

**TECHNICAL REPORT AND  
RESOURCE ESTIMATE  
FOR THE  
LEBEL GOLD DEPOSIT  
OF THE  
KIRKLAND LAKE GOLD PROJECT  
LEBEL TOWNSHIP, KIRKLAND LAKE  
NORTH-EASTERN ONTARIO, CANADA**

**Latitude 48° 09' 47" North  
Longitude 79° 54' 49" West**

**For**

**QUEENSTON MINING INC.**

**By**

**P&E Mining Consultants Inc.  
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**NI 43-101F1  
TECHNICAL REPORT No 209**

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Effective Date: September 15, 2011  
Signing Date: December 1, 2011

The effective date of this report is September 15, 2011

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Mr. Eugene Puritch, P. Eng.  
Date of Signature: December 1, 2011

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## 1.0 EXECUTIVE SUMMARY

The following report was prepared to provide a NI-43-101 compliant Technical Report and Resource Estimate of the gold mineralization contained in the Bidgood and Boundary zones and Lebel Gold Deposit of the Kirkland Lake East Gold Project (“KLEGP”), north-eastern Ontario, Canada. The Lebel Gold Deposit is held 100% by Queenston Mining Inc.

This report was prepared by P&E Mining Consultants Inc. (“P&E”) at the request of Mr. William J. McGuinty, P.Geo., Vice President, Exploration, Queenston Mining Inc., which is a Toronto-based resource company.

The Lebel Gold Deposit is comprised of 25 patented claims for both mining and surface rights, 6 patented claims with mining rights, 3 licences of occupation with mining rights only, 3 leases with mining and surface rights (with 1 lease unit having mining rights only) and 20 unpatented claims (24 units) that together cover an area of approximately 1,182 ha. Queenston owns a 100% interest in the Lebel Gold Deposit and all claims are in good standing as of the effective date of this report. The Bidgood Property was acquired in April, 2010 when Queenston merged with Vault Minerals Inc. The Lebel claims are subject to NSR royalties of 1.2% to 2%.

The following claims are subject to royalty payments:

- 23 patented claim units are subject to a NSR royalty of 1.2%,
- 6 patented claims are subject to a NSR royalty of 2%,
- 2 patents having no underlying royalty
- 3 License of Occupation are subject to a NSR royalty of 2%,
- 16 unpatented claims are subject to a NSR royalty of 1.5%,
- 4 unpatented claims have no underlying royalty, and
- 3 leases (19 units) are subject to a NSR royalty of 2%

The Lebel Property is located at an approximate latitude of 48° 09’ 47” North by 79° 54’ 49” West, a position approximately 500 kilometres north of Toronto, 200 kilometres north-northeast of Sudbury and 120 kilometres southeast of Timmins.

The Lebel Property is easily accessible via Highway 66 and the Crystal Lake-Bidgood Road leading from Highway 66 at the eastern edge of the village of King Kirkland. The property can be operated on a year-round basis.

There are excellent local resources and infrastructure to support exploration and mining activities. Mining equipment and personnel are readily available from the towns of Kirkland Lake, Matachewan, Ontario (approximately 50 kilometres west of Kirkland Lake) and Rouyn-Noranda, Quebec (approximately 60 kilometres east of the property). Water, telephone and high voltage power is available on the property.

There is low topographic relief on the Lebel Property, within the order of several metres, and the terrain is characterized by relatively flat plateaus and glacial deposits, such as eskers and moraines.

The Kirkland Lake area has a long history of exploration and gold mining dating back to the turn of the 20<sup>th</sup> Century. Gold was first discovered in the region in 1906, specifically in the Swastika and Larder Lake areas where production from the Gateford Mine and Swastika Mine began in 1910. Between 1910 and 2003, in excess of 40 million ounces of gold have been produced from 30 mines in the Kirkland Lake Mining District. The Bidgood Mine historically produced 165,000 oz. of gold from 1934-1951 at a recovered grade of 9.2 g/t Au.

The Kirkland Lake Gold Camp (KLGC) occurs in the south-western portion of the Abitibi greenstone belt of the Archean Superior Province of the Canadian Shield. The KLGC occurs on the southern limb of the regional Blake River synclinorium, the northern and southern limbs of which are truncated respectively by the Destor-Porcupine Break and the Cadillac-Larder Lake Break (LLB) with its associated deformation corridor (the LLDZ). The majority of the historical gold production in the Abitibi Greenstone Belt is spatially associated with these two major regional structures.

The dominant geological feature of the Lebel Property is the Bidgood break which occurs as a 100 m to 300 m wide package of highly sheared and deformed rocks, dipping from between 50°NW to vertical. Gold zones within the Bidgood break are hosted by quartz-carbonate veins and pyritic altered diorite, quartz-feldspar porphyry and syenite. The North Zone, near the Bidgood mine area, features narrow, high-grade gold mineralization within multiple structures. The South Zone, near the Moffat Hall shaft area features near surface, wide, low grade mineralization.

The Lebel property is classified as a lode gold type deposit where economic concentrations of gold derived from hydrothermal fluids are present in veining systems of epithermal or mesothermal origin. Most mineralization appears in veins, breccias or as disseminations and features strong structural controls.

The 2010-2011 Queenston drill program comprised a total of 14,402 m in 114 holes. The main objective of the program was to test the narrow, high-grade gold mineralization within multiple structures at the North Zone near the Bidgood mine area and near surface, wide, low grade mineralization at both the South Zone near the Moffat Hall shaft area and the Boundary Zone located in the eastern portion of the property.

The past-producing Bidgood mine historically produced 165,000 oz (“ounces”) of gold from 1934-1951 at a recovered grade of 9.2 g/t (“grams per tonne”) Au (“gold”) (0.27 oz/ton (“ounces per ton”).

## **1.1 2011 BIDGOOD RESOURCE ESTIMATES**

Based on the results of the drill program and 23 historic holes (3,632 m) drilled by previous operators, P&E prepared an initial NI 43-101 compliant Mineral Resources Estimate of low grade open pitminable mineralization contained in the Boundary and South Zones.

TABLE 1.1 BIDGOOD AND BOUNDARY IN-PIT AND UNDERGROUND MINERAL RESOURCE ESTIMATE						
<b>Capped</b>	<b>Indicated</b>			<b>Inferred</b>		
<b>Cut-Off Au g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>
Pit 0.42 g/t	1,438,000	1.66	76,000	242,000	1.68	13,000
UG Below Pit 2.3 g/t	26,000	3.28	3,000	76,000	3.09	8,000
<b>Total</b>	<b>1,464,000</b>	<b>1.69</b>	<b>79,000</b>	<b>318,000</b>	<b>2.02</b>	<b>21,000</b>
<b>Uncapped Sensitivity</b>	<b>Indicated</b>			<b>Inferred</b>		
<b>Cut-Off Au g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>
Pit 0.42 g/t	1,447,000	2.47	115,000	246,000	2.88	23,000
UG Below Pit 2.3 g/t	43,000	7.05	10,000	136,000	7.52	33,000
<b>Total</b>	<b>1,490,000</b>	<b>2.60</b>	<b>125,000</b>	<b>382,000</b>	<b>4.53</b>	<b>56,000</b>

- (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, socio-political, marketing, or other relevant issues, although the Company is not aware of any such 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 Table 1.1 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.
- (4) Grade capping of 7 g/t was utilized on raw assays for Boundary, 15 g/t for 20 Vein, and 22.5 g/t for the rest of Bidgood.
- (5) A bulk density of 2.87 t/m<sup>3</sup> was used for all tonnage calculations.
- (6) A gold price of US\$1,300/oz and an exchange rate of US\$0.98 US=C\$1.00 was utilized in the Au cut-off grade calculations of 0.42 g/t for open pit and 2.3 g/t for underground. Open pit mining costs were assumed at C\$3.00/t for mineralized material, C\$2.50/t for waste rock and C\$1.75/t for overburden, while underground mining costs were assumed at C\$75/t, with process costs of C\$12/t and G&A of C\$5/t. Process recovery was assumed at 95%.
- (7) Values in the table may differ due to rounding.
- (8) The area of influence of the indicated category is 20 m up/down dip, 15 m along strike, and 10 m across dip from a known sample point (drill holes), with a minimum 2 drill holes and max of 20 samples; other blocks within the hard-wireframe/ constrain are coded as inferred.
- (9) The open pit resource is reported within a Whittle optimized pit shell

The Lebel Property is a key component in Queenston's strategy of advancing five 100% owned gold deposits in the Kirkland Lake area (the Upper Beaver, McBean, Anoki, Upper Canada and Lebel properties) through prefeasibility and ultimately towards a production decision.

## **1.2 PROPOSED 2012-2013 EXPLORATION BUDGET FOR THE LEBEL PROPERTY**

Exploration drilling is ongoing at Lebel and has returned areas of new mineralization within and outside the estimated resource envelopes. An ongoing exploration budget for the Property is presented below:

Exploration & Resource Drilling (52,190 m @ \$90/m shallow all-in+\$100/m deep all-in, which is the drill cost average of \$62.44/m plus ~30% burden)* .....	\$4,811,000
Desktop Studies and early Preliminary Economic Assessment work .....	\$25,000
Baseline Environmental Studies .....	\$30,000
Subtotal .....	\$ 4,866,000
Contingency @ 10% .....	\$486,600
Total .....	\$5,352,600

*\*(consisting of open pit targeted drilling + other shallow drilling + Bidgood deep drilling: if all proposed holes are undertaken, using current 2 drills at 2200m/month would take 2 years*

## **2.0 INTRODUCTION**

### **2.1 TERMS OF REFERENCE**

The following report was prepared to provide a National Instrument (“NI”) 43-101 F1 compliant Technical Report of the gold mineralization contained in the Lebel Property of the Kirkland Lake East Gold Project (“KLEGP”), north-eastern Ontario, Canada. The Lebel Property is held 100% by Queenston Mining Inc.

This report was prepared by P&E Mining Consultants Inc. (“P&E”) at the request of Mr. William J. McGuinty, P.Geo., Vice President, Exploration, Queenston Mining Inc., which is a Toronto-based resource company, with its corporate office at:

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This report has an effective date September 15, 2011.

Mr. Antoine Yassa, a qualified person under the regulations of NI 43-101, conducted a site visit to the Property on March 2, 2011. Mr. Yassa discussed the geological model at that time but verification sampling could not be conducted at that time as the relevant drill core was snow covered. Verification sampling was conducted by Mr. Yassa on May 13, 2011.

In addition to the site visit, P&E held discussions with technical personnel from the Company regarding all pertinent aspects of the project and carried out a review of all available literature and documented results concerning the Property. The reader is referred to those data sources, which are outlined in the References section of this report, for further detail.

This Technical Report is prepared in compliance with the requirements of form NI 43-101F1 of the Ontario Securities Commission (OSC) and the Canadian Securities Administrators (CSA). The Mineral Resources in the estimate are considered compliant with 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 in force as of the effective date of this report.

The purpose of the current report is to provide an independent, NI 43-101 compliant, Technical Report and Resource Estimate on the Lebel Property. P&E understands that this report will be used for internal decision making purposes and may be filed as required under TMX regulations. The report may also be used to support public equity financings.



## 2.2 SOURCES OF INFORMATION

This report is based, in part, on internal company technical reports, maps and technical correspondence, published government reports, press releases and public information as listed in the References section 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.

It should be noted that the author has drawn heavily upon selected portions or excerpts from material contained in a NI 43-101 report prepared in 2010 by P&E. This report contains an overview of the Kirkland Lake Gold Project and much of the material in the current document has drawn heavily upon the Ewert (2010) report:

Ewert, W., Armstrong, T., Yassa, A., Puritch, E., 2010 titled “Technical Report and Resource Estimates for the McBean And Anoki Gold Deposits of the Kirkland Lake Gold Project Gauthier Township, Kirkland Lake North-Eastern Ontario, Canada.

Some of the technical sections were taken from, or in part from, Lengyel, P.J.W. “2006 Drilling Program Report. August-October, 2006. Lebel Property” dated November 17, 2006.

## 2.3 UNITS AND CURRENCY

Unless otherwise stated all units used in this report are metric. Gold values are reported in grams per tonne (“g/t Au”) unless some other unit is specifically stated. The CDN\$ is used throughout this report unless otherwise specifically stated.

## 2.4 GLOSSARY AND ABBREVIATION OF TERMS

In this document, the following terms have the meanings set forth below unless the context otherwise requires.

“\$” and “CD\$”	means the currency of Canada
“AAS”	means Atomic Absorption Spectroscopy
“AA”	is an acronym for Atomic Absorption, a technique used to measure metal content subsequent to fire assay
“asl”	means above sea level
“Au”	means gold
“C”	means degrees Celsius
“CIM”	means the Canadian Institute of Mining, Metallurgy and Petroleum
“cm”	means centimetres
“CSA”	means the Canadian Securities Administrators
“Dicom”	means Dicom Express Inc.
“DPB”	means the Destor-Porcupine Break
“E”	means east
“el”	means elevation level
“Ga”	means gigayear, a unit of a billion years
“g/t Au”	means grams per tonne gold
“Goldcorp”	means Goldcorp Canada Inc.
“ha”	means Hectare
“ICP-OES”	means Inductively Coupled Plasma-Optical Emission Spectroscopy
“KLEGP”	means the Kirkland Lake East Gold Project

“KLCG”	means the Kirkland Lake Gold Camp
“KLMB”	means the Kirkland Lake Main Break
“km”	means kilometre
“LLB”	means Larder Lake Break
“LLDZ”	means Larder Lake Deformation Zone
“m”	means metre(s)
“M”	means million(s)
“Ma”	means millions of years
“mm”	means millimetre(s)
“MNDM”	means Ontario Ministry of North Development and Mines
“Mt”	means millions of tonnes
“N”	means north
“NE”	means northeast
“NI”	means National Instrument
“NPI”	means Net Profit Interests
“NTS”	means National Topographic System
“NW”	means northwest
“NSR”	means an acronym for net smelter return, which means the amount actually paid to the mine or mill owner from the sale of ore, minerals and other materials or concentrates mined and removed from mineral properties, after deducting certain expenditures as defined in the underlying smelting agreements
“OGS”	means Ontario Geological Survey
“oz/T”	means troy ounces per short ton
“P&E”	means P&E Mining Consultants Inc.
“PDF”	means Porcupine-Destor Fault
“Property”	means the Lebel Property
“ppb”	means parts per billion
“ppm”	means parts per million
“Queenston”	means Queenston Mining Inc.
“S”	means south
“SE”	means southeast
“SEDAR”	means the System for Electronic Document Analysis and Retrieval
“SGS”	means SGS Laboratories in Rouyn-Noranda, Quebec
“SW”	means southwest
“Swastika Lab”	means Swastika Laboratories Ltd., in Swastika, Ontario
“t”	means tonnes (metric measurement)
“t/a”	means tonnes per year
“TN”	means True North
“tpd”	means tonnes per day
“TSX-V”	means the TSX Venture Exchange
“US\$”	means the currency of the United States
“UTM”	means Universal Transverse Mercator
“W”	means 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 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, operating licenses, permits, and work contracts were not reviewed but an independent verification of claim title was performed using the MNDM's CLAIMaps web application. It should be noted that leased and patented claims cannot be verified in this manner. 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, and believes it has a reasonable basis to rely upon, William McGuinty of Queenston, to have conducted the proper legal due diligence.

Select technical data, as noted in the report, were provided by Queenston 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 client and P&E has relied on Queenston'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 LEBEL PROPERTY LOCATION

The Property is located in the south central region of Lebel Township, District of Timiskaming, in the eastern part of Northern Ontario, Canada. The geographic centre of the Lebel Property is approximately 48° 09' 47" North Latitude and 79° 54' 49" West Longitude. King Kirkland is located at the western property limit and Kirkland Lake, a historical gold mining town with an approximate population of 10,000, is located approximately 6 km to the west. The Property is approximately 500 km north of Toronto, 200 km north-northeast of Sudbury and 120 km southeast of Timmins (Figure 4.1).

**Figure 4.1 Location of the Lebel Property**



(Source: Ewert, 2010)

## 4.2 PROPERTY DESCRIPTION AND TENURE

The Lebel Property comprises 31 patented claims with mining and/or surface rights, 3 licences of occupation mining rights only, 3 leases with mining and/or surface rights and 20 unpatented claims that together cover an area of approximately 1,182 ha. (Table 4.1 and Figure 4.2). Queenston owns 100% interest in the Lebel Property and all the patented claims are in good standing in perpetuity subject to annual Ontario Provincial mining taxes and surface municipal property taxes. Most of the unpatented claims are in good standing until 2015. Queenston has sufficient banked assessment credits to maintain its unpatented mining claims in good standing for many years. The Ontario crown and private interests own the unpatented claims' surface rights. The boundaries of individual claims can be identified in the field by locating claim posts. The claim boundaries have not been surveyed.

There are no current title defects affecting any of the Lebel Property mineral claims. Some of the Lebel claims are subject to Net Smelter Return royalties ranging up to 2%.

The Lebel Property is contiguous with two other Queenston properties; the Pawnee property to the south-west and the Commodore/Morris Kirkland Newstrike Resources Ltd – Queenston joint venture property to the southeast, (Figure 4.3).

In March of 2010, Queenston announced an amalgamation of 2236019 Ontario Inc., a wholly owned subsidiary of Queenston, with Vault Minerals Inc. (“Vault”). The newly amalgamated company continued operating under the name Vault Minerals Inc. as a wholly-owned subsidiary of Queenston.

Under the terms of the amalgamation, Queenston issued approximately 4.1 million Queenston common shares to the former Vault shareholders, with Vault shareholders receiving one Queenston common share for every 10 common shares of Vault. With approximately 68 million common shares outstanding, former Vault shareholders held approximately 6% of Queenston common shares. All issued and outstanding share of Vault were cancelled and delisted from the TSX Venture Exchange.

A schedule of claims has been provided by Queenston. The status of the unpatented claims has been independently verified by P&E using the MNDM's CLAIMaps web application. The unpatented mineral claims are on crown lands and thus surface rights are acquired as part of the staking process. According to the website, the unpatented claims are now registered to Queenston Mining after a notice of amalgamation with Vault was posted on March 14, 2011. P&E did not carry out an independent verification of land title and ownership for any of the patented or leased claims.

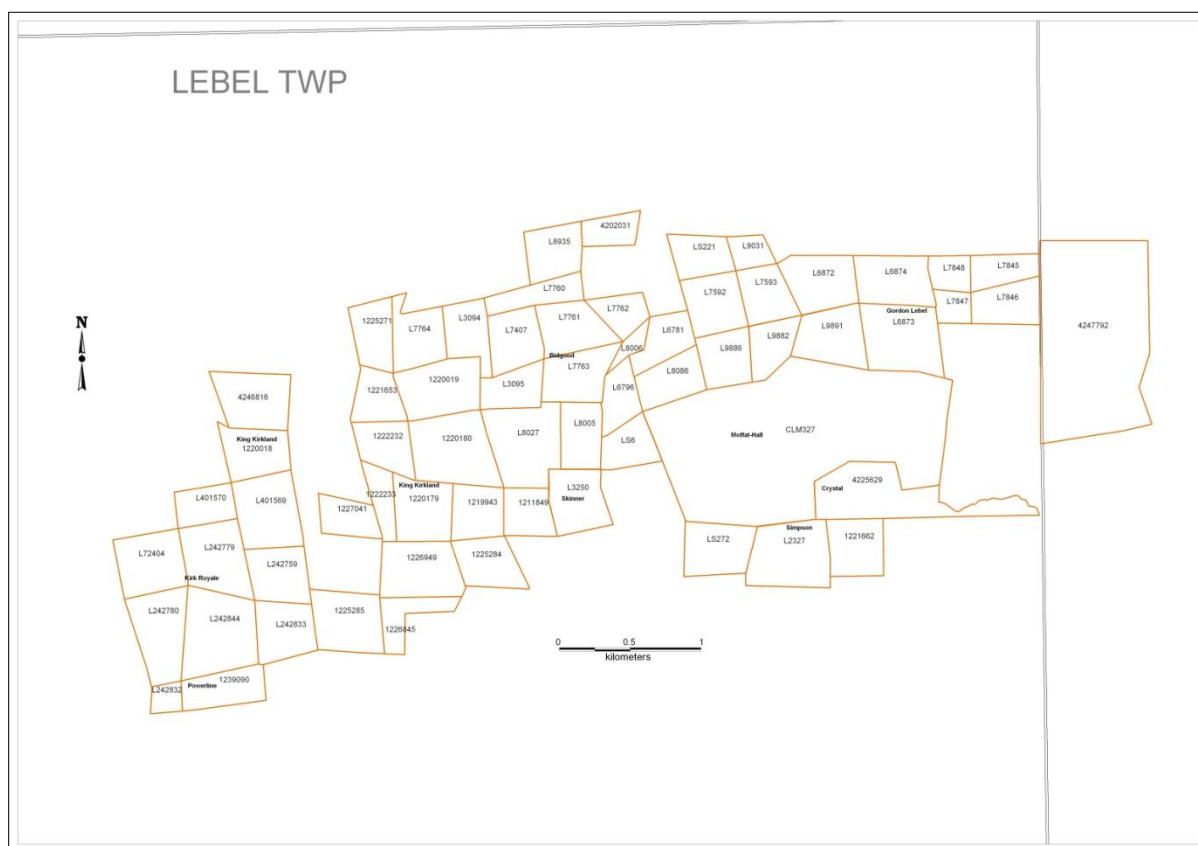
A due diligence report was prepared for Queenston on March 8, 2010 by Borden Ladner Gervais LLP for the Lebel property and other assets acquired in the Vault acquisition. The report indicated there were no substantive title issues with the Lebel Property. Queenston has not determined that there are changes to this opinion since the report was received.

<b>TABLE 4.1</b> <b>LEBEL PATENTED CLAIM DETAILS</b>						
<b>Claim Block No.#</b>	<b>No. Of Units</b>	<b>Area (ha)</b>	<b>Claim Type</b>	<b>Tenure Rights</b>	<b>Royalty</b>	<b>Due Date</b>
LS6	1	11.89	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
LS221	1	11.29	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
LS272	1	17.11	Patented	Mining & Surface Rights	None	Annual tax
L2327	1	22.86	Patented	Mining Rights Only	None	Annual tax
L3094	1	13.55	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L3095	1	12.34	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L3250	1	15.78	Patented	Mining & Surface Rights	2% NSR	Annual tax
L6781	1	12.14	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L6796	1	11.41	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L6872	1	16.59	Patented	Mining Rights Only	2% NSR	Annual tax
L6872/PT6872	1	9.31	License of occupation	Mining Rights Only	2% NSR	Annual tax
L6873	1	24.96	Patented	Mining Rights Only	2% NSR	Annual tax
L6874	1	14.44	Patented	Mining Rights Only	2% NSR	Annual tax
L6874/L14678	1	5.05	License of occupation	Mining Rights Only	2% NSR	Annual tax
L7407	1	14.89	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7592	1	10.06	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7593	1	12.90	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7760	1	12.06	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7761	1	16.59	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7762	1	8.417	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7763	1	16.43	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7764	1	15.09	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L7845/L7848	1	10.31	License of occupation	Mining Rights Only	2% NSR	Annual tax
L7847/L7846	2	19.78	Patented	Mining Rights Only	2% NSR	Annual tax
L7848	1	7.72	Patented	Mining Rights Only	2% NSR	Annual tax
L8005	1	12.58	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L8006	1	3.39	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L8027	1	26.50	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L8086	1	14.32	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L8935	1	14.44	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L9031	1	6.23	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L9882	1	11.21	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L9886	1	13.43	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
L9891	1	17.68	Patented	Mining & Surface Rights	1.2% NSR	Annual tax
<b>Total</b>	<b>35</b>	<b>462.9</b>				

<b>TABLE 4.2</b> <b>LEBEL UNPATENTED CLAIM DETAILS</b>							
<b>Claim Block No.#</b>	<b>No. Of Units</b>	<b>Area (ha)</b>	<b>Registration Date</b>	<b>Assessment Due Before</b>	<b>Royalty</b>	<b>Annual Expenditure required</b>	<b>Registered Claim Owner</b>
1211849	1	16		04/06/2015	1.5% NSR	?	Queenston
1219943	1	16		29/6/2015	1.5% NSR	?	Queenston
1220018	1	16		29/10/2015	1.5% NSR	?	Queenston
1220019	2	32		17/10/2015	1.5% NSR	?	Queenston
1220179	1	16		27/1/2015	1.5% NSR	?	Queenston
1220180	2	32		27/1/2015	1.5% NSR	?	Queenston
1221653	1	16		12/02/2015	1.5% NSR	?	Queenston
1221662	1	16		05/01/2015		?	Queenston
1222232	1	16		21/7/2015	1.5% NSR		Queenston
1222233	1	16		21/7/2015	1.5% NSR	?	Queenston
1225271	1	16		25/10/2015	1.5% NSR	?	Queenston
1225284	1	16		23/6/2015	1.5% NSR	?	Queenston
1225285	1	16		23/6/2015	1.5% NSR	?	Queenston
1226845	1	16		14/5/2015	1.5% NSR		Queenston
1226949	2	32		23/6/2015	1.5% NSR	?	Queenston
1227041	1	16		13/7/2015	1.5% NSR	?	Queenston
1239090	1	16		12/10/2015	1.5% NSR	?	Queenston
4202031	1	16		17/3/2015	None	?	Queenston
4225629	2	32		02/06/2015	None	?	Queenston
4246816	1	16		06/03/2016	None	?	Queenston
<b>Total</b>	<b>24</b>	<b>384</b>					

<b>TABLE 4.3</b> <b>LEBEL LEASED CLAIM DETAILS</b>						
<b>Claim Block No.#</b>	<b>No. Of Units</b>	<b>Area (ha)</b>	<b>Tenure Rights</b>	<b>Royalty</b>	<b>Due Date</b>	
108424/CLM327	10	177.56	Mining & Surface Rights	2% NSR	Annual tax	
108389/L72404	1	18.25	Mining & Surface Rights	2% NSR	Annual tax	
107430/242832etal	8	139.43	Mining & Surface Rights	2% NSR	Annual tax	
107430/242759	0	0	Mining & Surface Rights	2% NSR	Annual tax	
107430/242779	0	0	Mining & Surface Rights	2% NSR	Annual tax	
107430/242780	0	0	Mining & Surface Rights	2% NSR	Annual tax	
107430/242833	0	0	Mining & Surface Rights	2% NSR	Annual tax	
107430/242844	0	0	Mining & Surface Rights	2% NSR	Annual tax	
107430/401569	0	0	Mining Rights Only	2% NSR	Annual tax	
107430/401570	0	0	Mining & Surface Rights	2% NSR	Annual tax	
<b>Total</b>	<b>19</b>	<b>335.24</b>				

**Figure 4.2**      **Claim Location Map of the Lebel Property**



(Source: Queenston, 2011)

### 4.3 QUEENSTON HOLDINGS IN THE AREA

The Bidgood and Boundary gold zones are situated within the Lebel Property, which form part of the KLEGP (Figure 4.3). Queenston controls approximately 230 km<sup>2</sup> or 1,835 claim units held in 35 projects in the KLGC. In 25 of these projects Queenston controls 100% of the property, the remaining 10 projects are held in joint ventures (ranging from 50%-75% Queenston ownership).

Queenston's 100% properties in the KLEGP area contain current and historic mineral resources in seven gold deposits: Upper Beaver, Anoki, Anoki South, McBean, Upper Canada, AK and 180 East.

Information on the historic resources on Queenston's properties can be examined in the technical report prepared by Dale R. Alexander, P.Geo. titled, "Technical Report on the Mineral Properties of Queenston Mining Inc. in the Kirkland Lake Gold Camp," and dated November 17, 2007. This report can be found on the SEDAR website.

The Anoki and Anoki South deposits both contain current NI 43-101 compliant mineral resources prepared by Hrayr Agnerian, P.Geo., of Roscoe Postle and Associates Inc. (“RPA”) in a report dated April 30, 2004. This report can be found on the SEDAR website.

In 2008 an NI 43-101 mineral resource for the Upper Beaver property was presented in a report dated November 6, 2008 by Michael Kociumbas, P.Geo., of Watts, Griffis and McQuat Limited (“WGM”) of Toronto. WGM updated this resource on June 15<sup>th</sup> 2011 (K. Breede, P.Eng.). In 2009 P&E prepared new NI 43-101 resource estimates for both the McBean and Anoki deposits



in a report dated January 29, 2010 and a new NI 43-101 resource estimate for the Upper Canada deposit in a report dated June 17, 2011. These reports can be found on the SEDAR website.

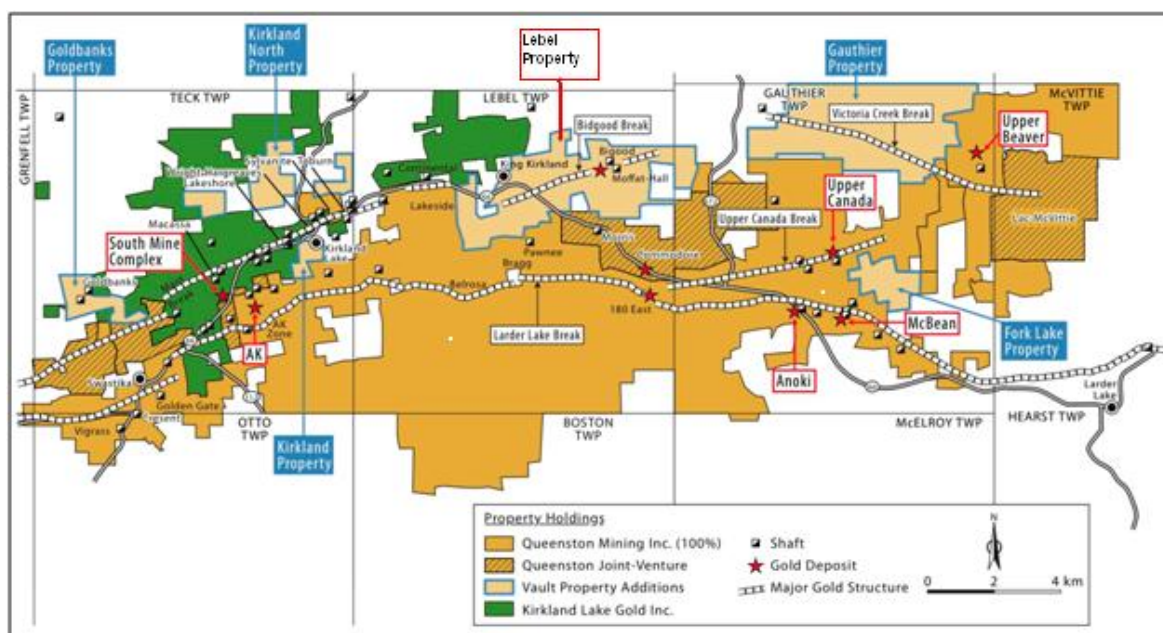
In the western side of the camp, the South Claims Joint Venture between Queenston and Kirkland Lake Gold Inc. (KLG) is continuing underground exploration. In 2008 a NI43-101 compliant mineral resource was outlined by KLG. and verified by Glenn R. Clark, P.Eng. of Glenn R. Clark and Associates Limited. The report, dated August 25, 2008 can be found on SEDAR. Queenston and KLG maintain a 50% interest in seven properties in joint venture with Queenston on the Gracie West, Kirkland Lake West, South Claims, AK, Hudson and East Claim properties (Figure 4.3).

#### 4.4 PERMITS AND OBLIGATIONS

The development of a mining project can require a number of environmental permits and approvals depending on the size, type of project and facilities required. Early stage exploration projects require few permits or approvals but environmental regulations still apply regardless of the need for specific approvals.

P&E is not aware of any First Nation or environmental issues pertaining to the Lebel Property. Preliminary discussions continue to be held with local First Nations communities with regard to possible future mining developments on Queenston properties in the Kirkland Lake area. Accommodation for project personnel is located in the Town of Kirkland Lake therefore no permit from the Ontario Ministry of Municipal Affairs and Housing will be required. The Ontario Ministry of Labour (MOL) needs to be advised of drilling programs but no permits are for this work are typically required. Ontario's Mining Act is currently undergoing revisions that will require consultations with various native bands, exploration plans, and work permits. Queenston maintains a Health and Safety Program at its operations compatible with the size of its employee base and activity level.

**Figure 4.3 Property Map of Kirkland Lake Gold Camp**



(Source: [www.queenston.ca](http://www.queenston.ca))

## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1 ACCESS**

The property can be accessed travelling east from Kirkland Lake on paved Highway 66, which transects the property for approximately 2 km. Secondary and tertiary gravel roads, such as Bidgood, McTavish and Crystal Lake roads accessed from Highway 66 and historic trails, allow access to most locations on the property (see Figure 4.3). The historical road connecting Larder Lake to Kirkland Lake, known as the Larder Lake Road or Government Road, is now a mine-run trail crossing the property from the intersection point of the other roads due east. The property can be operated on a year-round basis.

### **5.2 CLIMATE**

The climate in the region of the properties is that of a moderate northern temperate zone. The temperature ranges between +30°C during the summer season and -40°C during the winter. Yearly precipitation averages are in the vicinity of 60 cm of rain and 250 cm of snow. The ground is generally snow covered from mid-November to mid-April.

The climate information presented in Figure 5.1 was taken from the weather station in Earlton, Ontario, located approximately 35 km south of the Lebel Property.

### **5.3 LOCAL RESOURCES**

There are excellent local resources and infrastructure to support exploration and mining activities and the Kirkland Lake region has a long history of both activities. Water for exploration drilling is available from ponds and creeks within the Lebel Property. Telephone and high voltage power lines linked to the Ontario Power grid are available, connected to the nearby town of Kirkland Lake.

Mining equipment and personnel are readily available from the towns of Kirkland Lake, Matachewan, Ontario (approximately 50 kilometres west of Kirkland Lake) and Rouyn-Noranda, Québec (approximately 60 kilometres east of the properties).

### **5.4 INFRASTRUCTURE**

The Property is not inhabited and the only infrastructure present is access roads. Telephone and high voltage power lines are also available on both properties and nearby town of Kirkland Lake is also linked to the Ontario Power grid. An Ontario Northland Railway line also transects the south-western part of the Property and shipping facilities by rail are available at Kirkland Lake.

### **5.5 PHYSIOGRAPHY**

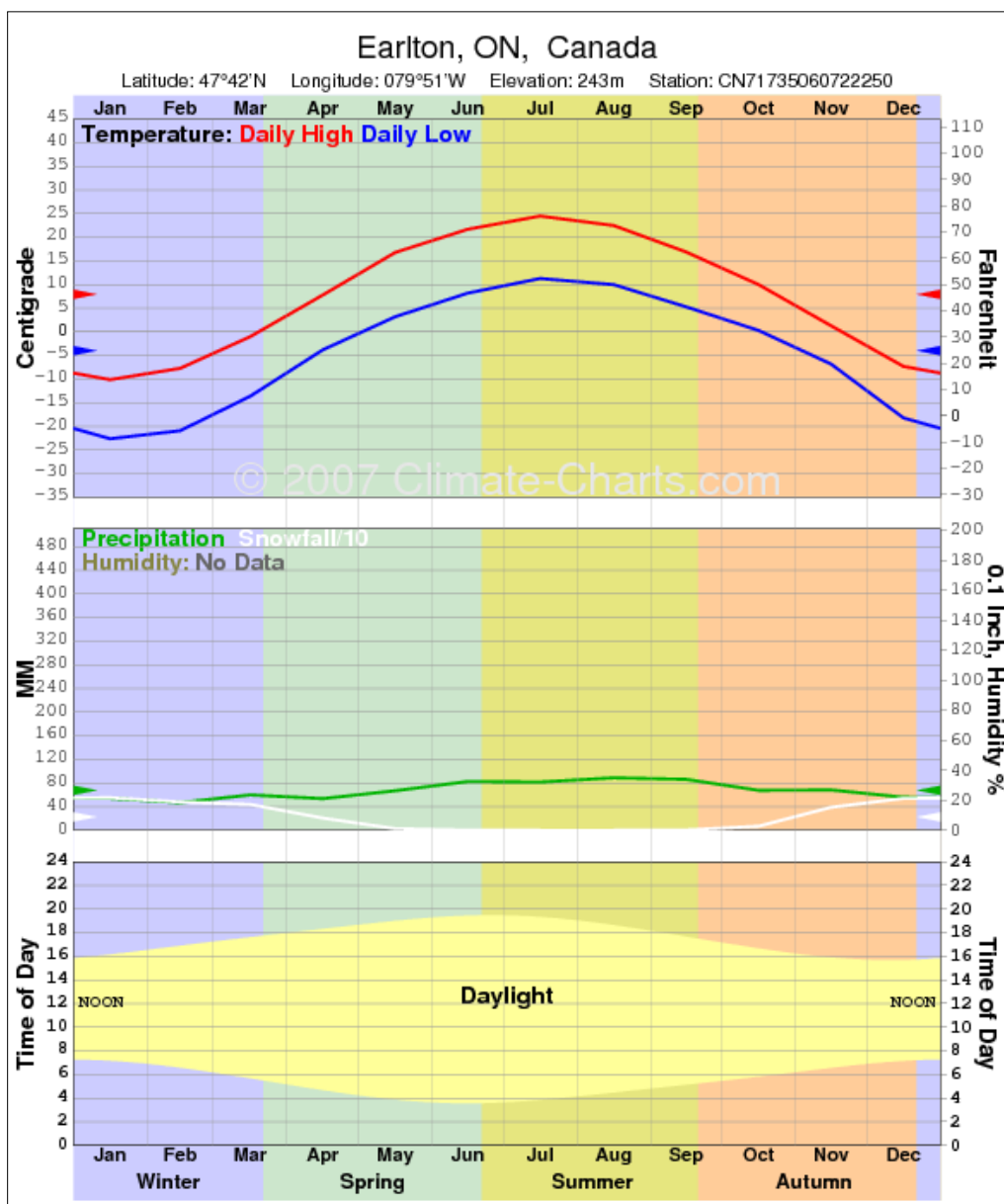
There is low topographic relief on the property, within the order of several metres and the terrain is characterized by relatively flat plateaus and glacial deposits. There is approximately 10-20% outcrop exposure on the property and the rest is covered by glacial overburden with thickness ranging from 3 m to 35 m.

Portions of the Bidgood Property were logged in previous decades via Crown or private permit. Much of the area was burned in the early part of the 20<sup>th</sup> century. The vegetation is determined

by drainage and soil conditions and ranges from rocky outcrops with little or no vegetation, to wetland areas of lower relief containing swamp vegetation. Immature jack pine can be found in the fine sandy soils and birch and poplar in the higher ground of the Property and small spruce and alders in areas with poor drainage.

The property is generally around 330 m above sea level.

**Figure 5.1 Climate trend Data Earlton, Ontario**



(Source: [www.climate-charts.com](http://www.climate-charts.com))

## **6.0 HISTORY AND PREVIOUS EXPLORATION**

### **6.1 EARLY REGIONAL HISTORY**

The Kirkland Lake area has a long history of exploration and gold mining dating back to the turn of the 20th Century. Gold was first discovered in the region in 1906, specifically in the Swastika and Larder Lake areas. Production from the Gateford Mine and Swastika Mine began in 1910. Between 1910 and 2003, in excess of 40 million ounces of gold have been produced from 30 mines in the Kirkland Lake Mining District.

In 1911, W.H. Wright discovered gold near the northern end of Kirkland Lake. This led to other discoveries and culminated in the development of seven mines along the Kirkland Lake Main Break between 1912 and 1933; namely the Macassa, Kirkland Minerals, Teck-Hughes, Lakeshore, Wright-Hargreaves, Sylvanite and Toburn Mines.

### **6.2 PROPERTY HISTORY**

From 1934-1951 the past-producing Bidgood mine, produced 165,000 oz. of gold from 586,000 tons at a recovered grade of 9.2 g/t Au utilizing three shafts and extensive underground workings.

The Moffat Hall property was originally staked in 1917 and 1918. A 2-compartment shaft was sunk to 550 ft. in 1931-32. Approximately 2,800 ft. of lateral workings were put in at the 150', 300', 425' and 550 foot levels. The mine closed in 1932. In 1934-1935, Bidgood-Kirkland leased it and mined ore via a raise from Bidgood-Kirkland's 500 foot level to Moffat Hall's 425 foot level. A total of 16,388 tons at a recovered grade of 0.29 oz/ton Au were extracted. One of the key geologists who worked at the Bidgood mine was Mr. Garfield "Red" Parsons, whose interpretations form the bulk of the information that remains on record regarding the underground work. No underground drillhole information is available, other than that available from an old plan view showing the bottom level of the Bidgood Mine. The logs were apparently destroyed.

In 1954 Upper Canada Mines Limited completed trenching and drilling of 12 holes on the Lebel Property. In 1967, Consolidated Virginia Mining Corporation carried out line cutting and re-sampled old trenches, followed by a 6 diamond drill hole program. The Moffat Hall property was staked by Mr. O'Connor in 1979 and optioned by the ENR Partnership which was absorbed by Silver Lake Resources Inc. Work done by Silver Lake included line cutting, magnetic, VLF-EM, IP surveys and diamond drilling of 43 holes near the Moffat Hall Mine, Blue Vein and Bidgood Break in 1981. In the late 1980's the property was explored by International Platinum. Later, Goldaur completed a trenching program and 9 diamond drill holes on a variety of targets.

Historical (non 43-101 compliant) high-grade drill intersections and surface channel samples (by Red Parsons) had returned: 124.8 g/t Au over 0.2 m, and 14.1 g/t Au over 1.0 m, while those representing open-pit potential include: 1.0 g/t Au over 36.5 m, 3.3 g/t Au over 10.2 m, and 1.4 g/t Au over 21.3 m.

Vault began acquisition and exploration of the Lebel Property in 2003 and by November 2009 had obtained 100% control and ownership of the current property. Earlier drilling by Vault Minerals in 2003 returned 18.8 g/t Au over 0.93 m, 8.8 g/t Au over 1.15 m, and 30.6 g/t Au over 1.3 m, following up on a surface channel sample of 95.1 g/t Au over 2.7 m from the 85-1 (Blue Vein) Zone.

Pursuant to the terms of a 2006 option agreement (Placer Dome), Goldcorp began a 2,786 m, 18 hole regional diamond drill program and covered various targets throughout the property. Highlights included 6.9 g/t Au over 1.0 m, 4.4 g/t Au over 2.8 m, 5.2 g/t Au over 1.0 m, and 16.3 g/t Au over 0.5 m. Follow-up drilling of 2,086 m in 4 holes located closer to the workings in 2007 returned intersections of 14.1 g/t Au over 1.0 m, 8.3 g/t Au over 2.6 m, and 11.2 g/t Au over 1.0 m from the immediate mine area. In 2008, the property saw a 5,236 m, 20 hole, diamond drill program, with Goldcorp undertaking 3,859 metres of this, and Vault drilling the remainder on its 100% owned Gordon Lebel property situated along the north-eastern strike extent of several gold-bearing structures, including projected structures from the former producing Bidgood #2 gold mine. Vault's program tested the Boundary Zone, where prospecting identified several strongly-altered, mineralized shear zones, with grades up to 27.9 g/t Au over 0.3 m.

In 2008, drill hole LB08-35 intercepted two broad zones of up to 80% quartz flooding in a porphyry host and that returned 0.52 g/t Au over 17.8 m (456.2 to 474 m) and 0.83 g/t Au over 11.5 m (530 to 541.5 m). Drill hole LB08-36, located 100 m to the northeast of LB08-35, intercepted a shear zone returning 1.47 g/t Au over 3.0 m and may represent a related structural horizon.

This shear zone, located under Mud Lake, was targeted due to anomalies delineated by lake bottom soil sampling (Placer Dome). It became known as the KQS (Kirkland Quartz Stockwork) zone. Drill hole LB08-40, located 700 m to the southwest of LB08-35, intersected an 8.7 m breccia zone from 154.5 to 163.2 m having up to 25% pyrite mineralization and returning 0.48 g/t Au over 4.5 m. 2008 drilling also intersected 10.2 grams of gold per tonne (g/t Au) over 1.1 m, 6.7 g/t Au over 1.4 m (within a zone grading 2.0 g/t Au over 13.7 m), and 7.3 g/t Au over 2.1 m (including 18.5 g/t Au over 0.6 m) at the Boundary Zone.

### **6.2.1 Lebel Township**

A brief summary of the exploration activity on each main occurrence is presented below and general locations can be found on Figure 6.1. Little data is available as assessment files with the MNDM as most of the ground was on patented claims. The majority of the data on the initial work is from Lovell (1976).

### **6.2.2 Bidgood #1 Mine**

The Bidgood #1 mine was developed on the No. 9 vein, a quartz vein with variable disseminated pyrite, chalcopyrite, malachite, and telluride content. Several associated zones of reportedly sporadic grade were delineated along a major feldspar porphyry and trachyte contact.

Bidgood Gold Mines was incorporated in 1919 to develop the Bidgood #1 mine near Mud Lake and restructuring in 1923 resulted in property expansion and the development of the Bidgood #2 mine in 1928. Between 1919 and 1923, the Bidgood #1 shaft had been sunk to 180 m and 3 levels were opened up to test the No. 9 vein and the "blue vein" (Todd, 1928). The mine was dewatered in 1927 and exploration was carried out for 2 years. Operations were suspended in 1931 as resources apparently were transferred to the Bidgood #2 shaft.

### **6.2.3 Bidgood #2 Mine**

Bidgood #2 shaft was sunk in 1928 following the discovery of free gold and telluride mineralization approximately 60 m west of the shaft (Bidgood Kirkland Gold Mines Limited, (1934). The shaft was sunk to 150 m prior to suspending operations in 1931. Operations resumed in 1933 and produced from several levels between 1934-1949, and 1951 (Savage, 1964). A total of 16 levels were developed on 9 main vein sets to a depth of approximately 617 m, from the #2 shaft and from two winzes. A total of approximately 160,000 oz Au and 72,468 oz Ag were produced from 586,367 tons of ore at a grade of 0.26 oz/t or 8.0 g/t Au (Parsons, 1980-VF). Lytton Minerals optioned the property in 1987 and completed tailings sampling and 13 drill holes north and west of the shaft (Lytton Minerals, 1987-VF, 1987). A letter recommending additional trenching in 1988 may have been part of this activity. A map of the Bidgood #2 mine tailings generated by Golder Associates in 1991 indicates additional work may have been completed at that time. Vault completed an Induced Polarization survey over the property in 2004 that extended south over Moffat-Hall and southwest over Bidgood #1 mine (Walker, 2004). Vault also completed several holes around Bidgood #1 mine area in 2004 (Carmichael, 2004).

### **6.2.4 Moffat-Hall Mine**

F.C. Bidgood discovered gold on the Moffat-Hall property in 1917 and Moffat-Hall Gold Mines Ltd. was incorporated in 1921 to begin development. A shaft was sunk and 4 levels were developed in the period between 1930 and 1935. Between February and September 1934, 3,178 tons were mined and shipped to Noranda. In 1935 the mine was connected underground to the Bidgood #2 mine and an additional 13,210 tons were mined and milled at the Bidgood #2 mill (Lovell, 1976). Total production from all mining was approximately 4,780 oz Au and 1,149 oz Ag at a grade of 0.292 oz/t Au or 9.0 g/t Au.

The Moffat-Hall mine property has had more regular exploration than the remaining occurrences in the Lebel property. After closing in 1935, additional surface trenching and drilling was completed from 1935-1943, including work on the “old” blue vein trenches and a total of 27 ddh. Sylvanite Mines Limited completed underground sampling and mapping prior to the mine being flooded (Rudderham, 1985) and then the property reverted to the crown. In 1954, Upper Canada Mines Limited completed trenching, sampling and 12 drill holes on the property. The area lay dormant until Consolidated Virginia Mining Company carried out mapping, trenching, and diamond drilling between 1964-1966. The property was restaked as the O’Connor property and exploration programs including surface geophysics, mapping, and 57 diamond drill holes were completed between 1980-89 by Silver Lake Resources, Priority Metals and Minerals Corp., and International Platinum Corporation including surface geophysics, mapping, and 57 diamond drill holes drilling (Leonard, 1989). Additional targets outside of the mine workings include the 85-1 Zone, Blue Vein, Discovery Vein, 83-27 Zone, Boundary Vein and an unnamed occurrence between the Boundary Vein and 83-27 Zone. Most occurrences were discovered by prospectors in the 1920s and several have been drill tested at least once. Goldaur completed a trenching program on the 85-1 Zone/Blue Vein trend in 2000 and obtained values ranging up to 95.08 g/t Au over 2.7 m. Goldaur then merged with Vault Minerals and completed an IP survey over the area in 2004 followed by 2 diamond drill programs. The first program, completed in December 2003, included 9 closely spaced holes along the 85-1 Zone immediately northeast of the Blue Vein and obtained values ranging up to 30.77 g/t Au over 1.28 m (Carmichael, 2004) and is open at depth. The second program, completed in February 2004, included 9 diamond drill holes on a variety of targets with no significant results.

### **6.2.5 King Kirkland Mine**

King Kirkland Gold Mines was incorporated in 1920 following the discovery of a gold bearing vein by R. Montgomery in 1918 (Lovell, 1976). An inclined shaft was sunk on the No. 5 vein and a series of new veins were exposed on two levels from 1919-21, primarily beneath King Lake. Tonopah Mining Company Limited completed additional drifting on the lower level in 1923. King Kirkland Gold Mines was reorganized into KirkKing Gold Mines Limited and the mine was dewatered, sampled and drilled in 1936.

Underground sampling of the 400 ft level beneath King Lake delineated 1.0 g/t Au over 36.6 m and high grade zones were also delineated by drilling, including DD #5 from the 400-foot level reported 0.292 oz/ton Au over 8 feet. (4 feet true width) and DD #11, collared from the same location but with a 100 steeper dip intersected 0.30 oz/ton over a core length of 2.0 ft (Savage, 1964, ref. Craig, 1921 and Gillanders, 1937). Minor trenching and a single drill hole were completed in the 1970's with no reported results. In 1980 the Canadian Nickel Company Ltd. completed ground geophysics and two diamond drill holes near the King Kirkland prospect (Bennet, 1979).

A series of small programs were completed between 1982-94 by several junior companies and private entities. Surface geophysics, stripping, and two diamond drill holes extended the wide, low grade zone northeast of King Lake (K82-2 -1.2 g/t Au over 15.0 m) and higher grade mineralization defined in trenches at surface indicates the higher grade vein arrays may also extend along strike. A new showing, the Cliff Showing, was delineated to the east near the highway and several high grade values ranging up to 0.40 oz/t Au over 3.0 ft were reported from surface sampling but two diamond drill holes failed to intersect mineralization at depth (Leahy, 1998).

Drilling by Vault of 4 holes was completed in 2009 under an option with Goldcorp, under the bottom level of the mine, and northeast along strike. Three of the holes targeted grade and continuity of a 1.6 km gold/copper-anomalous corridor known as the King Quartz Stockwork Zone. To 2009, nine drill holes had tested the corridor, indicating multiple mineralized shear/fault structures with up to 22 m of 80% laminar quartz veining within 93 m of 35% quartz veining with intense sericitic-silica alteration. Drill hole LB09-49 returned up to 2.19 grams gold per tonne (g/t) over 5.15 m within a wider interval of 9.4 m grading 1.40 g/t. This intersection is located 200 m below chip samples in a 400 ft (122 m) level cross-cut at the King Kirkland mine that identified a gold mineralized zone with an average grade of 1.0 g/t over 36 m and 280 m below historic drill hole KK82-2 that intercepted 1.2 g/t over 15 m. Drill hole LB09-50 returned 1.12 g/t over 5.1 m and 1.91g/t over 2.05 m. Drill hole LB09-51 returned 0.92 g/t over 8.6 m on a porphyry-basic syenite contact, 300 m from the nearest drill hole, that intersected 11.2 g/t over 0.5 m and 5.3 g/t over 0.65 m in the previous drill program. Drill hole LB09-52 returned multiple gold anomalous zones, including 0.29 g/t over 49.05 m.

### **6.2.6 Lebel-Oro Mine**

The Lebel-Oro mine consists of an inclined shaft sunk to 18 m in 1920 then deepened in 1923 to 61 m and opened up on two levels. The mine was dewatered in 1927 followed by 274 m of drifting and 137 m of crosscutting. Nipissing Mining Company optioned the property and completed 3 underground and 3 surface drill holes in 1928. Underground sampling obtained values ranging up to 1.48 oz/t Au over 0.23 m (Lovell, 1976, ref. Todd, 1928). The shaft was dewatered a second time in 1936 and several underground and surface diamond drill holes were completed.

Geo-Technical Development completed surface mapping, geophysical surveys, and 8 diamond drill holes in 1948 (Leahy, 1998-VF). New mineralization was intersected in the #3 hole (0.6 oz/ton Au over 1.4 feet) and in the #4 hole. (0.18 oz/ton Au over 1.3 feet). Two additional sub-parallel zones were delineated immediately north of Lebel-Oro in 1984. A new vein located approximately 300 ft southwest of the Road Cut showing was trenched and sampled and values up to 0.90 oz/t Au were reported from grab samples (Parsons, 1984).

The Road Cut showing, a 20 m wide strongly altered, deformation zone trending 050° and exposed on both sides of Highway 66, was sampled and drill tested. Outcrop and drill sampling failed to obtain high grade values. Sampling of highway fill float reported values ranging up to 0.30 oz/t Au but was not sourced.

### **6.2.7 Kirk Royal Mine**

The Kirk Royal shaft was sunk in 1924 and deepened the shaft to 140 m by a reorganized company in 1926. Additional work in 1928 included further deepening the workings via a winze to 340 m and development on two levels. Kirk Royale dewatered the mine in 1937 and completed additional sampling and diamond drilling. Additional drilling was completed in 1950 (1 ddh), and from 1959-63 by G. E. Harrison (10 ddh). T. Martin completed an additional 3 holes from 1971-72 (Lovell, 1976). No economic grades were reported from this activity.

The mine was dewatered, mapped and sampled by A.C.A. Howe International Limited in 1987 on behalf of Canadian Gold and Colray (Reukl, 1987-VF). The work identified significant deformation and alteration along a major intrusive-volcanic contact with a minimum strike length of 76 m. Sampling obtained values ranging up to 5.47 g/t over 0.91m and larger lower grade zones ranging up to 1.83 g/t Au over 7.9 m.

### **6.2.8 Lakeside-Kirkland Mine**

The Lakeside-Kirkland mine was originally developed by Queen Lebel Gold Mines Limited in 1921. A 60 m shaft (No. 1) was sunk on a quartz carbonate vein in claim L 2924. The property was optioned to Anglo-Canadian Syndicate in 1923 and the shaft was deepened to 98 m, 180 m of development, and underground drilling.

In 1936 a second shaft was sunk west of the first and in 1938 it was deepened to 175 m and over 70 m of development was completed on two levels. Summary reports do not report grade data, but indicate development of quartz-carbonate veins with disseminated molybdenite, pyrite, galena, sphalerite, and galena, which is typically associated with alkalic-type gold mineralization.

In 1941, the No. 1 shaft was dewatered, sampled, and drilled by Mining Research Corporation. At least 4 vein bearing zones were defined and underground drill values ranging up to 4.5 oz/t Au over 1.5 m were reported (Mineral Research Corporation Limited, 1941-VF). Single drill holes were completed in 1955 and 1962 by C. L. Bolland.

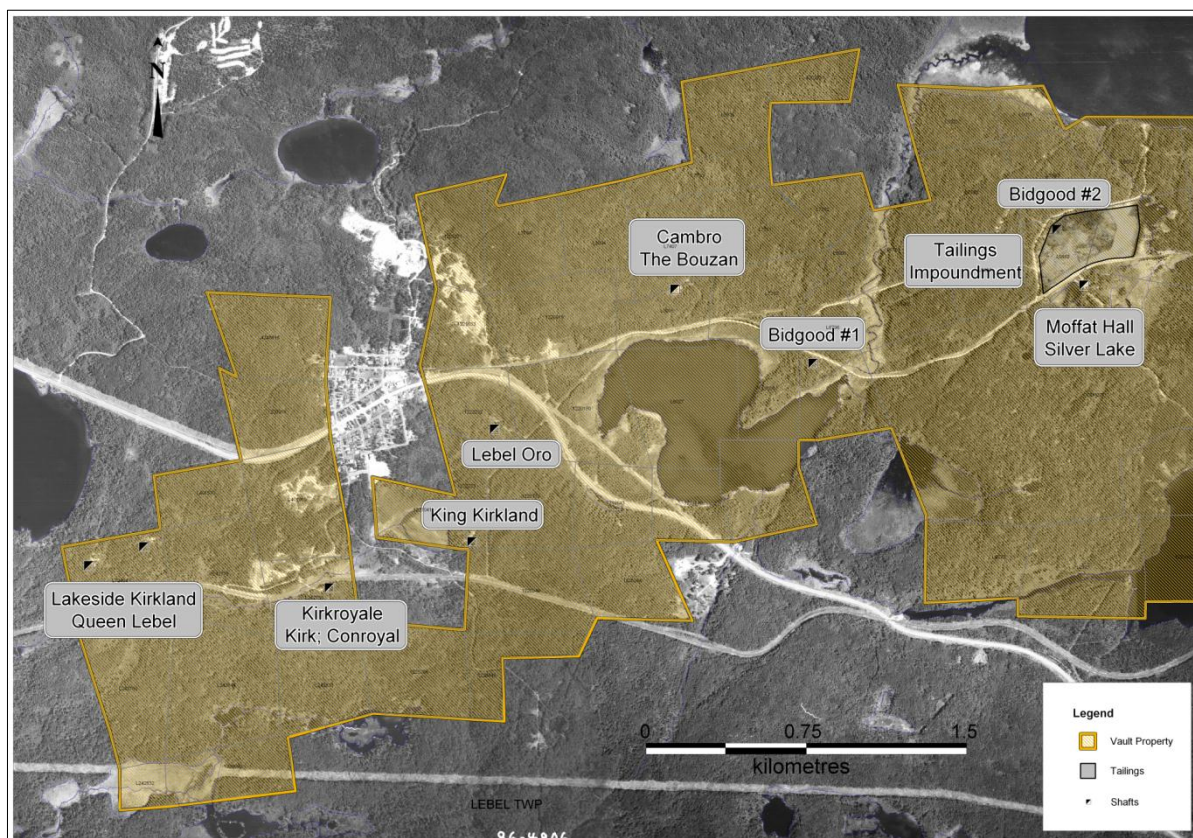
### **6.2.9 Cambro Shaft**

MacLean (1944) on his Map 53a depicts the location of a shaft and a single drill hole extending south to the north shore of Mud Lake, indicating the work was completed prior to his fieldwork in 1936. The shaft is located in a group of claims referred to by Lovell (1976) that originally



were owned by Cambro Kirkland Mines Limited and that were sold to Bidgood Kirkland Mines Limited in 1929. Presumably the shaft work was completed prior to that date as there is no record in the Bidgood Mines data of any work on it. Goldaur completed surface sampling of the waste rock pile in 2000 but did not obtain any significant results (Leahy, 2000).

**Figure 6.1 Historic Locations of Lebel Workings**



### 6.3 GOVERNMENT MAPPING

Early mapping of the Lebel Township was completed by the Ontario Department of Mines in 1914 and again at a scale of 1"=1/2 mile in 1923 (Map 23e, Hopkins, 1923) using claim boundaries for control. The Lebel Township was mapped in detail from 1936-39 at a scale of 1 inch = 1,000 feet (MacLean, 1944) but the accompanying report was not published until 1956 (MacLean, 1956). The report contained significant detail on the geology but little information on the various occurrences. Additional infill mapping was completed in 1969 and included a thorough review of the mineral occurrences and an evaluation of the structural geology (Lovell, 1976).

## **7.0 GEOLOGICAL SETTING AND MINERALIZATION**

### **7.1 REGIONAL GEOLOGY**

The KLGC occurs in the south-western portion of the Abitibi greenstone belt of the Archean Superior Province of the Canadian Shield (Figure 7.1) and the regional geological setting of the Kirkland Lake area is typical of many gold camps located within the Superior Province. The KLGC occurs on the southern limb of the regional Blake River synclinorium, the northern and southern limbs of which are truncated respectively by the Destor-Porcupine Fault (“DPF”) and the Cadillac-Larder Lake Break (“LLB”) with its associated deformation corridor (the LLDZ) (Figure 7.2). The majority of the historical gold production in the Abitibi Greenstone Belt is spatially associated with these two major regional structures (Queenston, 2001 Annual Report).

In the Kirkland Lake area, the LLB is considered to be a major east-west trending thrust fault that developed along the contact zone between mafic and ultramafic rocks of the Larder Lake Group to the south and mafic volcanic rocks of the Kinojevis Group to the north. Through recent age dating and review by the Ontario Geological Survey, these rocks have recently reclassified as parts of Tisdale Group and the Blake River Group respectively.

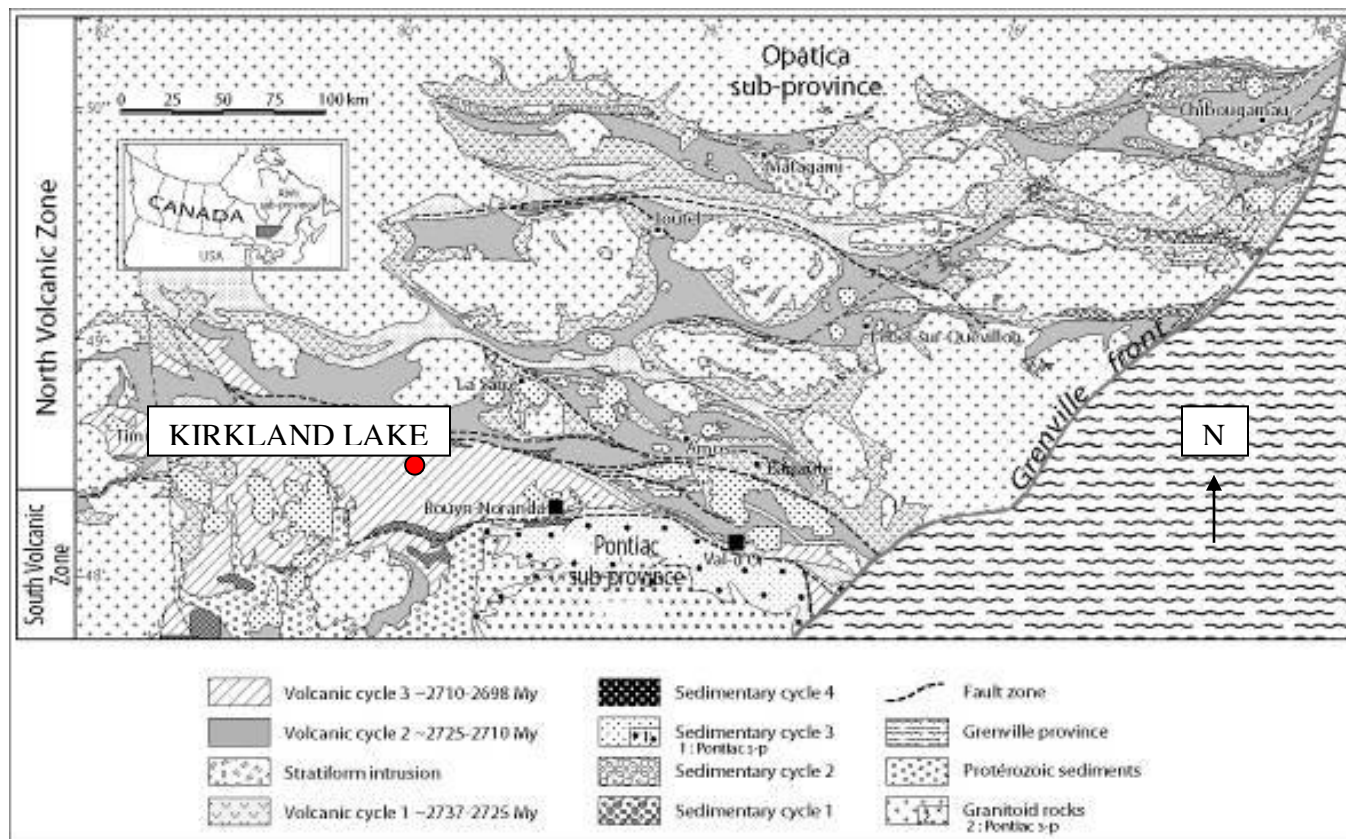
Expansion along the LLB created a graben-like basin which was filled with calc-alkaline volcanic and clastic sedimentary rocks of the Timiskaming Group. Later compression of this region created parallel and splay faults in both the Timiskaming and Lower Tisdale Group (Larder Lake Group) rocks along which many of the gold deposits of the KLGC were formed.

Today the LLB represents an unconformity between the Lower Tisdale Group rocks to the south and a 0.6 km to 5 km thick section of Timiskaming Group sedimentary and volcanic rocks to the north. Both the major rock groups in the area have been intruded by gabbroic and mafic-felsic intrusions, the most prominent are the Lebel Stock, Otto Stock, Murdoch Creek Stock and the Round Lake Batholith (Queenston, 2008 Annual Information Report).

The Timmins-Kirkland Lake segment of the Abitibi Greenstone Belt has been divided into nine supracrustal assemblages, as described in Table 7.1. Assemblages are described in order of increasing age.

Precious metal production in the Kirkland Lake Gold Camp has exceeded 40 million ounces (Risto et al, 2008) from 30 mines. Most of the gold production in the area has come from quartz veins associated with the Kirkland Lake Main Break (“KLMB”), which is interpreted to be a splay structure related to the LLB.

**Figure 7.1 Lithological Map Showing the Location of the KLGC within the Abitibi Greenstone Belt**



(Source: Chown et al., 1992)

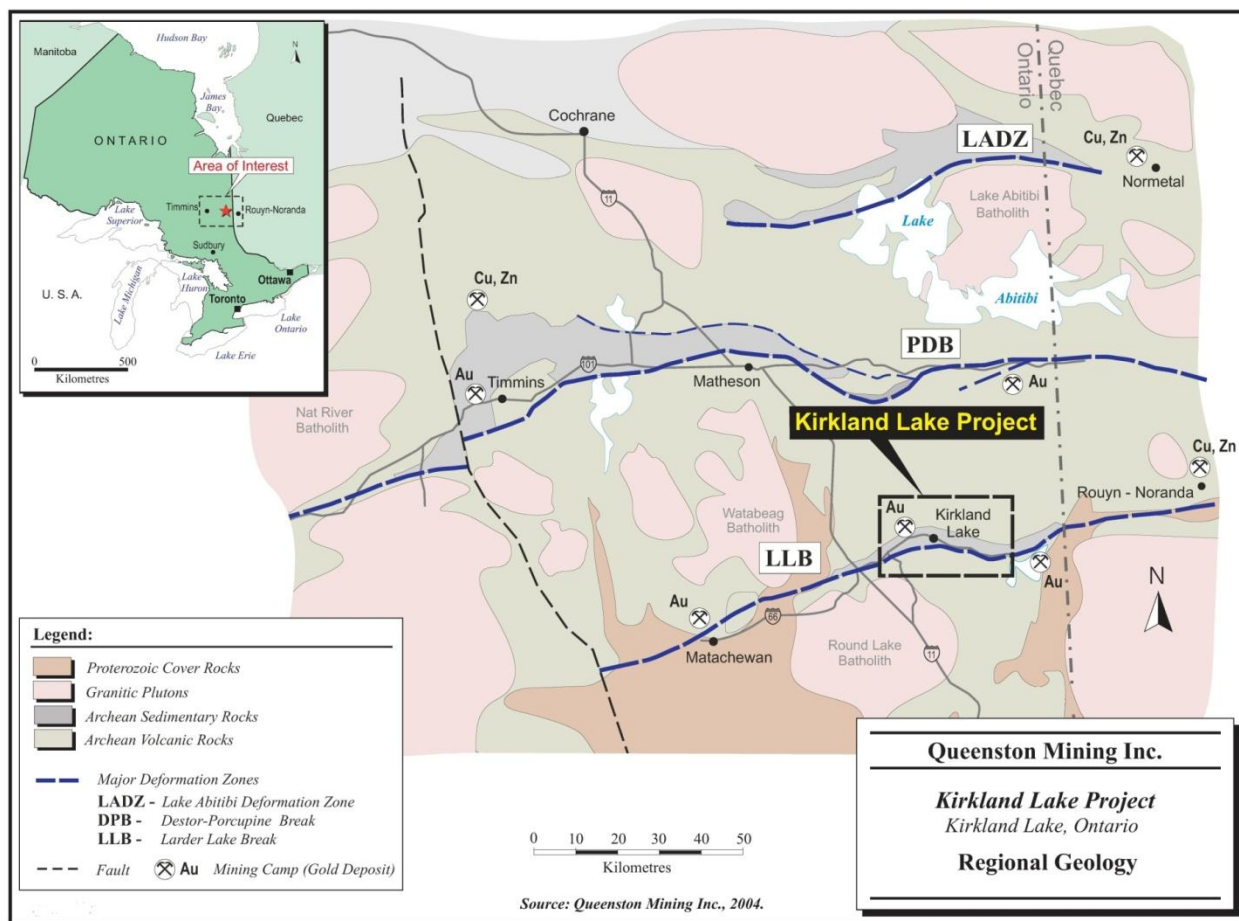
**TABLE 7.1**  
**SUPRACRUSTAL ASSEMBLAGES OF THE TIMMINS-KIRKLAND LAKE SEGMENT OF THE ABITIBI GREENSTONE BELT**

Assemblage	Description
Timiskaming	Contains sedimentary and alkali volcanic rocks including iron formation, such as Upper Canada and Macassa Mines.
Porcupine	Comprises sedimentary and calc-alkalic volcanic rocks including iron formation.
Upper Blake River	Comprised of mostly calc-alkalic volcanic rocks, such as at the Noranda Camp.
Lower Blake River (Kinojevis)	Comprised of mostly tholeiitic basalts, such as at the Holt McDermott Mine.
Upper Tisdale (Gauthier)	Comprised of calc-alkaline felsic to intermediate volcanics exhibiting flow and debris flow characteristics and associated volcanoclastics sediments.
Lower Tisdale (Larder Lake)	Comprised of mostly komatiitic, tholeiitic and calc-alkalic volcanic rocks and iron formation, such as at the Kerr Addison Mine, McBean Mine and Anoki deposits.
Kidd-Munro	Comprised of komatiitic, tholeiitic and calc-alkalic volcanic rocks.
Stoughton-Roquemaure	Comprised of komatiitic, tholeiitic and calc-alkalic volcanic rocks.
Deloro	Comprised of tholeiitic and calc-alkalic volcanic rocks and iron formation
Pacaud	Comprised of komatiitic, tholeiitic and calc-alkalic volcanic rocks.

(Source: RPA, 2004)



**Figure 7.2 Regional Geology Map**

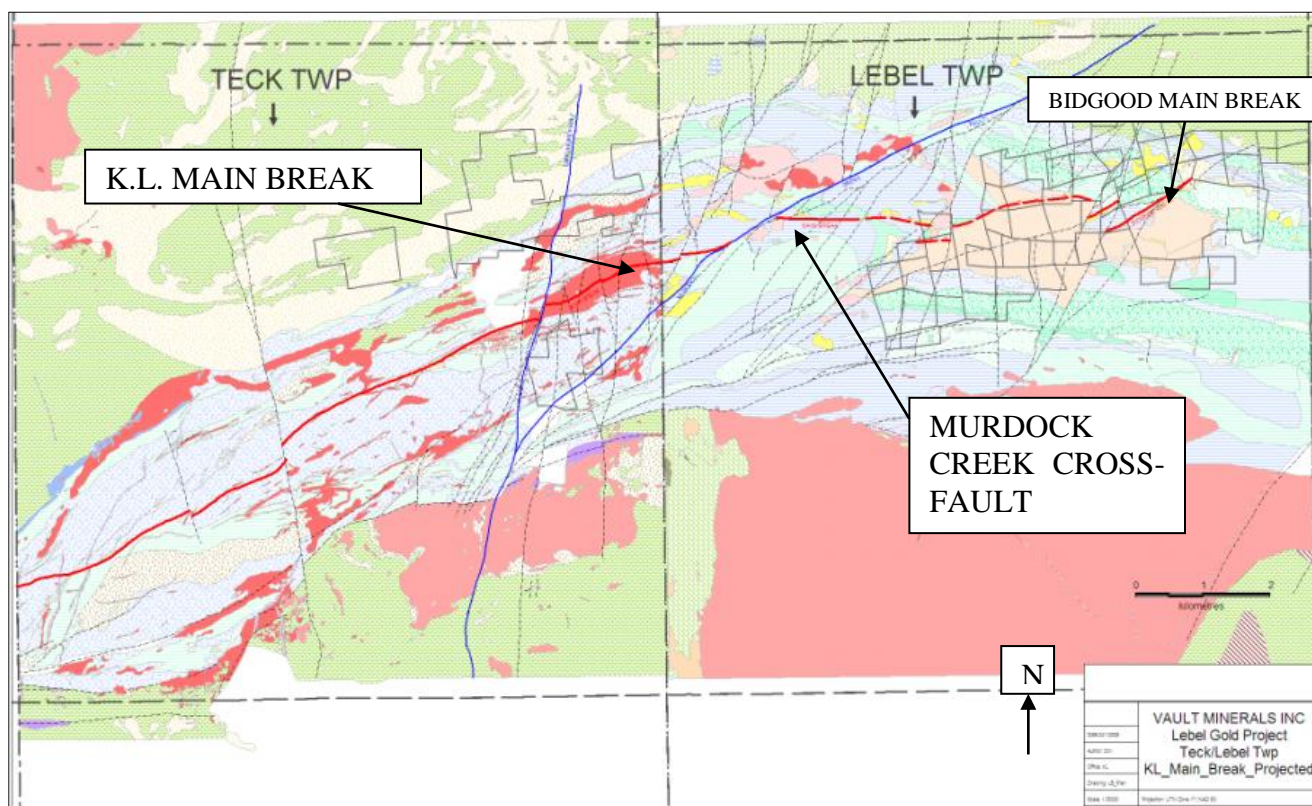


(Source: Agnerian, 2004)

## 7.2 GEOLOGY OF THE LEBEL PROPERTY

The Lebel property covers 7.7 km of the favourable Timiskaming Group of flows, tuffs and sediments with syntectonic dykes, sills and plugs of diorite, syenite and feldspar porphyry along strong structures that are splays off of the Larder Lake Break. The Main Break, the structure that hosts the seven big mines of Kirkland Lake, extends west of Teck Township, where it is offset by the Murdock Creek fault (Figure 7.3). The offset portion is thought by Queenston geologists to extend through the Lebel property where it becomes the host structure for Bidgood ore. The Bidgood mine area hosts gold in dark grey quartz veins with associated molybdenum, massive pyrite veins (replacing magnetite), and locally chalcopyrite. There are at least 23 separate veins, all structurally controlled and all with haloes of further pyrite (+/- sericite, epidote, and leucoxene) that are also gold-bearing. These veins are splays off of two north-eastern trending structures known as the North Break, and the Main Break. The primary host rock is a diorite, and locally diorite breccia, with quartz-feldspar porphyry surrounding it and locally cutting through it as dykes. Basic syenite and argillite are important hosts elsewhere on the property. The Cadillac-Larder Lake Break, which separates the Timiskaming and Tisdale assemblages in this area is located further south on the Pawnee and Commodore claims. A more detailed description of the rock units present on the property is presented below.

**Figure 7.3 Structures at the Bidgood Mine**



#### Kinojevis Assemblage - Mafic Volcanic Flow

Mafic volcanic flows observed in the north end of the property are coarse grained and amphibolitic and may be coarse flows, mafic ash tuff, or amphibolitized flows. The rocks weather a medium grey-green and are medium to dark green on fresh surface.

#### Timiskaming Assemblage - Polymictic Conglomerate

The basal conglomerate is a polymictic conglomerate that according to MacLean (1956) contains jasper clasts and represents weathering of exposed basement at the onset of deposition of the Timiskaming assemblage. Jasper clasts were found in most of the conglomerate units during the 2005 mapping program.

Polymictic conglomerate varies from clast to matrix supported, and contains up to 50% subangular to subrounded clasts that range in diameter up to 15cm but typically average about 4 cm. Clast composition is extremely variable but typically includes syenitic intrusion variants, basement lithologies such as mafic volcanic flows, magnetite iron formation, jasper, with reworked tuffaceous material typically as matrix. The rocks typically weather light to medium grey-green but can vary to dark brown due to carbonate alteration and are typically medium grey-green on fresh surfaces, varying with clast content. Primary bedding is readily observable throughout the property and includes graded bedding, coarse to fine conglomerate bedding and conglomerate-wacke bedding. Many conglomerates have a weakly magnetic matrix.

## Wacke

Wackes are typically fine grained versions of the polymictic conglomerate and range from coarse, pebbly wacke to fine grained silty wacke. The units weather medium grey-green to grey and are medium grey to grey-green on fresh surfaces. Thin (2-10 mm) laminae are common and graded bedding was observed locally. Most of the wacke units mapped are located along the southwest corner of the property within the LLDZ deformation zone and are typically well altered.

## Argillite

One argillite unit is found in the immediate vicinity of the Boundary Zone. It is an aphanitic olive green mudstone with bedding, and commonly with rip-up angular clasts.

## Trachyte - Massive, Porphyritic, Amygdaloidal

Trachyte flows are extremely variable due to primary composition that varies from mafic to felsic, and due to superimposed alteration. Trachyte flows weather medium grey and are dark to light grey, green, pink, dark purple and brown on fresh surfaces. Massive flows occasionally contain 2-10 mm bands assumed to be flow banding or flow related textures.

Porphyritic flows can contain up to 60% phenocrysts. Mafic porphyritic flows typically contain up to 25%, 2-5 mm augite, but can also contain up to 15% aegerine or pigeonite that weather recessively. Intermediate to felsic porphyritic flows are mineralogically diverse and contain variable amounts of pseudoleucite (up to 60%), plagioclase (up to 30%), K-feldspar (up to 30%), leucite (up to 7%), and nepheline (up to 7%). Amygdaloidal varieties occur locally and contain up to 10%, <10 mm carbonate amygdules. Epidotization, hematization, carbonatization and chloritization of trachyte flows is common. Magnetic varieties are common, but magnetism does not appear to be related to hydrothermal alteration as relatively pristine units as well as altered units are magnetic.

## FX Tuff – Ash, Crystal

Lapilli to ash tuff units are extremely variable in appearance ranging from grey to buff to purple-grey on weathered surfaces and medium green to grey to dark purple on fresh surfaces. Recessive weathering of the intragranular spaces is not uncommon. Individual beds can contain up to 20% crystals, which can include K-feldspar, plagioclase, and nepheline.

Tuff units typically have a granular texture but lack the micaceous and lithic content of wackes. Massive and bedded tuff varieties were observed with bedding typically ranging from 10-30 cm. Graded bedding was observed locally. Tuff units are variably magnetic.

## Mafic Syenite (Also Basic Syenite, Lamprophyre)

Several mafic syenite units are indicated on Map 53a within the property. Several were sampled during the 2005 mapping program but only a few approach true mafic syenite by mineralogy or composition. The more mafic syenites typically contain up to 65% K-feldspar and up to 20% augite, weather medium to light grey, and are medium grey on fresh surfaces.

Variations include pink and green tinged varieties due to hematite and chlorite/epidote alteration, respectively. Several units of wide basic syenite have been discovered from drilling in the period 2008-2010; the 1944 government map does not show these units.

### Syenite

Several intrusive rocks were mapped in the field as syenite. All weathered medium to light grey and were medium grey with <20% mafic minerals. Subsequent petrographic analysis indicates all are monzonite, comparable to the larger feldspar porphyry (Porphyrite) unit that extends through the south half of the property. Syenite units generally have a red brown to purple-red colour in core, are homogeneous, weakly to moderately magnetic locally, non-carbonated and contain up to 5% black xenoliths.

### Quartz Porphyry

There are several quartz porphyry intrusions adjacent to the gabbro intrusion at Bidgood #2. Mine, in the Boundary Zone area as well as a few immediately west of the property flanking mafic syenite intrusions that extend into the property. The quartz porphyry intrusions are similar to the feldspar porphyry intrusions elsewhere on the property, they weather light grey and are medium grey on fresh surface with colour variation due to alteration. Plagioclase is the dominant phenocryst, followed by amphibole and potassic feldspar. In core, they are always non-magnetic, pale grey to white to light lime green in colour, competent, homogeneous, with 1-3% ubiquitous coarse disseminated pyrite, 1-5% chlorite fractures and consist of 30% anhedral 1/8" glassy-greenish quartz phenocrysts.

### Bimodal Porphyries

The bimodal porphyries are relatively narrow, dyke-like units that are usually gold-barren, fresh, competent, homogeneous, brown-red to purple in colour, non-magnetic, non-carbonated, with 10% 1/4" euhedral feldspar phenocrysts and 30% feldspar 1/8" phenocrysts. Underground, lamprophyre dykes are similar to the bimodal porphyries in that they are apparently late, having no gold content and having a "damming effect" on the gold-bearing fluids such that gold grades decrease away from them and the contacts are often mineralized.

### Diorite

Several types of diorite are historically described on the property. The central stock is far more extensive than the 1944 government map indicates; recent drilling has uncovered its eastern extent at the Boundary Zone. It is the primary host of the Bidgood #2 and Moffat-Hall mines. The four sub-units described are diorite, ilmenitic diorite, epidote diorite, and diorite breccia. The diorite is a fine to medium grained unit that can occasionally grade into gabbroic textures. Feldspar groundmass holds 50% black mafics (chlorite after hornblende), often with alteration products of iron such as epidote, leucosiderite, specularite, and on its southern contact, magnetite. It is usually highly magnetic. The ilmenitic and epidote diorites are also historical classifications, but they are intermixed with the other two units. There are variations in epidote content from rare to 3-5%, usually as clots and fracture-filling veins. The diorite breccia is found on the north half of the stock (and locally on the west side) and consists of 10% -20% rounded breccia fragments up to 0.1 m with resorbed, rounded contacts. It is usually non-magnetic.



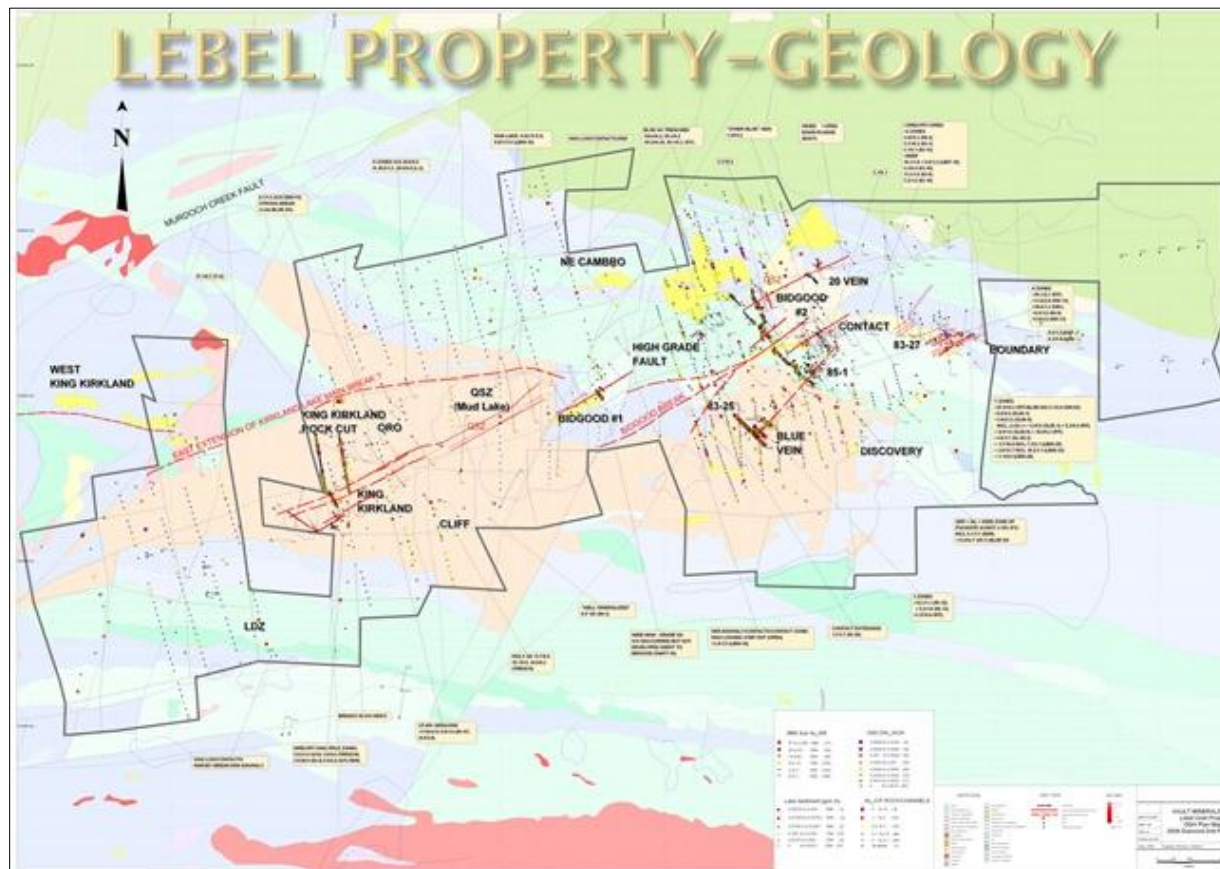
## Feldspar Porphyry (Porphyrite)

The largest geological unit on the property is the feldspar porphyry, or Porphyrite of MacLean (1944). The rock weathers light grey and is typically medium to light grey on fresh surfaces and the weathering rinds often have an orange tinge due to weathered pyrite and/or ankerite.

The main intrusive body extends from the west end of the property where it is approximately 150 m wide, thickens east of King Kirkland in the Mud Lake area to approximately 1500 m and narrows further east to just under 1000 m at the eastern contact. The width of the main body narrows significantly where it intersects the Long Lake fault and it also has an apophysis that extends northwest along S2 folded stratigraphy. The unit has been grouped into a single, homogenous unit due to the mapping scale but detailed mapping around trenches by previous workers has shown the unit consists of multiple phases. Two separate varieties occur in the Bidgood #1 mine area, including a bimodal porphyry. More massive varieties, although still porphyritic, occur south in the King Kirkland and southwest of Moffat-Hall mine. Previous workers describe relict textures of conglomerate, trachyte, and sediments locally within the large unit, and conglomerate-like textures are present in 2005 Trench 4. However, these are considered roof-pendant type remnant features. Therefore, all occurrences were initially termed feldspar porphyry and subsequently modified by petrographic analysis.

## QFP Feldspar Porphyry

The Quartz-Feldspar porphyry is a non-magnetic unit, often occurring as dykes, with 10%-30% anhedral 1/8" glassy-greenish quartz phenocrysts plus 10%-30% subhedral pinkish-white feldspar phenocrysts. Plagioclase is the dominant phenocryst. It sometimes contains rare dark grey xenoliths up to 1/4". When altered, they are frequently sericitized.





### 7.3 MINERALIZATION

Outside of the Bidgood mine area, the Lebel property contains numerous shafts with negligible assay results (see 6.1 Exploration History). The areas where significant gold assays have been historically returned include the following:

<b>TABLE 7.2</b> <b>SUMMARY OF MINERALIZATION</b>		
<b>Zone</b>	<b>Previous Drilling Results g/t Au over metres (hole #)</b>	<b>Notes</b>
Bidgood-Shallow	See Table 10.2; + Pit potential expansion north: 0.7/7.9 (BG10-61), 48.7/0.9 (BG10-69), 2.2/6.75 incl. 9.3/0.9 (BG10-60), 1.2/11.25 incl. 5.5/0.85 (BG10-57), 6.4/2.45 incl. 17.0/0.65 (BG11-98), 5.3/0.8 (BG11-95), 1.4/5.25 (BG10-32), 11.7/1.15 (BG10-65)	Intersections making up the Bidgood south resource (Table 10.2)
Bidgood-New (North)	See Table 10.3	Intersections from 2010-2011 drilling near surface and north of Bidgood south vein area (north of #11 vein)
Bidgood-Deep	14.1/1.0, 6.8/1.2 and 8.3/2.6 (LB07-19); 11.2/1.0 (LB07-22); See Table 10.3	Deep north- assays from zones north of the main break Deep south- south of or below 2011 south Bidgood resource
Boundary	See Table 10.1	Intersections making up the Bidgood south resource
Blue Vein East (85-1 Zone)	31 m of 15.6/1.8 incl. 86.4/2.7 (pit channel) 11.8/2.8 (MH-11), 30.7/1.3 (MH-3), 27.8/1.4 incl. 50.1/0.65 (BV10-04), 8.8/1.75 incl. 16.2/0.9 (BV10-07)	At contact; historical non 43-101 compliant resource at 2,600 tons @ 0.30 oz/ton (taken very narrow); new resource (incomplete-2011) shows 16,000 tonnes; plunge is sub-vertical; strike maximum of 45 metres; from surface to 100 metres
Blue Vein West	58 m of 6.5/3.1 incl. 73.0/1.0 (pit channel), 1.0/32.0 (BV10-18), 0.7/19.2+0.6/26.50 (BV10- 12), 14.26/0.5 (BV10-13), 12.27/1.07 (89-12)	All in porphyry
Discovery Zone	13.0/0.3 (65-7), 5.1/1.7 (88-07)	Strong wide pyrite shear
Bidgood #1	Limited information	Wide QV U/G-plunge steep east-drilled in 2011 (low values)
King Kirkland Mine	1.0/28.8 (82-2), 9.9/2.4 (U/G DDH), 2.2/5.15 (LB09-49), 1.0/36.0 (U/G CHIPS)	
Cliff Zone	13.7/0.9 (chip), 15.1/0.5 (chip), 30.9/0.3 (chip)	North-south zone; large parallel I.P. (not drilled)
Contact Zone	3.1/6.1 (83-13), 3.3/6.4 (83-10), 2.9/3.55 incl. 7.3/0.8 (BC10-3), 1.0/6.49 (89-05), 1.0/19.2 (83-20), 1.9/4.57 (83-15)	Pit potential expansion south; same zone intersected deeper "deep south" in Table 10.2
North Parson's Vein	124.8/0.2 (Parson chip), 101.8/0.25 (Parson Chip), 50.1/0.3 (Parson Chip), 19.4/0.5 (Vault Chip), 86.8, 67.2, 44.3 (Vault Grabs), 13.5/0.8 (BW10-01), 5.5/0.2 (38-12)	In trachyte; good vein on surface-no strike extent
Mud Lake South	0.9/8.6 (LB09-51)	New- porphyry/basic syenite contact sulphide zone
Isolated Zone	1.4/6.4 incl. 5.5/0.43 (83-25)	West extension of contact
Isolated Zone	23.6/1.25 (83-27)	In eastern extension of diorite (that extends to boundary zone)-some question on the grade
Isolated Zone	1.3/15.1 incl. 7.2/1.5 (83-19)	East extension of blue vein

- The mineralization is found within veins numbered 1 to 21 at Bidgood, and two more at Moffat-Hall. Subordinate splays are common, often cited as carrying significantly higher grades. These veins are commonly massive coarse pyrite with local dark grey to dark blue quartz veining, typically combining for ½”-1’ widths. Sometimes a calcite vein is intimately associated. Associate minerals are molybdenite, chalcopyrite, calaverite+altaite (tellurides), rare galena, tourmaline, and strontianite. For veins in the southern portion of the mine area, the diorite is highly magnetic, frequently hosting 1/8” magnetite veining, and 3-5% epidote. Within this southern area, the diorite is altered proximal to veining with;
- Magnetite altering to coarse disseminated and vein pyrite (vein areas are generally non-magnetic, although locally magnetite is part of the mineralization);
- With ilmenite altering to a light lavender-coloured leucoxene (localized to mineralized areas);
- With epidote forming as spots, patches, streaks, stringers (both generally and with increasing percentage proximal to mineralized areas);
- With saussuritization having weak to high bleaching plus silicification;
- With weak hematization, and chlorite-silica veining forming and grading into the dark grey-blue quartz veins.

Free gold is present usually within the dark grey-blue quartz veins, but also coating moly slips/faults and coating massive pyrite veins.

The Blue Vein zone located 700 m south of the Bidgood Mine consists of at least 3 sub-parallel vein systems that are fault-controlled. The BV1 occurs along a syenite-porphyry-wacke contact, while BV2 is completely contained within a porphyry body.

## **8.0 DEPOSIT TYPES**

Two separate gold mineralization events are proposed for the Timiskaming assemblage rocks (Ispolatov et al. 2008) and the potential for both types exists on the Lebel property. D2 associated quartz-carbonate vein and sulphide replacement mineralization occurs along the LLDZ (e.g. Kerr Addison mine), which extends through the south edge of the property. D4 associated quartz-molybdenite vein mineralization occurs primarily along northeast trending faults (e.g. Kirkland Lake deposit) such as the Bidgood fault.

### **8.1 D2 GOLD MINERALIZATION**

D2 gold mineralization is typical syn-deformation, mesothermal orogenic quartz-carbonate vein type mineralization. The D2 gold mineralization event in Kirkland Lake is coeval with the protracted D3 event that produced many of the gold deposits in the Timmins area. In both areas, fluid migration exploited south over north reverse fault displacement along the PDF and the LLDZ.

D2 mineralization occurs as either quartz-carbonate vein arrays in altered ultramafic rocks or as pyrite replacement type ore exploiting a variety of rheologically favourable areas. D2 deposits are located along first order structures, commonly at S-shaped bends. Au/Ag ratios are low and as enrichment is common.

Carbonate is the major alteration product. Alteration of the host rocks modified them into more competent products that were more suitable to brittle deformation which potentially improved permeability.

Most of the D2 deposits in the Kirkland Lake area such as the Upper Canada Mine, McBean, Cheminis, and Kerr Addison mine occur east of Lebel Township. All of the deposits occur long the LLDZ, or on splays, and plunge steeply to the east.

### **8.2 D4 GOLD MINERALIZATION**

D4 gold mineralization has many similarities with epithermal type gold mineralization. The main D4 type deposit is the Kirkland Lake deposit, which is essentially one large quartz vein array comprised of two main northeast trending, southeast dipping vein sets and a variety of low angle to orthogonal vein sets. The vein arrays are spatially associated with the northeast trending brittle-ductile Kirkland Lake fault.

D4 vein arrays are multiple injection-type veins, typically deformed, and vary from white to gray in colour. The veins contain minor disseminated pyrite and chalcopyrite, with molybdenite and graphite smears occurring along contacts and slip faces, and visible gold within veins and in the adjacent wall rock.

There are three vein types – break ore (fault fill along main break), hangingwall/footwall veins (fault fill related to subsidiary faults), and breccia ore (altered, veined, and mineralized areas between two relatively close breaks).

The veins often have open fill textures and crystal growth consistent with shallow level emplacement. Au/Ag ratios are higher than D2 mineralization ratios, and the D4 veins are enriched in Te, Mo, Pb, and Ag, sporadic Cu, and are low in As. Te occurs as gold and lead tellurides, and gold occurs in telluride form and as free gold. Proximal D4 wallrock alteration is

predominantly potassic (sericite). Bulk alteration includes moderate carbonatization (but in levels much lower than D2 type mineralization), minor sericitization and local silicification. Sericitization increases towards the core of the deposit at the Lake Shore mine. Carbonatization occurs along the faults but is independent of gold grade, potassic alteration mainly in the form of sericitization has the closest association with gold grade, and chloritization is entirely a post-ore alteration product. Hematization, particularly of wallrock K-feldspar, is also a common alteration product. The plunge of center of the Kirkland Lake deposit is controlled by the intersection of Main Break and oblique D2 stratigraphy. West of Macassa shaft the deposit has no defined plunge as D2 foliation is sub-parallel to the Kirkland Lake fault. Stylolite orientation and S4 orientations are consistent with northwest directed shortening. Chlorite seams that mark the main breaks do not occur in veins indicating the motion and alteration are post-ore formation. Alkaline dikes, geochemically similar to coeval intrusion activity, occur in several fault zones and are supporting evidence for an intrusion-related component to the gold mineralizing fluid.

## **9.0 EXPLORATION**

### **9.1 RECENT EXPLORATION (2009-2010)**

As described in a Queenston press release dated April 20, 2010, Vault Minerals Inc. was amalgamated with 2236019 Ontario Inc., a wholly owned subsidiary of Queenston. The Lebel Property was acquired during the amalgamation.

The Boundary Zone is located towards the eastern end of the Lebel property, approximately 1 km east of the Bidgood mine. Surface sampling and stripping of the Boundary Zone was completed by Vault minerals in 2009 and was followed up by a drilling program initiated in late 2009.

During the winter of 2010, Vault Minerals Inc. conducted an IP survey over the KQS Zone. The KQS Zone, discovered in 2008 beneath Mud Lake, is a wide copper-gold anomalous zone west of the Bidgood Mine. The IP survey was designed to outline mineralized targets along this corridor and was the target of the Queenston drilling program outlined in Section 10. It is a distinct 1.6 km-long mineralized corridor hosted within a large feldspar-porphyry stock contains a large quartz-stockwork zone that averages 114 m wide in core intercepts (not true width). Within this zone is a silicified core with over 80% quartz that averages 0.46 g/t Au and 0.10% copper over an average core length of 17 m.

All exploration work conducted on the property prior to 2009 is summarized in Section 5 of this report.

In 2009, drilling followed up on the KQS zone with 4 holes targeting its western extension to the King Kirkland Mine. Four holes representing 1,796 metres were drilled with a best result- under the mine- of 2.2 g/t Au over 5.15 m.

Also in late 2009/early 2010, The Blue Vein and Boundary Vein were tested by drilling programs, with most drill holes completed on 8 m to 15 m centres, to assist in defining resources. Earlier trench channel samples returned up to 95.1 g/t Au over 2.7 m from the Blue Vein. The Blue Vein zone located 700 m south of the Bidgood Mine consists of at least 3 sub-parallel vein systems that are fault-controlled. The BV1 occurs along a syenite-porphyry-wacke contact, while BV2 is completely contained within a porphyry body, at 420 metres west of BV1. Historic drilling (2003) includes intersections of 11.8 g/t Au over 2.8 m, 30.6 g/t Au over 1.3 m, 12.3 g/t Au over 1.1 m, and 18.8 g/t Au over 0.9 m to a depth of 100 m. The November 2009 Blue Vein trench channel samples returned 15.6 g/t Au over 1.8 m along 31 m from BV1 and 6.5 g/t Au over 3.1 m along 58 m on BV2, with sampling returned up to 73.0 g/t Au over 1.0 m. In early 2010, 23 shallow holes were drilled, totalling 1767 m, on BV1 and BV2. Hole BV10-23 on BV1 returned 7.7 g/t Au over 2.8 m (including 31.6 g/t Au over 0.6m), located 10 m west of previously reported hole BV09-04 that intersected 27.8 g/t Au over 1.4 m. On the BV2 area, hole BV10-18 returned 1.0 g/t Au over 32.8 m (including 9.6 g/t Au over 0.95 m) approximately 21 m to 45 m below surface. This intersection is located 90 m from historic (1989) intersection of 12.3 g/t Au over 1.1 m that formed part of a wide anomalous zone where sampling was incomplete. Other Blue vein drilling results include 14.3 g/t Au over 0.5 m (hole BV10-13) and 8.4 g/t Au over 0.85 m (hole BV10-8).

In 2009, surface trenching and chip sampling was undertaken on the Boundary Zone. It returned an average of 5.1 gAu/t across 3.0 m along an 18 m strike length with individual higher grade assays including 42.5 gAu/t over 0.4 m, 41.2 gAu/t over 0.5 m and 16.9 gAu/t over 0.6 m. A

total of 32 shallow diamond drill holes (2979 m) targeted the Boundary Zone in late 2009, and into early 2010. The drill program reported 5.3 g/t Au over 5.75 m (within 3.4 g/t Au over 11.35m-hole B09-04) and 15.9 g/t Au over 1.0 m (within 5.5 g/t Au over 3.5m and within 1.7 g/t Au over 14.5 m-hole B09-13B).

At the same time as the Blue vein and Boundary vein were drilled by Vault Minerals, 9 holes totalling 837 metres were also drilled on two other targets, the Contact Zone, located 100 metres south of the Bidgood Mine and the Bidgood West , located 400 metres west of the Bidgood Mine. Results include 13.5 g/t Au over 0.8 m in the West Zone (hole BW10-01), and 2.9 g/t Au over 3.55 m in the Contact Zone (hole BC10-3).

Following the acquisition of Vault by Queenston, starting in May 2010, a drilling program focused on the Bidgood Moffat-Hall mine complex confirmed and expanded the potential for both new high grade and low grade (open pit) mineralization at the Bidgood mine. Historically the mine produced gold from a series of narrow, 0.5 – 2.0 m wide quartz vein zones and the new results beyond the mined areas indicate that the material between the veins is gold bearing and forms a mineralized corridor that measures up to 28 m thick. Drilling intersected both narrow high-grade and wide, low-grade mineralization along two of the 23 known veins.

In the period from when drilling commenced in mid-2010, to Oct., 2011, 130 holes (24,051 m) were reported from the Bidgood mine area (or 153 holes of 29,758 m from the total Lebel Property). The mineral resource estimate (Boundary +Bidgood South Zones) incorporates 114 surface diamond drill holes (14,402 m) completed during 2010-11 and 23 historic holes

(3,632 m) drilled by previous operators completed by previous operators, and prior to the 2010-2011 current and ongoing drill program. The Bidgood South Zones and Boundary Zone that make up the resource were generally drilled at 10-20 m centres. Parts of veins #1, and #2 at Moffat-Hall, and the #20 vein and the Main Break at Bidgood, were incorporated in the Bidgood South Zone resource. Holes targeting the South Zones display the potential for open pit mineralization. The South Zone resource has been delineated with a strike length of 230 m and a depth of 150 m. The mineralized width is fairly consistent at 30-40 metres. The zones remain open horizontally along strike and vertically to depth, with a plunge to the east. Intersections include 1.9 g/t Au over 59.5 m in hole BG10-58, 12.15 g/t Au over 11.5 m in hole BG10-22, 5.0 g/t Au over 21.3 m (including 11.7 g/t Au over 7.2 m) in hole BG10-10, 4.4 g/t Au over 18.7 m (including 74.6 g/t Au over 0.6 m) in hole BG10-15, 1.6 g/t Au over 64.3 m (including 63.5 g/t Au over 0.6 m) in hole BG10-14, and 7.2 g/t Au over 24.1 m (including 12.8 g/t Au over 12.9 m) in hole BG10-33.

Outside of the South Zone resource, on the North Zones, hole BG10-03 returned 19.5 g/t Au over 5.2 m, including 107.0 g/t Au over 0.8 m from a strongly-mineralized new zone located 150 m northeast of the Bidgood shaft. Follow-up drilling at 30 m centres returned 5.8 g/t Au over 0.9 m (BG10-20), 5.7 g/t Au over 0.7 m (BG10-18C) within a broad 39.4 m zone averaging 1.1 g/t Au), and 5.69 g/t Au over 1.3 m (BG10-04) within 1.1 g/t Au over 40.9 m. Deep drilling has also been successful in extending gold potential in the vicinity of the Bidgood Mine complex. Intersections include 208.2 g/t Au over 1.1 m (with VG) in hole BG10-48, 184.5 g/t Au over 1.25 m (with VG) and 2.6 g/t Au over 11.7 m in hole BG10-86, 80.3 g/t Au over 0.85 m (with VG) and 1.1 g/t Au over 40.9 m in hole BG10-04, and 5.3 g/t Au over 6.75 m (including 15.9 g/t Au over 1.5 m) in hole BG10-52.

Other drilling by Queenston in 2011 occurred at the Boundary and at the KQS Zones. 13 holes were drilled at KQS, consisting of 5,125 metres as follow up to previous drilling, and targeting

the Bidgood #1 shaft zone. At Boundary, 10 holes were drilled for a total of 1589 metres to expand the resource in all directions and targeting the intersection of the two main structures. Results include 1.0 g/t Au over 14.35m (BZ11-39), 1.4 g/t Au over 20.0 m (BZ11-41), and 4.3 g/t Au over 7.5 m (including 18.6 g/t Au over 1.5 m- hole BZ11-46 at the Boundary, and 0.9 g/t Au over 8.1 m (ML11-08), 5.3 g/t Au over 0.6 m (ML11-09), and 1.1 g/t Au over 28.0 m (ML11-13).

## **10.0 DRILLING**

Starting in May 2010, a drilling program focused on the Bidgood-Moffat Hall mine complex confirmed and expanded the potential for both high grade and low grade (open pit) mineralization at the Bidgood mine. Historically the mine produced gold from a series of narrow, 0.5 – 2.0 m wide quartz vein zones and the new results beyond the mined areas indicate that the material between the veins is gold bearing and forms a mineralized corridor that measures up to 28 m thick. Drilling intersected both narrow high-grade and wide, low-grade mineralization along two of the 23 known veins.

130 holes (24,051 m) were completed in the Bidgood mine area (153 holes of 29,758 m from the total Lebel Property) in the period from mid-2010, to October, 2011. The current mineral resource estimate (Boundary+Bidgood South Zones) incorporates 114 surface diamond drill holes (14,402 m) completed during 2010-11 and 23 holes (3,632 m) completed by previous operators prior to the 2010-2011 current and ongoing drill program. The Bidgood South Zones and Boundary Zone that make up the resource were generally drilled at 10-20 m centres. Parts of veins #1, and #2 at Moffat-Hall, the #20 vein and the Main Break at Bidgood were incorporated in the Bidgood South Zone resource.

Drill sections and tables reported herein document results drawn from information from Queenston press releases published on the following dates and available on SEDAR:

- June 10, 2010
- July 7, 2010
- September 23, 2010
- January 13, 2011
- February 14, 2011
- June 9, 2011

### **10.1 2010 DRILLING – LEBEL BIDGOOD – MOFFAT HALL AREA**

In 2010, 2 drill rigs operated on the property and 93 diamond drill holes were advanced, totalling 16,500 m of drilling (Figure 10.2, Figure 10.3 and Figure 10.4). Selected core intervals from the 2010 drilling program with greater than 1.5 g/t Au and high grade intervals with mineralized intervals over 2.0 m and greater than 2.0 g/t Au are summarized on Table 10.3.

At the South Zone, drilling indicated the potential for a near surface mineral resource over a length of 100 m and to a depth of 150 m that would be amenable to an open-pit mining method. Mineralization remained open to the east, west and to depth.

Drilling on the North Zone has extended the gold mineralization over a length of 400 m and remains open to the northeast, southwest and to depth.

### **10.2 2009 - 2011 DRILLING – BOUNDARY ZONE**

The Boundary Zone is located on the eastern portion of the property approximately 1 km east of the Bidgood Mine. Stripping of the Boundary Zone was completed by Vault Minerals in 2009. Based on the success of surface sampling (8.9 g/t Au over 3.2 m) and historic drilling (which included 1.6 g/t Au over 26.5 m), Vault initiated a drilling program in late 2009 that was continued by Queenston in 2010 and 2011.



The Boundary Zone comprises two sub-zone, vein systems - the upper Perreault and lower Robert. The Perreault zone outcrops on surface and ranges from 6.7 to 25.1 m thick and comprises 3-20% coarse disseminated pyrite in silicified and altered porphyry and sediments. Twenty one of the thirty two holes drilled intersected the Perreault vein system. The Robert vein system is sub-parallel, approximately 20 m below the Perreault zone and is discontinuous. The Robert zone is generally narrower, reporting widths of less than 1 m containing high grades including 25.2 g/t Au over 0.75 m (BZ09-03), 12.8 g/t Au over 0.6 m (BZ09-10) and 12.1 g/t Au over 0.6 m (BZ10-16).

Drilling has traced the Boundary Zone over a length of 200 m and to a vertical depth of approximately 110 m. The zone has potential for near surface bulk tonnage gold mineralization and it remains open to the west towards the Bidgood South Zone (located 1 km to the west), to the east and to depth.

Selected (there are many left out @ >1.5 g/t) intervals from the 2009-2010 drilling program with greater than 1.5 g/t Au are summarized on Table 10.1 The borehole locations are shown on Figure 10.2.

Other drilling by Queenston in 2011 occurred at the Boundary. At Boundary, 10 holes were drilled for a total of 1,589 metres to expand the resource in all directions and targeting the intersection of the two main structures. Results include 1.0 g/t Au over 14.35 m (BZ11-39), 1.4 g/t Au over 20.0 m (BZ11-41), and 4.3 g/t Au over 7.5 m (including 18.6 g/t Au over 1.5 m- hole BZ11-46).

### **10.2.1 South Zone**

The South Zone is comprised of the two southern-most veins, mined from the 46 m to 91 m levels of the Bidgood Mine in the vicinity of the Moffat Hall shaft, and all veins at Bidgood controlled by the Main Break (i.e. south of and including the #11 vein). The mineralization generally consists of 10-90% coarse disseminated pyrite, 1-20% chalcopyrite hosted in altered, silicified, iron-rich diorite and porphyry along the Bidgood gold structure. The mineralization mined at Bidgood strikes northeast – southwest; dips vertically to 69° north and plunges to the east. The South Zone has been drilled at 10-20 m centres and has been delineated with a strike length of 230 m and a depth of 150 m. The mineralized width is fairly consistent at 30-40 metres. The zones remain open horizontally along strike and vertically to depth. Intersections include 1.9 g/t Au over 59.5 m in hole BG10-58, 12.15 g/t Au over 11.5 m in hole BG10-22, 5.0 g/t Au over 21.3 m (including 11.7 g/t Au over 7.2 m) in hole BG10-10, 4.4 g/t Au over 18.7 m (including 74.6 g/t Au over 0.6 m) in hole BG10-15, 1.6 g/t Au over 64.3 m (including 63.5 g/t Au over 0.6 m) in hole BG10-14, and 7.2 g/t Au over 24.1 m (including 12.8 g/t Au over 12.9 m) in hole BG10-33. The South Zone has both high-grade and low-grade near surface mineralization with the potential for developing an open-pit resource. The South Zone remains open in all directions and displays excellent continuity. The results of the 2010 drill program are shown on Figure 10.3 through Figure 10.5 and select intervals with greater than 1.5 g/t Au and high grade intervals with mineralized intervals over 2.0 m and greater than 2.0 g/t Au are summarized in Table 10.2.

### **10.2.2 North Zone**

At the North Zones, near the Bidgood #2 shaft, the drilling targeted primarily narrow, high-grade mineralization. Most past mine production from the Bidgood was from the North Zone vein system. Hole BG10-03 returned 19.5 g/t Au over 5.2 m, including 107.0 g/t Au over 0.8 m from

a strongly mineralized new zone located 150 m northeast of the Bidgood shaft. Follow-up drilling at 30 m centres returned 5.8 g/t Au over 0.9 m (BG10-20), 5.7 g/t Au over 0.7 m (BG10-18C) within a broad 39.4 m zone averaging 1.1 g/t Au, and 5.69 g/t Au over 1.3 m (BG10-04) within 1.1 g/t Au over 40.9 m.

Deep drilling has also been successful in extending gold potential in the vicinity of the Bidgood Mine complex. Intersections include 208.2 g/t Au over 1.1 m (with VG) in hole BG10-48, 184.5 g/t Au over 1.25 m (with VG) and 2.6 g/t Au over 11.7 m in hole BG10-86, 80.3 g/t Au over 0.85 m (with VG) and 1.1 g/t Au over 40.9 m in hole BG10-04, and 5.3 g/t Au over 6.75 m (including 15.9 g/t Au over 1.5 m) in hole BG10-52. Additional drilling is required to confirm the potential of the North Zone. The results of the 2010 drill program are shown on Figure 10.3 and Figure 10.4 and summarized in Table 10.3.

### **10.2.3 Mud Lake Zone**

The Mud Lake area is located west, along trend, of the Bidgood Mine sequence. 13 holes, totalling 4,118 metres targeted the Mud Lake Zone in 2011. The results of this drilling are summarized in Table 10.4 and the relative locations of the zones are presented in Figure 10.6.

<p align="center"><b>TABLE 10.1</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE 2009-2011 DRILL PROGRAM – BOUNDARY ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From(m)</b>	<b>To(m)</b>	<b>Length(m)</b>	<b>Au(g/t)</b>	<b>Zone</b>
BZ09-01	150	-45	5.20	6.00	0.80	6.8	Perreault
BZ09-03	180	-45	69.70	72.35	2.65	7.4	Robert
BZ09-04	121	-45	6.10	26.10	20.00	2.1	Perreault
BZ09-04	121	-45	66.10	67.10	1.00	1.60	Perreault
including	121	-45	14.75	26.10	11.35	3.4	Perreault
and	121	-45	14.75	20.50	5.75	5.3	Perreault
BZ09-08	150	-45	31.20	45.85	14.65	1.7	Perreault
BZ09-10	150	-45	75.80	83.20	7.40	1.7	Robert
BZ09-12	150	-45	57.45	58.00	0.55	1.7	New
BZ09-13	307	-45	61.5	76.0	14.5	1.7	Perreault
BZ09-15	314	-45	29.05	46.65	17.60	46.65	Perreault
including	314	-45	30.60	36.00	5.40	4.1	Perreault
BZ10-16	109	-45	74.70	76.65	1.95	1.7	New
BZ10-16	109	-45	81.95	82.55	0.6	12.1	Robert
BZ10-17	331	-45	28.20	29.30	1.10	4.3	New
BZ10-21	140	-40	10.40	17.10	6.70	3.0	Perreault
BZ10-22	111	-40	12.4	14.0	1.4	2.1	Perreault
BZ10-22	111	-40	23.90	24.55	0.65	6.2	Perreault
BZ10-23	105	-40	47.40	64.00	16.60	1.7	Perreault
BZ10-34	165	-41	101.60	102.10	0.50	18.5	Perreault
BZ10-34	165	-41	159.20	160.80	1.60	2.0	New
BZ10-36	167	-42	55.55	66.20	10.65	1.9	Perreault
BZ11-39	115	-59	73.60	74.20	0.60	5.01	Perr+Robert
BZ11-40	145	-62	196.25	197.65	1.40	3.91	Perrault
BZ11-41	158	-42	31.60	32.90	1.30	4.64	Perrault
BZ11-41	158	-42	36.80	37.50	0.70	3.57	Perrault
BZ11-45	190.2	-53	204.25	205.40	1.15	3.15	Robert
BZ11-45	190.2	-53	258.10	259.35	1.25	4.22	Robert
BZ11-46	111.9	-54	49.00	56.50	7.50	4.29	Robert

**Note:** The intervals presented represent core length. True widths are interpreted to be 90-100% of the core length and 70% for holes BZ10-13 and BZ10-15.

<p align="center"><b>TABLE 10.2</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2010-11 DRILL PROGRAM – SOUTH ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG10-01	129	-45	37.9	39.1	1.2	2.08	South
BG10-01	129	-45	135	142.8	7.8	2.36	South
BG10-02	121	-58	102.6	103.3	0.7	2.13	South
BG10-02	121	-58	158.0	158.5	0.5	5.80	South
BG10-02	121	-58	184.3	188.5	4.2	3.31	South
BG10-06	134	-54	87.7	90	2.3	3.34	South
BG10-08	102	-50	175.5	176.2	0.7	2.88	South
BG10-08	102	-50	198.5	199.4	0.9	5.28	South
BG10-08	102	-50	208.1	209.8	1.7	5.74	South
BG10-08	102	-50	238.8	239.6	0.8	11.42	South
BG10-09	189	-54	8.6	14.5	5.9	1.62	South
BG10-10	140	-78	11.9	33.2	21.3	4.95	South
including	140	-78	24.0	31.2	7.2	11.7	South
BG10-10	140	-78	46.9	47.6	0.7	1.89	South
BG10-10	140	-78	78	78.6	0.6	2.54	South
BG10-10	140	-78	80	80.7	0.7	2.37	South
BG10-10	140	-78	100.2	100.8	0.6	4.05	South
BG10-12	322.1	-62	288.70	289.50	0.80	4.90	South #20 Vein
BG10-12	322.1	-62	309.60	324.00	14.40	2.56	South #20 Vein
including	322.1	-62	309.60	312.00	2.40	6.18	South #20 Vein
BG10-14	179	-63	5.6	69.9	64.3	1.61	South
BG10-15	91	-51	9.9	28.6	18.7	4.38	South
BG10-16	76	-42	11.8	48.3	36.5	1.77	South
Including			11.8	26.6	14.8	3.46	South
and			11.8	18.5	6.7	5.4	South
and			16.0	18.5	2.5	11.09	South
BG10-21	80	-64	102	105.10	3.10	1.95	South
BG10-21	80	-64	126.10	127.10	1.00	4.17	South
BG10-21	80	-64	140.5	147.70	7.20	3.12	South
BG10-22	87	-69	103.80	104.60	0.80	3.15	South
BG10-22	87	-69	111.90	113.00	1.10	2.74	South
BG10-22	87	-69	128.00	128.50	0.50	6.58	South

<p align="center"><b>TABLE 10.2</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2010-11 DRILL PROGRAM – SOUTH ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG10-22	87	-69	139.50	140.90	1.40	2.02	South
BG10-22	87	-69	142.30	153.80	11.5	12.15	South
including	87	-69	144.00	146.00	2.00	25.80	South
BG10-23	320	-42	28.1	35	6.9	3.36	South
BG10-23	320	-42	48.2	49.1	0.9	2.02	South
BG10-24	310	-62	76.55	77.90	1.35	3.43	South #15 Vein
BG10-24	310	-62	141.40	142.20	0.80	12.31	South #15 Vein
BG10-24	310	-62	214.00	224.00	10.00	1.43	South #15 Vein
BG10-26	178	-60	15.7	16.6	0.9	4.49	South
BG10-26	178	-60	45.65	47.25	1.6	6.1	South
BG10-27	132	-60	10.9	33.2	22.3	1.97	South
BG10-28	162	-66	72.70	88.50	15.80	2.63	South
including	162	-66	79.84	84.90	5.06	4.24	South
BG10-28	162	-66	139.00	140.00	1.00	9.57	South
BG10-30	179	-42	6.5	10.3	3.8	2.59	South
BG10-31	181	-53	43.8	47.5	3.7	1.53	South
BG10-33	107	-72	14.2	38.3	24.1	7.24	South
including	107	-72	14.2	27.1	12.9	12.79	South
BG10-40	310	-42	23.6	33.2	9.6	1.67	South
BG10-41	308	-42	11.8	41.4	29.6	2.52	South
including	308	-42	35.0	40.4	5.4	4.29	South
BG10-42	149	-56	206.20	208.85	2.65	49.89 (VG)	South
BG10-43	187	-66	200.55	201.60	1.05	5.30	South
BG10-43	187	-66	399.00	400.30	1.30	7.72	South
BG10-43	187	-66	424.85	427.80	2.95	1.69	South
BG10-46	170	-53	78.7	82.1	3.4	1.98	South
BG10-47	150	-58	39.6	40.6	1.0	2.12	South
BG10-47	150	-58	49.0	49.6	0.6	6.45	South
BG10-47	150	-58	80.6	81.4	0.8	5.01	South
BG10-47	150	-58	86.5	88.0	1.5	6.62	South
BG10-50	112.5	-52	39.0	41.9	2.9	1.50	South
BG10-50	112.5	-52	53.3	85.2	31.9	1.51	South

<p align="center"><b>TABLE 10.2</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2010-11 DRILL PROGRAM – SOUTH ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
including	112.5	-52	75.7	78.5	2.8	4.93	South
BG10-50	112.5	-52	75.7	78.5	2.8	4.93	South
BG10-50	112.5	-52	104.1	105.0	0.9	5.62	South
BG10-57	127	-44	37.40	38.25	0.85	5.49	South
BG10-58	97	-68	72.20	131.70	59.50	1.88	South
including	97	-68	107.75	112.10	4.35	6.17	South
and	97	-68	117.65	120.40	2.75	5.98	South
and	97	-68	129.70	131.70	2.00	5.16	South
BG10-59	134	-62	50.60	80.35	29.75	1.52	South
including	134	-62	54.15	56.85	2.70	2.68	South
and	134	-62	77.40	80.35	2.95	6.07	South
BG10-60	161.3	-45	35.00	41.75	6.75	2.23	South #11 Vein
including	161.3	-45	35.00	37.00	2.10	5.49	South #11 Vein
BG10-69	192	-52	29.55	30.45	0.90	48.72 (VG)	South #6 Vein
BH10-70	120	-59	28.5	30	1.5	2.02	South
BG10-71	143.5	-75	149.50	153.85	4.35	5.76	South
including	143.5	-75	151.25	153.85	2.60	8.76	South
BG10-71	143.5	-75	156.40	158.30	1.20	2.23	South
BG10-72	113	-44	43.5	45.2	1.7	4.53	South
BG10-72	113	-44	119.45	122.30	2.85	1.99	South
BG10-72	113	-44	169.5	171.0	1.5	4.15	South
BG10-73	108	-47	159.65	160.55	0.90	5.83	South
BG10-73	108	-47	175.00	183.90	8.90	2.11	South
BG10-76	134	-45	61.65	63.10	1.45	3.35	South
BG10-76	134	-45	114.6	155.35	40.75	1.5	South
including	134	-45	139.05	155.35	16.3	2.99	South
BG10-77	136	-45	61.65	63.1	1.45	3.35	South
BG10-77	136	-45	140	141.6	1.6	4.94	South
BG10-78	106	-47.2	41.7	49.3	7.6	1.95	South
BG10-78	106	-47.2	183.0	193.8	10.8	2.19	South
BG10-78	106	-47.2	203.5	204.6	1.1	2.64	South
BG10-78	106	-47.2	207	208.2	1.2	1.75	South

<p align="center"><b>TABLE 10.2</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2010-11 DRILL PROGRAM – SOUTH ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG10-79	141	-56	136.10	180.75	44.65	1.94	South
including	141	-56	136.10	152.15	16.05	3.26	South
and	141	-56	139.35	142.10	2.75	11.10	South
and	141	-56	143.20	146.30	3.10	3.26	South
and	141	-56	159.00	164.20	5.20	2.77	South
BG10-86	110	-61	59.30	71.00	11.70	2.62	South
including	110	-61	60.20	63.70	3.50	6.60	South
BG10-86	110	-61	170.40	171.65	1.25	184.53	South
BG10-86	110	-61	171.65	174.50	2.85	1.43	South
BG10-92	132	-57	49.1	49.7	0.6	1.68	South
BG10-92	132	-57	70.5	71	0.5	1.92	South
BG10-92	132	-57	110.5	111.4	0.9	1.71	South
BG10-92	132	-57	168.6	182.7	14.1	3.1	South
BG10-93	143	-51	61.4	61.9	0.5	9.67	South
BG10-93	143	-51	186.9	188.2	1.3	1.71	South
BG10-94	125	-51	64.1	64.7	0.6	1.58	South
BG10-94	125	-51	70.6	72.6	2	2.27	South
BG10-94	125	-51	130.8	163.8	33	2.21	South
including	125	-51	146.4	158.6	12.2	4.31	South
BG10-94	125	-51	217.5	218.6	1.1	3.76	South
BG10-95	102	-42	52.75	54.00	1.25	2.85	South #11 Vein
BG10-95	102	-42	65.90	66.70	0.80	5.28	South #11 Vein
BG10-95	102	-42	81.10	82.15	1.05	2.30	South #11 Vein
BG10-97	129	-42	41.50	42.55	1.05	2.74	South #11 Vein
BG10-98	129	-61	50.30	52.75	2.45	6.41	South
BG10-101	104	-61	64.5	65.2	0.7	2.54	South
BG10-101	104	-61	86.1	94	7.9	2.04	South
BG10-101	104	-61	102.9	103.9	1	1.54	South
BG10-101	104	-61	294.6	295.2	0.6	2.09	South
BG10-102	91	-45	6.95	9.15	2.20	4.40	South
BG10-102	91	-45	15.00	17.00	2.00	1.73	South
BG11-109	130	-37	45.00	48.00	3.00	10.81	South

<p align="center"><b>TABLE 10.2</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2010-11 DRILL PROGRAM – SOUTH ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG11-109	130	-37	103.50	108.50	5.00	7.30	South
BG11-110	129	-55	37.00	38.35	1.35	2.88	South
BG11-110	129	-55	179.90	184.90	5.00	2.00	South
BG11-110	129	-55	224.85	226.00	1.15	5.52	South
BG11-111	141	-37	61.50	62.30	0.80	39.65	South
BG11-111	141	-37	72.70	87.00	14.30	1.59	South
BG11-114	127	-72	39.90	43.35	3.45	1.41	South
BG11-114A	106	-53.7	34.20	39.00	4.80	3.45	South
BG11-115	135	-64	61.40	83.00	21.60	2.04	South
BG11-115	135	-64	126.00	126.9	0.90	2.61	South
BG11-115	135	-64	131.90	132.95	1.05	4.29	South
BG11-115	135	-64	150.00	151.40	1.40	1.51	South
BG11-115	135	-64	161.25	162.25	1.00	2.20	South
BG11-116	198	-45	19.30	19.90	0.60	9.53	South
BG11-116	198	-45	113.70	114.50	0.80	4.11	South
BG11-116	198	-45	147.00	147.80	0.80	5.66	South
BG11-116	198	-45	160.35	161.35	1.00	3.02	South
BG11-116	198	-45	184.20	185.20	1.00	2.02	South
BG11-117	198	-45	20.10	91.15	71.05	2.99	South
including	198	-45	27.50	29.85	2.35	71.84	South

**Note:** The mineralized intervals in the above table represents core lengths. True widths were determined to be between 50-99% of core lengths. VG means the occurrence of visible gold.



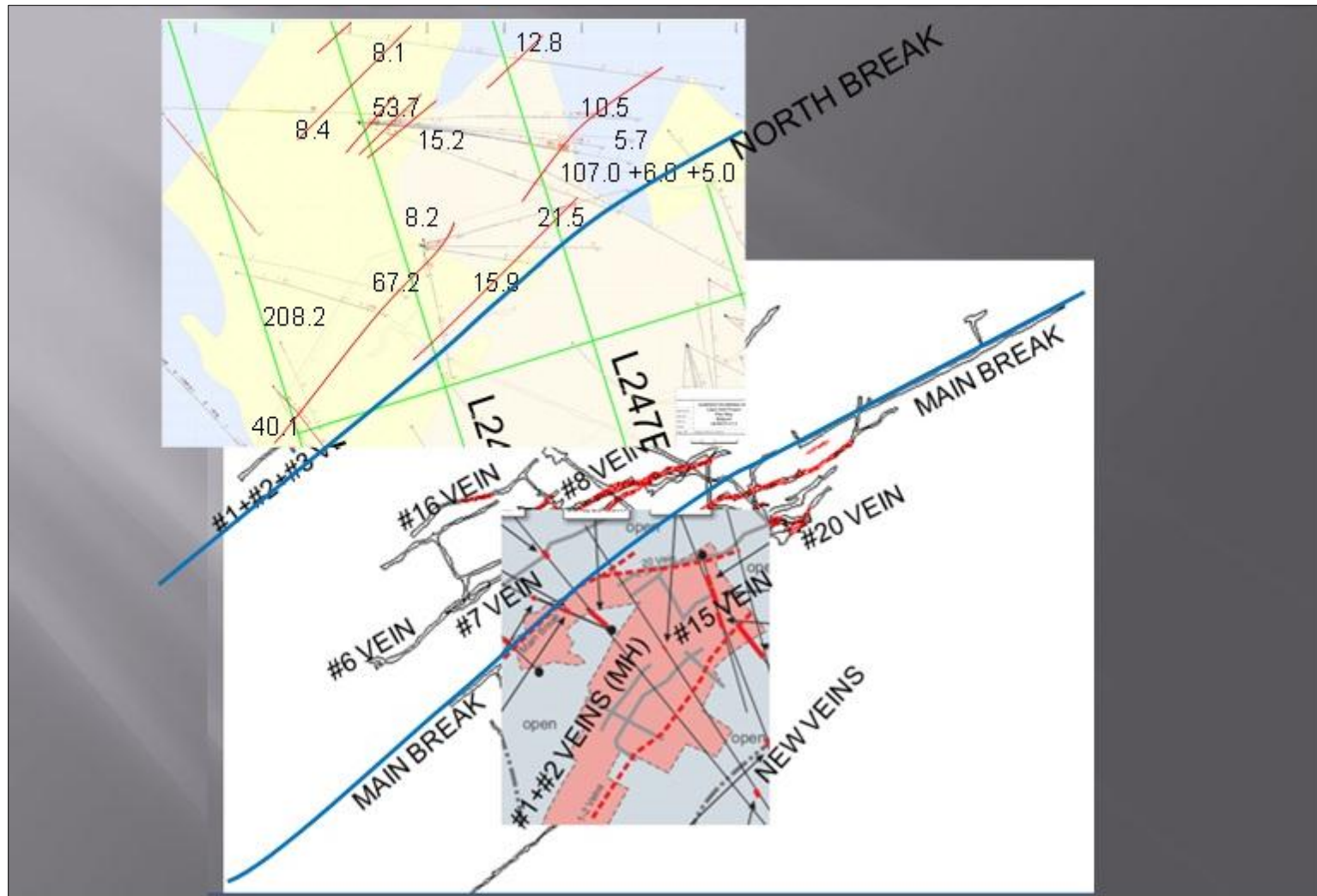
**TABLE 10.3**  
**HIGHLIGHTS OF DRILL INTERCEPTS FROM THE 2010-11 DRILL PROGRAM – NORTH ZONE**

<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG10-03	93	-68	341.20	346.40	5.20	19.51 (VG)	21 Vein
BG10-04	95	-71	19.55	20.4	0.85	80.26 (VG)	North
BG10-04	95	-71	66	68.9	2.9	2.15	North
BG10-04	95	-71	338.6	344.5	5.9	3.11	North
BG10-04	95	-71	375.5	376.8	1.25	5.69	North
BG10-05	75.1	-65	285	292.9	7.9	2.82	North
BG10-07	56.5	-61.7	5.15	7.1	1.95	1.8	North
BG10-07	56	-62	70.15	71.20	1.05	8.13	North
BG10-07	56	-62	243.00	245.05	2.05	5.86	North
BG10-07	56	-62	282.00	282.95	0.95	1.78	North
BG10-11	127	-39	28.1	28.8	0.7	2.57	North
BD10-13	94	-40	53.2	53.9	0.7	1.65	North
BD10-13	94	-40	60.7	61.5	0.8	1.51	North
BG10-17	92.2	-66	61.8	63.3	1.5	2.5	North
BG10-17	92.2	-66	304.65	305.25	0.6	2.26	North
BG10-17	92.2	-66	334.5	335.3	0.8	3.81	North
BG10-17	92.2	-66	349.95	350.7	0.75	5.73	North
BG10-18C	94.2	-65	71.9	72.6	0.7	1.65	North
BG10-18C	94.2	-65	332.6	333.3	0.7	5.73	North
BG10-20	112.9	-66	26.5	27.3	0.8	5.93	North
BG10-20	112.9	-66	55.9	60	4.1	2.43	North
BG10-20	112.9	-66	142.7	143.4	0.7	1.51	North
BG10-20	112.9	-66	195.3	195.8	0.5	2.64	North
BG10-20	112.9	-66	294	294.85	0.85	5.76	North
BG10-20	112.9	-66	384	384.7	0.7	3.05	North
BG10-29	176	-59	26.8	27.8	1.0	1.85	North
BG10-29	176	-59	78.0	78.7	0.7	2.50	North
BG10-32	117.6	-64	125.6	126.75	1.15	3.6	North
BG10-36	98.6	-65	198.9	200.45	1.55	3.11	North
BG10-36	98.6	-65	237.7	239.65	1.95	2.28	North
BG10-36	98.6	-65	254	256.3	2.3	2.37	North
BG10-36	98.6	-65	264.5	265.1	0.6	3.33	North

<b>TABLE 10.3</b> <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE 2010-11 DRILL PROGRAM – NORTH ZONE</b>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
BG10-36	98.6	-65	283.05	284	0.95	3.74	North
BG10-38	80.0	-62	200.70	202.25	1.55	5.49	North
BG10-38	80	-62	342	342.9	0.9	23.14	North
BG10-48	95.7	-66	84.40	85.50	1.10	208.15 (VG)	#1-2-3 Veins
BG10-48	95.7	-66	199.00	200.05	1.05	7.58	#1-2-3 Veins
BG10-48	95.7	-66	226.65	228.15	1.50	2.46	#1-2-3 Veins
BG10-48	95.7	-66	244.50	254.70	10.20	1.12	#1-2-3 Veins
BG10-49	102.4	-47	161.5	163	1.5	1.75	#1-2-3 Veins
BG10-49	102.4	-47	165.2	166.95	1.75	2.9	#1-2-3 Veins
BG10-52	169.6	-46.5	18.95	25.7	6.75	5.26	North
BG10-52	169.6	-46.5	108.5	109.25	0.75	4.56	North
BG10-56	146	-66	73.70	74.40	0.70	40.25 (VG)	#12 Vein
BG10-99	169.6	-74.0	55.40	57.10	1.70	32.06	North
BG10-104	74.8	-45	143.60	144.70	1.10	6.07	North

**Note:** The mineralized intervals in the above table represents core lengths. True widths are unknown at this time. VG means the occurrence of visible gold.

**Figure 10.1 Lebel Plan-New North Veins**

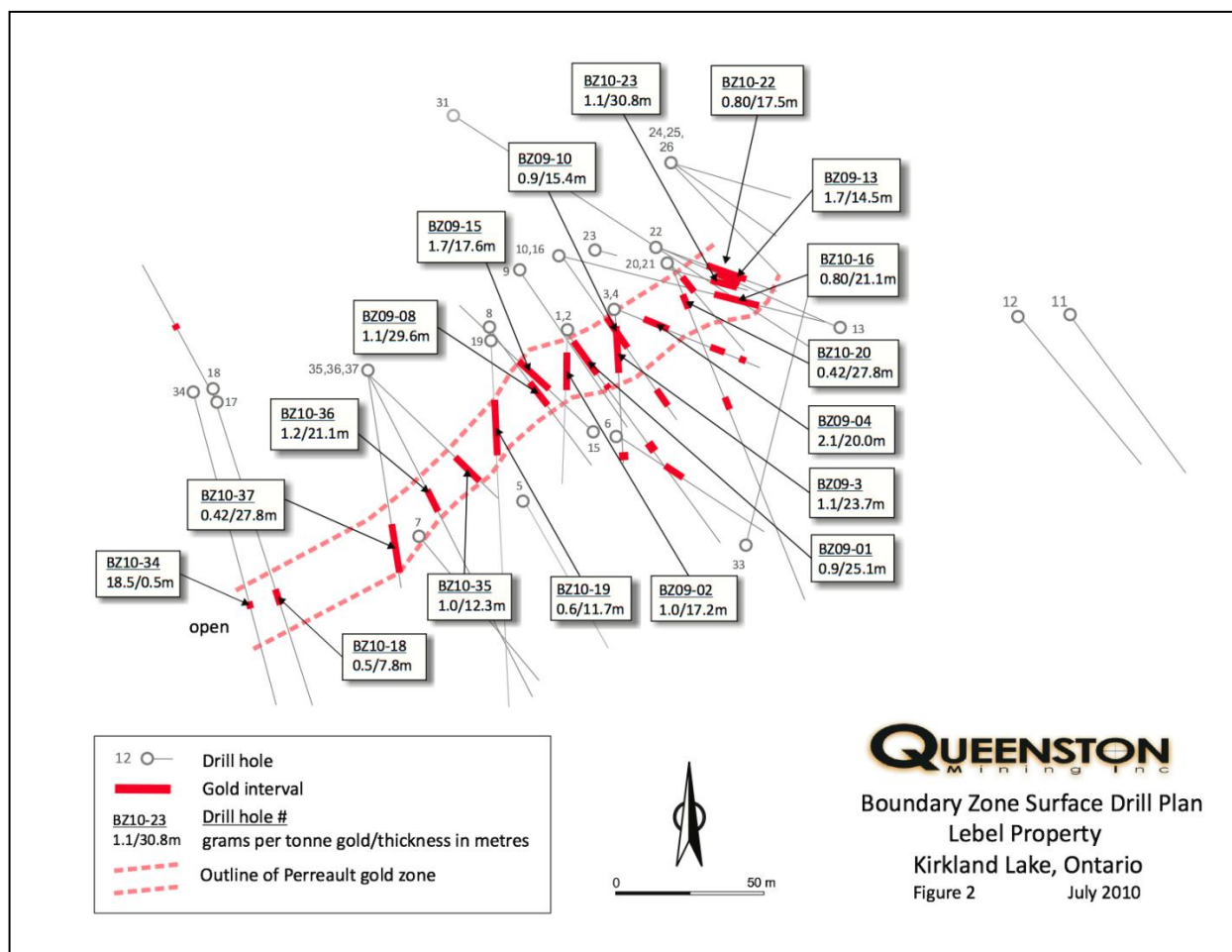


(Source: Ploeger, 2011)

<p style="text-align: center;"><b>TABLE 10.4</b>  <b>HIGHLIGHTS OF DRILL INTERCEPTS FROM THE LEBEL – 2011 DRILL PROGRAM – MUD LAKE ZONE</b></p>							
<b>Hole No.</b>	<b>Azimuth</b>	<b>Dip(°)</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Length (m)</b>	<b>Au (g/t)</b>	<b>Zone</b>
ML11-02	169	-50	275.00	276.20	1.20	2.06	Mud Lake
ML11-03	330	-45	112.90	113.50	0.60	1.99	Mud Lake
ML11-04	127	-48	146.00	146.90	0.90	1.51	Mud Lake
ML11-06	103	-54	45.00	45.80	0.80	1.99	Mud Lake
ML11-06	103	-54	182.1	183.30	1.20	2.02	Mud Lake
ML11-08	3	-45	583.50	584.00	0.50	3.33	Mud Lake
ML11-08	3	-45	629.50	631.00	1.50	1.72	Mud Lake
ML11-09	354	-60	202.50	203.10	0.60	5.28	Mud Lake
ML11-10	117	-45	157.60	158.50	0.90	2.47	Mud Lake
ML11-11A	73	-48	15.00	15.70	0.70	1.89	Mud Lake

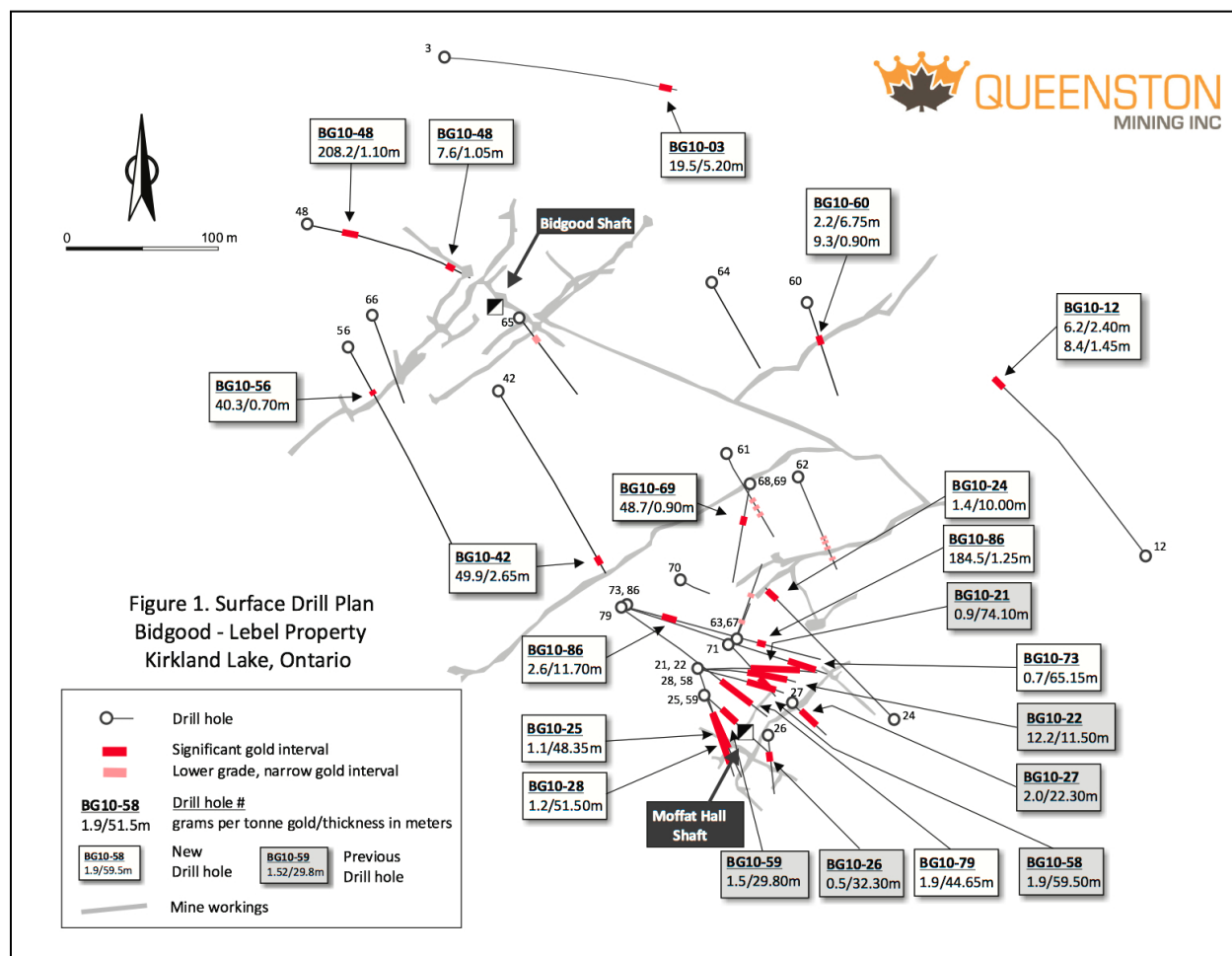
**Note:** The mineralized intervals in the above table represents core lengths. True widths are unknown at this time.

**Figure 10.2 2010 Drilling Program, Lebel Property – Boundary Zone**



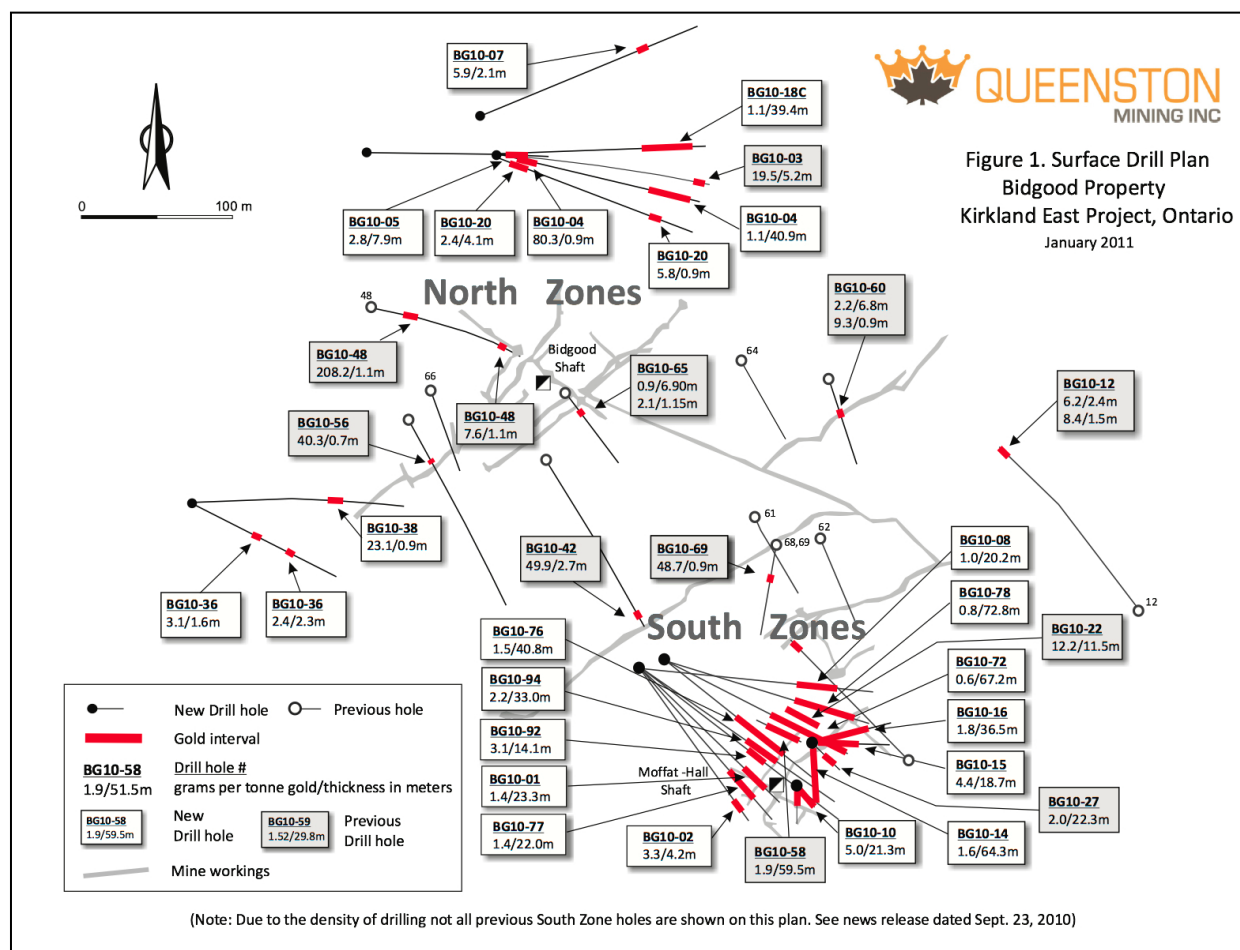
(Source: [www.queenston.ca](http://www.queenston.ca))

**Figure 10.3 2010 Drilling Program, Lebel Property**



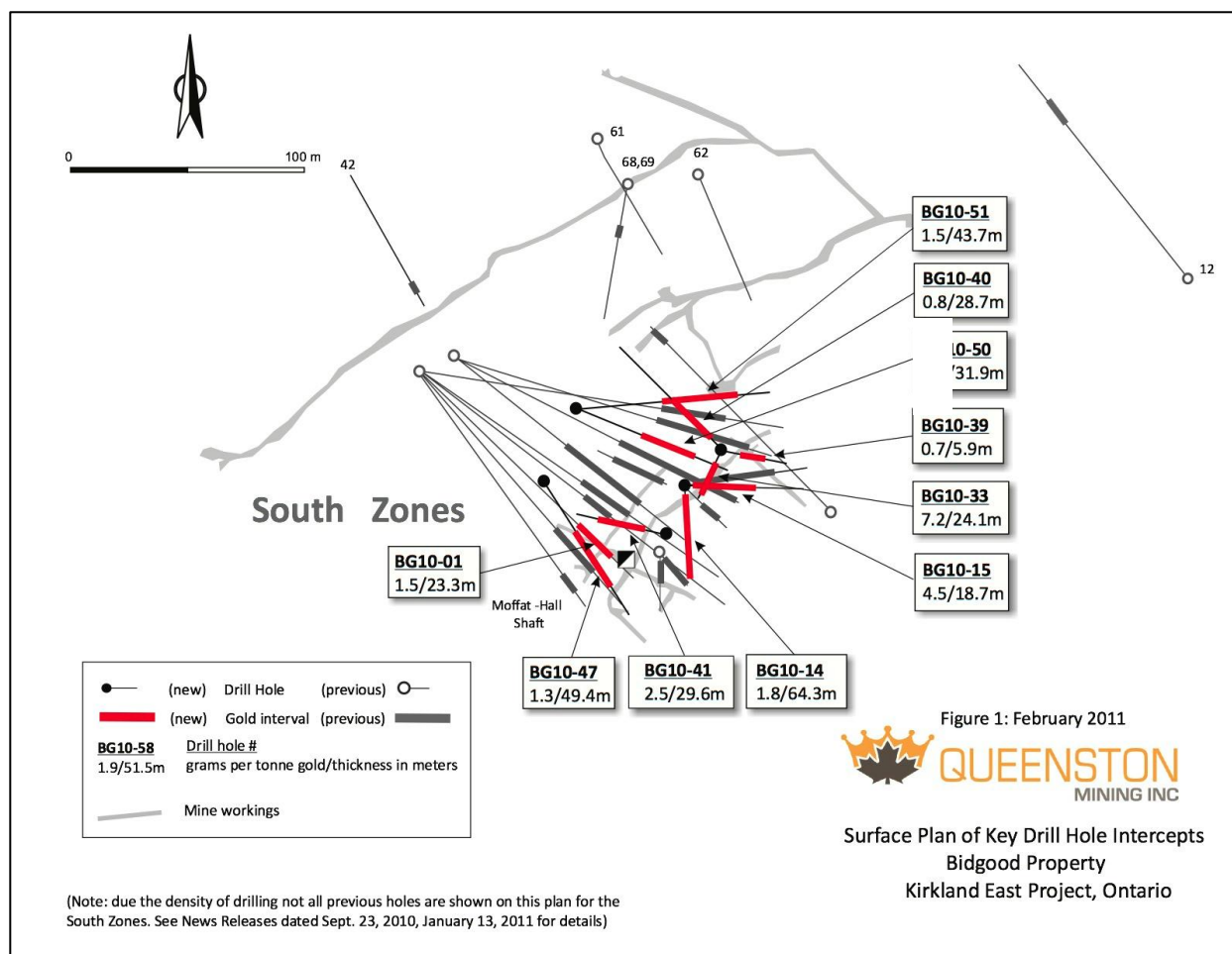
(Source: [www.queenston.ca](http://www.queenston.ca))

**Figure 10.4 2010 Drilling Program, Lebel Property**



(Source: [www.queenston.ca](http://www.queenston.ca))

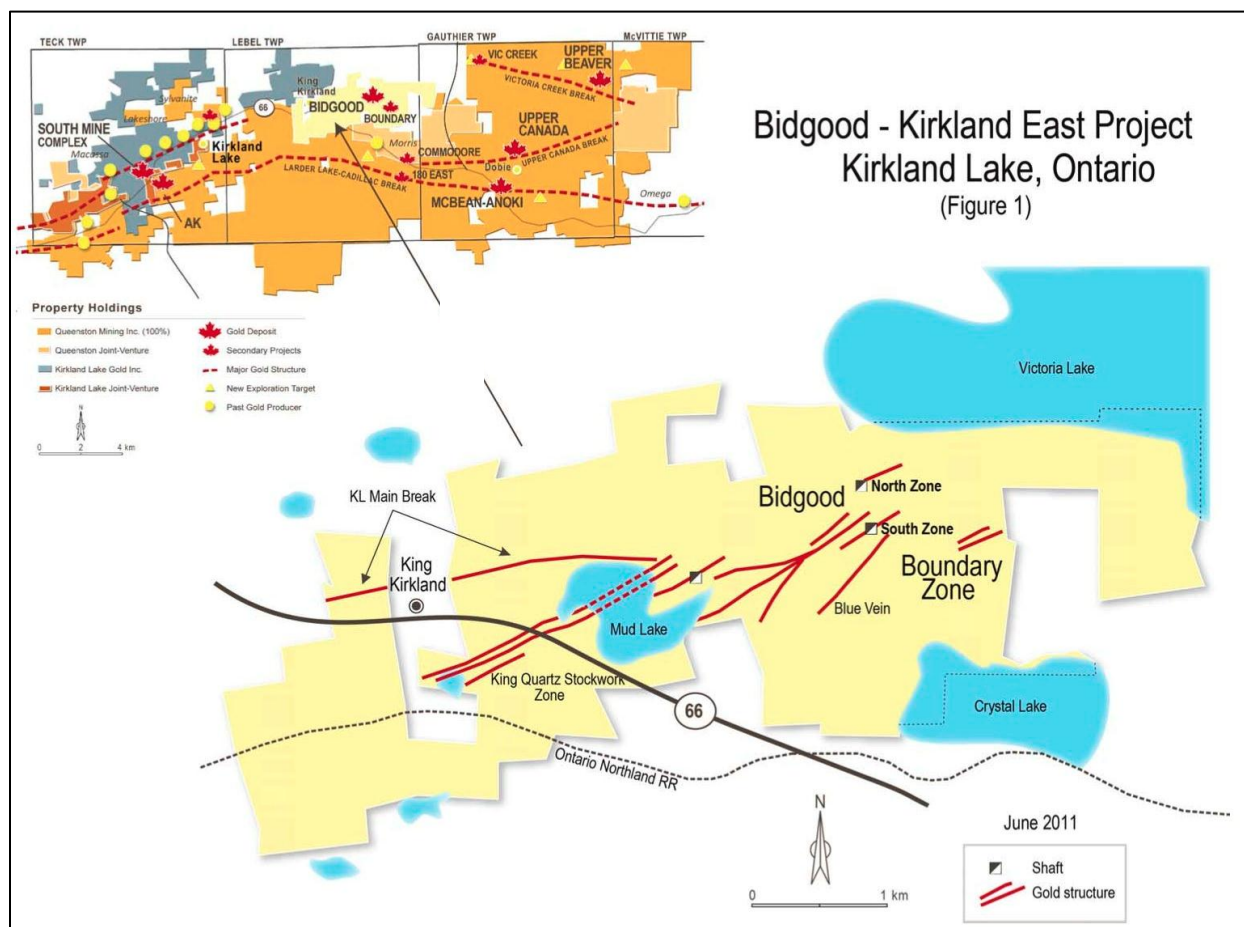
**Figure 10.5 2011 Drilling Program, Lebel Property**



(Source: [www.queenston.ca](http://www.queenston.ca))



**Figure 10.6 2011 Drilling Program, General Locations of Mineralized Zones**



(Source: [www.queenston.ca](http://www.queenston.ca))

## **11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY**

### **11.1 SAMPLING METHOD AND APPROACH**

Drill core sampling methodology and approach as provided by Queenston has been reviewed by P&E through the evaluation of the diamond drill database for the Bidgood and Boundary gold zones and through discussions with Queenston geological staff.

All assay results reported in this document have been obtained by P&E directly from Polymet Labs (“Polymet”) as electronic certificate files. P&E compared assay results from the electronic certificate files to that of Queenston’s assay database and found no discrepancies or errors.

The sampling methods utilized for the Bidgood and Boundary gold zones conform to generally accepted Canadian mining industry practices and were subjected to quality control procedures that ensured a best practice in the handling, sampling, analysis and storage of the drill core.

#### **11.1.1 General Protocol**

- All diamond drill core sampling activities are supervised by Project Geologists (McCormack, Sutton, Zalnieriunas).
- Drill core sample intervals are selected on a geological basis and most typically varied between 0.5 and 1.5 m (1.6 to 4.9 ft.) in length and very rarely are less than or greater than these values.
- Drill core sample demarcation is conducted by the Geologist while core logging. Core samples are entered into a digital database, (Excel file) whereby the spreadsheet format includes the drillhole number, “from”–“to” in metre interval, sample width in metres, sample ticket number, and related lithological description. Assay results received from assay labs are inserted into the database according to the corresponding sample number.
- Electronic certificate files received from assay laboratories are compared to hard copy, signed certificates for possible discrepancies.
- In regards to sampling Quality Assurance/Quality Control, field gold standards and field blanks are entered into the core sample flow at approximately every 25 metres and monitored for any abnormal gold concentrations or trends. Selected pulp and rejects returned from Polymet are submitted to Swastika Laboratories (“Swastika”) and AGAT Laboratories (“AGAT”) which are independent of Polymet, as a check on Polymet ½ core assays. Selected ½ core samples are also ¼ sawn and submitted to Polymet as a comparison to the original ½ core assay.

#### **Marking Core Samples**

- Geologists identify the beginning and end of samples directly on the core with a line perpendicular to the core and an arrow identifying direction of the end of sample. Samples are demarcated using a china marker or a grease pencil. A line is also traced along the long axis of the core defining the cutting line, which the core cutter will follow, to obtain a representative sample.
- A sample tag is placed at the beginning of the sample and is stapled on the core box at this location as record and for verification purposes.
- Each core tray is labelled according to sequential core tray number, drillhole number and representative depth interval.

## **11.2 SAMPLE HANDLING, PREPARATION, ANALYSIS AND SECURITY**

Information on sample preparation, analyses and security procedures was obtained through discussions held with Queenston geological staff (McCormack and Sutton) and from a review of the drillhole database and chain of custody records. It is P&E's opinion that the sample handling, preparation, security and analytical procedures conform to generally accepted Canadian mining industry practices.

Drill core, secured in enclosed core trays, is collected at the drill site by Queenston personnel and transported directly to the core logging facility at the Toburn Mine Site. Logging facilities are secured by lock with only Queenston personnel and the building owner possessing keys. Only authorized personnel are allowed in the logging and core cutting facilities. Once inside the core logging facilities tray lids are removed, core is measured, tray tags are applied and trays are racked in preparation for logging. Core remains inside the facility for the entire sample processing flow from logging to core cutting to sample bagging, in preparation for shipment.

Geologists log the core and demarcate samples as previously provided. Sample tickets, obtained from Polymet are utilized at all times for identifying samples. Each sample ticket has a unique series and numerical identity to mark individual core samples as identified by the geologist. Core cutting technicians place ½ core samples with the corresponding sample ticket into 10"x15"x.006 mil clear plastic bags and secure each bag with a cable tie. The other half of the sample ticket is stapled to the core tray at the beginning of the sample. Eight to twelve individual sample bags are placed into rice bags and secured with a security tag having its own identifying number. For shipment, the rice bag is marked with the Receiving Lab address and sequential rice bag number of the total number of rice bags to be shipped. A Chain of Custody form is provided in the first rice bag of the shipment outlining the number of rice bags in the shipment, sample number series in each rice bag and total number of samples. The security tag column on the form is intentionally left blank and is 'filled-in' by the receiving lab to return by fax to Queenston with the correct security tag number. This ensures that the security tag is not breached during shipment and that the samples are secure.

## **11.3 ASSAY METHODOLOGY**

### **11.3.1 Polymet**

Individual core samples normally weigh 0.5 to 2.5 kg in weight and are dried before crushing. The entire sample is crushed in a steel jaw crusher with 90% to -8 mesh, then split into 200 to 450 g samples using a Riffle Splitter. This portion is pulverized to 90% -150 mesh using a ring pulveriser. Brushing and compressed air cleaning is performed between each sample to prevent cross-contamination. A silica wash is used only after processing samples that are noted or marked containing visible gold or if an inspection proves any build-up on the rings or bowl. At every 15<sup>th</sup> sample, the ground wash material from the pulveriser is forwarded in sequence for analysis by fire assay. The data from the washes must be consistently <0.03 g/t Au to support the effectiveness of the cleaning protocol. All samples are submitted for fire assay with pulps and rejects returning to Queenston.

Gold is determined by fire assay of a 14.58 g fire assay charge. The analysis begins with a fusion of flux mixture and sample added to a crucible placed in an assay furnace leading to a resultant lead button. The lead button is melted into a cupel with the remaining gold bead ready for weighing. For core samples with gold assays exceeding 1 g/t Au, a check assay is performed

whereby a second cut off of the reject is taken, pulverized for a second pulp for an additional, separate fire assay.

Polymet performs its own quality assurance and control with internal blanks and standards checks and are ISO9001:2000 registered.

Swastika and AGAT have similar assay methodologies with fire assay and AAS or ICP-OES finish.

### **11.3.2 Data Entry**

Assays are reported by Polymet, Swastika and AGAT, by both electronic certificate and original, signed hard copy certificate. Queenston personnel compare and verify electronic data to hard copy data. Assay database input is performed and/or reviewed by Sutton, McCormack and P. Rozich ("Rozich") to avoid the possibility of data input error.

### **11.3.3 Data Verification**

#### Field Blank

Crushed cement blocks, placed in sample bags with sample tickets, are inserted into the sample core flow usually following a sample having suspected gold mineralization in order to detect possible contamination to surrounding samples. Of the 7,902 samples assayed for the Lebel Project, 372 field blanks were inserted or 4.7% of total samples assayed. Of the 1,849 samples assayed for the Boundary Project, 55 were inserted or 3% of the total samples assayed. With respect to field blank assays, any assay over 0.03 g/t Au are reviewed. If it were determined that possible contamination occurred, sample rejects surrounding the abnormal blank assay were either re-assayed or core samples were ¼ sawn and re-submitted for assay.

#### Field Standard

Two certified field standards were inserted at approximately every 25 metre intervals using RockLabs Si54 and OxL63. For the Lebel Project 318 standards were inserted or 4% of the 7,902 samples assayed having an average concentration for Si54 standard of 1.70 µg/g and 95% confidence level of 0.028 µg/g and for OxL63 of 5.61 µg/g and 95% confidence level of 0.026 µg/g. For the Boundary Project, 35 samples of field standard Rocklab Si54 were inserted representing 2% of the total assays and had an average concentration of 1.77 µg/g and 95% confidence level of 0.033 µg/g. Surrounding core assays of field standards were reviewed if standard assays fell 3 standard deviations from the sample mean; for Si54 standard 2.3 µg/g to 1.1 µg/g and for OxL63 standard 6.1 µg/g to 5.1 µg/g. If it were determined that standard assays were indicative of abnormal assay concentrations, re-assaying of surrounding core samples or review of referee analysis of pulp and rejects would be performed.

### ¼ Sawn Core

Selected ½ core samples were identified with an additional sample ticket for sawing ¼ of the ½ core as a check for gold variability and check on the ½ core assay. In regards to both projects the following ¼ samples were taken:

- Bidgood Project: 90 core samples were ¼ sawn or 1.1% of the total number of core assays.
- Boundary Project: 24 core samples were ¼ sawn or 1.3% of the total number of core assays.

Even though variance occurs between ½ and ¼ core assays, ¼ core assisted in evaluating core where contamination was suspected, where visible gold was observed while logging or where a high grade assay was returned.

### Referee Samples (Pulps and Rejects)

Bidgood zone: 610 pulps and 615 rejects representing 7.7% and 7.7% of total samples respectively were submitted to Swastika for comparative assay analysis.

Boundary zone: 38 pulps and 26 rejects were submitted to AGAT and 92 pulps and 92 rejects were submitted to Swastika for comparative assay analysis representing 7% for pulps and 6.4% for rejects of total assays submitted to Polymet.

Referee assays had anticipated variance when compared to Polymet assays in both pulp and reject samples but were comparable overall. Referee assays were also used as a check on core assays surrounding abnormal field blank or standard assays, high grade assays and for ¼ core assay review.

### Screened Metallic Fire Assay

Five samples from Boundary Zone and one sample from Bidgood were submitted for screened metallic fire assay at AGAT and Swastika respectively. Resultant screened metallic assay ranged from +/- 0.6% to 20% when compared to Polymet ½ core fire assays.

## **11.3.4 Conclusion**

It is the author's opinion that the core logging procedures employed are thorough and provide sufficient geotechnical and geological information. There is no apparent drilling or recovery factors that would materially impact the accuracy and reliability of the drilling results.

## 12.0 DATA VERIFICATION

### 12.1 SITE VISIT AND INDEPENDENT SAMPLING

Mr. Antoine Yassa, P. Geo., visited the Lebel Project, Bidgood and Boundary zones on May 13, 2011 for the purpose of doing the site visit and completing an independent verification sampling program. Eleven samples were collected from six 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 Queenston advised as to the identification of the samples to be chosen during the visit.

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

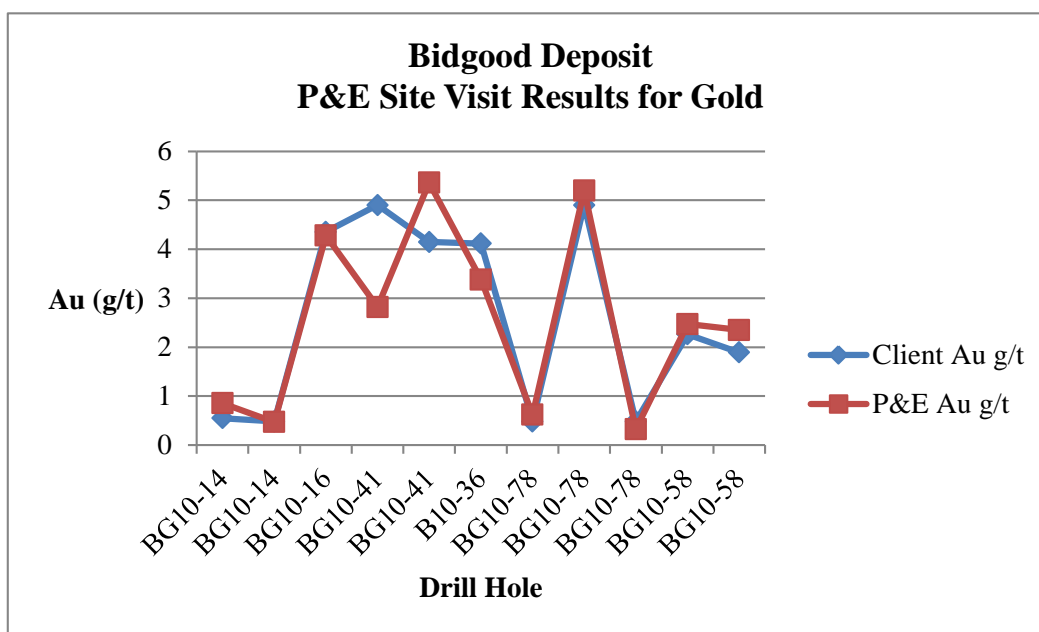
The samples were brought by Mr. Yassa to Dicom Express courier in Rouyn-Noranda, QC and sent to the P&E office in Brampton, ON. From there they were sent by courier to AGAT Laboratories, ("AGAT") in Mississauga for analysis.

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 Lebel Deposit Site Visit Sample Results for Gold**



## **12.2 QUEENSTON QUALITY ASSURANCE/QUALITY CONTROL REVIEW**

Queenston purchased Vault Minerals in April 2010, thereby acquiring the Bidgood and Boundary zones. Vault had used Polymet Labs as the principal lab for the 2008 and 2009 drilling. In addition, two batches of samples were sent to AGAT Labs during this time.

In 2010, Queenston began drilling the Bidgood and Boundary zones, and maintained Polymet as the principal lab. Coarse reject and pulp samples were sent to Swastika Labs, and to a lesser extent AGAT Labs, in order to monitor assay quality. Field duplicates as 1/4 core samples were submitted to Polymet in the regular sample stream.

Queenston's Quality Assurance / Quality Control ("QAQC") program included the submission of standards and blanks every 25 samples. Approximately 5% of sample rejects and/or pulps were sent to either Swastika or AGAT Lab for check assays.

Polymet Labs is a division of Polymet Resources Inc. located in Cobalt, Ontario. The lab has implemented and maintains a Quality Management System (QMS) which fulfills the requirements of ISO 9001:2000 standards.

Swastika Labs has been in continuous operation since 1928 and participates in the bi-annual round robin Proficiency Testing Program for Mineral Analysis Laboratories (PTP-MAL) through the Standards Council of Canada.

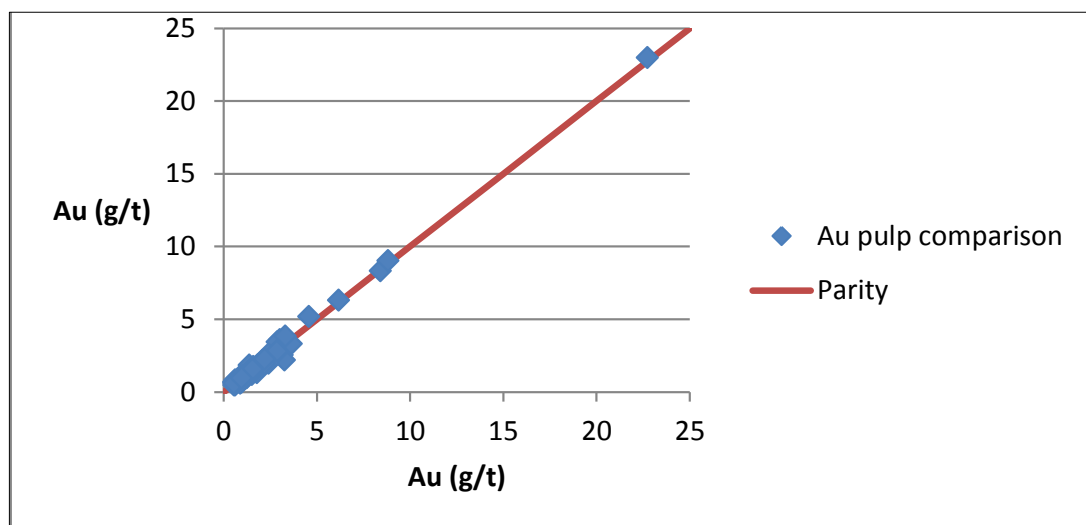
### **12.2.1 Performance of Certified Reference Materials**

Queenston purchased two certified reference materials from Rocklabs and inserted one or the other into the samples stream at a rate of approximately 1:25. One of the standards had a mean grade of 1.78 g/t Au and the other a mean grade of 5.87 g/t Au.

There were a total of 172 values for one standard and 146 values for the other. Queenston 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 Queenston, as well as all Polymet Lab and Swastika Lab internal quality control results dating back to 2009 when Vault held the project. In some instances the reference materials demonstrated a slight bias or a higher than acceptable failure rate. P&E requested that Queenston send 69 pulp samples to another lab in order to verify the results. The pulp samples were sent to Bourlamaque Assay Labs ("Bourlamaque") in Val-d'Or, Québec. Bourlamaque is registered under ISO 9001:2000 quality standard and participates in the CANMET PTP-MAL Laboratory Proficiency testing. Standards and blanks were sent and analyzed as part of the 69 samples. Results are presented in Figure 12.2 below, and demonstrate that the results as reported by Queenston are reliable.

**Figure 12.2 Pulp Reruns for Bidgood and Boundary Zones**



### 12.3 PERFORMANCE OF DUPLICATES

An evaluation of the field (1/4 core), coarse reject and pulp duplicate pairs was completed using the Thompson-Howarth precision analysis as well as a plot of the absolute relative difference versus the mean of the sample pairs, ("ARD"). Results of the two methods tend to be very similar, providing that the data are not wildly variable.

For the field duplicates the precision was poor, which is completely consistent for a gold deposit and particularly since the comparison is between 1/2 core and 1/4 core.

Using the Thompson-Howarth method, the coarse rejects yielded a precision of 13% and the ARD indicated a precision of 10%. For the pulp pairs, the Thompson-Howarth yielded a precision of 10% and the ARD a precision of 8%. For a gold deposit, pulp duplicates should demonstrate a precision of better than 10% which is the case for the results for the Bidgood and Boundary zones.

### 12.4 PERFORMANCE OF BLANK MATERIAL

The blank material used by Queenston was cement blocks broken into chunks and as such, this material passed through all the prep and analytical stages at the lab. There were 372 blank samples analyzed. All but two values were less than three times detection limit. The two samples in question were explained by carry-over contamination, and surrounding samples were rerun.

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



### **13.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

See Section 24 ‘Other Relevant Subsequent Data and Information’.

## **14.0 2011 RESOURCE ESTIMATES**

### **14.1 INTRODUCTION**

The purpose of this report section is to estimate the Mineral Resources of the Lebel 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 September 15, 2011.

### **14.2 DATABASE**

All drilling data were provided by Queenston Mining Inc. in the form of an MS-Access database. Seventeen (17) drill cross sections were developed for the Boundary Zone on a local grid looking Northeast on a 45o azimuth on a 20 metre spacing named from 110-NE to 430-NE. Ten (10) drill cross sections were developed for the Bidgood Zones on a local grid looking Northeast on a 32o azimuth on a 15 metre spacing named from 1000-NE to 1135-NE.

The Gemcom database for this estimate was constructed from 472 surface drill holes of which 106 were utilized in the resource calculation. All remaining data were not in the area that was modeled for the resource estimate. A 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 22,782 Au assays. Drill assay data grade values are expressed in metric units, while down hole interval data and grid coordinates are in the NAD 83 UTM system.

### **14.3 DATA VERIFICATION**

Verification of 22,782 assay database values was performed with original laboratory and electronically issued certificates from Swastika Laboratories and Polymet. Some minor errors were detected and corrected in the Gemcom database. The checked assays represent 92% of the constrained data used in the resource estimate and approximately 48% of the total database.

### **14.4 DOMAIN INTERPRETATION**

The Lebel mineralized constraining domain boundaries were determined from lithology, structure and grade boundary interpretation from visual inspection of drill hole sections. Three domains were created named Bidgood Main, Bidgood Vein 20 and Boundary. These domains were created with computer screen digitizing on drill hole 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 50 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
10	Bidgood Main Domain
20	Bidgood Vein 20 Domain
30	Boundary Domain
99	Waste

## 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 metre 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 values. Any composites that were less than 0.25 metres 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
Main	22.5	13	99.3	3.83	1.84
Vein 20	15.0	2	99.2	4.72	1.77
Boundary	7.0	9	98.6	1.72	1.32

## 14.8 VARIOGRAPHY

Reasonable directional variograms were developed for the Bidgood combined constrained composites while the Boundary constrained composites yielded only an omnivariogram. The variogram ranges were used as the search ellipse parameters for grade interpolation. See variograms 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 Antoine Yassa, P.Geo. and analysed at Agat Laboratories in Mississauga, Ontario. The average bulk density for the Lebel resource was derived from 11 samples and determined to be 2.87 tonnes per cubic metre.

## 14.10 BLOCK MODELING

The Lebel Deposit resource model was divided into two block model frameworks as follows:

- Bidgood containing 4,651,200 blocks that were 2.5 m in X direction, 2.5 m in Y direction and 2.5 m in Z direction. There were 190 columns (X), 204 rows (Y) and 120 levels (Z). The block model was rotated 32 degrees clockwise. Separate block models were created for rock type, density, percent, class and Au.
- Boundary containing 902,400 blocks that were 2.5 m in X direction, 2.5 m in Y direction and 2.5 m in Z direction. There were 94 columns (X), 160 rows (Y) and 60 levels (Z). The block model was rotated 45 degrees clockwise. Separate block models were created for rock type, density, percent, class and Au.
- The 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 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 Dir.	Strike	Dip	Dip Range (m)	Strike Range (m)	Across Dip Range (m)	Max # per Hole	Min # Sample	Max # Sample
Bidgood Indicated	302°	32°	-85°	20	15	10	2	3	20
Bidgood Inferred	302°	32°	-85°	150	150	50	2	1	20
Boundary Indicated	315°	45°	-80°	15	10	10	2	3	20
Boundary Inferred	315°	45°	-80°	150	150	50	2	1	20

## 14.11 RESOURCE CLASSIFICATION

During the Lebel classification interpolation search ellipsoid passes, 60,059 grade blocks were coded as Indicated and 30,331 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 tons and grade for potentially mineable areas. The volumes of the existing underground workings were removed from the resource estimates. The following calculation demonstrates the rationale supporting the Au cut-off grade that determines the underground and open pit potentially economic portions of the mineralization.

### Underground Au Cut-Off Grade Calculation CDN\$

Au Price (Approx 24 month trailing average price Aug 31/11)	US\$1,300/oz
\$US/\$CDN Exchange Rate	\$0.98
Au Recovery	95%
Mining Cost (2,000 tpd)	\$75/tonne mined
Process Cost (2,000 tpd)	\$12.00/tonne milled
General & Administration	\$5.00/tonne milled

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

$$\text{Operating costs per ore tonne} = (\$75 + \$12 + \$5) = \$92/\text{tonne}$$
$$[(\$92)/((\$1,300/\text{oz}/\$0.98/31.1035 \times 95\% \text{ Recovery})] = 2.27\text{g/t Use } 2.30 \text{ g/t}$$

### Open Pit Au Cut-Off Grade Calculation CDN\$

Au Price (Approx. 24 month trailing average price Aug 31/11)	US\$1,300/oz
\$US/\$CDN Exchange Rate	\$ 0.98
Au Recovery	95%
Process Cost (2,000tpd)	\$12.00/tonne milled
General & Administration	\$5.00/tonne milled

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

$$\text{Operating costs per ore tonne} = (\$12 + \$5) = \$17/\text{tonne}$$
$$[(\$17)/((\$1,300/\text{oz}/\$0.98/31.1035 \times 95\% \text{ Recovery})] = 0.42\text{g/t Use } 0.42 \text{ g/t}$$

The above data were derived from similar gold projects to Lebel.

In order for the constrained open pit mineralization in the Lebel 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	\$2.50
Ore mining cost per tonne	\$3.00
Overburden Mining cost per tonne	\$1.75
Process cost per tonne	\$12.00
General & Administration cost per ore tonne)	\$5.00
Process production rate (ore tonnes per year)	700,000
Pit slopes (inter ramp angle)	50 deg
Mineralized & Waste Rock Bulk Density	2.87t/m <sup>3</sup>
Overburden Density	1.85t/m <sup>3</sup>

The resulting resource estimate can be seen in the following table.

<b>TABLE 14.3</b> <b>RESOURCE ESTIMATE<sup>(1)(2)(3)(4)</sup></b>						
<b>Capped</b>	<b>Indicated</b>			<b>Inferred</b>		
<b>Cut-Off Au g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>
Pit 0.42 g/t	1,438,000	1.66	76,000	242,000	1.68	13,000
UG Below Pit 2.3 g/t	26,000	3.28	3,000	76,000	3.09	8,000
<b>Total</b>	<b>1,464,000</b>	<b>1.69</b>	<b>79,000</b>	<b>318,000</b>	<b>2.02</b>	<b>21,000</b>
<b>Uncapped Sensitivity</b>	<b>Indicated</b>			<b>Inferred</b>		
<b>Cut-Off Au g/t</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>	<b>Tonnes</b>	<b>Au g/t</b>	<b>Au oz</b>
Pit 0.42 g/t	1,447,000	2.47	115,000	246,000	2.88	23,000
UG Below Pit 2.3 g/t	43,000	7.05	10,000	136,000	7.52	33,000
<b>Total</b>	<b>1,490,000</b>	<b>2.60</b>	<b>125,000</b>	<b>382,000</b>	<b>4.53</b>	<b>56,000</b>

- (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, socio-political, marketing, or other relevant issues, although Queenston is not aware of any such 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 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.
- (4) Values in the table may differ due to rounding.
- (5) The open pit resource is reported within a Whittle optimized shell

### 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.

<b>TABLE 14.4</b> <b>COMPARISON OF WEIGHTED AVERAGE GRADE OF CAPPED ASSAYS AND COMPOSITES</b> <b>WITH TOTAL BLOCK MODEL AVERAGE GRADES</b>	
<b>Data Type</b>	<b>Au (g/t)</b>
Capped Assays	1.21
Composites	1.19
Block Model	1.35

The comparison above shows the average grade of all the Au blocks in the constraining domains to be somewhat higher than the weighted average of all capped assays and composites used for grade estimation. This is due to the localized clustering of some lower grade assays which were

smoothed by the block modeling grade interpolation process. 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	=998,459 m <sup>3</sup>
Geometric Domain Volume	=1,020,698 m <sup>3</sup>
Difference	=2.23%

## **15.0 MINERAL RESERVE ESTIMATES**

This section is not applicable at the current stage of exploration.



## **16.0 MINING METHODS**

This section is not applicable at the current stage of exploration.

## **17.0 RECOVERY METHODS**

This section is not applicable at the current stage of exploration.

## **18.0 PROJECT INFRASTRUCTURE**

This section is not applicable at the current stage of exploration.

## **19.0 MARKET STUDIES AND CONTRACTS**

This section is not applicable at the current stage of exploration.

## **20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

Queenston completed a detailed compilation and review of mine features over its entire property holdings and continues to evaluate these on an on-going basis.

Specific to the Lebel Property, there currently exists a mine tailings impoundment. Concrete caps cover former shafts and ventilation raises with the workings being flooded. The mine was decommissioned and is considered defunct.

## **21.0 CAPITAL AND OPERATING COSTS**

This section is not applicable at the current stage of exploration.

## **22.0 ECONOMIC ANALYSIS**

This section is not applicable at the current stage of exploration.

## 23.0 ADJACENT PROPERTIES

The Lebel Property adjoins two other properties in which Queenston has an interest. These include:

- The 100% held Pawnee property adjacent to the southwest of Bidgood lease #107430/242883 et al and unpatented claims 1239090, 1223285, 1226845 and 211849.
- The Commodore/Morris Kirkland Newstrike Resources Ltd – Queenston 50-50% joint ventured property to the southeast of Bidgood patented claims L8005, LS6, LS272, L2327 and lease #108424/CLM327.

Also the Lebel Property adjoins three other properties held by third party companies. These include:

- The Continental Property owned by Kirkland Lake Gold Inc. adjacent to the west of Bidgood claims 1220018 and 4246816.
- The Kalahari Resources Inc. Property adjacent to the north of Bidgood L7764, L3094, L7760, L8935, LS221 and L9031.
- The Consolidated Thompson Victoria Lake Property adjacent to the northeast of Bidgood patented claims L6872, L6874, L7848 and L7845.
- The Crystal Lake claims owned by Northern Pressured Treated Wood Ltd. east of Bidgood patented claim L6873 and lease #108424/CLM327.

Queenston conducted exploration programs on the Pawnee and Commodore/Morris Kirkland properties during 2010. Information relating to the above properties has been supplied by Queenston.

The Lebel Gold Project lies within the prolific Kirkland-Larder Gold Camp where over 35 million ounces of gold have been produced since the beginning of the 20<sup>th</sup> Century. Gold exploration in the camp, both underground and on surface, has been active since that time with increased or decreased activities related predominantly to the price of gold or new discoveries. Exploration and mining development activity in the district is currently very strong as shown in Table 23.1.

TABLE 23.1 PROPERTIES IN THE KIRKLAND-LARDER LAKE GOLD CAMP			
Company	Mine- Exploration Project	Location	Notes
Kirkland Lake Gold Inc.	Producer – gold mine	Teck Twp. – Kirkland Lake	formerly - Macassa Mine
Northgate Minerals Corporation	Pre- development mine - gold	Powell Twp. - 60 km west of Kirkland Lake	mill under development
St. Andrew Goldfields	Producer – gold mine	Harker –Holloway Twp.'s	Holt mine
Brigus Gold	Producer – gold mine	Hislop and Beatty Twp's	Black Fox mine
Armistice Resources Corp.	Exploration - gold	McGarry Twp.	former Kerr Mine
Northern Gold Mining Inc.	Exploration - gold	Garrison Twp.	Garrcon & Jonpol deposits



Queenston is the largest land holder within Teck, Lebel and Gauthier Townships. The holdings encompass a large majority of the Larder Cadillac Deformation Zone and key splay faults off of this Zone.

The Kirkland Lake Gold mine, located at the west end of Queenston's land package in Teck Township, is owned and operated by Kirkland Lake Gold Inc., and is situated adjacent to and has shared joint venture property with Queenston. In addition, several individual prospectors and junior mining companies peripherally adhere to portions of Queenston's holding.

## 24.0 OTHER RELEVANT SUBSEQUENT DATA AND INFORMATION

On July 20, 2011, Queenston received a metallurgical report from SGS Canada Inc. (“SGS”). A summary of the report findings are described below and can be used in future resource evaluations.

SGS conducted a metallurgical scoping test program on two composites from the Lebel property. The goal of the program was to obtain scoping level metallurgical test results. The two composites were from the Bidgood zone that assayed 1.45 g/t Au and 1.4 g/t Ag and the Boundary zone that assayed 1.28 g/t Au and 1.5 g/t Ag.

A Bond work index (BWI) test was performed on each of the composites. It was found that the BWI values were in the range of 16-21 kWh/t (metric) and in the medium or moderately hard range in comparison with the SGS BWI database.

The metallurgical testwork included gravity separation, flotation, cyanidation/CIL and size fraction analysis.

To examine the gold recovery by gravity separation, a gravity separation test was performed on each of the composites. A Knelson concentrator was used with the concentrate further upgraded by treatment on a Mozley table to a low weight, high grade product. The grind sizes for the gravity test were targeted into  $P_{80}=120\text{ }\mu\text{m}$ . To scope the recovery of the free milling gold in the gravity/flotation tailings of the composites by cyanide leaching, three 72-hour kinetic leaching tests with different regrind sizes were conducted on each of the composites.

In general, the cyanidation tests showed that a fine regrind size and 48 hour leach time were beneficial to the gold extraction; however, a fine regrind size caused significantly higher cyanide consumption.

For the Bidgood gravity tailing, the best gold extraction was 78%. The overall gold recovery by the gravity-cyanidation flowsheet was 82%.

For the Boundary gravity tailing, a gold extraction of 87% was achieved. The overall gold recovery by the gravity-cyanidation flowsheet was 91%. The overall gold recovery was considered at a high level due to its low gold grade in the composite.

A basic environmental test program, including strong acid digest inductively coupled plasma-optical emission spectroscopy/mass spectroscopy (ICP-OES/MS) elemental analyses, modified acid base accounting (ABA) and net acid generation (NAG) testing was completed to characterized the residue samples from the composites. ICP-OES/MS strong acid digest elemental analyses indicated that the residues were primarily composed of Si with significant amounts of aluminum, iron, calcium and potassium and minor amounts of magnesium and sodium.

Modified acid base accounting (ABA) test results for the Bidgood and Boundary CN residue samples reported a high level of sulphide suggesting that these samples contains insufficient neutralisation potential (NP) to counteract the sulphide concentration present in the samples.

The single addition NAG test completed in the samples could not be expected completely oxidized the significant concentration for sulphide present in the samples. Sequential NAG test using multiple additions of H<sub>2</sub>O<sub>2</sub> would be required to determine NAG results for these samples.

Much of the overburden that covers the South Veins resource consists of tailings that have been sampled, returning an average grade of 0.97 g/t from 586,000 tons (non 43-101 compliant). If gold extraction from these tailings is found to be economic, this may benefit the economics of mining.

P&E is not aware of any other relevant data or information as of the effective date of this report.

## 25.0 INTERPRETATION AND CONCLUSIONS

The Lebel deposit was modeled in compliance with current CIM Definitions and Standards on Mineral Resources and Mineral Reserve. National Instrument 43-101 reporting standards and formats were followed in this document in order to report Mineral Resources in a fully compliant manner.

Grade capping using a statistical log-normal histogram analysis on the entire constrained domain provides an 80% difference in the total ounces reported between capped resource estimate and uncapped resource sensitivity. Geological interpretation has identified two distinct, horizontal trending high grade populations from surface to a depth of 35 m and from 115 m to 170 m and may be associated with 50 to 60 degree dipping splays or intersections (conjugates) between two sets of vein systems. The high grade regions appear to display good continuity. Knowing this, future grade capping may be calculated by using a log-normal histogram analysis on weighted domains instead of the entire domain.

The resource pit shell includes tonnage that is currently designated waste but is not drilled yet and is proximal to mineralization included in the resource; thus the strip ratio may decrease.

Only 17% of the former mine footprint has been drilled to resource status to a depth of 150 m, and new drill hole intersections such as 38.8 g/t Au over 29.85 m (BG11-129-along zone), 5.2 g/t Au over 11.75 m (BG11-139), 1.5 g/t Au over 21.1 m (BG11-34A), exist in all directions outside of the resource.

Diamond drill data from 114 boreholes were utilized in the Lebel Resource Estimate. Grade interpolation was undertaken with the inverse distance cubed estimation method.

The Lebel Property is a key component in Queenston's strategy of advancing four 100% owned gold deposits in the Kirkland Lake area (the Upper Beaver, McBean, Anoki and Upper Canada properties) toward prefeasibility and a decision to advance these properties to production. Exploration work, the bulk of which has been diamond drilling, has been ongoing on this initiative since Queenston renewed exploration at its Upper Beaver property 2005.

The dominant geological feature of the Lebel Property is the Bidgood break which occurs as a 100 m to 300 m wide package of highly sheared and deformed rocks, dipping from between 50°NW to vertical. The Bidgood gold zones are located in quartz-carbonate veins and pyritic altered diorite, and syenite. The North Zone, near the Bidgood mine area, features narrow, high-grade gold mineralization within multiple structures. The South Zone, near the Moffat Hall shaft area features near surface, wide, low grade mineralization at the South Zone near the Moffat Hall shaft area.

The Lebel property is classified as a lode gold type deposit where economic concentrations of gold derived from hydrothermal fluids are present in veining systems of epithermal or mesothermal origin. Most mineralization appears in veins, breccia or as disseminations and features a strong structural component.

## 26.0 RECOMMENDATIONS

It is the opinion of the authors of this report that the Mineral Resource outlined at Lebel is of sufficient merit to warrant continued delineated drilling. The following work is recommended during 2012:

### 26.1 DIAMOND DRILLING

- Drill-testing at the Lebel deposit with a view to expanding the current resource.
- Drill-testing the North and South Zones to the west, the Boundary Zone, the Mud Lake zones, and various other exploration targets on the property (such as the Blue Vein).

### 26.2 PROPOSED 2012 BUDGET

**TABLE 26.1**  
**2012 OPEN PIT TARGET DRILLING**

ZONE	# HOLES	AVE. DEPTH	METRES	COST
NEWNORTH	15	100	1500	\$135,000
1-2-3 VEINS	21	80	1680	\$151,200
#11 VEIN	29	130	3770	\$339,300
#6 VEIN	57	166	9480	\$853,200
#20 VEIN	54	174	9390	\$845,100
NEWHG	18	80	1440	\$129,600
MAIN EAST, WEST	12	100	1200	\$108,000
M-H WEST	8	80	640	\$57,600
M-H NEW SOUTH	16	100	1600	\$144,000
TOTAL	230		30,700	\$2,763,000
CURRENT OCT 16	11		2250	\$202,500

**TABLE 26.2**  
**2012 OTHER SHALLOW DRILLING**

ZONE	# HOLES	AVE. DEPTH	METRES	COST
OLD STOPE	2	100	200	\$18,000
RED'S	3	120	360	\$32,400
83-27 DIORITE	3	200	600	\$54,000
BOUNDARY	10	101	1010	\$90,900
BLUE WEST	10	200	2000	\$180,000
BLUE EAST	8	160	1280	\$115,200
MAIN @MUD	4	150	600	\$54,000
CLIFF	4	100	400	\$36,000
NEWPOR (08-48)+SHAFT	4	150	600	\$54,000
MAIN@08-42	2	100	200	\$18,000
83-25, MUD SOUTH	4	200	800	\$72,000
TOTAL	52		7850	\$706,500

**TABLE 26.3**  
**BIDGOOD LABEL TWP. - DIAMOND DRILL PROPOSAL OCTOBER 2011 TO DECEMBER 2012**

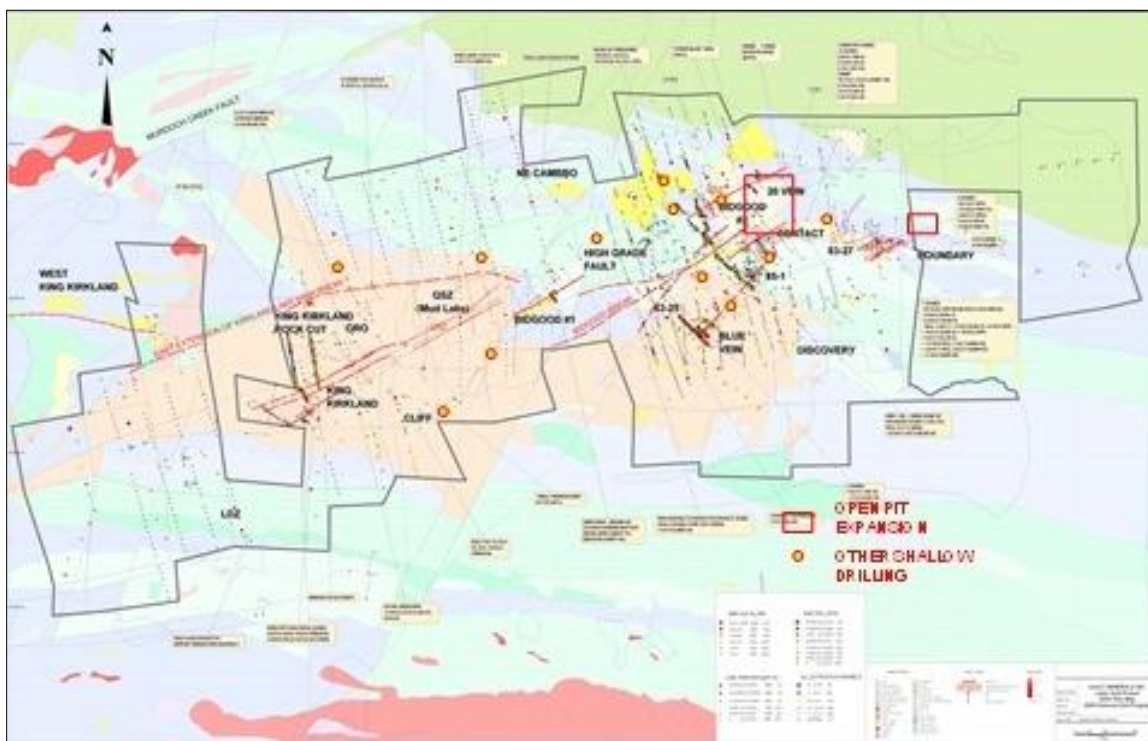
Zone	Goal	Total (m)	Total Cost	Proposed DDH	Azm	Dip	Length	Target Length	Comments
South Zone	Definition Drilling 30m spacing below 1025L; At end of Program define a block 150m plunge x 50m strike; enhancing u/g resource + drill 20V & Bidgood Break & New Zone	4,080	\$408,000	A	359	-50	625	1&2 V 455m; 20V 535m; Bid Bk 575M	30m east of BG11-139 5.78g/t/10.4m
				B	357	-49.5	640	1&2 V 445m; 20V 535m; Bid Bk 570M	30m below & between BG11-139 and proposed DDH A
				C	358	-51	660	1&2 V 480m	30m below proposed DDH B
				D	002	-48.5	690	1&2 V 495m	30m east of proposed DDH C
				E	166	-65.5	490	1&2 V 440m; 20V 405m; Main Bk 335m	30m below proposed DDH C and D; drill from N to South
				F	174	-64	500		west of proposed ddh E, same elevation; drill N-S
				G	156	-66.5	475		east of proposed ddh E, same elevation; drill N-S
				<b>Total</b>			<b>4,080</b>		
Below 2025 Level, 21 and 24 Vein	Test in area of historic U/G DDH with significant values and down dip-plunge of 21 and 24 Veins	4,400	\$440,000	BG11-160	192	-82.5	1300	21V down dip 640-660m; 24V 720- 740; DDH intercepts 1000-1050m	1st modern ddh's below Bidgood 2025 L; test the extension of the North Bidgood 21, 24 Veins and others
				wedge			900		
				Pilot DDH			1300		
				wedge			900		
				<b>Total</b>			<b>4,400</b>		

**TABLE 26.3**  
**BIDGOOD LABEL TWP. - DIAMOND DRILL PROPOSAL OCTOBER 2011 TO DECEMBER 2012**

<b>Zone</b>	<b>Goal</b>	<b>Total (m)</b>	<b>Total Cost</b>	<b>Proposed DDH</b>	<b>Azm</b>	<b>Dip</b>	<b>Length</b>	<b>Target Length</b>	<b>Comments</b>
18/10 or 24 Vein	Test from 1025L up to 500L with 30 to 50m spacing drillholes to define the vein discovered by BG10-03, -04, -18c, -20, on footwall of 21 Vein	2,910	\$291,000	A	103	-62	325	Veins- 28, 55, 182; 21V 220m; 18/10/24 Vein 254m	same set up as BG10-03,-04
	A block with dimensions of 180m plunge x 60 to 100m strike length would be tested for possible resource definition			B	114.5	-53	300		up dip of A
				C			325		see long section
				D			325		see long section
				E			300		see long section
				F			300		see long section
				G			360		see long section
				H			325		see long section
				I			350		see long section
				<b>Total</b>			<b>2,910</b>		
<b>Summary</b>	<b>Zones</b>	<b>Total (m)</b>	<b>Total Cost</b>	<b>Total DDH's</b>					
	South Zone+ Below 2025 + 18/10/24Vein	11,390	\$1,139,000	20					

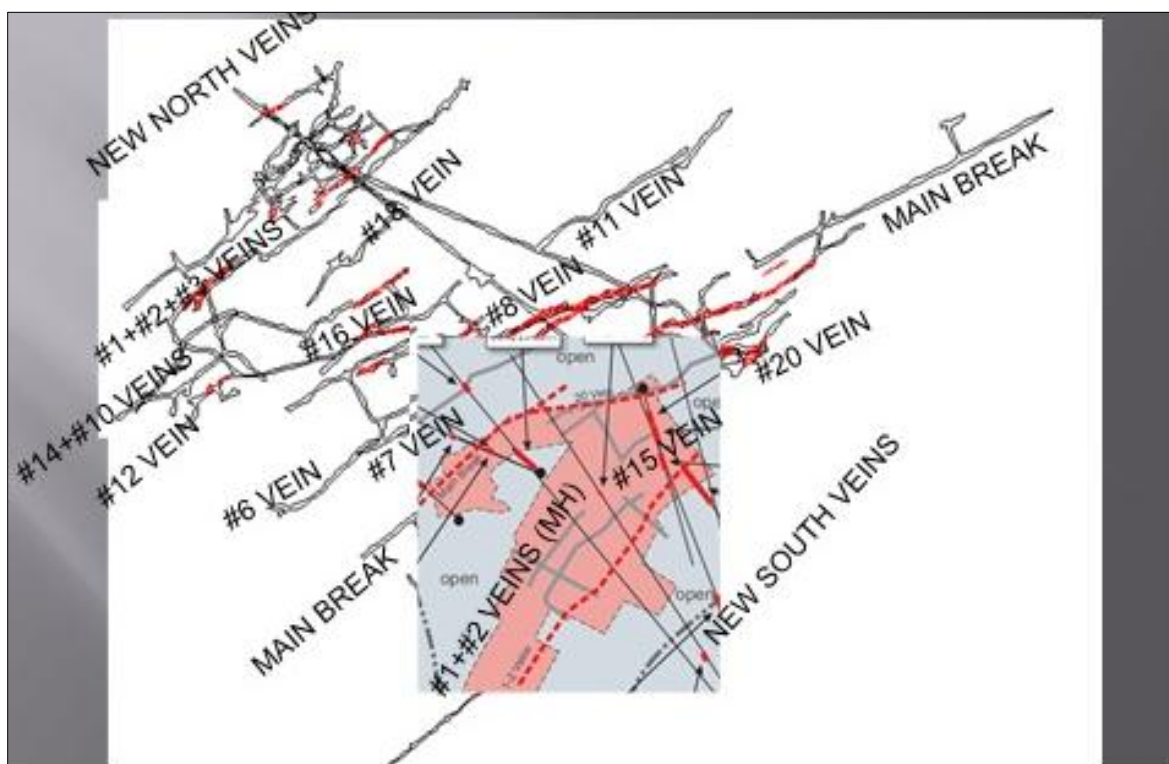


**Figure 26.1 Lebel Property – 2012 Exploration**



(Source: Ploeger, 2011)

**Figure 26.2 Bidgood Open Pit Expansion**



(Source: Ploeger, 2011)

## 27.0 REFERENCES

- Alexander, D. (2007): Technical Report on the Mineral Properties of Queenston Mining Inc. in the Kirkland Lake Gold Camp. Company report, November 15, 2007 filed on SEDAR.
- Carmichael, S. "Report on a Diamond Drilling Program Lebel Township District of Timiskaming, Ont. For Vault Minerals Inc.". February 2004
- Chown, E.H., Daigneault, R., Mueller, W., and Mortensen, J., 1992. Tectonic evolution of the Northern Volcanic Zone, Abitibi belt, Quebec. *Can. J. Earth Sci.*, vol. 29, p. 2211-2225.
- Ewert, D., Armstrong, T., Yassa, A., Puritch, E., (2010): Technical Report and Resource Estimates for the McBean and Anoki Gold Deposits of the Kirkland Lake Gold Project, Gauthier Township, Kirkland Lake, North-Eastern Ontario, Canada. P&E Mining Consultants Inc.
- Leahy, M. "Report on Diamond Drilling and Sampling, King Kirkland Property, Lebel Township." December 1998.
- Lengyel, P.E. "2006 Drilling Program Report, August-October, 2006, Lebel Property" November 17, 2006.
- Leonard, B.C. for International Platinum Corporation. "Report of the 1988, 1989 Field Work on the Moffat-Hall Project, Lebel Township". June 1989.
- Lovell, H. Ontario Department of Mines, Open File Report 5211. "Geology of Lebel Township, District of Timiskaming." 1976.
- McCormack, Daniel J. "2007 Diamond Drill Program Report, Lebel Gold Property" May 30 to July 11, 2007.
- McCormack, Daniel J. "2008 Diamond Drill Program Report, Lebel Gold Property" Jan. 19 to May 7, 2008.
- Ontario Department of Mines. Mineral Resources Circular No. 3. W.S. Savage. "Mineral Resources and Mining Properties in the Kirkland Lake-Larder Lake Area." 1964.
- Ontario Department of Mines. Vol. XXXII, Part IV. P. Hopkins, A.G. Burrows. "Kirkland Lake Gold Area." 1923.
- Ontario Department of Mines. Vol. XXXVII, Part II. E.W. Todd. "Kirkland Lake Gold Area." 1928.
- Ontario Geological Survey. "Kirkland Lake-Larder Lake Aeromagnetic Survey, Discover Abitibi Initiative". 2004.
- Parsons, G.E. "Geology of Former Bidgood Kirkland Gold Mines, Lebel Township, Kirkland Lake Area, Ontario". October 1980.

- Ploeger, F. R. (2010, 2011): Queenston internal Quarterly Reports for 2010 and 2011.
- Queenston Mining Inc., (2010, 2011): various press releases dated, June 10, 2010, July 7, 2010, September 23, 2010, January 13, 2011, and February 14, 2011.
- Rudderham, D.C. for Silver Lake Resources Inc. “Drilling Program, Moffat-Hall Property, Lebel Township” May 30, 1985.
- The Geological Society of America. Field Trip No. 8. “Geology and Mineral Deposits of the Kirkland-Larder.” 1953.
- Vault Minerals Inc. (2009, 2010): various press releases dated November 24, 2009, December 21, 2009, January 5, 2010, and March 4, 2010.
- V. Ispolatov, B. Lafrance, B. Dube, R. Creaser, M. Hamilton. (2008) Society of Economic Geologists, Inc. Economic Geology, v. 103, pp. 1309–1340. Geologic and Structural Setting of Gold Mineralization in the Kirkland Lake-Larder Lake Gold Belt, Ontario.
- Walker, P. “Interpretation Report, Bidgood Grid IP-Resistivity Survey, Lebel Township”. March 26, 2004.

## 28.0 CERTIFICATES

### 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 Lebel Gold Deposit of the Kirkland Lake Gold Project, Lebel Township, North-Eastern Ontario, Canada”, (the “Technical Report”) with an effective date of September 15, 2011.
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., ..... 1978-1980
- Open Pit Mine Engineer – Cassiar Asbestos/Brinco Ltd., ..... 1981-1983
- Pit Engineer/Drill & Blast Supervisor – Detour Lake Mine, ..... 1984-1986
- Self-Employed Mining Consultant – Timmins Area, ..... 1987-1988
- Mine Designer/Resource Estimator – Dynatec/CMD/Bharti, ..... 1989-1995
- Self-Employed Mining Consultant/Resource-Reserve Estimator, ..... 1995-2004
- President – P & E Mining Consultants Inc, ..... 2004-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for authoring Section 14 and co-authoring Sections 24 and 25 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 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. 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: September 15, 2011

Signed Date: December 1, 2011

{ SIGNED AND SEALED }

[Eugene Puritch]

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Eugene J. Puritch, P.Eng

## CERTIFICATE OF QUALIFIED PERSON

ANTOINE R. YASSA, P. GEO.

I, Antoine R. Yassa, P. Geo., residing at 241 Rang 6 West, Evain, Quebec, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled “Technical Report and Resource Estimate on the Lebel Gold Deposit of the Kirkland Lake Gold Project, Lebel Township, North-Eastern Ontario, Canada”, (the “Technical Report”) with an effective date of September 15, 2011.
3. I am a graduate of Ottawa University at Ottawa, Ontario with a B.Sc (HONS) in Geological Sciences (1977). I have worked as a geologist for a total of 30 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Order of Geologists of Québec (License No 224) and a practising member of the APGO (Registration Number 1890).

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:

- Minex Geologist (Val d’Or), 3D Modeling (Timmins), Placer Dome .....1993-1995
- Database Manager, Senior Geologist, West Africa, PDX .....1996-1998
- Senior Geologist, Database Manager, McWatters Mine.....1998-2000
- Database Manager, Gemcom modeling and Resources Evaluation (Kiena Mine)  
QAQC Manager (Sigma Open pit), McWatters Mines.....2001-2003
- Database Manager and Resources Evaluation at Julietta Mine, Far-East Russia,  
Bema Gold Corporation.....2003-2006
- Consulting Geologist .....since 2006

4. I have visited the Property on March 2 and May 13, 2010.
5. I am responsible for co-authoring Section 12 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 no prior involvement with the Property that is the subject of this Technical Report.
8. I have read NI 43-101 and Form 43-101F1 and 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: September 15, 2011

Signed Date: December 1, 2011

{SIGNED AND SEALED}

[Antoine Yassa]

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Antoine R. Yassa, P. Geo.

## CERTIFICATE of AUTHOR

**Tracy J. Armstrong, P.Geo.**

I, Tracy J. Armstrong, residing at 2007 Chemin Georgeville, res. 22, Magog, QC J1X 0M8, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc. and have worked as a geologist continuously since my graduation from university in 1982.
2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Lebel Gold Deposit of the Kirkland Lake Gold Project, Lebel Township, North-Eastern Ontario, Canada", (the "Technical Report") with an effective date of September 15, 2011.
3. I am a graduate of Queen's University at Kingston, Ontario with a B.Sc. (HONS) in Geological Sciences (1982). I am a geological consultant currently licensed by the Order of Geologists of Québec (License 566), the Association of Professional Geoscientists of Ontario (License 1204) and the Association of Professional Engineers and Geoscientists of British Columbia, (Licence No. 34720).

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 and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. This report is based on my personal review of information provided by the Issuer and on discussions with the Issuer's representatives. My relevant experience for the purpose of the Technical Report is:

- Underground production geologist, Agnico-Eagle Laronde Mine 1988-1993;
- Exploration geologist, Laronde Mine 1993-1995;
- Exploration coordinator, Placer Dome 1995-1997;
- Senior Exploration Geologist, Barrick Exploration 1997-1998;
- Exploration Manager, McWatters Mining 1998-2003;
- Chief Geologist Sigma Mine 2003
- Consulting Geologist 2003-to present.

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for the preparation and co-authoring of Section 12 of this Technical Report.
6. I am independent of issuer applying the test in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the Property 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: September 15, 2011

Signing Date: December 1, 2011

***{SIGNED AND SEALED}***

*[Tracy J. Armstrong]*

---

Tracy J. Armstrong, P. Geo.

## CERTIFICATE of AUTHOR

DAVID BURGA, P.GEO.

I, David Burga, P.Geo., residing at 3884 Freeman Terrace, Mississauga, Ontario, L5M 6P6, do hereby certify that:

1. I am an independent geological consultant contracted by P&E Mining Consultants Inc. and have worked as a geologist for a total of 12 years since obtaining my B.Sc. degree in 1997.
2. This certificate applies to the technical report titled "Technical Report and Resource Estimate on the Lebel Gold Deposit of the Kirkland Lake Gold Project, Lebel Township, North-Eastern Ontario, Canada", (the "Technical Report") with an effective date of September 15, 2011.
3. I graduated with a Bachelor of Science degree in Geology from The University of Toronto, Ontario in 1997. I am currently licensed by the Association of Professional Geologists of Ontario, (License No. 1836)

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.

- Exploration Geologist, Cameco Gold.....1997-1998;
- Field Geophysicist, Quantec Geoscience .....1998-1999;
- Geological Consultant, Andeburg Consulting Ltd. ....1999-2003;
- Geologist, Aeon Egmond Ltd. ....2003-2005;
- Project Manager, Jacques Whitford.....2005-2008;
- Exploration Manager – Chile, Red Metal Resources .....2008-2009
- Consulting Geologist .....2009-Present

4. I have not visited the Property that is the subject of this Technical Report.
5. I am responsible for the preparation and authoring of Sections 1 through, 11, 13, 15 through 23, 26 and 27 as well as portions of 24 through 25.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 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: September 15, 2011

Signing Date: December 1, 2011

***{SIGNED AND SEALED}***

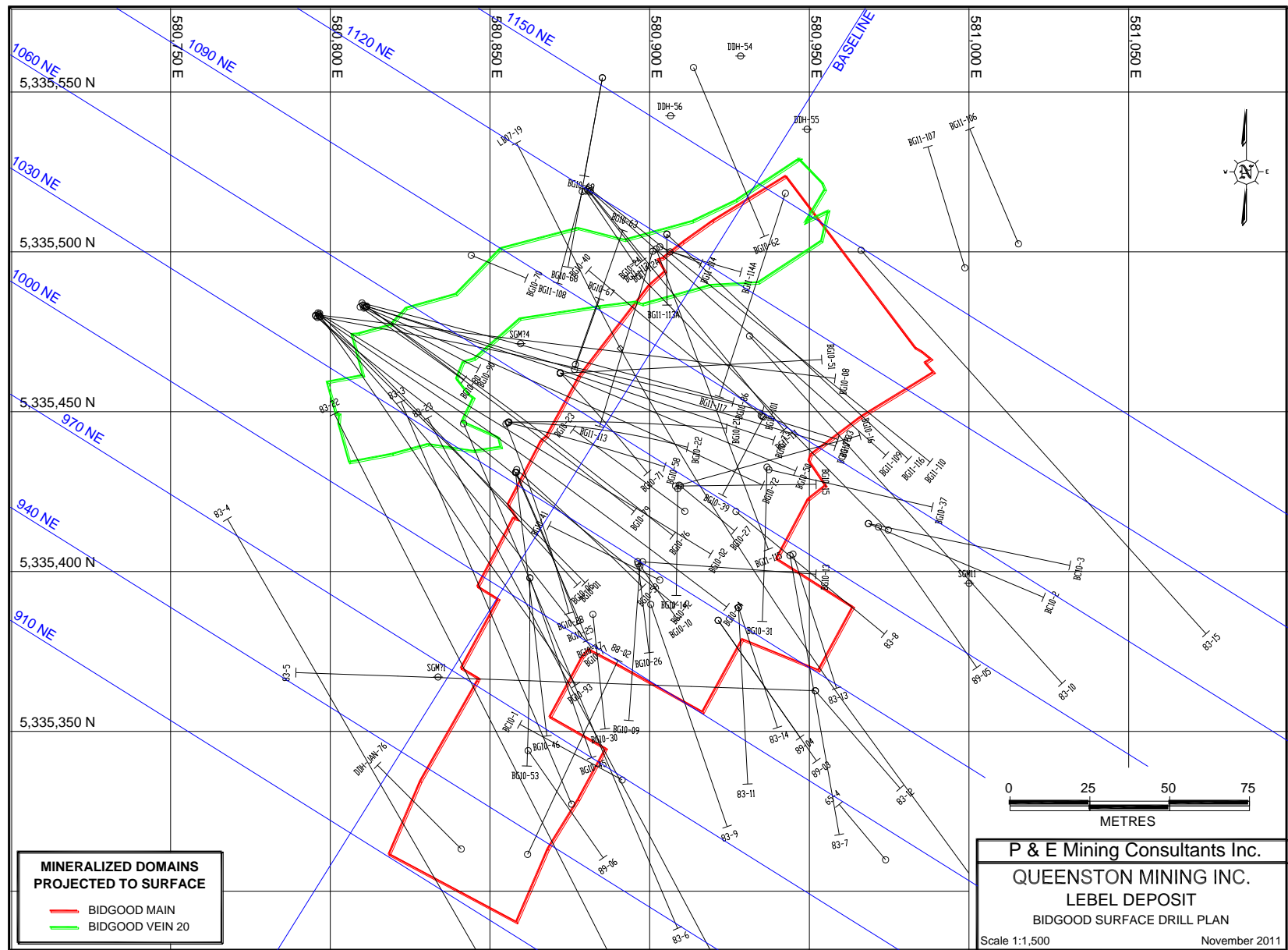
*[David Burga]*

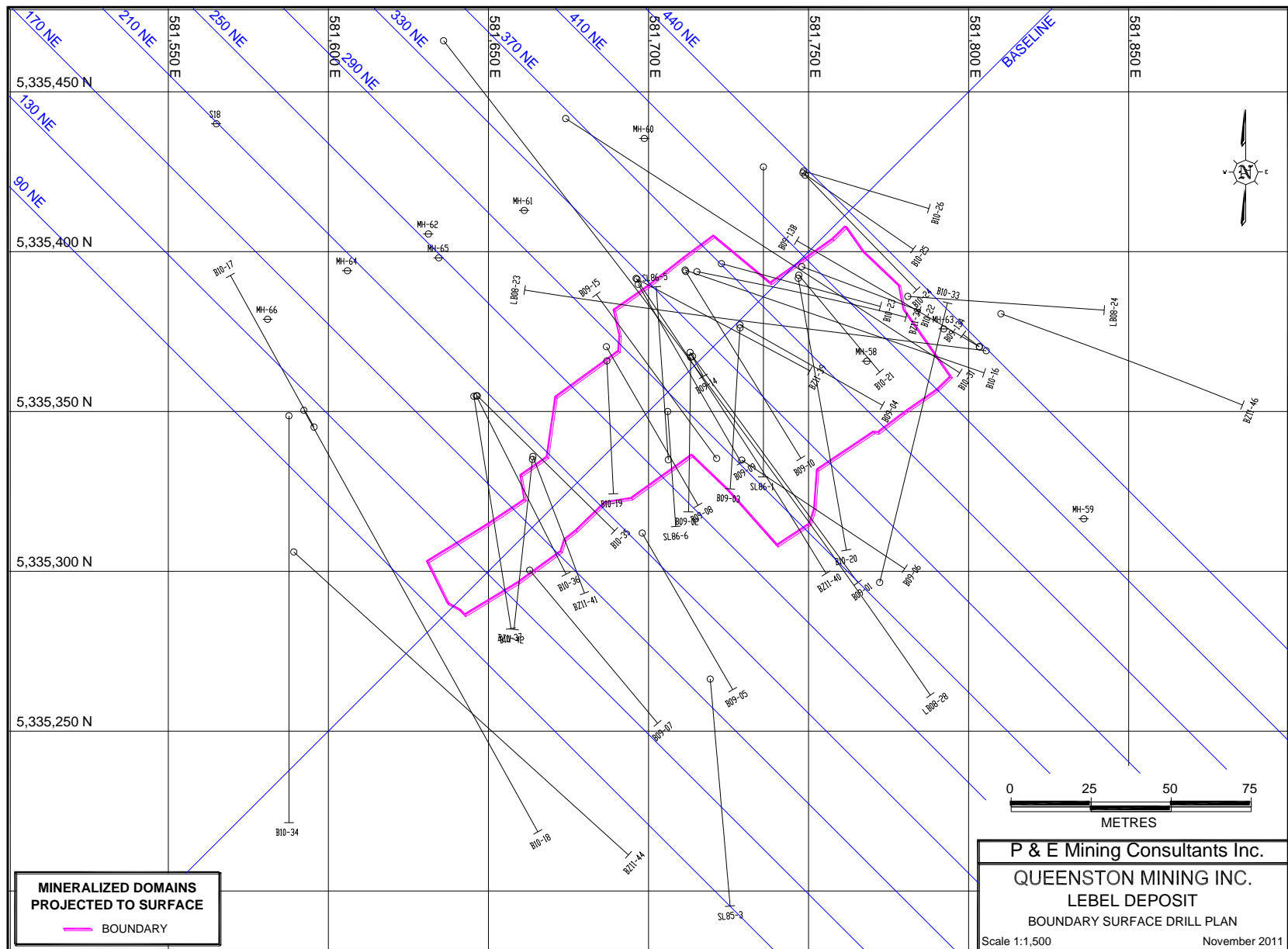
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David Burga, P.Geo.

## **APPENDIX I. SURFACE DRILL HOLE PLANS**

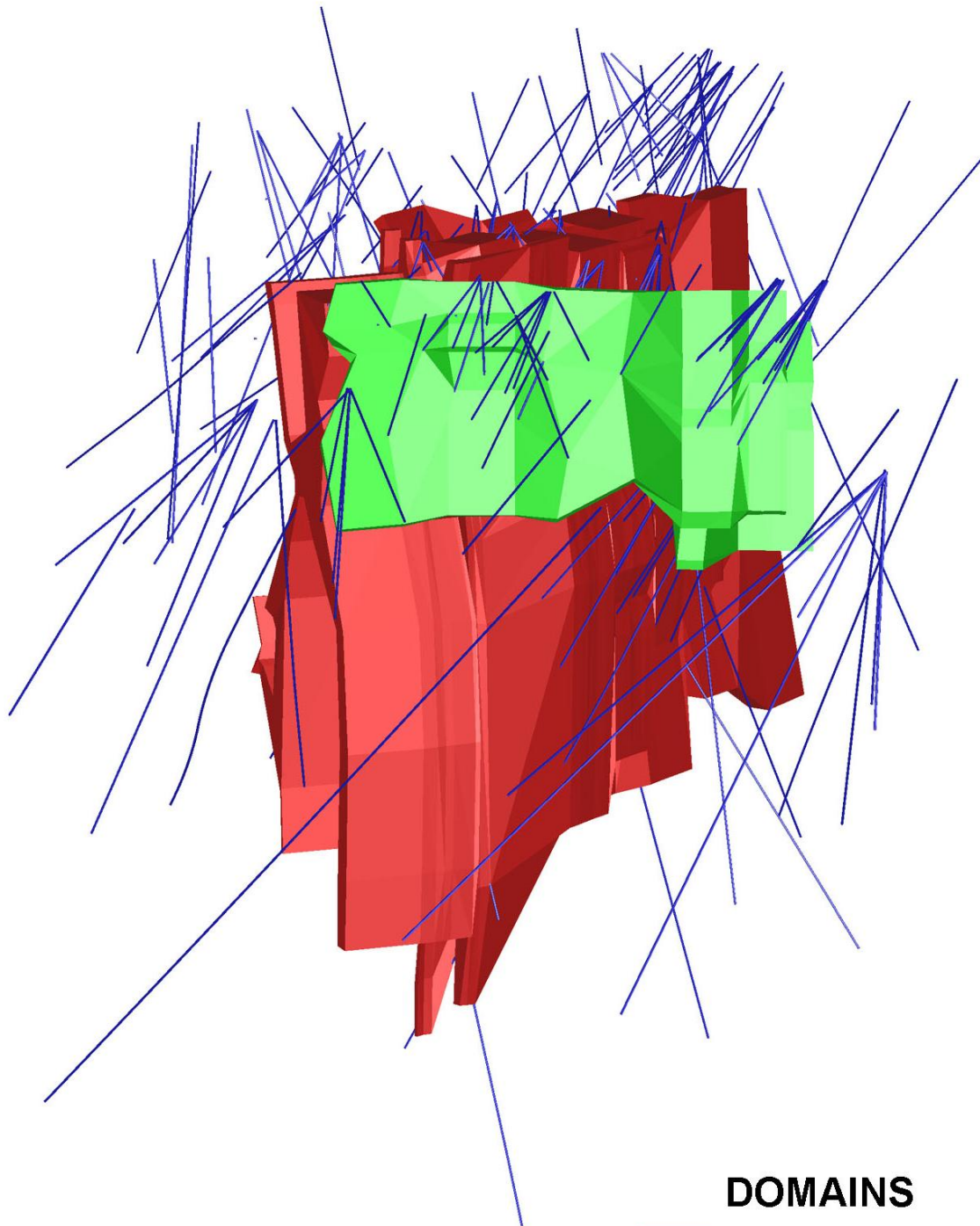






## **APPENDIX II. 3D DOMAINS**

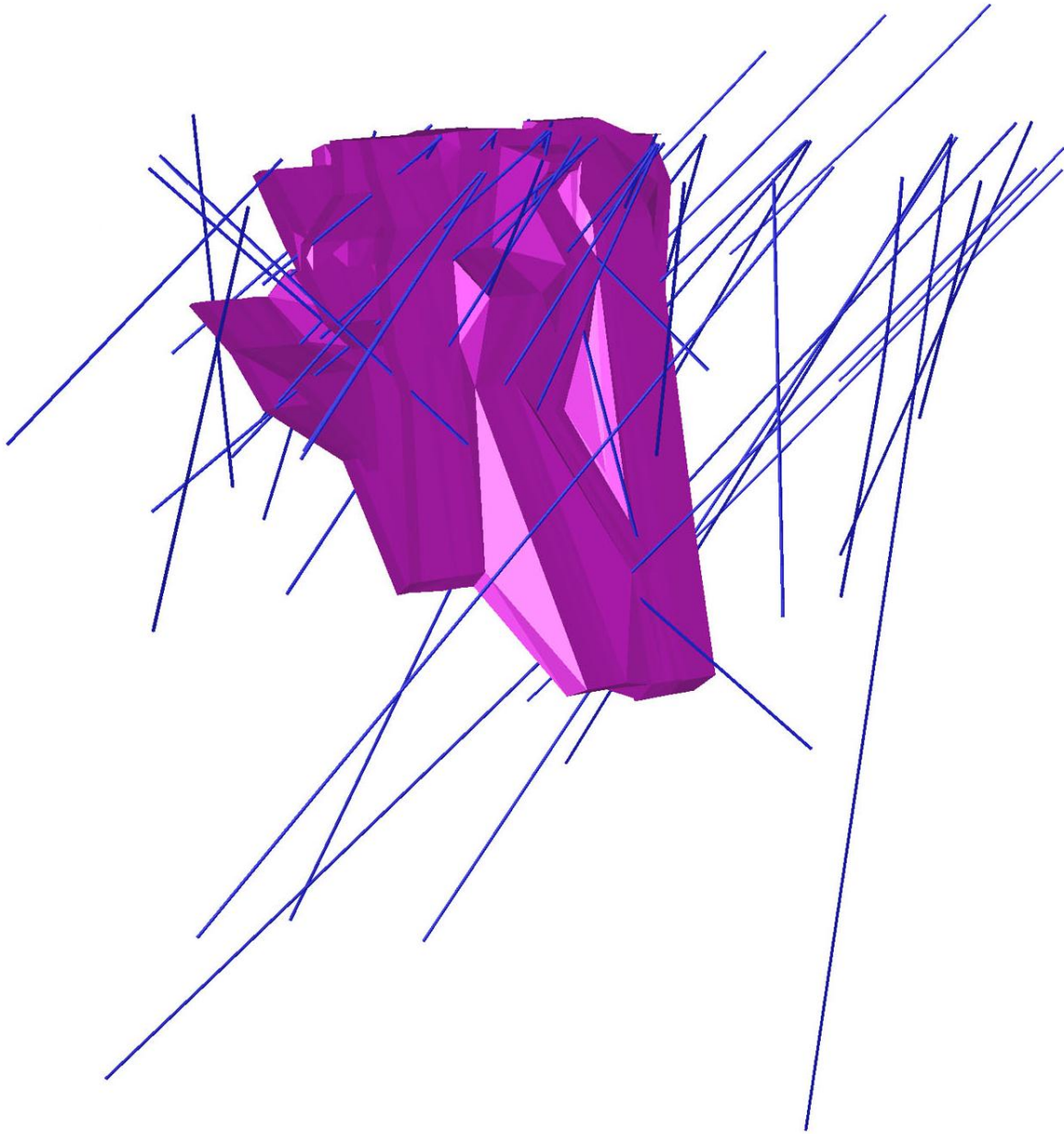
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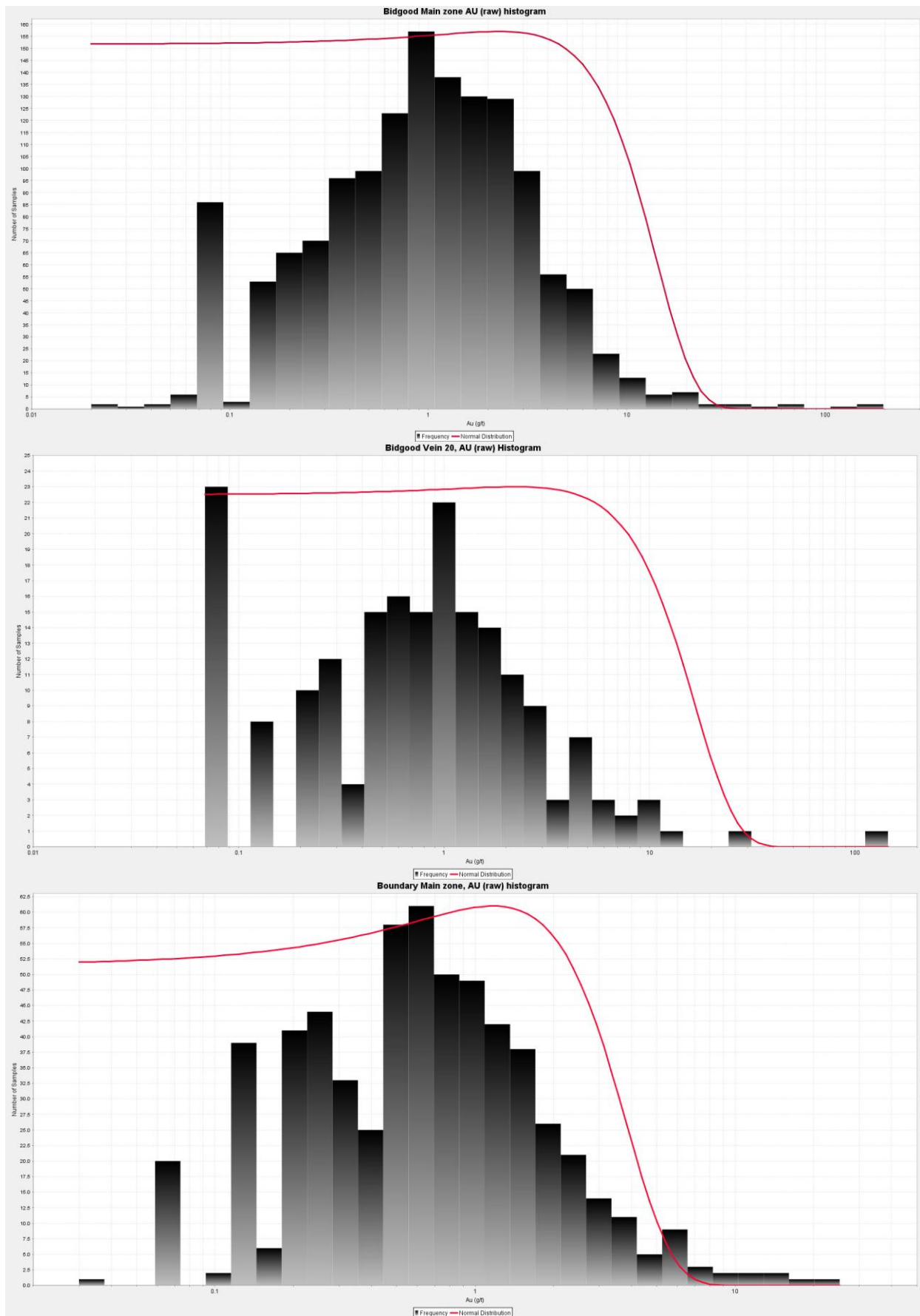
### DOMAINS

- BIDGOOD MAIN
- BIDGOOD VEIN 20

## BOUNDARY DEPOSIT - 3D DOMAIN



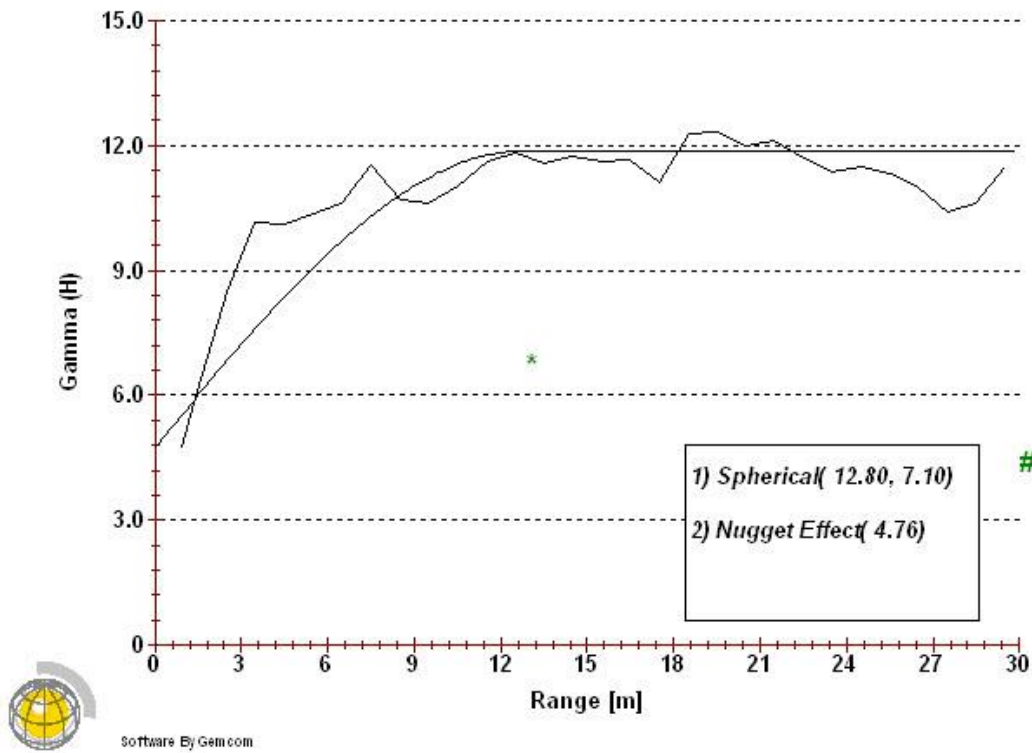
### **APPENDIX III. LOG NORMAL HISTOGRAMS**



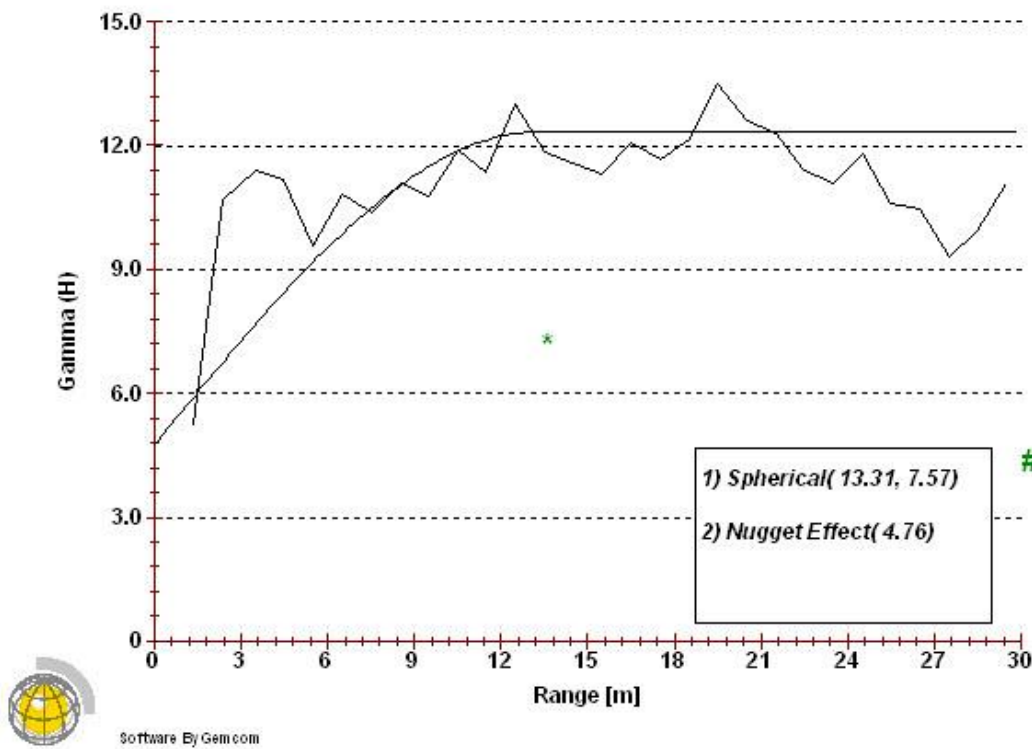
## **APPENDIX IV. VARIOGRAMS**



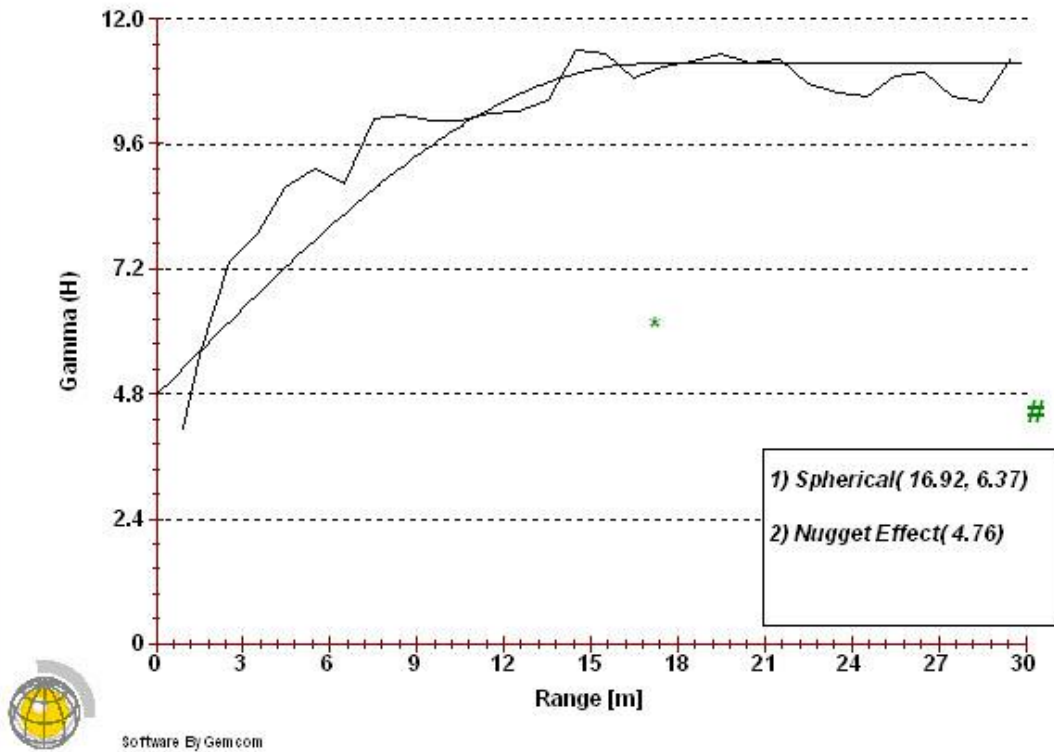
### BIDGOOD ALL ZONES Au OMNIVARIOGRAM



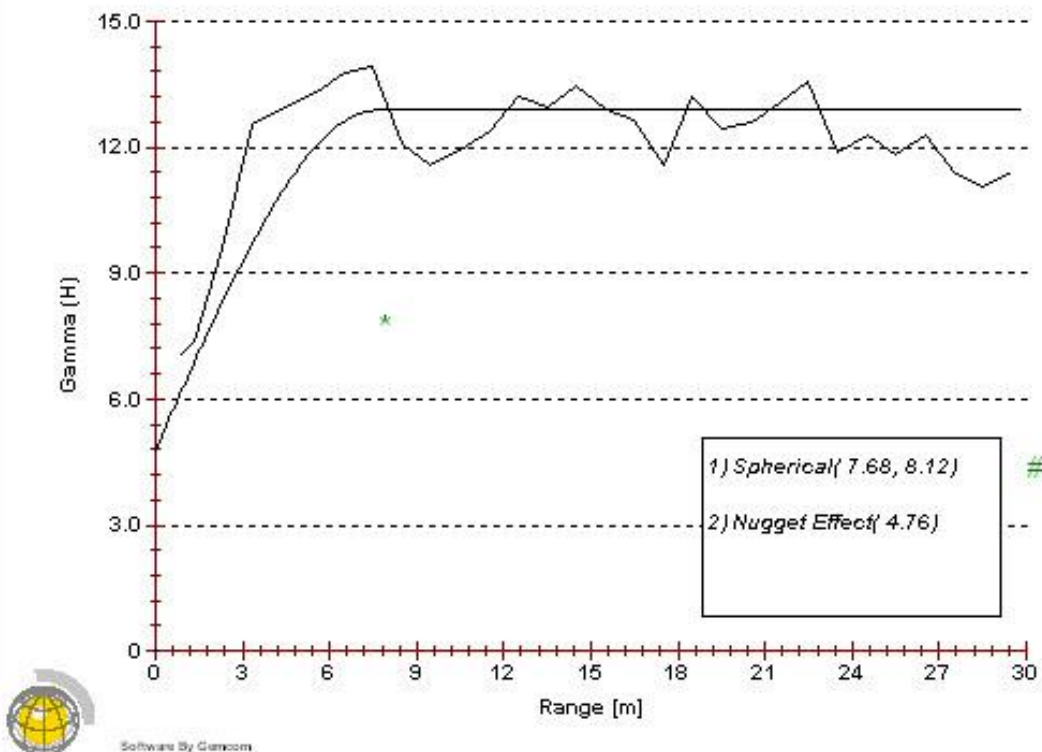
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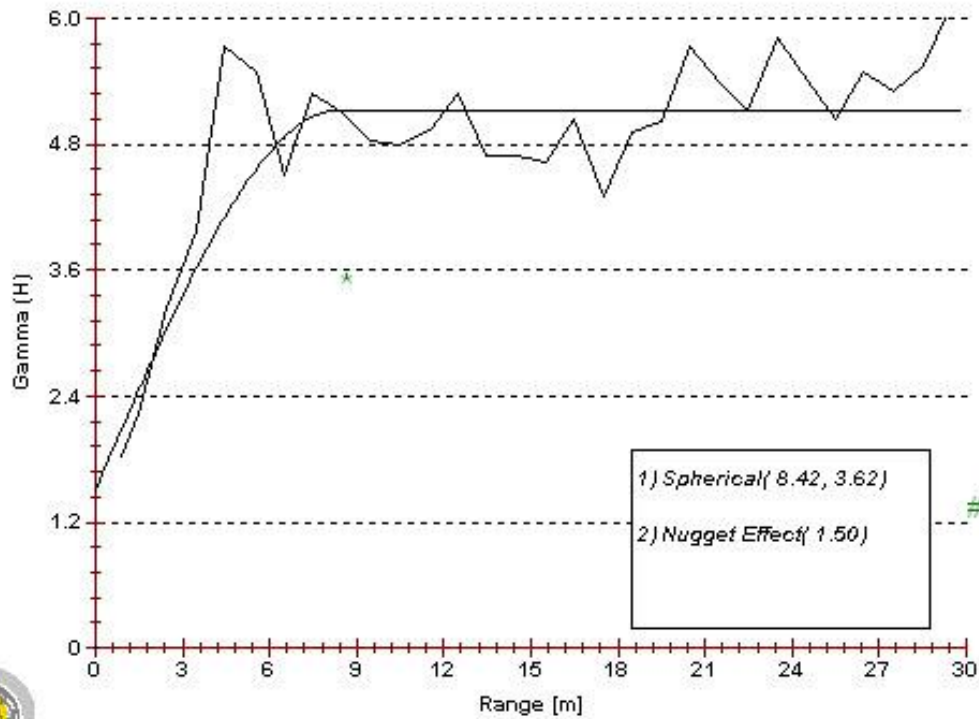
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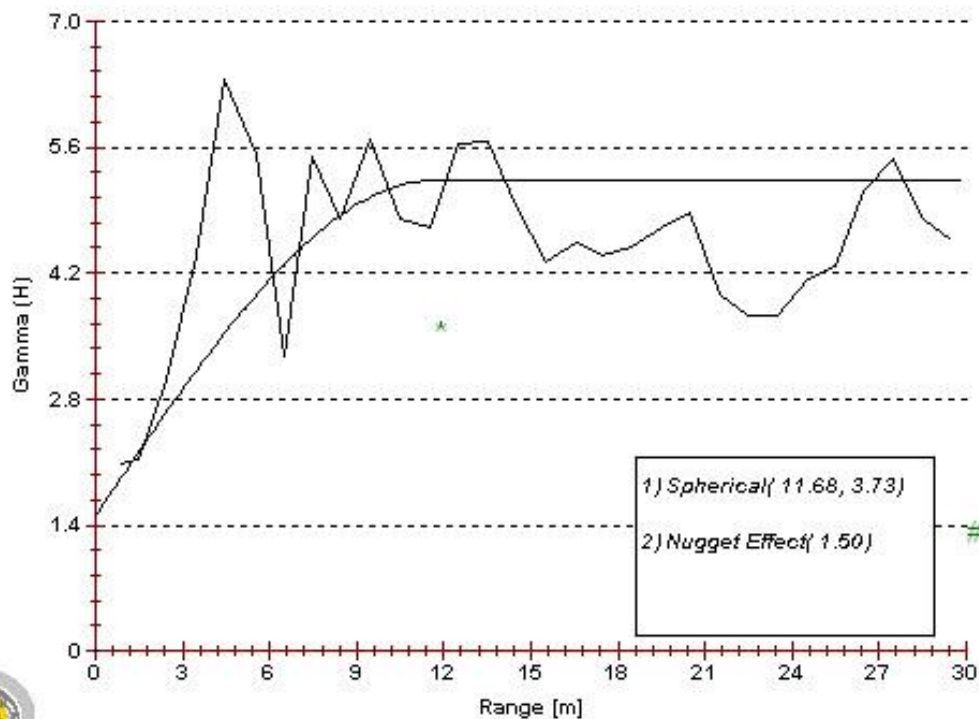
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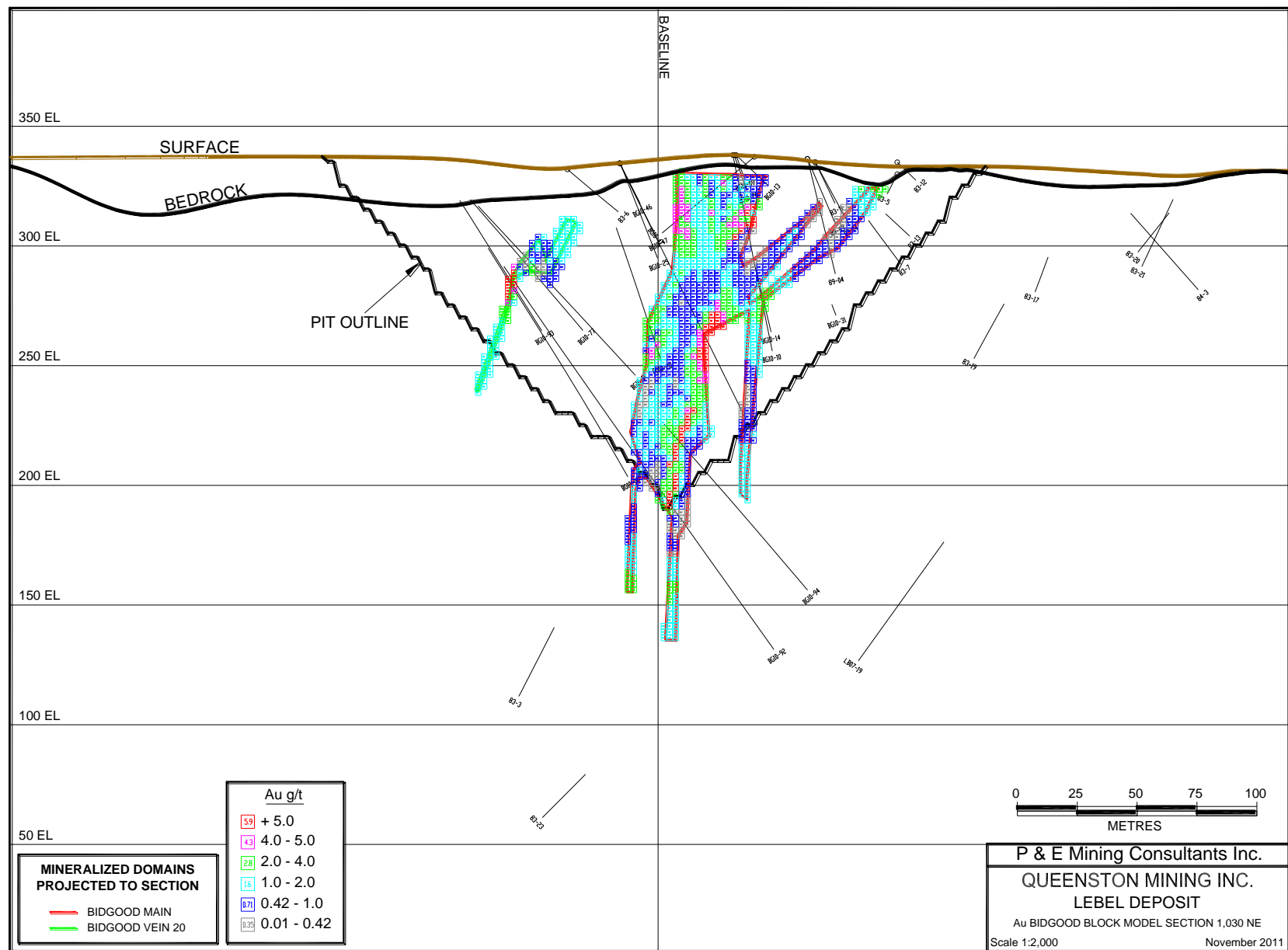
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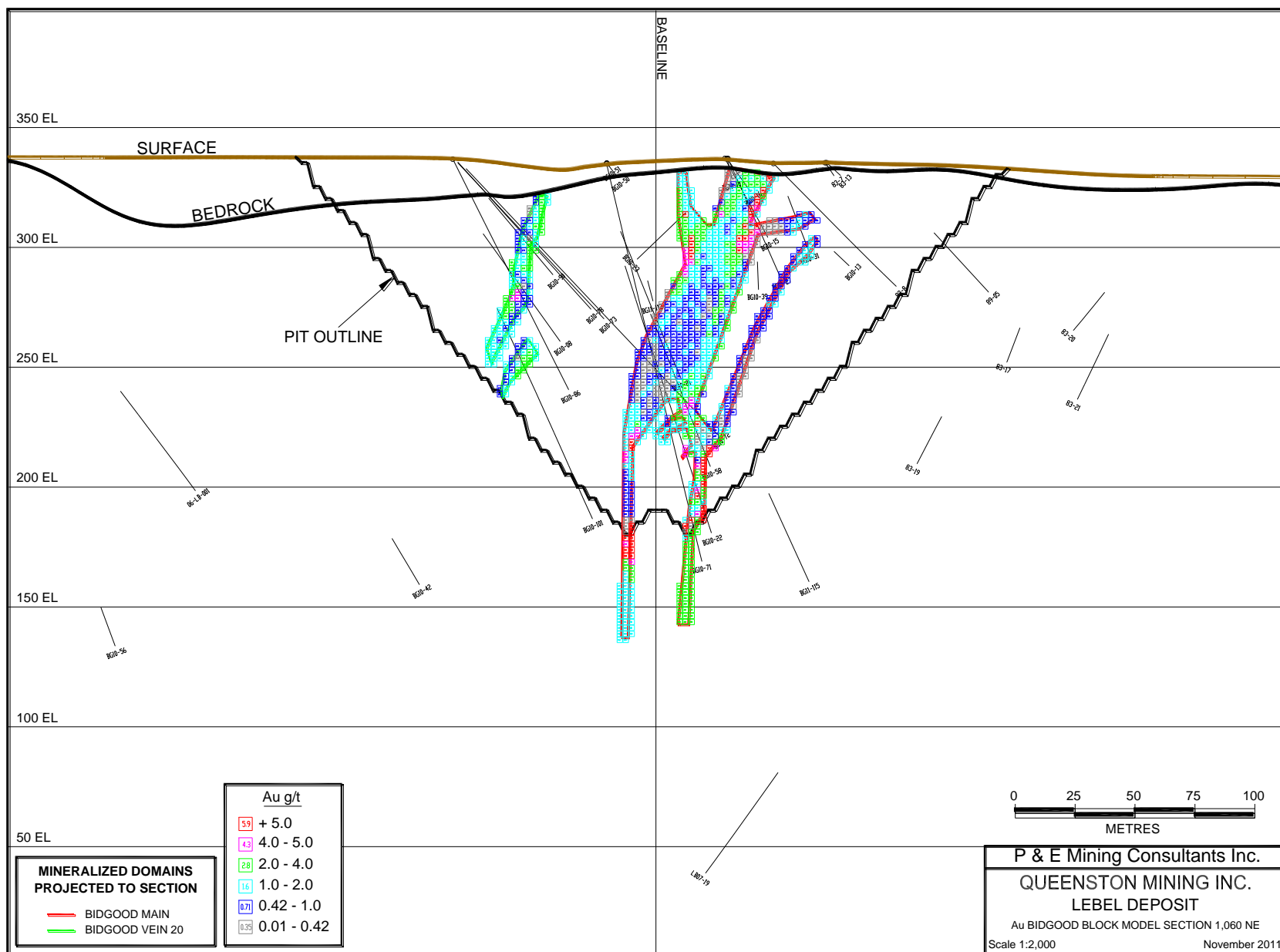


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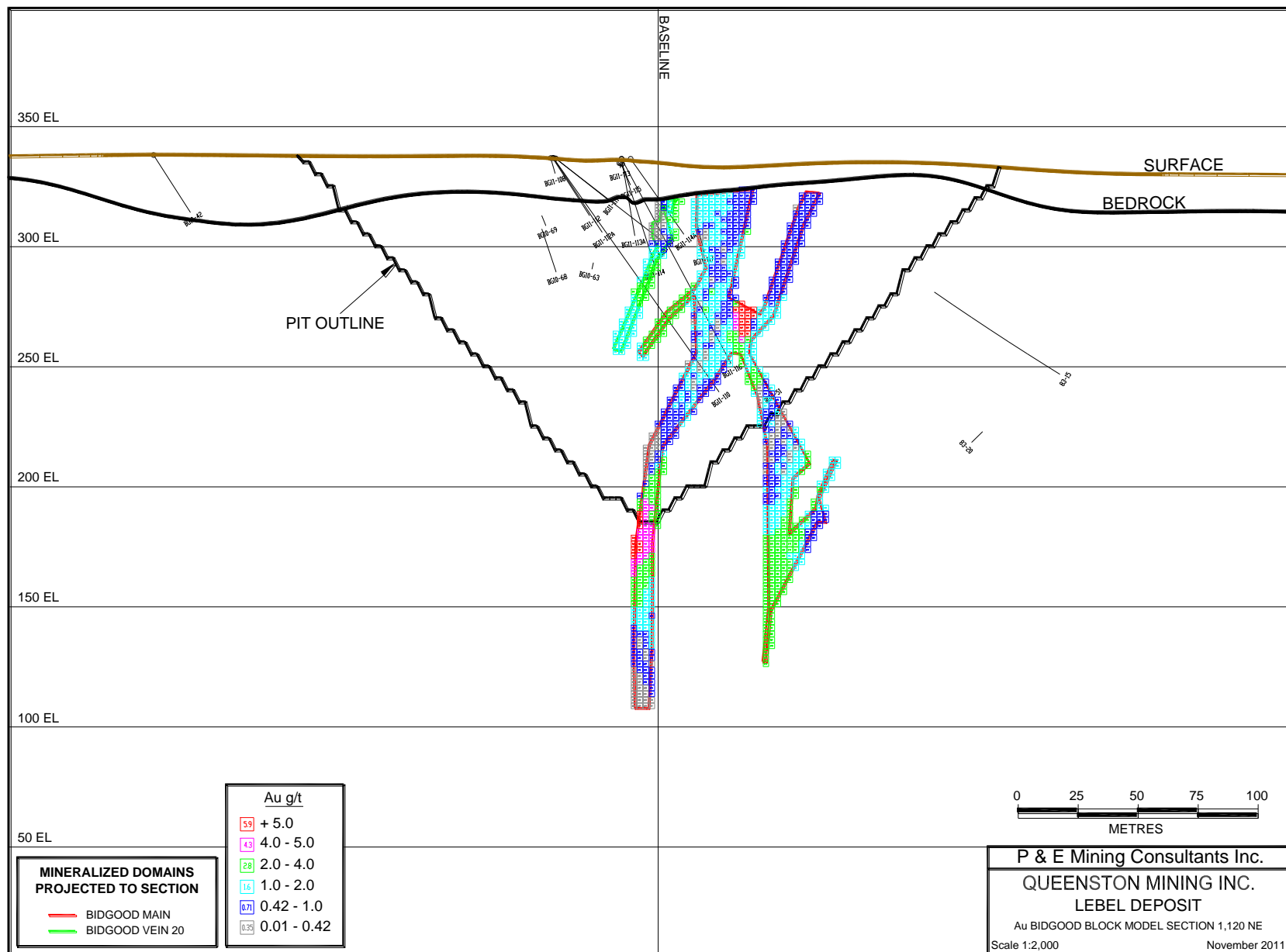


## **APPENDIX V. AU BLOCK MODEL CROSS SECTIONS AND PLANS**

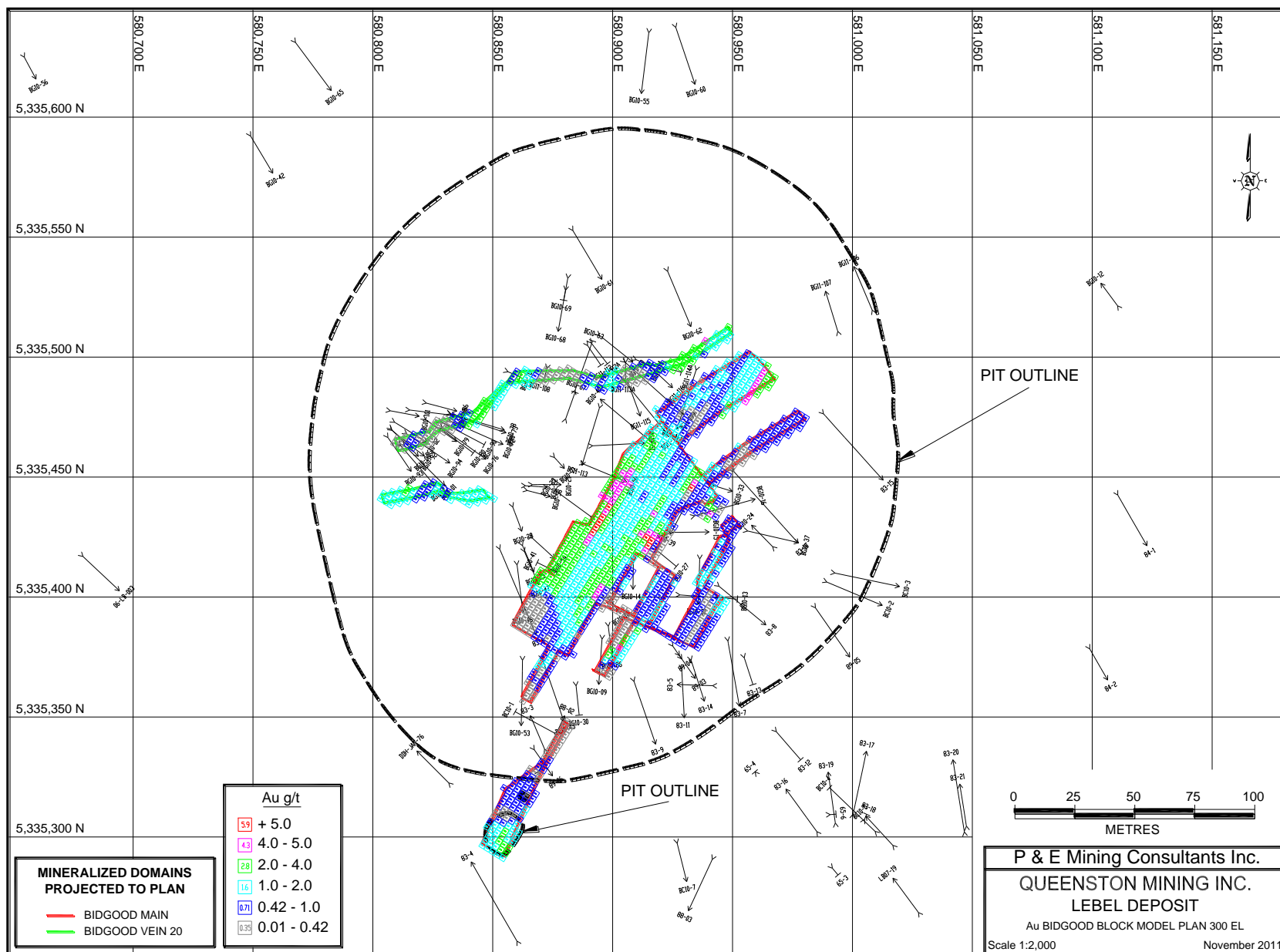


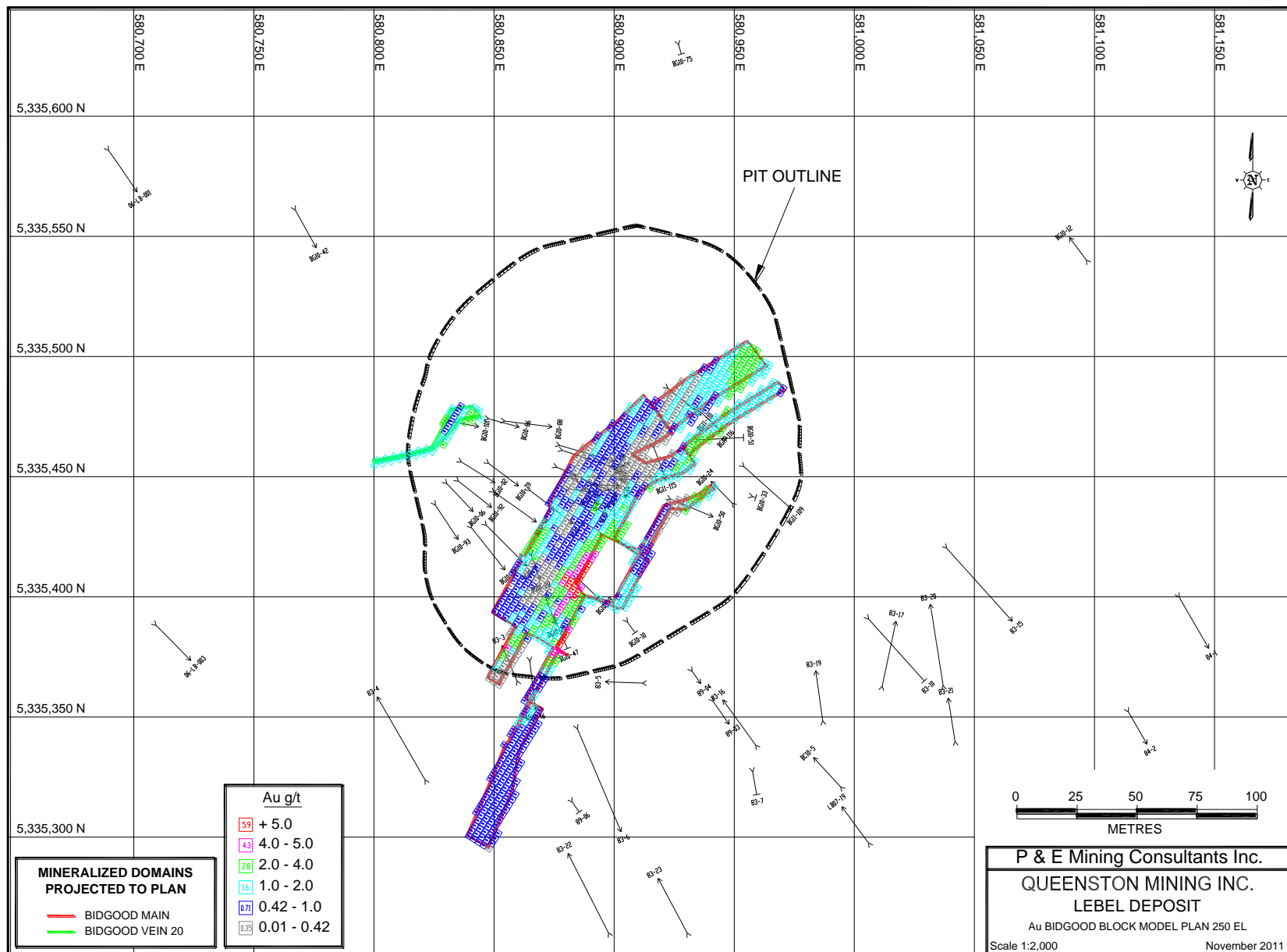


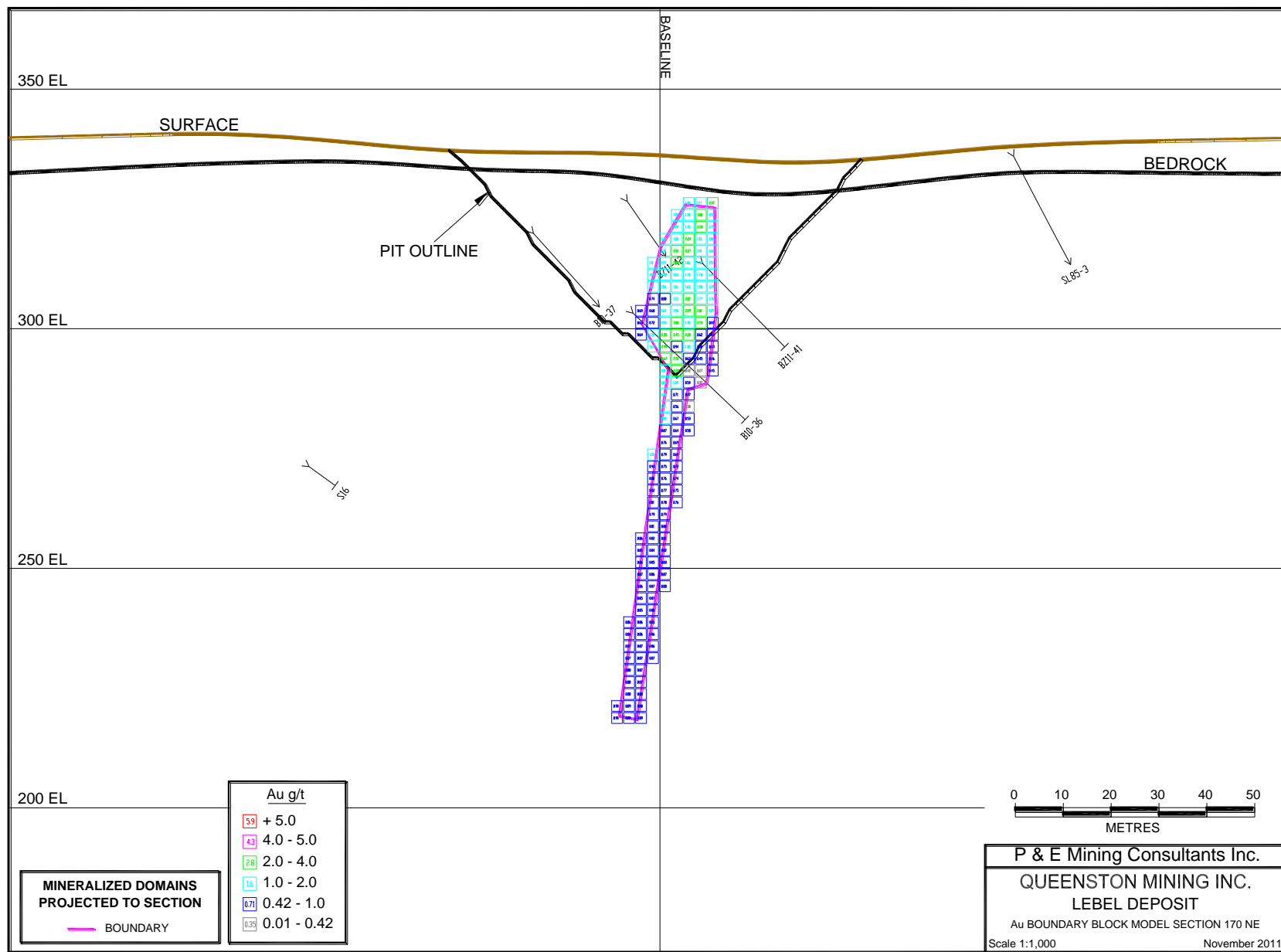


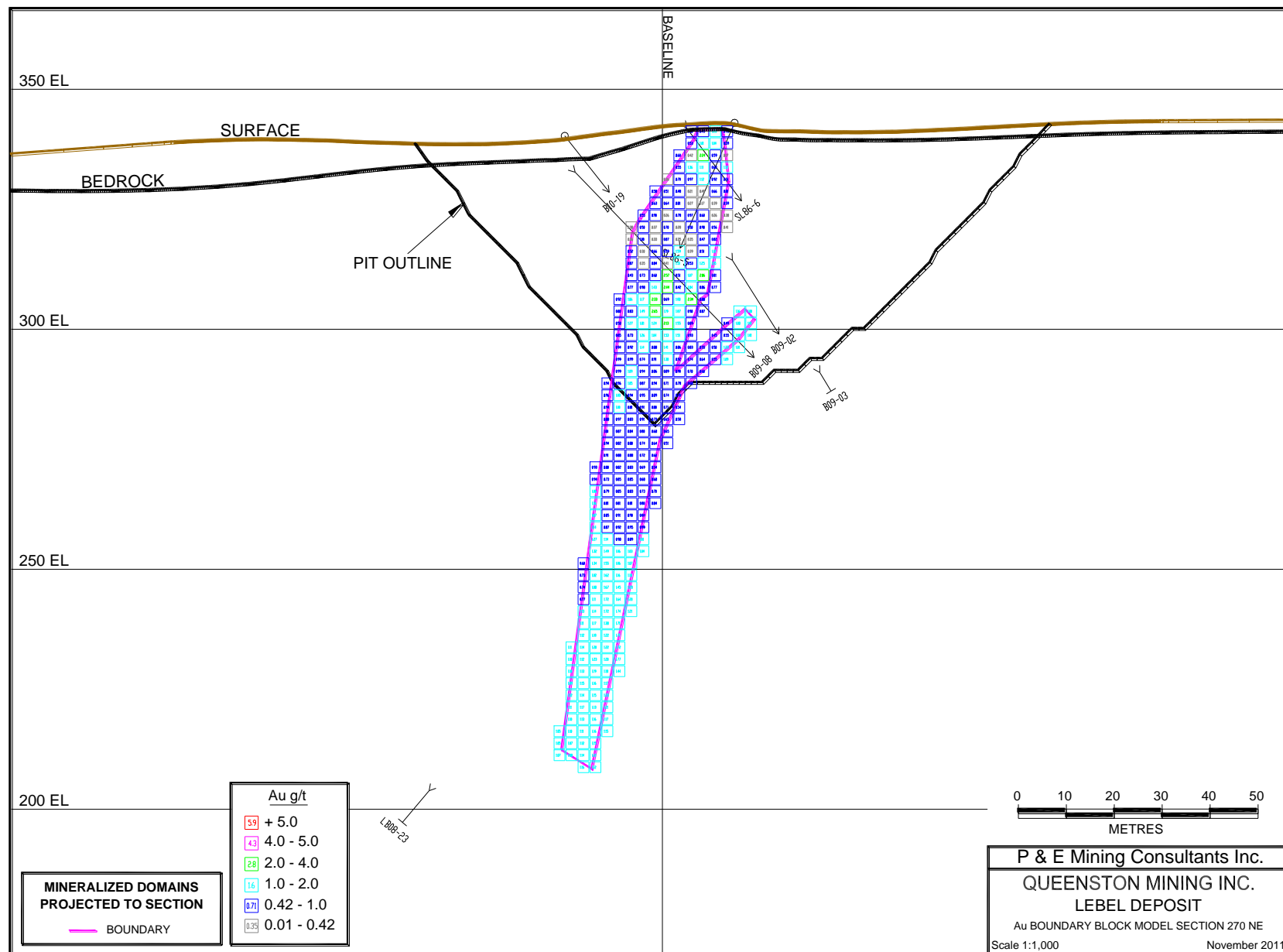


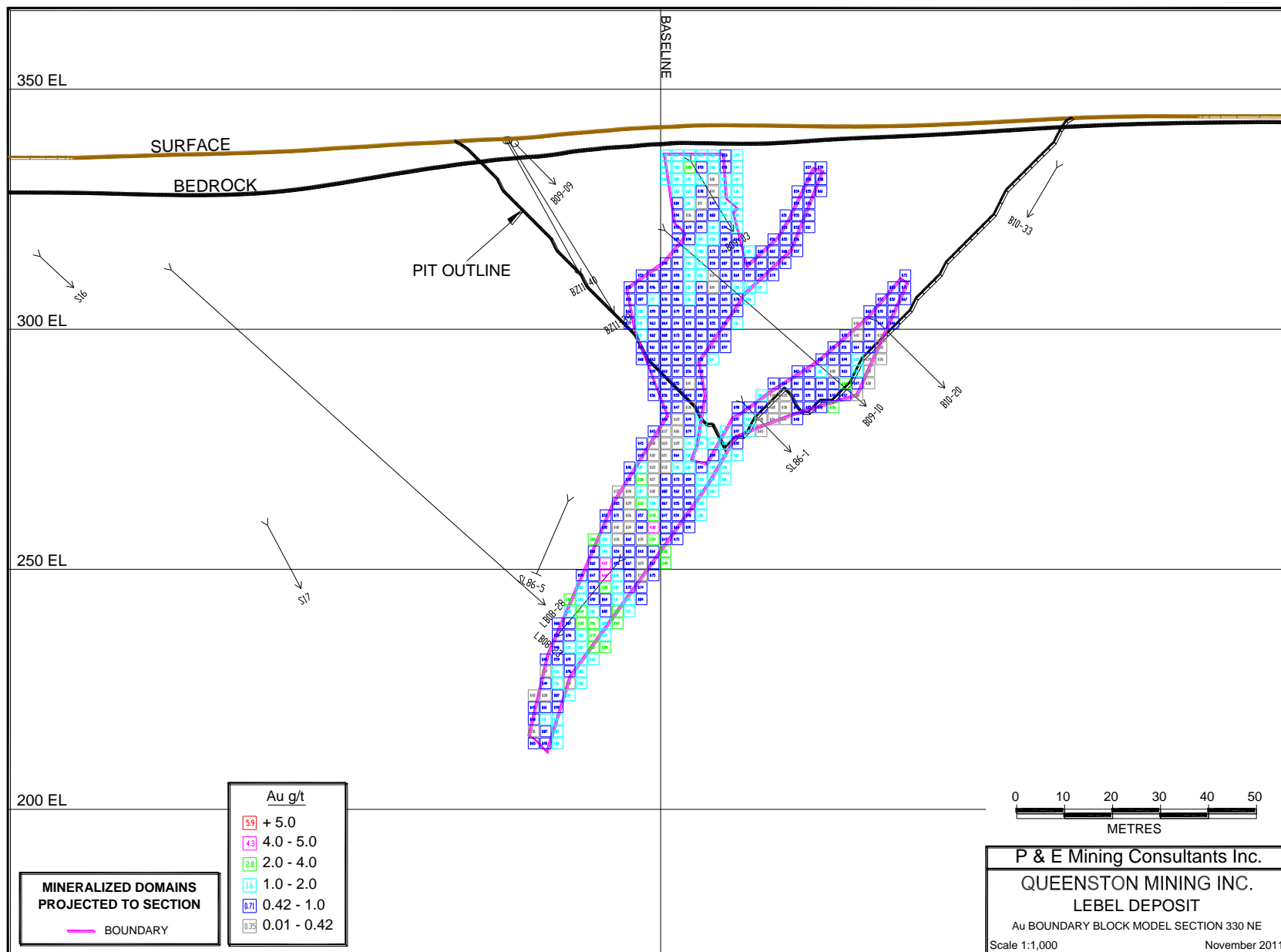


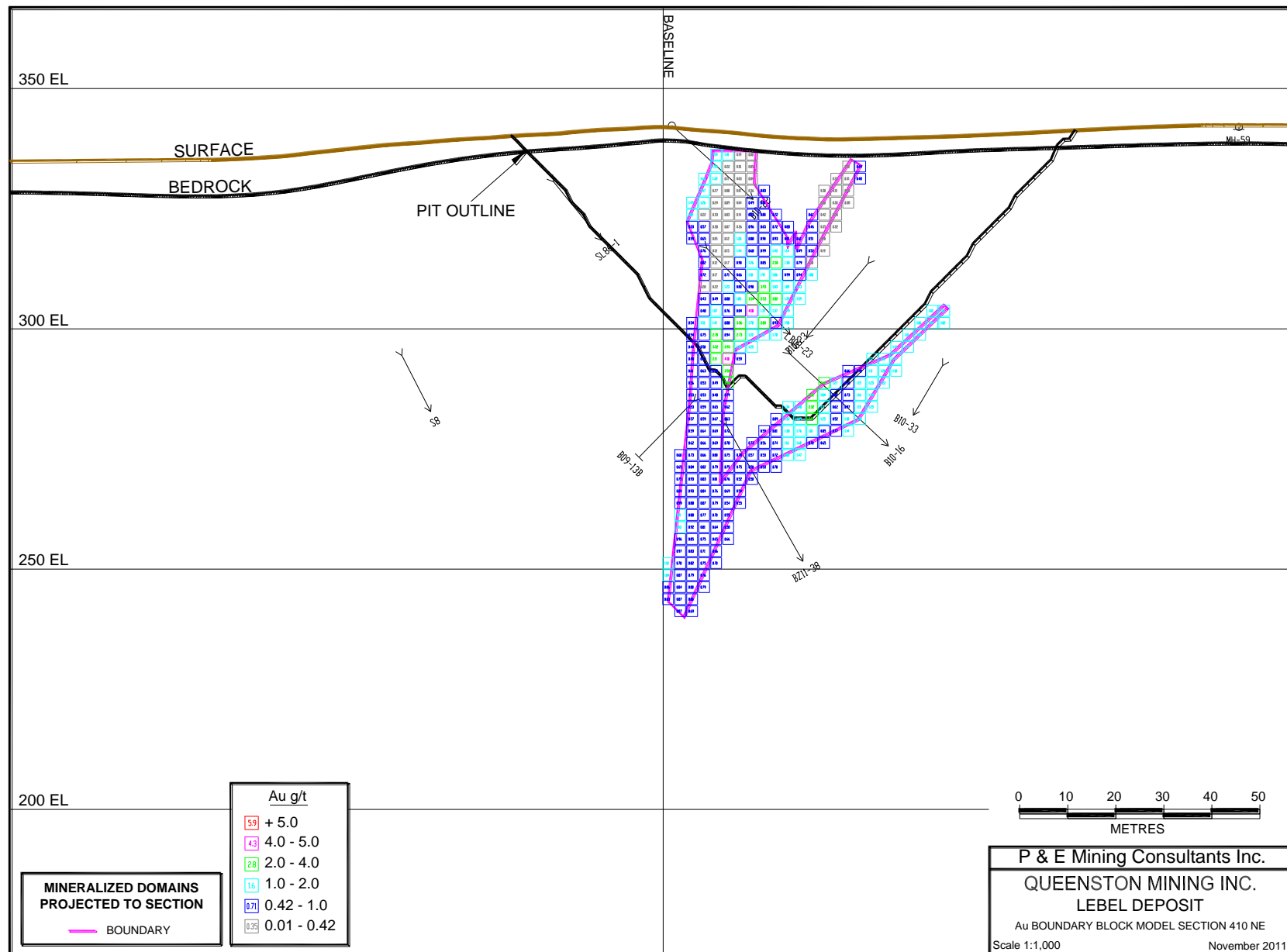








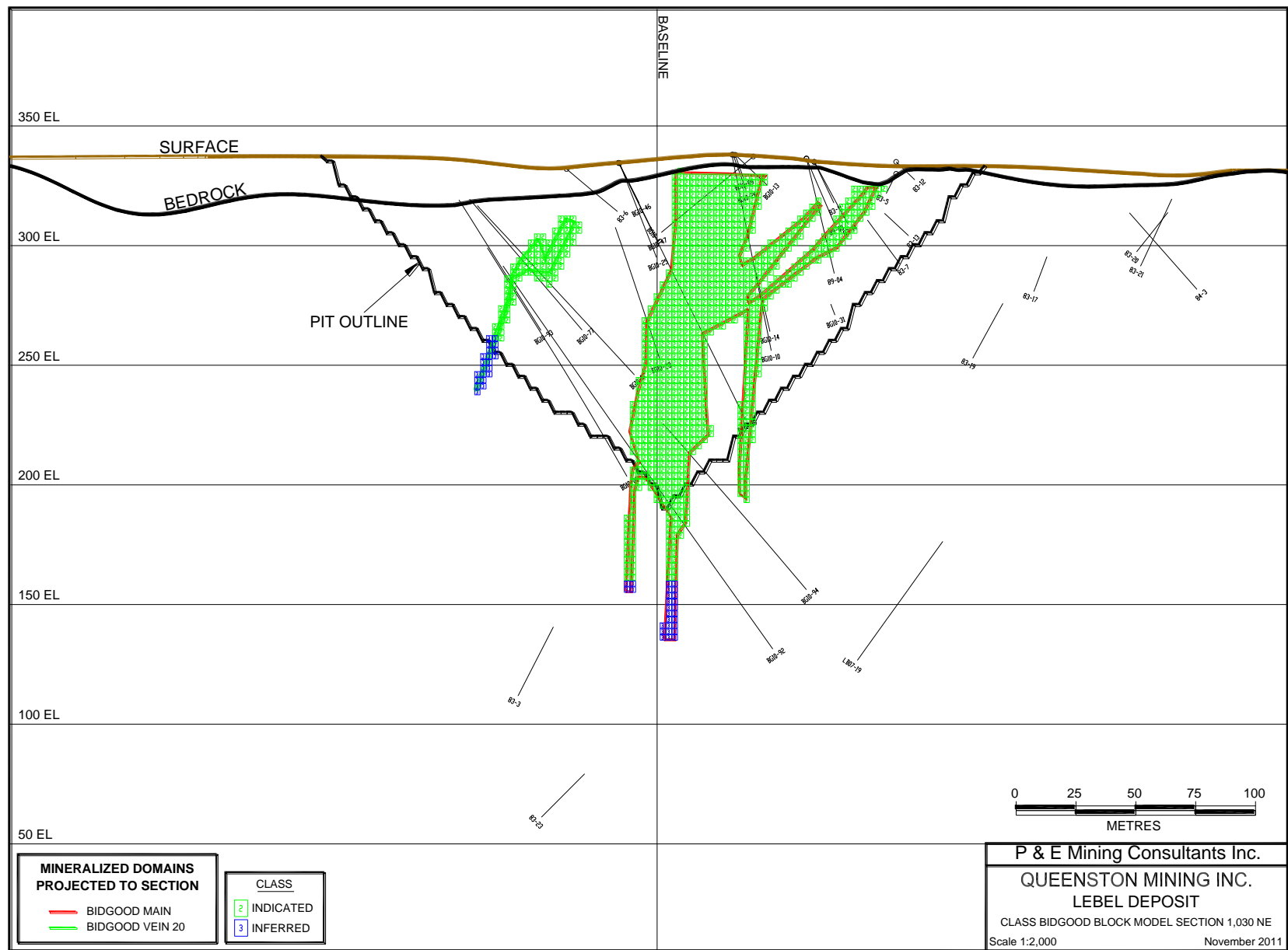


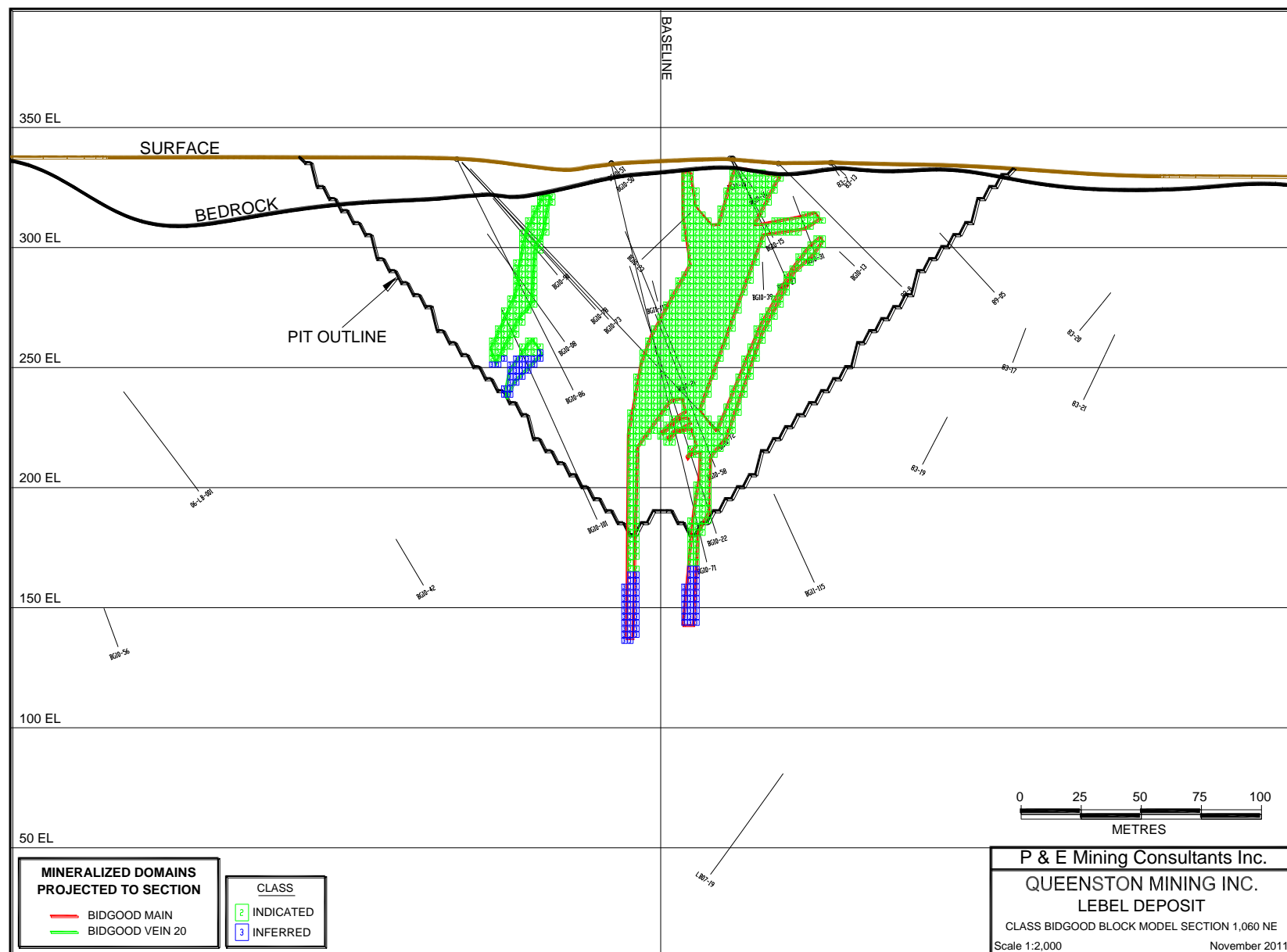


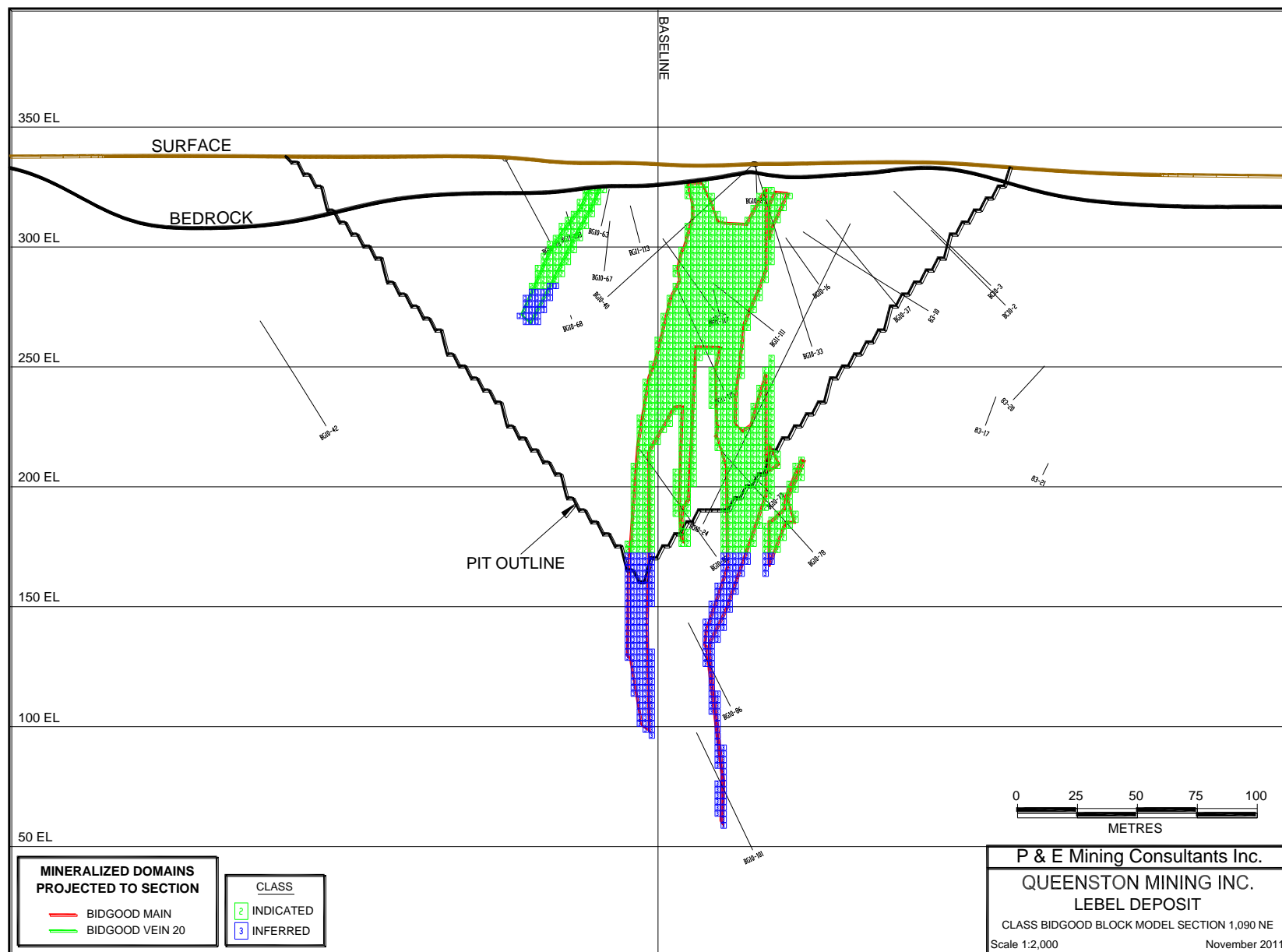


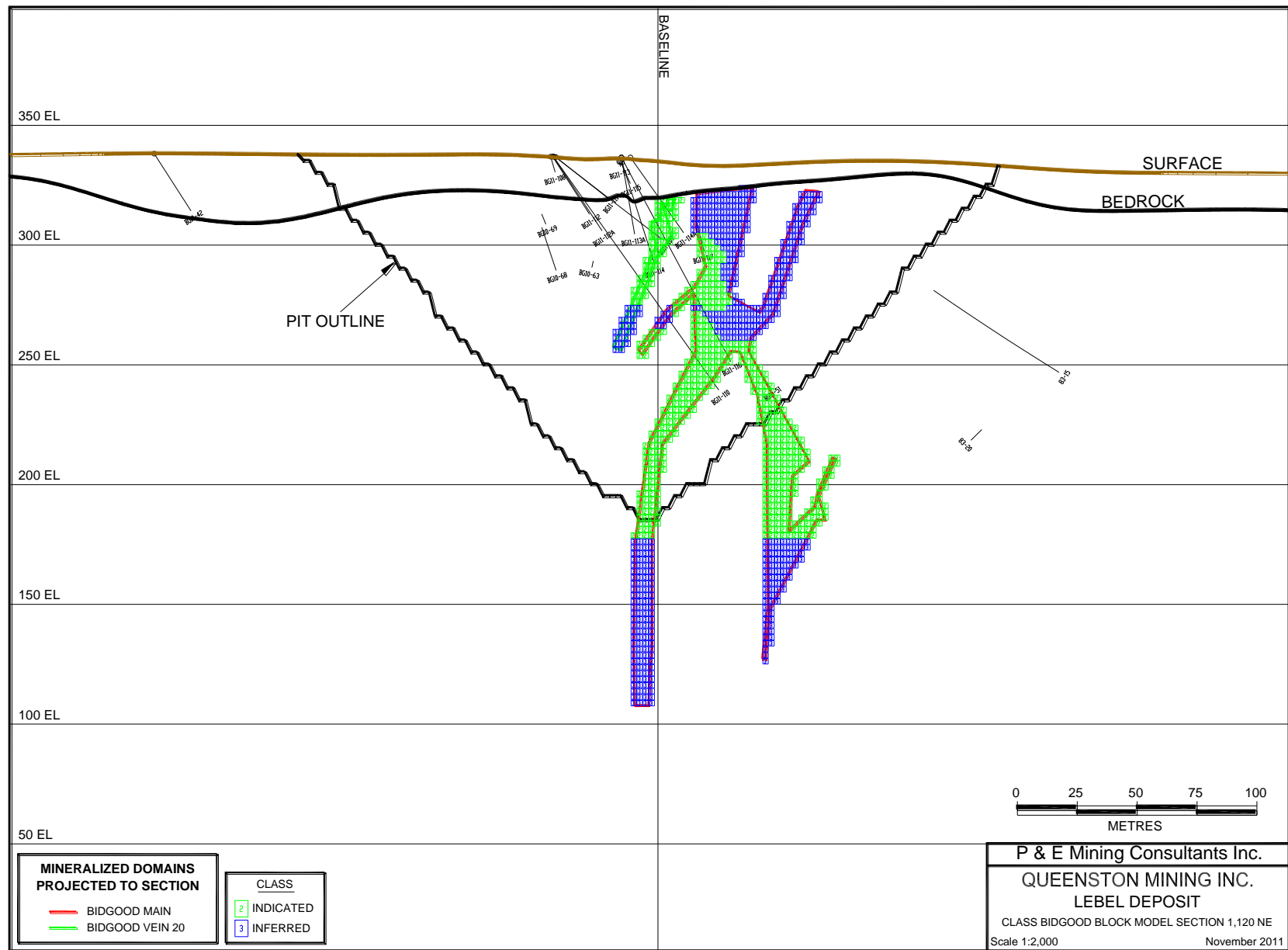
## **APPENDIX VI. CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS**

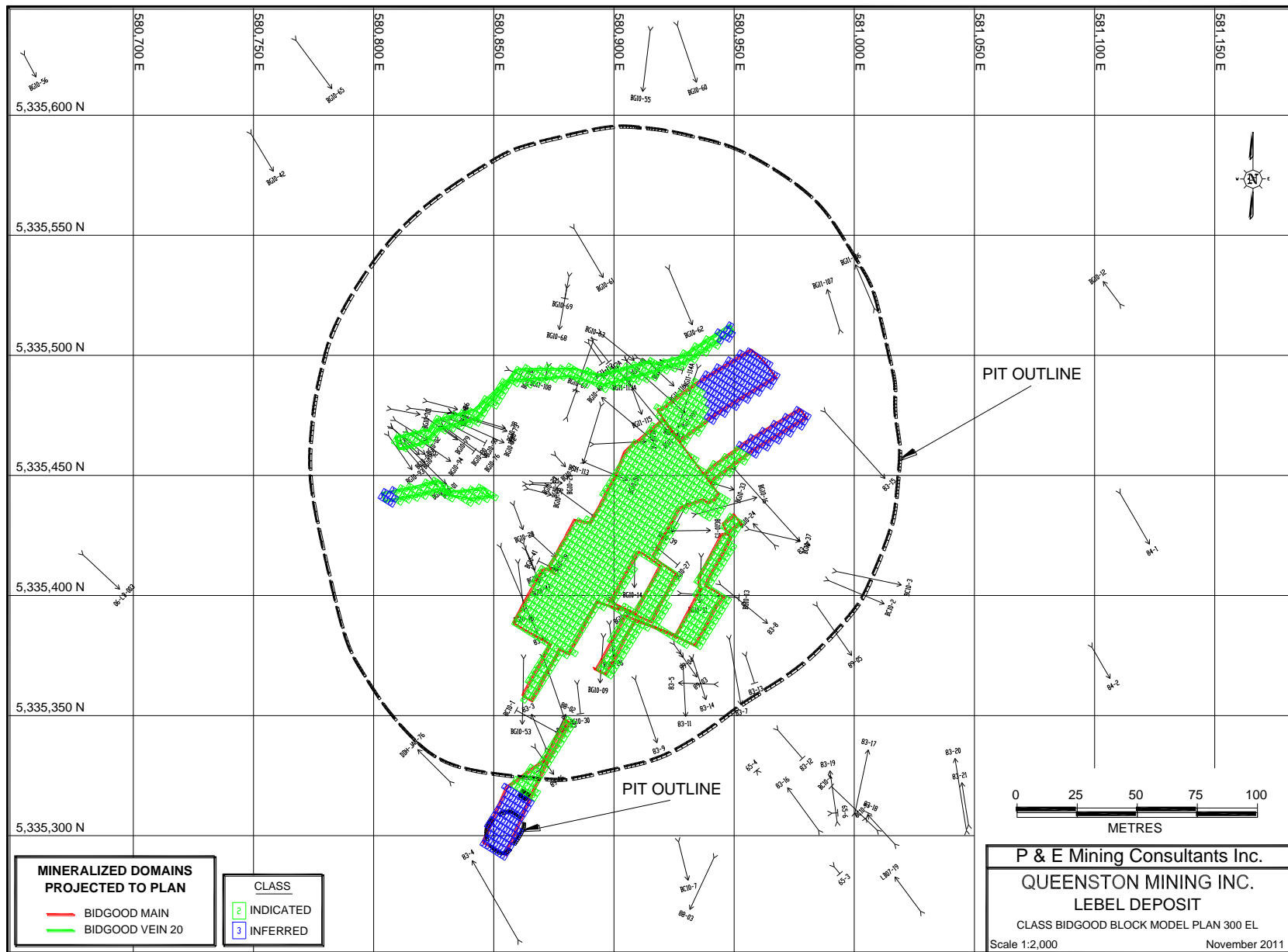


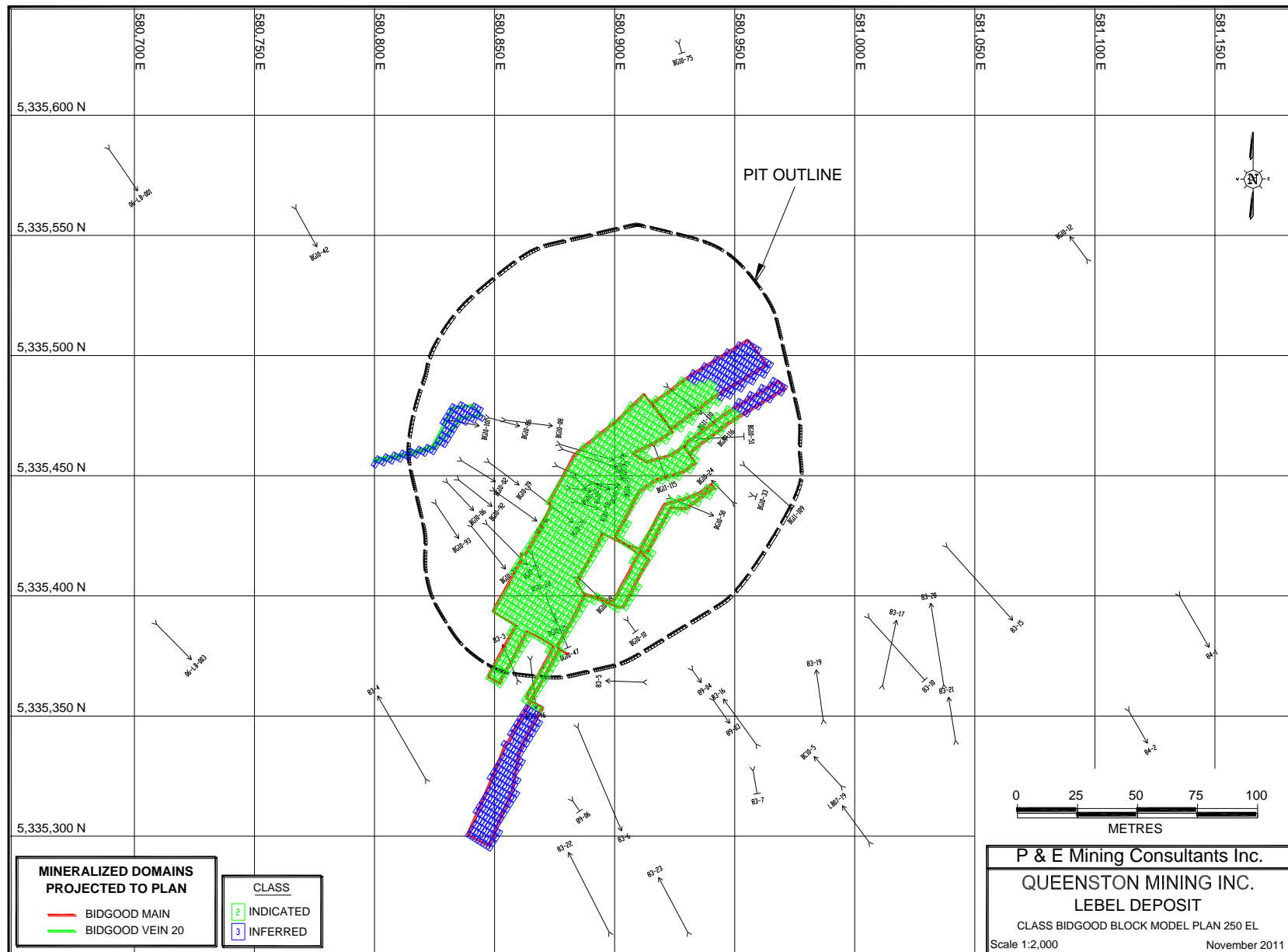


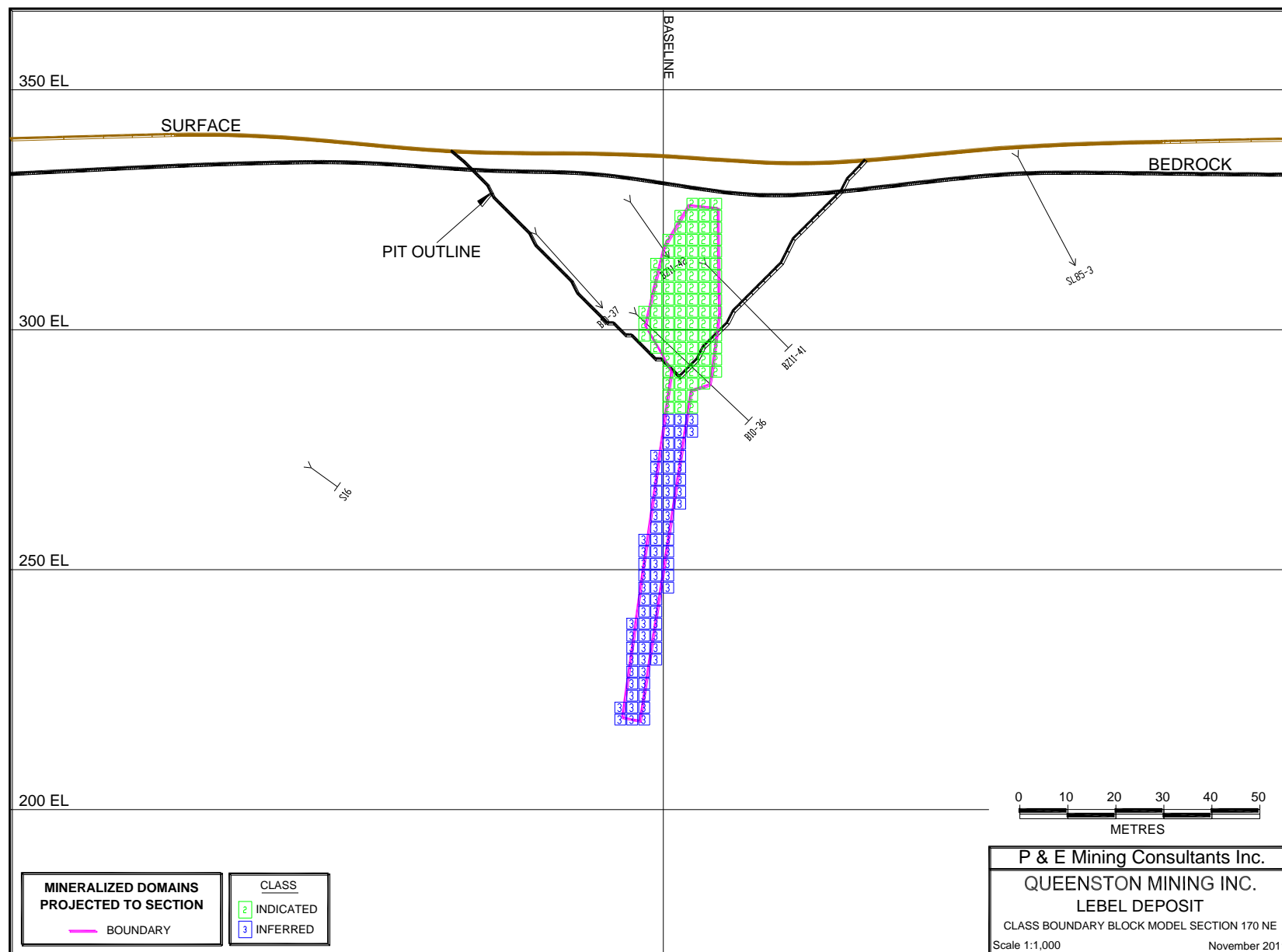


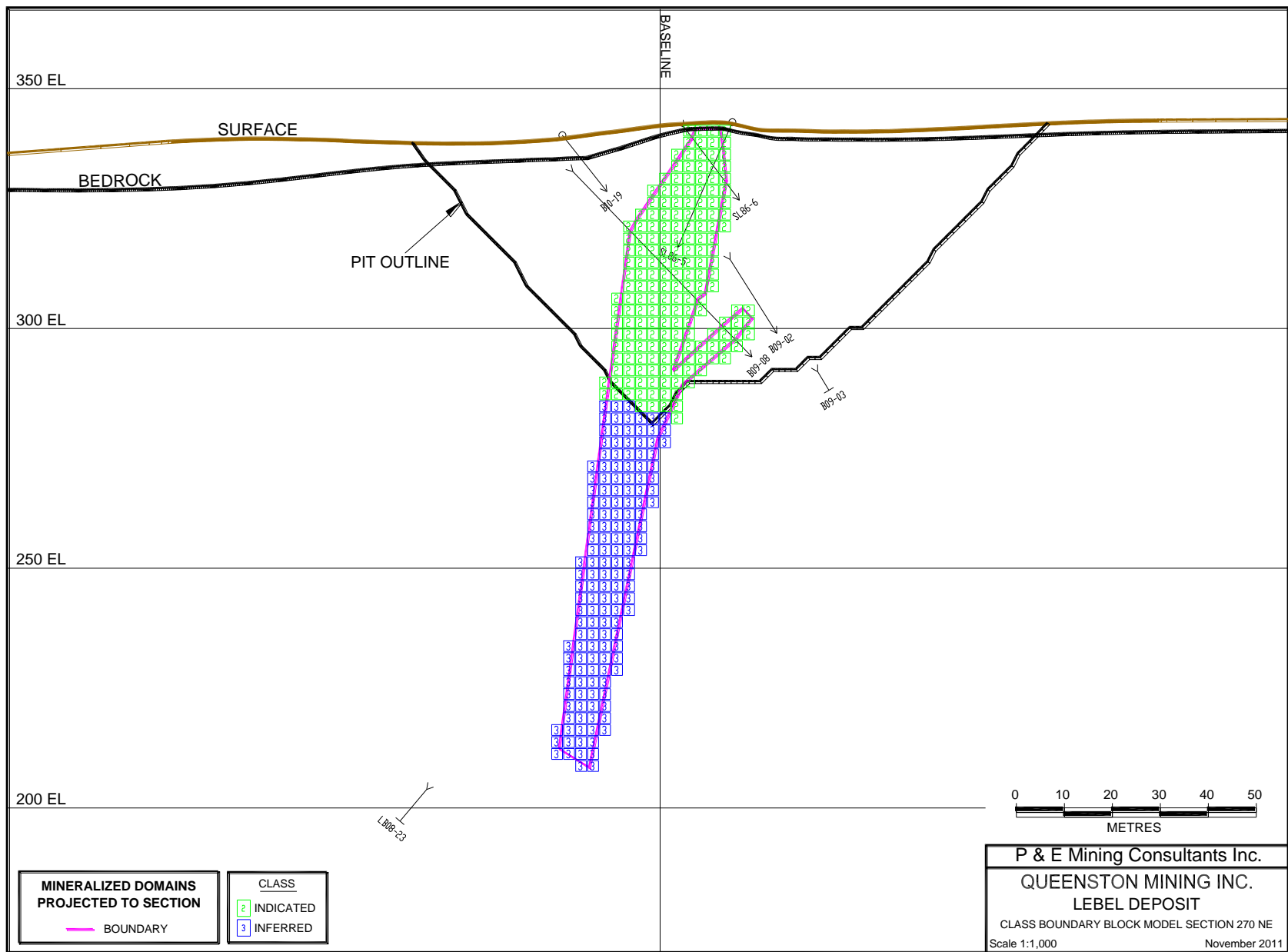






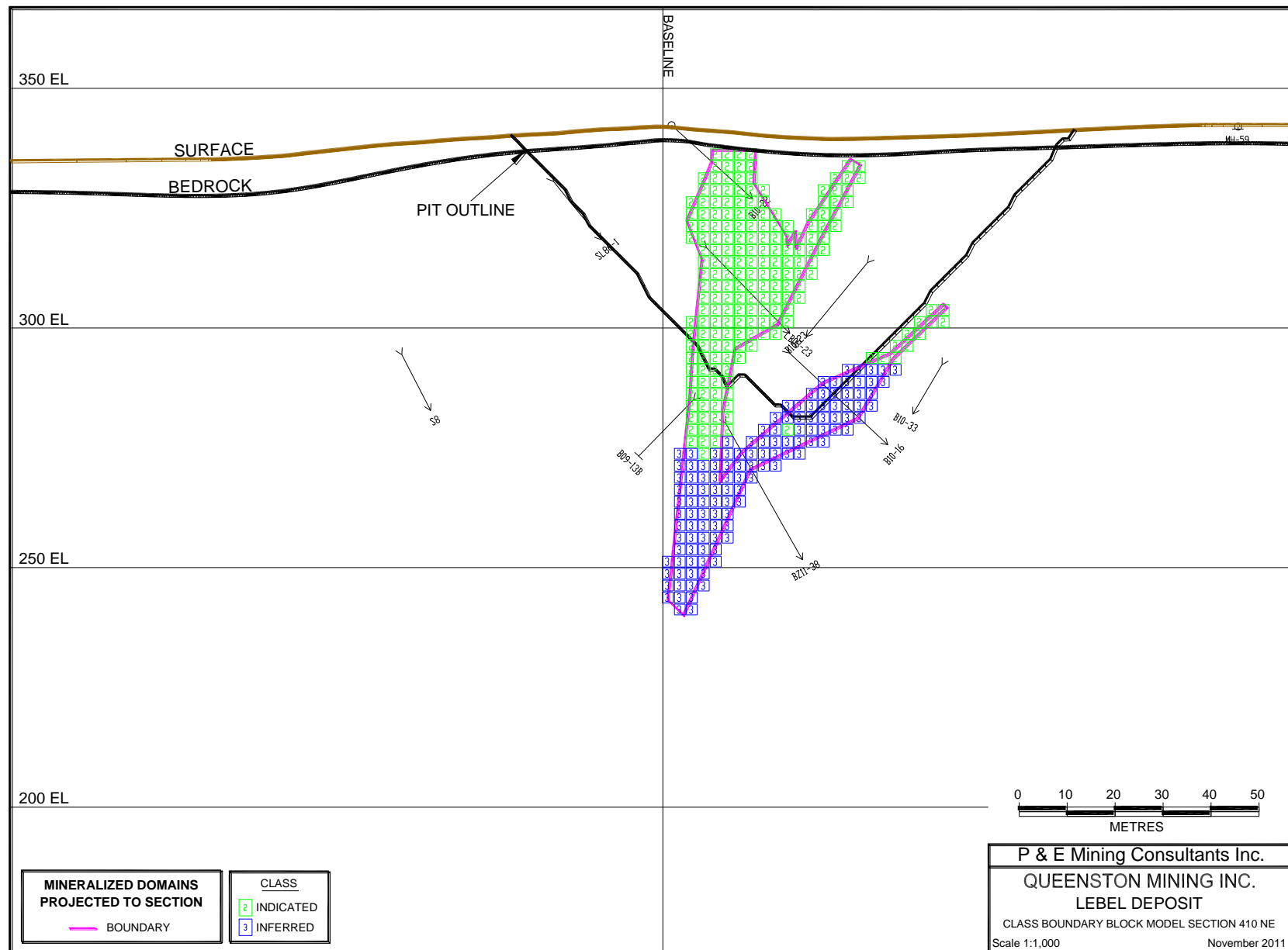








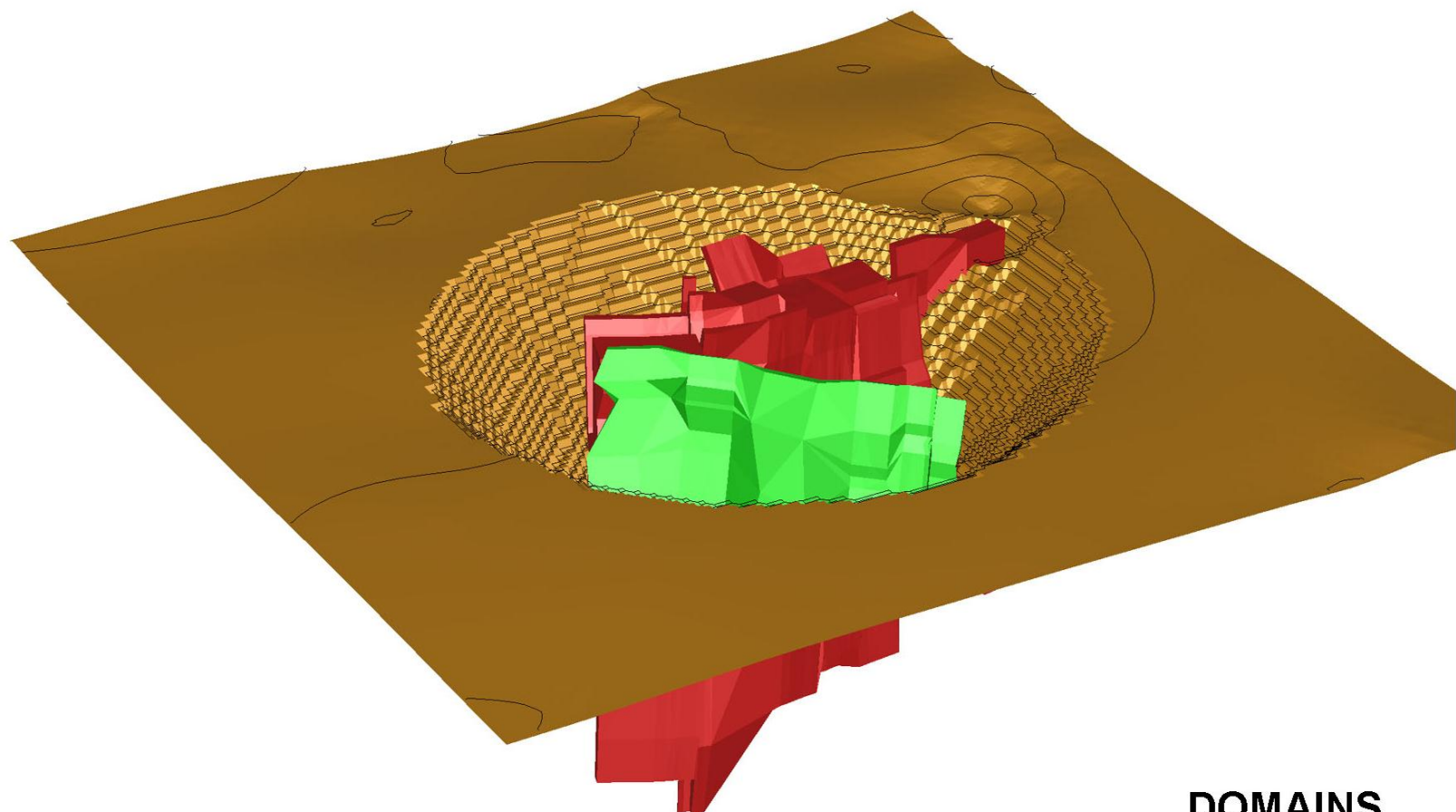






## **APPENDIX VII. RESOURCE PIT SHELLS**

## BIDGOOD DEPOSIT - OPTIMIZED PIT SHELL



### DOMAINS

- BIDGOOD MAIN
- BIDGOOD VEIN 20

## BOUNDARY DEPOSIT - OPTIMIZED PIT SHELL

