#### TECHNICAL REPORT AND RESOURCE ESTIMATE ON THE GLOVER ISLAND GOLD PROPERTY, GRAND LAKE AREA WEST-CENTRAL NEWFOUNDLAND, CANADA

Latitude: 48° 42' 32'' N Longitude: 57° 49' 45'' W

#### FOR

Mountain Lake Resources Inc. and Mountain Lake Minerals Inc.

By

**P&E** Mining Consultants Inc.

NI-43-101 & 43-101F1 TECHNICAL REPORT

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## 1.0 SUMMARY

P & E Mining Consultants Inc. (P&E) has been retained by Mountain Lake Resources Inc. and Mountain Lake Minerals Inc. (Mountain Lake or the Company) to provide a mineral resource estimate for the Lunch Pond South Extension (LPSE) deposit on Glover Island, and to prepare an independent Technical Report in accordance with the reporting requirements of Canadian National Instrument 43-101 (NI 43-101). The property is located in western Newfoundland.

This resource estimation is based on 41 diamond drill holes by Mountain Lake and 35 historical holes for a combined total of 76 holes. The Company drilled a total of 10,139 meters while historical drilling at LPSE totalled 5,312 meters. The total combined meters drilled at LPSE is 15,452 meters. The total number of core sample analyses used in this resource estimation totals 6,598 (5,156 from Mountain Lake and 1,442 from historical data).

The LPSE deposit is located at the south-western portion of an 11 km long mineralized corridor known as the Glover Island Trend (GI Trend). This prospective GI Trend is host to 17 gold, base metal, nickel and polymetallic minerals prospects in addition to numerous gold anomalies that cross several rock types adjacent to a major structural break known as the Cabot Fault which separates the Humber Zone terrain to the west from the Dunnage Zone to the east. Remnant slivers of the Humber Zone are recognized on Glover Island in addition to Dunnage Zone lithofacies.

The Glover Island property is owned 100% by Mountain Lake. On October 8, 2010, the Company acquired an undivided 100% interest in the Glover Island Property from New Island Resources. The Glover Island Property is a gold exploration property situated approximately 70 kilometres northwest from the Company's Valentine Lake gold project and consists of two mineral licenses and one mining lease covering a total of 5,100 hectares.

New Island retains a net smelter returns royalty of 1% of commercial production, which reduces to 0.5% after the payment of the first \$1.0 million.

The 2012 Lunch Pond global resource sensitivity compared with the combined historical resources for the Lunch Pond area indicates a 27.8% decrease in grade, a 57.4% increase in tonnage resulting in a 14.1% increase in contained gold ounces as detailed in Table 1.1.

TABLE 1.1 GLOBAL RESOURCE SENSITIVITY							
Lunch Po	nd Global Re 2012 <sup>(1</sup> (0.5 g/t Au C	source Se	ensitivity	Historical Resource <sup>(2)</sup>			
	Tonnes	Grade (g/t)	Ounces (Au)		Tonnes	Grade (g/t)	Ounces (Au)
Indicated	1,281,000	1.61	66,400	LP Main Zone	2,730,000	2.10	184,300
Inferred	4,434,000	1.38	196,900	LP West Zone	900,000	1.60	46,300

(1) Mineral Resources are not mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral Resource will be converted into mineral Reserves.

(2) The reader is cautioned that the above referenced "Historical Resource" is considered historical in nature and as such is based on prior data and reports prepared by previous property owners. The work necessary to

verify the classification of this mineral resources estimate has not been completed and the resource estimate therefore, cannot be treated as NI 43-101 compliant resources verified by a Qualified Person. The historical estimate should not be relied upon and there can be no assurance that any of the historical resources, in whole or in part, will ever become economically viable.

The ~50 meter spaced drilling by Mountain Lake in 2011 and 2012 confirmed the general geometry of the LPSE zone and expended the limits for the resource down dip and markedly increased the size and understanding of the historical resource. The silicified and brecciated nature of the mineralization is remarkably consistent across the extent of the zone. In addition, this work delineated the nature of the faulted hanging wall into un-mineralized Glover Formation, broad scale carbonate alteration and the presence of a potentially significant quartz-feldspar-porphyry (QFP) or crystal tuff along the southern footwall.

For the immediate future, P&E recommends further work be focused on follow-up activities of other prospects on Glover Island with the intent of adding additional resources to the current resource estimation, notably Kettle Pond and Lucky Smoke Zones.

The proposed budget for the upcoming work program amounts to CAN\$528,000 and is presented in Table 1.2.

<b>TABLE 1.2</b>				
BUDGET FOR PROPOSED PROGRAM				
Item	Cost (Cdn\$)			
Environmental Studies	5,000			
Diamond Drilling	240,000			
Assays	30,000			
Labour	80,000			
Helicopter	55,000			
Camp and trail	18,000			
Exploration	100,000			
Total	528,000			

P&E considers that the budget for the proposed work program is reasonable and recommends that it be implemented by Mountain Lake.

#### 2.0 INTRODUCTION

## 2.1 TERMS OF REFERENCE

The following Technical Report (the "Report") presents the resource estimate prepared by P&E Mining Consultants Inc. ("P&E") regarding the Glover Island Gold Property in west-central Newfoundland, Canada (the "Property"). This Technical Report was prepared pursuant to the requirements of Canadian National Instrument ("NI") 43-101. The P&E Mineral Resources contained within this report were prepared in accordance with the guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and in force as of the effective date of this report.

As at the effective date of this report, Mountain Lake Minerals Inc. is a wholly owned subsidiary of Mountain Lake Resources Inc.

This Report was prepared at the request of Mr. Allen Sheito President and CEO of Mountain Lake Resources Inc., (the "Company" or "Mountain Lake"). Mountain Lake is a Canadian based publicly held company trading on the TSX-V under the symbol MOA with its corporate office at:

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This Report is current as of May 01, 2012.

The purpose of the current Report is to provide an independent, NI 43-101 compliant, technical report that includes a mineral resource on the Glover Island Gold Property. P&E understands that this Report will support the public disclosure requirements of the Company and will be filed on SEDAR as required under NI 43-101 disclosure regulations.

Mountain Lake has accepted that the qualifications, expertise, experience, competence and professional reputation of P&E's Principals and Associate Geologists and Engineers are appropriate and relevant for the preparation of this Report. The Company has also accepted that P&E's Principals are members of professional bodies that are appropriate and relevant for the preparation of this Report.

# 2.2 SITE VISITS

Mr. Eugene Puritch, P.Eng., of P&E, a qualified person under the terms of the NI 43-101, who has provided specific input to this Report, has carried out a site visit to the Property on November 14-15, 2011. An independent verification sampling program was conducted at that time.

# 2.3 UNITS AND CURRENCY

Metal values are reported in percentage ("%"), grams per metric tonne ("g/t") and parts per billion ("ppb"). Costs are reported in Canadian dollars ("CDN\$") unless otherwise stated.

Grid coordinates are given in the UTM NAD 83 (Zone 14), latitude/longitude system or local mine grid; maps are either in UTM coordinate, latitude/longitude or local mine grid.

### 2.4 SOURCES OF INFORMATION

This Report is based, in part, on internal company technical reports, and maps, published government reports, company letters and memoranda, and public information as listed in Section 27 at the conclusion of this Report. Several sections from reports authored by other consultants have been directly quoted or summarized in this Report, and are so indicated where appropriate.

Abbreviation	Description
\$	Canadian Dollars
0	Degree(s)
°C	Degrees Celsius
<	Less than
>	Greater than
%	Percent
2791341	2791341 Manitoba Ltd.
3-D	Three dimensional
AA	Atomic absorption (spectrometry)
Ag	Silver
Au	Gold
AuEq	Gold equivalent
Az	Azimuth
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIP	Carbon-in-pulp (process)
cm	Centimetre
CND	Canadian
CND\$	Canadian dollar
CNSX	Canadian National Stock Exchange
Cr	Chromium
D1/D2	Deformation phase 1/phase 2
DD	Diamond drill
DDH	Diamond drill hole
DNR	Department of Natural Resources Newfoundland and Labrador
Е	East

## 2.5 GLOSSARY OF TERMS

Abbreviation	Description			
EM	Electromagnetic			
FA	Fire assay			
FA/Grav	Fire assay with a gravimetric finish			
Ft	Foot/feet			
g	Gram (s)			
g Ag/t	Grams silver per tonne			
g Au/t	Grams gold per tonne			
g/t	grams per tonne			
g/cm <sup>3</sup>	Grams per cubic centimetre			
g/mL	Grams per mililitre			
ha	Hectares			
HLEM	Horizontal loop electromagnetic (geophysics)			
ICP	Inductively coupled plasma			
$ID^2$	Inverse distance squared			
in	Inches			
IP	Induced polarization			
kg	kilograms			
km	Kilometres			
km <sup>2</sup>	Squared kilometres			
L	Litres			
LPSE	Lunch Pond South Extension			
m	Metres			
m <sup>3</sup>	Cubic metres			
m/s	Metres per second			
Ma	Million years (old)			
Mg	Magnesium			
mm	Millimetres			
Mm/y	Millimetres per year			
Mt	Million tonnes			
Mountain Lake	Mountain Lake Resources Inc. and Mountain Lake			
	Minerals Inc.			
Ν	North			
Ni	Nickel			
NE	Northeast			
NI	National Instrument (43-101)			
NSR	Net Smelter Return			
NSZ	North Shear Zone			
NW	Northwest			
OZ	Ounce			

Abbreviation	Description
P&E	P&E Mining Consultants Inc.
Pb	Lead
PEA	Preliminary economic assessment
ppb	Parts per billion
ppm	Parts per million
QA	Quality assurance
QC	Quality control
S	Southeast
SE	Southeast
SEDAR	System for Electronic Document Analysis and Retrieval
SW	Southwest
t	Tonnes (metric)
t/m <sup>3</sup>	Tonnes per cubic metre
tpd	Tonnes per day
US\$	United States dollars
UTM	Universal Transverse Mercator
VLM-EM	Very low frequency electromagnetic survey (geophysics)
W	West

#### 3.0 **RELIANCE ON OTHER EXPERTS**

P&E has assumed, and relied on the fact, that all the information and existing technical documents listed in the References (Section 27) of this report are accurate and complete in all material aspects. While we carefully reviewed all the available information presented to us, we cannot guarantee its accuracy and completeness. We reserve the right, but will not be obligated to revise our report and conclusions if additional information becomes known to us subsequent to the date of this report.

Copies of the tenure documents were reviewed by P&E and an independent but cursory verification of claim title was performed using the Mineral Rights Inquiry form found on the Newfoundland and Labrador Department of Natural Resources' website (http://gis.gov.nl.ca/mrinquiry/mrinquiry.asp). Operating permits and licenses, and work contracts were not reviewed. P&E has not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has relied on the and believes it has a reasonable basis to rely upon Paul Bowes - Secretary & Corporate Lawyer, Director to have conducted the proper legal due diligence in this regard.

Select technical data, as noted in the report, were provided by Mountain Lake, and P&E has relied on the integrity of such data.

A draft copy of the report has been reviewed for factual errors by the clients and P&E has relied on Mountain Lake's knowledge of the Property in this regard. All statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this report.

#### 4.0 PROPERTY DESCRIPTION AND LOCATION

# 4.1 LOCATION

#### Figure 4.1 General Location Map



The Glover Island Property is located in west-central Newfoundland (Figure 4.1), approximately 30 kilometres southeast from the city of Corner Brook (NTS 12A/12 & 12A/13, Figure 4.2). Glover Island itself is situated towards the south end of Grand Lake, the largest lake in Newfoundland. The island is elongated, northeast-southwest trending, 39 kilometres long by an average of 5 kilometres wide. Grand Lake is 135 kilometres long and forms the major watershed for the west-flowing Humber River. The south half and west side of the island rises 200-442 metres from the lake level along steep cliffs to form a plateau with moderate to gentle topography. The north and northeast shoreline is low-lying with common pebble beaches. Vegetation on Glover Island is dominated by mature fir with sparse birch trees and spruce forest on hummocky bedrock ridges and boggy terrain. Numerous bog areas are covered with grass and several varieties of low bush and commonly have small shallow ponds.

#### Figure 4.2 NTS Sheet Location with Place Names



# 4.2 LICENCE DETAILS

The Glover Island Property comprises two exploration licences and one mining lease covering a 13-kilometre by 5-kilometre area on the south end of Glover Island (Figure 4.3, Table 4.1). On October 8, 2010 the Company acquired an undivided 100% interest in the Glover Island Property from New Island Minerals. The reader is referred to filings on SEDAR for specific details of the transaction.



## Figure 4.3 Glover Island Claim Map

TABLE 4.1 LICENSES AND LEASE							
Licence	Number of Claims	Area (ha)	Renewal Date	Report Date	Expenditures Required (\$)		
007584M	102	2,550	21/07/2015	19/09/2012	44,603.29		
015583M	25	625	04/12/2013	04/02/2013	7,523.00		
7588M	77	1,925	05/20/2012		154,000		
Total	204	5,100					

Although Lease 7588M has expired, Mountain Lake have filed an application to extend the license with the DNR. DNR personnel have confirmed that Lease 7588M is in good standing. Licence descriptions are available via the Mineral Rights Database System Reports, Newfoundland and Labrador Department of Mines and Energy website (http://gis.geosurv.gov.nl.ca).

## 4.3 MINERAL RIGHTS, LAND USE STATUS AND PERMITS

The Glover Island Property is situated on crown lands. Mineral licence holders have the right to explore for, and ultimately exploit minerals, as per legislation as defined in the Public Reserve

Regulations of the Land Act. Exploration and exploitation activities may also be subject to an Environmental Impact Assessment (EIA) and compliance with other regulatory requirements.

Glover Island is part of a Provisional Ecological Reserve (the Glover Island Public Reserve), established in 2002 and subject to review in 2012. The reserve was established to protect pine marten habitat, and covers the whole island. Mineral exploration and all related activities are allowed within the Reserve with government permits. Permits are required for exploration activities, stream crossings, forest cutting, trail construction, ATV use, fuel storage, and for camp construction, occupancy and related water use. The various permits are obtained from the Mineral Land Division of the Newfoundland and Labrador Department of Natural Resources, the Lands Branch of the Department of Government Services and Lands, the Department of Environment and Conservation, the Department of Parks and Natural Areas, the Department of Forestry, and the federal Department of Fisheries and Oceans.

# 4.4 INTEREST IN THE PROPERTY

The Glover Island Property was acquired by Mountain Lake Resources Inc. from New Island Resources Inc. in October 8, 2010 for a purchase price of \$1,819,806 comprised of \$500,000 cash, the issuance of one million common shares at a fair value of \$900,000, the issuance of share purchase warrants to acquire 500,000 common shares of the Company at an exercise price of \$1.20 per share on or before October 8, 2012 with a fair value \$249,000, forfeiture of repayment of a loan and interest receivable from New Island of \$164,331 and purchase costs of \$6,475. New Island retains a net smelter returns royalty of 1% of commercial production, which reduces to 0.5% after the payment of the first \$1.0 million.

Exploration licence 007584M and mining licence 007588M are subject to a 3% NSR payable to Charles Dearin of St. John's, NL. The original claims on the Glover Island Project were staked by South Coast Resources Inc., of which Mr. Dearin was the principal owner. The NSR was originally part of an option agreement with Varna Gold Resources Inc., and has been transferred down to all subsequent holders of the property.

## 4.5 ENVIRONMENTAL LIABILITIES

There are no known environmental liabilities associated with the Glover Island property.

No mining or other potentially disruptive work has been carried out on the property beyond that described in this report. Mountain Lake reports that they have fully complied with the permitting requirements for all exploration activities.

Glover Island is a 178 sq. km Public Reserve which is administered under the Crown Lands Act. Mineral exploration and development is allowed to continue within this Public Reserve. Guidelines to minimize the impact on threatened Pine Marten are provided through the Wildlife Division and Parks and Natural Areas Division of the Department of Environment and Conservation. In 2010 a Pine Marten Recover Plan was prepared by the Newfoundland Marten Recovery Team and is implemented by the Wildlife Division. In addition, there are two rare plants (Carex pseudocyperus and Dryopteris fragrans) located on the island. At least two federally and provincially-protected species of birds have been recognized in the Reserve (Olivesided Flycatcher, Contopus cooperi; and Rusty Blackbird, Euphagus carolinus). Special care must be exercised so as not to adversely affect any of these species or disrupt their habitat.

### 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE

## 5.1 ACCESSIBILITY AND LOCAL RESOURCES

Access to the Glover Island Property is most easily achieved via helicopter from bases in the community of Pasadena, 40 km to the north-northeast. Float plane access is also possible to Kettle Pond, where the Mountain Lake exploration camp is located. The Lady Slipper Lake forest resource access road extends from Corner Brook to the west shoreline of Grand Lake, 9 km west of Kettle Pond. This point can be used as a staging area for helicopter transport of supplies to the exploration site.

A second forest resource access road extends 16 km southward from Pasadena to North Harbour on Grand Lake, near the northwest end of Glover Island. This road can be used for barge access to the northeast side of the island. Earlier work programs used a barge stationed at the community of Howley on the north shoreline of Grand Lake. This barge is no longer serviceable. In 2011 Mountain Lake contracted a barge and transported it along the North Harbour road in order to move heavy equipment onto the island (Figure 5.1).



#### Figure 5.11:50,000 Topographical Map showing Barge Route

The north half of Glover Island has been previously logged and a number of old logging roads and skidder trails exist in this area. These roads can be utilized to move heavy equipment from the barge offload point, approximately 20 km south to the Glover Island Property boundary. In 2011 Mountain Lake established an access trail from the end of this road 7 km south to the exploration camp on Kettle Pond.

Exploration supplies and contract services can be obtained in Corner Brook or Pasadena. Skilled and experienced exploration crews are also available there, as well as in adjacent communities. A major hydroelectric power transmission line utilizes the north end of the island as a bridging

point to cross Grand Lake. This line is located 24.5 km to northeast (in a straight line) from the Mountain Lake camp.

# 5.2 CLIMATE AND PHYSIOGRAPHY

Climate is temperate with warm to hot summers extending from mid-May to mid-September, and temperatures ranging from 10° to 30°C. Winter temperatures vary from 0° to -30°C, with snow cover normal from December to April. Winter storms may be frequent, and annual snowfall amount varies from 3 to in excess of 5 m. Winter exploration activities are not significantly impacted unless maximum snowfall amounts are recorded or in persistent blizzard conditions. Grand Lake freezes only during the coldest winters, and cannot be used for ice transport of supplies. Exploration can be carried out throughout most of the year depending on specific activities although Spring breakup conditions and environmental considerations for denning marten, flowering plants and nesting birds is a consideration.

Glover Island is characterized by a hummocky, elevated plateau bounded by steep cliffs up to 350 m high giving rise to fjord-like topography. Water depth in Grand Lake locally exceeds 475 m making it one of the deepest lakes in Newfoundland. Only the northeast side of the island offers lower elevations and local relief. Local relief at LPSE is in the order of 50 m.

The upper plateaus consist of tree covered hills and ridges with thin till/soil cover or exposed bedrock. Adjacent areas consist of bogs, fens and small open ponds (with locally abundant aquatic plants and fauna). Transitional zones into bedrock ridges can be less than 10 m wide and may range up to several hundred meters. These transitional areas are typically covered in stunted spruce, sycamore and low scrub. Ridges are typically treed with fir and lesser amounts of white & yellow birch.

## 5.3 INFRASTRUCTURE

Infrastructure on the Glover Island property includes a 24-person all season exploration camp situated at the southwest end of Kettle Pond. The camp, consisting of 8 structures was constructed by Mountain Lake in 2011. It is of wooden construction, with steel roofing and electric heating. Power is supplied by a 60 kw diesel generator. The camp includes a large core logging/sampling/cutting facility, two bunk houses, cook house, storage unit, generator building and outhouse. Both phone and internet is provided through two satellite communication dishes located on a high point at the edge of camp. Two bermed fuel cache facilities are present on the property, a small one at camp (3m x 3m) and a larger one (6 m x 7 m) near the Lunch Pond South Extension drilling area.

### Figure 5.2 Mountain Lake Camp on Kettle Pond



Also based at the campsite are a Cat 315 excavator and a rubber-tracked Morooka 800 carrier.

A small log cabin, built by New Island Minerals circa 1988, is situated at the northeast end of Meadow Brook Pond. The cabin is in modest condition and could be refurbished for future use. All other structures at the Meadow Brook site have been removed.

Corner Brook, Pasadena and Deer Lake are the nearest population centers located 30 km northnorthwest, 40 km north-northeast and 60 km northeast, respectively, from Mountain Lake's camp at Kettle Pond.

#### 6.0 HISTORY AND PREVIOUS EXPLORATION

## 6.1 GLOVER ISLAND EXPLORATION GENERAL

The earliest recorded mineral exploration on Glover Island was by Brinco Inc. in 1953, targeting copper bearing massive sulfides in Glover Group volcanic rocks. At this time the island formed part of a long-term mineral concession area. Subsequent base metal exploration was carried out on the concession area in the late 1970's by Hudson's Bay Oil and Gas Ltd. (Lassila, 1979). Work included a fixed-wing AEM survey, and ground follow-up, including three diamond drill holes, on resultant EM anomalies. The Brinco mineral concession area was surrendered to the crown on February 26, 1985, under terms of the 1982 Mineral Act.

Geological mapping on Glover Island has been done by a number of workers. The area was covered by G.C. Riley in 1957 as part of a regional GSC mapping program. A major geological mapping/compilation of the whole island was done by Douglas Knapp in 1982 as part of a doctoral thesis. A major portion of the island was covered by Cawood and van Gool in 1993 as part of a GSC mapping initiative. Mapping coverage of the island under this initiative was completed in 1995 by Szybinski et al. Mapping of the south part of the island was carried out by Barbour in 1994-1995 as part of a MSc. program.

# 6.2 HISTORY OF GOLD EXPLORATION

The property was first staked in 1985 by South Coast Resources Inc. Systematic exploration for gold in 1985/1986 consisted of prospecting, geological mapping, and rock, soil and stream sediment sampling, resulting in discovery of the Kettle Pond South auriferous zone Figure 7.8.

Title to the property was transferred to Varna Gold Inc in 1987. They continued the program of grid cutting, stream-sediment sampling, b-horizon soil and till sampling, rock-chip sampling and prospecting (Wallace 1988). In 1989 Newfoundland Goldbar Resources Inc. signed a deal with Varna Gold Inc. to acquire a 50% interest in the property in return for exploration expenditures. Subsequent exploration to 1993 included approximately 100 kilometres of linegrid, which was covered with b-horizon soil sampling, and partially with VLF-EM and magnetics surveying, and lesser IP surveying. Some backhoe and hand trenching and sampling was done, and several diamond drill holes were completed on auriferous showings (French 1989, 1990, 1992, 1993). Over the period of 1986-1992 several new auriferous zones were discovered. These include the Discovery, Lunch Pond and Lunch Pond North veins, and the Tomahawk, 2700 Zone, Meadow Brook, Rusty Vein, Line 1500, and Lunch Pond South Extension prospects.

From 1987 to 1990 exploration was conducted by Noranda Inc. in an area north of the property held by Varna Gold Inc. (Collins 1987, Walker 1988, MacDougal 1990, Andrews 1990). They carried out prospecting, geological mapping, b-horizon soil sampling, and backhoe trenching and sampling, resulting in discovery of the Keystone and Jacamar gold prospects. Three diamond drill holes were drilled on the auriferous showings

In 1993 Varna Gold Inc. underwent a name change to New Island Minerals Ltd. and the property reverted 100% to New Island Minerals Ltd. The property was enlarged in 1994, by new staking, to include the area of the Keystone and Jacamar gold prospects. Exploration consisted of additional line cutting, prospecting, geological mapping, backhoe trenching and diamond drilling (French, 1995). A new auriferous zone was identified at the Lucky Smoke prospect. Up to this time 70 diamond drill holes had been drilled by Varna/New Island.

In 1996 the property was optioned to International Northair Mines. They conducted geological mapping, soil sampling, MAG/VLF-EM ground surveys, and minor trenching. International Northair Mines did not complete their earn-in agreement, and the property returned 100% to New Island Minerals Inc.

From 1998 to 2003 sporadic exploration was continued on the property by New Island Resources Inc. (formerly New Island Minerals Inc.). Work in 1998 consisted of line cutting, b-horizon soil sampling, geological mapping and prospecting, and resulted in discovery of the Rusty Trickle VMS prospect (Barbour and Hodge, 1998). Subsequent work in 1999 and 2000 consisted of IP geophysical surveys, a helicopter supported AEM survey by Fugro Airborne Surveys, magnetic, VLF-EM, TEM and HLEM ground surveys, prospecting, soil sampling and geological mapping (Woods 2000, Basha and Frew 2001). In 2003 New Island Resources drilled 6 holes at the Lunch Pond Extension Zone, and 2 holes at the Lucky Smoke Prospect.

In 2006 the property was optioned to Crew Gold Corporation. Their exploration program in 2007 and 2008 consisted of linecutting, b-horizon soil sampling, geological mapping, re-sampling of historic trenches, base-station GPS capture of historic drill collars, trenches and grid lines, and a helicopter-borne VTEM and magnetics survey contracted to Geotech Limited (Wilson et al, 2008). Crew returned the property 100% to New Island Resources Inc.

Mountain Lake acquired the property from New Island in October, 2010.

# 6.3 QUANTITY AND QUALITY OF HISTORIC DATA

The historic exploration data is available mainly as hard format maps, drill sections, summary reports and drill logs. Digital files include some Word and Excel files containing drill logs and soil, trench and drill sample locations and assays, and a Lunch Pond South Extension-Kettle Pond South database compiled by New Island Resources for a previous resource modelling program.

Historic trenches on the property were left open and some are still in reasonable condition. Original channel sample cuts are visible, and although sample ID was not permanently affixed to the channels it can be re-established by comparing sample maps to the existing channels. Twenty-five of the earliest diamond drill holes are stored in the NL government core storage facility at Pasadena. Core from three or four drill holes was lost during transport off island because of a barge sinking. The remainder of the historic drill core was left on the island and is no longer in useable condition because boxes have rotted and are no longer identifiable.

In 2008 Exploration Alliance Ltd. (for Crew Gold) re-sampled some of the trenches using NI-43-101 compliant protocols. They report that "overall there was reasonable correlation between the gold assay results of the 2008 resampling programme and historic gold assay results" (Wilson et al., 2008). They completed a base station GPS survey to capture a number of historic drill collars and line grid coordinates in Nad 27 format. They also scanned and registered in Map Info some of the soil sampling maps, trench sampling maps and drill collar data for holes not located and re-surveyed. However, the Nad 27 projection carries an inherent positioning error; Nad 83 format is required for accurate positioning.

In 2010 Mountain Lake resampled the remaining half of sawed core from the mineralized intervals in drill holes LPSE.28-03, 29-03, 30, 31, 32, and 33, and drill holes LS.07 (LS is used

to designate the Lucky Smoke prospect at Quartz Pond near the northeast end of the GI Trend) and 08 using NI.43-101 compliant protocols. There was reasonable correlation between the gold values in the new versus historic sampling. One of the authors (D. Barbour) was involved in much of the exploration on the property from 1991 to 1998. In his estimation exploration was done in accordance with "exploration best practices". However, historic assaying protocols did not utilize the insertion of standards, blanks and quarter-split duplicates, and all analytical results are therefore not NI 43-101 compliant.

There has been no mining or mineral production of any kind on Glover Island.

#### 7.0 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 REGIONAL GEOLOGICAL SETTING

Newfoundland represents the north-eastern-most expression of the Canadian Appalachian Mountains (Figure 7.1). The Appalachians consist of a complex collage of Early Palaeozoic peri-Laurentian and peri-Gondwanan oceanic suprasubduction zone and ribbon-shaped microcontinental terranes. The suprasubduction zone terranes include infant arc, extensional arc and back-arc settings. The microcontinental terranes were rifted off from the Laurentian and Gondwanan margins. Sequential accretion of these terranes to one another, and to Laurentia, occurred during closure of the Iapetus and Rheic oceans between the Late Cambrian and Permian. Various styles of mineral deposits occur in different tectonic settings related to the complex tectonic architecture and evolution of the Canadian Appalachians (Figure 7.2 and Figure 7.3). Orogenic and epithermal mineralization formed mainly in the tectonically active part of the orogen (central mobile belt) during post-Ordovician orogenic and collisional events. These events are related to the accretion of the peri-Gondwanan microcontinents to Laurentia during the Silurian Salinian orogeny and the Devonian Acadian orogeny. Mineralization is spatially associated with major accretionary faults, although it generally occurs in second order structures.



#### Figure 7.1 Canadian Appalachian Mountains

# 7.2 GEOLOGY OF NEWFOUNDLAND

The island of Newfoundland is comprised of four northeast-southwest trending tectonostratigraphic zones that are separated by major crustal fault zones (Figure 7.2; Hibbard 1983, van Staal 2007).

#### Figure 7.2 Tectonic Architecture of Newfoundland



The Humber Zone comprises the western-most part of Newfoundland. This zone consists of a Precambrian (Laurentian) crystalline basement inlier. This is overlain by Late Proterozoic to Paleozoic Humber Margin allochthonous oceanic sedimentary and ophiolitic rocks, and by sedimentary shelf facies. Metamorphic grade reaches amphibolite to locally migmatitic facies. Several Mississippi Valley type deposits occur within shelf facies rocks; e.g. Daniels Harbour mine: 6.6 million tonnes at 7.9% Zn (Swinden and Dunsworth, 1995), and the Round Pond deposit; 400,000 tonnes at 2% Zn (van Staal, 2007). Ophiolitic rocks of the Humber Arm allochthons host numerous copper, zinc and gold showings, including the York Harbour Mine: production of 90,000 tonnes of 3-12% Cu, 7% Zn; reserves of 200,000 tonnes of 2.68% Cu, 8.25% Zn, and 1 g/t Au (MacDougal et al., 1991). Orogenic gold deposits occur along the eastern edge of the Humber Zone (e.g. the Viking and Rattling Brook deposits).

The Humber Zone is separated from the Dunnage Zone to the east by the Baie Verte-Brompton Line and the Cabot Fault. The Baie Verte-Brompton Line is traceable a distance of 1,500 km, from northeast Newfoundland to the Quebec Eastern Townships. It is marked by a zone of steeply dipping, east facing Ordovician ophiolite complexes overlain by shaly metaconglomerates and olistostromal melanges, and is thought to be the root zone for the obducted Humber Arm ophiolitic complexes. The Cabot Fault is a major crustal structure extending from the south coast of Newfoundland, through Grand Lake to the north coast of the Baie Verte Peninsula. Latest activity on the fault is probably Carboniferous normal movements.



Figure 7.3 Tectonostratigraphic Subdivisions of Newfoundland

The Dunnage Zone contains the vestiges of Cambro-Ordovician continental and intra-oceanic arcs, back-arcs, and ophiolites that formed in the Iapetus Ocean (Williams, 1995; Zagorevski et al., 2007; van Staal et al., 2009). The Dunnage Zone is subdivided into the western peri-Laurentian Notre Dame Subzone, and the eastern peri-Gondwanan Exploits Subzone. A major crustal-scale fault zone, the Red Indian Line, marks the fundamental Iapetus suture zone between the two subzones. The Notre Dame Subzone contains three distinct Cambrian to Middle Ordovician (507-462 Ma) oceanic terranes and a continental magmatic arc (the Notre Dame arc), overlain by non-marine Silurian sediments. The Exploits Subzone consists of Cambrian to mid-Ordovician marine sedimentary and intercalated volcanic rocks, overlain by mid to late Ordovician black shales that pass upwards through turbidites into shallow marine and terrestrial Silurian sediments.

Numerous syngenetic VMS deposits occur within the Dunnage Zone, including the Duck Pond Mine (4.1 Mt at 3.3% Cu, 5.7% ZN, 0.9% Pb and 0.9 g/t Au: Aur Resources, 2007), and the past producing Buchans Mines (16.2 Mt at 14.515 Zn, 7.56% Pb, 1.33% Cu, 126 g/t Ag and 1.37 g/t Au: Kirkham et al., 1987).

The Gander River Ultrabasic Belt-Day Cove fault system separates the Dunnage Zone from the Gander Zone to the east. The Gander Zone comprises a metamorphosed sequence of Lower Cambrian to Lower Ordovician (~520-480 Ma) arenites, siltstones and shales, which are considered to represent the outboard part of a passive margin (van Staal, 1994). The Gander Zone is bounded to the east by the Dover-Hermitage Bay crustal suture.

The Dunnage and Gander Zones host numerous orogenic gold deposits. The deposits are spatially associated with larger crustal structures that define terrane boundaries, and that have been active repeatedly through the Early to Mid Paleozoic. Structures along the western margin of the Dunnage Zone are particularly proficient in gold deposits (Isle aux Morts, Glover Island, Pine Cove, Deer Cove, Stog'er Tight, Nugget Pond, Hammer Down). The Gander Zone and the eastern part of the Dunnage zone also host epithermal gold deposits.

The eastern-most part of Newfoundland comprises the Avalon Zone. This zone consists of Late Proterozoic, largely juvenile, arc-related submarine and terrestrial volcano-sedimentary sequences and turbidite, deltaic and fluvialtile sedimentary rocks. The Avalon Zone hosts numerous Late Proterozoic epithermal gold deposits, and several VMS deposits associated with Neoproterozoic volcanics.

# 7.3 GEOLOGY OF GLOVER ISLAND

The Cabot Fault forms a major structural boundary along the west side of Grand Lake that separates Glover Island from the Humber Zone (Knapp, 1982). In the Glover Island area the fault is mostly concealed by Grand Lake, but where exposed to the south it consists of a 20-metre thick vertical zone of extensive mylonitization and brecciation. However, Glover Island does preserve a part of the lithologies found in the boundary between the Dunnage and Humber zones. Glover Island is characterized by a large number of contrasting rock types located in a relatively small area; nine distinct lithostratigraphic units are recognized. A cross section of the property is presented in Figure 7.4. Contacts are generally structural boundaries and unconformities. Metamorphism ranges from greenschist to amphibolite facies, which along with local intense deformation obscures many primary features and structures. Minor remnants of blueschist facies metamorphism are preserved in rocks of the Grand Lake Complex.

Two lithostratigraphic units of the Humber Zone crop out on the northwest side of Glover Island. The structurally/stratigraphically lowest unit is the Cobble Cove gneiss, a sequence of strongly foliated quartzo-feldspathic orthogneisses containing metasomatized mafic dikes (Knapp, 1982; Cawood and van Gool, 1993). This unit is interpreted to represent a fragment of Grenvillian basement.

The Cobble Cove gneiss is structurally overlain by a sequence of polydeformed and metamorphosed clastic rocks termed the Keystone schist. This sequence comprises interbanded psammite, quartz pebble conglomerate, pelite, and minor amphibolite, marble, quartzite, biotite schist and graphitic schist. The contact with the underlying gneiss is a 10-metre thick high strain zone consisting of quartzo-feldspathic gneiss and highly deformed mafic schist, containing rounded tectonic clasts of undeformed gneiss and vein quartz (Knapp, 1982). The Keystone schist is interpreted to represent a basal clastic unit overlying Grenvillian basement, and is inferred to be of Cambrian or Upper Precambrian age.

The Keystone schist is structurally overlain by the Grand Lake Complex, the oldest unit of the Dunnage Zone exposed on Glover Island. The Grand Lake Complex consists of a basal greenschist overlain by talc-carbonate schists, serpentinized peridotite, cumulate layered gabbro, massive mafic to leucocratic gabbro, fine-grained vari-textured gabbro, and an upper greenschist. All of the units are intruded by mafic dikes while medium-grained equigranular trondhjemite intrudes only the upper part of the complex. A sample of trondhjemite was dated at 490 +/- 4 Ma (U-Pb zircon; Cawood and van Gool, 1996). The complex is interpreted to represent part of a Lower Ordovician ophiolite suite. At the south end of Glover Island is a fault-bounded block

comprised of sheeted dikes and basaltic pillow lavas and breccias termed the Otter Neck Group (Knapp, 1982). Geochemical analyses of these rocks suggest that they are related to the Grand Lake Complex, and represent the upper levels of an ophiolite suite. However, they are only weakly deformed as opposed to strongly deformed within the latter.



# Figure 7.4LPSE Cross Section

# Figure 7.5 General Geology of Glover Island



The Grand Lake Complex is overlain by the Kettle Pond Formation. This formation consists of clast-supported polymictic pebble to cobble conglomerate, and matrix-rich polymictic conglomerates that grade into arenaceous schists. Clast lithologies include gabbro, leucogabbro, trondhjemite, basalt, rhyodacite, rhyolite, quartz, jasper and minor fine-grained sediments and orthoquartzite. The conglomerate matrix consists of a green volcaniclastic metasediment, with more deformed sections rich in talc and fuchsite. The similarity of gabbro and trondhjemite clasts to the underlying ophiolitic rocks, and the talc and fuchsite component, suggest that the Kettle Pond Formation was largely derived from the Grand Lake Complex. The contact between the two is interpreted to be a nonconformity.

The Kettle Pond Formation is overlain by a mixed mafic and felsic volcanic sequence termed the Tuckamore Formation. At the south end of Kettle Pond the contact between the two is a thin schistose zone developed in rocks of the Kettle Pond Formation, and is interpreted as a  $D_1$  thrust. Here the base of the Tuckamore Formation consists of thinly intercalated bands of very finegrained mafic and felsic water-lain tuffs, and/or epiclastic material. This grades upward into more coarsely interlayered bands of mafic and felsic tuffs, interspersed with thicker units of mafic volcanics. The top of the sequence is a thin unit of distinctive quartz-feldspar crystal tuff. To the southeast and north of Kettle Pond the Tuckamore Formation is bounded on both sides by high-angle late faults (the Meadow Brook and Tuckamore faults). This block contains significant units of fine quartz and feldspar phyric rhyolite and of aphanitic, cherty aphyric rhyolite, as well as the mafic volcanic and interlayered mafic-felsic volcanic units. Minor thin graphitic shale units and massive pyrite-pyrrhotite beds occur locally. The Tuckamore Formation is overlain by mafic volcanics of the Glover Formation. At the south end of Kettle Pond this contact is conformable, and is defined by the disappearance of felsic volcanic units. The formation is composed mainly of a massive plagioclase phyric mafic rock that contains up to 5mm sized strongly saussuritized plagioclase. This unit could be sub-volcanic or a massive flow. Massive fine-grained amygdaloidal mafic volcanics and pillow lavas are subordinate in this area, but volumetrically more important north of Kettle Pond and on the south end of Glover Island. Rocks of the Glover Formation are generally much less deformed than those of the Tuckamore and Kettle Pond formations. In the Lunch Pond to Meadow Brook area, the Tuckamore Fault juxtaposes very strongly deformed rocks of the Tuckamore Formation against essentially undeformed rocks of the Glover Formation. The Tuckamore and Glover formations are of calc-alkaline affinity, and are interpreted as extrusive products of island arc volcanism (Knapp, 1982).

Parallochthonous metaclastic rocks of the Red Point Formation unconformably overlie trondhjemite of the Otter Neck Group along the southwest shoreline of Glover Island (Knapp, 1982). These consist of purple phyllite, metagreywacke, gray sandstone and metaconglomerate. An area of similar metaclastic rocks unconformably overlies Glover Formation lithologies at Corner Pond on the western mainland. These rocks are correlated with the Red Point Formation. They contain graptolite fauna that indicate a mid-Arenig age. The Corner Pond Formation includes purple pillow lavas, massive felsic volcanic rocks and tan sandstones in its upper stratigraphy. Graded bedding in both formations indicates that stratigraphy is right side up.

On the east side of Glover Island, the Glover Formation is intruded by the Glover Island granodiorite. This intrusion comprises medium-grained equigranular quartz-diorite to quartz-monzonite. U/Pb age dating on titanites and zircon yielded respective ages of 439 + -2, 439 + -3 Ma, and 440 + -2 Ma (Cawood et al., 1996).

Carboniferous rocks of the Deer Lake Group are exposed on the north end of Glover Island (Hyde, 1982). These consist of red-brown pebble conglomerate with interstratified sandstone, siltstone and minor limestone. On the mainland these strata unconformably overlie Dunnage Zone rocks or contacts are faulted.

# 7.4 STRUCTURE

Four deformation events are recorded in the Dunnage Zone lithologies on Glover Island. An earlier, possibly Grenvillian event, is recorded in the Cobble Cove gneiss and Keystone schist lithologies of the Humber Zone (Knapp, 1982). This event is represented by a well-developed, penetrative, regional schistosity. Related folds or other structures are not recognized due to transposition and high strain associated with subsequent deformational events. This foliation is distinguished based on overprinting by post-tectonic porphyroblasts. Deformation events affecting Dunnage Zone rocks are listed below:

- $D_1$ :  $D_1$  is a folding and thrusting event that affected both Humber and Dunnage zone lithologies on Glover Island. It is interpreted to be related to initial assembly of the oceanic terranes against Laurentia during the Ordovician Taconic orogeny.
- The most prominent expression of  $D_1$  deformation is a regionally penetrative foliation,  $S_1$ , which is the main fabric seen in the map area. It overprints the porphyroblasts that cut the earlier foliation in the Humber Zone. Because of transposition the main fabric is generally a composite  $S_1/S_0$  fabric in the Dunnage Zone lithologies.  $S_1$  is associated with a well-developed  $L_1$  lineation defined by

clast and mineral elongation, and by a pressure shadow lineation.  $F_1$  folds are not recognized due to the intensity of the transposition in  $D_1$ . An exception is a major isoclinal F1 fold in the Keystone schist (Knapp, 1982). The fold is defined by a reversal of stratigraphic facing of the lithologic units. The presence of  $D_1$ thrusting is suggested at two locales. The geometric distribution of the Cobble Cove gneiss and the Keystone schist on the northwest side of Glover Island forms a pattern which strongly resembles that of a thrust duplex. Farther to the east, the contact between the Tuckamore and Kettle Pond formations is a schistose zone that is pre-D<sub>2</sub>, and thus interpreted as a D<sub>1</sub> thrust.

- **D**<sub>2</sub>: D<sub>2</sub> deformation consists of an asymmetric fold-thrust system which affects all lithostratigraphic units, and is consistent with peak metamorphic conditions. The deformation affects the Glover Island granodiorite, suggesting that it correlates with the Silurian Salinic orogeny. Major F<sub>2</sub> folds are kilometric scale fold nappes contained within D<sub>2</sub> thrust sheets. These thrust sheets comprise an antiformal stack built upon a D<sub>1</sub> duplex in the basement lithologies. Transport of the thrust sheets over the edge of the antiformal stack may be the cause of the steep S<sub>1</sub> dips and the steep plunges of F2 fold axes. This may also explain the change in the dip direction of thrusts in the Lunch Pond area from southeast to southwest, and why the thrusts cut significantly across stratigraphy.
- Mesoscopic  $F_2$  folds are spectacularly displayed in the Kettle Pond-Lunch Pond area (Figure 7.6).

Figure 7.6 F2 Folds – Note Interference on Fold Limb



• In the Tuckamore and Glover formations these are open to close, polyharmonic to disharmonic similar folds displaying chevron, cuspate-lobate and ptygmatic styles Figure 7.7).



#### Figure 7.7F2 Folds in Tuckamore Formation

• These folds lack an axial planar cleavage, except in more homogeneous lithologies where a spaced differentiated crenulation cleavage is variably developed. In more schistose lithologies, in particular within the Kettle Pond Formation, the folds are close to isoclinal. In these areas a  $S_2$  axial planar cleavage is well developed, with the earlier  $S_1/S_0$  cleavage variably transposed into parallelism with  $S_2$ . In areas of strong  $S_2$  foliation  $F_2$  folds are preserved as isolated tiny rootless intrafolial isoclinal folds oriented along the fabric. Quartz veins in the Kettle Pond Formation are commonly folded into "fish-hook" style folds. The mesoscopic folds are parasitic on decametric to kilometric scale  $F_2$  folds. Fold asymmetries indicate a kilometric scale antiform in the Lunch Pond area; the hinge domain of this fold has been removed by a thrust running through Lunch Pond (Figure 7.8).



Figure 7.8 Geology and Mineral Prospects of Central Glover Island

- $D_3$ :  $D_3$  deformation consisted of a northwest-southeast oriented compressional event which preferentially folded lithostratigraphic units that were suitably oriented by  $D_2$ . In areas where lithostratigraphic units trend northeast, the only obvious effects of  $D_3$  deformation are isolated highly asymmetric microscopic to mesoscopic folds.
- **F**<sub>3</sub> folds occur on all scales. The largest order of folds is the hectametric to kilometric scale Kettle Pond antiform-synform pair, located south and west of Kettle Pond (Figure 7.9).  $F_3$  folds vary from gentle to close, are dominantly chevron or cuspate-lobate style, and are frequently polyharmonic and occasionally disharmonic. Axial surfaces of the folds dip very steeply both to the west-northwest and the east-southeast. Because of the variable attitudes of foliation and layering caused by earlier  $F_2$  folds and  $D_2$  thrusts, the  $F_3$  folds have a range of plunges from steep southerly to steep northerly; steep southerly plunges are dominant. A S<sub>3</sub> axial planar cleavage is developed only in fine-grained schistose facies of the Kettle Pond Formation, and to a lesser extent in chloritic schists of the Glover Formation. The S<sub>3</sub> foliation is generally a differentiated crenulation cleavage, and locally a spaced cleavage defining the axial surfaces of tiny  $F_3$  chevron folds.



- A number of north to northeast trending high-angle faults cut the limbs of the  $F_3$  macroscopic folds, e.g. the Kettle Pond West, Kettle Pond and George's Pond faults. The faults are sub-parallel to  $F_3$  axial surfaces, and their placement along  $F_3$  limbs suggest that they originated as accommodation faults related to  $F_3$ . The faults show both dextral and sinistral surface offsets of lithostratigraphic units. However, the disposition of lithostratigraphic elements, on surface and in cross-section, requires that the net movement vectors on the faults are oblique-slip to dip-slip.
- **D**<sub>4</sub>: D<sub>4</sub> deformation consists of a series of brittle to brittle-ductile faults that are probably associated with Carboniferous movement on the Cabot Fault system. Deformation occurred in an extensional environment, producing northeast to north-northeast trending high angle faults with sub-vertical or steeply plunging oblique-slip movements. Local evidence suggests that many of the D<sub>4</sub> faults represent reactivation of earlier D<sub>1</sub> or D<sub>2</sub> thrusts, or of D<sub>3</sub> accommodation faults. D<sub>4</sub> movements on the faults are represented by thin fault gouge and breccia zones, and by extensive slickenside development in adjacent siliceous lithologies. In the Lunch Pond area slickensides suggest that there may be some strike-slip movements as well. Small kink bands and a spaced fracture cleavage may be developed immediately adjacent to the faults, and a brittle fracturing more extensively developed. In the project area, the Meadow Brook and Tuckamore faults represent two of the most significant D<sub>4</sub> faults, although the Meadow Brook Fault originated as a D<sub>1</sub> thrust.

## 7.5 MINERALIZATION

Sixteen (excluding the Clyde Cu-Ni-Pd-Pt occurrence) gold prospects or deposits have been identified on the Glover Island property (Figure 7.8). These are listed below, firstly the Kettle Pond hosted deposits, and secondly, the Tuckamore hosted deposits. In addition to gold, the property hosts volcanogenic base metal prospects.

# 7.6 KETTLE POND HOSTED

i) Discovery Vein: This prospect consists of a series of up to 40-centimetre thick quartz veins hosted in a decametric scale asymmetric  $F_2$  antiform. A single large trench exposes a 5-metre width of veins that occur as a stacked series along the hinge line of the fold (Figure 7.10). A concise gold anomaly in b-horizon soils tracks the hinge line for a distance of 800 metres to the northeast. Channel sampling of the vein returned a best value of 30.8 g/t gold over 1.7 metres (historic unverified value, New Island Minerals). No drilling has been done on this prospect.

## Figure 7.10 Discovery Vein showing highly irregular outcrop pattern



ii) Lunch Pond Vein: The Lunch Pond vein is also hosted in a decametric scale asymmetric F2 antiform. Two trenches were excavated 25 metres apart, exposing a white massive quartz vein up to 2 metres thick. Minor very fine-grained visible gold occurs in the milky quartz, and in millimetre scale late cross-cutting clear quartz veinlets. Finer-grained gold is associated with disseminated pyrite, commonly occurring along black pressure dissolution seams. Large aggregates of fine-grained auriferous pyrite are locally present in the vein. The best reported channel sample value is 1.5 metres of 150 g/t gold (unverified historic value).

This channel sample included a 15-centimetre thickness of a large pyrite aggregate (Figure 7.11). Three short diamond drill holes were drilled on the prospect. LPQ.1 and 2 were drilled across the vein. LPQ.2 intersected quartz vein from 4.88-10.67m and from 24.38 to 28.65m (end of hole). The drill hole assayed 0.73 g/t gold over its 23.62m length, with best values contained in altered rock between the two vein zones (unverified historic value). LPQ.3 was drilled in the opposite direction between the two trenches, and down-plunge of the vein, and did not cut significant mineralization. The prospect is open in all directions.

# Figure 7.11 Large Pyrite Aggregate in Lunch Pond Vein



Lunch Pond North veins: The main prospect consists of a very irregularly shaped vein exposed in a large trench over a length of 26 metres and a thickness of up to 4.5 metres. Numerous other smaller veins occur within a northeast trending iron carbonate-talc-fuchsite alteration zone measuring at least 400 metres by 50 metres. Veining is again spatially associated with a F2 antiformal closure. Best channel sampling on the main vein returned 4.92 g/t gold over 0.7 metres (unverified historic value). Drill hole LPN.1 on the main vein intersected up to 9-metre thick veined zones in altered conglomerate, with gold values of 1.2 g/t over 7.9 metres, and 0.85 g/t over 6.9 metres (unverified historic values). LPN.2, drilled 100 metres to the northeast, intersected altered conglomerate with sporadic gold values up to 0.85 g/t (unverified historic values). This prospect is also open in all directions.



## 7.7 TUCKAMORE HOSTED

- i) Kettle Pond Brook: Mineralization consists of a number of quartz vein boulders distributed over a small area in Kettle Pond brook. The boulders consistently assayed gold values up to 20 g/t (unverified historic values). Four hundred metres upslope to the east, drill hole KPB.1 intersected 5.4 metres of "typical mineralized felsite"; no assays are available for this zone. The hole was lost at 23.77 metres before reaching its intended target.
- ii) Kettle Pond South: The mineralized zone is located in Tuckamore Formation lithologies directly above the contact with the underlying Kettle Pond Formation (Figure 7.8). It is situated in the broad hinge zone of a hectometric scale F3 antiform. Mineralization consists of quartz-iron carbonate veining, up to 2 metres thick, with associated silicification and iron carbonate alteration that is semiconcordant to lithostratigraphy. Gold occurs with disseminated pyrite in both quartz vein and silicified host rock, but appears to be richest within pyrite concentrations adjacent to vein margins. The deposit has been outlined over 200 metres of strike and to a depth of 97 metres by 11 diamond drill holes. The best *ining Consultants Inc., Report No. 244a*
drill intersection assayed 4.8 g/t gold over 18.5 metres (unverified historic values). The zone averages 10 metres true thickness. Mineralization is open in all directions.

- iii) LPC: Seven diamond drill holes were drilled in Tuckamore Formation lithologies in an area of high gold values in b-horizon soils. Unfortunately the holes were drilled parallel to lithostratigraphy and to mineralization trends. Drill hole LPC.2 intersected 54.6 g/t gold over 1.22m, and LPC.3 intersected 3.72 g/t gold over 1.1 metres (unverified historic values). Holes GP.1 and 2 were drilled across lithostratigraphy 250 metres to the northwest. GP.2 intersected sporadic mineralization with best value of 3.6 g/t gold over 1 metre (unverified historic value).
- iv) Lunch Pond South Extension: Gold mineralization occurs adjacent to the LPSE thrust, which brings older Tuckamore Formation lithologies over younger rocks of the Glover Formation (Figure 7.8). Gold is associated with widespread silicification located directly above the thrust. The silicified zones are tabular and extensive, and are conformable (or at least semi-conformable) with lithostratigraphy. Silicification is normally pale gray colored, and massive with common "chicken wire" textured in-situ brecciation. A pale gray-green amorphous silicification, associated with anomalous chalcopyrite, is prominent at the east end of the deposit, adjacent to the Lunch Pond Thrust.

## Figure 7.13 Silicified and brecciated auriferous LPSE Zone



Mineralization in the Main Zone has been identified over an along-strike distance of 1250 metres and to a vertical depth of 270 metres, with maximum true thickness of 80 metres. The Main Zone is comprised of several closely spaced and parallel silicified sheets that locally coalesce into a single unit. Some of the better drill intercepts include 2.3 g/t gold over 53.7 metres in LPSE.4 (including 5 g/t gold over 18.5 metres) (unverified historic values). A second, less strongly mineralized zone is located 50 metres above the Main Zone. The Upper Zone has been traced for a distance of 500 metres and to 200 metres vertical depth, and is up to 35 metres in drill intersections of this zone include 0.24 g/t gold over 38.65 metres in drill hole LPSE.21 (unverified historic value). Gold has also been noted in association with thin pyrite-bearing quartz veins cutting a quartz-feldspar crystal tuff marker horizon approximately 100 metres above the Main Zone. This mineralization is sporadic, with values of up to 3.05 g/t gold over

1 metre in DDH LPSE.28-03 (unverified historic value). This unit has only been randomly sampled.



## Figure 7.14 Polished thin section of gold in pyrite (x20 magnification)

The LPSE Zone is the most advanced gold prospect on the property, and has been the focus of the 2011-2012 diamond drilling campaigns by Mountain Lake. The LPSE Zone is also the subject of the current resource estimate. Sixty-four diamond drill holes have been completed on this zone up to the date of this resource estimate. Several polished thin sections were prepared and examined by D. Barbour as part of his MSc. studies. The samples were collected from the mineralized zone at Lunch Pond South Extension. The sections show abundant tiny grains of free gold occurring along the margins between pyrite grains, along fractures in pyrite grains, and encapsulated within pyrite grains (Figure 7.14). It is unknown how much of the total gold is represented by these free gold grains.

- v) Lunch Pond: A single drill hole, LP.1, was drilled underneath Lunch Pond 300 metres to the east of the LPSE prospect. The drill hole is situated in an area where the distance between the Meadow Brook and Tuckamore faults narrows to 100 metres. The hole intersected 4.5 metres of typical LPSE-type mineralization, as well as several other thin bands. The mineralization was not assayed because the drill core was lost during transportation, before the core samples could be cut.
- vi) Line 1500: This prospect is located 1,300 m northeast of the Lunch Pond Prospect. Mineralization is associated with a series of thin, very fine-grained intrusive textured felsic units in the Tuckamore Formation adjacent to the Meadow Brook Fault. The felsite units are variably silicified and iron carbonate altered, with gold values directly related to the degree of alteration. The zone has been noted in outcrop for a strike distance of 500 metres, with best outcrop grab

values of 4.1 g/t gold (unverified historic value). A single short drill hole was drilled underneath the original outcrop showing. It intersected widespread weakly anomalous gold values, with a best value of 1 metre of 3.46 g/t gold (unverified historic value). The mineralization is open in all directions.

- vii) Rusty Vein: This showing straddles the Meadow Brook Fault, and is located 900 metres northeast along strike from Line 1500. Mineralization is associated with quartz-iron carbonate alteration in felsic lithologies of the Tuckamore Formation, and with iron carbonate-quartz-talc-fuchsite alteration of Kettle Pond Formation lithologies on the other side of the fault. The zone is exposed in six backhoe trenches over a 170-metre distance. Chip-channel sampling of the trenches returned best values of 11.3 g/t gold over 2 metres, and 6.8 g/t gold over 2 metres (unverified historic values). Two short diamond drill holes were drilled on the zone. Drill hole RV.1 was drilled in the conglomerates west of the fault and intersected 0.5 g/t gold over 4.5 metres; best value 1.79 g/t gold over 1.5 metres (unverified historic values). Mineralization remains open in all directions.
- viii) Meadow Brook: The showing is located 800 metres northeast along strike from Rusty Vein. Mineralization is associated with silicified and iron carbonate altered felsite of the Tuckamore Formation, immediately east of the Meadow Brook Fault. Seven backhoe trenches expose the zone over a width of 50 metres. Channel sampling of trenches returned a best value of 3.08 g/t gold over 5.1 metres (unverified historic value). Two short diamond drill holes were drilled in the trenched area. MBZ.1 intersected weak sporadic gold values over a 20-metre interval, with best value of 1.93 g/t gold over 0.4 m (unverified historic value). MBZ.2 was collared near the Meadow Brook Fault and encountered mainly conglomerates west of the fault. The prospect is open in all directions.
- ix) 2700 Zone: The 2700 Zone is located a further 1,600 m along strike to the northeast. Mineralization occurs in typical silicified and iron carbonate altered Tuckamore Formation lithologies immediately east of the Meadow Brook Fault; some stockwork quartz veining is also associated with the alteration. Seven backhoe trenches expose mineralization over a distance of 230 metres and over widths from 15 to 30 metres. Channel sample values include 4.93 g/t gold over 1.9 metres and 1.47 g/t gold over 11.6 metres (unverified historic values). Three diamond drill holes were completed over a 90-metre strike length of the deposit. All intersected a thick zone of low gold values (up to 36 metres), with best intervals of 1.1 g/t gold over 20 metres in DDH.2700-1; and 5.47 g/t gold over 2.8 m in DDH.2700-3 (unverified historic values). The 2700 Zone mineralization remains open in all directions.
- x) Tomahawk: The prospect consists of two mineralized areas separated by 350 metres of strike, and starting 450 metres northeast along strike from the 2,700 Zone. Gold mineralization occurs in typical altered Tuckamore Formation adjacent to the Meadow Brook fault. Five backhoe trenches expose a 50-metre length and 30-metre width of mineralization at the southwest area. The best trench channel sample assayed 2.9 g/t gold over 2.3 metres (unverified historic value). The northeast area consists of a number of mineralized outcrops; no trenching has been done in this area. No diamond drilling has been done on either area.
- xi) Lucky Smoke: The Lucky Smoke deposit is located 800 metres northeast along strike from Tomahawk, and is situated in the same relative position immediately east of the Meadow Brook Fault. Mineralization is similar to the LPSE zone in that massive aphanitic silicification is volumetrically significant, although

"chicken-wire" style in-situ brecciation has not been noted. Fine-grained "felsites" are also present, locally with silicification and iron carbonate alteration and related elevated gold values. Very fine-grained visible gold has been noted in the mineralized zones. Backhoe trenching and eight diamond drill holes expose mineralization over a 100 metre length, a 50-metre width, and to 120 metres vertical depth; mineralization is open in all directions. All drill holes intersected gold mineralization. The intersections include 10.18 g/t gold over 8 metres in LS.1, 25 metres below a surface trench intersection of 5.9 g/t gold over 9 metres. Drill hole LS.8 cut the thickest intersection at 42.45 metres of 0.95 g/t gold, including 1.48 g/t over 7 metres and 2.17 g/t over 11 m (all unverified historic values). A number of trenches expose visibly mineralized felsite northward toward the Keystone Prospect, suggesting that these zones may be contiguous. Assay data for these trenches is not available, although channel sample cuts are visible in the trenches.

- xii) Keystone: The Keystone prospect is located 300-400 m northeast along strike from Lucky Smoke. It was discovered by Noranda Exploration Company, Limited in the late 1980's. Mineralization is typical of all the prospects north of Lunch Pond. A channel sample across the showing assayed 3.74 g/t gold over 4 metres. A single diamond drill hole underneath the showing intersected a best zone of 1.65 g/t gold over 4 metres (all values unverified historic values).
- xiii) Jacamar: This prospect was also discovered by Noranda, and is situated approximately 60 m east across strike from Keystone. Two parallel zones of mineralization was exposed by trenching, with channel sample values of 3.34 g/t gold over 3.5 metres, and 8.96 g/t gold over 3 metres respectively (unverified historic values). Two short diamond drill holes were drilled 50 metres apart, intersecting several low grade zones, with best value of 3.29 g/t gold over 1.1 metres (unverified historic values).

## 7.8 BASE METAL PROSPECTS

- Rusty Trickle: Felsic volcanics at the south end of the property host a major VMS-style alteration zone characterized by strong silica-sericite-pyrite-chlorite alteration, with sodium depletion and barium enrichment (Barbour, 1998, Basha, 2001). The alteration zone has been traced over a length of 800 metres and a thickness up to 160 m. It contains up to 20% stringers of pyrite-sphalerite-chalcopyrite-galena.
- Grab samples of mineralization assayed as high as 12.9% zinc, 1.58% copper, 1.16% lead and 15.6 g/t silver (unverified historic values). A number of untested EM conductors are spatially associated with the alteration zone. No diamond drilling has been done on this prospect.
- iii) Other Mineralization: Massive aphanitic felsic volcanics at the north end of the property, north of Jacamar, host frequent stringers and pods of massive pyrite. Grab samples of this mineralization contained only traces of base metals. Seven hundred metres northeast of Meadow Brook is a conformable metre-thick band of massive pyrrhotite-pyrite-graphite. Grab samples of this zone also contained only traces of base metals.

#### 8.0 **DEPOSIT TYPES**

Gold mineralization on Glover Island resembles typical orogenic (shear-hosted mesothermal) deposits. The mineralization can be divided into two classifications based on host lithology and style of mineralization. These are: (i) Kettle Pond hosted; historically "quartz vein type", and (ii) Tuckamore hosted; historically "felsite type". Both classifications show a spatial association with F2 folds, share some similar alteration features, and have an association of gold with pyrite that occurs along late fractures that commonly contain black residua seams resulting from pressure dissolution. The two types of mineralization are considered to be cogenetic, with their differences resulting from the contrasting competencies of the host lithologies.

- i) Kettle Pond hosted: Gold mineralization hosted by the Kettle Pond Formation occurs in massive white quartz vein bodies that are highly irregular in shape and variable in strike extent and width (Discovery, Lunch Pond and Lunch Pond North veins; Figure 7.8). The quartz is ubiquitously fractured, with a mosaic of irregular black pressure dissolution lines and seams that are partly stylolitic. Visible free gold occurs in late, clear, very thin (1-3 mm) parallel veins that postdate the main quartz phase. Gold is also associated with minor pyrite within the veins. Very high gold values occur in larger aggregates or masses of fine grained pyrite hosted by the veins. The overall pyrite content of the veins is less than 0.5%; other sulphide minerals occur only in trace amounts. The quartz veins occur broadly within the foliation, and are commonly folded and boudinaged. Asymmetries of parasitic mesocopic  $F_2$  folds in the area of the veins indicate a spatial association between veins and decametric scale  $F_2$  fold closures. While the observed strike extent of the main veins does not exceed 25 metres, soil geochemical gold anomalies suggest that veins may be stacked in narrow zones that extend for hundreds of metres. The veins are associated with extensive Fecarbonate, talc and fuchsite alteration in the host lithologies.
- Tuckamore hosted: Gold mineralization hosted by the Tuckamore Formation is ii) more variable in character, but is generally characterized by silicification with volumetrically less quartz vein component (Kettle Pond Brook, Kettle Pond South, LPC, Lunch Pond South Extension, Lunch Pond, Line 1500, Rusty Vein, Meadow Brook, Tomahawk, 2700 Zone, Lucky Smoke, Keystone, and Jacamar; Figure 7.8). A common feature of all prospects is that they occur near the base of the Tuckamore Formation, immediately overlying a  $D_1$  or  $D_2$  thrust surface. Mineralization is mainly hosted by the sequence of thinly intercalated to laminated felsic and mafic tuffs. Thin units of very fine-grained, intrusivetextured quartzo-feldspathic rocks (aplites) are common within the mineralized sequence northeast of Lunch Pond; hence the historical "felsite type" classification. Silicification occurs as fragments in D2 fault breccias, is not folded by  $F_2$ , but is folded by  $F_3$ , suggesting that it occurred late during the  $D_2$  event. Massive silicification is generally cut by black pressure dissolution lines and seams, which locally produce a "chicken wire" style in-situ breccia. A spatially more extensive iron-carbonate alteration predates the silicification. Gold is associated with pyrite that fills late fractures in the silicified rock. The gold occurs as tiny grains within pyrite crystals or along crystal margins; coarser visible gold is rare. Pyrite content of the mineralized zones rarely exceeds 1%, and is generally less than 0.5%. Chalcopyrite occurs in trace amounts; other sulfides are very rare or absent.

# 9.0 EXPLORATION

Mountain Lake conducted two drilling programs on the property, one in 2010 and one in 2011. This work is summarized in Section 10. No other work was carried out during this stage of exploration.

#### 10.0 DRILLING

During 2011 and 2012 Mountain Lake engaged in two drilling campaigns (Summer & Fall, 2011, and Winter, 2012) and a location survey for both historical and Mountain Lake drill hole collars (excluding historical drill holes where the collars had been removed or covered and holes LPSE-12-63 to LPSE-12-74 which were completed after the survey). The survey results were provided to Mountain Lake in UTM Nad 83 coordinates.

#### **10.1 PROCEDURES AND SURVEYS**

The track-mounted, self-propelled, Duralite 800 diamond drill and motorized track carrier were flown in pieces from Lady Slipper Road to the LPSE drill site on August 20th and 21st, 2011 and reassembled on Glover Island. The first drill hole (LPSE-11-34) was collared on August 25th, 2011. Angled drill holes on the east grid were drilled at an azimuth of 350° true north while those on the west grid were drilled at a 020° azimuth. Slight adjustments were made where necessary in these azimuth directions to allow hole deviation such that the intersected mineralized sections would lie as close to the section lines as possible. Dips ranged from a low of 45° for shallow holes to a high of 68° for deeper holes. Down hole directional measurements were taken at regular ~50 m intervals using a Reflex survey instrument.

During the 2011 Summer and Fall drilling all core was strapped in lots of 15-25 boxes each and flown via helicopter (Universal Helicopters based in Pasadena) from each drill hole site back to the Kettle Pond camp where it was prepared for logging and sampling. Subsequently, the core was cross piled for stability and then transferred to core racks constructed at the camp site. Approximately 70% of all Mountain Lake core has currently been transferred to the core racks.

Thirty-five historic diamond drill holes were drilled on the Lunch Pond South Extension deposit (LPSE-1 to 33, plus LPSE-28-03 and 29-03) in addition to Mountain Lake drilling and combined are the focus of this report and the current resource estimate (Figure 10.1).

#### **10.2 HISTORICAL DRILL HOLES**

The historical holes identified mineralization along 1 kilometre of strike. Drill holes were primarily focused along 300 m of strike, from 9950E to 10250E on current drill grid coordinates. This section represents the thickest and most continuous area of mineralization. Mineralization continues eastward to 10500E and westward to 9300W, but is not as thick and individual zones appear less continuous. Historical hole locations at LPSE are indicated below in Table 10.1.





<b>TABLE 10.1</b>												
	HISTORICAL DRILL HOLES											
Drill Hole	Easting (Nad 83) Northing (Nad 83) Elevation (m) Dej											
LPSE-01	441435.3	5394738.6	414.76	127.71								
LPSE-02	441562.521	5394579.618	417.949	129.84								
LPSE-03	441382.7	5394738.6	412.2	106.68								
LPSE-04	441324.446	5394734.033	411.892	124.05								
LPSE-05	441283.3	5394704.0	413.8	87.78								
LPSE-06	441347.243	5394533.035	421.559	221.59								
LPSE-07	441455.218	5394549.502	415.995	227.69								
LPSE-08	441608.2	5394607.2	419.4	265.18								
LPSE-09	441632.3	5394709.9	424.1	122.83								
LPSE-10	441248.2	5394590.1	418	102.72								
LPSE-11	441195.646	5394577.559	422.005	117.35								
LPSE-12	441150.416	5394543.061	425.869	174.04								
LPSE-13	440953.247	5394652.556	431.634	89.00								
LPSE-14	440881.471	5394633.634	440.805	135.64								
LPSE-15	440670.4	5394832.1	441.1	75.29								
LPSE-16	441590.7	5394632.9	419.4	291.69								
LPSE-17	441820.7	5394781.9	424	100.28								
LPSE-18	441712.3	5394838.8	429.2	142.34								
LPSE-19	441521.372	5394768.239	421.627	64.01								
LPSE-20	441512.6	5394823.5	417.9	156.36								

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<b>TABLE 10.1</b>											
HISTORICAL DRILL HOLES											
Drill Hole	rill Hole Easting (Nad 83) Northing (Nad 83) Elevation (m) Depth										
LPSE-21	441458.653	5394523.052	419.101	314.86							
LPSE-22	441473.342	5394753.853	419.826	114.30							
LPSE-23	441545.1	5394753.9	421.9	57.61							
LPSE-24	441570.52	5394706.702	439.868	80.47							
LPSE-25	441568.715	5394703.953	440.267	77.11							
LPSE-26	441535.5	5394588.0	419.7	107.29							
LPSE-27	441506.533	5394603.322	421.603	68.28							
LPSE-28	441010.341	5394619.719	429.427	88.70							
LPSE-28-03	441327.601	5394518.999	424.208	281.33							
LPSE-29	441066.762	5394586.681	426.104	106.68							
LPSE-29-03	441447.6	5394751.2	414.8	135.62							
LPSE-30	441306.21	5394529.213	423.451	231.34							
LPSE-31	441410.491	5394502.474	425.167	398.37							
LPSE-32	440969.362	5394555.049	437.147	196.29							
LPSE-33	440667.6	5394664.7	443.6	192.94							

## **10.3 MOUNTAIN LAKE DRILL HOLES**

Diamond drilling on the deposit was continued by Mountain Lake in 2011-12. Results from all of these drill holes, LPSE.11-34 to LPSE.12-74 are included in the resource estimate. Drilling was concentrated in the main area of mineralization from 9800E to 10250E, with planned intercepts on 50-metre centers throughout the zone. The zone was delineated down to 230 m vertical depth; deepest intersection at 270 metres vertical depth. Several holes were drilled west of 9800E to improve the continuity of mineralization in that direction, and to see if some of it could be pulled into the resource estimate.

<b>TABLE 10.2</b>											
MOUNTAIN LAKE DRILL HOLES FOR 2011 AND 2012											
Drill Hole	Easting (Nad 83) Northing (Nad 83) Elevation (m) Depth (m										
LPSE-11-34	441542.223	5394627.269	426.408	311							
LPSE-11-35	441531.642	5394684.557	438.973	124							
LPSE-11-36	441493.684	5394624.54	423.268	205							
LPSE-11-37	441498.102	5394589.438	419.28	213.5							
LPSE-11-38	441442.544	5394603.984	418.389	189							
LPSE-11-39	441400.59	5394572.067	415.816	200							
LPSE-11-40	441407.24	5394531.179	419.735	269							
LPSE-11-41	441396.256	5394596.994	417.087	164							
LPSE-11-42	441334.469	5394638.568	416.618	116							
LPSE-11-43	441342.838	5394567.733	417.306	239							
LPSE-11-44	441352.933	5394484.532	430.348	337							
LPSE-11-45	440982.416	5394554.618	435.223	173							
LPSE-11-46	440896.657	5394623.601	439.947	171							
LPSE-11-47	441302.362	5394553.439	419.744	188							
LPSE-11-48	441313.251	5394482.587	430.94	293							
LPSE-11-49	441265.05	5394478.682	431.506	315							

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LPSE-11-50	441253.807	5394542.856	423.686	205
LPSE-11-51	441202.076	5394533.367	426.646	176
LPSE-11-52	441156.179	5394528.411	428.314	206
LPSE-11-53	441417.222	5394462.139	436.495	367
LPSE-11-54	441095.9	5394546.764	427.705	170
LPSE-11-55	441388.663	5394645.537	418.272	95
LPSE-11-56	441552.849	5394556.858	415.449	338
LPSE-11-57	441417.282	5394461.764	436.507	463
LPSE-11-58	441595.994	5394569.335	415.506	449
LPSE-11-59	441212.2	5394473.926	434.291	319
LPSE-11-60	441504.661	5394541.431	414.095	331
LPSE-11-61	441212.313	5394473.317	434.31	364
LPSE-11-62	441518.841	5394498.246	417.383	410
LPSE-12-63*	441163	5394471	443	338.8
LPSE-12-64*	441105	5394490	437	245
LPSE-12-65*	440892	5394514	461	275
LPSE-12-66*	440861	5394562	455	251
LPSE-12-67*	440813	5394581	457	212.47
LPSE-12-68*	441024	5394541	432	226
LPSE-12-69*	441010	5394489	436	290.3
LPSE-12-70*	440795	5394648	451	154
LPSE-12-71*	440746	5394664	451	139.19
LPSE-12-72*	440782	5394603	454	212
LPSE-12-73*	440734	5394619	453	184
LPSE-12-74*	441725	5394778	411	154

\*Indicated Nad 83 UTM coordinated were taken with a Garmin handheld GPS and may be limited to accuracies in the order of +/-4m.

The gold grades and intersection widths of the current drilling correlated very well with those of the adjacent historic drill holes. For this reason Mountain Lake did not twin any of the historic drill holes.

#### **10.4 SPECIFIC GRAVITY**

Specific gravity measurements were carried out at Mountain Lake's core logging facility using an A&D GF6100 scale with a readability of 0.01g. A table of 2012 specific gravity measurements is shown in Table 10.3 below.

TABLE 10.3 Specific Gravity Data									
Drill Hole	From (m)	To (m)	SG	% Sulfide	Rock Type				
LPSE-11-39A	157.65	157.76	2.664		Silicified Mafic Volcanic				
LPSE-11-39A	160.00	160.11	2.705		Silicified Mafic/Breccia				
LPSE-11-39A	162.80	162.97	2.693		Tuckamore banded Felsic				
LPSE-11-39A	165.50	165.66	2.773		Mafic Volcanic				
LPSE-11-39A	169.50	169.60	2.677		Breccia w/ ~1% Py				
LPSE-11-39A	170.00	170.13	2.643		Silicified Mafic/Breccia				
LPSE-11-39A	189.88	190.03	2.799		Mafic/Diabase				
LPSE-11-39A	191.50	191.65	2.758		Glover Fm - Mafic Volcanic				
LPSE-11-60	280.00	280.16	2.719		Carbonitized Mafic micro breccia				
LPSE-11-60	299.30	299.48	2.798		Tuckamore Mafic Volcanic				
LPSE-11-62	6.00	6.12	2.659		Qtz-Feld Crystal Tuff				
LPSE-11-62	89.10	89.24	2.770		Tuckamore Mafic Volcanic				
LPSE-11-62	133.50	133.62	2.636		Intermediate to Felsic Flow				
LPSE-11-62	153.85	153.98	2.809		Mafic Volcanic Tuff				
LPSE-11-62	163.05	163.14	2.713	tr	Quartz Breccia				
LPSE-11-62	170.65	170.78	2.675	tr	Quartz Breccia				
LPSE-11-62	197.50	197.67	2.658	tr	Alteration Zone				
LPSE-11-62	208.90	209.03	2.673	tr	Alteration Zone				
LPSE-11-62	219.70	219.83	2.654		Alteration Zone/ Silicified Zone				
LPSE-11-62	249.90	250.03	2.697		Felsic Tuff				
LPSE-11-62	272.05	272.17	2.747		Mafic Volcanic Tuff				
LPSE-11-62	293.55	293.70	2.766		Mafic Volcanic Tuff				
LPSE-12-63	94.21	94.30	2.697		Mafic Volcanic Tuff				
LPSE-12-63	96.52	96.64	2.645		Felsic Tuff				
LPSE-12-63	145.08	145.16	2.809		Diabase Dike				
LPSE-12-63	158.30	158.47	2.673		Felsic Volcanic Flow				
LPSE-12-63	191.25	191.36	2.684		Felsic Tuff				
LPSE-12-63	200.00	200.12	2.785		Mafic Volcanic Tuff				
LPSE-12-63	241.11	241.21	2.670	3	Felsic Volcanic Flow				
LPSE-12-63	229.15	229.43	2.787		Mafic Volcanic Tuff				
LPSE-12-63	242.15	242.24	2.658		Felsic Volcanic Flow				
LPSE-12-63	265.59	265.72	2.652	tr	Quartz Breccia				
LPSE-12-63	289.89	290.00	2.752	tr	Quartz Breccia				
LPSE-12-63	307.88	308.00	2.665		Quartz Breccia				
LPSE-12-63	329.03	329.13	2.803	tr	Mafic Volcanic				
LPSE-12-63	338.54	338.65	2.972		High Level Mafic Intrusive				
LPSE-12-64	17.63	17.78	2.703		Mafic Tuff				
LPSE-12-64	28.47	28.58	2.832	5	Mafic Tuff				
LPSE-12-64	34.44	34.56	2.665		Felsic Tuff				
LPSE-12-64	44.57	44.69	2.654		Felsic Tuff				
LPSE-12-64	53.20	53.32	2.658		Felsic Tuff				
LPSE-12-64	62.20	62.35	2.662	2	Felsic Tuff				
LPSE-12-64	81.62	81.73	2.621		Silicified Felsic Intrusive				

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TABLE 10.3   Specific Gravity Data									
Drill Hole	From (m)	To (m)	SG	% Sulfide	Rock Type				
LPSE-12-64	89.06	89.17	2.792		Diabase Dike				
LPSE-12-64	106.22	106.38	2.603		Silicified Felsic Intrusive				
LPSE-12-64	122.10	122.22	2.642		Silicified Felsic Tuff				
LPSE-12-64	130.47	130.60	2.784		Mafic Tuff				
LPSE-12-64	155.48	155.63	2.645	tr	Felsic Tuff				
LPSE-12-64	177.29	177.42	2.775		Carbonatized Mafic Tuff				
LPSE-12-64	190.68	190.79	2.672	tr	Silicified/Brecciated Felsic Volcanic				
LPSE-12-64	205.02	205.14	2.700		Silicified/Brecciated Felsic Volcanic				
LPSE-12-64	212.00	212.14	2.800	tr	Silicified/Brecciated Mafic Volcanic				
LPSE-12-64	217.78	217.94	2.658	1	Quartz Breccia				
LPSE-12-64	225.86	225.96	2.829	1	Silicified/Brecciated Mafic Volcanic				
LPSE-12-64	227.97	228.10	2.716	tr	Quartz Breccia				
LPSE-12-64	232.87	233.00	2.808		Mafic Volcanic				
LPSE-12-64	243.17	243.31	2.875		Mafic Volcanic				
LPSE-12-65	17.13	17.28	2.815		Mafic Tuff				
LPSE-12-65	28.80	28.93	2.936		Mafic Flow				
LPSE-12-65	39.53	39.65	2.888	tr	Mafic Tuff				
LPSE-12-65	50.00	50.14	2.796		Mafic Tuff				
LPSE-12-65	62.00	62.12	2.754		Silicified Mafic Volcanic				
LPSE-12-65	80.57	80.67	2.828		Diabase Dike				
LPSE-12-65	88.86	88.98	2.781		Mixed Mafic/Felsic Volcanic				
LPSE-12-65	94.89	95.00	2.636		Laminated Felsic Tuff				
LPSE-12-65	108.49	108.61	2.806	tr	Silicified Mafic Volcanic				
LPSE-12-65	113.71	113.86	2.648	1	Quartz Breccia				
LPSE-12-65	120.81	120.93	2.722	1	Silicified Mafic Volcanic				
LPSE-12-65	127.21	127.31	2.689	4	Quartz Breccia				
LPSE-12-65	137.12	137.26	2.842	3	Silicified Mafic Volcanic				
LPSE-12-65	144.20	144.33	2.640		Felsic Tuff				
LPSE-12-65	158.95	159.07	2.727	1	Silicified Mafic Volcanic				
LPSE-12-65	162.21	162.31	2.676	3	Quartz Breccia				
LPSE-12-65	169.90	170.00	2.636		Quartz Breccia				
LPSE-12-65	177.29	177.42	2.788	tr	Diabase Dike				
LPSE-12-65	182.00	182.14	2.772	tr	Silicified Mafic Volcanic				
LPSE-12-65	192.25	192.36	2.654		Silicified Zone - Breccia				
LPSE-12-65	200.00	200.18	2.694		Silicified Zone - Breccia				
LPSE-12-65	210.08	210.20	2.650	1	Silicified Zone - Breccia				
LPSE-12-65	222.06	222.18	2.673		Silicified Zone - Breccia				
LPSE-12-65	236.04	236.14	2.678		Silicified Mafic Volcanic (Felsic Bnd)				
LPSE-12-65	239.16	239.28	2.722	1	Silicified Mafic Volcanic				
LPSE-12-65	258.71	258.85	2.804		Mafic Volcanic				
LPSE-12-65	274.49	274.63	2.800		Mafic Volcanic				
LPSE-12-66	9.45	9.58	2.728		Mafic Flow				
LPSE-12-66	20.37	20.49	2.786		Mafic Flow				
LPSE-12-66	32.91	33.02	2.748		Silicified Mafic Volcanic				

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TABLE 10.3 Specific CDAVITY DATA									
Drill Hole	From (m)	To (m)	SG	% Sulfide	Rock Type				
LPSE-12-66	40.05	40.17	2.640		Silicified Felsic Intrusive				
LPSE-12-66	53.81	53.94	2.660		Felsic/Intermediate Tuff				
LPSE-12-66	71.11	71.21	2.713		Silicified Mafic Volcanic				
LPSE-12-66	91.66	91.78	2.784	tr	Silicified Mafic Volcanic				
LPSE-12-66	120.13	120.27	2.800		Silicified Mafic Volcanic				
LPSE-12-66	131.76	131.89	2.696	tr	Silicified Zone - Mafic Breccia				
LPSE-12-66	133.55	133.68	2.688	3	Silicified Zone - Felsic Breccia				
LPSE-12-66	141.41	141.51	2.841		Diabase Dike				
LPSE-12-66	144.81	144.92	2.662	tr	Silicified Zone - Felsic Breccia				
LPSE-12-66	158.39	158.50	2.825		Diabase Dike				
LPSE-12-66	169.73	169.84	2.727	tr	Silicified Mafic Volcanic				
LPSE-12-66	179.55	179.66	2.657	tr	Silicified Zone - Felsic Breccia				
LPSE-12-66	188.55	188.66	2.652	tr	Silicified Zone - Felsic Breccia				
LPSE-12-66	202.26	202.39	2.645	tr	Silicified Zone - Felsic Breccia				
LPSE-12-66	209.00	209.11	2.654	tr	Silicified Zone - Felsic Breccia				
LPSE-12-66	212.67	212.78	2.817	tr	Silicified Mafic Tuff				
LPSE-12-66	223.38	223.49	2.777	tr	Silicified Mafic Tuff				
LPSE-12-66	231.74	231.86	2.800	1	Laminated Mafic Tuff				
LPSE-12-66	238.89	239.00	2.913	tr	Plagioclase Porphyritic Mafic Flow				
LPSE-12-66	247.89	248.00	2.912	tr	Laminated Mafic Tuff				
LPSE-12-66	250.07	250.19	2.958	tr	Plagioclase Porphyritic Mafic Flow				
LPSE-12-67	17.35	17.46	2.758		Silicified Mafic Volcanic				
LPSE-12-67	32.48	32.58	2.789		Mixed Mafic/Felsic Volcanic				
LPSE-12-67	51.32	51.44	2.682		Laminated Felsic Tuff				
LPSE-12-67	58.97	59.10	2.797		Diabase Dike				
LPSE-12-67	71.43	71.56	2.704		Epidotized Fault Breccia				
LPSE-12-67	79.67	79.79	2.780		Mixed Matic/Felsic Volcanic				
LPSE-12-67	83.39	83.55	2.724		Felsic Volcanic				
LPSE-12-67	89.00	89.11	2.677		Carbonate Felsic Breccia				
LPSE-12-67	90.39	90.52	2.650	1	Silicified Zone - Felsic Breccia				
LPSE-12-67	107.79	107.91	2.843	1	Silicified Matic Volcanic				
LPSE-12-67	118.19	118.32	2.669	tr	Mixed Mafic/Felsic Volcanic				
LPSE-12-67	123.11	123.22	2.661	2	Silicified Zone - Felsic Breccia				
LPSE-12-67	130.73	130.86	2.683	3	Silicified Zone - Felsic Breccia				
LPSE-12-67	139.00	139.10	2.699	tr	Mixed Matic/Felsic Volcanic				
LPSE-12-67	152.33	152.43	2.656	tr	Silicified Zone - Feisic Breccia				
LPSE-12-0/	139.30	139.00	2.113		VIIXed Maric/Felsic Volcanic				
LFSE-12-0/	1/1.0/	1/1.18	2.034	1	Silicified Zene - Felsic Breccia				
LPSE-12-6/	1/9.92	180.04	2.00/	1 F	Silicified Zone - Feisic Breccia				
LPSE-12-0/	184.49	184.0/	2.720	5	VIIXed Maric/Felsic Volcanic				
LPSE-12-0/	208.01	208.14	2.730		Glover Formation Marie Tuff				
LPSE-12-6/	211.00	211.10	2.778		Glover Formation Matic Tuff				
LPSE-12-67	212.36	212.46	2.870		Glover Formation Matic Flow				

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#### **10.5 SIGNIFICANT RESULTS**

Drilling indicates that there are several continuous, possibly interconnecting lenses constituting the LPSE mineralization. The Mountain Lake drill quickly recognized the presence of the George's Pond Fault forming the northern hanging wall boundary that juxtaposes the silicified breccia mineralization against the barren mafic volcanics of the Glover Formation. Irrespective of the degree of silicification, brecciation and overprint potassic and carbonate alteration (that are all observed in the mineralized zones) it appears that the structurally lower zones have slightly higher and more consistent grades. One aspect of the assay results is the relative uniformity and consistency of gold grade with no large spikes prevalent in nugget vein style mineralization.

TABLE 10.4													
SUMMARY OF MOUNTAIN LAKE DRILL RESULTS REPORTED IN NEWS RELEASES, 2011 AND													
עחת	DDH Section Grid From(m) To(m) Core Width True Width (m) Gold g/t												
	Section	Gria	From(m)	10(m)			Gold g/t						
LPSE-11-34	10200E	East	167.0	170.0	3.0	2.0	1.37						
and			179.0	182.0	3.0	2.0	5.05						
and			202.0	208.0	6.0	4.1	0.70						
LPSE-11-36	10150E	East	7.0	9.0	2.0	2.0	0.84						
and			92.0	118.0	26.0	17.9	1.48						
including			92.0	101.0	9.0	6.2	1.84						
including			106.0	118.0	12.0	8.3	1.81						
and			131.0	136.0	5.0	3.5	1.56						
LPSE-11-37	10150E	East	166.0	169.0	3.0	2.1	3.41						
and			174.0	178.3	4.3	3.7	1.49						
and			192.0	198.6	6.3	5.0	1.45						
LPSE-11-38	10100E	East	42.0	44.0	2.0	1.8	2.19						
and			104.0	109.0	5.0	3.7	1.21						
LPSE-11-39	10050E	East	115.0	125.0	10.0	7.1	1.79						
and			129.0	133.0	4.0	2.8	1.48						
LPSE-11- 39A	10050E	East	169.50	187.5	18	9.5	2.35						
LPSE-11-40	10050E	East	121.5	124.5	3	2.8	0.8						
and			163.7	167.0	3.4	2.4	1.55						
and			174.5	192.0	16.5	11.7	2.03						
and			199.0	202.0	3	2.5	0.73						
and			232.5	237.5	5.0	3.6	1.34						
and			251.5	262.0	10.5	7.5	1.99						
LPSE-11-41	10050E	East	85.5	89.5	4	3.9	1.78						
and			113.0	124.5	11.3	8.1	1.54						
and			129.0	134.0	5	3.8	1.24						
and			137.0	145.0	8.0	5.8	2.26						
LPSE-11-42	10000E	East	2.0	5.3	3.3	2.2	1.77						
and			13.5	16.5	3.0	2.4	0.95						
and			55.0	59.0	4.0	2.8	2.19						

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TABLE 10.4											
SUMMARY OF MOUNTAIN LAKE DRILL RESULTS REPORTED IN NEWS RELEASES, 2011 AND 2012											
DDH	Section	Grid	From(m)	To(m)	Core Width	True Width (m)	Gold g/t				
and			67.2	77.0	9.8	6.8	1.35				
and			83.0	87.0	4.0	2.8	1.46				
LPSE-11-43	10000E	East	92.7	96.0	3.3	2.9	1.42				
and			99.3	101.7	2.4	2.0	1.13				
and			140.6	148.3	7.7	5.3	2.18				
and			154.7	171.4	16.7	11.5	1.77				
LPSE-11-44	10000E	East	192.3	323.1	130.9	89.0	0.70				
LPSE-11-45	9700E	West	72.7	74.7	2.0	1.4	3.76				
and			85.4	90.4	5.0	3.6	1.42				
LPSE-11-46	9600W	West	66.0	74.0	8.0	6.7	1.40				
LPSE-11-47	9950E	East	145.7	155.5	9.8	8.8	0.76				
and			165.5	175.2	9.7	9.5	0.89				
LPSE-11-48	9950E	East	182.0	283.4	101.4	81.7	1.34				
including			226	241	15	12	4.1				
LPSE-11-49	9900E	East	204.1	244.8	40.7	33.0	0.54				
and			262.0	265.6	3.6	2.9	1.68				
and			273.5	281	7.5	6.7	1.53				
LPSE-11-50	9900E	East	103.0	108.0	5.0	4.4	1.08				
and			162.3	188.9	26.6	20.0	1.76				
LPSE-11-52	9800E	East	67.0	78.7	11.7	10.8	1.39				
and			100.5	108.5	8.0	6.8	1.53				
LPSE-11-53	10050E	East	200.0	208.0	8.0	6.9	0.55				
and			327.0	343.0	16.0	14.7	1.27				
LPSE-11-54	9750E	East	43.0	50.0	7.0	5.7	1.08				
and			103.0	106.0	3.0	2.5	1.61				
and			114.6	119.5	4.9	4.1	2.1				
LPSE-11-55	10050E	East	38.5	92.0	53.5	42.0	1.74				
LPSE-11-56	10200E	East	85.0	88.0	3.0	2.9	0.76				
and			264.0	268.0	4.0	3.7	0.93				
LPSE-11-57	10050E	East	116.0	118.0	2.0	1.8	0.94				
and			334.9	389.0	54.1	42.1	1.51				
and			404.8	408.0	3.2	2.8	2.06				
LPSE-11-58	10250E	East	171.7	175.9	4.2	3.8	1.06				
and			206.9	208.9	2	1.8	1.12				
LPSE-11-59	9850E	East	163.0	166.8	3.8	3.3	0.9				
and			234.6	247.0	12.4	10.8	1.03				
and		East	265.0	270.0	5.0	4.4	1.56				
LPSE-11-60	10150E	East	81.8	89.0	7.2	5.4	0.5				
and			93.0	96.0	3.0	2.4	0.86				

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Table 10.4         Summary of Mountain Lake Drill results reported in news releases, 2011 and											
2012											
DDH	Section	Grid	From(m)	To(m)	Core Width	True Width (m)	Gold g/t				
and			120.0	124.1	4.1	3.2	1.72				
and			157.9	162.0	4.1	3.0	0.95				
and			279.0	287.0	8.0	6.5	1.59				
LPSE-11-61	9850E	East	62.5	66.8	4.3	3.9	1.34				
and			75.5	78.6	3.1	2.75	2.38				
and			301.0	304.5	3.5	2.2	0.70				
LPSE-12-63	9800E	East	64.0	66.0	2.0	1.8	1.04				
and			154.3	157.1	2.8	2.4	1.32				
LPSE-12-64	9750E	East	190.0	193.0	3.0	2.6	1.01				
and			205.0	209.0	4.0	3.5	1.06				
LPSE-12-65	9650W	West	162.0	170.5	8.5	7.4	0.85				
and			178.5	181.5	3.0	2.6	2.09				
and			206.0	211.0	5.0	4.4	1.58				
and			224.0	226.4	2.4	2.1	1.38				
LPSE-12-66	9600W	West	150.0	155.0	5.0	4.5	1.18				
and			178.0	188.0	10.0	8.9	0.65				
LPSE-12-67	9550W	West	142.5	147.0	4.5	4.0	1.05				
LPSE-12-68	9750W	West	21.0	24.0	3.0	2.7	1.49				
and			157.0	163.0	6.0	5.4	0.77				
LPSE-12-69	9750W	West	183.0	186.0	3.0	2.6	0.99				
and			254.0	260.0	5.0	4.5	1.43				

Note: Sampling returned no significant assays for holes LPSE-11-35, 51, 62 and for holes LPSE-12-70 through 74.

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

All drill core was brought into the core logging facility and laid out on racks capable of handling up to 24 boxes at once. All core was cleaned of dirt and reoriented so that the dominant regional cleavage had a consistent orientation so as to facilitate measurement of lithology, alteration, structures and mineralization. Core was then scribed with a wax pencil at 1 meter intervals with top and bottom of box intervals noted. Logging, RQD measurements and selective specific gravity measurements were then carried out. The geologist then clearly marked the sample intervals for cutting, placing a sample tag at the top of the interval and writing the sample number on the drill core. Each sample tag was placed in a plastic bag and stapled to the box at the beginning of each sample interval.

The core boxes were then moved to the cutting room where each sample was cut in half with the top half of the core placed in a plastic sample bag containing a duplicate tag. Each sample bag was sealed to avoid subsequent potential of contamination. Lots of 10 samples (including blanks and standards) were placed in rice bags, labelled and secured for transportation to the lab. Specifics of each sample batch were recorded in a sample submission log book with a unique tracking number that was also marked on the rice bag. Samples were flown from the camp, by helicopter, to the airbase in Pasadena. The samples were then delivered to the laboratory, by truck, by Mountain Lake employees.

Mountain Lake retained Eastern Analytical Limited (Eastern) as the principal lab.

Mountain Lake's Quality Assurance / Quality Control ("QAQC") program included the submission of standards and blanks approximately every 25 samples.

Eastern is an independent minerals testing laboratory located in Springdale, Newfoundland. The lab has implemented and maintains a Quality Management System (QMS) and is in the process of obtaining ISO 17025 accreditation.

#### 12.0 DATA VERIFICATIONS

#### 12.1 SITE VISIT AND INDEPENDENT SAMPLING

Mr. Eugene Puritch, P. Eng., visited the Glover Island Property on November 14-15, 2011 for the purpose of doing the site visit and completing an independent verification sampling program. Twelve samples were collected from three diamond drill holes by taking a quarter split of the half core remaining in the box. An effort was made to sample a range of grades.

At no time were any employees of Mountain Lake advised as to the identification of the samples to be chosen during the visit.

The samples were selected by Mr. Puritch, and placed into sample bags which were sealed with tape and placed in a larger bag.

The samples were brought by Mr. Puritch back to the P&E office in Brampton, ON. From there they were sent by courier to AGAT Laboratories, ("AGAT") in Mississauga for analysis.

AGAT has implemented a Quality Management System (QMS) designed to ensure the production of consistently reliable data. The system covers all laboratory activities and takes into consideration the requirements of ISO standards. AGAT maintains ISO registrations and accreditations, which provide independent verification that a QMS is in operation at the location in question. Most AGAT laboratories are registered or are pending registration to ISO 9001:2000.

Samples were analysed for gold using lead-collection fire assay with an AAS finish.

A comparison of the results is presented in Figure 12.1.



Figure 12.1 Glover Island Deposit Site Visit Sample Results for Gold

## 12.2 MOUNTAIN LAKE QUALITY ASSURANCE/QUALITY CONTROL REVIEW

In 2010, Mountain Lake began drilling the Glover Island Project, and maintained Eastern Analytical Limited as the principal lab.

Mountain Lake's Quality Assurance / Quality Control ("QAQC") program included the submission of standards and blanks approximately every 25 samples.

Eastern Analytical is located in Springdale, Newfoundland. The lab has implemented and maintains a Quality Management System (QMS) and is in the process of obtaining ISO 17025 accreditation.

#### **12.3 PERFORMANCE OF CERTIFIED REFERENCE MATERIALS**

Mountain Lake purchased four certified reference materials from Canadian Resources Laboratories Ltd., of Langley, B.C., and inserted one or the other into the samples stream at a rate of approximately 1:25. Standard CDN-GS-1F had a mean grade of 1.16 g/t Au, standard CDN-GS-4B had a mean grade of 3.77 g/t Au, standard CDN-GS-8A had a mean grade of 8.25 g/t Au and standard CDN-GS-3E had a mean grade of 2.97 g/t Au.

There were a total of 116 values for standard CDN-GS-1F, 46 values for standard CDN-GS-4B, 17 values for standard CDN-GS-8A and 29 values for the standard CDN-GS-3E. Mountain Lake monitored the results on a real-time basis as they were received from the lab.

P&E reviewed the results of all quality control samples inserted by Mountain Lake, as well as all Lab internal quality control results. The data reported low as the majority of the standards reported below the mean, although most data were within the warning limits of -2 standard deviations. There were approximately 6 failures, all on the low side. These failures were isolated and do not reflect the data as a whole. It is recommended that the performance of the standards be reported to the laboratory so they can verify the calibration of the equipment used to measure the lower Au values.

#### **12.4 PERFORMANCE OF DUPLICATES**

An evaluation of the field (1/4 core) was completed using a simple scatter plot. For the field duplicates the precision was poor, which is completely consistent for a gold deposit and particularly since the comparison is between  $\frac{1}{2}$  core and  $\frac{1}{4}$  core.

#### **12.5 PERFORMANCE OF BLANK MATERIAL**

The blank material used by Mountain Lake was obtained locally from a barren granodiorite, known locally as Bald Mountain. This material passed through all the prep and analytical stages at the lab. There were 156 blank samples analyzed. All but one value was at the detection limit of 5 ppb. The sample in question was explained by a mix-up with standard CDN GS-4B being mistakenly submitted in place of a blank. The gold value of this sample, 3458 ppb, is in line with the mean value of standard CDN GS-4B.

P&E declares the data acquired and analyzed by Mountain Lake to be satisfactory for use in a resource estimate.

# 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been done on the Glover Island property.

#### 14.0 2012 RESOURCE ESTIMATE

#### 14.1 INTRODUCTION

The purpose of this report section is to estimate the Mineral Resources of the Glover Island Gold Project Lunch Pond Deposit in compliance with NI 43-101 and CIM standards. This resource estimate was undertaken by Eugene Puritch, P.Eng. and Antoine Yassa, P.Geo. of P&E Mining Consultants Inc. of Brampton Ontario. The effective date of this resource estimate is April 3, 2012.

#### **14.2 DATABASE**

All drilling data were provided by Mountain Lake in the form of Excel data files. Thirty-three (33) drill cross sections were developed on two local grids, one looking Southeast on a 1050 azimuth on a 50 metre spacing named from 9,350-SE to 9,750-SE (9 sections) and the other looking Northeast on an 800 azimuth on a 25 metre spacing named from 9,750-NE to 10,325 NE (24 sections).

The Gemcom database for this estimate was constructed from 66 surface drill holes of which 61 were utilized in the Lunch Pond resource calculation. All remaining data were not in the area that was modeled for the resource estimate. A surface drill hole plan is shown in Appendix-I.

The database was verified in Gemcom with minor corrections made to bring it to an error free status. The Assay Table of the database contained 3,781 Au assays. All drillhole survey and assay values are expressed in metric units and grid coordinates are in a UTM system.

## **14.3 DATA VERIFICATION**

Verification of assay database values was performed with original laboratory and electronically issued certificates from the Eastern Analytical Ltd. laboratory in Springdale, Newfoundland. Some minor errors were detected and corrected in the Gemcom database. The checked assays represent 100% of the constrained data used in the resource estimate and 99% of the entire database.

## 14.4 DOMAIN INTERPRETATION

The Lunch Pond Deposit mineralized constraining domain boundaries were determined from lithology, structure and grade boundary interpretation from visual inspection of drill hole sections. Nine domains were created named N1, N2, N3, N4, N5, N6, N7, N8 and QFP. These domains were created with computer screen digitizing on drillhole sections in Gemcom by the authors of this report. The domain outlines were influenced by the selection of mineralized material above 0.5 g/t Au that demonstrated a lithological and structural zonal continuity along strike and down dip. In some cases mineralization below 0.5 g/t Au was included for the purpose of maintaining zonal continuity. Smoothing was utilized to remove obvious jogs and dips in the domains and incorporated a minor addition of inferred mineralization. This exercise allowed for easier domain creation without triangulation errors from solids validation.

On each section, polyline interpretations were digitized from drill hole to drill hole but not typically extended more than 25 metres into untested territory. Minimum constrained true width for interpretation was approximately 2 metres. Interpreted polylines from each section were

"wireframed" in Gemcom into 3-D domains. The resulting solids (domains) were used for statistical analysis, grade interpolation, rock coding and resource reporting purposes. See Appendix-II.

## 14.5 ROCK CODE DETERMINATION

The rock codes used for the resource model were derived from the mineralized domain solids. The list of rock codes used is as follows:

Rock Code Description

0	Air	60	N6 Domain
10	N1 Domain	70	N7 Domain
20	N2 Domain	80	N8 Domain
30	N3 Domain	90	QFP Domain
40	N4 Domain	99	Waste Rock
50	N5 Domain		

## 14.6 COMPOSITES

Length weighted composites were generated for the drill hole data that fell within the constraints of the above-mentioned domains. These composites were calculated for Au over 1.0 m lengths starting at the first point of intersection between assay data hole and hanging wall of the 3-D zonal constraint. The compositing process was halted upon exit from the footwall of the aforementioned constraint. Un-assayed intervals were set to ½ assay detection limit Au which was deemed to represent the prolific low grade background gold value in the deposit, but at the same time not introduce any mineralization above the open pit resource cut-off grade. Any composites that were less than 0.25 m in length were discarded so as not to introduce any short sample bias in the interpolation process. The constrained composite data were transferred to Gemcom extraction files for the grade interpolation as X, Y, Z, Au, files.

## 14.7 GRADE CAPPING

Grade capping was investigated on the raw assay values in the database within the constraining domains to ensure that the possible influence of erratic high values did not bias the database. Extraction files were created for the constrained Au data. From these extraction files, log-normal histograms were generated. See graphs in Appendix-III.

TABLE 14.1 AU GRADE CAPPING VALUES											
Domain	Capping Value Au g/t	Number of Assays Capped	Cumulative % for Capping	Raw Coefficient of Variation	Capped Coefficient of Variation						
N1	No Cap	0	100	0.64	0.64						
N2	No Cap	0	100	1.06	1.06						
N3	No Cap	0	100	0.85	0.85						
N4	5.0	1	99.5	1.34	1.01						
N5	No Cap	0	100	1.31	1.31						
N6	12.5	5	99.3	1.73	1.31						
N7	8.0	1	99.1	1.55	1.16						
N8	No Cap	0	100	0.16	0.16						
QFP	No Cap	0	100	1.04	1.04						

## 14.8 VARIOGRAPHY

A reasonable omnivariogram was developed for the combined constrained composites. See omnivariogram in Appendix-IV.

## **14.9 BULK DENSITY**

The bulk density used for the creation of a density block models was derived from site visit samples taken by, Eugene Puritch, P.Eng. and analysed at Agat Laboratories in Mississauga, Ontario. The average bulk density for the Lunch Pond Deposit resource was derived from 12 samples and determined to be 2.70 tonnes per cubic metre. Mountain Lake conducted their own on site wet immersion bulk density determination and arrived at an average value of 2.72 tonnes per cubic metre from 12 samples.

## 14.10 BLOCK MODELING

The Lunch Pond Deposit resource model was divided into a block model framework containing 2,361,456 blocks that were 10m in X direction, 2.5 m in Y direction and 10 m in Z direction. There were 138 columns (X), 342 rows (Y) and 46 levels (Z). The block model was not rotated. Separate block models were created for rock type, density, percent, class and Au.

A percent block model was set up to accurately represent the volume and subsequent tonnage that was occupied by each block inside the constraining domain. As a result, the domain boundary was properly represented by the percent model ability to measure individual infinitely variable block inclusion percentages within that domain.

The Au composites were extracted from the Microsoft Access database composite table into separate files. Inverse distance cubed (ID3) grade interpolation was utilized. The first grade interpolation pass was utilized for the Indicated classification and the second for Inferred. The resulting Au grade blocks can be seen on the block model cross-sections and plans in Appendix-V. Grade blocks were interpolated using the following parameters:

Table 14.2       Au Block Model Interpolation Parameters									
All Domains	Dip Directio n	Strike Direction	Dip	Dip Range (m)	Strike Range (m)	Across Dip Range (m)	Max # per Hole	Min # Sample	Max # Sample
Indicated	1800	900	-750	30	30	10	2	3	20
Inferred	1800	900	-750	100	100	50	2	1	20

# 14.11 RESOURCE CLASSIFICATION

During the Lunch Pond Deposit resource classification interpolation search ellipsoid passes, 3,775 grade blocks were coded as Indicated and 18,638 as Inferred. Classification block cross-sections and plans can be seen in Appendix VI.

## **14.12 RESOURCE ESTIMATE**

The resource estimate was derived from applying an Au cut-off grade to the block model and reporting the resulting tones and grade for potentially mineable areas. The following calculation demonstrates the rationale supporting the Au cut-off grade that determines the open pit potentially economic portion of the mineralization.

## Open Pit Au Cut-Off Grade Calculation

Au Price	US\$1,469/oz (March 31/12 24 month trailing average price)
US\$/\$CDN Exchange Rate	\$1.00
Au Recovery	95%
Process Cost (15,000tpd)	\$17.00/tonne milled
General & Administration	\$5.00/tonne milled

Therefore, the Au cut-off grade for the open pit resource estimate is calculated as follows:

#### Operating costs per ore tonne = (\$17+ \$5) = \$22/tonne [(\$22)/[(\$1,469/oz/31.1035 x 95% Recovery)] = 0.50g/t

The above data were derived from similar gold projects to the Lunch Pond Deposit.

In order for the constrained open pit mineralization in the Lunch Pond Deposit resource model to be considered potentially economic, a first pass Whittle 4X pit optimization was carried out to create a pit shell (See Appendix VII) utilizing the criteria below:

Waste mining cost per tonne	\$2.75
Ore mining cost per tonne	\$3.00
Process cost per tonne	\$17.00
General & Administration cost per ore tonne	\$5.00
Process production rate (ore tonnes per year)	500,000
Pit slopes (overall wall angle)	50 degrees
Mineralized & Waste Rock Bulk Density	$2.70t/m^{3}$

The resulting resource estimate can be seen in Table 14.3.

TABLE 14.3     IN PIT RESOURCE ESTIMATE <sup>(1)(2)(3)</sup>								
Classification	Indicated			Inferred				
Cut-Off Au g/t	Tonnes	Au g/t	Au oz	Tonnes	Au g/t	Au oz		
In Pit 0.50 g/t	993,000	1.72	54,700	1,703,000	1.59	87,300		

(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) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) Mineral resources were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council

TABLE 14.4 In Pit Pesculoce Estimate Cut Ope Sensitivity								
Classification	Classification Indicated Inferred							
In Pit Cut-Off Au g/t	Tonnes Au g/t Au oz			Tonnes	Au g/t	Au oz		
1.0	691,601	2.14	47,473	1,158,319	1.99	74,035		
0.9	758,703	2.03	49,518	1,274,620	1.89	77,575		
0.8	815,008	1.95	51,044	1,396,936	1.80	80,933		
0.7	863,149	1.88	52,200	1,493,615	1.73	83,268		
0.6	935,466	1.79	53,716	1,598,884	1.66	85,487		
0.5	992,710	1.72	54,737	1,703,456	1.59	87,299		
0.4	1,028,670	1.67	55,264	1,788,157	1.54	88,536		
0.3	1,061,659	1.63	55,637	1,835,938	1.51	89,072		
0.2	1,096,868	1.59	55,895	1,870,737	1.49	89,377		
0.1	1,113,976	1.56	55,979	1,889,223	1.47	89,470		

TABLE 14.5 CLOPAL SENSITIVITY TO RESOURCE ESTIMATE								
Classification	In	dicated	I U KESU	Inferred				
Cut-Off Au g/t	Tonnes	Au g/t	Au oz	Tonnes	Au g/t	Au oz		
In Pit 0.50 g/t	1,281,000	1.61	66,400	4,434,000	1.38	196,900		

## 14.13 CONFIRMATION OF ESTIMATE

As a test of the reasonableness of the resource estimates, the block models were queried at a 0.1 g/t Au cut-off grade with blocks in all classifications summed and their grades weight averaged. This average is the average grade of all blocks within the mineralized domain. The values of the interpolated grades for the block model were compared to the length weighted capped average grades and average grade of composites of all samples from within the domains. See below.

TABLE 14.6					
COMPARISON OF CAPPED WEIGHTED AVERAGE GRADE OF ASSAYS AND COMPOSITES					
WITH TOTAL BLOCK MODEL AVERAGE GRADES					
Data Type	Au (g/t)				
Capped Assays	1.28				
Composites	1.21				
Block Model	1.13				

The comparison above shows the average grade of all the Au blocks in the constraining domains to be similar to the weighted average of all capped assays and composites used for grade estimation. The block model Au values will be more representative than the capped assays or composites due to the block model's 3D spatial distribution characteristics.

In addition, a volumetric comparison was performed with the block model volume of the model blocks versus the geometric calculated volume of the domain solids.

Block Model Volume	=2,572,732 m <sup>3</sup>
Geometric Domain Volume	$=2,581,164 \text{ m}^3$
Difference	= 0.33 %

# 15.0 MINERAL RESERVE ESTIMATES

# 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

Mineral claims on Glover Island immediately north of the property are held by Buchans Minerals Inc. Very little exploration has been done on this claim area and no gold showings are known. No mineral claims are held immediately south of the property.

Gold showings in closest proximity to Glover Island are situated in similar geologic settings at Young's Pond and Corner Pond, about 20 kilometres along strike to the southwest. The showings were discovered by Noranda Exploration in the late 1980's. Gold grades in grab samples are reported up to 20 g/t. Minimal exploration has been done in this area.

Numerous gold deposits and showings occur in analogous geologic settings on the Baie Verte Peninsula, northeast of Glover Island. The most significant of these include The Pine Cove deposit (2.63 mt at 2.93 g/t gold indicated and 0.25 mt at 2.11 g/t inferred; currently producing), the Nugget Pond Mine (488,000 tonnes at 12.2 g/t gold; past producer), the Stog'er Tight deposit (600,000 tonnes at 4.5 g/t gold; partially mined), and the Hammer Down deposit (403,000 tonnes at 12.5 g/t gold; past producer).

Other structurally controlled orogenic gold deposits within the Dunnage Zone include the Valentine Lake and Cape Ray deposits. The Valentine Lake Deposit is located 50 kilometres southeast of Glover Island. The deposit contains NI 43-101 compliant measured reserves of 1,378,000 tonnes at 1.90 g/t Au, indicated reserves of 5,068,000 tonnes at 2.09 g/t Au, and an inferred resource of 5,742,000 tonnes at 1.65 g/t Au (Mountain Lake press release, Mar.29, 2012). The property is held by Mountain Lake and Marathon Gold Inc. The Cape Ray property is located 250 kilometres southwest of Glover Island. It hosts the Windowglass Hill and 51 Zone prospects, with diamond drill intersections of 5.8 metres of 13.7 g/t gold and 10.2 metres of 5.3 g/t gold respectively (www.cornerstoneresources.com, 2004).

# 24.0 OTHER RELEVANT DATA AND INFORMATION

There are no other data considered relevant to this Report that have not previously been included.
# 25.0 INTERPRETATION AND CONCLUSIONS

# 25.1 DRILL PROGRAMS

The results from the 2011 and 2012 drilling programs validate the presence of a gold resource at LPSE and also provide reliable confidence in earlier historical assay data. It also confirms that that the mineralization extends further down dip and that the silicified breccia is open further to the west along strike. Mountain Lake's drilling has further confirmed that the northern hanging wall is controlled by the steeply oriented, approximately strike parallel, George's Pond Fault which truncates the mineralization against barren mafic volcanics of the Glover Formation.

The 2011 and 2012 drill programs also identified that the silicified breccia mineralization exists as a series of separate and interconnecting lenses rather than as a complexly folded body.

Drilling further identified the presence of quartz-carbonate vein type gold mineralization in association with finely disseminated and aggregate pyrite clots hosted in quartz-feldspar crystal tuff and quartz-feldspar porphyry in the footwall volcanics.

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.

# 25.2 MINERAL RESOURCE ESTIMATION

The mineral resource, at a break even cut-off of 0.5 g/t Au, is summarized in Table 25.1. The effective date of the estimate is April 3, 2012.

This Resource Estimate, based on the Lunch Pond Global Resource Sensitivity compared with the combined Historical Resources for Lunch Pond indicates a 27.8% decrease in grade, offset by a 57.4% increase in tonnage and resulting in a 14.1% increase in contained gold ounces.

The resources in this report were estimated in accordance with the definitions contained in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves Definitions and Guidelines that were prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council on November 27, 2010.

TABLE 25.1										
GLOBAL MINERALIZED INVENTORY LPSE IN-PIT RESOURCE ESTIMATE										
Cut-Off Au g/t	Indicated			Inferred			Indicated & Inferred			
	Tonnes	Au g/t	Au oz.	Tonnes	Au g/t	Au oz.	Tonnes	Tonnes	Au oz.	
1.00	691,601	2.14	47,473	1,158,319	1.99	74,035	1,849,920	2.04	121,508	
0.90	758,703	2.03	49,518	1,274,620	1.89	77,575	2,033,323	1.94	127,093	
0.80	815,008	1.95	51,044	1,396,936	1.8	80,933	2,211,944	1.86	131,976	
0.70	863,149	1.88	52,200	1,493,615	1.73	83,268	2,356,764	1.79	135,468	
0.60	935,466	1.79	53,716	1,598,884	1.66	85,487	2,534,350	1.71	139,203	
0.50	992,710	1.72	54,737	1,703,456	1.59	87,299	2,696,166	1.64	142,036	
0.40	1,028,670	1.67	55,264	1,788,157	1.54	88,536	2,816,827	1.59	143,800	
0.30	1,061,659	1.63	55,637	1,835,938	1.51	89,072	2,897,597	1.55	144,709	
0.20	1,096,868	1.59	55,895	1,870,737	1.49	89,377	2,967,605	1.52	145,272	
0.10	1,113,976	1.56	55,979	1,889,223	1.47	89,470	3,003,199	1.51	145,449	
0.01	1,124,626	1.55	56,008	1,903,951	1.46	89,494	3,028,577	1.49	145,502	

This is further defined by an in pit resource estimate based on a 0.5 g/t Au Cut-off grade<sup>(1)(2)(3)</sup> as follows:

- Indicated (In Pit) 993,000 tonnes @ 1.72 g/t Au for 54,700 ounces gold
- Inferred (In Pit) 1,703,000 tonnes @ 1.59 g/t Au for 87,300 ounces gold
- (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) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.
- (3) The mineral resources in this news release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.

Further in pit mineral resource estimation parameters for LPSE are as follows:

- Grade estimation is based on assay samples composited to 1 meter (m). Grade capping thresholds were determined following a detailed statistical analysis of the data for the entire mineralized domains varied from 5 to 12.5 grams per tonne (g/t) gold (Au).
- Resource model grade blocks were estimated using Gemcom modeling software based on cross sectional interpretation and inverse distance cubed (1/d3) grade estimation.
- The database for the Lunch Pond Deposit model consisted of 76 diamond drill holes totalling 15,452 meters of drilling. A total of 6,598 analyses were considered for use in the resource estimate of which 1,689 were used for grade estimation.
- The mineralized zones at the Lunch Pond Deposit have been modeled approximately 950 meters along strike and 375 meters down dip.
- A bulk density value of 2.7 tonnes per cubic meter was used which was derived from 12 site visit samples collected by Eugene Puritch, P.Eng., an independent Qualified Person.

- Mineral resources were reported within an optimized pit shell using a March 31, 2012 two year trailing average gold price of US\$1,469/oz with a process recovery of 95% and a US\$ exchange rate of \$1.00.
- Process costs used were C\$17/tonne and G&A was C\$5/tonne. Open pit mining costs were C\$3.00/tonne for mineralized material and C\$2.75/tonne for waste with open pit slopes of 50 degrees.

P&E 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.

## 26.0 RECOMMENDATIONS

## 26.1 GEOLOGY AND RESOURCES

For the immediate future, P&E recommends that the next phase of drilling be conducted at other prospects along the GI Trend with the intent of building additional resources to supplement LPSE, specifically at both Kettle Pond and Lucky Smoke prospects where historical drilling has identified high potential for increasing additional resources. Secondly, P&E would further recommend that follow up exploration be carried out along the GI Trend to delineate the sources for numerous gold geochemical anomalies that remain unexplained. Lastly, P&E recommends that Mountain Lake conduct follow up exploration of the massive and polymetallic mineral prospects adjacent to the GI Trend, specifically at the Clyde (Cu-Ni-Pd-Pt) and Rusty Trickle VMS occurrences.

# 26.2 LUNCH POND SOUTH EXTENSION

Based on the existing information P&E would recommend that a series of drill holes be conducted at the western end of the west grid to test for the strike continuation of LPSE mineralization. Drilling should be restricted to shallow holes (~200 m) and should be completed during a winter program due to the large underlying boggy topography. In addition, there are several soil anomalies at the east end of the LPSE grid that remain unexplained and require additional soil delineation to determine if drilling is warranted. Lastly, in regard to the LPSE grid, the remainders of the un-surveyed Mountain Lake and historical drill holes should be surveyed. The above work is all predicated on further data compilation of historical information into the currently used Nad 83 UTM coordinate system.

# 26.3 ADJACENT PROSPECTS

The GI Trend is believed to be a highly prospective gold trend that warrants a considerable systematic exploration approach to evaluate the near surface potential for gold mineralization. P&E recommends that a thorough review and interpretation of the existing information for each of the remaining prospects be undertaken prior to embarking on expensive delineation drilling programs. The review/interpretative stage should necessarily be accompanied by other work including prospecting, mapping, limited geophysics, trenching and reconnaissance drilling. Particular attention should first be given to Kettle Pond, Quartz Pond area, Lunch Pond North, Lunch Pond C, Discovery Vein and Rusty Vein.

# 26.4 BUDGET

In P&E's opinion the Glover Island property associated with the GI Trend warrants further exploration. Mountain Lake has proposed a budget of \$528,000 for the next phase of work as shown in Table 26.1.

P&E believes that the proposed budget is reasonable and recommends that Mountain Lake proceed with the proposed work program.

TABLE 26.1BUDGET FOR PROPOSED PROGRAM				
Item	Cost (Cdn\$)			
Environmental studies	5,000			
Diamond Drilling	240,000			
Assays	30,000			
Labour	80,000			
Helicopter	55,000			
Camp and trail	18,000			
Exploration	100,000			
Total	528,000			

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#### **28.0 CERTIFICATES**

### **CERTIFICATE OF QUALIFIED PERSON**

#### WAYNE D. EWERT, P.GEO.

I, Wayne D. Ewert, P. Geo., residing at 10 Langford Court, Brampton, Ontario, L6W 4K4, do hereby certify that:

- 1. I am a principal of P & E Mining Consultants Inc.
- 2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Glover Island Gold Property, Grand Lake Area West-Central Newfoundland, Canada" (the "Technical Report"), with an effective of May 1, 2012.
- 3. I graduated with an Honours Bachelor of Science degree in Geology from the University of Waterloo in 1970 and with a PhD degree in Geology from Carleton University in 1977. I have worked as a geologist for a total of 42 years since obtaining my B.Sc. degree. I am a P. Geo., registered in the Province of Saskatchewan (APEGS No. 16217), the Province of British Columbia (APEGBC No. 18965), the Province of Ontario (APGO No. 0866) and the Province of Newfoundland and Labrador (PEG No. 06005).

I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

My relevant experience for the purpose of the Technical Report is:

•	Principal, P&E Mining Consultants Inc.	2004 - Present
•	Vice-President, A.C.A. Howe International Limited	1992 – 2004
•	Canadian Manager, New Projects, Gold Fields Canadian Mining Limited	1987 – 1992
•	Regional Manager, Gold Fields Canadian Mining Limited	1986 – 1987
•	Supervising Project Geologist, Getty Mines Ltd.	1982 – 1986
•	Supervising Project Geologist III, Cominco Ltd.	1976 – 1982

- 4. I have not visited the Property that is the subject of this Technical Report.
- 5. I am responsible for authoring Sections 1 through 10, 15 through 24 and Section 27 as well as co-authoring Sections 25 and 26 of this Technical Report.
- 6. I am independent of the Issuer applying all of the tests in section 1.5 of National Instrument 43-101.
- 7. I have not had prior involvement with the project that is the subject of this Technical Report.
- 8. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance therewith.
- 9. 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 the Technical Report not misleading.

Effective Date: May 1, 2012 Signed Date: May 29, 2012

#### {SIGNED AND SEALED} [Wayne Ewert]

Dr. Wayne D. Ewert P. Geo.

# **CERTIFICATE OF QUALIFIED PERSON**

#### EUGENE J. PURITCH, P. ENG.

I, Eugene J. Puritch, P. Eng., residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:

- 1. I am an independent mining consultant and President of P & E Mining Consultants Inc.
- 2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Glover Island Gold Property, Grand Lake Area West-Central Newfoundland, Canada" (the "Technical Report"), with an effective of May 1, 2012.
- 3. I am a graduate of The Haileybury School of Mines, with a Technologist Diploma in Mining, as well as obtaining an additional year of undergraduate education in Mine Engineering at Queen's University. In addition I have also met the Professional Engineers of Ontario Academic Requirement Committee's Examination requirement for Bachelor's Degree in Engineering Equivalency. I am a mining consultant currently licensed by the Professional Engineers of Ontario (License No. 100014010) and registered with the Ontario Association of Certified Engineering Technicians and Technologists as a Senior Engineering Technologist. I am also a member of the National and Toronto Canadian Institute of Mining and Metallurgy.

I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

I have practiced my profession continuously since 1978. My summarized career experience is as follows:

•	Mining Technologist - H.B.M.& S. and Inco Ltd.,	
•	Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd.,	
•	Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine,	
•	Self-Employed Mining Consultant – Timmins Area,	
•	Mine Designer/Resource Estimator – Dynatec/CMD/Bharti,	
•	Self-Employed Mining Consultant/Resource-Reserve Estimator,	
•	President – P & E Mining Consultants Inc,	
	-	

- 4. I have visited the Property that is the subject of this report on November 14, 2011-November 15, 2011.
- 5. I am responsible for authoring Sections 11 through 14 as well as coauthoring Sections 25 and 26 of the Technical Report.
- 6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
- 7. I have had prior involvement with the project that is the subject of this Technical Report.
- 8. I have read NI 43-101 and Form 43-101F1. This Technical Report has been prepared in compliance therewith.
- 9. 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 the Technical Report not misleading.

Effective Date: May 1, 2012

Signed Date: May 29, 2012

#### {SIGNED AND SEALED} [Eugene Puritch]

Eugene J. Puritch, P. Eng

# APPENDIX I. DRILL HOLE PLAN



# **APPENDIX II. 3D DOMAINS**



# **APPENDIX III. LOG NORMAL HISTOGRAMS**



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# **APPENDIX IV. VARIOGRAMS**



# APPENDIX V. AU BLOCK MODEL CROSS SECTIONS AND PLANS















# APPENDIX VI. CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS














## **APPENDIX VII. OPTIMIZED PIT SHELL**

## LUNCH POND DEPOSIT OPTIMIZED PIT SHELL

