# TECHNICAL REPORT
# AND
# UPDATED RESOURCE ESTIMATE
# ON THE
# THIERRY CU-NI-PGE MINE
# AND K1-1 PROPERTY
# PICKLE LAKE AREA
# PATRICIA MINING DISTRICT
# NORTH-WESTERN ONTARIO, CANADA.

**FOR**

**CADILLAC VENTURES INC.**

**51°29'51.32" N**
**90°20'52.45" W**

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

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**P & E Mining Consultants Inc.,**
**Report 237**

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## 1.0 SUMMARY

Cadillac Ventures Inc. (Cadillac) retained P&E Mining Consultants Inc. (P&E) to prepare an independent NI 43-101 compliant Technical Report and Updated Resource Estimate of the Thierry copper-nickel platinum group elements (PGE) deposit and the adjacent K1-1 deposit both located 12 km west of Pickle Lake and 450 kilometers north of Thunder Bay, Ontario. The basic purpose of this report is to encompass the most recent drill data in order to prepare an updated Resource Estimate on the K1-1 deposit as well as an updated Resource Estimate on the past producing Thierry Mine that supersedes the updated NI 43-101 compliant Resource Estimate prepared by P&E in 2011.

The updated Resource Estimate has been prepared pursuant to the National Instrument 43-101 regulations and guidelines, which require that all estimates be prepared in accordance with the "CIM Definition Standards on Mineral Resources and Mineral Reserves as prepared by the CIM Standing Committee on Reserve Definitions" and in effect as of the effective date of the report.

UMEX produced a total of 5.8 million tons of copper-nickel ore from the deposit with an average grade of 1.13% Cu and 0.14% Ni (leaving in excess of 8 million tons of the original resource in the ground). In addition minor payable amounts of precious metals were also reported: Platinum 17,500 oz; Palladium 47,000 oz; Gold 17,000 oz and Silver 900,000 oz. Production ceased in 1982 due to low metal prices.

During preparation of the updated P&E 2010 Resource Estimate it became obvious that certain gaps in the drilling pattern in the mine area still existed and prevented maximization of the mineral Resource Estimate.

An infill drill program consisting of 22,300 ft (6,800 m) of drilling in six diamond drill holes was completed by Cadillac in May 2011.

Also, another six hole diamond drill program, designed to test for shallower extension of mineralization from the known and modeled deposit, was completed in April of 2011. This drill program extended the mineralized zone east and west of the 2010 P&E deposit model with both directions remaining open. An updated Resource Estimate (P&E 2011), incorporating the 2011 drill results, is presented in Table 1.1. For Thierry, an Indicated and Measured Resource of 8,281,000 tonnes containing 1.73% Cu, 0.2% Ni, 4.3 g/t Ag, 0.05 g/t Au, 0.04 g/t Pt and 0.13 g/t Pd and an Inferred Resource of 14,639,000 tonnes containing 1.70% Cu, 0.16% Ni, 6.5 g/t Ag, 0.10, 0.07 g/t Pt, and 0.21 g/t Pd, using an NSR cut-off of C$46.30/tonne was calculated.

**TABLE 1.1**
**AUGUST 2011 P&E UPDATED RESOURCE ESTIMATE @ $46.30/TONNE NSR CUT-OFF(1-6)**

| Class | Tonnes | Cu % | Ni % | Ag g/t | Au g/t | Pt g/t | Pd g/t |
|---|---|---|---|---|---|---|---|
| Measured | 3,033,000 | 1.70 | 0.20 | 4.8 | 0.03 | 0.03 | 0.10 |
| Indicated | 5,248,000 | 1.75 | 0.20 | 4.0 | 0.06 | 0.05 | 0.15 |
| Meas&Ind | 8,281,000 | 1.73 | 0.20 | 4.3 | 0.05 | 0.04 | 0.13 |
| Inferred | 14,639,000 | 1.70 | 0.16 | 6.5 | 0.10 | 0.07 | 0.21 |

*(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.*

*(2) The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an indicated or measured mineral*

*resource and it is uncertain if further exploration will result in upgrading them to an indicated or measured mineral resource category.*

*(3) The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

*(4) The July 31, 2011 two year trailing average US metal prices used in this estimate were $3.57/lb Cu, $9.98/lb Ni, $23.87/oz Ag, $1,258/oz Au, $1,605/oz Pt and $557/oz Pd. The C$US$ Exchange rate was 0.98.*

*(5) Overall payable metal in the NSR calculation were 84% Cu, 13% Ni and 37% for Ag, Au, Pt & Pd.*

*(6) Costs used to determine the C$46/tonne NSR cut-off value are as follows: mining C$28/tonne, processing C$13/tonne and G&A C$5.30/tonne.*

In March of 2011, Cadillac Ventures commenced a 16 hole drill program that was completed in June of 2011 for a total of 12,500 ft (3,810 m) of drilling. For the K1-1 deposit, an Inferred Mineral Resource of 19,897,000 tonnes grading 0.10% Ni, 0.42% Cu, 2.0 g/t Ag, 0.03 g/t Au, 0.05 g/t Pt and 0.15 g/t Pd, using an NSR cut-off of $15/tonne was calculated.

**TABLE 1.2**
**OCTOBER 2011 P&E UPDATED RESOURCE ESTIMATE @ $15/TONNE NSR CUT-OFF(1-8)**

| NSR Cut-off | Tonnes (M) | Ni % | Cu % | Ag g/t | Au g/t | Pt g/t | Pd g/t |
|---|---|---|---|---|---|---|---|
| C$15/tonne | 19.897 | 0.1 | 0.42 | 2.0 | 0.03 | 0.05 | 0.15 |

*(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.*

*(2) The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.*

*(3) The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

*(4) The July 31, 2011 two year trailing average US metal prices used in this estimate were $3.57/lb Cu, $9.98/lb Ni, $23.87/oz Ag, $1,258/oz Au, $1,605/oz Pt and $557/oz Pd. The C$US$ Exchange rate was 0.98.*

*(5) Overall payable metal (process recovery x smelter payable) in the NSR calculation were 84% Cu, 13% Ni and 37% for Ag, Au, Pt & Pd.*

*(6) Mineral resources were determined within a Whittle pit shell with 50 degree slopes utilizing mining costs of C$2.00/tonne for mineralized material and waste rock, and C$1.50/tonne for overburden.*

*(7) Costs used to determine the C$15/tonne NSR resource cut-off value were processing at C$12/tonne and G&A C$3.00/tonne.*

*(8) The K1-1 Mineral Resource Estimate were undertaken by Antoine Yassa, P.Geo, Richard Routledge, P.Geo and Eugene Puritch, P.Eng. of P&E Mining Consultants Inc.*

In February of 2012, Cadillac revised the Resource Estimate for the underground portion of the Thierry Mine Project based upon the operating costs of conceptually combining the operations of the Thierry underground and the K1-1 open pit deposits. This combination of operations resulted in a decrease to the NSR cut-off $5.30/tonne for the underground resource. The revised Resource Estimate is presented in Table 1.3.

**TABLE 1.3**
**RESOURCE ESTIMATE @ $41/TONNE NSR CUT-OFF[1-6]**

| Class | Tonnes | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t |
|---|---|---|---|---|---|---|---|
| Measured | 3,233,000 | 1.65 | 0.19 | 0.03 | 0.03 | 0.09 | 4.6 |
| Indicated | 5,582,000 | 1.66 | 0.19 | 0.05 | 0.05 | 0.14 | 3.8 |
| Meas&Ind | 8,815,000 | 1.66 | 0.19 | 0.05 | 0.04 | 0.13 | 4.0 |
| Inferred | 14,922,000 | 1.64 | 0.16 | 0.10 | 0.07 | 0.21 | 6.4 |

*(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.*

*(2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.*

*(3) The mineral resources in this report 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) The January 31, 2011 two year trailing average US metal prices used in this estimate were $3.72/lb Cu, $10.15/lb Ni, $28.18/oz Ag, $1,419/oz Au, $1,663/oz Pt and $639/oz Pd. The C$US$ Exchange rate was 0.99.*

*(5) Overall payable metal (process recovery x smelter payable) in the NSR calculation were 84% Cu, 13% Ni and 37% for Ag, Au, Pt & Pd.*

*(6) Costs used to determine the C$41/tonne NSR cut-off value are as follows: mining C$40/tonne, processing C$9.50/tonne and G&A C$1.50/tonne.*

A second phase of drilling, consisting of 20,868 feet drilled over 26 holes, was completed in late 2011 and targeted the K1-1 open pit area. The lowered costs, from conceptually combining operating costs, were also incorporated into the Resource Estimate presented in Table 1.4.

**TABLE 1.4**
**OCTOBER 2011 P&E UPDATED RESOURCE ESTIMATE @ $11/TONNE NSR CUT-OFF[1-8]**

| NSR Cut-off | Tonnes (M) | Ni % | Cu % | Ag g/t | Au g/t | Pt g/t | Pd g/t |
|---|---|---|---|---|---|---|---|
| C$11/tonne | 53.614 | 0.1 | 0.38 | 1.83 | 0.03 | 0.05 | 0.14 |

*(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.*

*(2) The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.*

*(3) The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

*(4) The January 31, 2011 two year trailing average US metal prices used in this estimate were $3.72/lb Cu, $10.15/lb Ni, $28.18/oz Ag, $1,419/oz Au, $1,663/oz Pt and $639/oz Pd. The C$US$ Exchange rate was 0.99.*

*(5) Overall payable metal (process recovery x smelter payable) in the NSR calculation were 84% Cu, 13% Ni and 37% for Ag, Au, Pt & Pd.*

*(6) Mineral resources were determined within a Whittle pit shell with 50 degree slopes utilizing mining costs of C$2.00/tonne for mineralized material and waste rock, and C$1.50/tonne for overburden.*

*(7) Costs used to determine the C$15/tonne NSR resource cut-off value were processing at C$12/tonne and G&A C$3.00/tonne.*

*(8) The K1-1 Mineral Resource Estimate were undertaken by Antoine Yassa, P.Geo, Richard Routledge, P.Geo and Eugene Puritch, P.Eng. of P&E Mining Consultants Inc.*

With regard to K1-1 Mineral Resources, P&E recommends the following:

- Complete a Preliminary Economic Assessment;
- Fill-in drilling and definition drilling up to 6,850 m in the pit and zones immediately in the footwall of the pit to upgrade the Inferred Resource to Indicated;
- Collect a bulk sample for metallurgical testing;
- Conduct geotechnical and preliminary environmental/hydrological studies;
- Collar surveys and down hole azimuth and dip surveys should be completed on all fill-in holes and for unsurveyed/partially surveyed previous holes where practicable;
- The drillhole database should be converted to SI (metric units).

This work is expected to cost in the order of $5.2 million. A cost breakdown is presented in the following table.

**TABLE 1.5**
**RECOMMENDED PROGRAM AND BUDGET**

| Program | Unit Costs | Budget |
|---|---|---|
| **Scoping Study Thierry Mine & K1-1** | | **$250,000** |
| | | |
| **K1-1 Project** | | |
| Fill-in & Definition drilling | 6,850 m @ $280/m | $1,918,000 |
| Drill Hole Collar Surveys | | $35,000 |
| Bulk Sampling (P Core Drilling) | | $750,000 |
| Metallurgical Testing | | $500,000 |
| Geotechnical Study | | $50,000 |
| Prelim. Environmental/Hydrological Study | | $50,000 |
| Resource Estimate Update | | $75,000 |
| | | |
| **Subtotal** | | **$3,378,000** |
| | | |
| **Thierry Mine Project** | | |
| Mine De-Watering & Rehabilitation Study | | $500,000 |
| Exploration & Target Drilling at Thierry | 3,000 m @ $280/m | $840,000 |
| Helicopter & Logistical support | 75 hrs. @ $1,800/hr | $135,000 |
| Bedrock Sampling | | $65,000 |
| Geological Studies | | $50,000 |
| | | |
| **Subtotal** | | **$1,590,000** |
| | | |
| **Total** | | **$5,218,000** |

***Note:*** *Subject to HST*

## 2.0 INTRODUCTION AND TERMS OF REFERENCE

## 2.1 TERMS OF REFERENCE

Cadillac Ventures Inc. ("Cadillac") has retained P&E Mining Consultants Inc. ("P&E") to prepare an updated Resource Estimate on the past producing Thierry Mine and K1-1 deposit that supersedes the updated NI 43-101 compliant Resource Estimate prepared by P&E on the copper-nickel-PGE Thierry Mine and K1-1 Property in 2011. The Thierry deposit is located 12 km west of Pickle Lake and 450 kilometers north of Thunder Bay, Ontario. The current Resource Estimates have been prepared in full conformance with the "CIM Standards on Mineral Resources and Reserves – Definitions and Guidelines" as referred to in National Instrument (NI) 43-101 and Form 43-101F, Standards of Disclosure for Mineral Projects and in force as of the effective date of this report.

This Technical Report was prepared pursuant to NI 43-101 regulations and guidelines by P&E Mining Consultants Inc., at the request of Mr. Norm Brewster, President and CEO of Cadillac Ventures Inc., an Ontario registered company trading under the symbol of "CDC" on the TSX Venture Exchange with its corporate office at

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This report is considered current as of February 13, 2012.

Mr. Eugene Puritch P.Eng., a qualified person under the terms of NI 43-101, conducted a site visit of the Property on December 15, 2005, May 5, 2010 and again on June 2, 2011. Data verification sampling programs were conducted as part of the on-site reviews.

## 2.2 SOURCES OF INFORMATION

This report is based, in part, on internal company technical reports, and maps, published government reports, company letters and memoranda, and public information as listed in the "References" section at the conclusion of this report. P&E has not conducted detailed land status evaluations, and has relied upon existing reports, public documents, and statements by previous owners regarding the property tenure and status, third party agreements, and legal title to the Property. Additional details of the topic can be found in the public filings of Richview as available on SEDAR at www.sedar.com

The present Technical Report is prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101) and in compliance with Form NI 43-101F1 of the Ontario Securities Commission (OSC) and the Canadian Securities Administrators (CSA). The resource estimate is prepared in compliance with the CIM Definitions and Standards on Mineral Resources and Mineral Reserves that are in force as of the effective date of this report.

## 2.3 UNITS AND CURRENCY

Unless otherwise stated all units used in this report are metric. Base metal assays (Ni, Cu, Co) are reported in % while gold and platinum group precious metal assay values (Au, Pt, Pd, Rh) are reported in grams of metal per tonne ("g Au/t") unless ounces per ton ("oz Au/T") are specifically stated. The CDN$ is used throughout this report unless the US$ is specifically stated. At the time of this report the rate of exchange between the US$ and the CDN$ is 1 US$ = 1.00 CDN$.

## 2.4 GLOSSARY OF TERMS

The following list shows the meaning of the abbreviations for technical terms used throughout the text of this report.

| **Abbreviation** | **Meaning** |
|---|---|
| "Activation" | Activation Laboratories in Thunder Bay, Ontario |
| "Ag" | silver |
| "As" | arsenic |
| "Au" | gold |
| "Cadillac" | Cadillac Ventures Inc. |
| "cm" | centimetre(s) |
| "Co" | cobalt |
| "Cu" | copper |
| "DDH" | diamond drill hole |
| "ft" | foot |
| "g Au/t" | grams of gold per tonne of rock |
| "ha" | hectare(s) |
| "HLEM" | horizontal loop electromagnetic survey |
| "ICPOES" | inductively coupled plasma – optical emission spectrometry |
| "IP/RES" | induced polarization / resistivity survey |
| "km" | kilometre(s) |
| "m" | metre(s) |
| "Ma" | millions of years |
| "MAG" | magnetometer survey |
| "Ni" | nickel |
| "P&E" | P&E Mining Consultants Inc. |
| "PEA" | Preliminary Economic Assessment |
| "PGE" | platinum group elements (herein collectively to mean Pt, Pd, Au, Ag) |
| "Pt" | platinum |
| "Pd" | palladium |
| "Richview" | Richview Resources Inc. |
| "T" | short ton(s) |
| "t" | metric tonne |

## 3.0 RELIANCE ON OTHER EXPERTS

P&E has assumed that all of the information and 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.

Although copies of the licenses, permits and work contracts were reviewed, and an independent verification of land title and tenure performed using the Ministry of Ontario's CLAIMaps III website. 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 upon the efficacy of the legal due diligence process conducted by the legal counsels to Cadillac.

The environmental aspects of the Thierry Property were investigated and reported upon by Stephen Mlot, who was the expert responsible for the "Reclamation and Environmental" section of the SRK report. The environmental section of the current report is drawn entirely from the applicable sections of the SRK report and P&E has relied on Mr. Mlot regarding the environmental issues as referenced in the current report

A draft copy of the report has been reviewed for factual errors by Cadillac. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statement 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 DESCRIPTION

The Thierry Mine property is comprised of 27 mining leases, totalling 11,538 acres (4,670 hectares) located in the Dona Lake, Ponsford Lake, Tarp Lake and Kapkichi Lake areas in the Patricia Mining District, north-western Ontario. The mining leases, including the patented claims, as depicted on
Figure 4.1, were legally surveyed by UMEX in 1970. The mining leases are subject to a royalty interest payable to both UMEX and Kapkichi Nickel Mines Limited, although this interest does not include the actual Thierry mine site located on CLM 195 (see
Figure 4.1).

In addition to the mining leases, there are 3 unpatented contiguous claims totalling 752 ha acquired by staking in 2008 and 2009. The unpatented mining claims are summarized in Table 4.1 while the mining leases and patented claims are summarized in Table 4.2. The total combined property area is 5,422 hectares.

The unpatented mining are presently in good standing but will require that approximately $18,800 worth of assessment work be filed, per year, starting on September 10, 2010 to keep them current. None of these claims have surveyed boundaries.

**TABLE 4.1**
**UNPATENTED MINING CLAIMS - THIERRY MINE PROJECT**

| Claim No. | Unit Size (Ha) | Recorded Date | Due Date | Work Required | Ownership |
|---|---|---|---|---|---|
| PA 4247646 | 256.0 | 2009-Apr-21 | 2014-Apr-12 | $6,400 | Cadillac 100% |
| PA 4247647 | 256.0 | 2009-Apr-21 | 2014-Apr-12 | $6,400 | Cadillac 100% |
| PA 4247648 | 240.0 | 2009-Apr-21 | 2014-Apr-12 | $6,000 | Cadillac 100% |
| | | | | | |
| **Total 7 claims** | **752 ha** | | | **$18,800.00** | |

## 4.2 TENURE

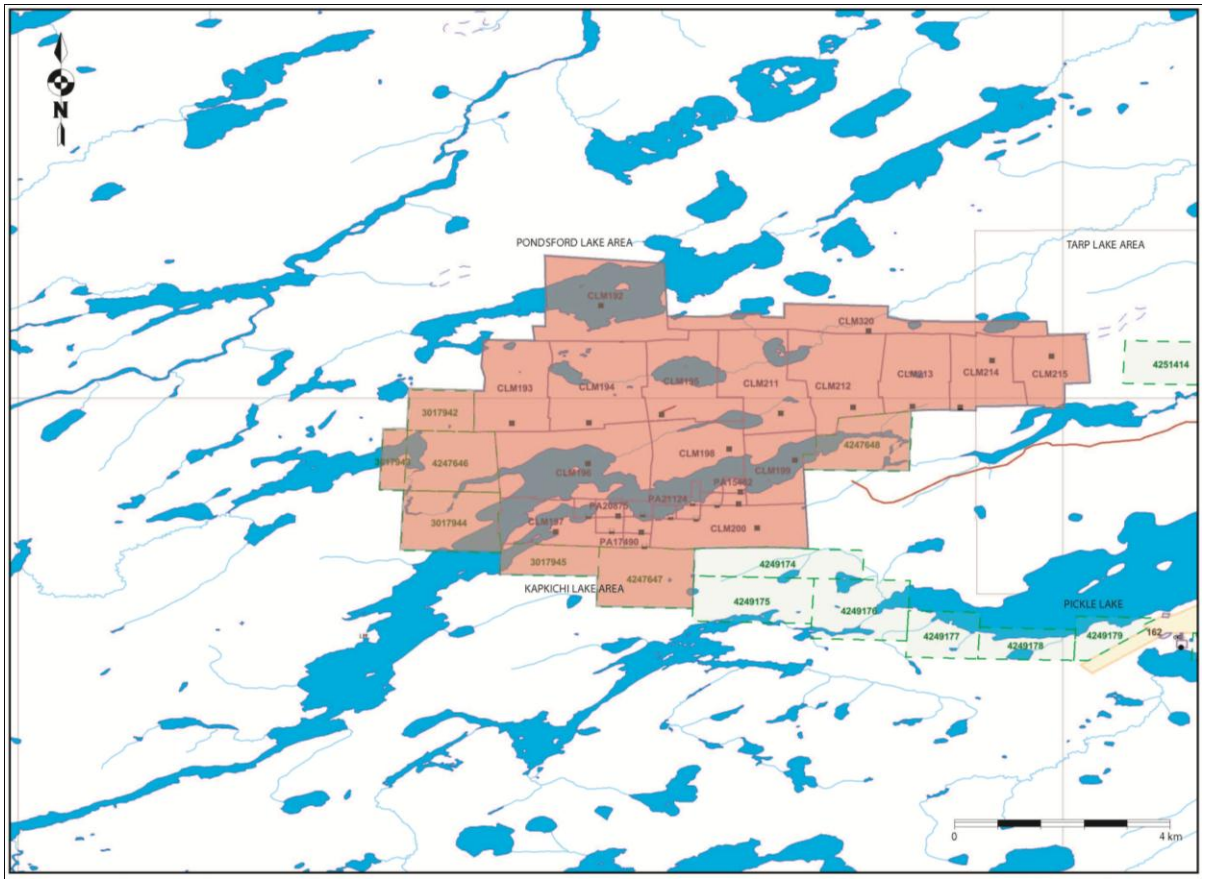
The amalgamation of Cadillac Ventures Inc. and Richview Resources Inc. (“Richview”), pursuant to a three-cornered amalgamation (the “Amalgamation”), became effective on Friday, January 15, 2010. Under the Amalgamation each common share of Richview was exchanged for one-ninth (1/9th) of a Cadillac common share. The shares of Richview were delisted from trading on the Toronto Stock Exchange as of the close of trading on January 12, 2010. As part of the acquisition, Cadillac assumed ownership of the past-producing Thierry Mine property in north-western Ontario.

**TABLE 4.2**
**SUMMARY OF MINING LEASES**

| Claim/Disposition ID | Area (ha) | Tenure Type | Tenure Rights | Expiry Date |
|---|---|---|---|---|
| CLM192 | 449 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM193 | 285 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM194 | 374. | Lease | Mining & Surface | 2017-Aug-31 |
| CLM195 | 374 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM196 | 486 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM197 | 192 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM198 | 292 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM199 | 202 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM200 | 267 | Lease | Mining & Surface | 2017-Aug-31 |
| CLM211 | 266 | Lease | Mining & Surface | 2021-Aug-31 |
| CLM212 | 342 | Lease | Mining & Surface | 2021-Aug-31 |
| CLM213 | 243 | Lease | Mining & Surface | 2021-Aug-31 |
| CLM214 | 226 | Lease | Mining & Surface | 2021-Aug-31 |
| CLM215 | 199 | Lease | Mining & Surface | 2021-Aug-31 |
| CLM320 | 263 | Lease | Mining | 2028-Nov-30 |
| PA15461 | 13 | Lease | Mining & Surface | 2012-Oct-31 |
| PA15462 | 15 | Lease | Mining & Surface | 2012-Oct-31 |
| PA15464 | 13 | Lease | Mining | 2012-Oct-31 |
| PA17490 | 17 | Lease | Mining | 2012-Oct-31 |
| PA20875 | 23 | Lease | Mining & Surface | 2012-Oct-31 |
| PA20876 | 20 | Lease | Mining | 2012-Oct-31 |
| PA20880 | 19 | Lease | Mining | 2012-Oct-31 |
| PA20891 | 15 | Lease | Mining | 2012-Oct-31 |
| PA20894 | 14 | Lease | Mining | 2012-Oct-31 |
| PA20895 | 22 | Lease | Mining & Surface | 2012-Oct-31 |
| PA20896 | 20 | Lease | Mining | 2012-Oct-31 |
| PA21124 | 19 | Lease | Mining | 2012-Oct-31 |
| | | | | |
| Total: 27 Mining Leases | 4670 | | | |

*(**Source:** Ont. Gov. website as of August 2011)*

**Figure 4.1 Claim Map Thierry Property**




(***Source:*** *Ont. Gov. website as of August 2011)*

## 4.3 PERMITS AND ENVIRONMENTAL ISSUES

Both the Thierry Mine and K1-1 deposits are considered to be advanced exploration stage projects as no development or pre-development programs are currently being conducted. The most recent work programs conducted on the Thierry Property were the 2010-2011 drilling programs conducted by Cadillac Ventures on both the Thierry Mine and K1-1 deposits. Permits for the proposed drilling program are not required from the Ontario Ministry of Northern Development and Mines. Other related Permits from the Ontario Ministry of Natural Resources are also not required as:

- No new roads on Crown property will be constructed;
- Roads or trails over water crossings will not be constructed; and
- Streams or rivers will not be diverted in the course of the program.

Permits for water use are not required from the Ontario Ministry of Environment and Energy as less than 50,000 litres of water per day will be taken. Accommodation for project personnel will be located in the town of Pickle 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 required.

The Thierry Property is presently permitted for dewatering.

## 4.4 LOCATION

The Thierry Project is located 12 kilometers west-northwest of the Town of Pickle Lake which is situated 450 kilometers northwest of Thunder Bay, Ontario, Canada (
Figure 4.1).

The geographical centre of the property lies at approximately 51°29’51.32” N Lat and 90°20’52.45” W Long.

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

## 5.1 LOCATION AND ACCESS

Pickle Lake is accessed by Provincial Highway No. 599 approximately 300 km north of the town of Ignace which is situated on the Trans-Canada Highway #17 (see Figure 5.1). The Canadian National Railway passes through the Town of Savant Lake, on Highway 599, approximately 170 km south-west of Pickle Lake

The Thierry project site is accessible by all-weather road from Pickle Lake (Figure 5.2).

## 5.2 CLIMATE AND PHYSIOGRAPHY

The climate is typical of northern areas within the Canadian Shield with long winters and short but warm to hot summers. Temperatures range from 30oC in the summer to -30oC in the winter. Mean annual rainfall is 48 centimetres and mean annual snowfall is 263 centimetres. Vegetation consists of black and white spruce and minor balsam poplar. Glacial overburden typically varies from 20 to 50 meters thick.

The climate does not create any problem for exploration with diamond drilling and other non-geological / geochemical work is able to be carried out at any time without difficulty, except for limited access issues during the 4 week period of "Spring Break-up", when most gravel roads are not suitable for driving and weight restrictions are in place on the Highways. Outcrops are generally snow covered from November to May inclusive.

The Pickle Lake area is characterized by a gentle topography, with flat lying to gently rolling hills that are less than 100 m high and numerous lakes in the intervening valleys. Elevations range from 360 metres above sea level ("A.S.L.") to 390 metres A.S.L. and the region slopes generally to the southwest. The project site is located within the Arctic Watershed and all local streams eventually drain to the Albany River.

Wildlife includes black bear, wolves, moose, rabbits, various migratory birds and various species of fish including lake trout and pickerel.

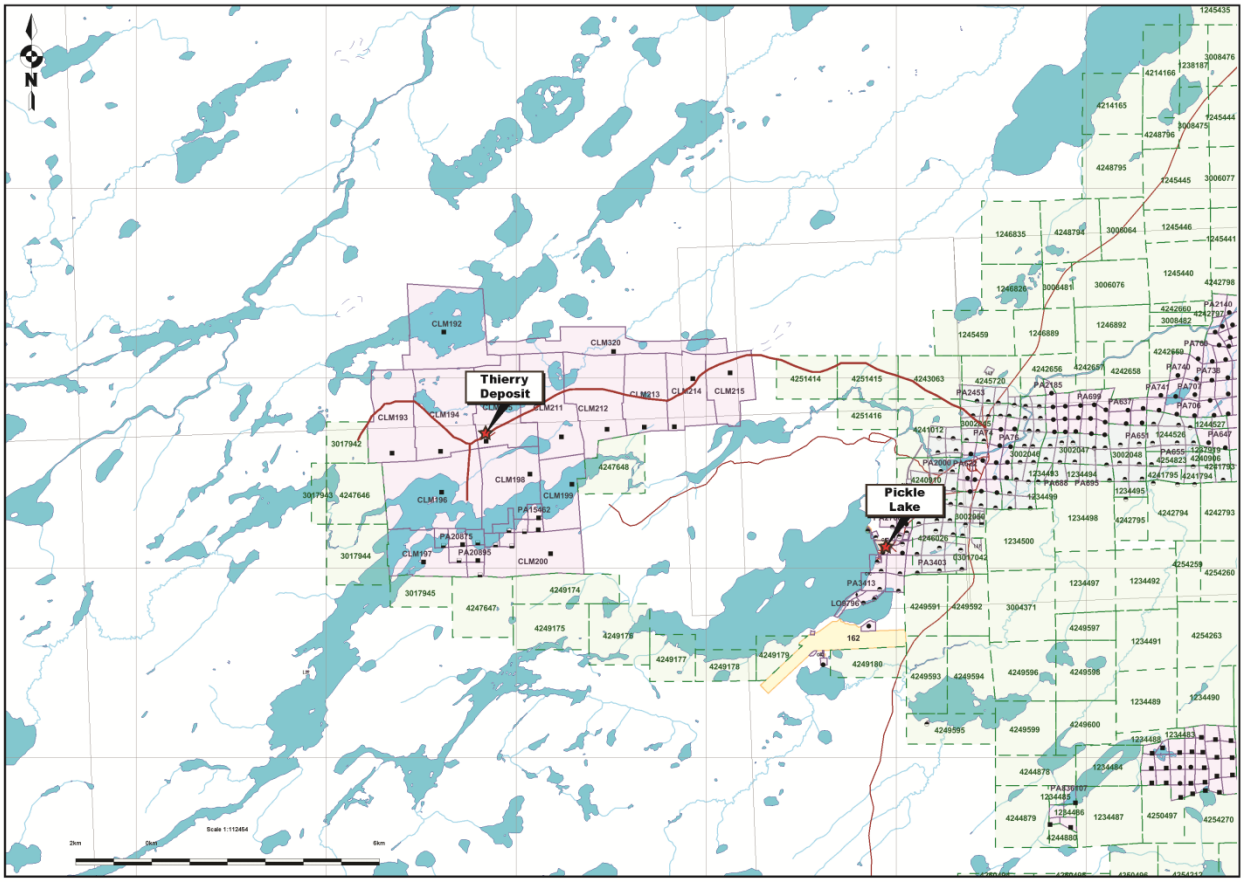
## 5.3 INFRASTRUCTURE

General mining related infrastructure in the Pickle Lake area is adequate to support a reasonable size mining operation, with an available workforce and amenities including power, paved roads, airport, housing, hospital and a school. Pickle Lake supported the mining operation of UMEX during the (1976-1982) production period.

**Figure 5.1 Regional Location Map**



## Figure 5.2 Detailed Location Map




(***Source:*** *Ont. Gov. website as of August 2011)*

## 6.0 HISTORY

## 6.1 HISTORICAL OVERVIEW

Detailed historical accounts of the Pickle Lake region in general and of the Thierry Mine/K1-1 area specifically are given in Curtis, L. (2001), Puritch et al., (2006) as well as in other reports as shown in the reference section 20.0 of this report. The reader is referred to these references for additional information. A summary of the pertinent historical events is given in Table 6.1 below.

**TABLE 6.1**
**THIERRY MINE – SUMMARY OF HISTORICAL EXPLORATION AND DEVELOPMENT ACTIVITIES**

| Year | Company | Exploration |
|---|---|---|
| 1928-1929 | | Gold was discovered along the banks of the Kawinogans River. Technological advances, namely air transport, made the area accessible and mining began in 1929. Pickle Lake, being the closest lake to the two new gold mines, became the transportation center of the area. (www.picklelake.ca). |
| 1934-1951 | Pickle Crow Gold Mines | The Pickle Crow gold mine operated from 1934 to 1951 producing 2,969,720 tonnes of ore grading 15.4 g Au/tonne (Klein and Day, 1994). |
| 1935-1966 | Central Patricia Gold Mines Limited | The Central Patricia gold mine, which operated from 1935 to 1966, produced 1,520,000 tonnes of ore at a grade of 12.5 g Au/tonne, (Klein and Day, 1994; Fyon et al., 1992). |
| 1946-1950 | Central Patricia Gold Mines Limited | Central Patricia Gold Mines Limited carried out drilling from 1946 to 1950 on several gabbro hosted copper-nickel prospects in the Kapkichi Lake area. |
| 1946-1947 | Albany River, Crowshore Patricia, and Norpic Gold Mines | Albany River Gold Mines was one of the mining companies active in the area at the time. Albany sunk a shaft and brought up some ore but did not go into production. In 1946, Pickle Crow took over the assets and liabilities of this company. Crowshore Patricia Gold Mines was situated approximately 3 miles east of Pickle Crow. This company sunk a shaft to 550 feet. It closed down in 1947 and never did reach the production stage. Norpic Gold Mines, situated north of Pickle Crow, did extensive drilling on their property. Dona Lake Gold Mines took an option on this property in 1979 and has done more diamond drilling. |
| 1956-1966 | Kapkichi Nickel Mines Limited | Kapkichi Nickel Mines Limited continued work in this area with geophysical surveys and diamond drilling, between 1956 and 1958.<br><br>Gold mining activity in the Pickle Lake Area ceased by 1966 |
| 1969 | UMEX Inc. | On January 1, 1969, UMEX signed a joint-venture agreement with Kapkichi Nickel Mines regarding 12 claims and a one mile zone surrounding them (the "Kapkichi Property"). A minor Nickel and Copper occurrence was known on one of the claims. McPhar Geophysics of Toronto conducted ground geophysical (magnetometer and EM) surveys on the agreement area. |

| | | |
|---|---|---|
| | | The actual claims covering the Thierry mine site were optioned by Union Miniere Explorations and Mining Corporation (UMEX) from Kapkichi Nickel Mines in 1969.<br><br>In 1969, UMEX conducted ground electromagnetic, magnetometer and geologic surveys on the Kapkichi property which had been enlarged by 78 additional 40 acres claims. Follow-up drilling led to the discovery of low grade copper and nickel mineralization in mafic and ultramafic rocks underlying Kapkichi Lake. Additional drilling in the immediate area by UMEX outlined 4 principal areas with copper-nickel mineralization; the K1-1, K2-1, G and J anomalies. In addition, anomaly K2-1 which was located north of Kapkichi Lake was drilled, and a historical mineral resource of 12 million tons grading 1.68% Cu and 0.18% Ni was estimated. |
| 1970 | UMEX Inc | Metallurgical lab tests carried out on the "J" and "G" mineralization were rather disappointing and the attention of UMEX was quickly focused on the nearby Thierry deposit which had been recently discovered outside the Kapkichi Property. Preliminary metallurgical test work on the Thierry mineralization indicated that a much more favourable metallurgical response than the nearby K1-1, K1-2, K2-1, J and G deposits.<br><br>On September 1970, the first hole drilled outside the Kapkichi Property area, intersected 20 feet of sulphides in biotite and chlorite schist containing 1.24% copper and 0.14% nickel. This was the discovery hole of the Thierry Mine<br><br>Immediately following the discovery drill hole, the Thierry deposit was drilled off on a grid of cross sections 200 feet apart. 77 holes totalling 45,000 feet were drilled. The mineralization is now known to cover 4,000 feet in length and to have a vertical depth of at least 2,500 feet. The ore-body was still open at depth. |
| 1971-1976 | UMEX Inc. | Umex reported in situ drill indicated at 11,500,000 tons averaging 1.68% Copper and 0.18% Nickel as of Dec 1971 (Novak and Mlot 2004) and awarded Kilborn Engineering a contract to prepare a preliminary feasibility study of the deposit and to assume the project engineering.<br><br>The preliminary feasibility study for the deposit was based on “mineral reserves” of 10 million tonnes at an undiluted copper grade of 1.65%.<br><br>Based on the Kilborn Engineering feasibility report, the decision to proceed with development of the deposit was |

| | | |
|---|---|---|
| | | made in 1974 |
| 1976-1982 | UMEX Inc. | The Thierry deposit initially produced from two open pits followed by underground operations. Underground development of the deposit included the development of a 543 meter, and 2,890 meters of excavations at the 180, 360 and 850 m levels. A total of 52,000 ft (15,850 meters) of underground diamond drilling was completed to delineate mineralization.<br><br>Historical UMEX records indicate production of approximately 5.8 million tons of ore with an average grade of 1.13% copper and 0.14% nickel, between October 1976 and April 1982 (Novak and Mlot, 2004). Initially only a copper concentrate was produced; by 1981 UMEX recognized the value of the nickel and a limited amount of nickel concentrate was produced.<br><br>Late in the mine life precious metals and PGE's were also recovered: platinum 17,500 troy ounces; palladium 47,000 troy ounces; gold 17,000 troy ounces and silver 900,000 troy ounces. The average grades of PGE's reported by UMEX were 0.0046 oz/t gold, 0.004 oz/t platinum and 0.020 oz/t (in Gurgurewicz-Luck, 1988).<br><br>In 1981, UMEX began test mining of a large low-grade zone of disseminated copper-nickel mineralization at the K1-1 anomaly. The average grade of the zone is historically reported as 0.31% Cu and 0.1% Ni at a cut-off of 0.2% Cu. |
| 1987-1989 | UMEX Inc. | UMEX staff geologist D. Unger, implemented re-sampling and assaying of selected diamond drill holes. In 1987, R. Dahl undertook a complete re-evaluation of the PGE potential of the Thierry mine and vicinity. As part of this study, PGM assaying of existing mineralized core was completed between 1987 and 1989.<br><br>The PGE studies undertaken between 1987 and 1988, revealed that higher grade nickel-copper zones were coincident with anomalous PGE's. UMEX re-evaluated the economic potential of the Thierry mine in a 1989 in-house study but due to corporate re-organization was unable to implement any decisions.<br><br>An airborne geophysical survey (EM/Resistivity / Magnetometer/ VLF) was flown by DIGHEM in 1988 over the Kibler Lake Stock. |
| 1990-1995 | Etruscan Resources Inc. | Etruscan purchased the Property in 1990 with a view to placing it into production.<br><br>In 1991, Watts, Griffis and McOuat Limited ("WGM") prepared an economic analysis for the reactivation of the |

| | | |
|---|---|---|
| | | Thierry operation. WGM reported diluted underground "mineral reserves" of 2.7 million tons with average grades of 1.78% copper and 0.25% nickel<br><br>Etruscan completed reclamation of the mill and shaft facilities from 1993 to 1995. |
| 2000-2003 | PGM Ventures Inc. | In 2000, PGM Ventures negotiated an option to obtain a 100% interest in the Thierry property from Etruscan and immediately reviewed and initiated development of a digital database from available UMEX data.<br><br>In 2002, PGM Ventures completed 25 drillholes totalling 8,952 meters to test mineralization at the Thierry deposit (11 of 25 holes) and at other targets on the property<br><br>Samples of ore from surface stockpiles of material from previous mining operations at the Thierry Mine were collected and assayed to confirm the presence of consistently attractive PGE values in the breccia and massive sulphide ore types.<br><br>JVX completed a Time-Domain EM and Mag Survey over the property. Coincident magnetic and EM anomalies, similar in intensity and extent to those of the Thierry Mine were outlined. |
| 2004-2005 | Richview Resources Inc. | Richview conducted a multi-phased drill program to explore the Thierry deposit and other target areas of the Thierry property during the period Oct 2004 to March 2005. Initial phase of drilling totalled 15 drillholes (32,347 feet) in the vicinity of the Thierry deposit. Exploration drilling consisted of seven drillholes (4,505 feet) outside of the Thierry Property.<br><br>A follow up phase of drilling consisting of 13 holes for a total of 16,608.85 feet was completed in 2005. Eight holes, for a total footage of 10,742.2 feet, targeted the mineralization in and around the 1200 foot level to infill information gaps and to prove the continuity of the mineralization.<br><br>Six holes for a total of 10,782 feet were targeted outside of the deposit proper and were focused on defining the possible western extension of the Thierry deposit. |
| 2006 | Richview Resources Inc. | A NI 43-101 compliant resource estimate with an effective date of February 1, 2006, was undertaken by P&E Mining Consultants Inc., and Billiken Management Services Inc. The resource consisted of 4,623,000 tonnes of Measured & Indicated material at a grade of 1.81 % Cu, 0.20 % Ni, along with 4,366,000 tonnes of Inferred material at a grade of 1.71 % Cu and 0.18 % Ni. |

| | | |
|---|---|---|
| | | On June 29, 2006 Richview announced it had received a report concerning the initial metallurgical test work on samples for its Thierry Mine Property.<br><br>On July 6, 2006, Richview filed a Certified Closure Plan for the Thierry Advanced Exploration Project with the Ministry of Northern Development and Mines. This plan was accepted by the Ministry on September 8, 2006.<br><br>Richview optioned a potential 100% interest in 3 leased, non-patented contiguous claims in Kapkichi Lake Twp., and one non-patented contiguous claim in Ponsford Lake Twp. from Rubicon Minerals Corp., on October 5, 2006. These claims are located in an area adjacent to Thierry Mine Property. |
| 2007 | Richview Resources Inc. | Richview commenced its summer validation and exploration program on May 9, 2007. The objective was to evaluate the historical open pit and underground mineralization of the Thierry Mine as well as the K1-1 open pit project. A 45,900 ft (14,000 metre) drilling program designed to confirm and validate the down dip and strike continuity of the known mineralization to the 3000 foot level commenced on August 15, 2007. Surface drilling around the K1-1 open pit area to confirm and validate the historic drilling by UMEX and to further define the open pit potential of the near surface mineralization along its identified 2500 foot strike length was completed.<br><br>Property re-grading and drainage upgrades were also made. A compilation of all mine data was completed.<br><br>A 3 km corridor of unexplored ground between the Thierry Mine and the K1-1 deposit was cleared of overburden. |
| 2008 | Richview Resources Inc. | A Memorandum of Understanding with the Mishkeegogamang Ojibway Nation committing to an ongoing relationship between the First Nation and Richview with respect to the company's exploration activities and the Thierry mine project was signed on April 15, 2008.<br><br>A summer work program included excavation, geological mapping, prospecting and geochemical sampling was completed by October 2008. Richview completed its 45,900 ft (14,000 m) deep drillhole program which target the central and north-eastern parts of the Thierry Mine deposit at depths ranging from 2500 ft to 4000 ft.<br><br>A detailed structural study was completed in order to understand the geometry of the Thierry deposit. |

| | | |
|---|---|---|
| | | A Mobile Metal Ion (MMI) geochemical survey of the Thierry property was conducted. Additional access roads totalling 3.8 kilometers were constructed to allow an increase in the number of drills operating in the Thierry – K1 area.<br><br>Aero Geometrics completed an airborne orthophotographic digital elevation model (DEM) survey of the Thierry property on May 28, 2008, to provide current imagery and topographic information. |
| 2009 | Richview Resources | Richview suspended high cost field activities in order to protect corporate assets and shareholder value. |
| 2010 | Cadillac Ventures Inc. | The amalgamation of Cadillac Ventures Inc. and Richview Resources Inc. ("Richview"), pursuant to a three-cornered agreement became effective on Jan 15, 2010. Cadillac assumed 100% control of the Thierry Mine property. |

## 6.2 HISTORICAL RESOURCE ESTIMATES

The following Table 6.2 summarizes the historical resource estimates prepared for the Thierry Deposit (Novak and Mlot 2004):

**TABLE 6.2**
**HISTORICAL RESOURCE ESTIMATES – THIERRY MINE**

| Company | Date | Reserves (t) | Cu % | Ni % | Category |
|---|---|---|---|---|---|
| UMEX | 1974 | 13,500,000 | 1.62 | 0.18 | Mining start-up in-situ reserve estimate |
| UMEX | 1989 | 7,000,000 | 1.88 | 0.23 | Drill indicated in-situ reserve to 2,500 ft |
| WGM | 1991 | 2,700,000 | 1.65 | -- | Diluted measured resource to 1800 ft |
| WGM | 1991 | 3,000,000 | 1.78 | 0.25 | Probable reserves to 1800 ft |

In addition to the K2-1 (Thierry) deposit UMEX in its exploration program on the property identified a number of other mineralized zones: G, J, and K1-1. Limited exploration drilling was conducted allowing UMEX to reported in-situ resources ("reserves") for these deposits as shown in Table 6.3 below.

**TABLE 6.3**
**HISTORICAL RESOURCES ("RESERVES") FOR K1-1 AND J&G ZONES**

| Deposit | Historical Reserve Parameters | Tons | Cu% | Ni% | Remarks |
|---|---|---|---|---|---|
| | Drill indicated, undiluted, in-situ reserves | | | | |
| K1-1 | Surface to level 1000 | 75,000,000 | 0.38 | 0.11 | UMEX 1973, 1981 |
| J&G Zones | Surface to level 600 | 44,700,000 | 0.40 | 0.11 | UMEX 1974, 1981 |
| | Surface to level 1000 | 55,000,000 | 0.40 | 0.11 | UMEX 1974, 1981 |

Drillhole data from the 2004-2005 drill programs, along with results from all previous drilling programs, were incorporated into an initial NI 43-101 compliant Resource Estimate completed by P&E Mining Consultants Inc. in 2006 and shown in the table below.

**TABLE 6.4**
**2006 P&E RESOURCE ESTIMATE @ 1.3% CU CUT-OFF GRADE[(1)(2)]**

| Classification | Tons | Cu (%) | Ni (%) | Cu (million lbs) | Ni (million lbs) |
|---|---|---|---|---|---|
| Measured | 17,000 | 1.71 | 0.25 | 0.6 | 0.1 |
| Indicated | 4,606,000 | 1.81 | 0.20 | 166.7 | 18.4 |
| | | | | | |
| Measured & Indicated | 4,623,000 | 1.81 | 0.20 | 167.3 | 18.5 |
| Inferred | 4,366,000 | 1.71 | 0.18 | 149.3 | 15.7 |

*(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.*

*(2) The quantity and grade reported in this inferred resource estimation are conceptual in nature and there has been insufficient exploration to define an Indicated Mineral Resource on the property and it is uncertain if further exploration will result in discovery of an Indicated or Measured Mineral Resource on the Property.*

The 2010 undated P&E Resource Estimate statement was prepared using the additional data generated by drilling 21 holes in 2007 and 2008 by Richview as well as the drilling used in previous NI 43-101 resource estimates.

The 2010 P&E updated Resource Estimate for the Thierry mine, as shown in the table below, consists of an Indicated Resource of 6,228,000 tonnes containing 1.92% Cu and 0.2% Ni and an Inferred resource of 8,379,000 tonnes containing 1.79% Cu and 0.16% Ni using an NSR cut-off of C$46/tonne.

**TABLE 6.5**
**2010 P&E UPDATED RESOURCE ESTIMATE @ $46/TONNE NSR CUT-OFF[(1)(2)(3)]**

| Class | Tonnes | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t |
|---|---|---|---|---|---|---|---|
| Measured | 2,221,000 | 1.90 | 0.21 | 0.13 | 0.13 | 0.41 | 7.7 |
| Indicated | 4,007,000 | 1.93 | 0.20 | 0.14 | 0.14 | 0.41 | 7.1 |
| | | | | | | | |
| Measured & Indicated | 6,228,000 | 1.92 | 0.20 | 0.14 | 0.14 | 0.41 | 7.3 |
| Inferred | 8,379,000 | 1.79 | 0.16 | 0.18 | 0.12 | 0.35 | 9.6 |

*(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.*

*(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 December 11, 2005.*

In December of 2011, P&E prepared an initial Resource Estimate on the K1-1 and updated the Resource Estimate on the past producing Thierry Mine. This information is presented on Table 6.6 below.

**TABLE 6.6**
**OCTOBER 2011 P&E UPDATED RESOURCE ESTIMATE @ $46.30/TONNE NSR CUT-OFF(1-8)**

| NSR Cut-off | Tonnes (M) | Ni % | Cu % | Ag g/t | Au g/t | Pt g/t | Pd g/t |
|---|---|---|---|---|---|---|---|
| C$15/tonne | 19.897 | 0.1 | 0.42 | 2.0 | 0.03 | 0.05 | 0.15 |

*(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.*

*(2) The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.*

*(3) The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

*(4) The July 31, 2011 two year trailing average US metal prices used in this estimate were $3.57/lb Cu, $9.98/lb Ni, $23.87/oz Ag, $1,258/oz Au, $1,605/oz Pt and $557/oz Pd. The C$US$ Exchange rate was 0.98.*

*(5) Overall payable metal (process recovery x smelter payable) in the NSR calculation were 84% Cu, 13% Ni and 37% for Ag, Au, Pt & Pd.*

*(6) Mineral resources were determined within a Whittle pit shell with 50 degree slopes utilizing mining costs of C$2.00/tonne for mineralized material and waste rock, and C$1.50/tonne for overburden.*

*(7) Costs used to determine the C$15/tonne NSR resource cut-off value were processing at C$12/tonne and G&A C$3.00/tonne.*

*(8) The K1-1 Mineral Resource Estimate were undertaken by Antoine Yassa, P.Geo, Richard Routledge, P.Geo and Eugene Puritch, P.Eng. of P&E Mining Consultants Inc.*

## 6.3 PREVIOUS RICHVIEW DIAMOND DRILL PROGRAMS

Upon acquiring an option on the Thierry Mine property in January, 2004 Richview's Exploration & Resource Development Program essentially consisted of two phases of diamond drilling. The initial Phase, conducted during the period of October 2004 to March 2005, consisted of a total of 15 drillholes (32,347 feet) completed within the confines of the Thierry deposit. Exploration drilling of seven drillholes (4,505 feet) outside of the Thierry property was also completed.

During the period of October to December, 2005 Richview carried out a second phase of exploration drilling. A total of 16,608.85 feet were drilled in 13 holes. Eight holes, for a total footage of 10,742.2 feet, targeted the mineralization in and around the 1200 foot level at various locations across the Thierry deposit. Six holes for a total of 10,782 feet were targeted outside of the deposit proper and were focused on defining the possible western extension of the Thierry deposit.

A brief description of the Richview drilling programs is given below with emphasis on the most recent 2007-2008 campaigns.

### 6.3.1 2004-2005 Richview Drilling Program

Upon acquiring an option on the Thierry Mine property from PGM in January, 2004 Richview's initial exploration and development program consisted of two phases of diamond drilling. The

initial Phase, conducted during the period of October 2004 to March 2005, consisted of a total of 32,347 feet of drilling in 15 holes within the confines of the Thierry deposit.

A further 4,505 feet of exploration drilling in seven holes was completed outside of the Thierry Property.

During the period of October to December, 2005 a second phase of exploration drilling was completed. A total of 16,608.85 feet were drilled in 13 holes. Eight holes, for a total footage of 10,742.2 feet, targeted mineralization in and around the 1200 foot level at various locations across the Thierry deposit. Six holes for a total of 10,782 feet were targeted outside of the deposit proper and were focused on defining the possible western extension of the Thierry Mine horizon.

More detailed information regarding these initial phases of drilling are presented in Puritch et al., 2006.

### 6.3.2 2007-2008 Richview Drilling Program

Richview's 2007-2008 surface diamond drill program on the Thierry Mine project was completed in 2 phases starting in the 2007-2008 winter period. Phase 1 targeted the western portion of the Thierry deposit while Phase 2 was designed as a deep drilling program which targeted the central and north-eastern parts of the Thierry Mine deposit at depths ranging from 2500 ft to 4000 ft. The objective was to increase the continuity of the mineralization at these depths in an effort to add significantly to the known resource base of the project. In addition, several historical drill holes were twinned to confirm pre 43-101 UMEX ore intercepts which could potentially expand the inferred resource boundary laterally.

Cabo Drilling (Ontario) Corp. of Kirkland Lake, Ontario completed drillholes RV-07-01 through RV-07-14B, 80 m of RV-08-15B and 1092.24 ft of RV-08-16 during the time period of August 10, 2007 to March 17, 2008.

Forage Orbit Garant Drilling ("Orbit") of Evain Quebec was responsible for the Phase 2 drilling program.

Drillhole information from internal diamond drill reports (Herwig, 2008) was provided by Cadillac and is briefly discussed below and summarized in Table 10.1. Due to the depth of the intended targets certain of the deeper drillholes as completed and down hole surveyed can have downhole deviations of up to 400 ft from the intended target. It should also be noted that the intercepted widths reported in this section are not true widths.

A brief hole by hole summary of the drill objectives and results is presented below with the significant assay results outlined in Table 6.7.

## 6.4 PHASE 1 DRILLING

The first Phase of drilling, consisting of 41,389.66 ft in 16 holes (RV -07-01 through RV-08-16) commenced on Aug 10, 2007 and was completed on March 17, 2008. All drillholes were successfully completed with the following exceptions: Drillhole RV-08-15A was only completed to 623 ft and was therefore extended at the start of the second phase of drilling as hole RV -08-15B. In addition, drillhole RV-08-16 was abandoned at a depth of 1,092 ft on March 17, 2008

due to bad surface conditions and was never re-entered. The 15 drillholes (RV-07-01 through RV-08-15B) that were successfully completed during Phase 1 totalled 40,297.4 ft.

RV-07-01 targeted the area between the main Thierry ore block and the westernmost ore block, along section 9300E, at approximately -1400 ft. elevation. As shown in Table 10.1, this drillhole RV-07-01 intercepted 0.83% copper over 34.6 ft from 1541-1575.6 ft, including 1.26% copper over 17.4 ft. The mineralized intercept is characterized by a strongly foliated mafic to ultramafic rock containing up to 5% stringer, fracture-controlled and minor breccia-hosted chalcopyrite.

RV-07-02A also targeted the area between the main Thierry ore block and the westernmost ore block, along section 9300E, at approximately -1700 ft elevation. RV-07-02A intercepted 0.77% copper over 22 ft from 1761-1783 ft, including 1.5% copper over 10 ft hosted within strongly foliated to banded ultramafic rock containing up to 7% fracture-controlled, disseminated and minor breccia-hosted chalcopyrite.

RV-07-03B targeted the down-dip extension of the Thierry deposit on section 10100E, at approximately -2500 ft. elevation. RV-07-03B intercepted 1.24% copper over 17.9 ft from 2175.1-2193 ft. Other significant assays from this intercept include 0.11 g/t platinum, 0.16 g/t palladium, and 8.72 g/t silver. The mineralized intercept is characterized by a strongly foliated to banded mafic rock containing up to 4% fracture-controlled and disseminated chalcopyrite and pyrrhotite.

RV-07-04A targeted the down-dip extension of the Thierry deposit on section 10250E, at approximately -2700 ft elevation. The mineralized intercept, characterized by an intensely foliated to mylonitic mafic rock containing up to 2% fracture-controlled, stringer and minor breccia-hosted chalcopyrite, yielded assay results of 0.49% copper over 15 ft from 2964-2979 ft.

RV-07-05 targeted the down-dip extension of the Thierry deposit on section 10100E, at approximately -2700 ft elevation. This drillhole intercepted 1.82% copper over 23.9 ft from 2876.9- 2900.8 ft including 2.3% copper over 16 ft. Other significant assays include 17.4 g/t silver, 0.22 g/t gold, 0.12 g/t platinum and 0.31 g/t palladium over 16 ft. The mineralization was hosted by banded chlorite-biotite schist (renowned CBS ore zone) within mafic rocks containing up to 3% disseminated, stringer and fracture-controlled chalcopyrite and pyrrhotite.

RV-07-06 targeted the westernmost extension of the western ore block on section 8750E at approximately -1000 ft elevation. Composite assay results of 1.56% copper over 30.1 ft from 981.7 to 1011.8 ft were obtained from core intercepts. Included within this zone were assays of 1.7% copper over 16 ft. Other significant assays include 0.19 g/t palladium and 11.1 g/t over 16 ft. This intercept is approximately 200 ft outside of the known inferred resource boundary of the western ore block and therefore may add modestly to the tonnage.

RV-07-07A targeted the westernmost extension of the western ore block on section 8500E at approximately -1500 ft elevation. The drillhole was only weak mineralization and intercepted 0.35% copper over 2.8 ft from 1353-1355.8 ft.

RV-07-08 targeted the westernmost extension of the western ore block on section 8500E at the -900 ft elevation. Only weak mineralization was intercepted (0.27% copper over 13.6 ft from 929.8 to 943.4 ft). The weakly mineralized intercept occurred within moderately foliated and intensely chloritized mafic volcanic rock containing up to 1% fracture-controlled chalcopyrite.

RV-07-09 and RV-07-10 are collared at the same location and targeted the up-dip potential of the westernmost ore block centered on section 9000E. RV-07-09 intercepted 0.76% copper over 4.3 ft from 237 to 241.3 ft, and RV-07-10 intercepted 0.51% copper over 2.1 ft from 288.6 to 290.7 ft. These two intercepts were very similar, characterized by weakly foliated mafic volcanic rocks containing trace fracture-controlled, stringer and disseminated chalcopyrite.

RV-07-11 and RV-07-13 are collared at the same location and targeted the up-dip potential to the west of the westernmost ore block, on section 8400E. RV-07-11 intercepted 0.46% copper over 6.2 ft from 603.7 to 609.9 ft, and RV-07-13 intercepted 0.62% copper over 7.8 ft from 587.0 to 594.8 ft. These two intercepts were very similar, characterized by strongly foliated to mylonitic mafic volcanic to ultramafic rocks containing trace disseminated and fracture-controlled chalcopyrite and pyrrhotite.

RV-07-14B targeted the area between the main Thierry ore block and the westernmost ore block, along section 9150E, at the -1300 ft elevation. The mineralized intercept, which was hosted within moderately foliated mafic volcanic rocks containing up to 5% stringer, fracture-controlled and minor breccia-hosted chalcopyrite and pyrrhotite, yielded assays of 2.04% copper over 14.9 ft from 1501.0 to 1515.9 ft.

RV-07-12A targeted the down-dip extension of the main Thierry ore block along section 11000E at the 3000 ft elevation and intercepted 1.77% Cu over 23.1 ft from 3141.4 ft to 3164.5 ft downhole. The mineralized intercept is characterized by a moderately to strongly foliated metagabbro/pyroxenite hosting up to 4% 30 stringer, fracture-controlled, disseminated and micro-breccia chalcopyrite with lesser pyrrhotite.

RV-08-15B targeted the down-dip extension of the main Thierry ore block along section 10500E at the -3000 ft elevation. Assay results from the mineralized interval yielded values of 1.53% Cu over 19.2 ft from 3060.6 to 3079.8 ft. The mineralized intercept is characterized by a moderately to strongly foliated metagabbro hosting up to 5% stringer, fracture-controlled and micro-breccia chalcopyrite with lesser pyrrhotite.

RV-08-16 targeted the down-dip extension of the main Thierry ore block along section 11500E at the -3000 ft elevation. This hole was abandoned due to unstable drilling conditions and was not further extended.

## 6.5 PHASE 2 DRILLING

The second Phase of drilling was carried out during the 2008 summer season. Drilling commenced on June 1, 2008 and was completed on October 19, 2008. A total of 20,040.8 ft of coring in 6 drillholes (the extension of RV-08-15B and the drilling of RV-08-17 through RV-08-21) was competed.

RV-08-17 and RV-08-18 were drilled to confirm the presence and extent of mineralization in potential high-grade shoots, the existence of which was interpreted from drillholes RV-07-05, RV-07-12 and RV-08-15.

Mineralization intersected in RV-08-17 returned assay vales of 0.54 % Cu over 25.6 ft from 3857.2 to 3887.7 ft. Included within this interval was 1.15 % Cu over 11.4 ft from 3866.6 to

3878.0 ft. RV-08-18 intercepted 0.55 % Cu over 25.7 ft from 2727.2 to 2752.9 ft. Included within this interval was 1.56 % Cu over 6.9 ft. from 2727.2 to 2734.1 ft.

RV-08-19 was drilled to provide further confirmatory evidence for the existence of steep northeast plunging shoots of high-grade mineralization that could extend well beyond the historic Thierry Mine resource boundary down to postulated depths greater than 3,000 vertical ft. As reported in Richview's News release of September 24, 2008, "Drillhole RV -08-19 marks the Company's richest and most significant drill intercept to date on the Thierry Mine Property. This high grade intersection supports the current geological model adopted by the Company that reflects steep northeast plunging shoots of high-grade mineralization that could extend well beyond the historic Thierry Mine resource boundary…."

RV-08-19 intersected 60.2 ft of 2.5% Cu from 2914.8 to 2975.0 ft. Included within this interval was:

49.0 ft grading 3.0 % Cu. from 2917.0 to 2966.0 ft;
3.8 % Cu over 22.6 ft from 2928.5 to 2951.1 ft; and
5.3 % Cu over 9.7 ft from 2928.5 to 2938.2 ft.

RV-08 20 and RV-08-21 were drill to test for mineralized structures at depths of between 3,000 and 4,000 ft. Drillhole RV-08-20 intersected 37.2 ft of mineralization grading 0.56 % Cu at depths from 4295.6 to 4332.8. Included within this interval were 14.6 ft grading 1.09 % Cu from 4305.8 to 4320.4 ft.

Drillhole RV -08-21 intersected two zones of mineralization. The first zone yielded assay values of 0.23 % Cu over 16.5 ft from 3014.4 to 3030.9 while the second stronger an deeper zone of mineralization yielded 17.7 ft grading 1.25 % Cu from 3054.6 to 3072.3 ft.

## 6.6 SUMMARY OF THE RICHVIEW 2007-2008 DRILLING PROGRAM

Mineralized intercepts encountered in the 2007 and 2008 drill program indicate extensions to the known mineralization in both the down-dip and along strike direction to the west. The RV-07-06 intercept resulted in a modest increase to the west boundary of the westernmost ore block, while intercepts encountered in drillholes RV-07-09, -10, -11, -13 indicate the presence of an up-dip component to the western ore block as well as the potential of increasing widths to the southwest.

Deep holes RV-08-15, -17, -18, -19, -20 and -21 confirm the existence of mineralization at depths ranging from approximately 3,000 to over 4,000 ft. The results of the deep holes must be somewhat tempered by the fact drillhole RV-07-04A, located in the area between the RV-07-05 and the previous UMEX high grade intercept (i.e. 1.98% copper over 100 ft.) at the -2200 ft elevation, did not achieve significant grades or widths, and may indicate that local pinch and swell structures exist at depth.

| TABLE 6.7<br>2007-2008 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS | | | | | |
|---|---|---|---|---|---|
| **Hole ID** | **From (ft)** | **To (ft)** | **Length (ft)** | **Cu %** | ***Cu Equivalent %** |
| RV-07-01 | 1556.0 | 1573.4 | 17.4 | 1.34 | 1.58 |
| RV-07-02 | 1761.0 | 1774.6 | 13.6 | 0.89 | 1.33 |
| RV-07-03B | 2175.0 | 2191.6 | 16.5 | 1.25 | 1.41 |
| RV-07-04A | 2964.1 | 2979.0 | 14.9 | 0.50 | 0.57 |
| RV-07-05 | 2876.9 | 2900.9 | 24.0 | 1.82 | 2.02 |
| RV-07-06 | 997.7 | 1014.4 | 16.7 | 1.24 | 1.43 |
| RV-07-07A | 1353.0 | 1355.8 | 2.8 | 0.35 | 0.40 |
| RV-07-08 | 929.8 | 943.4 | 13.6 | 0.27 | 0.35 |
| RV-07-09 | 235.8 | 241.3 | 5.5 | 0.69 | 0.87 |
| RV-07-10 | 288.6 | 290.7 | 2.1 | 0.51 | 0.82 |
| RV-07-11 | 603.7 | 609.9 | 6.2 | 0.46 | 0.55 |
| RV-07-12A | 3141.4 | 3164.5 | 23.1 | 1.77 | 2.01 |
| including | 3141.4 | 3159.3 | 17.9 | 2.21 | 2.50 |
| RV-07-13 | 587.0 | 596.0 | 9.0 | 0.56 | 0.67 |
| RV-07-14B | 1497.8 | 1515.9 | 18.1 | 1.41 | 1.70 |
| RV-08-15B | 3055.7 | 3119.2 | 63.5 | 0.61 | |
| including | 3055.7 | 3089.4 | 33.7 | 0.96 | |
| including | 3060.6 | 3083.2 | 22.6 | 1.33 | |
| including | 3060.6 | 3075.7 | 15.1 | 1.64 | |
| RV-08-16 | | | | | |
| RV-08-17 | 3857.2 | 3887.7 | 25.6 | 0.54 | |
| including | 3866.6 | 3878.0 | 11.4 | 1.15 | |
| RV-08-18 | 2727.2 | 2752.9 | 25.7 | 0.55 | |
| including | 2727.2 | 2734.1 | 6.9 | 1.56 | |
| RV-08-19 | 2914.8 | 2975.0 | 60.2 | 2.50 | |
| including | 2917.0 | 2966.0 | 49.0 | 3.00 | |
| including | 2928.5 | 2951.1 | 22.6 | 3.80 | |
| including | 2928.5 | 2938.2 | 9.7 | 5.30 | |
| RV-08-20 | 4295.6 | 4332.8 | 37.2 | 0.56 | |
| including | 4295.6 | 4320.4 | 24.8 | 0.80 | |
| including | 4300.4 | 4320.4 | 20.0 | 0.91 | |
| Including | 4305.8 | 4320.4 | 14.6 | 1.09 | |
| RV-08-21 | 3014.4 | 3030.9 | 16.5 | 0.23 | |
| | 3054.6 | 3072.3 | 17.7 | 1.25 | |
| | | | | | |
| Total 21 Holes | | | | | |

The Cu equivalency algorithm is as follows CuEq = Cu% + (Ni x 0.4419) + (Ag g/t x 0.0048) + (Au g/t x 0.2562) + (Pt g/t x 0.3277) + (Pd g/t x 0.1117). The copper equivalents are considered to represent close approximations of the value of the contained nickel, silver, gold, platinum and palladium in the Thierry mineralization.

| TABLE 6.8<br>VALUES FOR CU EQUIVALENCY CALCULATION | | | | | | |
|---|---|---|---|---|---|---|
| **Element** | **Metal Price $US** | **Process Recovery** | **Payable Metal** | **Refining Charges US$** | **Value at 1% or 1 g/t** | **Cu Eq Factor** |
| Cu | $3.57 | 90% | 93% | $0.40 | $58.49 | |
| Ni | $9.98 | 25% | 50% | $0.60 | $25.85 | 0.4419 |
| Ag | $23.87 | 50% | 75% | $0.50 | $0.28 | 0.0048 |
| Au | $1,258 | 50% | 75% | $15 | $14.99 | 0.2562 |
| Pt | $1,605 | 50% | 75% | $15 | $19.17 | 0.3277 |
| Pd | $557 | 50% | 75% | $15 | $6.53 | 0.1117 |

## 6.7 HISTORICAL METALLURGICAL TESTING

### 6.7.1 Lakefield Research Metallurgical Testing

In April 1973, Lakefield undertook metallurgical testing on the Thierry mineralization which involved several pilot plant test runs to produce a bulk Copper-Nickel concentrate. The following results were obtained:

Copper: from 15% to 24% Cu at recoveries from 83% to 94%
Nickel: from 1.4% to 2.5% Ni at recoveries from 29% to 68%

The conclusions from the Lakefield metallurgical tests and from market conditions enabled UMEX to design a concentrator for Thierry that produced a simple Copper concentrate fulfilling the conditions required by the Noranda toll smelter.

In 1980 Lakefield produced a copper concentrate from a Thierry Mine and K1-1 sample (in a 1:1 ratio) and produced a copper concentrate grading 24.1% Cu at 86.7% recovery. High nickel in copper concentrate was observed (1.4% Ni).

Also in 1980 UMEX conducted some tests on copper rougher concentrates with the objective of producing a separate, marketable nickel concentrate. A nickel concentrate grading 6 to 14% was achieved with a very low copper and some cobalt content. Based on this data the possibility of producing a separate nickel concentrate from copper rougher concentrates is possible, however it will be at very low overall nickel recoveries (Xstrata, 2008).

In late 2005, Lakefield undertook metallurgical testing on three composites of drill core samples from the 2004 drill program. Initial rougher tests were conducted to analyze grinding time and size. Additional test work with cleaner and scavenger stages will be required to arrive at a conclusive result for study purposes (Xstrata, 2008)

### 6.7.2 Salman Mineral Research Metallurgy

Salman Mineral Research Ltd. started metallurgical tests on Thierry ore samples in 1973. The initial work was performed in order to optimize the Copper concentrate grade and recovery. Dr. Salman's metallurgical tests were quite conclusive and confirmed Lakefield's results regarding production of a Copper concentrate (high grade, high recovery) but similar to Lakefield his tests were negative regarding the production of a separate Nickel concentrate.

Historical test work for the J and G deposits conducted at the University of Louvain, SGS Lakefield and McGill University showed that it was practically impossible to produce high grade, high recovery concentrates from the J and G deposits. Low grade – high recovery and low recovery – high grade concentrates were produced however but the J and G deposits can be considered consistently poor.

### 6.7.3 Noranda Mineralogical Processing Studies

The Noranda ore dressing laboratory of Noranda Mines, Quebec, carried out flotation tests and a mineralogical study on a 500 lb. Thierry ore sample in February 1974. Results comparable to those obtained by Lakeview were produced from the flotation of a Copper concentrate.

## 6.8 XSTRATA PROCESS SUPPORT METALLURGICAL REVIEW 2008

Xstrata Process Support conducted a review of existing mineral processing and metallurgical testwork on the Thierry Mine property. The objective of their report was to provide an assessment of the quality of work done to date, and mineralogical and metallurgical flags that may exist. Recommendations concerning protocols for future work were also included and are outlined below.

The documents reviewed covered both the Thierry Mine property and Kapkichi Lake area for the period between 1970 and 2007. In total, ten reports on the Thierry Mine and surrounding area as noted below were reviewed.

- Anderson, S., 2007: Observations Pertaining to the Structural Geology of the Thierry Cu-Ni (PGE) Deposit;
- Lascelles, D., Fleming, C., 2006: The Recovery of Copper, Nickel and PGM from the Thierry Deposit, SGS Lakefield Research Limited;
- Puritch, E., Ewert, W., Armstrong, T., 2006: Technical Report and Resource Estimate on the Thierry Cu-Ni –PGE Mine Property, Pickle Lake Area, Patricia Mining District North-western Ontario, Canada., NI-43-101, P&E Mining Consultants Inc.;
- Goodman, S., 2004: Structural Architecture of the Thierry Mine Cu-Ni-PGM deposit, Pickle Lake, Ontario, SRK Consulting;
- Curtis, L., 2001: Thierry Mine Property Thunder Bay Ontario, Curtis & Associates Inc;
- Patterson, G., Watkinson, D., 1984: The Geology of the Thierry Cu-Ni Mine, North-western Ontario., Canadian Mineralogist, Vol. 22 pp. 3-11;
- UMEX Inc., 1982: The Kapkichi Deposits, Internal report dated Apr. 1982.
- MacLellan, J., 1980: UMEX – Internal Thierry Mine Report re: Nickel Circuit, dated Dec., 1980;
- Patterson, G. C., 1980: The Geology of the Kapkichi Lake Ultramafic-Mafic Bodies and Related Cu-Ni Mineralization Pickle Lake, Ontario., Ph.D. thesis, Carlton University;
- UMEX Inc., 1970: Petrography of the Kapkichi Lake Copper-Nickel Deposits and Associated Rocks, Pickle Lake Area, North-West Ontario., Internal UMEX report dated Dec., 1970

Based on the conclusions resulting from their review Xstrata Process Support recommended the following:

- The Thierry Deposit should be considered primarily as a Copper deposit with credits obtained for minor Pt, Pd, Ag and Au content in copper concentrate. Testwork has shown that nickel concentrate production is unlikely with both grades and recoveries being poor.
- It is recommended that an economic evaluation and resource estimate on the property is completed including paymetals Cu, Pt, Pd, Au and Ag but without nickel. A decision to proceed with more testwork should be made once it is clear whether the economics of a Cu-Ag-Au-PGE deposit are sufficient to support the project moving forward.
- If the economics are still favourable for a copper PGM deposit, only then would XPS recommend a full ore characterisation study using spatially representative and fresh drill core samples. This could involve QEMSCAN and microprobe analysis to quantify the minerals present, paymetal deportments and association of the PGMs. This would be valuable information that would assist the mineral processing team to develop a sound flowsheet that maximizes the profitability of the Thierry Deposit.
- For all future testwork, it is recommended that a more rigorous sampling procedure be implemented, where the composite to be tested is representative of the population to be investigated in terms of average grade, grade distribution, lithology and space.
- For all future testwork, effort should be made to prevent oxidation of core. The amount of oxidation in old vs new core should be assessed to appropriately design a protocol which can limit oxidation in drill core from the current program. Core which oxidizes easily may require special handling protocols (eg. frozen or nitrogen purge).

# 7.0 GEOLOGICAL SETTING AND MINERALIZATION

## 7.1 REGIONAL GEOLOGY

The Thierry and K1-1 deposits occur along the northwest margin of the Pickle Lake metavolcanic-metasedimentary belt that forms part of the Uchi Lake Greenstone Belt (Figure 7.1). The mine property is underlain by a 1.5 kilometre wide belt of metavolcanics that widens to the southwest. This sequence is intruded by the Pickle Lake and the Tarp Lake granitic plutons. Lithologies in the belt are characterized by massive to pillowed mafic volcanics intercalated with chert magnetite iron formation and metasediments. The sequence is intruded by ultramafic to gabbroid and granitoid bodies. Metamorphic grade is lower amphibolite facies with the transition to greenschist facies occurring about 6 kilometres west of the Thierry mine. The rocks have been structurally modified by four distinct tectonic events, the most significant being a late cataclastic episode that produced a major shear zone (mylonite) in the vicinity of the Thierry mine (Figure 7.2).

## 7.2 DEPOSIT GEOLOGY

The most detailed geological study of the Thierry property, including the Thierry mine and K1-1 deposits was completed by Patterson (1980) who in his PhD thesis interpreted the mine sequence as consisting of metamorphosed gabbro and ultrabasic rocks hosted by sequences of massive to pillowed mafic volcanic rocks. The intrusions have been described by various other authors as amphibolite, peridotite and metagabbro. The temperature of metamorphism was determined from garnet-biotite, calcite dolomite and magnetite-ilmenite geothermometers as being approximately 600°C.

The pillowed flows around the Thierry Mine pits have been highly deformed and flattened. Pillow selvages have been preferentially recrystallized to the point that selvages form coarse amphibolite bands. Relatively undeformed flat lying amphibolitic pillows are found along the southeast shore of Kapkichi Lake near the Kapkichi Lake gold showing. The metavolcanics are moderately to strongly foliated and epidotized.

Interlayered with the mafic rocks of the Thierry Mine sequence is a chert magnetite iron formation of variable thickness that can be traced for at least a kilometre west and southwest of the Thierry mine where it appears to become truncated by a northwest trending sinistral fault. Mullen (1988) first observed chert-magnetite zones in drill core while re-logging old mine holes for UMEX's platinum program in 1988 and Gurgurewicz-Luck (1988) noted chert-magnetite iron formation while re-logging core for a 1987study. According to Mullen (1988), the iron formation horizon may have acted as a locus for the main shearing event that preferentially allowed the intrusion of the mineralized mafic-ultramafic bodies at Thierry.

According to Mullen (1988), the siliceous metasediments and cherty iron formation observed in drill holes west of the mine probably are not the strike extension of the main iron formation horizon west of the West Pit but represent another sedimentary horizon. Iron formations cored under Kapkichi Lake and further south in drillhole K-92 are probably the on strike extension of the "Mine Iron Formation". Magnetite-rich mafic intrusions similar to mafic-ultramafic bodies at Thierry underlie Kapkichi Lake.

**Figure 7.1 Regional Geology**

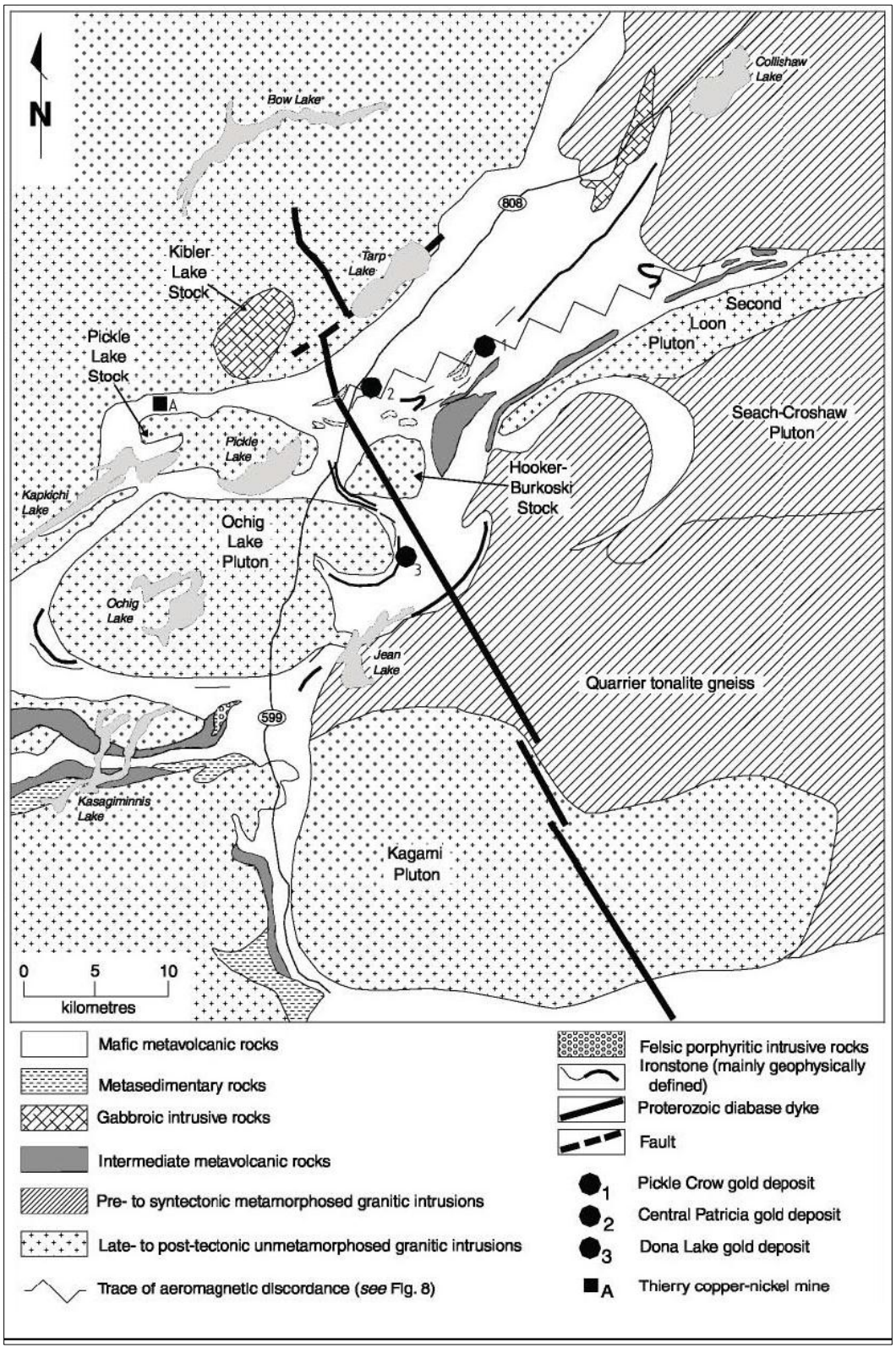
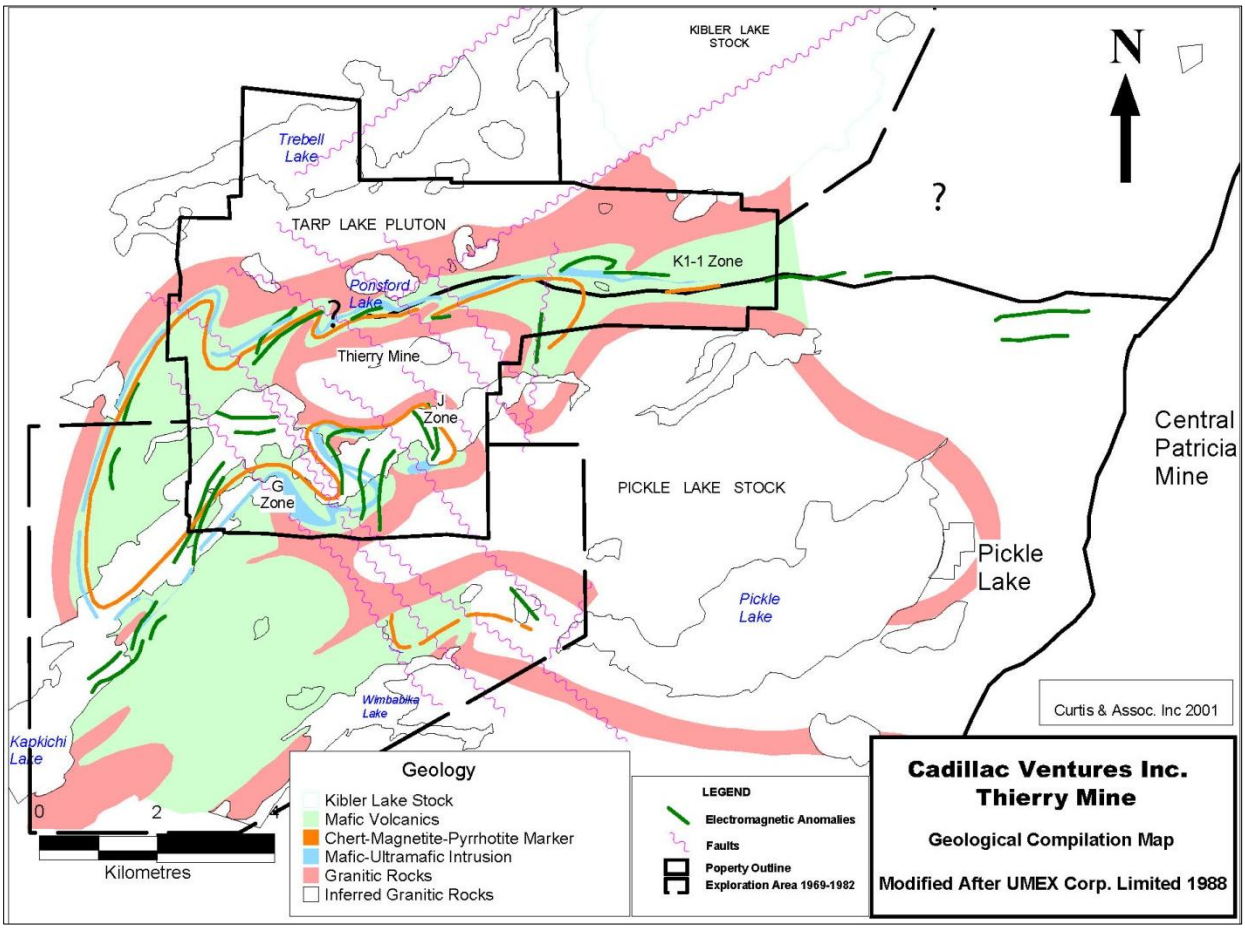


**Figure 7.2 Detailed Property Geology**




## 7.3 MINERALIZATION

Mineralization at the main Thierry deposit and adjacent K1-1 zone, is more or less coincident with what is best characterized as a chlorite-biotite-hornblende altered mylonitic shear zone (the "CBS shear zone"). The shear zone extends across the ultramafic intrusive along a strike length of about one kilometre and a width up to 50 metres. Within the shear zone mineralization is hosted by highly schistose rocks containing stringer sulphides to less schistose ultramafic rocks containing massive stringers or veins and disseminated sulphides. Primary sulphides, listed in approximate order of decreasing abundance are pyrrhotite, chalcopyrite, pyrite and pentlandite. Cubanite, bornite, magnetite and minor ilmenite have also been identified. Violarite and mackinawite have developed from alteration of pentlandite.

Outside of the main mineralized zone, chalcopyrite and bornite occur as stringers as well as finely dissemination sulphides. Bornite is commonly associated with carbonate and quartz veins. Oxidized ores are reported to contain violarite, millerite and bornite.

Copper-nickel-PGE mineralization at the Thierry Mine and K1-1 deposit is hosted within a highly deformed and altered ultramafic sequence. Copper-nickel-PGE mineralization consists of:

- Sulphide matrix breccia;
- Blebs and small stringers, occasionally net textured sulphides; and
- Disseminated sulphides.

The sulphide mineral assemblage consists of chalcopyrite, pyrrhotite, pentlandite and pyrite.

### 7.3.1 Copper-Nickel Mineralization

Four principal types of sulphide mineralization are recognized at the Thierry Mine (Patterson and Watkinson, 1984b) with Patterson (1980) noting a fifth:

- Breccia Mineralization: 40% of all ore and composed of 20-30% sulphide, consisting of rounded to angular fragments of gangue in a matrix of chalcopyrite, pyrrhotite, pyrite and pentlandite. Breccia ore grades into CBS ore.
- Chlorite-Biotite Schist Mineralization (mylonitic mineralization): 56% of all ore (CBS ore), containing 5-20% sulphide as stringers of chalcopyrite, pyrrhotite, pentlandite and pyrite; the stringers parallel foliation and where gradational with breccia ore, the breccia fragments are flattened and elongated.
- Bornite Mineralization: 2% of all ore, containing 1-5% sulphide as stringers and disseminations of chalcopyrite and bornite in carbonate veins associated with blocks of amphibolite schist in the main shear zone.
- Primary Disseminated Sulphide Mineralization: 1% of all ore, occurring as blocks of chalcopyrite (with exsolution of bornite or cubanite) plus pyrrhotite and pentlandite between remnants of olivine
- Oxidized Mineralization: 1% of all ore comprised of several varieties of ore, characterized by violarite, millerite, bornite etc.

The mylonite and breccia mineralization has a copper nickel ratio of 8:1, compared to a 2:1 ratio in the disseminated sulphides. In addition, the chalcopyrite-pyrrhotite ratio is approximately 1:1 in the mylonite mineralization and 1:10 in the disseminated sulphides (Patterson, 1980).

### 7.3.2 Platinum-Group Elements and Silver Mineralization

Precious metal minerals have been found in the Thierry Mine in two distinct associations:

In the breccia mineralization, the precious metal minerals merenskyite, moncheite, stutzite and an unnamed mineral Ag3BiTe3 occur with chalcopyrite, pyrrhotite. pentlandite, pyrite and violarite.

In the bornite ore, the precious metal minerals, native silver, acanthite, stutzite and merenskyite are associated with chalcopyrite, bornite and copper bismuth sulfosalt (wittichenite and emplectite).

The strongest positive correlation of metals is between silver and copper. There is a corresponding negative correlation between silver and nickel at values of nickel greater than 0.5%.

A plot of Pt/(Pt + Pd) versus Cu/(Cu + Ni) shows average head grades of the Thierry Mine to be enriched in copper and somewhat in platinum relative to other similar deposits (Naldrett and Cabri, 1976). From a PGE perspective the Thierry mineralization falls into two groups, both of which fall well off a characteristic trend line defined by Naldrett and Cabri, (1976) for typical PGE ores. The first group is pyrrhotite-rich and correspondingly has a high Ni content. This

group is platinum poor compared to the second Cu-rich, chalcopyrite rich fraction which has a high platinum content.

It is obvious that the ores at the Thierry Mine have undergone intense modification after their initial deposition as magmatic sulphides. Dynamic metamorphism has mobilized much of the breccia and mylonite mineralization. The occurrence of mylonite fragments in the breccia mineralization along with the localization of breccia mineralization along faults related to the main shear emphasizes this relationship. It is important to note the occurrence of merenskyite in carbonate veins (bornite ore) which cut across metamorphic foliation in these amphibolite blocks is evidence that PGE minerals were mobile during dynamic metamorphism.

SRK examinations of UMEX plans and sections indicate that there is strong structural control on the geometry of the zones of mineralization. As a result, mineralization is believed to occur as pinching and swelling structures. Thicker and higher grade structures are expected to be associated with steeply dipping and/or right stepping portions of shear zone segment.

The ultramafic-mafic rocks that host the mineralization are highly deformed along shear zones and are best defined texturally as blastomylonite rocks. A structural corridor, referred to as the "CBS Shear", is defined by zones of mylonite host rocks that enclose virtually all of the defined sulphide mineralization. The CBS shear zone has been traced over about 6 km, and extends from east of the K1-1 Pit to about 1 km west of the West Pit. The shear zone is truncated by a NW-SE sinistral fault, one kilometer west of the West Pit. The ore horizon may continue to the west of this fault as evidenced by the presence of a chert-sulphide iron formation under Kapkichi Lake. The CBS shear is narrow (2-30 metres wide) and is occasionally offset by east-west and north-northeast to northeast-trending fault zones. The shear structure dips 48°-55° to the north-northwest. The angle of dip increases to 70° in the eastern part of the ore body. Felsic intrusives and gabbro are reported to occur as lens shaped and narrow dykes from 5 cm to 3 m thick.

## 8.0 DEPOSIT TYPE AND MODEL

Early investigations of the Thierry deposit by workers such as Bowdidge (1970), Patterson (1980), and Patterson and Watkinson (1983, 1984) concluded that the ores at the Thierry mine had undergone intense modification after their initial deposition as magmatic sulphides. This observation also applies to the K1-1 area.

Bowdidge (1970) suggested that the textural evidence and the occurrence of sulphide inclusions in olivine supported the argument that the mineralization was originally an intercumulus sulphide phase. The excess Cu to Ni (3 to 1 ratio) was said by Bowdidge (1970) to occur as a result of depletion of Ni due to removal of olivine and pyroxene. There is a strong suggestion, especially at the main Thierry deposit, that re-mobilization of the original sulphide material, is responsible for the observation that chalcopyrite increases in late-stage veins relative to pentlandite.

Patterson and Watkinson (1984) noted that during regional metamorphism the primary disseminated sulphides were modified into veins and veinlets by the recrystallization of the surrounding silicates. Strong dynamic metamorphism mobilized the sulphides into fractures and pressure shadows. It also significantly changed the copper-to-nickel ratio of the mylonite and breccia hosted sulphides compared to the present disseminated material. Further, the occurrence of fragments of mylonite in the breccia mineralization suggests that the breccia hosted sulphides were formed during dynamic metamorphism (Patterson and Watkinson, 1984).

Curtis (2001) observed that the Thierry deposit contains significant concentrations of platinum and palladium with unusual characteristics. Unlike many Ni-Cu-PGE deposits, the Thierry deposit is not obviously of primary magmatic derivation.

Within the spectrum of magmatic Ni-Cu-PGE deposits, the two dominant examples are those from the Norilsk and Sudbury Districts. Naldrett (1999) has indicated that the 2 key factors which discriminate major deposits of this kind include:

- The efficient segregation and subsequent concentration of sulphides from a large volume of magma; and
- Sufficient time and element mobility to allow the sulphides to interact with enough magma to concentrate Ni, Cu and PGE's.

It is evident that despite the fact that Ni, Cu, PGE mineralization in the various zones on the Thierry property is associated with a metamorphosed ultramafic mafic complex, within which Ni and Cu are enriched, there is little textural evidence to suggest that primary magmatic concentration of sulphides played a major role in elevating the PGE content of the mineralization.

According to Curtis (2001), what is more evident with Thierry, and common to several other PGE enriched deposits is the following:

- The PGE enriched mineralization is structurally confined.
- The PGE's occur in association with higher concentrations of Ni and/or Cu, but the relationship is not exclusive, i.e. high concentration of PGE's are recognized also in zones that have low concentrations of Ni and Cu.
- Host rocks to the mineralization have been subjected to upper greenschist-lower amphibolite grade.
- There is evidence for late stage remobilization of sulphides +PGE's.
- There is evidence for involvement of hydrothermal fluids synchronous with metamorphism and remobilization.

Evidence is emerging from studies of similar deposits (the New Rambler mine in Wyoming (McCallum et al, 1976), the Rathburn Lake occurrence in north-eastern Ontario (Rowell and Edgar, 1986), the Salt Chuck Intrusion in Alaska (Watkinson and Melling, 1992) and parts of the Lac des Isles complex (Pyle, 1968).) that platinum and palladium (in particular when associated with bismuth and tellurium) can be mobilized and concentrated by hydrothermal fluids. Aqueous solutions are also known to remobilize and concentrate PGE's in laterites and placers. The additional association of hydrous silicates, in particular chlorite, biotite, sericite, and actinolite-talc that are atypical of magmatic environments strongly suggest that PGE's are remobilized and re-concentrated by hydrothermal fluids in the metamorphic regime.

A structural study by SRK (2004) contends that this primary relationship between host rocks and mineralization has been obscured by deformation, metamorphism, and remobilization of ore. The present form of the deposit is believed to result from extensive remobilization by hydrothermal fluids, into a ductile shear zone setting.

SRK (2005) concluded that the Thierry deposit is a shear-zone hosted deposit. As such, it shares the characteristic of any fault or shear-zone system that there are predictable areas of dilation and compression where the shear-zone bends or splays. Mineralization commonly accumulates in areas of dilation, as these areas are local low pressure zones, physically favouring sulphide precipitation, and allowing fluid mixing, which can provide a chemical trigger for precipitation.

Any model of ore genesis at the Thierry Mine and K1-1 must take into account the unusual Cu/Ni, Pt/Pd and chalcopyrite / pyrrhotite ratios in the rocks. According to Naldrett and Cabri (1976), intrusive complexes similar to those at Thierry Mine contain sulphides with a copper-nickel ratio of 2:1, a platinum-palladium ratio of 1:4, and a chalcopyrite/pyrrhotite ratio of 1:10.These ratios at the Thierry Mine are approximately; copper-nickel 8:1, platinum-palladium 1:4 and chalcopyrite/pyrrhotite 1:1.

## 9.0 EXPLORATION

The only exploration work that Cadillac has conducted since acquiring the Thierry property is diamond drilling. This work is summarized in Section 10.0.

## 10.0 DRILLING

Cadillac completed 3 drillholes in 2010 and 12 drillholes in 2011 on the Thierry Mine property and 16 drillholes on the K1-1 property in 2011. Previous drilling conducted by Richview is summarised in Section 6.3.

## 10.1 2010-2011 CADILLAC VENTURES DRILL PROGRAM

### 10.1.1 Thierry Property Drill Program

In 2010, Cadillac completed 3 deep drillholes totalling 10,926 ft of drilling, on the Thierry Mine property with the aim of infilling missing information from the 2010 P&E Thierry deposit model at depth. All three holes intersected mineralization and aided in closing a void in the model where there was no drilling. A table of significant intersections is presented in Table 10.1.

**TABLE 10.1**
**2010 THIERRY DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (o) | Dip (o) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| CV-10-06B | 180 | -80 | 3486.48 | 3503.75 | 17.27 | 1.043 | 0.047 |
| including | 180 | -80 | 3491.48 | 3503.75 | 12.27 | 1.26 | 0.065 |
| including | 180 | -80 | 3496.48 | 3500.72 | 4.24 | 2.21 | 0.147 |
| CV-10-06B | 180 | -80 | 3654.92 | 3657.82 | 2.90 | 1.82 | 0.056 |
| CV-10-06B | 170 | -80 | 3710.63 | 3715.68 | 5.05 | 1.24 | 0.047 |
| CV-10-01 | 170 | -80 | 3290.40 | 3309.17 | 18.77 | 1.064 | 0.184 |
| including | 170 | -80 | 3290.40 | 3305.40 | 15.00 | 1.191 | 0.196 |
| CV-10-01 | 170 | -80 | 3338.17 | 3368.64 | 30.47 | 0.336 | 0.081 |
| including | 170 | -80 | 3338.17 | 3343.17 | 5.00 | 0.558 | 0.128 |
| including | 170 | -80 | 3366.14 | 3368.64 | 2.50 | 1.310 | 0.079 |
| CV-10-01 | 170 | -80 | 3378.64 | 3388.13 | 9.49 | 0.574 | 0.285 |
| including | 170 | -80 | 3384.66 | 3388.13 | 3.47 | 0.617 | 0.592 |
| CV-10-04 | 172.5 | -82 | 3811.21 | 3820.87 | 9.66 | 0.80 | 0.140 |
| including | 172.5 | -82 | 3815.14 | 3817.94 | 2.80 | 1.52 | 0.233 |
| CV-10-04 | 172.5 | -82 | 3835.57 | 3857.55 | 21.98 | 2.02 | 0.120 |
| including | 172.5 | -82 | 3835.57 | 3840.57 | 5 | 3.38 | 0.119 |
| CV-10-04 | 172.5 | -82 | 3996.06 | 4001.29 | 5.23 | 1.49 | 0.09 |

In 2011, Cadillac advanced 12 drillholes on the Thierry Mine property. 3 drillholes, CV-11-02, CV-11-03 and CV-11-04, were the last deep holes drilled into the same void at depth as 2010 drillholes. The 6 deep drillholes, from 2010 and 2011, totalled 22,367 feet of drilling.

Three (3 drillholes, CV-11-08 to CV-11-10 were used to extend the mineralization to the west of the known deposit along strike as part of the 2011 shallow drilling program. In addition, 6 drillholes, CV-11-11 to CV-11-16 were used to extend the eastern strike of the Thierry Mine project, also as part of the 2011 shallow drilling program. A list of significant intersections is presented in Table 10.2.

| TABLE 10.2<br>2011 THIERRY DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Hole ID** | **Azimuth (o)** | **Dip (o)** | **From (ft)** | **To (ft)** | **Length (ft)** | **Cu %** | ***Ni %** |
| CV-11-02 | 170 | -80 | 3025.10 | 3038.10 | 13.00 | 0.98 | |
| including | 170 | -80 | 3028.40 | 3038.10 | 9.70 | 1.11 | |
| CV-11-03 | 170.8 | -80 | 3405.20 | 3436.60 | 33.40 | 1.42 | |
| including | 170.8 | -80 | 3411.20 | 3426.30 | 15.10 | 1.70 | |
| including | 170.8 | -80 | 3418.10 | 3426.30 | 8.20 | 2.12 | |
| CV-11-03 | 170.8 | -80 | 3418.10 | 3426.30 | 8.20 | 2.12 | |
| CV-11-05 | 170 | -80 | 3878.3 | 3883.5 | 5.2 | 1.76 | 0.158 |
| CV-11-05 | 170 | -80 | 3883.5 | 3887.4 | 3.9 | 3.38 | 0.156 |
| CV-11-05 | 170 | -80 | 3887.4 | 3890.4 | 3 | 1.72 | 0.120 |
| CV-11-05 | 170 | -80 | 3890.4 | 3892.4 | 2 | 0.02 | 0.004 |
| CV-11-05 | 170 | -80 | 3892.4 | 3897.7 | 5.3 | 0.98 | 0.148 |
| CV-11-05 | 170 | -80 | 3897.7 | 3899.7 | 2 | 0.85 | 0.59 |
| CV-11-08 | 172 | -85 | 1159.00 | 1176.00 | 17.00 | 0.74 | |
| including | 172 | -85 | 1170.00 | 1173.80 | 3.80 | 1.08 | |
| CV11-09 | 172 | -85 | 726.90 | 742.50 | 15.60 | 1.25 | |
| including | 172 | -85 | 726.90 | 735.15 | 8.25 | 1.30 | |
| including | 172 | -85 | 740.00 | 742.50 | 2.50 | 1.71 | |
| CV-11-10 | 172 | -85 | 705.00 | 710.40 | 5.40 | 0.64 | |
| CV-11-11 | 172 | -70 | 573.20 | 595.60 | 22.40 | 0.77 | |
| including | 172 | -70 | 580.00 | 590.00 | 10 | 1.17 | |
| CV-11-12 | 136 | -70 | 633.50 | 654.50 | 16 | 0.59 | |
| including | 136 | -70 | 633.50 | 645.00 | 6.5 | 0.88 | |
| CV-11-13 | 136 | -70 | 630.30 | 636.10 | 5.8 | 1.23 | |
| CV-11-14 | 136 | -70 | 563 | 575 | 12 | 0.29 | |
| CV-11-15 | 136 | -70 | 625 | 631.5 | 6.5 | 0.59 | |
| including | 136 | -70 | 629 | 631.5 | 2.5 | 0.81 | |
| CV-11-16 | 144 | -50 | 557 | 570 | 13 | 0.63 | |
| including | 144 | -50 | 565.5 | 570 | 4.5 | 0.81 | |

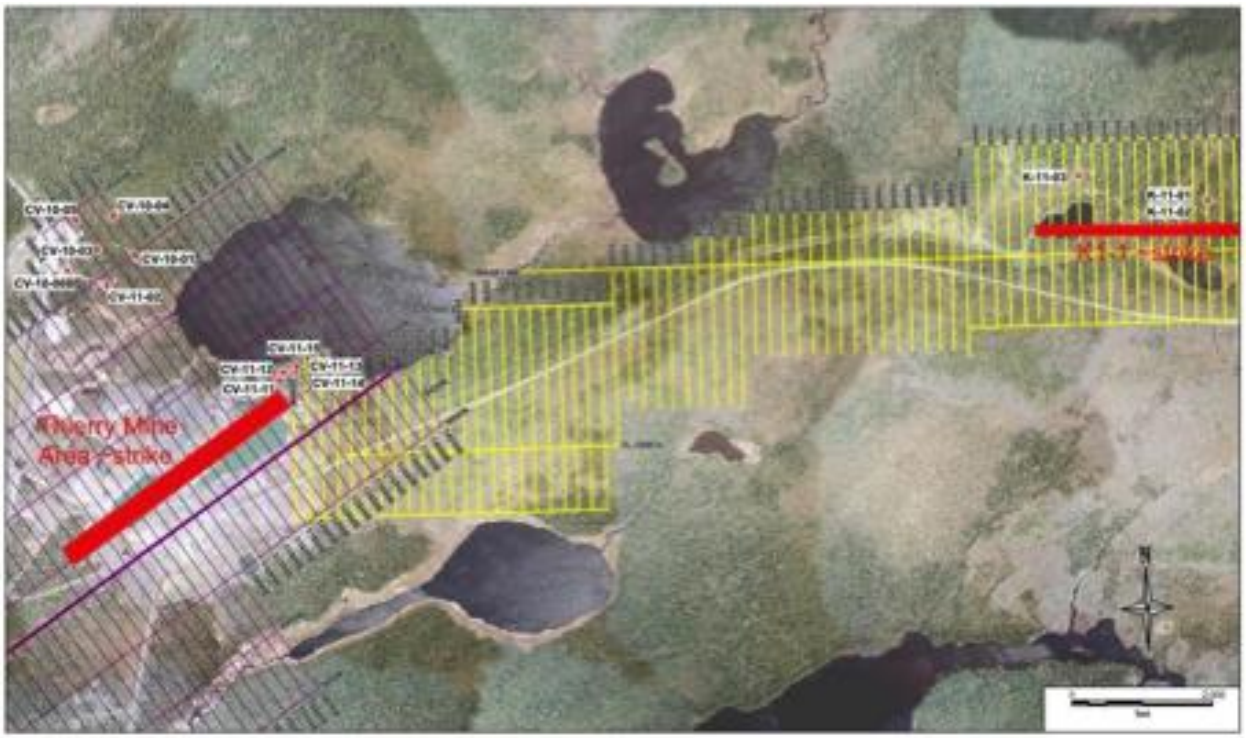
## 10.2 K1-1 DRILL PROGRAM

The K1-1 deposit area is located approximately 3 km east of the Thierry Mine as shown in . Figure 10.1 which also shows an interpretation of the strike for both deposits. In February and March of 2011 Cadillac completed three shallow drill holes on the K1-1 property (Boreholes K-11-01 to K-11-03) designed to confirm results obtained previously by UMEX and other previous operators. Drill hole K-11-01 was drilled at eastern limit of the K1-1 mineralization, drill hole K-11-02 was drilled to undercut K-11-01 at the same location and drill hole K-11-03 was drilled at the western end of the K1-1 mineralization. Based on the positive results of the initial 3 drill holes, an additional 13 drill holes were advanced on the K1-1 property and completed June of 2011. A summary of the significant intersections is presented in Table 10.3 and the borehole locations are presented in Figure 10.2.

A second phase of drilling, consisting of 20,868 feet drilled over 26 holes, was completed in late 2011 and targeted the K1-1 open pit area. The program was designed to address gaps within the

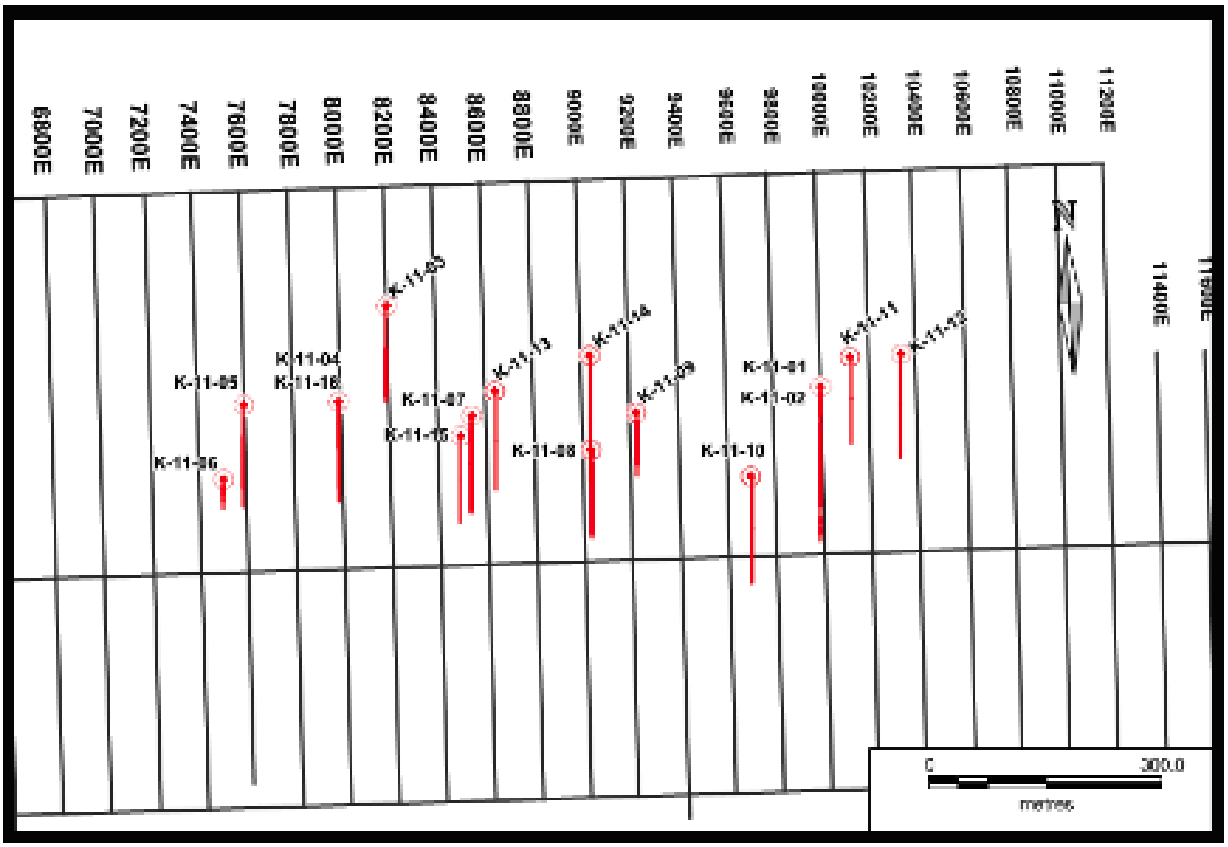
pit shell area as well as test for extensions along strike and at depth. A list of significant intersections is presented in Table 10.4 and the borehole locations are presented in Figure 10.3.

**Figure 10.1 Borehole Locations for 2011 K1-1 Drill Program**




(***Source:*** *www.cadillacventures.com)*

**Figure 10.2 Borehole Locations for 2011 K1-1 Drill Program**




(***Source:*** *www.cadillacventures.com*)

**Figure 10.3 2011 Borehole Locations**

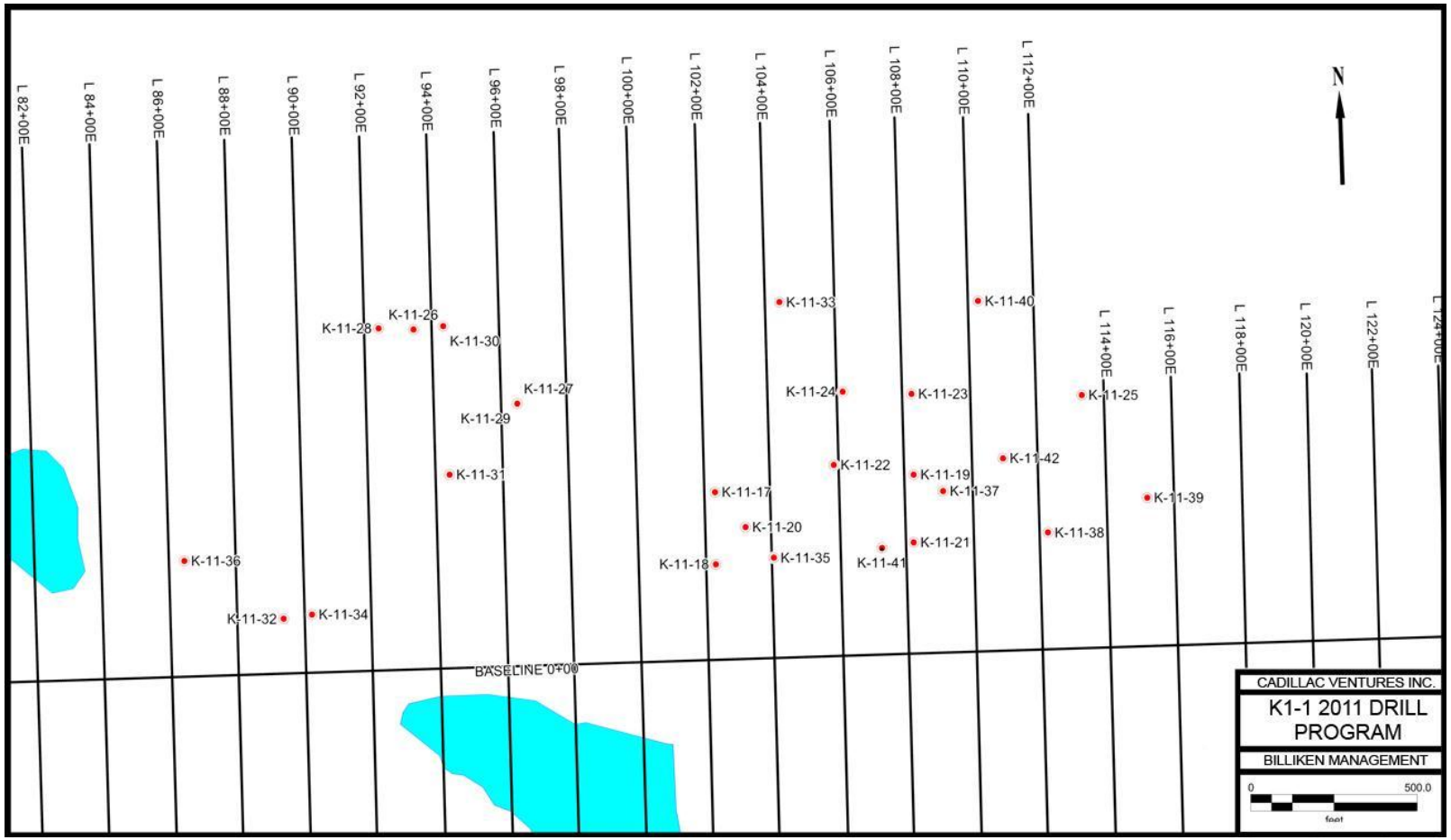


**TABLE 10.3**
**2011 K1-1 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (°) | Dip(°) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| K-11-01 | 180 | -50 | 348 | 381.50 | 33.50 | 0.41 | 0.10 |
| K-11-01 | 180 | -50 | 400 | 475 | 75 | 0.30 | 0.06 |
| K-11-01 | 180 | -50 | 500 | 510 | 10 | 0.65 | 0.09 |
| K-11-01 | 180 | -50 | 525 | 615 | 90 | 0.58 | 0.08 |
| including | 180 | -50 | 555 | 585 | 30 | 0.92 | 0.12 |
| K-11-01 | 180 | -50 | 620 | 793.50 | 173.50 | 0.27 | 0.05 |
| K-11-01 | 180 | -50 | 925 | 970 | 45 | 0.31 | 0.09 |
| K-11-02 | 180 | -80 | 485 | 615 | 130 | 0.35 | 0.08 |
| K-11-02 | 180 | -80 | 639.75 | 648.75 | 9 | 0.46 | 0.04 |
| K-11-03 | 180 | -80 | 530 | 1112 | 582 | 0.39 | 0.11 |
| K-11-04 | 180 | -50 | 150 | 580 | 430 | 0.36 | 0.10 |
| including | 180 | -50 | 207 | 316 | 108.6 | 0.55 | 0.09 |
| including | 180 | -50 | 235 | 270 | 35 | 0.84 | 0.09 |
| K-11-05 | 180 | -50 | 215 | 560 | 345 | 0.18 | 0.06 |
| including | 180 | -50 | 290 | 310 | 20 | 0.27 | 0.06 |
| including | 180 | -50 | 340 | 355 | 15 | 0.26 | 0.10 |
| including | 180 | -50 | 365 | 440 | 75 | 0.26 | 0.08 |
| including | 180 | -50 | 480 | 545 | 65 | 0.26 | 0.08 |
| K-11-06 | 180 | -70 | 35.5 | 280 | 138.55 | 0.28 | 0.06 |
| including | 180 | -70 | 115 | 120 | 5 | 1.04 | 0.17 |
| K-11-07 | 180 | -50 | 45 | 270 | 225 | 0.16 | 0.08 |
| including | 180 | -50 | 55 | 120 | 65 | 0.26 | 0.09 |
| K-11-07 | 180 | -50 | 274.5 | 635 | 360.5 | 0.27 | 0.13 |
| including | 180 | -50 | 520 | 615 | 95 | 0.50 | 0.26 |
| including | 180 | -50 | 546.5 | 550 | 3.5 | 1.12 | 0.405 |
| including | 180 | -50 | 550 | 555 | 5 | 0.778 | 0.23 |
| including | 180 | -50 | 555 | 560 | 5 | 0.649 | 0.63 |
| including | 180 | -50 | 560 | 565 | 5 | 0.427 | 0.636 |
| including | 180 | -50 | 565 | 570 | 5 | 0.748 | 0.251 |
| including | 180 | -50 | 570 | 575 | 5 | 0.264 | 0.139 |
| including | 180 | -50 | 575 | 580 | 5 | 0.68 | 0.322 |
| including | 180 | -50 | 580 | 585 | 5 | 0.488 | 0.158 |
| including | 180 | -50 | 585 | 590 | 5 | 0.494 | 0.476 |
| including | 180 | -50 | 590 | 595 | 5 | 0.549 | 0.459 |
| including | 180 | -50 | 595 | 598.5 | 4.5 | 0.712 | 0.417 |
| K-11-08 | 180 | -60 | 110.0 | 720.0 | 610.0 | 0.265 | 0.105 |
| including | 180 | -60 | 110.0 | 205.0 | 95.0 | 0.392 | 0.110 |
| including | 180 | -60 | 155.0 | 200.0 | 45.0 | 0.456 | 0.116 |
| including | 180 | -60 | 340.0 | 405.0 | 65.0 | 0.339 | 0.103 |
| including | 180 | -60 | 435.0 | 535.0 | 100.0 | 0.317 | 0.098 |
| including | 180 | -60 | 571.1 | 660.0 | 88.9 | 0.298 | 0.086 |
| including | 180 | -60 | 675.0 | 710.0 | 35.0 | 0.339 | 0.088 |
| K-11-08 | 180 | -60 | 150.0 | 335.0 | 185.0 | 0.238 | 0.135 |
| including | 180 | -60 | 195.25 | 280.0 | 84.75 | 0.197 | 0.149 |
| including | 180 | -60 | 215.0 | 245.0 | 30.0 | 0.186 | 0.166 |
| K-11-09 | 180 | -60 | 120.0 | 464.0 | 344.0 | 0.353 | 0.080 |
| including | 180 | -60 | 120.0 | 180.0 | 60.0 | 0.438 | 0.080 |
| including | 180 | -60 | 135.0 | 175.0 | 40.0 | 0.534 | 0.083 |
| including | 180 | -60 | 230.0 | 340.0 | 110.0 | 0.383 | 0.091 |
| including | 180 | -60 | 385.0 | 464.0 | 79.0 | 0.372 | 0.082 |
| including | 180 | -60 | 280.0 | 340.0 | 60.0 | 0.403 | 0.100 |
| including | 180 | -60 | 300.0 | 320.0 | 20.0 | 0.549 | 0.108 |
| K-11-10 | 180 | -50 | 18.6 | 535.0 | 516.4 | 0.329 | 0.064 |
| including | 180 | -50 | 130.0 | 190.0 | 60.0 | 0.41 | 0.07 |

**TABLE 10.3**
**2011 K1-1 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (°) | Dip(°) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| including | 180 | -50 | 210.0 | 265.0 | 55.0 | 0.52 | 0.08 |
| including | 180 | -50 | 320.0 | 350.0 | 30 | 0.42 | 0.07 |
| including | 180 | -50 | 385.0 | 470.0 | 85.0 | 0.39 | 0.09 |
| including | 180 | -50 | 495.0 | 535.0 | 40.0 | 0.51 | 0.10 |
| including | 180 | -50 | 550.0 | 570.0 | 20.0 | 0.43 | 0.11 |
| including | 180 | -50 | 643.5 | 685.0 | 41.5 | 0.34 | 0.1 |
| K-11-11 | 180 | -70 | 590 | 673.9 | 83.9 | 0.26 | 0.06 |
| including | 180 | -70 | 645.0 | 673.9 | 28.9 | 0.33 | 0.1 |
| K-11-11 | 180 | -70 | 820.0 | 845.0 | 25.0 | 0.42 | 0.13 |
| K-11-11 | 180 | -70 | 900.0 | 965.0 | 65.0 | 0.35 | 0.09 |
| including | 180 | -70 | 915.0 | 965.0 | 50.0 | 0.39 | 0.1 |
| K-11-11 | 180 | -70 | 992.3 | 1055 | 62.7 | 0.31 | 0.07 |
| including | 180 | -70 | 992.3 | 1030 | 37.7 | 0.35 | 0.08 |
| K-11-12 | 180 | -65 | 570 | 955 | 385.0 | 0.24 | 0.07 |
| including | 180 | -65 | 696.2 | 765 | 68.8 | 0.35 | 0.08 |
| including | 180 | -65 | 790 | 800 | 10 | 0.39 | 0.07 |
| including | 180 | -65 | 860 | 875 | 15 | 0.31 | 0.11 |
| K-11-13 | 180 | -60 | 139 | 150 | 11 | 0.37 | 0.09 |
| K-11-13 | 180 | -60 | 227 | 245 | 18 | 0.31 | 0.11 |
| K-11-13 | 180 | -60 | 415 | 440 | 25 | 0.30 | 0.13 |
| K-11-13 | 180 | -60 | 565 | 610.9 | 45.9 | 0.36 | 0.13 |
| including | 180 | -60 | 595 | 610.9 | 15.9 | 0.52 | 0.18 |
| K-11-14 | 180 | -60 | 260 | 502.5 | 242.50 | 0.25 | 0.10 |
| including | 180 | -60 | 300 | 465 | 165 | 0.30 | 0.11 |
| including | 180 | -60 | 395 | 425 | 30 | 0.37 | 0.11 |
| K-11-15 | 180 | -50 | 190 | 305 | 115 | 0.28 | 0.11 |
| including | 180 | -50 | 285 | 305 | 20 | 0.36 | 0.11 |
| K-11-15 | 180 | -50 | 340 | 490 | 150 | 0.24 | 0.09 |
| K-11-16 | 180 | -70 | 210 | 570 | 360 | 0.27 | 0.11 |
| including | 180 | -70 | 230 | 275 | 45 | 0.39 | 0.17 |
| including | 180 | -70 | 310 | 405 | 95 | 0.34 | 0.12 |
| including | 180 | -70 | 355 | 405 | 50 | 0.40 | 0.07 |
| including | 180 | -70 | 450 | 490 | 40 | 0.37 | 0.09 |
| including | 180 | -70 | 545 | 555 | 10 | 0.39 | 0.13 |
| | | | | | | | |
| **Total 16 Holes** | | | | | | | |

**TABLE 10.4**
**2012 K1-1 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (°) | Dip(°) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| K-11-17 | 180 | -50 | 335 | 345 | 10 | 0.41 | 0.1 |
| | 180 | -50 | 418.6 | 440 | 21.4 | 0.31 | 0.1 |
| | 180 | -50 | 480 | 605 | 125 | 0.35 | 0.1 |
| Including | 180 | -50 | 480 | 510 | 30 | 0.34 | 0.10 |
| Including | 180 | -50 | 545 | 570 | 25 | 0.42 | 0.11 |
| | 180 | -50 | 645 | 660 | 15 | 0.42 | 0.07 |
| K-11-18 | 180 | -50 | 60 | 205 | 145 | 0.32 | 0.08 |
| Including | 180 | -50 | 125 | 205 | 80 | 0.42 | 0.12 |
| Including | 180 | -50 | 125 | 140 | 15 | 0.56 | 0.12 |
| K-11-19 | 180 | -45 | 341.8 | 429.3 | 87.5 | 0.55 | 0.01 |
| Including | 180 | -45 | 341.8 | 410 | 68.2 | 0.60 | 0.1 |
| Including | 180 | -45 | 341.8 | 374.5 | 32.7 | 0.72 | 0.12 |
| K-11-20 | 180 | -45 | 290 | 320 | 30 | 0.32 | 0.6 |

**TABLE 10.4**
**2012 K1-1 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (°) | Dip(°) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| | 180 | -45 | 340 | 345 | 5 | 0.72 | 0.10 |
| | 180 | -45 | 530 | 585 | 55 | 0.32 | 0.07 |
| K-11-21 | 180 | -45 | 190 | 320 | 110 | 0.63 | 0.09 |
| Including | 180 | -45 | 190 | 275 | 85 | 0.71 | 0.10 |
| Including | 180 | -45 | 200 | 225 | 25 | 0.97 | 0.15 |
| | 180 | -45 | 377.5 | 485 | 107.5 | 0.33 | 0.07 |
| Including | 180 | -45 | 377.5 | 465 | 87.5 | 0.36 | 0.08 |
| Including | 180 | -45 | 410 | 465 | 55 | 0.37 | 0.09 |
| K-11-22 | 180 | -50 | 330 | 400 | 70 | 0.48 | 0.08 |
| Including | 180 | -50 | 330 | 375 | 45 | 0.537 | 0.087 |
| | 180 | -50 | 420 | 430 | 10 | 0.42 | 0.10 |
| | 180 | -50 | 450 | 465 | 15 | 0.53 | 0.12 |
| | 180 | -50 | 490 | 560 | 70 | 0.34 | 0.08 |
| Including | 180 | -50 | 540 | 550 | 20 | 0.46 | 0.10 |
| | 180 | -50 | 580 | 600 | 20 | 0.34 | 0.08 |
| | 180 | -50 | 640 | 650 | 10 | 0.5 | 0.7 |
| K-11-23 | 180 | -50 | 475 | 535 | 60 | 0.51 | 0.06 |
| Including | 180 | -50 | 475 | 495 | 20 | 0.74 | 0.07 |
| Including | 180 | -50 | 515 | 535 | 20 | 0.60 | 0.07 |
| K-11-24 | 180 | -55 | 550 | 790 | 240 | 0.31 | 0.08 |
| Including | 180 | -55 | 550 | 570 | 20 | 0.46 | 0.10 |
| Including | 180 | -55 | 590 | 610 | 20 | 0.49 | 0.11 |
| K-11-25 | 180 | -60 | 520 | 770 | 250 | 0.34 | 0.08 |
| Including | 180 | -60 | 520 | 555 | 35 | 0.42 | 0.07 |
| Including | 180 | -60 | 690 | 770 | 80 | 0.42 | 0.08 |
| Including | 180 | -60 | 735 | 760 | 25 | 0.62 | 0.09 |
| K-11-26 | 180 | -50 | 518.75 | 1325 | 806.25 | 0.37 | 0.09 |
| Including | 180 | -50 | 1010 | 1220 | 210 | 0.42 | 0.11 |
| Including | 180 | -50 | 630 | 660 | 30 | 0.31 | 0.07 |
| K-11-27 | 180 | -60 | 415 | 1005 | 585 | 0.34 | 0.06 |
| Including | 180 | -60 | 415 | 535 | 120 | 0.65 | 0.08 |
| Including | 180 | -60 | 995 | 1005 | 10 | 0.48 | 0.07 |
| K-11-28 | 180 | -50 | 495 | 1320 | 825 | 0.4 | 0.10 |
| Including | 180 | -50 | 720 | 925 | 205 | 0.52 | 0.10 |
| Including | 180 | -50 | 1010 | 1015 | 5 | 1.33 | 0.10 |
| K-11-29 | 180 | -55 | 395 | 520 | 125 | 0.31 | 0.05 |
| Including | 180 | -55 | 395 | 420 | 25 | 0.42 | 0.06 |
| Including | 180 | -55 | 440 | 470 | 30 | 0.35 | 0.05 |
| | 180 | -55 | 845 | 885 | 40 | 0.44 | 0.02 |
| | 180 | -55 | 1010 | 1020 | 10 | 0.55 | 0.12 |
| K-11-30 | 180 | -50 | 515 | 550 | 35 | 0.33 | 0.05 |
| | 180 | -50 | 675 | 967.7 | 292.7 | 0.36 | 0.08 |
| Including | 180 | -50 | 715 | 755 | 40 | 0.42 | 0.08 |
| Including | 180 | -50 | 835 | 935 | 100 | 0.41 | 0.10 |
| | 180 | -50 | 1015 | 1045 | 30 | 0.46 | 0.11 |
| | 180 | -50 | 1140 | 1170 | 30 | 0.36 | 0.09 |
| K-11-31 | 180 | -55 | 165 | 180 | 15 | 0.58 | 0.1 |
| | 180 | -55 | 285 | 655 | 370 | 0.37 | 0.10 |
| Including | 180 | -55 | 325 | 420 | 95 | 0.48 | 0.09 |
| Including | 180 | -55 | 625 | 645 | 20 | 0.35 | 0.12 |
| | 180 | -55 | 690 | 780 | 90 | 0.41 | 0.11 |
| | 180 | -55 | 825 | 850 | 25 | 0.38 | 0.11 |
| K-11-32 | 180 | -50 | 278 | 325 | 47 | 0.33 | 0.12 |
| | 180 | -50 | 390 | 410 | 20 | 0.38 | 0.11 |

**TABLE 10.4**
**2012 K1-1 DRILLING PROGRAM - SIGNIFICANT INTERCEPTS AND ASSAY RESULTS**

| Hole ID | Azimuth (°) | Dip(°) | From (ft) | To (ft) | Length (ft) | Cu % | *Ni % |
|---|---|---|---|---|---|---|---|
| K-11-33 | 180 | -50 | 240 | 380 | 140 | 0.29 | 0.07 |
| Including | 180 | -50 | 265 | 295 | 30 | 0.42 | 0.07 |
| Including | 180 | -50 | 340 | 380 | 40 | 0.33 | 0.07 |
| | 180 | -50 | 555 | 575 | 20 | 0.38 | 0.09 |
| K-11-34 | 180 | -50 | 140 | 195 | 55 | 0.34 | 0.11 |
| | 180 | -50 | 345 | 370 | 20 | 0.38 | 0.09 |
| K-11-35 | 180 | -50 | 44 | 45.33 | 1.33 | 0.92 | 2.13 |
| | 180 | -50 | 95 | 130 | 35 | 0.34 | 0.06 |
| | 180 | -50 | 255 | 260 | 5 | 0.99 | 0.12 |
| | 180 | -50 | 280 | 300 | 20 | 0.43 | 0.09 |
| | 180 | -50 | 365 | 375 | 10 | 0.40 | 0.10 |
| | 180 | -50 | 425 | 440 | 15 | 0.39 | 0.14 |
| K-11-36 | 180 | -65 | 35 | 40 | 5 | 0.97 | 0.15 |
| | 180 | -65 | 70 | 135 | 65 | 0.36 | 0.1 |
| Including | 180 | -65 | 110 | 135 | 25 | 0.41 | 0.13 |
| | 180 | -65 | 160 | 180 | 20 | 0.31 | 0.08 |
| | 180 | -65 | 243.3 | 245.3 | 2 | 0.12 | 2 |
| | 180 | -65 | 445 | 455 | 10 | 0.34 | 0.16 |
| K-11-37 | 180 | -50 | 270 | 285 | 15 | 0.38 | 0.05 |
| | 180 | -50 | 310 | 390 | 80 | 0.33 | 0.06 |
| Including | 180 | -50 | 335 | 350 | 15 | 0.64 | 0.10 |
| | 180 | -50 | 515 | 565 | 50 | 0.36 | 0.07 |
| Including | 180 | -50 | 515 | 535 | 20 | 0.43 | 0.08 |
| K-11-38 | 180 | -50 | 105 | 125 | 20 | 0.34 | 0.05 |
| | 180 | -50 | 140 | 150 | 10 | 0.40 | 0.07 |
| | 180 | -50 | 245 | 325 | 80 | 0.46 | 0.11 |
| Including | 180 | -50 | 245 | 295 | 50 | 0.50 | 0.11 |
| K-11-39 | 180 | -50 | 165 | 185 | 20 | 0.35 | 0.05 |
| K-11-40 | 180 | -50 | 425 | 435 | 10 | 0.35 | 0.05 |
| | 180 | -50 | 460 | 470 | 10 | 0.57 | 0.07 |
| | 180 | -50 | 525 | 565 | 40 | 0.58 | 0.14 |
| | 180 | -50 | 615 | 620 | 5 | 0.66 | 0.09 |
| | 180 | -50 | 640 | 650 | 10 | 0.65 | 0.08 |
| K-11-41 | 180 | -45 | 105 | 115 | 10 | 0.38 | 0.06 |
| | 180 | -45 | 175 | 185 | 10 | 0.50 | 0.11 |
| | 180 | -45 | 210 | 235 | 25 | 0.41 | 0.11 |
| | 180 | -45 | 285 | 320 | 35 | 0.53 | 0.08 |
| | 180 | -45 | 340 | 510 | 150 | 0.36 | 0.08 |
| Including | 180 | -45 | 425 | 450 | 25 | 0.45 | 0.11 |
| K-11-42 | 180 | -50 | 245 | 250 | 5 | 0.70 | 0.06 |
| | 180 | -50 | 295 | 315 | 20 | 0.43 | 0.05 |
| | 180 | -50 | 550 | 575 | 25 | 0.36 | 0.07 |
| | | | | | | | |
| **Total 26 Holes** | | | | | | | |

## 10.3 CORE RECOVERY AND SAMPLING

Core recovery was greater than 99% in all sections sampled allowing all samples to be truly representative of the encountered mineralization. No factors that could materially impact the accuracy and reliability of the samples were identified. Rock types and geological controls were described in detail in the drill logs as were samples and true widths, where known.

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

All sulphidic zones deemed to have a potential of hosting precious or base metals were sampled. One wing, measuring 1.5 metres was sampled on either side of every mineralized zone. Core was cut in half, with one half stored in core boxes on site and the other half cut in half again. This quarter core was sampled (other ¼ for duplicate).

Drill core sample lengths ranged from 0.3 m to 1.5 m. The core was cut on site by contract labourers under the supervision of the Brian H. Newton, P.Geo who was directly responsible for all aspects of sample collection, on-site sample preparation and subsequent shipping to the assay laboratory. Once cut, the remaining core was stored on-site in clearly labelled wooden core boxes placed in metal core racks.

Each individual sample was packaged in a labelled plastic bag with matching sample tags, then placed in rice bags and secured with duct tape and flagged. Samples were transported by bonded carrier to Activation Laboratories in Thunder Bay, ON. Samples were prepped and assayed using Fire Assay ICPOES. Samples which assayed over 1% were then reprocessed using total digestion ICP (Total).

Activation Laboratories is an independent, internationally recognized minerals testing laboratory operating in 10. The laboratory in Thunder Bay has also been accredited to ISO 17025 standards for specific laboratory procedures by the Standards Council of Canada (SCC).

It is the author's opinion that there are no drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

Sample pulps from the 2011 summer drill program are stored at Activation Laboratories' Thunder Bay storage facility. Sample pulps from the current program are stored at AGAT labs in Sudbury.

## 12.0 DATA VERIFICATION

## 12.1 SITE VISIT AND INDEPENDENT SAMPLING

Mr. Eugene Puritch, P. Eng., visited the Thierry and K1-1 Deposits on June 2, 2011 for the purpose of doing the site visit and completing an independent verification sampling program. Mr. Puritch has not returned to the site since that time. Six 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 Cadillac advised as to the identification of the samples to be chosen during the visit.

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

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

At each of its locations, AGAT has developed and 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 copper, nickel and silver using a multi acid digest (HCl/HNO3/HClO4/HF), with an ICP finish.

Gold, palladium and platinum were determined using lead collection fire assay, with an ICP finish.

A comparison of the results is presented in Figure 12.1 through Figure 12.5.

**Figure 12.1 K1-1 and Thierry Deposits Site Visit Sample Results for Copper**

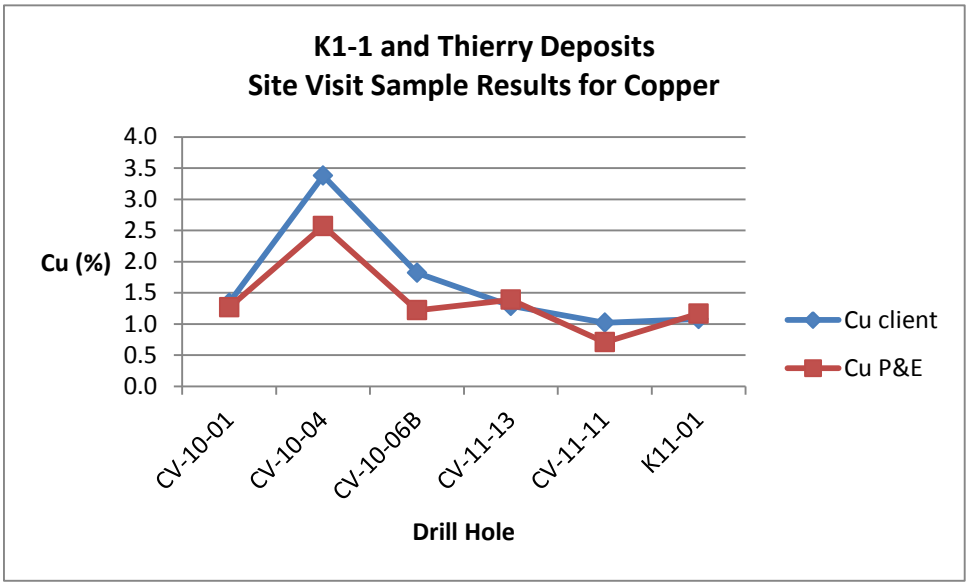



**Figure 12.2 K1-1 and Thierry Deposits Site Visit Sample Results for Nickel**

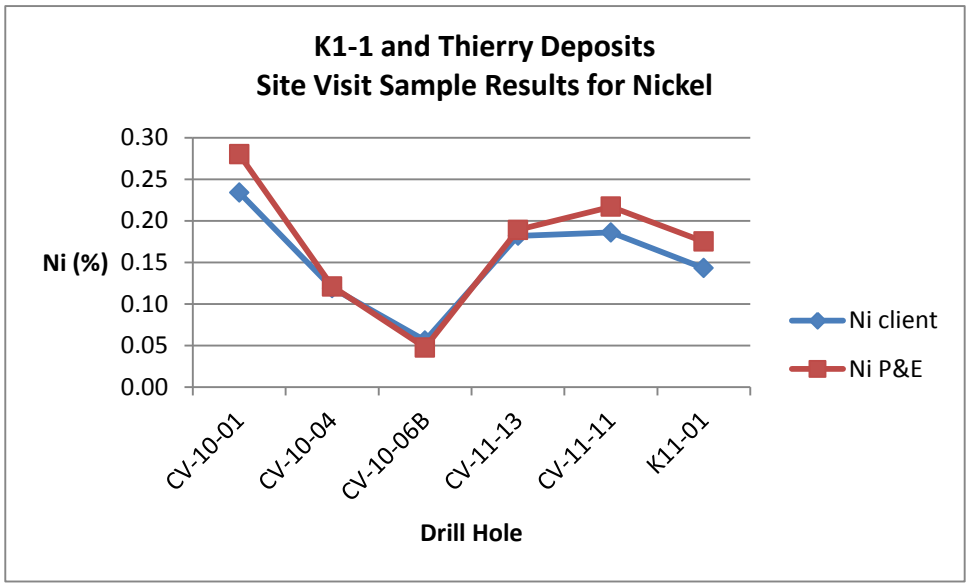


**Figure 12.3 K1-1 and Thierry Deposits Site Visit Sample Results for Gold**

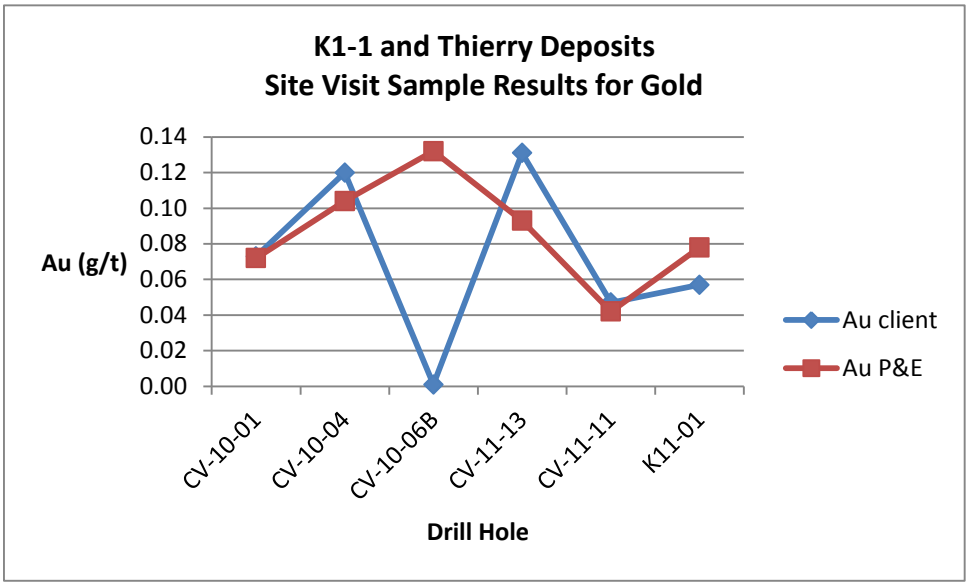



**Figure 12.4 K1-1 and Thierry Deposits Site Visit Sample Results for Palladium**

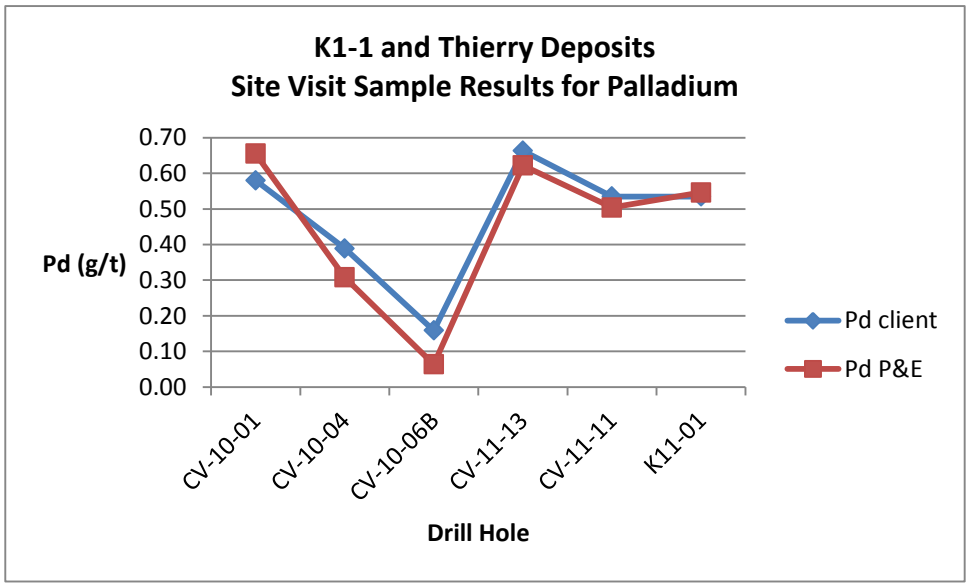
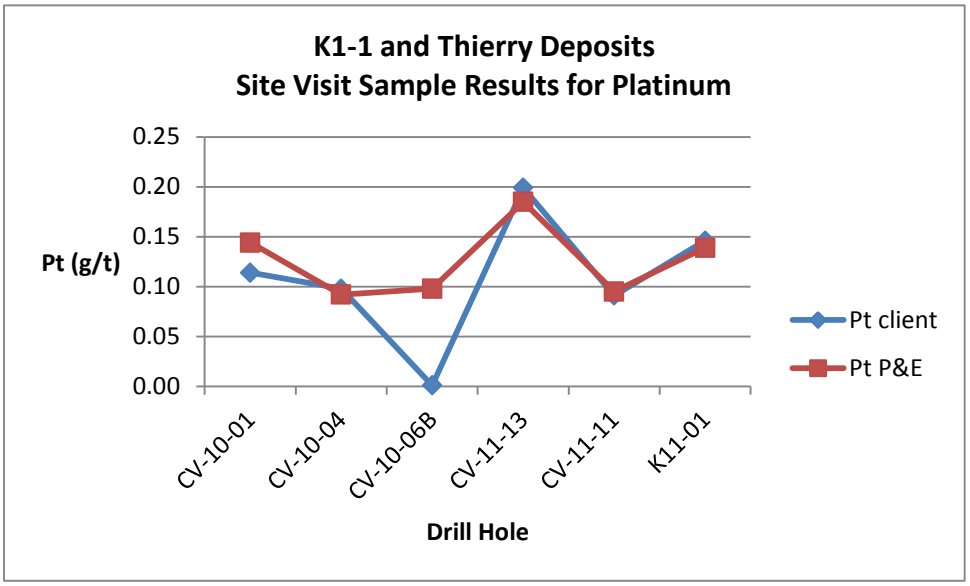


**Figure 12.5 K1-1 and Thierry Deposits Site Visit Sample Results for Platinum**




## 12.2 CADILLAC QUALITY ASSURANCE/QUALITY CONTROL REVIEW

For the winter 2011 diamond drill program comprised of 26 holes, Cadillac maintained the same Quality Assurance/Quality Control ("QA/QC" or "QC") program as had been initiated for the previous drilling. A few with minor changes were made. One certified reference material was purchased from CDN Resource Labs in Langley, BC, and one from Analytical Solutions Ltd. in Toronto, ON, who are distributors for the OREAS reference materials from Australia.

Cadillac's QC program included the insertion of one blank, one standard and (provision for) one pulp duplicate approximately every 20 to 24 samples.

The reference materials monitored Cu, Ni, Au, Pd, and Pt.

## 12.3 PERFORMANCE OF CERTIFIED REFERENCE MATERIALS

There were a total of 126 certified reference materials inserted with the 26 drill holes. All values were graphed and compared to the warning limits of +/- 2 standard deviations from the mean of the between lab round robin characterization, and the tolerance limits of +/- 3 standard deviations. For copper, there was an unacceptable level of failures, all exceeding +3 standard deviations from the mean. Drill hole samples bracketing the estimated Cu cut-off grade of 0.25%, (from 0.20% to 0.30%) that were associated with failed reference materials were rerun for Cu. All values rerun were lower in value that the original values, and the rerun values were imported into the master database. Cadillac inserted eight certified reference materials with these batches and all were within the warning limits.

Accuracy for the other metals was acceptable.

### 12.3.1 Performance of Pulp Duplicates

A total of 68 pulp duplicate pairs were analyzed as part of the QC program.

Simple scatter graphs were prepared for each element for each duplicate type. At the pulp duplicate level, all metals apart from Au demonstrated excellent precision. There was imprecision demonstrated on the Au pulp duplicates, with a scatter higher than desired. An investigation will be conduced to try to determine the reasons for the imprecision.

### 12.3.2 Performance of Blank Material

Cadillac used a blank material obtained from sterile historic drill core for a total of 72 data points for each of the elements. One hundred percent of the Ag values were < 3 times detection limit. For Pt, 100%, apart from one value, were less than 3 times detection limit. For Au, approximately 50% of the values exceeded 3 times detection limit, however the average was 0.003 g/t Au. For Pd, the values hovered around 3 times detection limit with an average of 0.006 g/t Pd and a one rogue high value of 0.15 g/t Pd. The rogue high values encountered were examined and found to be sample misallocations.

The copper and nickel data points were 100% above the set threshold of three times detection limit. Copper had an average value of 0.01% and two rogue high values of 0.05% and 0.06%. Nickel had an average value of 0.004% and a high value of 0.02%. The values as reported in the blanks have no impact on the metal value of the deposit. It is recommended however, that Cadillac source a blank material with no contained Cu or Ni.

### 12.3.3 Conclusion

P&E declares the data acquired and analyzed by Cadillac for the K1-1 deposit to be satisfactory for use in a resource estimate.

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral Processing and metallurgical testwork of mineralized material from the Thierry Mine and its satellite deposits dates from the late 1970's and the early 1980's. P&E is aware that Richview undertook metallurgical testing on three composites of drill core samples from the 2004 drill program, at Lakefield in late 2005. Initial rougher tests were conducted to analyze grinding time and size. Additional test work with cleaner and scavenger stages will be required to arrive at a conclusive result for study purposes.

Cadillac has not conducted any mineral processing or metallurgical testing since acquiring the Property. A summary of the previous mineral and metallurgical is given in section 65 of this report. A more thorough description of the existing historical metallurgical work can also be found in Puritch et al., 2006, and in the Xstrata Process Support Report, 2008.

## 14.0 RESOURCE ESTIMATE

## 14.1 P&E 2012 THIERRY RESOURCE ESTIMATE

The purpose of this report section is to delineate the Thierry Deposit Resources 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 February 13, 2012.

## 14.2 DATABASE

All drilling data was provided by Minroc Management Services Inc. (The Client) in the form of Microsoft Excel files, drill logs and assay certificates. Eighty five (89) drill cross sections were developed on a local grid looking east on an azimuth of 900 on a 50 foot spacing named 8,350-E to 12,750-E. A Gemcom database was provided by the client containing 1,455 diamond drill holes of which 324 were drilled from surface and 1,131 were drilled from underground. Of these drill holes, 202 surface and 993 underground drill holes were utilized in the resource calculation. The remaining data were not in the area that was modeled for this resource estimate. Drill hole plans are shown in Appendix I.

The database was validated in Gemcom with minor corrections required. The Assay table of the database contains 22,520 values for Cu, 21,702 for Ni, 2,832 for Au, Pt, Pd and 5,856 for Ag. All drillhole collar, downhole survey and interval data are expressed in imperial units and grid coordinates are in a local system. Assays are expressed as % for Cu and Ni while in ppm for Au, Pt, Pd and Ag.

## 14.3 DATA VERIFICATION

Verification of assay data entry was performed on 5,490 assay intervals. A few data entry errors were observed and corrected. The 5,490 verified intervals were checked against assay lab certificates from ALS Chemex of Vancouver, B.C., ACME Analytical Laboratories Ltd. of Vancouver, B.C., Bondar Clegg & Company Ltd. of Vancouver, B.C. and XRAL Laboratories of Don Mills, Ont. The checked assays represented 60% of the data to be used for the resource estimate and approximately 25% of the entire database.

## 14.4 DOMAIN INTERPRETATION

Domain boundaries were determined on drillhole sections from lithology, structure and NSR values. Three domains were developed named Main, Hanging Wall and Footwall. These domains were created with computer screen digitizing on drill hole sections in Gemcom by the authors of this report. The outlines were influenced by the selection of mineralized material above an NSR value of $CDN 46/tonne that demonstrated good zonal continuity along strike and down dip. In a very few cases mineralization below an NSR value of $CDN 46/tonne 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 extended more than 250 feet into untested territory. Minimum constrained true width for interpretation was 6 feet. The interpreted polylines from each section were “wireframed” in

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

### 14.4.1 Rock Code Determination

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

Rock Code Description

| | |
|---|---|
| 0 | Air |
| 10 | Hanging Wall Zone |
| 20 | Main Zone |
| 30 | Footwall Zone |
| 40 | East Zone (Subset of Main Zone) |
| 50 | Deep Plug Zone (Subset of Main Zone) |
| 99 | Waste Rock |

### 14.4.2 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 Cu, Ni, Au, Pt, Pd and Ag over 5.0 foot 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 assigned a ½ assay detection limit value. Any composites calculated that were less than 1.0 foot in length, were discarded so as to not introduce a short sample bias in the interpolation process. The composite data were transferred to Gemcom extraction files for the grade interpolation as X, Y, Z, Cu, Ni, Au, Pt, Pd and Ag files.

### 14.4.3 Grade Capping

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

**TABLE 14.1**
**GRADE CAPPING VALUES**

| Element | Capping Value | Number of Assays Capped | Cumulative Percent for Capping | Raw Coefficient of Variation | Capped Coefficient of Variation |
|---|---|---|---|---|---|
| **Main Zone** | | | | | |
| Cu | 15 % | 13 | 99.8 | 0.99 | 0.93 |
| Ni | 1.5 % | 14 | 99.8 | 1.00 | 0.86 |
| Au | 1 g/t | 3 | 98.8 | 1.37 | 1.24 |
| Pt | 0.9 g/t | 1 | 99.6 | 2.82 | 1.20 |
| Pd | 2 g/t | 3 | 98.8 | 1.29 | 1.18 |
| Ag | 60 g/t | 12 | 99.1 | 1.60 | 1.21 |

**TABLE 14.1**
**GRADE CAPPING VALUES**

| Element | Capping Value | Number of Assays Capped | Cumulative Percent for Capping | Raw Coefficient of Variation | Capped Coefficient of Variation |
|---|---|---|---|---|---|
| | | | | | |
| **Hanging Wall Zone** | | | | | |
| Cu | No Cap | 0 | 100 | 1.23 | 1.23 |
| Ni | 2 % | 2 | 99.8 | 1.19 | 1.14 |
| Au | 1.5 g/t | 1 | 97.1 | 2.78 | 1.33 |
| Pt | 1.5 g/t | 1 | 97.1 | 1.48 | 1.14 |
| Pd | No Cap | 0 | 100 | 0.98 | 0.98 |
| Ag | 80 g/t | 1 | 98.9 | 1.45 | 1.28 |
| | | | | | |
| **Footwall Zone** | | | | | |
| Cu | 15 % | 1 | 99.8 | 1.12 | 1.10 |
| Ni | 1 % | 5 | 99.2 | 1.08 | 0.84 |
| Au | No Cap | 0 | 100 | 1.50 | 1.50 |
| Pt | No Cap | 0 | 100 | 1.50 | 1.50 |
| Pd | 0.8 g/t | 3 | 87.5 | 1.55 | 1.21 |
| Ag | No Cap | 0 | 100 | 2.07 | 2.07 |
| | | | | | |
| **East Zone** | | | | | |
| Cu | No Cap | 0 | 100 | 0.68 | 0.68 |
| Ni | No Cap | 0 | 100 | 0.55 | 0.55 |
| Au | No Cap | 0 | 100 | 0.77 | 0.77 |
| Pt | No Cap | 0 | 100 | 0.81 | 0.81 |
| Pd | No Cap | 0 | 100 | 0.95 | 0.95 |
| Ag | No Cap | 0 | 100 | 2.46 | 2.46 |
| | | | | | |
| **Deep Plug Zone** | | | | | |
| Cu | No Cap | 0 | 100 | 0.47 | 0.47 |
| Ni | No Cap | 0 | 100 | 0.37 | 0.37 |
| Au | No Cap | 0 | 100 | 0.51 | 0.51 |
| Pt | No Cap | 0 | 100 | 0.62 | 0.62 |
| Pd | No Cap | 0 | 100 | 0.52 | 0.52 |
| Ag | No Cap | 0 | 100 | 1.07 | 1.07 |

### 14.4.4 Variography

Variography was carried out on the constrained domain composites within the three domains in the deposit model. All mineralized domains exhibited good directional variography for Cu, however, due to lower population densities, Ni, Au, Pt, Pd and Ag yielded only omnivariograms. Refer to Appendix IV for variograms.

### 14.4.5 Bulk Density

The bulk density used for the resource model was derived from measurements of test work performed by ALS Chemex of Don Mills, Ontario and Agat Laboratories of Mississauga Ontario. Representative samples obtained by this report author of the mineralized zones of the deposit were utilized. The average bulk density from the 27 samples collected was calculated to be 10.4 cubic feet per ton or 3.07 tonnes per cubic metre.

### 14.4.6 Block Modeling

The resource model was divided into a 3D block model framework. The block model has 21,830,040 blocks that are 15 ft in the X direction, 15 ft in the Y direction and 15 ft in the Z direction. There were 306 columns (X), 246 rows (Y) and 290 levels. The block model was not rotated. Separate block models were created for rock type, density, percent, class, Cu, Ni, Au, Pt, Pd and Ag. Previously mined out blocks were removed from the block model.

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

The Cu, Ni, Au, Pt, Pd and Ag composites were extracted from the Microsoft Access database composite table into separate files for each Mineralized Zone. Inverse distance squared (1/d2) grade interpolation was utilized. There were three interpolation passes performed on each domain for each element for the Measured, Indicated and Inferred classifications. The resulting Cu and NSR blocks can be seen on the block model cross-sections and plans in Appendix V. The grade blocks within all domains were interpolated using the following parameters:

**TABLE 14.2**
**CU BLOCK MODEL INTERPOLATION PARAMETERS**

| Profile | Dip Dir. (°) | Strike (°) | Dip (°) | Dip Range ft | Strike Range ft | Across Dip Range ft | Max # per Hole | Min # Samples | Max # Samples |
|---|---|---|---|---|---|---|---|---|---|
| Main Meas. | 0 | 90 | -52 | 90 | 90 | 25 | 2 | 5 | 20 |
| Main Ind. | 0 | 90 | -52 | 140 | 140 | 40 | 2 | 3 | 20 |
| Main Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| HW Meas. | 0 | 90 | -52 | 80 | 65 | 25 | 2 | 5 | 20 |
| HW Ind. | 0 | 90 | -52 | 120 | 100 | 40 | 2 | 3 | 20 |
| HW Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| FW Meas. | 0 | 90 | -52 | 80 | 80 | 20 | 2 | 5 | 20 |
| FW Ind. | 0 | 90 | -52 | 125 | 125 | 30 | 2 | 3 | 20 |
| FW Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |

**TABLE 14.3**
**NI, AU, PT, PD & AG BLOCK MODEL INTERPOLATION PARAMETERS**

| Profile | Dip Dir. (°) | Strike (°) | Dip (°) | Dip Range ft | Strike Range ft | Across Dip Range ft | Max # per Hole | Min # Samples | Max # Samples |
|---|---|---|---|---|---|---|---|---|---|
| Ni All Ind. | 0 | 90 | -52 | 50 | 50 | 25 | 2 | 3 | 20 |
| Ni All Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| Au Ind. | 0 | 90 | -52 | 200 | 200 | 50 | 2 | 3 | 20 |
| Au Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| Pt Ind. | 0 | 90 | -52 | 175 | 175 | 50 | 2 | 3 | 20 |
| Pt Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| Pd Ind. | 0 | 90 | -52 | 165 | 165 | 50 | 2 | 3 | 20 |
| Pd Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |
| Ag Ind. | 0 | 90 | -52 | 75 | 75 | 35 | 2 | 3 | 20 |
| Ag Inf. | 0 | 90 | -52 | 1000 | 1000 | 500 | 2 | 1 | 20 |

## 14.5 RESOURCE CLASSIFICATION

For the purpose of this estimate, classifications of all interpolated grade blocks were determined from the Cu interpolations for measured, indicated and inferred due to Cu being the dominant revenue producing element. See block model classification cross-sections and plans in Appendix VI.

## 14.6 RESOURCE ESTIMATE

The resource estimate was derived from applying an NSR cut-off value to the block model and reporting the resulting tonnes and grade for potentially mineable areas. The following calculations demonstrate the rationale supporting the NSR cut-off value that determines the potentially economic portion of the mineralized domains.

NSR Cut-Off Grade Calculation Components (All Currency $C Unless Stated Otherwise)

| | |
|---|---|
| $C/$US (Exchange Rate) | US$0.99 = C$1.00 |
| Cu Price | US $3.72/lb (Jan 31/12 24 month trailing average price) |
| Ni Price | US $10.15/lb (Jan 31/12 24 month trailing average price) |
| Au Price | US $1,419/oz (Jan 31/12 24 month trailing average price) |
| Pt Price | US $1,663/oz (Jan 31/12 24 month trailing average price) |
| Pd Price | US $639/oz (Jan 31/12 24 month trailing average price) |
| Ag Price | US $28.18/oz (Jan 31/12 24 month trailing average price) |
| U/G Mining Cost (2,000tpd) | $30/tonne mined |
| Process Cost (2,000tpd) | $9.50 tonne milled (Combined with K1-1) |
| General/Administration | $1.50/tonne milled (Combined with K1-1) |
| Cu Flotation Recovery | 90% |
| Ni Flotation Recovery | 25% |
| Au Flotation Recovery | 50% |
| Pt Flotation Recovery | 50% |
| Pd Flotation Recovery | 50% |
| Ag Flotation Recovery | 50% |
| Concentration Ratio | 18:1 |
| Cu Smelter Payable | 93% |

| | |
|---|---|
| Ni Smelter Payable | 50% |
| Au Smelter Payable | 75% |
| Pt Smelter Payable | 75% |
| Pd Smelter Payable | 75% |
| Ag Smelter Payable | 75% |
| Cu Refining Charges | US $0.40/lb |
| Ni Refining Charges | US $0.60/lb |
| Au Refining Charges | US $15/oz |
| Pt Refining Charges | US $15/oz |
| Pd Refining Charges | US $15/oz |
| Ag Refining Charges | US $0.50/oz |
| Smelter Treatment Charges | US $125/dry tonne ($125/18/0.98 = $7.09/tonne milled) |
| Concentrate Shipping | $125/ton ($125/18x1.08 = $7.50/tonne milled) |
| Moisture Content | 8% |

The above data were derived from metallurgical reports and other mining operations similar to that anticipated at Thierry.

In the anticipated underground mining operation, Mining, Mill Processing and G&A costs combine for a total of ($30 + $9.50 + $1.50) = $41/tonne milled which became the NSR/tonne value cut-off. Recovered contributions by the Cu, Ni, Au, Pt, Pd and Ag were as follows:

| | |
|---|---|
| Cu = [(90% Rec. x 93% Payable x 22.05lb/t x ($3.72/lb -$0.40/lb)] /0.99 | = $61.88/%/tonne |
| Ni = [(25% Rec. x 50% Payable x 22.05lb/t x ($10.15/lb -$0.60/lb)] /0.99 | = $26.58/%/tonne |
| Au = [(50% Rec. x 75% x ($1,419/oz -$15/oz)] /31.1035/0.99 | = $17.10/g/tonne |
| Pt = [(50% Rec. x 75% x ($1,663/oz -$15/oz)] /31.1035/0.99 | = $20.07/g/tonne |
| Pd = [(50% Rec. x 75% x ($639/oz -$15/oz)] /31.1035/0.99 | = $7.60/g/tonne |
| Ag = [(50% Rec. x 75% x ($28.18/oz -$0.50/oz)] /31.1035/0.99 | = $0.34/g/tonne |

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

**TABLE 14.4**
**RESOURCE ESTIMATE @ $41/TONNE NSR CUT-OFF**

| Class | Tonnes | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t |
|---|---|---|---|---|---|---|---|
| Measured | 3,233,000 | 1.65 | 0.19 | 0.03 | 0.03 | 0.09 | 4.6 |
| Indicated | 5,582,000 | 1.66 | 0.19 | 0.05 | 0.05 | 0.14 | 3.8 |
| Meas&Ind | 8,815,000 | 1.66 | 0.19 | 0.05 | 0.04 | 0.13 | 4.0 |
| Inferred | 14,922,000 | 1.64 | 0.16 | 0.10 | 0.07 | 0.21 | 6.4 |

*(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.*

*(2) The quantity and grade of reported Inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred resources as an Indicated or Measured Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured mineral resource category.*

*(3) The mineral resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

**TABLE 14.5**
**SENSITIVITY TO RESOURCE ESTIMATE TABLE**

| | Measured & Indicated | | | | | | | Inferred | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NSR Cut-Off C$/tonne | Tonnes | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t | Tonnes | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t |
| $100 | 3,248,038 | 2.37 | 0.22 | 0.07 | 0.06 | 0.18 | 5.8 | 6,921,503 | 2.03 | 0.18 | 0.13 | 0.08 | 0.25 | 7.8 |
| $95 | 3,718,843 | 2.28 | 0.22 | 0.06 | 0.06 | 0.18 | 5.7 | 8,280,295 | 1.96 | 0.17 | 0.12 | 0.08 | 0.24 | 7.7 |
| $90 | 4,248,669 | 2.19 | 0.21 | 0.06 | 0.06 | 0.17 | 5.5 | 9,702,533 | 1.90 | 0.17 | 0.12 | 0.08 | 0.24 | 7.6 |
| $85 | 4,762,377 | 2.12 | 0.21 | 0.06 | 0.05 | 0.16 | 5.3 | 10,812,077 | 1.86 | 0.17 | 0.12 | 0.08 | 0.24 | 7.4 |
| $80 | 5,311,883 | 2.05 | 0.21 | 0.06 | 0.05 | 0.16 | 5.1 | 11,799,332 | 1.82 | 0.17 | 0.12 | 0.08 | 0.23 | 7.2 |
| $75 | 5,849,090 | 1.98 | 0.21 | 0.05 | 0.05 | 0.15 | 4.9 | 12,526,894 | 1.79 | 0.16 | 0.11 | 0.08 | 0.23 | 7.1 |
| $70 | 6,360,964 | 1.93 | 0.21 | 0.05 | 0.05 | 0.15 | 4.8 | 13,146,085 | 1.77 | 0.16 | 0.11 | 0.08 | 0.23 | 6.9 |
| $65 | 6,829,824 | 1.88 | 0.20 | 0.05 | 0.05 | 0.14 | 4.7 | 13,647,414 | 1.75 | 0.16 | 0.11 | 0.08 | 0.22 | 6.8 |
| $60 | 7,311,543 | 1.83 | 0.20 | 0.05 | 0.05 | 0.14 | 4.5 | 14,003,035 | 1.73 | 0.16 | 0.11 | 0.07 | 0.22 | 6.7 |
| $55 | 7,751,521 | 1.78 | 0.20 | 0.05 | 0.05 | 0.14 | 4.4 | 14,319,409 | 1.72 | 0.16 | 0.11 | 0.07 | 0.22 | 6.6 |
| $50 | 8,181,889 | 1.74 | 0.20 | 0.05 | 0.04 | 0.13 | 4.3 | 14,575,168 | 1.70 | 0.16 | 0.11 | 0.07 | 0.21 | 6.6 |
| $45 | 8,576,163 | 1.70 | 0.19 | 0.05 | 0.04 | 0.13 | 4.3 | 14,790,246 | 1.69 | 0.16 | 0.10 | 0.07 | 0.21 | 6.5 |
| $41 | 8,815,315 | 1.66 | 0.19 | 0.05 | 0.04 | 0.13 | 4.0 | 14,922,094 | 1.64 | 0.16 | 0.10 | 0.07 | 0.21 | 6.4 |
| $35 | 9,218,477 | 1.64 | 0.19 | 0.05 | 0.04 | 0.12 | 4.1 | 15,211,522 | 1.67 | 0.16 | 0.10 | 0.07 | 0.21 | 6.4 |
| $30 | 9,498,088 | 1.61 | 0.19 | 0.04 | 0.04 | 0.12 | 4.1 | 15,431,417 | 1.65 | 0.16 | 0.10 | 0.07 | 0.20 | 6.3 |
| $25 | 9,732,884 | 1.59 | 0.19 | 0.04 | 0.04 | 0.12 | 4.0 | 15,574,616 | 1.64 | 0.16 | 0.10 | 0.07 | 0.20 | 6.3 |

## 14.7 CONFIRMATION OF ESTIMATE

As a test of the reasonableness of the estimate, the block model was queried at a 0.01 % Cu 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 domains. 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 domain. The results are presented below.

**TABLE 14.6**
**COMPARISON OF WEIGHTED AVERAGE GRADE OF CAPPED ASSAYS AND COMPOSITES WITH TOTAL BLOCK MODEL AVERAGE GRADE**

| Category | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t |
|---|---|---|---|---|---|---|
| Capped Assays | 1.60 | 0.18 | 0.11 | 0.10 | 0.31 | 6.1 |
| Composites | 1.48 | 0.17 | 0.11 | 0.10 | 0.21 | 4.8 |
| Block Model | 1.52 | 0.16 | 0.08 | 0.06 | 0.16 | 5.2 |

The comparison above shows the average grade of all of the blocks in all domains to be similar to the weighted average of all capped assays and composites used for grade estimation.

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

| | |
|---|---|
| Block Model Volume | =303,732,184 $ft^3$ |
| Geometric Domain Volume | =305,252,543 $ft^3$ |
| Difference | =0.50% |

## 14.8 P&E 2012 K1-1 RESOURCE ESTIMATE

### 14.8.1 Summary

The Mineral Resources for the K1-1 nickel-copper-PGE deposit (K1-1) on the Thierry Mine Property were estimated by conventional 3D computer block modelling using GEMS™ 6.3 mining software (GEMS) by GEMCOM Software International Inc. Mineral Resources for K1-1 were previously reported by P&E and filed on SEDAR December 9, 2011. Fill-in drilling, consisting of 21,018.08 ft (6,406.31m) in 26 diamond drill holes, was subsequently carried out in late 2011 and represents 22% of the drill hole database for K1-1. Consequently, Mineral Resources have been re-estimated for copper, nickel, platinum, palladium, gold and silver, based on the updated drill hole database, with reporting done by net smelter return (NSR) cut-off as appropriate for a polymetallic deposit. An open pit, with 50° slopes, was designed from the block model using Whittle™ software and an in-pit Inferred Mineral Resource reported.

This updated resource estimate is based entirely on diamond drilling, core sampling and assaying. The resource database is based on Imperial measure, consistent with the Thierry Mine drill hole database, with assay grades in SI. Short tons were converted to metric tonnes for reporting purposes. The drill hole database contains 158 diamond drill holes totalling 96,593.82 ft (29,441.80 m). Drill holes in the K1-1 resource area, showing the fill-in drilling, are located in plan in Figure 14-1.

The K1-1 deposit has been subdivided geologically into seven zones, lettered from "A" to "G", for the purpose of resource estimation. Since the boundaries of the zones are locally within several feet and within the resource block dimensions (10 ft), three partial–percent models were created in GEMS so that varied percentages of the zones and waste could be coded into the parent blocks.

The mineral wireframe, constructed at a NSR of $15/tonne for the previous estimate, was updated for the new drilling. The NSR was based on P&E's assessment of open pit mining costs and processing costs, and metal recoveries from previous processing at the Thierry Mine. Assay composites at five foot lengths were generated from the assays captured by GEMS in the wireframe.

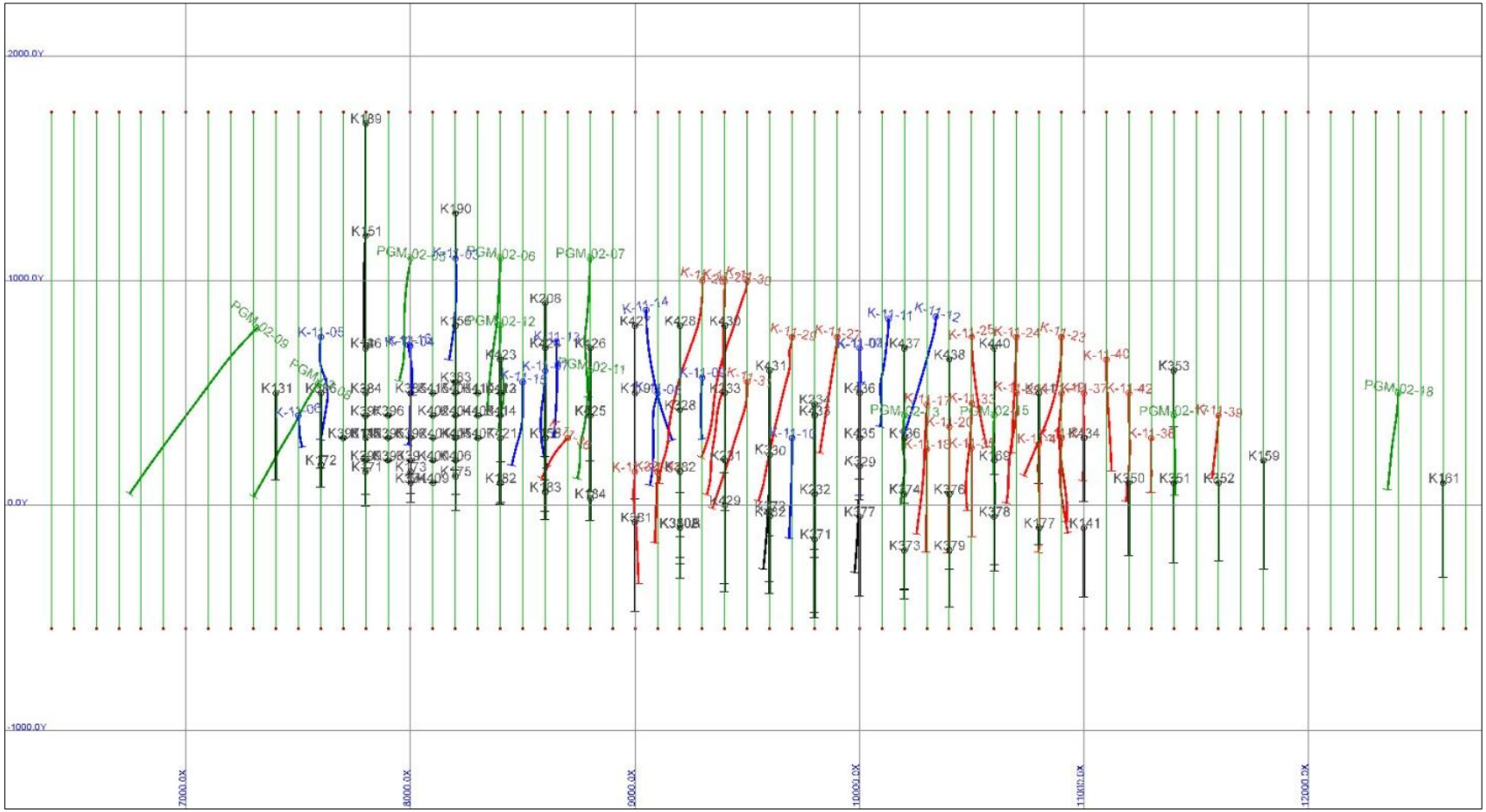
The resource block model is oriented with X axis at 090° azimuth i.e. non-rotated, and has block dimensions at 50 ft EW x 10 ft NS x 20 ft vertical. Block dimensions take into account the drill hole spacing on 200 ft sections, zone widths, and bench heights based on a minimum of 20 ft. Variography results, from the previous estimate, guided the interpolation search strategy, and inverse distance to the power of two (ID2) interpolation was carried out using three passes. The relatively higher degree of smoothing provided by ID2 is warranted by the moderately high nugget effect for copper. Short composites and expanded passes were adopted to avoid over-smoothing and preserve local grade variability. To convert volume to tons, a bulk density of 0.09721 tons/$ft^3$ (specific gravity (SG) 3.12) was applied uniformly throughout the deposit based on limited SG gravity testing by Cadillac Ventures and P&E. No new SG testing was done for the resource estimate update.

Resources were classified as Inferred based on the wide drill hole spacing and data limitations inherent in the older UMEX drilling including lack of collar elevation and down hole surveys and lack of assaying for PGE and precious metals for 32% of the sampling in the resource.

P&E's estimate of operating costs for the K1-1 is $11/tonne and less than the estimate of $15/tonne for the previous December 2011 estimate that considered stand-alone mining of K1-1. This estimate assumes concurrent mining and processing of concurrent Thierry Mine underground and K1-1 open pit operations with lower costs because of the economy of larger scale. The in-pit Inferred Resources for a $11/tonne NSR cut-off are estimated at 53.6 million tonnes averaging 0.38% Cu, 0.10% Ni, 0.05 g/t Pt, 0.14 g/t Pd, 0.02 g/t Au and 1.8 g/t Ag. Average NSR for the Inferred Resource is C$24.11/tonne.

Validation of the grade interpolation and the model was carried out by on-screen review of grades and other block model estimation parameters versus drill hole composites, by comparison of assay, composites, zone intercepts and block grades, comparison to alternate ID3 and nearest neighbour (NN) interpolations, and review of the volumetrics of wireframes versus reported resources.

**Figure 14.1 K1-1 Resource Area Drill Hole Location Plan**




***Note:*** *Scale in feet*

**LEGEND**

| | |
|---|---|
| | Drilling Campaign |
| | UMEX Series |
| | 2002 Series |
| | 2011 Series |
| | 2011 Fill in Series |

Resources were classified as Inferred based on the wide drill hole spacing and data limitations inherent in the older UMEX drilling including lack of collar elevation and down hole surveys and lack of assaying for PGE and precious metals for 32% of the sampling in the resource.

P&E's estimate of operating costs for the K1-1 is $11/tonne and less than the estimate of $15/tonne for the previous December 2011 estimate that considered stand-alone mining of K1-1. This estimate assumes concurrent mining and processing of concurrent Thierry Mine underground and K1-1 open pit operations with lower costs because of the economy of larger scale. The in-pit Inferred Resources for a $11/tonne NSR cut-off are estimated at 53.6 million tonnes averaging 0.38% Cu, 0.10% Ni, 0.05 g/t Pt, 0.14 g/t Pd, 0.02 g/t Au and 1.8 g/t Ag. Average NSR for the Inferred Resource is C$24.11/tonne.

Validation of the grade interpolation and the model was carried out by on-screen review of grades and other block model estimation parameters versus drill hole composites, by comparison of assay, composites, zone intercepts and block grades, comparison to alternate ID3 and nearest neighbour (NN) interpolations, and review of the volumetrics of wireframes versus reported resources.

### 14.8.2 Topographic and Bedrock Surfaces

In the absence of drill hole collar elevation survey data, the topographic surface was set at 0 ft elevation i.e. 0 RL and generated as a flat surface. All drill hole collars were set at this elevation for the purpose of resource estimation. Surveyed elevations, for the sixteen 2011 series drill holes by Cadillac Ventures, range from 1,204 ft to 1,217 ft with 13 holes at 1,210 ft. P&E's site visit indicates that the terrain at the K1-1 deposit is relatively flat. In P&E's opinion, the assumption of a flat topographic surface for the purpose of resource estimation will not introduce substantial error in the estimate. P&E recommends surveying the UMEX and 2002 series drill hole collars where practicable.

The bedrock surface, relative to the topographic surface, was generated from desurveyed XYZ coordinates of drill hole casing depths and overburden contacts, gridding and LaPlace transform interpolation.

### 14.8.3 Wireframe

<u>Cut-Off</u>

Conventional 3D wireframes were constructed for the seven domains at a NSR cut-off of $15/tonne for the previous estimate of December 2011, based on metal prices as of August 2011 (Puritch et al 2011). This cut-off was retained for wireframing in this update since P&E review indicates that the wireframe margins are relatively insensitive to small changes in NSR. This NSR was applied to individual assays and wireframed on screen. The NSR calculation included historic recoveries for the Thierry mill, and smelter recovery and payables.

**NSR ($/tonne) = (Ni% x $24.02) + (Cu% x $53.03) + (Ag g/t x $0.23) + (Au g/t x $14.24) + (Pt g/t x $18.53) + (Pd g/t x $5.47) - $4.76/tonne (Smelter related treatment/shipping/penalty costs)**

The smelting costs are based on the Thierry Mine concentrate/ore ratio.

North-south vertical cross sections were generated at 100 ft intervals in GEMS consistent with the 200 ft drill hole section spacing and areas filled in to 50 ft to 100 ft. The wireframe was developed on these sections from polylines enclosing drill hole core samples with assay NSRs ≥$15/tonne. Where PGE/PM assays were lacking the NSR was based on Cu and Ni only. This may under estimate the NSR somewhat however, P&E notes that PGE/PM account for only approximately 37% of the expected revenue so the lack of these assays has a minor impact on the wireframe boundary.

At the limits of drilling, wireframe boundaries were extrapolated ½ the drill hole spacing (±100 ft) past the drill hole. The wireframe polylines were snapped to drill hole assay limits in 3D graphical space and the polylines "wobbled" to bring them close to the general sectional plane of the drill holes and parallel to GEMS sections. The polylines were connected by tie lines and the wireframes generated and validated.

The wireframes extend on EW strike up to 4,530 ft (1,380 m) in length and in NS surface projection for up to 1,745 ft (532 m). Average widths of zone/domain intercepts are listed in Table 14.7. The wireframes extend from bedrock surface variously to a depth up to 1,465 ft (446 m). Total volume of the wireframes is 904 million $ft^3$ or approximately 88 million tons at a bulk density of 0.09721 $t/ft^3$. Table 14.8 lists the volumes for the zone/domain wireframes and Table 14.9 summarizes the drill hole intercepts in the wireframe. Because of the variable dips of the drill holes and wireframes, zone intercept lengths are not true widths. Figure 14-2 shows a plan and 3D perspective view of the mineral domain wireframes. Figures 14-3 and 14-4 show drill hole cross sections of the wireframes.

The mineral domains are reasonably continuous at the $15/tonne NSR cut-off, however, to preserve zone continuity locally some low grade material and non-assayed intervals (at zero grade) were incorporated as internal dilution. This dilution accounts for approximately 19% of the global wireframe material or approximately 18% of the wireframe resource within the Whittle™ pit.

**TABLE 14.7**
**SUMMARY OF ZONE/DOMAIN INTERCEPT WIDTHS**

| Zone | Domain | Average Width (ft)[1] | | |
|---|---|---|---|---|
| | | True | Horizontal | Vertical |
| A | 1 | 66 | 80 | 114 |
| B | 2 | 50 | 60 | 86 |
| C | 3 | 67 | 82 | 117 |
| D | 4 | 53 | 65 | 92 |
| E | 5 | 46 | 57 | 81 |
| F | 6 | 56 | 68 | 97 |
| G | 7 | 14 | 18 | 25 |

*(1) Excludes vertical holes, most of which do not reach zone footwalls*

**TABLE 14.8**
**WIREFRAME VOLUMES**

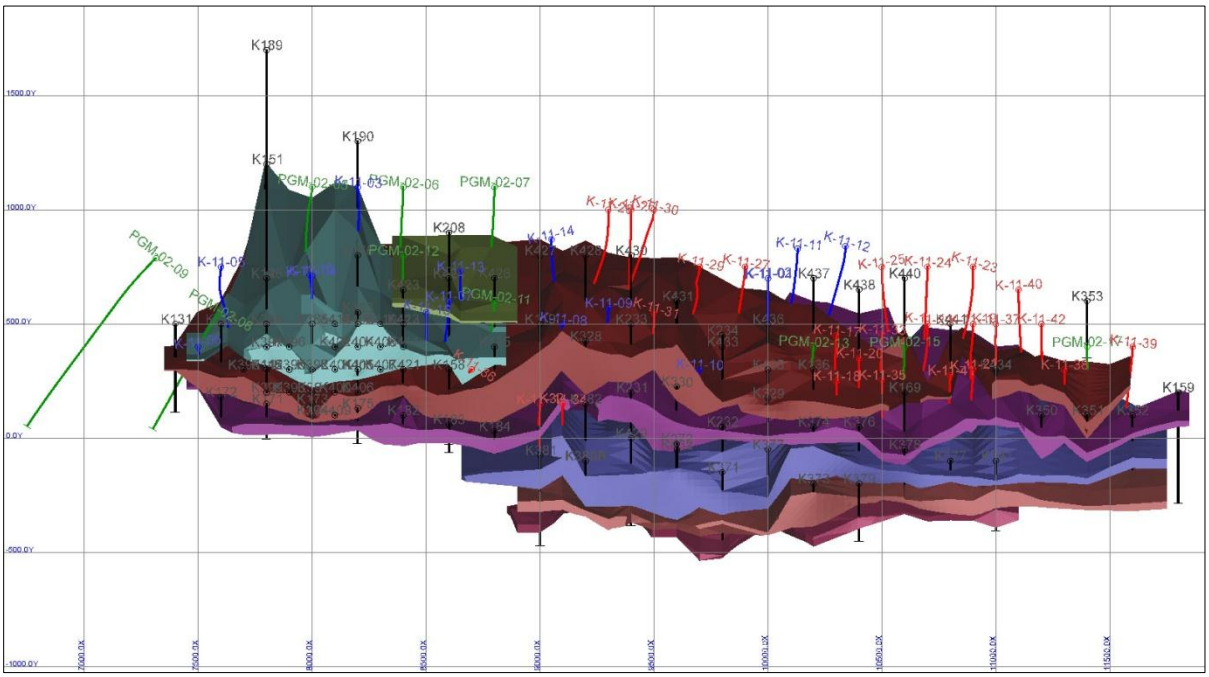
| Wireframe | | Block Model | Volume | Tons | Tonnes |
|---|---|---|---|---|---|
| **Domain/Zone** | **Status** | **Rock Code** | **$ft^3$ (000's)** | **(000's)** | **(000's)** |
| Zone-A | Clipped | 1 | 275,584 | 26,790 | 24,303 |
| Zone-B | Clipped | 2 | 169,157 | 16,444 | 14,918 |
| Zone-C | Clipped | 3 | 194,655 | 18,922 | 17,166 |
| Zone-D | Clipped | 4 | 112,128 | 10,900 | 9,888 |
| Zone-E | Clipped | 5 | 54,423 | 5,290 | 4,799 |
| Zone-F | Clipped | 6 | 93,958 | 9,134 | 8,286 |
| Zone-G | Clipped | 7 | 4,219 | 410 | 372 |
| | | | | | |
| **Total** | | | **904,123** | **87,890** | **79,733** |

**TABLE 14.9**
**SUMMARY OF DRILL HOLE INTERCEPTS IN THE WIREFRAMES**

| Domain | Count | Sum (ft) | Average (ft) | Cu% | Ni% | Pd g/t | Pt g/t | Au g/t | Ag g/t |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 103 | 7,921.61 | 76.91 | 0.348 | 0.095 | 0.131 | 0.046 | 0.024 | 1.70 |
| 2 | 114 | 6,041.91 | 53.00 | 0.381 | 0.106 | 0.143 | 0.049 | 0.023 | 1.79 |
| 3 | 92 | 6,351.86 | 69.04 | 0.352 | 0.091 | 0.131 | 0.049 | 0.022 | 1.69 |
| 4 | 56 | 3,050.07 | 54.47 | 0.352 | 0.090 | 0.130 | 0.046 | 0.023 | 1.72 |
| 5 | 30 | 1,422.58 | 47.42 | 0.303 | 0.081 | 0.110 | 0.041 | 0.020 | 1.47 |
| 6 | 44 | 3,951.22 | 89.80 | 0.386 | 0.115 | 0.141 | 0.050 | 0.027 | 1.84 |
| 7 | 10 | 151.60 | 15.16 | 0.378 | 0.082 | 0.140 | 0.049 | 0.026 | 1.81 |
| | | | | | | | | | |
| **Total** | **449** | **28,890.85** | **405.80** | **0.359** | **0.098** | **0.134** | **0.048** | **0.023** | **1.73** |

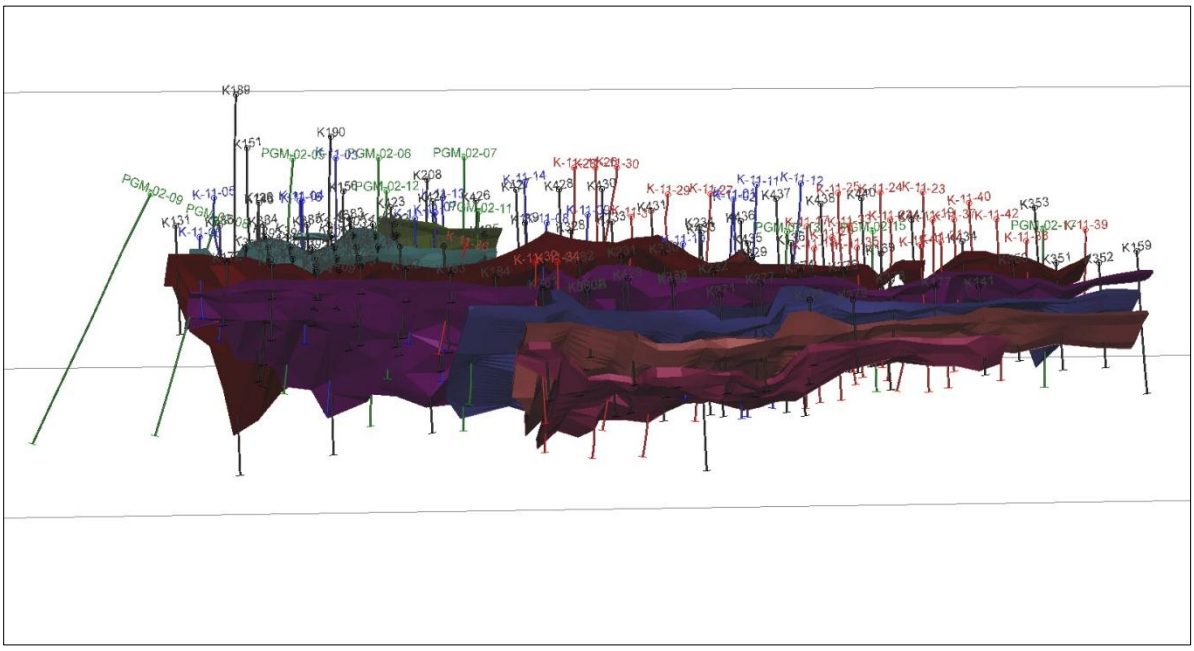
***Note:*** *Based on all holes including vertical holes, most of which do not reach domain footwalls*

**Figure 14.2 Plan and 3D Perspective Views of the K1-1 Resource Wireframes-Plan View**



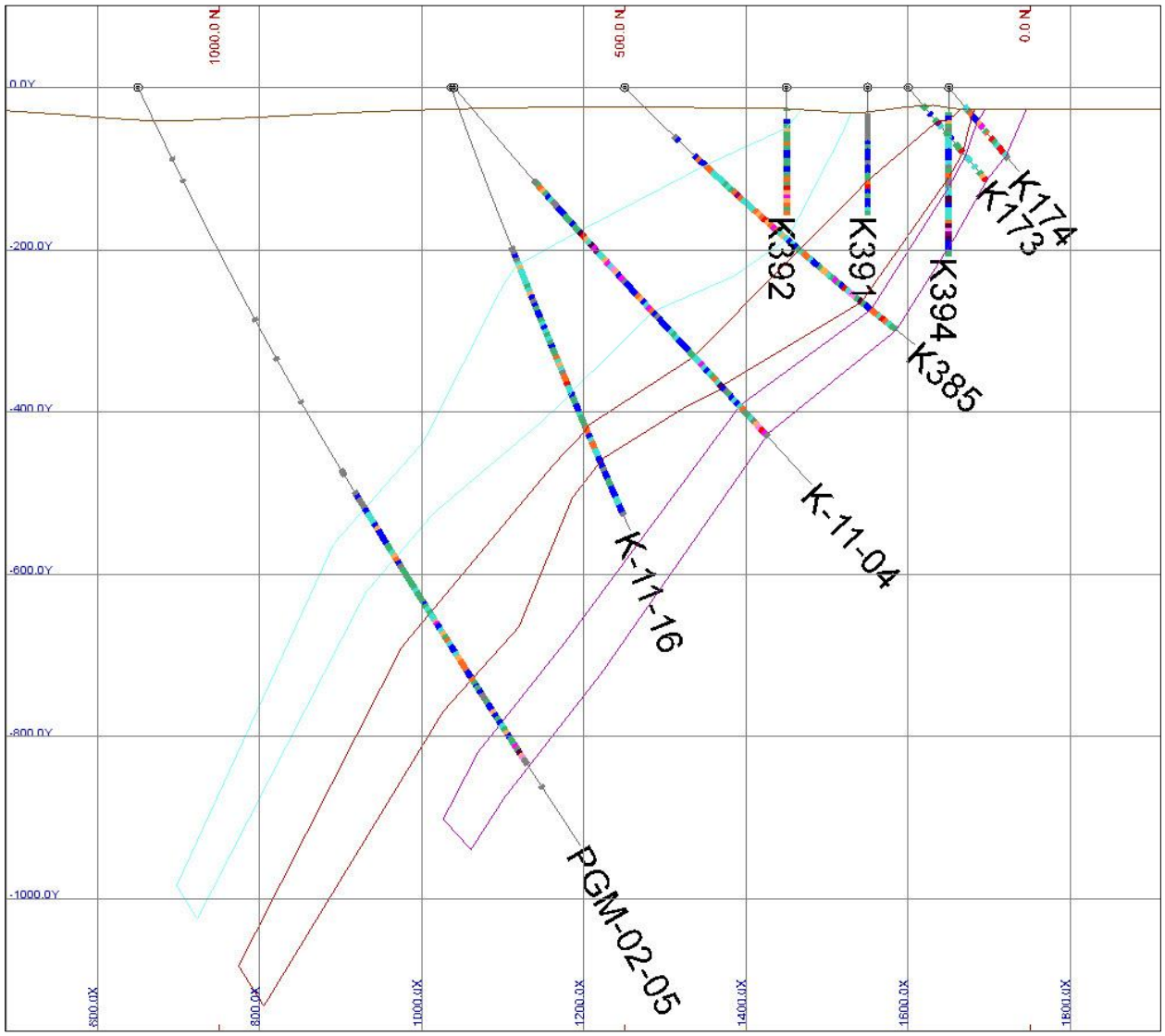

***Note:*** *Scale in feet*

**Figure 14.3 3D Perspective View-Looking North**




***Note:*** *Scale in feet*

**Figure 14.4 Drill Hole Cross Section 8000E-Looking East**

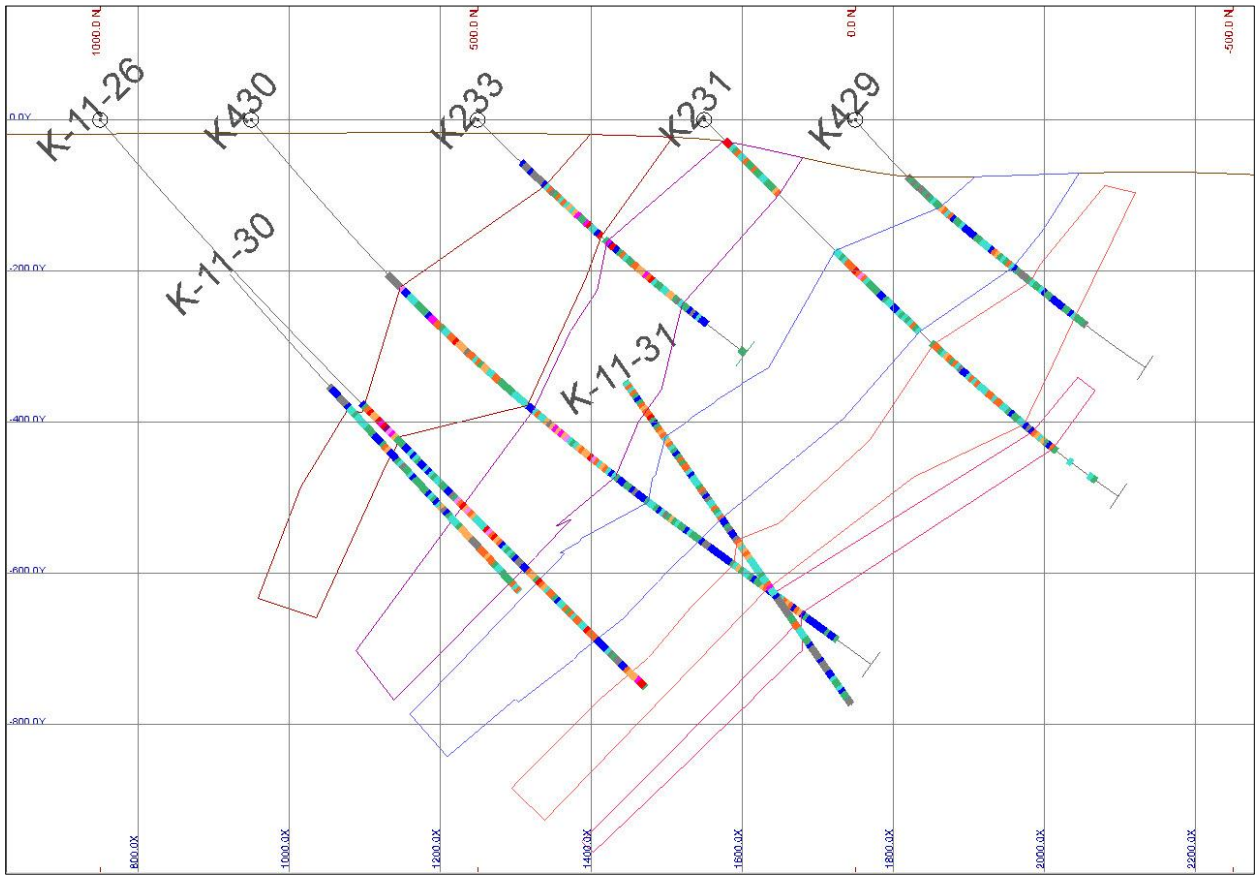



***Note:*** *Scale in feet*

Legend Cu% (Assays)

| | |
|---|---|
| 0.00001 | 0.10000 |
| 0.10000 | 0.20000 |
| 0.20000 | 0.30000 |
| 0.30000 | 0.40000 |
| 0.40000 | 0.50000 |
| 0.50000 | 0.60000 |
| 0.60000 | 0.70000 |
| 0.70000 | 0.80000 |
| 0.80000 | 0.90000 |
| 0.90000 | 1.00000 |
| 1.00000 | 100.00000 |

**Figure 14.5 Drill Hole Cross Section 9400E-Looking East**




***Note:*** *Scale in feet*

Legend Cu% (Assays)

| | |
|---|---|
| 0.00001 | 0.10000 |
| 0.10000 | 0.20000 |
| 0.20000 | 0.30000 |
| 0.30000 | 0.40000 |
| 0.40000 | 0.50000 |
| 0.50000 | 0.60000 |
| 0.60000 | 0.70000 |
| 0.70000 | 0.80000 |
| 0.80000 | 0.90000 |
| 0.90000 | 1.00000 |
| 1.00000 | 100.00000 |

## 14.9 ASSAY GRADE DISTRIBUTIONS

Figure 14-5 shows the grade distribution of Cu assays contained within the resource wireframe. The distributions are somewhat positively skewed. P&E notes that the coefficient of variation is low but there are some apparent outliers in the grade distribution indicating that grade capping is warranted.

P&E notes that copper and nickel assays are available for all of the explicit interval lengths within the mineral domains, however, only 68% of these intervals have PGE/PM assays. In order to provide for PGE/PM grade interpolation and allow for the economic evaluation of the

resources, the missing PGE/PM assays were generated in the database by regression from the available 2002 and 2011 PGE/PM assay data. Regression was only applied to intervals with existing Cu assays. Various metal correlation relationships were examined and P&E used the regression formulae with the highest correlation coefficients that also made geologic sense (Table 14.10). The PGE/PM "assay" data so generated were reviewed for implausible values and adjusted where necessary. Inherent in this process is the assignment of a low base level of PGE/PM for very low copper values, however, the impact on resource estimation is negligible.

**TABLE 14.10**
**SUMMARY OF METAL ASSAY REGRESSIONS UTILIZED**

| Regression | $R^2$ | Polynomial Fomula |
|---|---|---|
| Pd vs Cu | 0.3439 | Pd = -0.0228Cu2 + 0.3017Cu + 0.0335 |
| Au vs Cu | 0.1487 | Au = -0.00009Cu2 + 0.0672Cu + 0.0023 |
| Ag vs Cu | 0.8039 | Ag = 0.1583Cu2 + 4.2293Cu + 0.1522 |
| Pt vs Pd | 0.5588 | Pt = -0.1525Pd2 + 0.328Pd + 0.0066 |

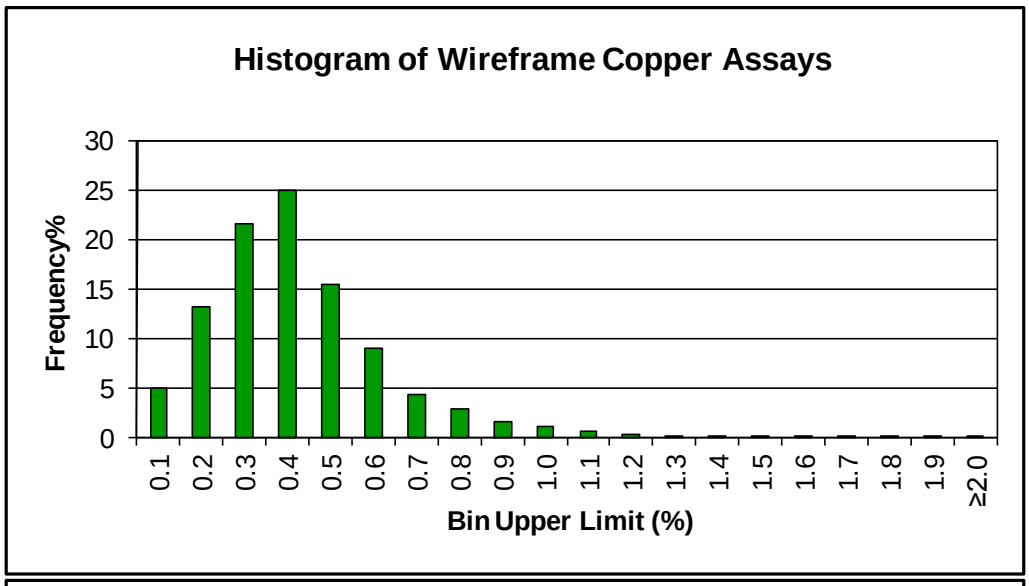
P&E understands from Cadillac Ventures consultant (pers. com., B. Newton, 2012)) that UMEX, for a period of time, had a policy of assaying every second interval that resulted in incomplete assaying for a number of holes and intercepts of mineralization within the resource. P&E reviewed the UMEX intercepts and for missing intervals, the adjacent assays were averaged to provide a value for the unassayed interval. This affected 71 intervals in 11 UMEX holes. For later drilling, the explicit missing and implicit missing assay intervals were assigned zero grade for resource estimation under the assumption that any visible base metal mineralization would have been logged and assayed. Where large intervals were not assayed or the entire hole not assayed, the wireframe was modeled to exclude the gaps or the hole was ignored for resource estimation.

## 14.10 GRADE CAPPING

Histograms were prepared to examine grade distributions of assays for each metal in each zone (Appendix 1) and grade capping set to eliminate the outliers evident in the graphs. Log-probability plots for all assays in the zones were also prepared to support grade capping conclusions from the copper and nickel histograms. Table 14.11 lists the grade capping levels, number of values capped and percent capped. The latter is less than 1% for all metals. The capping levels of Table 14.12 were applied to all zones.

Assays within the mineral wireframes were reviewed and statistics for capped assays calculated (Table 14.13).

**Figure 14.6 Distribution of Cu Assay Grades in Resource Wireframes**



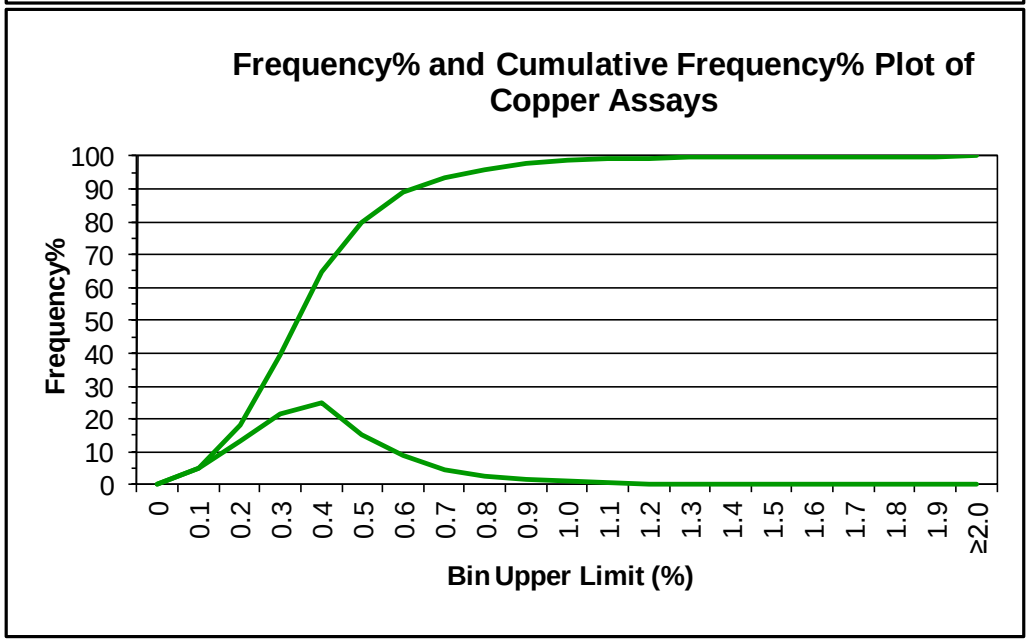




**TABLE 14.11**
**GRADE CAPPING LEVELS**

| Metal | Capping Level | Number Capped | Percent Capped |
|---|---|---|---|
| Cu | 2.00% | 7 | 0.13% |
| Ni | 0.60% | 38 | 0.68% |
| Pt | 0.15 g/t | 24 | 0.43% |
| Pd | 0.50 g/t | 23 | 0.41% |
| Au | 0.15 g/t | 12 | 0.22% |
| Ag | 7.00 g/t | 7 | 0.14% |

## 14.11 BULK DENSITY

Cadillac Ventures provided P&E with the results of water immersion specific gravity (SG) testing for some 29 core samples taken from drill holes K-11-06 and K-11-16. P&E had some independent tests done by pycometer which averaged 3.10 SG. P&E averaged the sample SGs and adopted a universal bulk density 3.12 tonnes/m3 for resource estimation. In Imperial units, this bulk density is 0.09721 tons/ft$^3$, which is a tonnage factor of 10.29 ft$^3$/ton. Waste was assigned a bulk density of 0.09173 tons/ft$^3$ and overburden 0.06240 tons/ft$^3$.

### 14.11.1 Assay Compositing

Cu assay grades appear to be uncorrelated to sample length. Some 89% of the assaying was done at five foot intervals. Only 271 of 5,630 samples exceed five feet with the maximum length of 25 ft. The five foot length and less represents 95.2% of all the sample lengths within the wireframes (Figure 14-6). In order to regularize the sampling for grade interpolation, assay compositing to five foot lengths was carried out down hole within the drill hole intercepts of the wireframe.

Three composites with lengths less than 1.25 ft (i.e. ¼ composite length) were discarded from resource estimation after P&E review confirmed the negligible impact on overall grade after discarding them. Table 14.12 provides grade statistics for composites by domain.

**TABLE 14.12**
**RESOURCE CAPPED ASSAYS AND COMPOSITE STATISTICS**

| Zone Assays Statistics | Length (ft) | Cu% | Ni% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---|---|---|---|---|---|---|---|
| Count | 5,630 | 5,630 | 5,630 | 5,630 | 5,630 | 5,630 | 5,630 |
| Sum | 28,191.77 | - | - | - | - | - | - |
| Minimum | 0.50 | 0.001 | 0.001 | 0.003 | 0.001 | 0.001 | 0.01 |
| 25th Percentile | 5.00 | 0.242 | 0.070 | 0.037 | 0.096 | 0.014 | 1.13 |
| Median | 5.00 | 0.340 | 0.091 | 0.047 | 0.130 | 0.022 | 1.61 |
| 75th Percentile | 5.00 | 0.468 | 0.120 | 0.059 | 0.170 | 0.031 | 2.26 |
| Maximum | 25.00 | 2.000 | 0.600 | 0.150 | 0.500 | 0.150 | 7.00 |
| Average | 5.01 | 0.376 | 0.103 | 0.050 | 0.140 | 0.025 | 1.81 |
| Weighted Mean | - | 0.375 | 0.103 | 0.050 | 0.140 | 0.024 | 1.81 |
| Variance | 0.79 | 0.046 | 0.004 | 0.000 | 0.005 | 0.000 | 1.04 |
| Standard Deviation | 0.89 | 0.214 | 0.065 | 0.021 | 0.071 | 0.016 | 1.02 |
| Coefficient of Variation | 0.18 | 0.570 | 0.634 | 0.422 | 0.508 | 0.672 | 0.56 |
| Skewness | 6.21 | 1.893 | 4.290 | 1.285 | 1.594 | 2.564 | 1.49 |
| Kurtosis | 100.86 | 7.862 | 27.306 | 3.464 | 4.805 | 13.170 | 3.92 |
| 97th Percentile | 6.00 | 0.850 | 0.213 | 0.097 | 0.306 | 0.059 | 4.22 |
| 98th Percentile | 7.00 | 0.954 | 0.265 | 0.108 | 0.331 | 0.067 | 4.60 |
| 99th Percentile | 9.00 | 1.080 | 0.438 | 0.127 | 0.413 | 0.079 | 5.40 |
| 99.5th Percentile | 10.00 | 1.306 | 0.600 | 0.143 | 0.496 | 0.109 | 6.40 |
| Composite Statistics | Length (ft)1 | Cu% | Ni% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
| Count | 5,815 | 5,815 | 5,815 | 5,815 | 5,815 | 5,815 | 5,815 |
| Sum | 28,862.79 | - | - | - | - | - | - |
| Minimum | 1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| 25th Percentile | 5.00 | 0.240 | 0.070 | 0.037 | 0.095 | 0.014 | 1.13 |
| Median | 5.00 | 0.340 | 0.090 | 0.047 | 0.128 | 0.022 | 1.61 |
| 75th Percentile | 5.00 | 0.460 | 0.120 | 0.059 | 0.167 | 0.030 | 2.22 |

**TABLE 14.12**
**RESOURCE CAPPED ASSAYS AND COMPOSITE STATISTICS**

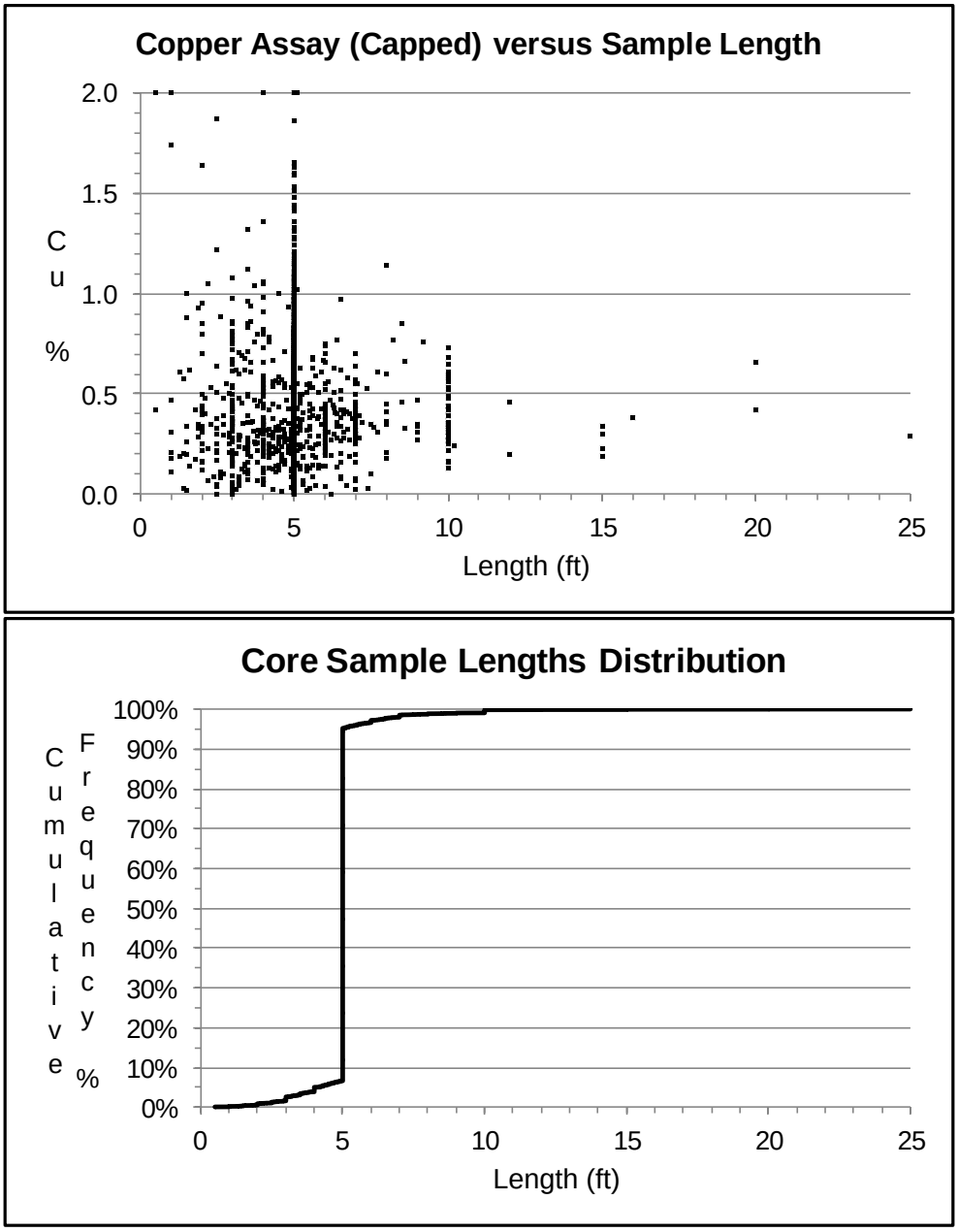
| Zone Assays Statistics | Length (ft) | Cu% | Ni% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---|---|---|---|---|---|---|---|
| Maximum | 5.00 | 2.000 | 0.600 | 0.150 | 0.500 | 0.150 | 7.00 |
| Average | 4.96 | 0.366 | 0.100 | 0.049 | 0.136 | 0.024 | 1.76 |
| Weighted Mean | - | 0.366 | 0.100 | 0.049 | 0.136 | 0.024 | 1.76 |
| Variance | 0.08 | 0.043 | 0.004 | 0.000 | 0.005 | 0.000 | 0.99 |
| Standard Deviation | 0.29 | 0.207 | 0.062 | 0.021 | 0.070 | 0.016 | 0.99 |
| Coefficient of Variation | 0.06 | 0.565 | 0.622 | 0.437 | 0.511 | 0.655 | 0.56 |
| Skewness | -8.88 | 1.53 | 3.79 | 0.92 | 1.27 | 2.18 | 1.28 |
| Kurtosis | 83.03 | 6.03 | 24.35 | 3.00 | 4.02 | 11.02 | 3.34 |
| 97th Percentile | 5.00 | 0.820 | 0.210 | 0.094 | 0.289 | 0.056 | 4.00 |
| 98th Percentile | 5.00 | 0.907 | 0.260 | 0.103 | 0.315 | 0.063 | 4.40 |
| 99th Percentile | 5.00 | 1.040 | 0.382 | 0.123 | 0.379 | 0.074 | 5.19 |
| 99.5th Percentile | 5.00 | 1.159 | 0.541 | 0.135 | 0.458 | 0.097 | 5.80 |

***Note:*** *Composites total length exceeds assays total length due to incorporation of implicit missing assay intervals (dilution) not accounted for in the assay table and the generation of extra composites from long assay intervals.*

**TABLE 14.13**
**RESOURCE COMPOSITE STATISTICS BY DOMAIN/ZONE**

| Domain | Count | Length (ft) | Cu% | Ni% | Pt g/t | Pd g/t | Au g/t | Ag g/t |
|---|---|---|---|---|---|---|---|---|
| 1 | 1,594 | 7,914 | 0.354 | 0.098 | 0.047 | 0.133 | 0.024 | 1.73 |
| 2 | 1,215 | 6,035 | 0.385 | 0.108 | 0.050 | 0.145 | 0.023 | 1.81 |
| 3 | 1,277 | 6,347 | 0.354 | 0.092 | 0.049 | 0.132 | 0.022 | 1.70 |
| 4 | 615 | 3,049 | 0.367 | 0.094 | 0.048 | 0.138 | 0.025 | 1.81 |
| 5 | 287 | 1,421 | 0.320 | 0.086 | 0.043 | 0.116 | 0.021 | 1.54 |
| 6 | 796 | 3,946 | 0.394 | 0.117 | 0.052 | 0.144 | 0.028 | 1.87 |
| 7 | 31 | 150 | 0.378 | 0.081 | 0.049 | 0.138 | 0.026 | 1.81 |
| | | | | | | | | |
| **Totals** | **5,815** | **28,863** | **0.366** | **0.100** | **0.049** | **0.136** | **0.024** | **1.76** |

**Figure 14.7 Core Sample Lengths Distribution**




## 14.12 VARIOGRAPHY

The updated resource estimate relies on the variography study on copper composites undertaken for the previous estimate. Variography was used as a guide to grade interpolation search strategy in both the previous and updated estimates. A linear semi-variogram (variogram) of the five foot resource composites was prepared down hole to assess the nugget effect which was found to be relatively high at 46%. Three-dimensional variography, using spherical and nested spherical models, was carried out on strike at~ 090°/0°, on dip 360°/-55° and transverse to the dip at 360°/+35°. The transverse (thickness) variogram is similar to the down hole linear profile. The strike and dip variograms are not robust and show ranges less than the 200 ft drill hole spacing. Variograms were based on 100 ft lags for strike (X) and dip (Y), and 10 ft for thickness (Z), a 30° spread angle, and 50 m bounding limits. Table 14.14 shows results of the variography. Variograms are presented in Appendix 2.

| TABLE 14.14<br>VARIOGRAPHY RESULTS | | | | | | |
|---|---|---|---|---|---|---|
| **Variogram** | **Nugget** | **%** | **C1** | **Range (ft)** | **C2** | **Range (ft)** |
| Down Hole | 0.019752 | 46 | 0.008859 | 18 | 0.043068 | 85 |
| 090°/0° | 0.003432 | 10 | 0.033816 | 111 | - | - |
| 360°/-55° | 0.020110 | 43 | 0.024184 | 43 | 0.003285 | 142 |
| 360°/+35° | 0.018233 | 44 | 0.011659 | 23 | 0.011958 | 101 |

## 14.13 BLOCK MODEL

The resource block model is oriented with X axis at 090° azimuth (i.e. no rotation) parallel to the trend of the K1-1 deposit and nickel mineralization. Block dimensions are 50 ft EW x 10 ft NS x 20 ft vertical (10,000 $ft^3$). Block dimensions are approximately ¼ of the drill hole spacing (X and Y), with vertical size suitable for open pit mining. The small NS dimension is needed for the locally narrow, moderately dipping zones and to control dilution and overlap between zones. A partial block model was set up to include two zone folios and a Standard folio for overburden and waste.

Block model parameters are shown in Table 14.15.

| TABLE 14.15<br>BLOCK MODEL PARAMETERS | | | |
|---|---|---|---|
| | **Columns** | **Rows** | **Levels** |
| **Parameter** | **X** | **Y** | **Z** |
| Model Origin | 6,020 | 1,000 | 100 |
| Block Size (ft) | 50 | 10 | 20 |
| No. of Blocks | 135 | 333 | 80 |
| Distance (ft) | 6,230 | 3,330 | 1,520 |
| Model End | 12,770 | 2,330 | -1,500 |
| Rotation | 0° | | |
| Blocks Total | 3,596,400 | | |
| Volume ($ft^3$) | 35,964 | million | |

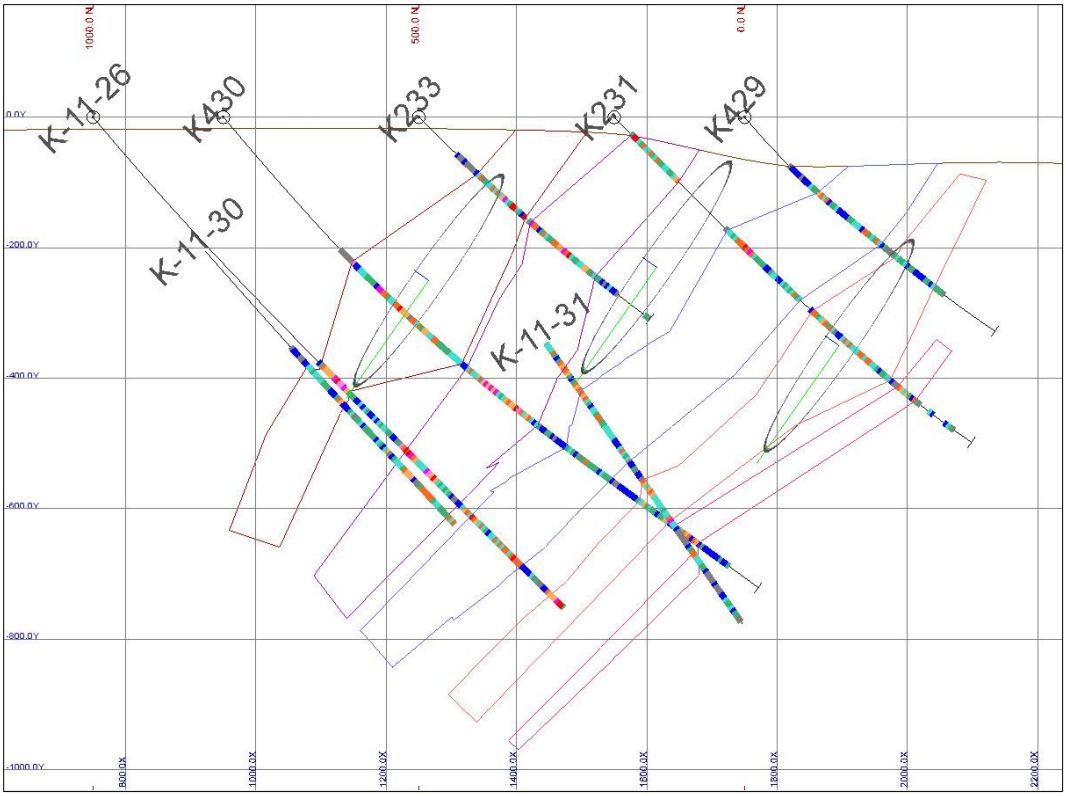
### 14.13.1 Block Model Grade Interpolation

Search Strategy and Grade Interpolation

Variography results guided the interpolation search strategy. The search ellipse main axis orientation is 085°/0° along the strike of the sulphide domain. Intermediate axis is 355° and minor axis vertical. Since the mineralization appears to dip ~ 20° north in the west portion of the deposit, is flat in the centre and dips ~ 35° south in the east, the search ellipse was similarly oriented in these sections of the block model (Figure 14-7). ID2 and ID3 interpolations were carried out in three passes (Table 14.16). The third pass was designed to fill the wireframe.

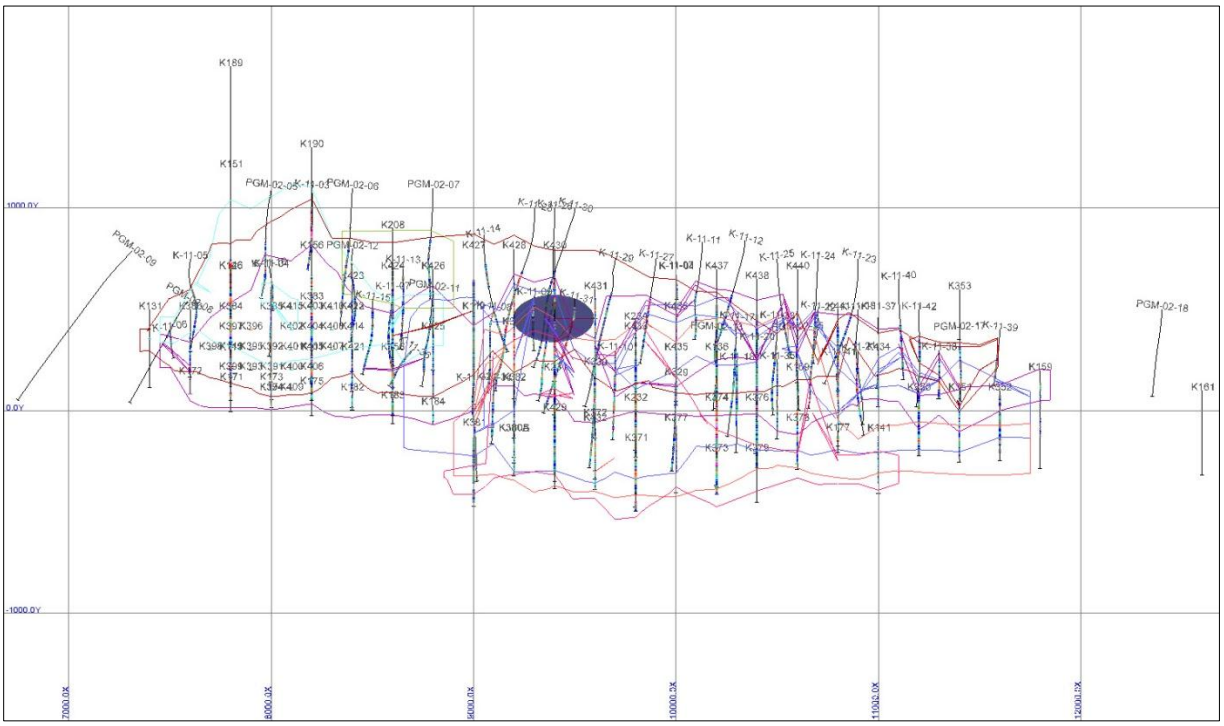
| TABLE 14.16<br>INTERPOLATION PARAMETERS AND SEARCH DISTANCES | | | |
|---|---|---|---|
| **Parameter** | **Pass 1** | **Pass 2** | **Pass 3** |
| Minimum Composites | 4 | 2 | 1 |
| Maximum Composites | 12 | 12 | 12 |
| Maximum Composites from One Hole | 3 | N/A | Na |
| Ellipse Search Distance X (ft) 90°/0° | 200 | 400 | 600 |
| Ellipse Search Distance Y (ft) 360°/-55° | 200 | 400 | 600 |
| Ellipse Search Distance Z (ft) 360°/+35° | 25 | 30 | 200 |

**Figure 14.8 Orientation of Primary Search Ellipse Cross Section 9400E-Looking East**




***Note:*** *Scale in Feet*

**Figure 14.9 Plan**



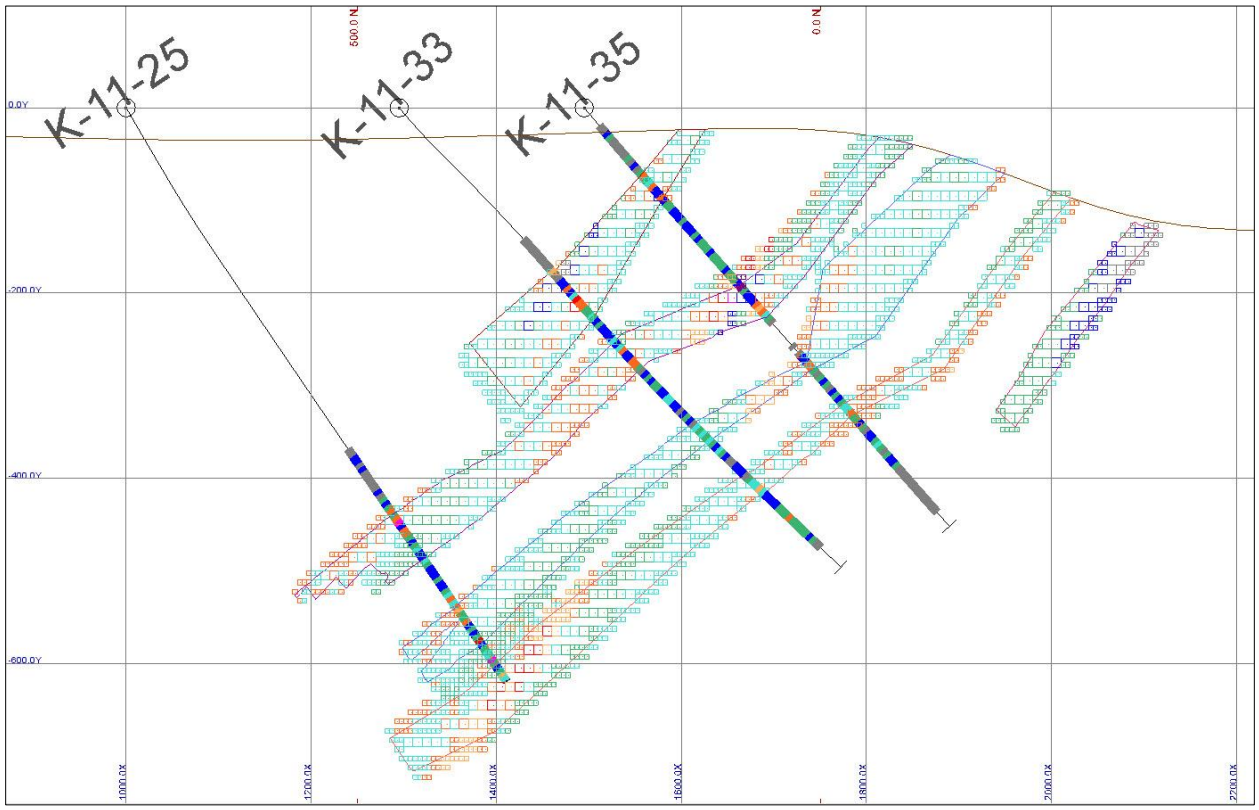
The number of blocks interpolated varied in each pass with 60% populated in the first pass and 99% populated after two passes.

The $ID^2$ method is reasonable since the nugget effect is moderate and some smoothing is desirable. The variography is not particularly robust due to few drill holes per zone and the generally low number of samples per zone that would impact on the use of kriging as an alternative method. Short composites of five feet, composite sample minimums and maximums, and expanded passes were adopted to avoid over-smoothing.

ID methods may be affected by data clustering if there is a grade bias in the clustered data with respect to surrounding data. Drilling is generally on 200 ft sections and at ±95 ft to ±275 ft pierce points along dip with intercepts wider at depth in part due to fanned drilling. At the west end of the deposit, collars for vertical holes are on a 100 ft by 100 ft grid producing some sample clustering in Zones A and F (domains 1 and 6), however, there are not many intercepts due to the short hole lengths (±155 ft). P&E examined, by means of cell declustering, whether sample clustering in this area could affect ID interpolation and found no significant impact.

Block model cross sections are presented in Figures 14-7 and 14-8.

**Figure 14.10 Block Model Cross Section 10,500E-Looking East**

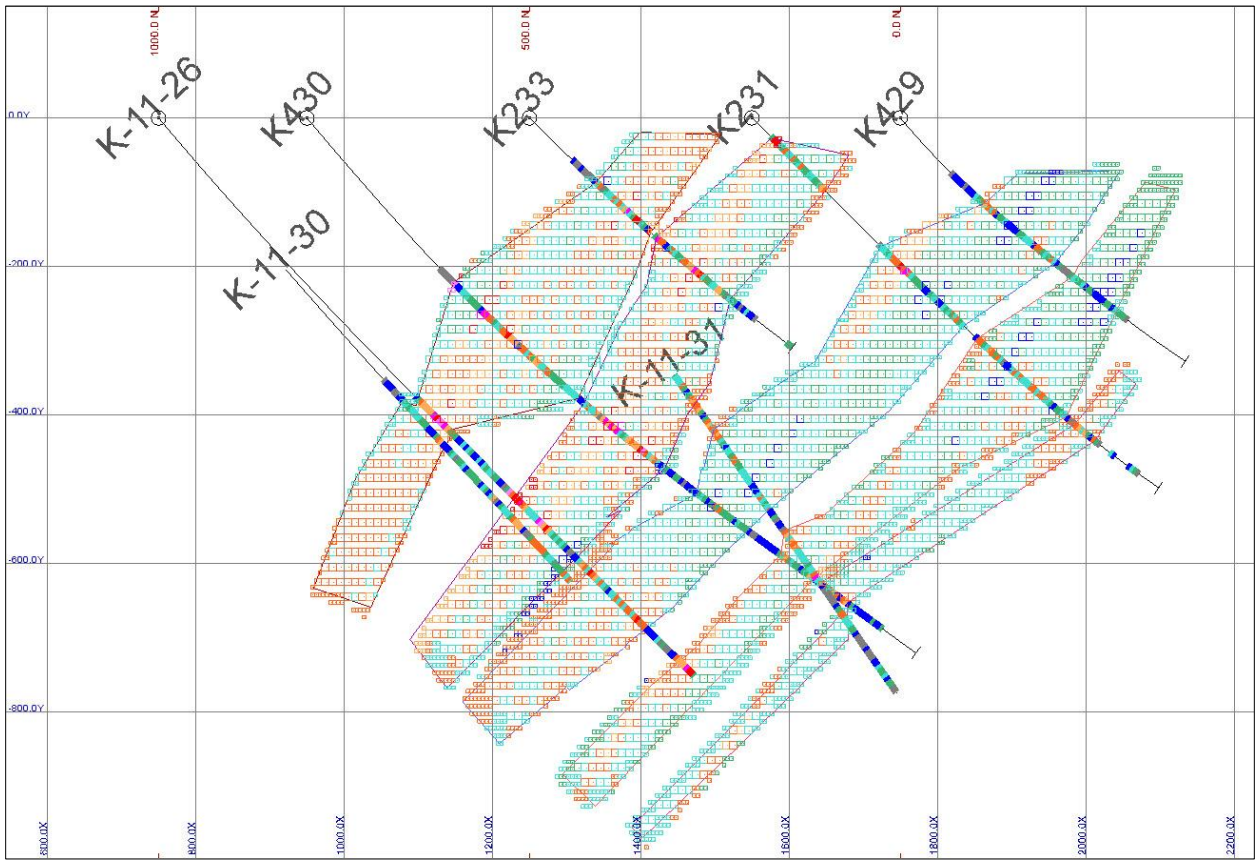



***Note:*** *Scale in Feet*

Legend Cu% (Composites & Blocks)

| | |
|---|---|
| 0.00001 | 0.10000 |
| 0.10000 | 0.20000 |
| 0.20000 | 0.30000 |
| 0.30000 | 0.40000 |
| 0.40000 | 0.50000 |
| 0.50000 | 0.60000 |
| 0.60000 | 0.70000 |
| 0.70000 | 0.80000 |
| 0.80000 | 0.90000 |
| 0.90000 | 1.00000 |
| 1.00000 | 100.00000 |

**Figure 14.11 Block Model Cross Section 9400E-Looking East**




***Note:*** *Scale in Feet*

Legend Cu% (Composites & Blocks)

| | |
|---|---|
| 0.00001 | 0.10000 |
| 0.10000 | 0.20000 |
| 0.20000 | 0.30000 |
| 0.30000 | 0.40000 |
| 0.40000 | 0.50000 |
| 0.50000 | 0.60000 |
| 0.60000 | 0.70000 |
| 0.70000 | 0.80000 |
| 0.80000 | 0.90000 |
| 0.90000 | 1.00000 |
| 1.00000 | 100.00000 |

## 14.14 RESOURCE CLASSIFICATION

In P&E's opinion, the level of drilling, assaying and exploration work completed to December 9, 2012 is sufficient to show that the K1-1 nickel deposit has the size and grade to indicate reasonable potential for economic open pit extraction and thus qualify it as a Mineral Resource under CIM definition standards. P&E classified the resources as Inferred Mineral Resources based on the wide drill hole spacing and data limitations inherent in the older UMEX drilling including lack of collar elevation and down hole surveys, and assaying for PGE/PM for only 68% of the sampling in the resource. Fill-in drilling, assaying existing core for PGE/PM and missing or non-assayed intervals within the wireframed zones, and surveying the UMEX and

2002 series holes will be necessary to upgrade these resources to Indicated and suitable for conversion to reserves.

### 14.14.1 Block Model Inventory

The Thierry K1-1 deposit is a near surface, low grade polymetallic deposit for which the economic mining potential rests with open pit mining. A NSR block model was created from the interpolated grades in the block model. The NSR was calculated on a short ton basis since the block model volume and tons are in Imperial units. The NSR calculation is:

**NSR ($/ton) = (Ni% x $24.12) + (Cu% x $56.14) + (Ag g/t x $0.31) + (Au g/t x $15.51) + (Pt g/t x $18.21) + (Pd g/t x $6.89) - $4.74/ton (Smelter related costs)**

Table 14.17 shows the input values in the derivation of the NSR.

**TABLE 14.17**
**NSR/PAYABLE METALS CALCULATION**

**K-1-1 PROJECT - NSR CALCULATION - OPEN PIT**

| 24 mo January 31, 2012 Trailing Average Prices | Metal Price | Concentrate | Smelter | Refining Chg. | Refining Chg. | Average Grade |
|---|---|---|---|---|---|---|
| Element | $US/lb or oz | Recovery | Payable | $US/lb or oz | $C/lb or oz | % or g/t |
| Ni | $10.15 | 25% | 50% | $0.60 | $0.61 | 1.00% |
| Cu | $3.72 | 90% | 93% | $0.40 | $0.40 | 1.00% |
| Ag | $28.18 | 50% | 75% | $0.50 | $0.51 | 1.0 |
| Au | $1,419 | 50% | 75% | $15.00 | $15.15 | 1.00 |
| Pt | $1,663 | 50% | 75% | $15.00 | $15.15 | 1.00 |
| Pd | $639 | 50% | 75% | $15.00 | $15.15 | 1.00 |
| $C/$US | | $0.990 | | | | |
| Concentration Ratio | | 50 | | | | |
| Smelter Treatment Charge $US/tonne | | $125 | | | | |
| Concentrate Shipping Charge $C/tonne | | $125 | | | | |
| Moisture Content | | 8% | | | | |

| Element | Payable Metal $C/tonne/g or % | Payable Metal $C/ton/g or % |
|---|---|---|
| Ni | $26.58 | $24.12 |
| Cu | $61.88 | $56.14 |
| Ag | $0.34 | $0.31 |
| Au | $17.10 | $15.51 |
| Pt | $20.07 | $18.21 |
| Pd | $7.60 | $6.89 |
| | **$133.57** | **$121.17** |
| Less Smelter Treatment Charges | **$2.53** | $2.29 |
| Less Concentrate Shipping Charges | **$2.70** | $2.45 |
| | **$128.34** | **$116.43** |

Table 14.18 provides the results of grade interpolation for the block model at various NSR cut-offs.

**TABLE 14.18**
**BLOCK MODEL INVENTORY**

**Block Model Mineral Inventory at Various NSR Cut-Offs**
**Cadillac Ventures Inc. Thierry Mine K1-1 Deposit, Pickle Lake, Ontario**
**As of February 2012(1-6)**

| Cut-Off NSR C$/Tonne | Tonnes (000's) | Cu % | Ni % | Au g/t | Pt g/t | Pd g/t | Ag g/t | NSR C$/Tonne |
|---|---|---|---|---|---|---|---|---|
| $5 | 79,114 | 0.370 | 0.101 | 0.024 | 0.048 | 0.137 | 1.77 | $23.38 |
| $10 | 76,836 | 0.377 | 0.102 | 0.024 | 0.049 | 0.139 | 1.80 | $23.84 |
| $11 | 75,857 | 0.379 | 0.103 | 0.024 | 0.049 | 0.140 | 1.81 | $24.01 |
| $15 | 69,111 | 0.393 | 0.105 | 0.025 | 0.050 | 0.144 | 1.87 | $25.05 |
| $20 | 49,865 | 0.433 | 0.110 | 0.027 | 0.053 | 0.156 | 2.06 | $27.88 |
| $25 | 28,059 | 0.491 | 0.119 | 0.031 | 0.058 | 0.173 | 2.32 | $32.12 |
| $30 | 13,947 | 0.558 | 0.134 | 0.035 | 0.062 | 0.191 | 2.63 | $37.05 |
| $35 | 6,945 | 0.623 | 0.152 | 0.039 | 0.067 | 0.208 | 2.91 | $41.93 |

*(1) The block model mineral inventory was estimated by conventional 3D block modelling based on wireframing at a $15/tonne NSR cut-off and ID2 grade interpolation.*
*(2) The Qualified Persons for this Mineral Resource estimate are: Richard Routledge, M.Sc. (Applied), P.Geo., and Eugene Puritch, P.Eng.*
*(3) Metal prices for the estimate are: US$3.72/lb Cu, US$10.15/lb Ni, US$1,663/oz Pt, US$639/oz Pd, US$1,419/oz Au, US$28.18/oz Ag, based on a two-year trailing average as of January 31, 2012..*
*(4) A uniform bulk density of 3.12 tonnes/m3 has been applied for volume to tonnes conversion.*
*(5) Mineral inventory in the block model is estimated from the 0 m RL to the -445 m RL (445 m depth).*
*(6) Block model mineral inventory does not constitute Mineral Resources or Mineral Reserves under CIM definitions and does not have demonstrated economic viability. The mineral inventory contains the Inferred Mineral Resources that have been outlined by Whittle™ pit design.*

### 14.14.2 Resource Reporting

The NSR block model was exported to Whittle™ open pit optimization software for open pit design. The resulting dipper pit was used to report in-pit Mineral Resources (Figures 14-9 and 14-10).

The Whittle™ designed pit is based on parameters listed in Table 14.19 and metal prices in Table 14.18. The costs in Table 14.19 assume concurrent mining of the Thierry Mine underground and the K1-1 open pit to provide economies of large scale operation for processing and G&A.

**TABLE 14.19**
**WHITTLE™ INPUT PARAMETERS**

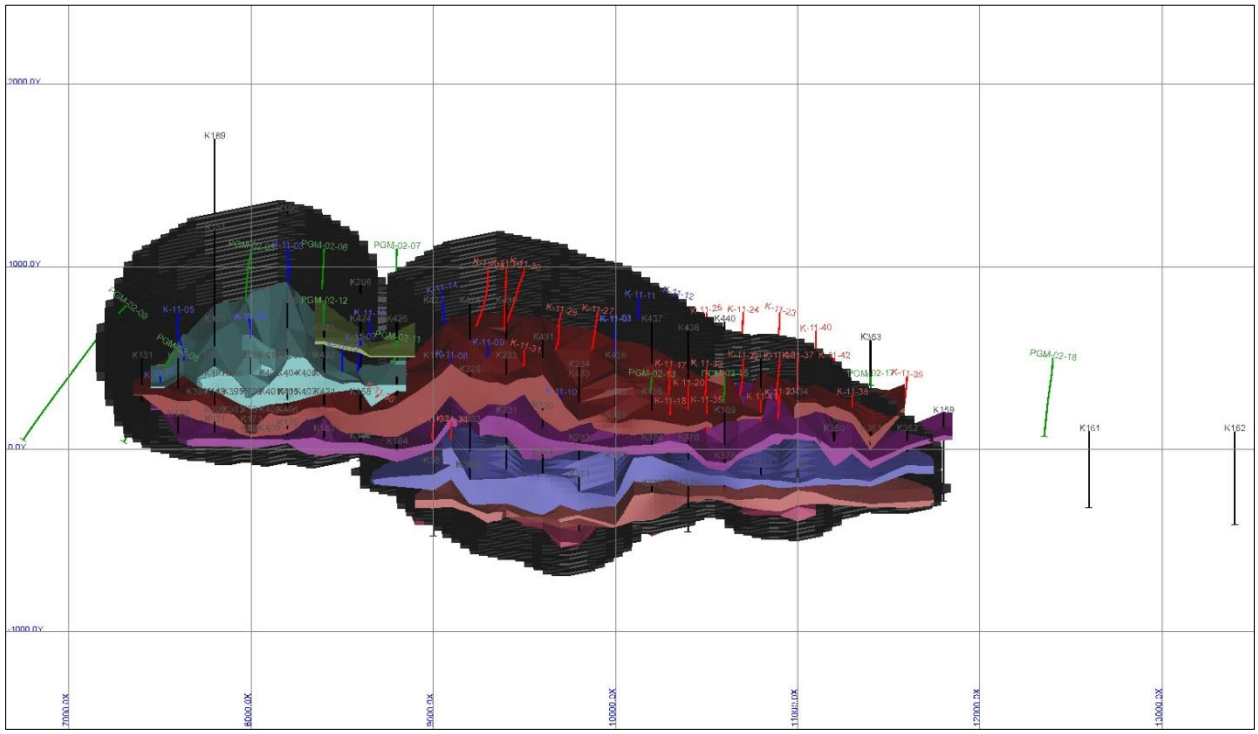
| | |
|---|---|
| Pit Slopes | 50° |
| Overburden Stripping | $1.25/tonne |
| Mining Cost (ore) | $1.85/tonne |
| Waste Stripping | $1.65/tonne |
| Process Cost | $9.50/tonne |
| G&A | $1.50/tonne |
| Pit Discard Cost | $11.00/tonne |

Ramp access and pit floor modifications have not been done to finalize the pit and such work will have an impact on the stripping ratio and thus a small impact on the in-pit resources. In

addition, there is no geotechnical information available to confirm the pit slopes and their modification will also impact on the stripping ratio and the in-pit resources. Material in the block modeled mineral wireframes lying outside the pit shells does not show open pit economic potential and the grade is not high enough to support underground mining and thus is not considered to be resources under CIM definitions.

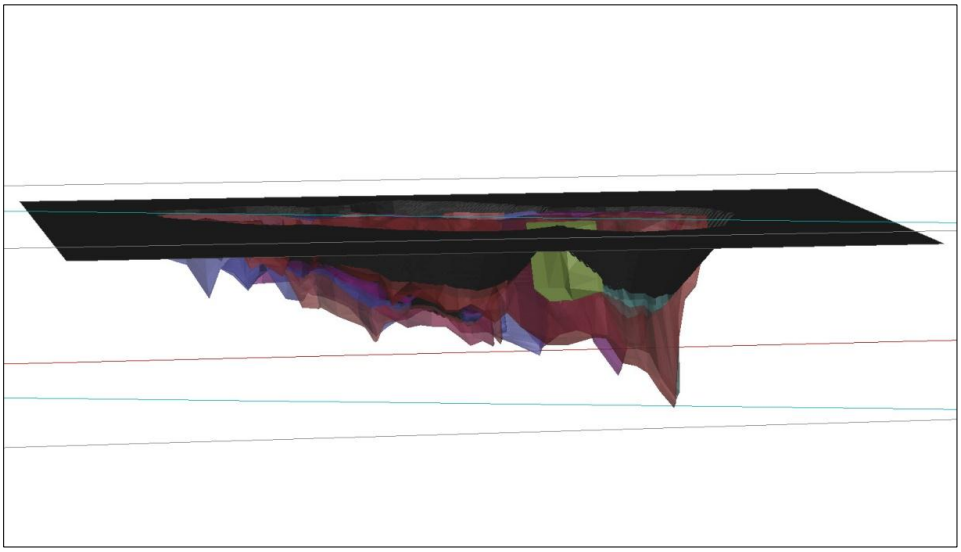
In-pit resource blocks by NSR are shown in cross section 9400E in Figure 14-11 and in plan at -200 ft RL in Figure 14-12.

**Figure 14.12 Plan of Whittle™ Dipper Pit and Mineral Zone Wireframes**



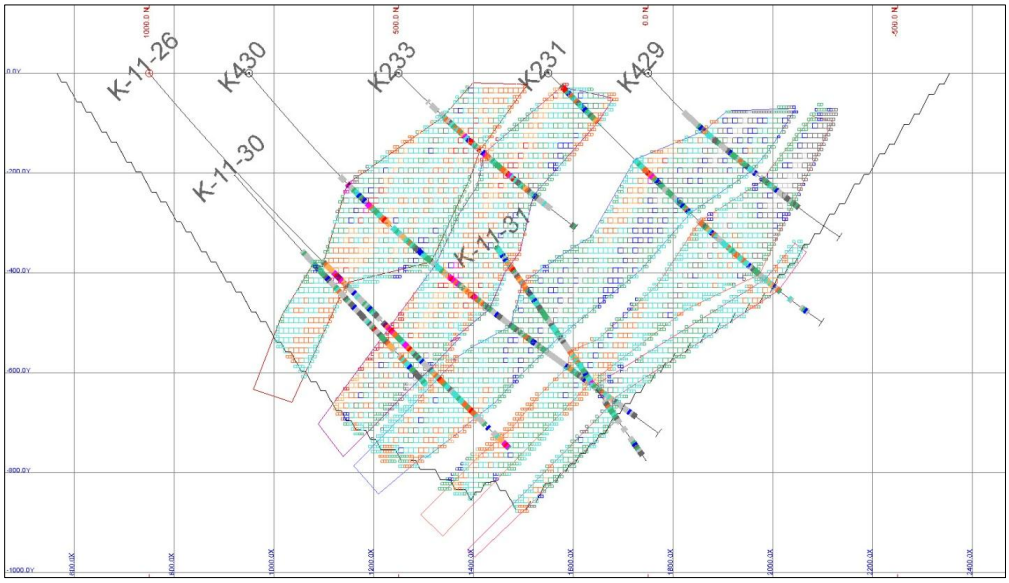

***Note:*** *Scale in Feet*

**Figure 14.13 3D Perspective View of the Whittle™ Dipper Pit and Mineral Zone Wireframes-Looking South**



***Note:*** *Scale in Feet*

**Figure 14.14 In-Pit Resource Blocks by NSR Cross Section 9400E-Looking East**

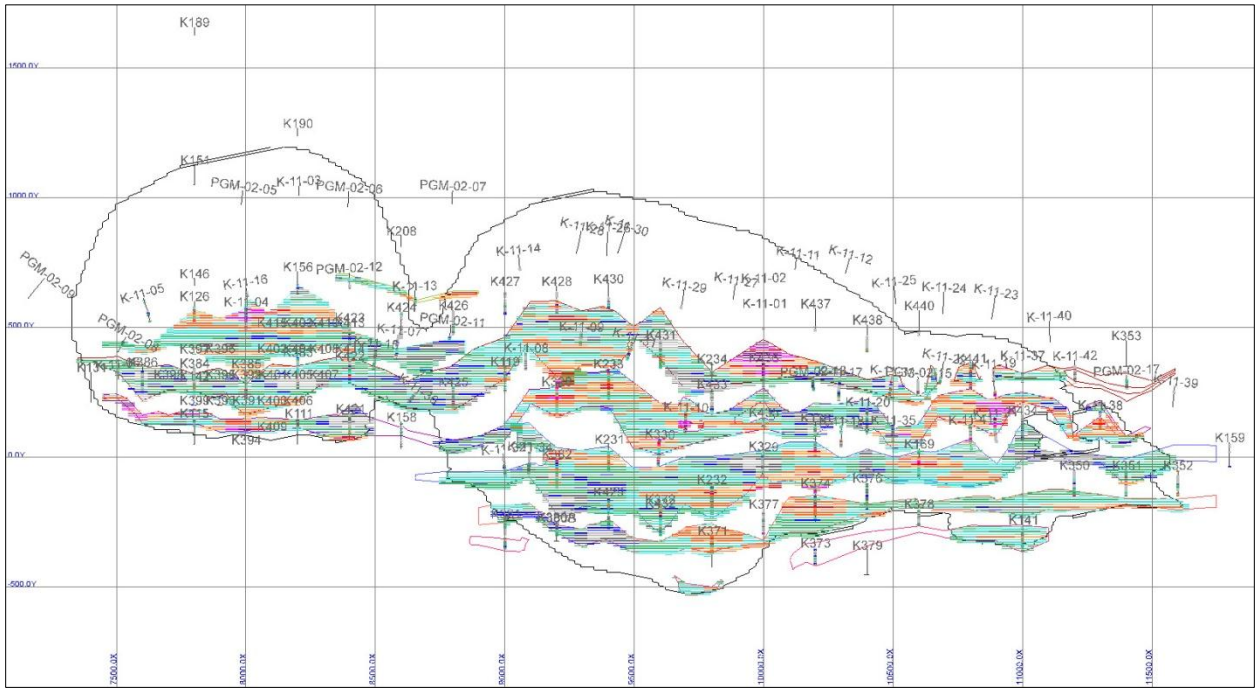



***Note:*** *Scale in Feet*

Legend NSR C$

| >= Lower Bound | < Upper Bound | |
|---|---|---|
| 0.00010 | 10.00000 | |
| 10.00000 | 11.00000 | |
| 11.00000 | 15.00000 | |
| 15.00000 | 20.00000 | |
| 20.00000 | 25.00000 | |
| 25.00000 | 30.00000 | |
| 30.00000 | 35.00000 | |
| 35.00000 | 40.00000 | |
| 40.00000 | 50.00000 | |
| 50.00000 | 500.00000 | |

**Figure 14.15 In-Pit Resource Blocks by NSR -200 ft RL Plan**




***Note:*** *Scale in Feet*

Legend NSR C$

| >= Lower Bound | < Upper Bound | |
|---|---|---|
| 0.00010 | 10.00000 | |
| 10.00000 | 11.00000 | |
| 11.00000 | 15.00000 | |
| 15.00000 | 20.00000 | |
| 20.00000 | 25.00000 | |
| 25.00000 | 30.00000 | |
| 30.00000 | 35.00000 | |
| 35.00000 | 40.00000 | |
| 40.00000 | 50.00000 | |
| 50.00000 | 500.00000 | |

Table 14.20 summarizes the in-pit Inferred Resource for a NSR cut-off of $11/tonne. P&E recommends that the in-pit Inferred Resource at the $11/tonne NSR cut-off be used for public release and further economic evaluation.

**TABLE 14.20**
**K1-1 DEPOSIT INFERRED RESOURCE**

**Open Pit Inferred Resources at Various NSR Cut-Offs**
**Cadillac Ventures Inc. Thierry Mine K1-1 Deposit, Pickle Lake, Ontario**
**As of February 2012**

| Cut-Off | Tonnes | Cu | Ni | Au | Pt | Pd | Ag | NSR |
|---|---|---|---|---|---|---|---|---|
| NSR C$/Tonne | (000's) | % | % | g/t | g/t | g/t | g/t | C$/Tonne |
| $5 | 55,718 | 0.374 | 0.098 | 0.024 | 0.049 | 0.139 | 1.79 | $23.54 |
| $10 | 54,287 | 0.379 | 0.099 | 0.025 | 0.050 | 0.141 | 1.82 | $23.95 |
| $11 | 53,614 | 0.381 | 0.099 | 0.025 | 0.050 | 0.141 | 1.83 | $24.11 |
| $15 | 49,021 | 0.395 | 0.101 | 0.026 | 0.051 | 0.146 | 1.89 | $25.13 |
| $20 | 36,227 | 0.432 | 0.106 | 0.028 | 0.054 | 0.156 | 2.06 | $27.73 |
| $25 | 20,589 | 0.488 | 0.113 | 0.031 | 0.058 | 0.173 | 2.32 | $31.76 |
| $30 | 9,982 | 0.554 | 0.124 | 0.034 | 0.063 | 0.192 | 2.62 | $36.56 |
| $35 | 4,616 | 0.623 | 0.139 | 0.038 | 0.068 | 0.212 | 2.92 | $41.61 |

*(1) CIM definitions were followed for Mineral Resources.*
*(2) The Qualified Persons for this Mineral Resource estimate are: Richard Routledge, M.Sc. (Applied), P.Geo., and Eugene Puritch, P.Eng.*
*(3) Mineral Resources are estimated by conventional 3D block modelling based on wireframing at a $15/tonne NSR cut-off and ID2 grade interpolation.*
*(4) Metal prices for the estimate are: US$3.72/lb Cu, US$10.15/lb Ni, US$1,663/oz Pt, US$639/oz Pd, US$1,419/oz Au, US$28.18/oz Ag, based on a two-year trailing average.*
*(5) A uniform bulk density of 3.12 tonnes/m3 has been applied for volume to tonnes conversion.*
*(6) Open pit Inferred Mineral Resources are estimated from the 0 m RL to the -267 m RL.*
*(7) Classification of Inferred Resources is based on wide drill hole spacing, lack of collar and down surveys for UMEX and 2002 series drilling and the lack of PGM/PM assays for more than 50% the sample data in the resource. Regression based on available assays was used to generate PGM/PM values for the resource estimate.*
*(8) Mineral resources were determined within a Whittle™ pit shell with 50 degree slopes utilizing mining costs of C$1.85/tonne for mineralized material, C$1.65/tonne for waste rock, and C$1.25/tonne for overburden.*
*(9) Costs used to determine the C$11/tonne NSR resource cut-off value were processing at C$9.50/tonne and G&A C$1.50/tonne.*
*(10) Overall payable metal in the NSR calculation were 80% Cu, 9% Ni and 11% for Ag, Au, Pt & Pd.*

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. There is no certainty that all or any part of this Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration.

P&E recommends reporting open pit resources at the $11/tonne NSR cut-off.

## 14.15 BLOCK MODEL VALIDATION

There has been no development or previous mining on the K1-1 deposit, so no reconciliation studies or data are available for validation of the resource estimate. As such, estimated tonnages, grades, and contained metal cannot be compared to actual production, or gauge the sensitivity of the grade estimate to drill hole density.

The block model was validated using a number of industry standard methods including visual and statistical methods.

Visual examination of composite and block grades on plans and sections on-screen and review of the reasonableness of estimation parameters including:

- Number of composites used for estimation
- Number of holes used for estimation
- Distance to the nearest composite
- Number of octants containing composites
- Number of passes used to estimate grade.

Verification of wireframe and reported resource volumes. GEMS reports resources using the percent models or solids models. As part of the validation, the global estimates for percent model and solids models were compared and found to differ by less than 0.1%.

Comparison of mean grades between assays, composites, and model blocks (Table 14.21). The mean grades agree between resource assays and composites when explicit and implicit missing assays/non-assayed intervals are accounted at zero grade. The block model global grade is slightly lower than the resource assay and composite grades which is generally expected as part of the volume variance effect.

Examination of the tonnage-grade profile for reasonable fit to expectations based on assay grade distribution (Figure 14-13).

**TABLE 14.21**
**COMPARISON TO $ID^3$ AND NN GRADE MODELS ON A GLOBAL WIREFRAME BASIS WHICH ARE CLOSE, WITHIN 3%**

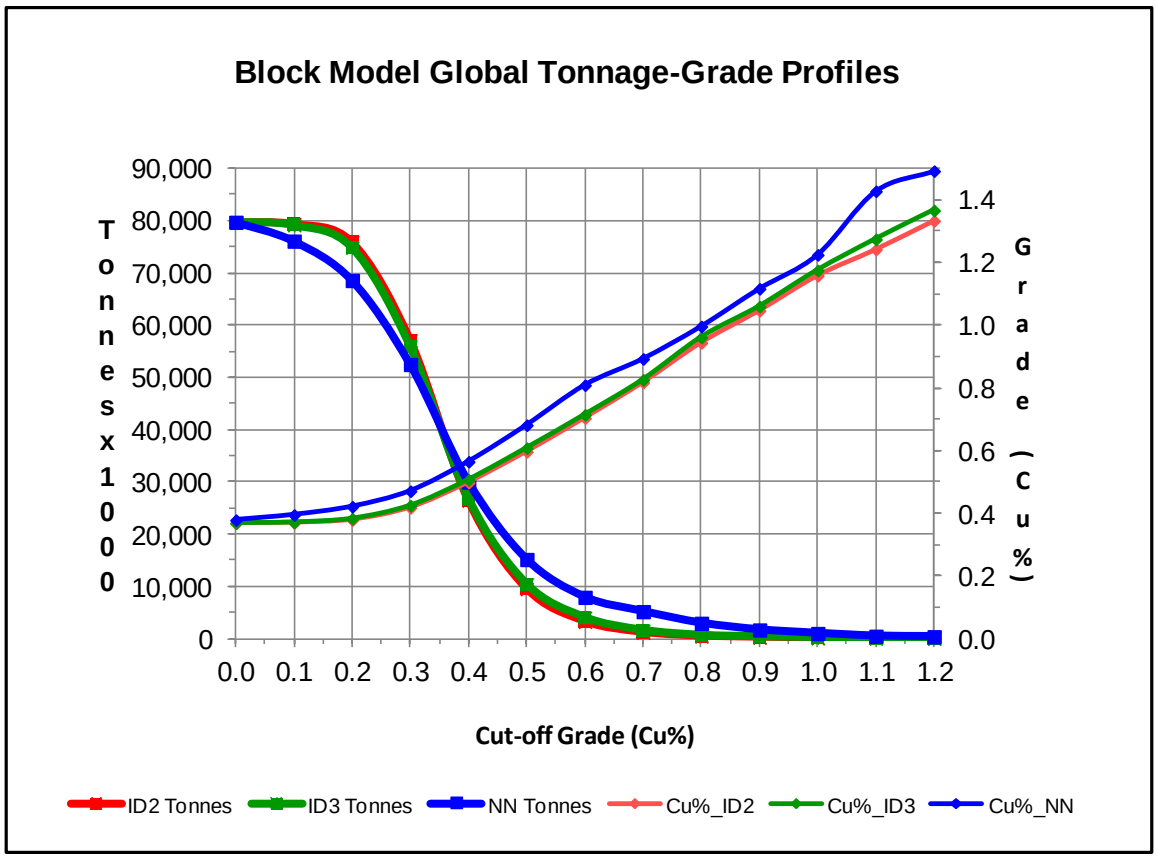
| Interpolation Model | $ID^2$ Cu% | $ID^3$ Cu% | NN Cu% |
|---|---|---|---|
| Average Grade | 0.368 | 0.369 | 0.378 |
| Tons (000s) | 87,865 | 87,865 | 87,865 |

**TABLE 14.22**
**COMPARISON OF GLOBAL GRADES BETWEEN ASSAYS, COMPOSITES AND BLOCK MODEL**

| Assays | Cu% |
|---|---|
| Weighted Mean | 0.375 |
| Weighted Mean[1] | 0.366 |
| Composites | Cu% |
| Average | 0.366 |
| ID2 Block Model | Cu% |
| Wireframe | 0.368 |
| **Variance: Block Model versus Assays** | |
| Variance | 0.002 |
| % Variance | 0.55% |
| **Variance: Block Model versus Composites** | |
| Variance | 0.002 |
| % Variance | 0.55% |

***(1)*** *Diluted at zero grade for gaps in assaying*

**Figure 14.16 Tonnage–Grade Profiles for the K1-1 Deposit Block Model**




*(1) Tons converted to metric tonnes*
*(2) "Zero" grade on the X axis represents all material in the wireframe*

## 14.16 RESOURCE INTERPRETATION AND CONCLUSIONS

The K1-1 nickel deposit, as modelled for resource estimation is approximately 4,530 ft (1,380 m) in length with horizontal widths of up to 108 ft. The deposit has been drill intersected from 12 ft depth to approximately 1,465 ft (466 m) depth. Host rocks for the polymetallic sulphide mineralization at K1-1 are sheared ultramafic to mafic units contained within moderately metamorphosed massive to pillowed mafic volcanics. Exploration drilling has been carried out at the K1-1 deposit since 1969 resulting in a resource drill hole database of 158 diamond drill holes totalling 96,593.82 ft (29,441.80 m) of which 25 are vertical short holes for 4,921.00 ft (1,499.92 m). The geological interpretation is based on diamond drilling. The drill hole spacings at 200 ft sections and ≥200 ft step outs on section, with some fill-in on 100 ft sections are somewhat wide for grade continuity as indicated by variography. Core sampling intervals, nominally at five feet, is appropriate to the deposit scale and mineralization continuity. The Mineral Resource estimate is based entirely on a diamond drilling and core assaying database.

P&E has the following conclusions and opinions:

- The geological interpretations are reasonable.
- In P&E's opinion, the core sampling, sample preparation, security, and analyses and overall quality of sampling are adequate and the drill hole database is reasonable and acceptable for estimation of Inferred Resources.
- The resource cut-off value at $11/tonne NSR, based on deposit grade distributions and preliminary economic evaluation, is reasonable.
- The interpolation domains are reasonable.
- Grade capping is at reasonable thresholds.
- The specific gravity testing is reasonable for an initial Inferred Resource estimate but more testing will be required to upgrade resources to Indicated or Measured.
- Composites at five ft lengths are reasonable.
- The ID2 interpolation approach is reasonable, given the sample spatial distribution, results of variography and nugget effect of 45%.
- The Inferred Resource classification is reasonable based on mineralization/grade continuity and drill hole density and availability of supporting data.
- The block model validation results are reasonable.
- The resource reporting methodology has been designed to support a scoping study and is reasonable.

### 14.16.1 Resource Recommendations

With regard to K1-1 Mineral Resources, P&E recommends the following two phases of work:

Phase 1

- Carry out a scoping study, preliminary assessment to evaluate the potential viability of economic mining for the combined Thierry Mine - K1-1 project.

Phase 2

Contingent on encouragement from Phase 1:

- Assay available core from previous holes where assaying was incomplete for the six metals or not done at all, particularly within the zones defined by the mineral resource wireframes and within the pits, and on the zone hanging wall and footwalls.
- Additional fill-in drilling and replacement of the UMEX drill holes for which assaying was limited to Cu and Ni and was locally discontinuous and for which core for re-assay is unavailable. The objective is to upgrade the Inferred Resource to Indicated.
- All assaying for core from future holes should be done for all six metals: Cu, Ni, Pt, Pd, Au and Ag. Collar surveys and down hole azimuth and dip surveys should be completed on all holes and for unsurveyed/partially surveyed previous holes where practicable. P&E recommends use of Gyro based down hole survey instrumentation which is more reliable for surveys in magnetic rocks such as at K1-1.

The drill hole database should be converted to SI (metric units).

Update the resource estimate based on new data acquired from the above work.

P&E has reviewed a Phase 1 work program and budget, prepared by Cadillac Ventures, which is based in part on P&E recommendations (Table 26.1). In P&E's opinion, the program and budget are reasonable.

## 15.0 MINERAL RESERVE ESTIMATES

Cadillac Ventures has not carried out any production feasibility studies designed to convert the Mineral Resources previously described in this report to Mineral Reserves.

## 16.0 MINING METHODS

This section is not applicable to this report.

## 17.0 RECOVERY METHODS

This section is not applicable to this report.

## 18.0 PROJECT INFRASTRUCTURE

Richview built a warehouse referred to as a "Hangar Facility" which is still present of the Property. It is currently used as a core shack and to store tools and small equipment.

On-site power transforms, communications facilities etc., will have to be re-established.

## 19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to this report.

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

## 20.1 RECLAMATION AND ENVIRONMENTAL

In 1993, Etruscan Resources submitted a Thierry Mine Closure Plan to the Ontario Ministry of Northern Development and Mines (MNDM). This Closure Plan was prepared by HBT Agra Limited (1993) and addressed the existing site conditions and proposed rehabilitation plans for final closure and abandonment of the site.

Between 1997 and 1998, Etruscan engaged Mindecom Industrial Constructors, who completed reclamation activities on the mine site including capping four vent raises with concrete slabs, removal of buildings and infrastructure and spreading overburden over certain site areas. A spillway was constructed at the secondary pond below the tailing dam. Financial difficulties necessitated Mindecom leaving the site without completing all of the required work. The open pits were allowed to recharge and the underground workings are presently flooded to surface. Large volumes of waste rock remain adjacent to the pits.

An addendum to the Agra Report, prepared by Klohn-Crippen Consultants Ltd. (1997), was submitted together with a response by Mindecom (Dated October 20, 1997) to answer certain issues raised by the MNDM. These issues related to the long-term stability of water quality in Ponsford and Kapkichi Lakes and the physical and chemical stability of the tailings area and the associated dams. The study included water and borehole sampling on-site to characterize the tailings. Results indicated that more than 90% of the acid generating potential of the unsaturated tailings has been depleted during the 15 years since mine operations ceased. The likelihood of failure of the rock fill dams was also determined to be low. The consequence of dam failure was also assessed to be low.

Specific recommendations of the Klohn-Crippen report included installation of a spillway at the tailings dam, re-vegetation of the balance of the tailings dam, implementation of a monitoring program to determine the impact of waste rock drainage on Ponsford Lake and monitoring at primary discharge points to demonstrate stable water quality and aquatic environment.

Drainage from waste rock piles and the open-pits was to be gauged by monitoring at the discharge points but no assessment of acid mine drainage potential of the waste rock and low-grade pile has been completed.

Much of the technical work done on the site would appear to have been poorly done, and thus the closure concepts implemented may be unfounded in terms of the acceptability of the off-property impacts on Ponsford Lake. In October 2004, N.A.R. Environmental Consultants Inc. (NAR) was engaged to undertake a pre-operative study of the project site including assessment of biological, sediment, and water quality conditions at the site. The NAR study covers:

- Sampling of Water Quality from the open pits, Ponsford Lake, and Kapkichi Lake
- Sampling the main shaft waters at various depths
- Sampling Benthic communities and sediment quality in Ponsford Lake and Kapkichi Lake
- Fisheries index netting in Ponsford Lake

Water quality conditions in Ponsford Lake currently do not meet Provincial Water Quality Objectives (PWQO) for nickel, and marginally exceed PWQO for copper. This defines a Ponsford Lake as Policy 2. The Ministry of the Environment (MOE) would typically not permit any discharge to this receiver, which would further degrade water quality and all practical measures to upgrade water quality to meet PWQO would be required. As such, effluent standards more restrictive than those specified as Best Available Technology (i.e. MISA effluent regulations - Regulation 560/94) would be required for any discharge into the lake.

Overall, the water quality of the both pits is poor to fair. The underground workings at the Thierry mine are directly connected to the pits, and as such, the water quality of samples taken from the shaft is generally comparable to the water quality samples collected from the bottom waters of the pits. Based on the collection of 5 samples at varying depths from the main shaft, both copper and nickel levels in this groundwater meet MISA effluent limits, but exceed PWQO by approximately 10 times on average for both copper and nickel.

The data collected during the study supports the observation that Ponsford Lake is degrading in terms of water and sediment quality after closure and decommissioning of the Thierry Mine site.

With much of its watershed impacted by historical mining operations, Ponsford Lake has limited assimilative capacity, and this has resulted in a build-up of metals (i.e. copper and nickel), particularly in the sediments.

These metals are at levels high enough to be toxic to benthic macro-invertebrate communities. The potential environmental liabilities associated with this project are significant. As the project advances to Advanced Exploration, these liabilities will be transferred. These risks need to be considered in advance of proceeding to re-permit the site.

Given the technical unknowns, a comprehensive environmental due diligence is recommended.

Virtually no acid mine drainage assessment has been completed on the low-grade ore and waste rock pile within the upper catchments of the west and east pits. To that end, a screening level review of the waste rock and low-grade stockpiles should be completed. This would involve the collection of 25 representative AMD samples.

Present water quality conditions in Ponsford Lake exceed MOE's Provincial Water Quality Objectives for copper and nickel. As concentrations of these two metals in the pits and underground workings would increase their level in the lake, treatment of these waters would be required prior to discharge to the lake to reduce these concentrations.

To assess the technical feasibility of achieving an end of pipe metals concentration, at least equal to the present-day water quality of Ponsford Lake, as well as to derive an estimate of treatment costs, a series of, on site, bench scale tests should be carried out, in co-operation with Ashland Chemicals. These require completion on site due to the high levels of dissolved iron present in the ground water and the pits at depth. Upon even brief exposure to atmospheric oxygen, this iron will precipitate. As such, representative testing cannot be carried out on samples submitted off-site. On the positive side, this iron as it precipitates should co-precipitate other base metals. The testing program will enhance this by adding low levels of scavenging organics and potentially polymers. Upon completion of the technical work and subsequent cost estimates, the results and their impact on any future dewatering project's costs would need to be considered. In order to advance a proposed dewatering of the mine workings both a Permit to Take Water

(PTTW) and hopefully an amendment to the existing Certificate of Approval for the decommissioned treatment works at the Thierry Mine will be filed with MOE. Pre-consultation with MOE is a requirement of the application process, and that meeting would likely be held in MOE's Thunder Bay Regional office.

Within this permitting phase of the project, a ruling will also be sought from Environment Canada and Fisheries and Oceans Canada as to their jurisdictional mandates under the Fisheries Act. By our recent experience, this project is a "mine in start-up" but a formal ruling must still be sought, and an assessment of fisheries habitat loss made by DFO.

Two technical field programs are also recommended as part of the start-up transition for the project. They include

- The establishment of a water quality and quantity monitoring program for the site, and
- Further sediment toxicity and sediment quality testing of Ponsford Lake.

An Order of magnitude cost estimate to implement the above recommended technical studies is $75,000 (seventy-five thousand Canadian dollars).

## 21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to this report.

## 22.0 ECONOMIC ANALYSIS

This section is not applicable to this report.

## 23.0 ADJACENT PROPERTIES

There are no adjacent active properties that have a similar geology or that are actively being explored for or developing copper-nickel-PGE mineralization similar to that of the Thierry property.

## 24.0 OTHER RELEVANT DATA AND INFORMATION

To the best of the authors' knowledge there is no other relevant data, additional information or explanation necessary to make the Report understandable and not misleading.

## 25.0 INTERPRETATION AND CONCLUSIONS

The Thierry copper-nickel deposit was discovered by Union Miniere Corporation (UMEX) in 1969 and was mined by both open pit and underground between 1976 and 1982. The current report details the latest 2012 updated NI 43-101 compliant Resource Estimate incorporating the latest drill results for the K1-1 deposit and a lowered operating cost obtained by conceptually combining operations at K1-1 with the Thierry underground deposit. For Thierry, an Indicated and Measured Resource of 8,815,000 tonnes containing 1.66% Cu, 0.19% Ni, 4.0 g/t Ag, 0.05 g/t Au, 0.04 g/t Pt and 0.13 g/t Pd and an Inferred Resource of 14,922,000 tonnes containing 1.64% Cu, 0.16% Ni, 6.4 g/t Ag, 0.10 g/t Au, 0.07 g/t Pt, and 0.21 g/t Pd, using an NSR cut-off of C$41/tonne was calculated. For the K1-1 deposit, an Inferred Mineral Resource of 53,614,000 tonnes grading 0.10% Ni, 0.38% Cu, 1.83 g/t Ag, 0.03 g/t Au, 0.05 g/t Pt and 0.14 g/t Pd, using an NSR cut-off of $11/tonne was calculated.

The K1-1 nickel deposit, as modelled for resource estimation is approximately 4,505 ft in length with horizontal widths of up to 108 ft. The deposit has been drill intersected from 12 ft depth to approximately 1,295 ft depth. Host rocks for the polymetallic sulphide mineralization at K1-1 are sheared ultramafic to mafic units contained within moderately metamorphosed massive to pillowed mafic volcanics. Exploration drilling has been carried out at the K1-1 deposit since 1969 resulting in a resource drill hole database of 132 diamond drill holes totalling 75,572.74 ft of which 25 are vertical short holes for 4,921.00 ft. The geological interpretation is based on diamond drilling. The drill hole spacings at 200 ft sections and ≥200 ft step outs on section, with some fill-in on 100 ft sections are somewhat wide for grade continuity as indicated by variography. Core sampling intervals, nominally at five feet, is appropriate to the deposit scale and mineralization continuity. The Mineral Resource estimate is based entirely on a diamond drilling and core assaying database.

P&E has the following conclusions and opinions:

- The geological interpretations are reasonable.
- In P&E's opinion, the core sampling, sample preparation, security, and analyses and overall quality of sampling are adequate and the drill hole database is reasonable and acceptable for estimation of Inferred Resources.
- The resource wireframe cut-off value at $11/tonne NSR, based on deposit grade distributions and preliminary economic evaluation, is reasonable.
- The interpolation domains are reasonable.
- Grade capping is at reasonable thresholds.
- The specific gravity testing is reasonable for an initial Inferred Resource estimate but more testing will be required to upgrade resources to Indicated or Measured.
- Composites at five ft lengths are reasonable.
- The ID2 interpolation approach is reasonable, given the sample spatial distribution, results of variography and nugget effect of 45%.
- The Inferred Resource classification is reasonable based on mineralization/grade continuity and drill hole density and availability of supporting data.
- The block model validation results are reasonable.
- The resource reporting methodology has been designed to support a scoping study and is reasonable.

# 26.0 RECOMMENDATIONS

## 26.1 RECOMMENDATIONS AND PROPOSED BUDGET

Prior to commencing any additional drilling on Thierry and K1-1, P&E recommends the undertaking of a Preliminary Economic Analysis ("PEA") to determine the potential economic viability of the combined deposits. This PEA would also indicate to what depth the Thierry Main Zone would be economically viable, thus indicating to what depth future fill-in drilling should be conducted.

During preparation of the updated P&E 2011 Thierry Resource Estimate it became obvious that certain gaps in the drilling in the lower portion of the deposit area still exist and prevent upgrading of the Inferred mineral Resources. P&E therefore recommends that upon the completion of a favourable Preliminary Economic Analysis, an additional 3,000 m of diamond drilling be carried out on the deep portion of the "Main Zone."

A proposed 2012 budget for the recommended drilling programs for Thierry is estimated at an "all-in" cost of approximately $840,000.

## 26.2 RECOMMENDATIONS FOR ADDITIONAL FUTURE WORK

With regard to K1-1 Mineral Resources, P&E recommends the following:

- Complete a Preliminary Economic Assessment;
- Fill-in drilling and definition drilling up to 6,850 m in the pit and zones immediately in the footwall of the pit to upgrade the Inferred Resource to Indicated;
- Collect a bulk sample for metallurgical testing;
- Conduct geotechnical and preliminary environmental/hydrological studies;
- Collar surveys and down hole azimuth and dip surveys should be completed on all fill-in holes and for unsurveyed/partially surveyed previous holes where practicable;
- The drillhole database should be converted to SI (metric units).

P&E has reviewed the proposed work program and budget, prepared by Cadillac Ventures, which is based in part on P&E recommendations (**Error! Reference source not found.**). In P&E's opinion, the program and budget are reasonable.

| TABLE 26.1<br>RECOMMENDED PROGRAM AND BUDGET | | |
|---|---|---|
| **Program** | **Unit Costs** | **Budget** |
| **Scoping Study Thierry Mine & K1-1** | | **$250,000** |
| | | |
| **K1-1 Project** | | |
| Fill-in & Definition drilling | 6,850 m @ $280/m | $1,918,000 |
| Drill Hole Collar Surveys | | $35,000 |
| Bulk Sampling (P Core Drilling) | | $750,000 |
| Metallurgical Testing | | $500,000 |
| Geotechnical Study | | $50,000 |
| Prelim. Environmental/Hydrological Study | | $50,000 |
| Resource Estimate Update | | $75,000 |
| | | |
| **Subtotal** | | **$3,378,000** |
| | | |
| **Thierry Mine Project** | | |
| Mine De-Watering & Rehabilitation Study | | $500,000 |
| Exploration & Target Drilling at Thierry | 3,000 m @ $280/m | $840,000 |
| Helicopter & Logistical support | 75 hrs. @ $1,800/hr | $135,000 |
| Bedrock Sampling | | $65,000 |
| Geological Studies | | $50,000 |
| | | |
| **Subtotal** | | **$1,590,000** |
| | | |
| **Total** | | **$5,218,000** |

***Note:*** *Subject to HST*

## 27.0 REFERENCES


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# 28.0 CERTIFICATES

**CERTIFICATE OF QUALIFIED PERSON**

**EUGENE J. PURITCH, P. ENG.**

1. I, Eugene J. Puritch, P. Eng., residing at 44 Turtlecreek Blvd., Brampton, Ontario, L6W 3X7, do hereby certify that:
2. I am an independent mining consultant and President of P & E Mining Consultants Inc.
3. This certificate applies to the technical report titled "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine and K1-1 Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada" prepared for Cadillac Ventures Inc. (the "Technical Report") with an effective date of February 13, 2012.

   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 visited the Thierry Mine Property on December 15, 2005, May 5, 2010 and on June 2, 2011.
5. I am responsible for co-authoring Sections 14, 25, and 26 of the Technical Report.
6. I am independent of Cadillac Ventures Inc. applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement is as a co-author of technical reports titled: "Technical Report and Resource Estimate on the Thierry Cu-Ni –PGE Mine Property, Pickle Lake Area, Patricia Mining District North-Western Ontario, Canada" dated April 6, 2006, "Updated Technical Report and Resource Estimate on the Thierry Cu-Ni – PGE Mine Property, Pickle Lake Area, Patricia Mining District North-Western Ontario, Canada" dated July 16, 2010 and "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada.
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: February 13, 2012
Signed Date: March 30, 2012

***{SIGNED AND SEALED}***
***[Eugene J. Puritch]***

_____
Eugene J. Puritch, P. Eng.

**CERTIFICATE of AUTHOR**

**TRACY J. ARMSTRONG, P. GEO**

I, Tracy J. Armstrong, P. Geo., residing at 2007 Chemin Georgeville, res. 22, Magog, Québec, J1X 0M8 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 Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine and K1-1 Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada" prepared for Cadillac Ventures Inc. (the "Technical Report") with an effective date of February 13, 2012.
3. I am a graduate of Queen's University at Kingston, Ontario with a B.Sc (HONS) in Geological Sciences (1982). I am a geologist currently licensed by the Order of Geologists of Québec (License No. 566), the Association of Professional Geoscientists of Ontario, (License No. 1204) and the Association of Professional Engineers and Geoscientists of British Columbia (License 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-present

4. I have not visited the Thierry Mine Property;
5. I am responsible for Section 12 of the Technical Report;
6. I am independent of Cadillac Ventures Inc. applying the test in Section 1.5 of NI 43-101.
7. I have read NI 43-101 and Form 43-101F1 and the Report has been prepared in compliance therewith;
8. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement is as a co-author of technical reports titled: "Technical Report and Resource Estimate on the Thierry Cu-Ni –PGE Mine Property, Pickle Lake Area, Patricia Mining District North-Western Ontario, Canada" dated April 6, 2006, "Updated Technical Report and Resource Estimate on the Thierry Cu-Ni – PGE Mine Property, Pickle Lake Area, Patricia Mining District North-Western Ontario, Canada" dated July 16, 2010 and "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada.
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: February 13, 2012
Signed Date: March 30, 2012

***{SIGNED AND SEALED}***
***[Tracy Armstrong]***

_____
Tracy J. Armstrong, P.Geo.

**CERTIFICATE OF QUALIFIED PERSON**

**RICHARD E. ROUTLEDGE, P. GEO.**

I, Richard E. Routledge, P. Geo., residing at 82 Oriole Drive, Holland Landing, Ontario, L9N 1H3, do hereby certify that:

1. I am an independent Consulting Geologist who has been contracted by P&E Mining Consultants Inc.
2. This certificate applies to the technical report titled "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine and K1-1 Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada" prepared for Cadillac Ventures Inc. (the "Technical Report") with an effective date of February 13, 2012.
3. I graduated with a Bachelor of Science degree, Major in Geology, from Sir George Williams (Concordia) University in 1971 and with a Masters degree in Applied Exploration Geology from McGill University in 1973. I have worked as a geologist for a total of 38 years since post-graduation. I am a Professional Geologist registered in the Province of Ontario (APGO No. 1354) and licensed by the Northwest Territories (NAPEGG No. L744).

   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:

   - Independent Consulting Geologist. 2011 – Present
   - Roscoe Postle Associates Inc., Consulting Geologist 1998 – 2011
   - Independent Consulting Geologist 1994 – 1997
   - Vice President Exploration, Greater Lenora Resources Corp. 1993 – 1994
   - Teck Explorations Ltd, Evaluations and Mineral Commodities Geologist. 1985 – 1992
   - Derry, Michener, Booth & Wahl, Exploration and Consulting Geologist. 1973 – 1985

4. I have not visited the Thierry Mine Property.
5. I am responsible for co-authoring Sections 14, 25 and 26 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the project that is the subject of this Technical Report. The nature of my involvement is as a co-author of the technical report titled: "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada.
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: February 13, 2012
Signed Date: March 30, 2012

***{SIGNED AND SEALED}***
***[Richard E. Routledge]***

_____
Richard E. Routledge, P. Geo.

**CERTIFICATE OF QUALIFIED PERSON**

**DAVID BURGA, P. GEO.**

I, David Burga, P. Geo., residing at 3884 Freeman Terrace, Mississauga, Ontario, 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 Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine and K1-1 Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada" prepared for Cadillac Ventures Inc." (the "Technical Report"), with an effective date of February 13, 2012.
3. I am a graduate of the University of Toronto with a Bachelor of Science degree in Geological Sciences (1997). I have worked as a geologist for a total of 12 years since obtaining my B.Sc. degree. I am a geological consultant currently licensed by the Association of Professional Geoscientists 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. My relevant experience for the purpose of the Technical Report is:

   - 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

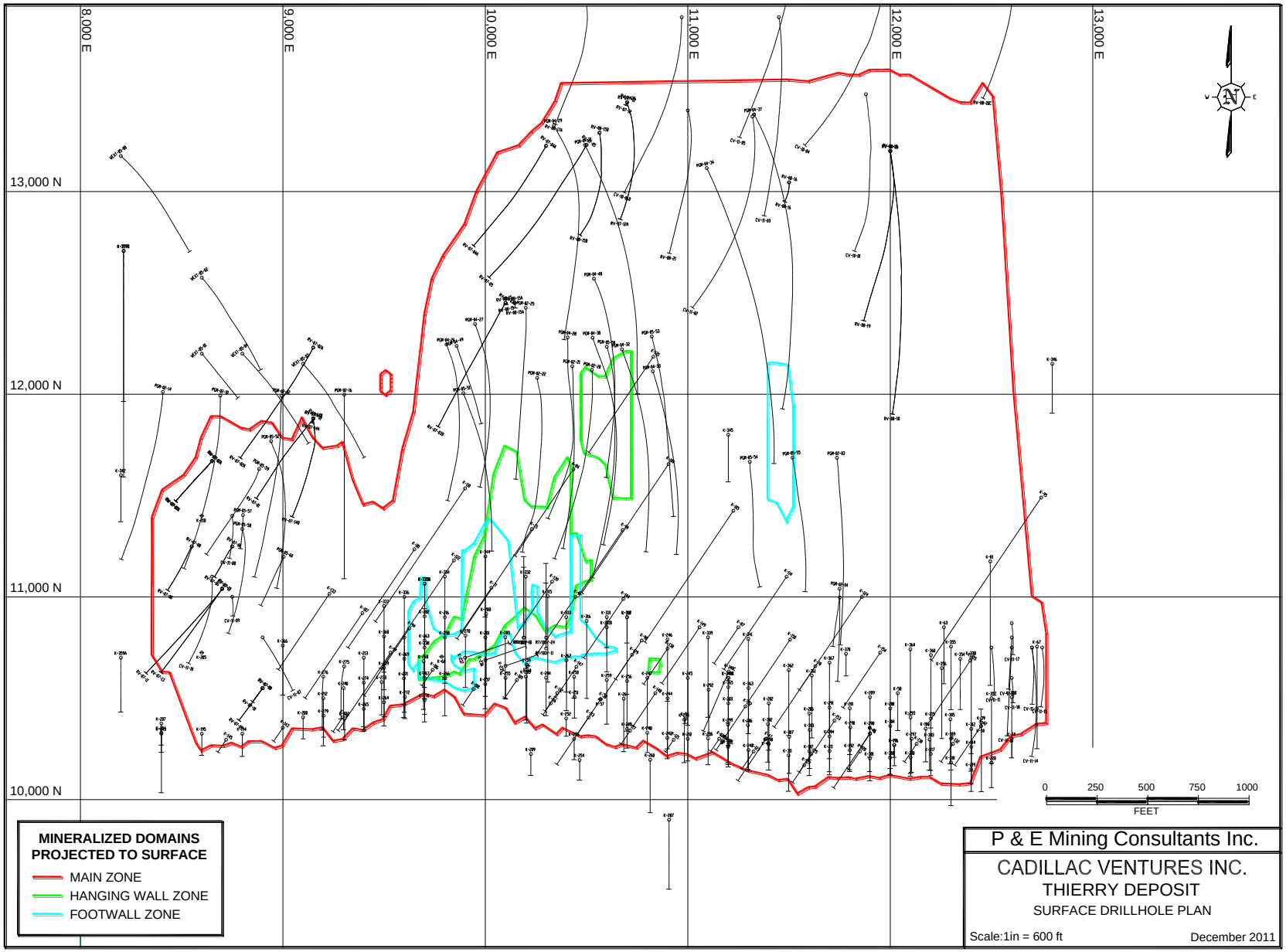
4. I have visited the Property that is the subject of this report on May 5, 2010.
5. I am responsible for and authoring Sections 1-11, 13, 15-24 and 27 as well as co-authoring Sections 25 and 26 of the Technical Report.
6. I am independent of the Issuer applying the test in Section 1.5 of NI 43-101.
7. I have had prior involvement with the Property that is the subject of this Technical Report. The nature of my involvement was conducting a site visit on May 5, 2010 and as a co-author of the technical report titled: "Technical Report and Updated Resource Estimate on the Thierry Cu-Ni-PGE Mine Property, Pickle Lake Area, Patricia Mining District, North-Western Ontario, Canada.
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.

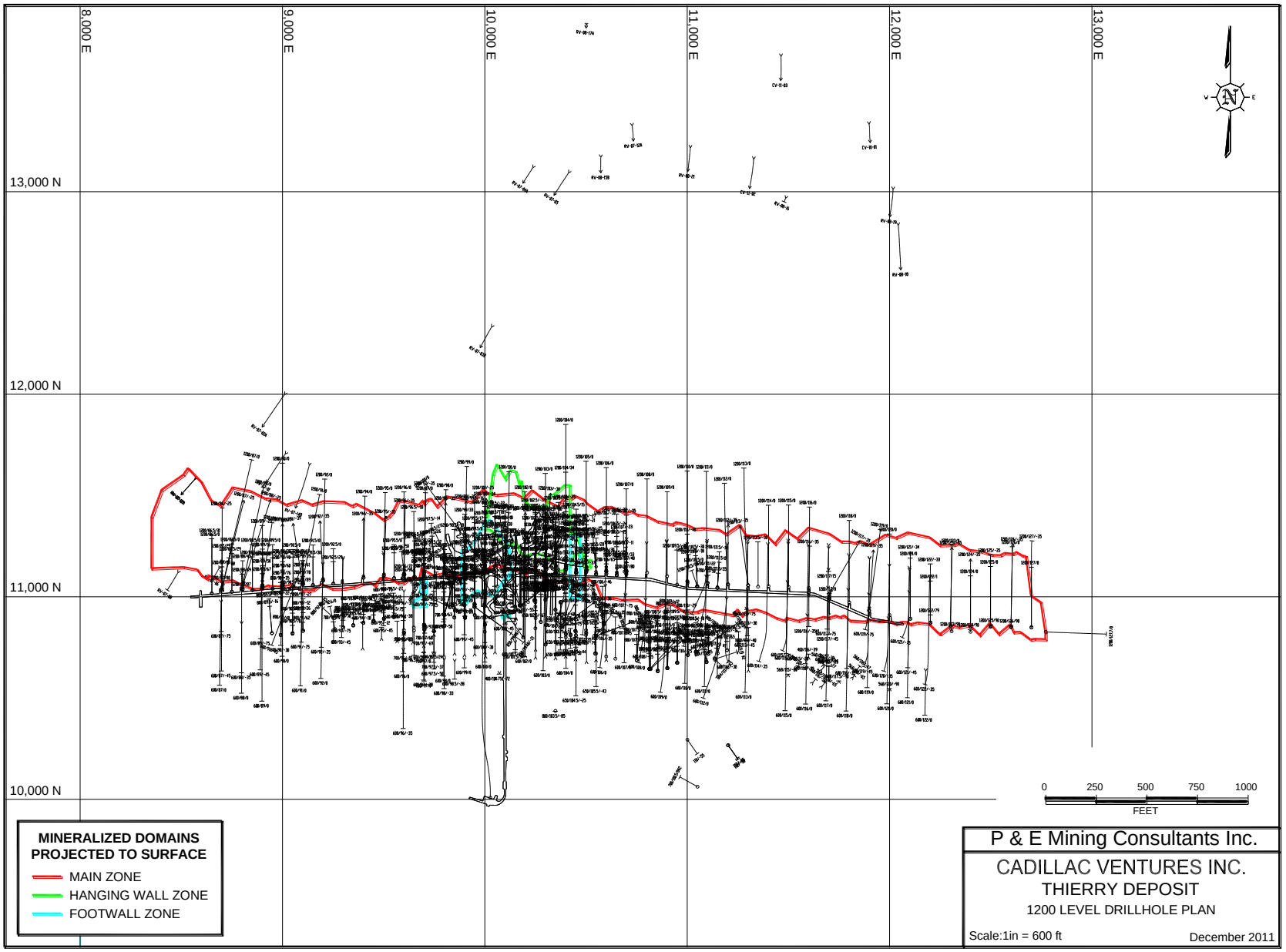
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Signed Date: March 30, 2012

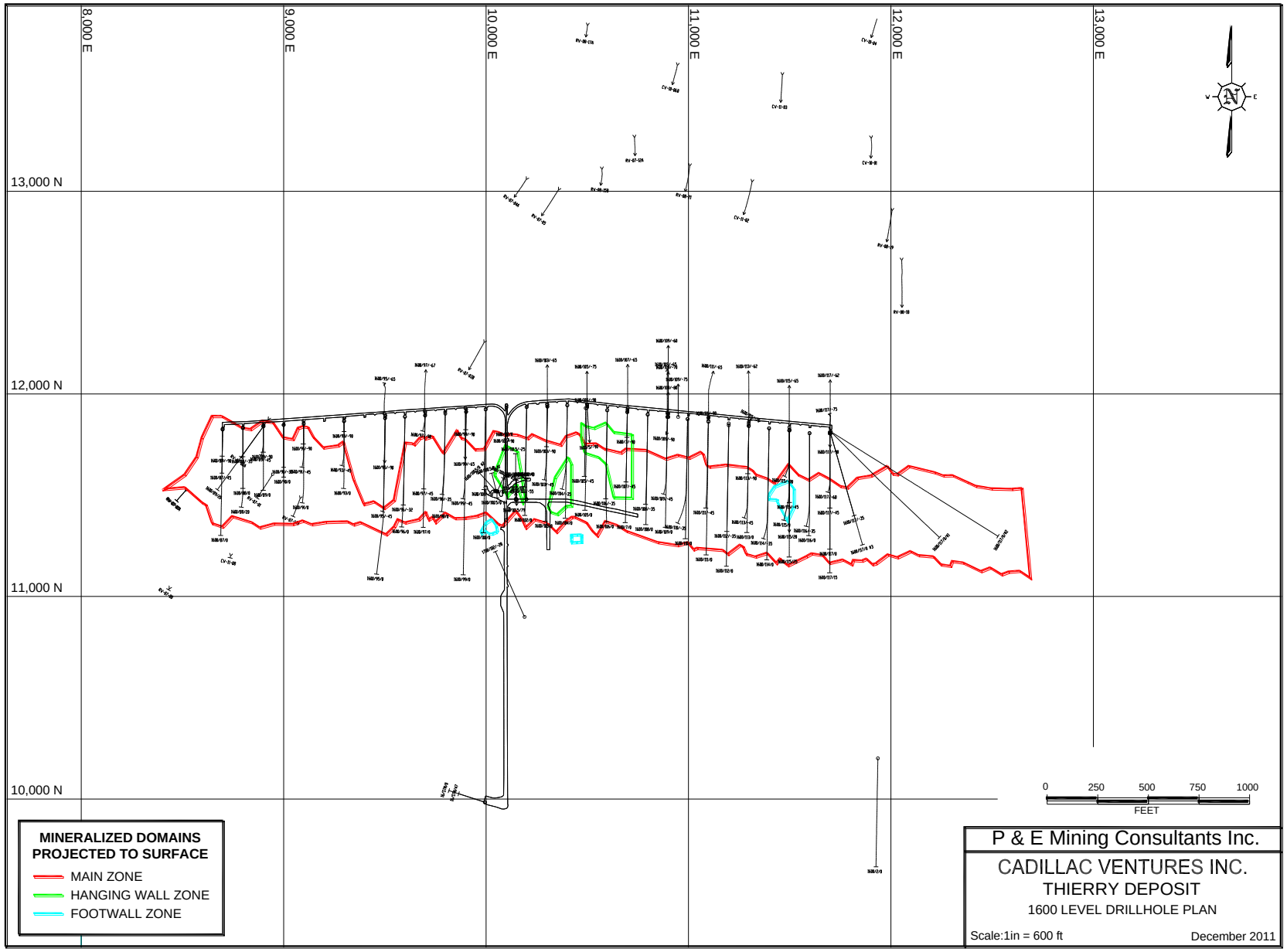
***{SIGNED AND SEALED}***
***[David Burga]***

_____
David Burga, P. Geo.

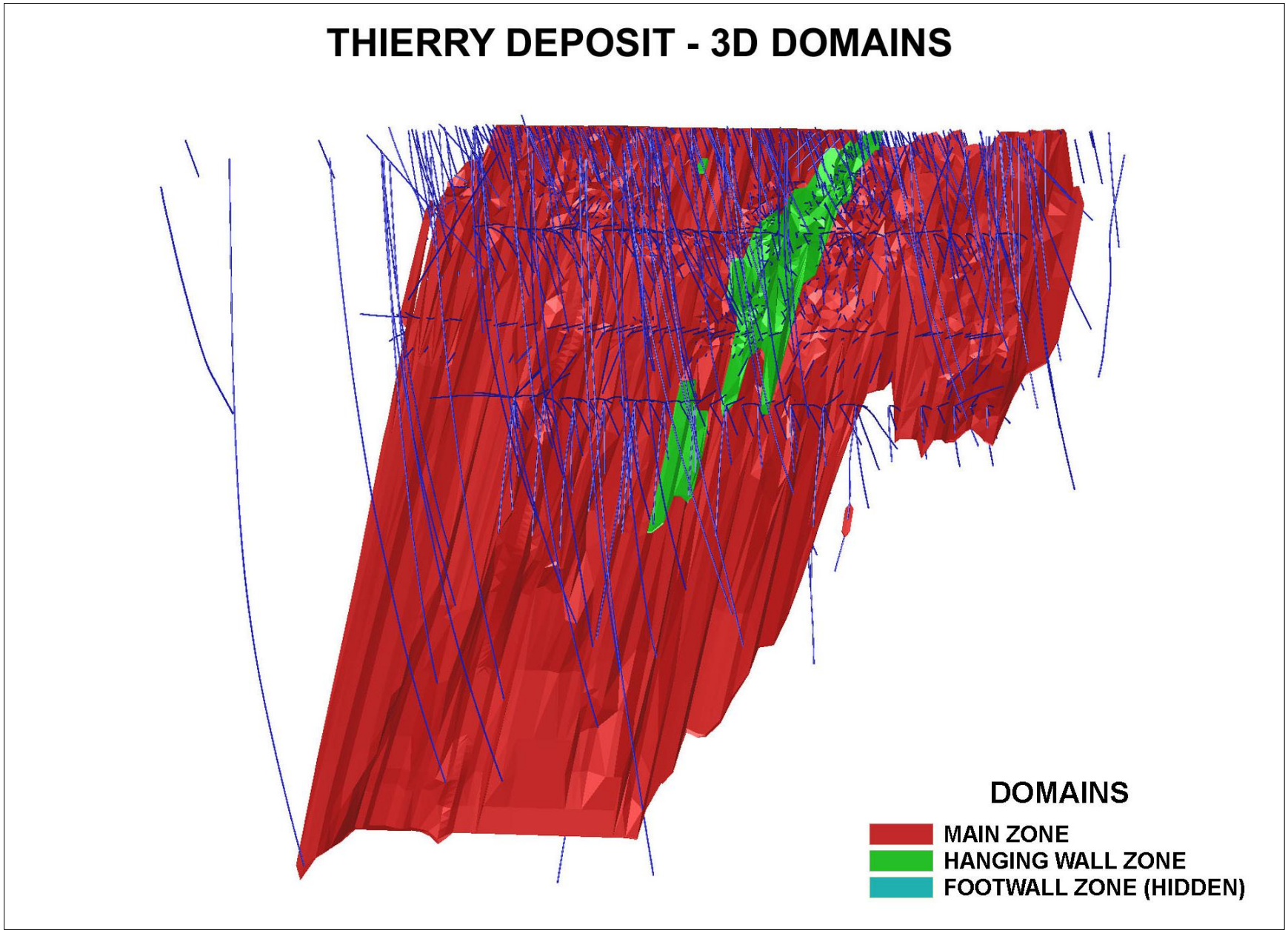
# APPENDIX I. DRILL HOLE PLANS


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
0 250 500 750 1000
FEET
MINERALIZED DOMAINS
PROJECTED TO SURFACE
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
SURFACE DRILLHOLE PLAN
Scale:1in = 600 ft
December 2011

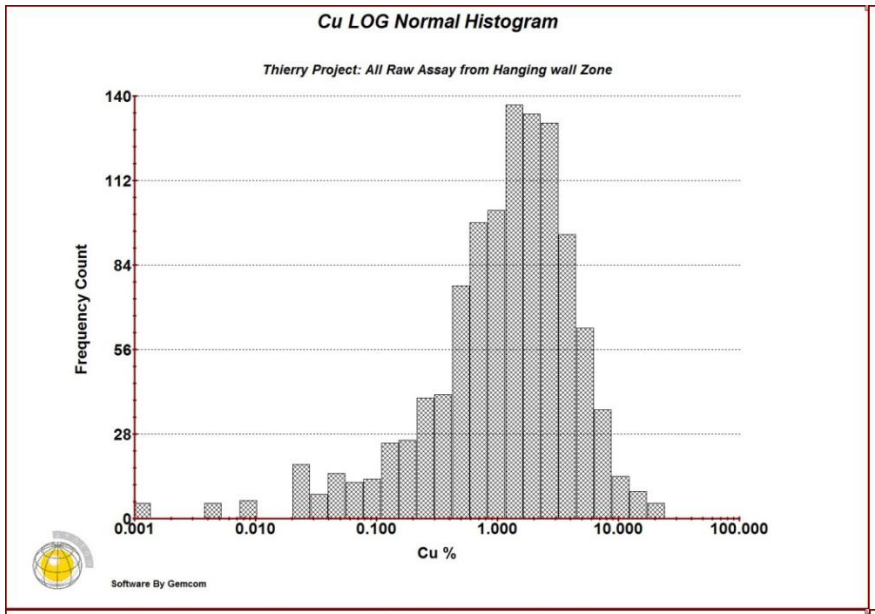

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
0
250
500
750
1000
FEET
MINERALIZED DOMAINS
PROJECTED TO SURFACE
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
1200 LEVEL DRILLHOLE PLAN
Scale:1in = 600 ft
December 2011

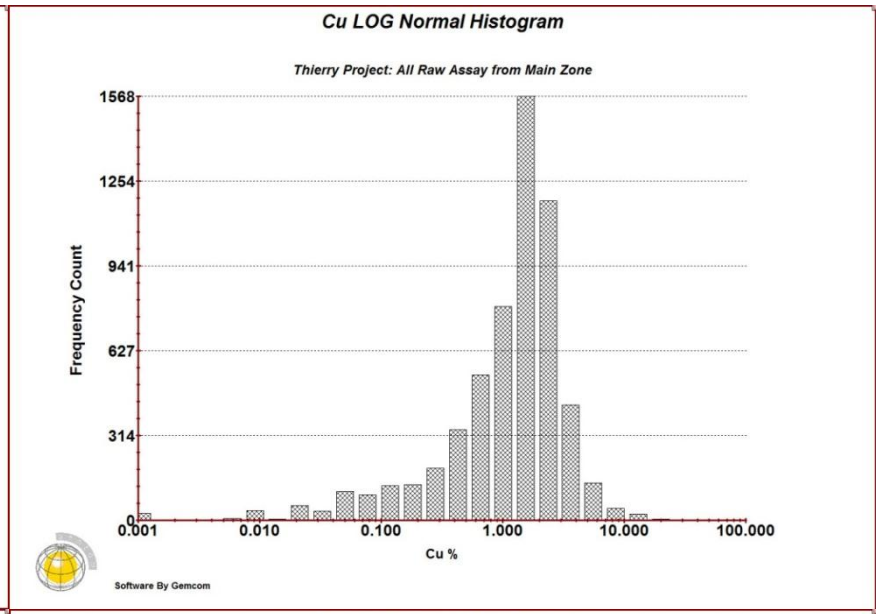

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS
PROJECTED TO SURFACE
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
1600 LEVEL DRILLHOLE PLAN
Scale:1in = 600 ft
December 2011

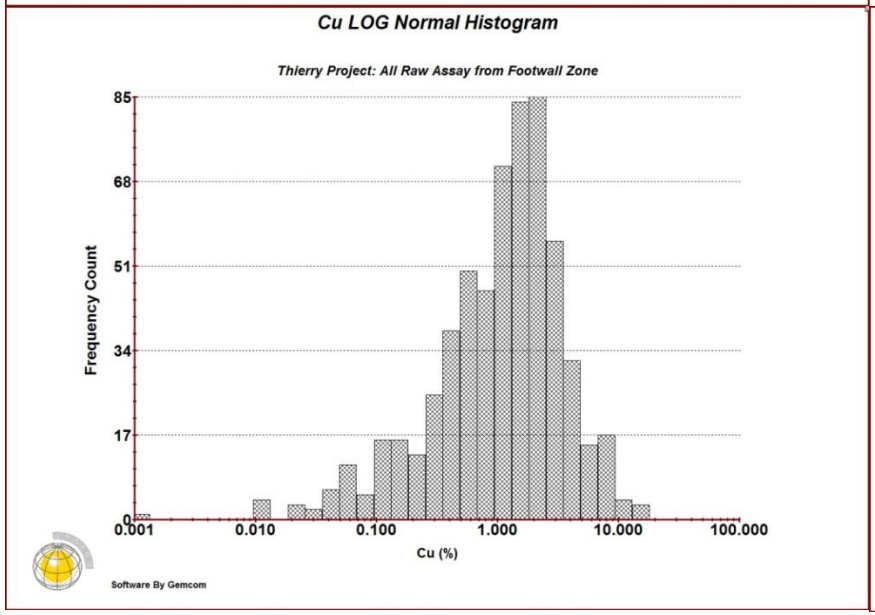
# APPENDIX II. 3D DOMAINS

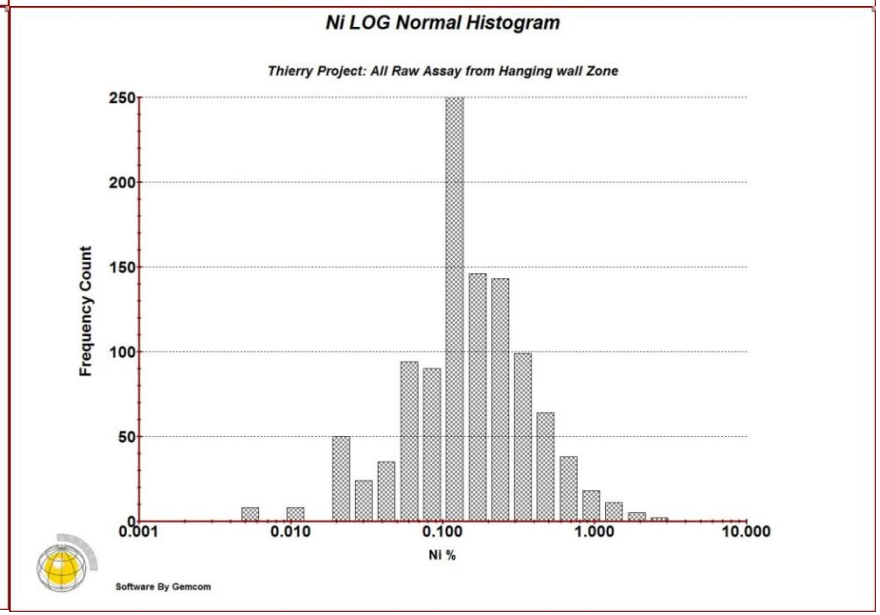

THIERRY DEPOSIT - 3D DOMAINS
DOMAINS
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE (HIDDEN)

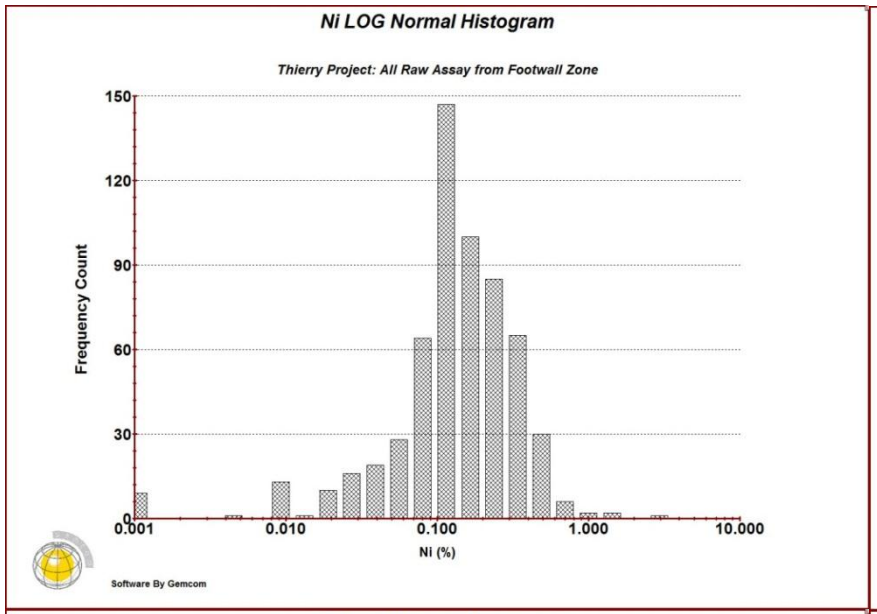
# APPENDIX III. LOG NORMAL HISTOGRAMS

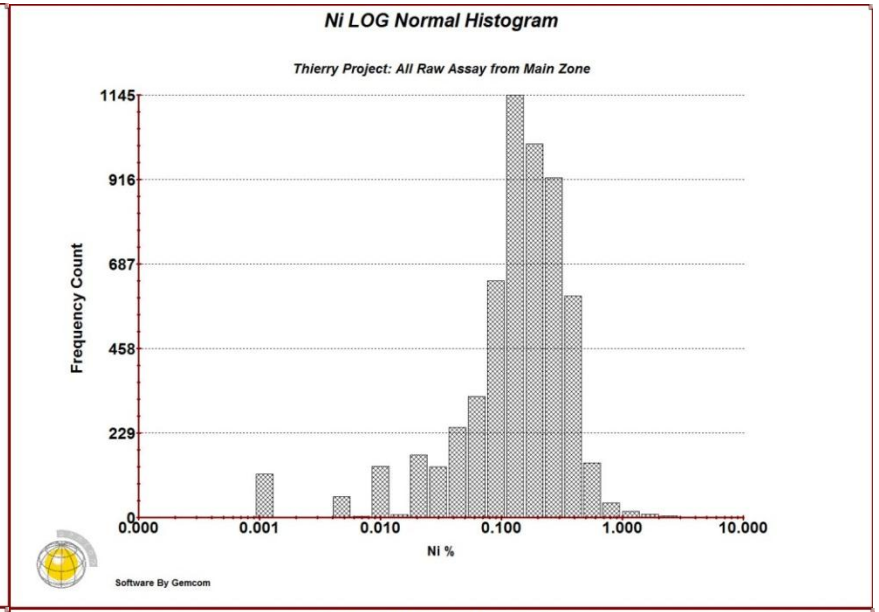

Cu LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
140
112
84
56
28
0
0.001
0.010
0.100
1.000
10.000
100.000
Cu %
Software By Gemcom

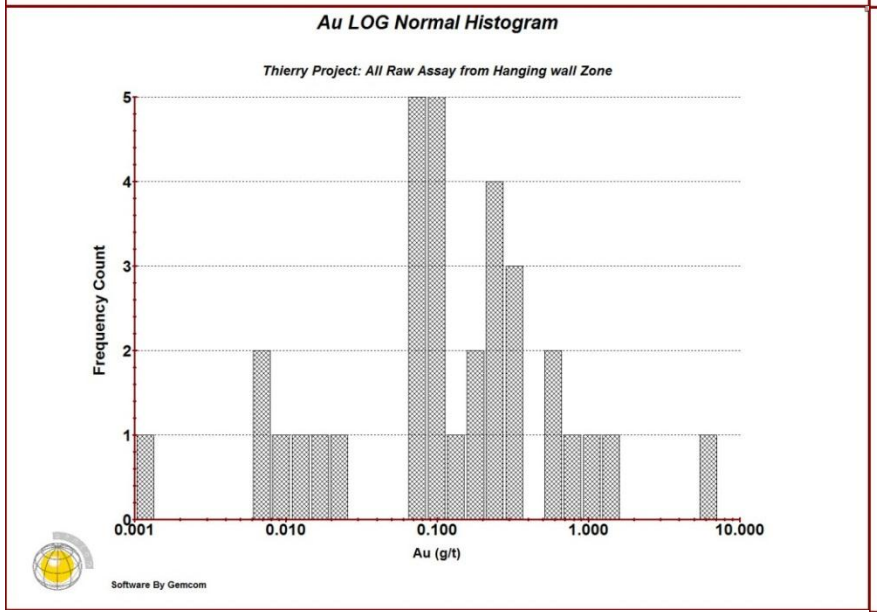

Cu LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
1568
1254
941
627
314
0
0.001
0.010
0.100
1.000
10.000
100.000
Cu %
Software By Gemcom

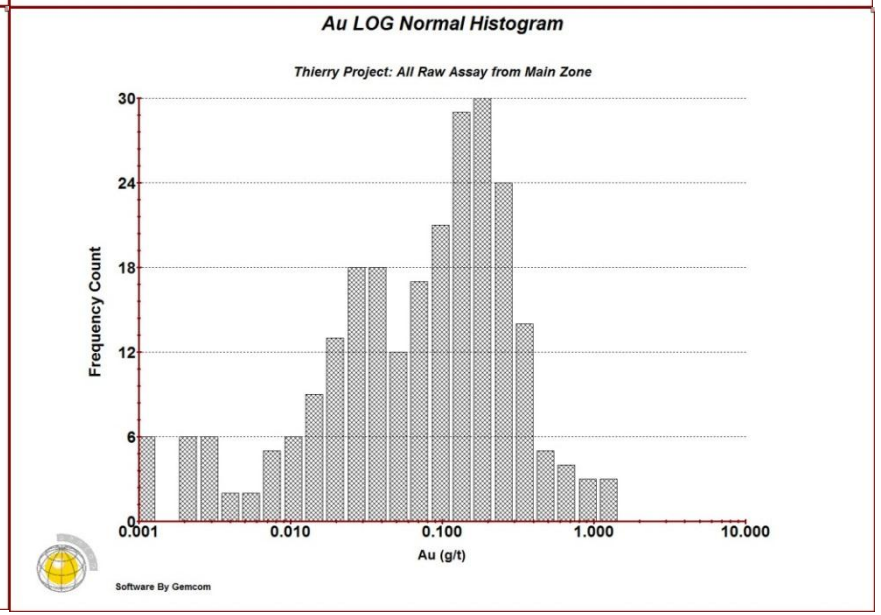

Cu LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
85
68
51
34
17
0
0.001
0.010
0.100
1.000
10.000
100.000
Cu (%)
Software By Gemcom

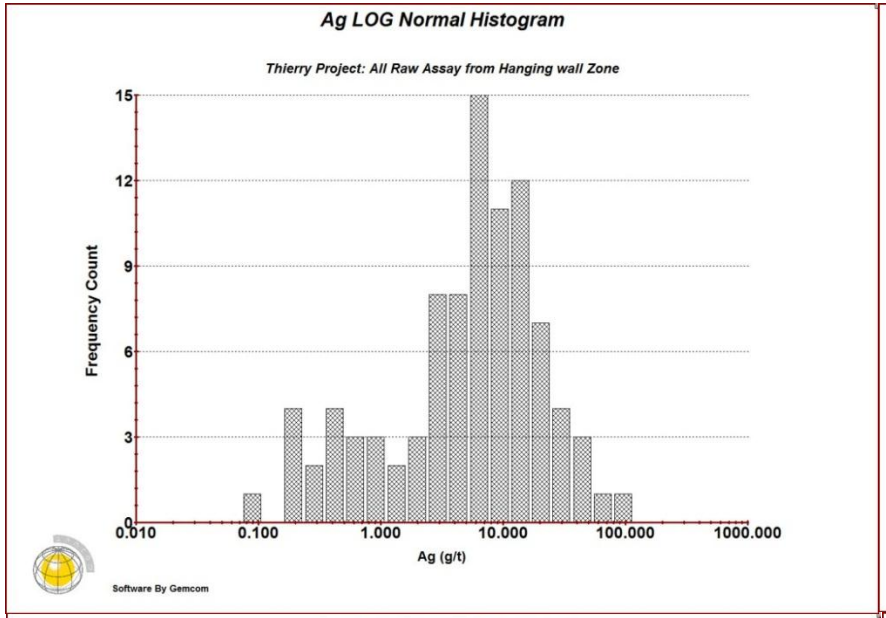

Ni LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
250
200
150
100
50
0
0.001
0.010
0.100
1.000
10.000
Ni %
Software By Gemcom

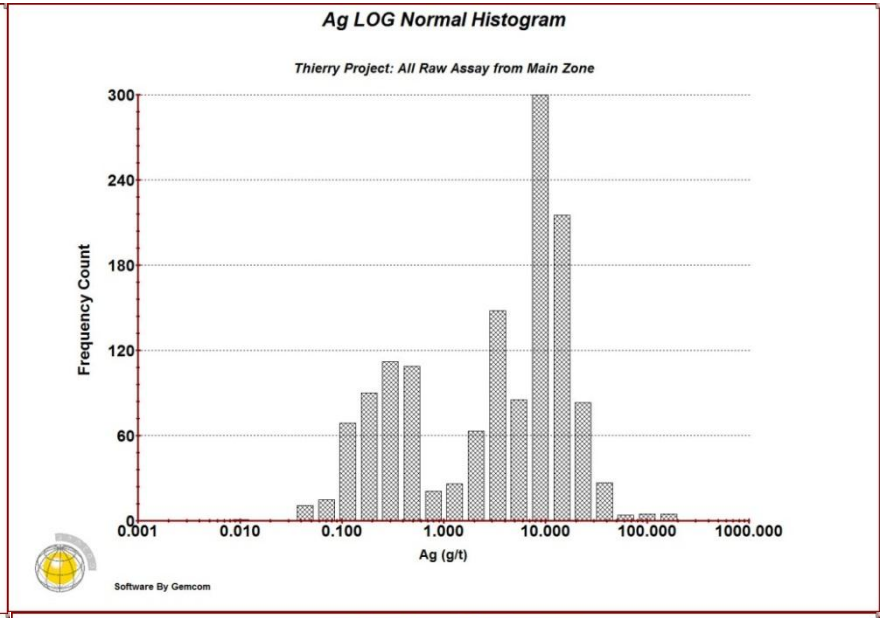

Ni LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
150
120
90
60
30
0
0.001
0.010
0.100
1.000
10.000
Ni (%)
Software By Gemcom

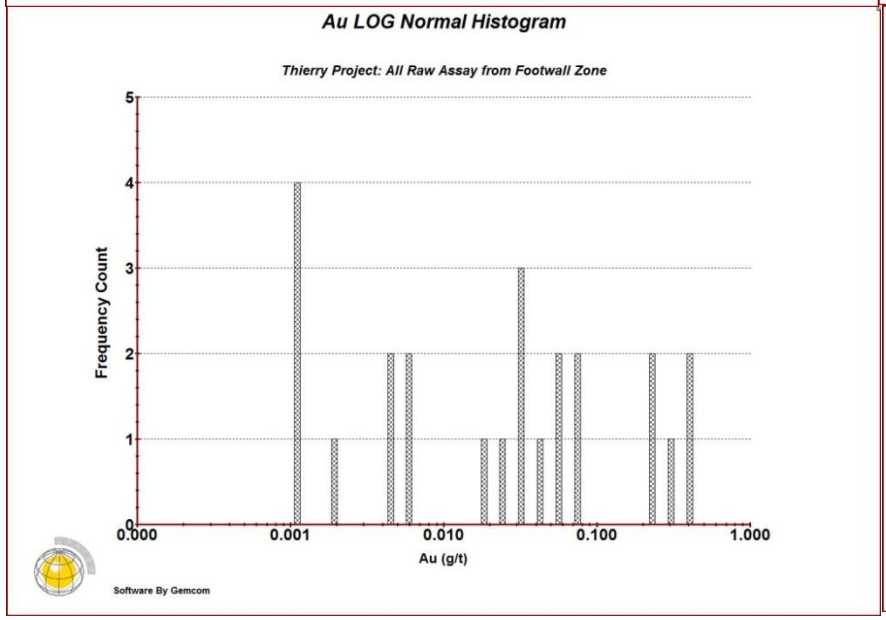

Ni LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
1145
916
687
458
229
0
0.000
0.001
0.010
0.100
1.000
10.000
Ni %
Software By Gemcom

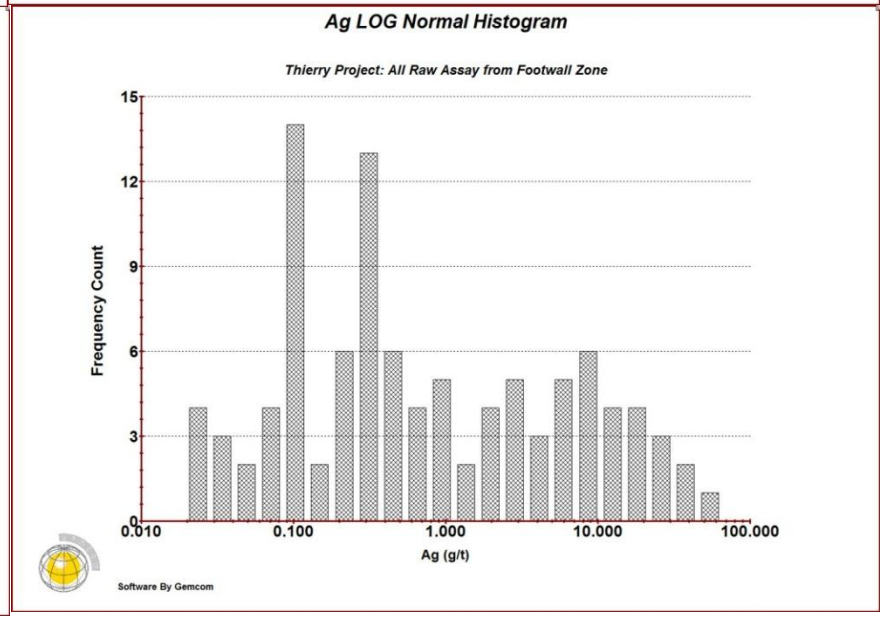

Au LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
5
4
3
2
1
0
0.001
0.010
0.100
1.000
10.000
Au (g/t)
Software By Gemcom

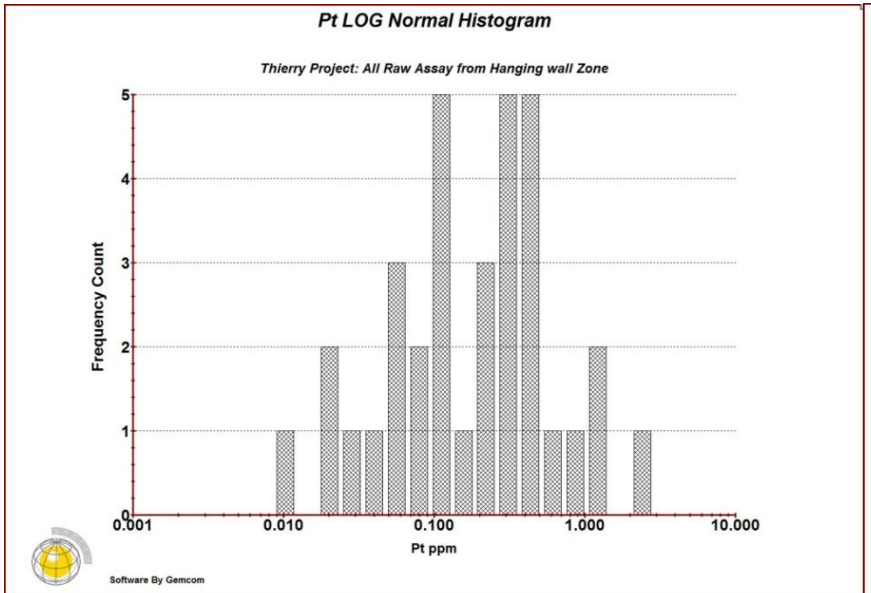

Au LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
30
24
18
12
6
0
0.001
0.010
0.100
1.000
10.000
Au (g/t)
Software By Gemcom

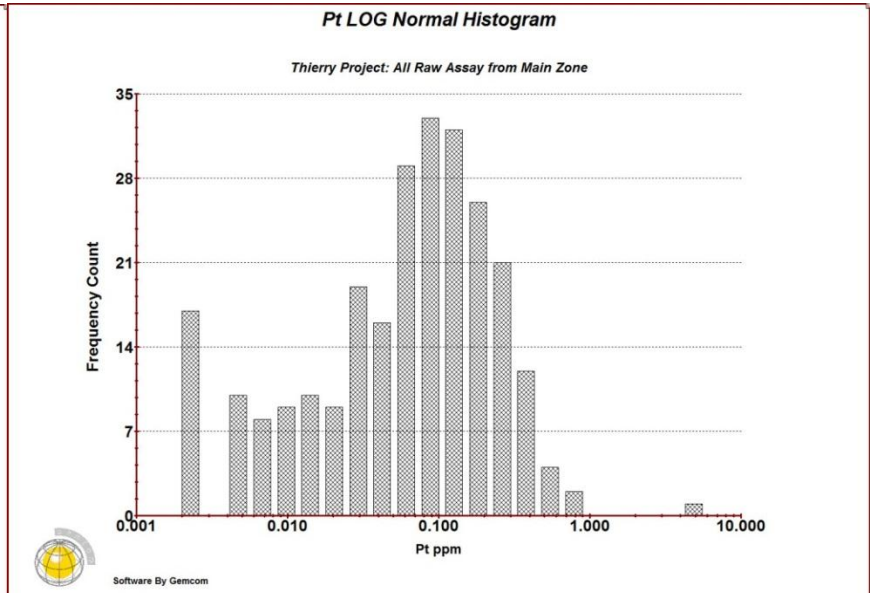

Ag LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
Ag (g/t)
0.010
0.100
1.000
10.000
100.000
1000.000
Software By Gemcom

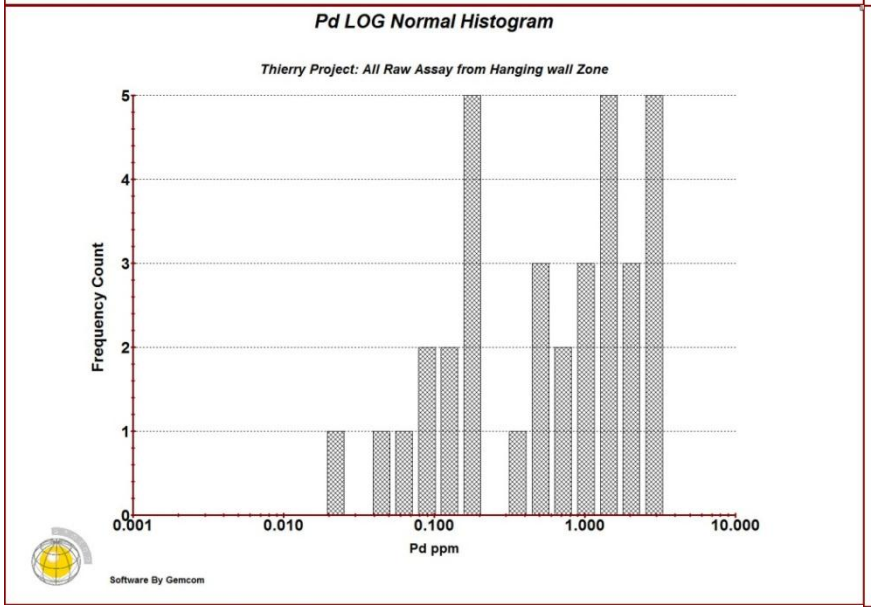

Ag LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
Ag (g/t)
0.001
0.010
0.100
1.000
10.000
100.000
1000.000
Software By Gemcom

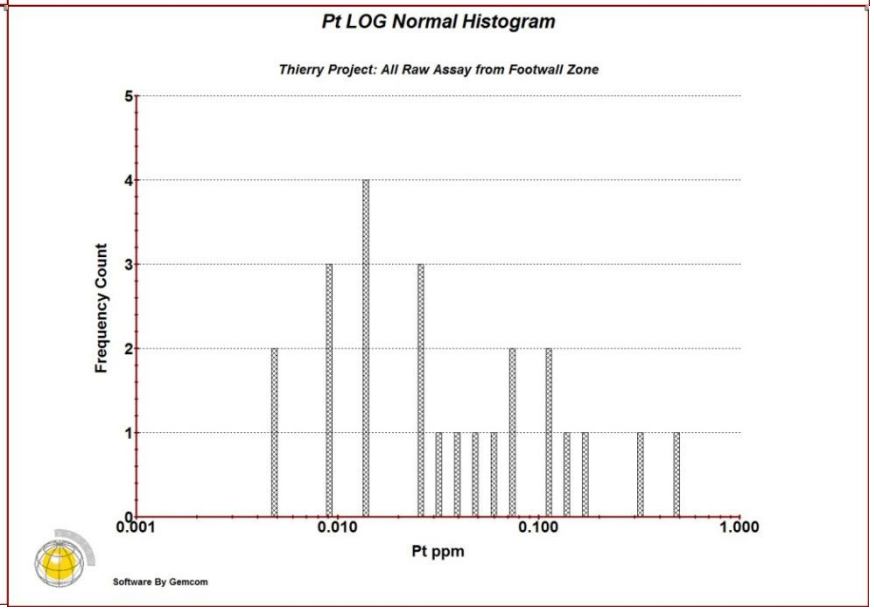

Au LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
Au (g/t)
0.000
0.001
0.010
0.100
1.000
Software By Gemcom

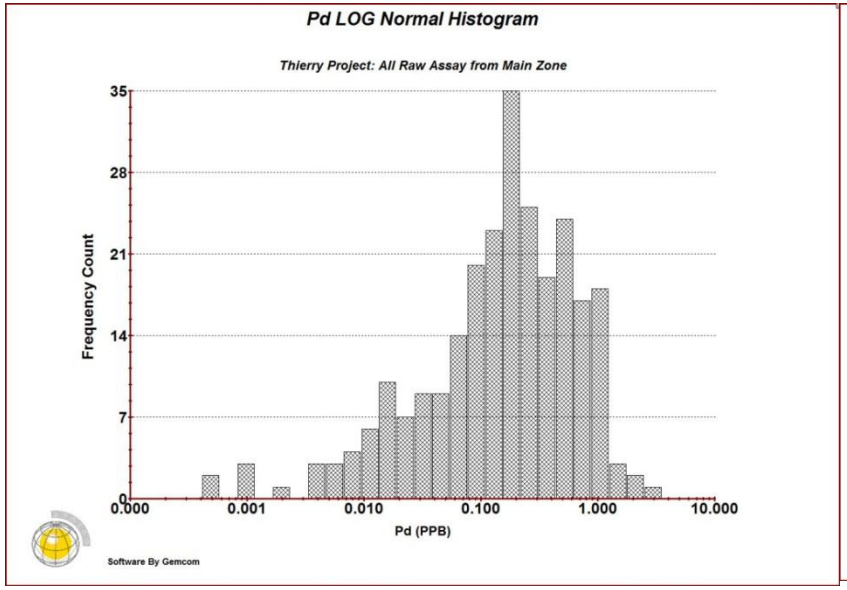

Ag LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
Ag (g/t)
0.010
0.100
1.000
10.000
100.000
Software By Gemcom

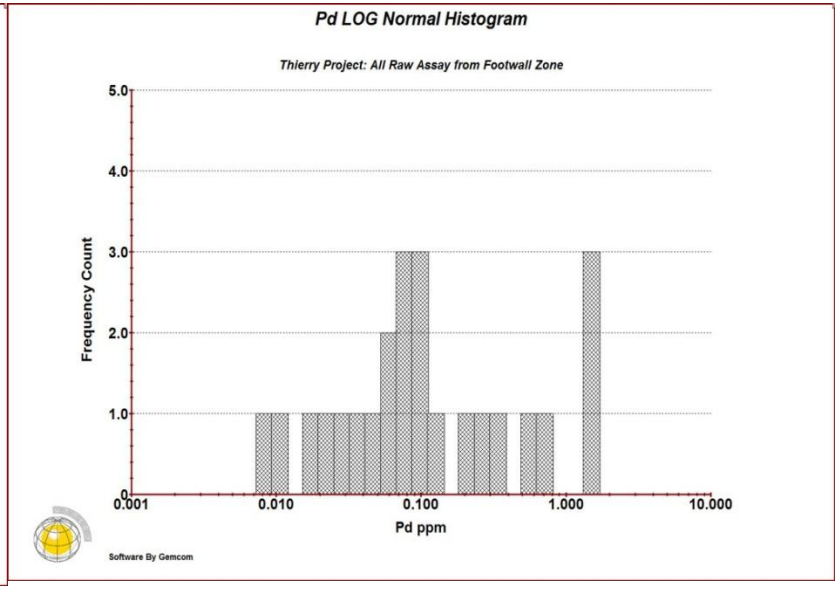

Pt LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
0
1
2
3
4
5
0.001
0.010
0.100
1.000
10.000
Pt ppm
Software By Gemcom


Pt LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
0
7
14
21
28
35
0.001
0.010
0.100
1.000
10.000
Pt ppm
Software By Gemcom

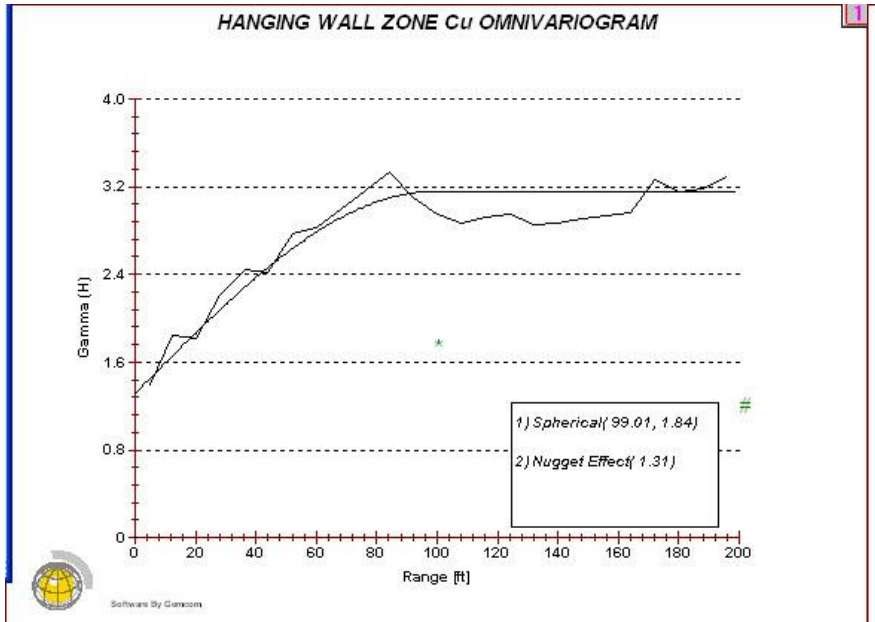

Pd LOG Normal Histogram
Thierry Project: All Raw Assay from Hanging wall Zone
Frequency Count
0
1
2
3
4
5
0.001
0.010
0.100
1.000
10.000
Pd ppm
Software By Gemcom

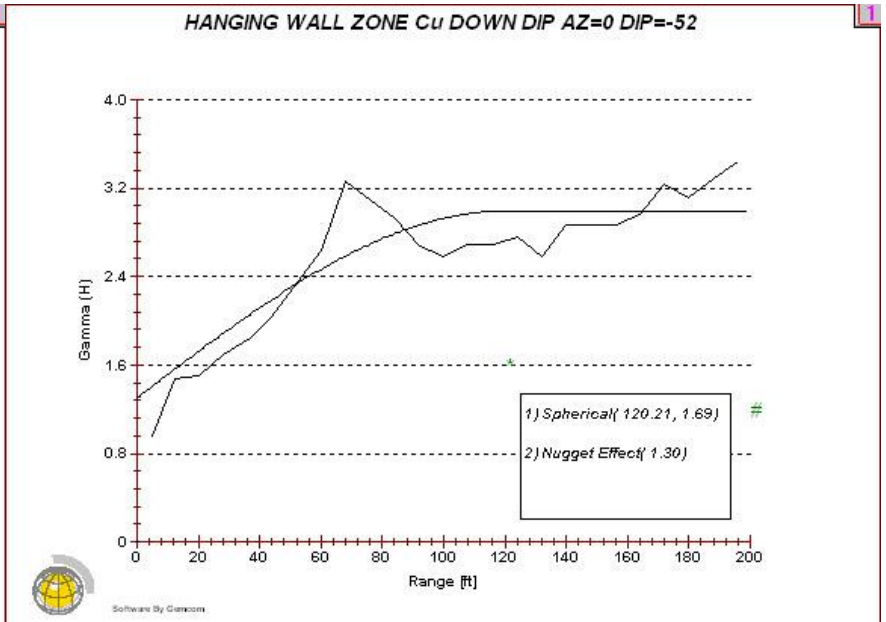

Pt LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
0
1
2
3
4
5
0.001
0.010
0.100
1.000
Pt ppm
Software By Gemcom

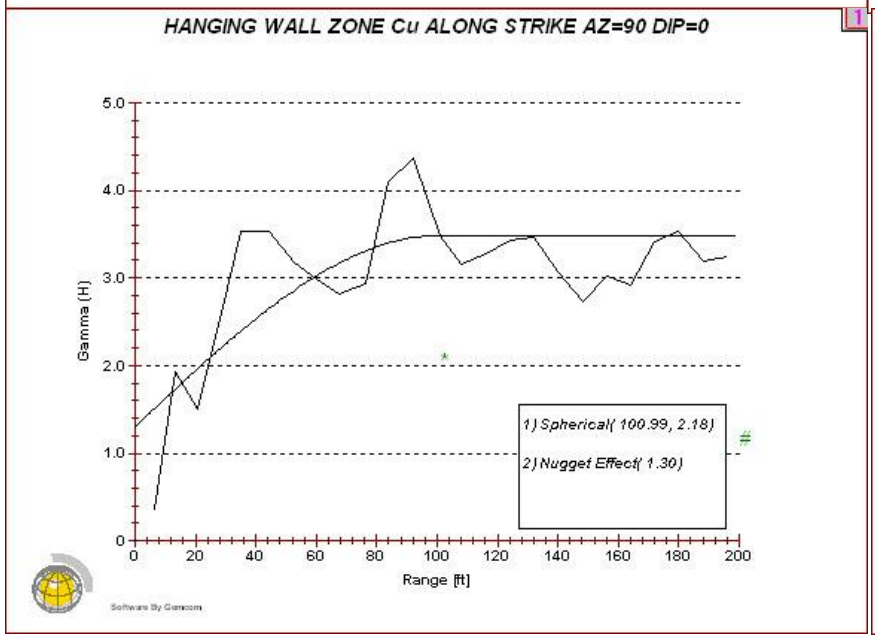

Pd LOG Normal Histogram
Thierry Project: All Raw Assay from Main Zone
Frequency Count
35
28
21
14
7
0
0.000
0.001
0.010
0.100
1.000
10.000
Pd (PPB)
Software By Gemcom

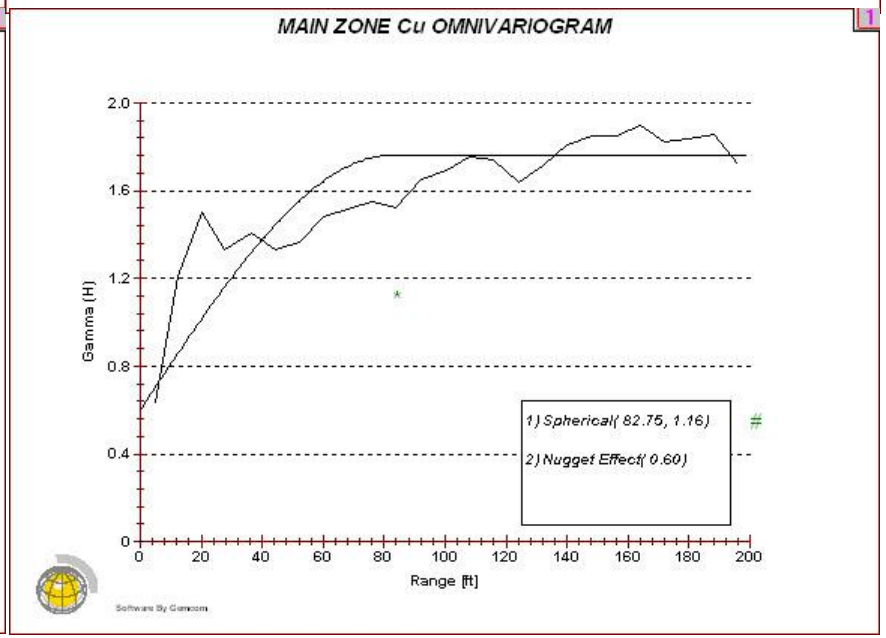

Pd LOG Normal Histogram
Thierry Project: All Raw Assay from Footwall Zone
Frequency Count
5.0
4.0
3.0
2.0
1.0
0
0.001
0.010
0.100
1.000
10.000
Pd ppm
Software By Gemcom

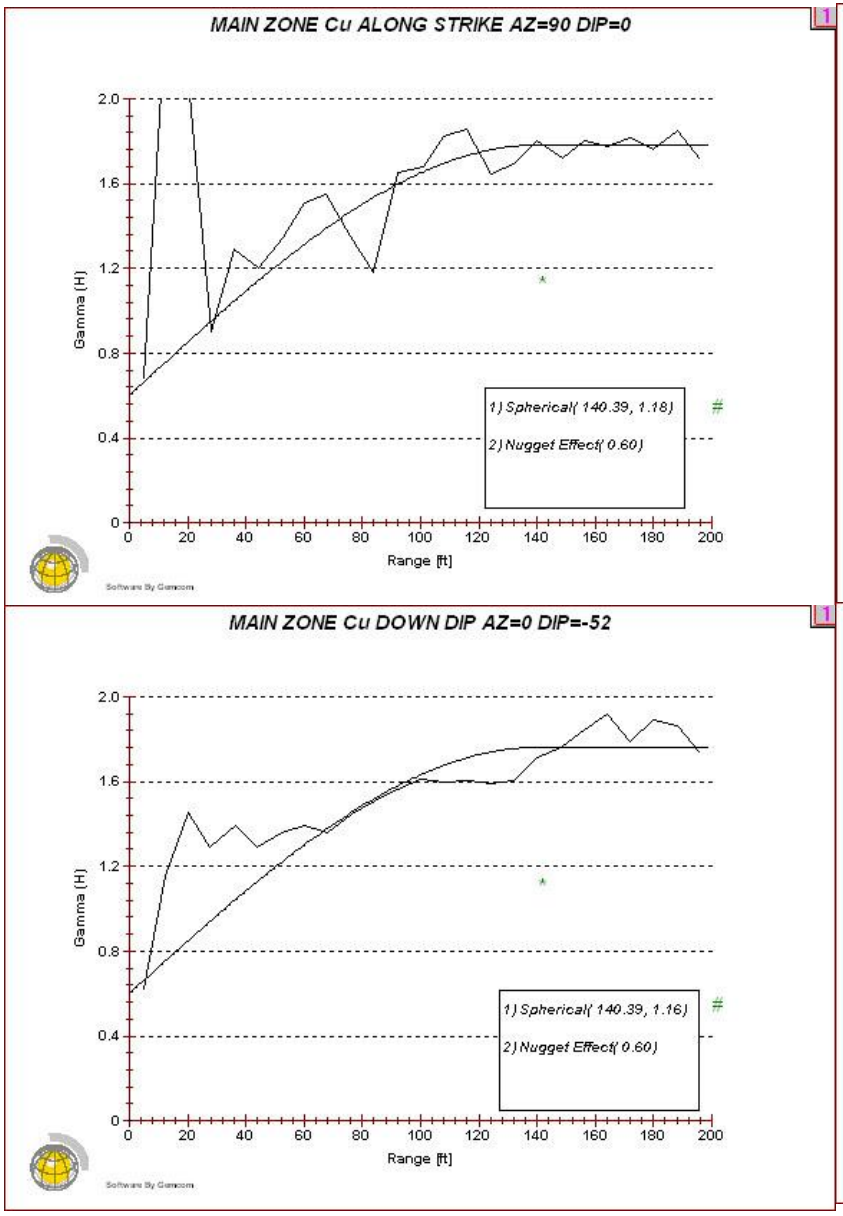
# APPENDIX IV. VARIOGRAMS

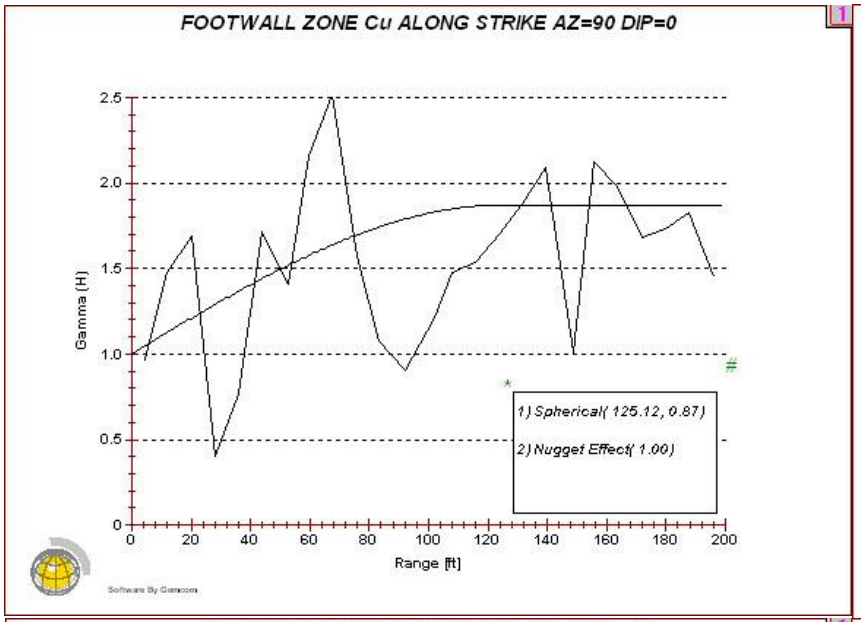

HANGING WALL ZONE Cu OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 99.01, 1.84)
2) Nugget Effect( 1.31)

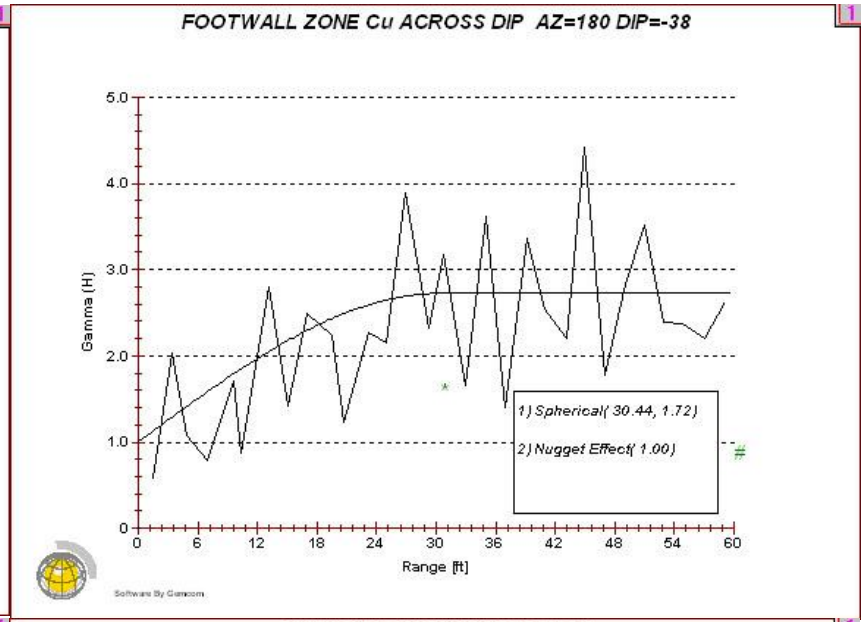

HANGING WALL ZONE Cu DOWN DIP AZ=0 DIP=-52
Gamma (H)
Range [ft]
1) Spherical( 120.21, 1.69)
2) Nugget Effect( 1.30)

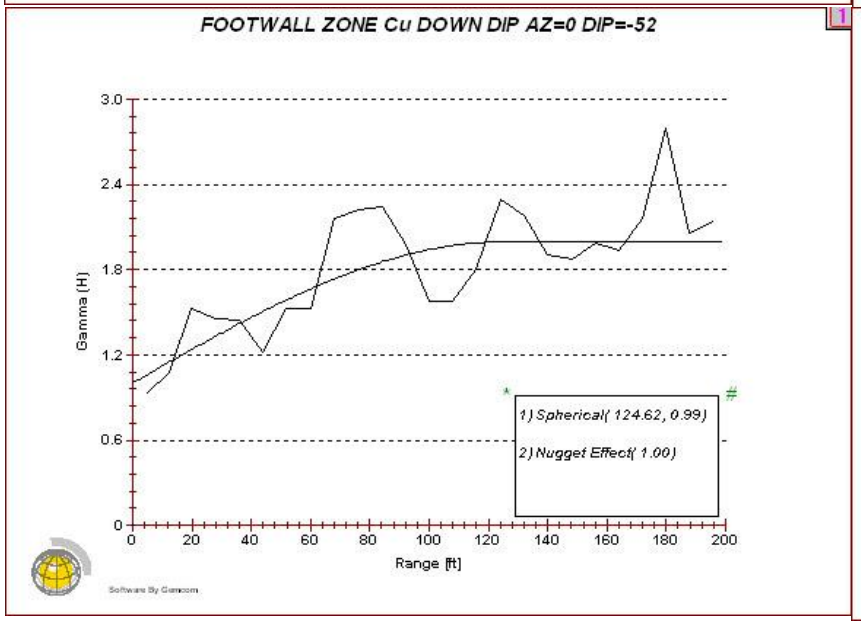

HANGING WALL ZONE Cu ALONG STRIKE AZ=90 DIP=0
Gamma (H)
Range [ft]
1) Spherical( 100.99, 2.18)
2) Nugget Effect( 1.30)

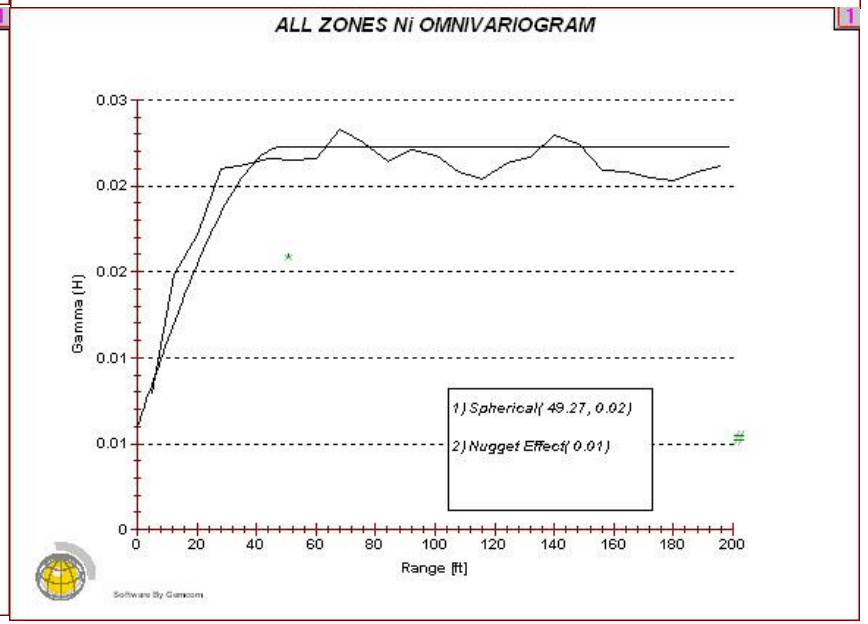

MAIN ZONE Cu OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 82.75, 1.16)
2) Nugget Effect( 0.60)

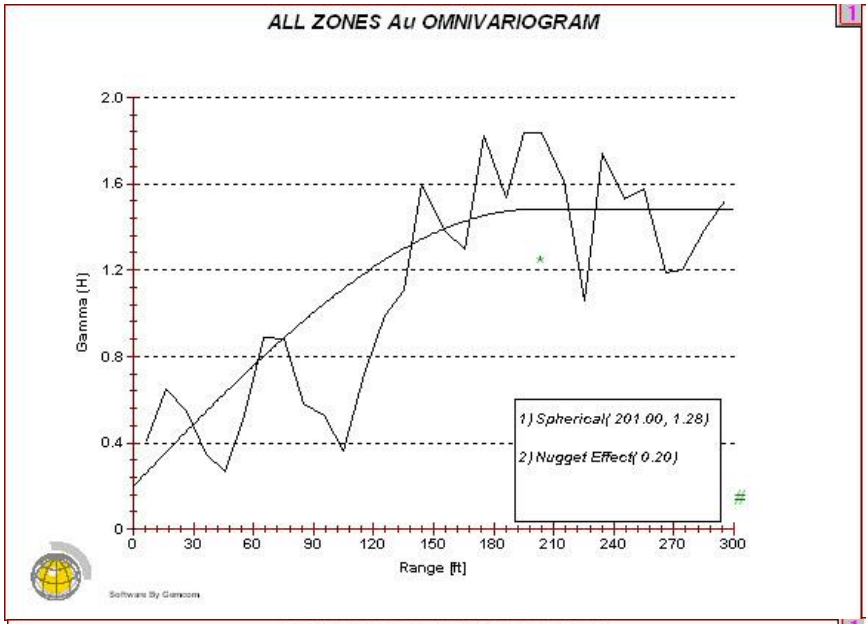

MAIN ZONE Cu ALONG STRIKE AZ=90 DIP=0
Gamma (H)
Range [ft]
1) Spherical( 140.39, 1.18)
2) Nugget Effect( 0.60)
MAIN ZONE Cu ACROSS DIP AZ=180 DIP=-38
Gamma (H)
Range [ft]
1) Spherical( 40.35, 1.02)
2) Nugget Effect( 0.60)
MAIN ZONE Cu DOWN DIP AZ=0 DIP=-52
Gamma (H)
Range [ft]
1) Spherical( 140.39, 1.16)
2) Nugget Effect( 0.60)
FOOTWALL ZONE Cu OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 125.61, 1.08)
2) Nugget Effect( 1.00)

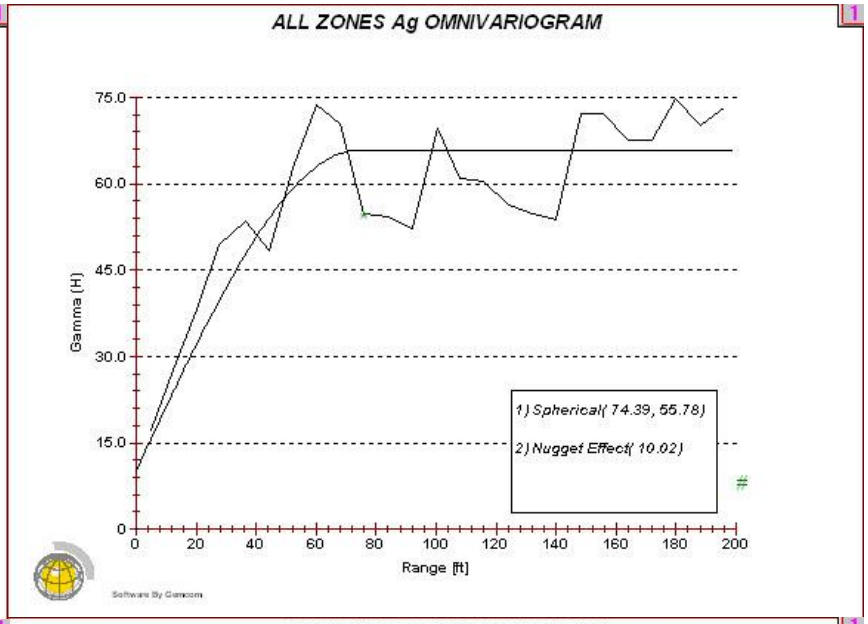

FOOTWALL ZONE Cu ALONG STRIKE AZ=90 DIP=0
Gamma (H)
Range [ft]
1) Spherical( 125.12, 0.87)
2) Nugget Effect( 1.00)

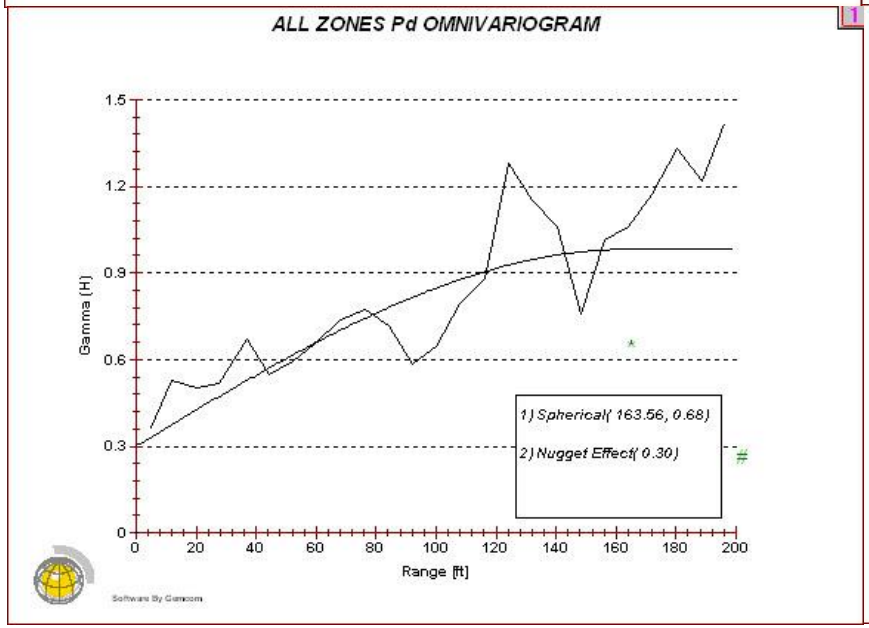

FOOTWALL ZONE Cu ACROSS DIP AZ=180 DIP=-38
Gamma (H)
Range [ft]
1) Spherical( 30.44, 1.72)
2) Nugget Effect( 1.00)

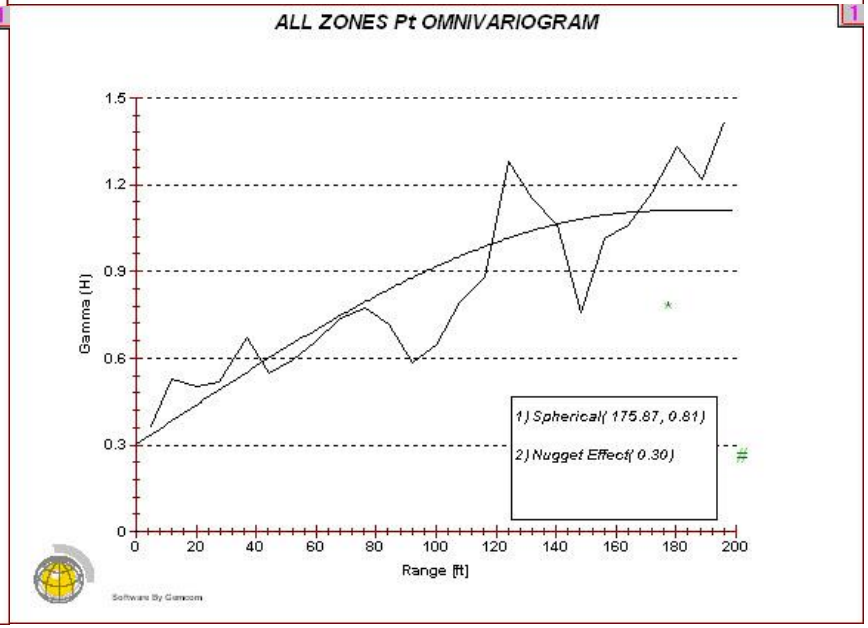

FOOTWALL ZONE Cu DOWN DIP AZ=0 DIP=-52
Gamma (H)
Range [ft]
1) Spherical( 124.62, 0.99)
2) Nugget Effect( 1.00)


ALL ZONES Ni OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 49.27, 0.02)
2) Nugget Effect( 0.01)

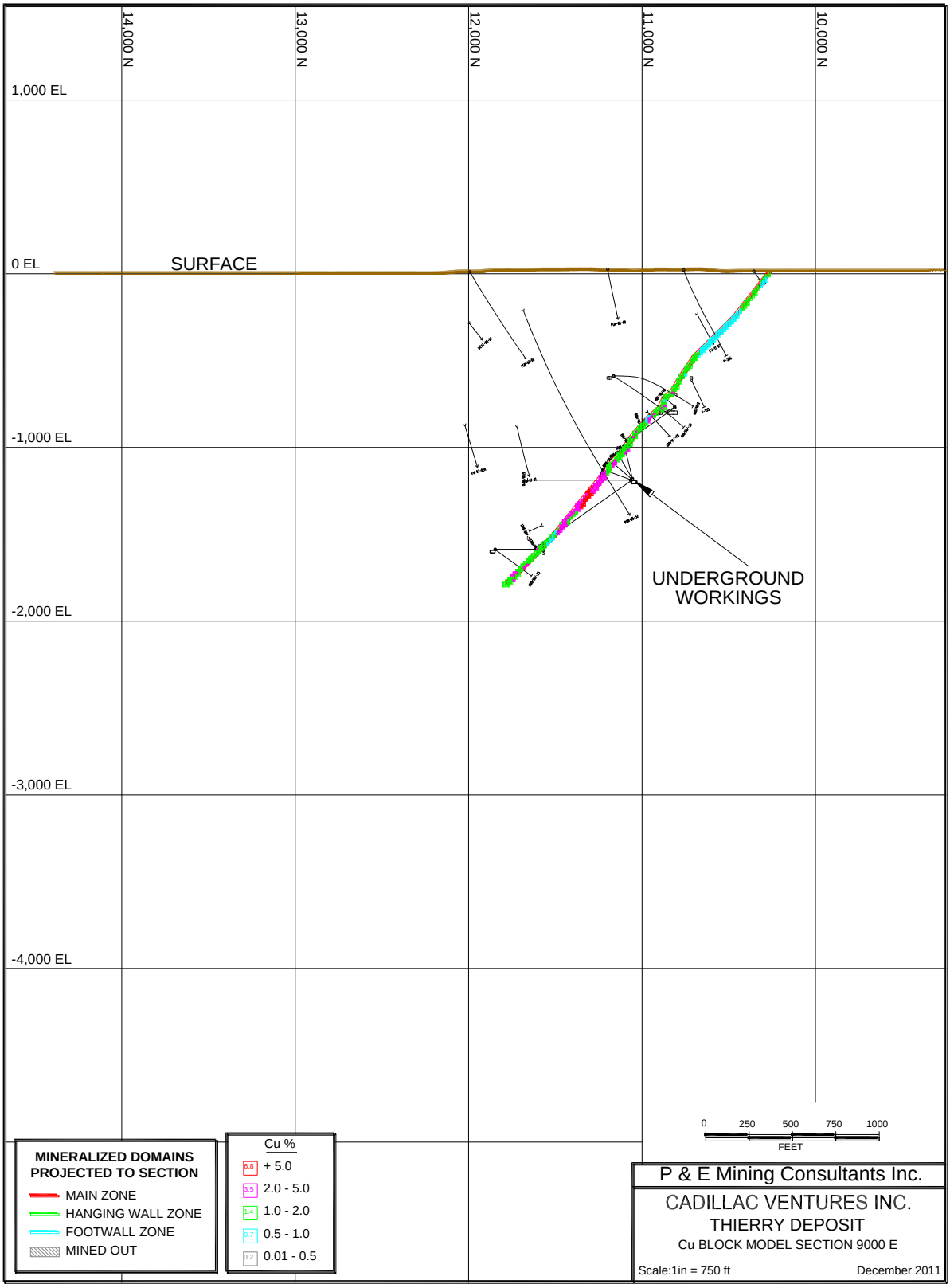

ALL ZONES Au OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 201.00, 1.28)
2) Nugget Effect( 0.20)
Software By Gemcom

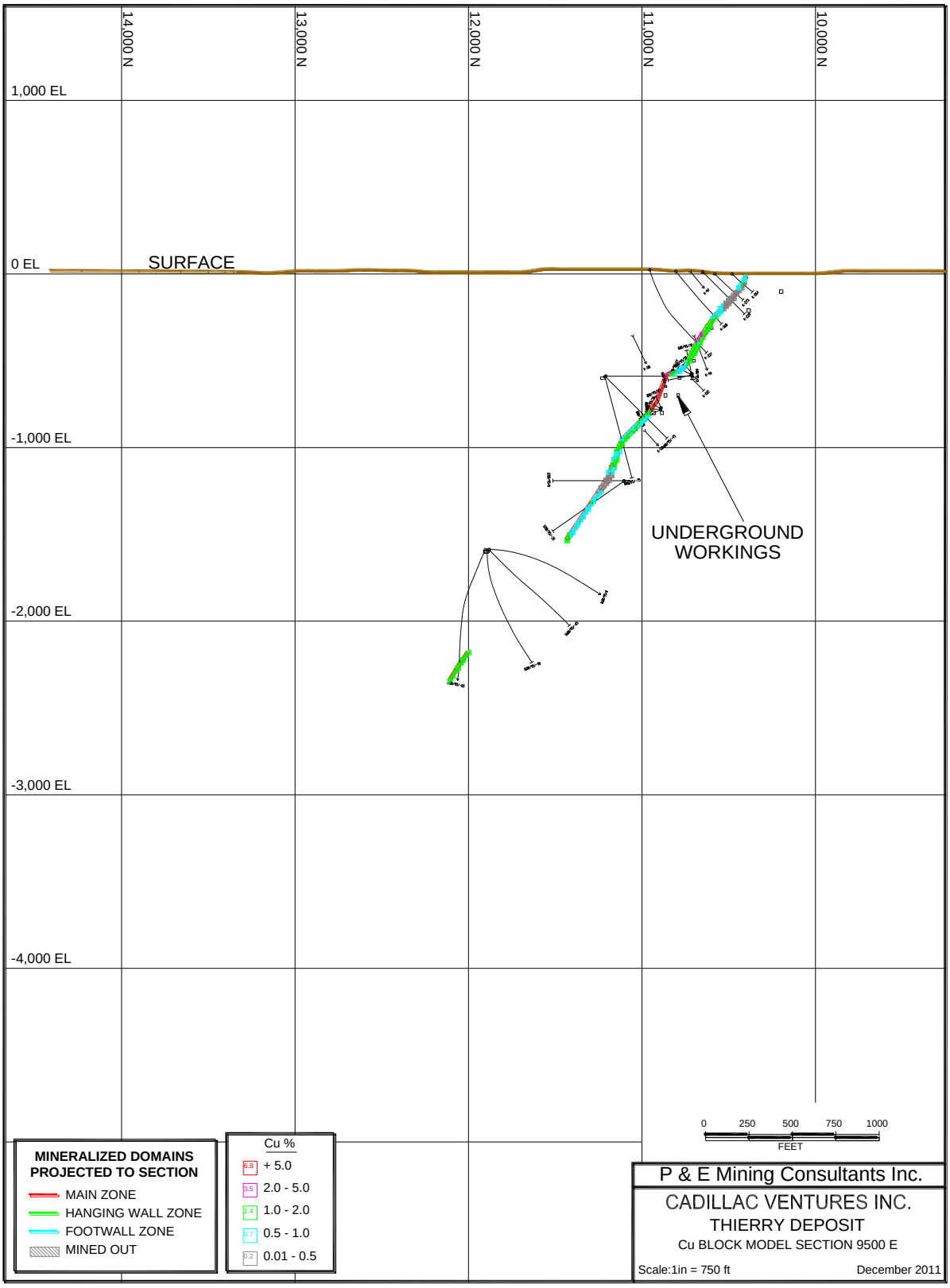

ALL ZONES Ag OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 74.39, 55.78)
2) Nugget Effect( 10.02)
Software By Gemcom

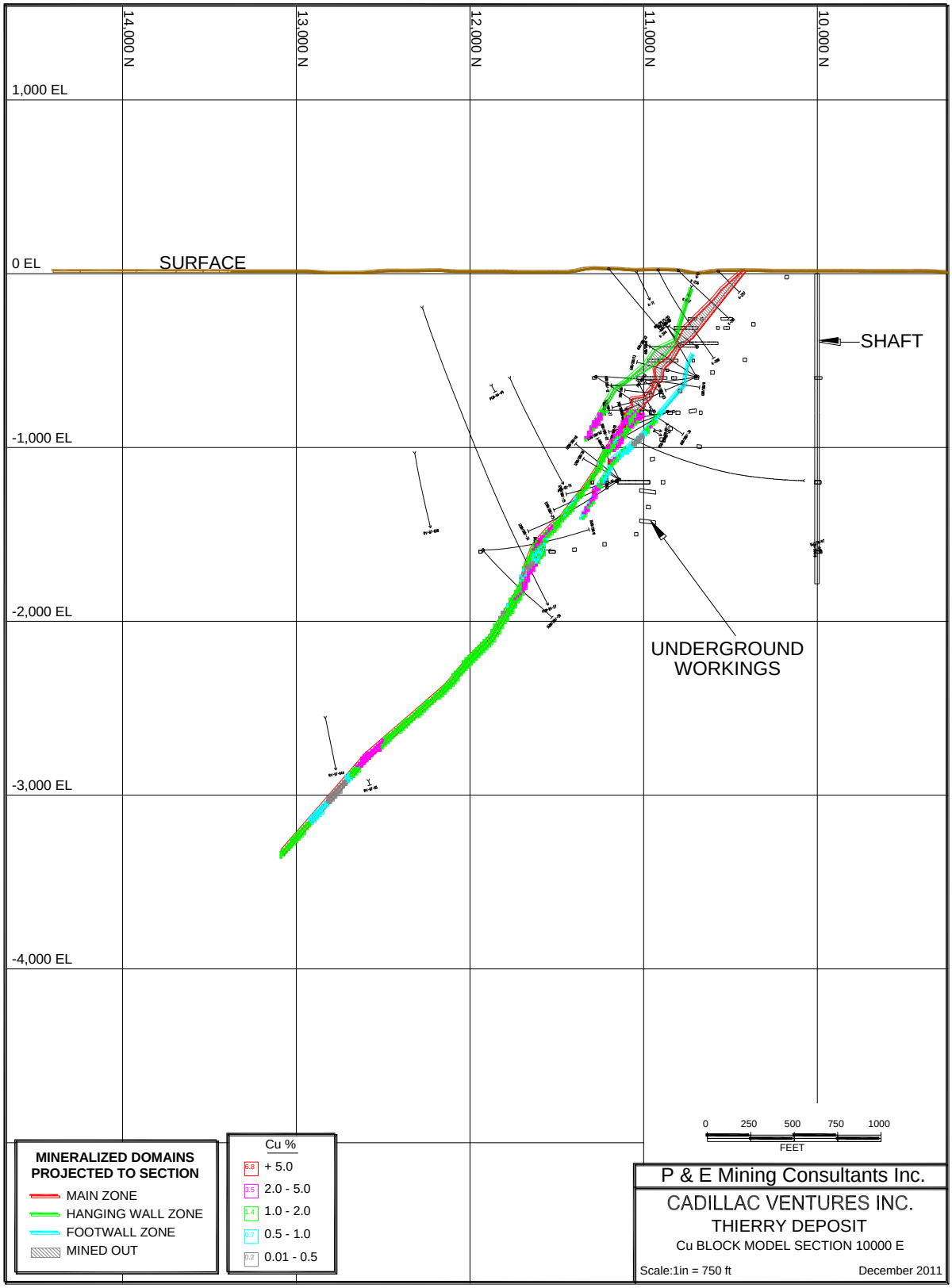

ALL ZONES Pd OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 163.56, 0.68)
2) Nugget Effect( 0.30)
Software By Gemcom

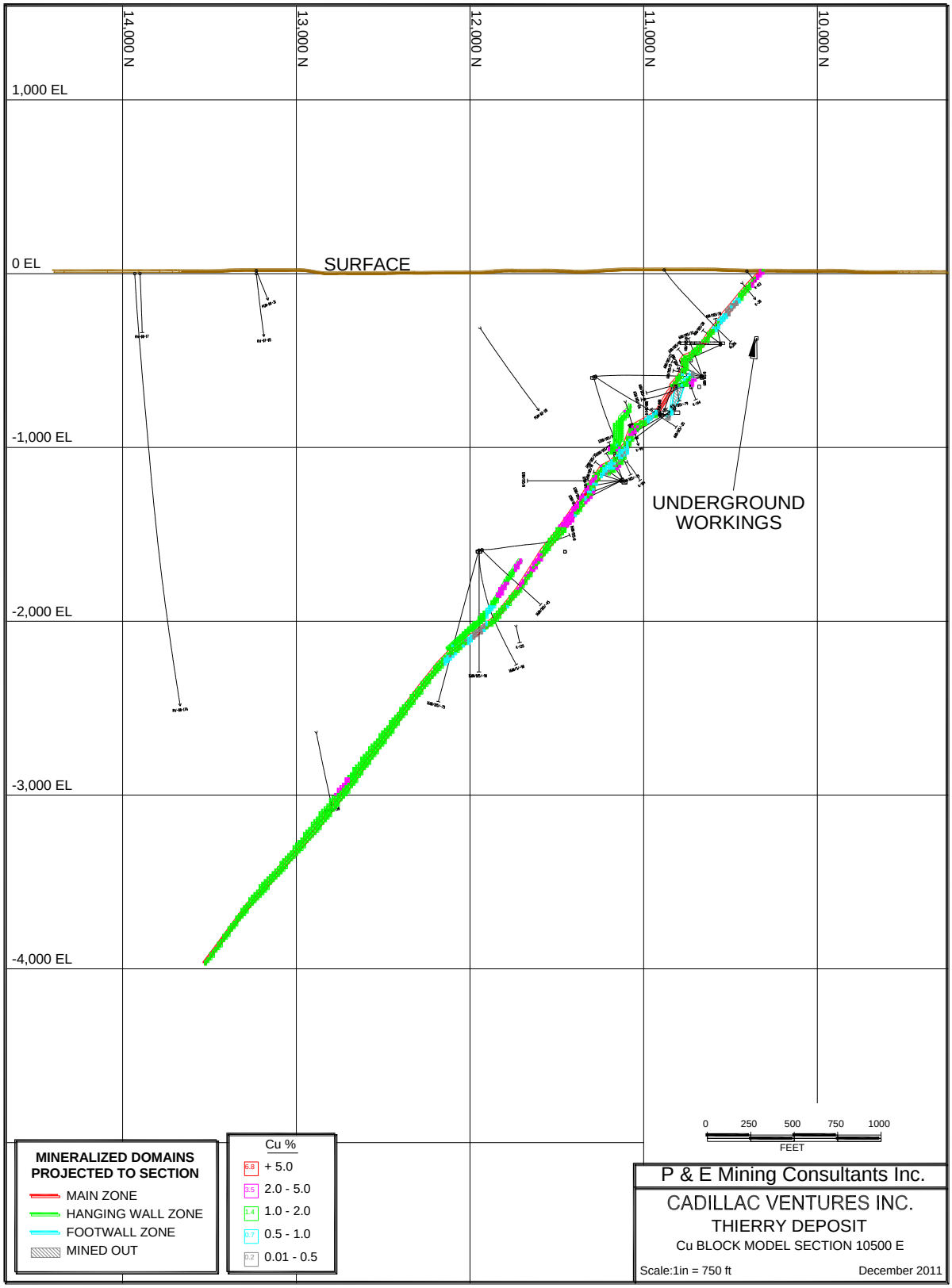

ALL ZONES Pt OMNIVARIOGRAM
Gamma (H)
Range [ft]
1) Spherical( 175.87, 0.81)
2) Nugget Effect( 0.30)
Software By Gemcom

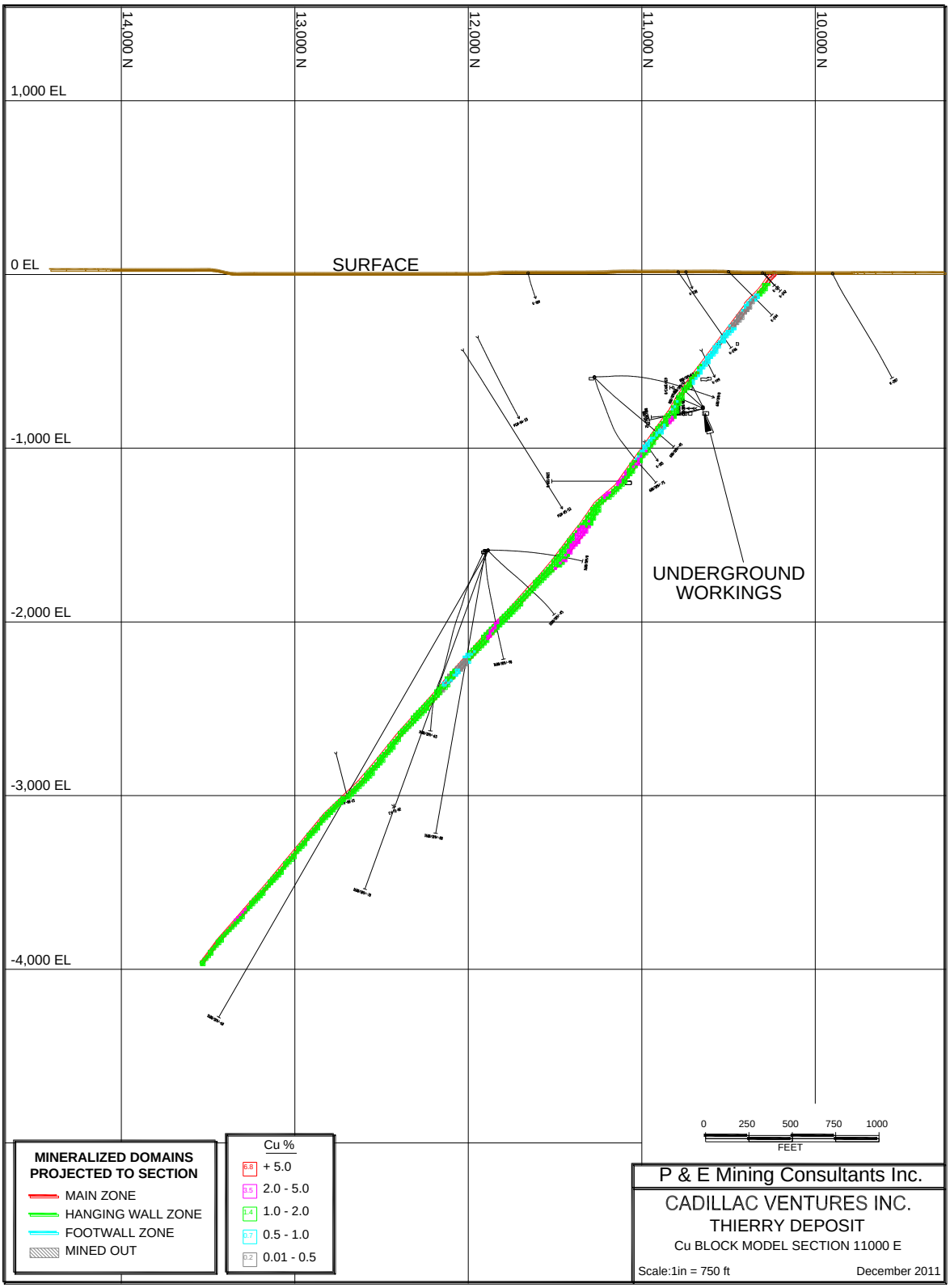
# APPENDIX V. CU BLOCK MODEL CROSS SECTIONS AND PLANS

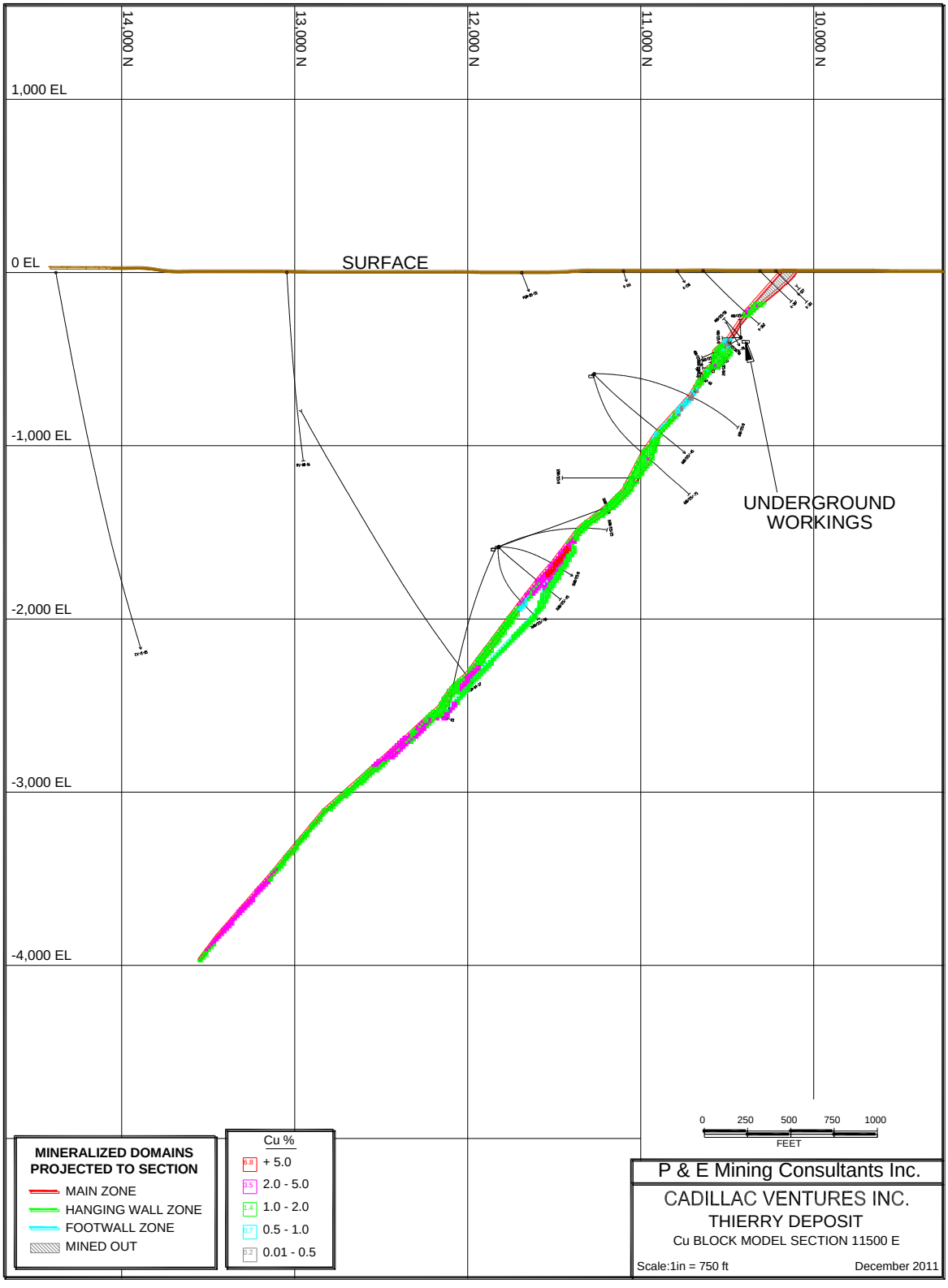

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 9000 E
Scale:1in = 750 ft
December 2011

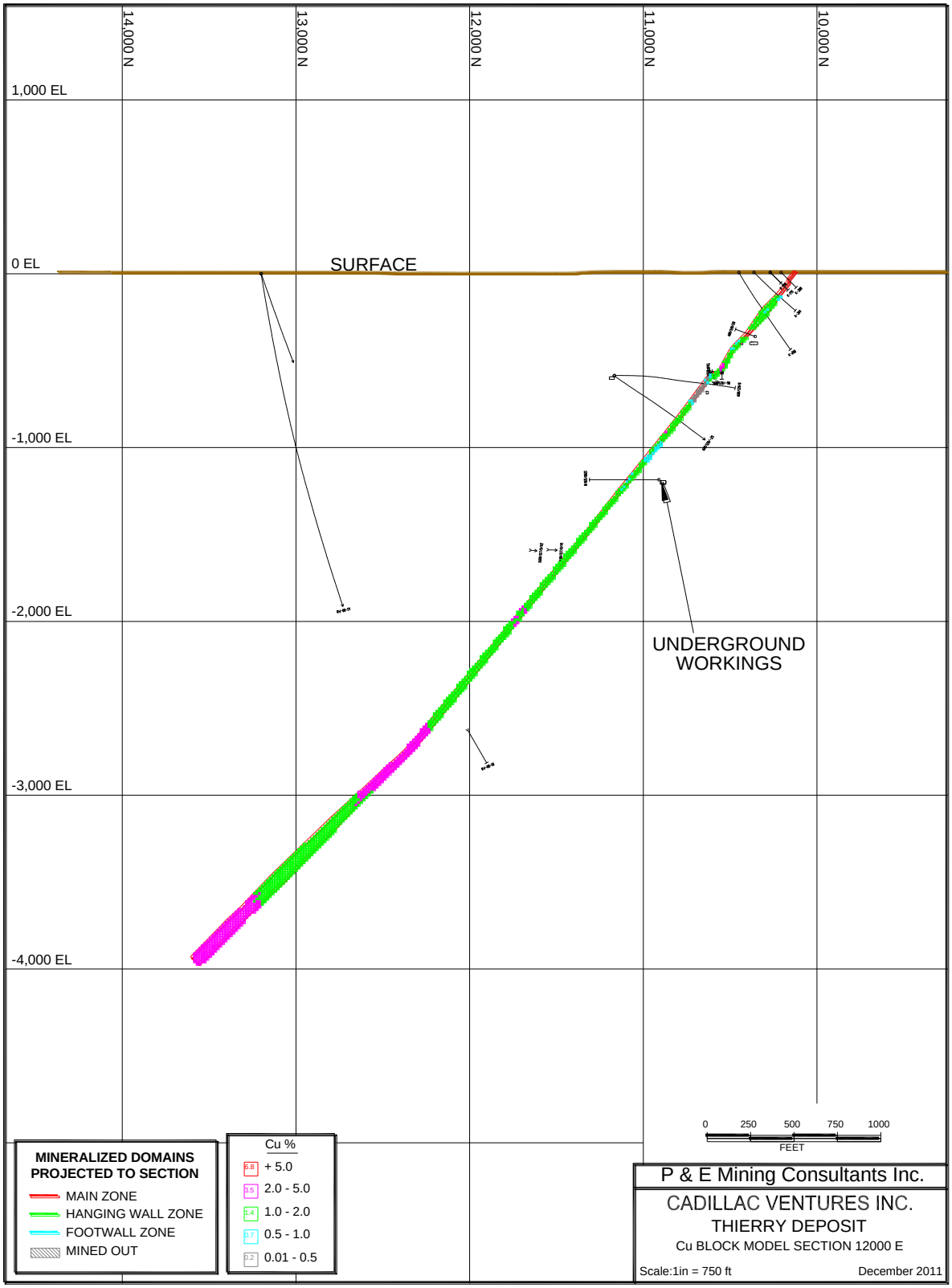

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 9500 E
Scale:1in = 750 ft
December 2011

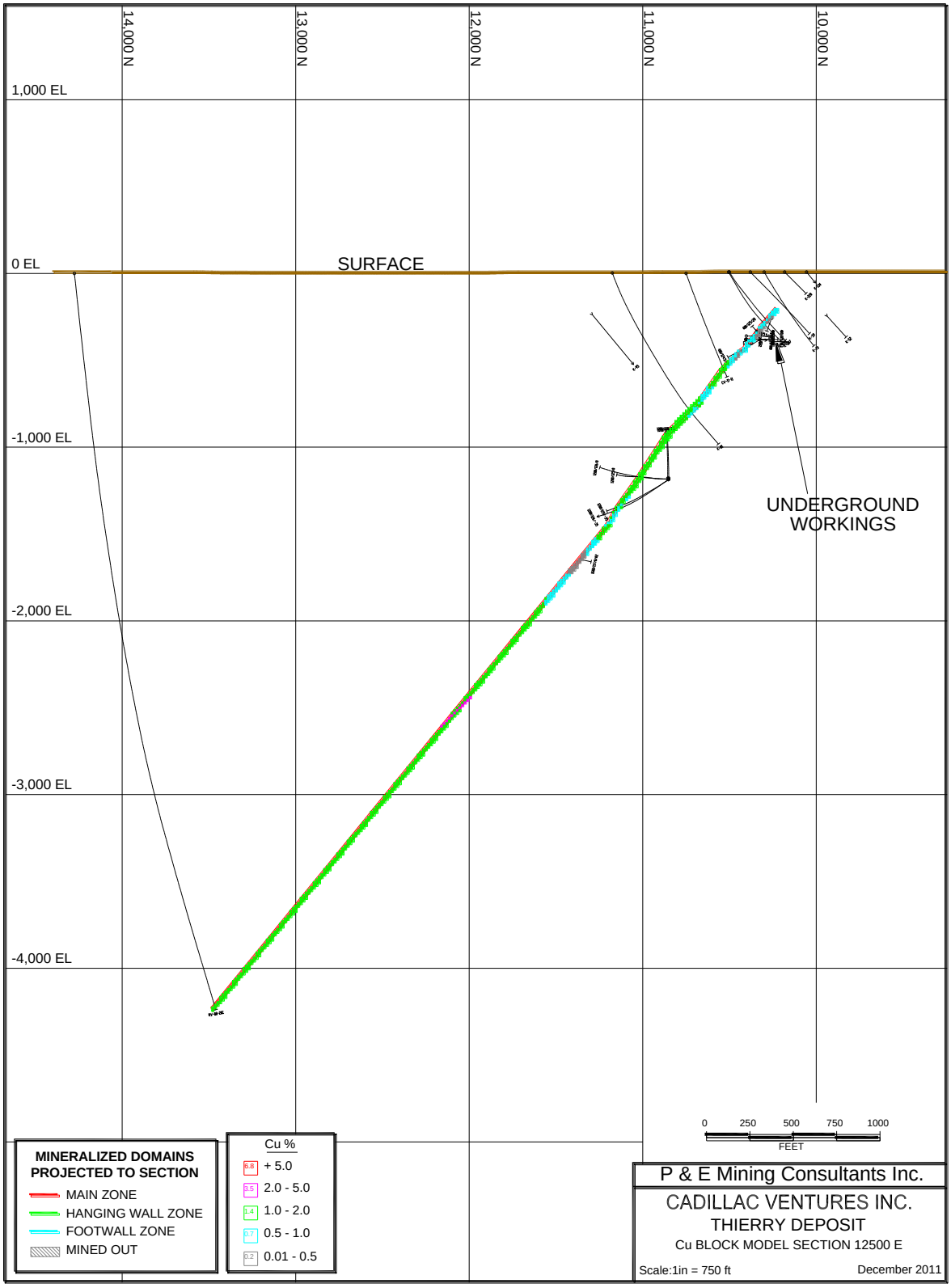

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
SHAFT
-1,000 EL
-2,000 EL
UNDERGROUND
WORKINGS
-3,000 EL
-4,000 EL
0 250 500 750 1000
FEET
MINERALIZED DOMAINS
PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 10000 E
Scale:1in = 750 ft
December 2011

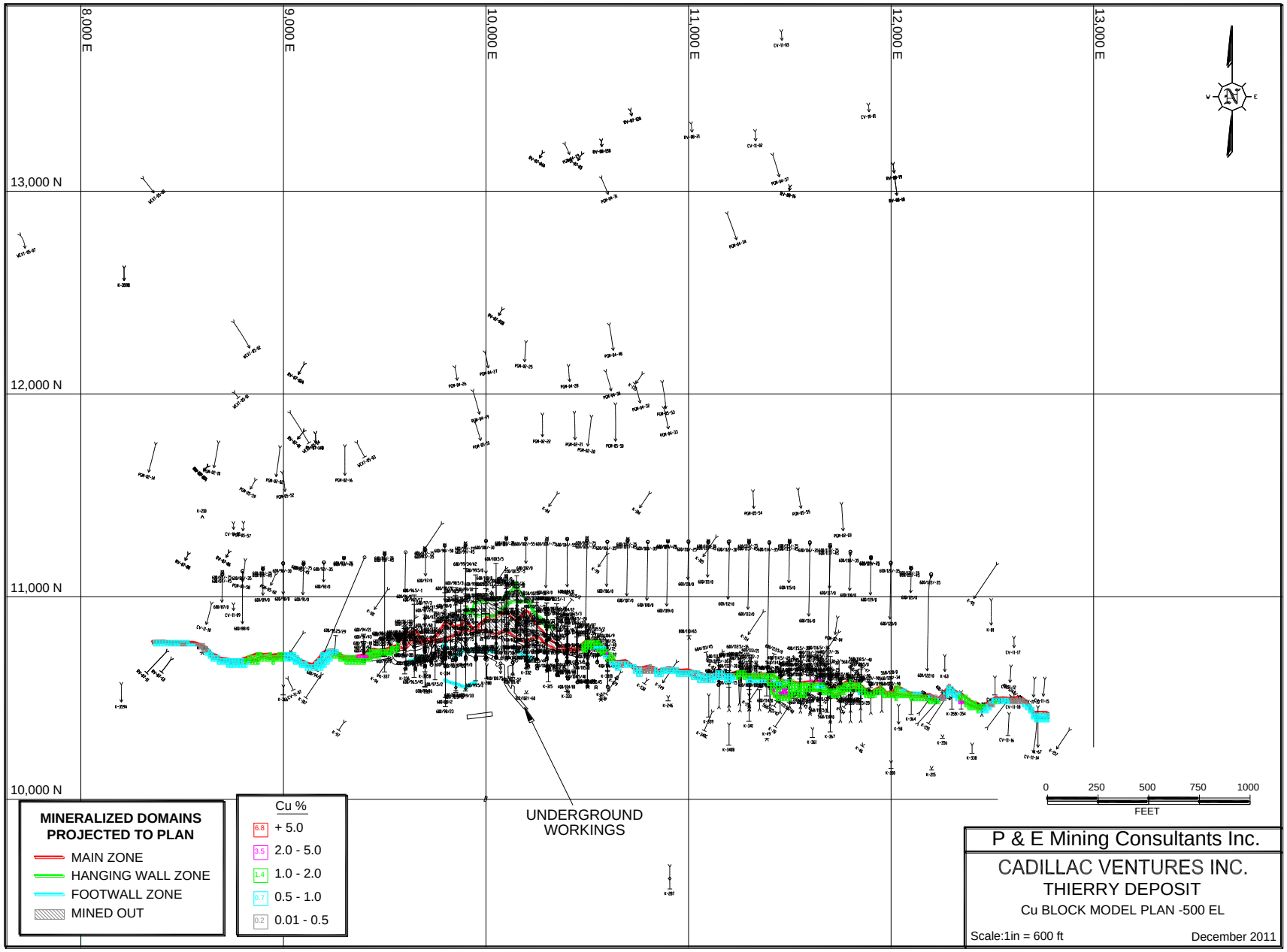

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 0.5
0.5 - 1.0
0.01 - 0.5
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 10500 E
Scale:1in = 750 ft
December 2011

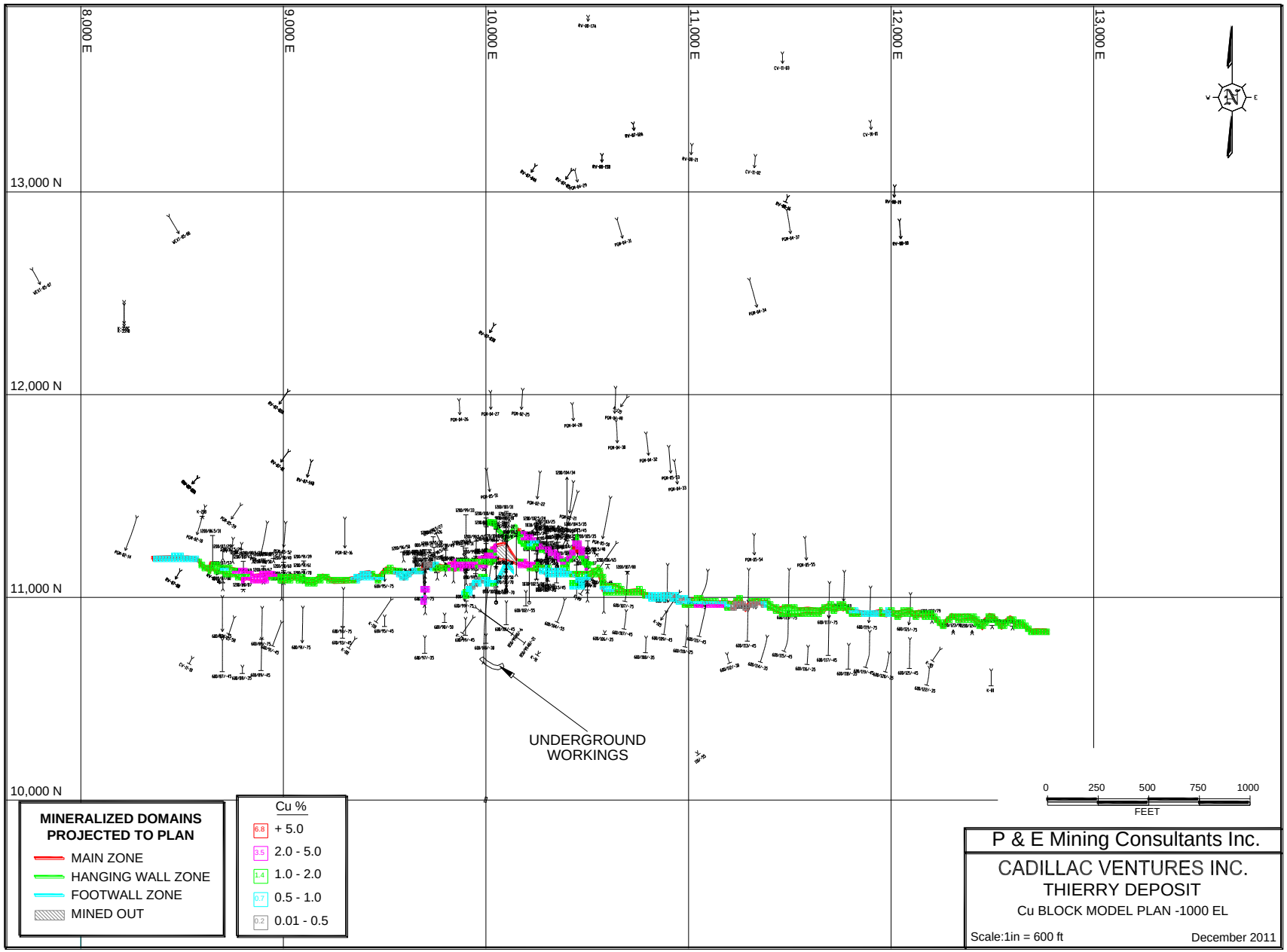

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 11000 E
Scale:1in = 750 ft
December 2011

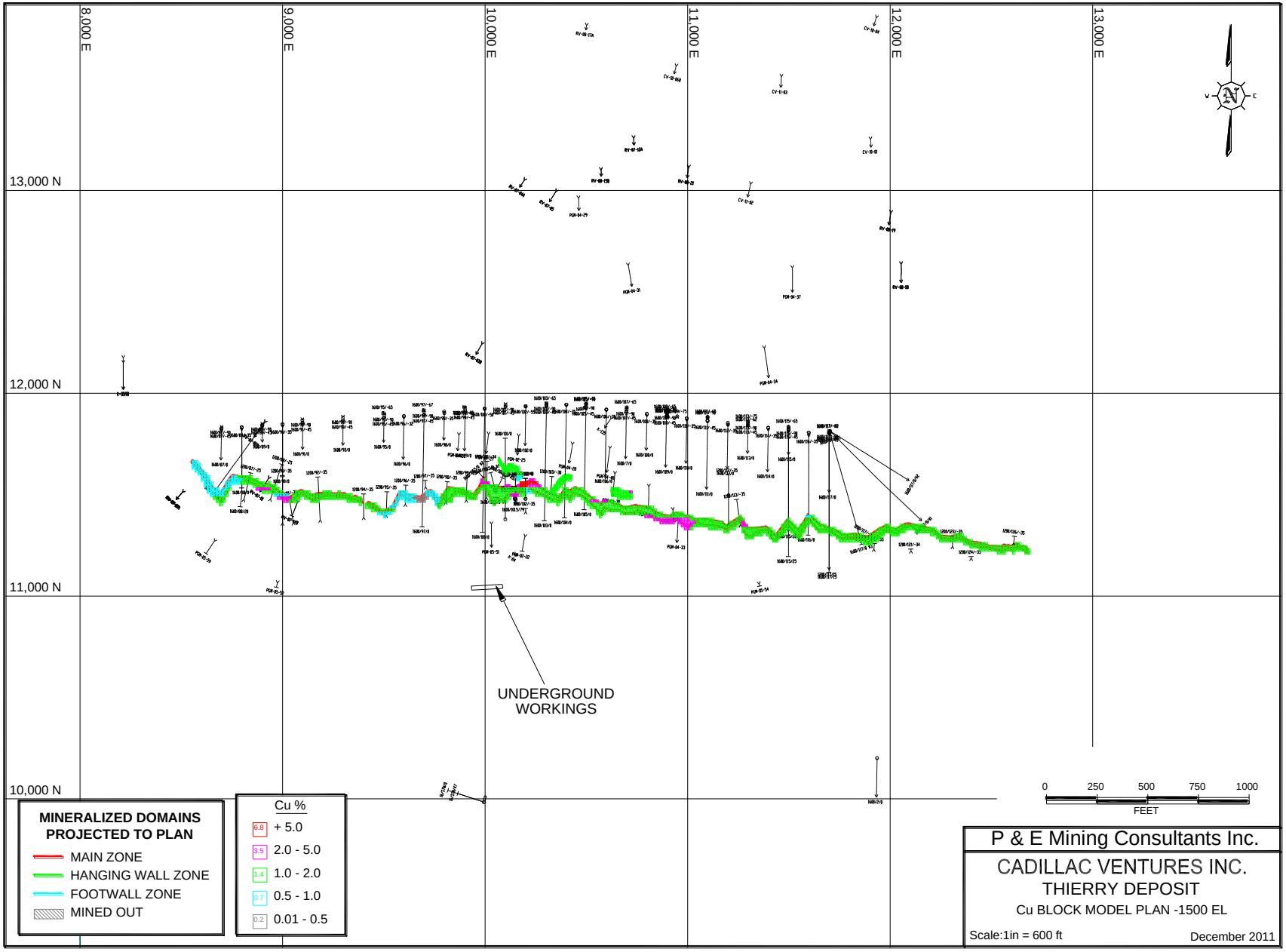

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 11500 E
Scale:1in = 750 ft
December 2011

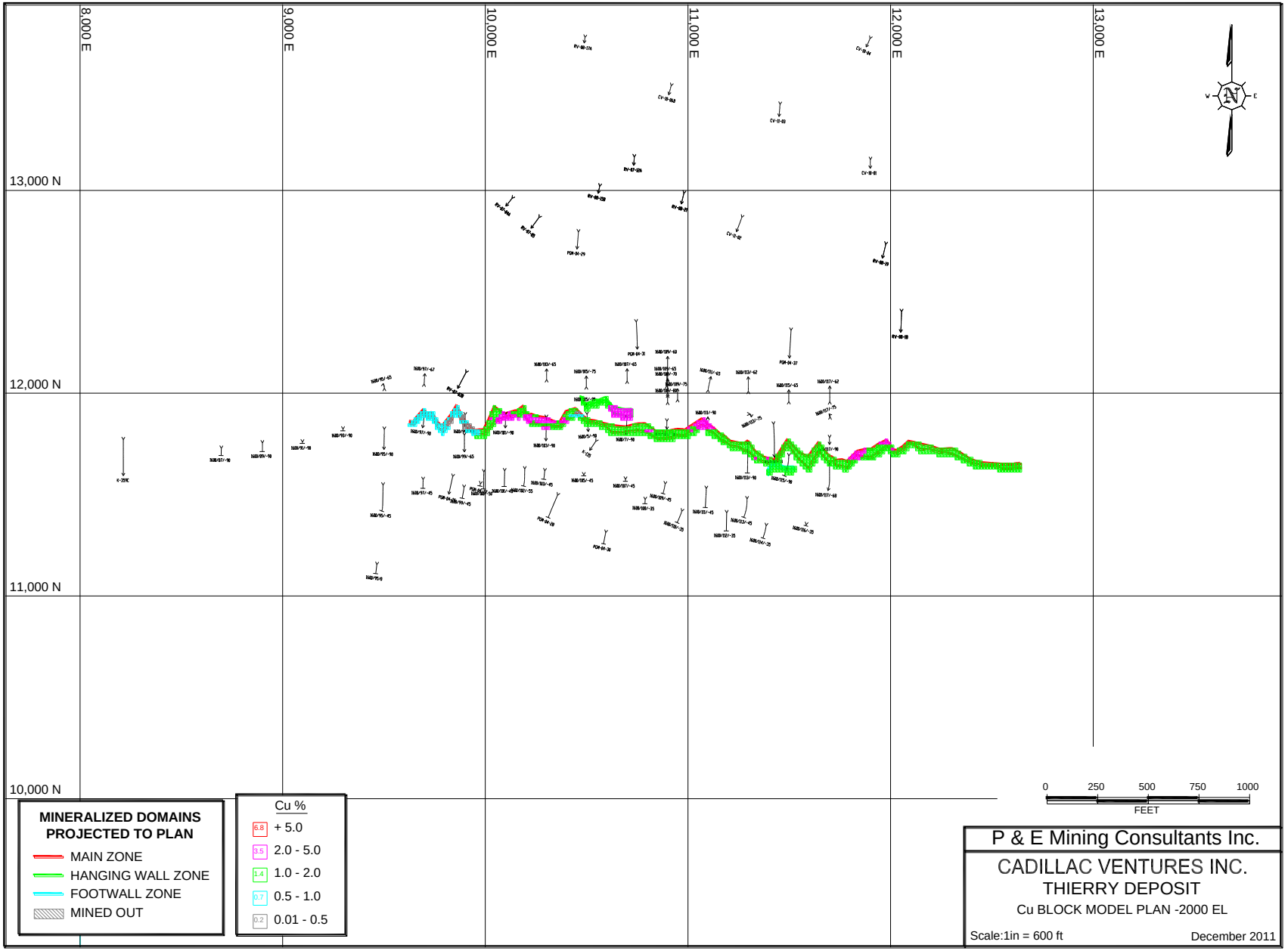

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
SURFACE
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 12000 E
Scale:1in = 750 ft
December 2011

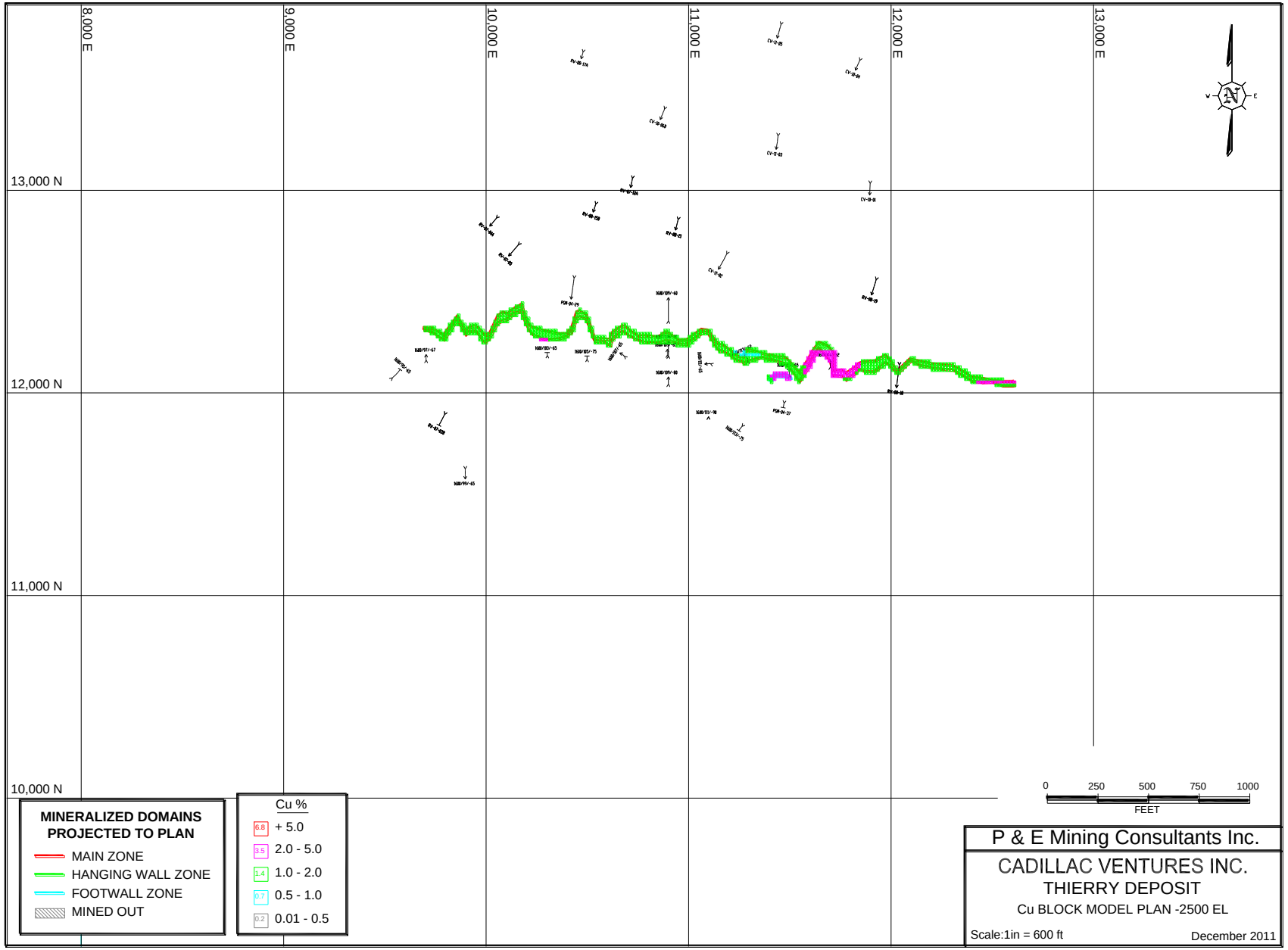

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND
WORKINGS
MINERALIZED DOMAINS
PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0
250
500
750
1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL SECTION 12500 E
Scale:1in = 750 ft
December 2011

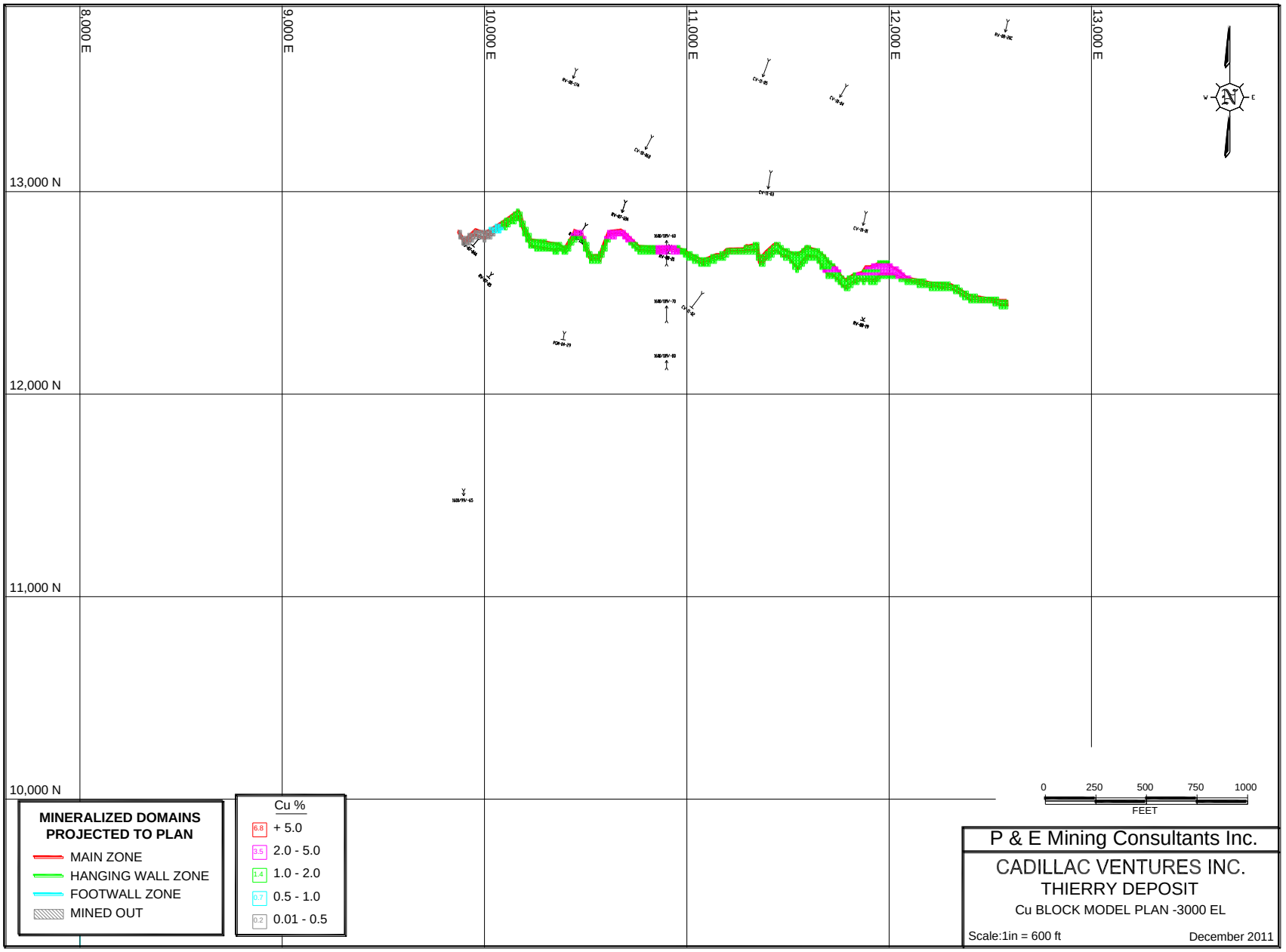

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
6.8 + 5.0
3.5 2.0 - 5.0
1.4 1.0 - 2.0
0.7 0.5 - 1.0
0.2 0.01 - 0.5
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -500 EL
Scale:1in = 600 ft
December 2011


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -1000 EL
Scale:1in = 600 ft
December 2011

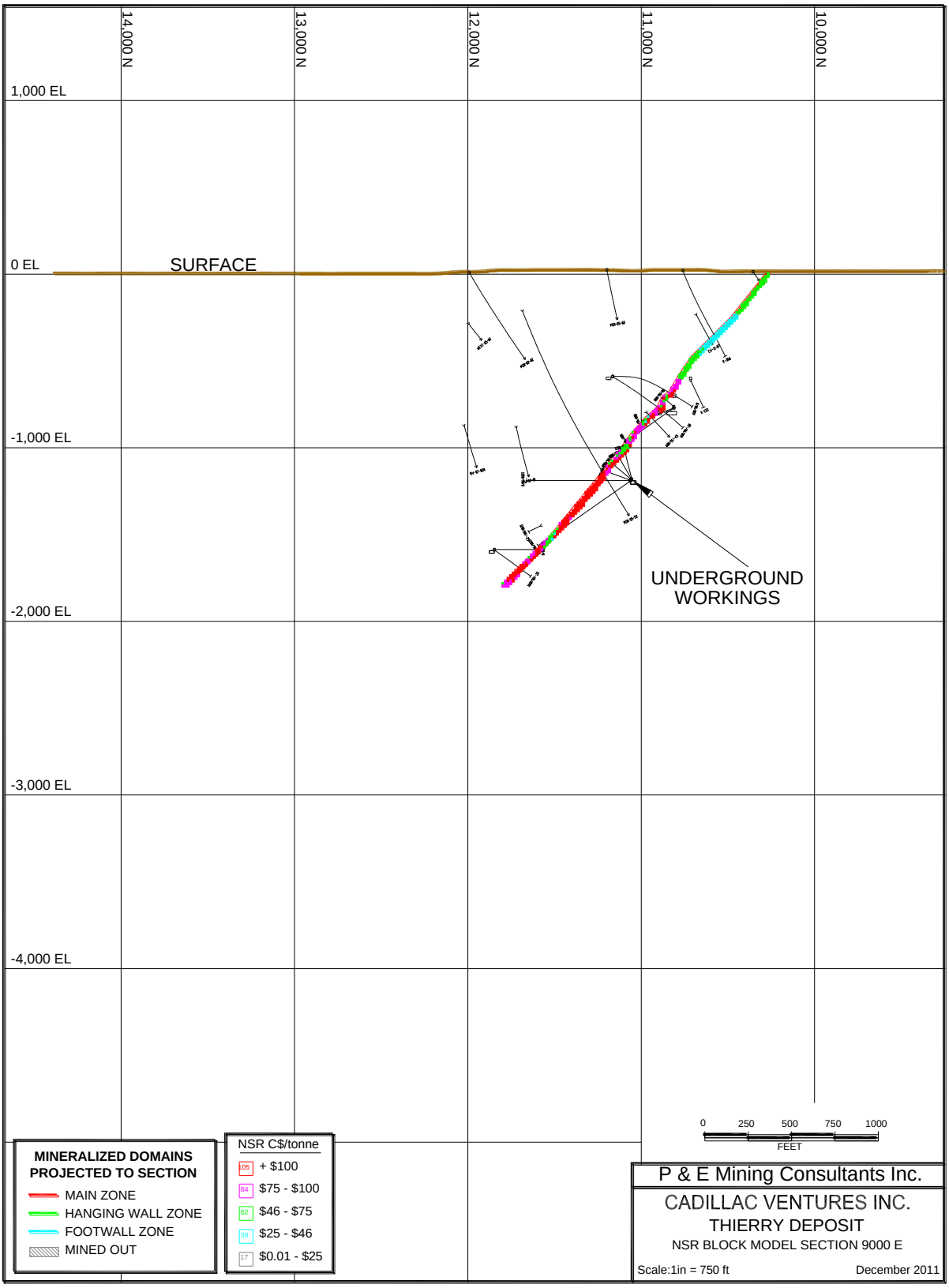

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -1500 EL
Scale:1in = 600 ft
December 2011

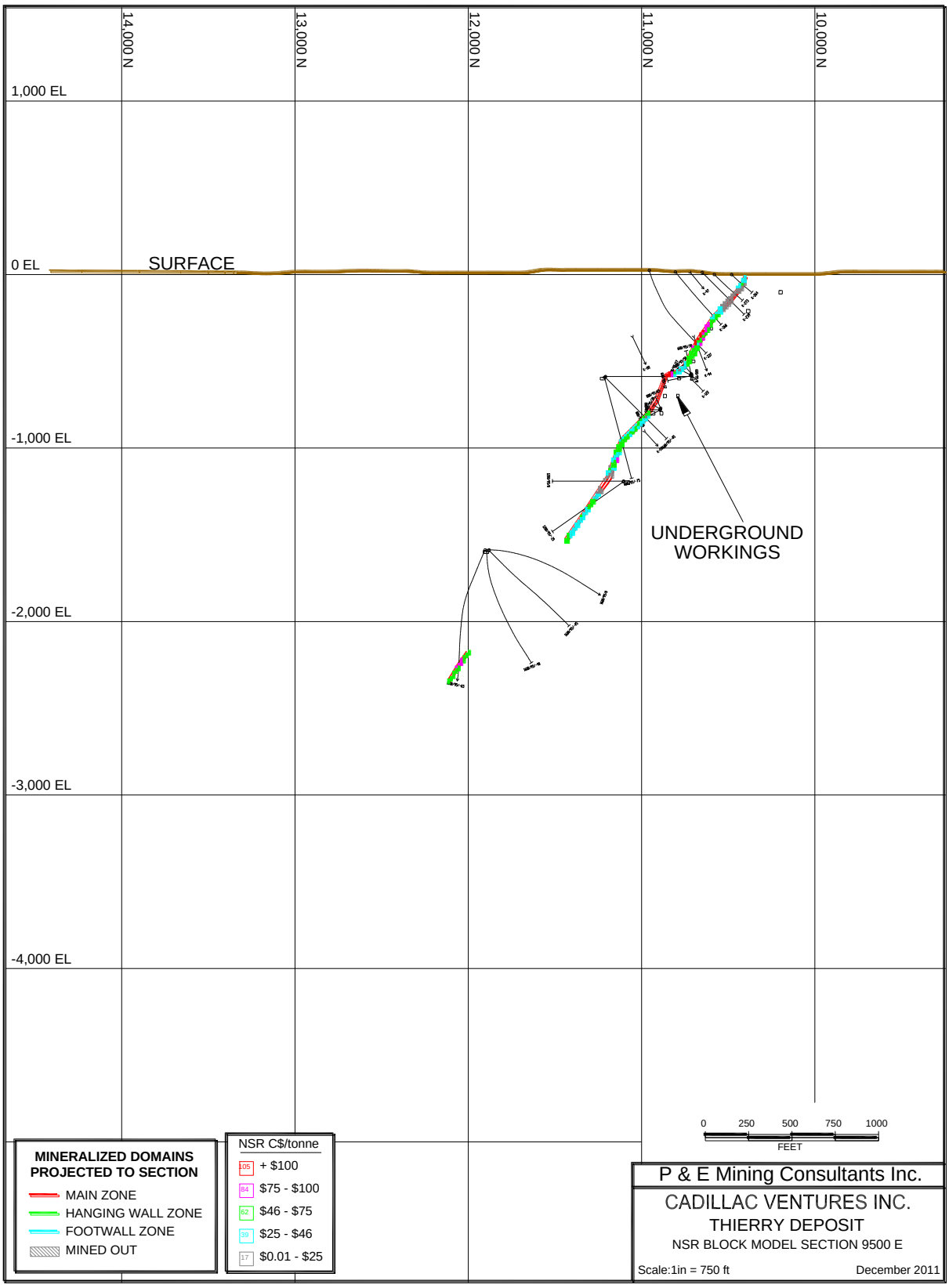

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
6.8 + 5.0
3.5 2.0 - 5.0
1.4 1.0 - 2.0
0.7 0.5 - 1.0
0.2 0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -2000 EL
Scale:1in = 600 ft
December 2011

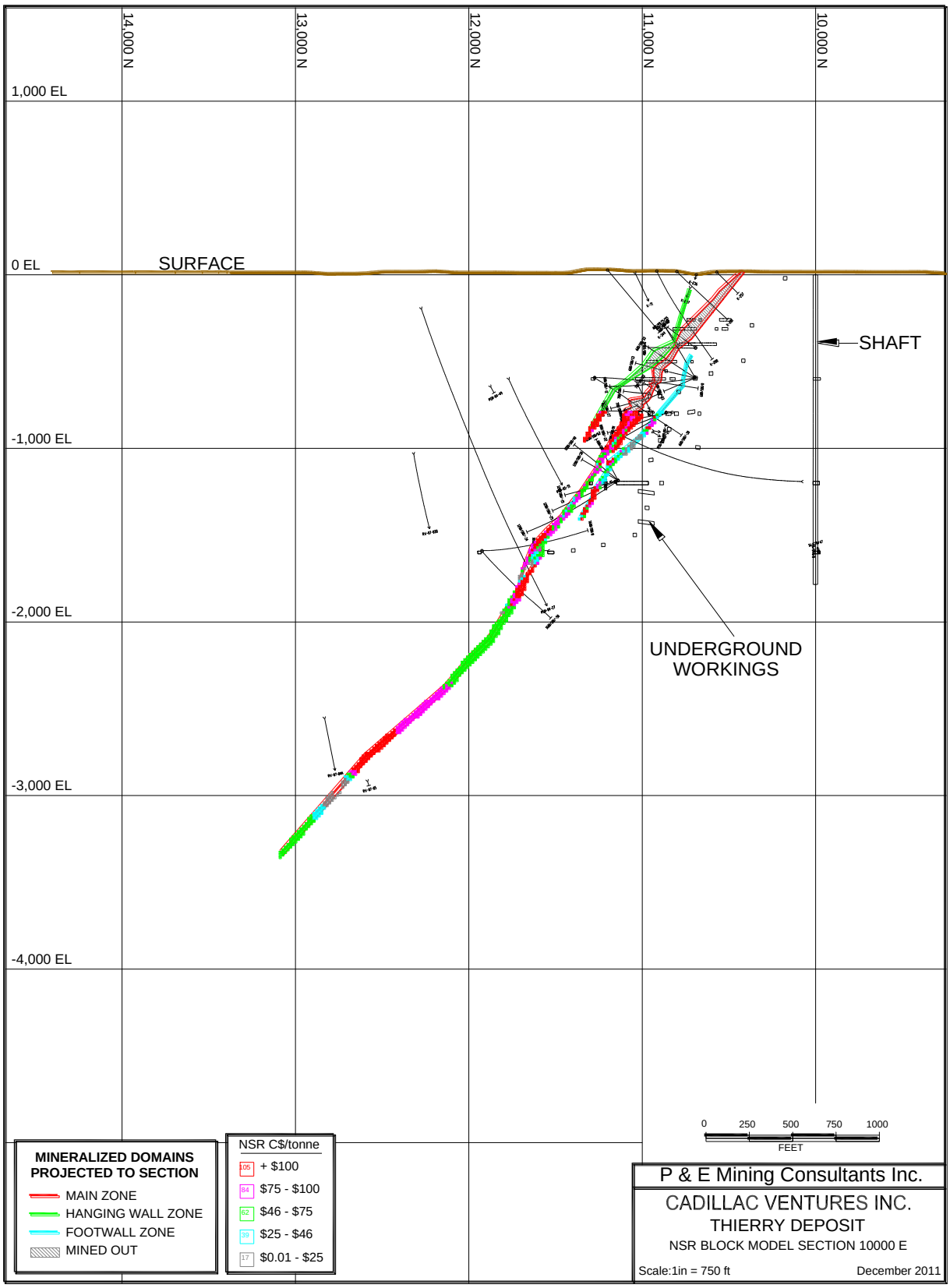

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -2500 EL
Scale:1in = 600 ft
December 2011

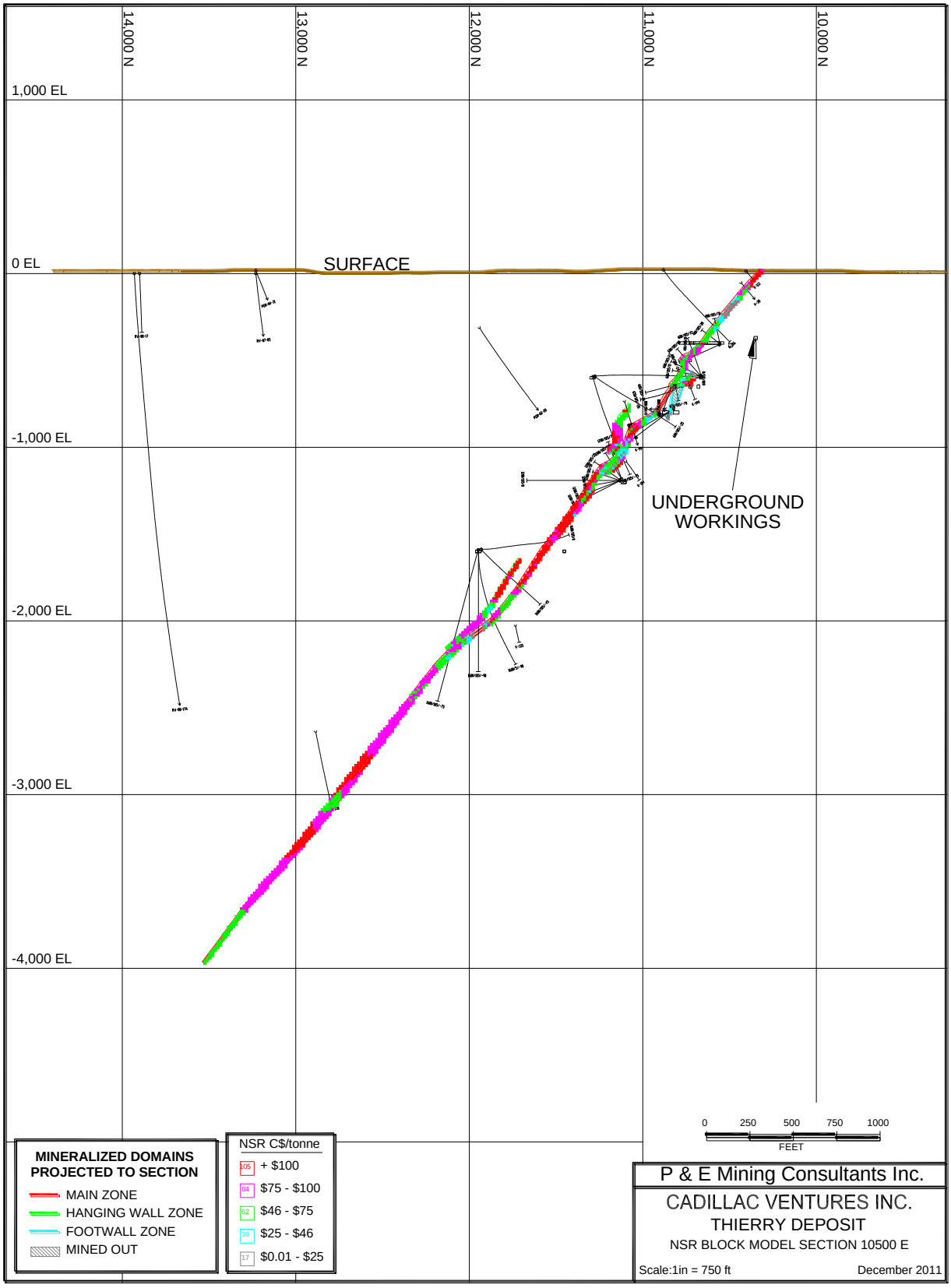

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
Cu %
+ 5.0
2.0 - 5.0
1.0 - 2.0
0.5 - 1.0
0.01 - 0.5
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
Cu BLOCK MODEL PLAN -3000 EL
Scale:1in = 600 ft
December 2011

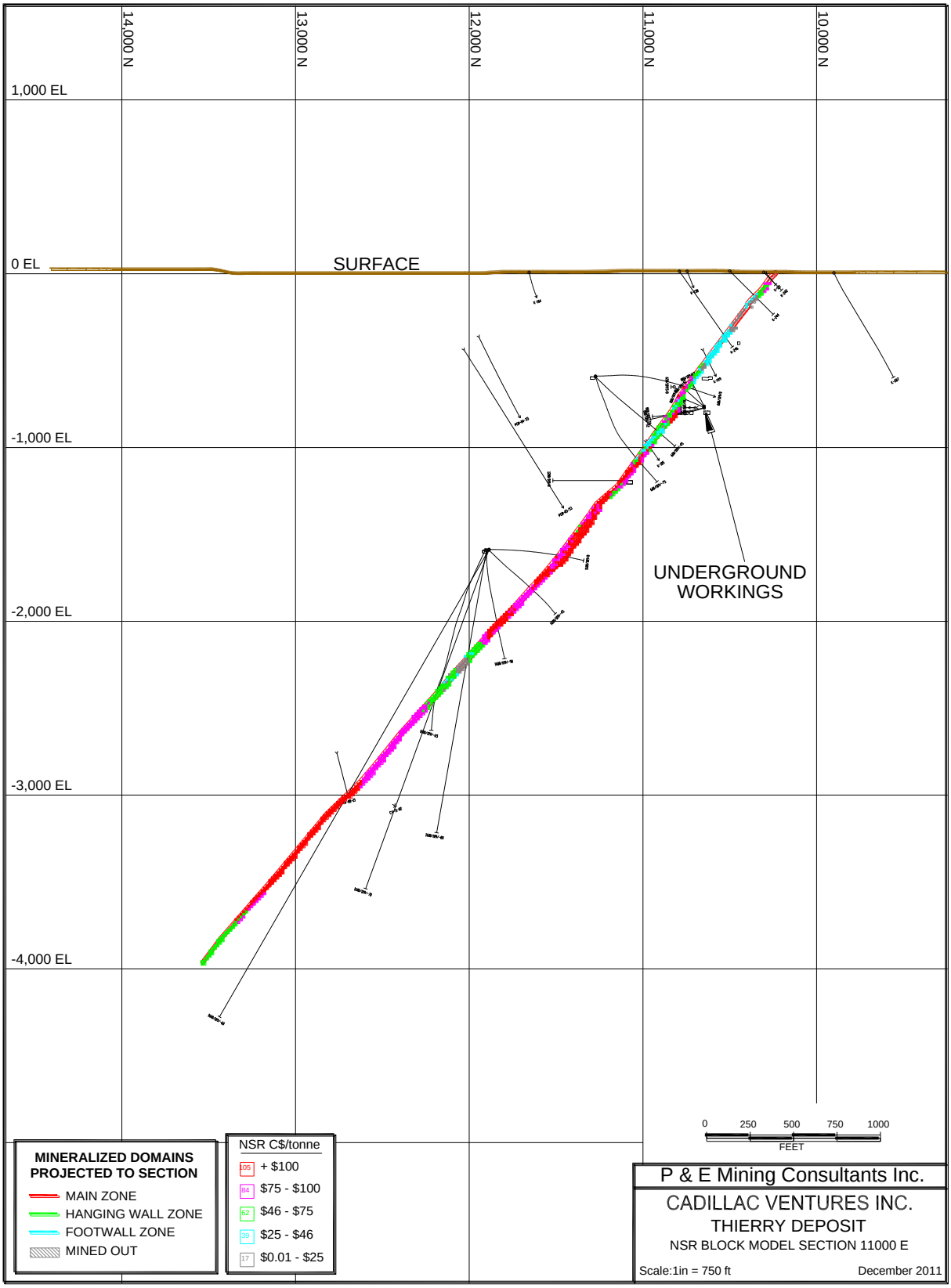
# APPENDIX VI. NSR BLOCK MODEL CROSS SECTIONS AND PLANS

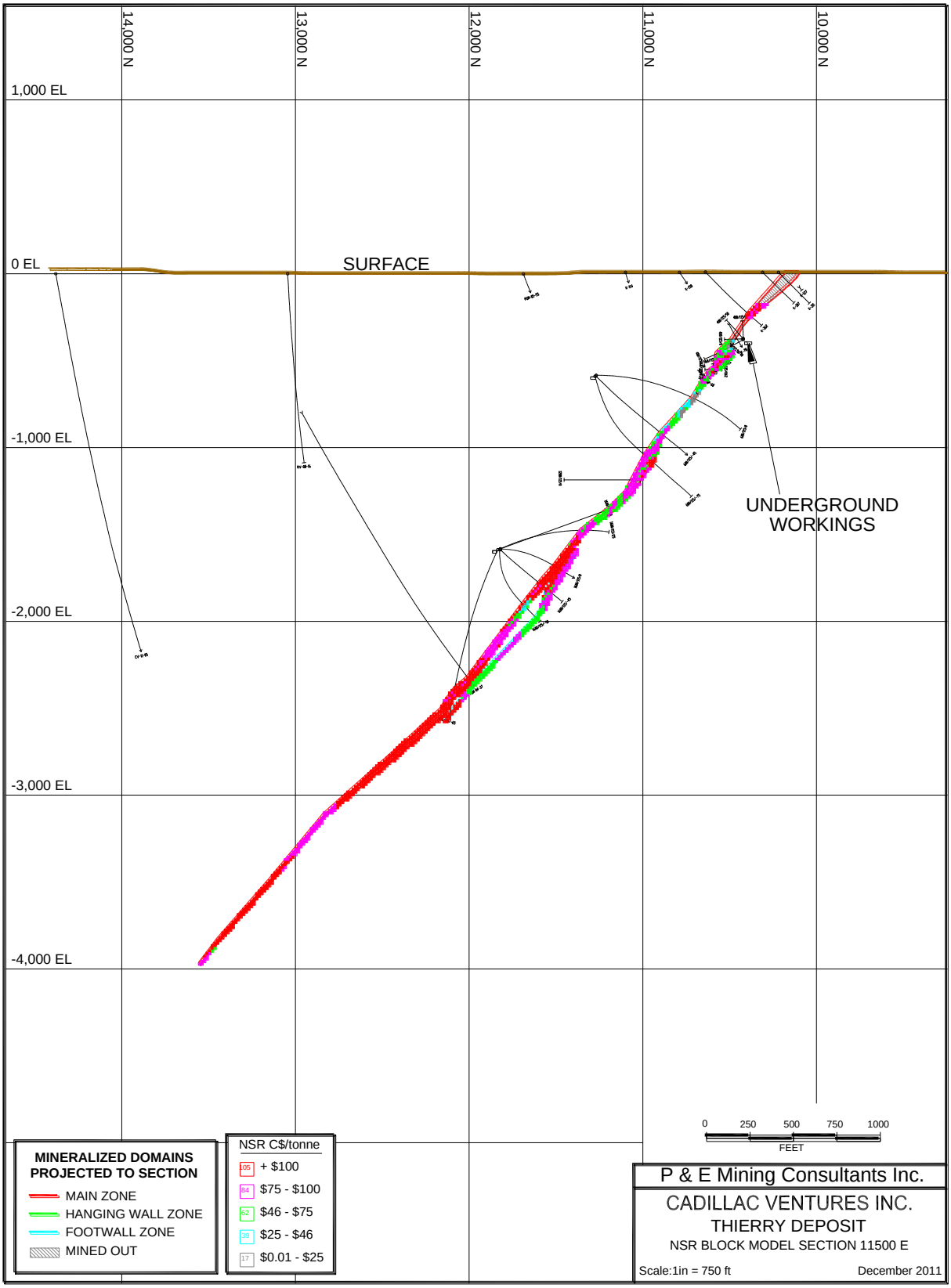

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 9000 E
Scale:1in = 750 ft
December 2011

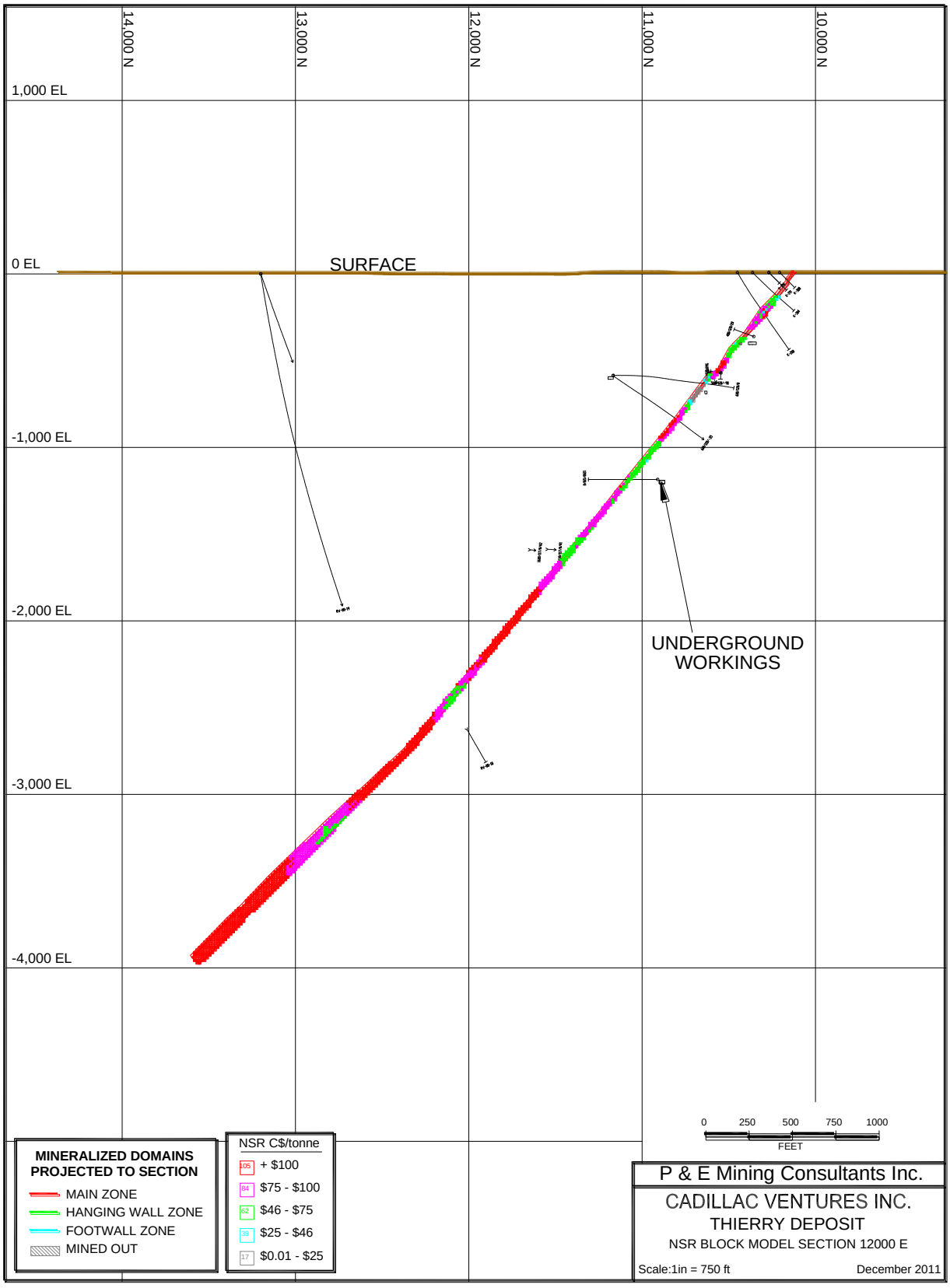

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
+ $100
$75 - $100
$46 - $75
$25 - $46
$0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 9500 E
Scale:1in = 750 ft
December 2011

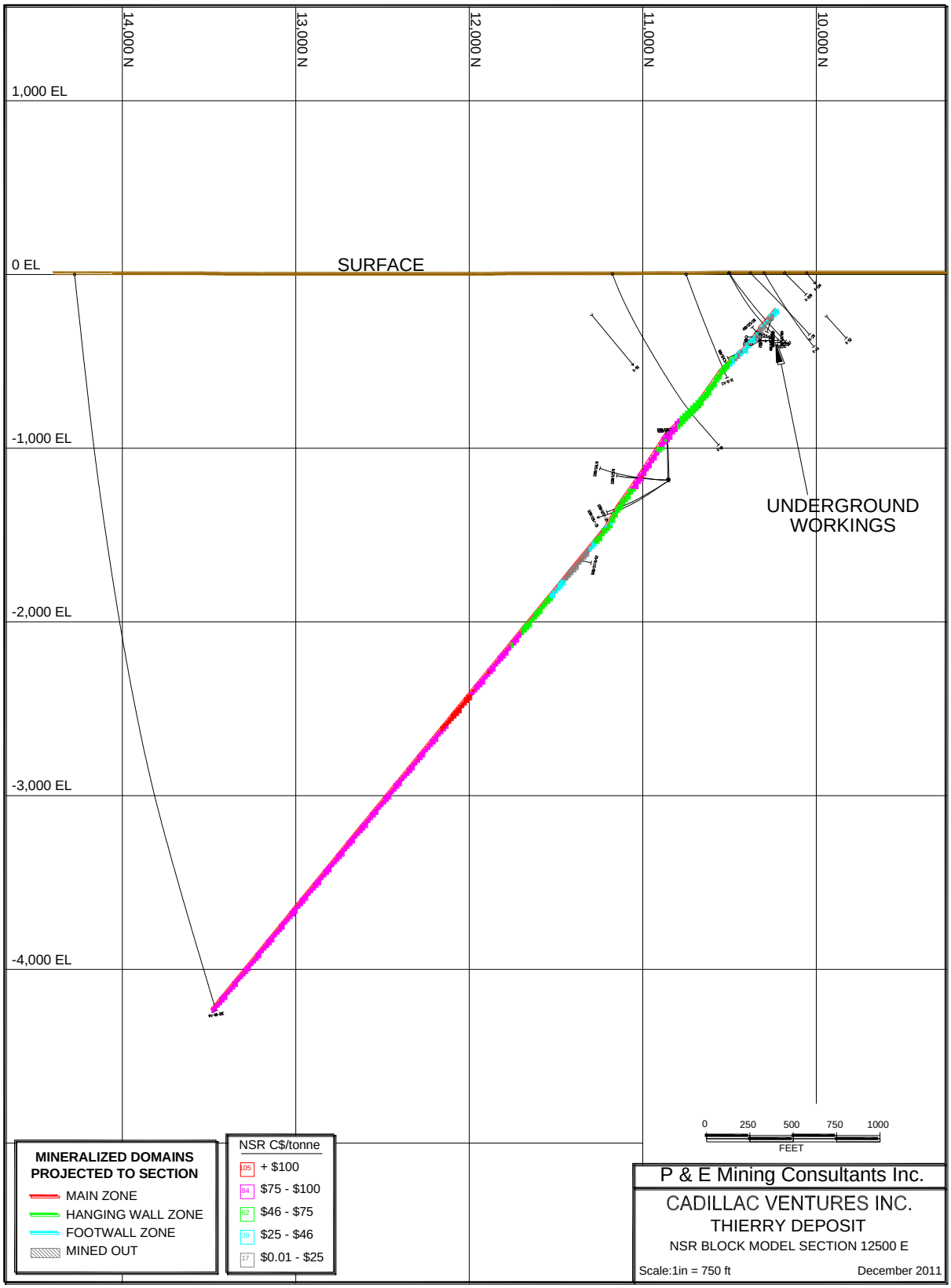

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
SHAFT
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
+ $100
$75 - $100
$46 - $75
$25 - $46
$0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 10000 E
Scale:1in = 750 ft
December 2011

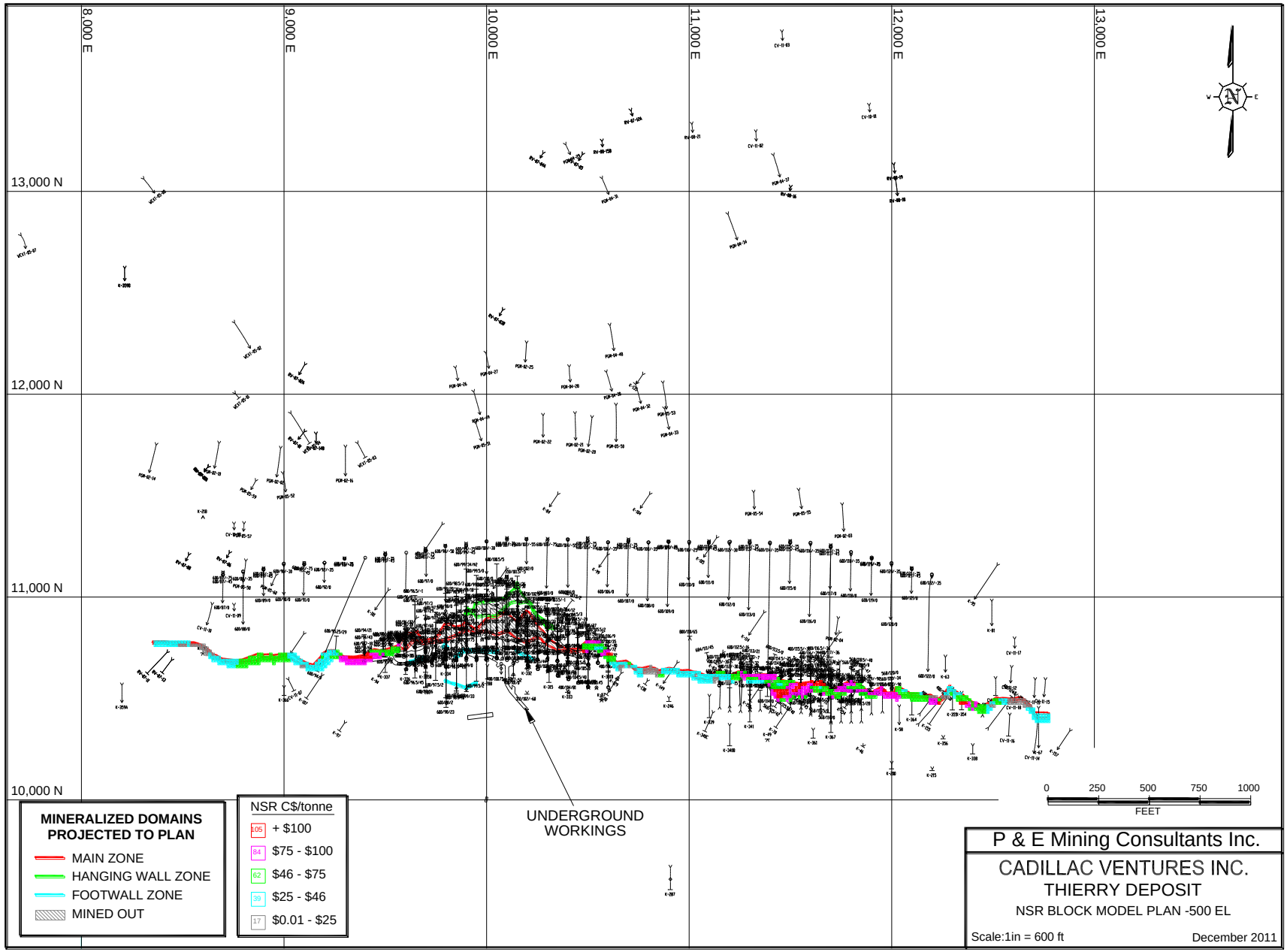

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 10500 E
Scale:1in = 750 ft
December 2011

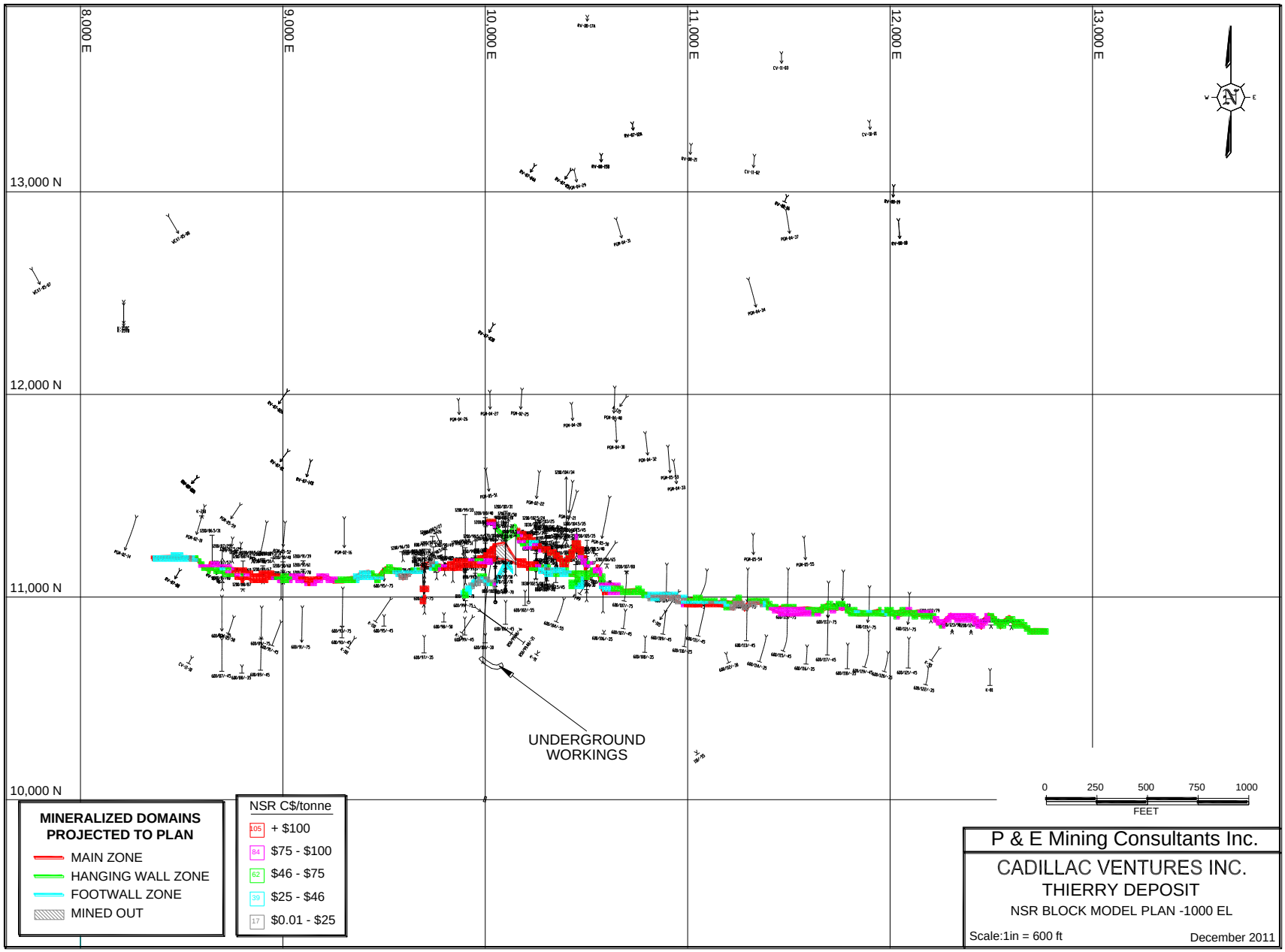

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 11000 E
Scale:1in = 750 ft
December 2011

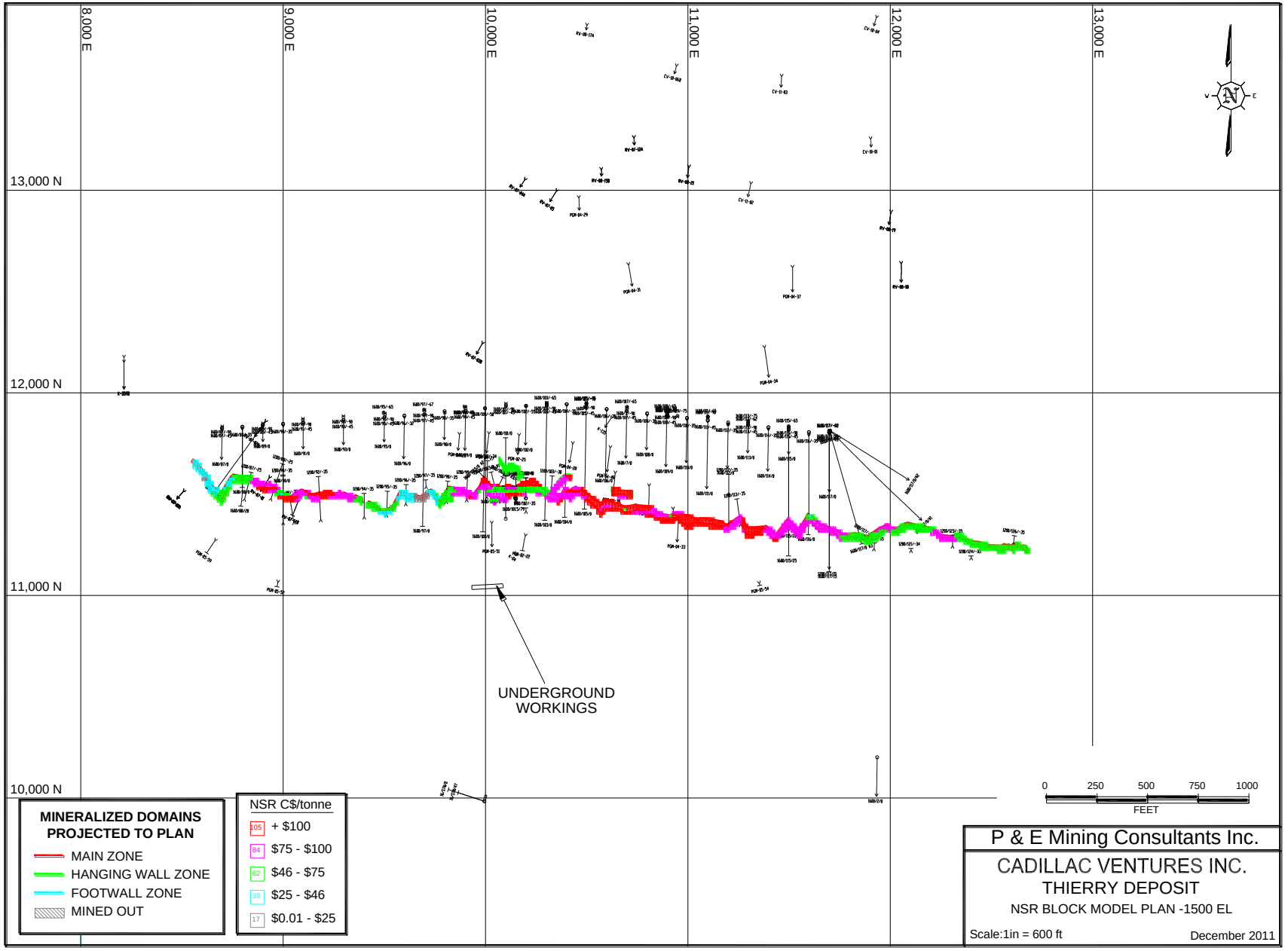

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
+ $100
$75 - $100
$46 - $75
$25 - $46
$0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 11500 E
Scale:1in = 750 ft
December 2011

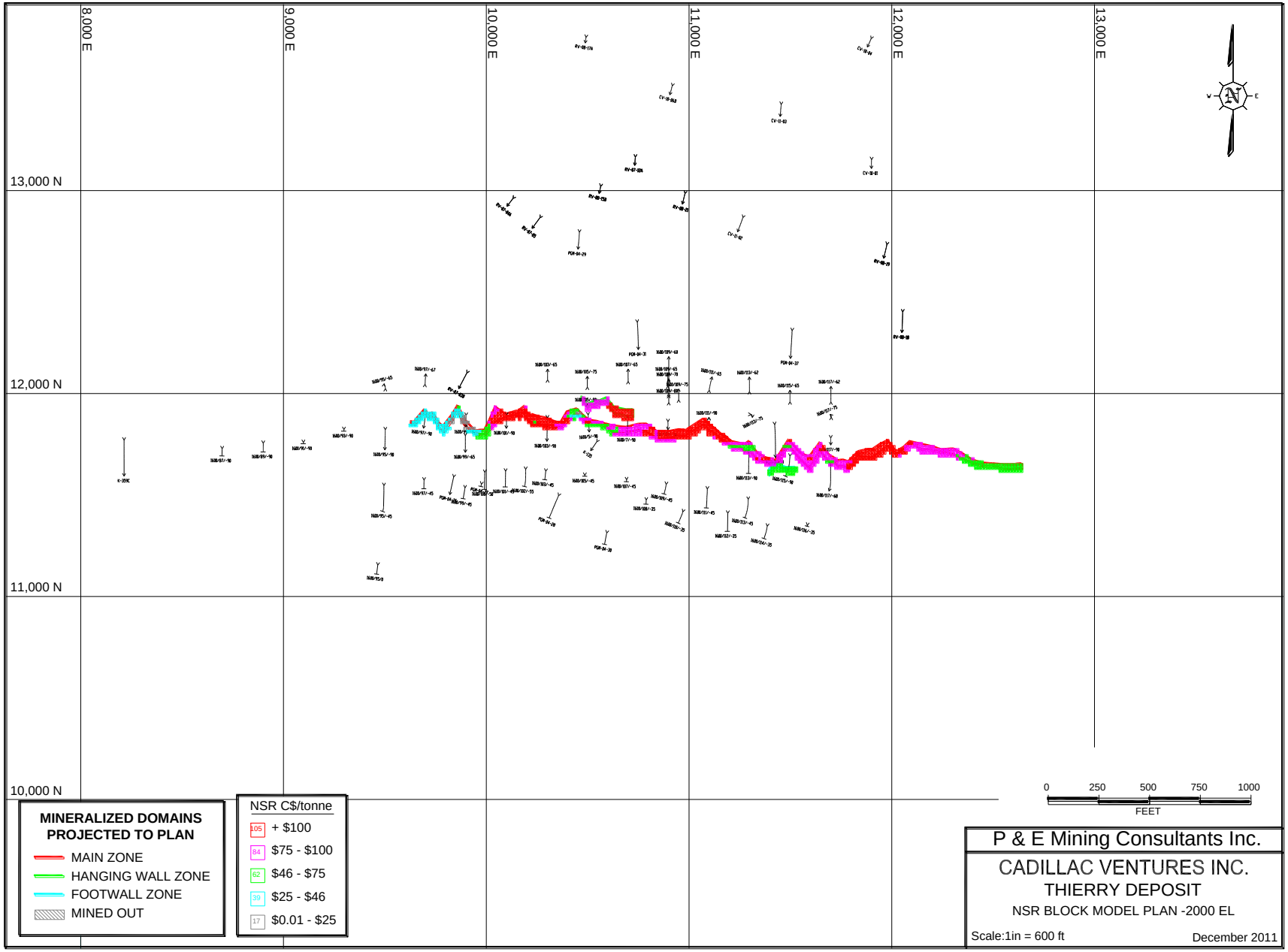

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
+ $100
$75 - $100
$46 - $75
$25 - $46
$0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 12000 E
Scale:1in = 750 ft
December 2011

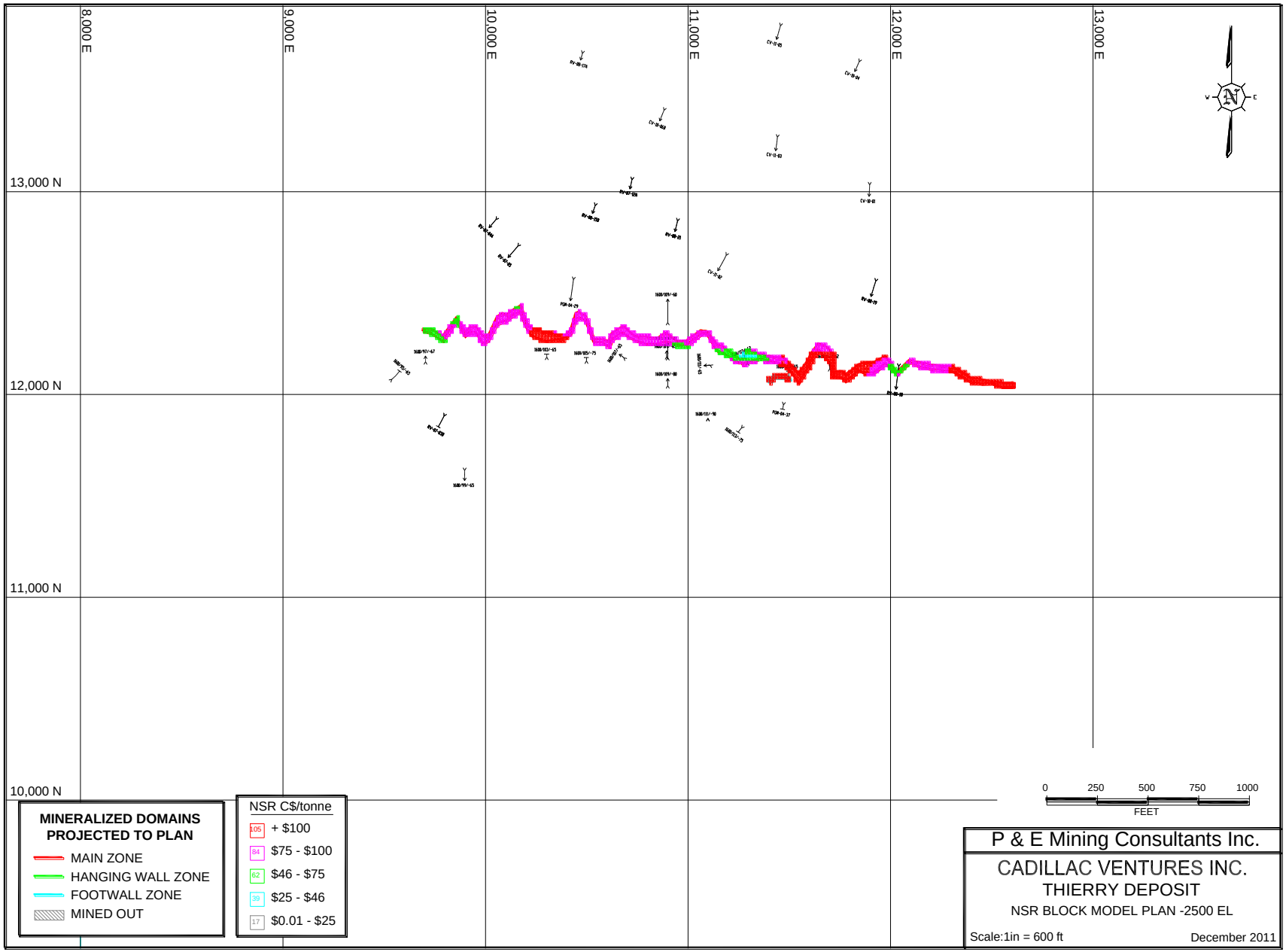

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL SECTION 12500 E
Scale:1in = 750 ft
December 2011

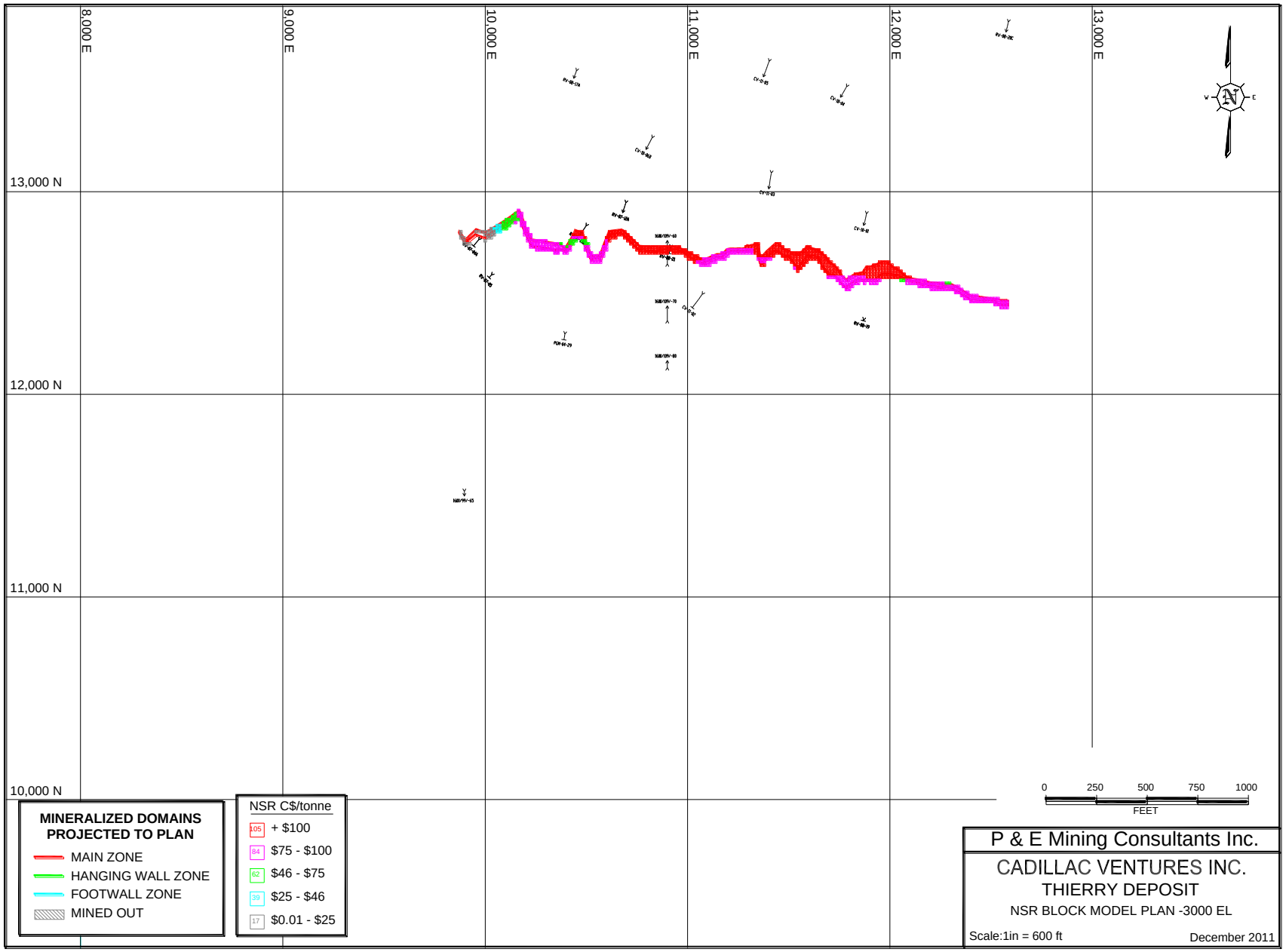

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -500 EL
Scale:1in = 600 ft
December 2011


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -1000 EL
Scale:1in = 600 ft
December 2011

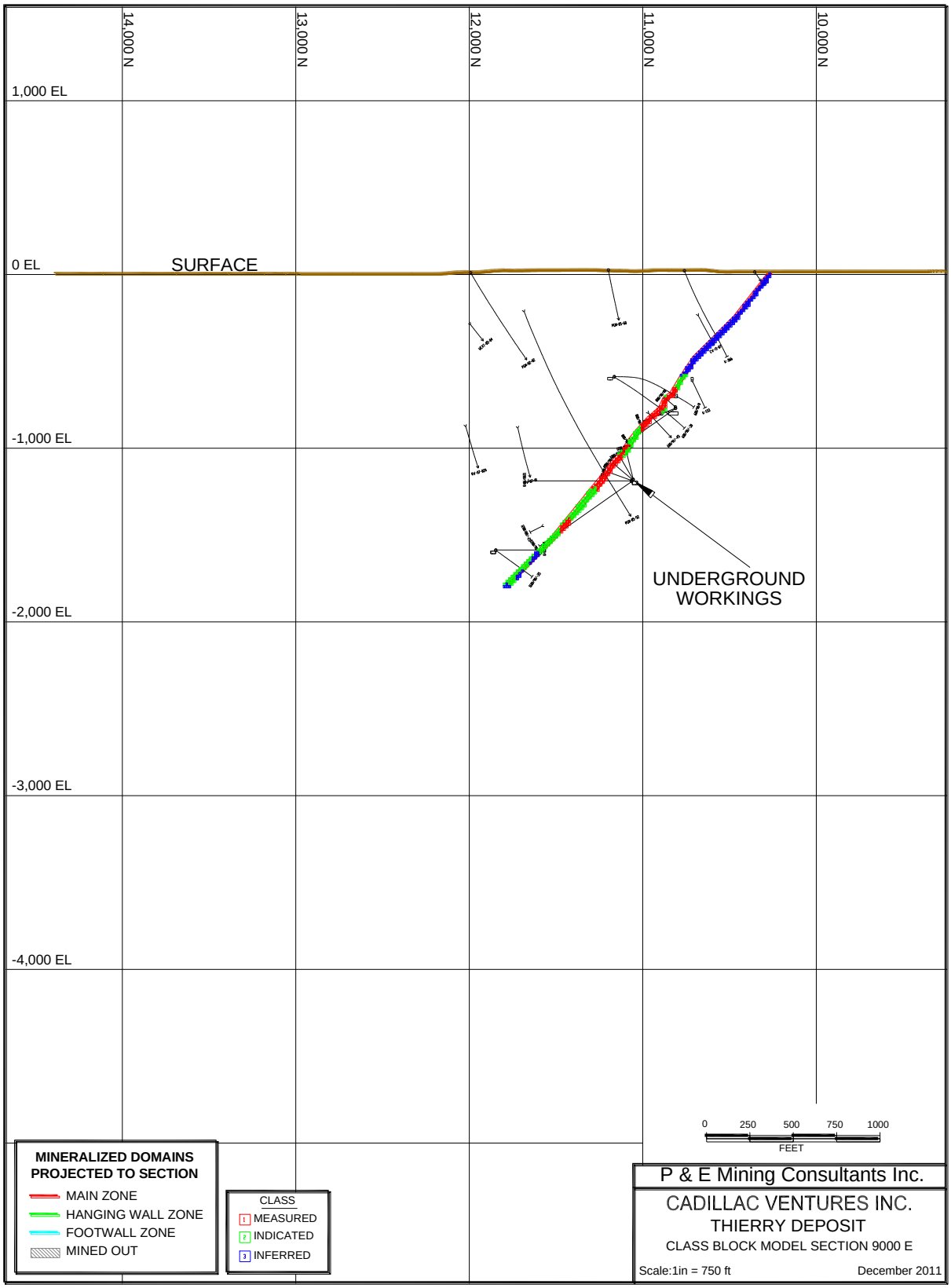

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -1500 EL
Scale:1in = 600 ft
December 2011

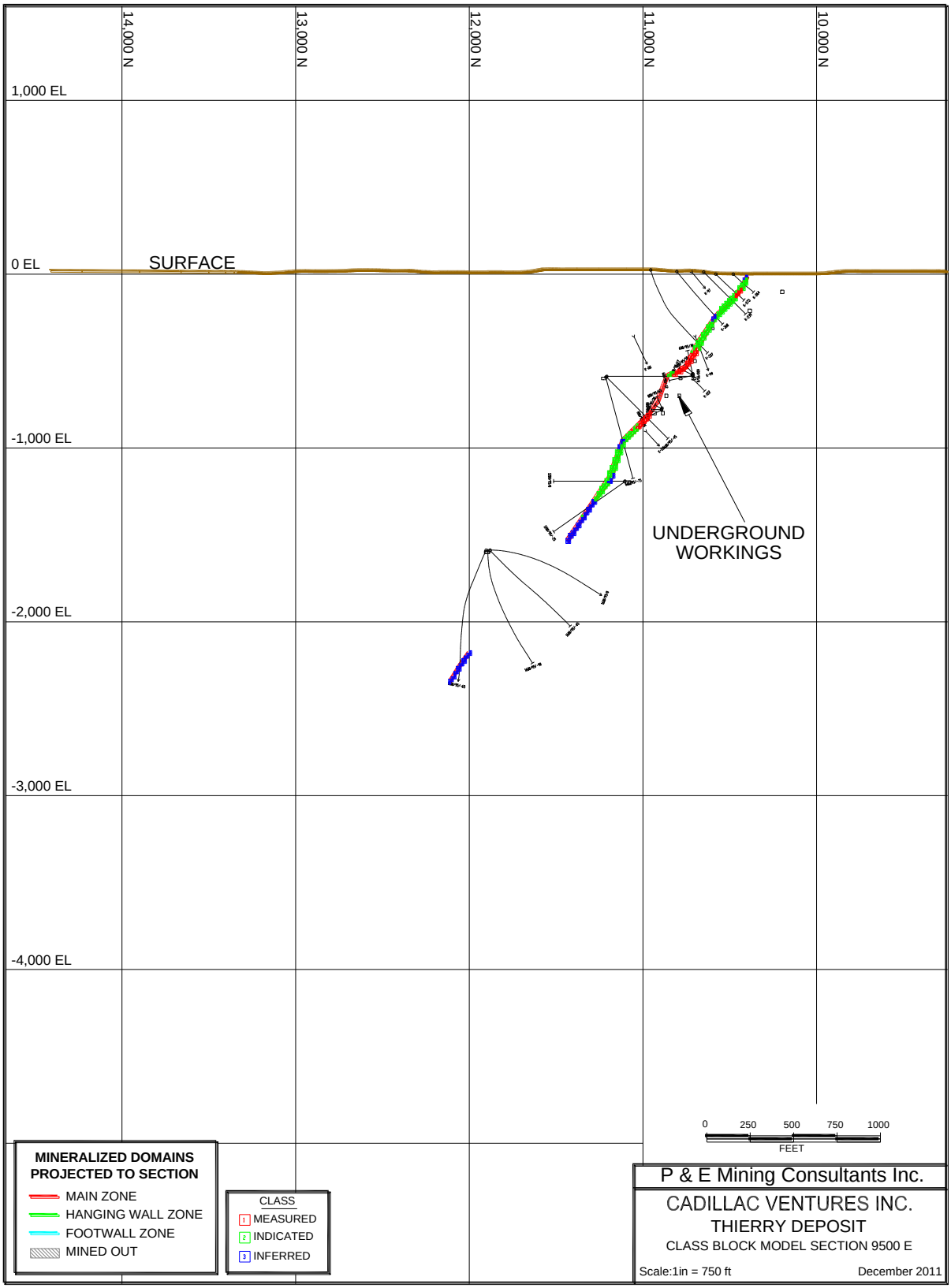

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -2000 EL
Scale:1in = 600 ft
December 2011

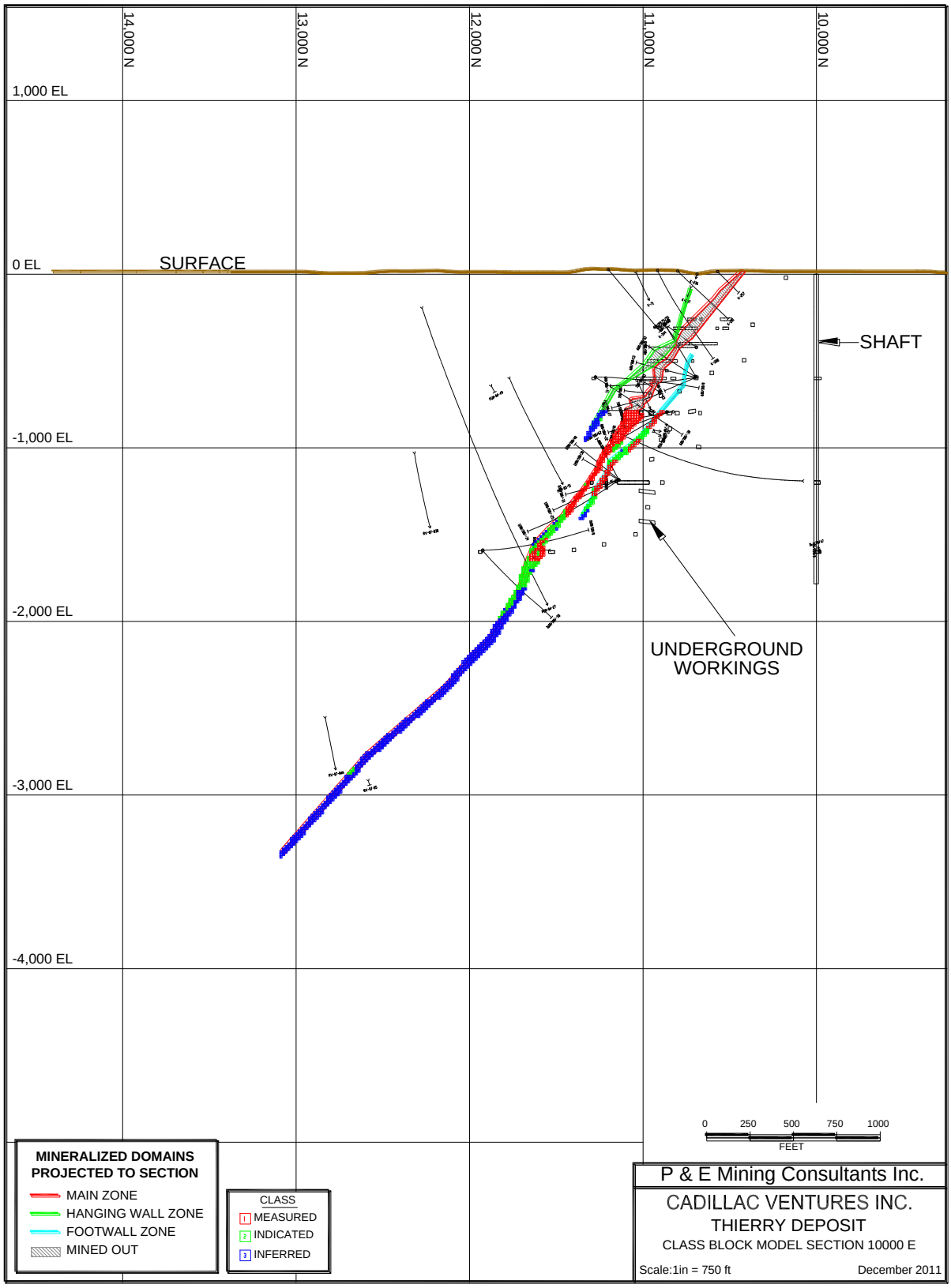

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -2500 EL
Scale:1in = 600 ft
December 2011

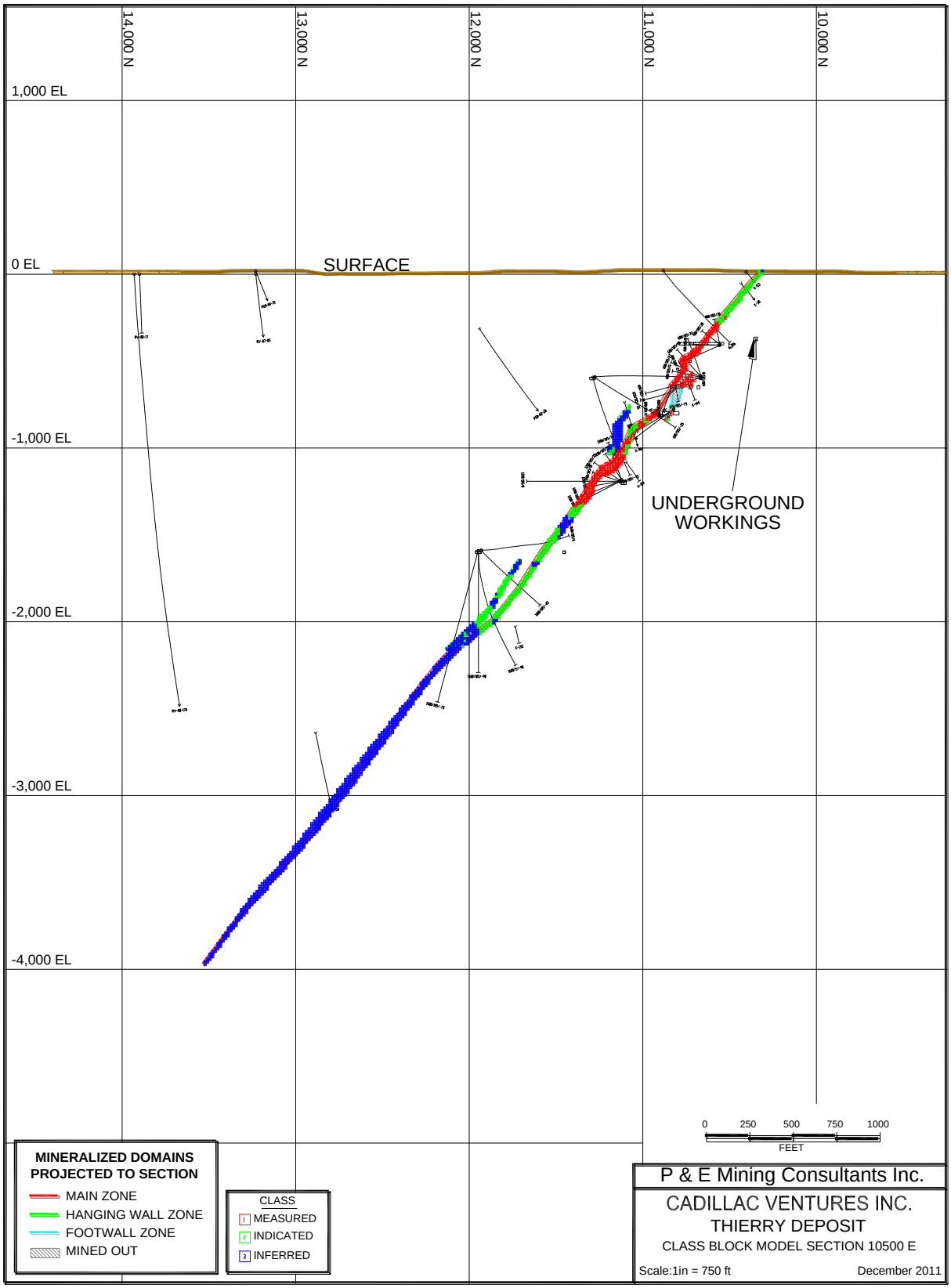

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
NSR C$/tonne
105 + $100
84 $75 - $100
62 $46 - $75
39 $25 - $46
17 $0.01 - $25
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
NSR BLOCK MODEL PLAN -3000 EL
Scale:1in = 600 ft
December 2011

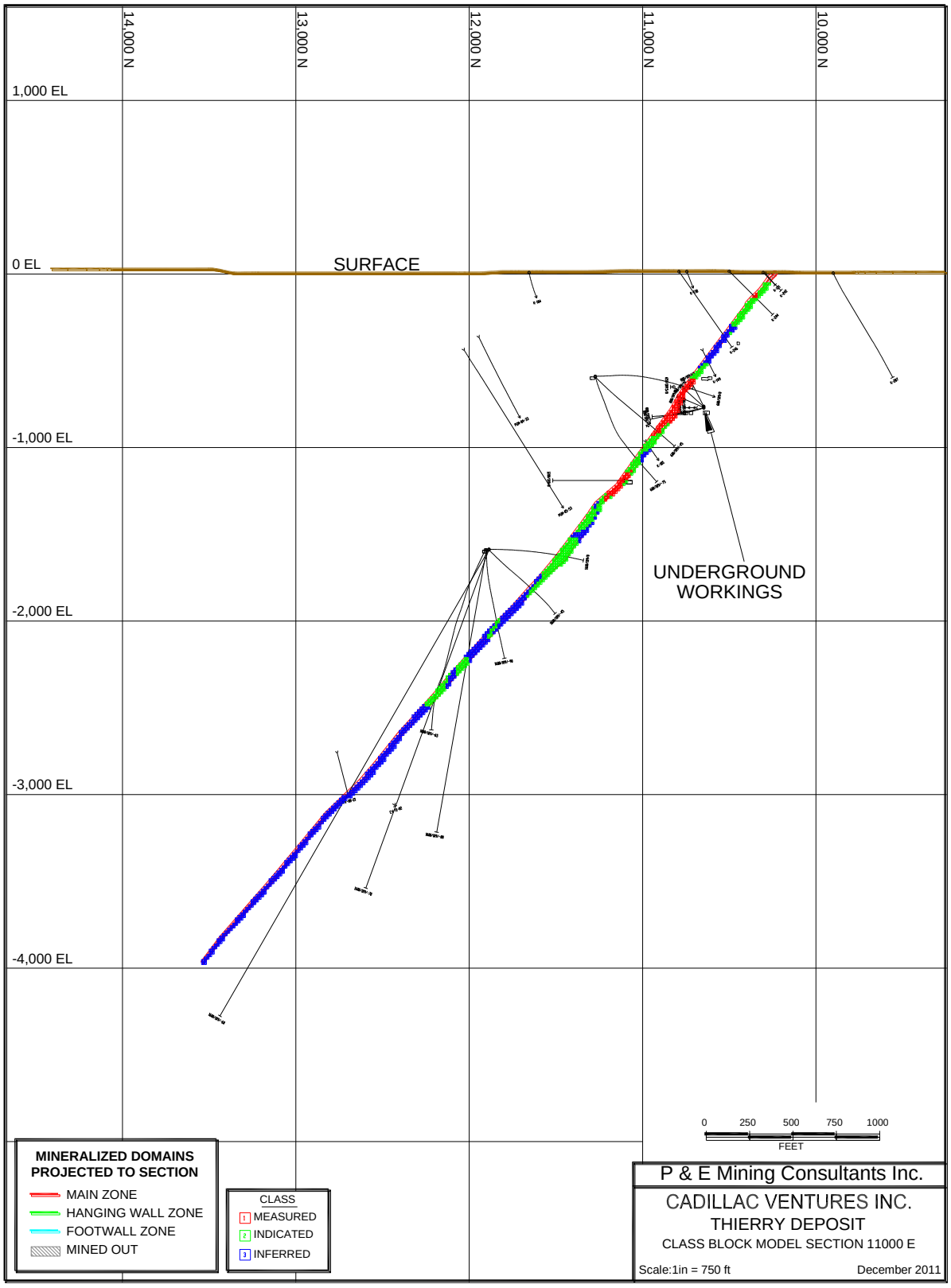
# APPENDIX VII. CLASSIFICATION BLOCK MODEL CROSS SECTIONS AND PLANS

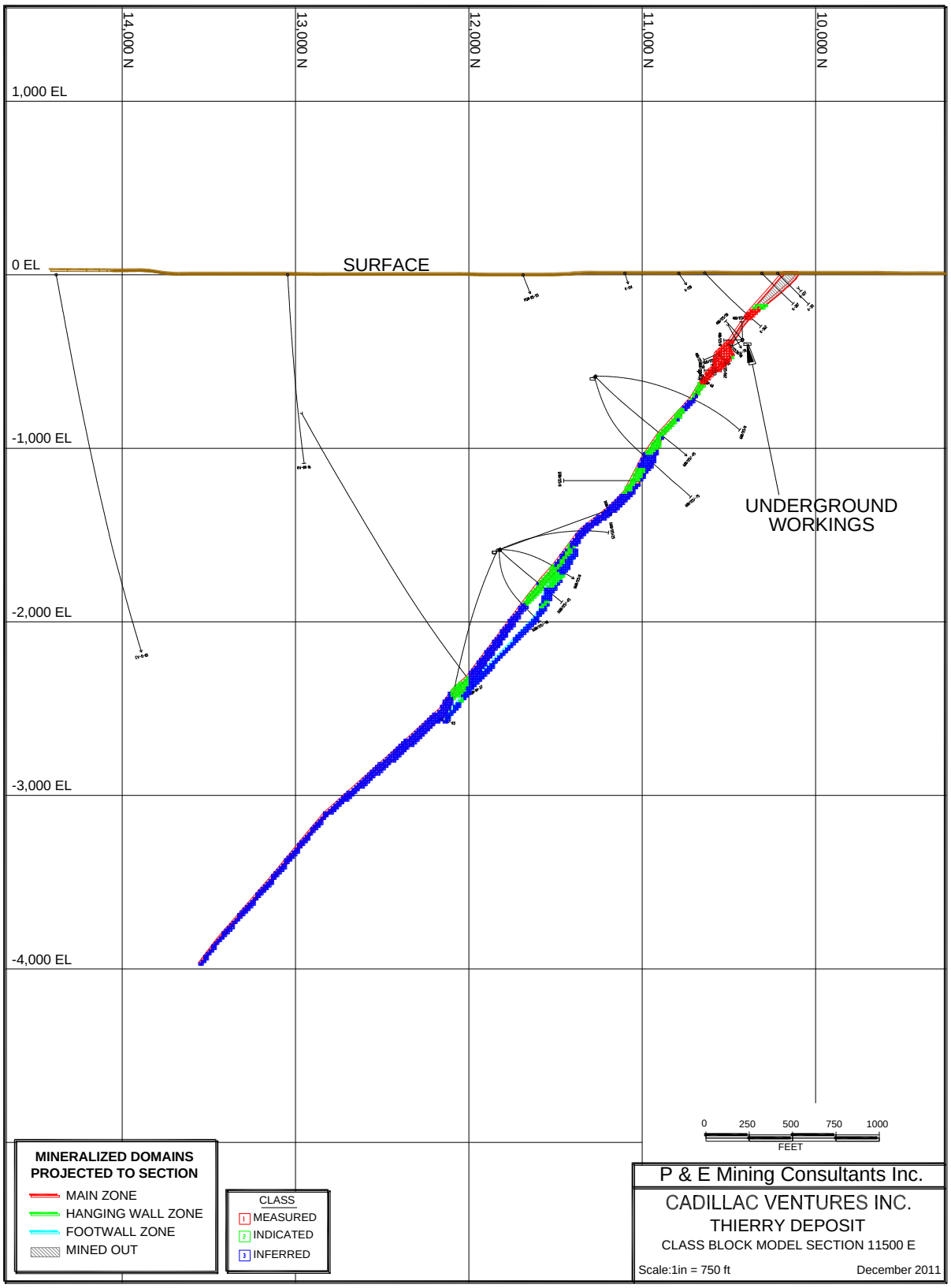

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 9000 E
Scale:1in = 750 ft
December 2011

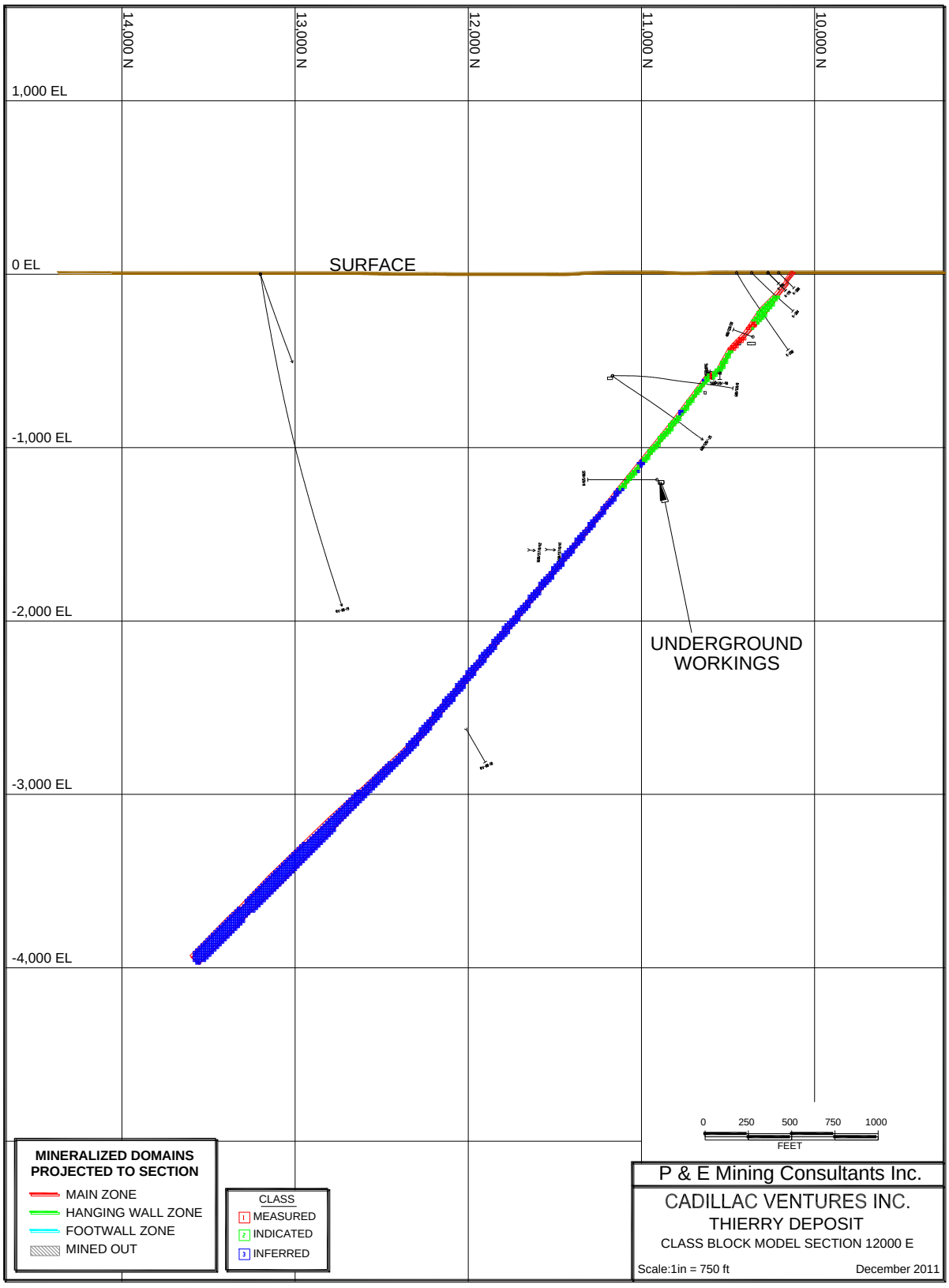

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 9500 E
Scale:1in = 750 ft
December 2011

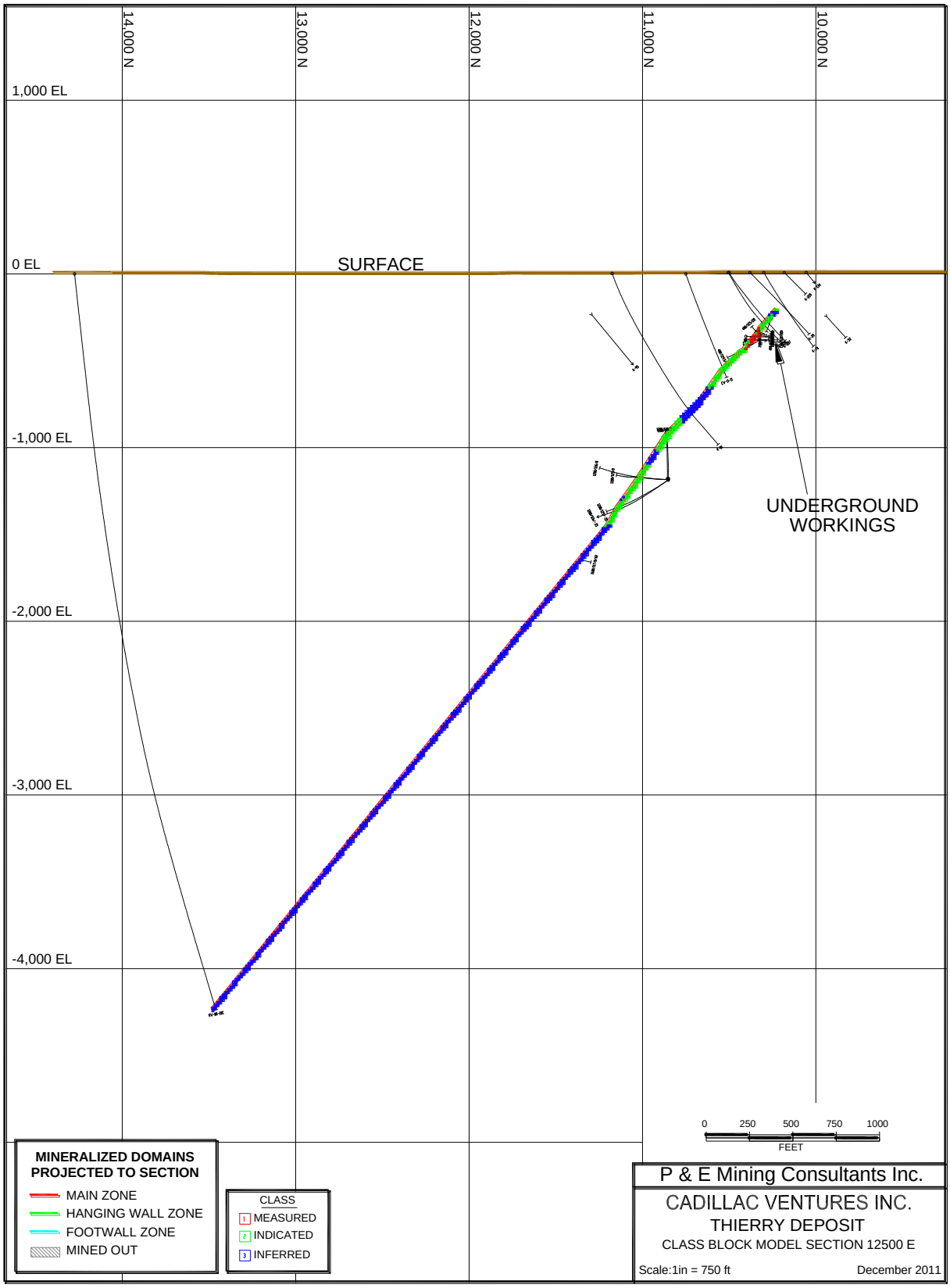

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
SHAFT
-1,000 EL
-2,000 EL
UNDERGROUND WORKINGS
-3,000 EL
-4,000 EL
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
MEASURED
INDICATED
INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 10000 E
Scale:1in = 750 ft
December 2011

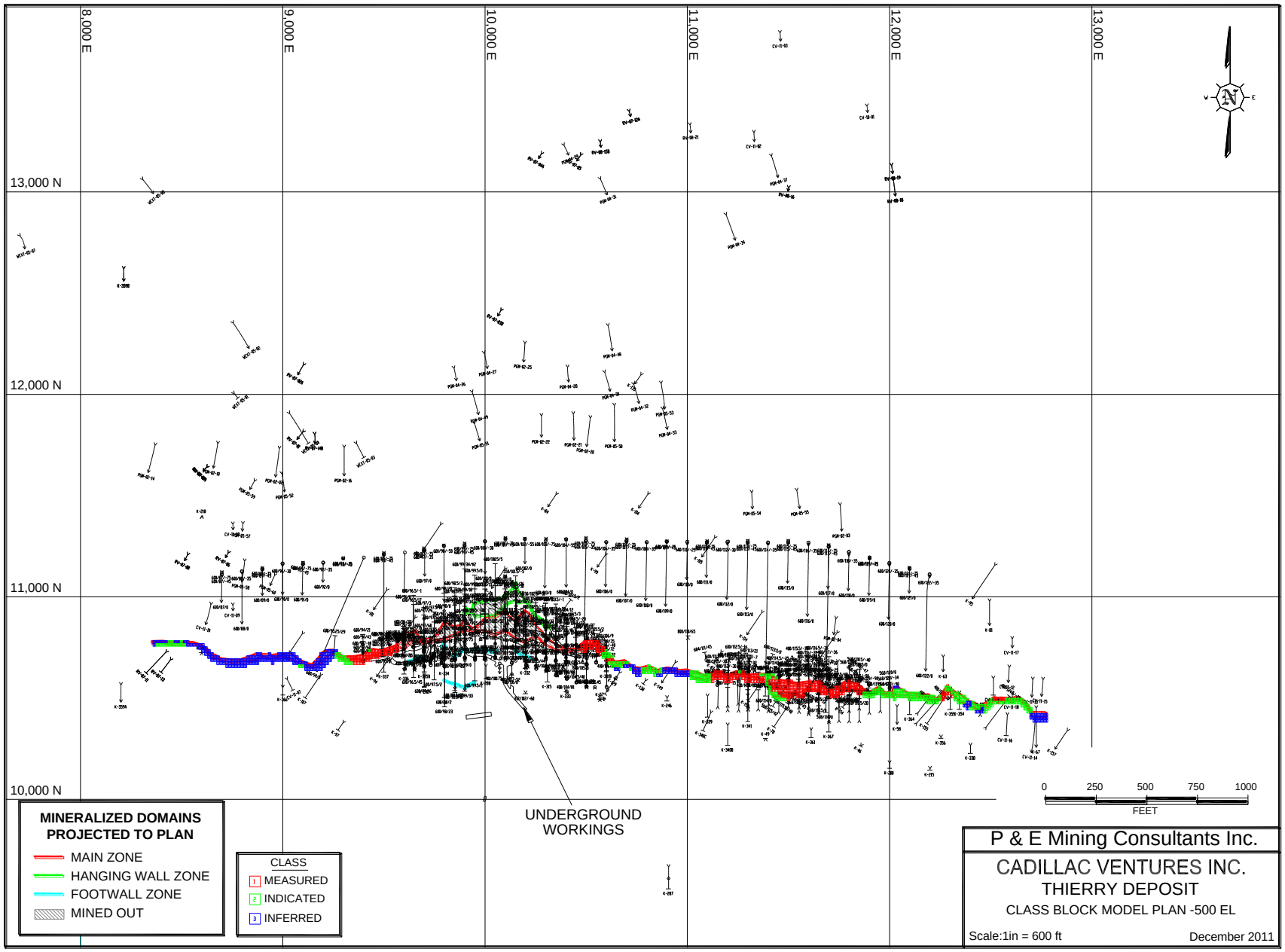

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 10500 E
Scale:1in = 750 ft
December 2011

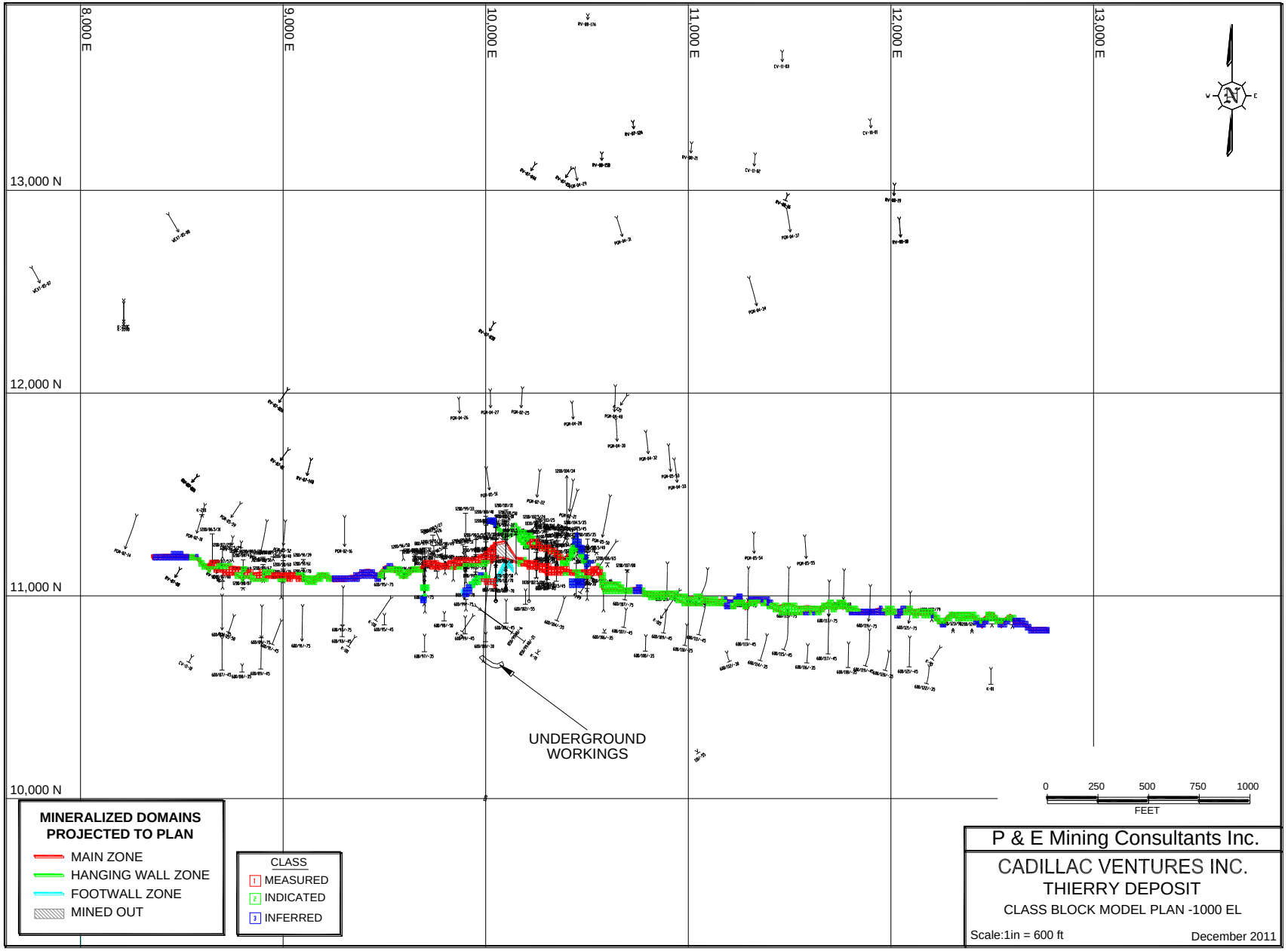

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 11000 E
Scale:1in = 750 ft
December 2011

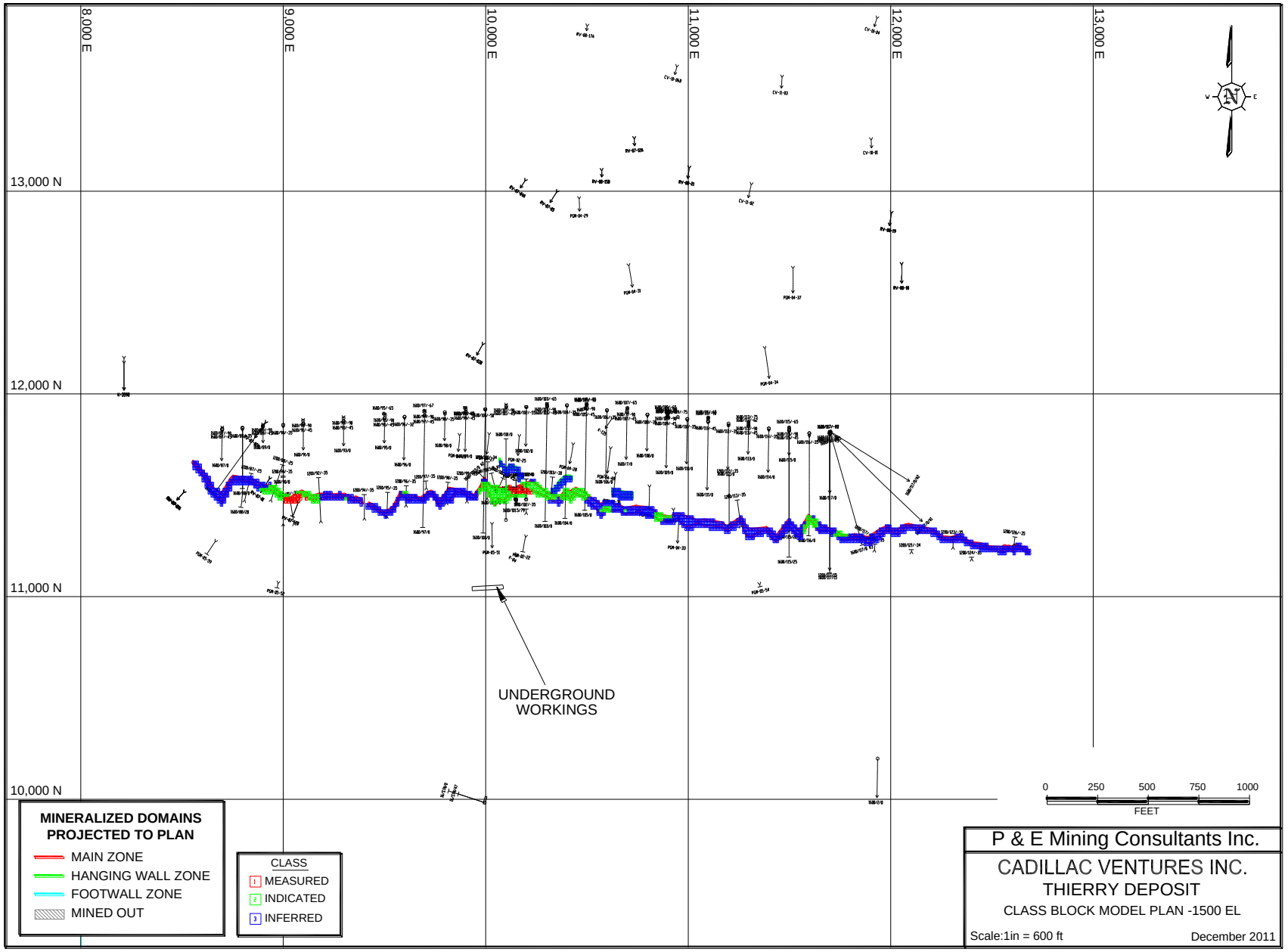

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13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 11500 E
Scale:1in = 750 ft
December 2011

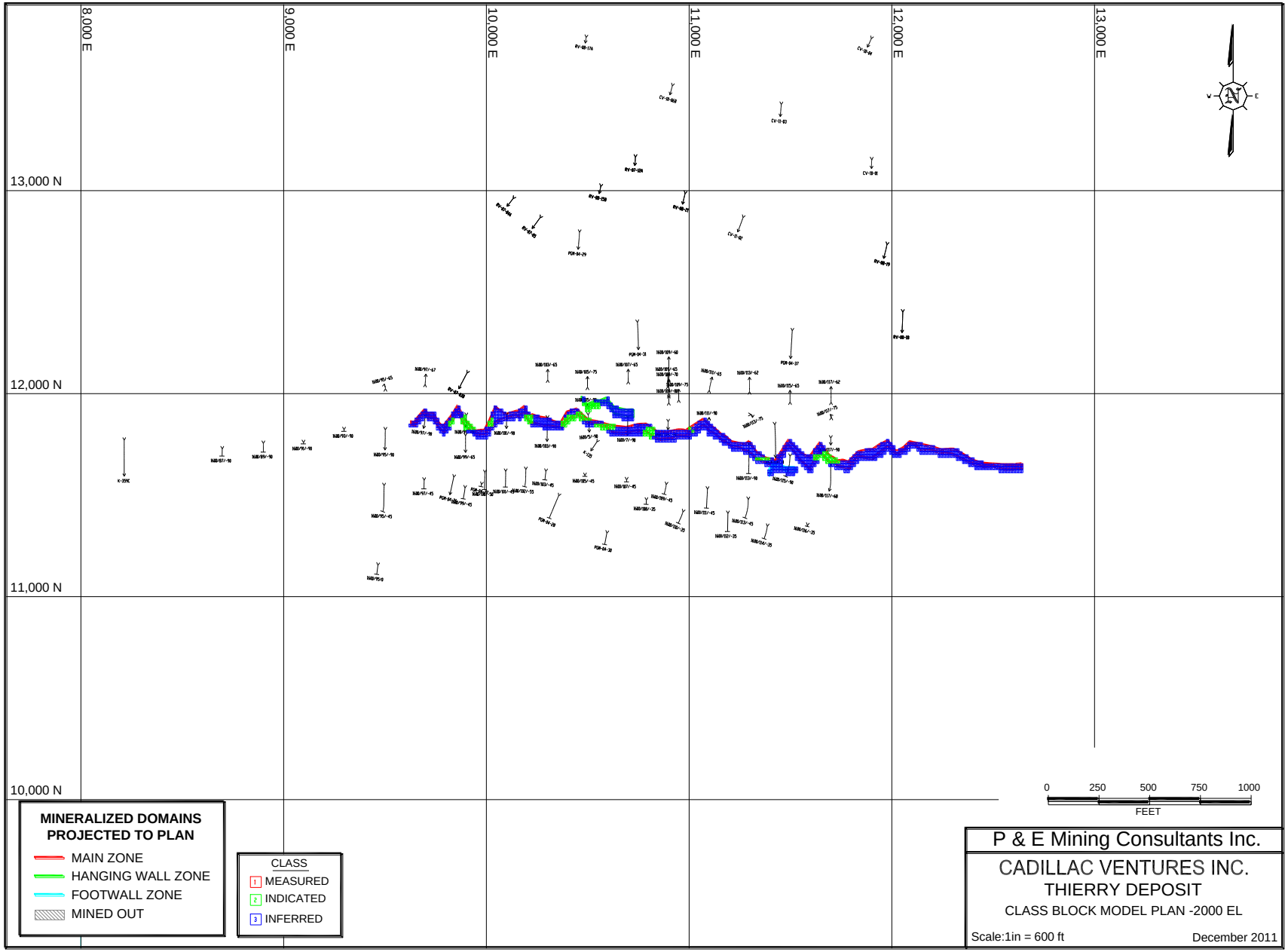

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13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
UNDERGROUND
WORKINGS
-3,000 EL
-4,000 EL
0 250 500 750 1000
FEET
MINERALIZED DOMAINS
PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 12000 E
Scale:1in = 750 ft
December 2011

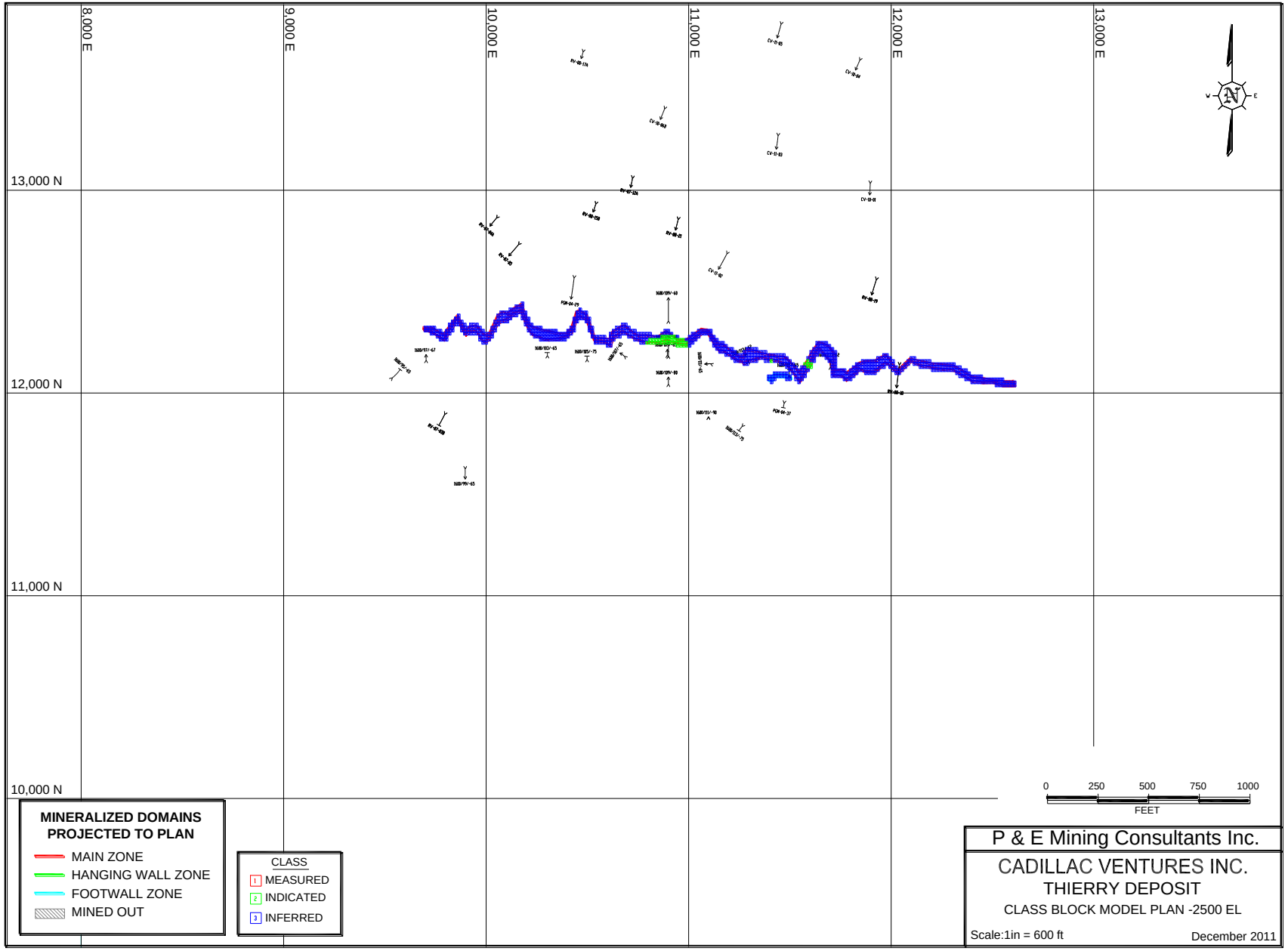

14,000 N
13,000 N
12,000 N
11,000 N
10,000 N
1,000 EL
0 EL
SURFACE
-1,000 EL
-2,000 EL
-3,000 EL
-4,000 EL
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO SECTION
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL SECTION 12500 E
Scale:1in = 750 ft
December 2011

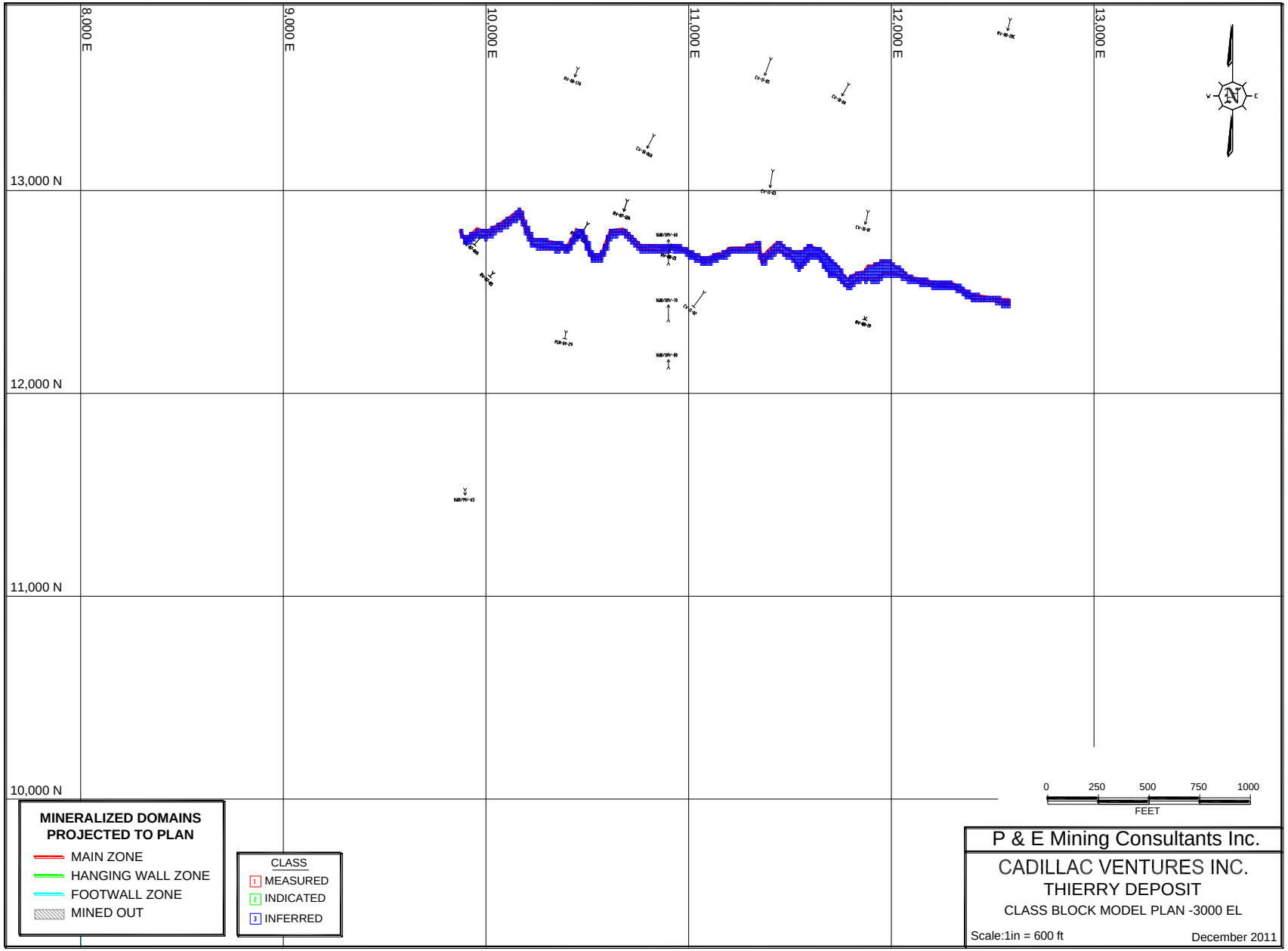

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -500 EL
Scale:1in = 600 ft
December 2011


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -1000 EL
Scale:1in = 600 ft
December 2011


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
UNDERGROUND WORKINGS
0 250 500 750 1000
FEET
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -1500 EL
Scale:1in = 600 ft
December 2011

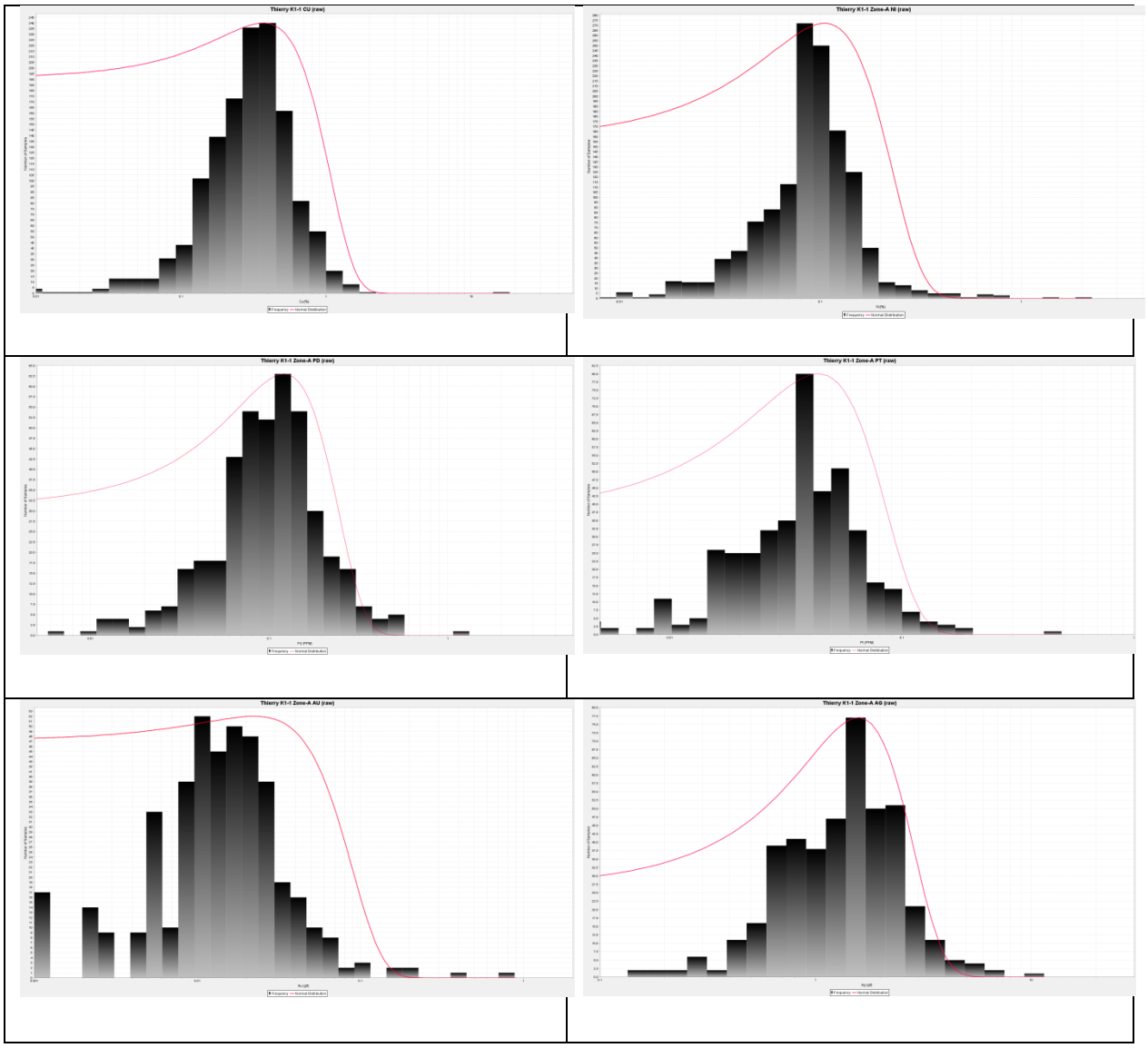

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -2000 EL
Scale:1in = 600 ft
December 2011


8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -2500 EL
Scale:1in = 600 ft
December 2011

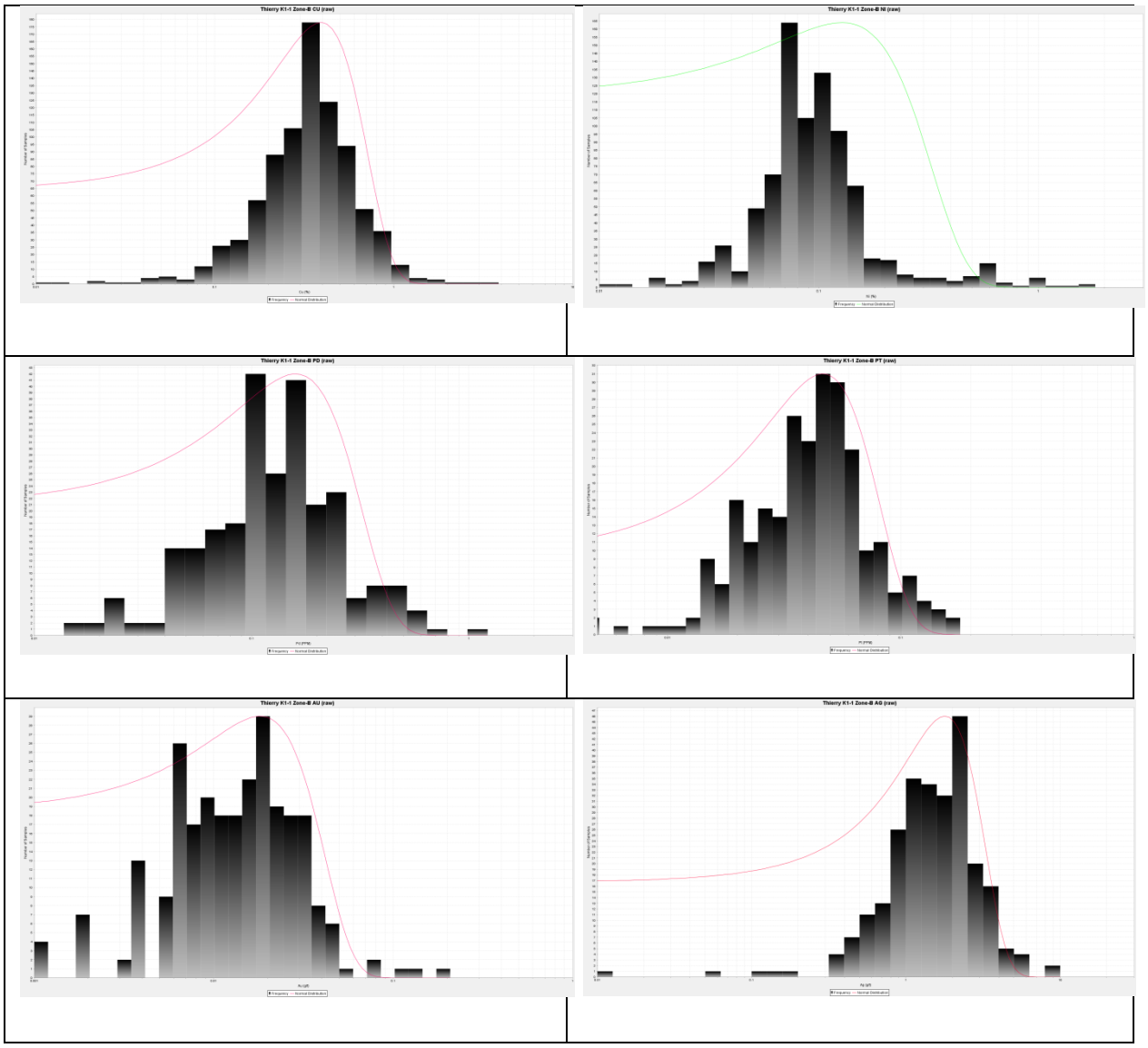

8,000 E
9,000 E
10,000 E
11,000 E
12,000 E
13,000 E
13,000 N
12,000 N
11,000 N
10,000 N
MINERALIZED DOMAINS PROJECTED TO PLAN
MAIN ZONE
HANGING WALL ZONE
FOOTWALL ZONE
MINED OUT
CLASS
1 MEASURED
2 INDICATED
3 INFERRED
0 250 500 750 1000
FEET
P & E Mining Consultants Inc.
CADILLAC VENTURES INC.
THIERRY DEPOSIT
CLASS BLOCK MODEL PLAN -3000 EL
Scale:1in = 600 ft
December 2011

# APPENDIX VIII. HISTOGRAMS BY METAL FOR K1-1 ZONES ASSAYS

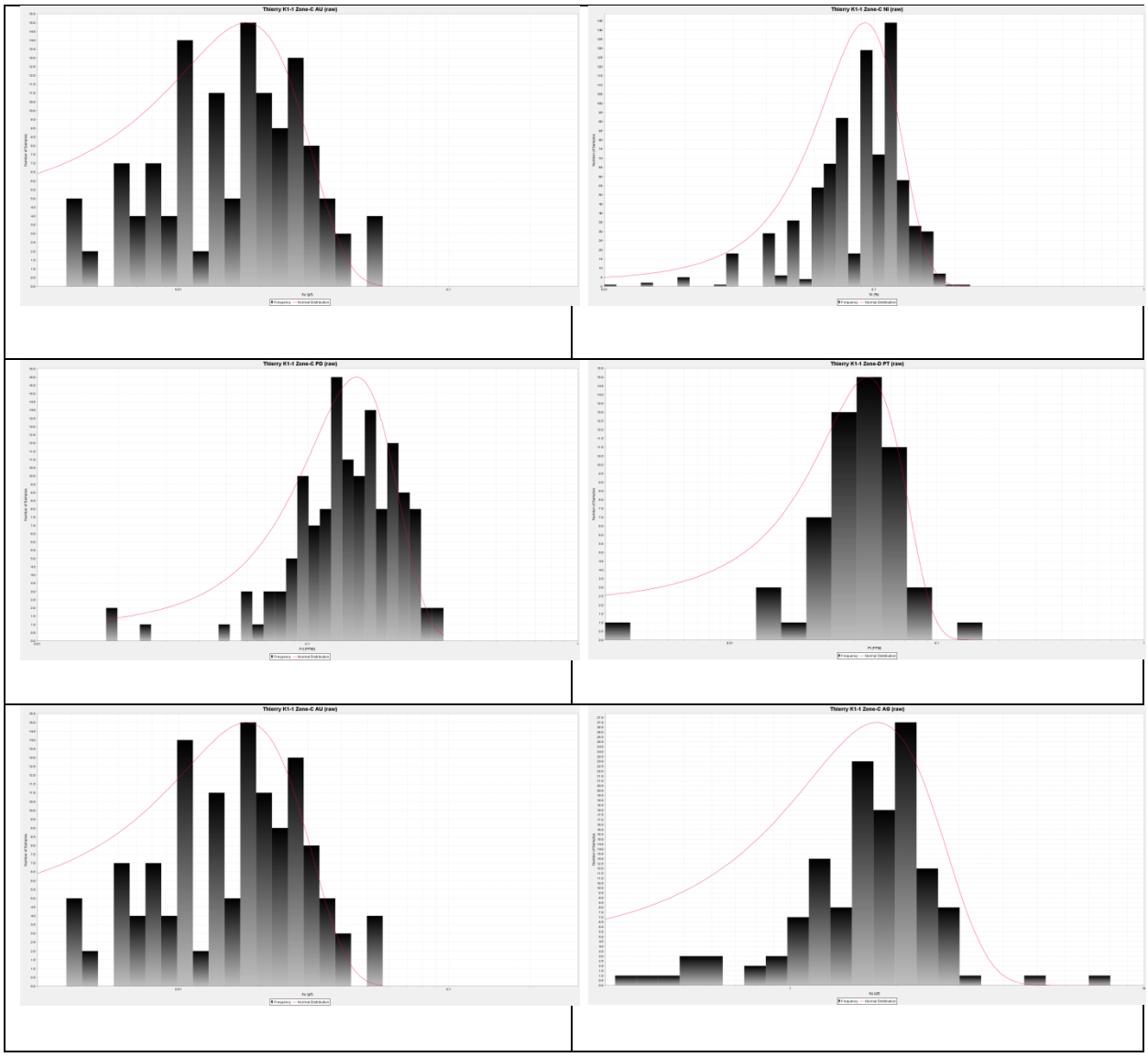
Zone A: Cu, Ni, Pd, Pt, Au, Ag



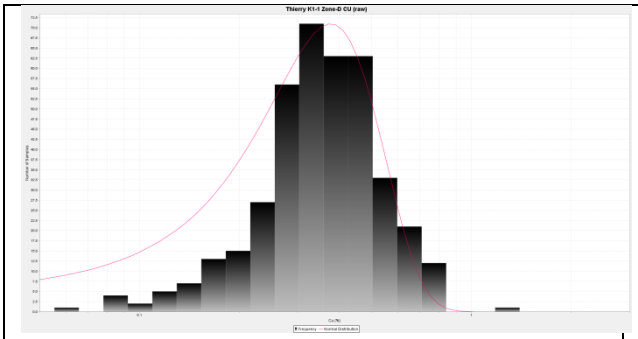
Zone B: Cu, Ni, Pd, Pt, Au, Ag

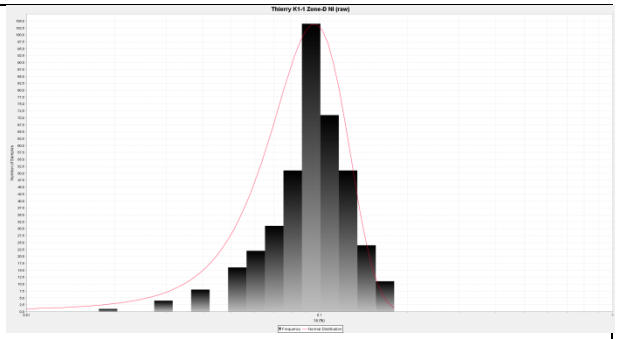


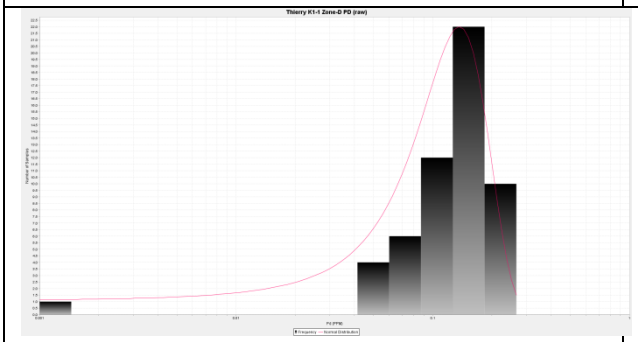
Zone C: Cu, Ni, Pd, Pt, Au, Ag

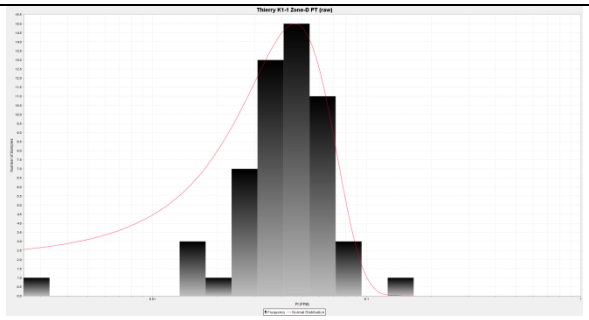


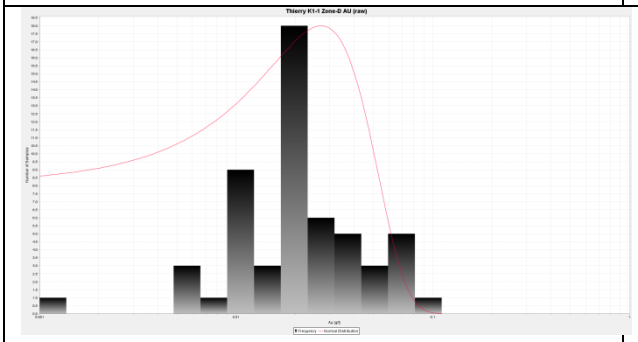
Zone D: Cu, Ni, Pd, Pt, Au, Ag

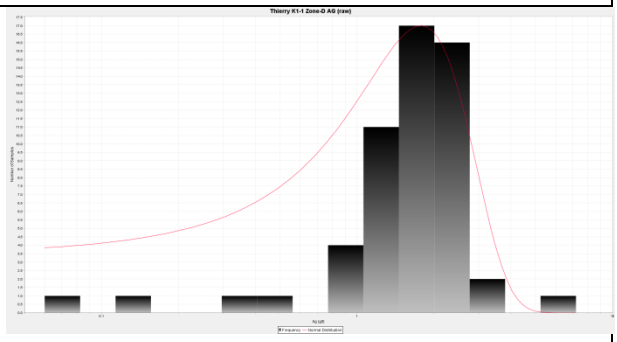


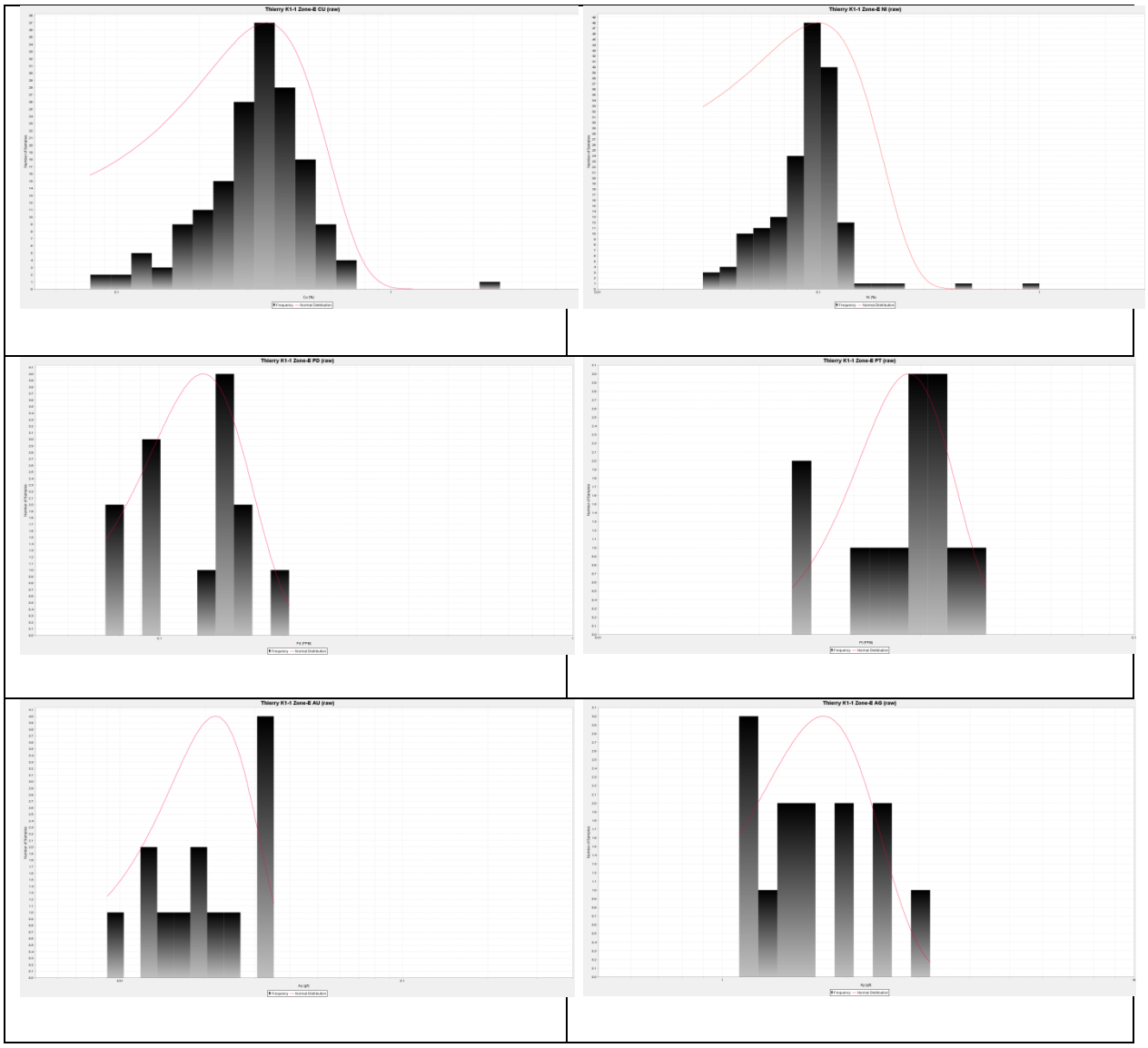



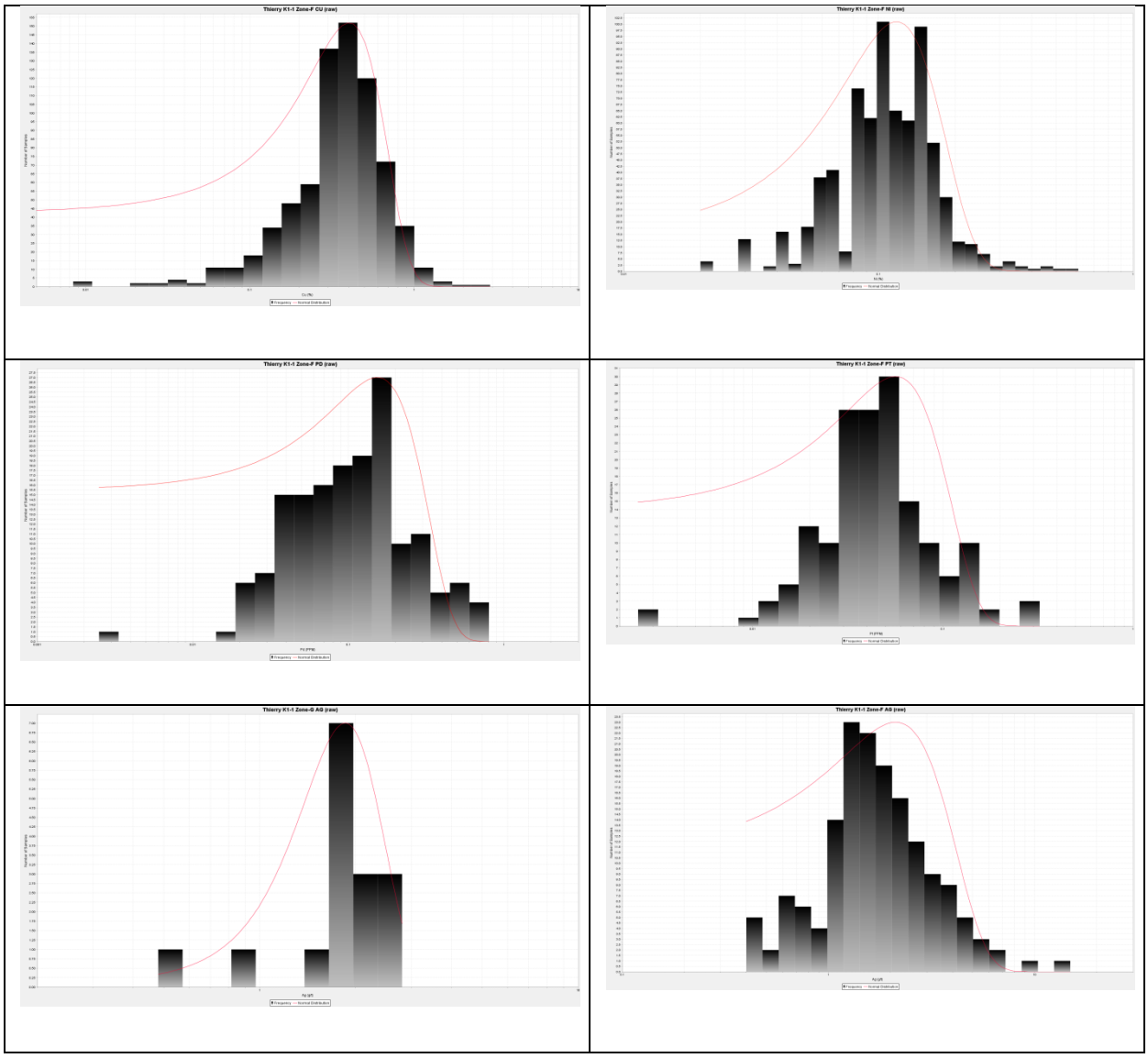



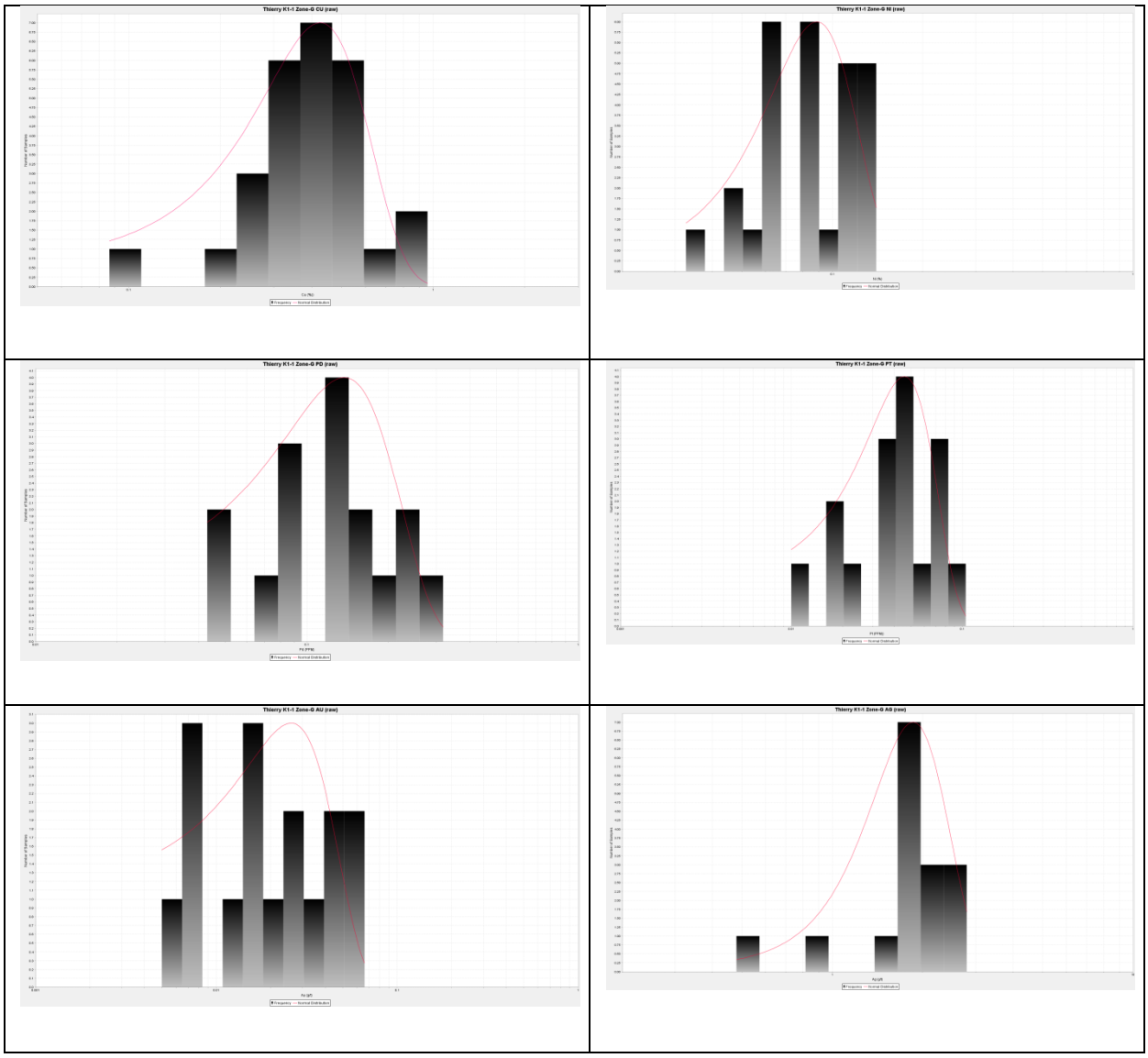
Zone E: Cu, Ni, Pd, Pt, Au, Ag



Zone F: Cu, Ni, Pd, Pt, Au, Ag



Zone G: Cu, Ni, Pd, Pt, Au, Ag

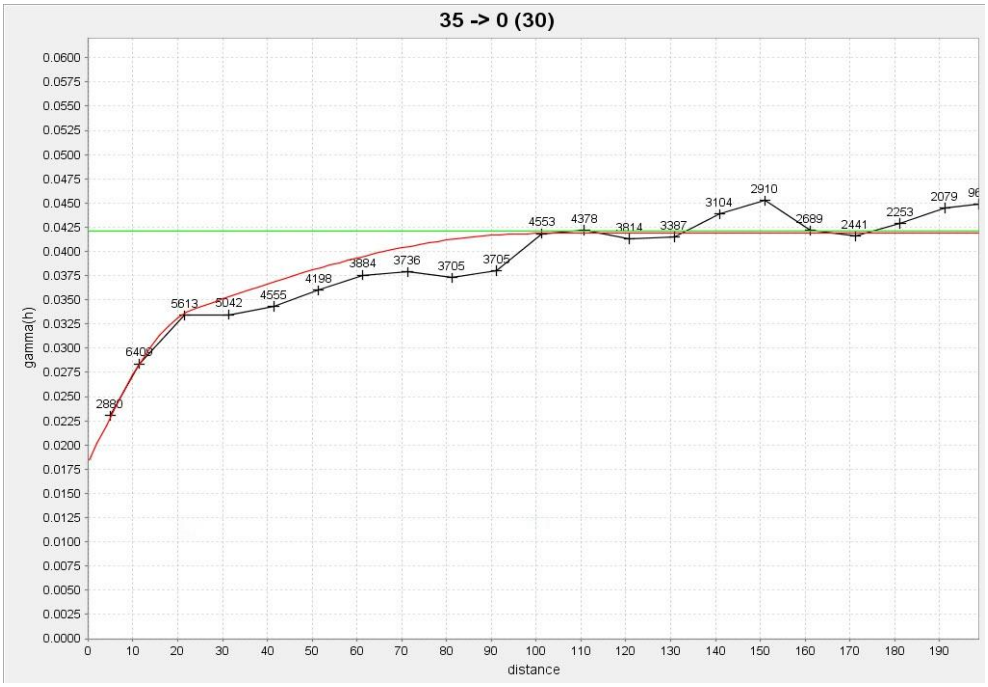


# APPENDIX IX. VARIOGRAPHY CU COMPOSITES (5 FT)

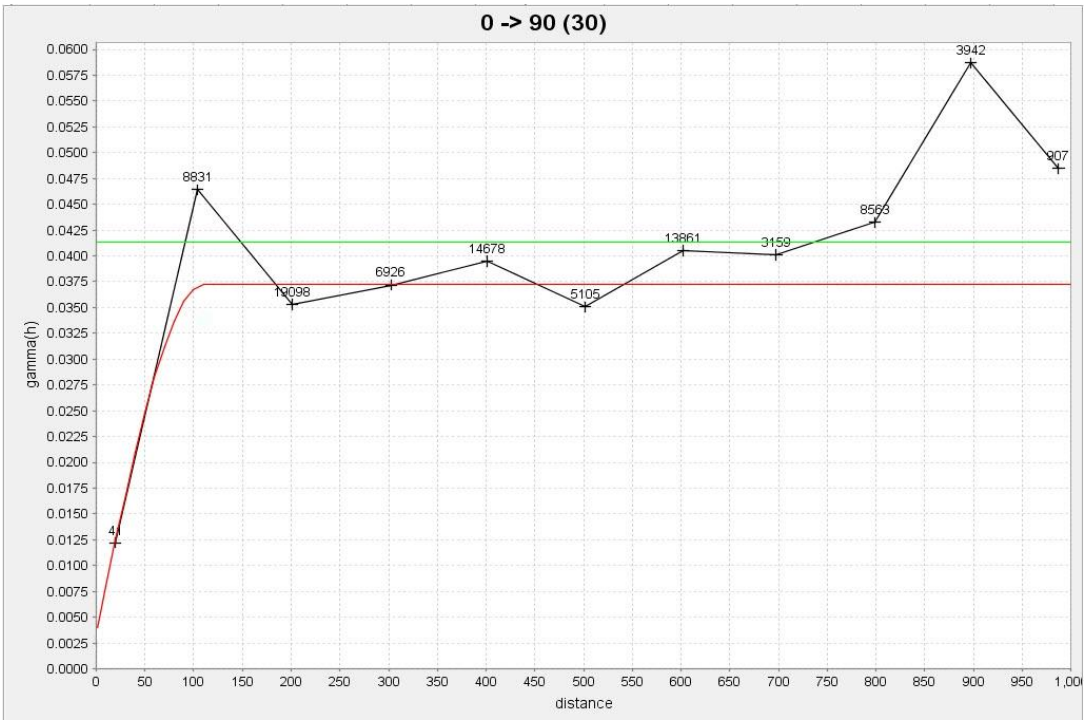
Down Hole Linear Variogram (Nested Spherical Model; 5 ft Lags for Nugget Effect)




3D Variogram  360°/+35° (Thickness; Nested Spherical Model ; 10 ft lags; 30° Spread Angle)




3D Variogram on Strike 090°/0° (Spherical Model; 100 m Lags; 30° Spread Angle)




3D Variogram on Dip 360°/-55° (Nested Spherical Model; 100 m Lags; 30° Spread Angle)

