the Wawa subprovince, the KSZ and the Abitibi subprovince, primarily within the southernmost limits of the KSZ.

1.2.2 Mineralization and Genetic Model

The gold mineralization occurs within a broad zone of disseminated and fracture-controlled sulphides within a volcano-metasedimentary package of variable composition. The main sulphides are pyrite and pyrrhotite, with the former typically predominating. The mineralized zone is generally low grade (0.25 g/t Au to 5 g/t Au), is up to 120 m wide and stretches for more than 1.6 km along strike. It is characterized by local silicification but lacks lithological control and quartz veining. The broad zone encompasses multiple/variable host rock metasedimentary horizons and subordinate intrusives of acidic to intermediate composition, all of which display feldspathic, chloritic and biotitic alteration. On the basis of the mineralization features, Micon believes that the deposit is associated with an Archaean-age copper-deficient porphyry system.

1.3 STATUS OF EXPLORATION

Early work conducted by local prospectors included VLF surveys, soil geochemical sampling and overburden stripping. A surface gold showing was identified over an area 150 m long by up to 45 m wide. Grab samples from selected parts of the outcrop returned values of up to 3.4 g/t Au.

Probe began exploration of selected claims of the Borden Lake property in 2010. A VTEM geophysical survey was flown over the property prior to drilling. This defined a broad zone of mineralization over a strike length of 1.6 km. This strike length has already been confirmed by diamond drilling. The deposit remains open in all directions and drilling is still in progress.

Currently, ground geophysical IP surveys are being conducted on the property in search of other areas hosting disseminated sulphide mineralization.

1.4 MINERAL RESOURCES ESTIMATE

The Borden Lake deposit initial mineral resource estimate has been conducted using a systematic and logical approach involving geological interpretation, conventional statistical analysis of raw data, solid creation, statistical analysis of composites, geostatistical analysis, creation of interpolation parameters, block modelling, block model validation and classification.

A summary of the resources at a cut-off grade of 0.30 g/t Au is given in Table 1.1.



Category	Cut-off Grade (g/t Au)	Tonnage	Average Grade (g/t Au)	Contained Gold (oz)	Average Silver Grade (g/t Ag)	Contained Silver (oz)
Indicated	0.30	11,607,000	0.82	305,000	0.9	323,000
Inferred	0.30	169,322,000	0.69	3,755,000	0.9	5,017,000

 Table 1.1

 Summary of the Borden Lake Mineral Resource Estimate

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

2. There has been insufficient exploration to define the inferred resources as an indicated or measured mineral resource. It is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.

The Qualified Person with overall responsibility for the preparation of this resource estimate is Charley Murahwi, M.Sc., P.Geo. He was assisted by Ing. Alan J. San Martin. Both are independent of Probe as defined in NI 43-101.

The effective date of the estimate is 23 August, 2011 and is based on drilling and assay data up to 31 July, 2011.

Micon believes that at present there are no known environmental, permitting, legal, title, taxation, socio-economic, marketing or political issues which could adversely affect the mineral resources estimated above.

1.5 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineralogical and metallurgical investigations have been initiated. At the time of writing this report, one metallurgical drill hole sited at the discovery point had been completed and sampled. SGS Mineral Services (SGS) at Lakefield has been contracted to conduct some preliminary investigations and this work is now in progress.

1.6 INTERPRETATION AND CONCLUSIONS

1.6.1 Exploration

Due to the general paucity of outcrops and thick overburden covering most of the northwestern extension of the deposit, soil- and litho-geochemical exploration techniques have limited application except in the original discovery area (i.e. the central part of the deposit) where outcrop can be seen and overburden averages 1 m or less. The surface gold discovery was identified over a zone 150 m long by about 45 m wide. Subsequently, the VTEM airborne EM-magnetic survey completed by Probe helped in defining the northwest and southeast extensions of the broad zone associated with the gold mineralization over a strike length exceeding 1.6 km.



1.6.2 Geology and Resources

The key attributes of the Borden Lake deposit are (a) the low grade/bulk tonnage/disseminated nature of the deposit, (b) lack of quartz veining, (c) lack of lithological control, (d) multiple/variable host metasedimentary rocks and intrusives of acidic to intermediate composition, and (d) dominantly feldspathic, chloritic and biotitic alteration in addition to local silicification. On the basis of these attributes, Micon believes it is reasonable to interpret the origin of the deposit as an Archaean-age copper deficient gold porphyry system. Probe has initiated detailed investigations to substantiate Micon's interpretation.

Silver is a minor but important component of the deposit.

At least three satellite mineralized zones to the Main Zone have been identified and are referred to as the SE, NE and Footwall satellites. The SE satellite is marked by an east-west trending magnetic high in the southeast and was intersected in holes BL11- 44, BL11- 46, and BL11- 56 above the hanging wall of the Main Zone. The NE satellite is marked by a north-northwest trending magnetic high in the northwestern part of the deposit area and was intersected in drill holes BL11- 22 and BL11- 23 above the hanging-wall of the Main Zone. The Footwall zone was intersected in drill hole BL 26 about 30 m below the footwall of the Main Zone.

The resource block model sections and plans demonstrate that, although the mineralization occurs within a broad zone of disseminated sulphide, there is a higher grade central core zone flanked by lower grade mineralization in the hanging and footwalls.

Variographic analysis of the deposit demonstrates that a spacing of 50 m between drill holes along strike and in section is likely sufficient to upgrade the resource to the Indicated category.

1.6.3 Mineral Processing and Metallurgical Testing

Mineralogical and metallurgical investigations have been initiated but no results are as yet available.

1.7 RECOMMENDATIONS

The initial mineral resource estimate of the Borden Lake deposit demonstrates significant potential for the development of a multi-million ounce mining project. Since the deposit is a low grade-bulk tonnage target, the success of the project is, among other things, heavily dependent upon achieving high metal recoveries and this will be determined through metallurgical testwork programs.

In view of the foregoing, Micon's recommendations are set out below.



1.7.1 Upgrading the Resource

1.7.1.1 Infill Drilling

Variographic analysis of the deposit demonstrates that a spacing of 50 m between drill holes along strike and in section is sufficient to upgrade the resource to the Indicated category. However, closer drilling may be necessary in a few instances where there is serious interference from barren diabase and ultramafic dykes in order to model the waste volume more accurately. Thus, the infill drill program should firstly focus on completing a 50 m by 50 m grid followed by additional infill holes wherever dyke shapes cannot be reasonably estimated. It is recommended that the grid coverage be down to a vertical depth of between 500 m and 600 m.

To avoid a situation where Inferred resources overlie Indicated resources, the projection of the mineralized zone to surface should be supported by a drill intercept not more than 50 m beneath the relevant surface; i.e. the distance between surface and the closest drill hole intercept should not exceed 50 m.

1.7.1.2 Resource Model Requirements

An air survey covering the Borden Lake project area and all the surrounding properties owned by Probe within the greater region, should be completed (ideally in autumn when vegetation cover is less intense) in order to generate a digital terrain model (DTM) to be used when updating the resource model and in future exercises on mine planning.

The next resource estimate should ideally be constrained within a pit shell to provide a preliminary overview of the likely mining economics of the project.

In future, all blanks used to monitor contamination between samples should look exactly the same as the other samples in the batch in order to to monitor contamination and to avoid preferential attention. This, coupled with periodic check analyses of the sample pulps at an umpire laboratory, will ensure a high quality database.

1.7.2 Defining the Limits of the Resource

1.7.2.1 Main Zone

The main mass of the deposit is open in all directions. However, in the extreme northwest, the deposit is bounded by Borden Lake and will require winter drill programs when ice thickness is sufficiently thick to support a drilling platform. Thus, in the short term, increasing the resource is restricted to following the southeast strike and down-dip extensions. For the southeast extension, drilling should be conducted at 50 m intervals until termination of the mineralized zone. For the down-dip extension, deep drilling to intersect the main zone at over 500 m vertical depth should be conducted, initially at 200-m spacing along strike. This should generate a sizeable inferred resource.



1.7.2.2 Satellite Zones

At least three satellite mineralized zones have been identified, referred to as the SE, NE and Footwall satellites. The SE satellite is marked by an east-west magnetic high in the southeast and was intersected in holes BL11-44, BL11-46, and BL11-56 above the hanging wall of the Main Zone. The NE satellite is marked by a north-northwest trending magnetic high in the northwestern part of the deposit area and was intersected in drill holes BL11-22 and BL11-23 above the hanging wall of the Main Zone. The Footwall zone was intersected in drill hole BL 26 about 30 m below the footwall of the Main Zone.

No separate drill holes are recommended at this stage as the deep drilling already recommended for the Main Zone will also intersect all the satellites, provided the step-out holes are placed along lines of holes BL11-22, 23, 26, 44 and 56.

1.7.3 Petrographic and Mineralogical Studies

Petrographic and mineralogical studies are recommended in order to confirm the genetic model of the deposit, understand the paragenetic sequence of the sulphides associated with the gold mineralization, and to complement and understand the metallurgical characteristics of the deposit.

1.7.4 Metallurgy

Detailed metallurgical investigations should be conducted simultaneously with mineralogical work to determine the metallurgical variability of samples at different levels of gold concentration within the entire envelope of the deposit. This should provide a grade recovery curve which will form the basis for flowsheet development for a subsequent economic model.

Following the completion of metallurgical investigations, a preliminary economic assessment (PEA) or scoping study should be conducted, followed by further detailed economic studies, if warranted.

1.7.5 Budget

In line with these recommendations, Probe has proposed a budget totalling \$12,300,000 for advanced exploration work in the 12 months commencing September, 2011. The proposed amount is broken down as shown in Table 1.2 and will, primarily, permit Probe to complete 70,000 m of drilling to upgrade and expand the mineral resource.



Item	Cost
	(\$)
Diamond Drilling	8,190,000
Assaying	1,878,000
Provisions	23,000
Geological	192,000
Support Services	720,000
Transport and Accommodation	74,000
Fuel	11,000
Property Work	38,000
Administration	825,000
Core Rack Area	11,000
SGS Mineralogical and Metallurgical	98,000
PA and Geological Modelling Support	240,000
Total	12,300,000

Table 1.2
Proposed Budget for Work on the Borden Lake Property

Micon considers that the proposed budget is reasonable and recommends that Probe proceeds with the proposed work program.



2.0 INTRODUCTION

2.1 AUTHORIZATION AND PURPOSE

Probe Mines Ltd. (Probe) has retained Micon International Limited (Micon) to prepare an initial mineral resource estimate and independent Technical Report under Canadian National Instrument 43-101 (NI 43-101) on the Borden Lake gold deposit located near Chapleau in northern Ontario. The Borden Lake property represents a new gold discovery associated with Timiskaming-age sediments in a largely under-explored part of the Kapuskasing Structural Zone (KSZ).

The gold mineralization occurs within a broad zone of disseminated sulphide mineralization, and is characterized by a lack of quartz veining. The initial resource estimate is based on the results of 78 drill holes available as of July 31, 2011. Probe's drilling campaign is still in progress and an update of the mineral resource will be conducted at an appropriate time after drilling is completed.

This report is intended to be used by Probe subject to the terms and conditions of its agreement with Micon. That agreement permits Probe to file this report as an NI 43-101 Technical Report with the Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

2.2 SOURCES OF INFORMATION

With the exception of Subsections 1.2.2 to 1.7.4, Sections 12 to 22, and Sections 24 to 29, the sources of information for this report are detailed below, and include those in the public domain as well as privately acquired data.

- Data and transcripts supplied by and at the instruction of Probe.
- Review of various geological reports and maps produced by the Ontario Geological Survey (OGS), its predecessors, and the Geological Survey of Canada (GSC).
- Discussions with Probe management and site geologists familiar with the property.
- Research of technical papers produced in various journals.
- Personal knowledge of the QP of gold mineralization in porphyry systems and similar geological environments.
- Observations made during the site visit by the author, Charley Murahwi, P.Geo.



Micon is pleased to acknowledge the helpful cooperation of Probe's management who made any and all data requested available and responded openly and helpfully to all questions, queries and requests for material.

2.3 SCOPE OF PERSONAL INSPECTION

Micon's direct knowledge of the property is based on the site visit conducted by Charley Murahwi, P.Geo., from 11 to 12 July, 2011. During this time, Micon verified all of the drill hole collar positions of the completed holes, examined drill cores, reviewed drill hole logs, reviewed mineralization types and discussed the quality assurance/quality control (QA/QC) protocols used by Probe. In addition, Micon also inspected the mineralization in a trench and pit in the original discovery area and examined some outcrops within the Borden Lake property and its immediate surroundings, including the Nose Target which lies approximately 3 km north-northwest of the Borden Lake deposit within Probe's land holdings. The site visit was conducted in the presence, and with the assistance of, David Palmer, Ph.D., P.Geo., President and CEO of Probe.

2.4 ABBREVIATIONS

Table 2.1 provides a list of abbreviations used in this report.

Abbreviation	Term				
0	degrees				
°C	degrees Celsius				
%	percent				
\$	Canadian dollar(s)				
μm	micron(s)				
3D	three dimensional				
AA	atomic absorption				
Ag	silver				
Au	gold				
az	azimuth				
cm	centimetre(s)				
DDH	diamond drill hole				
DTM	digital terrain mapping				
EM	electromagnetic				
FA	fire assay				
ft	foot/feet				
g	gram(s)				
Ga	billion years (old)				
GPS	global positioning system				
g/cm ³	grams per cubic centimetre				
g/mL	grams per millilitre				
g/t	grams per tonne				
g/t Ag	grams per tonne silver				
g/t Au	grams per tonne gold				

Table 2.1Table of Abbreviations



Abbreviation	Term
ha	hectare(s)
ICP	inductively coupled plasma
ID ³	inverse distance cubed
in	inch(es)
IP	induced polarization
kg	kilogram(s)
km	kilometre(s)
km/h	kilometres per hour
kV	kilovolt(s)
L	litre(s)
m	metres
masl	metres above mean sea level
Ma	million years (old)
m/s	metres per second
m^3	cubic metre(s)
mL	millilitre(s)
mm	millimetre(s)
mm/y	millimeters per year
Mt	million tonnes
OZ	ounce(s)
NSR	net smelter return
QA/QC	quality assurance/quality control
ppb	parts per billion
ppm	parts per million
sec	second(s)
t	tonne(s)
t/d	tonnes per day
t/m ³	tonnes per cubic metre
VLF	very low frequency
VLF-EM	very low frequency-electromagnetic
VTEM	versatile time domain electromagnetic



3.0 RELIANCE ON OTHER EXPERTS

Micon has not carried out any independent exploration work, drilled any holes or carried out any sampling and assaying on the property, other than examining/verifying mineralization on drill cores. While exercising all reasonable diligence in checking, confirming and testing it, the authors of this report have relied upon Probe's presentation of data for the Borden Lake property and the findings of its consultants in formulating their opinion.

The status of the mining claims or mineral tenements under which Probe holds title to the mineral rights for the Borden Lake deposit has not been investigated or confirmed by Micon, and Micon offers no legal opinion as to the validity of the mineral titles claimed. The description of the property, and ownership thereof, as set out in this report, is provided for general information purposes only.

The existing environmental conditions, liabilities and remediation have been described under the relevant section as per the NI 43-101 requirements. However, the statements made are for information purposes only and Micon offers no opinion in this regard.

The general descriptions of geology and past exploration activities used in this report are taken from transcripts prepared by Probe and its consultants, and from reports prepared by various reputable companies or their contracted consultants, as well as from various government and academic publications. Micon has relied on these data, supplemented by its own observations at site.



4.0 **PROPERTY DESCRIPTION AND LOCATION**

4.1 LOCATION AND GENERAL DESCRIPTION

The Borden Lake gold project is located in northern Ontario, approximately 160 km southwest of the city of Timmins and 9 km east-northeast of the town of Chapleau (see Figure 4.1). The discovery area is located on the eastern shore of Borden Lake which is located in Cochrane Township, in 1:50,000 NTS topographic sheet 410/14.

Figure 4.1 Location of the Borden Lake Project



Probe Mines Limited, 2011.

The Borden Lake project was acquired by Probe in 2010 at which time Probe entered into an option agreement with the vendors on the claims through which it has the right to acquire an interest of 100%. Subsequently, Probe has acquired interests in additional land holdings through staking (wholly-owned) and other private land agreements.





Figure 4.2 Claim Locations for the Borden Lake Property

Probe Mines Limited, 2011

The centre of licence number 4227868, where the initial discovery was made for the Borden Lake deposit, is located at roughly 5303800 N and 329500 E in the UTM NAD83 coordinate system (Zone 17). The block comprises 15 claim units covering an area of approximately $251.6 \text{ ha} (2.516 \text{ km}^2)$.

4.2 LAND TENURE

The Borden Lake Project covers a total area of 4,416 ha (276 units) and comprises three categories of landholdings:

- Wholly-owned claims acquired by staking (3,040 ha).
- Optioned claims acquired under an option agreement (1,056 ha).
- Private claims acquired through option or purchase agreements (320 ha).

These are summarized in Table 4.1 and illustrated in Figure 4.2.

The 190 wholly-owned claim units comprise 30 separate mineral licences. All wholly-owned claims were staked and recorded in the name of Probe Mines Limited.



The 66 option claims comprise eight individual mineral licences. The claims were optioned from Jacques Robert and Michael Tremblay. The option agreement gives Probe the right to earn 100% interest in the claims by making cash payments totalling \$55,000 and issuing 300,000 shares over the four-year term of the agreement, which was signed on 31 March, 2010, and the amended agreement on 13 August, 2010. The vendors retain a 2% net smelter return (NSR) interest, while Probe retains an option to buy back 1% of the NSR for \$1,000,000

There are five private claims or dispositions (patent lands) on which Probe has entered into either option or purchase agreements. Each disposition is equal in size to four claim units and, as such, there are 20 units in total. The north half of Lot 6, Concession 3 was purchased from Mr. J. O'Brien for a cash payment of \$15,000 and the issuance of 20,000 shares. The vendor will retain a 0.5% NSR which can be purchased by Probe for \$500,000. Probe 100% owns the surface and mineral rights. Probe has the right to earn a 100% interest in the mineral rights of the North Half of Lot 3, Concession 2, by making cumulative cash payments totalling \$20,000 and issuing 45,000 shares to Mrs. H. Ward, the vendor, over the three-year period of the option agreement which began on 23 February, 2011. The South Half of Lot 2, Concession 2, North Half of Lot 2, Concession 2 and North Half of Lot 1, Concession 2, are under an option agreement with BLI Inc. During the earn-in period, beginning on 22, December, 2010, Probe will need to complete \$400,000 in exploration expenditures and also complete and deliver a preliminary economic assessment, as defined by NI 43-101, on any resource identified on the property

A total of \$76,000 in assessment credits will be required to maintain all of the wholly-owned mineral claims in good standing in the year following their respective due dates. A total of \$17,211 in assessment credits will be required to maintain all of the optioned mineral claims in good standing by their respective due dates (see Table 4.1).

Assessment credits in the total amount of \$105,808 for drilling were filed in 2010 for claim 4227868 under work report W1060.02610 submitted to the MNDMF. A total of \$30,000 was applied to claim 4227868, leaving \$75,808 in reserve credits.

Assessment credits in the total amount of \$15,589 were applied in report W1160.00098 submitted to the MNDMF. Claims 4240490, 4240489, 4252987, 4252996 and 4252997 were covered by the work report.

At the time of the present report, additional assessment reports of work completed were being compiled to cover the required expenditures to maintain the claims in good standing.

The property boundaries were located using a hand-held, retail grade, GPS. There are no mineral reserves, mine workings, tailing ponds, waste deposits, important natural features and improvements within the property bounds or in the immediate adjacent areas.



Table 4.1Details of Land Tenure

Borden Lake Claims – Wholly Owned								
Township/Area	Claim Number	Acquisition	Ownership	Claim No.	Recording Date	Claim Due Date	Percent Option	Work Required
BORDEN	1234887	staking	100%	7	13-Sep-10	13-Sep-12	100%	\$2,800
COCHRANE	4242553	staking	100%	16	13-Sep-10	13-Sep-12	100%	\$6,400
COCHRANE	4242554	staking	100%	14	13-Sep-10	13-Sep-12	100%	\$5,600
COCHRANE	4242555	staking	100%	16	13-Sep-10	13-Sep-12	100%	\$6,400
COCHRANE	4242557	staking	100%	6	13-Sep-10	13-Sep-12	100%	\$2,400
COCHRANE	4242558	staking	100%	2	13-Sep-10	13-Sep-12	100%	\$800
COCHRANE	4242559	staking	100%	4	13-Sep-10	13-Sep-12	100%	\$1,600
COCHRANE	4242360	staking	100%	16	13-Sep-10	13-Sep-12	100%	\$6,400
COCHRANE	4249700	staking	100%	4	13-Sep-10	13-Sep-12	100%	\$1,000
ROPDEN	4249707	staking	100%	4	13-Sep-10	13-Sep-12	100%	\$1,000
COCHPANE	4249708	staking	100%	4	13-Sep-10	13-Sep-12	100%	\$1.600
COCHRANE	4249709	staking	100%	4	13-Sep-10	13-Sep-12	100%	\$1,000
COCHRANE	4249711	staking	100%	4	22-Sep-10	22-Sep-12	100%	\$1,600
BORDEN	4249712	staking	100%	8	22-Sep-10	22-Sep-12 22-Sep-12	100%	\$3,200
BORDEN	4249713	staking	100%	6	22-Sep-10	22-Sep-12	100%	\$2,400
COCHRANE	4256762	staking	100%	4	30-Nov-10	30-Nov-12	100%	\$1,600
COCHRANE	4256763	staking	100%	4	30-Nov-10	30-Nov-12	100%	\$1,600
BORDEN	4259801	staking	100%	11	30-Nov-10	30-Nov-12	100%	\$4,400
BORDEN	4259802	staking	100%	8	30-Nov-10	30-Nov-12	100%	\$3,200
MCNAUGHT	4259803	staking	100%	12	30-Nov-10	30-Nov-12	100%	\$4,800
MCNAUGHT	4259804	staking	100%	12	30-Nov-10	30-Nov-12	100%	\$4,800
MCNAUGHT	4259805	staking	100%	1	15-Dec-10	15-Dec-12	100%	\$400
COCHRANE	4260523	staking	100%	1	15-Dec-10	15-Dec-12	100%	\$400
GALLAGHER	4260524	staking	100%	1	15-Dec-10	15-Dec-12	100%	\$400
MCNAUGHT	4260525	staking	100%	4	15-Dec-10	15-Dec-12	100%	\$1,600
BORDEN	4260526	staking	100%	5	14-Feb-11	14-Feb-13	100%	\$2,000
MCNAUGHT	4260527	staking	100%	4	15-Dec-10	15-Dec-12	100%	\$1,600
BORDEN	4260531	staking	100%	1	14-Feb-11	14-Feb-13	100%	\$400
MCNAUGHT	4260536	staking	100%	5	10-Jan-11	10-Jan-13	100%	\$2,000
Total				190				\$76,000
			Borden Lake – Opti	ioned Claims	i			-
Township/ Area	Claim Number	Acquisition	Ownership	Claim No.	Recording Date	Claim Due Date	Percent Option	Work Required
COCHRANE	4227868	option	earn-in 100% (mineral rights)	15	10-Nov-08	10-Nov-15	50%	\$6,000
COCHRANE	4240489	option	earn-in 100% (mineral rights)	6	6-May-09	6-May-12	50%	\$2,243
COCHRANE	4240490	option	earn-in 100% (mineral rights)	6	6-May-09	6-May-12	50%	\$2,153
COCHRANE	4252987	option	earn-in 100% (mineral rights)	4	26-Feb-10	26-Feb-13	100%	\$1,518
COCHRANE	4252996	option	earn-in 100% (mineral rights)	10	26-Apr-10	26-Apr-12	100%	\$255
COCHRANE	4252997	option	earn-in 100% (mineral rights)	15	26-Apr-10	26-Apr-12	100%	\$1,042
COCHRANE	4255237	option	earn-in 100% (mineral rights)	6	27-May-10	27-May-12	100%	\$2,400
COCHRANE	4255238	option	earn-in 100% (mineral rights)	4	27-May-10	27-May-12	100%	\$1,600
Total				66			l	\$17,211
			Borden Lake – Pat	tent Claims	Dana P	Clair D	Den	W. 1
Township/Area	Claim No.	Acquisition	Ownership	Claims	Recording Date	Claim Due Date	Percent Option	Work Required
COCHRANE	PIN 731020007; North Half of Lot 6, Concession 3	purchase	100% (mineral and surface)	4	NA	NA	NA	NA
COCHRANE	PIN 731020012; North Half of Lot 3, Concession 2,	option	earn-in 100% (mineral rights)	4	NA	NA	NA	NA
COCHRANE	PIN 731020014; South Half of Lot 2, Concession 2	option	earn-in 50% (mineral rights)	4	NA	NA	NA	NA
COCHRANE	PIN 731020016; North Half of Lot 2, Concession 2	option	earn-in 50% (mineral rights)	4	NA	NA	NA	NA
COCHRANE	PIN 731020018; North Half of Lot 1, Concession 2	option	earn-in 50% (mineral rights)	4	NA	NA	NA	NA
Total				12				



There are no outstanding or pending adverse environmental issues attached to any of the properties. Regulatory permits are not required for the current and recommended exploration activities outlined in this report.



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 TOPOGRAPHY, ELEVATION AND VEGETATION

The Borden Lake project is situated just to the north of the Atlantic and Arctic Watershed Divide, with the terrain gently sloping towards Hudson and James Bays. A number of major rivers cross cut the relatively flat plain, namely the Chapleau, Nemegosenda and Ivanhoe rivers that drain north towards the Kapuskasing and Groundhog rivers. Major lakes in the region are Windermere, Como, Nemegosenda and Borden Lake. The Borden Lake area is located in the Abitibi upland physiographic region of Ontario (Thurston, 1991).

Locally, the terrain is primarily low to moderate relief. The uplands are comprised of rock knobs and moraine, while the lowlands are underlain by glaciofluvial deposits. Elevations typically range from 335 masl, near Nemegosenda Lake, to 597 masl, near Pemache River on Lockner Hill (Roed and Hallett, 1979).

The property is located in the boreal forest vegetation zone with the major tree species represented by black and white spruce, jack pine, aspen and balsam poplar, white birch and balsam fir, with some tamarack in poorly drained areas.

North of the town of Chapleau is the world's largest Crown nature preserve covering an area of 700,000 ha. Pickerel and pike are the most common fish species. Moose are plentiful as well as bear, beaver, wolf, otter, rabbit, weasel, red fox, muskrat, skunk and groundhogs.

5.2 ACCESSIBILITY AND INFRASTRUCTURE

The Borden Lake project is easily accessible by road and is located approximately 9 km eastnortheast of Chapleau on Ontario Provincial Highway 101. There is a 1.5-km gravel road that is accessed from Highway 101 that leads to the property. There are a number of public and private forestry roads that provide excellent access throughout the property.

Chapleau, the closest town to the property, has a population of approximately 2,400. It is located about 190 km northeast of Sault Ste. Marie, 272 km northwest of Sudbury, and 843 km north of Toronto. The nearest largest communities are Wawa (140 km to the west) and Timmins (about 200 km to the east). Chapleau is serviced by Highway 101 from the east and west and Highway129 from the south.

The community has traditionally been focused on forestry, and at one time three large lumber mills were producing in the area. Owing to a downturn in the forestry industry, only one mill remains in production.

CP Rail (CP) has a large presence in Chapleau, providing service to Sudbury and White River. The Northern Ontario Backwoods Budd Car departs Chapleau for Sudbury on



Sundays, Wednesdays, and Fridays. The passenger service departs for White River on Saturdays, Tuesdays, and Thursdays.

The Chapleau airport operates year-round for private flights but there are no scheduled carriers located at the base. There are two runways, 3,000 ft and 5,000 ft (approximately 915 m and 1,525 m), capable of landing business jets. The water bomber squad of the Ministry of Natural Resources (MNR) is based at the airport in the summer months for forest fighting dispatch.

5.3 CLIMATE

The continental climate of the area is characterized by cold winters and warm summers. Mean air temperatures range from 1-2°C and mean summer temperatures are 15-17°C. Extreme lows may reach -48°C and extreme highs 42°C. Precipitation ranges from 700-900 mm, with approximately one-third of the precipitation falling as snow.

5.4 SURFACE RIGHTS AND LOCAL RESOURCES

The claim block hosting the Borden Lake project is sufficiently large to accommodate an open pit operation and ancillary installations.

Local resources are readily available given the proximity to developed communities. A 115 kV power line links Chapleau to the trans-Ontario grid at Wawa. In addition to the airport at Chapleau, other services include the co-generation power plant that produces electricity for Hydro One, the Chapleau Public Utilities Corporation (CPUC), and the Chapleau Energy Services Corporation (CESC), numerous hotels and restaurants, local branches of major Canadian banks, a hospital, schools, grocery and hardware stores, heavy equipment and machinery shops, as well as a variety of other service contractors.

A number of First Nation Communities are located in the region. These include the Chapleau Cree First Nation, Brunswick House First Nation and Chapleau Ojibwe First Nation. Probe has a good working relationship with the First Nations. On 31 August, 2011, Probe announced a Memorandum of Understanding (MOU) with the three First Nation communities. The MOU establishes a commitment by Probe to develop an ongoing relationship with the three communities in the area of the Borden Lake project and will provide the communities with an opportunity to participate in the benefits of the project through training, ongoing communication and business development. An Elders Committee is to be created to provide advice to Probe on traditional values and local cultural and environmental matters during the exploration phase. Probe has also agreed to negotiate an Impact Benefit Agreement with the communities should the project proceed to production.



6.0 HISTORY

6.1 **OVERVIEW**

Prior to Probe's involvement, minimal previous work had been completed on the property. The Borden Lake project was acquired by Probe in 2010 through an option agreement on claims surrounding Borden Lake. Early work conducted by local prospectors (the vendors) included VLF surveys, soil geochemical sampling and overburden stripping. A surface gold showing was identified over an area 150 m long by up to 45 m wide. Grab samples from selected parts of the outcrop returned values of up to 3.4 g/t Au.

No economic mineral deposits are known in the area of the Borden Lake project. Approximately 80 km to the east, in the vicinity of Foleyet, is the Penhorwood talc mine and 160 km to the east is the prolific Timmins metal mining district.

The bulk of historic data is taken from a few assessment reports published for the local area and a few OGS reports that formed part of the Operation Treasure Hunt (OTH) program.

6.2 GENERAL HISTORY

The area around Borden Lake has experienced very little in the way of previous exploration. There are limited Assessment File Reports (AFRI) available from the MNDMF. These include work reports submitted by Kapuskasing Resources Ltd., Noranda Exploration Company Ltd. and Michael Tremblay.

Kapuskasing Resources explored in Cochrane Township in the summer of 1982. The work comprised geological, prospecting and geophysical surveys over 12 claims that were located in the central part of Cochrane Township, approximately 12 km northeast of Chapleau and 2.5 km north of Highway 101. This area is approximately 3 to 4 km to the northwest of the Borden Lake discovery area. The preliminary survey indicated modestly favourable results and further evaluation was recommended. Thirty-two rock samples were sent for gold and/or silver analysis, with results ranging from nil to 0.015 ounces per short ton gold with only trace/nil results for silver. The 16 samples that contained measurable quantities of gold were associated with sulphide-rich zones adjacent to an interpreted fault structure that trend through the property towards the east.

Noranda Exploration completed a few exploration programs in the area in the early to mid 1980s which consisted of geological surveys, ground geophysics and a single reported drill hole. The 16 claims were located about 10 km east of Chapleau on highway 101, and about 0.8 km northwest of Borden Lake. This area is approximately 2-3 km northwest of the main Borden Lake discovery area. In the fall of 1982, a ground magnetic and EM survey was completed over the property. Previous mapping by Noranda had revealed sulphide mineralization. Most of the magnetic features indicated east-west trends and the presence of diabase dykes suggested by several cross-cutting features. One conductor was located and recommended for drilling. A summer geological mapping campaign was completed in 1983



which led to the discovery of sulphide mineralization on a highly altered roadcut outcrop. A rhyolite quartz porphyry unit was identified as containing up to 5% sulphides, typically disseminated and comprising chalcopyrite, pyrite and traces of galena. It was concluded that the outcrop was likely proximal to a volcanic alteration pipe and the stratigraphy indicated that the top of the succession was likely towards the southwest. Further mapping to the southeast was recommended to locate the rhyolite quartz-eye porphyry as well as ground geophysics to determine if there were any conductors associated with the unit. In June, 1984, Noranda drilled one hole, approximately located at 327470E and 5304170N (NAD 83 UTM Zone 17) with a -53° dip to the south. The hole intersected a variety of schists and amphibolites, intermediate and mafic volcanics and a quartz feldspar porphyry. A graphite-bearing sulphide-oxide iron formation was intersected from 291.5 to 311 ft. The hole continued past this to a depth of 601 ft and ended in a rhyolite fragmental. No report is provided with the drill hole log, nor is there mention of any assay results.

M. Tremblay completed a number of small work programs in the property area between 1990 and 1993 for which he filed assessment reports with the MNDMF. Work completed included prospecting, VLF surveys, rock and soil geochemical sampling, and overburden stripping. Power stripping and trenching was completed on a surface gold showing discovered through prospecting. Grab samples from selected parts of the outcrop returned values of up to 3.4 g/t Au.

Operation Chapleau was completed in the 1970s and was the fifth in a series of Ontario Department of Mines helicopter-supported regional mapping projects. Two regional geology maps were produced during this program as well as a geology report. In the early 2000s, OTH was conducted by the OGS and was designed to encourage exploration by collecting and releasing new geoscience information. An aeromagnetic survey, the Kapuskasing-Chapleau survey, was released in 2002 and covered a portion of the Borden Lake property. A total of 105,848 line-km were surveyed with a traverse line spacing of 200 m and control line spacing of 1,600 m. Modern alluvium sampling was also a component of the OTH program and four reports were released that covered the area from south of Chapleau to north of Fraserdale along the Kapuskasing Structural Zone. Two reports, the Chapleau and Foleyet surveys, cover the Borden Lake project area and were released in 2001.

More recently in 2008, the Timmins Resident Geologist of the MNDMF visited the Tremblay-Robert property prior to Probe acquiring its option. A few outcrops were visited and some rock samples were sent for precious metal assay. Two samples returned values of 0.01 oz/t gold and 0.02 oz/t gold (Atkinson, 2008).

6.3 HISTORIC PRODUCTION

There has been no prior production from the Borden Lake property and there are no historical mineral resource or reserve estimates.



7.0 GEOLOGICAL SETTING AND MINERALIZATION

With the exception of Section 7.3, the following descriptions on regional/local/property geology have been compiled by Probe and are largely based on research papers on the KSZ by various authors, as well as a few reports released by the OGS. Most of the features described were verified by Micon during its site visit of 11 - 12 July, 2011. Based on its observations at site, Micon has edited Probe's descriptions where it deemed necessary.

7.1 **REGIONAL GEOLOGY**

The Borden Lake property claims are located in the Superior Province of Northern Ontario, an area of 1,572,000 km², which represents 23% of the earth's exposed Archean crust (Thurston, 1991). The Superior Province is divided into numerous subprovinces (Figure 7.1), each bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. These subprovinces can be classified into four types (Card and Ciesieliski, 1986):

- 1) Volcano-plutonic, consisting of low-grade metamorphic greenstone belts, typically intruded by granitic magmas, and products of multiple deformation events.
- 2) Metasedimentary, dominated by clastic sediments and displaying low grade metamorphism at the subprovince boundary and amphibolite to granulite facies towards the centres.
- 3) Gneissic/plutonic, comprised of tonalitic gneiss containing early plutonic and volcanic mafic enclaves, and larger volumes of granitoid plutons, which range from sodic (early) to potassic (late).
- 4) High-grade gneissic subprovinces, characterized by amphibolite to granulite facies igneous and metasedimentary gneisses intruded by tonalite, granodioritic and syenitic magmas.

Regionally, the KSZ, an elongate north to northeast-trending structure, transects the Wawa subprovince to the west, and the Abitibi subprovince to the east. It is a structurally discordant zone, bounded by abrupt changes in lithology and metamorphic grade indicative of faults. The KSZ is approximately 500 km 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). It is proposed that the KSZ is an east-verging thrust fault that has exposed an oblique section through 20 km of uplifted Archean crust. The KSZ is characterized by a high-grade gneiss terrain and grades westward into a central gneiss terrain and then into low-grade terrain of east-west-striking linear belts composed of supracrustal rocks. In addition to the major fault which forms the east boundary of the KSZ, three major northeast-striking faults



dip 60° to 70° northwest and are present within the uplift. These internal faults are west-sidedown with displacements of 7 to 10 km and result from a late tensional event that followed the compressional uplift (Sage, 1991).



Figure 7.1 Simplified Geological Map of the Superior Province of Ontario

The Borden Lake property lies at the intersection of the Wawa subprovince, the Kapuskasing Structural Zone and the Abitibi subprovince, primarily within the southernmost limits of the KSZ.

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 significant exploration and mining has occurred.

Except for minor lamprophyre dykes, bedrock in the Borden Lake area is Precambrian, the oldest rocks being the Archean metavolcanics and metasediments of the Abitibi and Wawa subprovinces. These belts are intruded by small mafic to ultramafic intrusions of various ages.

Colours differentiate the subprovinces. After Card and Cielieleski, 1986.



Several alkalic rocks such as carbonatite complexes along with lamprophyric dykes intruded along the KSZ, approximately 1,022 to 1,141 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 such complexes are known to occur. These include the Borden Township carbonatite complex, the Nemegosenda Lake alkalic complex, and the Lackner Lake alkalic complex.

7.1.1 Abitibi Subprovince

The Abitibi subprovince metavolcanic and metasediment assemblage extends its western edge from Quebec and terminates in the east at the junction with the KSZ. It is the largest greenstone belt in the world and has a high ratio of supracrustal rocks to intrusive rocks and in general is of a low metamorphic grade.

Typically bedding and tectonic fabric in the southern part of the Abitibi Greenstone Belt dip steeply to moderately (90° to 45°), and folds are east or west trending and upright. Steeplydipping shear zones are typically associated with the major gold camps and these zones include the Larder-Cadillac and the Porcupine-Destor zones which transect the belt over distances of 300 km in an easterly direction (Jackson and Fyon, 1991).

The Abitibi subprovince is subdivided into volcanic complexes distinguished by a mafic to felsic volcanic suite and associated intrusive and sedimentary rocks. Within the Chapleau area, there are three of these assemblages, namely the Swayze volcanic complex, the Deloro volcanic complex and the Kamiskotia volcanic complex (Thurston et al., 1977).

7.1.1.1 The Kamiskotia Assemblage

This greenschist facies assemblage comprises the synvolcanic, theoleiitic Kamiskotia gabbroic complex $(2,707\pm2 \text{ Ma})$ which is overlain by the Kamiskotia volcanic complex $(2,705\pm2 \text{ Ma})$. The emplacement of hornblende-biotite tonalite to granite intrusions (2,696 to 2,694 Ma) caused the western edge of the assemblage to become strained and metamorphosed. The igneous units dip near vertical and face north and east (Jackson and Fyon, 1991).

7.1.1.2 The Deloro Assemblage

Predominantly consisting of pillowed, commonly amygdaloidal and plagioclase-phyric, calcalkaline basalt and andesite, the Deloro assemblage is thought to be $2,703\pm3$ Ma at minimum. A regional aeromagnetic low with superimposed highs coincident with ultramafic intrusions characterize the assemblage (Jackson and Fyon, 1991). The intrusion of granitic rocks and the related compression have extensively modified the structural trends in the Deloro complex. It comprises mostly mafic metavolcanics with only minor metasediments and has greater abundance of mafic and ultramafic rocks than the nearby Swayze assemblage with minor pyroclastic and extrusive felsic metavolcanics. It terminates in the west with fault zones and granitic intrusions, potentially related to the KSZ. (Thurston et al., 1977).



7.1.1.3 The Swayze Assemblage

The Swayze complex in itself contains multiple sub-assemblages. Proterozoic dyke swarms are also present within the complex, the north-striking Matachewan swarm, the northwest-striking Sudbury swarm and the east to northeast-striking Abitibi swarm. In the Borden Lake area, these sub-assemblages include Muskego-Reeves, Horwood, Raney–Newton, Halcrow-Swayze, and Garnet-Tooms (Jackson and Fyon, 1991).

The Muskego-Reeves assemblage is defined on the west by the KSZ and a massive granodiorite to granite intrusion. It is greenschist to amphibolite facies, east striking, steeply dipping, and lithologically heterogeneous, with most of the assemblage comprising pillowed amygdaloidal basalt (tholeitic?) flows (Jackson and Fyon, 1991).

The greenschist facies Horwood assemblage is dominantly composed of massive, pillowed and amygdaloidal, iron-rich thoeliitic basalt, with associated flow breccia. Interlayered with the basalts are mafic and ultramafic sills and a few units of dacitic and rhyolitic flows, lapilli tuff, pyroclastic breccia and associated turbidites. On its eastern margin, the assemblage was intruded by the Hardiman Lake Pluton. In the Horwood Lake area, basalt flows face west, away from the Hardiman Lake Pluton and several shear zones occur which host several gold occurrences. The Hardiman shear zone strikes northeast, and a second northeast striking zone is believed to occur immediately to the north. Both are thought to illustrate oblique sinistral displacement (Jackson and Fyon, 1991).

The Raney-Newton assemblage is wedge-shaped, with its thickest part in the east. The assemblage consists of east-striking, south-facing, steeply dipping calc-alkalic andesitic, dacitic and rhyolitic flows, pyroclastic rocks and associated clastic metasedimentary rocks, commonly known as the Swayze series. In the northeast, greenschist facies basalt is predominant. Amphibolite facies is observed adjacent to the Kenogamissi batholith. In the west, past Rollo Lake, the assemblage thins and is truncated by the KSZ. It is primarily comprised of andesitic and rhyolitic flows and pyroclastic rocks along the north edge, and interlayered felsic metavolcanic and clastic metasedimentary rocks of the Swayze series along the south edge (Jackson and Fyon, 1991).

The greenschist to amphibolite facies Halcrow-Swayze assemblage is an east-trending package comprised of komatiitic flows, tholeiitic basalt, intermediate to felsic and calcalkalic metavolcanic rocks, interlayered with oxide-facies iron formation (Jackson and Fyon, 1991).

The greenschist to amphibolite facies Garnet-Tooms assemblage is truncated to the west by a north-striking fault, which juxtaposes the metavolcanic rocks against gneissic granodiorite. Several east-striking, east-closing folds occur in the west as well. Rock units consist of tholeiitic basalt, intermediate to felsic, calc-alkalic flows and fragmental rocks, and komatiitic flows and fragmental rock, interlayered with oxide-facies iron formation (Jackson and Fyon, 1991).



7.1.2 Wawa Subprovince

An aggregation of Archean greenstone belts and granitoid plutons, the Wawa subprovince is bounded to the north by the Quetic subprovince. The southern boundary is delineated by the Montreal River fault and is hidden beneath Lake Superior in the southwest. It extends from the KSZ in the east to the Proterozoic Trans-Hudson Orogen in the west. Its eastern boundary is thought to be transitional into the Chapleau block and Val Rita block and forms the southern and central parts of the KSZ (Williams et al., 1991).

Two linear concentrations of greenstone belts comprise the subprovince, one along the northern boundary with the Quetico and the other in the Mishibishu-Michipicoten-Gamitagama area, with the two zones being separated by belt-like domains of plutonic rocks. The Wawa subprovince is a granite-greenstone terrane in which disparate units, and well-defined greenstone belts of metamorphosed komatiite, basalt, dacite and rhyolite and associated metasedimentary rocks, are dispersed in granitoid rocks. The metasedimentary rocks include turbiditic wacke, minor conglomerate and iron formation. Stratigraphic and structural relationships between these units of volcanic and sedimentary rocks are usually unclear and commonly masked by later shearing (Williams et al., 1991). The eastern tip of the Michipicoten metavolcanic-metasedimentary belt is exposed to the southwest of Chapleau (Thurston et al., 1977). The Dayohessarah-Kabinakagami belt is located to the west of the project area.

The Michipicoten Greenstone belt is the largest within the Wawa subprovince extending approximately 140 km in length and 45 km in width. East striking supracrustal rocks occur and three discrete episodes of volcanism have been identified. It is stratigraphically and structurally complicated and comprises volcanic, sedimentary and plutonic rocks, metamorphosed to greenschist and amphibolite facies (Williams et al., 1991).

The Dayohessarah-Kabinakagami belt comprises poorly preserved, steeply dipping and strongly sheared, upper greenschist to epidote-amphibolite facies, mafic volcanic and clastic sedimentary rocks. Foliations range from north to east-striking. The assemblage boundaries are all against granitoid rocks. The supracrustal rocks are primarily composed of mafic volcanic rocks and subordinate quartz arenite, wacke, and rarely, conglomerate. Felsic volcanic rocks are rare and are difficult to distinguish from concordant sheets of deformed, intrusive granitoid. The rocks, especially the sedimentary units, are highly strained, as prominent foliation directions parallel the lithologic layering. Volcanic rocks, are elongate parallel to steeply plunging lineated amphibole and rarely contain pillow structures (Williams et al., 1991).

The tonalitic gneisses of the Wawa gneiss domain (WGD) are considered the oldest rocks in the Wawa subprovince although they are indistinguishable petrographically from younger rocks. Their extent is unknown. Near Chapleau, the tonalitic rocks extend form the eastern WGD northeast into the KSZ. The youngest supracrustal rocks of the WGD are located in the Borden Lake belt. The belt consists of deformed and metamorphosed mafic volcanic rocks, felsic porphyry, conglomerate and wacke (Heather et al., 1995).



7.1.3 Kapuskasing Structural Zone

In the 1980s and 1990s, the KSZ was intensely investigated from a geological and geophysical perspective using Lithoprobe as a window on the deep-crustal structure. The KSZ has been enigmatic since it was identified and has been interpreted in a variety of ways including as a suture, rift, transcurrent shear zone, or intracratonic thrust. A comprehensive three-dimensional image of Archean (2.75-2.50 Ga) crustal evolution and Proterozoic (2.5-1.1 Ga) cooling and uplift has been compiled from numerous studies of geochronology, geothermobarometry, and various geophysical probes. The favoured interpretation of the structure is as an intracratonic uplift related to Hudsonian collision (Percival and West, 1994).

The KSZ obliquely cuts the east-west trending Wawa and Abitibi subprovinces and is defined by strong positive gravity and aeromagnetic anomalies. In the Chapleau-Foleyet area, the gradient is gradual on the western margin, but abrupt on the east. This suggests a west-dipping contact between the Abitibi subprovince and the KSZ (Percival, 1983). Whereas the weakly metamorphosed volcanic belts of the Abitibi and Wawa subprovinces illustrate well preserved supracrustal sequences, the KSZ and WGD consist of high grade metamorphic rocks (Heather et al., 1995). The KSZ displays gravity and magnetic anomalies for most of its distance until south of Chapleau. The extensive study of the KSZ by Lithoprobe has allowed the structural frame of the Zone north of Chapleau to be constructed. However, the nature of its extension southwest into the WGD is relatively unknown due to the lack of geophysical expression and poor exposure (Zhang, 1999).

The KSZ comprises east-northeast-striking belts of paragneiss, mafic gneiss, tonalitic and dioritic rocks and units of the Shawmere anorthosite complex along with alkalic rocks such as carbonatite complexes. The paragneiss is layered, migmatitic, fine- to medium-grained, biotite-plagioclase-quartz rock, with some garnet and/or hornblende and/or orthopyroxene. Concentrations of quartz, biotite, garnet, or graphite are present in some layers and the overall quartz-rich composition implies that these rocks had a sedimentary origin. Mafic gneiss is a layered to homogeneous medium-to coarse-grained with a high calcium, high-alumina basaltic composition (Percival, 1983).

Numerous sharp truncations and offsets that indicate fault boundaries are apparent in the aeromagnetic expression. The outcrop pattern of granulite-grade rocks coincides well with groups of strong aeromagnetic anomalies over most of the KSZ (Percival and West, 1994). Using geological and geophysical characteristics, the rocks of the KSZ can be spatially defined into distinct blocks. The northern most block, the Fraserdale-Moosonee block, is represented by a positive aeromagnetic anomaly and high grade paragnesis. It is separated by a 65-km gap without granulites form the Groundhog River block which is characterized by high-grade metamorphic rocks and has an intense positive aeromagnetic anomaly with a negligible gravity signature. Brittle faults bound it on both the east and west margins. To the west, the Val Rita block grades from granulite facies in the northwest adjacent to the Lepage fault, to amphibolite facies in the Saganash Lake belt. In the south, the Chapleau block is also bounded by brittle faults to the southeast and northwest and is separated from the



Groundhog block by the Wakusimi River fault. It has a positive aeromagnetic and gravity signature and comprises metamorphosed to granulite facies units, including tonalite gneiss, and the Borden Lake belt that generally downgrade to the west into the WGD. The WGD is composed of tonalite, tonalitic and granodioritic orthogneiss plutons and kilometre scale belts of predominantly amphibolite facies mafic gneiss and paragniess, and occurs between the southern Val Rita block and Chapleau blocks and the Michipicoten greenstone block to the west. Towards the southern limits of KSZ, there is a relatively continuous metamorphic and structural gradient representing a 15-km thick section of accreted crust. This accreted crust consists of a series of metaplutonic and metasupracrustal belts. The largest and most extensive of the metasupracrustal belts is the Borden Lake belt (Burnstall et al., 1994), a 5 km by 25 km zone that strikes at a high angle across the amphibolite-granulite transition. (Percival and McGrath, 1986, Burnstall et al., 1994, Heather et al., 1995).





BLFZ: Budd Lake Fault Zone; BRF: Bad River fault; FF: Foxville fault; ILFZ: Ivanhoe Lake Fault Zone; KF: Kineras fault; SLF: Saganash Lake fault; WRF: Wakausimi River fault (after Percival and West, 1994).

The Chapleau block is believed to be transitional into the low grade granite-greenstone terrane of the Michipicoten belt or may be separated from the rest of the Wawa suprovince


by the Wakusimi and Lepage fault traces. It is an elongate block comprising highly metamorphosed supracrustal and intrusive rocks which have been altered to gneisses and migmatites, within the KSZ. It is north-northeast trending. To the east, the margin is defined by the Ivanhoe cataclastic zone; however, the western edge is poorly defined. The Chapleau block consists of granulite and upper amphibolite facies gneisses and foliated rocks, which can be assigned sedimentary, volcanic or igneous protoliths. Mafic and intermediate granulites, possibly of volcanic derivation, are intruded by the Shawmere anorthosite complex, which is a folded sill-like body that contains rocks with a highly calcic plagioclase. Foliation trends within the Chapleau block illustrate a shallow arc, from north-northeast in the east, to nearly easterly in the south. Dips vary, typically being moderate to the northwest. The pattern of foliation orientations and the location of lithologic units may be interpreted as being due to regional distortion of easterly trending units by sinistral ductile shears along the eastern margin of the KSZ. However, areas close to this eastern boundary, adjacent to the Ivanhoe Lake cataclastic zone, exhibit steep westerly dips and equivocal kinematic indicators (Williams et al., 1991).

Between Chapleau and Foleyet, the KSZ consists of northeast-striking, northwest-dipping belts of paragneiss, migmatitic mafic gneiss, ultramafic gneiss, dioritic to tonalitic gneiss and locally gneissic meta-anorthosite. Mafic rocks are characterized by garnet+diopside+orthopyroxene mineral assemblages indicative of high pressure granulite-grade metamorphism. To the northwest, lower grade mafic rocks are diospide-bearing but garnet is absent. (Hartel et al., 1996).

Three dyke swarms are present within the KSZ and provide constraints on its uplift history. These include the Matachewan $(2,454\pm2)$ Ma), the Biscotasing (2,167) Ma) and the Kapuskasing (2,040) Ma) dykes. The Matachewan dykes are absent in the Chapleau block but present in the Groundhog River block. They extend northwest for an estimated 500 km from a focal point near Lake Huron. The east-northeast trending Kapuskasing dykes occur within and west of the KSZ. The Biscotasing swarm trend east-northeast and occur east of the KSZ (Percival and West, 1994).

7.2 LOCAL AND PROPERTY GEOLOGY

The Borden Lake belt is an east-west trending, supracrustal assemblage occurring in the eastern part of the WGD. Current work suggests that it is comprised predominantly of metasedimentary units, including a distinctive polymictic metaconglomerate, with subordinate layers of mafic and felsic metavolcanics and mafic gneisses. The 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). Proximal to the Borden Lake belt, is the Borden Lake complex, an alkalic rock body with a Pb-Pb isochron age of 1,872 Ma (Bell et al., 1987).

In the vicinity of Borden Lake, deformed pebble metaconglomerate occurs in association with quartz wacke and amphibolite. An outcropping of the conglomerate consists of stretched-pebble metaconglomerate with a strong rodding lineation (Figure 7.3) and weak,



gently north-dipping foliation. The rock is a clast-supported conglomerate containing ~10% matrix of garnet-hornblende-biotite-quartz. The cobbles, which range up to 1 m in length, are felsic metavolcanics, metasediments, granodiorite, tonalite, plagioclase-porphyritic meta-andesite and amphibolite, with rare hornblendite and vein quartz. The metaconglomerate is spatially associated with amphibolite and paragneiss to the south on Borden Lake, and is cut by granite. However, the stratigraphic relations of the supracrustal rocks are unknown. Zircons dated at 2,664 \pm 12 Ma have been found in tonalitic cobbles extracted from the metaconglomerate. The zircons have a corroded appearance and produced discordant data points and, hence, this age is open to interpretation. The zircons could preserve the original crystallization age of the source pluton for the cobbles, or they could record a later deformation-metamorphic event (Percival et al., 1983).



Figure 7.3 Stretched-pebble Meta-conglomerate

Photograph taken by Micon during site visit, July, 2011.

Within the mafic metavolcanics and dioritic gneisses of the Borden Lake belt, there is layering (Figure 7.4) that parallels the steeply dipping gross lithological layering and constitutes the earliest recognized fabric which predates a 2,677 Ma granodiorite (Moser, 1994). Isoclinally folded, this foliation and an associated planar fabric are represented as flattened cobbles in the Borden Lake metaconglomerate.



Elsewhere in the KSZ, high-grade metamorphic rocks yield concordant U-Pb zircon dates of 2,650 to 2,627 Ma. Generally, U-Pb zircon dates are considered to record the age of crystallization of the zircons which, in this instance, are of metamorphic origin. As such, this would imply that metamorphism in the Kapuskasing zone occurred from 2,650 to 2,627 Ma ago, 25 to 50 Ma after tectonic stabilization of much of the rest of Superior province. A discrete burial and metamorphism event, restricted to the KSZ, could explain the deformed metamorphosed conglomerate cobbles from Borden Lake which have zircon dates of 2,664 Ma (Percival et al., 1983).



Figure 7.4 Layering in Meta-volcanics and Dioritic Gneisses

Photograph taken by Micon during site visit, July, 2011.

Following the early deformation within the WGD and the Michipicoten belt, the Borden Lake metaconglomerate, and potentially the whole supracrustal belt, appear to have been juxtaposed against the contiguous mid- to deep-crustal rocks. Therefore the relationship is unclear between the earliest deformation phases in the WGD to those in the Borden Lake supracrustal belt. If the Borden Lake belt is allochthonous, it was emplaced prior to the earliest structures that can be confidently demonstrated to affect both terranes These are younger than 2,667-2,664 Ma (conglomerate age), and may be 2,661 Ma, indicating that juxtaposition of this supracrustal belt and the surrounding gneiss had occurred by that time



(Moser, 1994; Burnstall et al., 1994). Burnstall et al., 1994 conclude that the Borden Lake belt, including the metaconglomerate, was finally assembled shortly before high grade metamorphism affected it at 2,660 Ma. Rapid burial of the Borden Lake conglomerate is inferred to have occurred from 2,667-2,660 Ma and movement on the Puskuta Shear Lake zone may have occurred in this period but the relationship between these two events is unknown.

Several models have been proposed to explain the Borden Lake conglomerate. These include an origin as part of a tectonic underplate (Krogh, 1993), a tectonically-buried Timiskamingtype conglomerate of the Swayze belt (Moser, 1994) and a tectonic sliver of the Timiskaming-type conglomerate ingested along an east-west transcurrent fault zone (LeClair et al., 1993). Percival and West (1994) indicate that given the <2,667 Ma age of the unit and evidence for continued high grade metamorphism in the KSZ during the period 2,665-2,625 Ma, the most likely explanation is the last.

A summary of the property geology is portrayed in Figure 7.5.



Figure 7.5 Local Geology Map of the Borden Lake Area

After Percival and West, 1994.

7.3 MINERALIZATION

Gold mineralization in the Borden Lake area occurs in a broad zone of disseminated and fracture controlled sulphides within a volcano-metasedimentary package of variable



composition. The main sulphides as identified using a hand lens are pyrite and pyrrhotite, with the former being more dominant. The mineralized zone is up to 120 m wide and is characterized by local silicification but clearly lacks lithological affiliation and quartz veining. The broad zone encompasses a wide range of lithologies, the main ones being mafic and felsic gneisses. Despite the lack of lithological control, the mineralization appears to be most intense wherever garnet is encountered in the volcano-metasedimentary package.

The mineralization consists of low to moderate grade gold with minor silver. Visible gold has been observed in the higher grade zones of the mineralization. The sulphides generally correlate to gold values but this relationship is not consistent. Drill hole intersections show an apparent high grade core sandwiched between lower grade mineralization in the hanging wall and footwall zones. The mineralization has been confirmed to be continuous over a strike length of about 1.6 km down to a vertical depth of about 345 m and remains open in all directions.



8.0 **DEPOSIT TYPES**

8.1 **DEPOSIT CLASSES**

The interpreted regional geology encompassing the Borden Lake property is conducive to a variety of deposits notably niobium-tantalum-phosphate in carbonatite ring complexes and epigenetic gold deposits which are spatially associated with secondary structures within, or in close proximity to, major regionally extensive structures. This section focuses on epigenetic gold mineralization which can be subdivided into epithermal and mesothermal styles although both styles are structurally controlled.

Epigenetic gold within the Borden Lake area had not been a significant exploration target prior to Probe's involvement in the area. The mesothermal gold types fall into three subclasses as follows:

- Auriferous quartz veins where gold occurs within extensional or shear fracture veins, often associated with pyrite or arsenopyrite.
- Altered wall rock (<u>+quartz veins</u>) where gold occurs mainly within the deformed and altered wall rock adjacent to the quartz veins.
- Disseminated gold associated with local silicification and disseminated sulphides.

The sub-class of mineralization is dependent upon host-rock characteristics, rheological properties and permeability; an overlap may exist between the classes, especially in the altered wall rock subclass.

The Borden Lake deposit is markedly different from most known Archean-aged mesothermal gold occurrences. On the basis of visual evidence, which is yet to be supported by detailed petrographic studies, Micon believes that the Borden Lake deposit belongs to the sub-class of disseminated gold noted above.

8.2 GENETIC MODEL

Epigenetic gold occurrences in general are often found to cluster within structurally complex areas that are characterized by regionally extensive faults or terrane-bounding structures, which most likely tapped deep fluid sources. These regional structures are the primary control on the location of epigenetic gold deposits. Intense deformational events within the KSZ accompanied by large-scale/widesread metamorphism and plutonism likely generated the fluids that were responsible for transporting and depositing gold.

Whilst detailed investigations of the Borden Lake deposit are underway, it is reasonable to postulate on the origin of the deposit as an Archaean copper-deficient gold porphyry. This is supported by the relatively low grade disseminated nature of the mineralization, lack of quartz veining and lithological control, existence of multiple/variable host rock intrusives of



acidic to intermediate composition, and dominantly feldspathic, chloritic and biotitic alteration, in addition to local silicification.



9.0 EXPLORATION

Probe began exploration of selected claims of the Borden Lake property in 2010. A VTEM geophysical survey was flown over the property prior to drilling.

9.1 VTEM AIRBORNE SURVEY

9.1.1 Program

Between 26 April and 2 May, 2010, Geotech Ltd. (Geotech) carried out a VTEM helicopterborne and aeromagnetic survey over the Borden Lake Block, see Figure 9.1. A total of 234.2 line-km of geophysical data were acquired during the survey. The Borden Lake Block was flown in a north to south (N 0° E/N 180° E) direction, with a traverse line spacing of 100 m wherever possible. Tie lines were flown perpendicular to the traverse lines at a spacing of 1,000 m in an east to west (N 90° E/N 270° E) flight direction. During the survey of the Borden Lake block, the helicopter was maintained at a mean height of 75 m above the ground with a nominal survey speed of 80 km/h. This allowed for a nominal EM sensor terrain clearance of 40 m and a magnetic sensor clearance of 62 m.

The data recording rates of the data acquisition were 0.1 sec for electromagnetics/ magnetometer and 0.2 sec for altimeter and GPS. This translates to a geophysical reading about every 2 m along flight track. Navigation was assisted by a CDGPS receiver and data acquisition system, which reports GPS co-ordinates as latitude/longitude and directs the pilot over a pre-programmed survey flight path.

The operator was responsible for monitoring of the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic feature. On return of the aircrew to the base camp, the survey data were transferred from a compact flash card (PCMCIA) to the data processing computer.

9.1.2 Results

Based on the geophysical results obtained, a number of interesting structures and anomalies were identified across the property. Preliminary results indicated a number of anomalies on the property, including a 700 m-long conductor located just south of the gold mineralization identified in outcrop. The airborne conductor, located along a horizon containing two other similar conductors, suggested the potential for an extensive mineralized zone and warranted follow up.

9.2 INTERPRETATION OF EXPLORATION INFORMATION

The geophysical technique employed is appropriate and effective in identifying structures of interest in the project area.



Higher EM conductances might be considered more typical of copper- and nickel-bearing mineralization, while low to moderate conductances might be considered more typical of the copper-zinc or the chromitite-platinum group mineralization. Zinc sulphide is not a notable conductor. Gold is an excellent conductor but does not typically occur in sufficient concentration to create a considerable anomaly. Accessory mineralization such as pyrite or pyrrhotite, if present with gold, may produce an anomaly that could indirectly indicate a gold bearing horizon or assist in following a known gold horizon but the existence of such a conductor does not imply a gold association. At Borden Lake, a number of the identified EM anomalies were found to be coincident with gold mineralization encountered in drill holes in the first phase drilling program which confirmed the discovery of the Borden Lake zone on claim number 4227868.



Figure 9.1 VTEM Survey I Flight Plan



10.0 DRILLING

Guided by the results of the 2010 VTEM airborne geophysical survey and the presence of the surface gold outcropping in the central part of the property, Probe conducted an initial diamond drilling program in the summer of 2010. The initial target was the gold outcrop occurrence coincident with the weak airborne conductor. With the positive results of the first phase drill program, a second phase drill program was initiated in December, 2010. At the time of writing of this report, the program is ongoing. As noted above, results to 31 July, 2011 have been used in the mineral resource estimate.

10.1 FIRST PHASE DRILLING

10.1.1 Program

The purpose was to confirm the gold discovery below surface. During July, 2010, eight drill holes of BQ size core were completed for a total of 787.9 m. The program was the first drilling on claim number 4227868 and all holes were collared on this claim. Norex Drilling Ltd. of Timmins, Ontario was contracted for the diamond-drilling program.

Collar positions and elevations were established using a hand held GPS. Down-hole surveys were conducted using a Reflex Survey instrument. The drill hole data are presented in Table 10.1. All co-ordinates are in NAD 83 UTM zone 17.

DDH Number	Easting	Northing	Azimuth (°)	Dip (°)	Elevation (m)	Depth (m)
BL10-01	330275	5303741	200	60	450	38
BL10-02	330244	5303682	20	60	445	128
BL10-03	330244	5303682	20	45	445	92
BL10-04	330244	5303682	200	45	445	95.2
BL10-05	330293	5303650	200	60	449	97
BL10-06	330317	5303698	200	60	451	134.5
BL10-07	330449	5303535	200	45	453	101
BL10-08	330135	5303520	200	45	437	104
					Total	789.7

Table 10.1Drill Hole Data for the July, 2010 Drilling Campaign

10.1.2 Results

Drill hole BL10-01was collared on the surface gold showing and drilled towards the southwest. The hole was stopped at 38 m due to uncertainty over the attitude of the rock units. The drill hole intersected felsic gneiss with a small 0.3-m intersection of pegmatite at 31 m. The felsic gneiss was predominantly paragneiss (classified as felsic gneiss (S)) with an 11-m intersection of orthogneiss (classified as felsic gneiss (G)) immediately above the pegmatite interval. Hole BL10-02 was collared 66 m to the southwest of BL10-01, with a



dip of -60° , and drilled in a northeast direction owing to observed foliations in nearby outcrop.

Hole BL10-03 was collared from the same setup, at a dip of -45°. Both holes intersected trace to 5% fine grained disseminated pyrite and pyrrhotite throughout, with sections of medium to coarse grained blebby, streaky and schlieren textures noted. Localized schlieren of sulphides within the alteration haloes was also noted. Alternating layers of pegmatite and orthogneiss or paragneiss were encountered in the drill core. The content of biotite and garnet varies in the orthogneiss from 5-60% biotite and/or 0-5% garnet; and two varieties are classified as biotite felsic gneiss and garnet biotite felsic gneiss, respectively. Other sub-classifications of felsic gneiss described in the core, based on mineral components and postulated origin include: mixed pegmatite (paragneiss), granitic (G) (orthogneiss), sedimentary (S) (paragneiss), conglomerate (C) (paragneiss), alkali feldspar rich (K-spar) (orthogneiss) and quartz pebble (QP) (paragneiss). Rocks vary from being massive and weakly foliated to moderately or well foliated, and from fine- through medium- to coarse-grained.

Drill hole BL10-04 was collared in the same location as BL10-02 and BL10-03 but the direction was changed to southwest. Detailed analysis of the core axes in BL10-02 and BL10-03 indicated that the units dip towards the northeast. BL10-05 and BL10-06 were drilled approximately 60 m to the southeast along strike of Holes BL10-01 to -04, with both being drilled in a southwest direction. BL10-06 was collared 55 m northeast of BL10-05. BL10-07 was collared 250 m southeast along strike of BL10-01 to -04 (190 m southeast of BL10-05) and drilled towards the southwest. All four drill holes, BL10-04, BL10-05, BL10-06 and BL10-07, intersected the same rock units as BL10-02 and BL10-03.

BL10-08 was collared approximately 200 m to the southwest of BL10-02,-3,-04 and drilled to test a parallel airborne EM conductor. The units consisted of alternating pegmatite and paragneiss of the sedimentary and quartz pebble varieties. The paragneiss contained trace to 2% disseminated pyrite and/or pyrrhotite. The hole ended in garnet biotite felsic orthogneiss that contained disseminated, streaky and blebby pyrite and pyrrhotite of 1% each.

10.2 SECOND PHASE DRILLING

10.2.1 Program

In December, 2010, a second phase program designed to follow up on the successful results of the summer program was initiated. Norex Drilling Ltd. of Timmins, Ontario was again contracted for the diamond-drilling program. One the three rigs deployed to the property is depicted on Figure 10.1. Phase II and subsequent drilling is all at NQ-sized core.





Figure 10.1 Boyles 35 Diamond Drill Rig in Northwest Section of the Borden Lake Deposit

Photograph taken by Micon during site visit, July, 2011.

The program, which is still in progress, has been successful in extending the initial discovery area to the northwest and southeast at 50 m-spacing over a total strike length of approximately 1,600 m and from surface to a depth of at least 340 m. The mineralized zone remains open in all directions. The drill hole data are shown in Table 10.2.

DDH Number	Easting	Northing	Azimuth	Dip	Elevation (m)	Depth (m)
Tumber			()	()	(111)	
BL10-09	330283	5303743	205	50	450	226
BL10-10	330283	5303743	205	70	450	275
BL10-11	330187	5303788	205	50	453	248
BL10-12	330187	5303788	205	70	453	275
BL10-13	330090	5303808	180	50	453	218
BL10-14	330090	5303808	180	70	453	239
BL10-15	329993	5303851	180	50	451	212
BL11-16	329993	5303851	180	70	451	215
BL11-17	329884	5303846	180	50	451	218

 Table 10.2

 Drill Hole Data for the December, 2010 to July, 2011 Drilling Campaign



DDH	Easting	Northing	Azimuth	Dip	Elevation	Depth (m)
Number			(°)	(°)	(m)	
BL11-18	329884	5303846	180	70	451	194
BL11-19	329783	5303865	180	50	445	182
BL11-20	329783	5303865	180	70	445	215
BL11-21	329691	5303917	180	50	443	74
BL11-22	329796	5304098	180	70	453	362
BL11-23	330097	5303966	180	70	454	344
BL11-24	329593	5303993	180	50	449	230
BL11-25	329593	5303993	180	70	449	242
BL11-26	330365	5303910	205	70	453	364
BL11-27	330353	5303700	205	50	453	209
BL11-28	330353	5303700	205	70	453	230
BL11-29	330460	5303653	205	50	454	206
BL11-30	330460	5303653	205	70	454	212
BL11-31	330544	5303608	205	50	457	206
BL11-32	330544	5303608	205	70	457	218
BL11-33	330638	5303559	205	50	463	221.5
BL11-34	330638	5303559	205	70	463	230
BL11-35	330720	5303512	205	50	462	107
BL11-36	330720	5303512	205	70	462	221
BL11-37	330812	5303464	205	50	454	227
BL11-38	330812	5303464	205	70	454	236
BL11-39	330904	5303421	205	50	451	251
BL11-40	330904	5303421	205	70	451	41.9
BL11-41	330904	5303421	205	75	451	248.6
BL11-42	330992	5303393	205	50	446	248
BL11-43	330992	5303393	205	70	446	242.7
BL11-44	330899	5303634	205	70	453	366.3
BL11-45	331030	5303344	205	50	443	267.2
BL11-46	330899	5303634	205	55	453	359
BL11-47	331030	5303344	205	70	443	266
BL11-48	331004	5303518	205	70	445	365
BL11-49	330957	5303300	205	50	448	203
BL11-50	330854	5303324	205	50	452	203
BL11-51	331004	5303518	205	55	445	323
BL11-52	330782	5303407	205	50	453	164
BL11-53	330707	5303693	205	55	457	302
BL11-54	330674	5303426	205	50	460	173
BL11-55	330597	5303482	205	50	461	173
BL11-56	330707	5303693	205	70	457	320
BL11-57	330511	5303505	205	50	454	174.8
BL11-58	330520	5303788	205	55	452	294
BL11-59	330418	5303571	205	50	452	130.8
BL11-60	330520	5303788	205	70	452	310.7
BL11-61	330334	5303635	205	50	449	191
BL11-62	330243	5303668	205	50	445	155



DDH	Easting	Northing	Azimuth	Dip	Elevation	Depth (m)
Number			(°)	(°)	(m)	
BL11-63	330700	5303474	205	50	462	221.2
BL11-64	330160	5303722	205	50	449	164
BL11-65	330757	5303481	205	50	458	215
BL11-66	330094	5303758	180	50	448	167
BL11-67	330757	5303481	205	70	458	227.8
BL11-68	329988	5303792	180	50	449	167
BL11-69	329883	5303809	180	50	448	152
BL11-70	330855	5303440	205	50	452	221
BL11-71	330855	5303440	205	70	452	215
BL11-72	329786	5303828	180	50	442	149.1
BL11-73	329693	5303963	180	50	449	242
BL11-74	330950	5303378	205	50	449	221
BL11-75	330950	5303378	205	70	449	257
BL11-76	329693	5303963	180	70	449	260
BL11-77	330677	5303535	205	50	464	221
BL11-78	329515	5304055	180	50	448	165.4
BL11-79	330677	5303535	205	70	464	221
BL11-80	329515	5304055	180	70	448	233.8
BL11-81	330597	5303584	205	50	461	228.6
BL11-82	330597	5303584	205	70	461	227
BL11-83	330507	5303624	205	50	454	189.4
BL11-84	329558	5304033	180	50	449	263
BL11-85	330507	5303624	205	70	454	206
BL11-86	329558	5304033	180	70	449	272
BL11-87	330403	5303665	205	50	453	200
BL11-88	330403	5303665	205	70	453	206
BL11-89	329643	5303953	180	50	445	227
BL11-90	330267	5303972	205	55	454	316.8
BL11-91	329643	5303953	180	70	445	212
BL11-92	329738	5303899	180	50	444	200
BL11-93	330267	5303972	205	70	454	329
BL11-94	329738	5303899	180	70	444	170
BL11-95	330267	5303972	205	85	454	314
BL11-96	329839	5303870	180	50	448	212
BL11-97	329839	5303870	180	70	448	200
BL11-98	329991	5304071	180	50	454	320
BL11-99	329991	5304071	180	70	454	230
					Total	20,872.6

10.2.2 Results

All the drill holes in the second phase program intersected the same rock units as in the first phase program. A new unit, the Quartz Feldspar Porphyry (QFP), was encountered and occurs as quartz and feldspar phenocrysts within a siliceous matrix. It is believed that the quartz pebble felsic paragneiss unit may actually be a textural variant of the QFP, however,



the nomenclature has not been changed at this time and further study is required to link these lithological units.

All the holes intersected broad zones of low-grade gold mineralization with localized small high grade intervals. The mineralized intervals are summarized in Table 10.3. The layout of the drill holes for both the July, 2010 and December, 2010 to July, 2011 drilling campaigns is presented in Figure 10.2.

DDH Number	Location ¹	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)
BL10-02	0 m NW	4	23	19	0.4	
BL10-02		37	128	91	2.0	
including		73	84	11	3.5	
also including		91	112	21	3.2	
also including		106	111	5	5.3	
BL10-03	0 m NW	5.2	32.7	27.5	0.4	
BL10-03		46	52.2	6.2	0.7	
BL10-03		60.2	69.8	9.6	0.6	
BL10-03		83	92	9	0.4	
BL10-04	0 m NW	5	83	78	0.7	
including		19	54.6	35.6	1.1	
BL10-05	60 m SE	11	97	86	1.0	
including		23	57	34	1.7	
including		44	49	5	4.4	
BL10-06	60 m SE	26	31	5	0.8	
BL10-06		58.6	134.4	75.8	0.9	
including		58.6	80	21.4	1.4	
BL10-07	260 m SE	34	57	23	1.2	
BL10-07		92.1	101	8.9	0.7	
including		92.1	97	4.9	1.0	
BL10-09	0 m NW	19	195	176	0.5	
including		53	131	78	0.9	
also including		174	195	21	0.6	
BL10-10	0 m NW	19	201	182	1.1	
including		39	151	112	1.7	
including		71	112	41	3.3	
including		85	95.7	10.7	6.5	
BL10-11	100 m NW	6	200	194	0.5	
including		12	69.3	57.3	0.6	
also including		85.9	95.2	9.3	1.2	
also including		122.5	153	30.5	1.2	
BL10-12	100 m NW	4.8	207	202.2	0.4	
including		4.8	142	137.2	0.6	
including		99	142	43	1.3	

Table 10.3
Summary of the Mineralized Intervals in the July, 2010 and December 2010 to July, 2011 Drill Holes



DDH Number	Location ¹	From	То	Width	Au	Ag
		(m)	(m)	(m)	(g/t)	(g/t)
BL10-13	200 m NW	8	184.2	176.2	0.7	
including		70.5	137	66.5	1.4	
including		81.3	130	48.7	1.8	
including		86	118	32	2.1	
BL10-14	200 m NW	4	191.8	187.8	0.7	
including		4	127	123	1.0	
including		60	127	67	1.5	
including		76.7	102.6	25.9	2.4	
including		86	102.6	16.6	2.8	
BL10-15	300 m NW	56	133.5	77.5	1.0	
including		91.6	114.1	22.5	1.8	
BL11-16	300 m NW	64	140.5	76.5	1.1	
including		78.3	83.5	5.2	1.5	
also including		108.3	140.5	32.2	1.8	
BL11-17	400 m NW	27	118.9	91.9	0.6	
including		72.7	118.9	46.2	0.9	
also including		95.1	118.9	23.8	1.2	
BL11-18	400 m NW	101.7	127	25.3	0.9	
BL11-19	500 m NW	74.7	122	47.3	0.9	
including		106	122	16	1.4	
BL11-20	500 m NW	64	134.2	70.2	1.1	
including		101.1	109.4	8. <i>3</i>	1.8	
also including		114	123	9	1.2	
0		185.8	190.4	4.6	3.0	
		206.8	208.7	1.9	3.0	
BL11-21	600 m NW	abandoned				
BL11-22	500 m NW	234	253	19	0.7	
		288	336.4	48.4	0.5	
		351	361.6	10.6	0.8	
BL11-23	200 m NW	139.2	173	33.8	0.6	
BL11-23		205	249	44	1.1	
including		210	220	10	1.4	
also including		224.9	231	6.1	2.2	
BL11-24	700 m NW	96	100	4	0.8	
		133	181	48	0.7	
		202	215	13	1.0	
BL11-25	700 m NW	44	68	24	0.8	
		83.6	90	6.4	0.7	
		119	123	4	1.9	
		143.2	222.3	79.1	0.7	
including		180	210	30	0.9	
BL11-26	50 m NW	161	280	119	0.7	
including		199	247.7	48.7	1.1	
BL11-27	100 m SE	88.1	197	108.9	1.1	



DDH Number	Location ¹	From	То	Width	Au	Ag
		(m)	(m)	(m)	(g/t)	(\mathbf{g}/\mathbf{t})
including		91.8	103.5	11.7	3.7	
also including		169	183	14	1.6	
BL11-28	100 m SE	45.4	182.2	136.8	1.2	
including		74.6	142	67.4	1.8	
also including		76	86.3	10.3	6.1	
BL11-29	200 m SE	65.4	185.9	120.5	0.8	
including		106.3	156.0	49.7	1.0	
BL11-30	200 m SE	70	197	127	0.8	
including		88.5	157.6	69.1	0.9	
including		136.0	157.6	21.6	1.4	
BL11-31	300 m SE	81	128.6	47.6	0.5	
including		81	104.5	23.5	0.6	
BL11-31	300 m SE	195	200	5	0.8	
BL11-32	300 m SE	73	199.7	126.7	0.8	
including		104.6	120	15.4	1.4	
also including		149	163.7	14.7	2.0	
BL11-33	400 m SE	71.5	76	4.5	0.9	
BL11-33	400 m SE	123.5	206	82.5	0.6	
including		123.5	188	64.5	0.7	
including		144.7	151	6.3	1.0	
BL11-34	400 m SE	111	200	89	0.8	
including		111	187	76	0.9	
including		131.1	136.2	5.1	1.8	
also including		151	171.6	20.6	1.4	
BL11-36	500 m SE	109	205.7	96.7	0.8	
including		149.4	181	31.6	1.2	
including		159	170.6	11.6	1.8	
BL11-37	600 m SE	99.8	198	98.2	0.5	
including		138	153	15	0.9	
including		138	147.1	9.1	1.4	
BL11-38	600 m SE	133	213	80	0.7	
including		142	180.8	38.8	1.3	
including		169	175.3	6.3	3.1	
BL11-39	700 m SE	42	43	1	11.4	
BL11-39		139	154.3	15.3	0.6	
BL11-39		173	201.6	28.6	0.7	
BL11-40 (lost)	700 m SE	25.4	36	10.6	0.5	
BL11-41	700 m SE	134	224	90	0.5	
including		154.3	202	47.7	0.7	
including		164	175	11	1.2	
BL11-42	800 m SE	31	34	3	4.2	
BL11-42		149	210	61	0.4	
including		149	171	22	0.5	
also including		185	198	13	0.5	
BL11-43	800 m SE	158	202	44	0.9	



DDH Number	Location ¹	From	То	Width	Au	Ag
		(m)	(m)	(m)	(g/t)	(g/t)
including		158	192	34	1.1	
BL11-44	600 m SE	260	301.5	41.5	1.4	
BL11-45	850 m SE	120	168.5	48.5	0.4	
including		148	168.5	20.5	0.6	
BL11-46	600 m SE	200	280.6	80.6	0.5	
including		258	280.6	22.6	1.1	
BL11-47	850 m SE	16	19	3	3.8	
BL11-47		118	195	77	0.5	
including		140	160	20	0.9	
including		149	160	11	1.2	
BL11-48	750 m SE	56.2	58	1.8	1.8	
BL11-48		206.3	284	77.7	0.7	
including		206.3	267	60.7	0.8	
including		232	264.7	32.7	1.1	
including		235	253	18	1.4	
BL11-49	800 m SE	50	100	50	0.3	
including		59.9	78	18.1	0.5	
BL11-49	800 m SE	59.9	78	18.1	0.5	0.7
BL11-49		95	100.0	5.0	0.8	2.3
BL11-50	700 m SE	36	44.6	8.6	1.1	0.8
BL11-50		112	121	9.0	0.7	0.4
BL11-51	750 m SE	162.0	283.7	121.7	0.6	0.5
including		228.0	262.0	34.0	1.5	0.9
BL11-52	600 m SE	74.0	110.0	36.0	0.5	0.4
BL11-53	400 m SE	168.2	265.0	96.8	0.7	0.6
including		168.2	200	31.8	0.9	0.7
including		185.0	200	15.0	1.1	0.8
also including		229.7	253.3	23.6	1.1	0.7
BL11-54	500 m SE	42.2	71.0	28.8	1.0	0.7
including		42.2	54.7	12.5	1.6	1.0
BL11-55	400 m SE	4.1	31.0	26.9	0.5	1.0
BL11-55		69.0	151.0	82.0	0.7	0.6
BL11-56	400 m SE	161.0	267.0	106.0	0.6	0.4
including		167.7	187.0	19.3	1.0	0.6
BL11-57	300 m SE	9.5	12.0	2.5	0.8	2.4
BL11-57		19.7	26.2	6.5	0.6	1.2
BL11-57		74.6	121.0	46.4	0.8	0.5
including		115.6	121.0	5.4	2.0	0.4
BL11-58	200 m SE	89.0	113.0	24.0	1.5	0.3
including		101.0	113.0	12.0	2.9	0.4
BL11-58		132.2	273.0	140.8	0.8	0.6
including		158.0	218.7	60.7	1.5	0.8
including		162.1	188.0	25.9	17	0.8
also including		2017	218.7	17.0	2.0	11
BI 11-59	200 m SF	Δ1	127.0	122.0	0.6	0.6
	200 11 51	7.1	147.0	144.1	0.0	0.0



DDH Number	Location ¹	From	То	Width	Au	Ag
		(m)	(m)	(m)	(g/t)	(g/t)
including		10.0	22.0	12.0	0.7	1.6
also including		55.0	69.0	14.0	1.5	0.9
also including		114.5	122.0	7.5	1.9	0.5
BL11-60	200 m SE	139.0	288.0	149.0	0.7	0.5
including		176.0	205.0	29.0	1.3	0.6
also including		214.0	239.5	25.5	1.4	0.6
BL11-61	100 m SE	17.0	130.6	113.6	0.5	0.7
including		28.0	62	34.0	0.7	1.3
including		34.0	49.2	15.2	1.0	1.4
BL11-62	0 m NW	4.0	144.0	140.0	0.5	0.8
including		4.0	51.0	47.0	1.0	1.7
BL11-63	500 m SE	122.0	158.0	36.0	0.5	0.5
BL11-64	100 m NW	9.0	24.8	15.8	0.5	0.4
BL11-64		55.0	77.0	22.0	1.3	1.7
BL11-65	550 m SE	97.9	181.0	83.1	0.5	0.6
including		135.9	147.0	11.1	0.9	1.4
also including		167.0	181.0	14	0.6	0.3
BL11-66	200 m NW	10.0	87.0	77	1.2	1.2
including		33.5	75.0	41.5	2.0	1.6
including		43.0	58.0	15	3.0	1.6
BL11-66		149.0	156.0	7.0	1.1	0.6
BL11-67	550 m SE	121.2	206	84.8	0.5	0.6
including		138.3	168.3	30	0.8	0.9
including		143.0	158	15	1.1	1.1
BL11-68	300 m NW	22.2	123	100.8	0.6	0.6
including		42.0	59.2	17.2	0.9	0.7
also including		98.0	103	5	2.6	1.0
BL11-69	400 m NW	28.5	99	70.5	0.6	0.6
including		73.8	99	25.2	1.1	1.1
BL11-70	650 m SE	135.8	196	60.2	0.7	0.9
including		135.8	151	15.2	1.5	2.3
BL11-71	650 m SE	144.8	205	60.2	0.6	0.6
including		144.8	169.8	25.0	1.1	1.1
BL11-72	500 m NW	48.4	110	61.6	0.9	0.8
including		66.1	103	36.9	1.3	1.0
including		84.7	103	18.3	1.7	1.0
BL11-73	600 m NW	37.0	44	7.0	1.5	0.6
BL11-73		130.0	175.4	45.4	0.8	1.0
including		141.0	155.3	14.3	1.1	1.4
BL11-73		202.8	210.7	7.9	1.1	0.9
BL11-74	750 m SE	4.4	8.7	4.3	1.9	0.2
BL11-74		121.0	176	55.0	0.5	0.5
including		158.0	174	16.0	0.9	0.2
BL11-75	750 m SE	140.0	208	68.0	0.6	0.7



DDH Number	Location ¹	From (m)	To (m)	Width	Au (a/t)	Ag
		(III)	(III)	(III)	(g/t)	(g/t)
including		142.0	162.2	20.2	1.1	1.5
BL11-76	600 m NW	45.0	54	9.0	1.1	0.6
BL11-76		142.9	211.3	68.4	0.5	0.6
including		180.0	193	13.0	0.6	0.7
BL11-77	450 m SE	4.3	18	13.7	0.5	0.2
BL11-77		132.8	162	29.2	0.6	0.9
including		132.8	145	12.2	0.8	1.4

¹ Discovery point is at location 0 m NW. Distances and directions measured from the discovery point.

Figure 10.2 Magnetic Map Showing Drill Hole Layout





11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SAMPLING INTERVAL CRITERIA

Sample intervals were identified based on changes in lithology, structure, alteration and mineralization. Generally, samples of 1 m were taken in longer sections of similarly mineralized rocks. However, sample size was reduced to as low as 0.4 m in areas of particular interest or where lithology and mineralization were distinct.

11.2 SAMPLING METHODOLOGY

The geologist identifies and marks the beginning and the end of the sampling intervals and prepares a detailed geologic log including lithology, alteration, mineralization and structure. In addition, a detailed written and graphical description is also included in the log sheet. Before sampling, a geotechnical description is recorded, paying particular attention to core recovery.

Upon completion of the logging and demarcating the sample intervals, technicians saw the core in half with a diamond saw (Figure 11.1), except for material which is highly fractured and/or carrying clay minerals, and which is divided manually with hammer and chisel. One half of the core is bagged, tagged with a sample number and then sealed; the other half is put back in the core boxes and kept as a reference and check sample in the event that duplicate assays are required.



Figure 11.1 Technician Using a Diamond Saw at Probe's Drill Core and Sample Facility, Chapleau

Photograph taken by Micon during site visit, July, 2011.



All core samples are recorded in the geological drill logs and in a sample chain of custody spreadsheet. While samples are en route, the chain of custody spreadsheet is e-mailed to the receiving laboratory.

For quality control (QC) purposes, each sub-batch consists of a duplicate, blank and two standards which are always positioned at the same sample location of each sub-batch. Repetitive QC positioning eliminates the chance of a duplicate from the laboratory (quality control procedure for the laboratory) being run on a submitted duplicate, blank or standard and also reduces the chances of mistakes at the sampling stage.

11.3 MICON COMMENTS

Micon is satisfied that Probe's sampling protocols are in line with the CIM best practice guidelines. No drilling, sampling or recovery factors have been identified that could result in sampling bias or otherwise materially impact the accuracy and reliability of the assays and, hence, the resource database.

11.4 PROTOCOLS BEFORE DISPATCH OF SAMPLES

11.4.1 Sample Packaging and Security

A tag with sample identification (ID) number was placed in each sample bag before being sealed. The sample ID number is also written on the outside of the sample bag. The position of the samples on the remaining half cores is marked with a corresponding ID tag. Samples are then grouped into batches before being placed into rice bags. Each rice bag is also sealed before being dispatched (Figure 11.2).



Figure 11.2 Sealed Rice Bags Ready for Dispatch

Photograph taken by Micon during site visit, July, 2011.



Other than the insertion of control samples as described in Section 11.2, above, there is no other action taken at site. Thus, no aspect of pre-analysis sample preparation is conducted by an employee, officer, director or associate of Probe.

Samples from the Borden Lake diamond drill core were initially sent to Accurassay Laboratories (Accurassay) in Thunder Bay, Ontario, up to drill hole BL10-28. Subsequently, all samples have been sent to Activation Laboratories Ltd. (Actlabs) in Thunder Bay, Ontario.

Both Accurassay and Actlabs provide analytical services to the mining and mineral exploration industry and are registered under the ISO 9001:2000 quality standard.

11.5 LABORATORY PROTOCOLS

11.5.1 Security

Upon receipt of the samples, laboratory personnel ensure that the seals on rice bags and individual samples have not been tampered with. Thereafter, the laboratory acknowledges delivery of the sample shipment in good order. Sample preparation and analysis were carried out at the respective Accurassay or Actlabs laboratories.

11.5.2 Sample Preparation

Samples are prepared by drying, if necessary, then the entire sample is crushed to a nominal minus 10 mesh (1.7 mm), mechanically split (riffle) to obtain a representative sample and then pulverized to at least 95% minus 150 mesh (106 μ m).

11.5.3 Analyses

The analytical techniques/procedures employed by Actlabs are detailed below. These are broadly similar to those employed by Accurassay.

<u>Gold - 1A2 - (1A2-50) Au Fire Assay - AA</u>

Fire Assay Fusion

A sample size of 30 g is applied for rock pulps. The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, intermediate 950°C and finish 1060°C, the entire fusion process should last 60 minutes. The crucibles are then removed from the assay furnace and the molten slag (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au.

AA Finish

The entire Ag doré bead is dissolved in aqua regia and the gold content is determined by AA (Atomic Absorption). AA is an instrumental method of determining element concentration by introducing an element in its atomic form, to a light beam of appropriate wavelength causing the atom to absorb light



- atomic absorption. The reduction in the intensity of the light beam directly correlates with the concentration of the elemental atomic species.

Code 1A2 (Fire Assay-AA) De	etection Limits (ppb))
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Element	Detection Limit	Upper Limit
Au	5	3,000

Note: If value exceeds upper limit, reanalysis by Fire Assay-Gravimetric (Code 1A3) is recommended.

1A3 - (1A3-30 or 50) - Au Fire Assay - Gravimetric

Fire Assay

A sample size of 30 g is applied for rock pulps. The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, intermediate 950 °C and finish 1060 °C, the entire fusion process should last 60 minutes. The crucibles are then removed from the assay furnace and the molten slag (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au.

Au is separated from the Ag in the doré bead by parting with nitric acid. The resulting gold flake is annealed using a torch. The gold flake remaining is weighed gravimetrically on a microbalance.

Code 1A3 (Fire Assay-Gravimetric) Detection Limits (g/tonne)

Element	Detection Limit	Upper Limit
Au	0.03	10,000

<u>Silver</u> <u>1E - Aqua Regia – ICP (ACQUAGEO)</u>

0.5 g of sample is digested with aqua regia for 2 hours at 95 $^{\circ}$ C. Sample is cooled then diluted with deionized water and homogenized. The samples are then analyzed using a Varian Vista ICP for the 9 element suite.

A series of USGS-geochemical standards are used as controls. This digestion is near total for base metals however will only be partial for silicates and oxides.

Code 1E Elements and Detection Limits (ppm)

Element	Detection Limit	Upper Limit
Ag*	0.2	100

Notes: * Element may only be partially extracted.

Assays are recommended for values which exceed the upper limits.



11.6 QUALITY CONTROL MEASURES

11.6.1 Probe Mines

Probe employs an internal quality assurance/quality control (QA/QC) program where each batch of 40 samples includes one duplicate of a sample, one blank sample and two internationally-certified reference materials (ICRMs, also known as standards), one quarter-sawn field duplicate, a coarse reject duplicate, and a pulp duplicate. Under the pass/fail criteria for the gold standard, if measured concentrations in standards differ from accepted values by more than three standard deviations, the entire batch fails and is re-analyzed. Probe's QA/QC program is supervised by Tracy Armstrong, P.Geo., of P&E Mining Consultants Inc.

11.6.2 Accurassay Laboratories

Accurassay is one of only two ISO/IEC 17025 with CAN-P-1579 registered laboratories in North America. The accreditation process allows laboratories to demonstrate proof of their technical competence and ability to meet a performance benchmark. Accreditation by the Standards Council of Canada (SCC) requires on-site assessment of the laboratory by auditors knowledgeable in the field. Accreditation also requires continued participation in proficiency testing programs.

Accreditation covers virtually all aspects of the assay laboratory practices including standard operating procedures (SOPs), quality control and quality assurance methods and requires successful participation in the PTP-MAL performance testing program. Successful participation means being able to process submitted certified reference material with proper precision and accuracy on a regular (minimum annually) basis.

11.6.3 Activation Laboratories

Actlabs is the second of the two ISO/IEC 17025 with CAN-P-1579 registered laboratories in North America. The accreditation process allows laboratories to demonstrate proof of their technical competence and ability to meet a performance benchmark. Accreditation by the SCC requires on-site assessment of the laboratory by auditors knowledgeable in the field. Accreditation also requires continued participation in proficiency testing programs.

QA/QC forms an integrated part of the analyses performed and of the work of Actlabs. Actlabs' quality system monitors all steps and phases of its operations and has a defined policy that ensures that all staff working in the laboratories are competent to perform the work required. New employees are trained to perform specific tasks and their ability to perform these tasks is formally assessed. Staff are routinely evaluated and up-to-date training and performance records are maintained. Actlabs' in-house methods are fully validated before being used on client samples. Standard material and reagent lists are also maintained. As part of its quality system, Actlabs maintains a schedule for the maintenance and calibration of equipment used in the laboratory. Records of calibration and performance



parameters are maintained for both testing and measuring equipment. Actlabs routinely monitors and documents the reliability of its sampling of submitted samples to ensure that any sub-samples taken (e.g. from a crushed rock split) are reliable and representative of the original sample submitted.

11.6.4 Laboratory Control Charts for Quality Control Standards

As part of both of the laboratories' in-house QA/QC protocols, all data generated for quality control standards, blanks and duplicates are retained with the client's file and are used in the validation of results. For each quality control standard, control charts are produced to monitor the performance of the laboratory. Warning limits are set at ± 2 standard deviations, and control limits are set at ± 3 standard deviations. Any data points for the quality control standards that fall outside the warning limits, but within the control limits, require 10% of the samples in that batch to be reassayed. If the results from the re-assays match the original assays, the data are validated; if the reassay results do not match the original data the entire batch is rejected and new reassays are performed. Any quality control standard that falls outside the control limits is automatically reassayed and all of the initial test results are rejected.

11.7 MICON COMMENTS

The author considers the sample preparation, security and analytical procedures to be adequate to ensure credibility of the assays. The QA/QC procedures and protocols employed by Probe are sufficiently rigorous to ensure that the sample data are appropriate for use in mineral resource estimations.



12.0 DATA VERIFICATION

Micon verified the data used in this Technical Report by conducting a site visit to the Borden Lake project area, reviewing the results of QA/QC samples used by Probe, and validating the various components of the resource database.

12.1 SITE VISIT

The site visit was conducted by Charley Murahwi, P.Geo., from 11 to 12 July, 2011, in the company of David Palmer, Ph.D., P. Geo. (President and CEO of Probe). The objectives included the following:

- Review of the project geology.
- Verification of collar positions of drill holes and topographic features.
- Examination of drill cores and visual verification of mineralized intercepts.
- Partial validation of analytical results by comparing assays with drill core intercepts.
- Review of QA/QC protocols.

12.1.1 Field Observations

Field observations show that the broad zone of mineralization encompasses variable host metasedimentary rocks and intrusives of mostly acidic to intermediate composition, often with feldspathic, chloritic and biotitic alteration. The exposures are confined to the central part (discovery area) and the south eastern half of the deposit area. Some of the exposures seen are shown in Figure 12.1 Outcrop is virtually absent in the north-western third of the deposit area adjoining Borden Lake and overburden may be as much as 10 m thick.

Figure 12.1 Borden Lake Central Area Exposure

Note: Felsic gneiss (left side), garnet-biotite gneiss (right side). Photograph taken by Micon during site visit, July, 2011.



Collar positions of all drill holes completed as of 12 July, 2011 were examined and found to be well preserved and labelled. An example is shown in Figure 12.2.



Figure 12.2 Drill Hole Collar Site Showing Casing with Labelled White Plugs

Photograph taken by Micon during site visit, July, 2011.

12.1.2 Drill Core Examination

Examination of drill core shows that the gold mineralization is associated with disseminated sulphides (mostly pyrite) occurring in a broad zone within the volcano-metasedimentary assemblage. The assemblage comprises amphibolite, biotite gneiss, diorite, garnet-biotite gneiss, granite, felsic pegmatite, porphyritic diorite and sedimentary gneiss. Note that the names assigned to these lithologies will be confirmed only after petrographic studies are completed. Figure 12.3 shows a mineralized intercept in garnet-biotite gneiss.





Figure 12.3 Mineralized Intercept in Garnet-biotite Gneiss

Photograph taken by Micon during site visit, July, 2011.

Assay results generally match the mineralized intercepts observed in drill cores.

12.1.3 Review of QA/QC Protocols

QA/QC protocols are reasonable and were instituted by Ms. Tracy Armstrong, P.Geo., an independent specialist. Control samples used include blanks and certified standards. Each batch of 40 samples has two standards (a low and a high) and one blank. Earlier in the program Probe used sand supplied by the laboratory as a blank but, at the recommendation of Micon, this was later changed to using blanks that looked like the rest of the samples in order to monitor contamination during sample preparation. In addition to these measures, Probe also conducts check analyses of the sample pulps using a different laboratory.

Drill core handling, logging and sampling are conducted in a professional manner. The author did not identify any material issues in the QA/QC protocols

12.2 ANALYSIS OF QA/QC RESULTS

12.2.1 Repeat Analysis

Repeat analyses of over 500 sample pulps confirmed the initial results within reasonable variations.

12.2.2 Monitoring Reports and Control Charts

A detailed report prepared by Ms. Armstrong, P. Geo., is presented in Appendix 1. Analysis of the monitoring reports reveals that adequate control samples incorporating high quality



certified reference material (CRM), blanks and duplicates were used to ensure accuracy of the analytical database. In a few instances where standards failed, appropriate investigations were conducted and re-assaying was conducted whenever it was deemed necessary. Micon did not identify any flaws in the QA/QC protocols

12.3 RESOURCE DATABASE VALIDATION

The resource database validation conducted by Micon involved the following steps:

- Checking for any non-conforming assay information such as duplicate samples and missing sample numbers.
- Verifying collar elevations against survey information for each drill hole.
- Verifying collar coordinates against survey information for each drill hole.
- Verifying the dip and azimuth against survey information for each hole.
- Comparing the database assays and intervals against the original assay certificates and drill logs.

Some minor discrepancies were noted with duplication of sample intervals where duplicate analyses had been conducted. The necessary corrections were made.

12.4 CONCLUSIONS ON DATA VERIFICATION

Based on the foregoing data verification exercises, the author is satisfied that the database used for the resource estimate in this Technical Report was generated in a credible manner and is representative of the main characteristics of the Borden Lake gold deposit and therefore suitable for use in estimating the resource.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineralogical and metallurgical investigations have been initiated. At the time of writing this report, one metallurgical drill hole sited at the discovery point had been completed and sampled. SGS has been contracted to do conduct some preliminary investigations and this work is now in progress.



14.0 MINERAL RESOURCE ESTIMATES

Prior to conducting the resource estimate, the integrity of the entire database was validated as per the methodology described in Section 12.0 of this report.

14.1 DATABASE DESCRIPTION

14.1.1 Drill Holes and Assays

The Borden Lake gold deposit has been tested by more than 100 drill holes on a grid of 50 m and 100 m for the southeast and northwest sections, respectively, taking 2 to 4 holes per line at between 50 m and 100 m apart. The layout is depicted in Figure 10.2. The drill holes up to 31 July, 2011 cover a strike length of 1,600 m down to a maximum vertical depth of about 340 m. Several assay results are still pending. This resource estimate is based on the results for 78 drill holes which were available as of 31 July, 2011. The assay database consists of 5,000 samples for which the principal analyses were for gold and silver.

14.1.2 Lithology and Mineralization

To facilitate geological interpretation of the deposit, all the major rock types encountered in drill holes are documented in a "from-to" interval format. The major rock types that have been coded include granite, sedimentary gneiss, biotite gneiss, garnet-biotite gneiss, amphibolite/amphibole gneiss, diabase dyke, diorite, porphyritic diorite, pegmatite/mixed pegmatite, quartz-feldspar porphyry, quartz vein, mafic/ultramafic dykes, and casing. The overburden thickness is variable between 0 m and about 5 m. Sulphide mineralization has been recorded for each interval as being either not visible or sparsely/heavily disseminated.

14.1.3 Survey

The survey information recorded in the files includes collar co-ordinates, dip, azimuth and down-hole survey data. Collars were located using a Trimble GPS Pathfinder with a Zephyr antenna. Down-hole deviations were measured using the Reflex EZ-Shot system.

The landscape in the Borden Lake area is generally flat with occasional slight or barely noticeable undulations and, therefore, a digital terrain model is not critical to this initial resource estimate.

14.1.4 Specific Gravity

Specific gravity (SG) was determined on a total of 4547 samples at the Actlabs facility in Ancaster, Ontario, during the course of sample analyses. The SG was determined using the ASTM D854 Standard Test Method for Specific Gravity of Soils. The crushed sample passes the 4.75 mm sieve and the SG measurement is performed using a calibrated pycnometer.



The SG data set is representative of the whole range of lithologies intersected at Borden Lake. Details on the number of determinations and average value for each rock type are given in Table 14.1.

Lithology	No. of Samples	Minimum	Maximum	Average
Amphibolite	335	2.57	3.90	2.99
Biotite Gneiss	178	2.55	3.90	2.80
Casing	1	2.90	2.90	2.90
Diorite	296	2.36	2.89	2.72
Diabase Dyke	28	2.64	3.50	2.92
Garnet-Biotite Gneiss	616	2.61	3.80	2.87
Granite	608	2.57	3.80	2.70
Pegmatite	218	2.55	2.97	2.71
Quartz Vein	4	2.60	2.69	2.66
Sedimentary Gneiss	2,196	2.46	3.90	2.71
Ultramafic Dyke	68	2.65	3.90	2.95
Total	4,548	2.36	3.90	2.76

 Table 14.1

 Table Showing Number of SG Determinations and Average SG for Each Rock Type

The SG for quartz-feldspar porphyry was obtained by averaging the SGs for granite, pegmatite, quartz vein and sedimentary gneiss.

Bulk densities were assigned to each block during creation of the block model, as were all the mineralized domain codes.

14.1.5 Master Geological Database

A master database was created by importing the data described in Sections 14.1.1 to 14.1.4 in Excel spreadsheet files into the Surpac version 6.2 software and GEMS software. The Surpac software was used for solid modelling and statistics while the Gems software was used for the resource modelling.

14.2 ESTIMATION DETAILS

14.2.1 Overview of Estimation Methodology

The Borden Lake deposit initial mineral resource estimate has been conducted using a systematic and logical approach involving geological interpretation, conventional statistical analysis on raw data, solid creation, statistical analysis on composite sample data, geostatistical analysis, creation of interpolation parameters, block modelling, block model validation and classification.



14.2.2 Geological Interpretation

The mineralization straddles all the rock types comprising the volcano-metasedimentary assemblage, showing virtually no evidence of lithological control; hence the need to sample all drilled lengths as already mentioned in Section 11.0. This is typical in porphyry systems where fault structures predominate over lithology in controlling the mineralization. A statistical analysis of the rock types encountered in the samples enclosed within the Main Zone envelope shows that the most common/dominant rock type in the in the mineralized zone is sedimentary gneiss followed by garnet-biotite gneiss, and that the greatest concentration of gold mineralization occurs in the garnet-biotite gneiss. This is demonstrated in Table 14.2.

Lithology	No. of Samples	Minimum	Maximum	Mean
		(g/t Au)	(g/t Au)	(g/t Au)
Amphibolite	632	0.003	17.207	0.418
Biotite Gneiss	410	0.012	5.199	0.557
Diorite	150	0.003	3.340	0.305
Diabase Dyke	10	0.003	0.273	0.063
Garnet-Biotite Gneiss	2,118	0.003	27.029	0.787
Granite	1,405	0.003	16.300	0.679
Pegmatite	533	0.005	14.958	0.530
Quartz-Feldspar Porphyry	72	0.007	2.131	0.168
Quartz Vein	6	0.036	0.434	0.183
Sedimentary Gneiss	3,286	0.003	19.300	0.427
Ultramafic Dyke	47	0.003	1.104	0.091
Total	8,669	0.003	27.029	0.561

 Table 14.2

 Lithology and Gold Grade of the Samples Within the Main Zone Mineralization Envelope

Despite the lack of lithological controls, the main mineralized horizon at Borden Lake comprises a higher grade central core zone flanked by lower grade mineralization in the hanging wall and footwall (see Figure 14.1). This pattern is also evident from the deposit block model when viewed in section and plan (Appendix 3).

14.2.3 Statistics on Raw Assay Data

Statistical analysis of the raw assay data was conducted primarily to determine the mineralization indicator grade defining the envelope of the resource zone. The primary statistics of the raw assay data are presented in Table 14.3.





Figure 14.1 Schematic Generalized Section of the Borden Lake Deposit

Probe Mines Limited Website.

Variable	Result	
Number of Samples	14,917	
Minimum Value (g/t Au)	0.0025	
Maximum Value (g/t Au)	27.0290	
Mean (g/t Au)	0.3515	
Median (g/t Au)	0.0990	
Geometric Mean (g/t Au)	0.1029	
Variance	0.7438	
Standard Deviation	0.8624	
Coefficient of Variation	2.4536	
Sichel-t (g/t Au)	0.3977	

Table 14.3Primary Statistics of Raw Assay Data



The log-histogram shown in Figure 14.2 demonstrates a bimodal distribution with the boundary between populations at about 0.1 g/t Au. The log-cumulative frequency plot (Figure 14.3) similarly shows a clear-cut break at 0.1 g/t Au. Thus, 0.1 g/t Au was interpreted as representing the lower limit of the broad zone/envelope of gold mineralization.



Figure 14.2 Log-histogram of Raw Assay Values




Figure 14.3 Log-cumulative Frequency Plot for Raw Assay Values

14.2.4 Solid Creation/Modelling

Using a cut-off grade of 0.1 g/t Au, the bulk of the mineralization was captured into a Main Zone solid designated/coded as minz10. Four smaller subsidiary zones separated from the Main Zone by significant zones of waste (i.e. up to 10 m or more measured down-hole) and were modelled as individual entities and coded 20, 30, 40 and 50. Diabase and ultramafic dykes were modelled as waste code 11. The waste patches/xenoliths within the Main Zone solid were modelled as waste zones code 99. Points defining the limits of each solid were snapped to the end points of the appropriate drill hole intervals to ensure proper sample capture. Snapped points were validated through visual checks. Using an in-built module within the Surpac software, the volumes were verified to ensure that there were no intersections or invalid (open or shared) edges. The Main Zone solid encompassing waste zones comprising dykes and xenoliths and the four subsidiary mineralized zones are shown on Figure 14.4.



Figure 14.4 3D Isometric View of the Borden Lake Deposit Solids and Diamond Drill-hole Coverage



14.2.5 Compositing and Statistics on Composites

Composites were developed (within the mineralized solids/envelopes defined on a 0.1 g/t Au cut-off grade) using a 2-m run length down-hole and rejecting any lengths at the bottom limit which were less than 1 m. Composites were generated without applying a top-cut and this is appropriate because the scale of mining selection will be significantly larger than that of uncomposited samples.

Statistical analysis of raw assays and composite samples within the solids was performed to determine (a) population pattern(s), (b) top-cut value(s) and (c) global means. A summary of the statistical results is presented in Table 14.4.

Variable	Raw Assays	2-m Composites
Number of Samples	8,600	4,386
Minimum Value (g/t Au)	0.010	0.010
Maximum Value (g/t Au)	27.029	15.215
Mean (g/t Au)	0.556	0.555
Median (g/t Au)	0.291	0.316

 Table 14.4

 Summary Statistics on Composite Samples



Variable	Raw Assays	2-m Composites
Geometric Mean (g/t Au)	0.275	0.310
Variance	1.138	0.682
Standard Deviation	1.067	0.826
Coefficient of Variation	1.885	1.488
Sichel-t (g/t Au)	0.569	0.557

The 2-m composites population pattern yields a positively skewed histogram which, when transformed into a log (see Figure 14.5), demonstrates a copy book type of log-normal distribution implying that the sample composites within the mineralized solids constitute a single mineralization domain/population. Also noticeable on Figure 14.5 is the absence of outlier values and hence, no grade-capping was applied.



Figure 14.5 Log-histogram of 2-m Composite Samples

Using the Sichel-t estimator, the global mean of the composites within the Main Zone solid is 0.56 g/t Au. This is marginally lower than the 0.57 g/t Au for the raw assays, as expected because of the smoothing effect of compositing. The global mean value provides an indirect check on the average weighted grade of the block model.

14.2.6 Grade Variography

Only the Main Zone was considered for variographic analysis as the smaller, subsidiary zones do not have adequate sample coverage. A prerogative for accuracy in spatial analysis is that variography be conducted on data comprising a single population and, as noted above, this condition has been met. Accordingly, variography was conducted to define the continuity



of the mineralization to establish the maximum range/distance over which samples/drill hole intercepts may be correlated, and the optimum parameters for the search ellipse to be used in the interpolation of grades.

Initially a down-hole variogram was computed in order to establish the nugget effect. Thereafter, three variograms to cover the principal geometrical directions were computed and modelled using the nugget effect established from the down-hole variogram. The variogram details are presented in Appendix 2. The results are summarized in Table 14.5.

Element	Axis	Direction	Model	Nugget	Structure 1	Structure 1
			Туре		Sill	Range
Au	N/A	Down-hole	Spherical	0.41	0.34	40
Au	Major (y)	Along strike	Spherical	0.41	0.41	100
Au	Semi-major (z)	Down-dip	Spherical	0.41	0.41	100
Au	Minor (x)	Across strike	Spherical	0.41	0.20	50

Table 14.5Summary Results of Main Zone Variography

Based on the ranges of influence, the maximum distance over which drill intercepts and samples can be correlated along strike and down dip is 100 m, indicating a fairly continuous mineralization typical of disseminated sulphide bodies. The maximum dimensions of the radii of the search ellipsoid for grade interpolation of the Borden Lake deposit should not exceed 100 m by 100 m by 40 m for an Indicated resource. In the latter case, Micon notes that the mineralization envelope encompasses un-mineralized dykes and xenoliths, and therefore recommends a 50 m by 50 m grid for resource definition to the Indicated category. To upgrade the resource to the Measured level, a 25 m by 25 m grid is recommended.

14.2.7 Interpolation Technique

The inverse-distance-cubed (ID^3) interpolation method was selected as the most suitable to bring out grade patterns inherent in the deposit at a micro-scale due to waste inclusions resulting from xenoliths and/or dyke intrusions. However, Micon also ran a parallel estimate using the ordinary kriging (OK) as a check on the ID^3 results.

14.2.8 Block Model Definition/Description

The block model of the deposit covers a 3D block in UTM coordinates from 329,050 to 331,550 East, 5,302,700 to 5,304,600 North, and 0 m to 500 m Elevation. The lower limit was defined on the influence of the deepest drill hole. The upper limit, representing the topography and top of bedrock, was generated from the drill hole collars and logs. The model was rotated 30° clock-wise to align with the strike direction.

Based on the geometry of the deposit and drill hole spacing, a parent block size of y = 20 m, x = 10 m and z = 20 m was selected to fill the mineralization envelope. Partial per cents were used at the solid/mineralization envelope boundary to get an accurate volume



representation. A volume check of the block model versus the mineralization envelopes revealed a good representation of the volumes of the solids.

14.2.9 Interpolation/Search Parameters

In deriving the search radii for the search ellipsoid, Micon adopted a prudent approach and halved the maximum ranges of influence as determined by the variography (see Table 14.5). The search parameters adopted for the resource estimate are summarized in Table 14.6.

Variable	Pass 1	Pass 2	Pass 3
Х	50	100	250
у	50	100	250
Z	15	30	60
Minimum number of samples	6	4	3
Maximum number of samples	12	12	12
Maximum samples/drill hole	2	3	3

 Table 14.6

 Summary of Search/Interpolation Parameters

For all passes, the maximum number of samples per drill hole is designed to control the number of drill holes in the interpolation.

For Pass 1, the minimum number of samples and the maximum samples per drill hole for interpolation are designed to ensure that the nearest sample(s) is/are accorded the highest weighting and that a minimum of the three closest holes are used in the interpolation.

For Pass 2, the maximum number of samples per drill hole is designed to ensure a minimum of two drill holes in the interpolation, while the allowable minimum samples per interpolation are reduced to four to go beyond the limits of Pass 1.

For Pass 3, the minimum number of samples and the maximum number of samples per drill hole allows the bigger ellipse to fill all the space in the solid/wireframe using one drill hole.

14.2.10 Resource Modelling/Estimation and Categorization

Block grades for gold and silver were interpolated into the individual blocks of the mineralized domains/envelopes using the search parameters in Table 14.6 and the ID^3 function of the GEMS software. Grade smearing was minimized by restricting the influence of gold grades greater than 7 g/t to within a smaller ellipsoid of 25 m by 25 m by 7 m for the x, y and z directions, respectively. Ordinary kriging was used to run a parallel estimate to validate the results for gold.

Classification of the mineral resource is described below.



14.2.10.1 Indicated Resource

The Indicated resource category was assigned to coherent portions of the deposit covered by Pass 1 of the search ellipsoid, with each individual block being supported by a minimum of 4 holes. These areas are in zones where drilling has been completed on a 50 m by 50 m grid. Isolated blocks occurring as "islands" were excluded.

14.2.10.2 Inferred Resource

The Inferred resource category was assigned to Passes 2, 3 and 4 plus isolated Pass 1 areas. These areas have been drilled on a 100 m by 100 m grid but infill drilling to achieve a 50 m by 50 m grid is still in progress. The greater part of the Main Zone and all the subsidiary zones (coded 20, 30 40 and 50) are in the inferred category.

14.3 MINERAL RESOURCE ESTIMATE

The resource block model is shown in Figure 14.6.



Figure 14.6 Resource Block Model Showing Distribution of Gold Grades



The estimated resources are presented in Table 14.7 at a range of gold cut-off grades between 0.10 g/t Au and 2.00 g/t Au. A cut-off grade of 0.3 g/t Au has been selected for reporting the mineral resource estimate.

The 0.3 g/t Au cut-off grade was selected based on the cut-off grades being used for similar deposits elsewhere, including at the operating Malartic mine of Osisko Mining Corporation in Val d'Or, Quebec, and for the mineral resource estimate for the Côte Lake deposit at the Chester Lake property of Trelawney Mining and Exploration Inc., located between Sudbury and Timmins, Ontario.

Category	Cut-off Grade	Tonnes	Average	Contained	Average	Contained
	(g/t Au)		Gold Grade	Gold	Silver Grade	Silver
			(g/t Au)	(oz)	$(\mathbf{g/t} \mathbf{Ag})$	(oz)
Indicated	2.00	478,000	3.22	50,000	1.2	19,000
	1.00	2,635,000	1.68	142,000	1.1	93,000
	0.75	4,628,000	1.33	197,000	1.0	156,000
	0.50	7,426,000	1.06	253,000	1.0	227,000
	0.30	11,607,000	0.82	305,000	0.9	323,000
	0.25	13,388,000	0.74	320,000	0.8	354,000
	0.20	15,056,000	0.69	332,000	0.8	386,000
	0.10	18,596,000	0.58	350,000	0.8	450,000
Inferred	2.00	2,424,000	2.41	188,000	1.3	103,000
	1.00	30,888,000	1.42	1,406,000	0.9	890,000
	0.75	52,771,000	1.19	2,012,000	0.9	1,567,000
	0.50	92,665,000	0.94	2,796,000	0.9	2,794,000
	0.30	169,322,000	0.69	3,755,000	0.9	5,017,000
	0.25	193,039,000	0.64	3,965,000	0.9	5,857,000
	0.20	215,763,000	0.60	4,130,000	0.9	6,439,000
	0.10	253,427,000	0.53	4,317,000	0.9	7,171,000

 Table 14.7

 Borden Lake Gold Deposit Mineral Resource Estimate

Tonnes and ounces have been rounded to the nearest thousand.

Figures/numbers for resource tonnes and ounces may not tally due to rounding

At present there are no known environmental, permitting, legal, title, taxation, socioeconomic, marketing or political issues which would adversely affect the mineral resources estimated above. Mineral resources which are not mineral reserves, do not have demonstrated economic viability. There is no assurance that Probe will be successful in obtaining any or all of the requisite consents, permits or approvals, regulatory or otherwise, for the project. Other hindrances may include aboriginal challenges to title or interference with ability to work on the property, and lack of efficient infrastructure. There are currently no mineral reserves on the Borden Lake property and there is no assurance that the project will be placed into production.

The Qualified Person with overall responsibility for the preparation of this resource estimate is Charley Murahwi, M.Sc., P.Geo. He was assisted by Ing. Alan J. San Martin. Both are independent of Probe as defined in NI 43-101.



The effective date of the estimate is 23 August, 2011 and is based on drilling and assay data up to 31 July, 2011.

14.3.1 Resource Model Validation

The resource model was validated by visual inspection, running a parallel estimate using ordinary kriging, and by comparing the average weighted block model grade to the global Sichel-t estimate.

14.3.1.1 Visual Inspection

The resource block model was validated by visual inspection in plan and section to ensure that block grade estimates reflect the grades seen in intersecting drill holes. Typical sections are presented in Appendix 3 from which it is evident that the block grades are complemented by the drill hole intersections.

14.3.1.2 Ordinary Kriging

The results of a parallel estimate using ordinary kriging are similar to those obtained using the ID^3 method. This is demonstrated in Table 14.8.

Description	OK Blocks	ID³ Blocks
Number of blocks	57,533	57,533
Minimum value (g/t Au)	0.031	0.022
Maximum value (g/t Au)	6.431	8.617
Mean (g/t Au)	0.510	0.501
Variance	0.139	0.175
Standard Deviation	0.373	0.418
Coefficient of variation	0.731	0.834

 Table 14.8

 Summary of Global Results of ID³ Versus Ordinary Kriging

14.3.1.3 Global Mean Values

The block model mean values of 0.510 and 0.501 obtained using OK and ID³, respectively, compare favourably with a Sichel-t global mean estimate of 0.557 given in Table 14.4

14.3.2 Mineral Resource Statement

A summary of the estimated mineral resources at a cut-off grade of 0.30 g/t Au is given in Table 14.9.



Category	Cut-off Grade (g/t Au)	Tonnage	Average Grade (g/t Au)	Contained Gold (oz)	Average Silver Grade (g/t Ag)	Contained Silver (oz)
Indicated	0.30	11,607,000	0.82	305,000	0.9	323,000
Inferred	0.30	169,322,000	0.69	3,755,000	0.9	5,017,000

 Table 14.9

 Summary of the Borden Lake Mineral Resource Estimate

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

2. There has been insufficient exploration to define the inferred resources as an indicated or measured mineral resource. It is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.

As noted above, the 0.3 g/t Au cut-off grade was selected based on the cut-off grades being used for similar deposits elsewhere, including at the operating Malartic mine of Osisko Mining Corporation in Val d'Or, Quebec, and for the mineral resource estimate for the Côte Lake deposit at the Chester Lake property of Trelawney Mining and Exploration Inc., located between Sudbury and Timmins, Ontario.



15.0 MINERAL RESERVE ESTIMATES

Section 15.0 and the following NI 43-101 Technical Report sections (i.e. Sections 16.0 through 22.0) are not applicable to the current Borden Lake Gold Project report. Further work will need to be conducted by Probe prior to the inclusion of these sections in a Technical Report.

16.0 MINING METHODS

17.0 RECOVERY METHODS

18.0 PROJECT INFRASTRUCTURE

19.0 MARKET STUDIES AND CONTRACTS

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

21.0 CAPITAL AND OPERATING COSTS

22.0 ECONOMIC ANALYSIS



23.0 ADJACENT PROPERTIES

The following is a description of the properties adjacent to and within the greater region of the Borden Lake deposit. Micon has not independently verified the information contained in this section and notes that the information is not necessarily indicative of the character and tenor of mineralization on the Borden Lake property.

There are no properties directly adjacent to the Borden Lake deposit that are known to be similar in nature. It is the first reported discovery of a deposit of this type in the Chapleau-Foleyet region of the KSZ.

To the northeast of the project is the Nemegosenda niobium deposit of Sarissa Resources Inc. The property lies on the Chewett-Collins township boundary, 30 km northeast of the town of Chapleau, and 20 km to northeast of the Borden Lake deposit. In 1957, the Dominion Gulf Company reported a non 43-101-compliant resource of 17.6 Mt grading 0.48% Nb₂O₅.

The Nemegosenda Lake alkalic complex consists of arcuate rings and partial rings of gabbro, ijolite, fenite, nepheline syenite, carbonatite, malignite, syenite, and mafic syenite. The intrusion has been cut by numerous alkalic dikes. The complex comprises an inner syenite core and an outer rim comprising mafic syenites, pyroxenites and early-formed, fine grained, border phases. Sandwiched between is a mixed breccia zone containing fine grained pyrochlore in chaotic mix of silicates, carbonates and fenites. The complex contains a significant amount of niobium mineralization in the northeast part of the complex as indicated by diamond drilling completed in 1955-56 and 2008-2010. Tantalum is present only in very low concentrations. Exploration in the Nemegosenda complex has focused exclusively on niobium associated with magnetite and containing uranium and thorium (Chance, 2010).

To the southeast lies the Lackner Lake complex which is located approximately 20 km southeast of Chapleau and about 15 km east-southeast of the Borden Lake project. Historic exploration has disclosed niobium, iron, uranium, phosphorus, and rare earth element mineralization of potential economic interest (Sage, 1988). In the most recent past, Rare Earth Metals was exploring the property under an option agreement, which was terminated in August, 2010 (Rare Earth Metals Financial Statements, March, 2011).

To the south of Probe's Borden Lake property, Reliant Gold Corp. has staked a number of claims that comprise its Borden Lake South property. According to the company's website, Reliant has completed an airborne VTEM survey over its property but results and the potential for economic mineralization have not been announced.





Figure 23.1 Ownership of Claims Adjacent to the Borden Lake Property

Figure 23.2

Aeromagnetic Map Showing Location of Producers and Developed Prospects with Reserves Relative to the Property Bounds of the Borden Lake Deposit





24.0 OTHER RELEVANT DATA AND INFORMATION

All relevant data and information regarding the Borden Lake property has been disclosed under the relevant sections of this report.



25.0 INTERPRETATION AND CONCLUSIONS

25.1 EXPLORATION

Due to the general paucity of outcrops and thick overburden covering most of the northwestern extension of the deposit, soil- and litho-geochemical exploration techniques have limited application except in the original discovery area (i.e., central part of the deposit) where outcrop can be seen and overburden averages 1 m or less. This is confirmed by the fact that originally, the surface gold discovery was identified over a zone 150 m long by about 45 m wide. Subsequently, the VTEM airborne EM-magnetic survey completed by Probe helped to define the northwest and southeast extensions of the broad zone associated with the gold mineralization over a strike length exceeding 1.6 km.

25.2 GEOLOGY AND RESOURCES

The key attributes of the Borden Lake deposit are (a) the low grade/bulk tonnage/disseminated nature of the deposit, (b) lack of quartz veining, (c) lack of lithological control, (d) multiple/variable host metasedimentary rocks and intrusives of acidic to intermediate composition, and (d) dominantly feldspathic, chloritic and biotitic alteration in addition to local silicification. On the basis of these attributes, Micon believes it is reasonable to interpret the origin of the deposit as an Archaean-age copper deficient gold porphyry system. Probe has initiated detailed investigations to substantiate Micon's interpretation.

The broad zone of gold mineralization/disseminated sulphide is up to 120 m wide and more than 1.6 km in length along strike. At the time of writing this report, the deposit remains open in all directions. Silver is a minor but important component of the deposit.

At least three satellite mineralized zones to the Main Zone have been identified and are referred to as the SE, NE and Footwall satellites. The SE satellite is marked by an east-west trending magnetic high in the southeast and was intersected in holes BL11- 44, BL11- 46, and BL11- 56 above the hanging wall of the Main Zone. The NE satellite is marked by a north-northwest trending magnetic high in the northwestern part of the deposit area and was intersected in drill holes BL11- 22 and BL11- 23 above the hanging-wall of the Main Zone. The Footwall zone was intersected in drill hole BL 26 about 30 m below the footwall of the Main Zone.

The resource block model sections and plans demonstrate that, although the mineralization occurs within a broad zone of disseminated sulphide, there is a higher grade central core zone flanked by lower grade mineralization in the hanging and footwalls.

Variographic analysis of the deposit demonstrates that a spacing of 50 m between drill holes along strike and in section is likely sufficient to upgrade the resource to the Indicated category.



The mineral resource estimate at a gold cut-off grade of 0.3 g/t Au is summarized in Table 25.1.

Category	Cut-off Grade (g/t Au)	Tonnage	Average Grade (g/t Au)	Contained Gold (oz)	Average Silver Grade (g/t Ag)	Contained Silver (oz)
Indicated	0.30	11,607,000	0.82	305,000	0.9	323,000
Inferred	0.30	169,322,000	0.69	3,755,000	0.9	5,017,000

 Table 25.1

 Summary of the Borden Lake Mineral Resource Estimate

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

2. There has been insufficient exploration to define the inferred resources as an indicated or measured mineral resource. It is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.

25.3 METALLURGY

Mineralogical and metallurgical investigations have been initiated but no results are as yet available.



26.0 **RECOMMENDATIONS**

The initial mineral resource estimate of the Borden Lake deposit demonstrates significant potential for the development of a multi-million ounce mining project. Since the deposit is a low grade-bulk tonnage target, the success of the project is, among other things, heavily dependent upon achieving high metal recoveries and this will be determined through metallurgical testwork programs.

In view of the foregoing, Micon's recommendations are set out below.

26.1.1 Upgrading the Resource

26.1.1.1 Infill Drilling

Variographic analysis of the deposit demonstrates that a spacing of 50 m between drill holes along strike and in section is sufficient to upgrade the resource to the Indicated category. However, closer drilling may be necessary in a few instances where there is serious interference from barren diabase and ultramafic dykes in order to model the waste volume more accurately. Thus, the infill drill program should firstly focus on completing a 50 m x 50 m grid followed by additional infill holes wherever dyke shapes cannot be reasonably estimated. It is recommended that the grid coverage be down to a vertical depth of between 500 m and 600 m.

To avoid a situation where Inferred resources overlie Indicated resources, the projection of the mineralized zone to surface should be supported by a drill intercept not more than 50 m beneath the relevant surface; i.e. the distance between surface and the closest drill hole intercept should not exceed 50 m.

26.1.1.2 **Resource Model Requirements**

An air survey covering the Borden Lake project area and all the surrounding properties owned by Probe within the greater region, should be completed (ideally in autumn when vegetation cover is less intense) in order to generate a digital terrain model (DTM) to be used when updating the resource model and in future exercises on mine planning.

The next resource estimate should ideally be constrained within a pit shell to provide a preliminary overview of the likely mining economics of the project.

In future, all blanks used to monitor contamination between samples should look exactly the same as the other samples in the batch in order to avoid preferential attention. This, coupled with periodic check analyses of the sample pulps at an umpire laboratory, will ensure a high quality database.



26.1.2 Defining the Limits of the Resource

26.1.2.1 Main Zone

The main mass of the deposit is open in all directions. However, in the extreme northwest, the deposit is bounded by Borden Lake and cannot be drilled any further at this time. Thus, in the short term, increasing the resource is restricted to following the southeast strike and down-dip extensions. For the southeast extension, drilling should be conducted at 50 m intervals until termination of the mineralized zone. For the down-dip extension, deep drilling to intersect the main zone at over 500 m vertical depth should be conducted, initially at 200-m spacing along strike. This should generate a sizeable inferred resource.

26.1.2.2 Satellite Zones

At least three satellite mineralized zones have been identified, referred to as the SE, NE and Footwall satellites. The SE satellite is marked by an east-west magnetic high in the southeast and was intersected in holes BL11-44, BL11-46, and BL11-56 above the hanging wall of the Main Zone. The NE satellite is marked by a north-northwest trending magnetic high in the northwestern part of the deposit area and was intersected in drill holes BL11-22 and BL11-23 above the hanging wall of the Main zone. The Footwall zone was intersected in drill hole BL 26 about 30 m below the footwall of the Main Zone.

No separate drill holes are recommended at this stage as the deep drilling already recommended for the Main Zone will also intersect all the satellites, provided the step-out holes are placed along lines of holes BL11-22, 23, 26, 44 and 56.

26.1.3 Petrographic and Mineralogical Studies

Petrographic and mineralogical studies are recommended in order to confirm the genetic model of the deposit, understand the paragenetic sequence of the sulphides associated with the gold mineralization, and to complement and understand the metallurgical characteristics of the deposit.

26.1.4 Metallurgy

Detailed metallurgical investigations should be conducted simultaneously with mineralogical work to determine the metallurgical variability of samples at different levels of gold concentration within the entire envelope of the deposit. This should provide a grade recovery curve which will form the basis for flowsheet development for a subsequent economic model.

Following the completion of metallurgical investigations, a preliminary economic assessment (PEA) or scoping study should be conducted, followed by further detailed economic studies, if warranted.



26.1.5 Budget

In line with these recommendations, Probe has proposed a budget totalling \$12,300,000 for advanced exploration work in the 12 months commencing September, 2011. The proposed amount is broken down as shown in Table 26.1 and will, primarily, permit Probe to complete 70,000 m of drilling to upgrade and expand the mineral resource.

Item	Cost
	(\$)
Diamond Drilling	8,190,000
Assaying	1,878,000
Provisions	23,000
Geological	192,000
Support Services	720,000
Transport and Accommodation	74,000
Fuel	11,000
Property Work	38,000
Administration	825,000
Core Rack Area	11,000
SGS Mineralogical and Metallurgical	98,000
PA and Geological Modelling Support	240,000
Total	12,300,000

Table 26.1
Proposed Budget for Work on the Borden Lake Property

Micon considers that the proposed budget is reasonable and recommends that Probe proceeds with the proposed work program.



27.0 DATE AND SIGNATURE PAGE

MICON INTERNATIONAL LIMITED

Effective Date: August 23, 2011

Signing Date: October 6, 2011

"Charley Murahwi" {signed and sealed}

Charley Murahwi, M.Sc., P. Geo., Pr.Sc.Nat. Micon International Limited



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29.0 CERTIFICATE



CERTIFICATE OF QUALIFIED PERSON

CHARLEY Z. MURAHWI, P.GEO.

As the author of this report entitled "Technical Report on the Initial Mineral Resource Estimate for the Borden Lake Gold Deposit, Chapleau, Northern Ontario, Canada", dated October 6, 2011, I, Charley Z. Murahwi do hereby certify that:

- I am employed as a Senior Geologist by, and carried out this assignment for, Micon International Limited, Suite 900, 390 Bay Street, Toronto, Ontario M5H 2Y2, telephone 416 362 5135, fax 416 362 5763, e-mail <u>cmurahwi@micon-international.com</u>.
- 2) I hold the following academic qualifications:

B.Sc. (Geology) University of Rhodesia, Zimbabwe, 1979;

Diplome d'Ingénieur Expert en Techniques Minières, Nancy, France, 1987;

M.Sc. (Economic Geology), Rhodes University, South Africa, 1996.

- 3) I am a registered Professional Geoscientist in Ontario (membership # 1618) and in PEGNL (membership # 05662), a registered Professional Natural Scientist with the South African Council for Natural Scientific Professions (membership # 400133/09) and am also a member of the Australasian Institute of Mining & Metallurgy (AusIMM) (membership number 300395).
- 4) I have worked as a mining and exploration geologist in the minerals industry for over 30 years.
- 5) I do, by reason of education, experience and professional registration, fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 14 years on gold, silver, copper, tin and tantalite projects (on and off mine), 12 years on Cr-Ni-Cu-PGE deposits in layered intrusions/komatiitic environments and 3.5 years in the consultancy business.
- 6) I visited the Borden Lake mineral property from 11 to 12 July, 2011.
- 7) I have had no prior involvement with the mineral property in question.
- 8) As of the date of this certificate to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this report not misleading;
- I am independent of the parties involved in the Borden Lake mineral property as described in Section 1.5 of NI 43-101.
- 10) I have read NI 43-101 and the portions of this Technical Report for which I am responsible have been prepared in compliance with this Instrument.
- 11) I am responsible for the preparation of all sections of this Technical Report dated October 6, 2011 and entitled "Technical Report on the Initial Mineral Resource Estimate for the Borden Lake Gold Deposit, Chapleau, Northern Ontario, Canada".

Effective Date: August 23, 2011 Signing Date: October 6, 2011

"Charley Z. Murahwi" {signed and sealed}

Charley Z. Murahwi, M.Sc., P. Geo. Pr.Sci.Nat.



APPENDIX 1 QA/QC MONITORING REPORT



MEMORANDUM

SUBJECT:	2011 Quality Control Report for Borden Lake Drilling
DATE:	September 29, 2011
FROM:	Jarita Barry, AusIMM, Tracy Armstrong, P. Geo.
TO:	David Palmer

This report describes the results for 387 batches, which were treated from June 6 through August 27, 2011 and are described in Table 1.

All samples were sent to Activation Laboratories ("Actlabs") in Thunder Bay, Ontario for sample preparation and analysis. Gold was determined by lead-collection fire assay with AA finish, and silver was determined using aqua regia digest and ICP finish.

Table 1: List of Analytical Certificates Included in the 2011 QC Report

Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
1	117	A11-4094Final	Actlabs	June 06, 2011	40
2	118	A11-4095Final	Actlabs	June 06, 2011	40
3	119	A11-4096Final	Actlabs	June 06, 2011	40
4	120	A11-4097Final	Actlabs	June 06, 2011	40
5	121	A11-4098Final	Acthbs	June 16, 2011	40
6	122	A11-4099final	Actlabs	June 17, 2011	40
7	123	A11-4100final	Actlabs	June 16, 2011	40
8	124	A11-4101Final	Actlabs	June 16, 2011	40
9	125	A11-4102Final	Actlabs	June 06, 2011	-40
10	126	A11-4103Final	Actlabs	June 16, 2011	40
11	127	A11-4104Final	Actlabs	June 16, 2011	40
12	128	A11-4105final	Actlabs	June 17, 2011	40
13	129	A11-4106Final	Actlabs	June 06, 2011	40
14	130	A11-4107Final	Actlabs	June 16, 2011	40
15	131	A11-4124Final	Actlabs	June 16, 2011	40
16	132	A11-4126Final	Actlabs	June 06, 2011	40
17	133	A11-4127Final	Actlabs	June 06, 2011	40
18	134	A11-4128Final	Actlabs	June 23, 2011	40
19	135	A11-4129Final	Actlabs	June 06, 2011	40
20	136	A11-4130Final	Actlabs	June 06, 2011	40
21	137	A11-4131Final	Actlabs	June 16, 2011	40
22	138	A11-4132final	Actlabs	June 17, 2011	40
23	139	A11-4133Final	Actlabs	June 16, 2011	40
24	140	A11-4134Final	Actlabs	June 23, 2011	40
25	141	A11-4135final	Actlabs	June 17, 2011	40
26	142	A11-4136Final	Actlabs	June 23, 2011	40
27	143	A11-4137Final	Actlabs	June 06, 2011	40
28	144	A11-4138Final	Actlabs	June 23, 2011	40
29	145	A11-4139Final	Actlabs	June 17, 2011	40
30	146	A11-4140Final	Actlabs	June 30, 2011	40
31	147	A11-4141Final	Actlabs	June 30, 2011	40
32	148	A11-4143Final	Actlabs	June 06, 2011	40
33	149	A11-4144Final	Actlabs	June 30, 2011	40
34	150	A11-4145Final	Actlabs	June 30, 2011	40
35	151	A11-4276final	Actlabs	June 06, 2011	40
36	152	A11-4277final	Actlabs	June 17, 2011	40
37	153	A11-4278final	Actlabs	June 30, 2011	40
38	154	A11-4280final	Actlabs	June 06, 2011	40

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Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
39	155	A11-4281Final	Actlabs	July 20, 2011	29
40	156	A11-4282final	Actlabs	June 17, 2011	40
41	157	A11-4284final	Actlabs	June 30, 2011	40
42	158	A11-4289final	Actlabs	June 30, 2011	40
43	159	A11-4290final	Actlabs	June 17, 2011	40
44	160	A11-4293final	Actlabs	June 17, 2011	40
45	161	A11-4294final	Actlabs	July 06, 2011	40
46	162	A11-4297Final	Actlabs	June 06, 2011	40
47	163	A11-4298Final	Actlabs	June 06, 2011	40
48	164	A11-4299Final	Actlabs	July 06, 2011	40
49	165	A11-4301Final	Actlabs	June 06, 2011	40
50	166	A11-4302Final	Actlabs	June 17, 2011	40
51	167	A11-4303Final	Actlabs	June 06, 2011	40
52	168	A11-4304Final	Actlabs	June 06, 2011	40
53	169	A11-4307Final	Actlabs	June 17, 2011	40
54	170	A11-4308Final	Actlabs	July 20, 2011	40
55	171	A11-4309Final	Actlabs	July 20, 2011	40
56	172	A11-4310Final	Actlabs	July 20, 2011	40
57	173	A11-4312Final	Actlabs	June 17, 2011	40
58	174	A11-4313Final	Actlabs	June 06, 2011	40
59	175	A11-4314Final	Actlabs	June 17, 2011	40
60	176	A11-4315Final	Actlabs	June 17, 2011	40
61	177	A11-4316Final	Actlabs	June 17, 2011	40
62	178	A11-4318Fmal	Actlabs	June 17, 2011	40
63	179	A11-4320Final	Actlabs	June 17, 2011	40
64	180	A11-4496Final	Actlabs	June 16, 2011	40
65	181	A11-4497Final	Actlabs	June 16, 2011	40
66	182	A11-4499Final	Actlabs	June 16, 2011	40
67	183	A11-4500Final	Actlabs	June 16, 2011	40
68	184	A11-4501final	Actlabs	June 16, 2011	40
69	185	A11-4502final	Actlabs	June 16, 2011	40
70	186	A11-4503final	Actlabs	June 16, 2011	40
71	187	A11-4504final	Actlabs	June 16, 2011	40
72	188	A11-4508Final	Actlabs	June 16, 2011	40
73	189	A11-4509Final	Actlabs	June 16, 2011	40
74	190	A11-4512Final	Actlabs	June 16, 2011	40
75	191	A11-4514final	Actlabs	July 22, 2011	40
76	192	A11-4217fmal	Actlabs	June 16, 2011	40
77	193	A11-4218Final	Actlabs	June 16, 2011	40
78	194	A11-4219Final	Actlabs	June 06, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
79	195	A11-4220Final	Actlabs	June 06, 2011	40
80	196	A11-4221final	Actlabs	June 16, 2011	40
81	197	A11-4222final	Actlabs	June 16, 2011	40
82	198	A11-4223Final	Actlabs	June 06, 2011	40
83	199	A11-4224Final	Actlabs	June 16, 2011	40
84	200	A11-4226Final	Actlabs	June 16, 2011	40
85	201	A11-4227Final	Actlabs	June 16, 2011	40
86	202	A11-4229Final	Actlabs	June 16, 2011	40
87	203	A11-4230final	Actlabs	June 16, 2011	40
88	204	A11-4231final	Actlabs	June 16, 2011	40
89	205	A11-4232Final	Actlabs	June 16, 2011	40
90	206	A11-4233Final	Actlabs	June 16, 2011	40
91	207	A11-4340Final	Actlabs	June 06, 2011	40
92	208	A11-4343Final	Actlabs	June 16, 2011	40
93	209	A11-4350Final	Actlabs	June 16, 2011	40
94	210	A11-4352Final	Actlabs	June 16, 2011	40
95	211	A11-4355Final	Actlabs	June 16, 2011	40
96	212	A11-4356Final	Actlabs	June 06, 2011	40
97	213	A11-4357Final	Actlabs	June 16, 2011	40
98	214	A11-4358Final	Actlabs	June 16, 2011	40
99	215	A11-4359Final2	Actlabs	June 16, 2011	45
100	216	A11-4533Final	Actlabs	June 23, 2011	40
101	217	A11-4534final	Actlabs	June 17, 2011	40
102	218	A11-4536final	Actlabs	June 17, 2011	40
103	219	A11-4537fmal	Actlabs	June 17, 2011	40
104	220	A11-4538final	Actlabs	June 17, 2011	40
105	221	A11-4539Final	Actlabs	June 17, 2011	40
106	222	A11-4540final	Actlabs	June 17, 2011	40
107	223	A11-4541fmal	Actlabs	June 17, 2011	40
108	224	A11-4542Final	Actlabs	June 23, 2011	40
109	225	A11-4543Final	Actlabs	June 16, 2011	40
110	226	A11-4544Final	Actlabs	June 23, 2011	40
111	227	A11-4545Final	Actlabs	June 16, 2011	40
112	228	A11-4778Final	Actlabs	June 30, 2011	40
113	229	A11-4779Final	Actlabs	June 30, 2011	40
114	230	A11-4781final	Actlabs	July 06, 2011	40
115	231	A11-4782final	Actlabs	July 06, 2011	40
116	232	A11-4783final	Actlabs	June 23, 2011	40
117	233	A11-4784Final	Actlabs	July 20, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
118	234	A11-4788Final	Actlabs	June 30, 2011	40
119	235	A11-4789Final	Actlabs	June 23, 2011	40
120	236	A11-4791Final	Actlabs	June 30, 2011	40
121	237	A11-4792Final	Actlabs	June 23, 2011	40
122	238	A11-4795Final	Actlabs	June 30, 2011	40
123	239	A11-4796Final	Actlabs	July 20, 2011	40
124	240	A11-4919Final	Actlabs	July 20, 2011	40
125	241	A11-4922Final	Actlabs	July 20, 2011	40
126	242	A11-4925Final	Actlabs	July 20, 2011	40
127	243	A11-4929Final	Actlabs	July 20, 2011	40
128	244	A11-4931Final	Actlabs	July 20, 2011	40
129	245	A11-4934Final	Actlabs	July 20, 2011	40
130	246	A11-4936Final	Actlabs	July 20, 2011	40
131	247	A11-4940Final	Actlabs	July 20, 2011	40
132	248	A11-4943Final	Actlabs	July 20, 2011	40
133	249	A11-4954Final	Actlabs	July 20, 2011	40
134	250	A11-4958Final	Actlabs	July 20, 2011	40
135	251	A11-4960Final	Actlabs	July 20, 2011	40
136	252	A11-5213Final	Actlabs	July 20, 2011	40
137	253	A11-5215Final	Actlabs	July 20, 2011	40
138	254	A11-5217Final	Actlabs	July 06, 2011	40
139	255	A11-5218Final	Actlabs	July 06, 2011	40
140	256	A11-5219Final	Actlabs	July 06, 2011	40
141	257	A11-5222Final	Actlabs	July 06, 2011	40
142	258	A11-5224Final	Actlabs	July 06, 2011	40
143	259	A11-5226Final	Actlabs	July 20, 2011	40
144	260	A11-5227Final	Actlabs	July 20, 2011	40
145	261	A11-5229Final	Actlabs	July 20, 2011	40
146	262	A11-5230Final	Actlabs	July 20, 2011	40
147	263	A11-5231Final	Actlabs	July 20, 2011	40
148	264	A11-5480Final	Actlabs	July 22, 2011	40
149	265	A11-5482Final	Actlabs	July 20, 2011	40
150	266	A11-5485Final	Actlabs	July 20, 2011	40
151	267	A11-5487Final	Actlabs	July 22, 2011	40
152	268	A11-5489Final	Actlabs	July 20, 2011	40
153	269	A11-5494Final	Actlabs	July 20, 2011	40
154	270	A11-5499Final	Actlabs	July 20, 2011	40
155	271	A11-5500Final	Actlabs	July 22, 2011	40
156	272	A11-5503Final	Actlabs	July 20, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
157	273	A11-5529Final	Actlabs	July 20, 2011	40
158	274	A11-5531Final	Actlabs	July 20, 2011	40
159	275	A11-5533Final	Actlabs	July 20, 2011	40
160	276	A11-5815Final2	Actlabs	August 04, 2011	40
161	277	A11-5816Final	Actlabs	July 22, 2011	40
162	278	A11-5819Final	Actlabs	July 22, 2011	43
163	279	A11-5833Final	Actlabs	July 22, 2011	40
164	280	A11-5838Final	Actlabs	July 22, 2011	40
165	281	A11-5840Final	Actlabs	July 22, 2011	40
166	282	A11-6568Final	Actlabs	July 22, 2011	40
167	283	A11-6570Final	Actlabs	August 04,2011	40
168	284	A11-6573Final	Actlabs	August 04,2011	40
169	285	A11-6576Final	Actlabs	August 27, 2011	40
170	286	A11-6581Final	Actlabs	August 27, 2011	40
171	287	A11-6587Final	Actlabs	August 27, 2011	40
172	288	A11-6590Final	Actlabs	August 04,2011	40
173	289	A11-6595Final	Actlabs	August 04,2011	40
174	290	A11-6600Final	Actlabs	August 04,2011	40
175	291	A11-6604Final	Actlabs	August 04,2011	40
176	292	A11-6607Final	Actlabs	August 04,2011	40
177	293	A11-6611Final	Actlabs	August 04,2011	40
178	294	A11-7002Final	Actlabs	August 27, 2011	40
179	295	A11-7005Final	Actlabs	August 15, 2011	40
180	296	A11-7007Final	Actlabs	August 27, 2011	40
181	297	A11-7011Final	Actlabs	August 16, 2011	40
182	298	A11-7013Final	Actlabs	August 15, 2011	40
183	299	A11-7016Final	Actlabs	August 15, 2011	40
184	300	A11-7023Final	Actlabs	August 15, 2011	40
185	301	A11-7031Final	Actlabs	August 16, 2011	40
186	302	A11-7039Final	Actlabs	August 16, 2011	40
187	304	A11-7043Final	Actlabs	August 15, 2011	40
188	305	A11-7047Final	Actlabs	August 15, 2011	40
189	306	A11-7109Final	Actlabs	August 27, 2011	40
190	307	A11-7117Final	Actlabs	August 15, 2011	40
191	308	A11-7118Final	Actlabs	August 15, 2011	40
192	309	A11-7121Final	Actlabs	August 16, 2011	40
193	310	A11-7136Final	Actlabs	August 15, 2011	40
194	311	A11-7137Final	Actlabs	August 15, 2011	40
195	312	A11-7139Final	Actlabs	August 27, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
196	313	A11-7140Final	Actlabs	August 27, 2011	40
197	314	A11-7142Final	Actlabs	August 16, 2011	40
198	315	A11-7160Final	Actlabs	August 27, 2011	40
199	316	A11-7161Final	Actlabs	August 15, 2011	40
200	317	A11-7164Final	Actlabs	August 16, 2011	40
201	318	A11-7590Final	Actlabs	August 27, 2011	40
202	319	A11-7592Final	Actlabs	August 27, 2011	40
203	320	A11-7595Final	Actlabs	August 27, 2011	40
204	321	A11-7598Final	Actlabs	August 27, 2011	40
205	322	A11-7600Final	Actlabs	August 27, 2011	40
206	323	A11-7606Final	Actlabs	August 27, 2011	40
207	324	A11-7608Final	Actlabs	August 27, 2011	40
208	325	A11-7609Final	Actlabs	August 27, 2011	40
209	326	A11-7611Final	Actlabs	August 27, 2011	40
210	327	A11-7614Final	Actlabs	August 27, 2011	40
211	328	A11-7620Final	Actlabs	August 27, 2011	40
212	329	A11-7621Final	Actlabs	August 27, 2011	40
213	330	A11-7658Final	Actlabs	August 27, 2011	40
214	332	A11-7662Final	Actlabs	August 27, 2011	40
215	BL-001	A11-4074Final	Actlabs	June 16, 2011	40
216	BL-002	A11-4075Final	Actlabs	June 16, 2011	40
217	BL-003	A11-4077Final	Actlabs	June 16, 2011	40
218	BL-004	A11-4078final	Actlabs	June 06, 2011	40
219	BL-005	A11-4079Final	Actlabs	June 16, 2011	40
220	BL-006	A11-4081final	Actlabs	June 16, 2011	40
221	BL-007	A11-4082Final	Actlabs	June 16, 2011	40
222	BL-008	A11-4084Final	Actlabs	June 16, 2011	40
223	BL-009	A11-4086final	Actlabs	June 16, 2011	40
224	BL-010	A11-4087final	Actlabs	June 16, 2011	40
225	BL-011	A11-4088final	Actlabs	June 16, 2011	40
226	BL-012	A11-4089final	Actlabs	June 16, 2011	40
227	BL-013	A11-4195final	Actlabs	June 16, 2011	40
228	BL-014	A11-4196fmal	Actlabs	June 16, 2011	40
229	BL-015	A11-4198Final	Actlabs	June 16, 2011	40
230	BL-016	A11-4199final	Actlabs	June 16, 2011	40
231	BL-017	A11-4200Final	Actlabs	June 16, 2011	40
232	BL-018	A11-4201final	Actlabs	June 16, 2011	40
233	BL-019	A11-4202Final	Actlabs	July 06, 2011	40
234	BL-020	A11-4203final	Actlabs	June 16, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
235	BL-021	A11-4205final	Actlabs	June 16, 2011	40
236	BL-022	A11-4207Final	Actlabs	June 16, 2011	40
237	BL-023	A11-4212Final	Actlabs	June 16, 2011	40
238	BL-024	A11-4214final	Actlabs	June 16, 2011	40
239	BL-025	A11-4709Final	Actlabs	June 23, 2011	40
240	BL-026	A11-4710Final	Actlabs	June 23, 2011	40
241	BL-027	A11-4711Final	Actlabs	June 23, 2011	40
242	BL-028	A11-4713final	Actlabs	June 16, 2011	40
243	BL-029	A11-4714fmal	Actlabs	June 16, 2011	40
244	BL-030	A11-4718Final	Actlabs	June 30, 2011	40
245	BL-031	A11-4722Final	Actlabs	June 30, 2011	40
246	BL-032	A11-4724Final	Actlabs	June 17, 2011	40
247	BL-033	A11-4727Final	Actlabs	June 30, 2011	40
248	BL-034	A11-4728Final	Actlabs	June 23, 2011	40
249	BL-035	A11-4731Final	Actlabs	June 23, 2011	40
250	BL-036	A11-4733Final	Actlabs	June 30, 2011	40
251	BL-037	A11-4736Final	Actlabs	June 30, 2011	40
252	BL-038	A11-4737Final	Actlabs	June 30, 2011	40
253	BL-039	A11-4738Final	Actlabs	June 23, 2011	40
254	BL-040	A11-4739Final	Actlabs	June 30, 2011	40
255	BL-041	A11-4740Final	Actlabs	June 23, 2011	40
256	BL-042	A11-4741final	Actlabs	June 23, 2011	40
257	BL-043	A11-4745Final	Actlabs	June 30, 2011	40
258	BL-044	A11-4748Final	Actlabs	June 23, 2011	40
259	BL-045	A11-4751Final	Actlabs	June 30, 2011	40
260	BL-046	A11-4754final	Actlabs	June 23, 2011	40
261	BL-047	A11-4757final	Actlabs	June 23, 2011	40
262	BL-048	A11-4758final	Actlabs	July 22, 2011	40
263	BL-049	A11-4968Final	Actlabs	July 20, 2011	40
264	BL-050	A11-4970Final	Actlabs	July 20, 2011	40
265	BL-051	A11-4973Final	Actlabs	July 20, 2011	40
266	BL-052	A11-4975Final	Actlabs	July 20, 2011	40
267	BL-053	A11-4977Final	Actlabs	July 20, 2011	40
268	BL-054	A11-4989Final	Actlabs	July 20, 2011	40
269	BL-055	A11-4991Final	Actlabs	July 20, 2011	40
270	BL-056	A11-4992Final	Actlabs	July 20, 2011	40
271	BL-057	A11-4993Final	Actlabs	July 20, 2011	40
272	BL-058	A11-4995Final	Actlabs	July 20, 2011	40
273	BL-059	A11-4998Final	Actlabs	July 20, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
274	BL-060	A11-5001Final	Actlabs	July 20, 2011	40
275	BL-061	A11-5020Final	Actlabs	July 20, 2011	40
276	BL-062	A11-5051Final	Actlabs	July 20, 2011	40
277	BL-063	A11-5052final	Actlabs	June 23, 2011	40
278	BL-064	A11-5054Final	Actlabs	July 20, 2011	40
279	BL-065	A11-5055Final	Actlabs	July 20, 2011	40
280	BL-066	A11-5056Final	Actlabs	July 20, 2011	40
281	BL-067	A11-5057Final	Actlabs	June 23, 2011	40
282	BL-068	A11-5058Final	Actlabs	July 20, 2011	40
283	BL-069	A11-5059Final	Actlabs	July 20, 2011	40
284	BL-070	A11-5060Final	Actlabs	July 20, 2011	40
285	BL-071	A11-5061Final	Actlabs	July 20, 2011	40
286	BL-072	A11-5063Final	Actlabs	July 20, 2011	40
287	BL-073	A11-6002Final	Actlabs	July 22, 2011	40
288	BL-074	A11-6003Final	Actlabs	July 22, 2011	40
289	BL-075	A11-6004Final	Actlabs	July 22, 2011	40
290	BL-076	A11-6010Final	Actlabs	July 22, 2011	40
291	BL-077	A11-6041Final	Actlabs	July 22, 2011	40
292	BL-078	A11-6044Final	Actlabs	July 20, 2011	40
293	BL-079	A11-6045Final	Actlabs	July 20, 2011	40
294	BL-080	A11-6042Final	Actlabs	July 22, 2011	40
295	BL-081	A11-6336Final	Actlabs	July 22, 2011	40
296	BL-082	A11-6006Final	Actlabs	July 22, 2011	40
297	BL-083	A11-6337Final	Actlabs	July 22, 2011	40
298	BL-084	A11-6008Final	Actlabs	July 22, 2011	40
299	BL-085	A11-5422Final	Actlabs	July 20, 2011	40
300	BL-086	A11-5423Final	Actlabs	July 20, 2011	40
301	BL-087	A11-5424Final	Actlabs	July 20, 2011	40
302	BL-088	A11-5426Final	Actlabs	July 20, 2011	40
303	BL-089	A11-5428Final	Actlabs	July 20, 2011	40
304	BL-090	A11-5429Final	Actlabs	July 20, 2011	40
305	BL-091	A11-5431Final	Actlabs	July 20, 2011	40
306	BL-092	A11-5432Final	Actlabs	July 20, 2011	40
307	BL-093	A11-5433Final	Actlabs	July 22, 2011	40
308	BL-094	A11-5434Final	Actlabs	July 20, 2011	40
309	BL-095	A11-5436Final	Actlabs	July 20, 2011	40
310	BL-096	A11-5437Final	Actlabs	July 20, 2011	40
311	BL-097	A11-5789Final	Actlabs	July 20, 2011	40
312	BL-098	A11-5790Final	Actlabs	July 20, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
313	BL-099	A11-5791Final	Actlabs	July 22, 2011	40
314	BL-100	A11-5792Final	Actlabs	July 20, 2011	40
315	BL-101	A11-5795Final	Actlabs	July 20, 2011	40
316	BL-102	A11-5796Final	Actlabs	July 22, 2011	40
317	BL-103	A11-5798Final	Actlabs	July 20, 2011	40
318	BL-104	A11-5800Final	Actlabs	July 20, 2011	40
319	BL-105	A11-5801Final	Actlabs	July 20, 2011	40
320	BL-106	A11-5803Final	Actlabs	July 22, 2011	40
321	BL-107	A11-5804Final	Actlabs	July 22, 2011	40
322	BL-108	A11-5806Final	Actlabs	July 22, 2011	40
323	BL-109	A11-5807Final	Actlabs	July 22, 2011	39
324	BL-110	A11-6238Final	Actlabs	August 15, 2011	40
325	BL-111	A11-6240Final~	Actlabs	August 04,2011	40
326	BL-112	A11-6246Final	Actlabs	August 04,2011	40
327	BL-113	A11-6251Final	Actlabs	August 04,2011	40
328	BL-114	A11-6259Final	Actlabs	August 04,2011	40
329	BL-115	A11-6261Final	Actlabs	August 04,2011	40
330	BL-116	A11-6263Final	Actlabs	August 04,2011	40
331	BL-117	A11-6264Final	Actlabs	August 04,2011	40
332	BL-118	A11-6266Final	Actlabs	August 04,2011	40
333	BL-119	A11-6275Final	Actlabs	August 27, 2011	40
334	BL-120	A11-6301Final	Actlabs	August 04,2011	40
335	BL-121	A11-6302Final	Actlabs	August 04,2011	40
336	BL-122	A11-6563Final	Actlabs	August 04,2011	40
337	BL-123	A11-6562Final	Actlabs	August 27, 2011	40
338	BL-124	A11-6540Final	Actlabs	August 04,2011	40
339	BL-125	A11-6541Final	Actlabs	August 15, 2011	40
340	BL-126	A11-6542Final	Actlabs	August 15, 2011	40
341	BL-127	A11-6543Final	Actlabs	August 15, 2011	40
342	BL-128	A11-6544Final	Actlabs	August 27, 2011	40
343	BL-129	A11-6545Final	Actlabs	August 04,2011	40
344	BL-130	A11-6546Final	Actlabs	August 27, 2011	40
345	BL-131	A11-6555Final	Actlabs	August 15, 2011	40
346	BL-132	A11-6557Final	Actlabs	August 15, 2011	40
347	BL-133	A11-6559Final	Actlabs	August 27, 2011	40
348	BL-146	A11-7063Final	Actlabs	August 27, 2011	40
349	BL-147	A11-7065Final	Actlabs	August 15, 2011	40
350	BL-148	A11-7066Final	Actlabs	August 27, 2011	40
351	BL-150	A11-7068Final	Actlabs	August 27, 2011	40



Count	Batch ID	Certificate	Laboratory	Date Approved	No. of samples
352	BL-151	A11-7072Final	Actlabs	August 27, 2011	40
353	BL-152	A11-7079Final	Actlabs	August 16, 2011	40
354	BL-153	A11-7080Final	Actlabs	August 27, 2011	40
355	BL-154	A11-7082Final	Actlabs	August 15, 2011	40
356	BL-155	A11-7083Final	Actlabs	August 27, 2011	40
357	BL-156	A11-7087Final	Actlabs	August 15, 2011	40
358	BL-157	A11-7091Final	Actlabs	August 27, 2011	40
359	BL-158	A11-7244Final	Actlabs	August 15, 2011	40
360	BL-159	A11-7245Final	Actlabs	August 16, 2011	40
361	BL-160	A11-7247Final	Actlabs	August 27, 2011	40
362	BL-161	A11-7249Final	Actlabs	August 27, 2011	40
363	BL-162	A11-7250final	Actlabs	August 27, 2011	40
364	BL-163	A11-7254Final	Actlabs	August 27, 2011	40
365	BL-164	A11-7255Final	Actlabs	August 27, 2011	40
366	BL-165	A11-7257Final	Actlabs	August 27, 2011	40
367	BL-166	A11-7304Final	Actlabs	August 27, 2011	40
368	BL-167	A11-7306Final	Actlabs	August 27, 2011	40
369	BL-168	A11-7309Final	Actlabs	August 27, 2011	40
370	BL-169	A11-7311Final	Actlabs	August 27, 2011	40
371	BL-170	A11-7564Final	Actlabs	August 27, 2011	40
372	BL-171	A11-7565Final	Actlabs	August 27, 2011	40
373	BL-172	A11-7567Final	Actlabs	August 27, 2011	40
374	BL-173	A11-7569Final	Actlabs	August 27, 2011	40
375	BL-174	A11-7570Final	Actlabs	August 27, 2011	40
376	BL-175	A11-7572Final	Actlabs	August 27, 2011	40
377	BL-175	A11-7575Final	Actlabs	August 27, 2011	40
378	BL-177	A11-7577Final	Actlabs	August 27, 2011	40
379	BL-178	A11-7579Final	Actlabs	August 27, 2011	40
380	BL-179	A11-7581Final	Actlabs	August 27, 2011	40
381	BL-180	A11-7582Final	Actlabs	August 27, 2011	40
382	BL-181	A11-7588Final	Actlabs	August 27, 2011	40
383	BL-182	A11-7645Final	Actlabs	August 27, 2011	40
384	BL-183	A11-7646Final	Actlabs	August 27, 2011	40
385	BL-184	A11-7647Final	Actlabs	August 27, 2011	40
386	BL-185	A11-7649Final	Actlabs	August 27, 2011	40
387	BL-186	A11-7650Final	Actlabs	August 27, 2011	40
				TOTAL	15,476

A total of 15,476 samples were treated at Actlabs from June 6 through August 27. This number includes the QC samples inserted in each batch. Samples were assembled into batches of 40 samples which included two certified reference materials, one blank sample comprised of either silica sand or drill core, and one field (1/4 core) duplicate. The lab pulp and coarse reject

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duplicates were compiled and used in order to compare all duplicate types. The cut-off date for all data for the resource estimate was July 22, which corresponds to batch BL-109.

Performance of OREAS 65a Reference Material

The OREAS 65a certified reference material was purchased from Ore Research and Exploration Pty Ltd, of Australia, through Analytical Solutions, a Canadian distributor. OREAS 65a was prepared from gold-silver ore from Martabe, North Sumatra, Indonesia blended with fresh alkali olivine basalt from the Newer Volcanics Province, Victoria, Australia. Martabe is an epithermal high sulphidation gold deposit hosted by a sequence of tertiary volcanic and sedimentary rocks near a fault splay of the Great Sumatran Fault complex. Gold homogeneity has been evaluated and confirmed by instrumental neutron activation analysis (INAA) on twenty 0.5 gram sample portions and by a nested ANOVA program on the fire assay data. The tolerance interval for Au is determined from the INAA data while the certified value and confidence interval are based on the fire assay results of a round robin program incorporating a total of 134 analyses at 19 laboratories. This standard was certified for gold, silver and copper.

There were 388 values for OREAS 65a. This standard performed extremely well with one failure > + 3 standard deviations from the mean for gold and one failure for silver > - 3 standard deviations from the mean, which was likely an improperly inserted blank sample.



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Performance of OREAS H3 Reference Material

The OREAS H3 standard was prepared from gold-copper oxide ore from the Hedges Mine located in the southwest Yilgarn Block of Western Australia. This deposit and the adjacent Boddington Mine deposit are hosted by diorite-andesite intrusive and volcanic rocks of the Saddleback Greenstone Belt. The mineralisation is structurally-controlled and intrusion-related and formed by two overprinting Archaean magmatic-hydrothermal systems. The earliest mineralisation comprises widespread silica-biotite alteration while the second stage comprises complex quartz-albite-molybdenite veins (controlling Mo distribution), clinozoisite-sulphide-quartz-biotite veining (controlling low grade skarn Au-Cu mineralisation) and actinolite, carbonate-chlorite-sulphide and sulphide veins (controlling high grade mineralisation). This standard is certified for gold, silver and copper.

There were 386 values for this standard. Gold did very well, although a high bias was noted. Two values exceeded > +3 standard deviations from the mean. Silver analyses appeared to reflect instrument drift over time, as the mean of the values gradually declined from June to August. There were many failures >+3 standard deviations from the mean as well as many values falling between +2 and +3 standard deviations from the mean. One point returned a very low value and was likely an incorrectly inserted blank sample.

All the values exceeding the tolerance limit of >+3 standard deviations from the mean were verified against the analytical certificates using the other standard in the batch as well as the lab's internal QC to decide whether the batch could be approved for import into the master database.

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Note: Any failures demonstrated in the graphs above were resolved, due to the other standard in the same batch passing the QC, as well as conformance of the lab's QC and/or low grade results in the certificate.

Performance of Blanks for Gold

The blank material used for the Borden Lake drill program was initially a pre-packaged pulverized blank purchased from Accurassay Labs, and was changed at batch 216 to drill core, which varied in rock type from felsic gneiss to amphibolite to biotite gneiss. It was noticed during the program that this drill core was in fact not "sterile" and a comparison was therefore done by Probe between the original value assayed in the drill core versus the returned "blank"

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value. The following three graphs show, (1) all the blank results, (2) "blank" results for batches 99 to 190, which all demonstrated much higher than acceptable levels, and (3) "blank" results for batches 215 to 386 which again returned values much higher than acceptable levels. The average value of the blanks was 0.03 g/t Au, however a few values were close to the resource cut-off grade of 0.30 g/t Au. In every instance where the blank value was higher than the acceptable threshold, it was verified against the lab blanks in order to be able to approve the certificate.

Probe was alerted to the problem and an alternate material will be sourced.





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Duplicates

Probe inserted ¹/₄ core duplicates with each batch. In addition, the coarse reject ("prep") duplicates and pulp duplicates prepared and analyzed by the lab were compiled and used in order to compare all three types of duplicates.

As expected, precision improved steadily from the field (1/4 core) duplicates to the pulp duplicates for both gold and silver. For the gold pulp duplicates, there are two graphs shown, the second one demonstrating the excellent precision at the lower grades. For silver, there are two graphs shown for the coarse reject duplicates, in order to demonstrate the imprecision in the analyses close to the detection limit of 0.2 g/t Ag. The graphs show data filtered to > 0.6 g/t Ag, which is 3 x detection limit.

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The graph below shows the precision in the gold pulp duplicates at lower grades.



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The graph below shows the imprecision in the silver duplicates at the coarse reject level at lower grades. The lower detection limit for silver using the aqua regia-ICP method is 0.20 g/t Ag. The graphs use data filtered to $> 3 \times DL$ for the first value of each pair (0.60 g/t Ag).

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APPENDIX 2 VARIOGRAPHY





Variogram Model Parameters Model Type : Spherical Nugget : 0.406254 Structure Sill Range 1 0.341774 39.732





Anisotropy parameters Ellipsoid plunge : 0.000000 Ellipsoid bearing: 120.000000 Ellipsoid dip : 45.000000 Major:Semi-major : 1.000000 Major:Minor : 1.999972

Variogram model parameters Model Type : Spherical Nugget : 0.404408 Structure Sill Range 1 0.411832 100.717





MINOR VARIOGRAM





APPENDIX 3 BLOCK MODEL PLANS AND SECTIONS























































































